Report

Site Investigations

M. Wallace and Son, Inc. Scrapyard
Cobleskill, New York

June 1990

O'BRIEN & GERE

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REPORT

SITE INVESTIGATION

M. WALLACE AND SON, INC. SCRAPYARD

COBLESKILL, NEW YORK

JUNE 1990

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SECTION 1 - INTRODUCTION

1.01 Purpose of Investigation

Niagara Mohawk Power Corporation (NMPC) and M. Wallace and Son, Inc. (MW&S) have been named as defendants in a lawsuit filed by the State of New York Attorney General over alleged PCB contamination at the M. Wallace and Son, Inc. Scrapyard in Cobleskill, New York (Figure 1). This property has been designated as an inactive hazardous waste site by the New York State Department of Environmental Conservation (NYSDEC) and is identified as site number 448003. A site investigation of the M. Wallace & Son, Inc. scrapyard has been conducted. The objectives of the site investigation were to:

1) evaluate the locations, extent (including the vertical and lateral limits) and concentrations of oil and grease and PCBs in on-site soils, ground water, surface water and sediments; and

2) identify and characterize the potential for off-site migration of oil and grease PCBs.

A Work Plan (October 1987) was prepared to achieve these objectives. Based upon the results of the initial sampling completed under the work plan the remaining investigatory work was modified to include the characterization of the presence of and potential for off-site migration of hazardous substance list metals and volatile organics.

This report is organized into five sections, tables, figures and appendices. The sections are as follows:

Section 1 - Introduction - presents the purpose of the investigation and a general site description.

Section 2 - Field Investigation Methodology - presents the objectives, the methodology and the output of the field investigation tasks.

Section 3 - Summary of Field Investigation Results - presents the physical and chemical results of the field investigation.

Section 4 - Discussion of Results - presents a discussion of the results as they relate to the objectives of the report.

Section 5 - Summary - provides conclusions based on the field investigation as well as recommendations for future action.

1.02 Background

M. Wallace and Son, Inc. Scrapyard is located at the intersection of New York Route 10 (Elm Street) and West Street in the Village of Cobleskill, Schoharie County, New York (Figure 1). The site on Route 10 consists of an office/garage building, a quarry pond and areas of stockpiled scrap material. The remaining areas are vegetated (Figure 2).

The site is allegedly contaminated with PCBs due to spillage of oil residue contaminated with PCBs over a period of years.

Sampling and analysis of soil, surface water, sediment, and nearby household wells has been conducted. On June 10, 1983, the Bureau of Enforcement and Criminal Investigation (BECI) of the NYSDEC sampled soil and sediment and water from the quarry pond and from an on-site stream. The analytical results allegedly revealed PCB concentrations

ranging from 170-200 parts per million (ppm) in the soil, 34 ppm in a sediment sample, 0.5 ppb in water from the quarry pond, and 0.5 ppb in water from the stream. On December 19, 1984, the Schoharie County Department of Health sampled 8 household ground water supply wells near the scrapyard for purgeable hydrocarbons, purgeable aromatics, PCBs, and heavy metals. The results of this effort revealed no detectable levels of organic contaminants.

1.03 Site Description

1.03.01 Site Physiography and Topography

M. Wallace and Son, Inc., Scrapyard is located in the glaciated Mohawk section of the Appalachian Plateau Physiographic Province (Figure 1). This region is characterized by low rolling hills at an average elevation of 1200 feet dissected into a limestone plateau. During the Pleistocene Epoch, ice sheets advanced over the entire area rounding and smoothing the hilltops, deepening the valleys and depositing a veneer of glacial till on the uplands. As the glaciers receded, streams flowing in the valleys deposited outwash sand and gravel or, if dammed, created glacial lakes where fine material such as silt and clay were deposited (USDA-SCS, 1969).

Elevation at the site ranges from 960 feet above mean sea level (amsl) on the south side of NY Route 10 to 1000 feet amsl at the northern fenceline.

1.03.02 Site Drainage

Surface water features on the MW&S site include a pond which formed in the old limestone quarry on the site and a stream formed by the overflow from the quarry pond. The stream flows into a culvert on the north side of Route 10, re-emerges on the south side, turns to the east and enters a culvert with an unknown discharge point on Cobleskill Creek. The quarry pond is fed from ground water issuing from fractures on the bottom and sides of the pond. Fractures are visible in the bedrock wall around the quarry and during early site visits water was occasionally observed to be flowing from these fractures. Another source of water for the pond is surface runoff and direct precipitation.

1.02.03 Land Use

The area surrounding the site is used for various residential and commercial purposes. To the north of the site is the Cobleskill High School athletic field. On the east side of the site are several apartments and single family residences. To the south of the site is New York State Route 10, the Delaware and Hudson Railroad. On the west side of the site there is a service station, and bus garage.

SECTION 2 - FIELD INVESTIGATION METHODOLOGY

2.01 Initial Surface Soil Sampling

As part of implementing the site Work Plan (October 1987) two surface soil samples were collected on December 17, 1987, and analyzed for full NYSDEC Hazardous Substance List (HSL) parameters using Contract Laboratory Protocols (CLP). The purpose of these analyses was to provide the basis for selecting a reduced set of HSL analytical parameters for the subsequent soil, ground water, sediment and surface water sampling. Compounds detected included PCBs, phthalates, poly-nuclear aromatic hydrocarbons 1,1-dichloroethene, xylene and metals. Based on the HSL results, the selected reduced list of HSL parameters included: volatile and semi-volatile organics and metals analyses for surface water and ground water; metals analysis for sediments; and volatile organics and metals analyses for subsurface soils. This reduced list of HSL parameters as well as the inclusion of five addition-al HSL samples was presented to the NYSDEC in a letter from O'Brien & Gere dated May 19, 1989 and subsequently approved by the NYSDEC.

2.02 Air Monitoring

An air monitoring program was conducted before and during the site investigation. This was completed to evaluate ambient air emissions from the site and consisted of evaluating volatile organic releases, PCBs and particulates.

An HNU Model PI-101 photoionization detector (PID) was used to monitor the air for volatile organic compounds at one upwind and one downwind location prior to beginning any site work. This PID survey

was conducted on December 17, 1987. In addition, PID air monitoring was periodically performed during boring and monitoring well installation, and collection of surface water, ground water and sediment samples for investigation work health and safety.

Particulate and vapor phase PCB samples were collected during site work at the two locations shown on Figure 4. The NYSDEC field representative agreed to the sample locations. Samples were collected during the surface and near-surface soil sampling event on August 29, 1989, using an air sampling pump operated at an air flow rate of 0.05 to 0.2 liters/minute until from 1 to 50 liters of air passed through the filter. The particulate sample was collected on a 25 ml, 0.8 micron filter. The air stream was then passed through a Florisil trap for vapor phase analysis. These samples were analyzed for PCBs in accordance with the method set forth in the section entitled "Polychlorinated Biphenyls in Ambient Air" of the New York State Department of Health (NYSDOH) document "Analytical Handbook" (NYSDOH, 1980). PCB air monitoring data are presented in Appendix A.

PID air monitoring data collected during site activities were compared to guidelines presented in the site Health and Safety Plan. PID readings did not exceed background concentrations for organic vapors throughout the site investigation.

PID and PCB air monitoring data is presented in Appendix A and discussed in Section 3.01.

2.03 Surface and Near-Surface Soil Sampling

Surface and near-surface soil samples were collected to identify the horizontal extent and concentration of oil and grease and PCB

contamination at the site. A total of 67 surface soil samples were collected per the MW&S Site Investigation Work Plan (October 1987) and analyzed for oil and grease and PCBs (see Table 1). The sampling strategy focused on areas exhibiting discoloration and/or staining of the soil. Samples were collected approximately every 15 feet on both the north-south and east-west traverse lines (Figures 3 & 4). The locations of the traverses were surveyed with respect to an on-site datum. At each sample location, a representative sample was collected between 0 and 6 inches below the ground surface. Seven samples were collected in isolated stained areas and thus are not on the traverse lines. Also included in the 67 sampling locations were 7 samples from non-stained areas of the site.

Fill material had been placed over some work areas. Therefore, eight samples of the total 67 samples were collected at a depth of 6 to 12 inches which was the top 6 inches of the native soil. These deeper samples were taken where visually clean soil was encountered during the collection of the 0 to 6 inch samples (Figure 4). At these locations, the 0 to 6 inch sample was not collected; only the 6 to 12 inch sample was collected and analyzed.

One sample (Line 1-270') of the 67 total was analyzed per Contract Laboratory Protocols (CLP) for NYSDEC Hazardous Substance List (HSL) metals, cyanide, and organics (see Table 1). The location of this sample was agreed upon in the field by a representative of the NYSDEC.

For quality assurance/quality control purposes, six of the 67 samples were duplicates, six were for matrix spike analysis and one was

a trip blank. Chain-of-custody procedures were followed during sample collection.

A laboratory report was generated that contains analytical results for oil and grease and PCBs that were in the soil samples (Appendix A). The laboratory report also includes the analytical results for the HSL sample.

2.04 Test Borings

Four test borings were drilled on the site by the subcontractor, Parratt-Wolff, Inc. to characterize and assess contamination in the subsurface soil. An O'Brien & Gere hydrogeologist was present during drilling to maintain boring logs and collect soil samples. One soil boring was placed north of the work area north of the quarry pond area. The other three borings were installed in the immediate vicinity of the work area north of the quarry pond to evaluate the vertical extent of soil contamination (see Figure 5). The locations were agreed to in the field by a representative of the NYSDEC. A laboratory report was generated that contains analytical results for the NYSDEC HSL parameters (Appendix A).

Hollow stem auger drilling techniques were used for the test borings. Soil samples were collected continuously to the top of bedrock using the Standard Split Barrel Sampling Method (ASTM D 1586-84). Geologic classification of the split-spoon samples was performed and boring logs maintained by the supervising field hydrogeologist (see Appendix B). Split-spoons were decontaminated between samples using a soap and water wash followed by a potable water rinse and a methanol rinse. Drilling equipment was decontaminated between borings by steam

cleaning. Boring and decontamination spoils were discarded on-site at each boring location. Sufficient water (3 ft or greater) was not found in Boring B-2, therefore per the approved work plan, the boring was not converted to an overburden monitoring well. Borings were backfilled with a bentonite grout.

Two split spoon samples from each boring were analyzed for the reduced NYSDEC Hazardous Substance List compounds which included PCBs, metals and volatile organics (Table 1). One split spoon sample from Boring B-2 (6 to 8 ft) was analyzed for NYSDEC HSL parameters. The selection of this sample was agreed to in the field by a representative from the NYSDEC. One sample collected was the first visually clean sample encountered in the boring. The second sample collected was the soil sample at the bedrock interface. However, at Boring B-4, insufficient soil was collected in the 2 to 4 feet split spoon sample, therefore, a composite of the 2 to 4 feet and 4 to 6 feet samples was collected for analysis as the first visually clean sample. Boring B-1, the upgradient boring, had only 3.3 feet of overburden to bedrock, therefore, only one sample, 0 to 3.3 feet, was collected for analysis as both the first visually clean soil sample and the bedrock interface soil sample. These modifications were agreed to by the NYSDEC field representative. One duplicate sample, one matrix spike, and one trip blank were analyzed for QA/QC purposes.

Three split-spoon samples were selected that are representative of subsurface lithologies. The samples selected were Boring B-1, 0 to 3.3 feet, Boring B-2, 6 to 8 feet, and Boring B-4, 2 to 4 feet. These samples were analyzed for grain size, Atterburg limits, and moisture content (Appendix C).

2.05 Ground Water Monitoring and Sampling

Four monitoring wells, 1 upgradient and 3 downgradient, were installed as directed by a hydrogeologist, to determine ground water flow direction and ground water impact, if any (Figure 6).

Monitoring well MW-1 was installed at the location of Boring B-1. Three wells were installed in the anticipated downgradient direction along the south side of the M. Wallace and Son, Inc. property (on the south side of Rt. 10) (Figure 6) per the Work Plan. Specific monitoring well locations were agreed to in the field by a representative of the NYSDEC. These three wells and the upgradient well were installed 10 feet into the first encountered bedrock ground water. Monitoring well MW-1 was installed, at the location of Boring B-1, to a depth of 35.9 feet. MW-2 was installed to a depth of 34.5 feet, MW-3 to a depth of 25.5 feet and MW-4 to a depth of 34.5 feet. The well depths varied because the depth to the first encountered bedrock ground water varied.

Per the approved site investigation Work Plan, the wells were completed as open rock wells, 3 inch nominal diameter. A 4 inch steel locking casing was cemented a minimum of 2 feet into the bedrock. Drilling equipment was decontaminated between wells by steam cleaning. Each monitoring well was developed by bailing to assure the collection of representative samples. This procedure was continued until each well yielded relatively sediment-free water.

All monitoring wells were surveyed, by a New York State licensed surveyor for elevation, to 0.01 feet, and location with respect to an on-site datum. Ground water elevations in each well were measured to

determine ground water flow direction. The elevation of the quarry pond was also measured when ground water elevations were measured (Table 2).

In-situ hydraulic conductivity tests were conducted on the monitoring wells using positive or negative displacement. For the positive displacement method, a teflon rod was placed into the well. The water level within the well was measured prior to the insertion of the rod and measured at predesignated intervals after insertion. The recorded data was analyzed using Hvorslev's Method (Appendix D). The hydraulic conductivity tests for MW-3 and MW-4 were performed using the positive displacement method.

For the negative displacement method, water was bailed out of the well. The water level within the well was measured prior to the removal of the water and measured at predesignated intervals after removal. The hydraulic conductivity tests for MW-1 and MW-2 were performed using this method.

A ground water sample was collected from each monitoring well in accordance with the Work Plan. A dedicated stainless steel bailer was used for each well. Ground water sampling logs are in Appendix E.

Two (2) seep samples were to be collected from the northern quarry wall to evaluate ground water quality. No quarry seep samples were collected during the sampling event since no seeps were actively flowing. The decision not to collect seep samples was concurred with in the field by the NYSDEC representative. A subsequent conversation with Sue McCormick of the NYSDEC resulted in an agreement, documented in a letter dated November 3, 1989, that no quarry seep samples would be collected during the site investigation.

The ground water samples were analyzed for reduced NYSDEC Hazardous Substances List (HSL) parameters which included PCBs, volatile organics, semi-volatile organics and metals. In addition, one ground water sample (MW-3) was analyzed for full NYSDEC HSL parameters. The selection of this sample was agreed to in the field by a representative from the NYSDEC. Analytical methods used are listed on Table 1. A total of one duplicate sample, one matrix spike, and one trip blank were also analyzed for QA/QC purposes. A laboratory report was generated that contains analytical data for the ground water samples. NYSDEC HSL parameters are also included (Appendix A).

2.06 Surface Water and Sediment Sampling

Two surface water samples from the on-site quarry pond and two water samples from the quarry outflow ditch were collected using the procedures in the approved Site Investigation Work Plan to characterize the surface water in the on-site quarry and drainage stream. Sample locations are shown on Figure 7. Each water sample was analyzed for reduced NYSDEC Hazardous Substances List (HSL) parameters which included PCBs, volatile organics, semi-volatile organics and metals. One surface water sample (W-1) was analyzed for NYSDEC HSL parameters. The selection of this sample was agreed upon in the field by a representative from the NYSDEC. Analytical methods used are listed on Table 1.

Sediment samples were collected from four different locations in the on-site quarry pond. Sediment sample locations are shown on Figure 7. The sediment samples were collected from 0 to 12 inches below the bottom. These samples were not composited by the laboratory as the

Work Plan had specified so four discrete samples were analyzed rather than two composite samples. Two sediment samples were also collected from the quarry outflow stream (Figure 7). Five of the six sediment samples were analyzed for PCBs and metals. One sediment sample (SED-3) was analyzed for NYSDEC HSL parameters. The selection of this sample was agreed to in the field by a representative from the NYSDEC.

The detection limit for PCBs was 0.1 ppm. Proper collection procedures and chain-of-custody were maintained per the Work Plan during the sampling event. A laboratory report was generated that contains the analytical results for NYSDEC HSL parameters in the surface water and sediment samples (Appendix A).

SECTION 3 - SUMMARY OF FIELD INVESTIGATION RESULTS

3.01 Geology

3.01.01 Soils

Soils in the vicinity of the site consist of the well drained to moderately well drained Schoharie and Hudson series soils and the somewhat poorly drained Odessa and Rhinebeck series soils. All the soil series are silt loams developed in red and gray calcareous glacio-lacustrine silt and clays on gently sloping terrain (USDA-SCS, 1969). Soils on-site have probably been reworked or covered over due to the nature of past and present activities.

3.01.02 Unconsolidated Material

A thin veneer of glaciolacustrine silt and clay underlies the surface. This material formed during the recession of the ice sheets which once covered the area. The valleys draining the glacial meltwater would become blocked by ice or other material and a glacial lake would form behind the dam. As the water entering the lake calmed, fine sediments would fall out of suspension in the water and deposit beds of silt and clay (USDA-SCS, 1969). Visual observation and grain size analyses conducted on soils from the soil boring task indicate the site is underlain by glaciolacustrine silt and clays. This layer is 3.3 ft. thick at B-1, the upgradient soil boring, thickening to 18 ft. at MW-4, a downgradient monitoring well.

3.01.03 Bedrock

The bedrock in the region is chiefly carbonate rock of the Lower to Middle Devonian. The bedrock dips 100 to 135 ft. per mile to the south-southwest (USDA-SCS, 1969).

Based upon cores collected during the installation of the monitoring wells the bedrock directly underlies the silts and clays, and is composed of a light to medium gray limestone containing chert, rugose coral, brachiopod and bioherm fossils. Data from geologic maps indicate the bedrock is the Onondaga Limestone of Lower to Middle Devonian age (Fisher, et. al., 1970).

3.02 Hydrogeology

Ground water in the area is found primarily in the bedrock. The water in the bedrock occurs in fractures, bedding planes and joints. Many of these features could be solutionally enlarged due to the action of acidic water on the limestone, creating highly permeable ground water zones. Yields can vary depending on the number and size of conduits found in the limestone. Ground water in the bedrock flows to the south-southeast (Figure 8). Ground water from upgradient enters the site from the north-northwest, flows beneath the work area north of the quarry pond and enters the quarry pond through fractures in the quarry wall and floor. The quarry pond acts as a ground water discharge boundary with most of the shallow site ground water entering the pond exiting as surface water. Some ground water flows to the south in the area of the downgradient monitoring wells.

The bedrock monitoring wells installed during the site investigation have hydraulic conductivities ranging from 1.7×10^{-5} ft/sec (11 gpd/ft^2) at MW-3 to 1.5×10^{-8} ft/sec (9.7×10^{-3} gpd/ft^2) at MW-1. These values are close to published values of hydraulic conductivity for limestone of 10 gpd/ft^2 to 1×10^{-3} gpd/ft^2 (Freeze and Cherry, 1979). The variability depends on the degree of fracturing and solutional enlargement in the limestone.

Little or no water was encountered during soil boring advancement in the glaciolacustrine overburden

3.03 Air Monitoring Analyses

Results of the air monitoring indicate that PCB and total particulates were not detected. The laboratory detection limits were 0.001 mg/m^3 for PCBs and 0.1 mg/m^3 for total particulates. In addition, PID testing at the site during various tasks indicated no readings above background (<1 ppm).

3.04 Surface and Near-Surface Soil Analyses

Soil samples were submitted for laboratory analyses of PCB and Oil and Grease. Of the 67 total samples submitted for laboratory analysis, six were duplicates, six were for matrix spike quality assurance/quality control and one was a trip blank. Therefore, at 54 locations, surface and near-surface soil samples were collected at the site. Seven samples were collected in isolated stained areas. Seven samples were collected in isolated unstained areas and eight samples were collected from 6 to 12 inches which was the top 6 inches of native material (See Figures 3 and 4).

3.04.01 Oil and Grease Analyses

Concentrations of oil and grease was detected in each of the surface and near-surface soil samples collected at the site. Concentrations ranged from 130 ppm at sample site #22 to 120,000 ppm at Line 7-15' S (See Figures 9 and 10). Table 3 summarizes the surface soil oil and grease results. The highest concentrations of oil and grease were in areas that exhibited staining of the soil. Non-stained areas had concentrations of oil and grease ranging from 130 ppm to 17,000 ppm. The high values of oil and grease at non-stained sites #23, #24, and #25 were probably due to their proximity to the public roads near the site. Soil samples collected from 6 to 12 inches exhibited lower concentrations of oil and grease than the surface soil samples collected from 0 to 6 inches.

3.04.02 PCB Analyses

PCB concentrations in the surface and near-surface soil samples ranged in concentration from not detected at several sampling locations to 2100 ppm at Line 7-12' N. (See Figures 9 and 11). Arochlors detected included 1248, 1260 and 1254. Table 3 summarizes the surface soil PCB results.

Highest concentrations of PCBs were observed in the vicinity of areas that exhibited staining of the soil. Non-stained areas had lower concentrations of PCBs than stained areas, ranging from non-detectable to 6.4 ppm. Soil samples collected from 6 to 12 inches below the surface also had lower concentrations of PCBs than the stained surface samples. In comparing PCB concentrations to oil and grease concentrations, both have the highest

levels in the vicinity of the work area north of the quarry pond.

3.04.03 HSL Parameters

Three soil samples for Hazardous Substance List analyses were collected at the MW&S site. Two samples, WS-1 and WS-2, were collected during the initial phase of the site investigation work and were used to determine the reduced HSL list. The third sample was collected at Line 1-270 ft. at a depth of 6 to 12 inches. Results are summarized on Tables 3, 4, 5 and 6.

HSL parameters detected include PCB-1016/1242, PCB-1248, PCB-1260, PCB-1254. HSL PCB concentrations were within the range of PCB concentrations for non-HSL soil samples indicating that the non-HSL analytical method provides an acceptable means for evaluating PCB concentrations in the soil. Volatile organics and semi-volatile organics (phthalates and polynuclear aromatic hydrocarbons) were detected during the initial soil sampling event (WS-1 and WS-2). These compounds were not detected in the HSL surface soil sample collected at Line 1-270'. Metals analyses indicate that the trace metals in sample Line 1-270' were within the typical range of concentrations for trace metals in soils (Table 4). HSL metal concentrations in samples WS-1 and WS-2 were within the typical ranges for metals in soils except for arsenic, cadmium, copper, lead and zinc (Table 4). Pesticides and cyanide were not detected in any of the HSL soil samples.

3.05 Subsurface Soil Analyses

Four soil borings were completed to the top of bedrock at the site. One upgradient boring, B-1, was completed to a depth of 3.3 feet and three downgradient borings in the immediate vicinity of the work area north of the quarry pond, B-2, B-3 and B-4, completed to a depth of 8.2 feet, 6.7 feet and 7.2 feet, respectively (Figure 5). Two soil samples were collected from each boring with the exception of B-1 due to the shallow depth to bedrock. Soil samples collected were analyzed for PCBs, metals and volatile organics. One sample, boring B-2, 6-8', was analyzed for full NYSDEC HSL parameters.

3.05.01 PCB Analyses

PCBs in the subsurface soil samples ranged in concentration from 0.25 ppm at boring B-3, 2 to 4 ft. to 6.6 ppm at boring B-3, 6 to 8 ft. Arochlors detected were 1248 and 1260. PCB results are summarized on Table 5. The concentrations of PCBs are less in the subsurface samples than the surface soil PCB concentrations. In borings B-2, B-3 and B-4, concentrations of PCB are higher at the overburden/bedrock interface than at the first visually clean sample.

3.05.02 Metals

Metals analyses revealed the presence of arsenic, barium, chromium, lead and zinc in each of the samples. Results are summarized on Table 4. Boring B-1 contained the highest concentrations of detected metals except for chromium, which was highest in boring B-2, 6 to 8 feet. The concentration of lead in soil

sample B-1 0-3.3' at 240 mg/kg was the only metal detected in the subsurface soil samples that exceeded the typical range for lead in soils. The other subsurface soil samples revealed metal concentrations within the typical range for soils.

3.05.03 Volatile Organics

Volatile organics were not detected in any subsurface soil samples.

3.05.04 HSL Parameters

A soil sample was collected for NYSDEC HSL analyses at boring B-2, 6-8'. The NYSDEC field representative agreed to the selection of this sample. HSL parameters detected include PCB-1248 at 0.47 ppm, PCB-1260 at 0.53 ppm and HSL metals with the exception of antimony, beryllium, cadmium, cobalt, mercury, selenium, silver and thallium. PCB concentrations were within the range of concentrations of PCB detected in the non-HSL subsurface samples. Metal concentrations are within the typical range for North American soils. Bis (2-ethylhexyl) phthalate was also detected at a concentration of 880 ppb. Volatile organics, pesticides and cyanide were not detected. Results are summarized on Tables 4, 5 and 6.

3.06 Ground Water Analyses

Ground water samples were collected on a single occasion from each of the four monitoring wells installed. One well is located upgradient of the work area north of the quarry pond and three are located downgradient of the quarry pond on the south side of NY Route 10 (Figure 6).

The well locations were agreed to by the NYSDEC field representative Water samples collected from the monitoring wells were analyzed for PCBs, unfiltered metals, volatile organics, and semi-volatile organics. One sample, from monitoring well MW-3, was analyzed for NYSDEC HSL parameters. The ground water samples from the monitoring wells all had some turbidity and were not filtered for PCB or metal analyses.

3.06.01 PCB Analyses

PCBs were not detected (detection limit of 0.065 ppb) in any of the three downgradient wells. PCB-1260 was detected at a concentration of 1.5 ppb in the upgradient well, MW-1. This value is above the NYS Class GA standard of 0.1 ppb for ground water. Table 5 summarizes the PCB concentrations.

3.06.02 Total Metals

Lead at 0.22 ppm was detected in MW-1. This above the NYS Class GA standard of 0.025 ppm for ground water. Zinc concentrations ranged from 0.02 ppm at MW-4 to 0.14 ppm at MW-1. These values were below the NYS Class GA standard of 5 ppm. Total metal analyses for ground water is summarized on Table 7. Monitoring well MW-1, the upgradient well, had higher concentrations of lead and zinc than the downgradient wells.

3.06.03 Organics Analyses

Table 6 summarizes the volatile and semi-volatile organic compounds in the ground water samples. Chloroform was detected at a level of 2 ppb in MW-1, which is below the NYS Class GA

standard of 100 ppb. Bis(2-ethylhexyl) phthalate was detected at 16 ppb in MW-4. This is below the NYS Class GA guidance value of 4200 ppb in ground water. No other volatile or semi-volatile organics were detected.

3.06.04 HSL Parameters

A ground water sample was collected from MW-3 for HSL analyses. Table 7 summarizes the analyses. Total metals were the only parameters detected. Iron was detected at 18 ppm which is above the NYS Class GA standard of 0.3 ppm. Manganese was detected at 1.1 ppm which is also above NYS Class GA standard of 0.3 ppm for ground water. Other metals detected were aluminum, barium, calcium, lead, magnesium,sodium and zinc. The concentration of these metals is either below the NYS Class GA standards or there are no standards established. No volatile, semi-volatile organics or cyanide were detected.

3.07 Surface Water Analyses

Four surface water samples were collected for laboratory analyses. Two samples were collected from the quarry pond and two were collected from the quarry pond outflow stream (Figure 7). Three of the samples were analyzed for PCBs, metals, volatile organics and semi-volatile organics. One water sample taken at W-1 was analyzed for full NYSDEC HSL parameters.

3.07.01 PCB Analyses

PCBs ranged in concentration from 0.12 ppb at W-3 to 0.72 ppb at W-4. The concentration of PCBs in the surface water samples was above the NYS Class A standard of 0.01 ppb for surface water. The arochlors detected were 1248 and 1260.

3.07.02 Metals

Zinc was the only metal detected in the surface water samples. Concentrations ranged from 0.01 to 0.03 ppm which are below the NYS Class A standard of 0.3 ppm for surface water. Table 7 summarizes the metal analyses.

3.07.03 Organics Analyses

Volatile and semi-volatile organics were not detected in the surface water samples.

3.07.04 HSL Parameters

A surface water sample was collected at W-1 for NYSDEC HSL analyses. Tables 5 and 7 summarize the HSL analyses. HSL parameters detected include PCB-1248 and PCB-1260 at a concentration of 0.39 ppb which is above the NYS Class A standard of 0.01 ppb for surface water. Metals that were detected include calcium, magnesium, manganese, sodium and zinc. Magnesium, manganese and zinc were all detected at levels below NYS Class A standards. Calcium and sodium do not have standards or guidance values. Volatile and semi-volatile organics and cyanide were not detected in the sample.

3.08 Sediment Analyses

Six sediment samples were collected at the site. Four samples, SED-1, SED-2, SED-3 and SED-4, were collected, using a sediment sampler and rowboat, from the bottom of the quarry pond. Two other sediment samples, SED-5 and SED-6 were collected from the quarry outflow stream (Figure 7). Five of the samples were analyzed for PCBs and metals. One sample, SED-3 from the quarry pond was analyzed for NYSDEC HSL parameters.

3.08.01 PCB Analyses

Table 5 summarizes the PCB analyses for the sediment samples. PCB concentrations ranged from 3.8 ppm in SED-1 to 28 ppm in SED-5. Arochlors detected were 1248, 1254, and 1260. The highest concentration of PCB was in the stream sediment at the outflow of the quarry pond (SED-5).

3.08.02 Metals

Metals detected include arsenic, chromium, lead and zinc. Table 7 summarizes the metal analyses. Lead and zinc concentrations were highest in the sediment at the outflow of the quarry pond (SED-5). Arsenic and chromium concentrations were highest in the sediment in the quarry pond at location SED-2.

3.08.03 HSL Parameters

A sediment sample was collected at SED-3 in the quarry pond for NYSDEC HSL analyses. Table 5, 6 and 7 summarize the HSL analyses. PCB-1254 was detected and estimated at 0.23 ppm which

is below the detection limit of 6.4 ppm for this sample. HSL metals were detected excluding antimony, cadmium, cobalt, mercury, potassium, selenium and thallium. Methylene chloride was detected at 54 ppb and acetone was detected at 150 ppb. These organic compounds were detected at the same concentration in the trip blank which indicates sample contamination in the field or in the laboratory. Pesticides and cyanide were not detected in sample SED-3.

SECTION 4 - DISCUSSION OF RESULTS AND INTERPRETATION

4.01 Air Monitoring

Short term air monitoring using an photoionization detector and long term air monitoring using sampling pumps indicate there were no detectable airborne releases of PCB's or volatile organic compounds or dust from the site during the field investigation. Since field investigation, activities were occurring on the site during the air monitoring, detectable airborne releases would not be expected at other times when no activities occur on the site.

4.02 Surface, Near-Surface and Subsurface Soils

Analyses of the soils indicate there are detectable levels of oil and grease at the site with highest concentrations in stained areas. Figure 9 shows the concentration of oil and grease in the isolated soil samples. Figure 10 shows the concentration and contours in the stained work area north of the quarry pond. High concentrations of oil and grease in non-stained sites #23, #24, and #25 are probably due to their proximity to the public roads near the site. Precipitation events can also mobilize oil and grease and transport it across the site.

PCBs at detectable levels were highest at areas where scrap operations were conducted. PCBs at concentrations of 50 ppm or greater were present in soils proximate to the work area north of the quarry pond. Figure 11 illustrates the concentration of PCB and delineates the area of 10 ppm and 50 ppm concentration or greater. The PCB concentrations outside the work area north of the quarry pond were generally low - less than 6.4 ppm. This is also true of PCB concentrations below

the upper 1 foot of soil. The highest concentration of PCBs in the subsurface soil samples was 6.6 ppm. Since the soil borings were placed in the immediate vicinity of the work area, the lower concentrations of PCBs indicate vertical migration of PCBs below 1 foot is limited. PCB concentrations in the soils 6 to 12 inches below the surface ranged from nondetectable to 32 ppm. This indicates that vertical migration of PCBs through the top 6 inches of soil is also limited.

The surface area of soil with PCB concentrations of 50 ppm or greater is approximately 1125 square yards (Figure 11). This area also includes the area surrounding soil samples #18, #19 and #20 which are isolated stained areas just to the north of the stained work area.

The surface area of soil with PCB concentrations of 10 ppm or greater is estimated at 2100 square yards. Based on the subsurface soil samples which indicate PCB concentrations of less than 10 ppm, a depth estimate of soil with a PCB concentrations of 10 ppm or greater is 1 foot. Therefore, a conservative estimate of the volume of soils with a PCB concentration of 10 ppm or greater is 700 cubic yards.

4.03 Ground Water

The only monitoring well that appears to exhibit elevated concentrations of contaminant indicators at this time is the upgradient well MW-1. MW-1 contains lead and PCBs at concentrations greater than NYS Class GA standards for ground water.

Based on the analytical results, three possible explanations for the elevated readings in MW-1 are:

1. The well was not placed far enough upgradient from the work area or other sources of contamination to accurately represent upgradient ground water quality.
2. There is an upgradient source of PCBs in the ground water.
3. The sediment entrained in the ground water sample contains PCBs and lead and the analytical results do not accurately represent dissolved ground water quality.

Ground water flowing beneath the work area north of the quarry pond probably enters the quarry pond through the fractures in the bottom and sides. This ground water could contain contaminants either in solution or as suspended colloid particles in the ground water as flow occurs through bedrock fractures where particles could be transported. This could in turn affect the surface water and sediment chemistry in the quarry pond and discharge stream.

The ground water quality at downgradient wells, MW-2, MW-3 and MW-4, apparently has not been affected with concentrations of substances which would likely be indicators of the site. The probable reason PCBs were not detected is because they are not very soluble in water but readily adhere to soil particles, and oil and grease. The quarry pond is a principle discharge boundary for the ground water flowing beneath the site. Ground water, containing contaminants, upgradient of the quarry pond enters the pond through fractures in the bedrock and then exits via the quarry pond discharge stream.

4.04 Surface Water and Sediments

PCBs are present in the quarry pond water and sediments, the discharge stream water and in the discharge stream sediments. As discussed previously (Section 4.03), PCBs tend to adsorb to soil particles and oil and grease which can be mobilized in the surface water. This mechanism is the probable explanation of higher concentrations of PCB in the outflow stream sediment. The water in the stream is flowing at a higher velocity than water in the pond. This causes more turbulent flow which suspends a greater amount of soil particles with PCBs adhering to them. The sediments in the stream and pond are soil particles, some with PCBs adhering to them, that have fallen out of suspension in the water.

4.05 Contaminant Transport Mechanism

The common transport mechanism for PCBs is adsorption to a soil particle which can then be mobilized via air, surface water or ground water flow Limited solubility of PCBs in water can occur and therefore PCB transport as a dissolved constituent in surface water and/or ground water can occur. Mobilization of oil and grease or organic compounds with PCB adsorbed to them can also transport PCBs.

Based on the analytical results, contaminant transport by surface water flow is the most probable transport mechanism for PCBs on the site. Surface water samples from the quarry pond and stream detected PCBs. Limited contaminant transport by ground water flow into the quarry pond may be suggested by the analytical results from well MW-1. This data should be confirmed.

Oil and grease also appears to be transported in the same manner by surface water on the site.

Based on the air sampling results, transport of PCBs by air does not appear to be a probable transport mechanism at the site. The soils at the site are fairly cohesive and, due to the oil and grease in the more contaminated areas, are not mobilized by air currents.

4.06 PCB Remediation Technologies

PCBs have been observed at the Wallace & Sons Site (Site) in soil,sediment, and surface water. The following presents an overview of remedial technologies which may be suitable for managing the contaminated media at the site.

4.06.01 Soil

Soil contaminated with PCBs can be remediated by a number of technologies. The type of technology used is often predicated by the volume of soil which requires remediation. On-site treatment technologies are generally used in situations where large volumes of highly contaminated soils are present, whereas off-site treatment or containment are the remedial methods of choice when smaller volume of soil with relatively low levels of contamination are present. The latter situation appears to be the case at the Site.

Typically, PCB-contaminated soils such as those observed at the Site are excavated using standard construction techniques and either incinerated or disposed in a properly designed landfill. Incineration involves the permanent destruction of PCBs in a high temperature vessel. Landfilling involves placement of the soils in a landfill designed to contain PCB-contaminated materials. Either of these methods could be readily implemented at the Site.

Other technologies which could potentially be applicable for soils at the Site include the following:

- vitrification
- chemical extraction
- soil washing
- stabilization/solidification
- biodegradation
- glycolate dechlorination

These technologies are treatment technologies which can be used to reduce the toxicity, mobility, or volume of PCBs in the soil.

4.06.02 Sediment

Sediments in the quarry pond which have been contaminated with PCBs could be managed similarly to the soils. The sediments could be removed from the pond and incinerated, landfilled, or treated using the same technology as that for the soil. If the sediments were to be landfilled, they would require dewatering prior to landfilling. The sediments could be removed from the quarry using hydraulic dredging techniques, although the effectiveness of hydraulic dredging may be reduced by the conditions of the bottom of the quarry. Spoils from the dredging operation would require special handling and space. Lack of spoils storage space may preclude the removal of the sediments from the quarry.

The sediments could also be immobilized in place by adding activated carbon to treat the water in the quarry pond. This is discussed below.

4.06.03 Surface Water

PCBs have been observed in the water in the quarry pond. Carbon adsorption is the treatment technology of choice for removal of PCBs from water. Activated carbon filters could be used to treat the water as it leaves the quarry pond through the drainage channel. Alternatively, powdered or granular activated carbon could be added to the pond. As the carbon settles, PCBs in the water column would adsorb to the carbon. The carbon could also be expected to bind PCBs which have been observed in the sediment, making them immobile.

SECTION 5 - SUMMARY

5.01 Conclusions

The following presents conclusions regarding the site conditions at M. Wallace and Son, Inc. Scrapyard. These conclusions are based on data collected during the site investigation completed at the site.

- Visual observation and grain size analyses of the subsurface soils indicate they consist primarily of silt and clay. These deposits are glaciolacustrine in origin and known to range at least 3.3 to 18 feet in thickness at the site.
- The bedrock underlying the glaciolacustrine deposits is gray Onondaga Limestone from the Lower to Middle Devonian. Fractures, bedding planes and joints control ground water movement.
- Soils at the site were found to contain oil and grease and PCBs. Highest concentrations were found in the work area north of the quarry pond.
- Concentrations of PCBs in soils beneath the top 12 inches of soil are lower, below 10 ppm, than the concentrations of PCB in the top 12 inches of soil.
- An estimated 700 cubic yards of soil have PCB concentrations of 10 parts per million (ppm) or greater.
- The surface water in the quarry pond and outflow stream contain concentrations of PCBs ranging from 0.12 ppb to 0.72 ppb.

- Sediment samples from the quarry pond and outflow stream contain PCB at concentrations ranging from 3.8 ppm to 28 ppm.
- The upgradient ground water monitoring well contains lead at 0.22 ppm and PCB at 1.5 ppb.
- Analytical data for downgradient ground water monitoring wells indicate the parameters tested for are below NYS Class GA standards and guidelines for ground water. No PCBs were detected.
- Hydraulic conductivity tests conducted on the monitoring wells indicate hydraulic conductivity values ranging from 1.7×10^{-5} ft/sec (11 gpd/ft^2) to 1.5×10^{-8} ft/sec (9.7×10^{-3} gpd/ft^2). Ground water in the bedrock is flowing to the south-southwest.
- The quarry pond appears to be part of the ground water system. Ground water flows into the pond through fractures in the sides and bottom of the quarry and exits via the outflow stream and possibly fractures on the downgradient (south) side of the quarry.

5.02 Recommendations

The following presents recommendations regarding the M. Wallace and Son, Inc. Scrapyard.

1. Ground water samples should be periodically collected to confirm previous analytical results and monitor the site ground water quality.

2. Pending soil removal, access to portions of the site should be further controlled to prevent people from coming into direct contact with compounds found at the site.
3. Access to the quarry pond should be further controlled.
4. Soils with PCB concentrations in excess of 10 ppm should be excavated and removed from the site. Off-site soil treatment or disposal options should be evaluated.
5. On-site stream sediments with PCB concentrations in excess of 10 ppm should be excavated and removed from the site. Off-site treatment or disposal options should be evaluated.
6. Surface water discharge from the quarry pond should be treated for PCBs prior to surface water discharge off-site. The surface water quality and treatment system performance should be periodically monitored.

REFERENCES

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TABLE 1
ANALYTICAL METHODS FOR SAMPLES
M. WALLACE & SON, INC. SCRAPYARD
COBLESKILL, NEW YORK

Sample Matrix	Analysis	USEPA Analytical Method (USEPA, 1982a)
Soil	Oil and Grease	9070
	PCBs (detection limit of 5 ppm)	8080
	NYSDEC HSL	8080, 6000 & 7000 Series 9010, 8240, 8270
Surface Water and Ground Water	PCBs	608
	Purgeables	601 & 602
	Base Neutrals	625
	Metals (As, Ba, Cd, Cr, Pb, Hg, Ag, Zn)	200 Series
	NYSDEC HSL	608, 624, 625, 200 Series, 335
Subsurface Soil	PCBs	8080
	Metals (As, Ba, Cd, Cr, Pb, (Hg, Ag, Zn)	7000 Series
	Purgeables	8010 & 8020
	NYSDEC HSL	8080, 6000 & 7000 Series, 9010, 8240, 8270
Sediment	PCBs	8080
	Metals (As, Ba, Cd, Cr, Pb, (Hg, Ag, Zn)	7000 Series
	NYSDEC HSL	8080, 6000 & 7000 Series, 9010, 8240, 8270

Note: #1: Methodology in NYSDOH "Analytical Handbook" (1980) will be used.

TABLE 2

GROUND WATER ELEVATIONS
11/19/89
DATUM USED: 400 FT.

M. WALLACE & SON, INC. SCRAPYARD
COBLESKILL, NEW YORK

	Ground Elevation	Casing Elevations	Elevation of Bottom of Well	Depth to Water	Ground Water Elevation
Pond	NA	NA	NA	NA	394.51*
MW-1	436.5	438.59	400.6	23.54	415.05
MW-2	397.7	399.36	363.7	7.18	392.18
MW-3	392.2	401.00	373.7	7.68	393.32
MW-4	397.4	39.21	363.4	5.00	394.21

All measurements in feet

*Surface of water in pond

NA - Not Applicable

TABLE 3
SURFACE AND NEAR SURFACE SOIL ANALYSES

M. WALLACE AND SON SCRAPYARD
COBLESKILL, NEW YORK

SAMPLE NO.	OIL & GREASE	PCB	AROCLOR
LINE 1-0'	10,000	39	1260
LINE 1-15'	20,000	140	1254+1260
LINE 1-30'	12,000	56	1260
LINE 1-45'	38,000	170	1260
LINE 1-60'	48,000	560	1260
LINE 1-75'	58,000	190	1260
LINE 1-90'	60,000	94	1260
LINE 1-105'	81,000	88	1260
LINE 1-120'	74,000	74	1248+1260
LINE 1-135'	44,000	92	1248+1260
LINE 1-135' (DUP1)	54,000		
LINE 1-135' (DUP2)	44,000		
LINE 1-150'	110,000	91	1248+1260
LINE 1-165'	23,000	40	1260
LINE 1-180'	42,000	56	1248+1260
LINE 1-195'	45,000	140	1248+1260
LINE 1-210'	59,000	62	1248+1260
LINE 1-225'	66,000	31	1248+1260
LINE 1-240'	78,000	35	1248+1260
LINE 1-255'	58,000	300	1248+1260
LINE 1-270'*	9,100	14	1260
LINE 1-285'	820	(0.6	-----
LINE 1-300'	840	(0.6	-----
LINE 2-15'N	22,000	97	1260/54
LINE 2-15'S	52,000	33	1260
LINE 3-15'N	11,000	54	1260
LINE 3-15'S	16,000	14	1260
LINE 4-15'N	2,300	4.0	1260
LINE 4-15'S	63,000	32	1260
LINE 4-15'S(DUP1)	62,000		
LINE 4-15'S(DUP2)	42,000		
LINE 5-15'N	63,000	51	1260
LINE 5-22'S	32,000	10	1260
LINE 5-30'S	28,000	13	1260
LINE 6-15'N	8,800	3.7	1260
LINE 6-15'N(DUP1)	7,300		
LINE 6-15'N(DUP2)	3,600		
LINE 6-15'S	66,000	91	1248+1260
LINE 6-30'S	36,000	32	1260
LINE 7-12'N	25,000	2100	1248
LINE 7-12'N(DUP1)	20,000		
LINE 7-12'N(DUP2)	28,000		
LINE 7-15'S	120,000	50	1248+1260
LINE 7-30'S	95,000	15	1254/1260
LINE 8-15'N	1,400	2.0	1260
LINE 8-15'S	26,000	50	1248+1260
LINE 8-30'S	380	15	1248+1254
LINE 8-45'S	42,000	25	1248+1260
LINE 8-45'S(DUP1)	34,000		

TABLE 3
SURFACE AND NEAR SURFACE SOIL ANALYSES

M. WALLACE AND SON SCRAPYARD
COHLESKILL, NEW YORK

SAMPLE NO.	OIL & GREASE	PCB	AROCLOR
LINE 8-45'S(DUP2)	30,000		
#16	450	4.7	1248+1260
#17	54,000	1.9	1260
#18	58,000	160	1248+1260
#19	38,000	120	1260
#20	112,000	470	1248+1260
#21	190	<0.6	------
#22	130	<0.7	------
#23	16,000	<0.6	------
#24	1,700	1.9	1260
#25	3,500	<0.5	------
#26	8,000	6.0	1260/54
#27	7,500	4.7	1248+1260
#29	420	2.2	1248+1260
#30	1,800	6.4	1248+1260
WS-1*	NA	31	1016/1242
WS-1*	NA	69	1260
WS-2*	NA	6.3	1016/1242
WS-2*	NA	39	1260

NOTES: All analytical values reported in ug/kg (ppb).
* - Identifies HSL sample.
NA - Not analyzed.
WS-1
) Initial sois samples collected/December 1987.
WS-2

TABLE 4
METALS ANALYSIS FOR SOILS

M. WALLACE AND SON SCRAPYARD
COBLESKILL, NEW YORK

BORING NO. / DEPTH (FT)	TYPICAL RANGE OF CONCENTRATION IN SOILS (1)	B-1 0-3.3'	B-1 0-3.3(DUP)	B-2 2-4'	B-2* 6-8'	B-3 2-4'	B-3 6-8'	B-4 2-4'	B-4 6-8'	LINE 1 270'*	WS-1*	WS-2*
ALUMINUM	--- - ---	NA	NA	NA	17,000	NA	NA	NA	NA	18,000	4,110	10,200
ANTIMONY	--- - ---	NA	NA	NA	(12	NA	NA	NA	NA	(6	(6	(6
ARSENIC	0.1 - 40	8.3	8.2	7.5	7.8	7.9	4	4.5	5.3	9	10	99.6
BARIUM	--- - ---	190	210	150	110	77	50	51	67	130	119	1,370
BERYLLIUM	--- - ---	NA	NA	NA	(2.4	NA	NA	NA	NA	(1.2	0.77	0.85
CADMIUM	0.01 - 7	(1.2	(1.2	(1.3	(2.4	(1.2	(5.6	(2.2	(2.3	(1.2	6.6	71.6
CALCIUM	--- - ---	NA	NA	NA	67,000	NA	NA	NA	NA	11,000	198,000	32,500
CHROMIUM	5 - 3,000	29	34	27	47	18	18	12	16	26	161	81.2
COBALT	1 - 40	NA	NA	NA	(12	NA	NA	NA	NA	9.4	12.3	7.5
COPPER	2 - 100	NA	NA	NA	26	NA	NA	NA	NA	66	4,600	2,940
IRON	--- - ---	NA	NA	NA	23,000	NA	NA	NA	NA	26,000	24,400	86,100
LEAD	2 - 200	240	130	27	41	16	62	11	95	110	682	8,860
MAGNESIUM	--- - ---	NA	NA	NA	4,400	NA	NA	NA	NA	4,300	4,880	4,240
MANGANESE	100 - 4,000	NA	NA	NA	560	NA	NA	NA	NA	570	461	617
MERCURY	--- - ---	(0.5	(0.5	(0.5	(0.5	(0.5	(0.5	(0.5	(0.5	(0.5	0.4	1.9
NICKEL	10 - 1,000	NA	NA	NA	45	NA	NA	NA	NA	31	147	(4
POTASSIUM	--- - ---	NA	NA	NA	3,100	NA	NA	NA	NA	2,500	(500	(500
SELENIUM	0.1 - 2.0	NA	NA	NA	(6	NA	NA	NA	NA	(6.0	0.5	0.5
SILVER	--- - ---	(1.2	(1.2	(1.3	(2.4	(1.2	(5.6	(2.2	(2.3	(1.2	4.2	8.4
SODIUM	--- - ---	NA	NA	NA	250	NA	NA	NA	NA	130	(500	(500
THALLIUM	--- - ---	NA	NA	NA	(1.2	NA	NA	NA	NA	(1.2	5.6	14.2
VANADIUM	20 - 500	NA	NA	NA	35	NA	NA	NA	NA	37	25.6	16.6
ZINC	10 - 300	130	100	82	83	82	99	49	170	160	734	3,840

NOTES:

All analytical values measured in mg/kg.
* - Identifies HSL sample.
NA - Not analyzed.
(1) - Typical ranges of concentration for trace metals in soils from "Hazardous Waste Land Treatment," 1980, U.S. Dept. of Commerce Publication PB81 - 182107

TABLE 5
PCB ANALYSIS FOR WATER, SEDIMENTS AND SUBSURFACE SOILS

M. WALLACE AND SON SCRAPYARD
COBLESKILL, NEW YORK

SAMPLE NO.	UNITS	PCB	AROCLOR
W-1*	ug/l	0.39	1248+1260
W-2	ug/l	0.24	1248+1260
W-3	ug/l	0.12	1248+1260
W-4	ug/l	0.72	1248+1260
MW-1	ug/l	1.5	1260
MW-2	ug/l	(0.065	-------
MW-3*	ug/l	(0.065	-------
MW-4	ug/l	(0.065	-------
SED-1	mg/kg	3.8	1254/1260
SED-2	mg/kg	5.8	1248+1254/60
SED-3*	mg/kg	(6.4 (0.23)**	1254
SED-4	mg/kg	4.6	1248+1254/60
SED-5	mg/kg	28	1248+1260
SED-6	mg/kg	5.0	1248+1254/60
B-1 (0-3.3')	mg/kg	0.31	1260
B-2 (2-4')	mg/kg	0.38	1248+1260
B-2* (6-8')	mg/kg	1.0	1248+1260
B-3 (2-4')	mg/kg	0.25	1248+1260
B-3 (6-8')	mg/kg	6.6	1248+1260
B-4 (2-6')	mg/kg	1.5	1260
B-4 (6-8')	mg/kg	4.2	1248+1260

NOTES: * - Indicates HSL sample.
** - Estimated value.

TABLE 6
VOLATILE AND SEMI-VOLATILE ANALYSES

M. WALLACE AND SON SCRAPYARD
COBLESKILL, NEW YORK

	MW-1	MW-4	SED-3*	WS-1*	WS-2*	B-2* (6-8')
1-DICHLOROETHENE	(1	(1	(13	9,385	4,800	(6
XYLENES	(1	(1	(13	(625	1,580	(6
ETONE	NA	NA	150 B	(1,250	2,600 B	(12
(	NA	NA	NA	7,390 B	6,700	NA
CHLOROFORM	2	(1	(13	(625	(625	(6
THYLENE CHLORIDE	(1	(1	54 B	(1,250	(1,250	(6
PHANATHRENE	(11	(11	(8,700	15,000	(3,300	(400
NTHRACENE	(11	(11	(8,700	4,000	(3,300	(400
-N-BUTYL-PHTHALATE	(11	(11	(8,700	6,000	10,000	(400
FLUORANTHENE	(11	(11	(8,700	52,000	21,000	(400
RENE	(11	(11	(8,700	11,000	3,400	(400
BUTYL BENZYL PHTHALATE	(11	(11	(8,700	(3,300	7,000	(400
S(2-ETHYLHEXYL)PHTHALATE	(11	16	(8,700	5,800	(3,300	880
RYSENE	(11	(11	(8,700	30,000	9,000	(400
BENZO(A)ANTHRACENE	(11	(11	(8,700	23,000	7,000	(400
NZO(B)FLUORANTHENE	(11	(11	(8,700	11,000	(3,300	(400
BENZO(K)FLUORANTHENE	(11	(11	(8,700	11,000	(3,300	(400
ENZO(A)PYRENE	(11	(11	(8,700	5,000	9,100	(400
DENO(1,2,3-CD)PYRENE	(11	(11	(8,700	5,000	(3,300	(400

NOTES: All analytical values measured in (ppb).
* - Identifies HSL sample.
B - Detected in blank.
NA - Not analyzed.

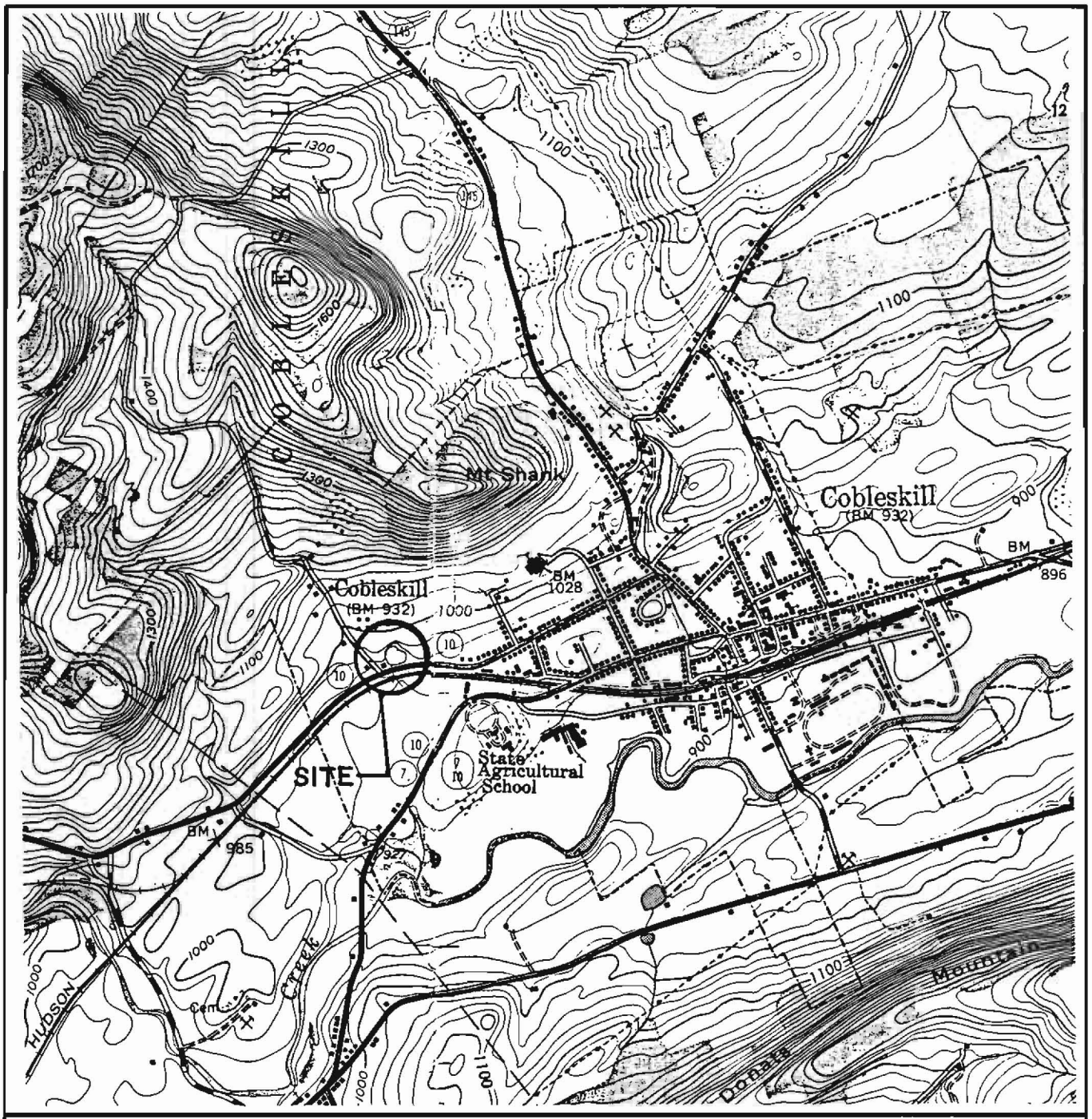
TABLE 7
METALS ANALYSIS FOR WATER AND SEDIMENT

M. WALLACE AND SON SCRAPYARD
COBLESKILL, NEW YORK

SAMPLE NO.	SED-1	SED-2	SED-3*	SED-4	SED-5	SED-6	MW-1	MW-2	MW-3*	MW-4	W-1*	W-1(DUP)	W-2	W-3	W-4
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
ALUMINUM	NA	NA	8,400	NA	NA	NA	NA	NA	5.0	NA	(0.2	NA	NA	NA	NA
ANTIMONY	NA	NA	(26	NA	NA	NA	NA	NA	(0.06	NA	(0.06	NA	NA	NA	NA
ARSENIC	6.1	8.4	3.5	3.3	5.6	2.6	(0.005	(0.005	(0.005	(0.005	(0.005	(0.005	(0.005	(0.005	(0.005
BARIUM	(180	(210	100	(230	(160	(74	(0.5	(0.5	0.3	(0.5	(0.2	(0.5	(0.5	(0.5	(0.5
BERYLLIUM	NA	NA	1.3	NA	NA	NA	NA	NA	(0.005	NA	(0.005	NA	NA	NA	NA
CADMIUM	(4	(5	(1.1	(5	(3	(2	(0.01	(0.01	(0.005	(0.01	(0.005	(0.01	(0.01	(0.01	(0.01
CALCIUM	NA	NA	140,000	NA	NA	NA	NA	NA	230	NA	100	NA	NA	NA	NA
CHROMIUM	22	31	18	19	31	13	(0.05	(0.05	0.02	(0.05	(0.01	(0.05	(0.05	(0.05	(0.05
COBALT	NA	NA	(2.6	NA	NA	NA	NA	NA	(0.05	NA	(0.05	NA	NA	NA	NA
COPPER	NA	NA	43	NA	NA	NA	NA	NA	(0.025	NA	(0.025	NA	NA	NA	NA
IRON	NA	NA	13,000	NA	NA	NA	NA	NA	18	NA	(0.1	NA	NA	NA	NA
LEAD	84	84	32	37	910	160	0.22	(0.05	0.007	(0.05	(0.005	(0.05	(0.05	(0.05	(0.05
MAGNESIUM	NA	NA	2,600	NA	NA	NA	NA	NA	19	NA	6	NA	NA	NA	NA
MANGANESE	NA	NA	150	NA	NA	NA	NA	NA	1.1	NA	0.16	NA	NA	NA	NA
MERCURY	(1.8	(2.1	(1.3	(1.2	(0.8	(0.8	(0.0005	(0.0005	(0.0005	(0.0005	(0.0005	(0.0005	(0.0005	(0.0005	(0.0005
NICKEL	NA	NA	15	NA	NA	NA	NA	NA	(0.04	NA	(0.04	NA	NA	NA	NA
POTASSIUM	NA	NA	(530	NA	NA	NA	NA	NA	(50	NA	(50	NA	NA	NA	NA
SELENIUM	NA	NA	(1.3	NA	NA	NA	NA	NA	(0.005	NA	(0.005	NA	NA	NA	NA
SILVER	(4	(5	1.3	(5	(3	(2	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01
SODIUM	NA	NA	490	NA	NA	NA	NA	NA	170	NA	24	NA	NA	NA	NA
THALLIUM	NA	NA	(3	NA	NA	NA	NA	NA	(0.01	NA	(0.01	NA	NA	NA	NA
VANADIUM	NA	NA	18	NA	NA	NA	NA	NA	(0.05	NA	(0.05	NA	NA	NA	NA
ZINC	220	230	109	140	440	110	0.14	0.04	0.03	0.02	0.02	0.07	0.01	0.03	0.02

NOTES: All analytical values measured in mg/l unless otherwise noted.
* Identifies HSL sample.
NA - Not analyzed.

FIGURE 1



QUAORANGLE LOCATION

M. WALLACE AND SON, INC. SCRAPYARD
COBLESKILL, NEW YORK

SITE LOCATION MAP

0 2000 4000

SCALE IN FEET

ADAPTED FROM U.S.G.S. COBLESKILL, & RICHMONDVILLE, N.Y. QUAD.

1118.053.131 y22/90

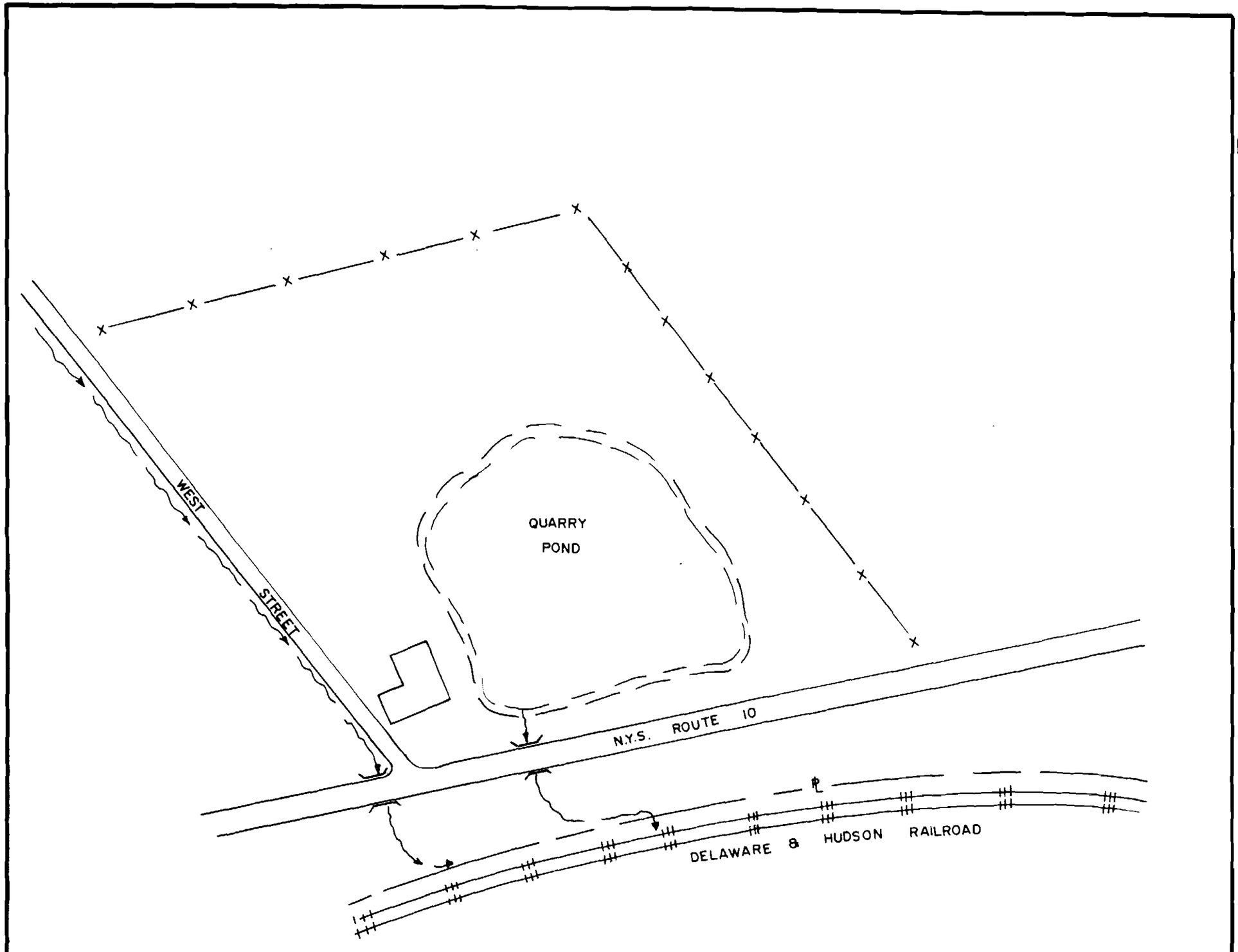
8.5X11

O'BRIEN & GERE
ENGINEERS, INC.

FIGURE 2

SITE INVESTIGATION
M. WALLACE AND SON, INC.
SCRAPYARD
COBLESKILL, NEW YORK

SITE MAP



LEGEND

SYMBOL FOR STREAMS

0' 100' 200'

APPROXIMATE SCALE IN FEET

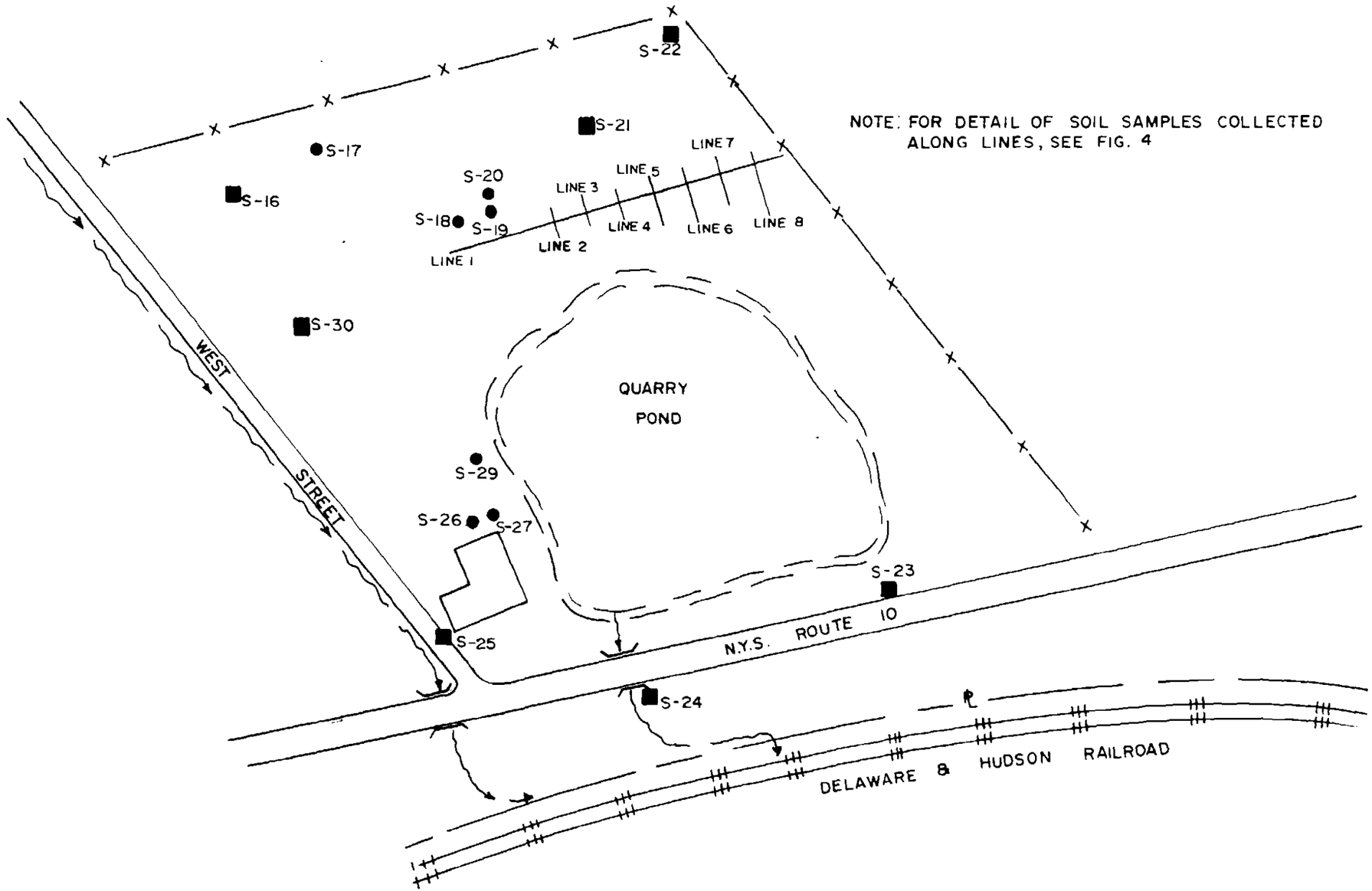
NOTE: SITE FEATURES MAY NOT BE TO SCALE

O'BRIEN & GERE

FIGURE 3

SITE INVESTIGATION
M. WALLACE AND SON, INC.
SCRAPYARD
COBLESKILL, NEW YORK

SURFACE AND NEAR-SURFACE SOIL SAMPLING LOCATIONS



NOTE: FOR DETAIL OF SOIL SAMPLES COLLECTED ALONG LINES, SEE FIG. 4

LEGEND

- ● SOIL SAMPLE - (STAINED)
- ■ SOIL SAMPLE - (UNSTAINED)
- ~~~→ SYMBOL FOR STREAMS

0' 100' 200'

APPROXIMATE SCALE IN FEET

NOTE: SITE FEATURES MAY NOT BE TO SCALE

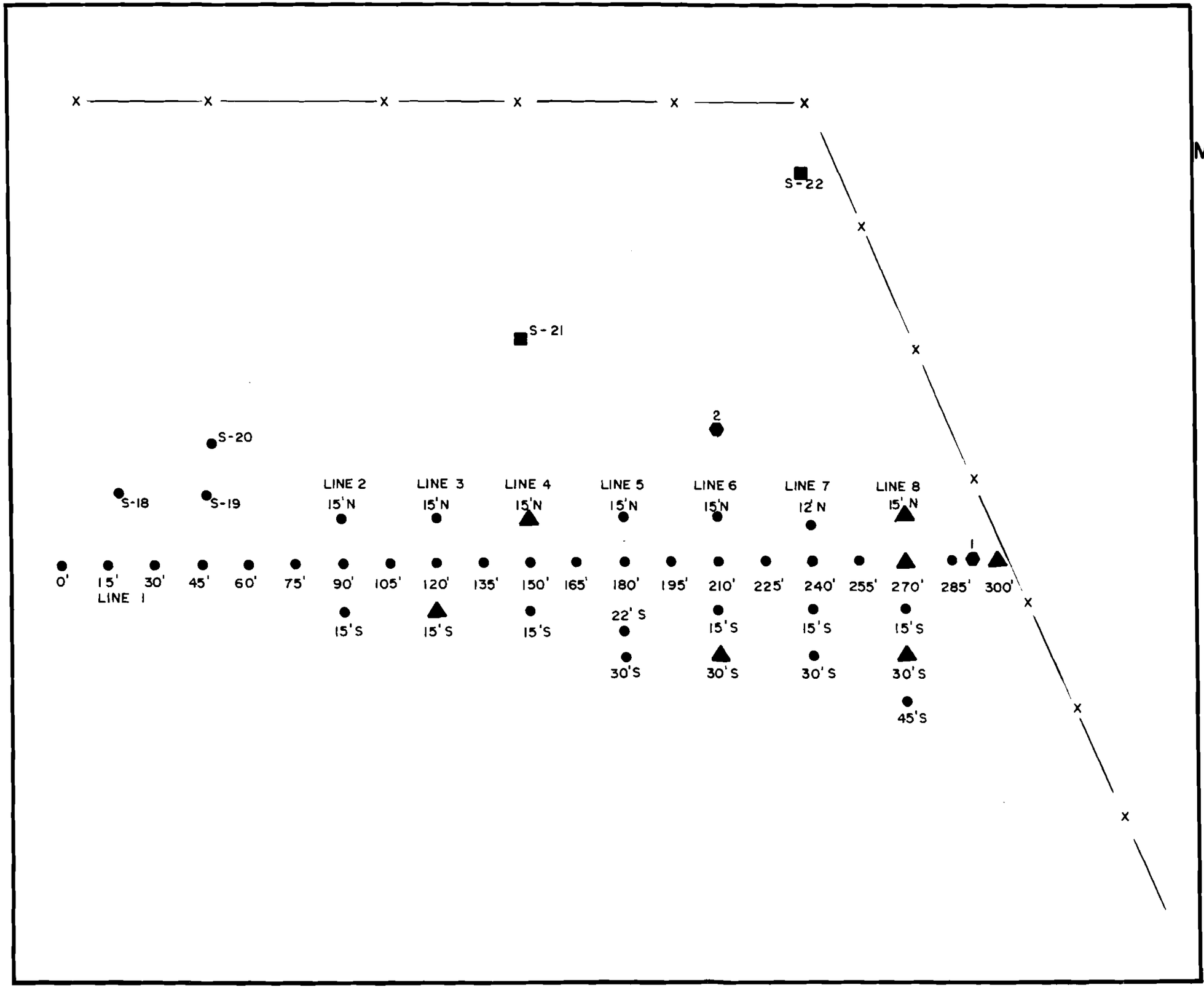
O'BRIEN & GERE

FIGURE 4

SITE INVESTIGATION

M. WALLACE AND SON, INC.
SCRAP YARD
COBLESKILL, NEW YORK

DETAIL OF SURFACE AND NEAR-SURFACE SOIL SAMPLING AND AIR SAMPLING LOCATIONS



LEGEND

- AIR SAMPLING LOCATION
- SOIL SAMPLE 0-6" DEEP (STAINED)
- SOIL SAMPLE 6-12" DEEP (STAINED)
- SOIL SAMPLE 0-6" DEEP (UNSTAINED)

0' 30' 60'

APPROXIMATE SCALE IN FEET

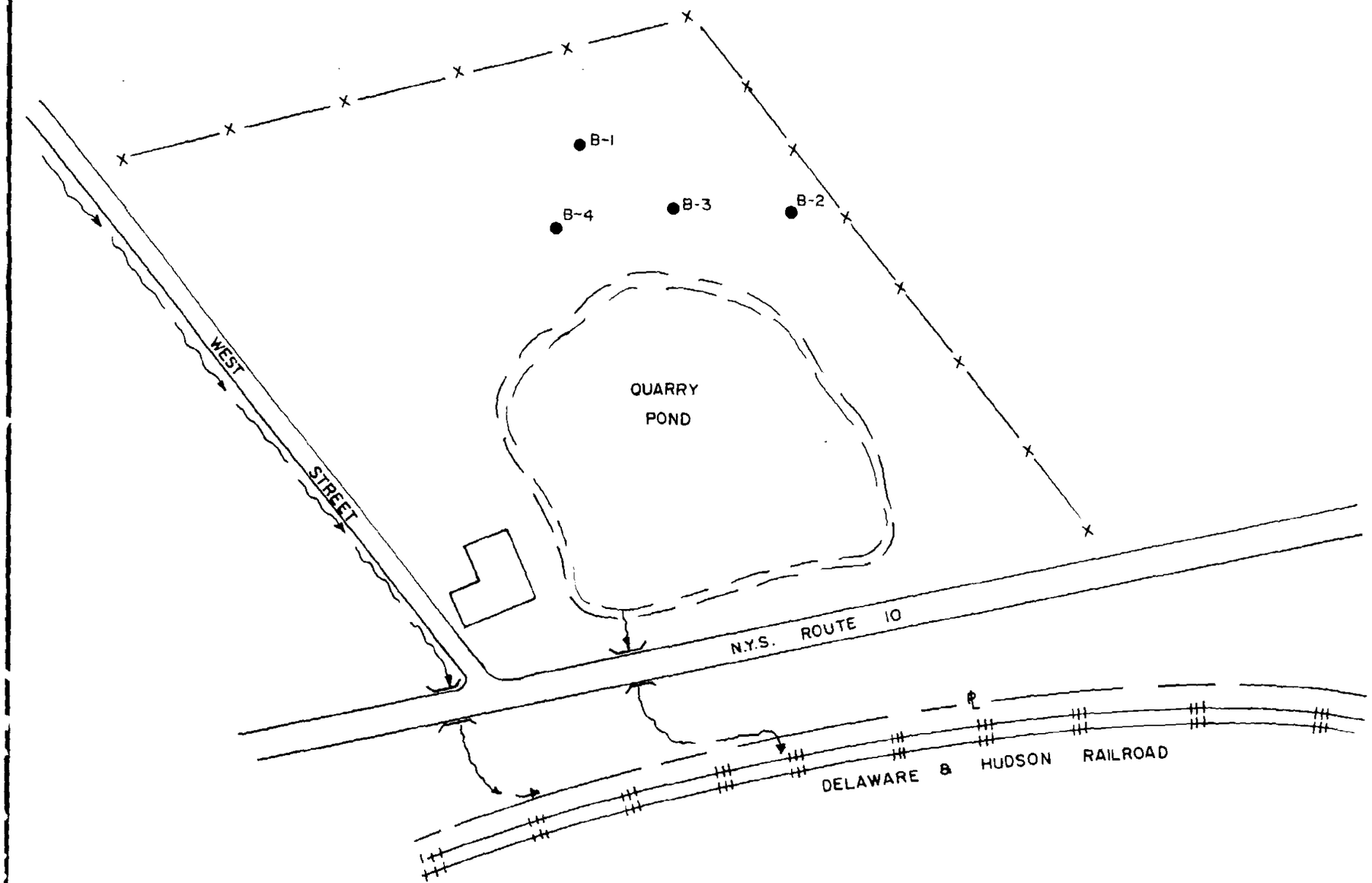
O'BRIEN & GERE

061982

FIGURE 5

SITE INVESTIGATION
M. WALLACE AND SON, INC.
SCRAPYARD
COBLESKILL, NEW YORK

SOIL BORING LOCATIONS



LEGEND

- ● SOIL BORING
- ~~~→ SYMBOL FOR STREAMS

0' 100' 200'

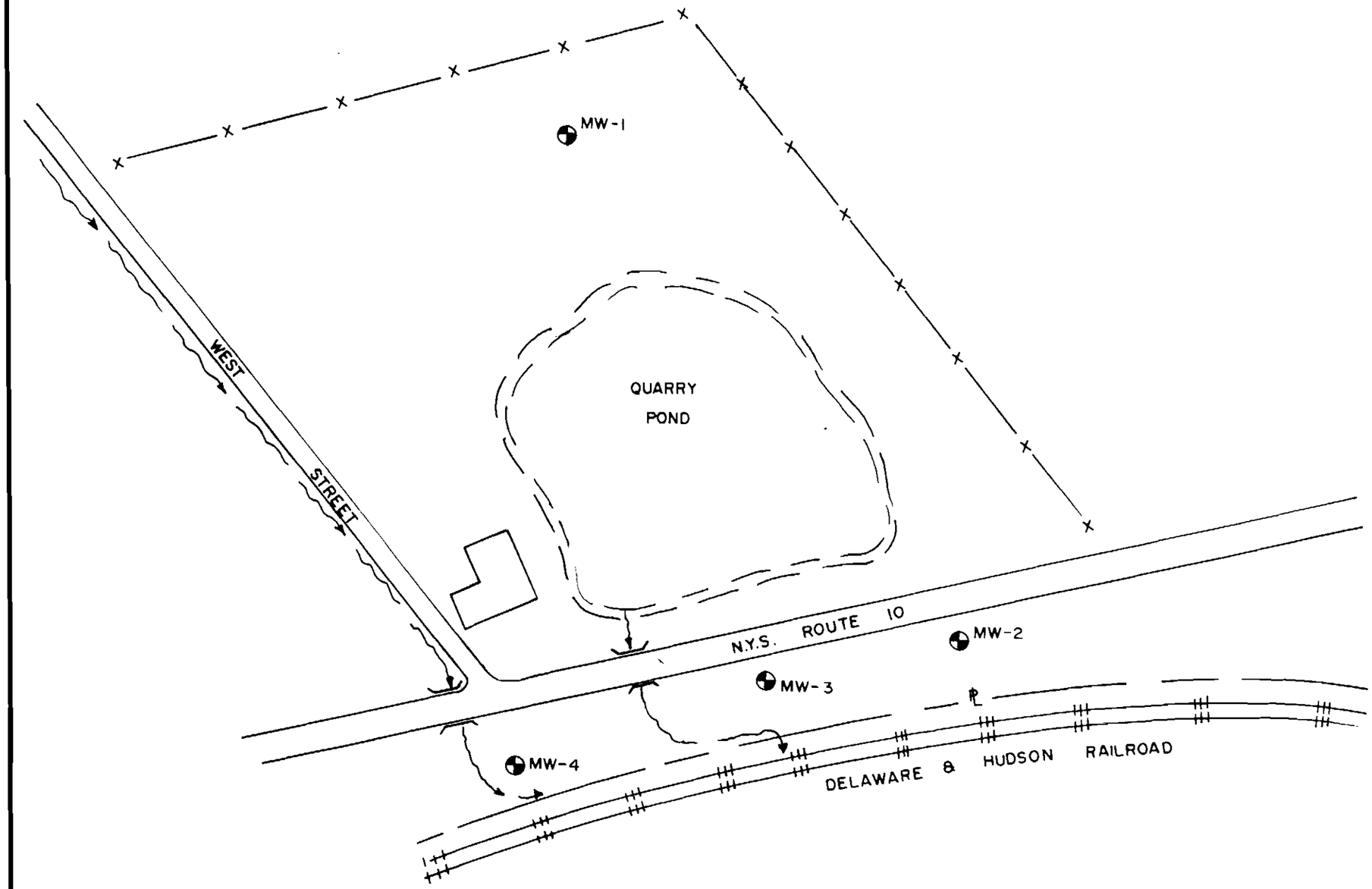
APPROXIMATE SCALE IN FEET

NOTE: SITE FEATURES MAY NOT BE TO SCALE

FIGURE 6

SITE INVESTIGATION
M. WALLACE AND SON, INC.
SCRAPYARD
COBLESKILL, NEW YORK

GROUND WATER MONITORING WELL LOCATIONS



LEGEND

- GROUND WATER MONITORING WELL
- SYMBOL FOR STREAMS

0' 100' 200'

APPROXIMATE SCALE IN FEET

NOTE: SITE FEATURES MAY NOT BE TO SCALE

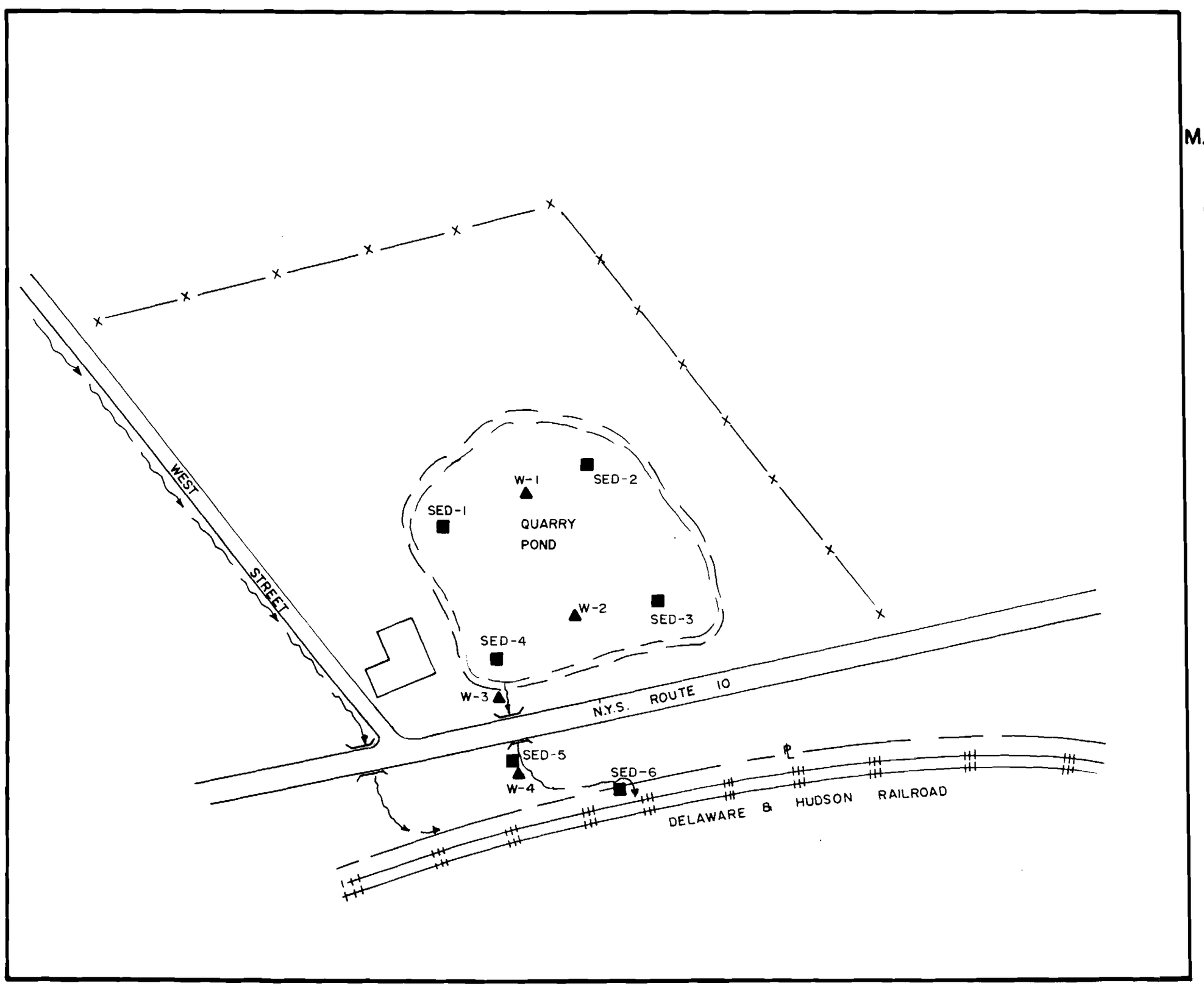
O'BRIEN & GERE

FIGURE 7

SITE INVESTIGATION
M. WALLACE AND SON, INC.
SCRAPYARD

COBLESKILL, NEW YORK

SURFACE WATER AND SEDIMENT SAMPLING LOCATIONS



LEGEND

- ▲ SURFACE WATER SAMPLE
- ■ SEDIMENT SAMPLE
- SYMBOL FOR STREAMS

0' 100' 200'

APPROXIMATE SCALE IN FEET

NOTE: SITE FEATURES MAY NOT BE TO SCALE

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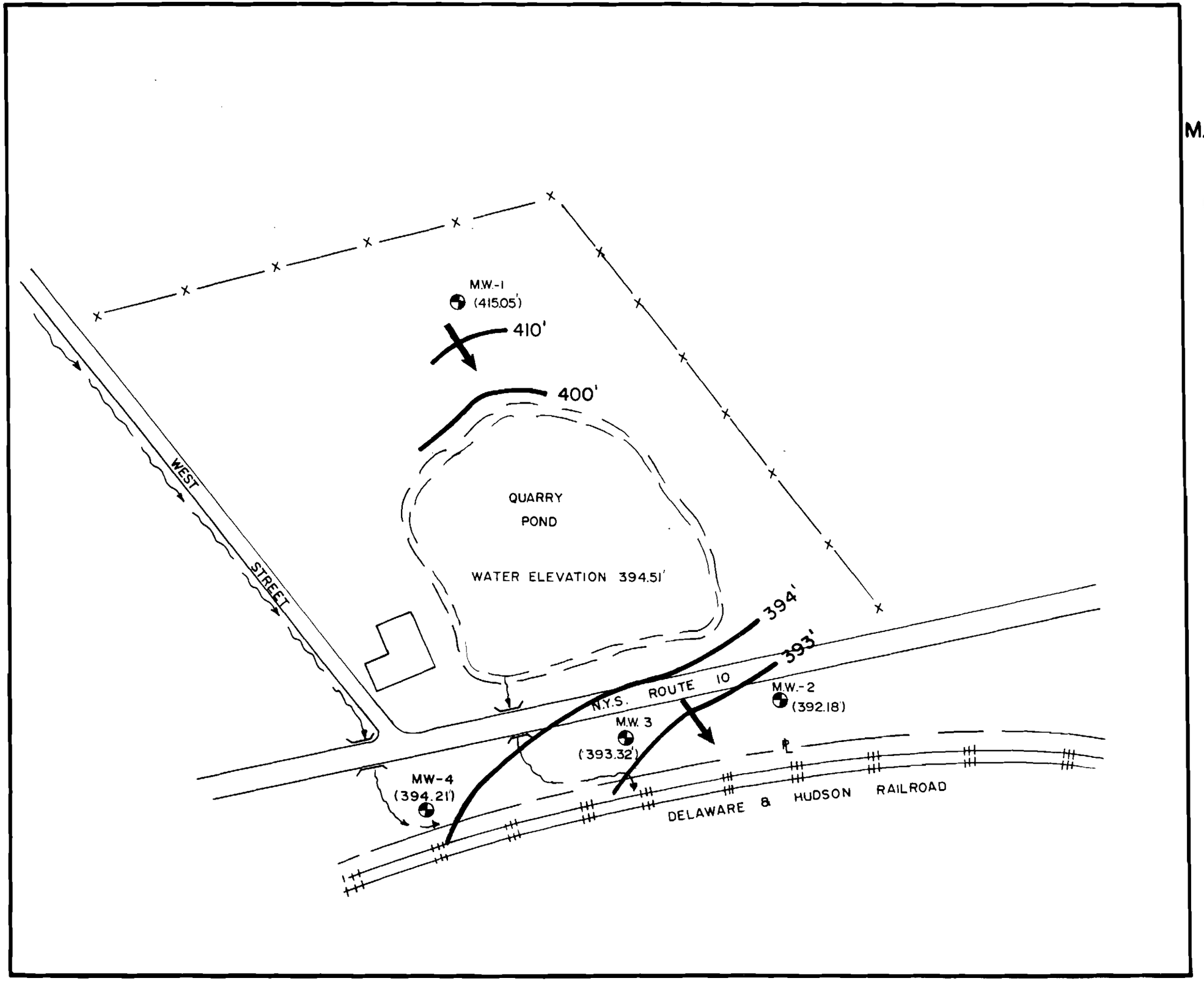
FIGURE 8

SITE INVESTIGATION
M. WALLACE AND SON, INC.
SCRAPYARD
COBLESKILL, NEW YORK

GROUND WATER CONTOUR MAP

11/10/89



ASSUMED DATUM OF 400 FEET

N

LEGEND

- GROUND WATER MONITORING WELL
- GROUND WATER CONTOUR
- (415.05') GROUND WATER ELEVATION
- GROUND WATER FLOW DIRECTION
- SYMBOL FOR STREAMS

0' 100' 200'

APPROXIMATE SCALE IN FEET

NOTE: SITE FEATURES MAY NOT BE TO SCALE

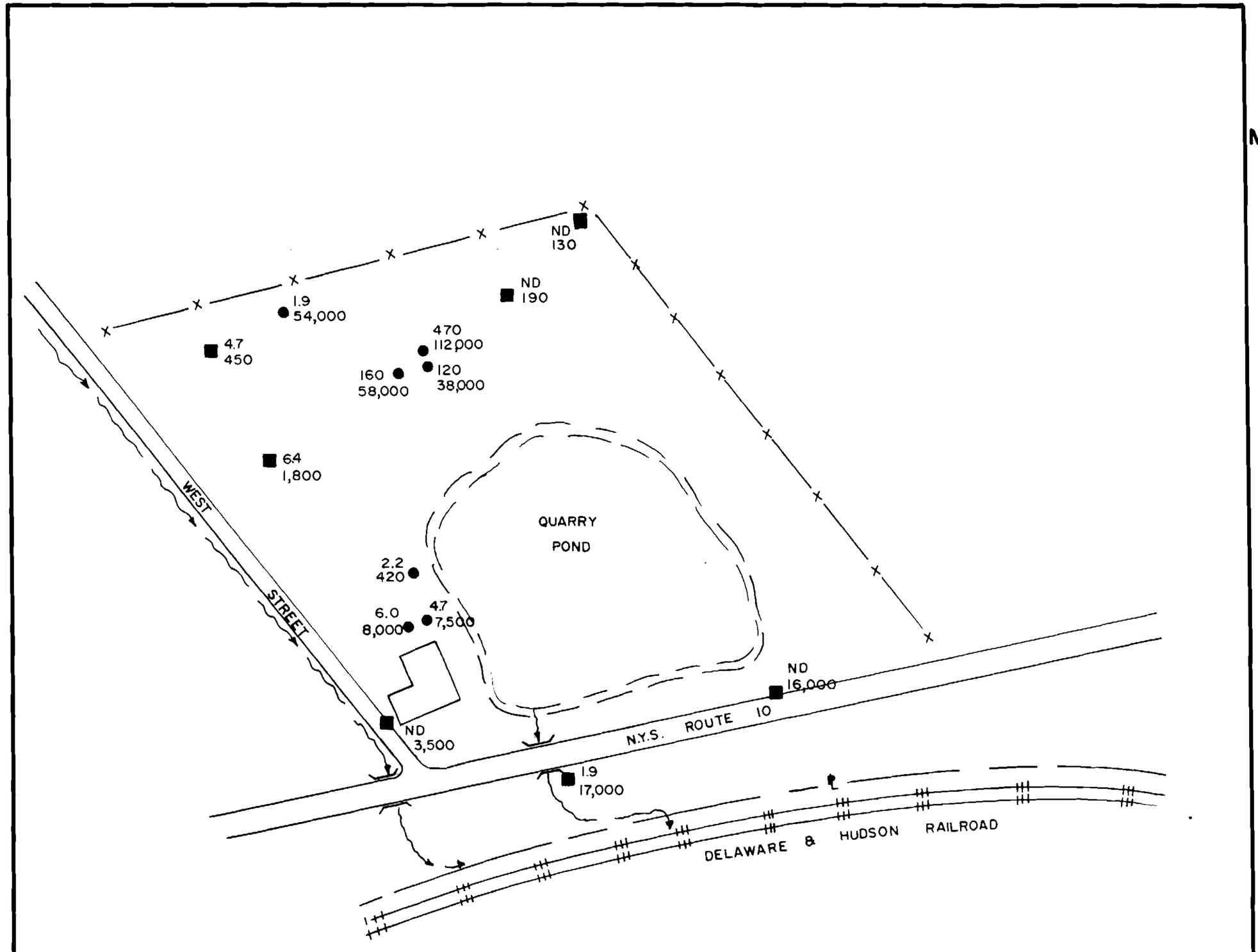
O'BRIEN & GERE

FIGURE 9

SITE INVESTIGATION
M. WALLACE AND SON, INC.
SCRAPYARD

COBLESKILL, NEW YORK

SURFACE AND NEAR-SURFACE SOIL PCB AND OIL/GREASE CONCENTRATIONS



LEGEND

- ● P.C.B. OIL/GREASE SOIL SAMPLE (STAINED)
- ■ P.C.B. OIL/GREASE SOIL SAMPLE (UNSTAINED)

CONCENTRATIONS IN ppm

SYMBOL FOR STREAMS

0' 100' 200'

APPROXIMATE SCALE IN FEET

NOTE: SITE FEATURES MAY NOT BE TO SCALE

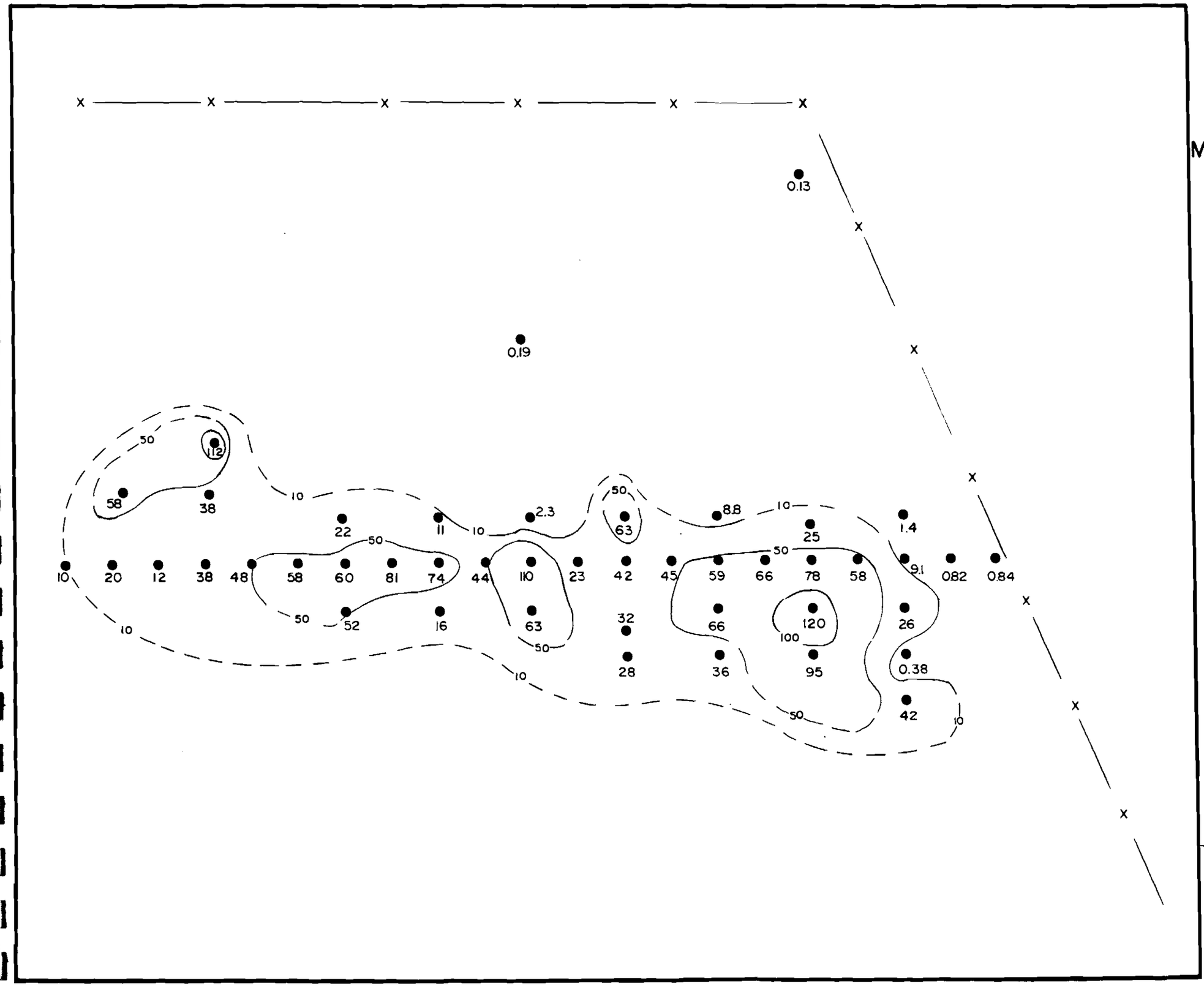
O'BRIEN & GERE

FIGURE 10

SITE INVESTIGATION
M. WALLACE AND SON, INC.
SCRAP YARD
COBLESKILL, NEW YORK

OIL AND GREASE CONCENTRATION CONTOUR MAP

CONTOUR LEVELS
10 ppt
50 ppt
100 ppt



LEGEND

50 — SOIL SAMPLE WITH OIL & GREASE CONTAMINANT LEVEL (ppt)

– – – – INFERRED CONTOUR LINE

0' 30' 60'
APPROXIMATE SCALE IN FEET

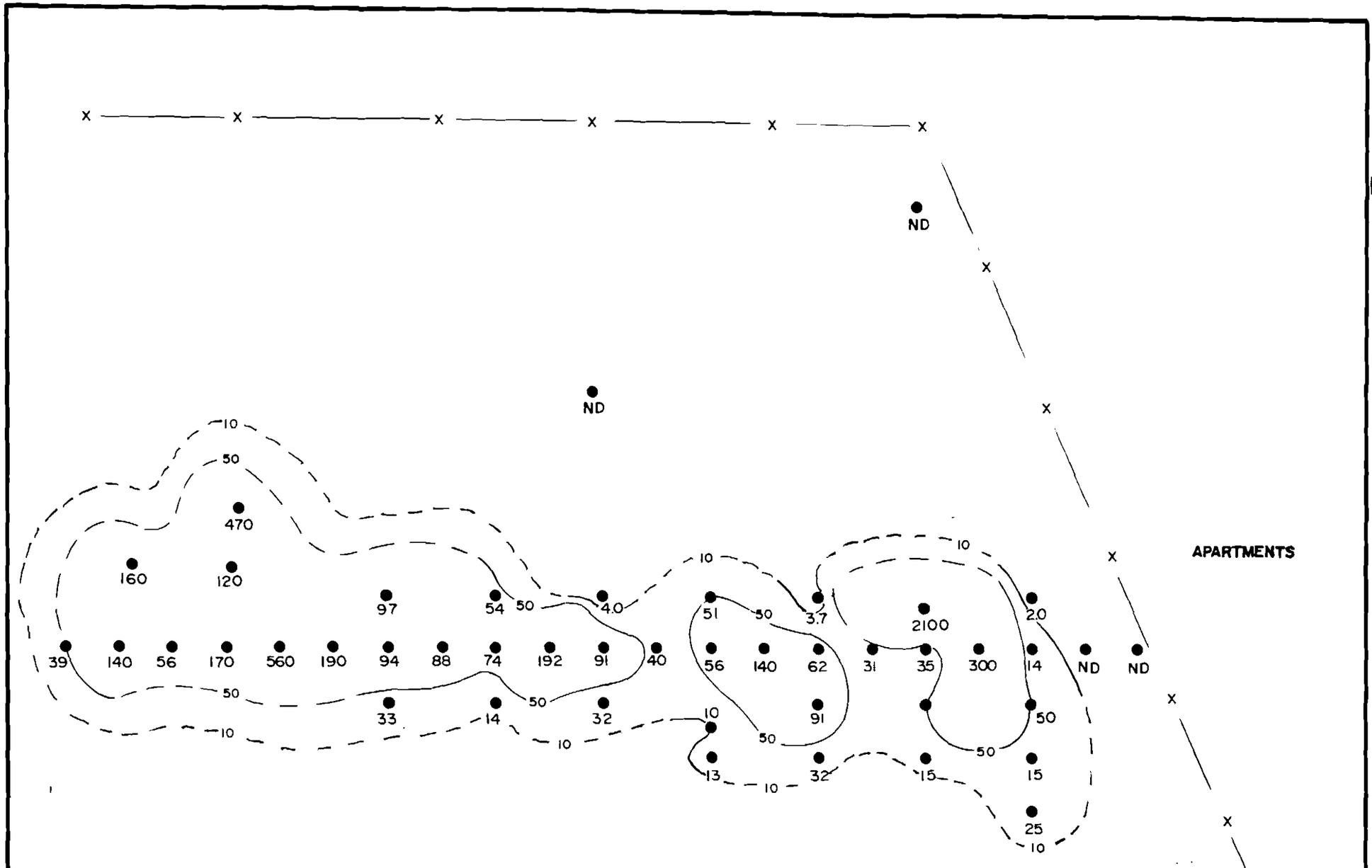
O'BRIEN & GERE

FIGURE II

SITE INVESTIGATION

M. WALLACE AND SON, INC.
SCRAP YARD
COBLESKILL, NEW YORK

PCB CONCENTRATION CONTOUR MAP



CONTOUR LEVEL
50 ppm
10 ppm

LEGEND

- ● SOIL SAMPLE WITH P.C.B CONTAMINANT LEVEL (P.P.M.)
- — — — INFERRED CONTOUR LINE
- ND NONDETECTED

0' 30' 60'

APPROXIMATE SCALE IN FEET

O'BRIEN & GERE

APPENDIX A

LABORATORY RESULTS

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace + Sons, Inc. Scrapyard
Air Samples

DATE COLLECTED 8-31-89 DATE REC'D. 9-8-89 DATE ANALYZED

	Sample #	TOTAL PARTICULATES	PCB
1A	J0246	<0.1	-
1B & 1C	J0247	-	<0.001
2A	J0248	<0.1	-
2B & 2C	J0249	-	<0.001
CSB - TPB	J0250	<0.1	-
CSTP-1 & CSTP-2	J0251	-	<0.001

UNITS: Total Particulates, mg
PCB, mg/m^3

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/l (ppm) unless otherwise noted

Comments:

Authorized: Anthony Cuccaro

Date: September 29, 1989

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

LABORATORIES, INC. CHAIN OF CUSTODY RECORD

SURVEY: Wallace Scrap - Xi Mo - Cobleskill

SAMPLERS: Bill Hesse

STATION NUMBER	STATION LOCATION	DATE	TIME	SAMPLE TYPE: Water (Comp / Grab)	Air	SEQ. NO.	NO. OF CONTAINERS	ANALYSIS REQUIRED
1A	END OF MAIN LINE - ON HILL	8/31/89	1515		X		1	TOT Part
1B	"	8/31/89	"		X		1	PCB
1C	"	"	"		X		1	PCB
2A	WEST SIDE - LINE 6 (OFF)				X		1	TOT Part
2B	"				X		1	PCB
2C	"				X		1	PCB
CSB-TPB	Blank				X		1	TOT Part
CSTP-1	"				X		1	PCB
CSTP-2	"				X		1	PCB

Relinquished by: Bill Hesse	Received by:	Date/Time
Relinquished by:	Received by:	Date/Time
Relinquished by:	Received by:	Date/Time
Relinquished by:	Received by Mobile Laboratory for field analysis:	Date/Time
Dispatched by:	Date/Time: 8/31/89 1713	Received for Laboratory by: Glenn Barnes — Date/Time: 9-8-89 0800

Method of Shipment: Hand

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Road / Syracuse, New York 13221 / (315) 457-1494

CASE FILE

Survey: Cobleskill Date Collected: 8-31-89

Sampler: Bill Hesse Date Received: 9-8-89

Client Name and Ref. # : (Cobleskill) NIMO

Laboratory Number: 1118.053.517

Condition of Shipment: good

Archive? If so how long ? NO

Signed: Dawn Barnes

Sample Coordinator

****

Disposal Procedure *: Routine

Signed: Anthony Iacampo

Date: 9-21-89

* The routine disposal procedure for non-hazardous samples is to dispose of the samples 4 weeks after a typed report is signed and mailed to the client. Water samples are filtered through carbon to the sanitary sewer. Solid samples are sent to a sanitary landfill.

OBG
LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soils

DATE COLLECTED 9-12-89 DATE REC'D. 9-18-89 DATE ANALYZED 9-22-89

	Sample #	PCB	Aroclor
B-2,2-4'	J0630	0.38	1248+1260
B-3,2-4'	J0632	0.25	1248+1260
B-3,6-8'	J0633	6.6	1248+1260
B-4,2-6'	J0634	1.5	1260
B-4,6-8'	J0635	4.2	1248+1260
B-1,0-3.3'	J0636	0.31	1260

UNITS: mg/kg dry weight

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/ℓ (ppm) unless otherwise noted

Comments:

Authorized: Anthony Cuccinello

Date: January 6, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG
LABORATORIES, INC.

Pesticide/PCB Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soil
B-2,6-8'

SAMPLE NO. J0631 DATE COLLECTED 9-12-89 DATE REC'D. 9-18-89 DATE ANALYZED 9-22-89

	ppb		ppb
α-BHC	<14.	4,4'-DDT	<28.
γ-BHC		Endosulfan Sulfate	
β-BHC		Endrin Aldehyde	
Heptachlor		Methoxychlor	<140.
δ-BHC		Endrin Ketone	<28.
Aldrin		Chlordane	<140.
Heptachlor Epoxide		Toxaphene	<280.
Endosulfan I		PCB-1221	*
4,4'-DDE	<28.	PCB-1232	*
Dieldrin		PCB-1016/1242	*
Endrin		PCB-1248	470.
4,4'-DDD		PCB-1254	*
Endosulfan II		PCB-1260	530.

Methodology: Federal Register—40 CFR, Part 136, October 26, 1984

Comments:

PCBs were found in the concentration of 1000.µg/kg dry weight.
The predominant aroclors were 1248 + 1260.

Authorized: Anthony Crisci Jr

Date: January 6, 1990

OBG Laboratories, Inc.
Box 4942/1304 Buckley Rd./Syracuse, NY/13221/(315) 457-1494

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soils

DATE COLLECTED 9-12-89 DATE REC'D. 9-18-89 DATE ANALYZED

Description	B-2,2-4'	B-3,2-4'	B-3,6-8'	B-4,2-6'	B4,6-8'	B-1,0-3.3'
Sample #	J0630	J0632	J0633	J0634	J0635	J0636
Total Metals:						
ARSENIC	7.5	7.9	4.0	4.5	5.3	8.3
BARIUM	150.	77.	50.	51.	67.	190.
CADMIUM	<1.3	<1.2	<5.6*	<2.2*	<2.3*	<1.2
CHROMIUM	27.	18.	18.	12.	16.	29.
LEAD	27.	16.	62.	11.	95.	240.
MERCURY	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SILVER	<1.3	<1.2	<5.6*	<2.2*	<2.3*	<1.2
ZINC	82.	82.	99.	49.	170.	130.
Other Analysis:						
PERCENT TOTAL SOLIDS	79.9	84.0	89.2	91.3	88.4	84.5

UNITS: mg/kg dry weight

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/l (ppm) unless otherwise noted

Comments: *The detection limit has been raised due to the presence of matrix interferences (i.e., Calcium).

Authorized: Anthony Cuscuna

Date: January 6, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soil

DATE COLLECTED 9-12-89 DATE REC'D. 9-18-89 DATE ANALYZED

Description	B-2,6-8'				
Sample #	J0631				
Total Metals:					
ALUMINUM	17,000.				
ANTIMONY	<12.				
ARSENIC	7.8				
BARIUM	110.				
BERYLLIUM	<2.4				
CADMIUM	<2.4				
CALCIUM	67,000.				
CHROMIUM	47.				
COBALT	<12.				
COPPER	26.				
IRON	23,000.				
LEAD	41.				
MAGNESIUM	4,400.				
MANGANESE	560.				
MERCURY	<0.5				
NICKEL	45.				
POTASSIUM	3,100.				
SELENIUM	<6.0*				
SILVER	<2.4				
SODIUM	250.				
THALLIUM	<1.2				
VANADIUM	35.				
ZINC	83.			UNITS:	mg/kg dry weight

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/ℓ (ppm) unless otherwise noted

Comments: *The detection limit has been raised due to the presence of matrix interferences.

Authorized: [signature]

Date: January 6, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soil

DATE COLLECTED 9-12-89 DATE REC'D. 9-18-89 DATE ANALYZED

Description	B-2,6-8'
Sample #	J0631
Other Analyses:	
PERCENT TOTAL SOLIDS	82.5
TOTAL CYANIDE	<1.

UNITS: mg/kg dry weight

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/l (ppm) unless otherwise noted

Comments:

Authorized: Anthony Cresanti

Date: January 6, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Purgeable Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soils

DATE COLLECTED 9-12-89 DATE REC'D. 9-18-89 DATE ANALYZED 9-22-89

DESCRIPTION:	B-2,2-4'	B-3,2-4'	B-3,6-8'	B-4,2-6'	B-4,6-8'	B-1,0-3.3'
SAMPLE NO.:	J0630	J0632	J0633	J0634	J0635	J0636
Chloromethane	<13.	<12.	<11.	<11.	<11.	<12.
Bromomethane						
Vinyl chloride						
Chloroethane						
Methylene chloride						
1,1-Dichloroethene						
1,1-Dichloroethane						
t-1,2-Dichloroethene						
Chloroform						
1,2-Dichloroethane						
1,1,1-Trichloroethane						
Carbon tetrachloride						
Bromodichloromethane						
1,2-Dichloropropane						
t-1,3-Dichloropropene						
Trichloroethene						
Benzene						
Dibromochloromethane						
1,1,2-Trichloroethane						
c-1,3-Dichloropropene						
2-Chloroethylvinyl ether	<130.	<120.	<110.	<110.	<110.	<120.
Bromoform	<130.	<120.	<110.	<110.	<110.	<120.
1,1,2,2-Tetrachloroethane	<13.	<12.	<11.	<11.	<11.	<12.
Tetrachloroethene						
Toluene						
Chlorobenzene						
Ethylbenzene						
Xylenes						

UNITS: µg/kg dry weight

Methodology: Federal Register—40 CFR, Part 136, October 26, 1984

Units: µg/l (ppb) unless otherwise noted

Comments:

Authorized: Anthony Cimino

Date: January 6, 1990

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG
LABORATORIES, INC.

Purgeable Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water

DATE COLLECTED 9-12-89 DATE REC'D. 9-18-89 DATE ANALYZED 9-22-89

DESCRIPTION:	QC Trip Blank
SAMPLE NO.:	J0639
Chloromethane	<1.
Bromomethane	
Vinyl chloride	
Chloroethane	
Methylene chloride	
1,1-Dichloroethene	
1,1-Dichloroethane	
t-1,2-Dichloroethene	
Chloroform	
1,2-Dichloroethane	
1,1,1-Trichloroethane	
Carbon tetrachloride	
Bromodichloromethane	
1,2-Dichloropropane	
t-1,3-Dichloropropene	
Trichloroethene	
Benzene	
Dibromochloromethane	
1,1,2-Trichloroethane	
c-1,3-Dichloropropene	
2-Chloroethylvinyl ether	<10.
Bromoform	<10.
1,1,2,2-Tetrachloroethane	<1.
Tetrachloroethene	
Toluene	
Chlorobenzene	
Ethylbenzene	
Xylenes	

UNITS: µg/l

Methodology: Federal Register—40 CFR, Part 136, October 26, 1984

Units: µg/l (ppb) unless otherwise noted

Comments:

Authorized: Anthony Graziano

Date: January 6, 1990

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG
LABORATORIES, INC.

Base/Neutral Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soil
B-2,6-8'

SAMPLE NO. J0631 DATE COLLECTED 9-12-89 DATE REC'D. 9-18-89 DATE ANALYZED 9-26-89

	ppb		ppb
1,3-Dichlorobenzene	<400.	Diethylphthalate	<400.
1,4-Dichlorobenzene		N-nitrosodiphenylamine	
1,2-Dichlorobenzene		Hexachlorobenzene	
Hexachloroethane		4-Bromophenyl phenyl ether	
Bis (2-chloroethyl) ether		Phenanthrene	
Bis (2-chloroisopropyl) ether		Anthracene	
N-Nitrosodi-n-propylamine		Di-n-butyl phthalate	
Nitrobenzene		Fluoranthene	
Hexachlorobutadiene		Pyrene	
1,2,4-Trichlorobenzene		Benzidine	<1900.
Isophorone		Butyl benzyl phthalate	<400.
Naphthalene		Bis(2-ethylhexyl)phthalate	880.
Bis (2-chloroethoxy) methane		Chrysene	<400.
Hexachlorocyclopentadiene		Benzo(a)anthracene	<400.
2-Chloronaphthalene		3,3-Dichlorobenzidine	<800.
Acenaphthylene		Di-n-octylphthalate	<400.
Acenaphthene		Benzo(b)fluoranthene	
Dimethyl phthalate		Benzo(k)fluoranthene	
2,6-Dinitrotoluene		Benzo(a)pyrene	
Fluorene		Indeno(1,2,3-cd)pyrene	
4-Chlorophenyl phenyl ether		Dibenzo(a,h)anthracene	
2,4-Dinitrotoluene		Benzo(g,h,i)perylene	
1,2-Diphenylhydrazine		N-Nitrosodimethyl Amine	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Authorized: Anthony Cimmino

Date: January 6, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG
LABORATORIES, INC.

Acid Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soil
B-2,6-8'

SAMPLE NO. J0631 DATE COLLECTED 9-12-89 DATE REC'D. 9-18-89 DATE ANALYZED 9-26-89

	ppb		ppb
2-Chlorophenol	<400.	2,4,6-Trichlorophenol	<400.
2-Nitrophenol		4-Chloro-3-methylphenol	<400.
Phenol		2,4-Dinitrophenol	<1900.
2,4-Dimethylphenol		2-Methyl-4,6-dinitrophenol	
2,4-Dichlorophenol		Pentachlorophenol	
		4-Nitrophenol	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Benzyl Alcohol	<400.
2-Methylphenol	
4-Methylphenol	
Benzoic Acid	<1900.
4-Chloroaniline	<400.
2-Methylnaphthalene	<400.
2,4,5-Trichlorophenol	<1900.
2-Nitroaniline	
3-Nitroaniline	
Dibenzofuran	<400.
4-Nitroaniline	<1900.

Authorized: Anthony Cuccaro

Date: January 6, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Purgeable Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soil B-2,6-8'

SAMPLE NO. J0631 DATE COLLECTED 9-12-89 DATE REC'D. 9-18-89 DATE ANALYZED 9-21-89

	ppb		ppb
Chloromethane	<12.	t-1,3-Dichloropropene	<6.
Bromomethane		Trichloroethene	
Vinyl chloride		Benzene	
Chloroethane		Dibromochloromethane	
Methylene chloride	<6.	1,1,2-Trichloroethane	
1,1-Dichloroethene		c-1,3-Dichloropropene	
1,1-Dichloroethane		2-Chloroethylvinyl ether	<12.
t-1,2-Dichloroethene		Bromoform	<6.
Chloroform		1,1,2,2-Tetrachloroethane	
1,2-Dichloroethane		Tetrachloroethene	
1,1,1-Trichloroethane		Toluene	
Carbon tetrachloride		Chlorobenzene	
Bromodichloromethane		Ethylbenzene	
1,2-Dichloropropane		Xylenes	

Methodology: Federal Register—40 CFR, Part 136, October 26, 1984

UNITS: µg/kg dry weight

Comments:

Acetone	<12.
Carbon Disulfide	<6.
2-Butanone	<12.
Vinyl acetate	
4-Methyl-2-pentanone	
2-Hexanone	
Styrene	<6.

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

Authorized: Anthony Cucinotta

Date: January 6, 1990

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY

Quality Control Summary, PCBs: Matrix Spike and Matrix Spike Duplicate

DATE COLLECTED 9-12-89 DATE REC'D. 9-18-89 DATE ANALYZED 9-22-89

	UNITS	LAB # OF SPIKED SAMPLE	CONC. OF SPIKE ADDED	SAMPLE RESULT	CONC. MS	% RECOVERY	CONC. MSD	% RECOVERY	RPD %	LABORATORY SAMPLE #s		
PCB 1254	mg/kg	J0636	10.0	<0.5	10.2	102.	10.8	108.	5.7	MS + MSD	101189S1	
										J0637,J0638		

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/l (ppm) unless otherwise noted

MS = MATRIX SPIKE
MSD = MATRIX SPIKE DUPLICATE
RPD = RELATIVE PERCENT DIFFERENCE

Comments:

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY / 13221 / (315) 457-1494

Authorized: Anthony Cuccaro

Date: January 6, 1990

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY

Quality Control Summary, Trace Metals: Matrix Spike, Duplicate & Method Blank

DATE COLLECTED 9-12-89 DATE REC'D. 9-18-89 DATE ANALYZED See Below

PARAMETER	DATE ANALYZED	LABORATORY NUMBER OF SPIKED SAMPLE	SPIKED SAMPLE RESULT (SSR)	SAMPLE RESULT (SR)	SPIKE ADDED (SA)	SPIKE (%R)	LABORATORY NUMBER OF DUPLICATE SAMPLE	SAMPLE RESULT (S)	DUPLICATE RESULT (D)	DUPLICATE RPD	METHOD BLANK
Total Metals:											
ARSENIC	10-4-89	J0636	12.1	8.3	4.70	81.	J0636	8.3	8.2	1.	<0.5
BARIUM	9-27-89		420.	190.	239.	96.		190.	210.	10.	<0.5
CADMIUM			4.29	<1.2	5.98	72.		<1.2	<1.2	-	<1.
CHROMIUM			55.9	29.	23.9	113.		29.	34.	16.	<5.
LEAD			644.	240.	59.8	676.		240.	130.	59.	<5.
MERCURY			1.26	<0.5	1.18	107.		<0.5	<0.5	-	<0.5
SILVER			6.23	<1.2	5.98	104.		<1.2	<1.2	-	<1.
ZINC			280.	130.	59.8	90.		130.	100.	26.	<1.

NOTES: 1) Spike % Recovery = $\frac{(SSR - SR)}{SA} \times 100$

2) Duplicate RPD = $\frac{S - D}{(S+D)/2} \times 100\%$

UNITS: µg/kg dry weight

Internal Lab Dup #J0637
Internal Lab Spike #J0638

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/l (ppm) unless otherwise noted

Comments:

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY / 13221 / (315) 457-1494

Authorized: Anthony Cuccaro

Date: January 6, 1990

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY

QC Summary, Volatile Organics: Matrix Spike and Matrix Spike Duplicate

DATE COLLECTED 9-12-89 DATE REC'D. 9-18-89 DATE ANALYZED 9-25-89

	UNITS	LAB # OF SPIKED SAMPLE	CONC. OF SPIKE ADDED	SAMPLE RESULT	CONC. MS	% RECOVERY	CONC. MSD	% RECOVERY	RPD %
METHYLENE CHLORIDE	µg/kg	J0636	100.	<10.0	106.	106.	96.4	96.	10.
1,1-DICHLOROTEHANE	wet	B-1,	110.		135.	123.	119.	108.	13.
CARBON TETRACHLORIDE	weight	0-3.3'	100.		113.	113.	104.	104.	8.
TETRACHLOROETHENE	↓	↓	↓	↓	115.	115.	114.	114.	1.
CHLOROBENZENE					104.	104.	104.	104.	0.
m-XYLENE					107.	107.	102.	102.	5.

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/l (ppm) unless otherwise noted

MS = MATRIX SPIKE
MSD = MATRIX SPIKE DUPLICATE
RPD = RELATIVE PERCENT DIFFERENCE

Comments:

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY / 13221 / (315) 457-1494

Authorized: Anthony Cuscuna

Date: January 6, 1990

LABORATORIES, INC. CHAIN OF CUSTODY RECORD

SURVEY 1118.053.131
NIMO / WALLACE SCRAP COBLESKILL, NY

SAMPLERS: (Signature) Peter J. Hauff

STATION NUMBER	STATION LOCATION	DATE	TIME	SAMPLE TYPE: Water (Comp. / Grab)	SAMPLE TYPE: Soil	SEQ. NO.	NO. OF CONTAINERS	ANALYSIS REQUIRED
	B-2 2-4'	9/12/89	0815		X		1	Per letter of authorization
	B-2 6-8'	/	0845		X		3	HSL
	B-3 2-4'	/	1205		X		1	
	B-3 6-8'	\	1212		X		1	
	B-4 2-6'	\	1350		X		1	
	B-4 6-8'	/	1400		X		1	
	B-1 0-3.3'	/	1625		X		1	
	B-1 0-3.3' DUP	/	1625		X		1	
	B-1 0-3.3' MS	↓	1625		X		1	
	TRIP BLANK	—	—				1	

Relinquished by: (Signature) Peter J. Hauff	Received by: (Signature)	Date/Time 9/15/89 1515 hrs
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by Mobile Laboratory for field analysis: (Signature)	Date/Time
Dispatched by: (Signature) Date/Time	Received for Laboratory by: Wendy Smith	Date/Time 9/18/89 10:08

Method of Shipment: HAND DELIVERED TO

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Road / Syracuse, New York 13221 / (315) 457-1494

CASE FILE

Survey: Ni-MO Cobles Kill NY Date Collected: 9-12-89

Sampler: Peter Haff Date Received: 9-18-89

Client Name and Ref. # : O'Brien & Gere #1118-053-131

Laboratory Number: 1118-053-517

Condition of Shipment: Good. Chain of custody did not specifically state what samples were to be analyzed for. Sampler did not collect 4-oz. jar for the filtrable analysis on 8 of the 9 sites - these jars were supplied.

Archive? If so how long ? NO.

Signed: Wendy Smith

Sample Coordinator

****

Disposal Procedure*: Disposal will be determined by the hazardous waste officer.

Signed: Anthony Lucey

Date: 1-10-90

* The routine disposal procedure for non-hazardous samples is to dispose of the samples 4 weeks after a typed report is signed and mailed to the client. Water samples are filtered through carbon to the sanitary sewer. Solid samples are sent to a sanitary landfill.

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soils

DATE COLLECTED See Below DATE REC'D. 8-31-89 DATE ANALYZED 9-1-89

		Sample #	PCB	Aroclor	PERCENT TOTAL SOLIDS	OIL & GREASE
Line 8-30'S	8-30-89	I9866	15.	1248+1254	84.	380.
Line 7-30'S		I9867	15.	1254/1260	74.	95,000.
Line 8-45'S		I9868	25.	1248+1260	83.	42,000.
Line 6-30'S		I9871	32.	1260	82.	36,000.
Line 5-30'S		I9872	13.	1260	75.	28,000.
#16	8-29-89	I9873	4.7	1248+1260	83.	450.
#17		I9874	1.9	1260	78.	54,000.
#18		I9875	160.	1248+1260	89.	58,000.
#19		I9878	120.	1260	93.	38,000.
#20		I9879	470.	1248+1260	90.	112,000.
#21		I9880	<0.6	-	87.	190.
#30	8-30-89	I9881	6.4	1248+1260	87.	1,800.
#26		I9882	6.0	1260/54	88.	8,000.
#27		I9883	4.7	1248+1260	96.	7,500.
#29		I9884	2.2	1248+1260	89.	420.
Line 1-0'	8-29-89	I9885	39.	1260	96.	10,000.
Line 1-15'		I9886	140.	1254+1260	94.	20,000.
Line 1-30'		I9887	56.	1260	97.	12,000.
Line 1-45'		I9888	170.	1260	96.	38,000.

UNITS: mg/kg dry weight
Units: mg/ℓ (ppm) unless otherwise noted

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Authorized: Anthony Cusumano

Date: January 6, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soils

DATE COLLECTED See Below DATE REC'D. 8-31-89 DATE ANALYZED 9-1-89

	Sample #	PCB	Aroclor	PERCENT TOTAL SOLIDS	OIL & GREASE
Line 1-60' 8-29-89	I9889	560.	1260	92.	48,000.
Line 1-75'	I9890	190.	1260	86.	58,000.
Line 1-90'	I9891	94.	1260	83.	60,000.
Line 1-105'	I9892	88.	1260	90.	81,000.
Line 1-120'	I9893	74.	1248+1260	87.	74,000.
Line 1-135'	I9894	92.	1248+1260	93.	44,000.
#23 8-30-89	I9897	<0.6	-	86.	16,000.
#24	I9898	1.9	1260	84.	1,700.
#25	I9899	<0.5	-	92.	3,500.
#22	I9900	<0.7	-	76.	130.
Line 2-15'N	I9901	97.	1260/54	91.	22,000.
Line 2-15'S	I9902	33.	1260	79.	52,000.
Line 3-15'N	I9903	54.	1260	88.	11,000.
Line 3-15'S	I9904	14.	1260	77.	16,000.
Line 4-15'N	I9905	4.0	1260	87.	2,300.
Line 4-15'S	I9906	32.	1260	78.	63,000.
Line 5-15'N	I9909	51.	1260	80.	63,000.
Line 6-15'N	I9910	3.7	1260	85.	8,800.
Line 5-22'S	I9913	10.	1260	75.	32,000.

UNITS: mg/kg dry weight
Units: mg/ℓ (ppm) unless otherwise noted

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Authorized: Anthony Cuccinelli

Date: January 6, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soils

DATE COLLECTED See Below DATE REC'D. 8-31-89 DATE ANALYZED 9-1-89

		Sample #	PCB	Aroclor	PERCENT TOTAL SOLIDS	OIL & GREASE
Line 7-12'N	8-30-89	I9914	2100.	1248	85.	25,000.
Line 8-15'N		I9917	2.0	1260	87.	1,400.
Line 6-15'S		I9918	91.	1248+1260	76.	66,000.
Line 7-15'S		I9919	50.	1248+1260	79.	120,000.
Line 8-15'S		I9920	50.	1248+1260	80.	26,000.
Line 1-150'	8-29-89	I9921	91.	1248+1260	93.	110,000.
Line 1-165'		I9922	40.	1260	96.	23,000.
Line 1-180'		I9923	56.	1248+1260	95.	42,000.
Line 1-195'		I9924	140.	1248+1260	93.	45,000.
Line 1-210'		I9925	62.	1248+1260	92.	59,000.
Line 1-225'		I9926	31.	1248+1260	90.	66,000.
Line 1-240'		I9927	35.	1248+1260	87.	78,000.
Line 1-255'		I9928	300.	1248+1260	91.	58,000.
Line 1-270'		I9929	14.	1260	84.	9,100.
Line 1-285'	8-30-89	I9930	<0.6	-	83.	820.
Line 1-300'	8-30-89	I9931	<0.6	-	82.	840.

UNITS: mg/kg dry weight
Units: mg/ℓ (ppm) unless otherwise noted

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Authorized: Anthony Cucinotti

Date: January 6, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG
LABORATORIES, INC.

Pesticide/PCB Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soil
Line 1-270'

SAMPLE NO. I9929 DATE COLLECTED 8-29-89 DATE REC'D. 8-31-89 DATE ANALYZED 9-13-89

	ppb		ppb
α-BHC	<140.	4,4'-DDT	<280.
γ-BHC		Endosulfan Sulfate	
β-BHC		Endrin Aldehyde	
Heptachlor		Methoxychlor	<1400.
δ-BHC		Endrin Ketone	<280.
Aldrin		Chlordane	<1400.
Heptachlor Epoxide		Toxaphene	<2800.
Endosulfan I		PCB-1221	*
4,4'-DDE	<280.	PCB-1232	*
Dieldrin		PCB-1016/1242	*
Endrin		PCB-1248	6400.
4,4'-DDD		PCB-1254	*
Endosulfan II		PCB-1260	7200.

Methodology: Federal Register—40 CFR, Part 136, October 26, 1984

Comments:

PCBs were found at the concentration of 13,600.µg/kg dry weight.
The predominant aroclors are 1248 + 1260.

Authorized: Anthony Cusanzi

Date: January 6, 1990

OBG Laboratories, Inc.
Box 4942/1304 Buckley Rd./Syracuse, NY/13221/(315) 457-1494

OBG LABORATORIES, INC.

Purgeable Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water QC Trip Blank

SAMPLE NO. I9932 DATE COLLECTED 8-29-89 DATE REC'D. 8-31-89 DATE ANALYZED 9-5-89

	ppb		ppb
Chloromethane	<10.	t-1,3-Dichloropropene	<5.
Bromomethane		Trichloroethene	
Vinyl chloride		Benzene	
Chloroethane		Dibromochloromethane	
Methylene chloride	<5.	1,1,2-Trichloroethane	
1,1-Dichloroethene		c-1,3-Dichloropropene	
1,1-Dichloroethane		2-Chloroethylvinyl ether	<10.
t-1,2-Dichloroethene		Bromoform	<5.
Chloroform		1,1,2,2-Tetrachloroethane	
1,2-Dichloroethane		Tetrachloroethene	
1,1,1-Trichloroethane		Toluene	
Carbon tetrachloride		Chlorobenzene	
Bromodichloromethane		Ethylbenzene	
1,2-Dichloropropane		Xylenes	

Methodology: Federal Register—40 CFR, Part 136, October 26, 1984

Comments:

Acetone	<10.
Carbon Disulfide	<5.
2-Butanone	<10.
Vinyl acetate	
4-Methyl-2-pentanone	
2-Hexanone	
Styrene	<5.

Authorized: Anthony Cuscuna, Jr.

Date: January 6, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG
LABORATORIES, INC.

Base/Neutral Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soil
Line 1-270'

SAMPLE NO. I9929 DATE COLLECTED 8-29-89 DATE REC'D. 8-31-89 DATE ANALYZED 9-6-89

	ppb		ppb
1,3-Dichlorobenzene	<40,000.	Diethylphthalate	<40,000.
1,4-Dichlorobenzene		N-nitrosodiphenylamine	
1,2-Dichlorobenzene		Hexachlorobenzene	
Hexachloroethane		4-Bromophenyl phenyl ether	
Bis (2-chloroethyl) ether		Phenanthrene	
Bis (2-chloroisopropyl) ether		Anthracene	
N-Nitrosodi-n-propylamine		Di-n-butyl phthalate	
Nitrobenzene		Fluoranthene	
Hexachlorobutadiene		Pyrene	
1,2,4-Trichlorobenzene		Benzidine	<200,000.
Isophorone		Butyl benzyl phthalate	<40,000.
Naphthalene		Bis(2-ethylhexyl)phthalate	
Bis (2-chloroethoxy) methane		Chrysene	
Hexachlorocyclopentadiene		Benzo(a)anthracene	
2-Chloronaphthalene		3,3-Dichlorobenzidine	<79,000.
Acenaphthylene		Di-n-octylphthalate	<40,000.
Acenaphthene		Benzo(b)fluoranthene	
Dimethyl phthalate		Benzo(k)fluoranthene	
2,6-Dinitrotoluene		Benzo(a)pyrene	
Fluorene		Indeno(1,2,3-cd)pyrene	
4-Chlorophenyl phenyl ether		Dibenzo(a,h)anthracene	
2,4-Dinitrotoluene		Benzo(g,h,i)perylene	
1,2-Diphenylhydrazine		N-Nitrosodimethyl Amine	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Elevated detection limits due to matrix interferences.

Authorized: Anthony Cusanza

Date: January 6, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

LABORATORIES, INC.

Acid Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118,053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soil Line 1-270'

SAMPLE NO. I9929 DATE COLLECTED 8-29-89 DATE REC'D. 8-31-89 DATE ANALYZED 9-6-89

	ppb		ppb
2-Chlorophenol	<40,000.	2,4,6-Trichlorophenol	<40,000.
2-Nitrophenol		4-Chloro-3-methylphenol	<40,000.
Phenol		2,4-Dinitrophenol	<200,000.
2,4-Dimethylphenol		2-Methyl-4,6-dinitrophenol	
2,4-Dichlorophenol		Pentachlorophenol	
		4-Nitrophenol	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Benzyl Alcohol	<40,000.
2-Methylphenol	
4-Methylphenol	
Benzoic Acid	<200,000.
4-Chloroaniline	<40,000.
2-Methylnaphthalene	<40,000.
2,4,5-Trichlorophenol	<200,000.
2-Nitroaniline	
3-Nitroaniline	
Dibenzofuran	<40,000.
4-Nitroaniline	<200,000.

Elevated detection limits due to matrix interferences.

Authorized: [signature]

Date: January 6, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Purgeable Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soil
Line 1-270'

SAMPLE NO. I9929 DATE COLLECTED 8-29-89 DATE REC'D. 8-31-89 DATE ANALYZED 9-5-89

	ppb		ppb
Chloromethane	<12.	t-1,3-Dichloropropene	<6.
Bromomethane		Trichloroethene	
Vinyl chloride		Benzene	
Chloroethane		Dibromochloromethane	
Methylene chloride	<6.	1,1,2-Trichloroethane	
1,1-Dichloroethene		c-1,3-Dichloropropene	
1,1-Dichloroethane		2-Chloroethylvinyl ether	<12.
t-1,2-Dichloroethene		Bromoform	<6.
Chloroform		1,1,2,2-Tetrachloroethane	
1,2-Dichloroethane		Tetrachloroethene	
1,1,1-Trichloroethane		Toluene	
Carbon tetrachloride		Chlorobenzene	
Bromodichloromethane		Ethylbenzene	
1,2-Dichloropropane		Xylenes	

Methodology: Federal Register—40 CFR, Part 136, October 26, 1984

Comments:

Acetone	<12.
Carbon Disulfide	<6.
2-Butanone	<12.
Vinyl acetate	
4-Methyl-2-pentanone	
2-Hexanone	
Styrene	<6.

Authorized: Anthony Crescenzi

Date: January 6, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soil

DATE COLLECTED 8-29-89 DATE REC'D. 8-31-89 DATE ANALYZED

Description	Line 1 270'
Sample #	I9929
Total Metals:	
ALUMINUM	18,000.
ANTIMONY	<6.
ARSENIC	9.0
BARIUM	130.
BERYLLIUM	<1.2
CADMIUM	<1.2
CALCIUM	11,000.
CHROMIUM	26.
COBALT	9.4
COPPER	66.
IRON	26,000.
LEAD	110.
MAGNESIUM	4,300.
MANGANESE	570.
MERCURY	<0.5
NICKEL	31.
POTASSIUM	2,500.
SELENIUM	<6.0*
SILVER	<1.2
SODIUM	130.
THALLIUM	<1.2
VANADIUM	37.
ZINC	160.

UNITS: mg/kg dry weight

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/ℓ (ppm) unless otherwise noted

Comments: *The detection limit has been raised due to the presence of matrix interferences.

Authorized: Anthony Cuscuna Jr.

Date: January 6, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soil

DATE COLLECTED 8-29-89 DATE REC'D. 8-31-89 DATE ANALYZED

Description	Line 1 270'
Sample #	I9929
Other Analyses:	
PERCENT TOTAL SOLIDS	84.
CYANIDE	<1.

UNITS: mg/kg dry weight

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/ℓ (ppm) unless otherwise noted

Comments:

Authorized: Anthony Cusanza

Date: January 6, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
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OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Quality Control Analysis
Duplicate Anaysis for Oil & Grease in Soils

DATE COLLECTED _____ DATE REC'D. _____ DATE ANALYZED _____

	UNITS	LABORATORY NUMBER OF SAMPLE	SAMPLE RESULT (S)	LABORATORY NUMBER OF DUPLICATE	SAMPLE RESULT (D)	RPD	LABORATORY NUMBER OF SECOND DUPLICATE	SAMPLE RESULT (D_1)	RPD
OIL & GREASE	mg/kg dry	I9868	42,000.	I9869	34,000.	21.	I9870	30,000.	13.
	weight	I9875	58,000.	I9876	54,000.	7.	I9877	45,000.	18.
		I9894	44,000.	I9895	54,000.	22.	I9896	44,000.	20.
		I9906	63,000.	I9907	62,000.	2.	I9908	42,000.	38.
		I9910	6,800.	I9911	7,300.	18.	I9912	3,600.	68.
		I9914	25,000.	I9915	20,000.	22.	I9916	28,000.	33.

NOTE: Duplicate RPD = $\frac{S-D}{(S+D)/2} \times 100$

RPD = RELATIVE PERCENT DIFFERENCE

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/l (ppm) unless otherwise noted

Comments:

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY / 13221 / (315) 457-1494

Authorized: Anthony Cascenza

Date: January 20, 1990

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Quality Control Summary:
Matrix Spike & Matrix Spike Duplicates of Soils

DATE COLLECTED 8-29,30-89 DATE REC'D. 8-31-89 DATE ANALYZED 9-8,11-89

	UNITS	LAB # OF SPIKED SAMPLE	CONC. OF SPIKE ADDED PCB 1260	SAMPLE RESULT	CONC. MS	% RECOVERY	CONC. MSD	% RECOVERY	RPD %	LABORATORY SAMPLE #s	
PCB 1260	mg/kg	Blank	10.	<0.5	13.8	138.	10.7	107.	25.	SB & SBD 090189	
		Blank		<0.5	8.25	83.	8.14	81.	2.	SB & SBD 090589	
		I9868		8.4	8.6	**	8.9	**	**	I9869 & I9870	
		19875		48.4	52.7	**	48.8	**	**	I9876 & I9877	
		I9894		50.7	62.3	116.	57.5	68.	8.	I9895 & I9896	
		I9906		25.0	34.3	93.	32.3	73.	6.	19907 & I9908	
		I9910		3.18	10.7	75.	9.0	58.	17.	I9911 & I9912	
		19914		1800.	416.	*	906.	*	*	19915 & I9916	

*Quality control was not obtainable due to the high concentrations of the same Aroclor in the samples.

**Due to the variability of the matrix, QC cannot be calculated.

MS = MATRIX SPIKE
MSD = MATRIX SPIKE DUPLICATE
RPD = RELATIVE PERCENT DIFFERENCE

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/l (ppm) unless otherwise noted

Comments:

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY / 13221 / (315) 457-1494

Authorized: Anthony Cusanzi

Date: January 3, 1990

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY

QC Summary, Volatile Organics: Matrix Spike and Matrix Spike Duplicate

DATE COLLECTED 8-29-89 DATE REC'D 8-31-89 DATE ANALYZED 9-5-89

	UNITS	LAB # OF SPIKED SAMPLE	CONC. OF SPIKE ADDED	SAMPLE RESULT	CONC. MS	% RECOVERY	CONC. MSD	% RECOVERY	RPD %
1,1-DICHLOROETHENE	µg/kg	I9929	58.6	<6.	57.6	98.	54.0	92.	6.
TRICHLOROETHENE	dry				54.7	93.	56.6	96.	3.
BENZENE	weight				57.9	99.	59.8	102.	3.
TOLUENE					62.2	106.	61.9	106.	0.
CHLOROBENZENE	↓	↓	↓	↓	56.1	96.	57.4	98.	2.

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/l (ppm) unless otherwise noted

MS = MATRIX SPIKE
MSD = MATRIX SPIKE DUPLICATE
RPD = RELATIVE PERCENT DIFFERENCE

Comments:

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY / 13221 / (315) 457-1494

Authorized: Anthony Cusanzi

Date: January 6, 1990

OBG
LABORATORIES, INC.

CHAIN OF CUSTODY RECORD

SURVEY: WALLACE SCRAP / NIMO COBLESKILL, NY

SAMPLERS: Peter Jm Hoff

STATION NUMBER	STATION LOCATION	DATE	TIME	SAMPLE TYPE: Water (Comp. / Grab)	SAMPLE TYPE: Soil (Grab)	SEQ. NO.	NO. OF CONTAINERS	ANALYSIS REQUIRED
1	LINE 1 - 0'	8/29/89	1120		Soil		1	PCBs OIL GREASE
2	LINE 1 - 15'		1125					
3	LINE 1 - 30'		1130					
4	LINE 1 - 45'		1150					
5	LINE 1 - 60'		1156					
6	LINE 1 - 75'		1200					
7	LINE 1 - 90'		1213					
8	LINE 1 - 105'		1240					
9	LINE 1 - 120'		1348					
10	LINE 1 - 135'		1355					
10-MS	LINE 1 ~~-150~~ 135 MS		1357					
10-DUP	LINE 1 - 135 DUP		1400					

Relinquished by: Peter Jm Hoff	Received by:	Date/Time 8/31/89 0830
Relinquished by:	Received by:	Date/Time
Relinquished by:	Received by:	Date/Time
Relinquished by:	Received by Mobile Laboratory for field analysis:	Date/Time
Disposed by: Date/Time	Received for Laboratory by: Wendy Smith	Date/Time 8/31/89 08:30
Method of Shipment:		

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OBG
LABORATORIES, INC.

CHAIN OF CUSTODY RECORD

SURVEY: WALLACE SCRAP NIMO - Cobleskill NY

SAMPLERS: Peter Jm Haff

STATION NUMBER	STATION LOCATION	DATE	TIME	SAMPLE TYPE: Water / Comp. / Grab / Soil	SEQ. NO.	NO. OF CONTAINERS	ANALYSIS REQUIRED
11	LINE 1 - 150'	8/25/89	1410	SOIL		1	PCB - Oil - Grease
12	LINE 1 - 165'		1415				
13	LINE 1 - 180'		1457				
14	LINE 1 - 195'		1523				
15	LINE 1 - 210'		1535				
16	LINE 1 - 225'		1550				
17	LINE 1 - 240'		1600				
18	LINE 1 - 255'		1620				
19	LINE 1 - 270'		1640			3	and TCL
~~20~~	LINE 1 - 285'	8/30/89	1040				
	LINE 1 - 300'		1045				
	TRIP BLANK						

Relinquished by: Peter Jm Haff	Received by:	Date/Time 8/31/89 0830
Relinquished by:	Received by:	Date/Time
Relinquished by:	Received by:	Date/Time
Relinquished by:	Received by Mobile Laboratory for field analysis:	Date/Time
Dispatched by:	Date/Time	Received for Laboratory by: Wendy Smith — Date/Time 8/31/89 08:30

Method of Shipment:

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OBG
LABORATORIES, INC.

CHAIN OF CUSTODY RECORD

SURVEY: NIMO - WALLACE SCRAP COBLESKILL, NY

SAMPLERS: (Signature) Peter McHaff

STATION NUMBER	STATION LOCATION	DATE	TIME	SAMPLE TYPE: Water (Comp. / Grab) / Soil	SEQ. NO.	NO. OF CONTAINERS	ANALYSIS REQUIRED
	LINE 5 - 15'N	8/30/89	1120	X		1	PCB's and OIL/GREASE
	LINE 6 - 15'N	/	1145	/		/	/
	LINE 6 - 15'N DUP	/	1146	/		/	/
	LINE 6 - 15'N MS	/	1147	/		/	/
	LINE 5 - ~~PCB~~ 22'S	/	1215	/		/	/
	LINE 7 - 12'N	/	1155	/		/	/
	LINE 7 - 12'N DUP	/	1156	/		/	/
	LINE 7 - 12'N MS	/	1157	/		/	/
	LINE 8 - 15'N	/	1212	/		/	/
	LINE 6 - 15'S	/	1240	/		/	/
	LINE 7 - 15'S	/	1254	/		/	/
	LINE 8 - 15'S	↓	1308	↓		↓	↓

Relinquished by: (Signature) Peter McHaff	Received by: (Signature)	Date/Time 8/31/89 0830
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by Mobile Laboratory for field analysis: (Signature)	Date/Time
Dispatched by: (Signature) Date/Time	Received for Laboratory by: Wendy Smith	Date/Time 8/31/89 08:30
Marked at Shipment:		

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OBG
LABORATORIES, INC.

CHAIN OF CUSTODY RECORD

SURVEY: NIMO - WALLACE SCRAP CORLESKILL, NY

SAMPLERS: (Signature) Peter M Hall

STATION NUMBER	STATION LOCATION	DATE	TIME	SAMPLE TYPE: Water (Comp. / Grab)	SAMPLE TYPE: Soil	SEQ. NO.	NO. OF CONTAINERS	ANALYSIS REQUIRED
	LINE 8 - 30'S	8/30/89	1325				1	PCB and GREASE/OIL
	LINE 7 - 30'S	"	1324				"	"
	LINE 8 - 45'S		1358					
	LINE 8 - 45'S DUP		1358					
	LINE 8 - 45'S MS		1359					
	LINE 6 - 30'S		1340					
	LINE 5 - 30'S		1345					
		↓			↓		↓	↓

Relinquished by: (Signature) Peter M Hall	Received by: (Signature)	Date/Time 8/31/89 0830
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by Mobile Laboratory for field analysis: (Signature)	Date/Time
Dispatched by: (Signature) Date/Time	Received for Laboratory by: Wendy Smith	Date/Time 8/31/89 08:30
Method of Shipment:		

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OBG
LABORATORIES, INC.

CHAIN OF CUSTODY RECORD

SURVEY: Cobleskill - Wallace Scrap - N. MO

SAMPLERS: Bill Hesse

STATION NUMBER	STATION LOCATION	DATE	TIME	SAMPLE TYPE: Water	SAMPLE TYPE: Soil	SEQ. NO.	NO. OF CONTAINERS	ANALYSIS REQUIRED
	#16 - STAINED	8/29/89	1500		Soil		1	DCB Oil Grease
	#17 STAINED	"	1513		"		"	"
	#18 STAINED	"	1530		"		"	"
	18 DUP STAINED	"	1531		"		"	"
	18 MS STAINED	"	1532		"		"	"
	#19	"	1618		"		"	"
	#20	"	1630		"		"	"
	#21	"	1655		"		"	"
	#30	8/30/89	0725		"		"	"
	#26	"	0747		"		"	"
	#27	"	0802		"		"	"
	#29	"	0908		"		"	"

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Peter M. Hall		8/31/89 0830
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by Mobile Laboratory for field analysis: (Signature)	Date/Time
Dispatched by: (Signature) Date/Time	Received for Laboratory by: Wendy Smith	Date/Time 8/31/89 08:30
Method of Shipment:		

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Road / Syracuse, New York 13221 / (315) 457-1494

OBG
LABORATORIES, INC.

CHAIN OF CUSTODY RECORD

SURVEY: NIMO - WALLACE SCRAP CORLESKILL NY

SAMPLERS: (Signature) Peter M Haff

STATION NUMBER	STATION LOCATION	DATE	TIME	SAMPLE TYPE: Water (Comp. / Grab)	SAMPLE TYPE: Other (Soil)	SEQ. NO.	NO. OF CONTAINERS	ANALYSIS REQUIRED
	# 23	8/30/89	0943				1	PCB's and oil/grease
	# 24	"	0935				"	"
	# 25	"	0928				"	"
	# 22	"	1015				"	"
	LINE 2 - 15'N	"	1050				"	"
	LINE 2 - 15'S	"	1047				"	"
	LINE 3 - 15'N	"	1056				"	"
	LINE 3 - 15'S	"	1057				"	"
	LINE 4 - 15'N	"	1110				"	"
	LINE 4 - 15'S	"	1129				"	"
	LINE 4 - 15'S DUP	"	1129				"	"
	LINE 4 - 15'S MS	↓	1129		↓		↓	↓

Relinquished by: (Signature) Peter M Haff	Received by: (Signature)	Date/Time 8/31/89 0830
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by Mobile Laboratory for field analysis: (Signature)	Date/Time
Dispatched by: (Signature) Date/Time	Received for Laboratory by: Wendy Smith	Date/Time 8/31/89 08:30
Method of Shipment:		

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Road / Syracuse, New York 13221 / (315) 457-1494

CASE FILE

Survey: Ni-Mo-Cobleskill Date Collected: 8/29 + 8/30/89

Sampler: Peter Haff Date Received: 8/31/89

Client Name and Ref. # : O'Brien & Gere

Laboratory Number: 1118.053.517

Condition of Shipment: Hand delivered.

Archive? If so how long ? No.

Signed: Wendy Smith

Sample Coordinator

****

Disposal Procedure*: Disposal will be determined by the hazardous waste office

Signed: Anthony Cucci

Date: 1-10-90

* The routine disposal procedure for non-hazardous samples is to dispose of the samples 4 weeks after a typed report is signed and mailed to the client. Water samples are filtered through carbon to the sanitary sewer. Solid samples are sent to a sanitary landfill.

OBG
LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soil & Waters

DATE COLLECTED 10-10/12-89 DATE REC'D. 10-13-89 DATE ANALYZED

Description	SED-3 (Soil)	MW-3 (Water)	W-1 (Water)	
Sample #	J2117*	J2118	J2119	
Total Metals:				
ALUMINUM	8400.	5.0	<0.2	
ANTIMONY	<26.	<0.06	<0.06	
ARSENIC	3.5	<0.005	<0.005	
BARIUM	100.	0.3	<0.2	
BERYLLIUM	1.3	<0.005	<0.005	
CADMIUM	<1.1	<0.005	<0.005	
CALCIUM	140,000.	230.	100.	
CHROMIUM	18.	0.02	<0.01	
COBALT	<2.6	<0.05	<0.05	
COPPER	43.	<0.025	<0.025	
IRON	13,000.	18.	<0.1	
LEAD	32.	0.007	<0.005	
MAGNESIUM	2600.	19.	6.	
MANGANESE	150.	1.1	0.16	
MERCURY	<1.3	<0.0005	<0.0005	
NICKEL	15.	<0.04	<0.04	
POTASSIUM	<530.	<50.	<50.	
SELENIUM	<1.3	<0.005	<0.005	
SILVER	1.3	<0.01	<0.01	
SODIUM	490.	170.	24.	
THALLIUM	<3.	<0.01	<0.01	**UNITS: Water=mg/l**
VANADIUM	18.	<0.05	<0.05	**Soils=mg/kg dry**
ZINC	109.	0.03	0.02	**weight**

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/ℓ (ppm) unless otherwise noted

Comments: *Several detection limits have been raised due to the presence of matrix interferences.

Authorized:

Date: January 5, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Laboratory Report

CLIENT: NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION: Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soil & Waters

DATE COLLECTED: 10-10/12-89 DATE REC'D. 10-13-89 DATE ANALYZED:

Description	SED-3 (Soil)	MW-3 (Water)	W-1 (Water)		
Sample #	J2117	J2118	J2119		
Other Analyses:					
PERCENT TOTAL SOLIDS	38.	-	-		
CYANIDE	<1.5	<0.01	<0.01		

UNITS: Water=mg/l
Soil=mg/kg dry weight

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/l (ppm) unless otherwise noted

Comments:

Authorized: [signature]

Date: January 5, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG
LABORATORIES, INC.

Base/Neutral Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soil
SED-3

SAMPLE NO. J2117 DATE COLLECTED 10-12-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-17-89

	ppb		ppb
1,3-Dichlorobenzene	<8700.	Diethylphthalate	<8700.
1,4-Dichlorobenzene		N-nitrosodiphenylamine	
1,2-Dichlorobenzene		Hexachlorobenzene	
Hexachloroethane		4-Bromophenyl phenyl ether	
Bis (2-chloroethyl) ether		Phenanthrene	
Bis (2-chloroisopropyl) ether		Anthracene	
N-Nitrosodi-n-propylamine		Di-n-butyl phthalate	
Nitrobenzene		Fluoranthene	
Hexachlorobutadiene		Pyrene	
1,2,4-Trichlorobenzene		Benzidine	*
Isophorone		Butyl benzyl phthalate	<8700.
Naphthalene		Bis(2-ethylhexyl)phthalate	
Bis (2-chloroethoxy) methane		Chrysene	
Hexachlorocyclopentadiene		Benzo(a)anthracene	
2-Chloronaphthalene		3,3-Dichlorobenzidine	<17,000.
Acenaphthylene		Di-n-octylphthalate	<8700.
Acenaphthene		Benzo(b)fluoranthene	
Dimethyl phthalate		Benzo(k)fluoranthene	
2,6-Dinitrotoluene		Benzo(a)pyrene	
Fluorene		Indeno(1,2,3-cd)pyrene	
4-Chlorophenyl phenyl ether		Dibenzo(a,h)anthracene	
2,4-Dinitrotoluene		Benzo(g,h,i)perylene	
1,2-Diphenylhydrazine		N-Nitrosodimethyl Amine	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

*Not Included in HSL List or TCL List

Elevated detection limits due to matrix interferences.

Authorized: Anthony Cusumano

Date: January 5, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

LABORATORIES, INC.

Acid Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soil

SED-3

SAMPLE NO. J2117 DATE COLLECTED 10-12-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-17-89

	ppb		ppb
2-Chlorophenol	<8700.	2,4,6-Trichlorophenol	<8700.
2-Nitrophenol		4-Chloro-3-methylphenol	<8700.
Phenol		2,4-Dinitrophenol	<42,000.
2,4-Dimethylphenol		2-Methyl-4,6-dinitrophenol	
2,4-Dichlorophenol		Pentachlorophenol	
		4-Nitrophenol	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Benzyl Alcohol	<8700.
2-Methylphenol	
4-Methylphenol	
Benzoic Acid	<42,000.
4-Chloroaniline	<8700.
2-Methylnaphthalene	<8700.
2,4,5-Trichlorophenol	<42,000.
2-Nitroaniline	
3-Nitroaniline	
Dibenzofuran	<8700.
4-Nitroaniline	<42,000.

Elevated detection limits due to matrix interferences.

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Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

Authorized:

Date: January 5, 1990

OBG LABORATORIES, INC.

Purgeable Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soil
SED-3

SAMPLE NO. J2117 DATE COLLECTED 10-10-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-18-89

	ppb		ppb
Chloromethane	<26.	t-1,3-Dichloropropene	<13.
Bromomethane		Trichloroethene	
Vinyl chloride		Benzene	
Chloroethane		Dibromochloromethane	
Methylene chloride	54.B	1,1,2-Trichloroethane	
1,1-Dichloroethene	<13.	c-1,3-Dichloropropene	
1,1-Dichloroethane		2-Chloroethylvinyl ether	<26.
t-1,2-Dichloroethene		Bromoform	<13.
Chloroform		1,1,2,2-Tetrachloroethane	
1,2-Dichloroethane		Tetrachloroethene	
1,1,1-Trichloroethane		Toluene	
Carbon tetrachloride		Chlorobenzene	
Bromodichloromethane		Ethylbenzene	
1,2-Dichloropropane		Xylenes	

Methodology: Federal Register—40 CFR, Part 136, October 26, 1984

Comments:

Acetone	150.B
Carbon Disulfide	<13.
2-Butanone	<26.
Vinyl acetate	
4-Methyl-2-pentanone	
2-Hexanone	
Styrene	<13.

Values flagged with a "B" indicate that the analyte was detected in the blank as well as the sample. The blank exhibited 54.ppb of Methylene Chloride and 150.ppb of Acetone.

Authorized: _____

Date: January 18, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Pesticide/PCB Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soil SED-3

SAMPLE NO. J2117 DATE COLLECTED 10-10-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-18-89

	ppb		ppb
α-BHC	<320.	4,4'-DDT	<640.
γ-BHC		Endosulfan Sulfate	
β-BHC		Endrin Aldehyde	
Heptachlor		Methoxychlor	<3200.
δ-BHC		Endrin Ketone	<640.
Aldrin		Chlordane	<3200.
Heptachlor Epoxide		Toxaphene	<6400.
Endosulfan I		PCB-1221	<3200.
4,4'-DDE	<640.	PCB-1232	
Dieldrin		PCB-1016/1242	
Endrin		PCB-1248	
4,4'-DDD		PCB-1254	<6400. (230.)
Endosulfan II		PCB-1260	<6400.

Methodology: Federal Register—40 CFR, Part 136, October 26, 1984 UNITS: µg/kg dry weight

Comments:

Detection limits raised due to matrix interferences.

Values reported in parentheses are estimated values, detected, but below the quantitation limit.

Authorized: Anthony Cerasoli

Date: January 5, 1990

OBG Laboratories, Inc.
Box 4942/1304 Buckley Rd./Syracuse, NY/13221/(315) 457-1494

OBG
LABORATORIES, INC.

Base/Neutral Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water
MW-3

SAMPLE NO. J2118 DATE COLLECTED 10-10-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-16-89

	ppb		ppb
1,3-Dichlorobenzene	<10.	Diethylphthalate	<10.
1,4-Dichlorobenzene		N-nitrosodiphenylamine	
1,2-Dichlorobenzene		Hexachlorobenzene	
Hexachloroethane		4-Bromophenyl phenyl ether	
Bis (2-chloroethyl) ether		Phenanthrene	
Bis (2-chloroisopropyl) ether		Anthracene	
N-Nitrosodi-n-propylamine		Di-n-butyl phthalate	
Nitrobenzene		Fluoranthene	
Hexachlorobutadiene		Pyrene	
1,2,4-Trichlorobenzene		Benzidine	*
Isophorone		Butyl benzyl phthalate	<10.
Naphthalene		Bis(2-ethylhexyl)phthalate	
Bis (2-chloroethoxy) methane		Chrysene	
Hexachlorocyclopentadiene		Benzo(a)anthracene	
2-Chloronaphthalene		3,3-Dichlorobenzidine	<21.
Acenaphthylene		Di-n-octylphthalate	<10.
Acenaphthene		Benzo(b)fluoranthene	
Dimethyl phthalate		Benzo(k)fluoranthene	
2,6-Dinitrotoluene		Benzo(a)pyrene	
Fluorene		Indeno(1,2,3-cd)pyrene	
4-Chlorophenyl phenyl ether		Dibenzo(a,h)anthracene	
2,4-Dinitrotoluene		Benzo(g,h,i)perylene	
1,2-Diphenylhydrazine		N-Nitrosodimethyl Amine	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

*Not Included in HSL List or TCL List

Authorized: Anthony Cusenza

Date: January 5, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG
LABORATORIES, INC.

Acid Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water
MW-3

SAMPLE NO. J2118 DATE COLLECTED 10-10-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-16-89

	ppb		ppb
2-Chlorophenol	<10.	2,4,6-Trichlorophenol	<10.
2-Nitrophenol		4-Chloro-3-methylphenol	<10.
Phenol		2,4-Dinitrophenol	<53.
2,4-Dimethylphenol		2-Methyl-4,6-dinitrophenol	
2,4-Dichlorophenol		Pentachlorophenol	
		4-Nitrophenol	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Benzyl Alcohol	<10.
2-Methylphenol	
4-Methylphenol	
Benzoic Acid	<53.
4-Chloroaniline	<10.
2-Methylnaphthalene	<10.
2,4,5-Trichlorophenol	<53.
2-Nitroaniline	
3-Nitroaniline	
Dibenzofuran	<10.
4-Nitroaniline	<53.

Authorized: Anthony Cusanza

Date: January 5, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Purgeable Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water MW-3

SAMPLE NO. J2118 DATE COLLECTED 10-10-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-20-89

	ppb		ppb
Chloromethane	<10.	t-1,3-Dichloropropene	<5.
Bromomethane		Trichloroethene	
Vinyl chloride		Benzene	
Chloroethane		Dibromochloromethane	
Methylene chloride	<5.	1,1,2-Trichloroethane	
1,1-Dichloroethene		c-1,3-Dichloropropene	
1,1-Dichloroethane		2-Chloroethylvinyl ether	<10.
t-1,2-Dichloroethene		Bromoform	<5.
Chloroform		1,1,2,2-Tetrachloroethane	
1,2-Dichloroethane		Tetrachloroethene	
1,1,1-Trichloroethane		Toluene	
Carbon tetrachloride		Chlorobenzene	
Bromodichloromethane		Ethylbenzene	
1,2-Dichloropropane		Xylenes	

Methodology: Federal Register—40 CFR, Part 136, October 26, 1984

Comments:

Acetone	<10.
Carbon Disulfide	<5.
2-Butanone	<10.
Vinyl acetate	
4-Methyl-2-pentanone	
2-Hexanone	
Styrene	<5.

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
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Authorized: _____

Date: January 18, 1990

OBG LABORATORIES, INC.

Base/Neutral Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water W-1

SAMPLE NO. J2119 DATE COLLECTED 10-12-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-16-89

	ppb		ppb
1,3-Dichlorobenzene	<10.	Diethylphthalate	<10.
1,4-Dichlorobenzene		N-nitrosodiphenylamine	
1,2-Dichlorobenzene		Hexachlorobenzene	
Hexachloroethane		4-Bromophenyl phenyl ether	
Bis (2-chloroethyl) ether		Phenanthrene	
Bis (2-chloroisopropyl) ether		Anthracene	
N-Nitrosodi-n-propylamine		Di-n-butyl phthalate	
Nitrobenzene		Fluoranthene	
Hexachlorobutadiene		Pyrene	
1,2,4-Trichlorobenzene		Benzidine	*
Isophorone		Butyl benzyl phthalate	<10.
Naphthalene		Bis(2-ethylhexyl)phthalate	
Bis (2-chloroethoxy) methane		Chrysene	
Hexachlorocyclopentadiene		Benzo(a)anthracene	
2-Chloronaphthalene		3,3-Dichlorobenzidine	<21.
Acenaphthylene		Di-n-octylphthalate	<10.
Acenaphthene		Benzo(b)fluoranthene	
Dimethyl phthalate		Benzo(k)fluoranthene	
2,6-Dinitrotoluene		Benzo(a)pyrene	
Fluorene		Indeno(1,2,3-cd)pyrene	
4-Chlorophenyl phenyl ether		Dibenzo(a,h)anthracene	
2,4-Dinitrotoluene		Benzo(g,h,i)perylene	
1,2-Diphenylhydrazine		N-Nitrosodimethyl Amine	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

*Not Included in HSL List or TCL List

Authorized: Anthony Cimino

Date: January 5, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Acid Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water
W-1

SAMPLE NO. J2119 DATE COLLECTED 10-12-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-16-89

	ppb		ppb
2-Chlorophenol	<10.	2,4,6-Trichlorophenol	<10.
2-Nitrophenol		4-Chloro-3-methylphenol	<10.
Phenol		2,4-Dinitrophenol	<53.
2,4-Dimethylphenol		2-Methyl-4,6-dinitrophenol	
2,4-Dichlorophenol		Pentachlorophenol	
		4-Nitrophenol	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Benzyl Alcohol	<10.
2-Methylphenol	
4-Methylphenol	
Benzoic Acid	<53.
4-Chloroaniline	<10.
2-Methylnaphthalene	<10.
2,4,5-Trichlorophenol	<53.
2-Nitroaniline	
3-Nitroaniline	
Dibenzofuran	<10.
4-Nitroaniline	<53.

Authorized: Anthony Cimmino

Date: January 5, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Purgeable Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water W-1

SAMPLE NO. J2119 DATE COLLECTED 10-12-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-20-89

	ppb		ppb
Chloromethane	<10.	t-1,3-Dichloropropene	<5.
Bromomethane		Trichloroethene	
Vinyl chloride		Benzene	
Chloroethane		Dibromochloromethane	
Methylene chloride	<5.	1,1,2-Trichloroethane	
1,1-Dichloroethene		c-1,3-Dichloropropene	
1,1-Dichloroethane		2-Chloroethylvinyl ether	<10.
t-1,2-Dichloroethene		Bromoform	<5.
Chloroform		1,1,2,2-Tetrachloroethane	
1,2-Dichloroethane		Tetrachloroethene	
1,1,1-Trichloroethane		Toluene	
Carbon tetrachloride		Chlorobenzene	
Bromodichloromethane		Ethylbenzene	
1,2-Dichloropropane		Xylenes	

Methodology: Federal Register—40 CFR, Part 136, October 26, 1984

Comments:

Acetone	<10.
Carbon Disulfide	<5.
2-Butanone	<10.
Vinyl acetate	
4-Methyl-2-pentanone	
2-Hexanone	
Styrene	<5.

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
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Authorized: _____

Date: January 18, 1990

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Soils

DATE COLLECTED 10-10/12-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-18-89

	Sample #	PCB	Aroclor	PERCENT TOTAL SOLIDS
SED-1	J2120	3.8	1254/1260	28.
SED-2	J2121	5.8	1248+1254/60	24.
SED-4	J2122	4.6	1248+1254/60	43.
SED-5	J2123	28.	1248+1260	61.
SED-6	J2124	5.0	1248+1254/60	68.
			UNITS:	mg/kg dry weight

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/ℓ (ppm) unless otherwise noted

Comments:

Authorized: Anthony Cusanza

Date: January 4, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Waters

DATE COLLECTED 10-10/12-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-17-89

	Sample #	PCB	Aroclor
MW-3	J2118	<0.065	-
W-1	J2119	0.39	1248+1260
MW-1	J2125	1.5	1260
MW-2	J2126	<0.065	-
MW-4	J2127	<0.065	-
W-2	J2130	0.24	1248+1260
W-3	J2131	0.12	1248+1260
W-4	J2132	0.72	1248+1260
			UNITS: µg/l

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1964

Units: mg/ℓ (ppm) unless otherwise noted

Comments:

Authorized: Anthony Arnone

Date: January 4, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Purgeable Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Waters

DATE COLLECTED 10-10/12-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-13-89

DESCRIPTION:	MW-1	MW-2	MW-4	W-1	W-2	W-3
SAMPLE NO.:	J2125	J2126	J2127	J2128	J2130	J2131
Chloromethane	<1.	<1.	<1.	<1.	<1.	<1.
Bromomethane						
Vinyl chloride						
Chloroethane						
Methylene chloride						
1,1-Dichloroethene						
1,1-Dichloroethane						
t-1,2-Dichloroethene						
Chloroform	2.					
1,2-Dichloroethane	<1.					
1,1,1-Trichloroethane						
Carbon tetrachloride						
Bromodichloromethane						
1,2-Dichloropropane						
t-1,3-Dichloropropene						
Trichloroethene						
Benzene						
Dibromochloromethane						
1,1,2-Trichloroethane						
c-1,3-Dichloropropene						
2-Chloroethylvinyl ether	<10.	<10.	<10.	<10.	<10.	<10.
Bromoform	<10.	<10.	<10.	<10.	<10.	<10.
1,1,2,2-Tetrachloroethane	<1.	<1.	<1.	<1.	<1.	<1.
Tetrachloroethene						
Toluene						
Chlorobenzene						
Ethylbenzene						
Xylenes						

UNITS: µg/l

Methodology: Federal Register—40 CFR, Part 136, October 26, 1984

Units: *µg/l* (ppb) unless otherwise noted

Comments:

Authorized: Anthony Gusmano

Date: January 4, 1990

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Purgeable Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Waters

DATE COLLECTED 10-10-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-13-89

DESCRIPTION:	W-4	QC Trip Blank
SAMPLE NO.:	J2132	J2133
Chloromethane	<1.	<1.
Bromomethane		
Vinyl chloride		
Chloroethane		
Methylene chloride		
1,1-Dichloroethene		
1,1-Dichloroethane		
t-1,2-Dichloroethene		
Chloroform		
1,2-Dichloroethane		
1,1,1-Trichloroethane		
Carbon tetrachloride		
Bromodichloromethane		
1,2-Dichloropropane		
t-1,3-Dichloropropene		
Trichloroethene		
Benzene		
Dibromochloromethane		
1,1,2-Trichloroethane		
c-1,3-Dichloropropene	↓	↓
2-Chloroethylvinyl ether	<10.	<10.
Bromoform	<10.	<10.
1,1,2,2-Tetrachloroethane	<1.	<1.
Tetrachloroethene		
Toluene		
Chlorobenzene		
Ethylbenzene		
Xylenes	↓	↓

UNITS: µg/l

Methodology: Federal Register—40 CFR, Part 136, October 26, 1984

Units: µg/l (ppb) unless otherwise noted

Comments:

Authorized: Anthony Cusumano Jr.

Date: January 4, 1990

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Base/Neutral Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water MW-1

SAMPLE NO. J2125 DATE COLLECTED 10-12-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-16-89

	ppb		ppb
1,3-Dichlorobenzene	<11.	Diethylphthalate	<11.
1,4-Dichlorobenzene		N-nitrosodiphenylamine	
1,2-Dichlorobenzene		Hexachlorobenzene	
Hexachloroethane		4-Bromophenyl phenyl ether	
Bis (2-chloroethyl) ether		Phenanthrene	
Bis (2-chloroisopropyl) ether		Anthracene	
N-Nitrosodi-n-propylamine		Di-n-butyl phthalate	
Nitrobenzene		Fluoranthene	
Hexachlorobutadiene		Pyrene	
1,2,4-Trichlorobenzene		Benzidine *	
Isophorone		Butyl benzyl phthalate	<11.
Naphthalene		Bis(2-ethylhexyl)phthalate	
Bis (2-chloroethoxy) methane		Chrysene	
Hexachlorocyclopentadiene		Benzo(a)anthracene	
2-Chloronaphthalene		3,3-Dichlorobenzidine	<22.
Acenaphthylene		Di-n-octylphthalate	<11.
Acenaphthene		Benzo(b)fluoranthene	
Dimethyl phthalate		Benzo(k)fluoranthene	
2,6-Dinitrotoluene		Benzo(a)pyrene	
Fluorene		Indeno(1,2,3-cd)pyrene	
4-Chlorophenyl phenyl ether		Dibenzo(a,h)anthracene	
2,4-Dinitrotoluene		Benzo(g,h,i)perylene	
1,2-Diphenylhydrazine		N-Nitrosodimethyl Amine	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

*Not Included in HSL List or TCL List

Authorized: Anthony Cuccaro

Date: January 5, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG
LABORATORIES, INC.

Acid Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water MW-1

SAMPLE NO. J2125 DATE COLLECTED 10-12-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-16-89

	ppb		ppb
2-Chlorophenol	<11.	2,4,6-Trichlorophenol	<11.
2-Nitrophenol		4-Chloro-3-methylphenol	<11.
Phenol		2,4-Dinitrophenol	<54.
2,4-Dimethylphenol		2-Methyl-4,6-dinitrophenol	
2,4-Dichlorophenol		Pentachlorophenol	
		4-Nitrophenol	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Benzyl Alcohol	<11.
2-Methylphenol	
4-Methylphenol	
Benzoic Acid	<54.
4-Chloroaniline	<11.
2-Methylnaphthalene	<11.
2,4,5-Trichlorophenol	<54.
2-Nitroaniline	
3-Nitroaniline	
Dibenzofuran	<11.
4-Nitroaniline	<54.

Authorized: Anthony Cusanza

Date: January 5, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Base/Neutral Priority Pollutants

CLIENT: NIAGARA MOHAWK POWER CORPORATION — JOB NO. 1118.053.517

DESCRIPTION: Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water
MW-2

SAMPLE NO. J2126 — DATE COLLECTED 10-10-89 — DATE REC'D. 10-13-89 — DATE ANALYZED 10-16-89

	ppb		ppb
1,3-Dichlorobenzene	<11.	Diethylphthalate	<11.
1,4-Dichlorobenzene		N-nitrosodiphenylamine	
1,2-Dichlorobenzene		Hexachlorobenzene	
Hexachloroethane		4-Bromophenyl phenyl ether	
Bis (2-chloroethyl) ether		Phenanthrene	
Bis (2-chloroisopropyl) ether		Anthracene	
N-Nitrosodi-n-propylamine		Di-n-butyl phthalate	
Nitrobenzene		Fluoranthene	
Hexachlorobutadiene		Pyrene	↓
1,2,4-Trichlorobenzene		Benzidine	*
Isophorone		Butyl benzyl phthalate	<11.
Naphthalene		Bis(2-ethylhexyl)phthalate	
Bis (2-chloroethoxy) methane		Chrysene	
Hexachlorocyclopentadiene		Benzo(a)anthracene	↓
2-Chloronaphthalene		3,3-Dichlorobenzidine	<22.
Acenaphthylene		Di-n-octylphthalate	<11.
Acenaphthene		Benzo(b)fluoranthene	
Dimethyl phthalate		Benzo(k)fluoranthene	
2,6-Dinitrotoluene		Benzo(a)pyrene	
Fluorene		Indeno(1,2,3-cd)pyrene	
4-Chlorophenyl phenyl ether		Dibenzo(a,h)anthracene	
2,4-Dinitrotoluene		Benzo(g,h,i)perylene	
1,2-Diphenylhydrazine	↓	N-Nitrosodimethyl Amine	↓

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

*Not Included in HSL List or TCL List

Authorized: [signature]

Date: January 5, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Acid Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water MW-2

SAMPLE NO. J2126 DATE COLLECTED 10-12-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-16-89

	ppb		ppb
2-Chlorophenol	<11.	2,4,6-Trichlorophenol	<11.
2-Nitrophenol		4-Chloro-3-methylphenol	<11.
Phenol		2,4-Dinitrophenol	<56.
2,4-Dimethylphenol		2-Methyl-4,6-dinitrophenol	
2,4-Dichlorophenol		Pentachlorophenol	
		4-Nitrophenol	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Benzyl Alcohol	<11.
2-Methylphenol	
4-Methylphenol	
Benzoic Acid	<56.
4-Chloroaniline	<11.
2-Methylnaphthalene	<11.
2,4,5-Trichlorophenol	<56.
2-Nitroaniline	
3-Nitroaniline	
Dibenzofuran	<11.
4-Nitroaniline	<56.

Authorized: Anthony Cimino

Date: January 5, 1990

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OBG LABORATORIES, INC.

Base/Neutral Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water MW-4

SAMPLE NO. J2127 DATE COLLECTED 10-10-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-16-89

	ppb		ppb
1,3-Dichlorobenzene	<11.	Diethylphthalate	<11.
1,4-Dichlorobenzene		N-nitrosodiphenylamine	
1,2-Dichlorobenzene		Hexachlorobenzene	
Hexachloroethane		4-Bromophenyl phenyl ether	
Bis (2-chloroethyl) ether		Phenanthrene	
Bis (2-chloroisopropyl) ether		Anthracene	
N-Nitrosodi-n-propylamine		Di-n-butyl phthalate	
Nitrobenzene		Fluoranthene	
Hexachlorobutadiene		Pyrene	
1,2,4-Trichlorobenzene		Benzidine	*
Isophorone		Butyl benzyl phthalate	<11.
Naphthalene		Bis(2-ethylhexyl)phthalate	16.
Bis (2-chloroethoxy) methane		Chrysene	<11.
Hexachlorocyclopentadiene		Benzo(a)anthracene	<11.
2-Chloronaphthalene		3,3-Dichlorobenzidine	<21.
Acenaphthylene		Di-n-octylphthalate	<11.
Acenaphthene		Benzo(b)fluoranthene	
Dimethyl phthalate		Benzo(k)fluoranthene	
2,6-Dinitrotoluene		Benzo(a)pyrene	
Fluorene		Indeno(1,2,3-cd)pyrene	
4-Chlorophenyl phenyl ether		Dibenzo(a,h)anthracene	
2,4-Dinitrotoluene		Benzo(g,h,i)perylene	
1,2-Diphenylhydrazine		N-Nitrosodimethyl Amine	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

*Not Included in HSL List or TCL List

Authorized: Anthony Cimino

Date: January 5, 1990

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OBG
LABORATORIES, INC.

Acid Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water MW-4

SAMPLE NO. J2127 DATE COLLECTED 10-10-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-16-89

	ppb		ppb
2-Chlorophenol	<11.	2,4,6-Trichlorophenol	<11.
2-Nitrophenol		4-Chloro-3-methylphenol	<11.
Phenol		2,4-Dinitrophenol	<54.
2,4-Dimethylphenol		2-Methyl-4,6-dinitrophenol	
2,4-Dichlorophenol		Pentachlorophenol	
		4-Nitrophenol	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Benzyl Alcohol	<11.
2-Methylphenol	
4-Methylphenol	
Benzoic Acid	<54.
4-Chloroaniline	<11.
2-Methylnaphthalene	<11.
2,4,5-Trichlorophenol	<54.
2-Nitroaniline	
3-Nitroaniline	
Dibenzofuran	<11.
4-Nitroaniline	<54.

Authorized: Anthony Cimino

Date: January 5, 1990

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OBG
LABORATORIES, INC.

Base/Neutral Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water W-2

SAMPLE NO. J2130 DATE COLLECTED 10-12-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-16-89

	ppb		ppb
1,3-Dichlorobenzene	<10.	Diethylphthalate	<10.
1,4-Dichlorobenzene		N-nitrosodiphenylamine	
1,2-Dichlorobenzene		Hexachlorobenzene	
Hexachloroethane		4-Bromophenyl phenyl ether	
Bis (2-chloroethyl) ether		Phenanthrene	
Bis (2-chloroisopropyl) ether		Anthracene	
N-Nitrosodi-n-propylamine		Di-n-butyl phthalate	
Nitrobenzene		Fluoranthene	
Hexachlorobutadiene		Pyrene	
1,2,4-Trichlorobenzene		Benzidine *	
Isophorone		Butyl benzyl phthalate	<10.
Naphthalene		Bis(2-ethylhexyl)phthalate	
Bis (2-chloroethoxy) methane		Chrysene	
Hexachlorocyclopentadiene		Benzo(a)anthracene	
2-Chloronaphthalene		3,3-Dichlorobenzidine	<21.
Acenaphthylene		Di-n-octylphthalate	<10.
Acenaphthene		Benzo(b)fluoranthene	
Dimethyl phthalate		Benzo(k)fluoranthene	
2,6-Dinitrotoluene		Benzo(a)pyrene	
Fluorene		Indeno(1,2,3-cd)pyrene	
4-Chlorophenyl phenyl ether		Dibenzo(a,h)anthracene	
2,4-Dinitrotoluene		Benzo(g,h,i)perylene	
1,2-Diphenylhydrazine		N-Nitrosodimethyl Amine	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

*Not Included in HSL List or TCL List

Authorized: Anthony Cuccinelli

Date: January 5, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG
LABORATORIES, INC.

Acid Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water W-2

SAMPLE NO. J2130 DATE COLLECTED 10-12-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-16-89

	ppb		ppb
2-Chlorophenol	<10.	2,4,6-Trichlorophenol	<10.
2-Nitrophenol		4-Chloro-3-methylphenol	<10.
Phenol		2,4-Dinitrophenol	<52.
2,4-Dimethylphenol		2-Methyl-4,6-dinitrophenol	
2,4-Dichlorophenol		Pentachlorophenol	
		4-Nitrophenol	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Benzyl Alcohol	<10.
2-Methylphenol	
4-Methylphenol	
Benzoic Acid	<52.
4-Chloroaniline	<10.
2-Methylnaphthalene	<10.
2,4,5-Trichlorophenol	<52.
2-Nitroaniline	
3-Nitroaniline	
Dibenzofuran	<10.
4-Nitroaniline	<52.

Authorized: [signature]

Date: January 5, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Base/Neutral Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water W-3

SAMPLE NO. J2131 DATE COLLECTED 10-10-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-16-89

	ppb		ppb
1,3-Dichlorobenzene	<10.	Diethylphthalate	<10.
1,4-Dichlorobenzene		N-nitrosodiphenylamine	
1,2-Dichlorobenzene		Hexachlorobenzene	
Hexachloroethane		4-Bromophenyl phenyl ether	
Bis (2-chloroethyl) ether		Phenanthrene	
Bis (2-chloroisopropyl) ether		Anthracene	
N-Nitrosodi-n-propylamine		Di-n-butyl phthalate	
Nitrobenzene		Fluoranthene	
Hexachlorobutadiene		Pyrene	
1,2,4-Trichlorobenzene		Benzidine	*
Isophorone		Butyl benzyl phthalate	<10.
Naphthalene		Bis(2-ethylhexyl)phthalate	
Bis (2-chloroethoxy) methane		Chrysene	
Hexachlorocyclopentadiene		Benzo(a)anthracene	
2-Chloronaphthalene		3,3-Dichlorobenzidine	<21.
Acenaphthylene		Di-n-octylphthalate	<10.
Acenaphthene		Benzo(b)fluoranthene	
Dimethyl phthalate		Benzo(k)fluoranthene	
2,6-Dinitrotoluene		Benzo(a)pyrene	
Fluorene		Indeno(1,2,3-cd)pyrene	
4-Chlorophenyl phenyl ether		Dibenzo(a,h)anthracene	
2,4-Dinitrotoluene		Benzo(g,h,i)perylene	
1,2-Diphenylhydrazine		N-Nitrosodimethyl Amine	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

*Not Included in HSL List or TCL List

Authorized: Anthony Cimino

Date: January 5, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Acid Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water W-3

SAMPLE NO. J2131 DATE COLLECTED 10-10-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-16-89

	ppb		ppb
2-Chlorophenol	<10.	2,4,6-Trichlorophenol	<10.
2-Nitrophenol		4-Chloro-3-methylphenol	<10.
Phenol		2,4-Dinitrophenol	<52.
2,4-Dimethylphenol		2-Methyl-4,6-dinitrophenol	
2,4-Dichlorophenol		Pentachlorophenol	
		4-Nitrophenol	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Benzyl Alcohol	<10.
2-Methylphenol	
4-Methylphenol	
Benzoic Acid	<52.
4-Chloroaniline	<10.
2-Methylnaphthalene	<10.
2,4,5-Trichlorophenol	<52.
2-Nitroaniline	
3-Nitroaniline	
Dibenzofuran	<10.
4-Nitroaniline	<52.

Authorized: [signature]

Date: January 5, 1990

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OBG LABORATORIES, INC.

Base/Neutral Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water W-4

SAMPLE NO. J2132 DATE COLLECTED 10-10-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-16-89

	ppb		ppb
1,3-Dichlorobenzene	<11.	Diethylphthalate	<11.
1,4-Dichlorobenzene		N-nitrosodiphenylamine	
1,2-Dichlorobenzene		Hexachlorobenzene	
Hexachloroethane		4-Bromophenyl phenyl ether	
Bis (2-chloroethyl) ether		Phenanthrene	
Bis (2-chloroisopropyl) ether		Anthracene	
N-Nitrosodi-n-propylamine		Di-n-butyl phthalate	
Nitrobenzene		Fluoranthene	
Hexachlorobutadiene		Pyrene	
1,2,4-Trichlorobenzene		Benzidine	*
Isophorone		Butyl benzyl phthalate	<11.
Naphthalene		Bis(2-ethylhexyl)phthalate	
Bis (2-chloroethoxy) methane		Chrysene	
Hexachlorocyclopentadiene		Benzo(a)anthracene	
2-Chloronaphthalene		3,3-Dichlorobenzidine	<22.
Acenaphthylene		Di-n-octylphthalate	<11.
Acenaphthene		Benzo(b)fluoranthene	
Dimethyl phthalate		Benzo(k)fluoranthene	
2,6-Dinitrotoluene		Benzo(a)pyrene	
Fluorene		Indeno(1,2,3-cd)pyrene	
4-Chlorophenyl phenyl ether		Dibenzo(a,h)anthracene	
2,4-Dinitrotoluene		Benzo(g,h,i)perylene	
1,2-Diphenylhydrazine		N-Nitrosodimethyl Amine	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

*Not Included in HSL List or TCL List

Authorized: Anthony Cusanza

Date: January 5, 1990

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY 13221 / (315) 457-1494

OBG LABORATORIES, INC.

Acid Priority Pollutants

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Water W-4

SAMPLE NO. J2132 DATE COLLECTED 10-10-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-16-89

	ppb		ppb
2-Chlorophenol	<11.	2,4,6-Trichlorophenol	<11.
2-Nitrophenol		4-Chloro-3-methylphenol	<11.
Phenol		2,4-Dinitrophenol	<56.
2,4-Dimethylphenol		2-Methyl-4,6-dinitrophenol	
2,4-Dichlorophenol		Pentachlorophenol	
		4-Nitrophenol	

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Comments:

Benzyl Alcohol	<11.
2-Methylphenol	
4-Methylphenol	
Benzoic Acid	<56.
4-Chloroaniline	<11.
2-Methylnaphthalene	<11.
2,4,5-Trichlorophenol	<56.
2-Nitroaniline	
3-Nitroaniline	
Dibenzofuran	<11.
4-Nitroaniline	<56.

Authorized: Anthony Cimino

Date: January 5, 1990

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OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY

Total Metals

DATE COLLECTED 10-10/12-89 DATE REC'D. 10-13-89 DATE ANALYZED

	Sample #	ARSENIC	BARIUM	CADMIUM	CHROMIUM	LEAD	MERCURY	SILVER	ZINC	PERCENT TOTAL SOLIOS
Soils (mg/kg dry weight):										
SED-1	J2120	6.1	<180.	<4.	22.	84.	<1.8	<4.	220.	28.
SED-2	J2121	8.4	<210.	<5.	31.	84.	<2.1	<5.	230.	24.
SED-4	J2122	5.3	<230.*	<5.*	19.	37.	<1.2	<5.*	140.	43.
SED-5	J2123	5.6	<160.*	<3.*	31.	910.	<0.8	<3.*	440.	61.
SED-6	J2124	2.6	<74.	<2.	13.	160.	<0.8	<2.	110.	68.
Waters (mg/l):										
MW-1	J2125	<0.005	<0.5	<0.01	<0.05	0.22	<0.0005	<0.01	0.14	-
MW-2	J2126	<0.005	<0.5	<0.01	<0.05	<0.05	<0.0005	<0.01	0.04	-
MW-4	J2127	<0.005	<0.5	<0.01	<0.05	<0.05	<0.0005	<0.01	0.02	-
W-2	J2130	<0.005	<0.5	<0.01	<0.05	<0.05	<0.0005	<0.01	0.01	-
W-3	J2131	<0.005	<0.5	<0.01	<0.05	<0.05	<0.0005	<0.01	0.03	-
W-4	J2132	<0.005	<0.5	<0.01	<0.05	<0.05	<0.0005	<0.01	0.02	-

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/l (ppm) unless otherwise noted

Comments: *The detection limit has been raised due to the presence of matrix interferences.

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Authorized: Anthony Cuscuna

Date: January 4, 1990

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Quality Control Summary
Trace Metals: Matrix Spike, Duplicate and Method Blank

DATE COLLECTED 10-10/12-89 DATE REC'D. 10-13-89 DATE ANALYZED See Below

PARAMETER	DATE ANALYZED	LABORATORY NUMBER OF SPIKED SAMPLE	SPIKED SAMPLE RESULT (SSR)	SAMPLE RESULT (SR)	SPIKE ADDED (SA)	SPIKE (%R)	LABORATORY NUMBER OF DUPLICATE SAMPLE	SAMPLE RESULT (S)	DUPLICATE RESULT (D)	DUPLICATE RPD	METHOD BLANK
Total Metals:											
ARSENIC	11-13-89	J2127	0.0224	<0.005	0.02	112.	J2127	<0.005	<0.005	-	<0.005
BARIUM	11-6-89		(0.147)	<0.5	0.10	147.		<0.5	<0.5	-	<0.5
CADMIUM			0.109	<0.01	0.10	109.		<0.01	<0.01	-	<0.01
CHROMIUM			0.109	<0.05	0.10	109.		<0.05	<0.05	-	<0.05
LEAD			0.103	<0.05	0.10	103.		<0.05	<0.05	-	<0.05
MERCURY	10-27-89		0.00095	<0.0005	0.001	95.		<0.0005	<0.0005	-	<0.0005
SILVER	11-6-89		0.995	<0.01	1.0	100.		<0.01	<0.01	-	<0.01
ZINC	11-6-89		0.131	0.02	0.10	111.		0.02	0.07	111.	<0.01

NOTES: 1) Spike % Recovery = $\frac{(SSR - SR)}{SA} \times 100$

2) Duplicate RPD = $\frac{S - D}{(S+D)/2} \times 100\%$

3) Values in parentheses are values greater than the instrument detection limit, but less than the reported detection limit.

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/l (ppm) unless otherwise noted

Comments:

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Authorized: [signature]

Date: January 4, 1990

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - QC Summary, Volatile Organics - Water Matrix Spike and Matrix Spike Duplicate

DATE COLLECTED 10-12-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-17-89

	UNITS	LAB # OF SPIKED SAMPLE	CONC. OF SPIKE ADDED	SAMPLE RESULT	CONC. MS	% RECOVERY	CONC. MSD	% RECOVERY	RPD %
METHYLENE CHLORIDE	µg/l	J2129	20.0	<1.00	18.0	90.	18.0	90.	0.
1,1-DICHLOROETHANE		W-1	22.0		21.7	99.	22.3	101.	3.
CARBON TETRACHLORIDE			20.0		19.7	99.	18.5	93.	6.
TETRACHLOROETHENE					19.5	98.	20.9	105.	7.
CHLOROBENZENE					19.3	97.	19.2	96.	1.
m-XYLENE					19.9	100.	20.1	101.	1.

MS = MATRIX SPIKE
MSD = MATRIX SPIKE DUPLICATE
RPD = RELATIVE PERCENT DIFFERENCE

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/l (ppm) unless otherwise noted

Comments:

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd, / Syracuse, NY / 13221 / (315) 457-1494

Authorized: Anthony Cuccia Jr.

Date: January 4, 1990

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY - Quality Control Summary: Matrix Spike & Matrix Spike Duplicates of Water

DATE COLLECTED 10-10/12-89 DATE REC'D. 10-13-89 DATE Extracted: 10-18-89

	UNITS	LAB # OF SPIKED SAMPLE	CONC. OF SPIKE ADDED PCB 1242	SAMPLE RESULT	CONC. MS	% RECOVERY	CONC. MSD	% RECOVERY	RPD %	LABORATORY SAMPLE #
PCB 1242	µg/l	J2119	1.17	0.079	1.04	89.	1.06	91.	1.9	J2128 & J2129

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/l (ppm) unless otherwise noted

MS = MATRIX SPIKE
MSD = MATRIX SPIKE DUPLICATE
RPD = RELATIVE PERCENT DIFFERENCE

Comments:

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY / 13221 / (315) 457-1494

Authorized: Anthony Cavanaugh Jr.

Date: January 3, 1990

OBG LABORATORIES, INC.

Laboratory Report

CLIENT NIAGARA MOHAWK POWER CORPORATION JOB NO. 1118.053.517

DESCRIPTION Wallace & Sons, Inc. Scrapyard, Cobleskill, NY

QA/QC Summary - Waters: Semivolatile Organics

DATE COLLECTED 10-12-89 DATE REC'D. 10-13-89 DATE ANALYZED 10-16-89

	UNITS	LAB # OF SPIKED SAMPLE	CONC. OF SPIKE ADDED	SAMPLE RESULT	CONC. MS	% RECOVERY	CONC. OF SPIKE ADDED	CONC. MSD	% RECOVERY	RPD %
PHENOL	µg/l	J2119	104.	<10.	42.1	40.	108.	42.6	39.	2.
2-CHLOROPHENOL			104.		85.5	82.	108.	91.6	85.	3.
1,4-DICHLOROBENZENE			52.1		49.3	95.	54.1	51.5	95.	1.
N-NITROSO-DI-N-PROPYLAMINE			52.1		48.0	92.	54.1	49.8	92.	0.
1,2,4-TRICHLOROBENZENE			52.1		38.3	74.	54.1	40.7	75.	2.
4-CHLORO-3-METHYLPHENOL			104.		82.9	80.	108.	97.7	90.	13.
ACENAPHTHENE			52.1		46.8	90.	54.1	49.5	92.	2.
4-NITROPHENOL			104.		43.3	42.	108.	41.	38.	9.
2,4-DINITROTOLUENE			52.1		40.3	77.	54.1	42.1	78.	1.
PENTACHLOROPHENOL			104.		99.0	95.	108.	101.	94.	1.
DI-N-BUTYLPHTHALATE			52.1		44.2	85.	54.1	45.1	83.	2.
PYRENE			52.1		55.6	107.	54.1	55.4	103.	4.

MS = MATRIX SPIKE
MSD = MATRIX SPIKE DUPLICATE
RPD = RELATIVE PERCENT DIFFERENCE

Methodology: Federal Register — 40 CFR, Part 136, October 26, 1984

Units: mg/l (ppm) unless otherwise noted

Comments:

OBG Laboratories, Inc., an O'Brien & Gere Limited Company
Box 4942 / 1304 Buckley Rd. / Syracuse, NY / 13221 / (315) 457-1494

Authorized: Anthony Cimaglia

Date: January 5, 1990

OBG LABORATORIES, INC. CHAIN OF CUSTODY RECORD

SURVEY: WALLACE SCRAP 1118-053-131
NIMO / COBLESKILL, NY

SAMPLERS: (Signature) Peter M Haff / Shawn P. O'Dell

STATION NUMBER	STATION LOCATION	DATE	TIME	SAMPLE TYPE Water Comp.	Water Grab	SED.	SEQ. NO.	NO. OF CONTAINERS	ANALYSIS REQUIRED
	SED-5	10/10/89	1620			X		1	PCB, METALS
	SED-6	↓	1625			X		1	↓
	W-3	↓	1553		X			5	PCB, VOA, B-N, METALS
	W-4	↓	1605		X			5	↓
	MW-2	↓	1640		X			5	↓
	MW-3	↓	1650		X			6	HSL
	MW-4	↓	1710		X			5	PCB, VOA, B-N, METALS
	SED-1	10/12/89	0955			X		1	PCB, METALS
	SED-2	↓	0940			X		1	↓
	SED-3	↓	0915			X		2	HSL
	SED-4	↓	1010			X		1	PCB, METALS
	W-1	↓	1045		X			6	HSL

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Peter M Haff		10/12/89 1610
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by Mobile Laboratory for field analysis: (Signature)	Date/Time

Dispatched by: (Signature)	Date/Time	Received for Laboratory by:	Date/Time
		Jane Barnes	10-13-89 0800

Method of Shipment: HAND-DELIVERED

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Road / Syracuse, New York 13221 / (315) 457-1494

OBG
LABORATORIES, INC.

CHAIN OF CUSTODY RECORD

SURVEY: NIMO/WALLACE SCRAP COBLESKILL, NY

SAMPLERS: (Signature) Peter M Hall / Shawn P. O'Dell

STATION NUMBER	STATION LOCATION	DATE	TIME	SAMPLE TYPE: Water (Comp. / Grab)	Air	SEQ. NO.	NO. OF CONTAINERS	ANALYSIS REQUIRED
	W-1 DUP	10/12/89	1045	X			5	PCB, VOA, B-N, METALS
	W-1 MS		1045	X			5	↓
	W-2		1055	X			5	↓
	MW-1	↓	1155	X			5	↓
	TRIP BLANK						1	

Relinquished by: (Signature) Peter M Hall	Received by: (Signature)	Date/Time 10/13/89 1610
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by Mobile Laboratory for field analysis: (Signature)	Date/Time
Dispatched by: (Signature) Date/Time	Received for Laboratory by: Anne Barnes	Date/Time 10-13-89 0800

Method of Shipment: HAND DELIVERED

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Road / Syracuse, New York 13221 / (315) 457-1494

CASE FILE

Survey: Wheatbill, NY. Date Collected: 10-10&12-89

Sampler: Peter Hoff. Date Received: 10-13-89

Client Name and Ref. # : Nimo

Laboratory Number: 1118.053.517

Condition of Shipment: good

Archive? If so how long ? no

Signed: Lisa Barnes

Sample Coordinator

****

Disposal Procedure*: Disposal will be determined by the hazardous waste officer

Signed: Anthony Luscri

Date: 1-10-90

* The routine disposal procedure for non-hazardous samples is to dispose of the samples 4 weeks after a typed report is signed and mailed to the client. Water samples are filtered through carbon to the sanitary sewer. Solid samples are sent to a sanitary landfill.

APPENDIX B

SOIL BORING LOGS

O'BRIEN & GERE ENGINEERS, INC.	TEST BORING LOG	Report of Boring No. B-1 Sheet 1 of 1
Project Location: Cobbleskill, New York Client: NIMO/Wallace Scrap	SAMPLER Type: Split Spoon Hammer: 140 lbs. Fall: 30"	Ground Water Depth Date Depth Date File No.: 1118.

Boring Co.: Parratt-Wolff, Inc.
Foreman: Mark Beck
OBG Geologist: P.M. Haff

Boring Location:
Ground Elevation:
Dates: Started: 9/12/89 Ended: 9/12/89

Depth	Sample No	Sample Depth	Blows /6"	Penetr/ Recovry	"N" Value	Sample Description	Stratum Change General Descript	Equipment Installed	Field Testing pH	Field Testing Sp Cond	Field Testing HNU	Rmks*
0	1	0-2'	6-17-9-6	24"/2'	26	Brown, dry SILT, some clay, little fine to medium sand.					0	
	2	2-3.3'	16-19-	1.3/1.3'	>69	Brown, moist CLAY, little silt, trace fine to coarse sand.					0	
			50/0.3			Spoon refusal at 3.3'. Bottom of boring 3.3'.						

B1.KJF
2/16/90

O'BRIEN & GERE ENGINEERS, INC.	TEST BORING LOG	Report of Boring No. B-2 Sheet 1 of 1
Project Location: Cobbleskill, New York Client: NIMO/Wallace Scrap	SAMPLER Type: Split Spoon Hammer: 140 lbs. Fall: 30"	Ground Water Depth Date Depth Date File No.: 1118.
Boring Co.: Parratt-Wolff, Inc. Foreman: Mark Beck OBG Geologist: P.M. Haff	Boring Location: Ground Elevation: Dates: Started: 9/12/89	Ended: 9/12/89

Depth	Sample No	Sample Depth	Blows /6"	Penetr/ Recovry	"N" Value	Sample Description	Stratum Change General Descript	Equipment Installed	Field Testing pH	Field Testing Sp Cond	Field Testing HNU	Rmks*
0	1	0-2'	2-3-6-6	2'/2'	9	0-2" Black stained soil 2-4" Light brown with gray mottling SILT, some fine sand, trace medium to coarse sand, trace clay.					0	
	2	2-4'	6-7-8-8	24"/14"	15	Brown, dry SILT, some clay, little fine to coarse sand, moderately stiff.					0	
	3	4-6'	4-3-2-2	24"/4"	5	Same as above.					0	
5												
	4	6-8'	1-3-1-2	24"/16"	4	Brown, wet CLAY, some silt, little fine to coarse sand.					0	
	5	8-8.2'	50/0.2'	2'/2'		8-8'1/2" Same as above. 8'1/2"-8'2" Dark gray LIMESTONE. Bottom of boring 8.2'.					0	
10												

B2.KJF
2/16/90

O'BRIEN & GERE ENGINEERS, INC.	TEST BORING LOG	Report of Boring No. B-3 Sheet 1 of 1
Project Location: Cobbleskill, New York Client: NIMO/Wallace Scrap	SAMPLER Type: Split Spoon Hammer: 140 lbs. Fall: 30"	Ground Water Depth Date Depth Date File No.: 1118.

Boring Co.: Parratt-Wolff, Inc.
Foreman: Mark Beck
OBG Geologist: P.M. Haff

Boring Location:
Ground Elevation:
Dates: Started: 9/12/89 Ended: 9/12/89

Depth	Sample No	Sample Depth	Blows /6"	Penetr/ Recovry	"N" Value	Sample Description	Stratum Change General Descript	Equipment Installed	Field Testing pH	Field Testing Sp Cond	Field Testing HNU	Rmks*
0	1	0-2'	15-18-7-6	2'/3'	25	FILL, gravel, broken ceramic, dark staining					0	
	2	2-4'	6-3-6-9	2'/1'	9	Brown, moist SILT, some clay, fine to coarse sand, trace gravel.					0	
	3	4-6'	6-9-5-7	2'/2'	14	Same as above.					0	
5												
	4	6-6.7'	19-50/.2	0.7/0.7'	>50	Same as above. Spoon refusal at 6.7'. Bottom of boring at 6.7'.					0	

B3.KJF
2/16/90

O'BRIEN & GERE ENGINEERS, INC.	TEST BORING LOG	Report of Boring No. B-4 Sheet 1 of 1
Project Location: Cobbleskill, New York Client: NIMO/Wallace Scrap	SAMPLER Type: Split Spoon Hammer: 140 lbs. Fall: 30"	Ground Water Depth Date Depth Date File No.: 1118.

Boring Co.: Parratt-Wolff, Inc.
Foreman: Mark Beck
OBG Geologist: P.M. Haff

Boring Location:
Ground Elevation:
Dates: Started: 9/12/89 Ended: 9/12/89

Depth	Sample No	Sample Depth	Blows /6"	Penetr/ Recovry	"N" Value	Sample Description	Stratum Change General Descript	Equipment Installed	Field Testing pH	Field Testing Sp Cond	Field Testing HNU	Rmks*
0	1	0-2'	6-19-13-7	24"/5"	32	FILL, black stained gravel, ceramic, hardware.					0	
	2	2-4'	6-6-11-22	24"/6"	17	Brown, moist SILT, some clay, little fine to coarse sand, trace gravel.					0	
	3	4-6'	13-11-6-8	24"/6"	17	Same as above.					0	
5												
	4	6-7.2'	19-17-	14"/3"	>67	Same as above.					0	
			50/0.2			Spoon refusal at 7.2'. Bottom of boring 7.2'.						

B4.KJF
2/16/90

O'BRIEN & GERE ENGINEERS, INC.	TEST BORING LOG	Report of Boring No. MW-1 Sheet 1 of 1
Project Location: Cobbleskill, New York Client: NIMO/Wallace Scrap	SAMPLER Type: Split Spoon Hammer: 140 lbs. Fall: 30"	Ground Water Depth Date Depth Date File No.: 1118.
Boring Co.: Parratt-Wolff, Inc. Foreman: Mark Beck OBG Geologist: P.M. Haff	Boring Location: Ground Elevation: Dates: Started: 9/12/89	Ended: 9/12/89

Depth	Sample No	Sample Depth	Blows /6"	Penetr/ Recovry	"N" Value	Sample Description	Stratum Change General Descript	Equipment Installed	Field Testing pH	Field Testing Sp Cond	Field Testing HNU	Rmks*
0		0-3.3'				See boring log for boring B-1.						
						CASING INSTALLED TO 5.9'.						
5												
	1	5.9-	---	5'/5'	---	Light to medium gray LIMESTONE, contains fossilized rugose coral, brachiopods and biherms, also contains chert nodules.						
		10.9'										
	2	10.9-	---	5'/5'	---	Same as above.						
		15.9'										
	3	15.9-	---	5'/5'	---	Same as above.						
		20.9'										
	4	20.9-	---	5'/5'	---	Same as above.						
		25.9'										
	5	25.9-	---	5'/5'	---	Same as above.						
		30.9'										
	6	30.9-	---	5'/5'	---	Same as above.						
		35.9'										
						Bottom of boring 35.9'.						

MW1.KJF
2/16/90

O'BRIEN & GERE ENGINEERS, INC.	TEST BORING LOG	Report of Boring No. MW-2 Sheet 1 of 1
Project Location: Cobbleskill, New York Client: NIMO/Wallace Scrap	SAMPLER Type: Split Spoon Hammer: 140 lbs. Fall: 30"	Ground Water Depth Date Depth Date File No.: 1118.

Boring Co.: Parratt-Wolff, Inc.
Foreman: Mark Beck
OBG Geologist: P.M. Haff

Boring Location:
Ground Elevation:
Dates: Started: 9/12/89 Ended: 9/12/89

Depth	Sample No	Sample Depth	Blows /6"	Penetr/ Recovry	"N" Value	Sample Description	Stratum Change General Descript	Equipment Installed	Field Testing pH	Field Testing Sp Cond	Field Testing HNU	Rmks*
0		0-3.5'				Overburden.						
						SET CASING TO 15.5'.						
5												
	1	15.5-	---	4'/4'	---	Light to medium gray fossilferous LIMESTONE contains chert nodules.						
		19.5'										
	2	19.5-	---	5'/5'	---	Same as above.						
		24.5'										
	3	24.5-	---	5'/5'	---	Same as above.						
		29.5'										
	4	29.5-	---	5'/5'	---	Same as above.						
		34.5'				Bottom of boring 34.5'.						

MW2.KJF
2/16/90

O'BRIEN & GERE ENGINEERS, INC.	TEST BORING LOG	Report of Boring No. MW-3 Sheet 1 of 1
Project Location: Cobbleskill, New York Client: NIMO/Wallace Scrap	SAMPLER Type: Split Spoon Hammer: 140 lbs. Fall: 30"	Ground Water Depth Date Depth Date File No.: 1118.

Boring Co.: Parratt-Wolff, Inc.
Foreman: Mark Beck
OBG Geologist: P.M. Haff

Boring Location:
Ground Elevation:
Dates: Started: 9/13/89 Ended: 9/18/89

Depth	Sample No	Sample Depth	Blows /6"	Penetr/ Recovry	"N" Value	Sample Description	Stratum Change General Descript	Equipment Installed	Field Testing pH	Field Testing Sp Cond	Field Testing HNU	Rmks*
0		0-15.5'				Overburden						
						SET CASINGS TO 17.5'.						
	1	17.5-				Light to medium gray, fossilferous LIME-STONE, contains chert nodules.						
		20.5'										
	2	20.5-				Same as above.						
		25.5'				Bottom of boring 25.5'.						

MW3.KJF
2/16/90

O'BRIEN & GERE ENGINEERS, INC.	TEST BORING LOG	Report of Boring No. MW-4 Sheet 1 of 1
Project Location: Cobbleskill, New York Client: NIMO/Wallace Scrap	SAMPLER Type: Split Spoon Hammer: 140 lbs. Fall: 30"	Ground Water Depth Date Depth Date File No.: 1118.

Boring Co.: Parratt-Wolff, Inc.
Foreman: Mark Beck
OBG Geologist: P.M. Haff

Boring Location:
Ground Elevation:
Dates: Started: 9/14/89 Ended: 9/19/89

Depth	Sample No	Sample Depth	Blows /6"	Penetr/ Recovry	"N" Value	Sample Description	Stratum Change General Descript	Equipment Installed	Field Testing pH	Field Testing Sp Cond	Field Testing HNU	Rmks*
0		0-17.5'				Overburden						
						CASING SET TO 19.5'.						
	1	19.5-	---	5'/4.3'	---	Light to medium gray, fossilferous LIMESTONE, contains chert nodules.						
		24.5'										
	2	24.5-	---	5'/5'	---	Same as above.						
		29.5'										
	3	29.5-	---	5'/5'	---	Same as above.						
		34.5'				Bottom of boring 34.5'.						

MW4.KJF
2/16/90

APPENDIX C

GRAIN SIZE ATTERBURG LIMITS AND MOISTURE CONTENT ANALYSES

Soil Testing Services wolff inc
FISHER RD., EAST SYRACUSE, N.Y. 13057
TELEPHONE AREA CODE 315/437-1429

Project No. B [illegible]17

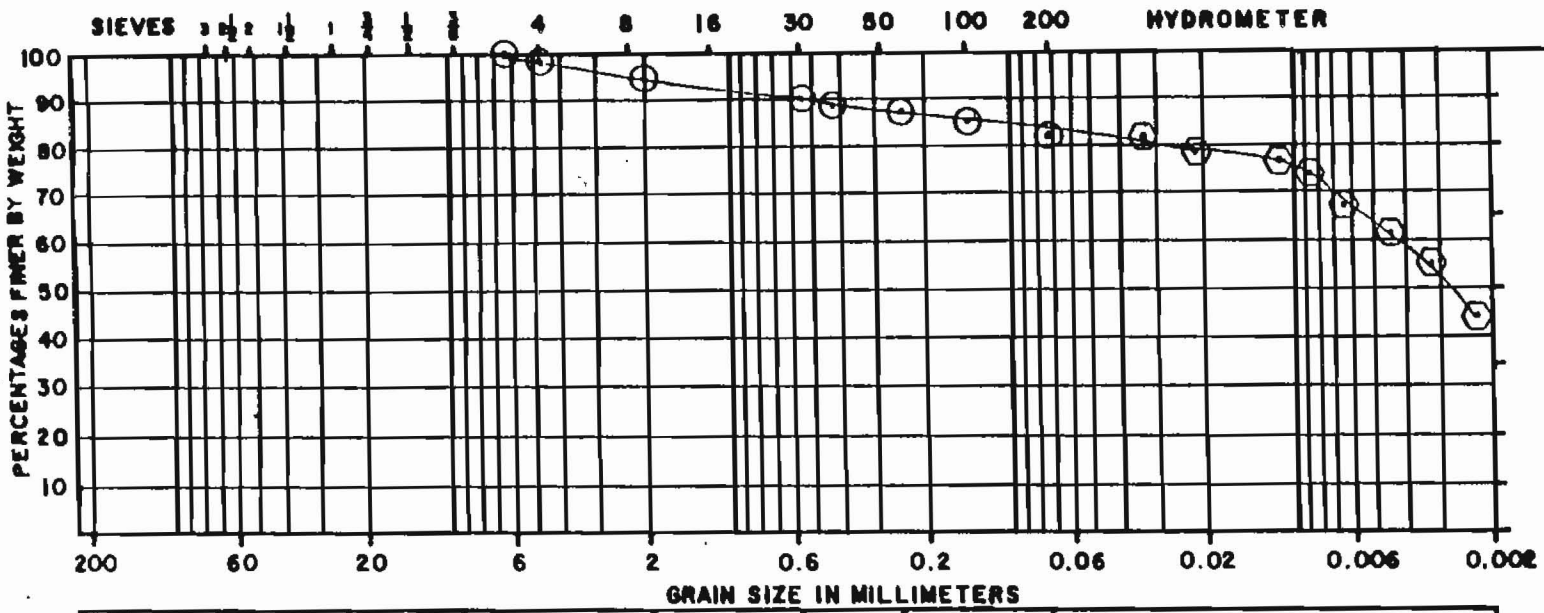
Project Title Laboratory Testing - M. Wallace & Son, Inc. Scrapyard
Cobleskill, New York

Sieve Analysis ASTM D422

		Sieve Size - Percent Passing Sieve														
Boring #	Depth (in feet)	½"	3/8"	¼"	#4	#10	#30	#40	#60	#100	#200					
B-1	0-33	-	-	100	98.5	95.4	90.0	89.0	87.0	84.6	81.8					
B-2	6-8	-	100	99.0	97.0	93.4	86.2	83.8	78.5	71.9	64.8					
B-4	2-4	100	94.4	91.5	89.1	84.2	73.4	70.3	65.1	59.4	53.0					

Remarks: Prewashed ASTM C-117
Yes x No
Performed By M.C.

GRAIN SIZE ANALYSIS



BOULDERS COBBLES	GRAVEL C	GRAVEL M	GRAVEL F	SAND C	SAND M	SAND F	SILT-CLAY SOIL
228	76.2	25.4	9.52	2.0	0.59	0.25	0.074 MM. OPENING
9 in.	3 in.	1 in.	3/8 in.	Nos. 10	30	60	200 SIEVE

B-89117
Laboratory Testing
M. Wallace & Son, Inc. Scrapyard
Cobleskill, New York

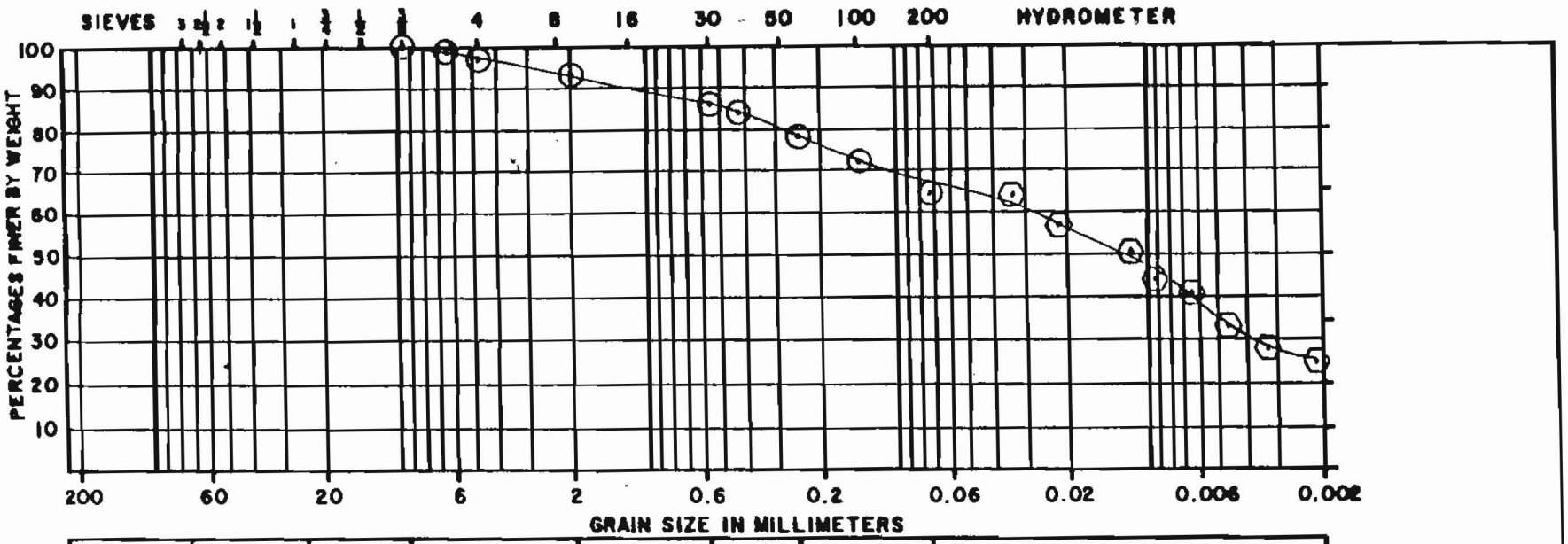
Boring #: B-1
Depth : 0'-33'

⊙ Sieve Analysis
⊙ Hydrometer Analysis

parratt wolff inc
115-ER RD. EAST SYRACUSE N.Y. 13057
TELEPHONE AREA CODE 315/437 1429

JOB NO. B-89117
REPORT NO.

GRAIN SIZE ANALYSIS



B-89117
Laboratory Testing
M. Wallace & Son, Inc. Scrapyard
Cobleskill, New York

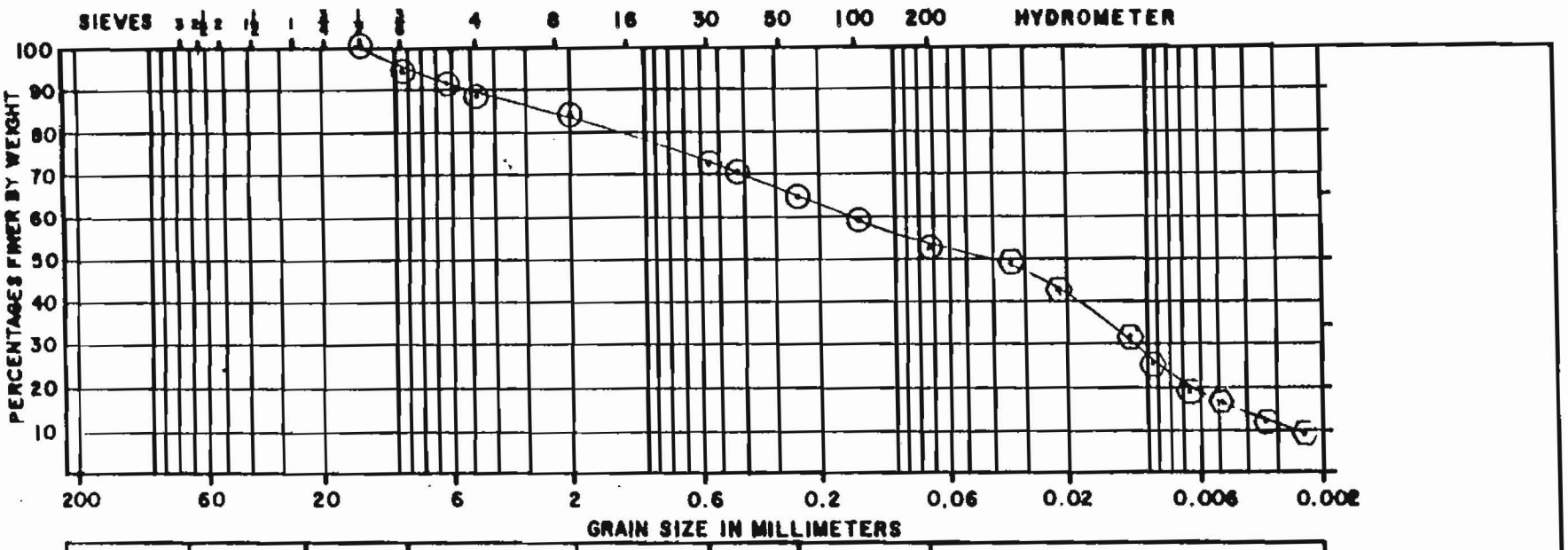
Boring #: B-2
Depth: 6'-8'

- ⊙ Sieve Analysis
- ⊙ Hydrometer Analysis

parratt wolff inc
FISHER RD. EAST SYRACUSE N.Y. 13057
TELEPHONE AREA CODE 315/437 1429

JOB NO. B-89117
REPORT NO. 2

GRAIN SIZE ANALYSIS



B-89117
Laboratory Testing
M. Wallace & Son, Inc. Scrapyard
Cobleskill, New York

Boring #: B-4
Depth: 2'-4'

⊙ Sieve Analysis
⊙ Hydrometer Analysis

parratt wolff inc
FISHER RD EAST SYRACUSE N.Y. 13057
TELEPHONE AREA CODE 315, 437 1429

JOB NO. B-89117
REPORT NO. 3

B-89117

Soil Borings and Monitoring Well
Installation - M. Wallace and Son, Inc.
Scrapyard - Cobleskill, New York
File #1118.053

NATURAL MOISTURE CONTENT

Boring #	Depth (in feet)	Moisture as a Percent of Dry Weight
B-1	0-3	19.9
B-2	6-8	20.9
B-4	2-4	11.8

ATTERBERG LIMITS

Boring #	Depth (in feet)	Plastic Limit	Liquid Limit	Plasticity Index
B-1	0-3	23	54	31
B-2	6-8	18	35	17
B-4	2-4	14	27	13

APPENDIX D

HYDRAULIC CONDUCTIVITY CALCULATIONS

IN-SITU PERMEABILITY TEST
FIELD LOG

PROJECT: NIMO/WALLACE SCRAP
WELL NUMBER: MW-1
DATE: 11/10/89

EVACUATION METHOD: RECOVERY
PERSONNEL: PETER HAFF
DATUM FOR CALCULATIONS: TOP OF STEEL

STATIC HEAD (H) = 23.54 ft

PIPE RADIUS (r) = 0.125 ft

SCREEN RADIUS (R) = 0.125 ft

SCREEN LENGTH (L) = 12.36 ft

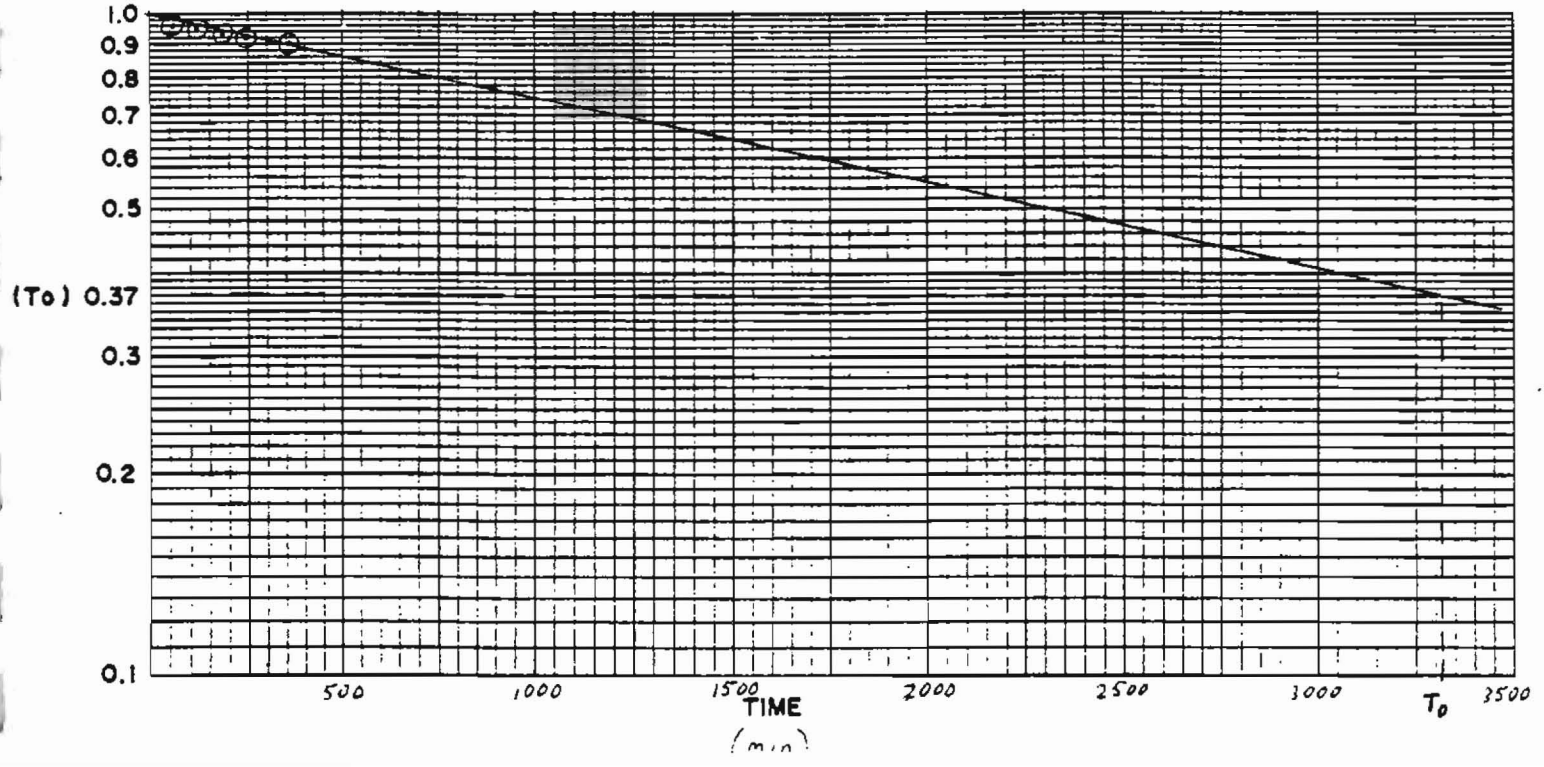
INITIAL HEAD (Ho) = 25.22 ft

To (from graph) = 3320 min
199200 sec

HYDRAULIC CONDUCTIVITY

$$\frac{r^2 \ln(L/R)}{2LTo} = 1.5E\text{-}8 \text{ ft/sec} = 4.4E\text{-}7 \text{ cm/sec}$$

TIME (min)	h	H-h / H-Ho
0	25.22	1
60	25.16	0.96
120	25.13	0.95
180	25.10	0.93
240	25.08	0.92
360	25.05	0.90



IN-SITU PERMEABILITY TEST
FIELD LOG

PROJECT: NIMO/WALLACE SCRAP
WELL NUMBER: MW-1
DATE: 11/10/89

EVACUATION METHOD: RECOVERY
PERSONNEL: PETER HAFF
DATUM FOR CALCULATIONS: TOP OF STEEL

STATIC HEAD (H) = 23.54 ft

PIPE RADIUS (r) = 0.167 ft

SCREEN RADIUS (R)= 0.125 ft

SCREEN LENGTH (L)= 12.36 ft

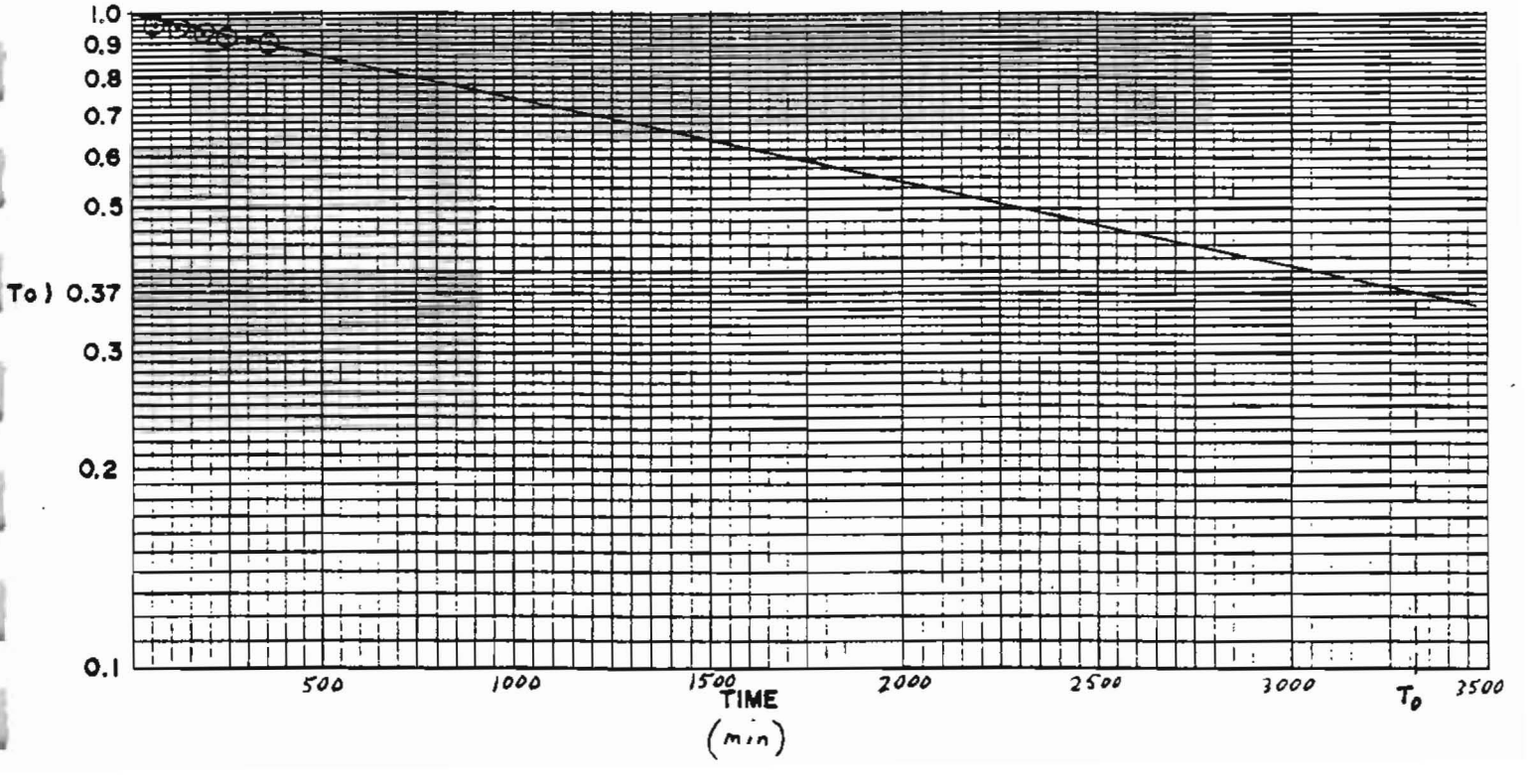
INITIAL HEAD (Ho)= 25.22 ft

To (from graph) = 3320 min
199200 sec

HYDRAULIC CONDUCTIVITY

$$\frac{r^2 \ln(L/R)}{2LTo} = 2.6E\text{-}8 \text{ ft/sec} = 7.9E\text{-}7 \text{ cm/sec}$$

TIME (min)	h	H-h / H-Ho
0	25.22	1
60	25.16	0.96
120	25.13	0.95
180	25.10	0.93
240	25.08	0.92
360	25.05	0.90



IN-SITU PERMEABILITY TEST
FIELD LOG

PROJECT: NIMO/WALLACE SCRAP
WELL NUMBER: MW-2
DATE: 11/10/89

EVACUATION METHOD: RECOVERY
PERSONNEL: PETER HAFF
DATUM FOR CALCULATIONS: TOP OF STEEL

STATIC HEAD (H) = 7.18 ft

PIPE RADIUS (r) = 0.167 ft

SCREEN RADIUS (R)= 0.125 ft

SCREEN LENGTH (L)= 19 ft

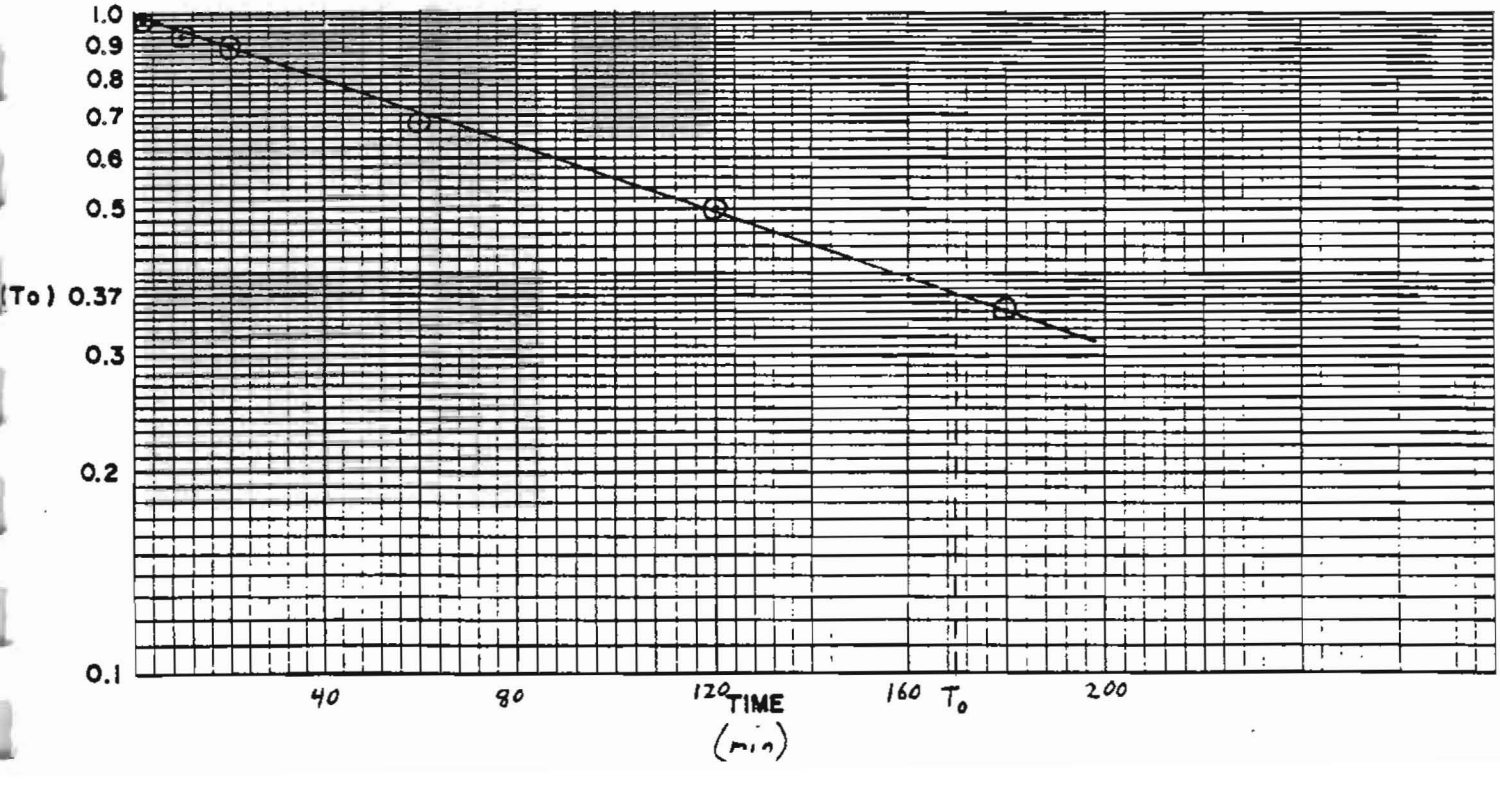
INITIAL HEAD (Ho)= 7.8 ft

To (from graph) = 170 min
10200 sec

HYDRAULIC CONDUCTIVITY

$$\frac{r^2 \ln(L/R)}{2LTo} = 3.6E\text{-}7 \text{ ft/sec} = 1.1E\text{-}5 \text{ cm/sec}$$

TIME (min)	h	H-h / H-Ho
0	7.80	1
2	7.78	0.97
10	7.75	0.92
20	7.73	0.89
60	7.60	0.68
120	7.49	0.50
180	7.40	0.35



IN-SITU PERMEABILITY TEST
FIELD LOG

PROJECT: NIMO/WALLACE SCRAP
WELL NUMBER: MW-3
DATE: 11/9/89

EVACUATION METHOD: SLUG
PERSONNEL: PETER HAFF
DATUM FOR CALCULATIONS: TOP OF STEEL

STATIC HEAD (H) = 7.68 ft

PIPE RADIUS (r) = 0.167 ft

SCREEN RADIUS (R)= 0.125 ft

SCREEN LENGTH (L)= 8 ft

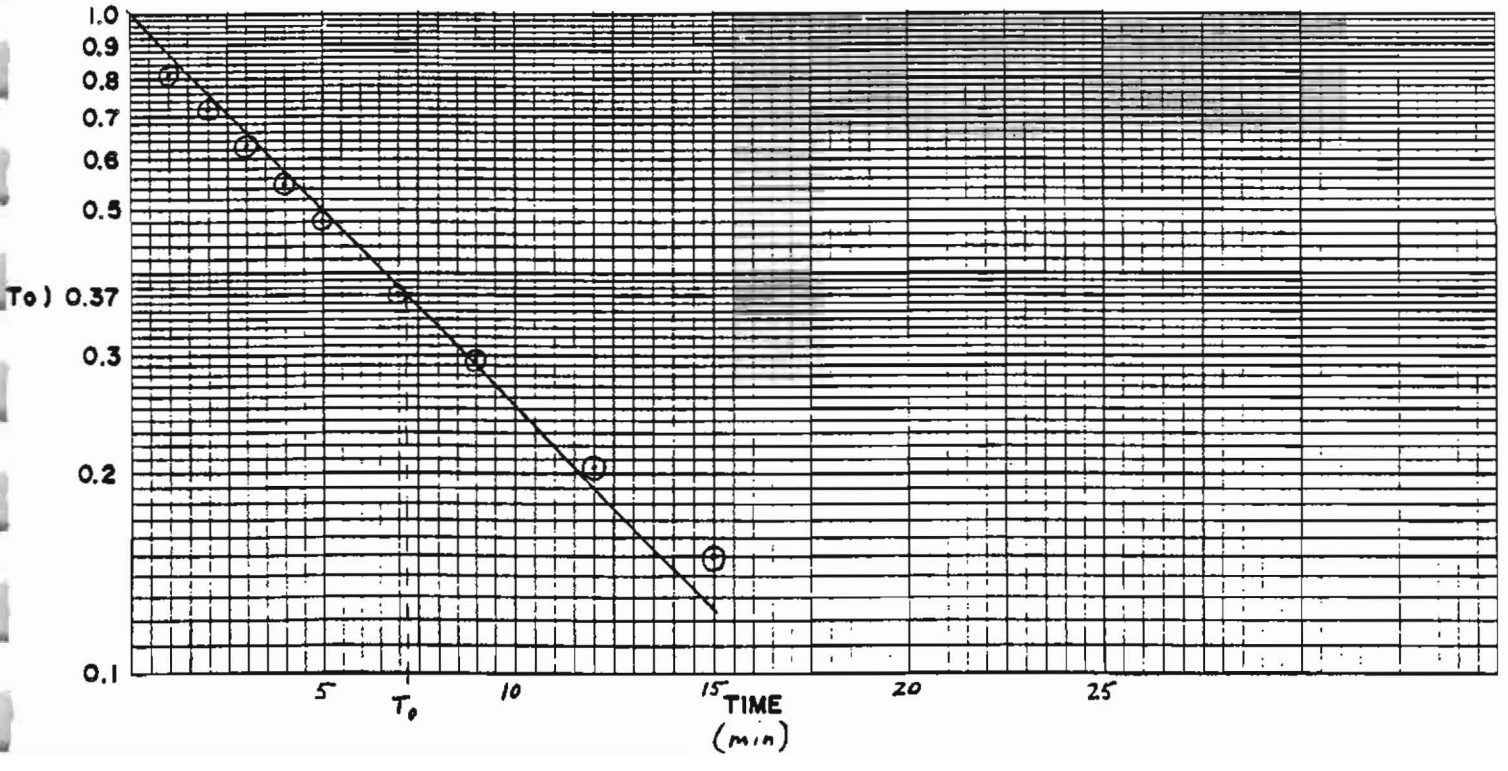
INITIAL HEAD (Ho)= 6.82 ft

To (from graph) = 7.25 min
435 sec

HYDRAULIC CONDUCTIVITY

$$\frac{r^2 \ln(L/R)}{2LT_o} = 1.7E\text{-}5 \text{ ft/sec} = 5.1E\text{-}4 \text{ cm/sec}$$

TIME (min)	h	H-h / H-Ho
0	6.82	1
1	6.98	0.81
2	7.06	0.72
3	7.14	0.63
4	7.21	0.55
5	7.27	0.48
7	7.36	0.37
9	7.43	0.29
12	7.50	0.21
15	7.55	0.15
20	7.61	0.08



IN-SITU PERMEABILITY TEST
FIELD LOG

PROJECT: NIMO/WALLACE SCRAP
WELL NUMBER: MW-4
DATE: 11/10/89

EVACUATION METHOD: SLUG
PERSONNEL: PETER HAFF
DATUM FOR CALCULATIONS: TOP OF STEEL

STATIC HEAD (H) = 5 ft

PIPE RADIUS (r) = 0.167 ft

SCREEN RADIUS (R) = 0.125 ft

SCREEN LENGTH (L) = 15 ft

INITIAL HEAD (Ho) = 4.01 ft

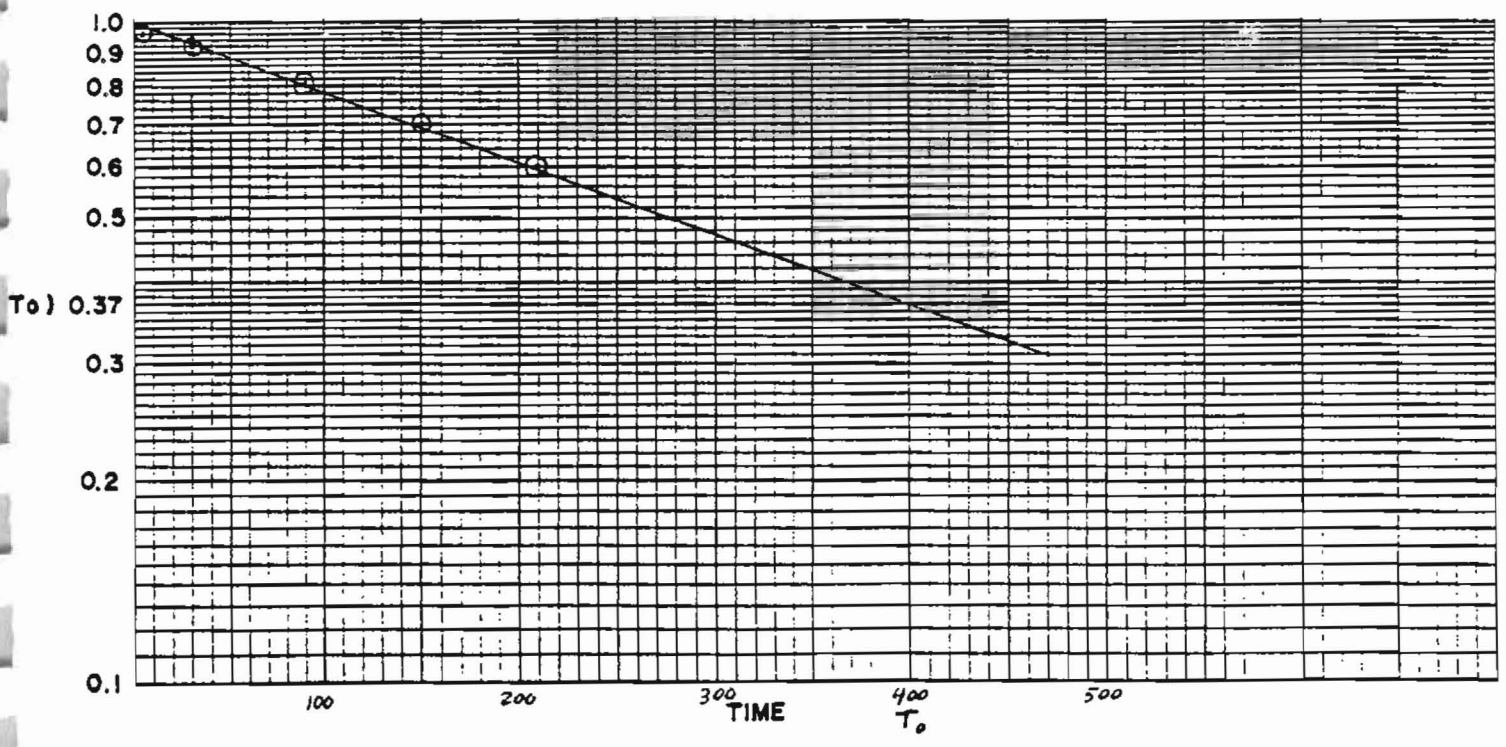
To (from graph) = 400 min
24000 sec

HYDRAULIC CONDUCTIVITY

$$\frac{r^2 \ln(L/R)}{2LTo} = 1.9E\text{-}7 \text{ ft/sec}$$

5.7E-6 cm/sec

TIME (min)	h	H-h / H-Ho
0	4.01	1
5	4.05	0.96
30	4.09	0.92
90	4.2[illegible]	0.81
150	4.31	0.70
210	4.41	0.60



APPENDIX E

GROUND WATER SAMPLING LOGS

GROUND WATER SAMPLING FIELD LOG

Sample Location *Nims & Wallace Scrapyard* Well No. *MW-1*
Sampled By *PMH/CPO* Date *10/12/89* Time *1155*
Weather *60°-Sunny* Sampled with Bailer *X* Pump ____

A. WATER TABLE:

Well depth:
(below top of casing) *35.9 + 2.05* ft.

Well elevation:
(top of casing) ________ ft.

Depth to water table:
(below top of casing) *24.11* ft. *10/12/89*

Water table elevation: ________ ft.

Length of water column (LWC) *13.04* ft.

Volume of water in well:

2" diameter wells = 0.163 x (LWC) = *2.12* gallons *(6 ½ gal)*
4" diameter wells = 0.653 X (LWC) = ________ gallons
6" diameter wells = 1.469 X (LWC) = ________ gallons

B. PHYSICAL APPEARANCE AT START:

Color *Light Brown* Odor *None* Turbidity *Low*

Was an oil film or layer apparent? *No*

C. PREPARATION OF WELL FOR SAMPLING:

Amount of water removed before sampling *~ 3.5* gallons.

Did well go dry? *Yes*

D. PHYSICAL APPEARANCE DURING SAMPLING:

Color *Light Brown* Odor *None* Turbidity *Low*

Was an oil film or layer apparent? *No*

E. CONDUCTIVITY ________

F. pH ________

G. TEMPERATURE ________

H. WELL SAMPLING NOTES:

GROUND WATER SAMPLING FIELD LOG

Sample Location NIMO/WALLACE SCRAPYARD Well No. MW-3
Sampled By CPO/PMH Date 10/10/89 Time 1640
Weather 55°- SUNNY Sampled with Bailer X Pump ____

A. WATER TABLE:

Well depth: (below top of casing) 34.0 ± 1.7 ft.
Well elevation: (top of casing) ____ ft.
10/10/89 Depth to water table: (below top of casing) 9.71 ft.
Water table elevation: ____ ft.
Length of water column (LWC) 25.99 ft.
Volume of water in well:
2" diameter wells = 0.163 x (LWC) = 4.2 gallons (12 gal)
4" diameter wells = 0.653 X (LWC) = ____ gallons
6" diameter wells = 1.469 X (LWC) = ____ gallons

B. PHYSICAL APPEARANCE AT START:
Color LT. GRAY-BROWN Odor MODERATE Turbidity MODERATE
Was an oil film or layer apparent? NO

C. PREPARATION OF WELL FOR SAMPLING:
Amount of water removed before sampling ~13.5 gallons.
Did well go dry? NO

D. PHYSICAL APPEARANCE DURING SAMPLING:
Color LIGHT BROWN Odor MODERATE Turbidity MODERATE
Was an oil film or layer apparent? NO

E. CONDUCTIVITY ____

F. pH ____

G. TEMPERATURE ____

H. WELL SAMPLING NOTES:
COOK WAS A SULFUR SMELL

GROUND WATER SAMPLING FIELD LOG

Sample Location NIMO/WALLACE SCRAP Well No. MW-3

Sampled By CPO/PMH Date 10/10/89 Time 1650

Weather 55°- SUNNY Sampled with Bailer X Pump _____

A. WATER TABLE:

Well depth: (below top of casing) 25.5 + 1.8 ft. Well elevation: (top of casing) _____ ft.

10/10/89 Depth to water table: (below top of casing) 9.74 ft. Water table elevation: _____ ft.

Length of water column (LWC) 17.56 ft.

Volume of water in well:

2" diameter wells = 0.163 x (LWC) = 2.86 gallons (8½ g⁻¹)
4" diameter wells = 0.653 X (LWC) = _____ gallons
6" diameter wells = 1.469 X (LWC) = _____ gallons

B. PHYSICAL APPEARANCE AT START:

Color LT. BROWN-GRAY Odor MODERATE Turbidity MODERATE

Was an oil film or layer apparent? NO

C. PREPARATION OF WELL FOR SAMPLING:

Amount of water removed before sampling ~9 gallons.

Did well go dry? NO

D. PHYSICAL APPEARANCE DURING SAMPLING:

Color LT. BROWN Odor MODERATE Turbidity MODERATE

Was an oil film or layer apparent? NO

E. CONDUCTIVITY _____

F. pH _____

. TEMPERATURE _____

WELL SAMPLING NOTES:

ODOR WAS A SULFUR SMELL

GROUND WATER SAMPLING FIELD LOG

Sample Location NIMO/WALLACE SCRAP Well No. MW-4

Sampled By PMH/CPD Date 10/10/89 Time 1710

Weather 55°-SUNNY Sampled with Bailer X Pump ____

A. WATER TABLE:

Well depth: (below top of casing) 34.0+ 1.8 ft.

Well elevation: (top of casing) ____ ft.

10/10/89 Depth to water table: (below top of casing) 5.93 ft.

Water table elevation: ____ ft.

Length of water column (LWC) 29.87 ft.

Volume of water in well:

2" diameter wells = 0.163 x (LWC) = 4.87 gallons (14½ gal)
4" diameter wells = 0.653 X (LWC) = ____ gallons
6" diameter wells = 1.469 X (LWC) = ____ gallons

B. PHYSICAL APPEARANCE AT START:

Color GREENISH-BROWN Odor NONE Turbidity LOW TO MODERATE

Was an oil film or layer apparent? NO

C. PREPARATION OF WELL FOR SAMPLING:

Amount of water removed before sampling ~16 gallons.

Did well go dry? YES

D. PHYSICAL APPEARANCE DURING SAMPLING:

Color LIGHT BROWN Odor NONE Turbidity LOW TO MODERATE

Was an oil film or layer apparent? NO

E. CONDUCTIVITY ____

F. pH ____

G. TEMPERATURE ____

H. WELL SAMPLING NOTES: