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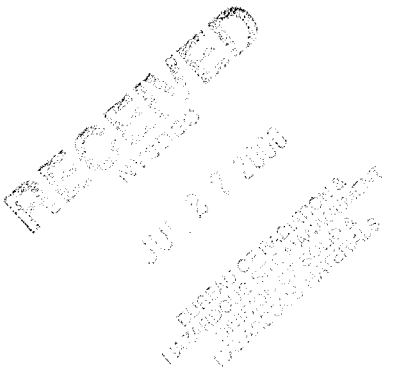

REVISED CLOSURE PLAN

Prepared for:

GE APPARATUS SERVICE SHOP
TONAWANDA, NEW YORK

June 28, 2000

Prepared by:

URS Corporation
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URS

June 28, 2000

Mr. David Greenlaw
MS105
USEPA Facilities
Raritan Depot
2890 Woodbridge Avenue
Edison, NJ 08837-3679

Re: *Revised Closure Plan*
Commercial PCB Storage Area
Tonawanda, New York

Dear Mr. Greenlaw:

On behalf of General Electric Company (GE), URS is submitting the attached *Revised Closure Plan* for the commercial PCB storage area at GE's service shop in Tonawanda, New York for your review and comment. GE will be closing their commercial PCB storage area and wishes to conduct the closure in accordance with this *Revised Closure Plan*.

URS has modified the existing approved *Closure Plan* to reflect changes at the site and address your comments on a draft of this *Revised Closure Plan*. The attached *Revised Closure Plan* is based on the existing *Closure Plan* and incorporates information from the *RCRA Facility Investigation (RFI) Report* prepared by Dames & Moore (a division of URS) and the *Corrective Measure Study* prepared by Dames & Moore. In response to your comments on the previous draft, we have modified these sections of this *Revised Closure Plan*:

- Section 2.3.3 - Includes floor of depressed dock area in scope of closure,
- Section 4.0 - Includes floor of depressed dock area in scope of closure,
- Section 5.1.1 - Includes floor of depressed dock area in scope of closure,
- Section 5.1.2 - Includes floor of depressed dock area in scope of closure and clarifies sampling plan for PCB area and truck bay, and
- Section 5.1.3 - Clarifies number of samples to be collected from paved transportation corridor.

If you have any questions regarding this material, please contact Dawn Varacchi of GE at (508) 486-0503 or Don Porterfield of URS at (518) 688-0015.

Very truly yours,

URS

Don Porterfield, P.E.
Senior Engineer

Attachment
cc: Dawn Varacchi – GE
Kevin McNally – GE
Tony Hejmanowski - GE

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1.0 INTRODUCTION

On behalf of General Electric Company (GE), URS Corporation (URS) has prepared this *Revised Closure Plan (RCP)* for the commercial storage of polychlorinated biphenyl (PCB) waste at GE's Tonawanda Apparatus Service Division service shop. This *RCP* supercedes the approved *Closure Plan*, dated July 1992 (revised).

In 1995, the United States Environmental Protection Agency (EPA) issued an approval for GE to operate their Tonawanda shop as a commercial storage facility for PCB wastes. The approval, which was issued by the EPA under Toxic Substances Control Act (TSCA), will expire on July 31, 2000.

In New York State, the Resource Conservation and Recovery Act (RCRA) program, which regulates hazardous wastes, is administered by the New York State Department of Environmental Conservation (DEC). GE maintains a *6 NYCRR Part 373 Hazardous Waste Management Permit* (*373 Permit*), which was issued by the DEC in May 1996, for the Tonawada service shop.

The existing *Closure Plan*, dated 1992, was incorporated, by reference, into EPA's approval for the commercial storage of PCB waste. GE's operations at their Tonawanda shop have changed since the 1992 *Closure Plan* was prepared. This *RCP* has been prepared to reflect those changes.

Section 2.0 describes the site and the changes in site conditions since 1992. The remainder of this report describes closure actions. Section 3.0 describes the objectives of this *RCP*. Section 4.0 provides an overview of the closure process and Section 5.0 provides the detailed description of closure procedures. Section 6.0 describes the schedule for closure.

2.0 BACKGROUND

GE's Tonawanda Service Shop is located at 175 Milens Road, Tonawanda, New York. As shown in Figure 1, the shop is in an urban area that includes some commercial businesses and other industries. GE built the slab-on-grade building in 1968 and 1969 and expanded the building in 1978. GE uses the service shop, which is also known, as the Buffalo Service Shop, to repair industrial equipment, such as electric motors, transformers, turbines, pumps, and compressors.

During operations at the shop, GE generates hazardous wastes. GE also formerly received liquids, solids, and other articles containing PCBs from customers and other GE facilities for repair or storage prior to shipment for off-site disposal or treatment at facilities with the appropriate permits.

2.1 RECENT HISTORY

GE currently operates an approved commercial PCB storage area inside their Tonawanda service shop. GE has used the PCB storage area to service PCB-containing equipment and to store PCB wastes generated from their activities at the shop prior to shipping the PCB wastes to appropriately licensed disposal facilities. As shown in Figure 2, the PCB storage area is in the southeast corner of the shop.

The operations at the site and the regulatory status of the site have changed since the existing *Closure Plan* was revised in July 1992. In 1994, GE deactivated portions of the approved PCB storage area. In addition, as a condition of their *373 Permit*, GE has conducted a RCRA Facility Investigation (RFI) and recently completed a Corrective Measure Study at their Tonawanda service shop.

2.1.1 Changes at the Service Shop

On August 1, 1990, when GE submitted the application to the EPA, the PCB management area consisted of a bermed work area and a PCB drum storage area.

In 1994, GE deactivated the PCB drum storage area and the northern portion of the work area. Appendix A presents the December 15, 1994 letter report (*Deactivation Report*) by ERM that describes the work and certifies the deactivation. In their June 9, 1995 approval letter, entitled *Notice of Issuance of Approval of General Electric Company Tonawanda Service Center Tonawanda, New York NYD067539940 As a Commercial Storer of PCB Waste*, EPA stated that "*If an area is not used again for storage of PCB waste, the decontamination activities described in GE's December 15, 1994 report will generally not be required to be repeated for final closure.*"

Based on discussions with GE, URS understands that GE has not used the northern portion of the PCB work area or the PCB drum storage area for either the handling or storage of PCB wastes since those areas were deactivated in 1994. Therefore, this *RCP* addresses only the 1,230 square foot active PCB area that is shown in Figure 2.

2.1.2 373 Permit

The 373 Permit allows GE to store hazardous wastes that contain volatile organic compounds (VOCs), metals, and PCBs at a storage area on the northeast side of the building (Figure 2). GE does not treat or dispose hazardous or solid wastes at the site.

Because PCBs are considered a hazardous waste in the state of New York, GE's *373 Permit* covers the interior PCB storage area as well as the RCRA container storage area. The terms of GE's 373 Permit state that the *Closure Plan* for the PCB storage area is incorporated, by reference, into the *Closure Plan* for GE's 373 Permit.

2.1.3 RCRA Corrective Action

In accordance with the terms of the 373 Permit, GE has begun Corrective Action at the site. Module III of GE's *373 Permit* requires Corrective Actions for all releases of hazardous wastes or constituents from any Solid Waste Management Units (SWMUs) or Areas of Concern (AOCs). Module III of the *373 Permit* lists eight SWMUs and AOCs at the Tonawada shop. These eight units, which are shown in Figure 2, are:

- RCRA Container Storage Area
- PCB Container Storage Area
- PCB Work Area
- Former Rinse Water Underground Storage Tank
- Old Oil/Water Separator
- New Oil/Water Separator
- Floor Drains and Sewers
- Rail Spur

Seven of the eight SWMUs listed in GE's *373 Permit* are within the areas the existing *Closure Plan* specifies for sampling. The only SWMU that is not within the areas to be sampled are the floor drains and the sewers.

Under RCRA, Corrective Actions are to be implemented wherever they are necessary, including areas beyond the boundaries of the facility. Corrective Actions include a RCRA Facility Assessment (RFA), an RFI and, if needed, Corrective Measures. GE completed the RFA in 1988 and the RFI in 1998. A Corrective Measure Study (CMS) was completed in 2000.

The RFI was submitted to the DEC April 2, 1999 and a copy was sent to Mr. James Reidy of the EPA. The results of the RFI indicate that the concentrations of selected constituents (primarily PCBs) at the Tonawanda shop exceed the recommended soil cleanup objectives (RSCOs) published by the DEC in TAGM HWR-94-4046.
Figure 3 shows the locations from which samples have been collected and analyzed for PCBs during the RFI. Table 1 summarizes the analytical results for sediment samples collected at the

site. Table 2 and 3 summarize the PCB analytical results for PCBs in groundwater and water. Figures 4 through 7 present the analytical results for PCBs in soil samples.

The RFI identified five locations for which corrective measures were warranted. At NYSDEC's request, GE prepared a focused CMS. The locations, shown in Figure 8, that were the subject of the CMS are:

- The former rinse water UST investigation;
- The sewer lines east of the building near the former rinse water tank;
- The truck bay trench and sump;
- The area around the old oil/water separator; and
- The surface soils near the rail spur.

Surface soils, subsurface soils, or sediments in these five areas contain concentrations of PCBs that exceed the DEC's RSCOs. The CMS evaluated six alternatives for the focused CMS locations. The recommended alternative from the CMS is presented in Figure 9. The CMS was submitted to the DEC on April 24, 2000 and a copy was sent to Mr. Reidy of the EPA.

The corrective measure that was recommended for implementation includes:

- Institutional actions such as deed restrictions, fences and signs to isolate low-occupancy areas near rail spur and east side of shop building;
- Surface soil excavation of a soil pile and isolated areas near the rail spur;
- Sediment removal from storm sewers, truck bay trench, and sump;
- Off-site disposal of soil and sediment;
- Storm sewer cleaning;
- Sealing of floor drain;
- Sewer lining;
- Asphalt cap over the former rinse water UST area; and
- Groundwater monitoring

In Section 2.3, the conclusions of the RFI and the recommendations from the CMS will be briefly described as they relate to the sampling required by the existing *Closure Plan.*

2.2 DESCRIPTION OF PCB STORAGE AREA

As shown in figure 2, GE's active PCB area is in the southeast corner of the Tonawanda service shop. The area is 68.5 feet long, 18 feet wide, and is enclosed with a berm that is 0.75 feet high.

The storage area is bordered to the south by an exterior wall, to the west by a truck bay, to the north by the deactivated portion of the PCB work area, and to the east by a shop tool storage area and the deactivated PCB drum storage area.

According to GE's existing *Closure Plan*, which was written before portions of the PCB areas were deactivated, the PCB areas were two separate and distinctly bermed areas: the PCB drum storage area and the former PCB work area. The current active PCB area was a part of the former PCB work area. Table 4 summarizes the storage capacity given in the existing *Closure Plan* and the storage capacity of GE's current active PCB area.

2.3 COMPARISON OF EXISTING SAMPLING PLAN TO ONGOING CORRECTIVE ACTIONS

This section compares the sampling plan and proposed cleanup actions in the July 1992 *Closure Plan* to the results of the RFI (1999) and corrective actions recommended in the CMS (2000). These comparisons form the basis for the proposed changes to the closure plan. The sampling plan that is proposed in this *RCP* is presented in Section 5.0.

2.3.1 Interior Surfaces

The existing *Closure Plan* calls for interior surfaces to be wipe sampled on a 10-foot grid. Wipe samples were chosen because the surface of the PCB areas is epoxy-coated and non-porous. The grid was to be continued up the walls and additional wipe samples collected at two- and eight-foot heights. The *Closure Plan* called for 50 percent of the surface samples to be collected and analyzed, initially, with the provision for additional wipe samples based on the analytical results and judgmental sampling.

The extent of the grid and, consequently, the number of wipe samples stated in the closure plan were based upon GE's entire approved PCB storage area being active. Since the existing *Closure Plan* was prepared, GE has deactivated more than 63 percent of the area that was originally approved for storage. Therefore, this *RCP* proposes a smaller grid area and, consequently fewer wipe samples in the interior of the building.

The RFI primarily focused on the exterior of the Tonawanda shop building and did not include sampling in the PCB storage area. Therefore, the RCRA corrective action program has no bearing on the interior sampling for the closure of the PCB storage area.

The *Deactivation Report*, which summarizes the deactivation of portions of the PCB storage area, documents that the floor was scarified to achieve the cleanup objectives. GE anticipates that scarification may be required in the active area.

2.3.2 Exterior Surfaces

The existing *Closure Plan* calls for the collection of wipe samples from locations on exterior surfaces on a 20-foot grid. The grid extended from the gate on the access road southwest of the building, east to the southeast building corner, then north along the east wall to the rail spur, and

then east to the fence. The grid was to be continued up the outside walls and additional wipe samples collected two feet above grade. In addition, supplemental sampling would include collecting chip samples from the parking lot.

The scope of work for the RFI included an investigation of the soil quality outside the building adjacent to, but not beneath, the PCB container storage area (CSA). The RFI also included an investigation of the soil and groundwater quality around the new oil/water separator south of the service shop.

The soils south and southeast of the PCB CSA do not appear to have been significantly impacted by PCBs. Both surface and subsurface soil samples collected from south of the building during the RFI were found to have concentrations of PCBs either less than method detection limits or less than the DEC RSCOs for PCBs. Therefore, neither additional investigative work nor corrective action was deemed necessary in this area.

The RFI also included an investigation of the soil quality outside the building east of the PCB work area. During previous investigations, PCBs were detected in the surface soils east of the building between the old oil/water separator and the former rinse water tank. The fill within the former rinse water tank excavation and the perched water within the fill showed evidence of impacts from either PCBs or VOCs. The impacted soil appears to be limited to the former UST excavation. Contamination migration to the native soils around or beneath the former UST excavation is limited to the materials in the immediate proximity of the former excavation. The old oil/water separator may have been a source of the PCBs found in soil and perched groundwater along the sewer line south of the old oil/water separator.

As a result of the investigation, the area outside the PCB work area near the old oil/water separator and the former rinse water tank was included in the focused CMS. The recommended corrective action for this location is for subsurface soils to be covered with a 3,500 square foot asphalt cap. After being cleaned, the sewer lines near the former rinse tank excavation would be lined to prevent infiltration of perched groundwater. Both deep groundwater and shallow, perched groundwater would be monitored for five years.

The scope of work of the RFI also included an investigation of soil quality in the area around the rail spur. The surface soils near the rail spur in the northeast part of the site contain concentrations of PCBs (up to 142 mg/kg) that exceed the RSCO of 1.0 mg/kg for surface soil. However, the concentrations of PCBs in subsurface soils are less than the RSCO of 10 mg/kg. The rail spur area was included in the focused CMS.

The recommended alternative for surface soil in the rail spur area is excavation and off-site disposal at appropriately permitted facilities. Approximately 100 cubic yards of piled soil and approximately 20 cubic yards of surface soil from two locations where the soil with PCB concentrations that exceed 25 mg/kg would be removed. The remaining soil would meet the 25 mg/kg criteria for low occupancy areas. Additional fencing would be installed to restrict access.

Since no problem areas were identified south of the building, and four corrective measures are proposed for areas east of the building, this *RCP* does not include sampling on the south or east

side of the building. As discussed below, some exterior sampling will be conducted near the transportation corridor.

2.3.3 Transportation Facilities

The existing *Closure Plan* calls for collection of approximately 10 surface (chip) samples at equally spaced intervals beginning 100 feet outside the security gate and continuing to the loading docks. The existing *Closure Plan* also calls for collection of samples from the truck ramps and loading docks at ten-foot intervals.

As described in the RFI, the exterior drains in the truck bay trench and the truck bay sump contain PCBs. PCBs were found in the truck bay trench (240 mg/kg) and the sump in the truck bay area (24 mg/kg) on the south side of the building. The truck bay is an area for which corrective measures have been proposed.

The recommended corrective measure for the truck bay trench and sump is the removal of PCB contaminated sediments and cleaning of the storm sewer. The sediments would be dewatered and transported off-site for disposal at properly licensed facilities.

Although the truck bay trench and sump have already been identified as areas requiring corrective measures, this *RCP* includes collection of wipe samples from the floor in the depressed dock area. Collection of samples from the depressed dock area truck bay adjacent to the active storage area will be included in the *RCP* and is described in Section 5.1.

2.3.4 Drainage Ditches and Surface Runoff

GE's existing *Closure Plan* calls for collection of sediment samples to evaluate whether PCBs are in the drainage ditches or surface depressions. Soil and water samples were collected from a swale in the north west portion of the site. Neither the soil nor the water sample was found to contain PCBs.

Sediment samples were collected from on-site storm water catch basins and manholes. The sediments were found to contain PCBs.

As a result of the investigation, the on-site storm sewers are being addressed through corrective measures. The recommended corrective action calls for the sediments to be removed, dewatered and transported off-site for disposal at properly licensed facilities. The storm sewers would be cleaned and a portion of the sewers would be lined in areas of perched and contaminated groundwater.

As part of the RFI, stormwater runoff was sampled and did not contain PCBs. Therefore, this *RCP* does not call for sampling of the storm sewers or stormwater runoff.

2.3.5 Groundwater Investigation

The existing *Closure Plan* states that a groundwater investigation would be conducted if the results of assessment or sampling activities indicated it would be appropriate. The RFI included a groundwater investigation.

The RFI concluded that groundwater at the site had not been impacted by PCBs. While perched groundwater in the former rinse tank excavation and in the fill along the sewer lines on the east side of the building was found to be impacted, the RFI concluded that rate of percolation through approximately 40 feet of the native low-permeability clay would be low. The impacted perched groundwater is addressed in the CMS through preventing infiltration with an asphalt cap, and protecting the sewers from infiltration by lining the sewer lines. Therefore, this *RCP* does not include a groundwater investigation.

3.0 OBJECTIVES

The objective of this *RCP* is to ensure that surfaces of the facility that may have been impacted by GE's operations as a commercial PCB storer are cleaned up in accordance with the cleanup levels specified in 40 CFR Part 761 Subpart G – PCB Spill Cleanup Policy.

Specifically, the cleanup objectives for the portions of the site that have not been addressed under GE's ongoing RCRA Corrective Action are:

Media	Location	Cleanup Objective for PCBs
Surfaces	Indoor solid surfaces and high contact outdoor solid surfaces	10 μg/100 cm^2
Surfaces	Indoor vault areas and low-contact, out door impervious solid surfaces	10 μg/100 cm^2
Surfaces	Low-contact , outdoor, impervious solid surfaces	10 μg/100 cm^2 or 100 μg/100 cm^2 and encapsulated
Soil	Less than 10 inches below surface	1 mg/kg
Soil	More than 10 inches below surface	10 mg/kg

4.0 TECHNICAL APPROACH

This *RCP* describes the steps that GE will take to close their approved commercial PCB storage area. This section of this *RCP* provides an overview of GE's technical approach.

As described earlier, portions of the approved PCB storage area were deactivated in 1994. In addition, much of the sampling called for in the existing *Closure Plan* has been recently conducted under the RCRA corrective action program. The sampling plan set forth in this *RCP* focuses on these four general areas:

- GE's active PCB storage area in the southeast corner of the shop;
- The nearby truck bay;
- The depressed dock area on the south side of the building; and the
- Transportation corridor that extends from the gates of GE's property to the truck bay.

In general, the closure will occur in this sequence:

- Step 1 - Remove PCB inventory for off-site disposal;
- Step 2 - Walk and note possible locations for judgmental sampling;
- Step 3 - Remove debris and vacuum the active PCB storage area and the nearby truck bay;
- Step 4 - Clean the active PCB storage area, the nearby truck bay, and the depressed dock area using the double wash double rinse procedure;
- Step 5 - Collect wipe and chip samples, as appropriate, from the active PCB area, the nearby truck bay, and the depressed dock area;
- Step 6 - Conduct further cleaning or removal if the first round of analytical results warrant further action;
- Step 7 - Collect confirmatory sampling, if necessary;
- Step 8 - Collect chip samples from the transportation corridor;
- Step 9 - If sampling indicates actions are warranted for the transportation corridor, a plan will be developed and reviewed with EPA prior to implementing;
- Step 10 - Dispose remediation waste; and
- Step 11 - Submit *Closure Certification Report*.

5.0 CLOSURE

This section provides a detailed description of the closure process. All work performed will be conducted in accordance with applicable OSHA regulations and a site-specific health and safety plan. Section 5.1 describes specific procedures that will be followed during closure. Section 5.2 describes sampling protocol and quality assurance and quality control measures. Section 5.3 describes waste handling and disposal.

5.1 CLOSURE PROCEDURES

This section describes the procedures that will be used during closure of the PCB area.

5.1.1 Preparations

The first step in the closure process will be remove the existing PCB inventory and transport the materials to a properly licensed off-site facility for disposal. As discussed in Section 5.3, PCB inventory will be handled and disposed in accordance with 40 CFR Section 761.

Upon completion of inventory removal, a walkthrough will be conducted to assess the condition of the active storage area, the adjacent truck bay, the depressed dock area, and the transportation corridor. The purpose of the walkthrough will be to determine whether supplementary, judgmental, samples should be included in the sampling plan. Areas with an oily stain, buildup of grime, or cracks in the concrete (or other) surface will be noted during the walkthrough. The observations collected in this step will be used to determine the number and locations of judgmental samples that will be collected during implementation of the sampling plan.

5.1.2 Interior Areas

The closure of GE's active PCB area, the adjacent truck bay, and the depressed dock area will include cleaning and collection of samples to confirm that the cleanup objectives have been achieved. If necessary, additional measures will be taken to remove PCB residues, and confirmatory samples will be collected.

Bulk debris will be removed from the storage area and the areas will be vacuumed. The active PCB storage area, the adjacent truck bay, and the depressed dock area will be cleaned using a double wash double rinse procedure as defined in 40 CFR 761.123. The adjacent building wall will also be washed to a height of eight feet. The truck bay and depressed dock area may be washed as well, if the inspection shows this step is warranted. All waste generated, including wash and rinse water, will be containerized for disposal at a properly licensed facility.

After the active PCB storage area, truck bay, and depressed dock area have been cleaned, samples (wipe or chip, as appropriate based on the surface) will be collected from the surfaces

for PCB analysis. Two ten-foot by ten-foot grids will be established on the floors. One grid will begin at the northeast corner of the active PCB area. The grid will extend up the adjacent building wall to a height of three feet. The second grid will begin in the northeast corner of the depressed dock area.

Each line of the grid will be assigned a letter or number so that each node of the grid will have a unique identification, such as "B2". Each unique identification will then be assigned a number. A random number generator will be used to select which corresponding nodes will be sampled and analyzed. Fifteen numbers (approximately 50 percent of the nodes) will be selected from the grid on the PCB storage area and truck bay using a random number generator. No more than two numbers that correspond to locations on the walls will be selected. Five numbers (approximately 50 percent of the nodes) will be selected from the grid on the depressed dock area using a random number generator. Based upon the type of material to be sampled, wipe or chip samples will be collected, as appropriate. Sampling protocol is discussed in more detail in Section 5.2.

The results of the first round of sampling will determine what further actions, if any, are warranted. If the results of the sampling indicate that the surfaces meet the cleanup objective of 10 µg/100 cm^2 and concrete chip samples meet the objective of 1 mg/kg, then no further actions will be taken. However, if the results of the first round of sampling do not meet cleanup objectives, then GE will either reclean the areas or employ more aggressive approaches, such as scarification, to achieve the objectives. If further action is undertaken, confirmatory samples will be collected to verify the cleanup objectives have been achieved in areas where additional cleanup activities are conducted.

5.1.3 Exterior Areas

Exterior sampling will focus on GE's transportation corridor. For the purpose of this *RCP* the transportation corridor begins at the access gate on Milens Road and extends to the truck bay adjacent to the PCB storage area. Six samples will be collected at equally spaced intervals along the corridor. Because this area is entirely asphalt or concrete paved, chip samples will be collected for PCB analysis.

If the results of the sampling indicate that there are PCBs in the pavement, the affected area will be cored and additional samples of paving materials and underlying soil will be collected to evaluate the extent of PCBs. An appropriate plan will be developed and reviewed with EPA before implementation. Confirmatory samples will be collected to verify that cleanup objectives have been achieved.

5.2 SAMPLING PROTOCOL AND QA/QC

This section provides a summary of the sampling protocol and quality control measures that will be employed during closure.

5.2.1 Sampling Protocol

This section describes the protocol to be followed for each of the sample types that may be collected during closure. Each sample that is collected will be assigned a unique sample identification related to the location from which it was collected and sample type. If an obstruction prevents the collection of any sample from a designated location, the location shall be adjusted in the field, and the sample will be collected as close as practical to the designated location.

The samples will be transferred to containers provided by the analytical laboratory, and submitted under proper chain of custody for PCB analyses. All samples collected during the closure will be analyzed for PCBs using EPA Method 8082.

All sampling equipment will be decontaminated between sampling locations. The core barrel, hand auger, and any other nondisposable sampling equipment will be washed with liquinox, rinsed with distilled water, then washed with hexane, and rinsed with distilled water.

Wipe Samples

Wipe samples will be collected from non-porous surfaces and from epoxy-coated concrete surfaces at the locations described in Section 5.1.

Wipe samples will be collected by framing the surface to be sampled with a 10 centimeter by 10 centimeter template and systematically wiping the area using a pad moistened with hexane. The solvent-moistened pad will be wiped twice, once vertically and once horizontally, over the entire area to be sampled. Duplicate wipe samples will be collected immediately adjacent to the original sampling location. The samples will be submitted to the analytical laboratory under proper chain of custody for PCB analyses.

Chip Samples

Chip samples will be collected from noncoated concrete and asphalt surfaces at the locations described in Section 5.1.

Chip samples will be removed from the paved area or from cores drilled through the paved area. The samples will be crushed and placed in clean bottles provided by the laboratory. The sample bottles will be capped, labeled, and placed in a cooler for transport under proper chain-of-custody.

Core Samples

If the analytical results from chip samples indicate further investigation is warranted, core samples may be collected from either concrete or asphalt paved areas.

A coring machine equipped with a diamond edged core barrel will be used to core through solid surfaces. The core barrel will have a minimum diameter of four inches to allow soil samples to be collected through the hole. The core samples will be split into one inch intervals at the

laboratory. The core barrel will be decontaminated between sample locations using the procedures outlined above.

Soil Samples

If the analytical results from chip samples, either asphalt or concrete, indicate further investigation is warranted, a paved surface will be cored, and soil samples will be collected.

Soil samples will be collected from borings installed using a hand auger. The borings will be advanced to a maximum of three feet below the base of the slab. Soil samples will be collected at one foot and three feet below the base of the slab. The analyses for the samples collected at three feet below the base of the slab will be held pending the results of the samples from one foot below the slab.

Residual soil will be used to backfill the soil boring. The concrete or asphalt surface will be patched.

5.2.2 Quality Control and Quality Assurance

Field blanks and duplicate samples will be collected and analyzed for QA/QC purposes. Field blanks will be collected for each day of sampling. Duplicate samples will be collected at a rate of one duplicate sample per 20 samples for each type of sample collected.

5.3 WASTE HANDLING & DISPOSAL

Handling, storage, transportation, and disposal of the existing inventory of PCB waste and all PCB wastes generated during implementation of this *RCP* will be in accordance with 40 CFR 761.

5.3.1 Disposal of Inventory

Existing inventory will be removed from the site for disposal within 60 days of beginning closure. Inventory will handled and disposed based upon the type of PCB article or container, and the concentration of PCBs. The existing inventory includes one drum of PCB sludge and decommissioning equipment.

The solids are anticipated to be disposed in a chemical waste landfill that complies with the requirements of 40 CFR 761.75. The PCB liquids and solvents drained from PCB articles will be disposed by incineration by Safety-Kleen at an incinerator that complies with the requirements of 40 CFR 761.70. At the time this *RCP* is written, it is likely that the chemical waste landfill operated by Chemical Waste Management, Inc, in Model City, New York will receive the wastes generated during closure of the storage area.

5.3.2 Closure Derived Waste

Wastes generated during decontamination of the facility will be stored on-site until final disposal. Wastes will be handled in accordance with applicable storage requirements.

6.0 SCHEDULE

Figure 10 presents a schedule for the final closure. GE anticipates that the PCB storage will receive wastes until July 31, 2000. As shown in Figure 10, GE will:

- Notify the EPA and DEC of their intention to close the PCB storage area at least 60 days before the anticipated date that the final closure will begin;
- Begin closure no more than 30 days after receiving the final PCB waste;
- Remove all existing inventory within 90 days of receiving the final PCB waste;
- Complete closure within 180 days of receiving the final PCB waste; and
- Submit to the EPA and to the DEC, within 60 days of completing the closure, a certification that the PCB storage area was closed in accordance with the approved closure plan (this document). An independent registered professional engineer will sign the certification.

TABLE 1
POLYCHLORINATED BIPHENYL COMPOUND RESULTS
SEDIMENT SAMPLES

GENERAL ELECTRIC COMPANY
TONAWANDA, NEW YORK

Sample ID	Sample Date	Aroclor-1254	Aroclor-1260	Total PCBs
S1	1986-1987	-	-	160
S2	1986-1987	-	-	51
SED2	7/14/98	240	<23	240
SUMP SED	11/17/98	<2.4	24	24
CB-1	1/25/00	<0.052	0.1	0.1
CB-2	2/29/00	<0.41	1.3	1.3
CB-3	2/29/00	<0.42	1.6	1.6
STMH-2	1/25/00	14	6.7	20.7
STMH-3	1/25/00	36,000	<5,300	36,000

Notes:
All data in mg/kg.
Samples analyzed using EPA-8082.
SED2 was collected from the trench in the truck bay.
SUMP SED was collected from the sump in the truck bay.

TABLE 2
POLYCHLORINATED BIPHENYL COMPOUND RESULTS
GROUNDWATER SAMPLES

GENERAL ELECTRIC COMPANY
TONAWANDA, NEW YORK

Sample ID	Sample Date	Aroclor-1248	Aroclor-1254	Aroclor-1260	Total PCBs
MW-2	7/27/98	7	<5.6	76	83
MW-2	11/17/98	<5	42	100	142
MW-3DL	7/27/98	15	<5.6	61	76
DUP1GWDL	7/27/98	21	<5.8	86	107
MW-3	11/17/98	<5	15	81	96
MW-4	7/27/98	<0.5	<0.5	<0.5	ND
MW-4	11/17/98	<0.5	<0.5	<0.5	ND
MW-5	12/21/98	<0.5	<0.5	<0.5	ND
SEW-1	7/15/98	<0.5	<0.5	<0.5	ND

Notes:
All data in ug/L.
Samples analyzed using EPA-8082.

TABLE 3
POLYCHLORINATED BIPHENYL COMPOUND RESULTS
1986 WATER SAMPLING

GENERAL ELECTRIC COMPANY
TONAWANDA, NEW YORK

Sample ID	Sample Date	Total PCBs
W1	1986	<5
W2	1986	740
W3	1986	5
W4	1986	<5
W5	1986	<5
W6	1986	<5
W7	1986	ND

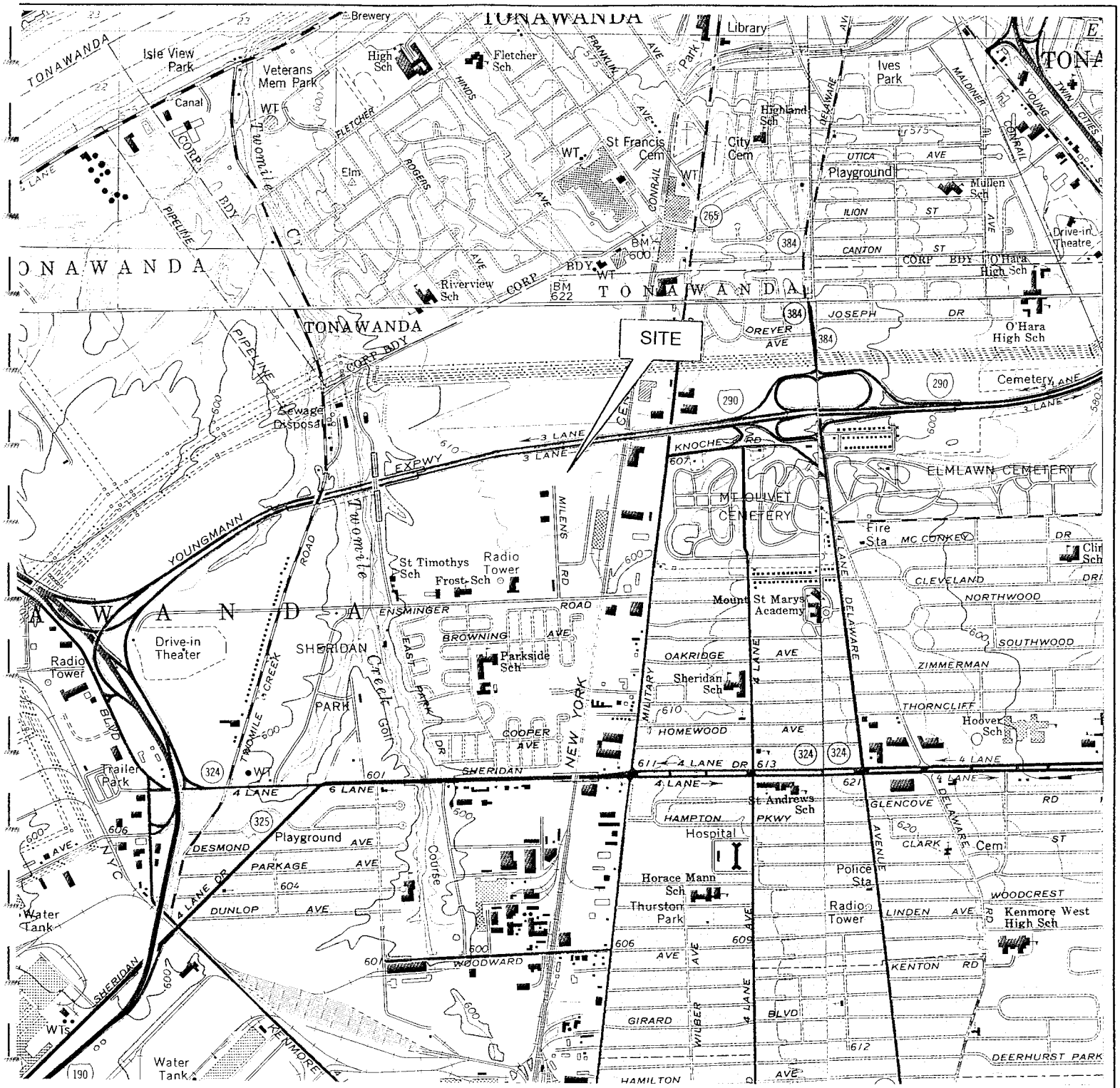
Notes:
All data in ug/L.
Samples analyzed using EPA-8082.

TABLE 4
STORAGE CAPACITY OF
APPROVED PCB STORAGE AREAS

Parameter	Existing *Closure Plan* (Pre-1994)*		(1994-2000)
	PCB Drum Storage Area	PCB Work Area**	Active PCB Area
Area (square feet)	480	2,886	1,233
Berm Height (inches)	14	9	9
Containment Volume (cubic feet) (gallons)	560 4,189	2,165 16,190	925 6,918
Largest Volume Container or PCB Article (gallons)	2,094	8,095	3,459
Total Volume of all Articles and Containers (gallons)	16,756	64,760	27,672
Capacity (number of drums) (number of crates)	75 -	400 84	216 (max) -
Capacity (number of transformers) (weight in pounds)	- -	85 419,730	- -
Total Capacity, drums and transformers (gallons)	4,125	64,200	11,880 (max)

* The existing *Closure Plan* was prepared by Law Environmental and was revised July 1992 by ERM-Northeast.

** The size and capacity shown for the PCB work area includes the portion of the work area that was deactivated and the portion that is still active.



CONTOUR INTERVAL = 10 FEET

REFERENCE
USGS 7.5 MINUTE TOPOGRAPHIC MAPS:
BUFFALO NORTHWEST QUADRANGLE 1965
BUFFALO NORTHEAST QUADRANGLE 1965
TONAWANDA WEST QUADRANGLE 1980
TONAWANDA EAST QUADRANGLE 1980

QUADRANGLE LOCATION

SCALE: 1" = 2000'

FIGURE 1	SITE LOCATION

175 MILENS ROAD
TONAWANDA, NEW YORK

URS
Dames & Moore

646 PLANK ROAD, SUITE 202
CLIFTON PARK, NEW YORK 12065

03/29/00
85030-44

YOUNGMANN EXPRESSWAY

CHAIN LINK FENCE

RAIL SPUR

R.R. TRACKS

R.R. TRACKS

RCRA CONTAINER STORAGE AREA

OLD (ACTIVE)
OIL/WATER SEPARATOR

NORTHERN PORTION OF
PCB WORK AREA

FORMER RINSE WATER UST
EXCAVATION

PCB CONTAINER STORAGE AREA

SUMP

BAY DRAIN

TRUCK BAY

DEPRESSED DOCK

TRUCK BAY

NEW (INACTIVE)
OIL/WATER SEPARATOR

PCB DRUM
STORAGE AREA

CHAIN LINK FENCE

CHAIN LINK FENCE

EXPLANATION

- SWMU/AOC
- DEACTIVATED PCB AREA
- FLOOR DRAIN
- TRENCH WITH FLOOR DRAIN

SOURCE: "MAP OF GENERAL ELECTRIC SERVICE CENTER PROPERTY, PART OF LOT 45, TOWNSHIP 12, RANGE 8, TOWN OF TONAWANDA, ERIE COUNTY, NEW YORK" KRIEBEL ASSOCIATES, JULY 29, 1998.

GRAPHIC SCALE (IN FEET)

0 60 120

FIGURE 2

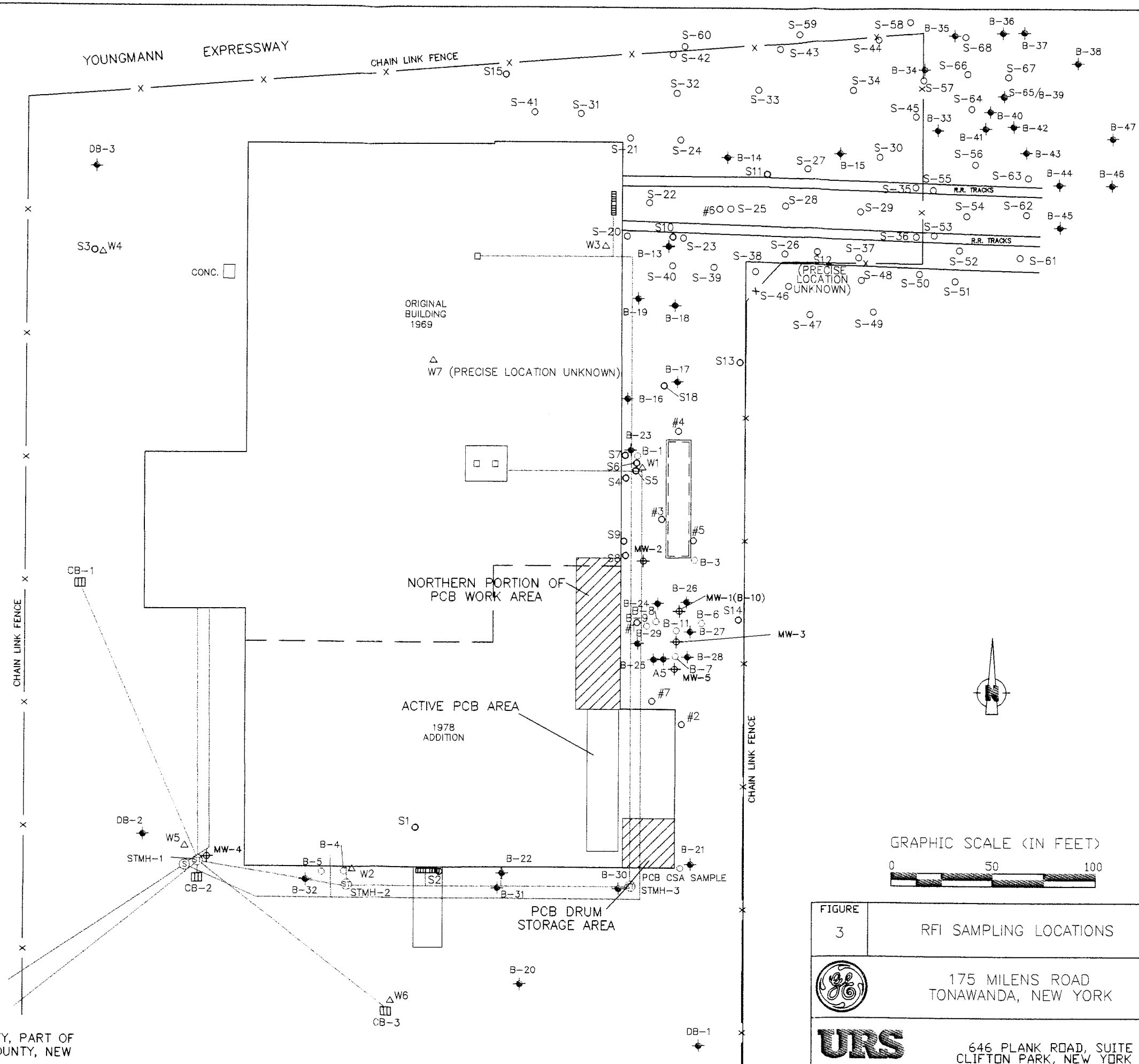
SITE PLAN

175 MILENS ROAD
TONAWANDA, NEW YORK

URS

646 PLANK ROAD, SUITE 202
CLIFTON PARK, NEW YORK 12065

85030-52 06/27/00



EXPLANATION

- STORM MANHOLE
- SANITARY MANHOLE
- CATCH BASIN
- STORM SEWER
- SANITARY SEWER
- FLOOR DRAIN
- TRENCH WITH FLOOR DRAIN
- DB-2 — DEEP SOIL BORING (DAMES & MOORE, 1998)
- B-21 — SHALLOW SOIL BORING (DAMES & MOORE, 1998)
- MW-4 — MONITORING WELL (DAMES & MOORE, 1998)
- S-41 — SURFACE SOIL SAMPLE LOCATION (DAMES & MOORE, 1998)
- B-1 — SOIL SAMPLE LOCATION (LMS, 1986 AND 1987)
- W1 — WATER SAMPLE LOCATION (LMS, 1986)
- #1 — SOIL SAMPLE LOCATION (DAMES & MOORE, 1981)
- S1 — SURFACE SOIL SAMPLE LOCATION (LMS, 1986 AND 1987)
- DEACTIVATED PCB AREA

NOTE: ALL SAMPLING LOCATIONS ARE APPROXIMATE.

SOURCE: "MAP OF GENERAL ELECTRIC SERVICE CENTER PROPERTY, PART OF LOT 45, TOWNSHIP 12, RANGE 8, TOWN OF TONAWANDA, ERIE COUNTY, NEW YORK" KRIEBEL ASSOCIATES, JULY 29, 1998.

GRAPHIC SCALE (IN FEET)

0 50 100

FIGURE 3

RFI SAMPLING LOCATIONS

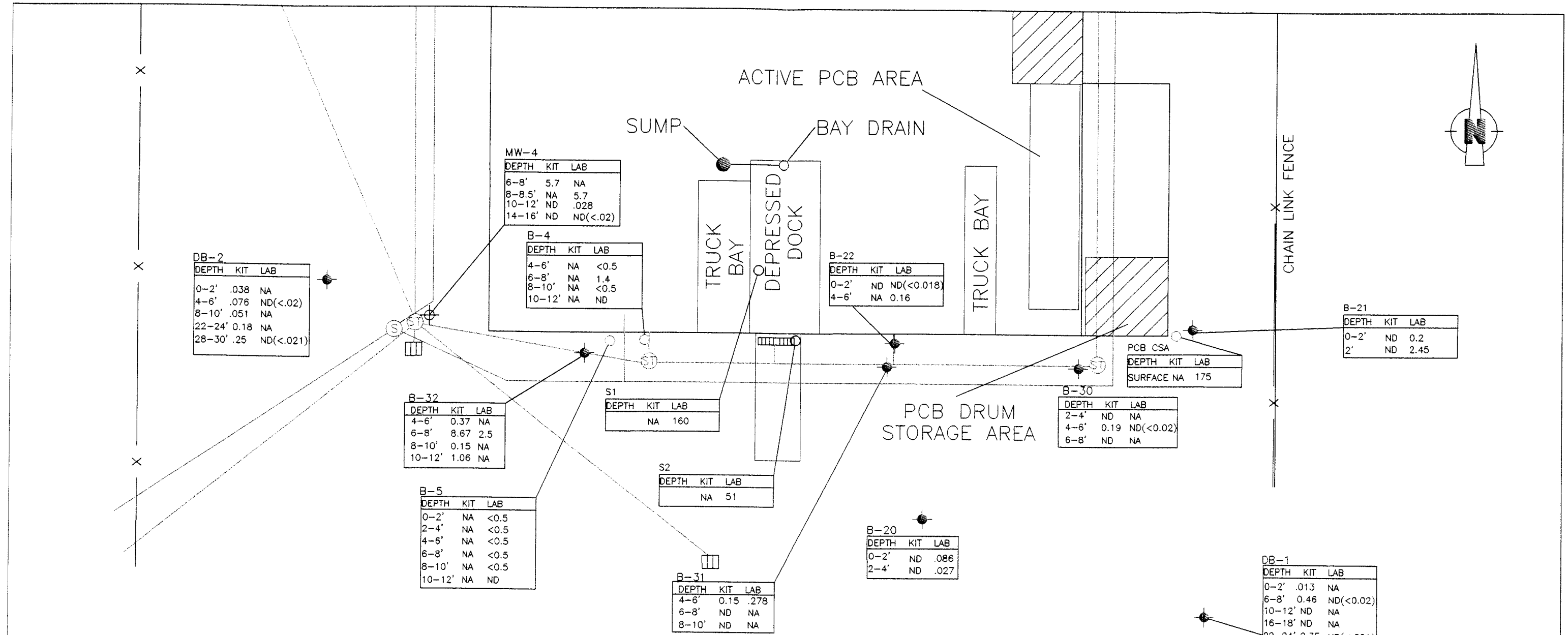
175 MILENS ROAD
TONAWANDA, NEW YORK

URS

646 PLANK ROAD, SUITE 202
CLIFTON PARK, NEW YORK 12065

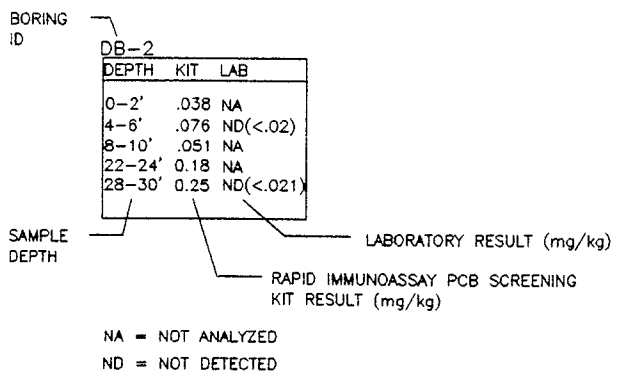
06/26/00

85030-50



EXPLANATION

- STORM MANHOLE
- SANITARY MANHOLE
- CATCH BASIN
- STORM SEWER
- SANITARY SEWER
- TRENCH WITH FLOOR DRAIN
- DB-2 — DEEP SOIL BORING (DAMES & MOORE, 1998)
- B-21 — SHALLOW SOIL BORING (DAMES & MOORE, 1998)
- MW-4 — MONITORING WELL (DAMES & MOORE, 1998)
- #1 — SOIL SAMPLE LOCATION (DAMES & MOORE, 1981)
- S1 — SURFACE SOIL SAMPLE LOCATION (LMS, 1986 AND 1987)
- DEACTIVATED PCB AREA



NA = NOT ANALYZED
ND = NOT DETECTED

NOTE: ALL SAMPLING LOCATIONS ARE APPROXIMATE.

SOURCE: "MAP OF GENERAL ELECTRIC SERVICE CENTER PROPERTY, PART OF LOT 45, TOWNSHIP 12, RANGE 8, TOWN OF TONAWANDA, ERIE COUNTY, NEW YORK" KRIEBEL ASSOCIATES, JULY 29, 1998.

GRAPHIC SCALE (IN FEET)

0 30 60

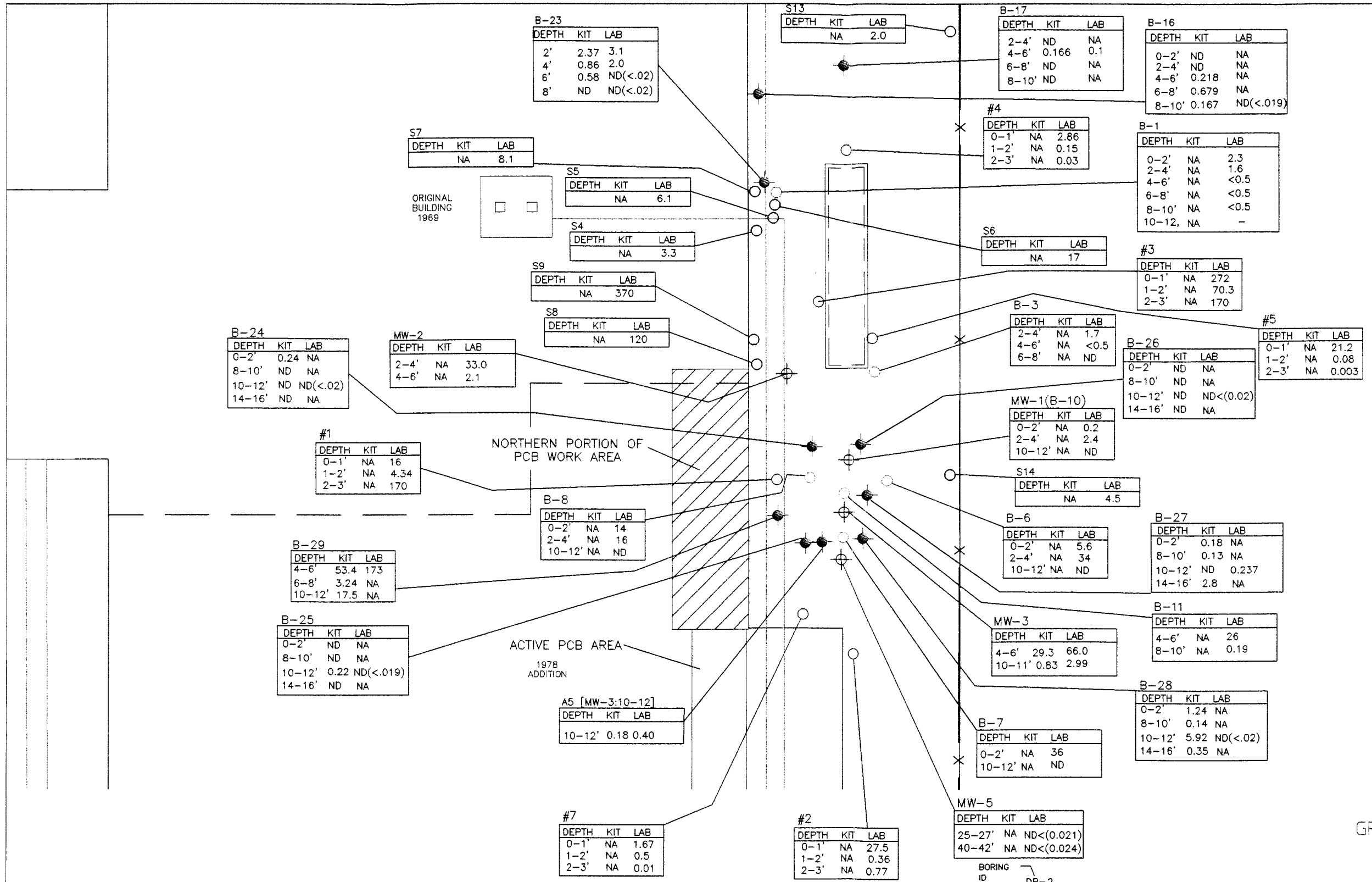
FIGURE	PCB ANALYTICAL RESULTS SOIL SAMPLES SOUTH SIDE OF SHOP
4	

175 MILENS ROAD
TONAWANDA, NEW YORK

URS
646 PLANK ROAD, SUITE 202
CLIFTON PARK, NEW YORK 12065

85030-54 06/27/00

SAMPLE ID	LOCATION	PCB (mg/kg)
S3GE	BETWEEN RWTEP & BLDG.	24
S16GE	5FT NE OF RWTEP	44
S20GE	40FT N OF RWTEP	52
S21GE	AS S20, 1.5-1.8'	2.2
S22GE	10FT N OF RWTEP	0.54
S23GE	RR TRACKS	1.8
S25GE	5FT N OF S23	1.1
S26GE	0-6IN, E OF BLDG.	2.2
S27GE	AS S26GE, 3FT DEEP	180



EXPLANATION

- ——— – STORM SEWER
- ——— – SANITARY SEWER
- □ – FLOOR DRAIN
- B-21 ✦ – SHALLOW SOIL BORING (DAMES & MOORE, 1998)
- MW-4 ✦ – MONITORING WELL (DAMES & MOORE, 1998)
- S-41 ○ – SURFACE SOIL SAMPLE LOCATION (DAMES & MOORE, 1998)
- B-1 ○ – SOIL SAMPLE LOCATION (LMS, 1986 AND 1987)
- #1 ○ – SOIL SAMPLE LOCATION (DAMES & MOORE, 1981)
- S1 ○ – SURFACE SOIL SAMPLE LOCATION (LMS, 1986 AND 1987)
- ▨ – DEACTIVATED PCB AREA

NOTE: ALL SAMPLING LOCATIONS ARE APPROXIMATE.

SOURCE: "MAP OF GENERAL ELECTRIC SERVICE CENTER PROPERTY, PART OF LOT 45, TOWNSHIP 12, RANGE 8, TOWN OF TONAWANDA, ERIE COUNTY, NEW YORK" KRIEBEL ASSOCIATES, JULY 29, 1998.

85030-57 06/26/00

FIGURE 5

PCB ANALYTICAL RESULTS, SOIL SAMPLES
EAST SIDE OF SHOP

175 MILENS ROAD
TONAWANDA, NEW YORK

URS
646 PLANK ROAD, SUITE 202
CLIFTON PARK, NEW YORK 12065

CHAIN LINK FENCE

S15
DEPTH	KIT	LAB
NA		ND

S-41
DEPTH	KIT	LAB
ND		NA

S-31
DEPTH	KIT	LAB
2.9		NA

S-42
DEPTH	KIT	LAB
6.2		3.1

S-60
DEPTH	KIT	LAB
ND		NA

S-43
DEPTH	KIT	LAB
ND		NA

S-59
DEPTH	KIT	LAB
1.4		NA

S-58
DEPTH	KIT	LAB
4.5		ND

S-44
DEPTH	KIT	LAB
4.7		0.52

S-68
DEPTH	KIT	LAB
NA		7.4

B-35
DEPTH	KIT	LAB
0.5'	NA	3.0

S-66
DEPTH	KIT	LAB
"TOP"	NA	7.8
1.5'	NA	8.9

B-36
DEPTH	KIT	LAB
0.5'	NA	0.24
2-4'	NA	ND<0.019

B-37
DEPTH	KIT	LAB
0.5'	NA	0.33

B-38
DEPTH	KIT	LAB
0.5'	NA	0.96

S-57
DEPTH	KIT	LAB
2.6		4.8

B-40
DEPTH	KIT	LAB
0.5'	NA	160.0

B-34
DEPTH	KIT	LAB
0.5'	NA	15
2-4'	NA	ND

S-32
DEPTH	KIT	LAB
14.7		NA

S-33
DEPTH	KIT	LAB
2.1		NA

S-34
DEPTH	KIT	LAB
1.5		NA

S-64
DEPTH	KIT	LAB
NA		29

S-65/B-39
DEPTH	KIT	LAB
6"	NA	142.0
6'	NA	0.04

S-67
DEPTH	KIT	LAB
"TOP"	NA	5.4
1'	NA	3.8

B-15
DEPTH	KIT	LAB
0-2'	ND	1.2
2'	ND	ND(<.02)
4'	ND	ND(<.021)

S-21
DEPTH	KIT	LAB
7.0		NA

S-24
DEPTH	KIT	LAB
379.9		42.0

S-45
DEPTH	KIT	LAB
1.2		NA

B-41
DEPTH	KIT	LAB
0.5'	NA	27
2-4'	NA	ND

S-30
DEPTH	KIT	LAB
2.1		NA

B-33
DEPTH	KIT	LAB
0.5'	NA	60.0
2-4'	NA	ND(<.02)

B-43
DEPTH	KIT	LAB
0.5'	NA	12

B-42
DEPTH	KIT	LAB
0.5'	NA	7.3

B-47
DEPTH	KIT	LAB
0.5'	NA	0.18

S-25
DEPTH	KIT	LAB
10		NA

#6
DEPTH	KIT	LAB
0-1'	NA	2.07
1-2'	NA	0.14
2-3'	NA	0.20

B-14
DEPTH	KIT	LAB
0-2'	ND	0.089
2'	ND	0.026
4'	ND	ND(<.021)

S-27
DEPTH	KIT	LAB
54.4		13.8

S11
DEPTH	KIT	LAB
NA		51

S-56
DEPTH	KIT	LAB
0.76		NA

R.R. TRACKS

S-29
DEPTH	KIT	LAB
4.1		NA

S-35
DEPTH	KIT	LAB
34.3		8.8

S10
DEPTH	KIT	LAB
NA		16

S-22
DEPTH	KIT	LAB
226.9		7.8

S-28
DEPTH	KIT	LAB
0.4		1.2

S-26
DEPTH	KIT	LAB
23.5		NA

S-36
DEPTH	KIT	LAB
32.4		NA

R.R. TRACKS

B-44
DEPTH	KIT	LAB
0.5'	NA	0.33

B-45
DEPTH	KIT	LAB
0.5'	NA	0.19

S-20
DEPTH	KIT	LAB
0.36		0.7

S-38
DEPTH	KIT	LAB
23.5		NA

S-63
DEPTH	KIT	LAB
NA		2.5

B-13
DEPTH	KIT	LAB
0-2'	0.79	4.9
2'	1.04	2.75
4'	NA	2.27

S-37
DEPTH	KIT	LAB
89.7		75.0

S-48
DEPTH	KIT	LAB
ND		NA

S-62
DEPTH	KIT	LAB
NA		0.30

S-61
DEPTH	KIT	LAB
NA		0.31

S-54
DEPTH	KIT	LAB
0.44		2.47

S-23
DEPTH	KIT	LAB
17.6		NA

S-40
DEPTH	KIT	LAB
0.9		1.9

S-46
DEPTH	KIT	LAB
ND		NA

S12
DEPTH	KIT	LAB
NA		7.5

S-47
DEPTH	KIT	LAB
ND		NA

S-50
DEPTH	KIT	LAB
6.3		NA

S-53
DEPTH	KIT	LAB
8.4		NA

S-55
DEPTH	KIT	LAB
3.2		NA

S-51
DEPTH	KIT	LAB
3.8		0.85

B-19
DEPTH	KIT	LAB
0-2'	0.166	NA
2-4'	0.653	0.76
4-6'	ND	NA
6-8'	ND	NA
8-10'	ND	NA

B-18
DEPTH	KIT	LAB
0-2'	ND	NA
2-4'	0.423	0.28
4-6'	ND	NA
6-8'	ND	ND(<.02)
8-10'	ND	NA

S-49
DEPTH	KIT	LAB
0.88		0.24

S-52
DEPTH	KIT	LAB
1.33		NA

S-39
DEPTH	KIT	LAB
0.3		0.07

BORING ID

DB-2
DEPTH	KIT	LAB
0-2'	.038	NA
4-6'	.076	ND(<.02)
8-10'	.051	NA
22-24'	0.18	NA
28-30'	0.25	ND(<.021)

SAMPLE DEPTH

LABORATORY RESULT (mg/kg)

RAPID IMMUNOASSAY PCB SCREENING KIT RESULT (mg/kg)

NA = NOT ANALYZED
ND = NOT DETECTED

NOTE: ALL SAMPLING LOCATIONS ARE APPROXIMATE.

SOURCE: "MAP OF GENERAL ELECTRIC SERVICE CENTER PROPERTY, PART OF LOT 45, TOWNSHIP 12, RANGE 8, TOWN OF TONAWANDA, ERIE COUNTY, NEW YORK" KRIEBEL ASSOCIATES, JULY 29, 1998.

EXPLANATION

- ——— – STORM SEWER
- ——— – SANITARY SEWER
- □ – FLOOR DRAIN
- ▭ – TRENCH WITH FLOOR DRAIN
- B-21 ⌖ – SHALLOW SOIL BORING (DAMES & MOORE, 1998)
- MW-4 ⌖ – MONITORING WELL (DAMES & MOORE, 1998)
- S-41 ○ – SURFACE SOIL SAMPLE LOCATION (DAMES & MOORE, 1998)
- B-1 ○ – SOIL SAMPLE LOCATION (LMS, 1986 AND 1987)
- #1 ○ – SOIL SAMPLE LOCATION (DAMES & MOORE, 1981)
- S1 ○ – SURFACE SOIL SAMPLE LOCATION (LMS, 1986 AND 1987)
- ▨ – DEACTIVATED PCB AREA

GRAPHIC SCALE (IN FEET)

0 30 60

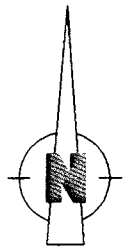
85030-56 06/26/00

FIGURE 6

PCB ANALYTICAL RESULTS SOIL SAMPLES RAIL SPUR AREA

175 MILENS ROAD
TONAWANDA, NEW YORK

URS
646 PLANK ROAD, SUITE 202
CLIFTON PARK, NEW YORK 12065



YOUNGMANN EXPRESSWAY

CHAIN LINK FENCE

CHAIN LINK FENCE

DB-3

DEPTH	KIT	LAB
0-2'	ND	NA
8-10'	ND	ND(<.02)
14-16'	ND	NA
18-20'	ND	NA
24-26'	ND	NA
28-30'	ND	ND(<.019)

S3

DEPTH	KIT	LAB
	NA	ND

CONC.

ORIGINAL BUILDING 1969

BORING ID

DB-2

DEPTH	KIT	LAB
0-2'	.038	NA
4-6'	.076	ND(<.02)
8-10'	.051	NA
22-24'	0.18	NA
28-30'	0.25	ND(<.021)

SAMPLE DEPTH

LABORATORY RESULT (mg/kg)

RAPID IMMUNOASSAY PCB SCREENING KIT RESULT (mg/kg)

NA = NOT ANALYZED
ND = NOT DETECTED

EXPLANATION

- CATCH BASIN
- STORM SEWER
- SANITARY SEWER
- FLOOR DRAIN
- TRENCH WITH FLOOR DRAIN
- DB-2 — DEEP SOIL BORING (DAMES & MOORE, 1998)
- B-1 — SOIL SAMPLE LOCATION (LMS, 1986 AND 1987)
- S1 — SURFACE SOIL SAMPLE LOCATION (LMS, 1986 AND 1987)

NOTE: ALL SAMPLING LOCATIONS ARE APPROXIMATE.

SOURCE: "MAP OF GENERAL ELECTRIC SERVICE CENTER PROPERTY, PART OF LOT 45, TOWNSHIP 12, RANGE 8, TOWN OF TONAWANDA, ERIE COUNTY, NEW YORK" KRIEBEL ASSOCIATES, JULY 29, 1998.

GRAPHIC SCALE (IN FEET)

0 30 60

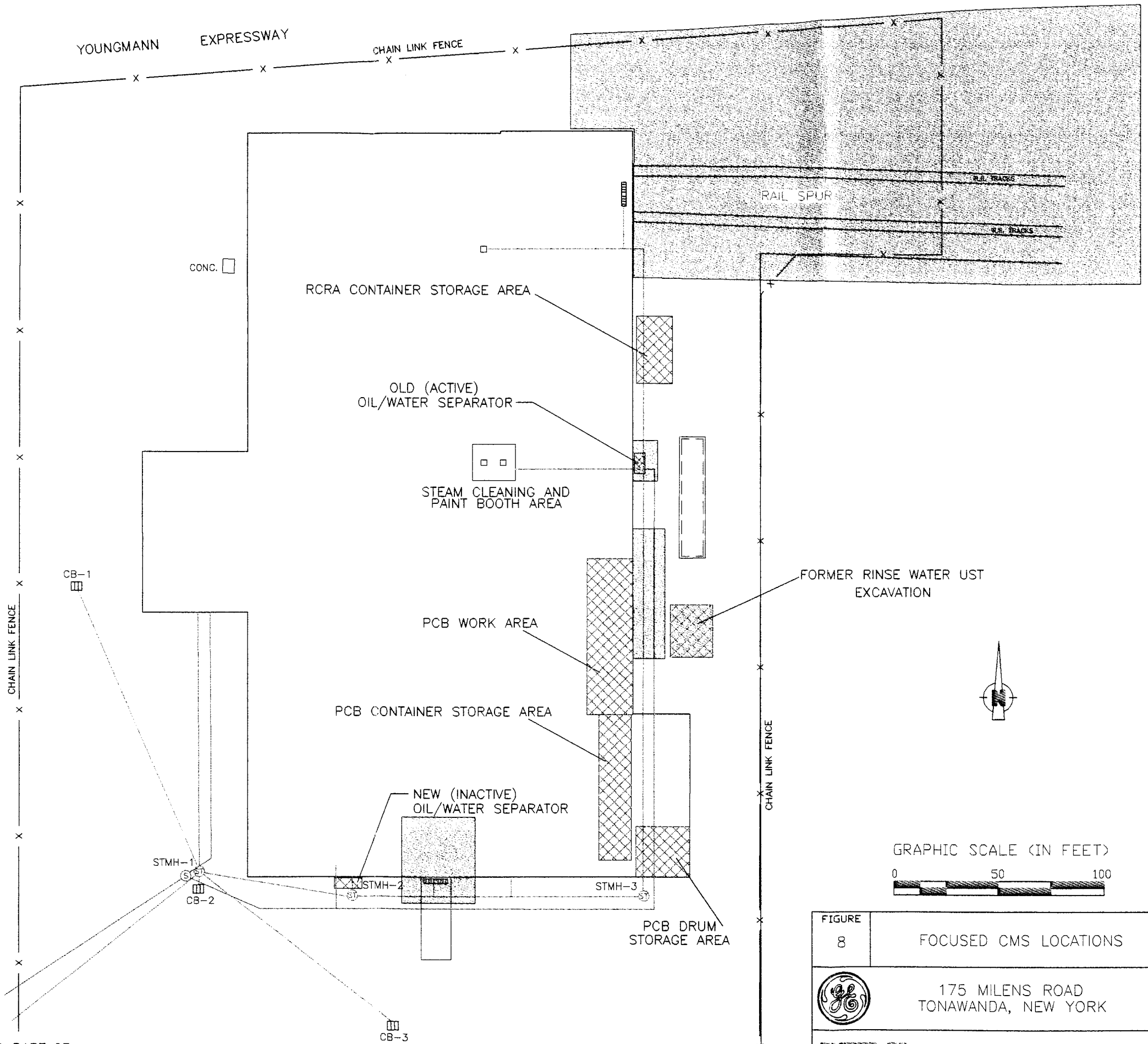
FIGURE	PCB ANALYTICAL RESULTS SOIL SAMPLES WEST SIDE OF SHOP
7	

175 MILENS ROAD
TONAWANDA, NEW YORK

URS

646 PLANK ROAD, SUITE 202
CLIFTON PARK, NEW YORK 12065

85030-55 06/26/00



EXPLANATION

- STORM MANHOLE
- SANITARY MANHOLE
- CATCH BASIN
- STORM SEWER
- SANITARY SEWER
- FLOOR DRAIN
- TRENCH WITH FLOOR DRAIN
- FOCUSED CMS AREA
- SWMU/AOC

GRAPHIC SCALE (IN FEET)

0 50 100

06/26/00

85030-58

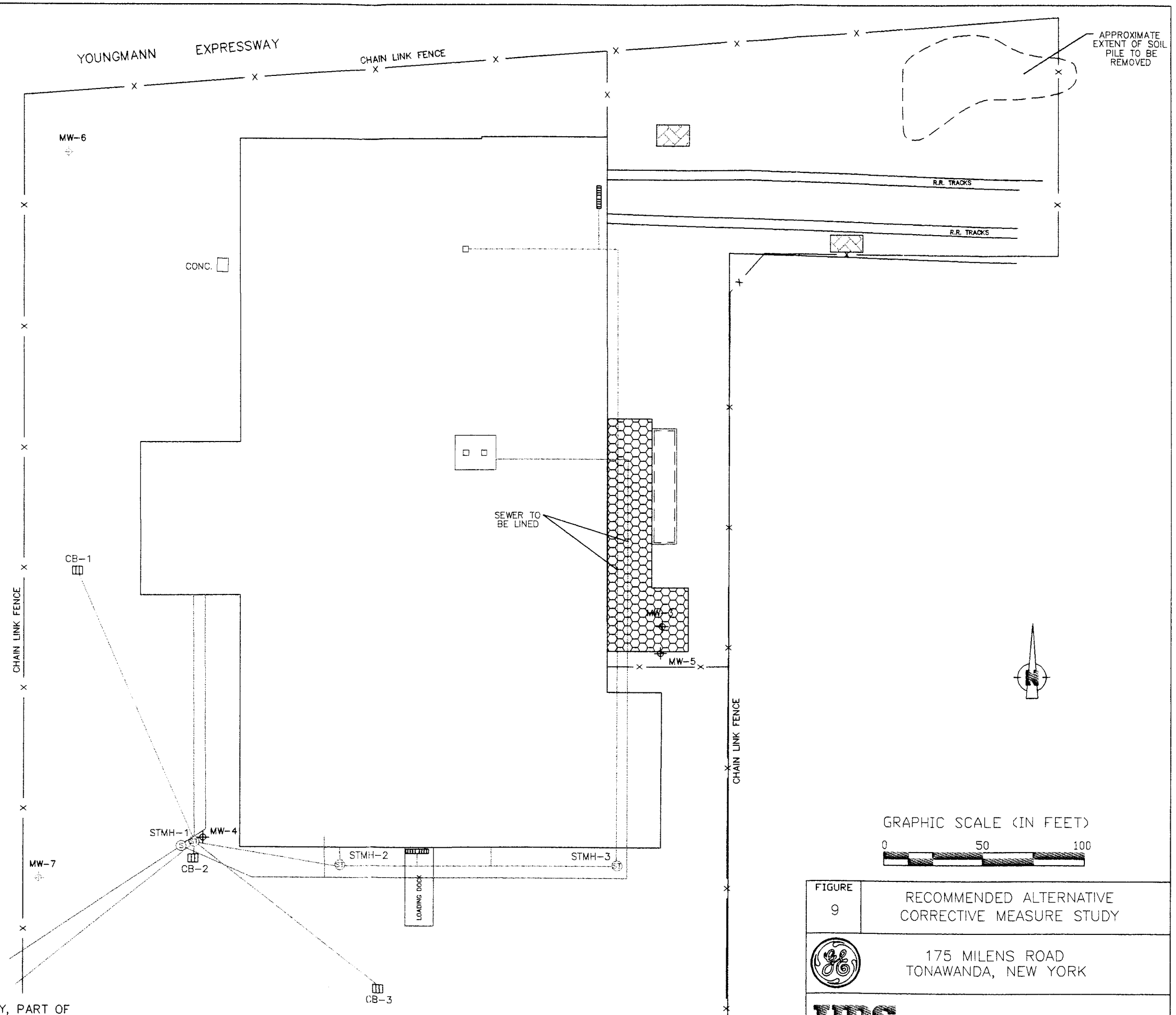
SOURCE: "MAP OF GENERAL ELECTRIC SERVICE CENTER PROPERTY, PART OF LOT 45, TOWNSHIP 12, RANGE 8, TOWN OF TONAWANDA, ERIE COUNTY, NEW YORK" KRIEBEL ASSOCIATES, JULY 29, 1998.

FIGURE 8

FOCUSED CMS LOCATIONS

175 MILENS ROAD
TONAWANDA, NEW YORK

URS
646 PLANK ROAD, SUITE 202
CLIFTON PARK, NEW YORK 12065



EXPLANATION

- (S) – STORM MANHOLE
- (S) – SANITARY MANHOLE
- ▥ – CATCH BASIN
- ——— – STORM SEWER
- ——— – SANITARY SEWER
- □ – FLOOR DRAIN
- ▭▭▭ – TRENCH WITH FLOOR DRAIN
- ▨ – ASPHALT CAP
- ▨ – EXCAVATION TO 1 FOOT AND BACKFILL
- ——— – STORM SEWER TO BE LINED
- ——— – SANITARY SEWER TO BE LINED
- ⊕ – EXISTING MONITORING WELL
- ⊕ – NEW MONITORING WELL
- — x — – NEW FENCE

SOURCE: "MAP OF GENERAL ELECTRIC SERVICE CENTER PROPERTY, PART OF LOT 45, TOWNSHIP 12, RANGE 8, TOWN OF TONAWANDA, ERIE COUNTY, NEW YORK" KRIEBEL ASSOCIATES, JULY 29, 1998.

85030-59 06/26/00

FIGURE 9	RECOMMENDED ALTERNATIVE CORRECTIVE MEASURE STUDY
	175 MILENS ROAD TONAWANDA, NEW YORK
URS	646 PLANK ROAD, SUITE 202 CLIFTON PARK, NEW YORK 12065

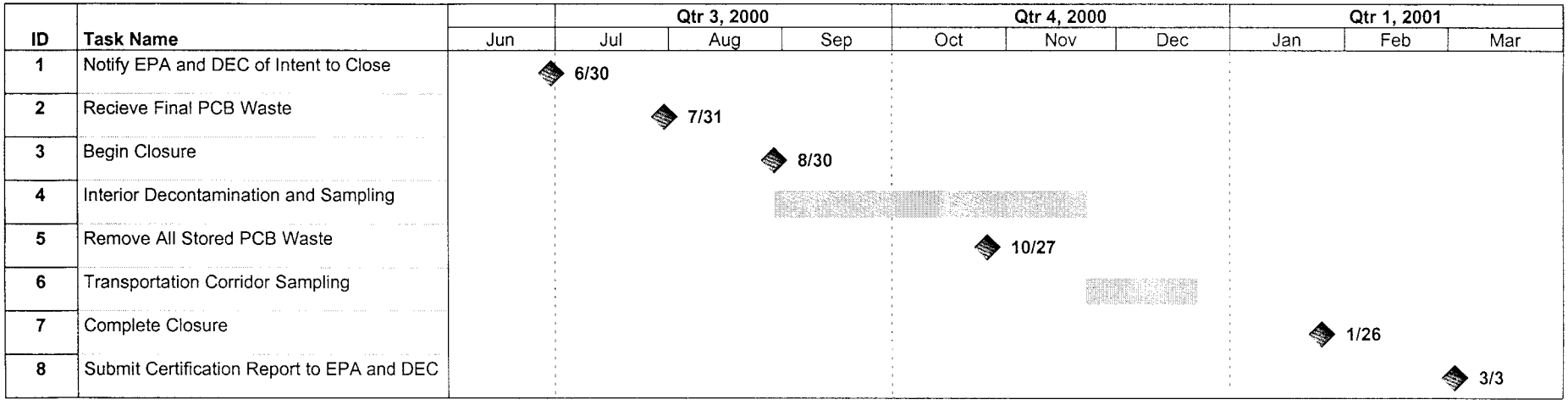


FIGURE 10

CLOSURE SCHEDULE

GENERAL ELECTRIC COMPANY
TONAWANDA, NEW YORK

URS
Dames & Moore
646 PLANK ROAD, SUITE 202
CLIFTON PARK, NEW YORK 12065

APPENDIX A

DEACTIVATION REPORT

ERM-Northeast

5788 Widewaters Parkway
Dewitt, New York 13214
(315) 445-2554
(315) 445-2543 (Fax)

15 December 1994

Mr. Andrew Bellina, P.E., Chief
Hazardous Waste Facilities Branch
US EPA - Region II
Jacob K. Javits Federal Building
New York, New York 10278

ERM

RE: General Electric Company - Tonawanda Apparatus Service Center
Deactivation of a Portion of the PCB Facility
EPA ID# NYD067539940

Dear Mr. Bellina:

Deactivation activities for the General Electric Company's (GE) Tonawanda Apparatus Service Center's PCB work area and PCB drum storage area were conducted on 19 September to 22 September 1994 and 2 November to 10 November 1994. All activities were performed in accordance with GE's previously submitted Sampling and Analysis Plan with oversight provided by ERM EnviroClean-Northeast, Inc. (ECNE). Closure activities and other pertinent information is discussed below.

SITE SPECIFIC INFORMATION

The areas of consideration consisted of two PCB management areas located at GE's Apparatus Service Center at 175 Milens Road, Tonawanda, New York. Descriptions of these two areas are provided below.

Drum Storage Area - This is a 480 ft^2 concrete pad with a 14" concrete berm. The concrete and berm were coated with an epoxy resin sealant for spill containment capability.

PCB Work Area - The PCB work area is divided into two bermed sections. The larger of the two sections, the section to the north, has dimensions of 75 x 22.5 x 0.75 feet. This north section is the area that was cleaned. This area was also coated with the same epoxy resin sealant as the drum storage area.

The drum storage area and PCB work area are depicted in Figure 1.

CLEANUP ACTIVITIES

Site work was performed by Allwash, Inc., Key Equipment Co., and ECNE. Cleanup procedures were initiated on 19 September 1994 in the PCB work area utilizing standard protocols of a double wash/rinse of the floor and back wall. The decontamination work task was conducted by scrubbing and vacuuming the floor and back wall with bristled brushes and mops. Simple Green, a degreasing detergent manufactured by Sunshine of Huntington Harbor, California was diluted to its recommended maximum strength and applied to the floor and wall. All waste and washwater residues were vacuumed with a shop vac. Following the initial cleansing of the area, all rinsate and solid wastes were emptied into appropriately labeled 55-gallon drums.

On 20 September 1994, the PCB work area was again cleaned. A 10 x 10 foot grid was set up to facilitate the collection of screening samples for determining the effectiveness of the cleanup operation. Wipe samples were then collected by wiping a 10 centimeter (cm) by 10 cm area with a large gauze pad saturated with methanol. The wipe samples were analyzed for PCB content through the use of in-field PCB test methods.

On 20 September 1994, the drum storage area was swept and solid wastes from the floor were placed in an appropriately labeled 55-gallon drum.

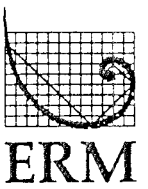
Cleanup of the drum storage area was performed in accordance with protocols of a double wash/rinse using scrubbing brushes and mops saturated with Simple Green. All generated washwater was vacuumed and containerized in an appropriately labeled 55-gallon drum. Subsequently, a 10 x 10 foot grid was constructed and wipe samples were collected from the walls and floor of the area.

On 21 September 1994, analytical results of the initial wipe samples indicated that all floor samples and three out of eight samples collected on the walls of the PCB work area had failed to meet the cleanup standard of less than 10 micrograms per 100 square centimeters (10 $\mu g/100\ cm^2$). A second cleanup effort was initiated in the two areas by a double wash/rinse with Simple Green followed by steam cleaning the areas five times. Subsequently, wipe samples were collected and analyzed for PCB content. Analytical results of the second cleanup indicated that all samples were greater than 10 $\mu g/100\ cm^2$.

The decision was made to clean the PCB areas a third time using Pentatone Power Cleaner #155 instead of Simple Green. The areas were

again cleaned and triple rinsed with a steam cleaner. Analytical results of wipe samples collected after the third cleanup indicated that all samples were above the 10 μg/100 cm^2 cleanup standard.

Due to difficulties encountered in attempting to clean the two areas, the decision was made to sandblast the area utilizing a piece of equipment with the trade name Blast Trac. This unit is completely self contained to minimize dust. On 2 November to 10 November 1994, the Blast Trac was used to remove approximately 1/8 inch of the surface (see photos in Attachment 1). Wipe samples were taken using a 10 x 10 foot grid and analyzed for PCB content through the use of in-field PCB test methods. Once in-field PCB tests indicated the area was clean, wipe samples were collected and submitted for laboratory analysis. Analytical results indicated that all samples were less than the 10 μg/100 cm^2 cleanup standard. Analytical results are presented in Attachment 2.



EQUIPMENT DECONTAMINATION

All equipment used in this project was decontaminated according to 40 CFR 761.79(b) standards. Decontamination fluids were containerized in 55-gallon drums and staged for disposal by GE as PCB waste.

SUMMARY OF FINDINGS AND CONCLUSIONS

ECNE conducted cleanup verification sampling of the two PCB management areas at the GE Apparatus Service Center at 175 Milens Road, Tonawanda, New York. Deactivation activities were performed in accordance with the Sampling and Analysis Plan which was submitted to EPA.

The ECNE verification samples indicated that the PCB work area and PCB drum storage area meet the EPA cleanup standard of less than 10 μg/100 cm^2.

CERTIFICATION

In order to certify that the deactivation activities were adequately performed, Mr. David Bradley, P.E. directed the efforts of ECNE personnel to monitor and document closure efforts, collect independent cleanup verification samples, interpret the sample results, and prepare the report. Mr. Bradley's certification is provided on the last page of this report.

If you have any questions, please contact the undersigned.

Sincerely,

David G Bradley for

Lawrence D. Argus
Project Engineer

ERM

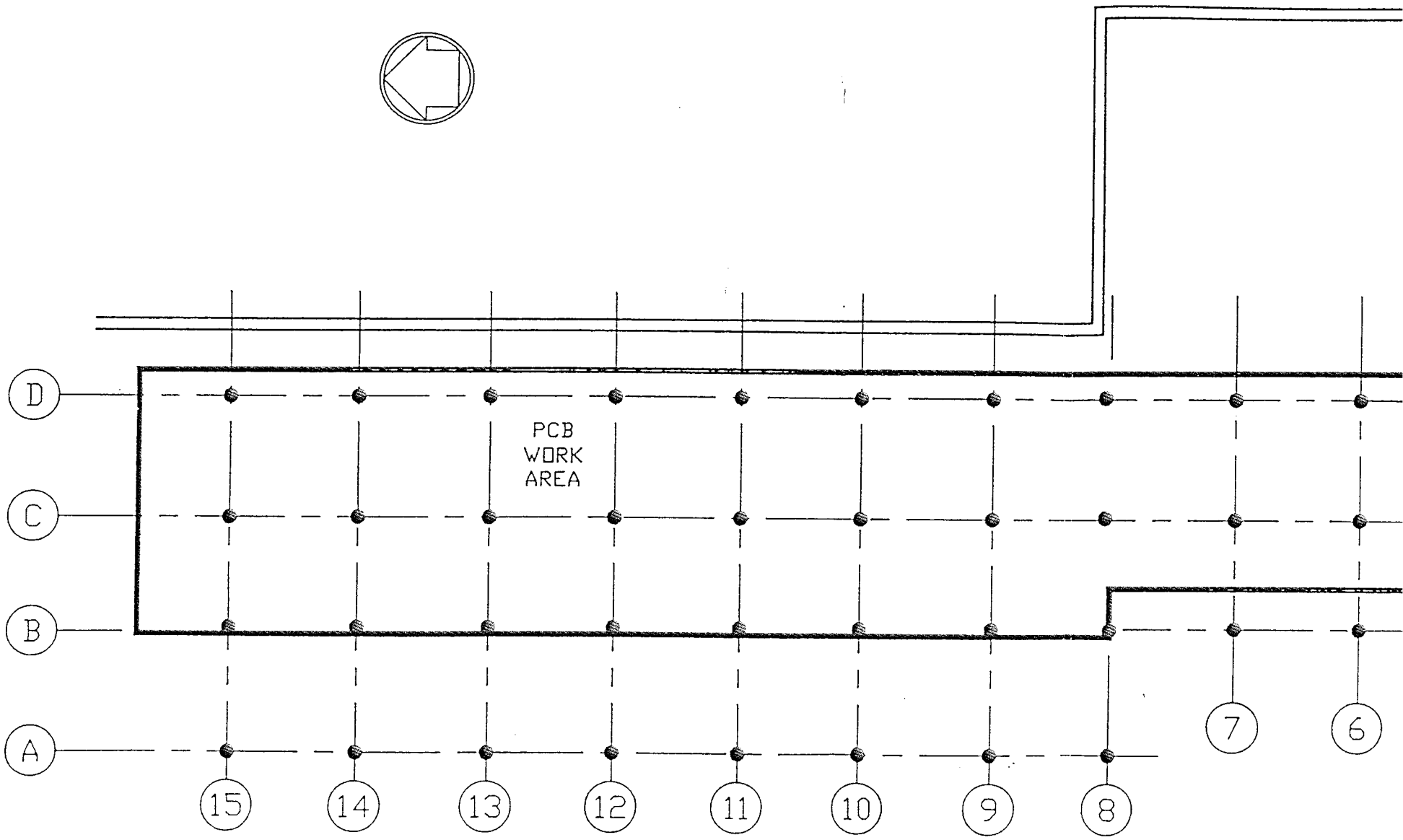
cc: D. Greenlaw - EPA
C. Allen - GE
C. Carey - GE
A. Hejmanowski - GE

Verification Sampling Report
GE Apparatus Service Center
175 Milens Road
Tonawanda, New York
Dated December 19, 1994

Under the civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 USC 1001 and 15 USC 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to sections of this document for which I cannot personally verify truth and accuracy, I certify as the company representative having supervisory responsibility for the person who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

ERM

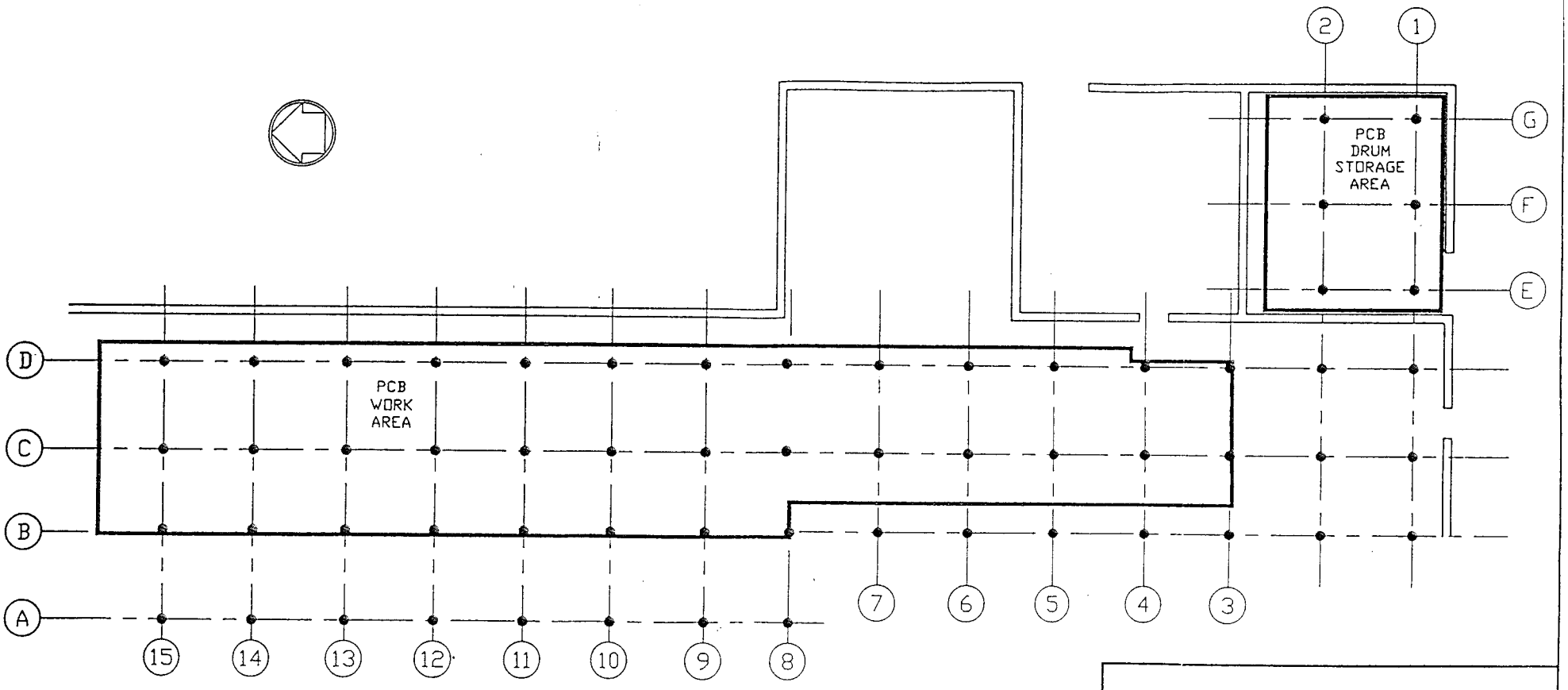
David S. Bradley, P.E.
ERM-Northeast, Inc.
Albany, New York
P.E. Registration NYS 063696-1



LEGEND:

BERM WALLS

NOTE:



LEGEND:

BERM WALLS

NOTE:

SAMPLING GRID 10' X 10'
COORDINATE SYSTEM.

PCB MANAGEMENT AREAS
SAMPLING GRID

PREPARED FOR

GE - BUFFALO SERVICE CENTER

ERM-Northeast
Environmental Resources Management
501 New Karner Rd. Suite 7, Albany, NY 12205
Tel:(518)452-4291 Fax:(518)452-4295

SCALE NTS

DATE 05/94

FIGURE 1

ATTACHMENT 1

PHOTOGRAPHS

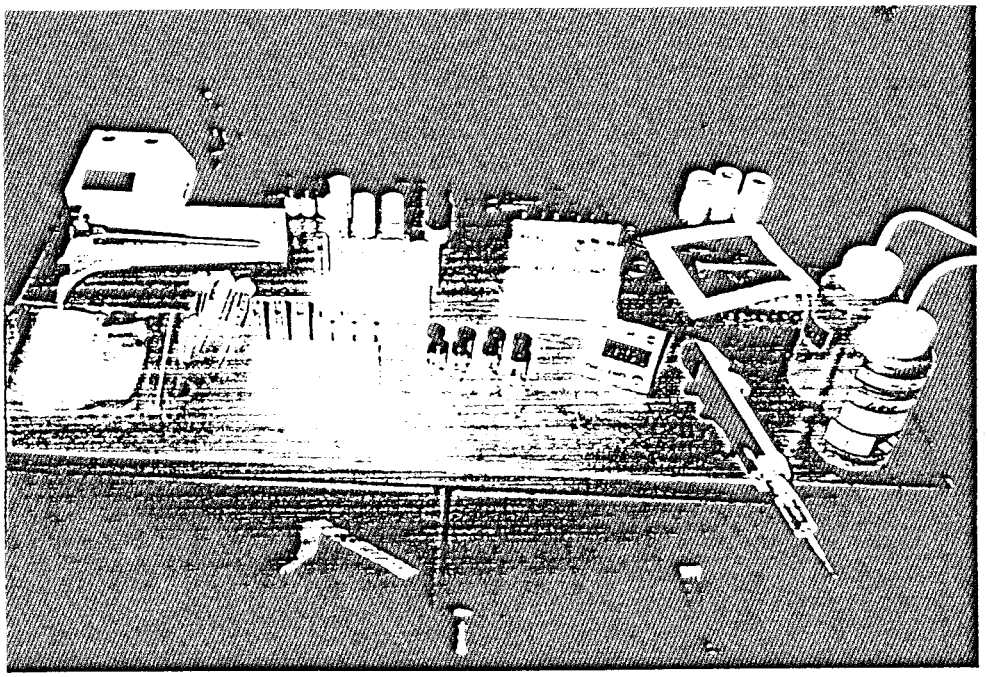


PHOTO 1 - THE PCB TEST KIT WORK AREA

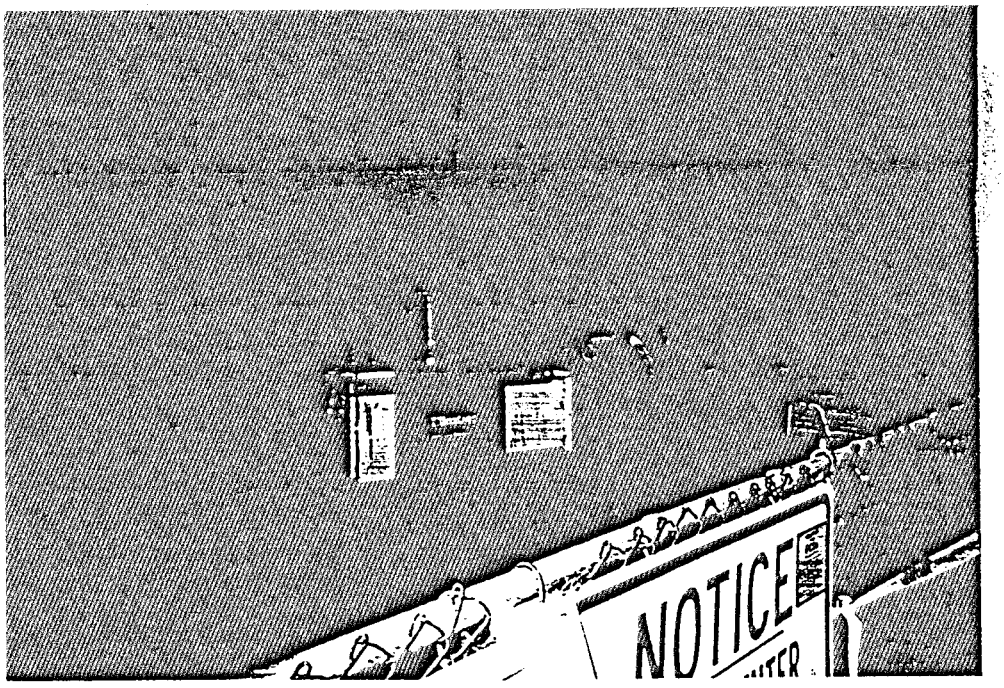


PHOTO 2 - A PIECE OF THE BLAST TRAC EQUIPMENT

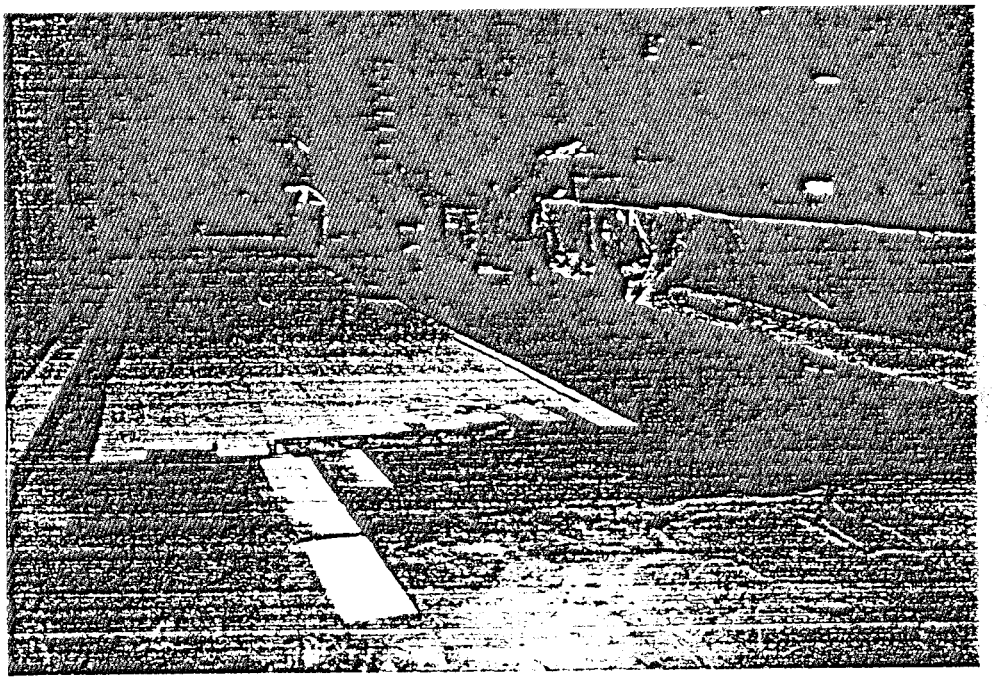


PHOTO 3 - SANDBLASTING UNDERWAY IN THE PCB WORK AREA

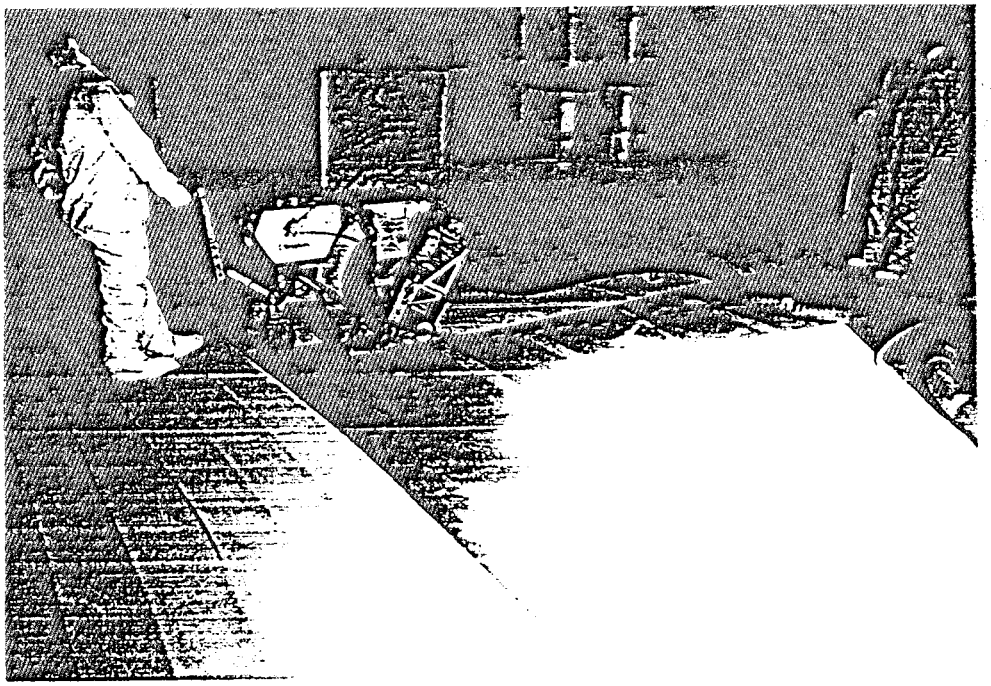


PHOTO 4 - NEAR COMPLETION IN THE PCB WORK AREA

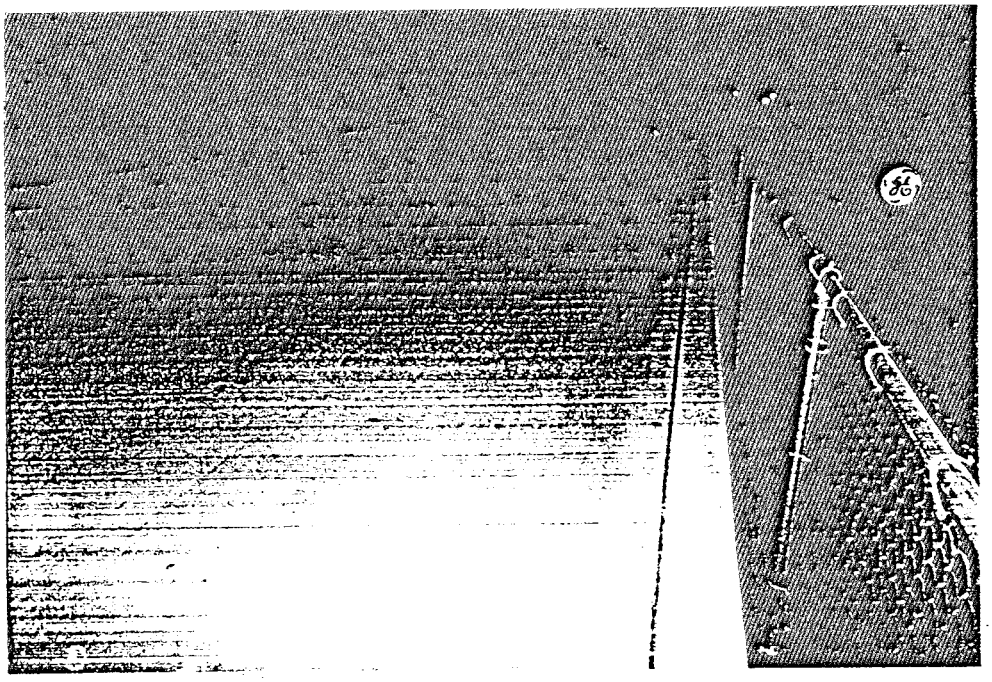


PHOTO 5 - THE PCB WORK AREA FINISHED

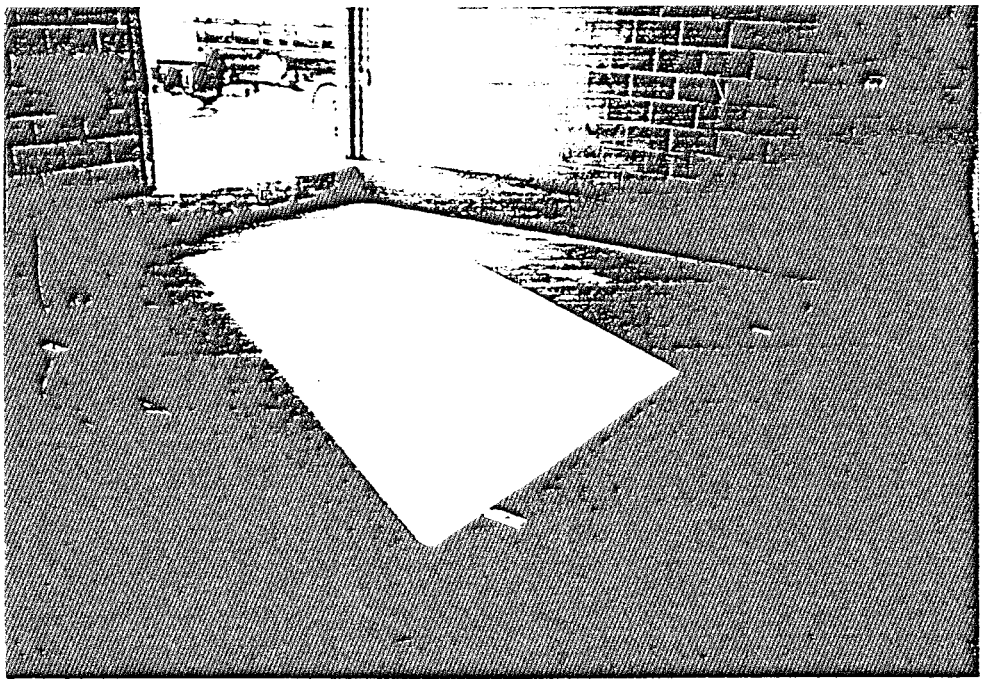


PHOTO 6 - THE DRUM STORAGE AREA FINISHED

ATTACHMENT 2

VERIFICATION SAMPLE ANALYTICAL RESULTS

Adirondack Environmental Services Inc

A full service analytical research laboratory offering solutions to environmental concerns
314 North Pearl Street • Albany, New York 12207 • 518 434-4546 • Fax: 518 434-0891

CLIENT: ERM Northeast
amples taken by: C.B. Mongillo
Location: GE-Buffalo MATRIX: wipe

Date Sampled: 11/10/94
Date sample received: 11/11/94
Grab

PARAMETER PERFORMED	YOUR SAMP ID-> / AES NUMBER->	A1 941111 G01	A2 941111 G02	A3 941111 G03	A4 941111 G04	A5 941111 G05	NOTEBOOK REFERENCE	TEST DATE
PCB		<2	<2	<2	<2	<2	KP-PCB-P41	11/11/94

The above results were obtained using method EPA-8080
and the results are expressed in ug/wipe

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CLIENT: ERM Northeast
amples taken by: C.B. Mongillo
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Date Sampled: 11/10/94
Date sample received: 11/11/94
Grab

ARAMETER PERFORMED	YOUR SAMP ID-> / AES NUMBER->	A6 941111 G06	A7 941111 G07	A8 941111 G08	B1 941111 G09	B2 941111 G10	NOTEBOOK REFERENCE	TEST DATE
PCB		<2	<2	<2	<2	<2	KP-PCB-P4	11/11/94

The above results were obtained using method EPA-8080
and the results are expressed in ug/wipe

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CLIENT: ERM Northeast
Samples taken by: C.B. Mongillo
Location: GE-Buffalo MATRIX: wipe

Date Sampled: 11/10/94
Date sample received: 11/11/94
Grab

PARAMETER PERFORMED	YOUR SAMP ID-> / AES NUMBER->	B3 941111 G11	B4 941111 G12	B5 941111 G13	B6 941111 G14	B7 941111 G15	NOTEBOOK REFERENCE	TEST DATE
PCB		<2	<2	<2	<2	<2	KF-PCB-P41	11/11/94

The above results were obtained using method EPA-8080
and the results are expressed in ug/wipe

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CLIENT: ERM Northeast
Samples taken by: C.B. Mongillo
Location: GE-Buffalo
MATRIX: wipe

Date Sampled: 11/10/94
Date sample received: 11/11/94
Grab

PARAMETER PERFORMED	YOUR SAMP ID-> AES NUMBER->	B8 941111 G16	C1 941111 G17	C2 941111 G18	C3 941111 G19	C4 941111 G20	NOTEBOOK REFERENCE	TEST DATE
PCB		<2	<2	<2	<2	<2	KF-PCB-P4	11/11/94

The above results were obtained using method EPA-8080
and the results are expressed in ug/wipe

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CLIENT: ERM Northeast
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Location: GE-Buffalo MATRIX: wipe

Date Sampled: 11/10/94
Date sample received: 11/11/94
Grab

PARAMETER PERFORMED	YOUR SAMP ID-> / AES NUMBER->	C5 941111 G21	C6 941111 G22	C7 941111 G23	C8 941111 G24	DUPE 2 941111 G25	NOTEBOOK REFERENCE	TEST DATE
PCB		<2	<2	<2	<2	<2	KF-PCB-P44	11/11/94

The above results were obtained using method EPA-8080
and the results are expressed in ug/wipe

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CLIENT: ERM Northeast
Samples taken by: C.B. Mongillo
Location: GE-Buffalo MATRIX: wipe

Date Sampled: 11/10/94
Date sample received: 11/11/94
Grab

PARAMETER PERFORMED	YOUR SAMP ID-> / AES NUMBER->	Field Blank 941111 G26	E2 941111 G27	E3 941111 G28	F2 941111 G29	F3 941111 G30	NOTEBOOK REFERENCE	TEST DATE
PCB		<2	<2	<2	<2	<2	KF-PCB-P4	11/11/94

The above results were obtained using method EPA-8080
and the results are expressed in ug/wipe

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CLIENT: ERM Northeast
Samples taken by: C.B. Mongillo
Location: GE-Buffalo MATRIX: wipe

Date Sampled: 11/10/94
Date sample received: 11/11/94
Grab

PARAMETER PERFORMED	YOUR SAMP ID-> / AES NUMBER->	G1 941111 G31	G2 941111 G32	G3 941111 G33	H1 941111 G34	H2 941111 G35	NOTEBOOK REFERENCE	TEST DATE
PCB		<2	<2	<2	<2	<2	KF-PCB-P41	11/11/94

The above results were obtained using method EPA-8080
and the results are expressed in ug/wipe

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CLIENT: ERM Northeast
Samples taken by: C.B. Mongillo
Location: GE-Buffalo MATRIX: wipe

Date Sampled: 11/10/94
Date sample received: 11/11/94
Grab

PARAMETER PERFORMED	YOUR SAMP ID-> / AES NUMBER->	H3 941111 G36	I2 941111 G37	I3 941111 G38	DUPE 1 941111 G39	NOTEBOOK REFERENCE	TEST DATE
PCB		<2	<2	<2	<2	KF-PCB-P4	11/11/94

The above results were obtained using method EPA-8080
and the results are expressed in ug/wipe

APPROVED BY: Tara Davis
Report date: 11/14/94

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

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CHAIN OF CUSTODY RECORD

CLIENT NAME	PROJECT NAME (Location)	SAMPLERS: (Names)
ERM- NORTHEAST	GE-BUFFALO SERVICE SHOP	C. BRETT MONGILLO
ADDRESS	**PO NUMBER**	**SAMPLERS: (Signature)**
ALBANY, NY	400.081	C. Brett Mongillo

AES SAMPLE NUMBER	CLIENT SAMPLE IDENTIFICATION & LOCATION	DATE SAMPLED	TIME A=a.m. P=p.m.	SAMPLE TYPE MATRIX	COMP	GRAB	NUMBER OF CONT'S	ANALYSIS REQUIRED
941111 G01	A1	11-10-94	1241 A/P	WIPE		✓	1	PCB's
G02	A2		1244 A/P			✓	1	(SEE ATTACHED
G03	A3		1247 A/P			✓	1	LIST OF ADDITIONAL
G04	A4		1249 A/P			✓	1	SAMPLES)
G05	A5		1251 A/P			✓	1	
G06	A6		1253 A/P			✓	1	
G07	A7		1255 A/P			✓	1	
G08	A8		1257 A/P			✓	1	
G09	B1		1259 A/P			✓	1	
G10	B2		1301 A/P			✓	1	
G11	B3		1307 A/P			✓	1	
G12	B4		1309 A/P			✓	1	
G13	B5	↓	1311 A/P	↓		✓	1	↓

Turnaround Time: | **Laboratory Approval:**

Relinquished by: (Signature) C. Brett Mongillo	**Received by:** (Signature)	**Date/Time** 11-10-94 16:00
Relinquished by: (Signature)	**Received by:** (Signature)	**Date/Time**
Relinquished by: (Signature)	**Received by:** (Signature)	**Date/Time**

Dispatched by: (Signature)	**Date/Time**	**Received for Laboratory by:** Becki Hoffmann	**Date/Time** 11/11 9:20
Method of Shipment:	**Send Report To:**		**Client Phone No.:**

The Laboratory reserves the right to return hazardous samples to the client or may levy an appropriate fee per container for disposal.

WHITE - Lab Copy | YELLOW - Sampler Copy | PINK - Generator Copy

Adirondack Environmental Services Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

A full service analytical research laboratory offering solutions to environmental concerns

CHAIN OF CUSTODY RECORD

CLIENT NAME	PROJECT NAME (Location)	SAMPLERS: (Names)
ERM NORTHEAST	GE-BUFFALO SERVICE SHOP	C. BRETT MONGILLO
ADDRESS	**PO NUMBER**	**SAMPLERS: (Signature)**
ALBANY, NY	400.081	C. Brett Mongillo

AES SAMPLE NUMBER	CLIENT SAMPLE IDENTIFICATION & LOCATION	DATE SAMPLED	TIME A=a.m. P=p.m.	SAMPLE TYPE MATRIX	COMP	GRAB	NUMBER OF CONT'S	ANALYSIS REQUIRED
	E2	11-10-94	8:40 A/P	WIPE		✓	1	PCB's
G21	E3		8:43 A/P			✓	1	
G20	F2		8:45 A/P			✓	1	
G09	F3		8:47 A/P			✓	1	
G22	G1		9:07 A/P			✓	1	
G01	G2		8:52 A/P			✓	1	
G00	G3		8:57 A/P			✓	1	
G33	HL...		9:04 A/P			✓	1	
G31	H2		8:57 A/P			✓	1	
G32	H3		8:59 A/P			✓	1	
G30	I2		9:03 A/P			✓	1	
G31	I3		9:01 A/P			✓	1	
G50	DUPE 1	↓	/ A/P	↓		✓	1	↓

Turnaround Time: STANDARD

Laboratory Approval:

Relinquished by: (Signature) C. Brett Mongillo	**Received by:** (Signature)	**Date/Time** 11-10-94 16:00
Relinquished by: (Signature)	**Received by:** (Signature)	**Date/Time**
Relinquished by: (Signature)	**Received by:** (Signature)	**Date/Time**
Dispatched by: (Signature)	**Date/Time**	**Received for Laboratory by:** Chuck Hoffman **Date/Time** 11/11 9:20
Method of Shipment:	**Send Report To:**	**Client Phone No.:**

The Laboratory reserves the right to return hazardous samples to the client or may levy an appropriate fee per container for disposal.

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

CHAIN OF ~~Communication Planner~~

Name: C. BRETT MONGILLO
Company: ERM-NORTHEAST
Position: ALBANY, NY
Address:

Subject: GE-BUFFALO SERVICE SHOP
File: PO 400.081
Circulate:
Delegate to:
Return to:
(Contact Data / Action Data)

Bus.: Fax: Res.: Car:

Type	Date / Note	Time / Sec.	Subject ~~Response~~	Follow-up Date

AES ID	CLIENT ID	DATE / TIME	MATRIX	TYPE	ANALYSIS
G14	B6	11/10/94 1313	WIPE	GRAB	PCBs
G15	B7	1315			
G16	B8	1317			
~~G17~~	~~B9 CBM~~	—			
G17	C1	1330			
G18	C2	1329			
G19	C3	1327			
G20	C4	1325			
G21	C5	1323			
G22	C6	1322 ~~1317 CBM~~			
G23	C7	1320 ~~1315 CBM~~			
G24	C8	1318			
G25	DUPE 2	—			
G26	FIELD BLANK	13:03			

Relinquished By C. Brett Mongillo 11-10-94 1600

Type: O = Outgoing Call I = Incoming Call M = Meeting C = Correspondence F = Facsimile