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POST-CLOSURE PART B PERMIT APPLICATION FOR ELECTROPLATING SLUDGE LAGOONS

GAR ELECTROFORMING
DANBURY, CONNECTICUT

NOVEMBER 1991

PREPARED BY

PACE INCORPORATED
100 MARSHALL DRIVE
WARRENDALE, PENNSYLVANIA 15086

RDMS 106556

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December 6, 1991

Mr. Frank Ray
GAR Electroforming Division
Electroformers, Inc.
P. O. Box 340, Commerce Park
Augusta Drive
Danbury, CT 06810

Re: Post-Closure Part B Permit Application

Dear Mr. Ray:

Enclosed please find three copies of the Post-Closure Part B Permit Application for your facility. A copy will need to be submitted to both the Connecticut Department of Environmental Protection(1) and the U.S. Environmental Protection Agency(2) by no later than December 17, 1991. The third copy is for your records. Registered mail or an overnight service such as Federal Express is recommended. Please remember to sign the certification on Page 131 before submitting.

For your convenience, I have prepared draft cover letters which you may want to use with GAR letterhead. Should you have any questions, please do not hesitate to call.

Sincerely,

PACE INCORPORATED

John L. Lazar

John L. Lazar
Associate Environmental Specialist

JLL080/glb

cc: Roger A. Dhonau

(1) Connecticut Department of
Environmental Protection
Waste Management Bureau
165 Capitol Avenue
Hartford, CT 06106

(2) U.S. EPA
Waste Management Division
JFK Federal Building
Boston, MA 02203
ATTN: CT RCRA (HEE CAN6)

100 Marshall Drive
Warrendale, PA 15086-7527
TEL: 412-772-0610
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December , 1991

U.S. EPA
Waste Management Division
JFK Federal Building
Boston, MA 02203
ATTN: CT RCRA (HEE CAN6)

RE: Post-Closure Part B Permit Application
GAR Electroforming - Danbury, CT

Dear Sir/Madam:

Enclosed please find a Post-Closure Part B Permit Application for our facility. This is in fulfillment of the June 13, 1991 permit call letter to GAR which was received on June 17, 1991. Submission of the permit is pursuant to 40 CFR Part 270 and Section 22a-449(c) of the Connecticut DEP.

Should you have any questions regarding this permit application you may contact either me at (203)744-4300 or John Lazar of PACE Incorporated (412)772-4016, our environmental consultant who prepared the document.

Sincerely,

George Ray, President
GAR Electroforming Division

GR/JLL080:glb

Enclosure

cc: John L. Lazar - PACE Inc.

December , 1991

Connecticut Department of
Environmental Protection
Waste Management Bureau
165 Capitol Avenue
Hartford, CT 06106

RE: Post-Closure Part B Permit Application
GAR Electroforming, Danbury, CT

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Sincerely,

George Ray, President
GAR Electroforming Division

GR/JLL080:glb

Enclosure

cc: John L. Lazar - PACE Inc.

POST-CLOSURE PART B
PERMIT APPLICATION
FOR
ELECTROPLATING SLUDGE LAGOONS

GAR ELECTROFORMING

DANBURY, CONNECTICUT

NOVEMBER 1991

PREPARED BY

PACE INCORPORATED
100 MARSHALL DRIVE
WARRENDALE, PA 15086

PROJECT NO. 110813.201

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JEFFREY SCOTT HOLMES
ENGINEER
035724E

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1.0 INTRODUCTION

Under the Resource Conservation and Recovery Act (RCRA), Hazardous Waste Management (HWM) units were required to file a Section 3010 Hazardous Waste Activity Notification, and by November 19, 1980, a Part A Permit application. A RCRA permit application consists of two parts, Part A (Section 270.13) and Part B (Section 270.14 and applicable section in 270.15-270.29). For "existing HWM facilities" the requirement to submit an application is satisfied by submitting only Part A of the permit application until the date the director sets for submitting Part B of the application. Timely submission of both notifications under Section 3010 and Part A qualifies owners and operators of existing HWM facilities (who are required to have a permit) for interim status under Section 3005 (e.) of RCRA. Facility owners and operators with interim status are treated as having been issued a permit until EPA or a state with interim authorization for Phase II or final authorization under Part 271 makes a final determination on the permit application. For existing HWM facilities, the director shall set a date, giving at least six months notice, for submission of Part B of the application.

By a letter dated June 13, 1991 to GAR Electroforming, the U. S. Environmental Protection Agency (EPA) and the Connecticut Department of Environmental Protection (DEP) have requested the submission of a Post-Closure Part B application ("Part B application") pursuant to 40 CFR Part 270 and 22a-449(c) of the Regulations of Connecticut State Agencies. A copy of the letter can be found as Appendix A. GAR is required to submit the Post-Closure Part B permit application within one hundred-eighty (180) days of the date of receipt of the letter.

This Post-Closure Part B Permit Application is being submitted for the hazardous waste management facility owned and operated by GAR Electroforming, Danbury, Connecticut. The hazardous waste management facility consists of two closed sludge beds (surface impoundments) and existing active Solid Waste Management units (SWMU's).

The information contained in the following sections has been developed in accordance with Connecticut's hazardous waste management regulations (Sections 22a-449(c)-110) and U. S. EPA regulations (40 CFR part 270.1(c).

2.0 FACILITY DESCRIPTION HISTORY

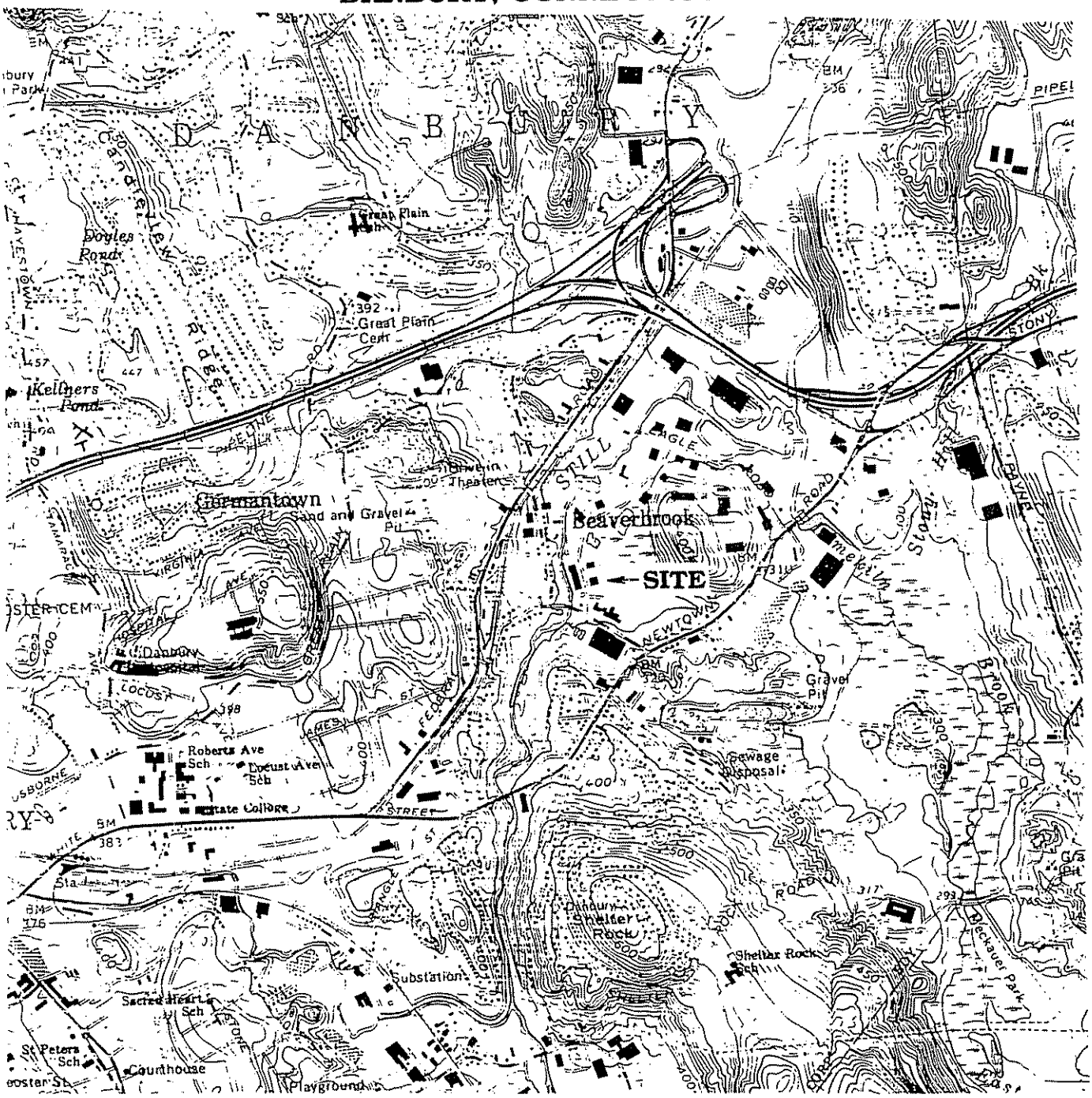
GAR Electroforming, Division of Electroformers Incorporated (GAR), is a manufacturer of precision electroforms. In their manufacturing process metals are plated onto mandrels and the mandrels subsequently separated from the electroformed part.

GAR is located in an industrial park in the Beaverbrook area of Danbury, Connecticut. The site is identified in Figure 2-1, a section from the USGS Danbury, Connecticut topographic quadrangle. Figure 2-2 is the overall layout of the site. Development of this park began in the early 1960s. The GAR facility was constructed in 1963 and was specifically designed for electroforming work. There have been no significant changes in the manufacturing process over this time period. Thus, the wastes generated today are representative of the wastes produced since the facility became operational.

Wastewaters generated by plating operations are batch treated to reduce hexavalent chromium and oxidize cyanides. The pH is then adjusted to precipitate contaminant metals as hydroxides and the resultant sludge is then thickened. Thickened sludge is now hauled off by a licensed transporter at least once every 90 days. However, prior to October, 1985, the sludge was discharged to one of two sludge drying beds in accordance with a CTDEP issued permit. Spent plating solutions are transported off-site to a licensed disposal facility.

The two sludge drying beds (lagoons) were considered hazardous waste storage sites, and as such, were subject to regulation by the State of

FIGURE 2-1 SITE LOCATION MAP
GAR ELECTROFORMING
DANBURY, CONNECTICUT



USGS DANBURY, CONN. QUADRANGLE
1963, PHOTOREVISED 1972
SCALE 1:24000

N

TITLE	POST-CLOSURE PART B PERMIT			
CLIENT	GAR ELECTROFORMING			
DRAWN	DATE	PROJECT NO.	DRAWING NO.	REV.
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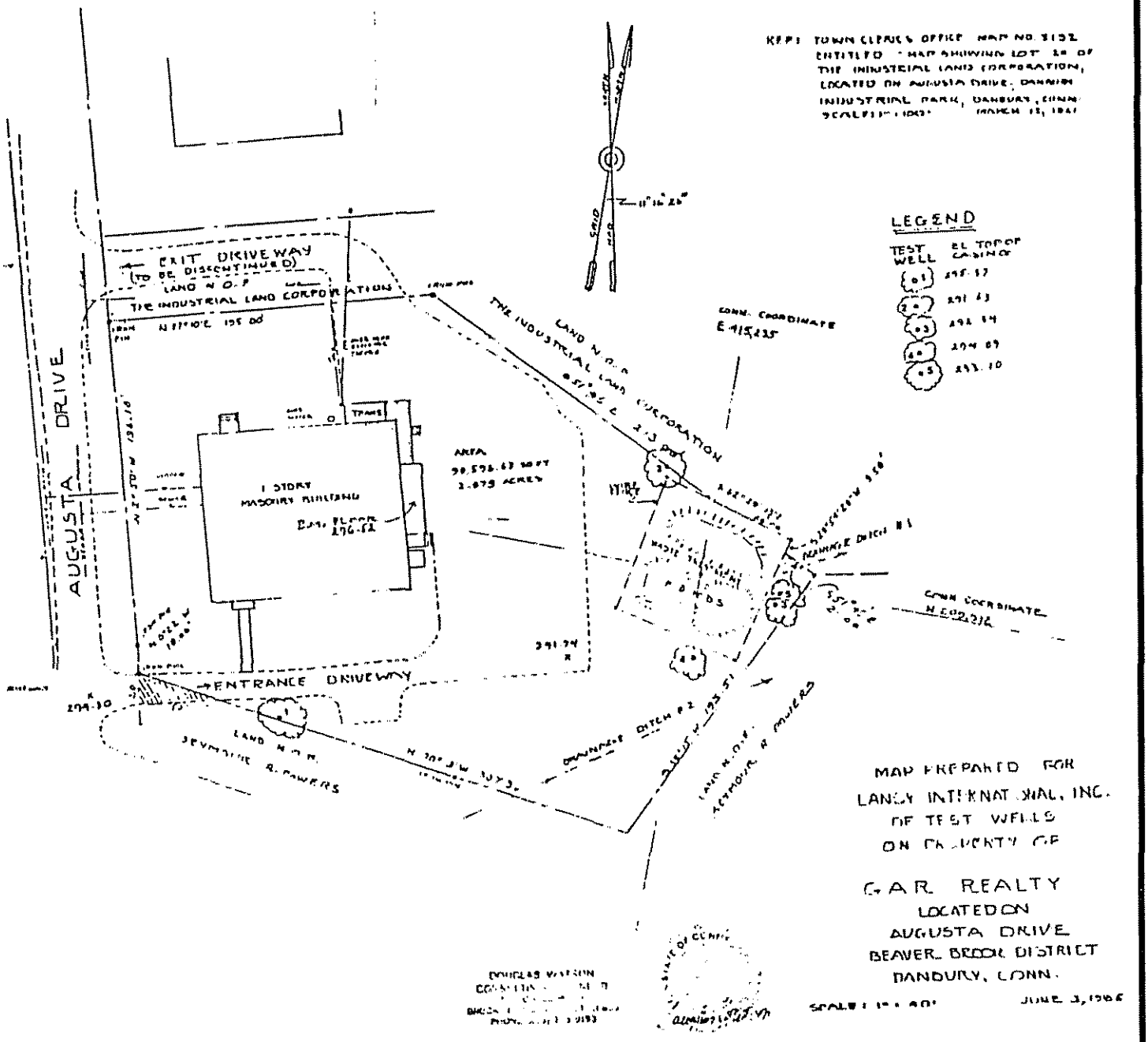
FIGURE 2-2 - SITE LAYOUT
GAR ELECTROFORMING
DANBURY, CONNECTICUT



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Connecticut under the Resource Conservation and Recovery Act (RCRA) as an Interim Status TSD facility. Rather than seeking a full permit to operate this unit, GAR chose to close it. Closure of GAR's sludge lagoons began in November 1986, prior to final closure plan approval, with removal of all sludge and two to three feet of underlying contaminated soil. The actual closure plan was approved by a letter from the State of Connecticut, Department of Environmental Protection (DEP) dated September 29, 1987 (Appendix B). Activities addressed in the approved closure plan began on June 1, 1988, and concluded on June 9, 1988 with the seeding and mulching of the final cover soil.

In April 1985, GAR installed five monitoring wells, MW1 through MW5, to monitor the shallow ground water in the vicinity of the lagoons. These wells were installed according to the specifications in a CTDEP approved Alternate Ground Water Monitoring System Plan (Appendix C). GAR had monitored each well for every quarter since installation until closure of the lagoons. In accordance with the approved post-closure care plan, MW5 was removed from the monitoring well network beginning in the 4th quarter of 1988. It was reinstituted in the third quarter of 1990 as part of the upgraded monitoring system.

2.1 Regulatory Status

The sludge was by definition a hazardous waste with the EPA waste identification number F006. Thus, the lagoons were considered hazardous waste storage sites, and as such, were subject to regulation by the State of Connecticut under the Resource Conservation and Recovery Act (RCRA). The Connecticut Department of Environmental Protection (CTDEP) had originally allowed GAR to operate this treatment/storage system under a permit for

discharge to ground water. However, as a result of increasingly stringent restrictions on discharges to ground water, CTDEP was not able to renew this permit and placed GAR under Administrative Order #3396/HM-49. This order required GAR to install treatment equipment necessary to eliminate the need for the lagoons and once in operation, close the lagoons in accordance with a plan approved by CTDEP.

As had been previously stated, the lagoons were closed in June 1988. Currently the ground water in the vicinity of the lagoons is being monitored on a quarterly basis and the required inspection performed.

2.2 Closure Activities

Closure of GAR Electroforming, Inc.'s electroforming sludge lagoons began in November 1986, prior to final closure plan approval, with removal of all sludge and two to three feet of underlying contaminated soil. Once all waste and heavily contaminated soil was removed, the transfer plumbing was rinsed, disconnected and capped off. The lagoons were then backfilled using clean fill and compacted. A 40 mil high density polyethylene liner was installed, then covered with a layer of sand, a geotextile membrane and a final cover soil. This final cover soil was then seeded and mulched. The actual closure plan was approved by a letter from the State of Connecticut Department of Environmental Protection (DEP) dated September 29, 1987, signed by Stephen W. Hitchcock, Director of the Hazardous Materials Management Unit of the DEP and Merrill S. Hohman, Director of the Waste Management Division, USEPA Region I (see Appendix B). Activities addressed in the approved closure plan began on June 1, 1988, and concluded on June 9, 1988.

3.0 TOPOGRAPHIC LOCATION

3.1 Location

GAR Electroforming is located in an industrial park in the northeastern portion of Danbury, Connecticut. The facility occupies a site of approximately two acres. It is bordered by industrial properties in all directions but east. See Figure 3-1 for the location of the GAR facility in Commerce Park and its location with respect to nearby companies. The eastern portion is bounded by swampy woodlands associated with an unnamed creek leading to the Still River.

The property is on the Still River floodplain and consequently is very flat. The elevation ranges from approximately 294 feet MSL on the west to 291 feet MSL on the eastern boundary. The land gradually rises to the south so that approximately 0.5 km directly south of the property, ground elevations are near 400 feet MSL. Figure 3-2 is a topographic map with two-foot contour intervals showing the area within 1000 feet of the GAR facility.

3.2 Wind Rose Data

A wind rose for Danbury, Connecticut is not available. The only wind rose available for a city closest to the GAR facility was Hartford, Connecticut. The usefulness of this wind rose, however, is uncertain and therefore another source of weather information was utilized.

It was determined that daily weather measurements are made at the Danbury Airport. For the 365 days of 1990, 52 days of weather data which represent one day per week, was obtained. The data is given in Appendix D. The Hartford wind rose is also given in Appendix D. A review of this data shows that the wind direction and speed is variable; it would appear that with respect to direction a large percentage of time it is from the North to West.

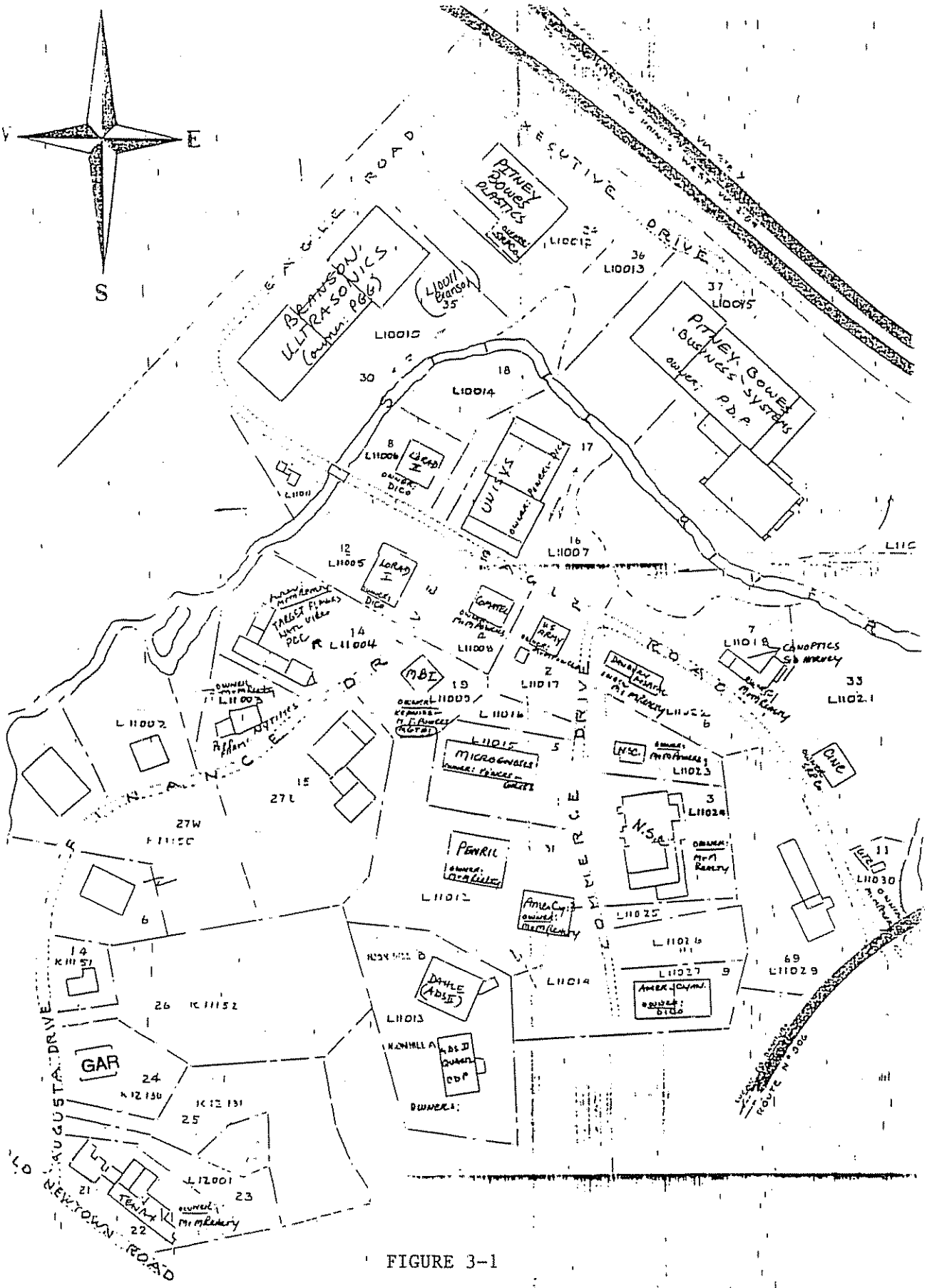


FIGURE 3-1

COMMERCE PARK

3.3 Seismic Standard

The GAR Electroforming facility is not located in an area listed in Appendix VI of 40 CFR Part 264, and therefore is not required to demonstrate compliance with the seismic standard.

3.4 Floodplain Information

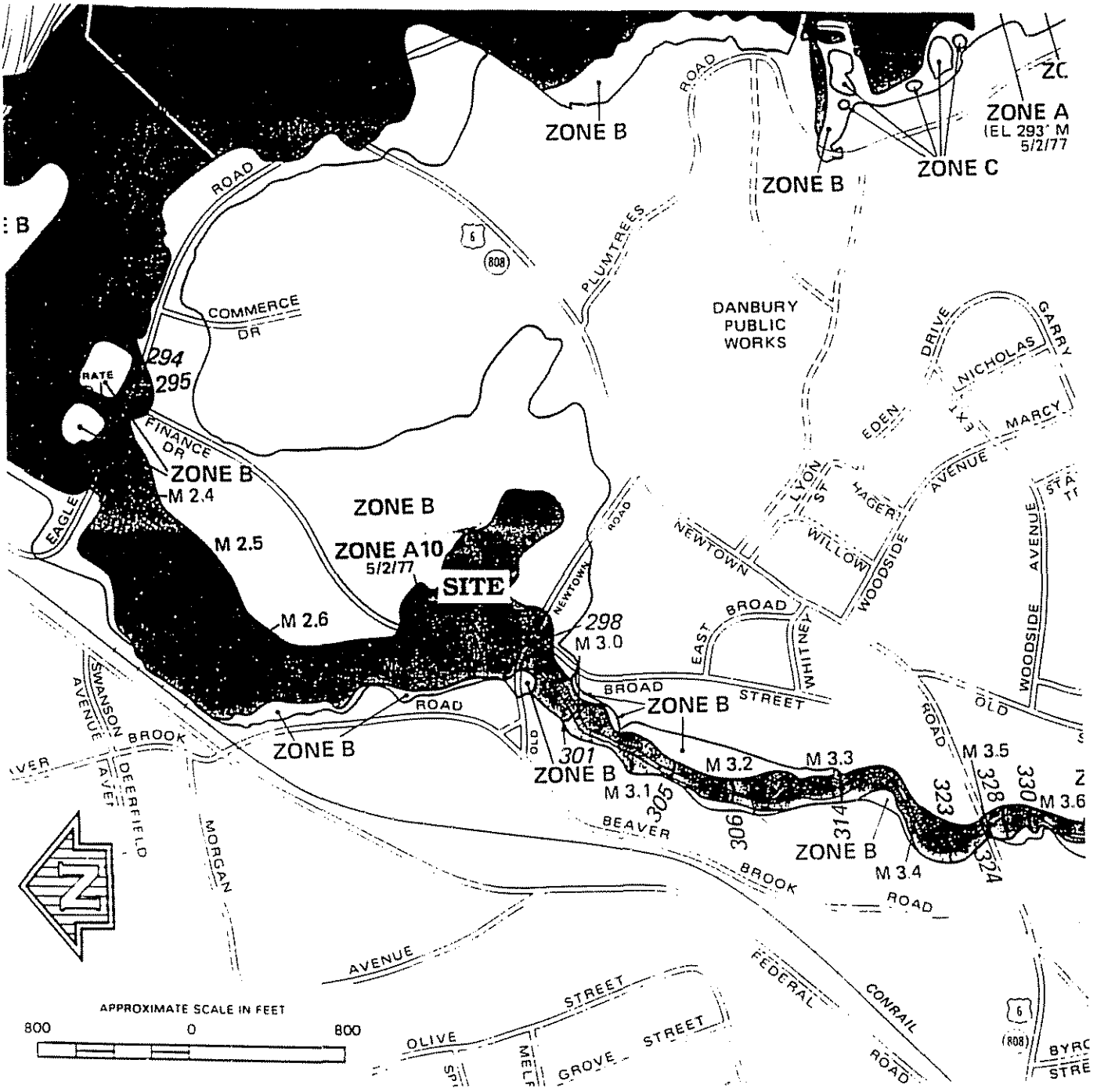
The GAR Electroforming Danbury, Connecticut facility is located approximately 400 feet east of the Still River, at River Mile 2.9. It lies within the 100-year floodplain, based on information obtained from the Federal Emergency Management Agency, Flood Insurance Rate Map, Community Panel Number 090004 0005B. The 100-year base floodplain elevation line in the proximity of the river is 298 feet. (See Figure 3-3 and accompanying key to map).

The sludge lagoons have been closed in accordance with a Connecticut DEP approved closure plan with the hazardous waste and underlying soil removed for off-site disposal. Because of the removal of this material above the ground water table there would be no remaining contamination in the ground water and soil >3-4 feet below grade for a flood to wash away; therefore, no special precautions need to be taken.

The regulations [270.14(11)(iv)(A&B)] requiring hydrodynamics and structural analyses necessary to render the facility resistant to a potential 100-year washout is not pertinent. Similarly, due to the absence of any bulk hazardous waste, there is no need to prepare a procedural plan or schedule for waste removal and transfer/storage end points [270.14(11)(iv)(C)].

Section 9.0, External Factors, of the GAR PPC Plan states that "all reasonable measures are taken at the facility to minimize exposure of production chemicals to flood waters."

FIGURE 3-3 - FLOODPLAIN MAP
GAR ELECTROFORMING
DANBURY, CONNECTICUT



FIRM

FLOOD INSURANCE RATE MAP

COMMUNITY-PANEL NUMBER

090004 0005 B

MAP REVISED:
APRIL 16, 1982

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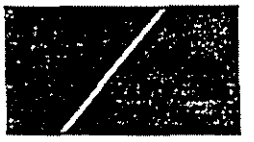
KEY TO MAP

500-Year Flood Boundary	
100-Year Flood Boundary	ZONE B
Zone Designations* With Date of Identification e.g., 12/2/74	
100-Year Flood Boundary	
500-Year Flood Boundary	ZONE B
Base Flood Elevation Line With Elevation In Feet**	513
Base Flood Elevation in Feet Where Uniform Within Zone**	(EL 987)
Elevation Reference Mark	RM7 ×
River Mile	• M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

3.5 Traffic

As shown on Figure 2-2, there is a driveway entrance to the GAR facility which is located to the south of the building and which runs off Augusta Drive. An exit driveway is located to the north of the facility. In the rear of the building is an area primarily used for employee parking. Both driveways and the rear parking area are of normal asphalt construction.

Vehicular traffic consists of approximately 16 employee automobiles, a once per week UPS truck for finished product shipment, a once per week garbage pickup and occasional truck delivery of raw materials. The only traffic controls are stop signs at the driveway's exit lanes to Augusta Drive.

No environmental problems due to traffic at the site are anticipated.

4.0 GEOLOGIC INFORMATION

4.1 Bedrock Geology

GAR is located in an area that is underlain by Ordovician age metamorphic crystalline rocks that have undergone tectonic movements. Consequently, these rocks are folded and faulted into complex patterns. On GAR's property the bedrock is covered with a layer of unconsolidated sediments approximately forty (40) feet thick.

The rock beneath the plant is mapped as the Ratlum Mountain Schist (formerly referred to as Hartland Formation). The foliation plane of the schist dips to the west at about 50 degrees (the foliation plane is parallel to the original bedding plane). Ratlum Mountain Schist is described as a quartzitic sillimanite-biotite schist with pockets of amphibolite, metaspilite and gneiss. No faults have been mapped in or near the vicinity of this site.

GAR is located in an area surrounded by a belt of Stockbridge Marble (formerly mapped as Inwood Marble). There is a slight chance of finding this marble unit beneath the site. This unit occupies the valley of Still River and Limekiln Brook.

4.2 Soils

Appendix E provides the boring logs for each monitoring well. In general, there is a 34-foot blanket of silt, sand and gravel which covers the igneous bedrock under the GAR property. At well sites 1, 2, and 4 fill was found in the upper five feet of soil. The fill consisted of sand and cobbles. No foreign material such as metal or trash was found. The monitoring wells

showed medium brown, fine to coarse sand with a trace of silt. It varies from 16 to 13 feet in thickness. This layer is thickest at the site of Monitoring Well 1 and thinnest at Monitoring Well 2. The ground water in this uppermost layer of sand acts as a water table aquifer and Wells 1 through 4 are all situated in this layer. Water production from this sand layer (0.1 to 4.0 gpd/sq. ft.) was less than expected. This low production is suspected to be due to very fine to fine sand in the unit and clogging of the filter fabric with silt from the formation.

Beneath this uppermost layer of sand is a layer of gray silt. This unit varies across the site from a silt with very fine sand to a very fine sand with silt and has a medium consistency (3 to 11 blows per 6 inches). This gray silt unit (eleven feet thick at Well 5) appears to act as a leaky aquitard, separating the uppermost sand aquifer from a deeper sand and gravel unit. The pump drawdown test in Well 5 indicated that there was little leakage through the gray silt layer during pumping of the deeper sand and gravel unit during the time of the test (1.7 hr.). However, the static water levels in Wells 3 and 5 are approximately the same, implying that the two aquifers are hydraulically connected.

The deepest unit encountered was a coarse sand gravel unit at 28 to 34 feet below the surface in Well 5. Drilling was stopped at 34 feet because of auger refusal. It is therefore possible that the unit is thicker than the boring log indicates. The sand and gravel of this aquifer consists of weathered igneous material. This unit is more productive than the upper brown sand aquifer (about 53.5 gpd/sq. ft. assuming a thickness of 6 feet) and is interpreted as a confined aquifer. Only Monitoring Well 5 is situated in this deeper sand and gravel aquifer.

4.3 Hydrology

Measurements of the depth to the ground water in the monitoring wells indicate the flow direction in the water table aquifer. During June of 1985, three sets of measurements were taken. The first two measurements on 6/1/85 and 6/17/85 were taken during dry weather and the third on 6/26/85 was taken after a rainfall event. Table 4-1 lists the water elevations of these dates. In general, the flow direction seems to be toward the northeast. There is fluctuation in the flow direction after a rainfall event, possibly because of spatial variations in the permeability of the water table aquifer. The well in the deeper sand and gravel aquifer had, at that time, shown a constant pieziometric surface elevation of 287.10' regardless of fluctuations in the shallow water table aquifer. One reason for this may be that the lower aquifer is receiving a constant amount of leakage from the silt confining layer.

Ground Water Monitoring

Prior to lagoon closure, the ground water monitoring network at this site consisted of five monitoring wells at four locations selected by the CTDEP. Four wells monitored the uppermost ground water zone, while a fifth monitored the next lower water-bearing zone. Upon completion of closure, modifications to the monitoring program that had been presented in the post-closure plan were implemented. The primary modification at this time was deletion of the single deep monitoring well from the network. This deletion was completed with concurrence from CTDEP.

Revisions to Alternate Ground Water Monitoring Plan

An upgraded Alternate Ground Water Monitoring Plan was being submitted in response to CTDEP Order No. HM-641. Its purpose is to address deficiencies in the previous plan dated January 1985 and to realign the program in accordance with findings of the first full year of post-closure monitoring.

Specifically, this upgraded plan proposes system modifications to better determine the rate and direction of migration of possible hazardous constituents in the ground water at this site.

TABLE 4-1

Hydrogeologic Properties

Well No.	Aquifer Thickness	Water Elevation 6/1/85	6/17/85	6/16/85	Transmissibility gpd/ft	Permeability gpd/sq.ft.
1	15.0 ft.	287.25'	287.24'	288.29'	42.1	2.8
2	11.4 ft.	285.71'	285.71'	187.09'	1.2	0.1
3	10.9 ft.	286.76'	286.75'	287.92'	44.0	4.0
4	13.8 ft.	287.14'	287.14'	289.50'	2.2	0.2
5	6.0 ft.	287.10'	287.10'	287.10'	321.0	53.5

5.0 SITE EVALUATION

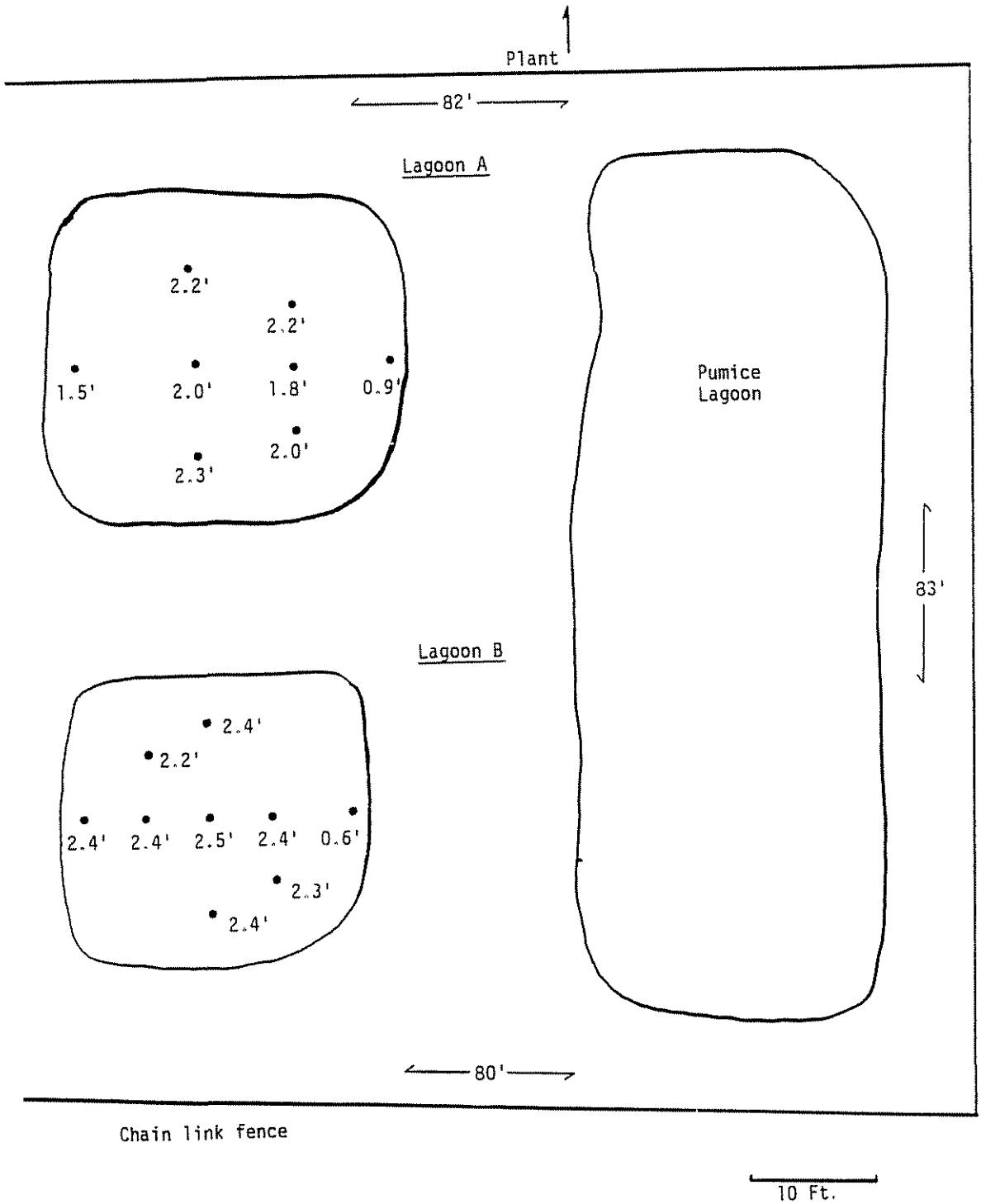
A site evaluation was performed in accordance with the plan presented within the original closure plan (July, 1985). The following paragraphs present the findings of this evaluation, describe waste removal activities completed in November of 1986, as well as provide the results of the confirmational soils testing completed during July, 1987.

5.1 Sludge Sampling and Quantification

Prior to initiation of the sludge and soil sampling, sludge depth measurements were made at eight (8) points within each lagoon. These measurement location points and depths are presented in Figure 5-1. Data gathered from this process were used to develop the sludge quantity estimate presented in Section 6.3.

Composite samples were collected from each lagoon in accordance with the statistical procedure presented in the preliminary plan. Within each lagoon equal portions of sludge were taken from each of the five locations and placed into a wide mouth one liter glass container. It should be noted that the sludge was highly stratified, a phenomenon common with process/batch treatment operations. Thus in order to obtain a sample representative of the overall sludge composition, a sludge "core" of approximately ten (10) inches in depth was collected at each sampling location. The two resultant composite samples were homogenized in the laboratory prior to analysis. Results of these analyses (See Section 5.3) were used to generate the chemical characteristics discussed in Section 6.2. Actual laboratory data are presented in Appendix F.

LAGOON SLUDGE DEPTH MEASUREMENTS



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5.2 Soil Sampling

Soil samples were collected at predetermined locations around and beneath the lagoons, and at a background location as indicated in Figure 5-2. The following paragraphs describe the actual field procedures used to obtain the samples and conditions encountered.

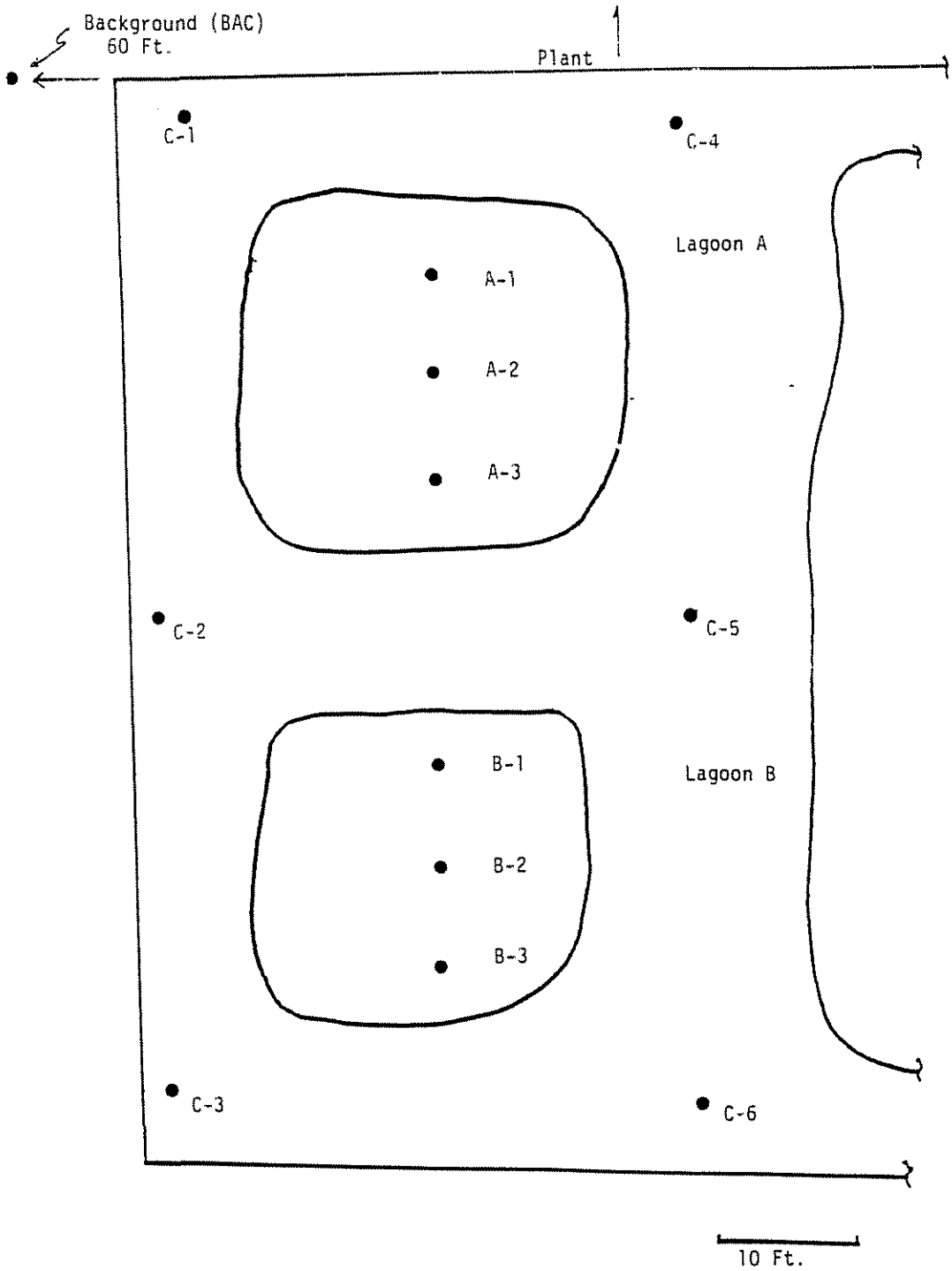
Background

The background sample (BAC) was collected at a location sixty feet past the southwest corner of the lagoon fence enclosure along a line formed by the western side of the fence perimeter. This location was in a small wooded area separating GAR from its industrial neighbor. The sample was collected at a depth of three (3) feet below grade and visually appeared to be composed primarily of fine to medium sands with lesser amounts of silt.

Berm

Berm samples (C-1 through C-6) were collected at locations spaced along the berms of the sludge lagoons. These berms were composed of excavated material removed during installation of the lagoons and consisted of medium to course sands with some gravel and cobbles. The presence of cobbles and gravel proved to be an impedance to the sample collection procedure. Consequently Sample C-2 was collected at a depth of two (2) feet rather than the planned three (3 feet).

SOIL SAMPLING LOCATIONS



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Lagoons

The evaluation plan called for samples to be collected at four depth (in six inch increments) at each location indicated in Figure 5-2. However, in that these samples were in a saturated zone and the soils contained considerable gravel and cobbles, collection of the samples proved to be very difficult. Many samples could not be obtained under the given site conditions. However, a sufficient number of samples were obtained to develop a clearer picture of the vertical extent of contamination. The incompleteness of the data required the collection and analysis of additional samples during the confirmational testing.

5.3 Analytical Plan for Sludge and Soils

The composite samples representing the waste remaining in the lagoons were characterized to determine its classification for disposal. The waste profile which had been developed met both regulatory requirements for manifesting the shipment off-site and for the licensed waste hauler and disposal facility. Table 5-1 shows the waste profile parameter list. These measurements were accomplished by EPA approved procedures for those parameters for which EPA has published methods (SW846, Second Edition). The results of these analyses are presented in Appendix F.

Individual soil samples from the perimeter of the lagoons were subjected to the following analytical scheme:

Parameter	Method
pH	9045
Cadmium	7130
Chromium, Total	7190
Nickel	7520
Cyanide, Total	9010
Aluminum	7020
Copper	7210
Silver	7760
EP Toxicity Leachate	
Arsenic	7060
Barium	7080
Cadmium	7130
Chromium, Total	7190
Lead	7420
Mercury	7471
Selenium	7740
Silver	7760
Nickel	7520
Aluminum	7020
Copper	7210
Zinc	7950
Chromium, Hexavalent[1]	7196
Cyanide, Total[1]	9010

[1]ASTM Method D3987 Leaching Procedure

The following table shows the parameter list for analyses of the two sludge samples. Where applicable, the same methodologies referenced above were utilized.

TABLE 5-1

EXAMPLE WASTE PROFILE PARAMETER LIST

Physical Properties	Chemical Composition
Physical State	Water
Specific Gravity	Calcium Carbonate
Flash Point	Calcium Sulfate
Viscosity	Chromium Oxide
pH	Nickel Oxide
Layering	Volatile Organics
Solids, Total	
Ash	

Minor Components	Hazardous Characteristics
Arsenic	Corrosivity (pH)
Cadmium	Ignitability
Chloride	Reactivity
Chromium, Hexavalent	EP Toxicity:
Chromium, Trivalent	Arsenic
Copper	Barium
Cyanide, Total	Cadmium
Lead	Chromium
Mercury	Lead
Nickel	Mercury
Sulfur	Nickel
Zinc	Selenium
	Silver

Soil samples collected within the lagoons were analyzed for the following parameters:

(1) Analysis for F006 listing criteria parameters:

Cadmium
Chromium
Nickel
Cyanide, Total

(2) Analysis of additional parameters regulated under GAR's defunct discharge to ground water permit #DEP/WPC-034-048:

Aluminum
Copper
Silver
pH

This analysis plan provided information on both parameters of regulatory concern and key parameters known to have been present in the waste originally stored in these lagoons.

5.4 Past Waste Removal Activities

Because results of the initial soils testing were inconclusive as far as identifying the extent of contamination, GAR elected to remove all sludge from the two lagoons as well as an estimated 90 cubic yards of underlying material. These activities were conducted on November 3 and 4, 1986, under full approval from the CTDEP. The following is a summary of these site activities.

The removal activities were performed by Sealand Environmental Services of Danbury, Connecticut. Approximately 247 tons of sludge and contaminated soil were removed from the two lagoons. This material was transported in lined 20 cubic yard trailers by Service Sanitare Blairville of Quebec (ID#NYD980762140) to Stablex Canada, Inc. (ID#NYD980756415) for disposal. Manifests for the wastes are provided as Appendix G.

The sludge and underlying materials were excavated with a large backhoe. The machine was able to reach all areas of excavation without actually entering the lagoons; thus, only the bucket came in contact with contaminated materials. Excavated materials were placed directly into the transportation vehicles. There was no on-site transfer of materials between vehicles or placement of wastes in a temporary stockpile.

Personnel involved in this remediation task were equipped with level D protection. This level of protection was determined to be adequate for the risks presented by these wastes. All protective clothing was placed in with the final truckload of waste and disposed of at the Stablex facility. No wash waters were generated during decontamination of personal protection equipment.

The loading area and the area between the lagoons and loading area was underlain by a protective plastic sheet to prevent any spillage from contacting the underlying soils. Upon completion of the excavation and loading process, this liner, along with spillage, was rolled and placed in the final truckload of waste.

Due to the high moisture content of the waste and surrounding soils, wind entrainment was not a concern and no special precautions were required.

Decontamination of the backhoe was limited to the bucket since this was the only area which came into contact with the waste. Upon completion of the excavation and loading process, the bucket was positioned over the protective plastic sheet and all visible sludge and soil scraped off. All material removed in this process was collected and placed into the final truckload of waste material for transportation and disposal at a licensed hazardous waste management facility.

5.5 Subsequent Soils Testing

Soil samples were collected on July 9, 1987 with the aid of a manual soil auger. Eighteen (18) samples were obtained from nine (9) locations in each lagoon excavation area at depths of 0 to 6 and 6 to 12 inches as shown in Figure 5-3. Of the eighteen (18) samples, ten (10) were collected from the excavation floor and eight (8) from the excavation walls. The soil auger was washed with water, rinsed with tap water and rinsed again with distilled water between sampling locations.

Samples were immediately placed in prelabeled wide mouth glass jars with teflon lined lids and transported to the laboratory for analysis. Samples from the 0 to 6 inch depth were analyzed first. Several 6 to 12 inch samples were analyzed for documentation purposes only.

Based upon data generated during the preliminary site investigation and at the request of CTDEP, the soil samples were analyzed for the parameters listed in Table 5-2.

SUBSEQUENT SOIL SAMPLE LOCATIONS

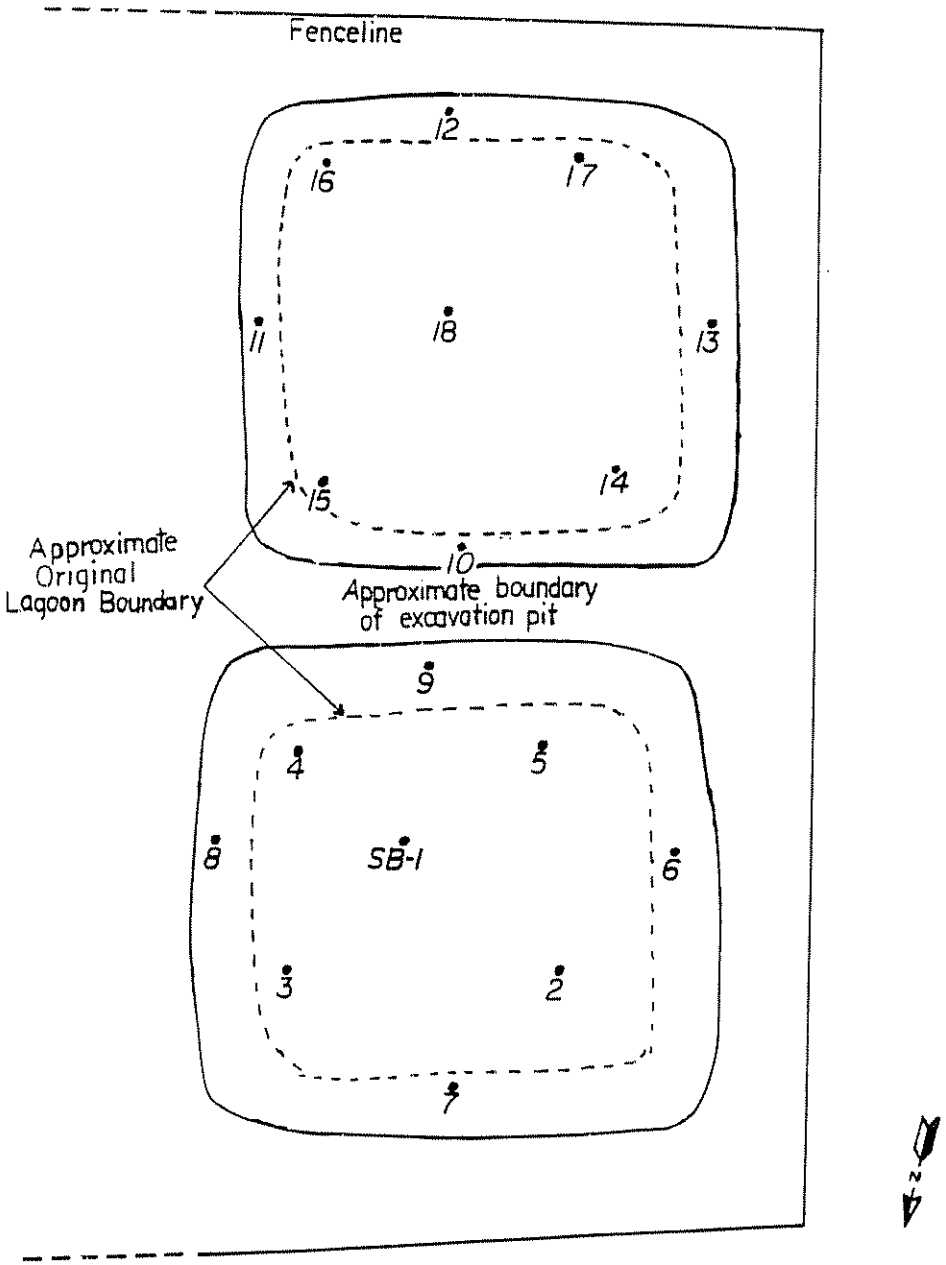

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TABLE 5-2
Analytical Parameters and Methods
Soil Samples

Parameter	Reference #	Method
Arsenic	1	7060
Barium	1	7080
Cadmium	1	7130
Chromium, Total	1	7190
Copper	1	7210
Lead	1	7420
Nickel	1	7520
Selenium	1	7740
Silver	1	7760
EP Toxicity Leachate:	1	1310
Arsenic	1	7060
Barium	1	6080
Cadmium	1	7130
Chromium, Total	1	7190
Copper	1	7210
Lead	1	7420
Mercury	1	7471
Nickel	1	7520
Selenium	1	7740
Silver	1	7760
Volatile Organics	1	8010, 8020

[1]SW846, Test Methods for Evaluating Solid Waste, Third Edition

The analytical results are included in Appendix H.

5.6 Data Evaluation and Closure Strategy Development

Data from the post-excavation soil sampling confirmed that all hazardous waste had been removed, but that minor waste residues remained in the underlying soil. The sampling of the excavation walls determined that only slight contamination was present when moving horizontally from the excavation sites. Because minor residuals are still present in the underlying soils at levels above background, and ground water contamination exists, clean closure was determined not to be economically feasible. Therefore, closure as a disposal facility was selected.

Due to the direct communication of site ground waters with the base of the lagoons, the option of on-site closure with all wastes remaining on site was not considered an environmentally sound approach. Such an approach would not have met the closure requirements of 40 CFR 265.111 since waste constituents would have continued to enter the local ground water. Removal of the wastes and heavily contaminated soils prior to closure in accordance with 40 CFR 265.310 was determined to be necessary in order to meet the goal of minimizing the threat to human health and the environment (40 CFR 265.111).

This approach has resulted in significant improvements in ground water quality noted since the removal described in Section 5.4. These ground water data show that concentrations for all of the primary waste constituents (copper, chromium, and nickel) have been returning to natural levels. Because of the current low levels of these constituents and continued improvement, ground water remediation is not warranted. In addition, there are no drinking water wells utilizing the two monitored zones in the site vicinity. Continued monitoring of these waste constituents are included in the post-closure ground water monitoring program.

In that all wastes and heavily contaminated soils have been removed and the vast majority of remaining soil is below the ground water table, installation of a full RCRA cap as described in the appropriate guidance manuals is not warranted. A simple single layer 40 mil HDPE membrane is sufficient to isolate those trace constituents above the ground water table from the environment. Details of this approach are described in Section 7.0, Lagoon Closure Certification.

6.0 WASTE CHARACTERISTICS

6.1 Regulatory Classification

The material stored in the lagoons was classified as a hazardous waste under RCRA with an assigned code of F006. The waste contained concentrations of metal hydroxides and trace amounts of cyanide from electroforming operations. The CTDEP issued Administrative Order No. 3396/HM-49 on March 29, 1983, requiring GAR to cease discharge of this waste to the lagoons and to close the lagoons in accordance with all applicable federal and state regulations.

6.2 Chemical Characteristics

The wastes discharged to the lagoons were alkaline (pH approximately 9) and contained metals, both dissolved and as metal hydroxides. In addition, the waste contained trace amounts of cyanides (5-10 mg/kg). It is believed that this cyanide was complexed with iron in the water and not mobile. Routine analyses of the discharge after 1980 indicated that both metal concentrations and cyanide concentrations were normally very low. This discharge was monitored monthly with all results reported to CTDEP in accordance with the terms of GAR's defunct discharge to ground water permit DEP/WPC-034-048.

GAR Electroforming submitted an Alternate Ground Water Monitoring Plan to the CTDEP on January 29, 1985. This plan specified the installation of one (1) upgradient monitoring well and four (4) downgradient monitoring wells to monitor the shallow aquifer in the vicinity of the two (2) lagoons. This plan was approved by the State on February 7, 1985. The wells were installed in

May of 1985, and the initial monitoring event took place on January 13, 1986. All existing ground water monitoring data are included as Appendices I through O.

Ground water monitoring in the immediate vicinity of the lagoons indicates the presence of a variety of chlorinated volatile organic compounds ranging in concentration from less than 1 ug/l to 935 ug/l. The background monitoring well (well #1) contains the highest concentrations of halogenated organic compounds. It is believed this contamination originates from an off-site source.

Of the seven chlorinated compounds detected in the ground water, only one (trichloroethylene) has ever been used at GAR. None of the detected compounds were found in the lagoon sludges.

Concentrations of nickel, copper and cyanide above that of background are present in the ground water. These concentrations are decreasing on the whole as are the concentrations of the organic compounds present. It is suspected that the concentrations of the inorganic compounds will continue to decrease as all sludge and heavily contaminated materials have been removed from the lagoons.

6.3 Maximum Waste Inventory

The amount of sludge in the lagoons was measured as part of the site evaluation after all discharge to the lagoons had ceased. It had been estimated that 88 cubic yards of sludge were present. In November 1986, GAR removed this sludge and approximately two (2) feet of contaminated soil from the lagoons. A total of 247 tons of sludge and contaminated soil were removed

from the lagoons which were transported by a licensed hazardous waste transporter to a licensed hazardous waste disposal facility.

6.4 Toxicity

Table 6-1 summarizes the acute and chronic toxicities of compounds that were present in the sludge. As can be seen from this table, there is little concern over acute toxicity of these compounds with the exception of cyanide. However, based upon the routine analysis of wastes discharged to the lagoons, the concentration of cyanide did not present a concern. Some chronic toxicity studies have found nickel hydroxide and chromium hydroxide to be carcinogenic in laboratory animals. Therefore, GAR determined that removal of all sludge and heavily contaminated soil was necessary in order to prevent possible migration of these compounds.

6.5 Mobility

The compounds present in the waste were stable and not amenable to biodegradation. Rain water may have released the metals from the immobile hydroxide form, depending upon its acidity. Ground water monitoring data indicate that there has been no significant movement of these metals. Since the noted organic contamination is comprised primarily of compounds never utilized by GAR and the sludge was found to be free of these same compounds, it is safely contended that GAR, and this unit in particular, is not associated with the noted organic contamination.

TABLE 6-1

TOXICITY SUMMARY OF WASTE CONSTITUENTS

Compound	Toxicity
Chromium Hydroxide	Chromium is the only metal anticipated to be present in the sludge which is on the Primary Drinking Water Standards list of toxic metals. Only the hexavalent form of chromium is so listed. Under normal handling procedures, chromium hydroxide (a compound of trivalent chromium) presents little risk. The compound can, however, present health risks if ingested or inhaled.
Copper Hydroxide	Rather low toxicity with a lowest lethal dosage of 200 mg/kg for human ingestion. No known chronic effects.
Aluminum Hydroxide	Very little data available, but laboratory tests of some animals show a potential for this compound to be a mutagen. Acute toxicity is low.
Copper Cyanide	This is a toxic material and is classified as a poison. Laboratory animal tests have indicated lethal dosages at under 50 mg/k of body weight. In addition this cyanide as well as others is highly toxic to aquatic life. Many species of fish are severely affected by concentrations of less than 1 ppm.
Nickel Hydroxide	Acute toxicity is low. This compound and related nickel compounds can cause an "itchy" type of dermatitis when exposure is extensive. Studies by the Internation Agency for Research on Cancer have found this substance to cause cancer in laboratory animals.
Silver Hydroxide	Very little data are available, but acute toxicity is believed to be very low. Acute toxicity in laboratory animals have been as high as 2.85 grams/kg. There are no known chronic effects.

Sources: 1) Registry of Toxic Effects of Chemical Substances, 1981-1982, U.S. Department of Health and Human Services.

2) Dangerous Properties of Industrial Materials, Fourth Edition, N. Irving Sax.

6.6 Waste Analysis Plan

A copy of the waste analysis plan which would be required under 40 CFR 264.13(b) is not applicable since all hazardous waste has been removed from the site for off-site disposal and the lagoons closed with DEP approval.

7.0 LAGOON CLOSURE CERTIFICATION

Closure of GAR Electroforming, Inc.'s electroforming sludge lagoons began in November 1986, prior to final closure plan approval, with removal of all sludge and two to three feet of underlying contaminated soil. Once all waste and heavily contaminated soil was removed, the transfer plumbing was rinsed, disconnected and capped off. The actual closure plan was approved by a letter from the State of Connecticut Department of Environmental Protection (DEP) dated September 29, 1987, signed by Stephen W. Hitchcock, Director of the Hazardous Materials Management Unit of the DEP and Merrill S. Hohman, Director of the Waste Management Division, USEPA Region I. See Appendix B. Activities addressed in the approved closure plan began on June 1, 1988, and concluded on June 9, 1988.

The following is a chronological summary of activities that I witnessed during closure of GAR Electroforming's lagoons. Sealand Environmental Services, Inc. performed the actual closure of the lagoons.

7.1 Site Preparation

I arrived at the site on June 1, 1988. It was discovered that a significant amount of rain water had accumulated in both lagoons. It was decided to remove this water to facilitate backfilling operations and to avoid potential problems with compaction. Grab samples of standing water were collected from each lagoon and analyzed on-site in GAR's laboratory for total nickel and total copper. These were the prime lagoon waste constituents. Once the analytical results were obtained, the water in the eastern lagoon (nickel and copper concentrations less than existing permit limits) was discharged directly to the sanitary sewer. Approximately 2,075 gallons of

water were discharged. The water in the second lagoon was on the order of existing discharge permit limits, so it was decided that all water from this lagoon be discharged to GAR's wastewater treatment facility. Approximately 500 gallons were pumped directly to GAR's batch treatment tank, with an additional 2,200 gallons pumped to the sludge holding tank. Water from the holding tank was subsequently treated in GAR's wastewater treatment system as capacity was available.

Dewatering activities were completed on June 1, 1988, with the exception of 150 gallons of water from the eastern lagoon. This water was discharged directly to the sanitary sewer system on June 2, 1988.

7.2 Backfilling

During dewatering activities on June 1 and 2, 1988, clean fill was hauled to the site and backfilling activities were initiated. Seventeen trucks arrived on-site during June 1, 1988. The existing berms were first cut down to grade utilizing a Dresser TD-7E tracked bulldozer. All seventeen loads of fill were placed in the lagoons on June 1, 1988, with compaction of the fill taking place with the bulldozer. An additional ten loads of fill were brought on-site on June 2, 1988, with compaction of the fill taking place with the bulldozer. An additional ten loads of fill were brought on-site on June 2, 1988, with eight loads being placed in the lagoons. Two loads were stockpiled, as the lagoons were within 6 to 12 inches of grade. The backfill used for initial fill material was not adequate for use as the top one foot of fill material which was specified in Lancy Environmental Services' September 22, 1988 letter to USEPA Region I (Appendix B). The criteria specified were 50% passing a #200 sieve and no inclusions or rocks greater than one (1) inch in diameter. The test sample from the backfill material actually used to this

point, yielded 8.6% passing the #200 sieve. The job was shut down on June 2, 1988 until June 7, 1988, when a new source of final fill was located that met Lancy's specifications. Actual backfilling activities were again initiated on June 8, 1988. Approximately 95 yd^3 (one foot in depth) of red clay, meeting Lancy's specifications with 63.9% passing the #200 sieve, were placed and compacted using a one ton steel vibratory roller. A 2% slope from the lagoon's center toward the perimeter was achieved over the entire surface area of the lagoons. This was verified using conventional surveying equipment.

7.3 Compaction Testing

The compaction testing was initiated by an independent contractor, Fairfield Testing, on June 8, 1988. A total of six tests were performed on the compacted surface at random locations that I selected. A moisture (nuclear) density gauge was utilized to obtain compaction percentages at two levels of the final backfill, six inches below the compacted surface and one foot below the compacted surface. This gauge was not capable of backscatter readings. All test locations met the compaction criteria specified in the September 29, 1987 approval letter of 95%, according to the Modified Proctor Density test, with the exception of one test location. The initial evaluation at this location yielded 94.4% at one foot below the compacted surface and 93.7% at six inches below the compacted surface. This area was subjected to additional compaction with the vibratory roller and rechecked at a new test location approximately 18 inches away from the original test. This test yielded compactive efforts of 96.1% at the one foot level and 97.8% at the six inch level. Results of the compaction testing from Fairfield Testing are included in Appendix B.

7.4 Synthetic Liner

On June 7, 1988, the 40 mil high density polyethylene liner, which arrived on-site on June 2, 1988, was seamed together. The liner was shipped in two pieces, each 25 feet by 90 feet. Due to delays in placement of the final one foot of backfill (completed June 8, 1988), it was decided to seam the two pieces of liner together on June 7, 1988. The manufacturer's representatives arrived on-site early the morning of June 7, 1988. The two pieces of liner were unrolled and placed on the lagoon's surface. A hot fusion welder was used to seam the two sections together. Once the seaming operation was completed, the seam was inspected by the manufacturer's representative and me. An air pressure test was performed on the field seam to assure that no leaks existed. The seam passed the pressure test, with no noticeable pressure drop over a 4-minute period. The test procedure allows for a maximum test pressure of 30 psi with an allowable drop of 2 psi over a 5-minute period. Once the test was completed, the liner was rolled up and placed outside the perimeter of the lagoons. When all compaction testing was completed on June 8, 1988, the anchor trench was excavated using a John Deere 410 B backhoe. The trench was excavated around the perimeter of the lagoons and was approximately 1.5 feet wide and 1.5 to 2 feet deep. The liner was then unrolled and placed over the lagoon's compacted surface. The liner (now one piece) was cut to size so approximately five to six feet of excess were available. The excess portion of the liner was placed in the anchor trench and the trench backfilled with clean fill using hand shovels.

A manufacturer's representative was present during installation of the liner and during my final inspection of the entire liner. The manufacturer's certification of installation as well as factory seam test results are included in Appendix B.

7.5 Sand Drainage Layer

Approximately 140 yd^3 of graded sand with a permeability of 1×10^{-1} cm/sec. were placed on the 40 mil liner on June 9, 1988. The thickness of this layer was verified to be one foot at a minimum, by using shovels and digging holes down to the liner at various locations. An overall slope of approximately 2.2% was maintained from the center of the lagoons toward the perimeter. This was verified using conventional surveying equipment.

7.6 Geotextile Membrane

A geotextile membrane manufactured by TerraTex was then placed over the sand drainage layer. The membrane as shipped, was approximately ten feet wide and several hundred feet long. Segments were placed on the drainage layer, with two to five feet placed beyond the perimeter of the sand. Additional segments were placed lengthwise on the drainage layer with a minimum two-foot overlap on the previous segment to allow for adequate coverage. The manufacturer's specification is included in Appendix B.

7.7 Final Cover Soil

Following placement of the geotextile membrane, approximately 240 yd^3 of loam were placed over the existing surface previously occupied by the lagoons. A two-foot layer of loam was placed over the geotextile membrane. A 3% slope from the center of the lagoons toward the perimeter was maintained. This was confirmed using conventional surveying equipment. No compaction other than that of the bulldozer took place. Additional compaction was not recommended or felt necessary to achieve adequate vegetative cover.

7.8 Seeding and Mulching

Four representative soil samples of the final cover material were collected for analysis by the Connecticut Department of Transportation for lime and fertilization requirements. Because the pH of the soil was not less than 6.0 SU's, lime was not necessary. A mixture of Birdsfoot trefoil and oats was applied to the entire lagoon surface area as well as the disturbed areas round the closed lagoons to achieve adequate cover and minimize erosion. The cation exchange capacity (CEC) was determined and the potassium and phosphorus requirements for appropriate fertilization were satisfied. Approximately 200 pounds/acre of fertilizer were applied over the site followed by an application of straw mulch at approximately three tons/acre. Soil analysis data are included in Appendix B to this certification.

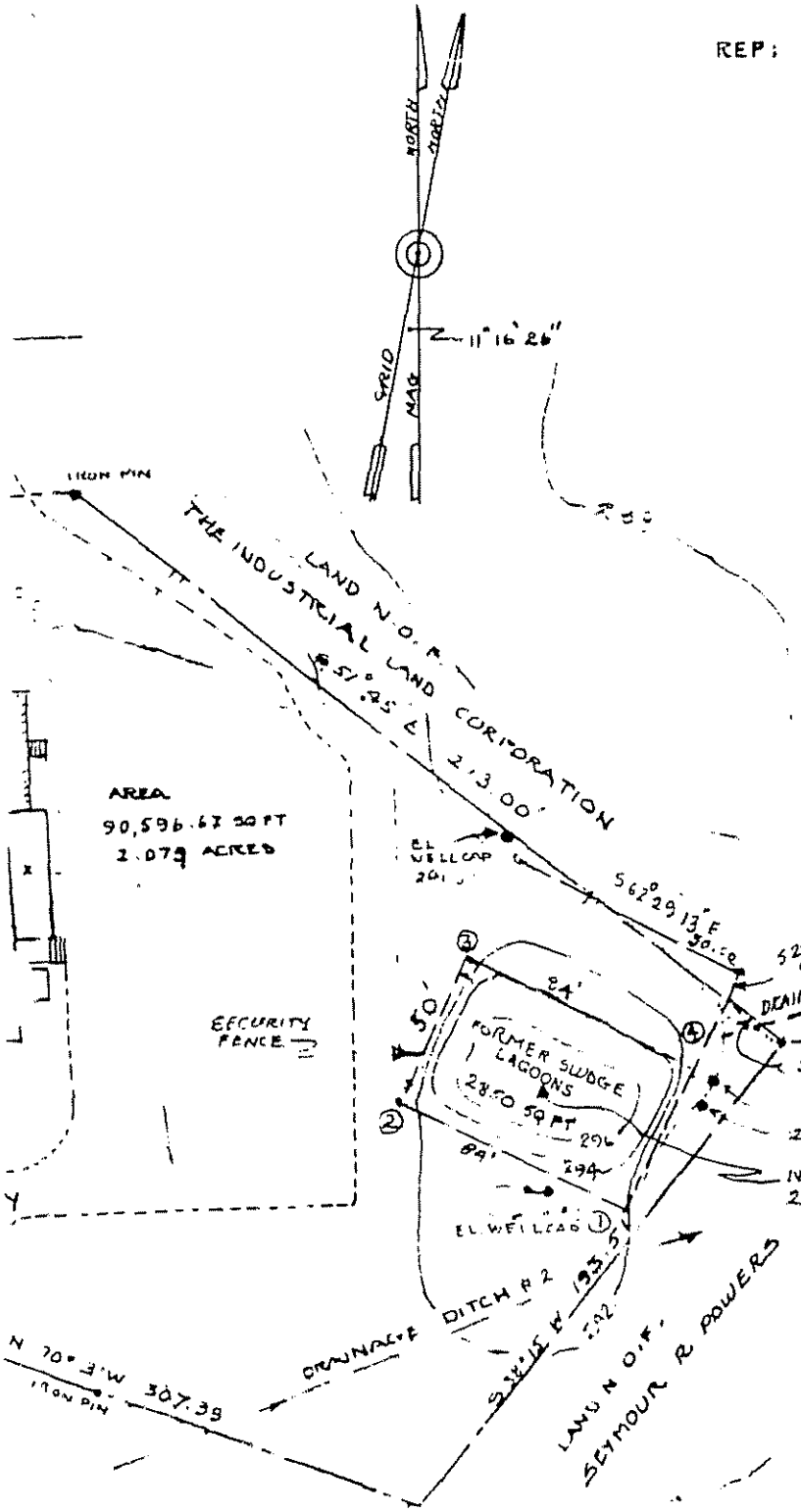
Closure activities specified in the approved closure plan and associated amendments were completed with the application of mulch on June 9, 1988. A survey plat is included as Figure 7-1 to this certification.

7.9 Certification

The following closure certification documentation can be found in Appendix P.

- Owner's Certification of Closure
- Professional Engineer's Certification of Closure
- Plat plan filing with the City of Danbury, Connecticut

REF: TOWN CLERK'S OFFICE MAP NO. 5132
ENTITLED MAP SHOWING LOT 24 OF
THE INDUSTRIAL LAND CORPORATION,
LOCATED ON AUGUSTA DRIVE, DANBURY
INDUSTRIAL PARK, DANBURY, CONN.
SCALE: 1" = 100' MARCH 15, 1961



NOTE

WITH REFERENCE TO FORMER SLUDGE LAGOON AREA, ALL SLUDGE AND HEAVILY CONTAMINTED SOIL REMOVED AS OF NOV., 1986.
CLOSURE COMPLETED JUNE 9, 1988.

THE CLOSURE/POST-CLOSURE PLANS DATED JULY 1985 AND FEBRUARY 1986 and modified AUGUST 1987 (AMENDED SEPTEMBER 1987) WERE PREPARED FOR GAR ELECTROFORMING, BY LANCY ENVIRONMENTAL SERVICES CO.
THESE PLANS WERE APPROVED BY DEP & EPA PER THEIR LETTER OF SEPTEMBER 29, 1987.
SIGNED BY:
STEPHEN W. HITCHCOCK, DIRECTOR
HAZARDOUS MATERIALS MANAGEMENT UNIT
DEPARTMENT OF ENVIRONMENTAL PROTECTION AND

MERRILL S. HOHMAN, DIRECTOR, EPA
WASTE MANAGEMENT DIVISION

SITE PLAN

SHOWING LOCATION OF FORMER SLUDGE LAGOONS AND HAZARDOUS WASTE MANAGEMENT AREA. LAND USE OF THE AREA OF THE FORMER LAGOONS RESTRICTED PER FED. REG. 40 CFR SUB PART "G".

PREPARED FOR

LANCY ENVIRONMENTAL SERVICES
RE:

GAR REALTY
LOCATED ON
AUGUSTA DRIVE
BEAVER BROOK DISTRICT
DANBURY, CONN.

SCALE: 1" = 40' JULY 17 1988

DOUGLAS WATSON
CONSULTING ENGINEER
MUSIC HILL ROAD
BROOKFIELD CENTER CT. 06806
PHONE (203) 775-9193

hereby certify this map to be
accord with the criteria of
survey

Douglas Watson
July 17 1988

FIGURE 7-1
SURVEY PLAT

8.0 POST-CLOSURE CARE PLAN

8.1 General

Because minor contamination of some underlying soils remains in both lagoons, GAR Electroforming is required to comply with the post-closure regulations of 40 CFR 265.117-265.120, 265.228(c), 265.144 and 265.145. Post-closure care if required for a period of up to 30 years following actual closure activities. These requirements will consist of routine ground water monitoring, site maintenance, and routine inspections.

The contact person at GAR responsible for supervision of post-closure care activities will be:

Director - Environmental Management
GAR Electroforming Division
Electroformers, Inc.
P. O. Box 340
Danbury, Connecticut 06813
203/744-4300

Routine site inspections will be made twelve (12) times per year according to a written inspection schedule. Because only contaminated soils are present, a more frequent inspection program is not warranted.

The inspection schedule contains a time table for the entire hazardous waste management area, and identifies the types of potential problems that may arise during the post-closure care period. The following areas will be evaluated during the post-closure inspections:

- Gate and lock at site entrance
- Warning signs
- Lagoon cover areas

- Ground water monitoring well condition
- Bench mark integrity
- General site condition

Table 8-1 defines these inspection items and frequency of inspection in detail.

Any out-of-order conditions will be reported to the Compliance and Safety Officer or his designated alternate, and recorded on inspection log sheets that will be maintained at GAR's plant office.

A copy of the site inspection log sheet is given in Appendix Q.

A copy of the Post-Closure Care Plan is maintained on-site by the GAR compliance and safety officer, who will also be responsible for updating the plan. The plan will be updated following any significant changes at the GAR facility that would affect ground water quality.

8.2 Cover Soils

Maintenance of the cover soil areas for each lagoon following establishment of adequate cover will be on an as needed basis. Cover maintenance will consist of mowing, twice per year, to control growth of the vegetative cover and promote rapid run-off. Because of the small area affected by closure of the lagoons, and the fact that 3% slopes will be maintained on the final cover soil, no specifically designed run-off control measures have been provided. Run-on will be prevented by the sloped surfaces. The designated seed mixture generates a low level cover and consequently more frequent mowing is not required.

If erosion or cracking of the final cover is discovered, the affected area would be filled immediately with top soil, compacted with a hand tamper and reseeded with Birdsfoot trefoil and oats and fertilized. Spot seeding or strip sodding may be necessary should erosion be excessive; however, this is not anticipated as a 3% slope on the final cover will minimize this condition.

TABLE 8-1

Post-Closure Inspection Schedule

Area/Equipment	Inspection Item	Minimum Frequency of Inspection
Site Security	Gate at Site Entrance	Monthly
	Chain and Lock	Monthly
Lagoon Cover Soil*	Soil Erosion or Cracking	Monthly
	Vegetative Growth	Monthly
Ground Water Monitoring Wells*	Soil Erosion	Monthly
	Guard Pipes, Caps, and Locks	Monthly
General Site Condition	Bench Mark Integrity	Monthly
	Warning Signs	Monthly

*Inspections will also be conducted immediately following severe weather conditions, including rain storms of moderate intensity.

8.3 Ground Water Monitoring Wells

Well casings and guard pipes will be inspected to assure they are in good condition. All wells are equipped with locking caps and secured with padlocks. These wells are kept locked at all times except during sampling activities. Any erosion that may occur around the well guard pipes should be minimal, but will be repaired with the addition of top soil, hand tamped, seeded and fertilized as described above.

8.4 Site Security

The hours of operation for the plant are from approximately 7:00 AM to 5:30 PM, Monday through Friday. In addition, designated personnel continue surveillance inspections of the plant for approximately two hours on Saturdays, Sundays, and holidays.

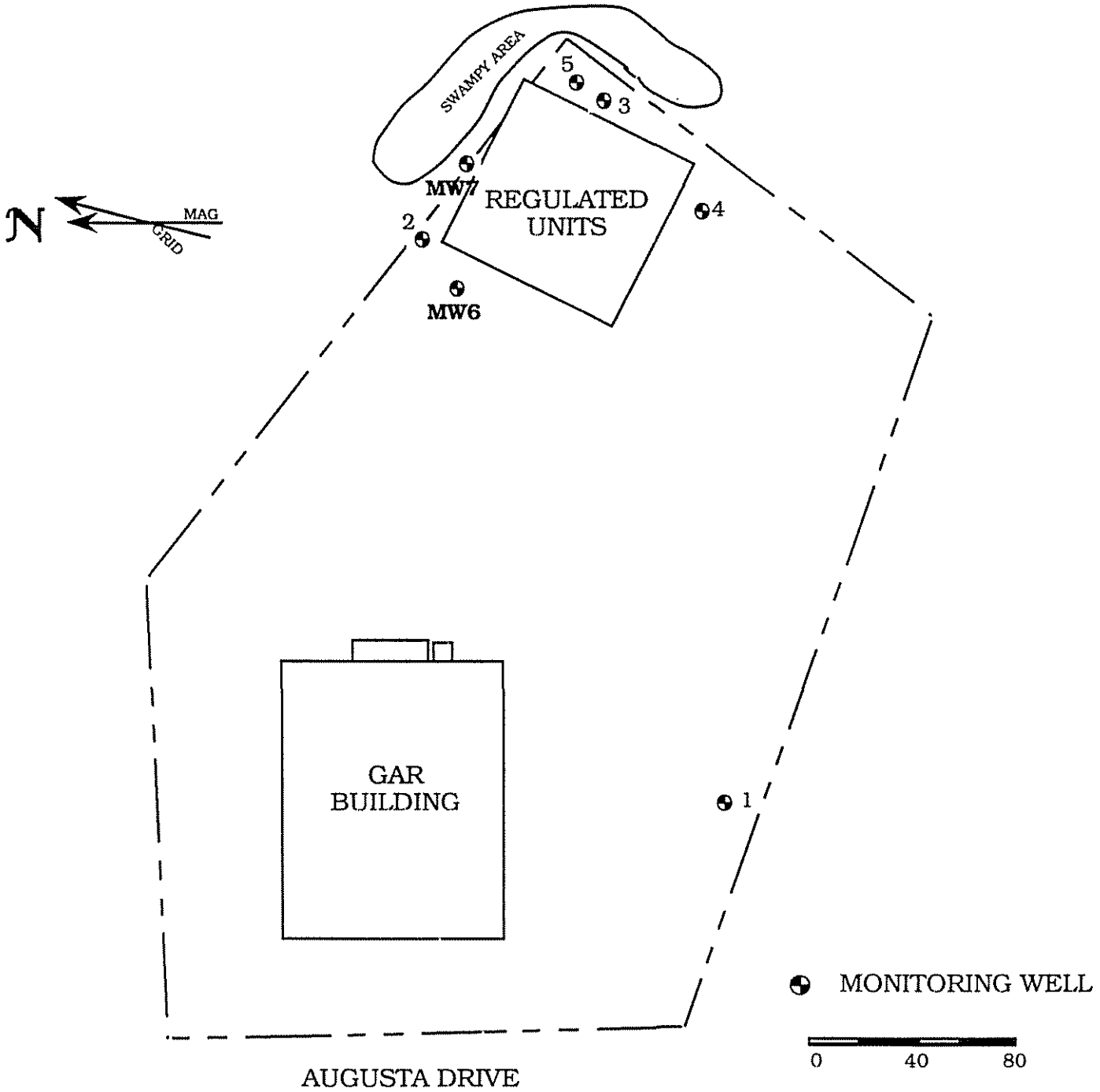
GAR has installed a national security alert system (ADT Alarm System) to notify proper personnel in the event of an emergency during non-working hours. Security for the entire plant is enforced through automatic outside lighting and the requirement that all visitors to the GAR facility be logged in.

The fence surrounding the hazardous waste management facility will be locked at all times except during site inspections. Should any portion of the fence be damaged, it would be repaired immediately.

8.5 Post-Closure Ground Water Monitoring

8.5.1 Sample Collection and Handling

GAR's ground water monitoring network in 1985 consisted of five wells (MW1 through MW5) as shown in Figure 8-1. The present ground water



TITLE				
GROUNDWATER MONITORING WELL LOCATION MAP				
CLIENT				
GAR ELECTROFORMING				
DRAWN	DATE	PROJECT NO.	DRAWING NO.	REV.
JLL	10/91	110813.201	FIG.8-1	

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monitoring network is described in Section 10.0. The current ground water sampling and analysis program is given in Section 11.0.

8.6 Post-Closure Cost Estimate

The following table is a summary of estimated post-closure costs for the 30-year care period.

Table 8-2
Post-Closure Cost Estimate

Total 27 Year Post-Closure Care
Costs in 1991 Dollars

I. Ground Water Monitoring		
o Sampling - 4 hours/event 2 events/year 1 man @ $12/hour		$ 2,590
o Analysis - 2 events/year 5 wells/event $140/sample		$37,800
	Sub-Total	$40,390
II. Inspection and Maintenance		
o Inspection - 20/year - 1 man 0.5 hours/inspection $12/hour		$ 3,240
o Maintenance - Fence Repair		$ 4,500
Top Soil		$ 1,200
Seed and Fertilizer		$ 1,200
Labor for Repairs and Mowing 2 men - $12/hour - 3 days/year		$15,550
Miscellaneous Materials		$ 1,200
	Sub-Total	$26,890
III. Contingency (10%)		$13,820
	TOTAL	$81,100

8.7 Post-Closure Financial Assurance

Financial assurance for post-closure care activities has been provided for in the form of an "irrevocable Standby Letter of Credit" and "Trust Agreement." A line of credit in the amount of $73,240.00 has been established with the North American Bank and Trust Company. Copies of the letter of credit and trust agreement can be found in Appendix R.

8.8 Certification of Post-Closure Care

Upon completion of the established post-closure care period, GAR will provide a certification signed by an officer of the company and an independent professional engineer, that post-closure care was performed in accordance with the plan described in Section 8.0.

The certification will be in accordance with 40 CFR 265.120 and will be submitted to the EPA regional office within 60 days from completion of post-closure activities.

9.0 SOLID WASTE MANAGEMENT UNITS (SWMU)

For the purpose of this application, the following definition of solid waste management unit (SWMU) was utilized:

> Any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released (55 FR 30808).

Under this definition there are seven SWMU's at the GAR facility in addition to the closed hazardous waste lagoons discussed in previous section. These SWMU's are as follows:

1. Drummed Waste Oils and Drummed Hazardous Wastes Accumulation Area
2. Industrial Wastewater Pretreatment System
3. Facility General Waste Dumpster
4. Spent Pumice Accumulation Drum Sump
5. Spent Pumice Lagoon
6. Scrap Metal Accumulation Areas

The following sub-sections present a description of each of these units.

9.1 Drummed Waste Oil Accumulation Area

In its manufacturing operations GAR requires the use of cutting oil for the machining of mandrels. In addition lubrication oil for the facility air compressor must also be routinely changed. Waste oils from these two operations are generated at a rate of approximately 30 gallons per year. As they are generated the wastes are accumulated in separate 55-gallon closed top drums in a designated area of the wastewater treatment room (Figure 9-1). When a drum is full, it is manifested and shipped to a local waste oil recycler. The drum(s) are placed in a shallow metal pan to collect any spills and segregate this waste from other wastes in the room. In addition, the area

is indoors on a poured concrete floor with no floor drains. A maximum of two drums of waste oil (110 gallons) are in this area at any given time.

Inspection of the area revealed no indication of past leaks or spills. There is no ready access to the environment from this SWMU.

Drummed hazardous wastes are also accumulated in a section of the wastewater treatment room (Figure 9-1) prior to shipment to a licensed TSD facility. In accordance with 40 CFR 261.34, no drummed wastes are accumulated in this area for more than 90 days. Wastes accumulated in this area consist of various aqueous cleaners (acids and caustics) used in the electroforming process and spent dilute cyanide solutions. Wastes are segregated according to chemical compatibility with waste acids being kept on a slotted wood floor over the neutralization tank of the wastewater treatment system (the treatment system is located in a basement level of this room). In addition to the segregation of waste acids, the single drum of cyanide bearing waste is kept in a steel secondary container, isolating it from all other wastes. A maximum of 12 drums of wastes can be accumulated in this area.

Inspection of the area revealed no indication of past leaks or spills. There is no ready access to the environment from this SWMU.

9.2 Industrial Wastewater Pretreatment System

Wastewaters from the electroforming process are pretreated prior to discharge to the Danbury sewer system under Connecticut permit DEP/WPC 034-048. The system is designed to meet the requirements of 40 CFR 433. Treatment is performed in a batch type process and averages approximately 800 gallons per week. GAR is permitted for a considerably

higher discharge volume, but has reduced actual discharge by more than 70 percent due to water conservation measures. Treatment consists of cyanide destruction and subsequent pH adjustment to precipitate metals as hydroxide sludges. Sludges are thickened and periodically removed by a licensed hazardous waste TSD facility as F006.

Plating bath constituents that enter the treatment system as rinse water components include:

Nickel chloride	Nickel	Nitric acid
Nickel sulfate	Sodium hydroxide	Hydrochloric acid
Copper sulfate	Sulfuric acid	Calcium Hypochlorite
Nickel carbonate	Copper cyanide	Silver
Chromic acid	Cadmium cyanide	
Cadmium	Sodium cyanide	

The exact composition of both treated and untreated wastewaters for any given batch is highly dependent upon the composition of electroforms being produced at that time.

A discharge renewal permit application was submitted to CTDEP in May, 1990 and contains a complete description of the treatment system. It should be referred to for detailed information. The following does, however, provide a brief overview of the system operation:

> Spent acid solutions and wet grinding solutions are routed to the non-cyanide batch treatment tank. When the tank is full the pH is first lowered to dissolve all metals (pH 4.0-4.5) and sodium bisulfite is added to reduce hexavalent chromium to the trivalent state. Upon verification of chromium reduction, the operator then raises the pH to approximately 9.0 with sodium hydroxide to precipitate the metals. An anionic polymer is added as a flocculant aid. The resultant slurry is pumped to the sludge thickener and mixed with sludge generated from the cyanide batch treatment.

All cyanide-bearing wastewaters and alkaline wastewaters are routed to the cyanide treatment tank. When the tank is full, the pH is raised to 12.0 with sodium hydroxide and calcium hypochlorite is added to oxidize the cyanide. Sodium hydrosulfite is also added as needed for reduction of hexavalent chromium to trivalent chromium. The pH is lowered to 9.0-10.0 and an anionic polymer is added to promote metal hydroxide precipitation. The resultant slurry is then pumped to the sludge thickener tank and blended with sludge from the non-cyanide treatment. Periodically, clear supernate is pumped off, pH adjusted to 6.0 to 9.5 and discharged to sewer. The concentrated sludge is periodically pumped off the bottom of the tank for off-site treatment and disposal.

The area is constructed of poured concrete and no direct access to the environment exists.

The current treatment system is an upgrade of the original system installed in the 1970s. No other previous treatment systems existed.

9.3 Facility General Waste Dumpster

In addition to the various industrial waste streams managed at SWMUs discussed elsewhere in this section, GAR rents two 2-cubic yard dumpsters for the collection of office trash and other general facility wastes. The location of this dumpster is depicted in Figure 9-2. The dumpster receives primarily office wastes and trash from the lunchroom.

Approximately two cubic yards of these various wastes are generated per week with an estimated 95 percent being lunchroom and general office trash.

9.4 Spent Pumice Accumulation Sump

As discussed in Section 9.5, pumice is occasionally used in a water slurry to give parts a matte finish. Under current operations the spent pumice is

accumulated in a concrete sump of approximately 150 gallon capacity (see Figure 9-1). This waste is finely ground pumice mixed with water. The waste is generated at a rate of approximately 200 lbs. per year. The waste is non-volatile and in a solid form. These characteristics combined with an isolated indoor location make the risk of releases to the environment from this SWMU extremely low. Once a year the sump is cleaned out and the spent pumice transferred to the dumpster.

9.5 Spent Pumice Lagoon

Certain electroform products require a matte finish on part or all of the workpiece. This type of finish is obtained by treating the workpiece with a spray of water mixed with ground pumice. The pumice roughens the surface to the desired texture. Prior to 1985, spent pumice/water slurry from this operation was discharged to a lagoon adjacent to the then active hazardous waste lagoons. Here the pumice settled out and the water infiltrated to the surrounding shallow aquifer.

Discharge to this lagoon ceased in 1985. At that time GAR constructed the accumulation sump and began to route the slurry to this location. This sump is discussed in Section 9.4.

Wastes in the pumice lagoon were evaluated in 1986 to confirm its non-hazardous status. This analysis is provided on page 8 of Appendix F. No TCLP analysis of this waste has been performed to date. This was not done because: 1) it is an inorganic waste and TCLP primarily impacts organic constituents; and 2) the inorganic constituents were far below their EP limits and not deemed to pose a risk of exceeding the associated TC limit.

The lagoon is approximately 60 by 20 feet and contains an estimated 50 cubic yards of spent pumice. The area is surrounded by a chain-link fence and is currently heavily overgrown with vegetation.

9.6 Scrap Metal Accumulation

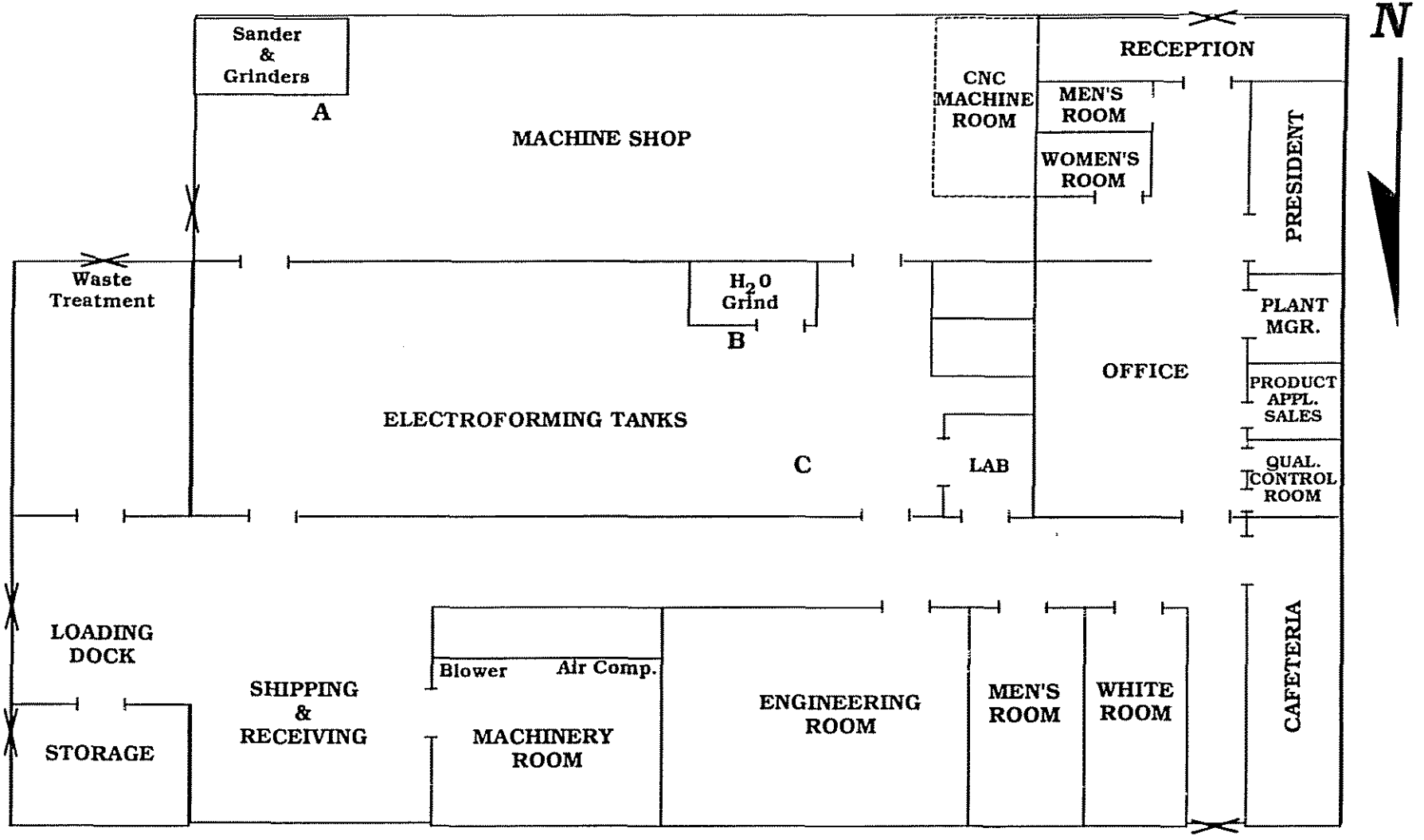
Scrap metal is accumulated in three 55 gallon drums kept at various locations in the facility. The first drum is kept near the back of the machine shop (location on Figure 9-1) and contains turning from the machining of mandrels and products. The second drum is kept near the silver spray room an is used to accumulate scrap copper from electroforming. The third drum is also kept in the electroforming room and contains scrap nickel from electroforming operations. When full, these drums are removed up by a metal recycler and a new drum left in its place.

The materials in these SWMUs are non-volatile solids kept in an indoor location. Consequently the risk of release from these SWMUs to the environment is remote.

TOPOGRAPHIC MAP
OF
CITY OF DANBURY, CONNECTICUT
FOR
THE ENGINEERING DEPARTMENT

DATE OF PHOTOGRAPHY MAY 1965 DATE OF MAPPING APRIL 1967

COMPILED BY PHOTOGRAMMETRIC METHODS
BY
ABRAMS AERIAL SURVEY CORPORATION
LANSING, MICHIGAN



= EXITS

TITLE				
INDOOR SWMU LOCATIONS				
CLIENT				
GAR ELECTROFORMING				
DRAWN	DATE	PROJECT NO.	DRAWING NO.	REV.
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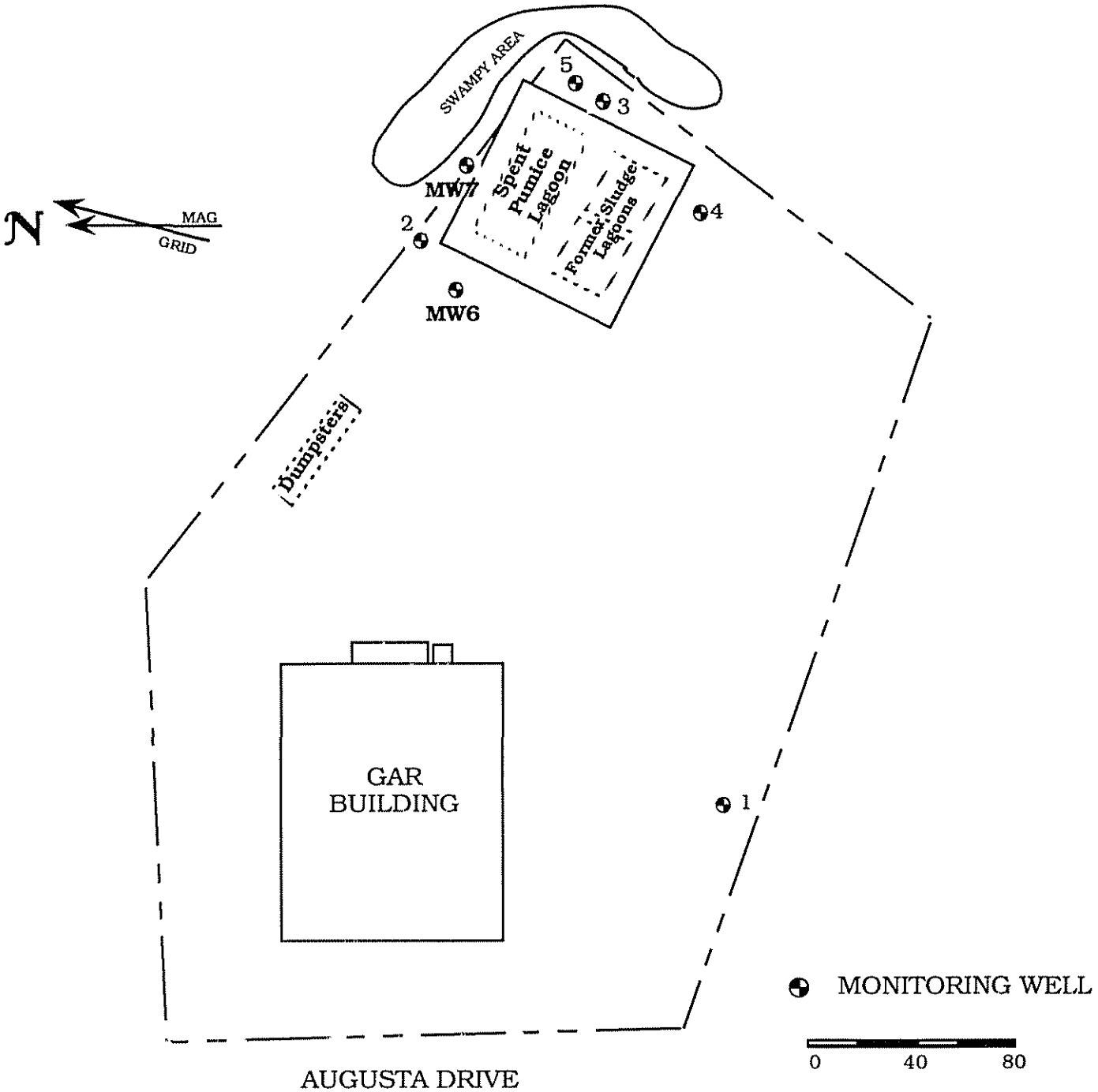

TITLE: OUTDOOR SOLID WASTE MANAGEMENT UNITS				
CLIENT: GAR ELECTROFORMING				
DRAWN: JLL	DATE: 10/91	PROJECT NO.: 110813.201	DRAWING NO.: FIG.9-1A	REV.

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10.0 GROUND WATER MONITORING SYSTEM

10.1 Facility Ground Water Monitoring History

Ground water monitoring associated with these lagoons began in 1985 under a CTDEP approved Alternate Ground Water Monitoring Plan. Monitoring was performed quarterly under this plan through completion of closure.

Prior to lagoon closure, the ground water monitoring network at this site consisted of five monitoring wells at four locations selected by the CTDEP. Four wells monitored the uppermost ground water zone while a fifth monitored the next lower water bearing zone. Upon completion of closure, modifications to the monitoring program that had been presented in the post-closure care plan were implemented. The primary modification at this time was deletion of the single deep monitoring well from the network. This deletion was completed with concurrence from CTDEP.

During the early years of the ground water monitoring program, the originally installed well network was adequate to monitor the impact of the active lagoons upon the local shallow ground water. In this time period, effluent discharged to the lagoons created a ground water mounding effect in the immediate vicinity of the lagoons which overshadowed the natural flow patterns. Upon cessation of discharge, this mounding effect was greatly diminished. Completion of closure further modified flow patterns in the immediate vicinity of the lagoons. Consequently, the CTDEP has requested the upgrade of the existing well network to properly monitor the rate and extent of plume movement.

In order to bring the network into compliance with Connecticut regulations Title 22a-449(c)-28, two additional wells are needed. There is sufficient variability in the ground water flow direction that both wells MW2 and MW3 are downgradient of all or part of the closed units during a significant portion of the time between sampling events. However, there is a significant amount of time that MW3 is not downgradient. Consequently, two additional wells are needed to meet the requirements of the Connecticut ground water monitoring regulations. Well MW4 has been found to be consistently upgradient of the closed units and will now serve as the upgradient well. Well MW1 has been found to be primarily sidegradient of the units and will serve only as a supplementary data collection point.

An upgraded Alternate Ground Water Monitoring Plan was developed in response to CTDEP Order No. HM-641 and subsequently approved by CTDEP in June 1990. Its purpose was to address deficiencies in the previously approved CTDEP Plan, dated January 1985 and to realign the program in accordance with findings of the first full year of post-closure monitoring. This upgraded plan instituted system modifications to better determine the rate and direction of migration of possible hazardous constituents in the ground water at this site. Most significantly, it called for the installation of two new wells and their inclusion in the monitoring network.

MW6 was placed on the west side of the closed lagoons while MW7 was located in the central portion of the north side of the closed lagoons. Selection of these downgradient locations was based upon data generated during the first six monitoring events after completion of closure.

It is intended that the long-term post-closure network wells will eventually consist of wells MW2, MW4, MW6 and MW7, with MW4 serving as an

upgradient well. Wells MW1, MW3 and MW5 will be monitored during the initial year of monitoring under the upgraded program. If data generated during this period proves to be as anticipated, monitoring of wells MW5 and MW3 will be eliminated, and MW1 will be monitored as part of a company-based monitoring program. The monitoring wells construction details are given in Appendix S.

10.2 Monitoring Well Location

The locations of the seven monitoring wells MW1 through MW7 are shown on Figure 8-1. A summary of the well construction data is presented in Table 10-1.

TABLE 10-1

Well Construction Summary

	MW1	MW2	MW3	MW4	MW5	MW6	MW7
Depth of Bore Hole	26.5'	19.5'	19.5'	21.5'	34'	22'	22'
Bore Hole Diameter	6"	6"	6"	6"	6"	6"	6"
Well Depth	25'	19'	19'	20'	34'	20'	20'
Screen Length	10'	10'	10'	10'	5'	10'	10'
Slot Size	0.010"	0.010"	0.010"	0.010"	0.015"	0.010"	0.010"
Well Diameter	2"	2"	2"	2"	2"	2"	2"
Construction	PVC	PVC	PVC	PVC	PVC	PVC	PVC
Packing	Fabric	Fabric	Fabric	Fabric	Fabric	Sand	Sand
Screened Interval	15-25'	9-19'	9-19'	10-20'	29-34'	10-20'	10-20'

11.0 GROUND WATER SAMPLING AND ANALYSIS PLAN

11.1 Monitoring Approach

This monitoring program has been designed to complement the existing post-closure monitoring program as required by Administrative Order HM-641 by the Connecticut Department of Protection.

11.1.1 Monitoring Parameters

Additional monitoring parameters are presented below in Table 11-1. These parameters, as recommended by the CTDEP, were determined in all wells over the first year of monitoring.

TABLE 11-1

ADDITIONAL MONITORING PARAMETERS

Parameter	Method
Aluminum	SW846 6010
Bicarbonate	SW846 6010
Cadmium	SW846 6010
Calcium	SW846 6010
Carbonate	EPA 310.1
Chloride	SW846 9252
Iron	SW846 6010
Magnesium	SW846 6010
Manganese	SW846 6010
Nitrate	SW846 9200
Potassium	SW846 6010
Sodium	SW846 6010
Sulfate	SW846 9038

11.1.2 Monitoring Frequency

Samples were collected quarterly for a one-year period to provide data representing all seasons with which to develop background values for future determination of post-closure monitoring parameters. These initial

four sets of data were utilized for decisions regarding future post-closure monitoring needs.

Following this initial year of quarterly sampling and analysis, a request to decrease sampling frequency to a semi-annual basis were made in accordance with 40 CFR 205.118(d). As all wastes and heavily contaminated soils were removed during closure, the probability of a significant new plume emanating from the lagoon area is extremely remote. This fact, coupled with the documented slow flow of ground water through the site, makes quarterly monitoring unnecessary. This intention will, of course, require that data generated during the initial year to confirm this position.

In addition to the reduction of sampling frequency, monitoring well MW1 will have its role revised after the first year. In the initial monitoring program, this well served as an upgradient monitoring point. However, recent flow patterns have found this well to be "sidegradient" rather than upgradient of the closed lagoons. This condition, coupled with the well's relatively remote location, greatly diminishes its value to the post-closure monitoring network. Nevertheless, as this well still serves an important function monitoring volatile organic contamination entering the property from an off-site source, it will not be abandoned. A post-closure modification request will be submitted for this well to be revised for the monitoring of volatiles only.

In addition, the inclusion of Wells MW3 and MW5 in the initial year of monitoring is simply to better define the chemical characteristics

between the upper and lower segments of the aquifer and associated flow patterns. Consequently, these two wells will be dropped from the network (but maintained) after one year of monitoring. Well MW5 had been deleted from the network at the onset of post-closure monitoring. The rationale for this deletion still holds. It is also expected that Well MW3 will serve only as a "sidegradient" monitoring location and a request will be submitted for its deletion from the network.

Finally, the chemical database generated by the current monitoring program indicates that several of the site-specific parameters required in the initial monitoring program have consistently been far below any level of concern. Consequently, continued monitoring of these parameters is unwarranted. Parameters that are being considered for deletion from the analytical program are as follows:

Cyanide, Total
Chromium, Hexavalent
Silver

A request for these deletions will be submitted <u>after</u> the one year of quarterly monitoring with new monitoring wells in the network in accordance with procedures specified in 40 CFR 265.118(d). If data collected over the initial year of the upgraded network contradict previous findings for the parameters, then such a request will, of course, not be made.

Based upon the above discussion, Table 11-2 presents the analytical parameter list for the one year of quarterly monitoring after Wells MW6 and MW7 have been installed. Table 11-3 presents the anticipated

analytical parameter list for all subsequent years of post-closure monitoring. This list is, of course, subject to modification as required by data generated over the ensuing years and approval of the above-mentioned modification request. Again, wells intended for the long-term post-closure monitoring network include MW2, MW4, MW6 and MW7. A discussion of the long-term post-closure monitoring plan can be found in Section 14.0 - Recommendations.

TABLE 11-2
Initial Analytical Parameters

Parameter	Method
pH (SU)	SW846 9040
Specific Conductance	SW846 9050
Organic Carbon, Total	SW846 9060
Nickel	SW846 6010
Aluminum	SW846 6010
Bicarbonate	SW846 6010
Cadmium	SW846 6010
Calcium	SW846 6010
Carbonate	EPA 310.1
Chloride	SW846 9252
Chromium, Hexavalent	SW846 7196
Chromium, Total	SW846 6010
Copper	SW846 6010
Cyanide, Total	SW846 9010
Iron	SW846 6010
Manganese	SW846 6020
Nitrate	SW846 9200
Potassium	SW846 6010
Sodium	SW846 6010
Sulfate	SW846 9038
Silver	SW846 7760

Volatile Organics	Method
Chloromethane	SW846 8010/8020
Bromomethane	SW846 8010/8020
Dichlorodifluoromethane	SW846 8010/8020
Vinyl Chloride	SW846 8010/8020
Chloroethane	SW846 8010/8020
Methylene Chloride	SW846 8010/8020
1,1-Dichloroethylene	SW846 8010/8020
1,1-Dichloroethane	SW846 8010/8020
Trans-1,2-Dichloroethylene	SW846 8010/8020
Chloroform	SW846 8010/8020
1,2-Dichloroethane	SW846 8010/8020
1,1,1-Trichloroethane	SW846 8010/8020
Carbon Tetrachloride	SW846 8010/8020
Bromodichloromethane	SW846 8010/8020
1,2-Dichloropropane	SW846 8010/8020
Cis-1,3-Dichloropropene	SW846 8010/8020
Trichloroethylene	SW846 8010/8020
Chlorodibromomethane	SW846 8010/8020
1,1,2-Trichloroethane	SW846 8010/8020
Trans-1,3-Dichloropropene	SW846 8010/8020
2-Chloroethylvinylether	SW846 8010/8020
Bromoform	SW846 8010/8020
1,1,2,2-Tetrachloroethane	SW846 8010/8020
Tetrachloroethylene	SW846 8010/8020
Chlorobenzene	SW846 8010/8020

1,3-Dichlorobenzene	SW846 8010/8020
1,2-Dichlorobenzene	SW846 8010/8020
1,4-Dichlorobenzene	SW846 8010/8020
Benzene	SW846 8010/8020
Toluene	SW846 8010/8020
Ethylbenzene	SW846 8010/8020

TABLE 11-3
Anticipated Analytical Parameters

Parameter	Method
pH (SU)	SW846 9040
Specific Conductance	SW846 9050
Organic Carbon	SW846 9060
Chromium, Total	SW846 6010
Copper	SW846 6010
Nickel	SW846 6010

Volatile Organics	Method
Chloromethane	SW846 8010/8020
Bromomethane	SW846 8010/8020
Dichlorodifluoromethane	SW846 8010/8020
Vinyl Chloride	SW846 8010/8020
Chloroethane	SW846 8010/8020
Methylene Chloride	SW846 8010/8020
1,1-Dichloroethylene	SW846 8010/8020
1,1-Dichloroethane	SW846 8010/8020
Trans-1,2-Dichloroethylene	SW846 8010/8020
Chloroform	SW846 8010/8020
1,2-Dichloroethane	SW846 8010/8020
1,1,1-Trichloroethane	SW846 8010/8020
Carbon Tetrachloride	SW846 8010/8020
Bromodichloromethane	SW846 8010/8020
1,2-Dichloropropane	SW846 8010/8020
Cis-1,3-Dichloropropene	SW846 8010/8020
Trichloroethylene	SW846 8010/8020
Chlorodibromomethane	SW846 8010/8020
1,1,2-Trichloroethane	SW846 8010/8020
Trans-1,3-Dichloropropene	SW846 8010/8020
2-Chloroethylvinylether	SW846 8010/8020
Bromoform	SW846 8010/8020
1,1,2,2-Tetrachloroethane	SW846 8010/8020
Tetrachloroethylene	SW846 8010/8020
Chlorobenzene	SW846 8010/8020
1,3-Dichlorobenzene	SW846 8010/8020
1,2-Dichlorobenzene	SW846 8010/8020
1,4-Dichlorobenzene	SW846 8010/8020
Benzene	SW846 8010/8020
Toluene	SW846 8010/8020
Ethylbenzene	SW846 8010/8020

11.2 Sample Collection

Samples will be collected initially by trained field technicians under contractual arrangement with a qualified environmental services firm. During this event GAR personnel will be retrained on proper sampling techniques. GAR Electroforming will then use its own laboratory technicians for subsequent sampling events. Procedures to be employed are based on those given in the following documents:

- DRAFT "RCRA Ground Water Monitoring Technical Enforcement Guidance Document" - August, 1985 (EPA WH-527)
- "Ground Water Monitoring at Solid Waste Disposal Facilities" (EPA-530/SW-61).

11.2.1 Measurement of Static Water Level Elevation

At the beginning of each sampling event, prior to any other activities, measurements will be made of the static water level elevation in each well in the monitoring system. Water level measurements will be made using an electric water tape (i.e., Slope Indicator Company, Soil Test, or other manufacturer). Measurements will be made to 0.01 foot relative to the surveyed reference at top of casing. Measurement of the total depth of well will also be taken.

11.2.2 Well Evacuation

Following water level measurement, each well will be evacuated using a bottom loading bailer of PVC construction or a stainless steel pump. Three well volumes will be removed prior to sample collection. The wells will be allowed to recover to a point providing a column of at least 6 feet of water prior to sample collection.

11.2.3 Sample Withdrawal

Sample collection from the monitoring wells will be accomplished with a bottom loading stainless steel bailer. To minimize the possibility of sample contamination, the bailer will be carefully cleaned before use in each well with a water wash, 0.1N hydrochloric acid rinse, and a deionized water rinse. A plastic sheet will be used to cover the ground in the immediate vicinity of the well during sampling activities to ensure that no surface soil or contamination enters the open well and that the bailers do not contact the surrounding soil. Samples will be carefully removed and transferred to sample containers with a minimum of agitation and aeration.

Sample bottles will be filled in the following order:

Volatile Organics
Total Organic Carbon
Metals
Cyanide
Sulfate/Chloride
Other Inorganics

11.2.4 Field Analyses

All of the parameters being monitored, as described in previous sections require laboratory analysis with the exception of pH and specific conductance. The field technician will be prepared to perform routine measurements of pH and specific conductance in accordance with SW846 methodology. All field measurements taken will be reported with laboratory data.

11.3 Sample Preservation and Handling

Obtaining a sample that is representative of the actual ground water quality is the objective of the entire sampling program. The methods selected for sample handling and preservation are critical to obtaining valid data. With this in mind, the procedures to be used at the GAR site have been taken from recommended procedures found in "Test Methods for Evaluating Solid Waste" (SW 846), 3rd Edition, Revised 1984. A combination of procedural guidance from this document and from "Ground Water Monitoring at Solid Waste Disposal Facilities" (EPA-530/SW-611) and information on the parameters of interest have been used to develop the following approach to sample handling and preservation.

11.3.1 Sample Containers

The sampling planned for the GAR site includes metals, inorganics, general chemistry and volatiles. Appropriate sample containers for each analytical parameter shall be pre-washed in the originating laboratory with non-phosphate detergent and tap water, rinsed with 1:1 nitric acid, tap water, and deionized water (ASTM Type II), in that order and specifically prepared. The cleanliness of each batch of bottles will be verified through use of a trip blank filled with deionized water and handled in the field and in the laboratory in the same fashion as the samples.

Sample bottles will be pre-labeled with site-specific information including preservative. The sample label shown in Figure 11-1, or equivalent, will be used.

FIGURE 11-1

STANDARD SAMPLE LABEL

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100 Marshall Drive
Warrendale, PA 15086
TEL: 412-772-0810

Client: _____

Sample Description: _____

Date Collected: _____ Received: _____

Collected by: _____ Time: _____

Analysis: _____

Preservative: ☐ None ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH
☐ Acetone Rinse ☐ HCl Other: _____

FIGURE 11-2

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GROUND WATER MONITORING FIELD LOG DATA SHEET

Client: _____ Project #: _____ Lab Ref #: _____

Address: _____ Well #: _____

_____ Time: _____

_____

Reason Sampled: _____ Date: _____

Sample Containers

Depth of Cased Hole: _____ ft.
Depth to Water: _____ ft.
Height of Water: _____ ft.
Well Diameter: _____ ft.
Volume of Water: _____ ~~ft.~~ GALLONS

Volume of water removed before sampling: _____ gal.
Depth to water at time of sampling: _____ ft.
Date Prepumped: _____ Time Prepumped: _____ Pump Rate: _____
Prepumping (equipment) method used: _____
Calibration of pH meter pH7= _____ pH4= _____ pH10= _____ Temp= _____ °C
Calibration of Specific Conductance meter: _____ umhos/um. Temp of standard: _____ °C
Ground Water: pH 1. _____ 2. _____ 3. _____ 4. _____ Ground Water Temp: _____ °C
Ground Water Specific Conductance: 1. _____ 2. _____ 3. _____ 4. _____
Metals filtered in field: Yes _____ No _____
Sample Description: _____

_____

Observations: _____

_____

Type of Sampler: _____ Type of Bailer: _____ Filter Media: _____
Sample Taken By: _____ Witness _____

FOR LABORATORY USE ONLY

Date Received: _____ By: _____

Conditions of Samples: _____

Date Analyzed: _____ By Staff Authorized Signature _____

PLEASE LIST ANY KNOWN HAZARDS OR CONSTITUENTS _____

_____

CAUTION: STABILIZING REAGENTS ARE CORROSIVE AND SHOULD BE HANDLED CAREFULLY. IF REAGENTS COME IN CONTACT WITH SKIN; FLUSH WITH WATER.

100 Marshall Drive
Warrendale, PA 15086 7554
TEL: 412 772 0610
FAX: 412 772 4020

Offices Serving: Minneapolis, Minnesota
Tampa, Florida
Iowa City, Iowa
San Francisco, California
Kansas City, Missouri
Los Angeles, California
Charlotte, North Carolina
Asheville, North Carolina
New York, New York
Pittsburgh, Pennsylvania
Denver, Colorado

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11.3.2 Sample Preservation

The following table identifies the sample preservation methods that will be employed:

TABLE 11-4

Sample Preservation Methods

Parameter	Preservation
Metals	(1) field filtration (0.45 um) (2) acidification to pH <2 with HNO_3
Cyanide	Cool, 4^oC, NaOH to pH >12
Sulfate, Chloride	Cool, 4^oC
Organic Carbon	Cool, 4^oC HCl or H_2SO_4 to pH <2

Note: Analysis will be complete within the maximum holding time.

11.4 Chain-of-Custody

The following procedures, or equivalent, will be utilized to establish chain of possession of a sample from the time of field collection through laboratory analyses. The elements of the chain-of-custody program that will be employed for GAR's ground water monitoring are given in the following sections.

11.4.1 Sample Labels

For identification purposes, a label will be affixed to each sample container. Durable, weather resistant labels will be utilized, similar in format to that shown in Figure 11-1.

11.4.2 Field Log Book

Sampling personnel collecting ground water samples and field data at the GAR site will keep an up-to-date field log book to record all relevant information. An example of information to be recorded can be found in Figure 11-2 of this document.

11.4.3 Chain-of-Custody Record

Chain-of-Custody forms will be used to record pertinent on-site sampling data. Space is provided for the entry of the signature of the person taking the sample, a supervisor or witness, the sampling date, time and location. This sheet also provides a list of the appropriately stabilized bottles. Chain-of-Custody forms accompany samples in sample handling and shipping packages. A chain-of-custody form similar to that in Figure 11-3 will be used.

11.4.4 Laboratory Chain-of-Custody Procedures

Procedures equivalent to the following, taken from those of PACE Incorporated, will be employed.

1. Samples are received and unpacked in PACE's Shipping/Receiving area by the Receiving Clerk who records and signs for the shipment, keeping a record of the date received, carrier, number and size of bottles received and shipper. The Receiving Clerk notifies the Sample Custodian of shipment arrivals.

2. PACE's Sample Custodian removes the samples from the Shipping/Receiving area to the laboratory where the samples are verified with incoming paperwork (packing slip, etc.) by type of bottle and stabilizer. The paperwork is either signed or initialed.

3. A Lab Work Sheet and computer log are issued to each sample or group of samples. Information concerning the sample (from the Sampling Record and observation) is entered on the Lab Work Sheet to further identify the sample along with parameters to be analyzed, date of sampling, date sample received in lab.

4. Each sample is issued a Lab Reference number by which is listed in the sample control notebook, on the lab work sheet, on incoming paperwork with the sample, and on the sample container. The numbers run consecutively in the control book and include space for company name and date received.

5. The samples are also logged-in alphabetically by Client in Shipping Record Books. Information listed is Lab Reference Number, type of sample, date received and Sample Custodian initials. All incoming paperwork is filed alphabetically by Client in an expandable file in the Analytical Services Office.

6. Samples are placed in a secured appropriate storage area; e.g., refrigeration, until analysis.

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FIGURE 11-3

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CHAIN-OF-CUSTODY RECORD
Analytical Request

Client

Address

Phone

Report To:

Bill To:

P.O. # / Billing Reference

Project Name / No.

Pace Client No.

Pace Project Manager

Pace Project No.

*Requested Due Date:

Sampled By (PRINT):

Sampler Signature

Date Sampled

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES: UNPRESERVED	H_2SO_4	HNO_3	VOA			ANALYSES REQUEST	REMARKS
1													
2													
3													
4													
5													
6													
7													
8													

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT / DATE	RETURNED / DATE

Additional Comments

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME

7. When analysis is complete, samples are stored for a 30-day period unless otherwise specified. Lab Work Sheets are checked off on a monthly master log and copied for report preparation. Originals are filed.

8. The Analytical Report Sheet combines all sample data generated in the laboratory and that received with the samples, the identifying sample code, date received, and report date.

9. Analytical results and sample information are maintained in the laboratory for a period of one year and in the laboratory archive for at least three years.

11.5 Analytical Procedures

The analytical methods that will be used for these ground water samples are given in Table 11-4.

11.6 Quality Assurance/Quality Control

This plan presents procedures developed to ensure the quality of data to be generated during the course of the entire post-closure care period. GAR Electroforming intends to contract with a qualified Connecticut certified laboratory which has and applies a documented, active quality assurance/quality control program. The QA/QC program described here is that of the PACE Incorporated laboratory. This program or its equivalent will be employed for all sampling and analytical work performed. GAR will carry out its responsibility to assure that such a program is in place by requesting periodic reports of quality control data and by arranging for "split sample" analysis on two (2) randomly selected samples per year.

11.6.1 Quality Assurance Objectives for GAR's Ground Water Monitoring

Ground Water Monitoring will be performed in conformance with a quality assurance program and applicable regulatory requirements. Specific quality assurance objectives are as follows:

- Data generated will be of sufficient quality to stand up to technical and legal scrutiny.
- Data will be gathered or developed in accordance with procedures appropriate for the intended use of the data.
- Data will be of known or acceptable precision, accuracy, representativeness, completeness, and comparability within the limits of the project.

This Quality Assurance, Quality Control Plan has been prepared in direct response to these goals. This plan describes the Quality Assurance Program to be implemented and the quality control procedures to be followed by personnel during the course of the project. The plan is based upon PACE Incorporated's quality assurance program which provides for traceable documentation of an adequate level of project records, ensures that reports and documentation are technically accurate; that proper equipment is available, properly used and calibrated; and that the scope of work as established in the contract is followed. It provides a minimum of 10% duplicate analyses and 5% spikes or at least one control sample per set. The specific objectives of this program are to:

- Establish protocol for estimating the quality of each analytical system.
- Assist in the early recognition of deficiencies that affect quality of data.
- Provide a system by which action can be taken, as necessary, to correct and document out-of-control conditions.
- Enhance data usefulness for reporting and decision making by defining and documenting limitations on the quality of data.

11.6.2 Field Quality Assurance

All information obtained from sampling and field data collection will be recorded and documented in accordance with the internal quality assurance program of PACE. Required documentation of field investigation

and testing includes a daily log of activities; a photographic record, as required, for anomalies; and the appropriate survey results, test data forms, field collection and chain-of-custody forms.

Sampling personnel will keep a daily log of field activities. Items to be included in the daily log, as appropriate, are:

- Identification of well
- Well depth
- Static water level depth and measurement technique
- Presence of immiscible layers and detection method
- Well yield - high or low
- Collection method for immiscible layers and sample identification numbers
- Well evacuation procedure/equipment
- Sample withdrawal procedure/equipment
- Date and time of collection
- Well sampling sequence
- Types of sample containers used and sample identification numbers
- Preservative(s) used
- Parameters requested for analysis
- Field analysis data and method(s)
- Sample distribution and transporter
- Field observations on sampling event
- Signature of collector

Copies of the daily log entries will be retained with other records, for reference. Any photographs taken will be identified with the project number, date taken, and a brief description.

Two types of blanks will be employed: trip blanks and equipment blanks. Trip blanks will be used to identify contamination introduced from sample containers or handling, and equipment blanks will be used to identify contamination introduced by sample collection equipment.

11.6.3 Laboratory Quality Assurance

The basic approach to QA data at PACE's facility is to provide bench information readily usable as a determination of in/out-of-control conditions and provide a visual record and review tool for program evaluation. After review of various data handling and display procedures, the Shewhart method was implemented as the most practical. This procedure is further detailed in the section entitled: "Performance of Analytical Quality Assurance" of PACE's manual.

11.7 Reporting

Quarterly and annual reports will be prepared and submitted in compliance with state and federal reporting requirements.

12.0 GROUND WATER MONITORING ANALYSES SUMMARY

12.1 Monitoring Plan Overview

The upgraded Alternate Ground Water Monitoring System Plan called for a comprehensive sampling and analysis program to take place over a one year period, beginning with the third quarter (August) of 1990, and ending with the June 1991 sampling event. Data generated from field and laboratory analysis during this period was then utilized to design a long-term post-closure monitoring plan. This long-term plan is set forth in Section 14.2 of this document.

Overall, monitoring to date has consisted of comprehensive field and laboratory analysis of samples collected from all seven wells on a quarterly basis. With a few minor exceptions, the implemented program matched the plan exactly.

Numerous general water quality and site specific parameters were added to the existing analytical program as part of the program upgrade. The entire expanded list of parameters (Table 12-1) was determined for each well during each of the four quarterly sampling events.

12.2 Monitoring Data

As had been previously pointed out, ground water monitoring began in 1985. All of the analyses from 1985 up to the most recent sampling event (third quarter 1991) are given in Appendices I through O.

12.3 Summary of Analyses

40 CFR 270.14(c)(1) requires that a summary of the ground water monitoring data obtained during the interim status under 265.90 through 265.94 be provided.

TABLE 12-1

INITIAL ANALYTICAL PARAMETERS

Parameter	Method
pH (SU)	SW846 9040
Specific Conductance	SW846 9050
Organic Carbon, Total	SW846 9060
Nickel	SW846 6010
Aluminum	SW846 6010
Bicarbonate	SW846 6010
Cadmium	SW846 6010
Calcium	SW846 6010
Carbonate	EPA 310.1
Chloride	SW846 9252
Chromium, Hexavalent	SW846 7196
Chromium, Total	SW846 6010
Copper	SW846 6010
Cyanide, Total	SW846 9010
Iron	SW846 6010
Magnesium	SW846 6010
Manganese	SW846 6020
Nickel	SW846 6010
Nitrate	SW846 9200
Potassium	SW846 6010
Sodium	SW846 6010
Sulfate	SW846 9038
Silver	SW846 7760
Volatile Organics	SW846 8010/8020

In addition, Section 22(c)(3) of the Connecticut Hazardous Waste Rules provide that the most recent three years of ground water monitoring data be included in the annual report in graphical form.

Therefore, the most recent monitoring data is summarized in the following sections. The ground water monitoring data is summarized both graphically and by use of statistical analysis. Graphically the data is presented for the previous three years. Statistically the data is presented by year for the previous two years since closure occurred. There are three parameters for which data summaries have been prepared: total chromium, total copper, and total nickel.

12.3.1 Statistical Analysis

The two years of ground water monitoring data for the three inorganic parameters are given in Tables 12-2 through 12-4. This is the data that is used for the test for significance: The Cochrans Approximation to the Behrens-Fisher Students t test to determine statistically significant changes in the concentration or value of an indicator parameter in periodic ground water samples when compared to the initial background concentration or value of that indicator parameter. A single tailed Students t test at a 0.01 level of significance was employed for the statistical analysis. Pertinent information regarding the use of the test is given in Table 12-5.

A statistical analysis was not performed for the organic compounds since they are known to be present in significant amounts. It is believed that an off-site source is responsible for this contamination.

Ground water monitoring well MW4 is the upgradient well, and is the well against which the downgradient wells are compared. Statistical analysis of the post-closure network was performed by utilizing the first four quarters of monitoring data after closure as the background monitoring period (9/88, 12/88, 3/89 and 6/89). Once background statistical data was determined, a statistical analysis was performed using an average of four quarters of analytical data over a two year period. This was performed to take into account any seasonal fluctuations that may occur at the point of compliance area.

Tables 12-6 and 12-7 are summaries of the statistical data for each monitoring well by parameter for the two years following closure and the results of which are discussed below:

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TABLE 12–2

GROUND WATER MONITORING – CHROMIUM

DATE	MW1	MW2	MW3	MW4	MW5	MW6	MW7
09/07/88	0.01	0.003	0.003	0.003	0.02		
12/08/88	0.01	0.003	0.003	0.003			
03/14/89	0.01	0.003	0.003	0.003			
06/07/89	0.01	0.003	0.003	0.003			
MEAN				0.003			
STD DEV				0			
VARIANCE				0			
09/25/89	0.007	0.003	0.003	0.003			
12/19/89	0.06	0.01	0.003	0.04			
03/25/90	0.008	0.003	0.003	0.003			
06/25/90	0.003	0.003	0.003	0.003			
MEAN	0.0195	0.00475	0.003	0.01225	ERR	ERR	ERR
STD DEV	0.027086	0.0035	0	0.0185	ERR	ERR	ERR
VARIANCE	0.000734	0.000012	0	0.000342	ERR	ERR	ERR
t*	1.218329	1	ERR	1	ERR	ERR	ERR
tc	4.541	4.541	ERR	4.541	ERR	ERR	ERR
09/26/90	0.01	0.003	0.007	0.003	0.003	0.003	0.003
12/17/90	0.009	0.003	0.003	0.003	0.003	0.003	0.003
03/25/91	0.011	0.003	0.003	0.003	0.003	0.006	0.01
06/24/91	0.003	0.003	0.003	0.003	0.006	0.019	0.003
MEAN	0.00825	0.003	0.004	0.003	0.00375	0.00775	0.00475
STD DEV	0.003594	0	0.002	0	0.0015	0.007632	0.0035
VARIANCE	0.000013	0	4.0E–06	0	2.3E–06	0.000058	0.000012
t*	2.921555	ERR	1	ERR	1	1.244731	1
tc	4.541	ERR	4.541	ERR	4.541	4.541	4.541

Notes: All analysis in mg/l.
t* = Students t statistic
tc = Comparison t statistic
MW4 is upgradient well

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GAR ELECTROFORMING
DANBURY, CT

TABLE 12–3

GROUND WATER MONITORING – COPPER

DATE	MW1	MW2	MW3	MW4	MW5	MW6	MW7
09/07/88	0.18	0.04	0.02	0.03	0.02		
12/08/88	0.007	0.0035	0.08	0.04			
03/14/89	0.04	0.02	0.02	0.02			
06/07/89	0.04	0.02	0.04	0.11			
MEAN				0.05			
STD DEV				0.040825			
VARIANCE				0.001667			
09/25/89	0.02	0.03	0.05	0.03			
12/19/89	0.06	0.0035	0.0035	0.05			
03/25/90	0.02	0.02	0.48	0.05			
06/25/90	0.1	0.06	0.04	0.04			
MEAN	0.05	0.028375	0.143375	0.0425	ERR	ERR	ERR
STD VAR	0.038297	0.023746	0.225305	0.009574	ERR	ERR	ERR
VARIANCE	0.001467	0.000564	0.050762	0.000092	ERR	ERR	ERR
t*	−1.2E−19	−0.91575	0.815596	−0.35772	ERR	ERR	ERR
tc	4.541	4.541	4.541	4.541	ERR	ERR	ERR
09/26/90	0.12	0.04	0.13	0.08	0.04	0.06	0.03
12/17/90	0.1	0.058	0.039	0.047	0.041	0.047	0.029
03/25/91	0.066	0.05	0.037	0.007	0.051	0.14	0.087
06/24/91	0.031	0.02	0.031	0.007	0.037	0.15	0.019
MEAN	0.07925	0.042	0.05925	0.03525	0.04225	0.09925	0.04125
STD DEV	0.039135	0.016411	0.047289	0.035293	0.006076	0.05325	0.030902
VARIANCE	0.001532	0.000269	0.002236	0.001246	0.000037	0.002836	0.000955
t*	1.034427	−0.36364	0.296126	−0.54665	−0.37553	1.467984	−0.34179
tc	4.541	4.541	4.541	4.541	4.541	4.541	4.541

Notes: All analysis in mg/l.
t* = Students t statistic
tc = Comparison t statistic
MW4 is upgradient well

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GAR ELECTROFORMING
DANBURY, CT

TABLE 12–4

GROUND WATER MONITORING – NICKEL

DATE	MW1	MW2	MW3	MW4	MW5	MW6	MW7
09/07/88	0.57	0.45	0.14	0.14	0.1		
12/08/88	0.19	0.52	0.12	0.14			
03/14/89	0.19	0.41	0.01	0.04			
06/07/89	0.23	0.38	0.08	0.09			
MEAN				0.1025			
STD DEV				0.047871			
VARIANCE				0.002292			
09/25/89	0.19	0.26	0.11	0.07			
12/19/89	0.18	0.48	0.08	0.14			
03/25/90	0.2	0.51	0.99	0.12			
06/25/90	0.25	0.37	0.06	0.07			
MEAN	0.205	0.405	0.31	0.1	ERR	ERR	ERR
STD DEV	0.031091	0.113871	0.453799	0.03559	ERR	ERR	ERR
VARIANCE	0.000967	0.012967	0.205933	0.001267	ERR	ERR	ERR
t*	3.591337	4.897809	0.909456	−0.08382	ERR	ERR	ERR
tc	4.541	4.541	4.541	4.541	ERR	ERR	ERR
09/26/90	0.23	0.38	0.2	0.11	0.05	0.53	0.56
12/17/90	0.32	0.49	0.11	0.12	0.12	0.55	0.61
03/25/91	0.15	0.54	0.12	0.11	0.12	0.66	0.62
06/24/91	0.12	0.44	0.05	0.06	0.06	0.55	0.55
MEAN	0.205	0.4625	0.12	0.1	0.0875	0.5725	0.585
STD DEV	0.089629	0.068496	0.061644	0.02708	0.037749	0.05909	0.035119
VARIANCE	0.008033	0.004692	0.0038	0.000733	0.001425	0.003492	0.001233
t*	2.017478	8.615909	0.448435	−0.09091	−0.49209	12.36058	16.25353
tc	4.541	4.541	4.541	4.541	4.541	4.541	4.541

Notes: All analysis in mg/l.
t* = Students t statistic
tc = Comparison t statistic
MW4 is upgradient well

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TABLE 12-9

STATISTICS

Statistical analysis of indicator of contamination parameters for each well monitored was accomplished using the method preferred by the United States EPA[1.] and the State of Connecticut for comparing the difference of two groups. Equations for this comparison are:

$$t^* = \frac{\overline{X}_m - \overline{X}_b}{\left[\frac{S^2_m}{n_m} + \frac{S^2_b}{n_b}\right]^{1/2}} \qquad t_c = \frac{\frac{S^2_m t}{n_m} + \frac{S^2_b t}{n_b}}{\frac{S^2_m}{n_m} + \frac{S^2_b}{n_b}}$$

Where:

t^* = t-statistic

t_c = t-comparison

X_m = Monitoring Well Mean

X_b = Background Mean

S^2m = Monitoring Well Variance

S^2_b = Background Variance

n = Number of Readings

t = t-statistic Value at 0.01 level of significance

Comparison:

If t^* is equal to or greater than t_c, then a significant concentration increase <u>is</u> indicated.

If t^* is less than t_c, then a significant concentration increase <u>is not</u> indicated.

If t^* is negative, then there is no significant difference between the monitoring data and background data.

(1.) 40 CFR 265.93(b.)

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DANBURY, CT

TABLE 12–6

POST–CLOSURE PART B PERMIT
GROUND WATER MONITORING SUMMARY – YEAR ONE

	MW1	MW2	MW3	MW4	MW5	MW6	MW7
CHROMIUM							
Mean	0.0195	0.00475	0.003	0.01225			
t*	1.2183	1	N.A.	1			
tc	4.541	4.541	N.A.	4.541			
Significant Change	NO	NO	NO	NO			

	MW1	MW2	MW3	MW4	MW5	MW6	MW7
COPPER							
Mean	0.05	0.0284	0.1434	0.0425			
t*	0	–0.9158	0.8156	–0.3577			
tc	4.541	4.541	4.541	4.541			
Significant Change	NO	NO	NO	NO			

	MW1	MW2	MW3	MW4	MW5	MW6	MW7
NICKEL							
Mean	0.205	0.405	0.31	0.1			
t*	3.5913	4.8978	0.9095	–0.0838			
tc	4.541	4.541	4.541	4.541			
Significant Change	NO	YES	NO	NO			

Notes: All analysis in mg/l
t* = Students t statistic
tc = Comparison t statistic
MW4 is upgradient well
N.A. – Zero value

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TABLE 12–7

POST–CLOSURE PART B PERMIT
GROUND WATER MONITORING SUMMARY – YEAR TWO

	MW1	MW2	MW3	MW4	MW5	MW6	MW7
CHROMIUM							
Mean	0.00825	0.003	0.004	0.003	0.00375	0.00775	0.00475
t*	2.2922	N.A.	1	N.A.	1	1.2447	1
tc	4.541	N.A.	4.541	N.A.	4.541	4.541	4.541
Significant Change	NO	NO	NO	NO	NO	NO	NO

	MW1	MW2	MW3	MW4	MW5	MW6	MW7
COPPER							
Mean	0.7925	0.042	0.0593	0.0353	0.0423	0.0993	0.0413
t*	1.0344	–0.3636	0.2961	–0.5467	–0.3755	1.4679	–0.34179
tc	4.541	4.541	4.541	4.541	4.541	4.541	4.541
Significant Change	NO	NO	NO	NO	NO	NO	NO

	MW1	MW2	MW3	MW4	MW5	MW6	MW7
NICKEL							
Mean	0.205	0.4625	0.12	0.1	0.0875	0.5725	0.585
t*	2.0175	8.6159	0.4484	–0.0909	–0.4921	12.3606	16.2535
tc	4.541	4.541	4.541	4.541	4.541	4.541	4.541
Significant Change	NO	YES	NO	NO	NO	YES	YES

Notes: All analysis in mg/l
t* = Students t statistic
tc = Comparison t statistic
MW4 is upgradient well
N.A. – Zero value

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Chromium

- $t^* < t_c$ for all monitoring wells for both years - Significant concentration increase is not indicated.

Copper

- $t^* < t_c$ for all monitoring wells for both years - Significant concentration increase is not indicated.

Nickel

- A negative t^* was found for monitoring well MW5 in year two - No significant difference between monitoring data and background data.
- $t^* < t_c$ for monitoring wells MW1 and MW3 for year one and two - Significant concentration increase is not indicated.
- $t^* > t_c$ for monitoring well MW2 for year one and MW2, MW6 and MW7 for year two - Significant concentration increase is indicated.

In summary the following are the parameters and monitoring wells for which a significant change in concentration is noted:

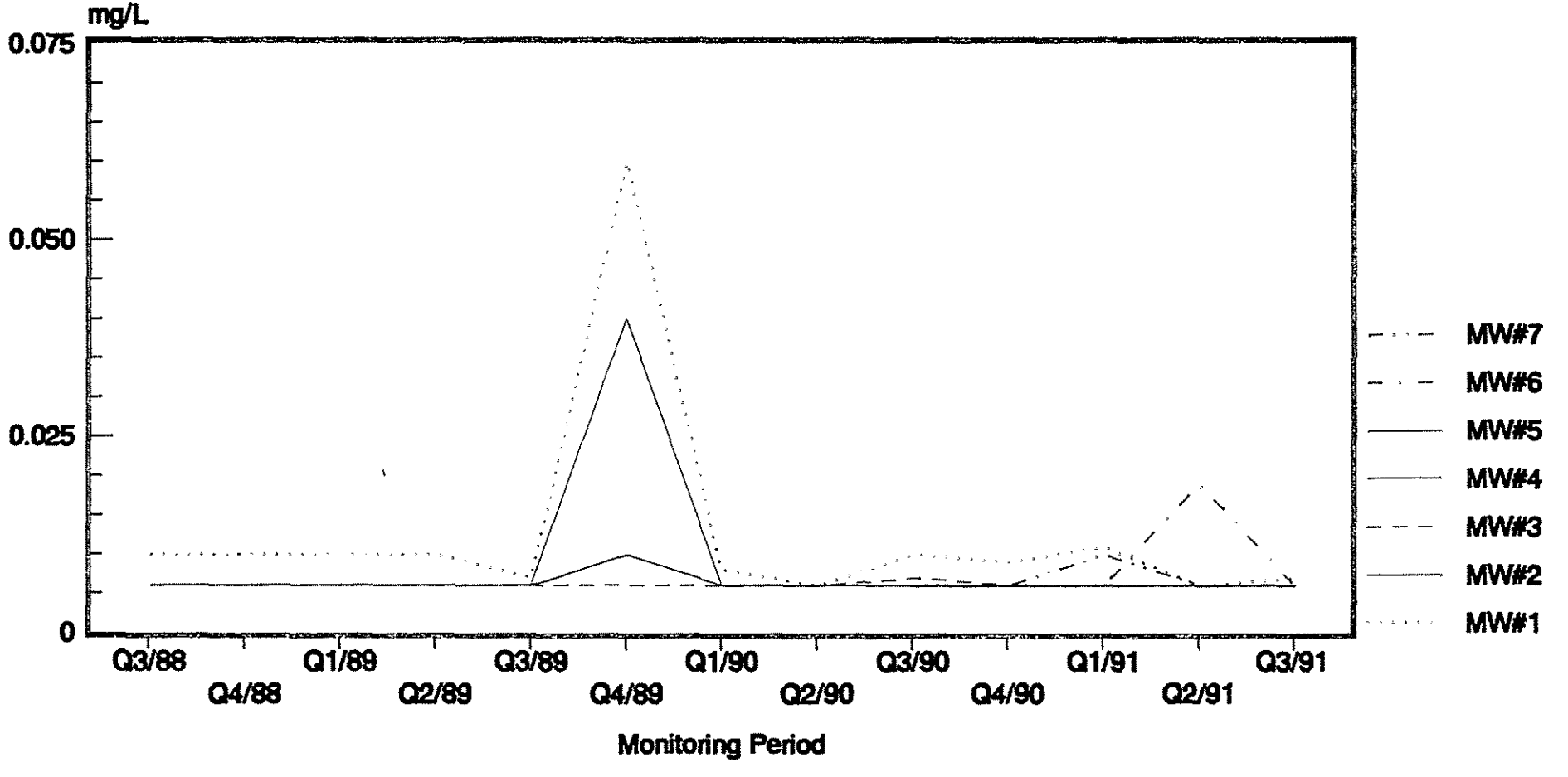
Nickel - MW2, MW6 and MW7

12.3.2 Graphical Analysis

In accordance with Connecticut DEP hazardous waste regulations, the previous three years of ground water monitoring data is presented in graphical form in this section of the permit application. Two types of graphs are presented: Normal line graphs and Trend graphs.

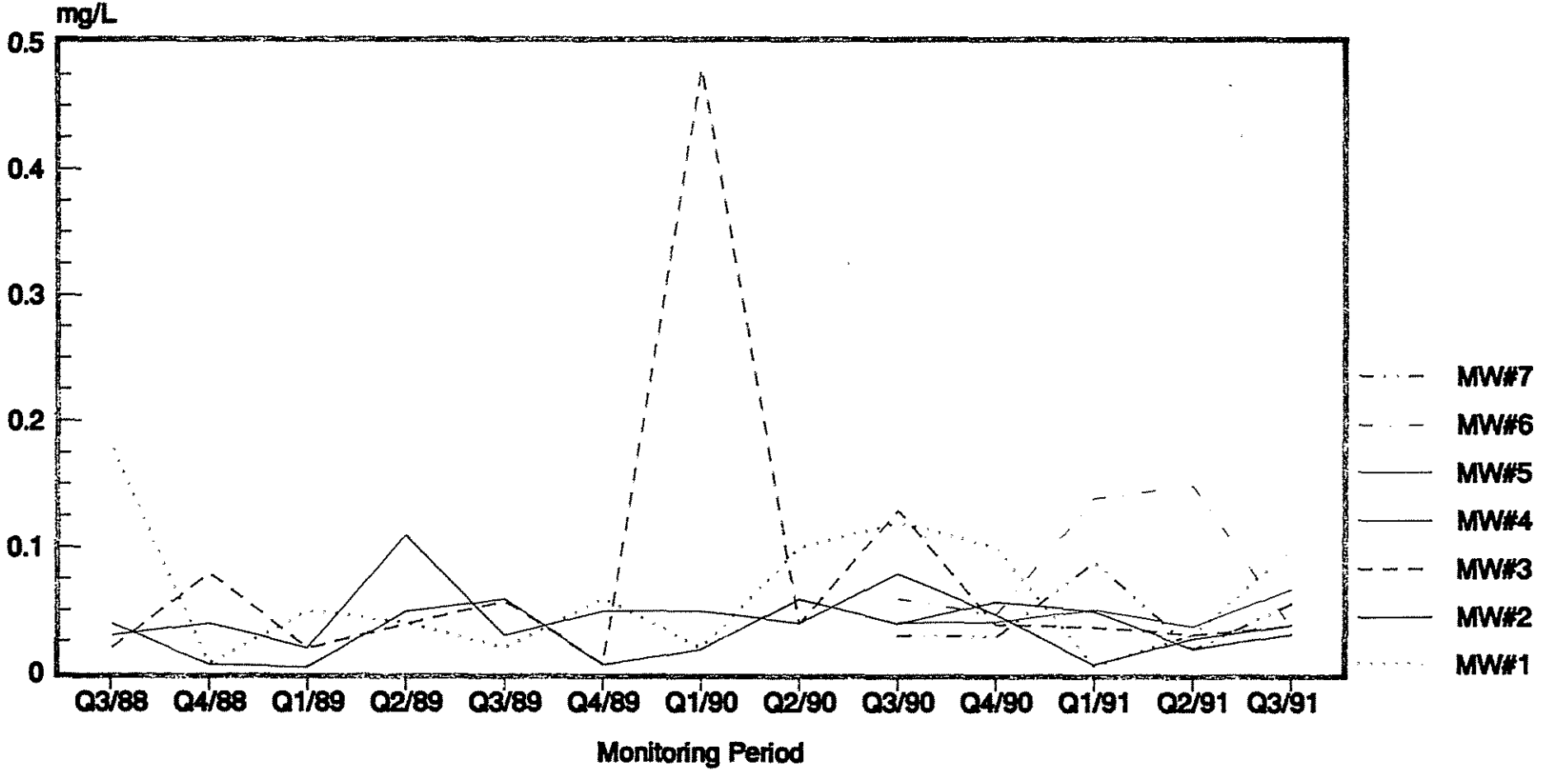
The normal line graphs are shown in Figures 12-1L through 12-7L. The trend graphs are shown in Figures 12-1T through 12-7T.

GAR ELECTROFORMING - DANBURY,CT
GROUND-WATER MONITORING
FIGURE 12-1L - Chromium (mg/l)



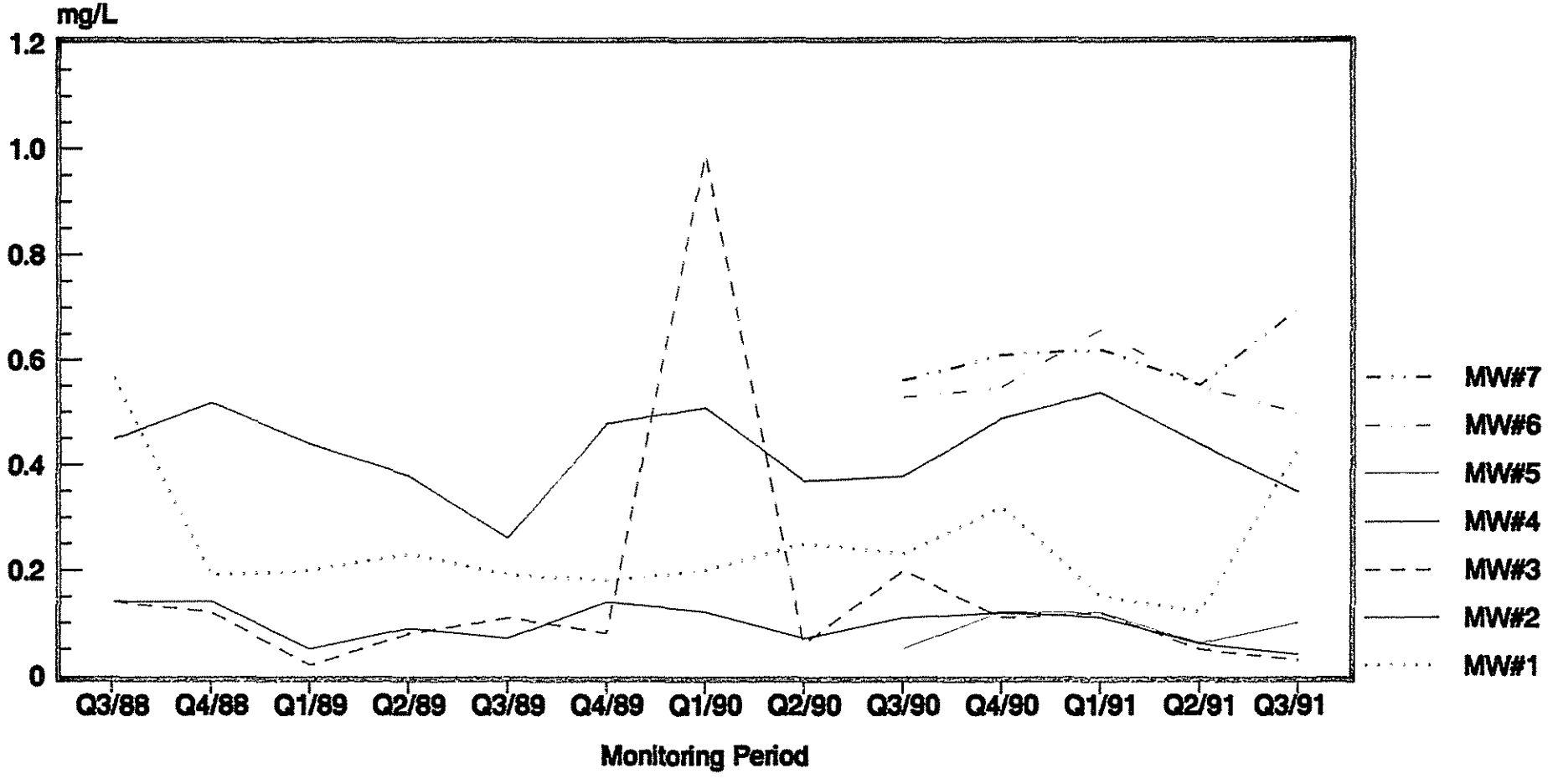
GARCR 11-05-91

GAR ELECTROFORMING – DANBURY,CT
GROUND–WATER MONITORING
FIGURE 12–2L – COPPER (mg/l)



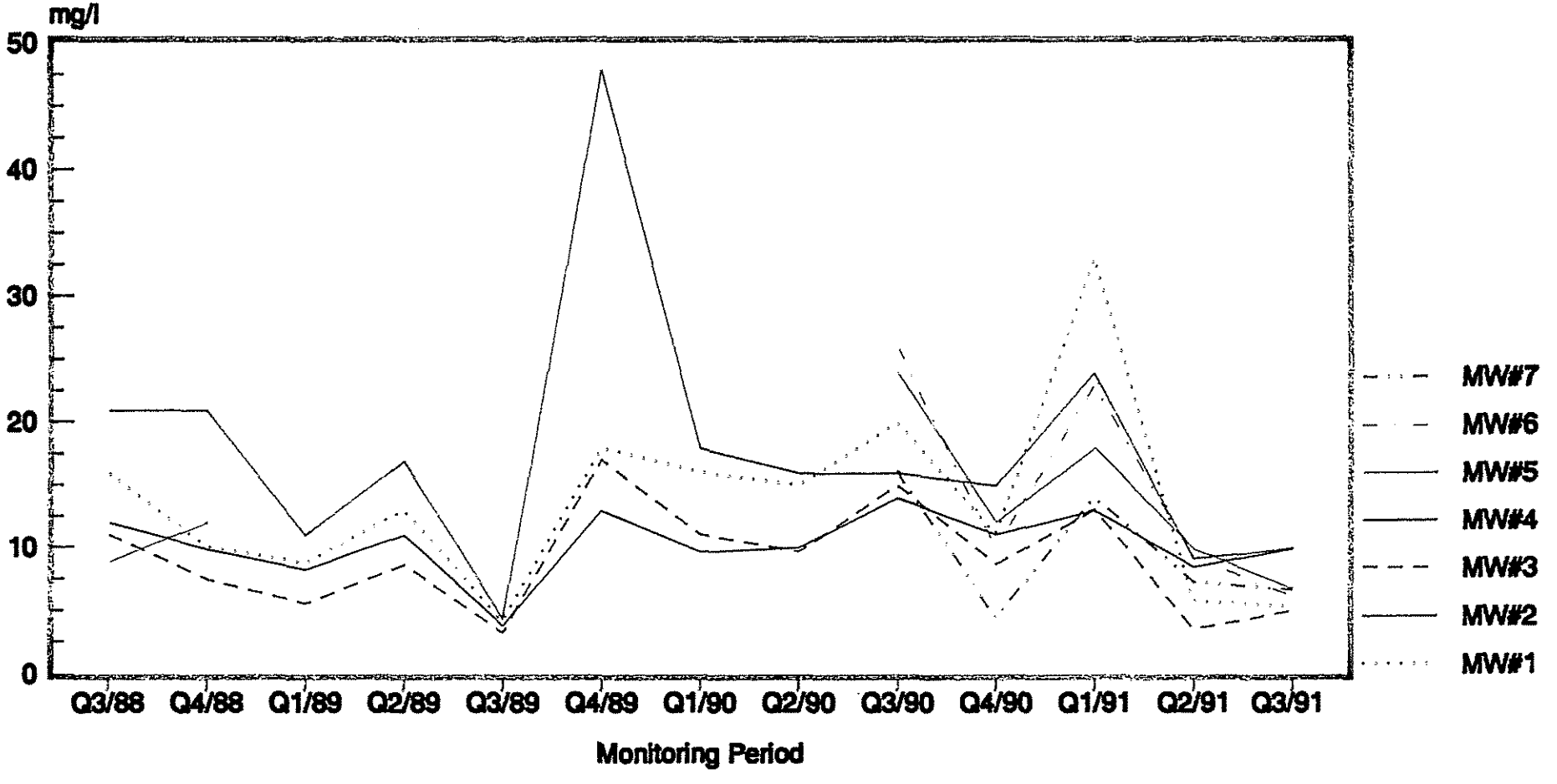
GARCU 11–05–91

GAR ELECTROFORMING - DANBURY,CT
GROUND-WATER MONITORING
FIGURE 12-3L - NICKEL (mg/l)



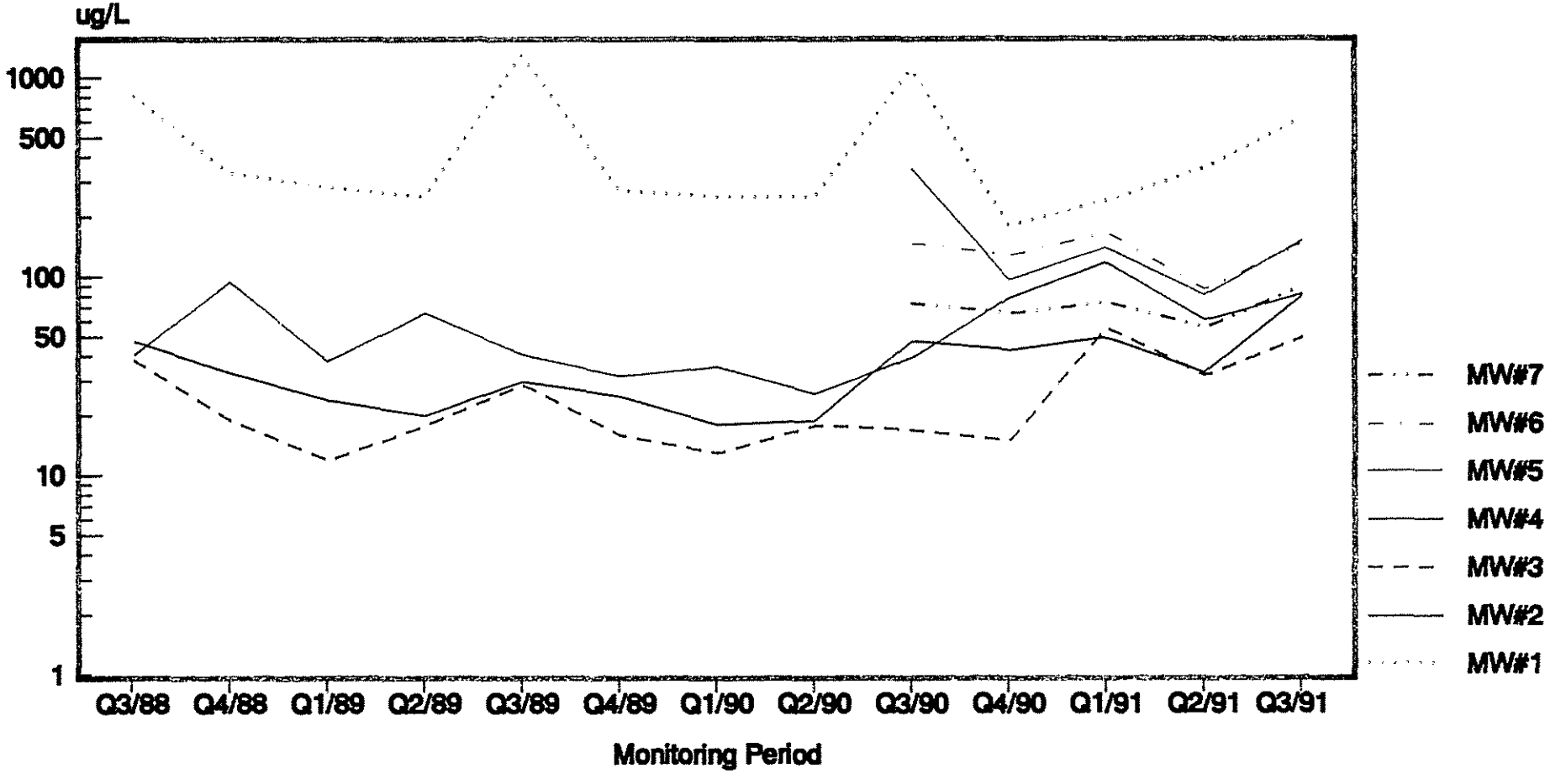
GARNI 11-05-91

GAR ELECTROFORMING - DANBURY,CT
GROUND-WATER MONITORING
FIGURE 12-4L - TOTAL ORGANIC CARBON (mg



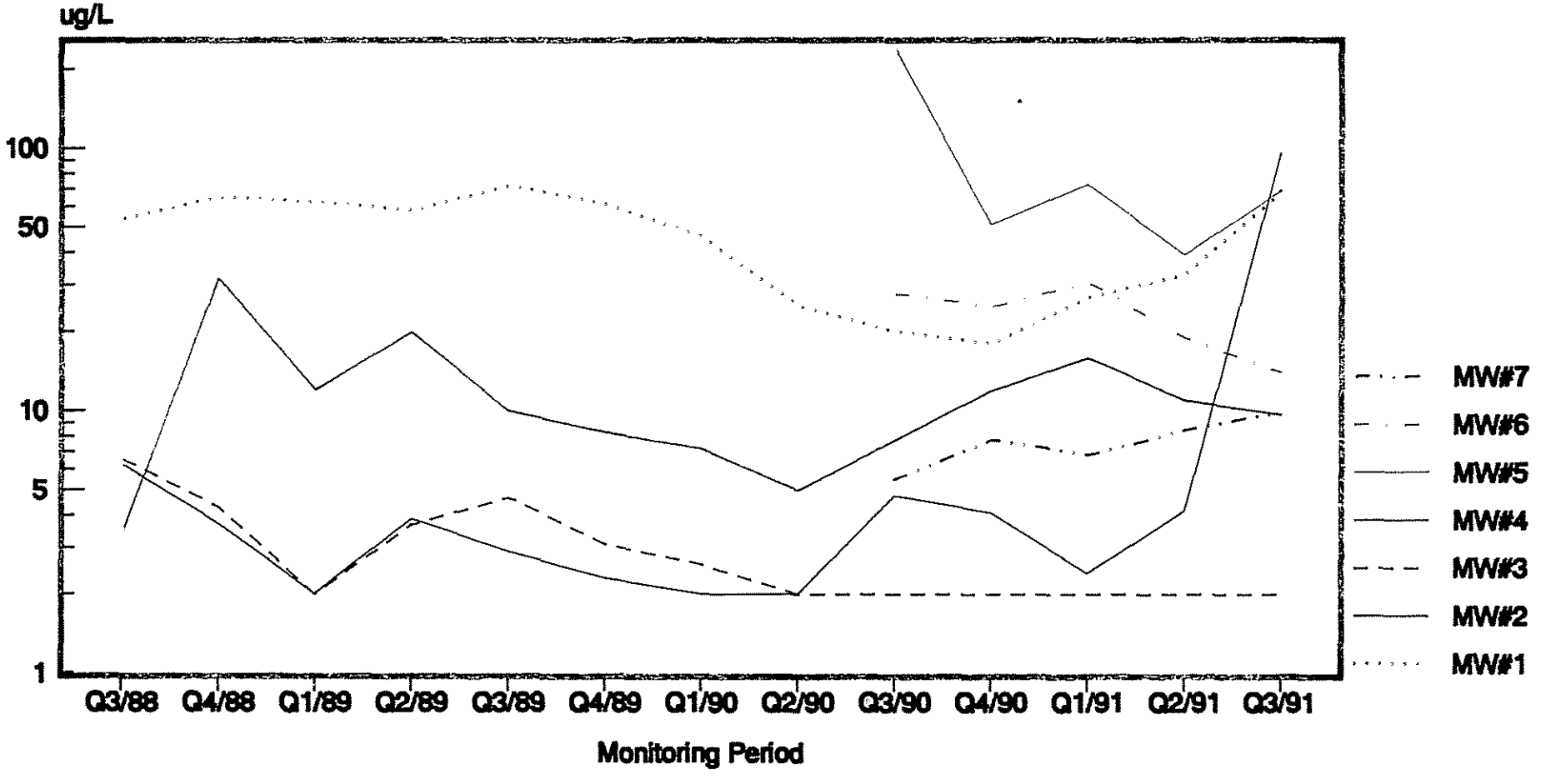
GARTOC 11-05-91

GAR ELECTROFORMING - DANBURY,CT
GROUND-WATER MONITORING
FIGURE 12-5L - TRICHLOROETHYLENE (ug/l)



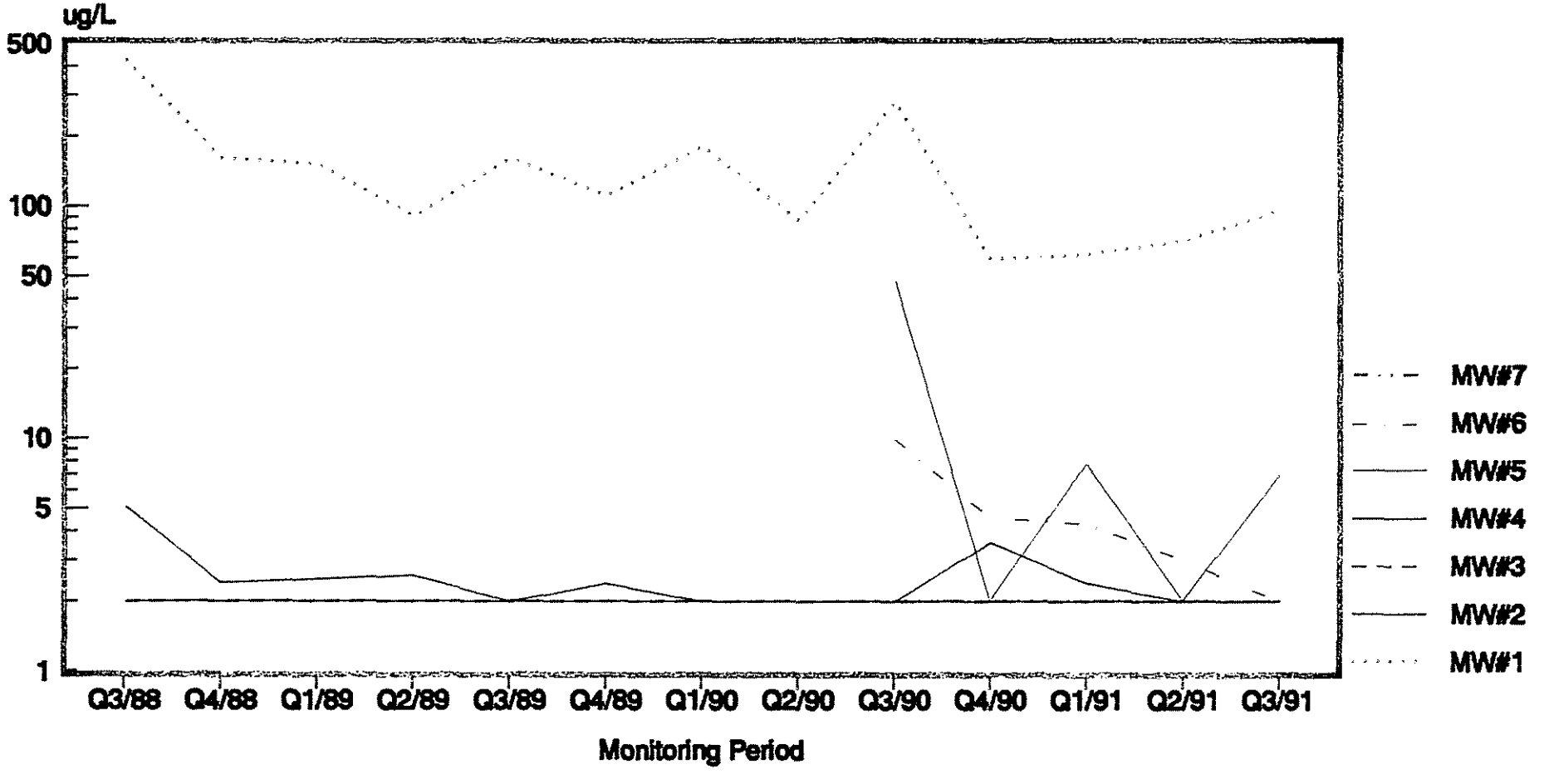
GARTRI 11-06-91

GAR ELECTROFORMING - DANBURY,CT
GROUND-WATER MONITORING
FIGURE 12-6L - Tetrachloroethylene (ug/)



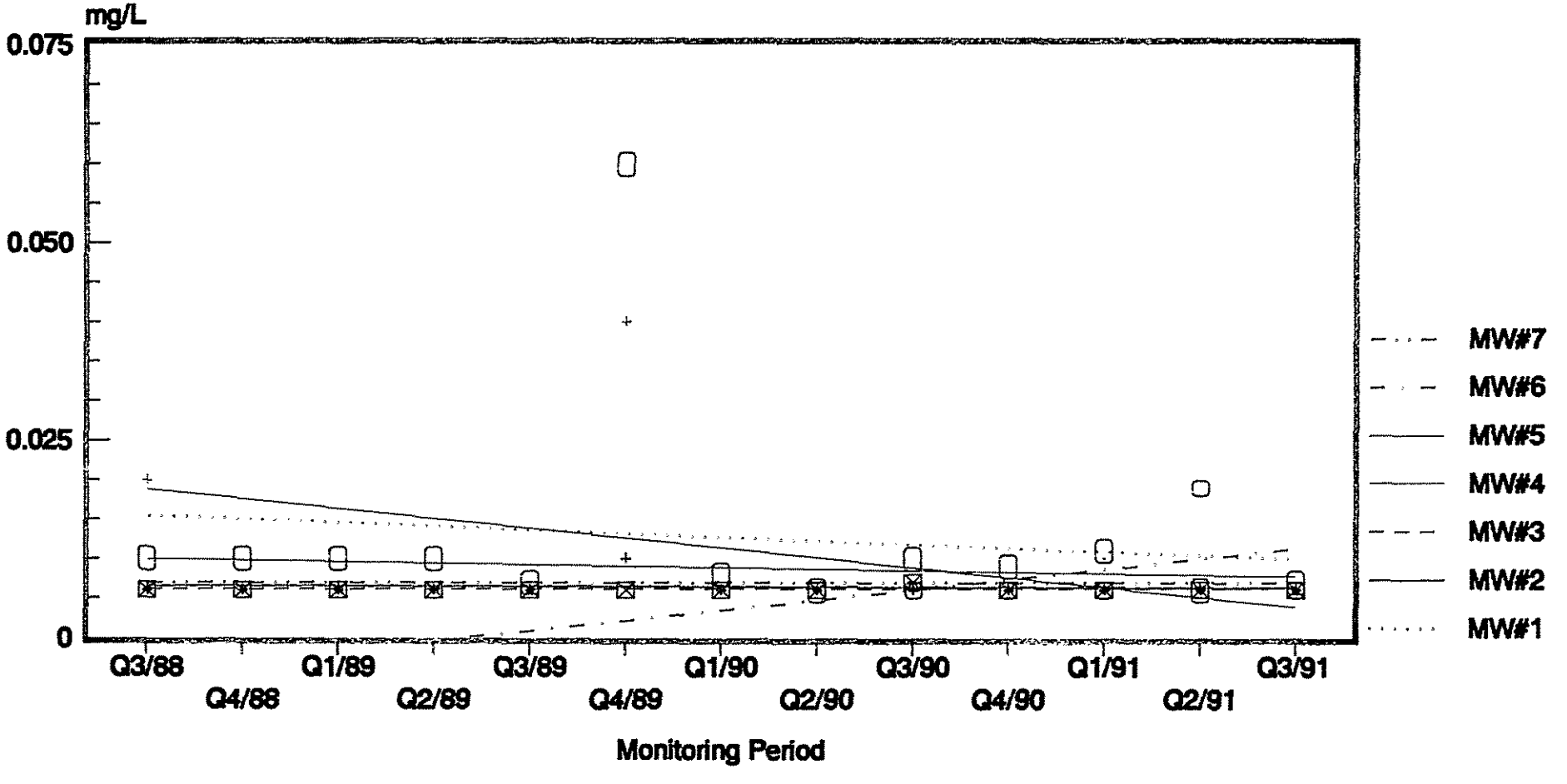
GARTETRA 11-06-91

GAR ELECTROFORMING - DANBURY,CT
GROUND-WATER MONITORING
FIGURE 12-7L -1,1,1-Trichloroethane



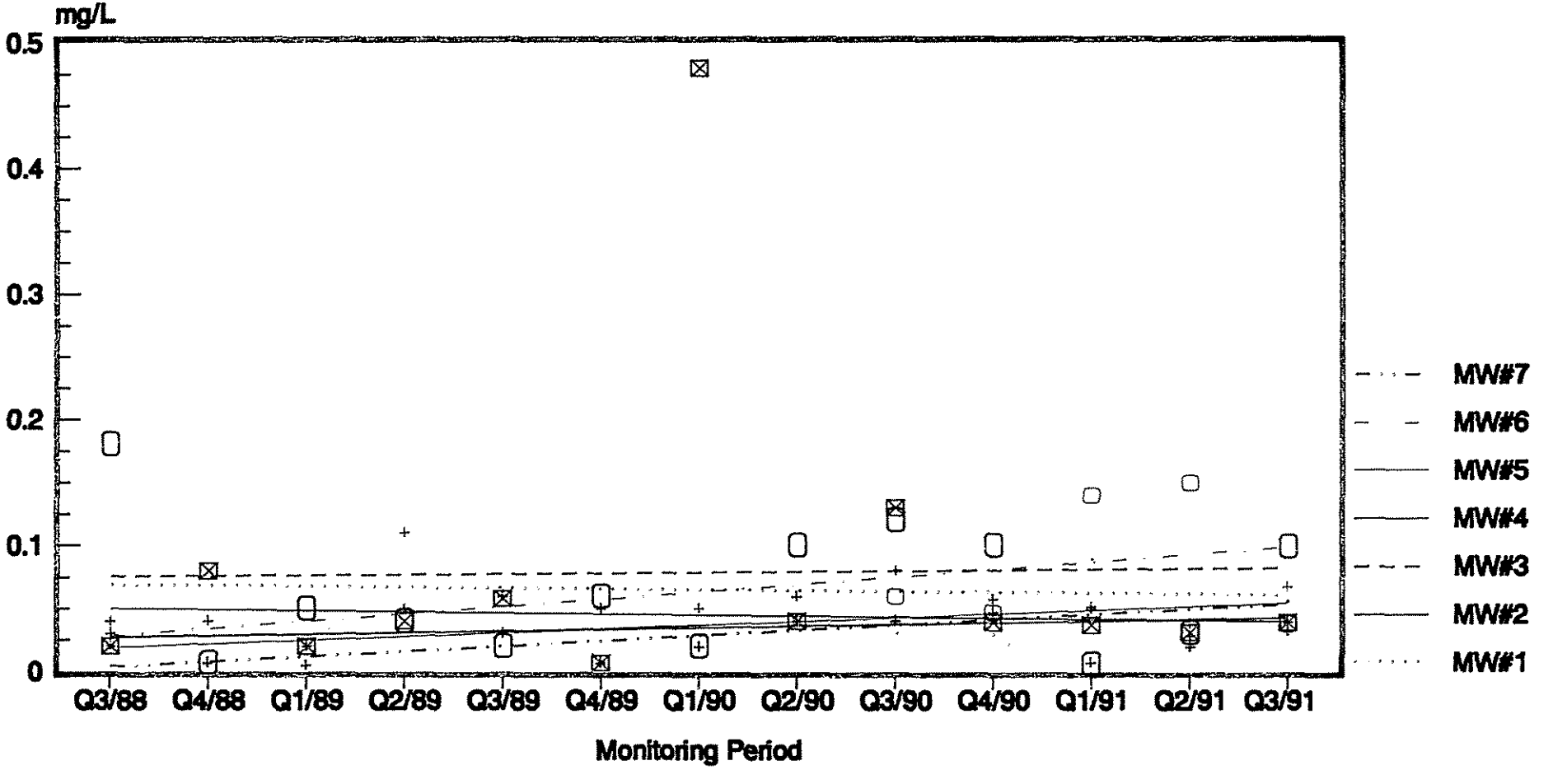
GAR111 11-06-91

GAR ELECTROFORMING - DANBURY,CT
GROUND-WATER MONITORING
FIGURE 12-1T - Chromium (mg/l)



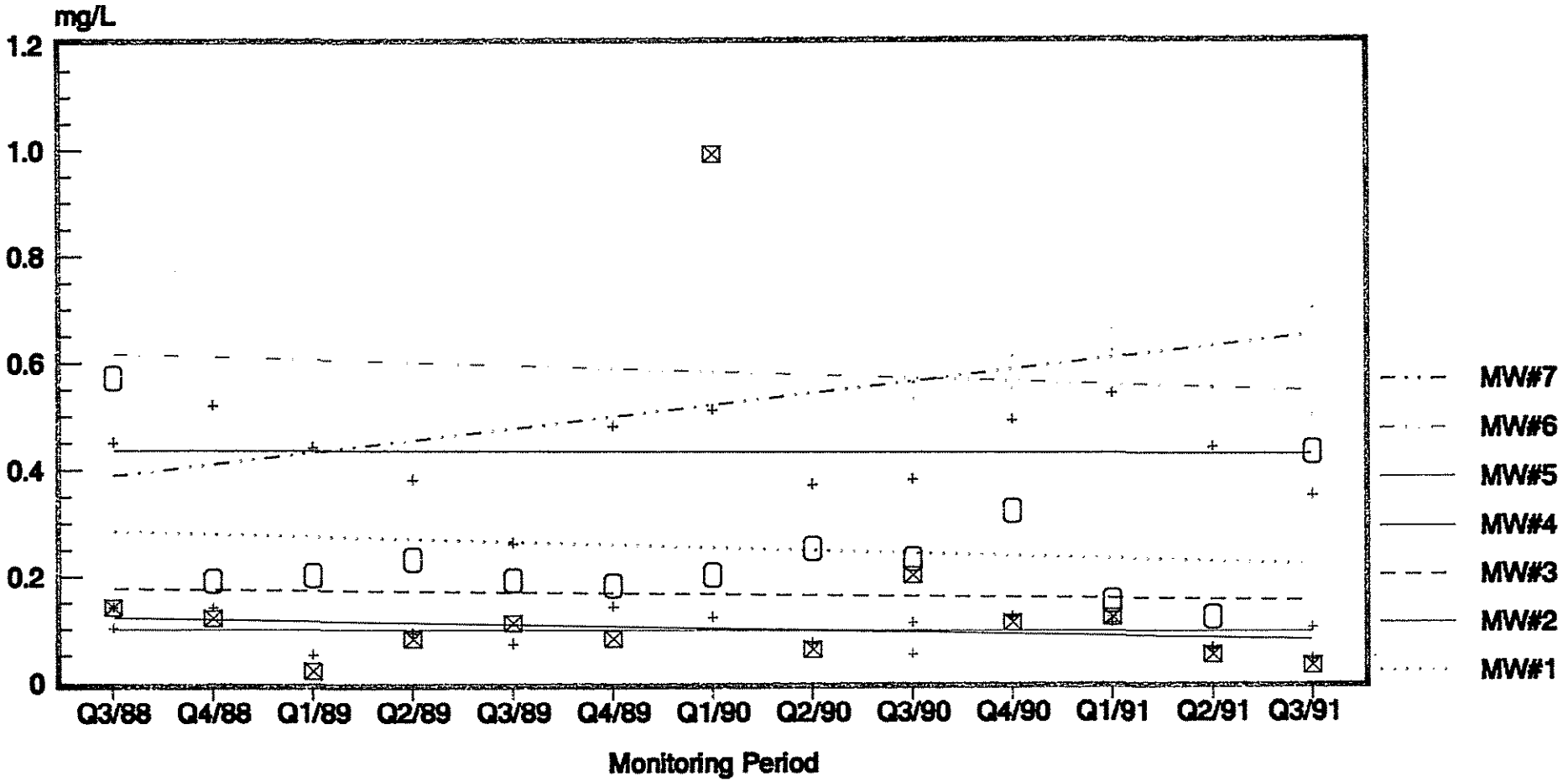
GARCR 11-05-91

GAR ELECTROFORMING - DANBURY,CT
GROUND-WATER MONITORING
FIGURE 12-2T - COPPER (mg/l)



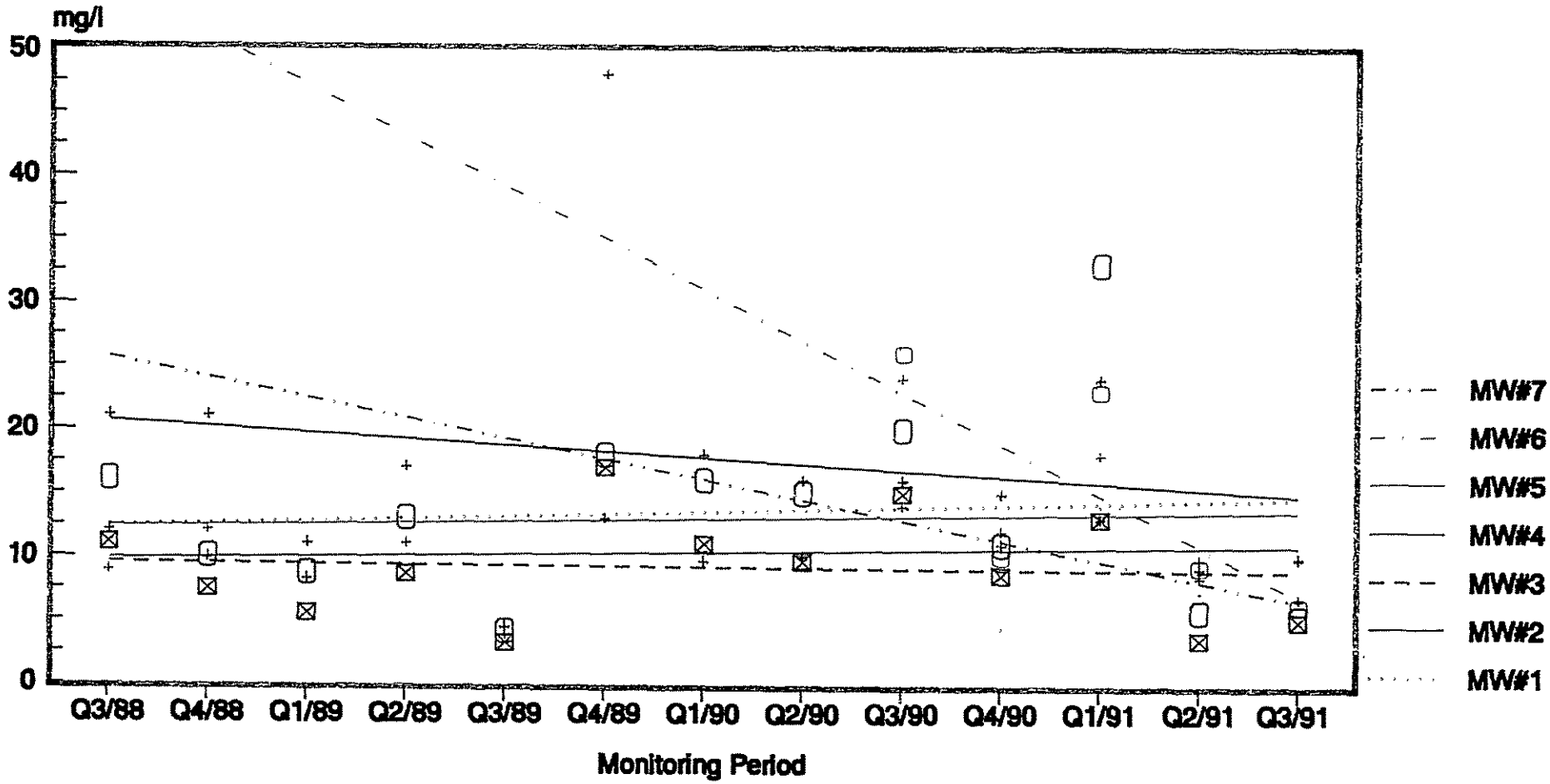
GARCU 11-05-91

GAR ELECTROFORMING - DANBURY,CT
GROUND-WATER MONITORING
FIGURE 12-3T - NICKEL (mg/l)



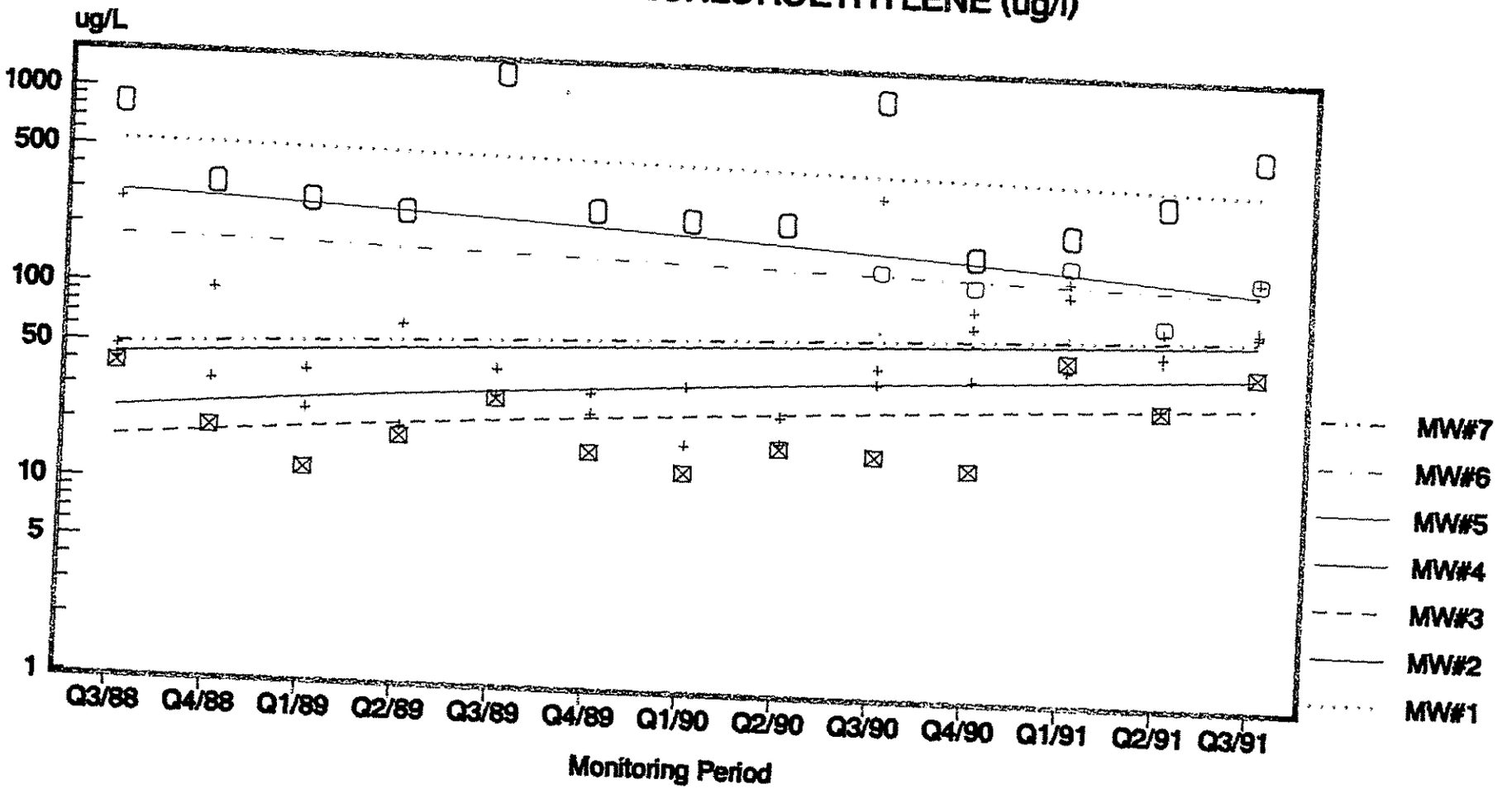
GARNI 11-05-91

GAR ELECTROFORMING - DANBURY,CT
GROUND-WATER MONITORING
FIGURE 12-4T - TOTAL ORGANIC CARBON (mg



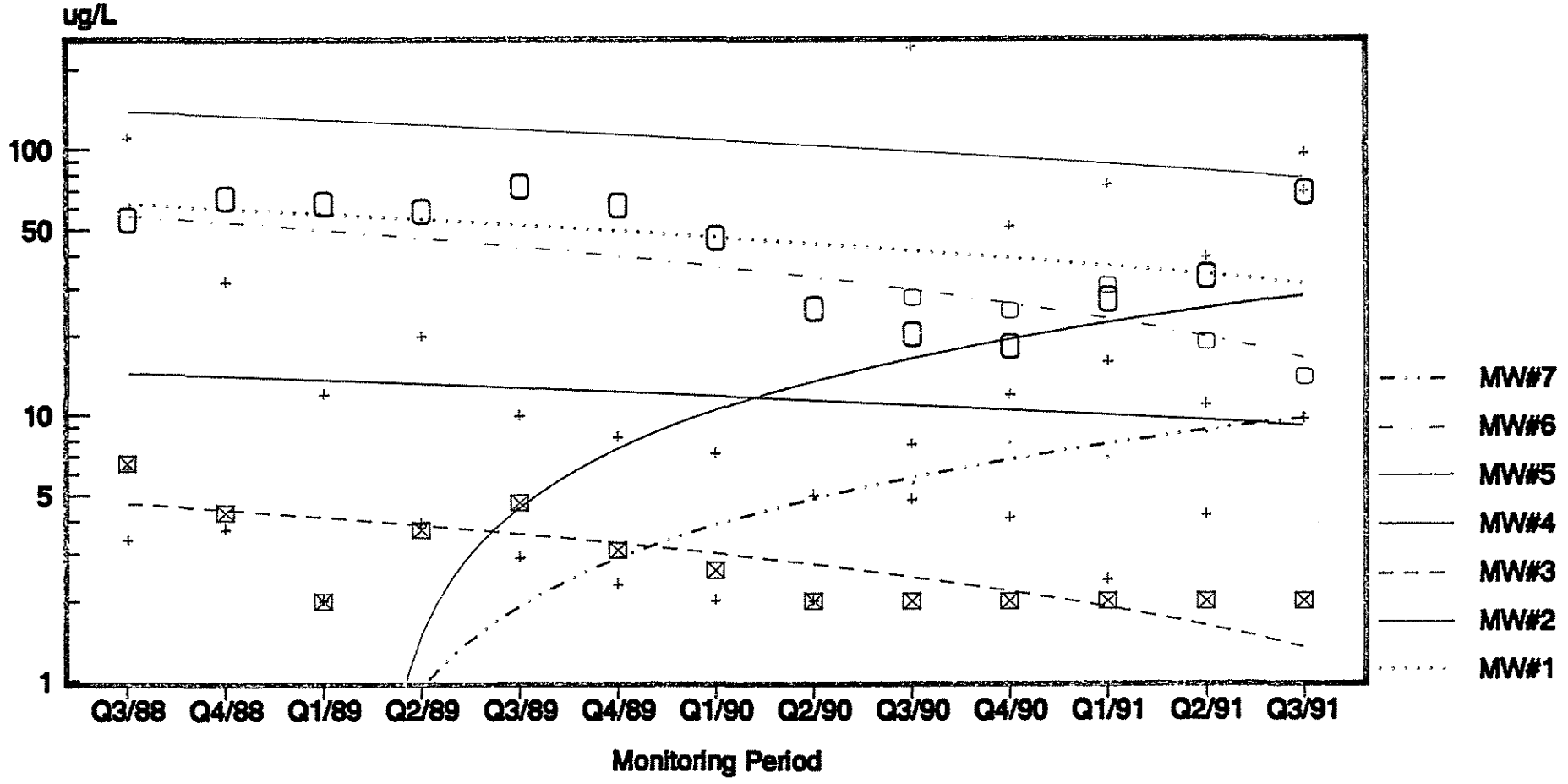
GARTOC 11-05-91

GAR ELECTROFORMING - DANBURY,CT
GROUND-WATER MONITORING
FIGURE 12-5T - TRICHLOROETHYLENE (ug/l)



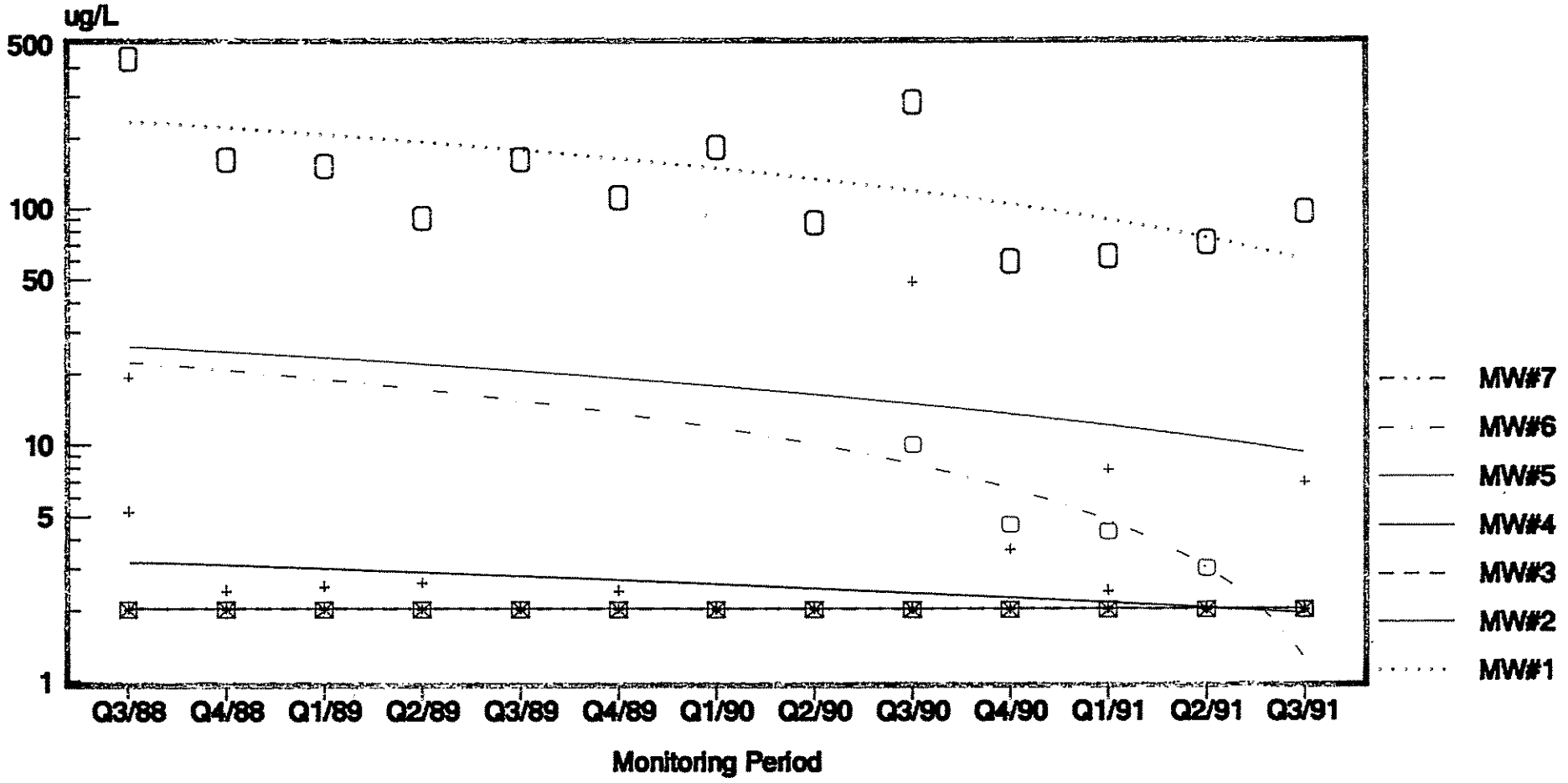
GARTRI 11-06-91

GAR ELECTROFORMING - DANBURY,CT
GROUND-WATER MONITORING
FIGURE 12-6T - Tetrachloroethylene (ug/)



GARTETRA 11-06-91

GAR ELECTROFORMING - DANBURY,CT
GROUND-WATER MONITORING
FIGURE 12-7T -1,1,1-Trichloroethane



GAR111 11-06-91

A review of the trend graphs shows the following significant events:

Chromium - A slightly increasing concentration is shown for Monitoring Well 6. All other wells are either constant or slightly declining.

Copper - Monitoring Wells 5, 6 and 7 show a slight increase. All other wells are constant.

Nickel - Monitoring Well 7 shows an increasing trend. Monitoring Wells 1, 4 and 6 slightly decreasing. All others remain constant.

Total Organic Carbon - Monitoring Wells 4 and 5 show a slight increase. Monitoring Wells 2, 6 and 7 declining.

Trichloroethylene - Monitoring Wells 2, 3, 4 and 7 increasing. Wells 1, 5 and 6 decreasing.

Tetrachloroethylene - Monitoring Wells 4 and 7 increasing. All others decreasing.

1,1,1-Trichloroethane - Monitoring Wells 1, 2, 5 and 6 decreasing. All others constant.

12.4 Comparison With Drinking Water Standards

Table 12-8 is a listing by parameter showing concentrations which exceeded drinking water standards. Of the inorganic parameters, there were no exceedances for copper, one very slight exceedance for chromium and numerous exceedances of the proposed federal MCLG of 0.1 mg/L for nickel. It should be pointed out, however, that none of the concentrations exceeded the Connecticut DEP guideline of 1.0 mg/L for nickel.

Several exceedances of federal drinking water criteria and state action levels did, however, occur for organic parameters. These exceedances are also summarized in Table 12-8. As can quickly be seen in this table, trichloroethylene (TCE) is the primary organic of concern at this site, with MCL exceedances occurring in all wells every quarter. This also strongly implies that the volatile organic contamination at this site is not associated with the lagoons and is indicative of a much larger problem. Tetrachloroethylene is also a significant constituent.

GAR ELECTROFORMING

Danbury, CT

TABLE 12-8

Ground Water Monitoring

Values Exceeding Drinking Water Standards

Parameter	MCL (mg/L)	MCLG (mg/L)	Monitoring Well Data		
			Well No.	Sample Date	Result
Chromium	0.05[1]	0.1	1	12/19/89	0.06
Copper	1.0[3]	1.3[4]		None > MCLG	
Nickel	1.0[3]	0.1[2]	1	13 of 13 Values >0.1	
			2	13 of 13 Values >0.1	
			3	7 of 13 Values >0.1	
			4	7 of 13 Values >0.1	
			5	4 of 6 Values >0.1	
			6	5 of 5 Values >0.1	
			7	5 of 5 Values >0.1	
Total Organic Carbon	N.A.	N.A.			
Trichloroethylene	5 µg/L	-	1	13 of 13 Values >5	
			2	12 of 13 Values >5	
			3	12 of 13 Values >5	
			4	12 of 13 Values >5	
			5	6 of 6 Values >5	
			6	5 of 5 Values >5	
			7	4 of 5 Values >5	
Tetrachloroethylene	5 µg/L	-	1	13 of 13 Values >5	
			2	11 of 13 Values >5	
			3	1 of 13 Values >5	
			4	1 of 13 Values >5	
			5	6 of 6 Values >5	
			6	5 of 5 Values >5	
			7	5 of 5 Values >5	
1,1,1-Trichloroethane	200 µg/L	-	1	2 of 13 Values >200	

Notes: [1] Effective until 7/30/92.

[2] Proposed. Federal Register, July 25, 1990.

[3] Connecticut DEP Standard.

[4] EPA Recommended Maximum Containminant Level (RMCL)

MCL = Maximum Contaminatn Level

MCLG = Maximum Contaminant Level Goal

12.5 Plume Delineation

Section 40 CFR 270.14(c)(4.) of the hazardous waste regulations requires information describing any plume of contamination that has entered the ground water from a regulated unit. As previously discussed, the principle parameter of concern with respect to ground water contamination is nickel. In order to determine the nickel plume a series of ground water concentration contour intervals were constructed. Figures 12-2 through 12-5 are the intervals for the last four sampling events. It can be seen that the contour intervals of highest concentration are located to the north of the regulated units (former lagoons). It would appear that this plume has migrated off-site. However, there is insufficient data to determine the plume's extent as there are no monitoring wells located off-site.

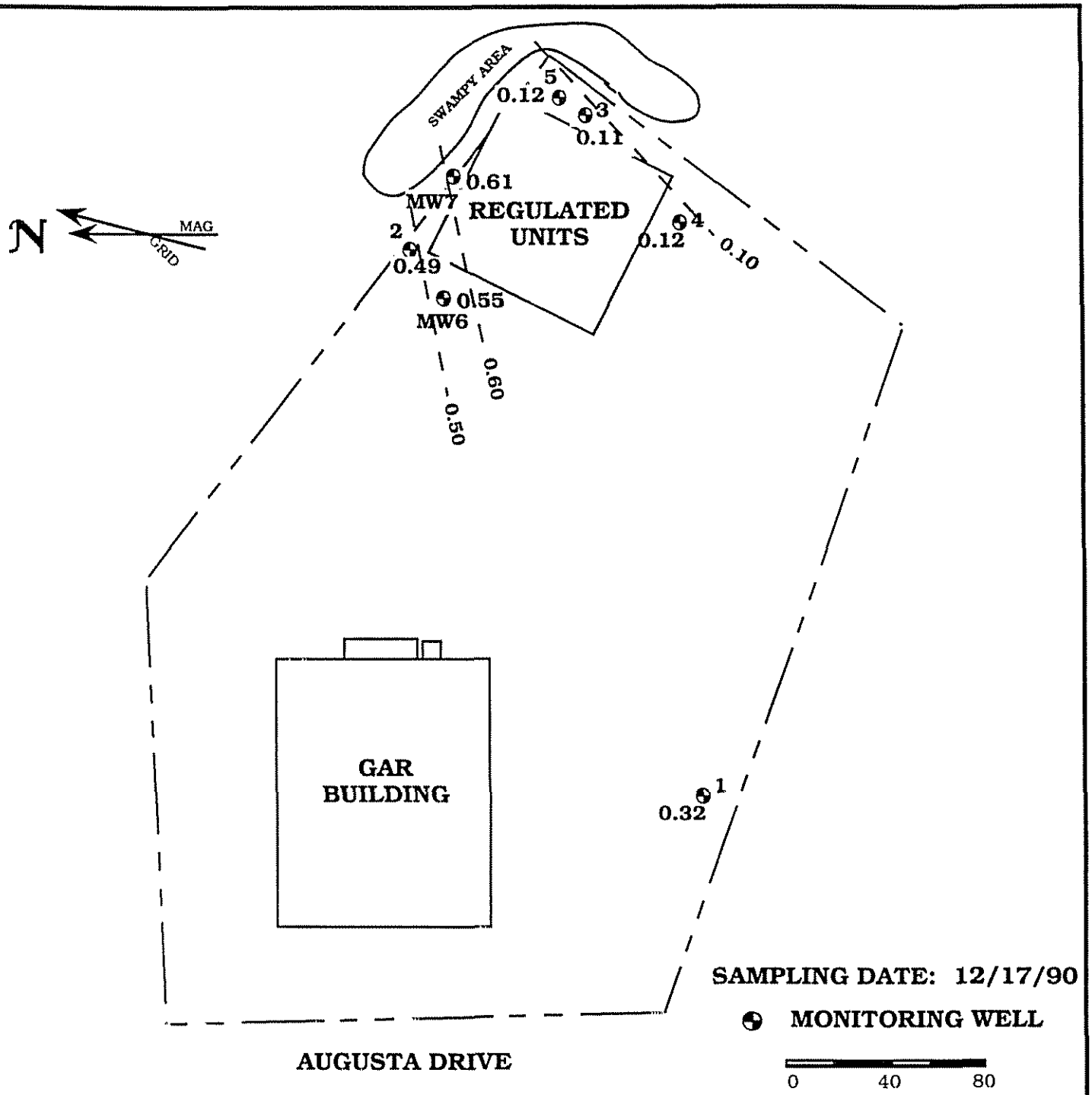
12.6 Point of Compliance

The point of compliance is a vertical surface located at the hydraulically downgradient limit of the waste management area that extends down into the uppermost aquifer underlying the regulated units.

Using this definition and the knowledge that the ground water flow, although somewhat variable, is toward the east-northeast, would place the GAR point of compliance at the east-northeast section of property line at the regulated units.

12.7 Ground Water Flow Direction

Ground water flow direction was determined by measuring the ground water elevation in each well and graphically analyzing the data. Table 12-12 presents a matrix of ground water elevations for each well for each of the four previous sampling events. Figures 12-6 through 12-9 provide the associated ground water contour maps generated from these data.



TITLE				
GROUNDWATER MONITORING NICKEL CONCENTRATION INTERVAL				
CLIENT GAR ELECTROFORMING				
DRAWN	DATE	PROJECT NO.	DRAWING NO.	REV.
JLL	10/91	110813.201	FIG12-2	

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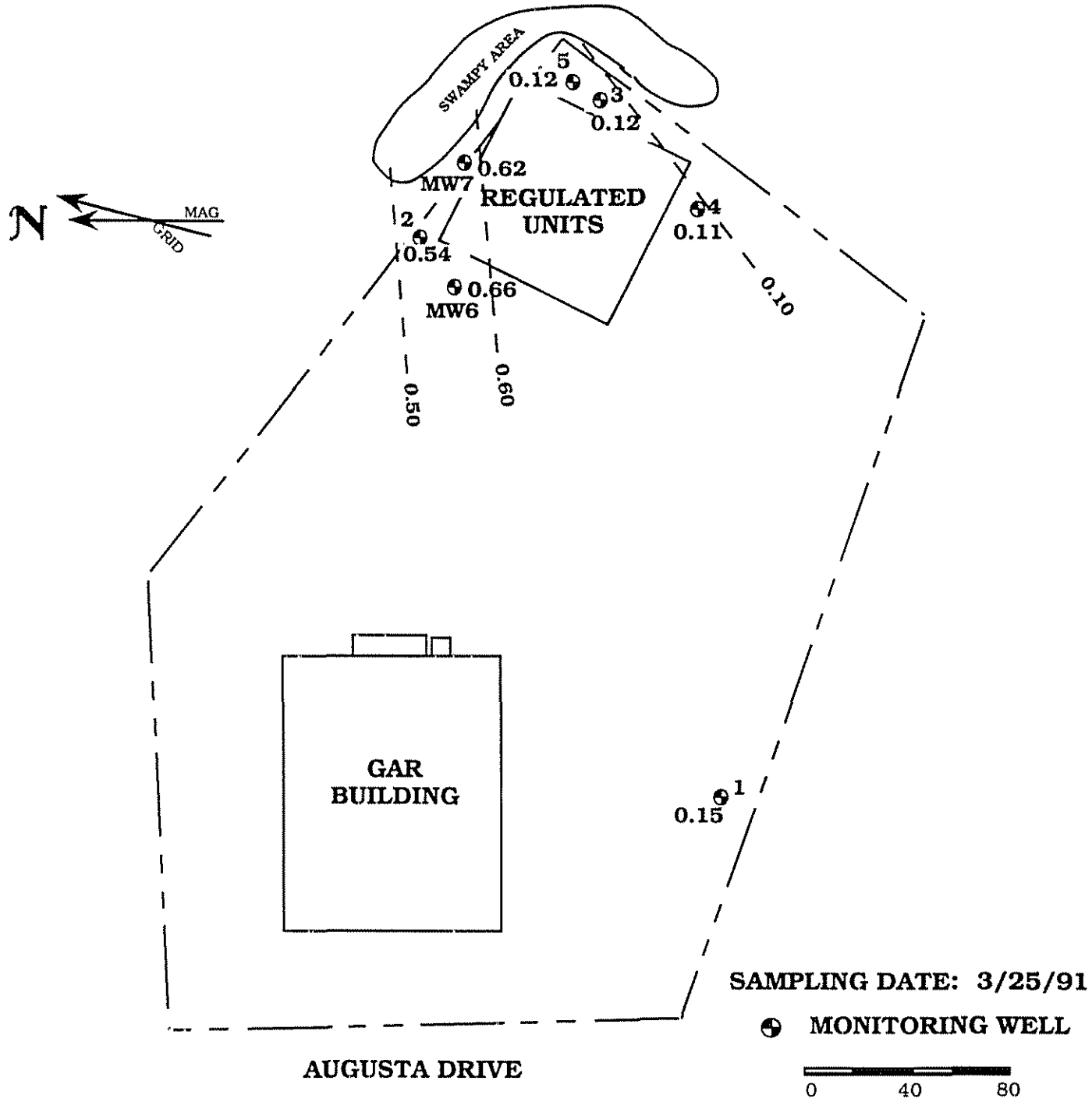

TITLE				
GROUNDWATER MONITORING NICKEL CONCENTRATION INTERVAL				
CLIENT				
GAR ELECTROFORMING				
DRAWN	DATE	PROJECT NO.	DRAWING NO.	REV.
JLL	10/91	110813.201	FIG12-3	

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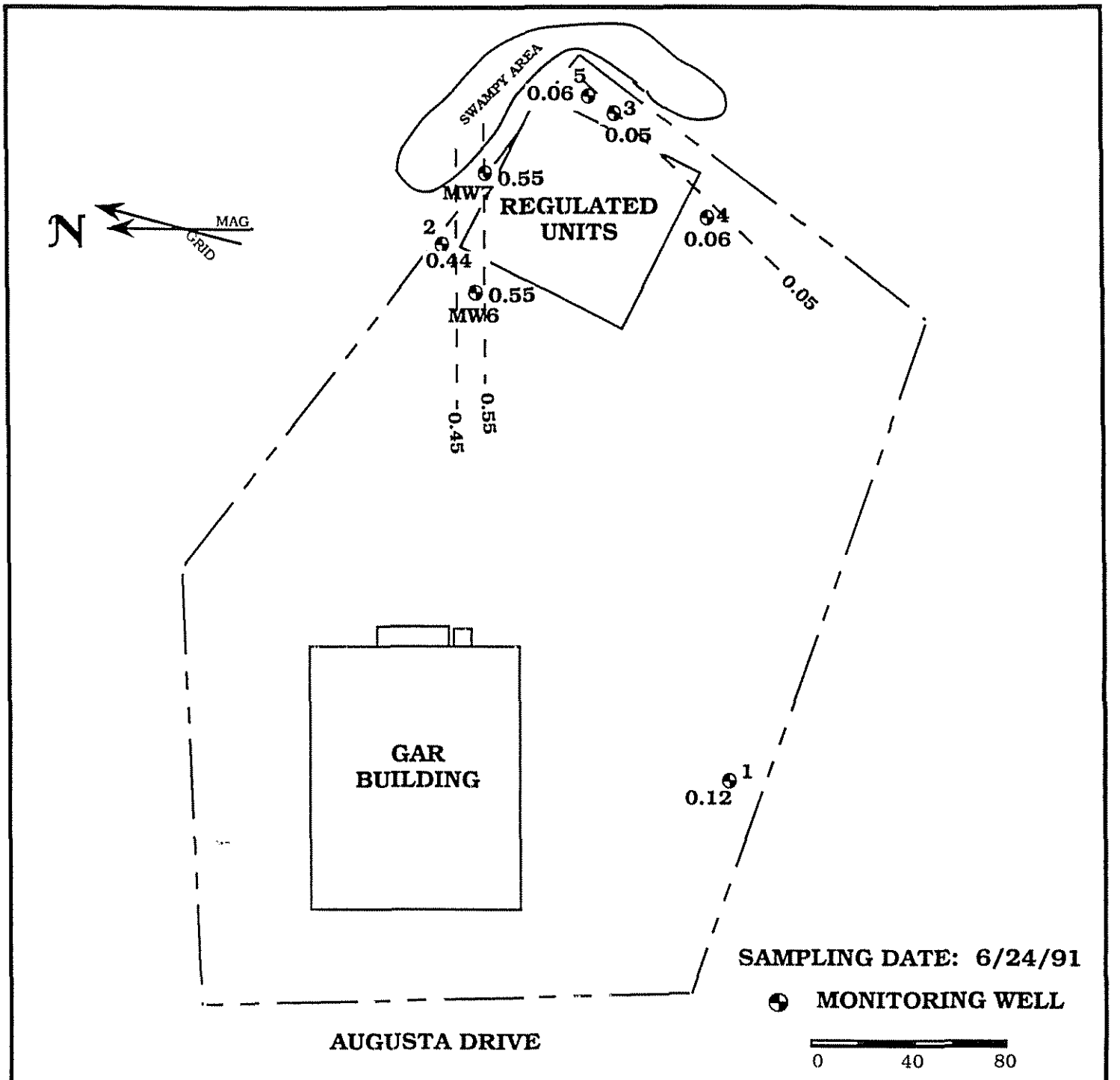

TITLE				
GROUNDWATER MONITORING NICKEL CONCENTRATION INTERVAL				
CLIENT				
GAR ELECTROFORMING				
DRAWN	DATE	PROJECT NO.	DRAWING NO.	REV.
JLL	10/91	110813.201	FIG12-4	

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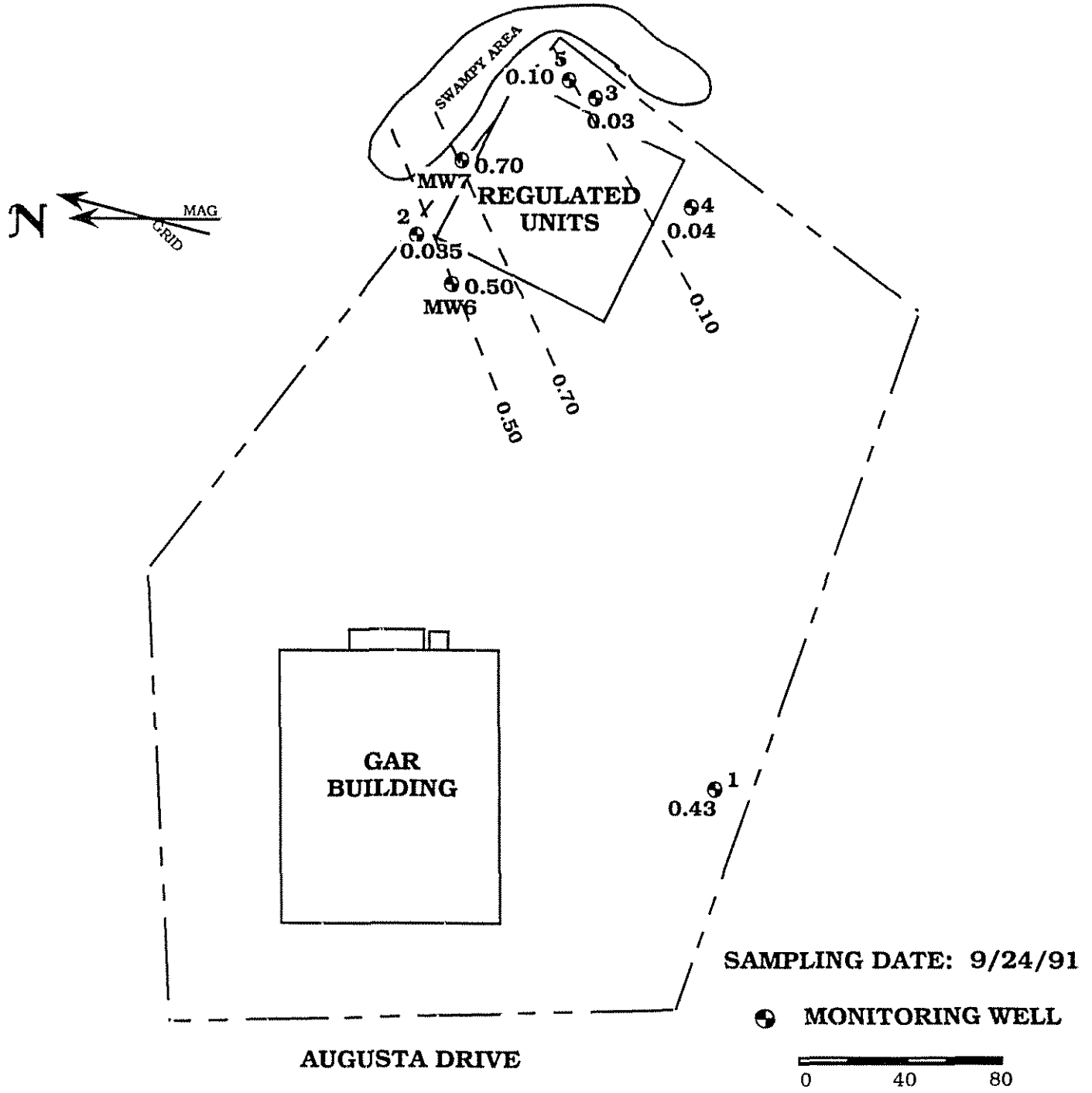

TITLE				
GROUNDWATER MONITORING NICKEL CONCENTRATION INTERVAL				
CLIENT				
GAR ELECTROFORMING				
DRAWN	DATE	PROJECT NO.	DRAWING NO.	REV.
JLL	10/91	110813.201	FIG12-5	

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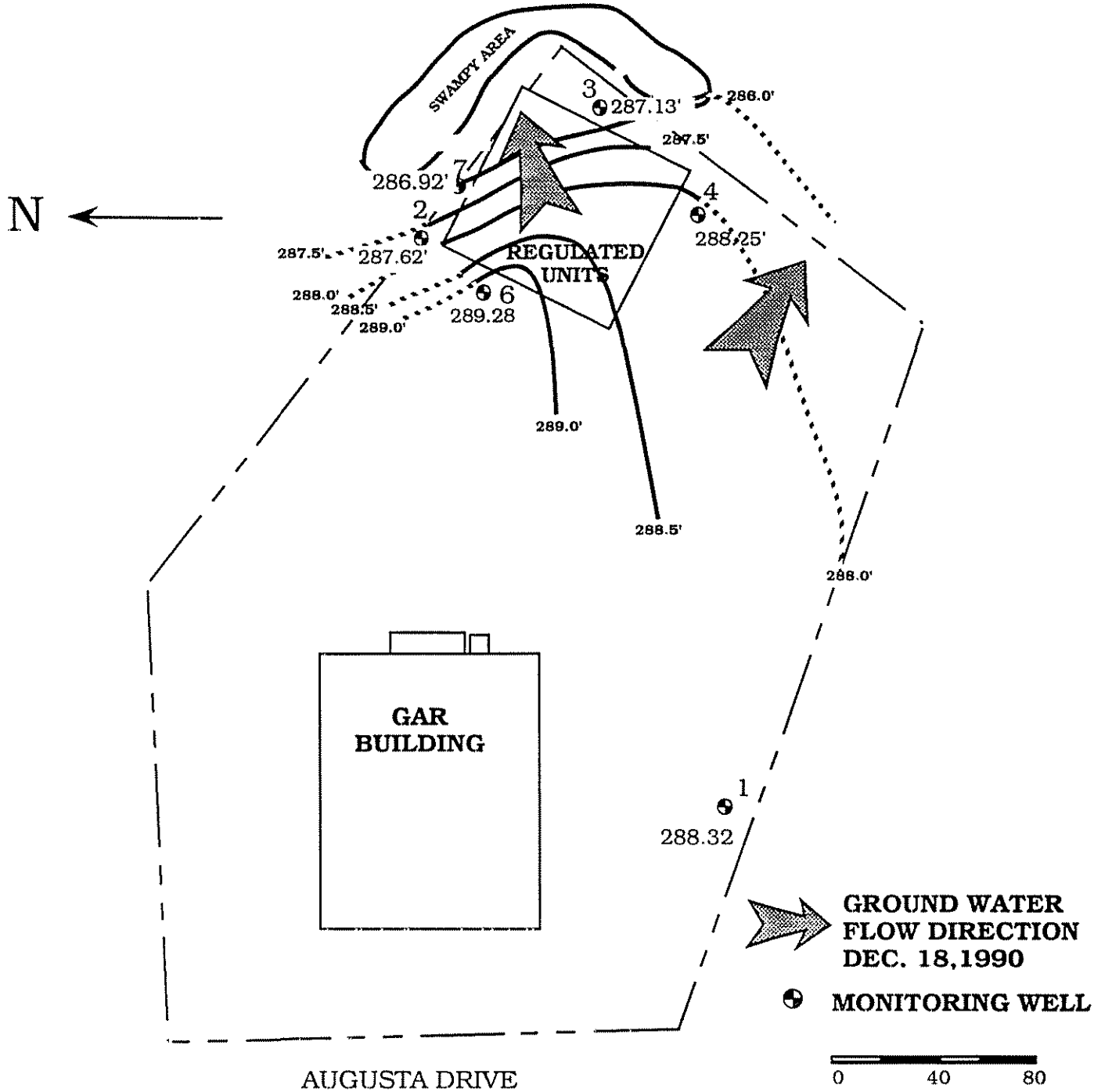
TABLE 12-9
SHALLOW GROUND WATER ELEVATIONS
(MSL FEET)

Well	12/17/90	3/25/91	6/24/91	9/24/91
1	288.37	288.12	286.87	286.72
2	287.62	287.87	286.46	286.46
3	288.08	288.08	286.58	286.67
4	288.25	288.20	286.50	286.67
5*	288.09	287.99	286.76	286.84
6	289.27	288.02	286.62	286.62
7	286.92	287.84	286.42	286.50

*Note: Well MW5 is deeper than all other wells and monitors a different zone. Consequently it is not used in developing gradient maps.



NOTE: Due to the deeper ground water monitored by Well 5, its ground water elevation has not been used to elevate flow direction.

TITLE SHALLOW GROUND WATER CONTOURS				
CLIENT GAR ELECTROFORMING				
DRAWN HLJ	DATE 1/91	PROJECT NO. 100724.001	DRAWING NO. FIG. 12-6	REV. 1

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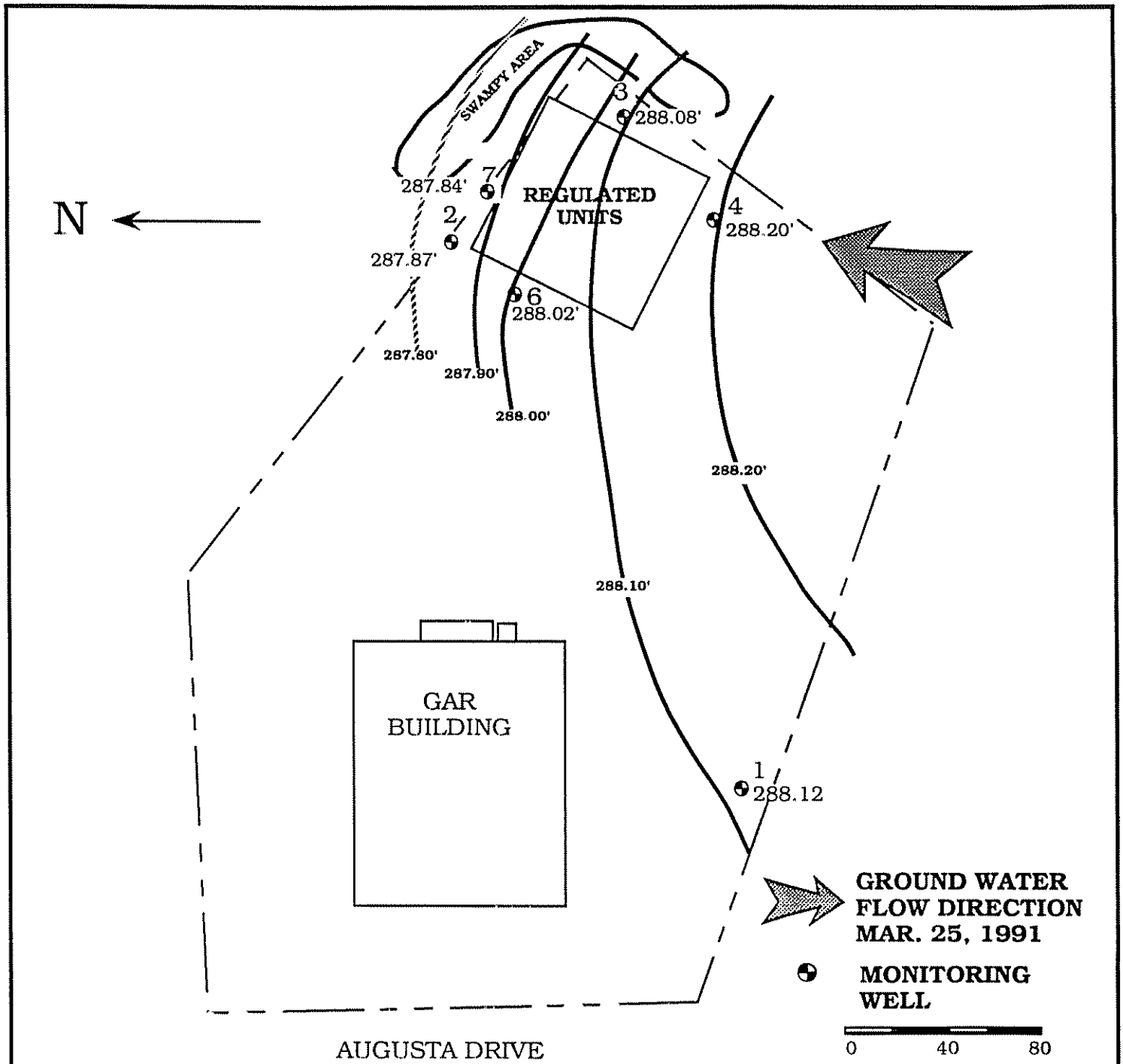

TITLE SHALLOW GROUND WATER CONTOURS				
CLIENT GAR ELECTROFORMING				
DRAWN HLJ	DATE 4/91	PROJECT NO. 100724.001	DRAWING NO. FIG.12-7	REV. 1

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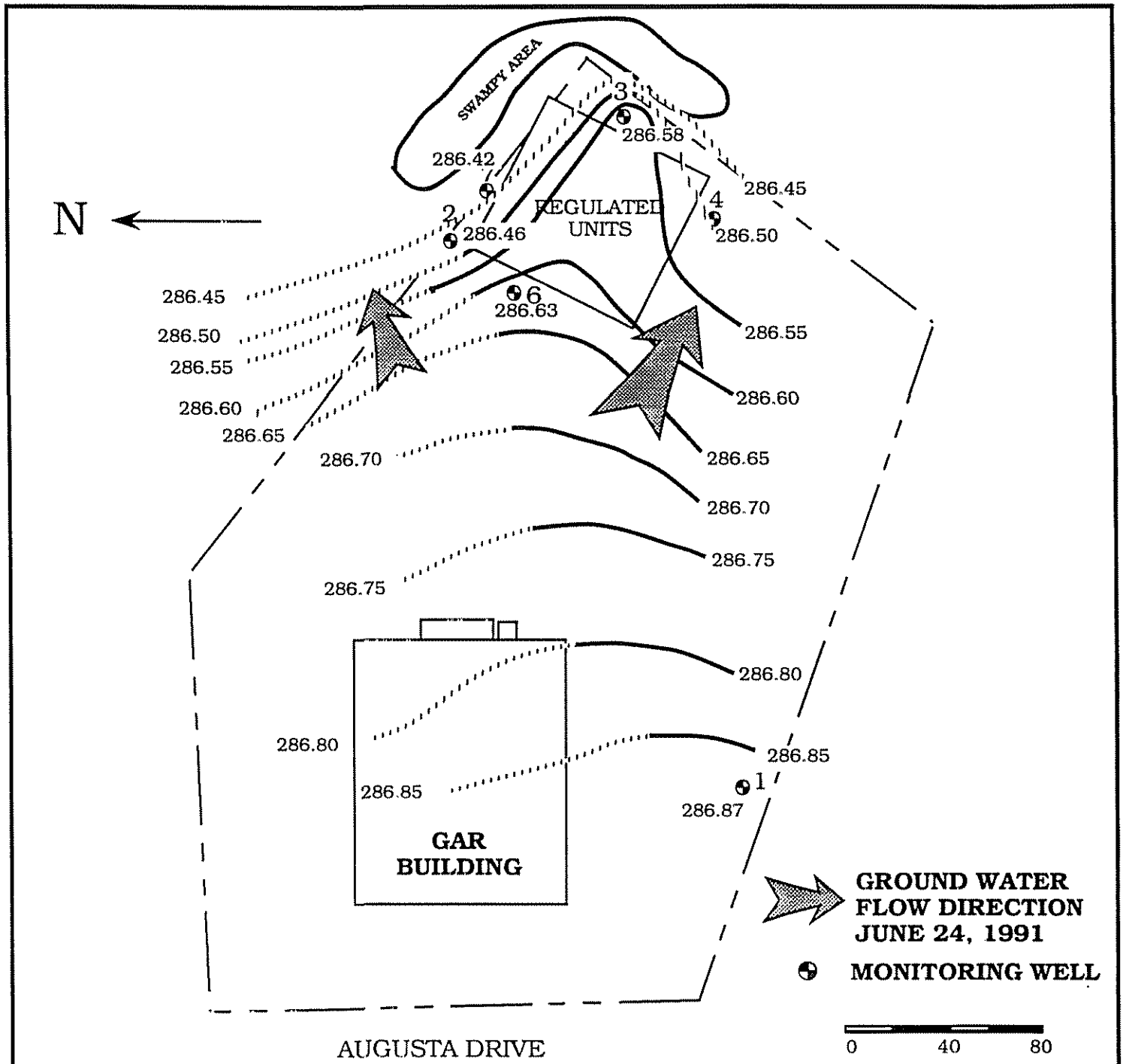

TITLE SHALLOW GROUND WATER CONTOURS				
CLIENT GAR ELECTROFORMING				
DRAWN HLJ	DATE 7/91	PROJECT NO. 100724.001	DRAWING NO. FIG. 12-8	REV. 0

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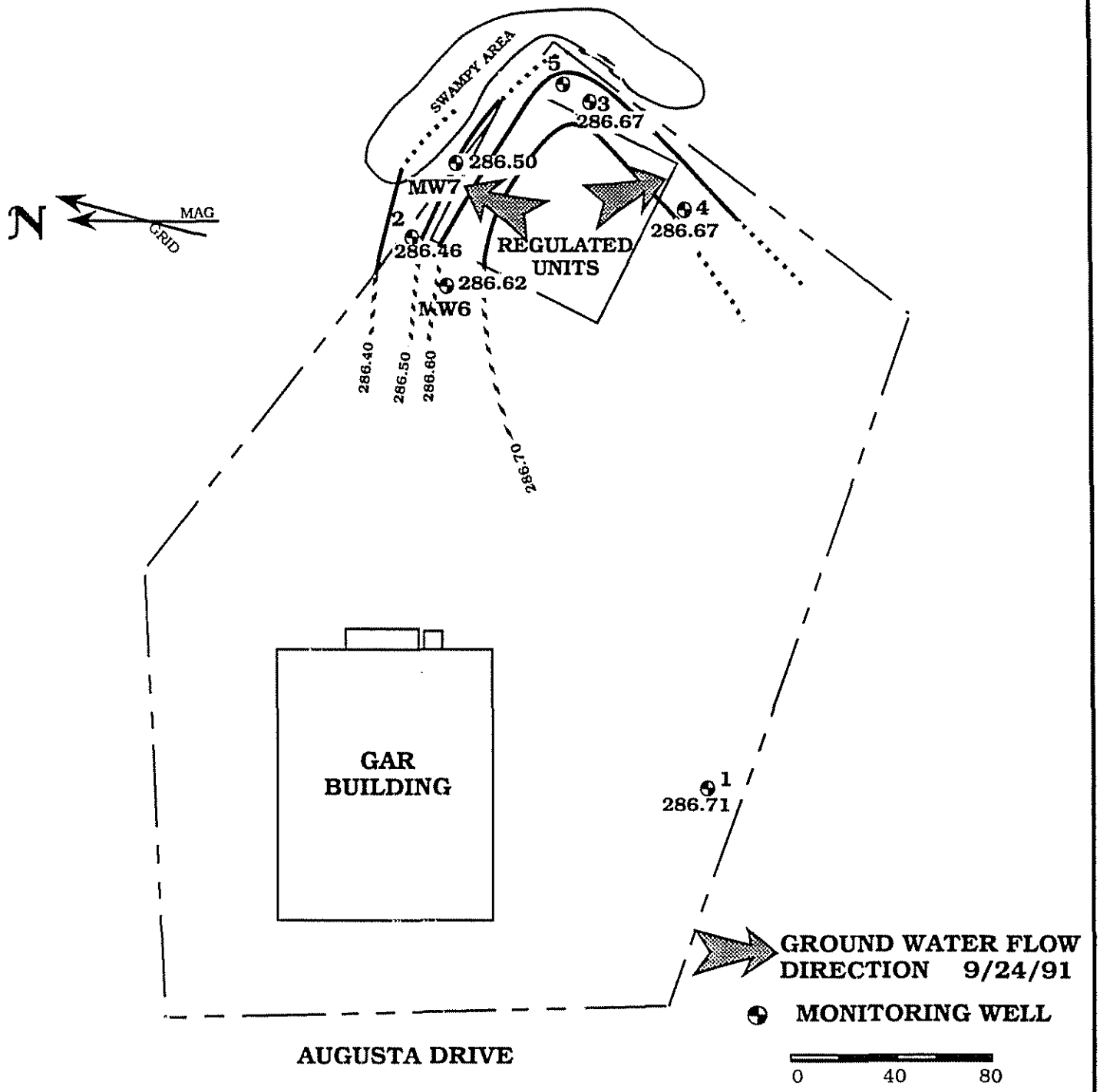

TITLE				
SHALLOW GROUND WATER CONTOURS				
CLIENT				
GAR ELECTROFORMING				
DRAWN	DATE	PROJECT NO.	DRAWING NO.	REV.
JLL	10/91	100724.001	FIG12-9	

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As expected, ground water flow across the site has a very shallow gradient and is rather variable in direction. This variable direction is believed to be due to influence by nearby surface water expressions interacting with the shallow ground water. The site is in a river floor plain situated between the river and a wetland. Flow direction is therefore highly dependent upon the relative water elevations of the river, the swamp and the ground water. These three water bodies are thought to be strongly influenced by location, duration and intensity of rainfall events. For example, a distant rainfall event would raise the river but not the swamp, causing one flow pattern, while a local rain event, raising both the river and the swamp, would cause a different flow pattern. In addition, the site gradient is so shallow that only a minor change in elevation of one well has a strong influence on the flow direction determination.

12.8 Hydraulic Gradient and Flow Rate

As the contour maps indicate, the gradient fluctuates between approximately 0.0002 and 0.042 ft/ft over the past four monitoring events. Gradient values were as follows:

4th Qtr 1990:	0.042	ft/ft
1st Qtr 1991:	0.0024	ft/ft
2nd Qtr 1991:	0.0027	ft/ft
3rd Qtr 1991:	0.0059	ft/ft

The permeability of the shallow aquifer in which monitoring wells MW1, MW2, MW3, MW4, MW6, and MW7 are located is estimated to range from 1.0 - 9.0 x 10^{-3} cm/sec. This range is based upon hydraulic conductivity values identified during the on-site study. Ground water flow velocity is then estimated by the equation:

$$\text{Ground Water Flow Velocity} = \frac{KI}{n}$$

Where K = permeability (cm/sec)
I = hydraulic gradient (ft/ft)
n = effective porosity (assume 20%)

Using a median hydraulic gradient of 0.01325 ft/ft and an averaged permeability of 5.0×10^{-3} cm/sec, the estimated ground water velocity is calculated to be 3.31×10^{-4} cm/sec or 0.94 ft/day.

12.9 Conclusions

The Statistical analysis of the past three years of monitoring data has shown some significant changes in monitoring well concentration levels for several indicator parameters as compared to background levels. Of these parameters the nickel constituent is of most concern as it is significant in four of the six downgradient wells. The other two inorganics, chromium and copper, do not show any significant changes, compared to background levels, for any downgradient wells. Figure 12-3T, the trend graph for nickel, shows that MW7 is the monitoring well with the increasing concentration trend.

Several volatile organic compounds have been present in many of the wells throughout the entire ground water monitoring program. Most notable of these is trichloroethylene (TCE) and several of its degradation products such as 1,2-dichloroethylene, and 1,1-dichloroethylene. Two other common organic solvents 1,1,1-trichloroethane (TCA) and tetrachloroethylene (PCE) are also present, but at lesser concentrations. Although the maximum system concentration for these parameters increased during the latest monitoring event, the general trend as shown in the trend graphs has been declining, with the exceptions of MW2, MW3, MW4 and MW7 for trichloroethylene and MW4 and MW7 for tetrachloroethylene.

The highest concentration of volatile organics have been and continue to be associated with wells MW1 and MW5. As stated before, MW1 is far removed from the lagoon area and monitoring water entering the property from off-site. Well MW5 is adjacent to the lagoons, but monitors a deeper zone with completely different water quality characteristics (i.e. high salt content). Because of its vertical separation and different basic quality characteristics, ground water monitored at MW5 is believed to <u>not</u> be associated with the lagoons and is detecting contamination by another source. Finally, the fact that most of the volatile organics detected in these wells have never been used by GAR lends more weight to the position that this organic contamination is due to an off-site source.

13.0 SOLID WASTE MANAGEMENT UNITS SUMMARY

As discussed in Section 9.0 there are a total of six solid waste management units (SWMU's) at the GAR facility. These units are:

1. Drummed Waste Oils and Drummed Hazardous Wastes Accumulation Area
2. Industrial Wastewater Pretreatment System
3. Facility General Waste Dumpster
4. Spent Pumice Accumulation Drum Sump
5. Spent Pumice Lagoon
6. Scrap Metal Accumulation Areas

With the exception of the Spent Pumice Lagoon and Facility General Waste Dumpster, the SWMU's are indoors and therefore not subject to releases due to outside factors. In addition, the units are well managed from an environmental standpoint. Therefore, a low probability of a release to the environment exists.

The General Waste Dumpster does not contain any hazardous waste and is of the covered type. Consequently, a release from this unit to the environment is remote.

Discharge to the Spent Pumice Lagoon ceased in 1985 and analysis of the waste showed the inorganic constituents to be far below the EP toxicity limits, and therefore not deemed an environmental problem.

14.0 RECOMMENDATIONS

14.1 Evaluation of Program Adequacy

The upgraded ground water monitoring system now incorporates 7 wells that are all sampled on a quarterly basis. Due to a variety of factors this network is more than adequate to fulfill post-closure monitoring needs. Wells are placed in such a manner that, despite variations in flow direction, there is always adequate upgradient and downgradient coverage and estimates of migration direction and velocity can be made. Well depths are appropriate to monitor the water bearing zone impacted by the closed lagoons. The list of parameters includes all primary waste constituents and is more than adequate to appropriately monitor their movement.

14.2 Recommendations for Future Monitoring

In accordance with the approved monitoring system plan, the upgraded program was reviewed after four quarters of monitoring. The purpose of this review was to determine what aspects, if any, of the program can and should be revised to provide continued adequate post-closure monitoring without incurring excessive data collection and evaluation. Three aspects of the program were evaluated: the number of wells; the frequency of monitoring; and the analytical parameters. The following paragraphs address each of these components of the program. Recommendations associated with these discussions were included in a report prepared in response to an administrative order.

14.2.1 Monitoring Wells

The current network includes 7 wells of which one is remote from the lagoon area and one other monitors a deeper portion of the overburden aquifer. Monitoring well MW5 has an intake approximately 15 feet below all other wells and monitors a zone of brackish water. Although waste constituents are present in this zone, both hydraulic and water quality data indicate that this is not the primary water bearing zone that received leachate from the lagoons. It is therefore recommended that this well be eliminated from the network, but maintained for possible future contingencies.

Monitoring well MW2 is situated midway between wells MW6 and MW7, being less than 40 feet from either of these two new wells. As the two new wells provide a better downgradient coverage than achieved by MW2, this older well now serves little purpose and can be eliminated with no significant loss to the network. It is therefore recommended that MW2 also be deleted from the network, but maintained for possible future contingencies.

As discussed in the May, 1990, plan, MW1 is side gradient to the lagoons and is relatively far removed from the lagoons. On this basis there would be a recommendation for its elimination from the network. Data from this well does, however, provide valuable information on the movement of volatile organics into the GAR property from an unknown off-site source(s). Therefore it is recommended that this well be kept in the network, but for the sole purpose of providing water flow data and data on these volatile organics.

14.2.2 Monitoring Frequency

After several years of monitoring at this site, most changes in water quality have been very gradual. Of the few instances where there has been a large, sudden change, most have been attributed to contamination either in the laboratory or during sampling. The sudden appearance and disappearance of toluene in all wells is an example of these suspect situations. The rather slow changes in water quality are expected due to the shallow gradient across the site. Therefore, the need for quarterly monitoring is greatly diminished.

In addition, all wastes and heavily contaminated soils were removed during closure. Thus, the probability of a significant new plume emanating from the lagoon area is extremely remote. As a result of the slowly changing chemistry and this remote possibility of new contamination, it is recommended that monitoring frequency be reduced to semi-annual. This should be coupled with an annual review of the program to determine if this frequency should be maintained or returned to a quarterly basis.

14.2.3 Analytical Parameters

The upgraded plan sharply increased the number of parameters routinely monitored at all well locations. Most of these new parameters were added to determine the cause of high conductivity in MW5. As this question has been answered, there is no further need for most of these new

parameters. In addition, years of monitoring have determined that several other parameters have consistently been at or below detection limits in all wells. Consequently, the inclusion in future monitoring efforts is not expected. These parameters include:

cyanide, total

chromium, hexavalent

silver

Finally, only the chlorinated fraction of the volatile organics have been found to be significant at this site, thus analysis by SW846 method 8020 (Aromatics) is not necessary and should be deleted.

As discussed in a previous section, MW1 serves only to monitor organic contamination coming from off-site sources. Thus, only volatile organics and on-site measurement of pH and conductivity are recommended for this well. Should a sudden change in either of these field parameters take place, additional analysis may be warranted.

A complete Appendix IX analysis is not warranted at this time based upon the production processes, chemicals used[1.] and monitoring results to date.

[1.] See Table 1 of GAR's PPC Plan (Appendix U).

TABLE 13-1

Recommended Analytical Parameters
for
Post-Closure Monitoring

Parameter	Method	
pH (SU)	SW846	9040
Specific Conductance	SW846	9050
Organic Carbon, Total	SW846	9060
Chromium, Total	SW846	6010
Copper	SW846	6010
Nickel	SW846	6010

Volatile Organics	Method	
Chloromethane	SW846	8010
Bromomethane	SW846	8010
Dichlorodifluoromethane	SW846	8010
Vinyl Chloride	SW846	8010
Chloroethane	SW846	8010
Methylene Chloride	SW846	8010
1,1-Dichloroethylene	SW846	8010
1,1-Dichloroethane	SW846	8010
Trans-1,2-Dichloroethylene	SW846	8010
Chloroform	SW846	8010
1,2-Dichloroethane	SW846	8010
1,1,1-Trichloroethane	SW846	8010
Carbon Tetrachloride	SW846	8010
Bromodichloromethane	SW846	8010
1,2-Dichloropropane	SW846	8010
Cis-1,3-Dichloropropene	SW846	8010
Trichloroethylene	SW846	8010
Chlorodibromomethane	SW846	8010
1,1,2-Trichloroethane	SW846	8010
Trans-1,3-Dichloropropene	SW846	8010
2-Chloroethylvinylether	SW846	8010
Bromoform	SW846	8010
1,1,2,2-Tetrachloroethane	SW846	8010
Tetrachloroethylene	SW846	8010

14.2.4 Reporting

GAR will continue to provide quarterly and annual reports of ground water monitoring data obtained during the post-closure period as required under 40 CFR 265.90 through 265.94. The annual reports will contain the following information:

1.0 INTRODUCTION
- 1.1 Facility Ground Water Monitoring History
- 1.2 Report Purpose and Content

2.0 GROUND WATER MONITORING SYSTEM
- 2.1 Well Locations
- 2.2 Well Installation and Construction
- 2.3 Field Evaluation of Aquifer Parameters

3.0 SAMPLING AND ANALYSIS PROCEDURES
- 3.1 Monitoring Plan Overview
- 3.2 Sample Collection Procedures
- 3.3 Sample Preservation and Handling
- 3.4 Chain of Custody
- 3.5 Analytical Procedures

4.0 AQUIFER CHARACTERISTICS
- 4.1 Ground Water Flow Direction
- 4.2 Hydraulic Gradient and Flow Rate

5.0 SITE CHEMICAL DATA
- 5.1 Summary of Data
- 5.2 Exceedances of Drinking Water Criteria

6.0 DATA EVALUATION AND RECOMMENDATIONS
- 6.1 Evaluation of Program Adequacy
- 6.2 Recommendations for Future Monitoring
- 6.3 Next Scheduled Event

The quarterly reports will not be as extensive as the annual reports, but will contain sufficient information to meet applicable reporting requirements.

Should, during any monitoring period, there be a statistically significant increase in any constituent or parameter at any compliance point monitoring well, written notification to the regional administrator of the procedure to be implemented will be made.

15.0 CERTIFICATION AND SIGNATORIES

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

GAR Electroforming Representative

Name George A. Ray

Title _____

Date _____

Signature _____

Certifying Engineer

Name Jeffrey S. Holmes, P. E.

Title Senior Environmental Engineer

Date December 5 1991

Signature Jeffrey S. Holmes

16.0 PART B CHECKLIST

Checklist For Part B Application For Post-Closure Permit

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Part 270	Part 264	Subject Requirement	Provided	Not Applicable	Location in Application	Comments
270.14(b)		Part B General Information Requirments	X			
270.14(b)(1)		- General description of the closed facility which existed and the facility as closed	X		2.0	
270.14(b)(5)		- General Inspection Schedule and Procedures Description	X		8.1	
	264.15(b)(1)	- Written schedule	X		8.1	
	264.15(d)	- Inspection records	X		APPENDIX Q	
	264.15(b)(2)	- Statement as to where, at the facility, inspection schedule and inspection records will be kept	X		8.1	
			X		TABLE 8-1	
	264.15(b)(1)	- Identification of item or feature to be inspected				
	264.15(b)(3)	- Identification of types of problems for which each item or feature is to be checked	X		8.1-8.3	
	264.15(b)(4)	- Frequency of inspections by item or feature	X		TABLE 8-1	
	264.15(c)	- Schedule of remedial action	X		8.1-8.3	
270.14(b)(5) 270.17(c)	264.226	- Specific Inspection Requirements for Surface Impoundments	X			
		- Description of procedures for Inspection of liners/covers	X		8.2	
270.17(d)	264.15(a) and 264.226	- Inspections weekly and after storms for	X		TABLE 8-1	
		- Presence of liquid in leak detection system		X		LAGOONS CLOSED
		- Integrity of dikes/containment devices		X		LAGOONS CLOSED

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Part 270	Part 264	Subject Requirement	Provided	Not Applicable	Location in Application	Comments
270.14(b)(5) and 270.18(e)	264.15(a) and 264.254	- Specific Inspection Requirements for Waste Piles		X		
		- Description of procedures for		X		
		- Inspection of liners/covers		X		
		- Inspections weekly and after storms for		X		
		- Operation of run-on/run-off controls		X		
		- Liquids in leak detection system		X		
		- Proper functioning of wind dispersal controls		X		
		- Leachate in and proper operation of leachate collection/removal system		X		
270.14(b)(5) and 270.21(d)	264.15(a) and 264.303	- Specific Inspection Requirements for Landfills		X		
		- Description of procedures for		X		
		- Inspection of liners/covers		X		
		- Inspections weekly and after storms for		X		
		- Operation of run-on/run-off controls		X		
		- Liquids in leak detection system		X		
		- Proper functioning of wind dispersal controls		X		
		- Leachate in and proper operation of leachate collection/removal system		X		
270.14(b)(11) (iii)-(v)	264.18(b)	- Documentation of facility location relative to 100-year flood plain level	X		3.4	

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Part 270	Part 264	Subject Requirement	Provided	Not Applicable	Location in Application	Comments
		- Documentation that facility within a 100-year flood plain can withstand the 100-year flood without washout of hazardous waste by:		X		
		- Analysis of hydrodynamic/hydrostatic forces resulting at site from 100-year flood, and		X		
		- Presentation of operating units and flood protection devices design and how they will prevent washout, or		X		
		- Plan for removal of waste before washout including,		X		
		- Timing of removal relative to flood levels		X		
		- Estimated time to remove all waste		X		
		- Location to which waste will be moved and proof of compliance with Parts 270 through 271 and 264 through 267 of this Chapter		X		
		- Detailed description of personnel, equipment and procedures for waste removal sufficient to insure availability in time for use		X		
		- Analysis of potential for discharge during waste movement		X		
		- A plan documenting how and on what time schedule the facility will comply with §264.18(b) if not in compliance (existing facilities only).		X		
270.14(b)(13)	264.112 264.114	- Closure Documentation	X			
		- Description of actual partial or final closure procedures. Closure Plan may be resubmitted or referenced (by date of submittal), with detailed description of exceptions to plan during implementation.	X		2.2 5.4	

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Part 270	Part 264	Subject Requirement	Provided	Not Applicable	Location in Application	Comments
		- The closure performance standards (CPSs)	X		5.6	
		- Soil and groundwater data showing that closing unit met the CPSs	X		5.6	
270.14(b)(13) and 270.17(g)	264.112 and 264.228(a)	- Specific Closure Documentation for Surface Impoundments	X			
		- Actual procedures for removal and/or decontamination of all wastes and materials associated with the impoundment, or	X		7.0	
		- A description of the following, actually accomplished:	X			
		- Elimination of free liquids	X		7.1	
		- Stabilillization of remaining wastes	X		7.2-7.3	
		- Design of final cover demonstrating	X		7.4-7.8	
		- Liquid migration minimization	X		8.2	
		- Function with minimum maintenance	X		8.2	
		- Drainage promotion	X		8.2	
		- Erosion/abrasion minimization	X		8.2	
		- Settling/subsidence accomodation	X		8.2	
		- Permeability less than liner or subsoils	X		8.2	
270.14(b)(13) and 270.21(e)	264.112 and 264.310(a)	- Specific Closure Documentation for Landfills		X		
		- Detailed plans and an engineering report which describes the final cover components in detail		X		

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Part 270	Part 264	Subject Requirement	Provided	Not Applicable	Location in Application	Comments
		- Documentation that the final cover will		X		
		- Provide long-term minimization of migration of liquids through closed landfill		X		
		- Function with minimum maintenance		X		
		- Promote drainage and minimize erosion/abrasion		X		
		- Settle/subside without losing integrity		X		
		- Be less permeable than bottom liners or subsoils.		X		
270.14(b)(13)	264.117 and 264.118	- Post-Closure Plan Documentation	X		8.0	
		- Description of ground water monitoring activities and frequencies	X		8.5 10.0	
		- Description of maintenance activities and frequencies for:		X		
		- Final containment structures		X		
		- Facility monitoring equipment		X		
		- Location(s) and number of copies of post-closure plan	X		8.1	
		- Identification and location (address and phone number) of person responsible for filing and updating facility copy of post-closure plan during post-closure period	X		8.1	
		- Procedure for updating all other copies of post-closure plan	X		8.1	

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Part 270	Part 264	Subject Requirement	Provided	Not Applicable	Location in Application	Comments
270.14(b) (13) and 270.17(g) (a) & (f)	264.118 and 264.228(b)	- Specific Post-Closure Plan Requirements for Surface Impoundments	X			
		- Procedures for maintenance of groundwater monitoring system.	X		8.3	
		- Procedures for compliance with Subpart F	X		5.4	
		- Procedures for preventing run-on/run-off and final cover damage.	X		8.2	
270.14(b) (13) and 270.18	264.118 and 264.258(b)	- Specific Post-Closure Plan Requirements for Waste Piles		X		
		- Procedures for post-closure care that meet the requirments for landfills		X		
270.14(b) (13) and 270.21(e)	264.118 and 264.310(b)	- Specific Post-Closure Plan Requirements for Landfills		X		
		- Procedures for maintenance and repair of final cover		X		
		- Monitoring and maintenance procedures for leak detection system		X		
		- Procedure for leachate collection/removal system operation		X		
		- Procedures for maintainance of groundwater monitoring system		X		
		- Procedures for compliance with Subpart F		X		
		- Procedures for preventing final cap erosion due to run-on and run-off		X		
		- Procedures for protection and maintenance of benchmarks		X		

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Part 270	Part 264	Subject Requirement	Provided	Not Applicable	Location in Application	Comments
	264.310(c)	- Procedures to be undertaken if liquid is found in leak detection system		X		
270.14(b)(14)	264.119(b)	- Documentation of Notice on Deed	X			
		- Statement that land used to manage wastes	X		APPENDIX P	
		- Statement of restricted use per §264.117(c)	X			
	264.119(a)	- Documentation of type, location, and quantity of wastes filed with local authority and EPA Regional Administrator	X			
270.14(b)(16)	264.144	- Post-Closure Cost Estimate	X		TABLE 8-2	
	264.145 and 264.146	- Documentation of a financial assurance mechanism for post-closure that is;	X			
	264.151(a)	- Closure trust fund		X		
	264.151(b)	- Surety bond guaranteeing payment		X		
	264.151(c)	- Surety bond guaranteeing performance		X		
	264.151(d)	- Post-closure letter of credit	X		8.7	APPENDIX R
	264.151(e)	- Post-closure insurance		X		
	264.151(f) and (h)	- Financial test and corporate guarantee		X		
		- Multiple financial mechanism for one facility		X		
		- Single financial mechanism for multiple facilities		X		

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Part 270	Part 264	Subject Requirement	Provided	Not Applicable	Location in Application	Comments
270.14(b) (18)		- Topographic map showing a distance of 1000 feet around facility at a scale of not more than 1 inch equals 200 feet that clearly shows	X		FIGURE 3-2	
		- Contours, with intervals not to exceed 5 feet.	X		FIGURE 3-2	
		- Map scale and date	X		FIGURE 3-2	
		- 100-year flood plain area	X		FIGURE 3-3	
		- Surface waters and intermittent streams	X		FIGURE 3-2	
		- Surrounding land uses	X		FIGURES 3-1	
		- Wind rose	X		3.2	
		- North orientation	X		FIGURE 3-2	
		- Legal boundaries of facility site	X		FIGURE 2-2	
		- Access control	X		FIGURE 2-2	
		- Injection and withdrawal wells onsite and offsite	X		FIGURE 3-2	
		- Buildings and recreation areas	X		FIGURES 3-1, 3-2	
		- Runoff control systems		X		
		- Access and internal roads	X		FIGURES 2-2, 3-2	
		- Storm, sanitary, and process sewerage systems		X		
		- Barriers for drainage or flood control		X		
		- Location of past or present operational units and equipment cleanup areas	X		FIGURES 9-1, 9-2	
270.17		Specific Part B Information Requirements for Surface Impoundments	X			

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Part 270	Part 264	Subject Requirement	Provided	Not Applicable	Location in Application	Comments
270.17(a)		- List of hazardous wastes placed in impoundment	X		6.2	
270.18		Specific Part B Information Requirements for Waste Piles		X		
270.18(a)		- List of Hazardous wastes placed in each waste pile		X		
270.21		Specific Part B Information Requirements for Landfills		X		
270.21(a)		- List of hazardous wastes placed in each landfill cell		X		
270.21(b)(2)	274.301(c)	- System for control of run-on from peak discharge of a 25-year storm		X		
270.21(b)(3)	274.301(d)	- System for control of run-off water volume from a 24-hour, 25-year storm		X		
270.21(b)(4)	274.301(e)	- Procedures to manage collection and holding facilities associated with run-on and run-off control systems		X		
270.14(c)	Part 264 Subpart F	Part B Protection of Ground Water Information Requirements for Surface Impoundments, Waste Piles, and Landfills	X			
270.14(c)(1)		- Interim status period ground-water monitoring data summary	X		TABLES 12-2, 12-3, & 12-4	
270.14(c)(2)		- Indentification of uppermost and hydraulically interconnected aquifers under facility facility including,	X		4.2	
		- Water flow rate and direction	X		4.3 & 12.7	
		- Bases for identification	X		4.3 & 12.7	
270.14(c)(3) and 270.14(b)(18)		- Topographic map	X		FIGURES 2-1 & 3-2	

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Part 270	Part 264	Subject Requirement	Provided	Not Applicable	Location in Application	Comments
	264.95(b)	- Delineation of waste management area	X		FIGURE 9-1A	
	264.95(a)	- Delineation of point of compliance	X		12.6	
		- Ground-water monitoring well locations	X		FIGURE 8-1	
		- Location of aquifers	X		4.2	
	264.97	- Location of GWM wells	X		FIGURE 8-1	
270.14(c)(4)		- Descriptions of existing contamination	X		6.1, 6.2	
		- Delineation of plume extent	X		12.5	
		- Appendix IX constituent concentrations	X			
		- Concentrations throughout plume	X		14.2.3	
		- Maxium concentrations in plume	X			
270.14(c)(5)	264.97	- Detailed plans and an engineering report of Ground Water Monitoring Program	X		10.0	
	264.97(a)	- Description of wells	X		10.0	
		- Number of wells	X		10.0	
		- Locations	X		10.2 & FIGURE 8-1	
		- Depths	X		TABLE 10-1	
		- Assurance of unaffected background water measurement	X		10.1	
		- Assurance of compliance point ground water measurement	X		12.6	
	264.97(c)	- Casing description	X		TABLE 10-1	
	264.97(d)	- Description of sampling/analysis procedures	X		11.0	
		- Sample collection methods	X		11.2	

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Part 270	Part 264	Subject Requirement	Provided	Not Applicable	Location in Application	Comments
		- Presentation of procedures to calculate such values		X		
270.14(c)(6)(ii)	264.98(b)	- Description of an appropriate ground-water monitoring system installed at the compliance point	X		10.1	
			X		11.2-11.6	
270.14(c)(6)(iv)	264.98(d)	- Procedures for collecting semi-annual ground-water samples at the compliance point during the Post-closure period				
			X		12.8	
	264.98(e)	- *Procedure for annual determination of uppermost aquifer flow rate and direction*				
	264.98(f)& 264.97(d) &(e)	- Documentation of sample collection and analysis procedures	X		11.2-11.6	
	264.98(g)	- Procedure for determining a statistically significant increase for any monitored parameter or constituent by	X		TABLE 12-5	
			X		12.3	
		- Comparing compliance point data to background value data using the procedures in §264.97(h)(1) or (2), and				
		- Providing an estimate of the time period after sampling completion necessary to obtain results			11.3.2	
270.14(c)(6)	264.98(h)	- Procedure to be implemented if a statistically significant increase in any constituent or parameter is identified at any compliance point monitoring well, including			14.2.4	
	264.98(h)(1)	- Written notification to Regional Administrator			14.2.4	
	264.98(h)(2)	- Sample collection and analysis methods for all Appendix IX constituents at all monitoring wells		X		

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Part 270	Part 264	Subject Requirement	Provided	Not Applicable	Location in Application	Comments
		- Sample preservation/shipment		X		
		- Analytical procedures		X		
		- Chain of custody control		X		
	264.97(e)	- Documentation of proper/adequate analytical procedures		X		
	264.97(f)	- Procedure for determination of ground water elevation with each sample		X		
270.14(c)(6)	264.91(a)(4) and 264.98	- Description of Detection Monitoring Program including,		X		
270.14(c)(6)(i)	264.93 and 264.98(a)	- List of indicator parameters, waste constituents, reaction products to be monitored for, including		X		
		- Type, quantities, concentrations expected in wastes		X		
		- Mobility, stability, persistence in unsaturated zone		X		
		- Detectability in ground-water		X		
270.14(c)(6)(iii)	264.98(a)(4) and 264.98(c)(1)	- Background ground-water concentration values and coefficients of variation established by		X		
	264.98(c)(3)	- Use of an appropriate ground water monitoring system, and		X		
	264.97(g)(1)	- Quarterly sampling of upgradient wells for one year, or		X		
	264.97(g)(3)	- Quarterly sampling of other wells for one year, and		X		
	264.97(g)(4)	- Data from a minimum of one sample/well and minimum of four samples per quarter, or		X		

EPA I.D. No. CTD 064834914

Part 270	Part 264	Subject Requirement	Provided	Not Applicable	Location in Application	Comments
	264.98(h)(3)	- Method for establishing Appendix IX constituent background values		X		
	264.98(h)(4)	- Preparation of an application for permit modification to establish compliance monitoring		X		
270.14(c)(7)	264.91(a)(1) and 264.99	- Description of Compliance Monitoring Program, including	X			
		- List of wastes previously handled at facility	X		6.1, 6.2	
		- Characterization of contaminated groundwater	X		6.2	
		- Hazardous constituents identified	X		6.2	
		- Hazardous constituents concentration	X		6.2, APPENDICIES I THROUGH O	
	264.99(b)	- Description of compliance monitoring system at the compliance point	X		11.0	
		- List of hazardous constituents to be compliance monitored	X		TABLE 11-3	
	264.96	- Proposed compliance period	X		14.2	
	264.99(d)	- Procedure for collecting quarterly samples at compliance point during compliance period	X		11.2	
	264.99(c)(3)	- Procedures for establishing background concentration values for constituents that are based on	X			
		- Use of an appropriate ground-water monitoring system, and	X		10.0	
	264.97(g)	- Data that is available prior to post-closure permit issuance	X		APPENDICIES I THROUGH O	
		- Data that accounts for measurement errors in sampling and analysis	X		11.6	

Part 270	Part 264	Subject Requirement	Provided	Not Applicable	Location in Application	Comments
		- Data that accounts for seasonal ground-water quality fluctations	X		12.3.1	
		- Data from a minimum of one sample per well and a minimum of four samples from monitoring system, each time system is sampled		X		
270.14(c)(7)(iv)	264.92 and 264.99(c)(1),(2)	- Proposed concentration limits for constituents with justification based on	X			
		- §264.94(a)(1) and §264.97(g)	X		12.4	
		- §264.94(a)(2)	X		12.4	
		- §264.94(b) and §264.99(c)(1)	X		12.4	
	264.99(e)	- Procedure for annual determination of uppermost aquifer flow rate and direction	X		12.7, 12.8	
	264.99(f)	- Procedure for annual testing of all compliance point wells for Appendix IX constituents		X		
	264.99(g)	- Documentation of all sampling and analysis procedures	X		FIGURES 11.1, 11.2	
	264.99(h)	- Procedures for determining a statistically significant increase for any monitored constituent by	X		12.3.1	
		- Comparing compliance point data to the concentration limit using the procedure in §264.97(h)(2)	X		12.3.1	
		- *Providing an estimate of the time period* after sampling completion necessary to *obtain results*	X		11.3	
	264.99(i)	- Procedures to be implemented if the ground-water protection standard is exceeded at any compliance point monitoring well, including	X			

EPA I.D. No. CTD 064834914

Part 270	Part 264	Subject Requirement	Provided	Not Applicable	Location in Application	Comments
	264.99(i)(1)	- Written notification to Regional Administrator	X		14.2.4	
	264.99(i)(2)	- Preparation of an application for permit *modification to establish a corrective* action program, including		X		
		- Details of program to comply with ground-water protection standard		X		
270.14(c)(7)(v)	264.99(i)(2)(ii)	- Details of ground-water monitoring to demonstrate effectiveness of program			14.0	
270.14(c)(8)	264.91(a)(2) and 264.100	- *Description of Corrective Action Program*, including		X		
270.14(c)(8)(i)		- Characterization of contaminated groundwater		X		
	264.100(a)(1)	- Identified hazardous constituents		X		
		- Concentrations of hazardous constituents	-	X		
270.14(c)(8)(ii)	264.100(a)(2)	- Concentration limit for each hazardous constituent		X		
270.14(c)(8)(iii)	264.100(b)	- Detailed plan and an engineering report describing the corrective actions to be taken at the compliance point		X		
	264.100(c)	- Time period necessary to implement corrective action program		X		
270.14(c)(8)(iv)	264.100(d)	- Description of *ground-water monitoring* program that will be sufficient to assess the adequacy of corrective action	X		14.0	
	264.91(a)(3) and 264.100(e)	- Description of the corrective action to be taken for constituents in ground-water between compliance point and downgradient facility boundary		X		

EPA I.D. No. CTD 064834914

Part 270	Part 264	Subject Requirement	Provided	Not Applicable	Location in Application	Comments
	264.100(g)	- Procedure and content for semi-annually submitting written reports to the Regional Administrator on program effectiveness			14.2.4	
270.14(d)		Information Requirements for Solid Waste Management Units (SWMUs)	X			
270.14(d)(1)		- Description of SWMUs, including	X		9.0	
		- Location on topographical map	X		FIGURES I & 9-1	
		- Type of unit(s)	X		9.0	
		- Dimensions/Structure		X		
		- Period of unit operation	X		9.1-9.7	
		- Wastes managed in unit(s)	X		9.1-9.7	
	Part B Certification and Signatories		X			
270.11(d)		- Certification paragraph	X		15.0	
270.11(a)		- Appropriate signatory	X		15.0	

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX A

CONNECTICUT DEP POST-CLOSURE PART B PERMIT CALL

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 13, 1991

RECEIVED
JUN 17 1991
GAR

Mr. George Ray, President
G A R Electroforming Division
Electro
11 Augusta Drive
Post Office Box 340
Danbury, Connecticut 06813

RE: EPA I.D. No. CTD 064834914 Post-Closure Part B Permit Call

Dear Mr. Ray:

Federal and State hazardous waste management regulations adopted pursuant to the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6901 et. seq. require persons owning or operating a hazardous waste treatment, storage, or disposal facility to have a permit (RCRA Section 3005; 42 U.S.C. Section 6925). On November 8, 1984, RCRA was amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA). Section 3005(i) of RCRA requires all landfills, surface impoundments, waste piles, and land treatment units that received waste after July 26, 1982 to comply with the groundwater monitoring, unsaturated zone monitoring, corrective action and post-closure care requirements that apply to new units. Section 3004 (u) of RCRA requires corrective action for releases of hazardous waste or constituents from any Solid Waste Management Unit at a facility seeeking a permit. Since Connecticut is not yet authorized for the RCRA corrective action program, EPA is joining Connecticut in this Part B permit call.

Pursuant to Section 22a-449(c)-110 of the Connecticut's Hazardous Waste Management Regulations and 40 CFR Part 270.1(c), post-closure permit requirements apply to all RCRA land disposal facilities, including surface impoundments that received wastes after July 26, 1982, or that certified closure in accordance with an approved closure plan after January 26, 1983.

The U.S. Environmental Protection Agency (EPA) and the Connecticut Department of Environmental Protection (DEP) are hereby requesting the submission of a Post-Closure Part B application ("Part B application") pursuant to 40 CFR Part 270 and 22a-449(c) of the Regulations of Connecticut State Agencies.

If a land disposal facility has an approved closure/post-closure plan, any requirements of the approved plans will remain in effect until a post-closure permit is issued.

You are required to submit a complete Post-Closure Part B permit application within one-hundred eighty (180) days of the date of receipt of this letter. Information on the required content of the application is found in 22a-449(c)-110 of Connecticut's Hazardous Waste Management Regulations, 40 CFR Part 270.14 -.21. Supplemental information is provided in Enclosures I - III. The Part B application should be sent to both agencies at the addresses below:

U.S. Environmental Protection Agency
Waste Management Division
JFK Federal Building
Boston, MA 02203
Attn: CT RCRA (HEE CAN6)

Connecticut Department of
Environmental Protection
Waste Management Bureau
Permits Section
165 Capitol Avenue
Hartford, CT 06106

Failure to submit a complete permit application within the time period specified may result in an enforcement action. Penalties of up to $25,000 per day may be assessed for violations of RCRA.

If you have any questions concerning this letter, please contact either of the following:

Michael J. O'Brien
US EPA
(617) 573-9675

George Dews
CT DEP
(203) 566-4869

Sincerely,

Merrill S. Hohman, Director
Waste Management Division

Richard J. Barlow, Chief
Waste Management Bureau

Enclosures: Groundwater Monitoring Guidance
Corrective Action Guidance
Checklist

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX B

CONNECTICUT DEP APPROVAL OF CLOSURE/POST-CLOSURE PLANS

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

September 29, 1987

RECEIVED
OCT 5 1987
GAR

APPROVAL

Mr. Frank Ray
GAR Electroforming Division
P.O. Box 340
Danbury, CT 06813

Re: Approval of Closure/Post-Closure Plans for Two Hazardous Waste Surface Impoundments at GAR Electroforming CTD064834914

Dear Mr. Ray:

The closure/post-closure plans (hereinafter the plans) dated July 1985 and February 1986 and modified August 1987 (amended September 1987) that were prepared for GAR Electroforming, by Lancy Environmental Services Co., have been reviewed by the Connecticut Department of Environmental Protection (DEP) and the U.S. Environmental Protection Agency (EPA), Region I.

The DEP and EPA have determined that these plans comply with the closure/post-closure requirements pursuant to Section 22a-449(c)-29 of the Regulations of Connecticut State Agencies, and with Title 40 Part 265 Subparts G and K (and N) of the Code of Federal Regulations (CFR). Both Agencies hereby approve the plans provided that the following conditions are met:

1. Any plans and specifications to be developed for implementation of the approved closure/post-closure plan shall be submitted to the CT DEP and US EPA for review and approval at least 30 days prior to their implementation.

2. Gar Electroforming Division must modify the plans in accordance with regulations cited below to assure long term integrity of the cap. This can be achieved by installing a 12" drainage layer with a permeability no less than 10^{-3} cm/sec. This will also provide a greater frost depth. A compaction of 95% ASTM D68 instead of 90% according to the standard proctor density test is also required. The accompanying regulations are 40 CFR Part 265.310(a)(3) and 40 CFR Part 265.112(a)(5).

3. GAR Electroforming shall contact the CT DEP and US EPA for their review of the following closure/post-closure plan events at least 14 days prior to their implementation:

a. Prior to the placement of the cap(s);

b. Prior to the final certification; and

c. At all critical points, during the implementation of the closure plan.

All work shall be subject to the review of the CT DEP and US EPA. They shall decide all questions as to interpretation of approved plans and specifications.

The Regional Administrator of the US EPA and the Commissioner of the CT DEP may authorize changes to the approved closure/post-closure plans upon written request pursuant to 40 CFR Part 265.112(c) and 40 CFR Part 265.118(d), respectively.

Approval of the closure plan constitutes approval of the closure time extension as detailed in the closure plan schedule (Section 6.7) and pursuant to Section 22a-449(c)-29 of Connecticut's Hazardous Waste Management Regulations and 40 CFR Part 265.113.

This approval does not constitute approval of the groundwater monitoring program implemented pursuant to Section 22a-449(c)-28 of Connecticut's Hazardous Management Regulations or 40 CFR Part 265 Subpart F; nor does it constitute approval of the financial mechanisms established pursuant to Section 22a-449(c)-30 of Connecticut's Hazardous Waste Management Regulations or 40 CFR Part 265 Subpart H. This facility shall continue to be subject to the applicable standards mentioned above. Thus, in accordance th 40 CFR Part 265.90(d), post-closure monitoring must include analyses for cadmium and hexavalent chromium. In addition, a minmimum of three downgradient wells and one upgradient well must be monitored during the post-closure period.

This Approval does not relieve the facility of the obligation to obtain any other authorizations as may be required by other provisions of the Connecticut General Statutes, Regulations of Connecticut State Agencies, Code of Federal Regulations, or Federal Statutes.

Sincerely,

Edwin Sarkis for

Stephen W. Hitchcock, Director
Hazardous Materials Management Unit
Department of Environmental Protection

Merrill S. Hohman

Merrill S. Hohman, Director
Waste Management Division

September 22, 1987

Ms. Rhona Julian
USEPA Region I
JFK Federal Building
Mail Code HER-CAUS
Boston, MA 02203

Dear Ms. Julian:

This letter is in response to the six comments on the GAR closure plan you presented during our September 14 telephone conversation. These matters were again discussed with a Mr. Chuck Franks of Region I on September 17. The following responses are made on behalf of GAR and should be considered part of the closure plan.

Comment: Incorporate a drainage layer above the synthetic membrane.

Response: This layer was originally omitted under the determination that the size of the lagoons were so small that a drainage layer was not needed to prevent slumping of the overlying soils and the slope was sufficient to provide adequate drainage. However, this approach did not allow for protection of the membrane during a hard freeze event. Therefore, we concur and will incorporate a drainage layer above the synethic membrane. This layer will be one foot thick, and composed of sand-soil falling into USCS range of SW to SP. A geotextile fabric will placed over this permeable layer to prevent clogging of the sand with the overlying top soil.

Comment: Describe the backfill materials in greater detail.

Response: The backfill materials will fall into the USDA textural classes of loam, sandy clay loam, silty clay loam, clay, silty clay, or silty loam. The top one foot of this fill will contain no inclusions or rocks greater than 1 inch diameter. At least 50 percent of the materialof this top foot layer, by weight, will pass through a #200 mesh sieve.

Comment: Provide for verification of decontamination.

Response: At this point in time, all wastes and hevily contaminated soils have been removed. Although they contain trace residues of the wastes, remaining soils present a very low risk to human health and the environment. In addition, the remaining closure activities simply involve backfilling and capping. No contact with the underlying contaminated soil should take place. Any contact that does take place will

be incidental and not as a result of actively moving and/or working them. Since risks presented by the site soils is minimal and the probability of contact with these soils is low, a rigorous decontamination program and subsequent verification testing is not warranted.

Comment: Provide greater detail on inspections, at minimum, by certifying engineer.

Response: The certifying engineer will be present, at minimum, to observe the placement of the final layer of backfill material and its compaction, proctor density testing placement of the synthetic membrane, placement of the drainage layer and geotextile membrane and re-vegetation. He will also verify the establishment of a 3% slope of the backfill material.

Comment: Compact backfill material to 95% Proctor Density.

Response: This will be done. Although we content that this level of density is not required at this site to provide a stable base for the cover, the impact on closure activities and expense are minimal. Therefore, we agree to this stipulation.

Comment: Add TOC and TOX to the post closure monitoring parameter list.

Response: GAR has been performing routine monitoring under an Alternative Ground Water Monitoring System Plan approved by CTDEP (February 7, 1985). Development of post closure parameters was therefore based on this approved alternative plan rather than requirements of 40 CFR 265.92 as stipulated by 40 CFR 265.118. This plan called for the quarterly sampling and analysis of TOC and Volatile Organics, but not TOX. Incorporation of TOX into post-closure monitoring is therefore not appropriate. Routine TOC analysis have not provided any meaningful data regarding the site ground water with respect to the lagoons and the contents. Therefore, it is appropriate to delete this parameter from post-closure monitoring requirements. Since there is no longer a CTDEP representative assigned to GAR, a means by which this could be implemented was not clear. Your input on how GAR can petition to delete TOC from subsequent monitoring requirements would be greatly appreciated.

Should you have any questions regarding these responses, please feel free to contact us at your convenience.

Sincerely,

Lancy Environmental Services Company

Roger A. Dhonau
Project Manager

RAD:csb
cc: Frank Ray - GAR Electroforming, Inc.

FAIRFIELD TESTING LABORATORY

AN INDEPENDENT INSPECTION AND ENGINEERING LABORATORY

Materials Testing, Research, Consulting, Nondestructive Testing, Subsoil Investigation

!G' ›rook Road • Stamford, Connecticut 06906 (203) 323-3148

CLIENT: SEALAND ENVIRONMENTAL SERVICES INC.
326 DERBY AVE.
DERBY, CT. 06418

PROJECT: GAR ELECTROFORMING DIVISION / DANBURY, CT.

SUBJECT: Moisture Density Relationship (Modified Proctor) in accordance with AASHO T-180, Gradation and Washed Sieve Analysis

DATE: 6/7/88 Top Foot Fill material

MOISTURE DENSITY RELATIONSHIP METHOD D

MAXIMUM DENSITY	137.3	PCF
OPTIMUM MOISTURE	9.2	

MECHANICAL ANALYSIS

Sieve Size	Passing
3/4	100
1/2	100
1/4	97.3
10	91.4
20	87.8
40	79.2
100	68.7
200 (BY WASH)	63.9

RESPECTFULLY SUBMITTED,

FAIRFIELD TESTING LABORATORY

John Vitale

JV:AC JOHN VITALE

FAIRFIELD TESTING LABORATORY

AN INDEPENDENT INSPECTION AND ENGINEERING LABORATORY

Materials Testing, Research, Consulting, Nondestructive Testing, Subsoil Investigation

2 Glenbrook Road • Stamford, Connecticut 06906 (203) 325-5148

CLIENT: SEALAND ENVIRONMENTAL SERVICES INC.
326 DERBYAVE.
DERBY, CT. 06418

PROJECT: GAR ELECTROFORMING DIVISION
DANBURY, CT.

SUBJECT: In-place Field Density Testing

DATE: 6/8/88

On the above date a representative from the Fairfield Testing Laboratory visited the above named project at the request of the client to perform field density testing. The following are the results of those tests:

Location	Dry Density Lbs. Cu. Ft.	Moisture Content	Proctor Value	Percent Compaction	Required Compaction
CLAY LAYER -- SEE ATTACHED MAP					
TEST #1					
A) 12" BELOW	132.4	8.3	137.3	96.4	90
B) 6" BELOW	134.1	7.9	137.3	97.7	90
TEST #2					
A) 12" BELOW	131.9	8.1	137.3	96.1	90
B) 6" BELOW	134.3	7.5	137.3	97.8	90
TEST #3					
A) 12" BELOW	135.8	6.9	137.3	98.9	90
B) 6" BELOW	132.0	8.0	137.3	96.1	90
TEST #4					
A) 12" BELOW	130.5	8.4	137.3	95.0	90
B) 6" BELOW	130.6	8.3	137.3	95.1	90
TEST #5					
A) 12" BELOW	133.7	9.1	137.3	97.4	90
B) 6" BELOW	135.4	8.7	137.3	98.6	90

The above Tests were performed at the locations and elevations designated by the Client. Sub surface evaluation was not a part of this Testing.

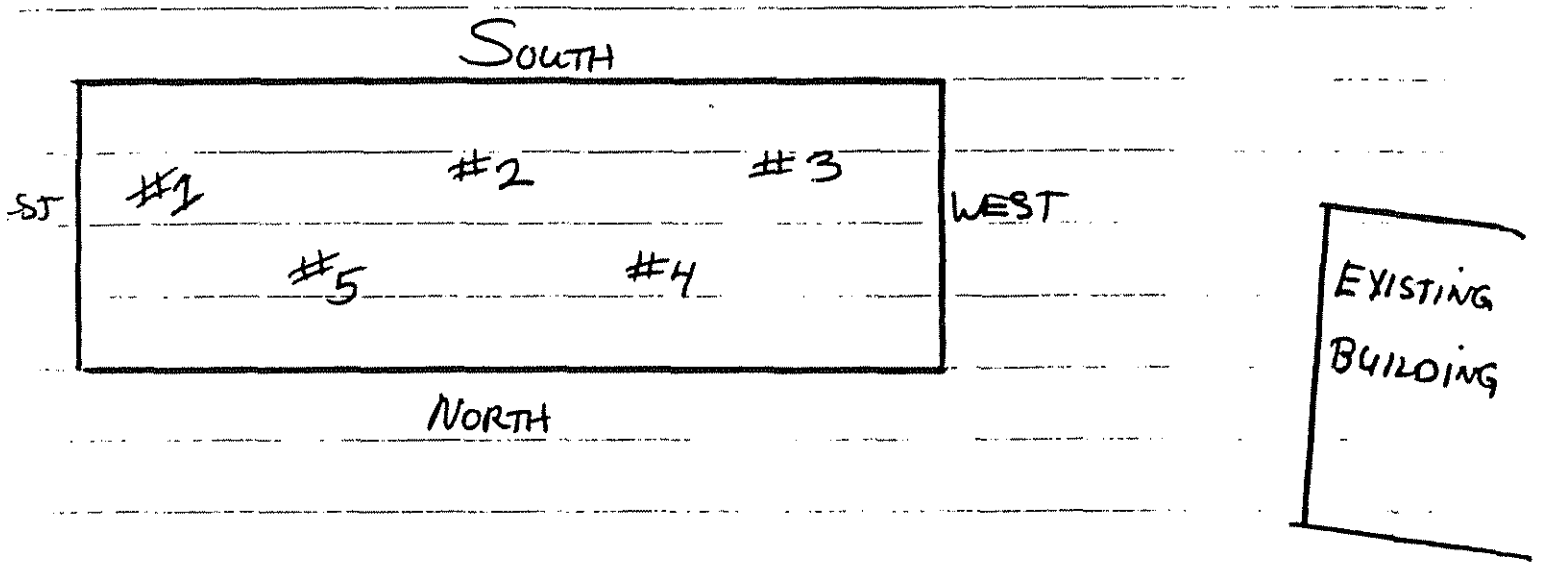
Unless otherwise indicated the above results are for the testing of the specific elevations designated by the Client.

Respectfully submitted,

John Vitale ac

John Vitale

JV:ac



GAR ~~ELECTRO~~ FORM ~~PLATING~~ING

DANBURY, CT.

THE LINER COMPANY INC.

1 BRANDYWINE DRIVE • MORGANVILLE, NEW JERSEY 07751
PHONE (201) 946-9200

JACK A. HARTWELL, Pres

June 7, 1988

SeaLand Environmental Services
326 Derby Ave.
Derby, Connectucut 06418
Attn: Mr. Morris Fortror

RE: GAR Electroforming
Danbury, Connecticut

Dear Mr.Fortror:

Please find enclosed Quality Control Certificates, resin certifications, 6" x 12" seam samples and the actual destructed weld samples from 40 Mil panels.

We also certify, The Liner Company personnel witnessed the installation and binded to be within specifications.

Sincerely,

Wayne M. Csupa

WMC/sa

Enclosure: Quality Control Certificates,
Samples ETC.

CERTIFICATE OF ANALYSIS

[redacted]

FAX # 608-742-5707
PORTAGE INDUSTRIES
1[illegible]5 ADAMS STREET
P[illegible]AGE, WISCONSIN 53901
ATTN: MR. BOB CHAPMAN

MAR 0 3 REC'D

UNION CARBIDE CORPORATION
POLYOLEFINS DIVISION
P.O. BOX 186
PORT LAVACA, TEXAS 77979

FEBRUARY 26, 1988

PRODUCT NAME	DHDA-5500 BK	
BLEND NUMBERS	449623	449624
QUANTITY, LBS.	85,550	85,550
CUSTOMER ORDER NO.	30881	
UCC ORDER NO.	466415	
SHIPPING DATE	02/25	
CONTAINER	UCFX60269	UCFX60269

SHIPPED TO: PORTAGE, WI.

NAT Seal Po # 05042
Pic wo # E-27310

GENTLEMEN:

WE CERTIFY THAT THE POLYETHYLENE RESIN IDENTIFIED ABOVE MEETS THE REQUIREMENTS OF:

UNION CARBIDE INTERNAL SPECIFICATIONS

THE FOLLOWING TEST DATA WAS OBTAINED:

		449623	449624
MELT INDEX	GTM	0.46	0.45
DENSITY ASTM	GCC	0.949	0.949
ANALYSIS NO.		851006	1721006

M. E. Delgado

QUALITY CONTROL DEPARTMENT
SEADRIFT PLANT LABORATORY

PORTAGE INDUSTRIES CORPORATION

NATIONAL SEAL COMPANY

CERTIFICATE OF ANALYSIS

NSC W.O. # 05042

PIC W.O. # E-27310

DATE 4/27/88

VIRGIN RESIN

UC DHDA 5500 LOT # 449623 & 449624

COMPARTMENT NUMBER	MELT FLOW RATE: ASTM D1238 COND E	DENSITY: ASTM D792 METHOD A
A	0.45	0.950
CA	0.45	0.950
B	0.44	0.950
CB	0.44	0.950

EXTRUDED ROLL STOCK

ROLL NUMBER	MELT FLOW RATE: ASTM D1238 COND E	DENSITY: ASTM D792 METHOD A
38	0.48	0.951

CARBON BLACK = 2.15%

Don Peterson

DON PETERSON
QUALITY ASSURANCE MANAGER

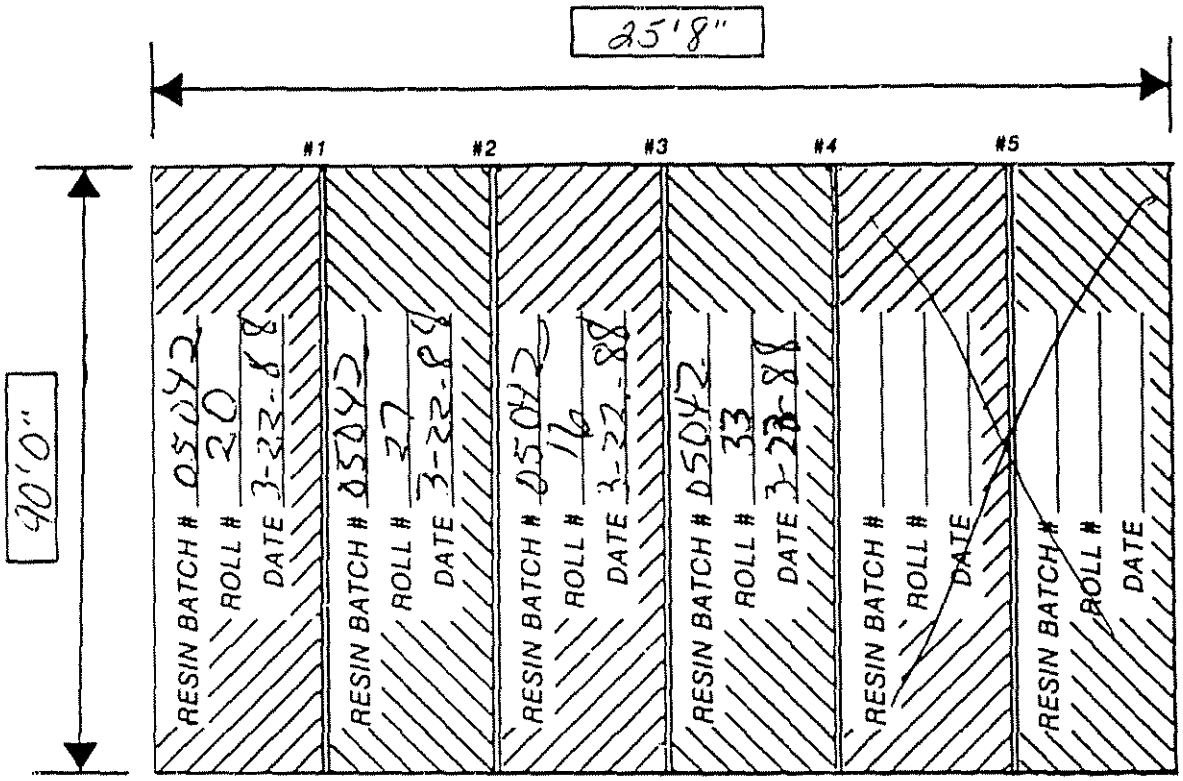
1325 ADAMS STREET PORTAGE, WISCONSIN 53901 608-742-7123 (TELECOPIER 608-742-5707)

NSC QUALITY CONTROL CERTIFICATE

ATE 6-1-88 PANEL IDENT. # 1

ATERIAL 40 MIL HDPE FAB. ORDER # 806-18

JST MER THE LINER COMPANY TEST LEVEL I



	#1	#2	#3	#4	#5
BEG. PRESSURE	29	28	28	/	/
END PRESSURE	28	26	27	/	/
△	1	1½	1		

SEAM FINISH PEEL TEST VALUES

SEAM #	YIELD PPI	YIELD PPI	SEAM #	YIELD PPI	YIELD PPI
1	78	94	4	—	—
2	74	82	5	—	—
3	92	73	6	—	—

SHEAR TEST VALUES

SEAM #	YIELD PPI
1	116
2	116
3	—

NOTES: Panels 1 & 2 were run together.

KEY

Seam Run Directions are Top to Bottom

= = Denotes Sheet Splice

All Peel Tests are Film Tear Bond (FTB)

Panels are Rolled Starting Top of Page

QUALITY CONTROL APPROVAL:

Testing and Visual Inspection of Panel

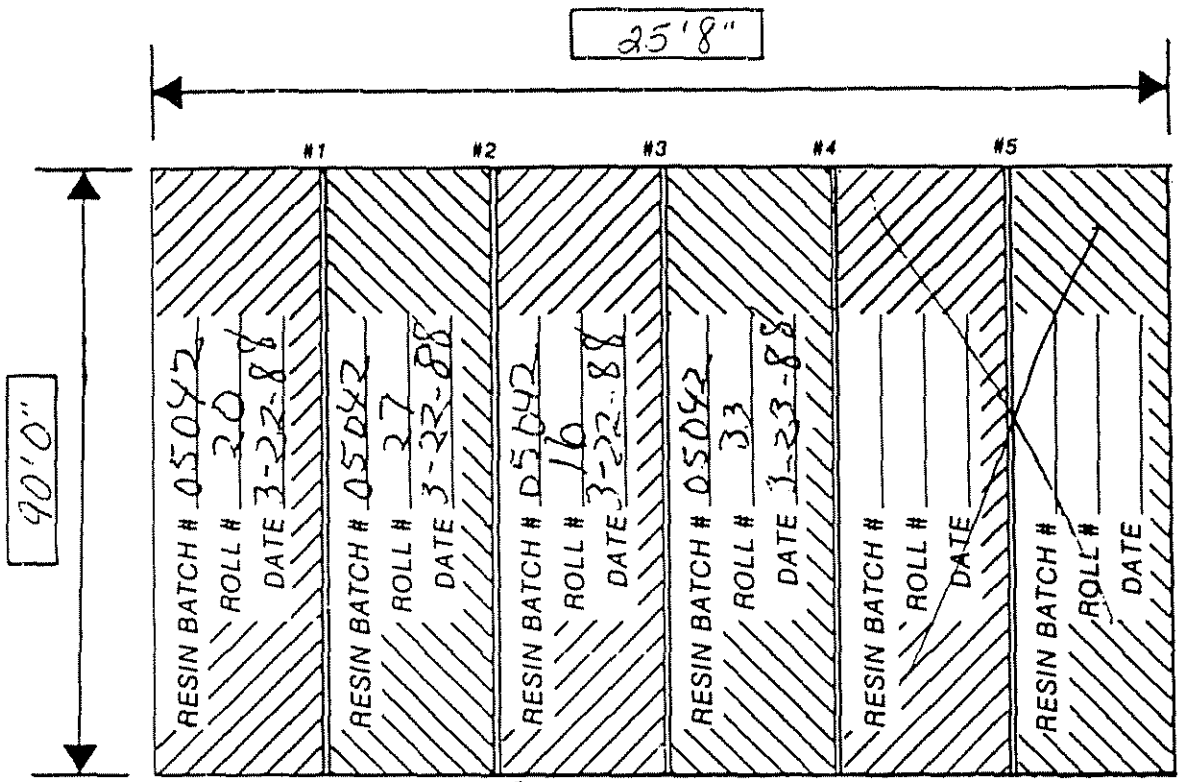
J.D. DATE 6-1-88

NSC QUALITY CONTROL CERTIFICATE

TE 6-1-88 PANEL IDENT. # 2

TERIAL 40 MIL HDPE FAB. ORDER # 806-18

ST ER THE LINER COMPANY TEST LEVEL I



	#1	#2	#3	#4	#5
BEG. PRESSURE	29	28	28		
END PRESSURE	28	26½	27		
△	1	1½	1		

SEAM FINISH PEEL TEST VALUES

SEAM #	YIELD PPI	YIELD PPI	SEAM #	YIELD PPI	YIELD PPI
1	78	94	4		
2	74	82	5		
3	92	73	6		

SHEAR TEST VALUES

SEAM #	YIELD PPI
1	116
2	116
3	

NOTES: Panels 1+2 were run together.

KEY

Seam Run Directions are Top to Bottom

= = Denotes Sheet Splice

All Peel Tests are Film Tear Bond (FTB)

Panels are Rolled Starting Top of Page

QUALITY CONTROL APPROVAL:

Testing and Visual Inspection of Panel

[signature] DATE 6-1-88

FAIRFIELD TESTING LABORATORY

AN INDEPENDENT INSPECTION AND ENGINEERING LABORATORY
Materials Testing, Research, Consulting, Nondestructive Testing, Subsoil Investigation

652 Glenbrook Road • Stamford, Connecticut 06906 (203) 323-3148

CLIENT: SEALAND ENVIRONMENTAL SERVICES INC.
326 DERBY AVE.
DERBY, CT. 06418

PROJECT: GAR ELECTROFORMING DIVISION/DANBURY, CT.

SUBJECT: GRADATION (DRAINAGE MATERIAL) ASTM D2434

DATE: 7/15/88 SAMPLE SUBMITTED BY CLIENT

MECHANICAL ANALYSIS

SIEVE SIZE	PERCENTAGES PASSING
3/4	100%
1/2	100%
1/4	98.0%
10	89.8%
20	69.4%
40	33.6%
100	5.7%
200 (BY WASH)	1.0%

PERMEABILITY 10^{-1} CM/SEC. SPEC. 10^{-3} CM/SEC.

RESPECTFULLY SUBMITTED,

FAIRFIELD TESTING LABORATORY

John Vitale

JOHN VITALE

JV:AC

Construction Fabrics by TerraTex

TerraTex nonwoven construction fabrics are made of specially formulated polypropylene to insure resistance to most soil chemicals, rot, mildew, acids and alkalies in a pH range from 3 to 12.

Typical Physical Properties

	N02		3D		N08		N12		WC
Grab Tensile Strength (lb) ASTM D-1682	65		125		270/300		430/360		70
Grab Elongation (%) ASTM D 2200	20		[illegible]		[illegible]		[illegible]		[illegible]
Mullen Burst (psi) ASTM D-3786			275		450		600		
Coef. Of Permeability (cm/sec)	2		2		25		3		2
Equivalent Opening Size US Std. Sieve	70-100		80+		80+		100+		70-100
Thickness (mils)	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]
Weight (oz/sy) ASTM D-3776	[illegible]		[illegible]		[illegible]		12.0		[illegible]

Roll Dimensions

Width (ft)	12.5/15		12.5/15		12.5/15		12.5/15		12.5
Length (ft)	360		360		360/300		360/300		360
Area (sy)	500/600		500/600		500		500		500
Gross Weight (lbs)	95/135		150/190		270		400		95

Distribution and Manufacturing

TerraTex products are marketed by WEBTEC, Inc. through a network of local distributors. For further information contact

WEBTEC, Inc.
P.O. Box 240302
Charlotte, N.C. 28224-0302
Phone (800) 438-0027 or (704) 398-0954

Local Distributor

Superior Products Dist., Inc.
1403 Meriden-Waterbury Road
MILLDALE, CT 06467
Phone (203) 621-3621

The facts stated and the recommendations made herein are offered free of charge and are accurate to the best of our knowledge. However, no guarantee of their accuracy is made and the products mentioned are distributed without warranty, expressed or implied. Final determination on the use of any information or material, of how it is used, and whether the use infringes any patents is the sole responsibility of the user.

100

24.0
− 3.4
20.6 % Clay & Silt

100.0
− 20.6 % Clay & Silt
79.4 % Sand

14.0
− 5.2
8.8 % Clay

20.6 % Clay & Silt
− 8.8 % Clay
11.8 % Silt

Connecticut Department of Transp
Bureau of Administration
P.O. Drawer A
Wethersfield, Conn., 06109

ORGANIC CONTENT

Wt. of Crucible & topsoil	43.429
Wt. of Crucible	17.661
Oven dried topsoil	25.768
Wt. of Crucible & ash	42.501
Wt. of Crucible	17.661
Ash	24.840
Oven dried Topsoil	25.768
Ash	24.840
Loss of Wt.	.928

pH- 6.51

Hydrom	24.0	14.0
Therm	74°F	76°F
±	3.4	5.2

Loss of Wt. ÷ Oven dried topsoil (100) = % Organic

.928 ÷ 25.768 (100) = 3.60 %

County Wide Construction, Inc.
1842 Meriden-Waterbury Turnpike,
P.O. Box 639, Southington, CT 06489

FORM NO. MAT-58 A ED. 8/65
STATE HIGHWAY DEPARTMENT
STATE OF CONNECTICUT
REPORT OF AGRONOMIC TESTS

DATE 5/16/88
LABORATORY NO. 255428
T

KIND OF MATERIAL: Topsoil				
SOURCE OF SUPPLY: County Wide				
LOCATION OF SOURCE OF SUPPLY: Cheshire	TEXTURE	Sandy Loam		RATIO
SAMPLE TAKEN FROM: Stockpile	SILT, %	11.8	ALUMINUM	
LOCATION:	CLAY, %	8.8	CALCIUM	
SAMPLED BY: Schweighhoffer	SANDS, %	79.4	NITRATE NITROGEN	
DATE SAMPLED: 5-14-88	pH	6.51	PHOSPHORUS	
BUYING AGENCY:	ORGANIC MATTER CONTENT, %	3.60	POTASSIUM	
QUANTITY REPRESENTED: Source Sample	DOLOMITIC LIMESTONE, TONS PER ACRE		MAGNESIUM	
PURPOSE FOR WHICH MATERIAL WILL BE USED	RECOMMENDED FOR	REMARKS		
DATE MATERIAL WILL BE USED	Acceptance	ACCEPTED		
WHERE MATERIAL WILL BE USED				
SAMPLE RECEIVED				

P. O. BOX 366
BUFFALO, NY 14240

Stanford Seed

MUDDY CREEK RO
DENVER, PA 175

EMPIRE BIRDSFOOT TREFOIL
99.22% PURE SEED
.43% OTHER CROP SEED
.00% WEED SEED ORIGIN-CANADA
.35% INERT MATTER NET WT. 25#
70.0% GERMINATION
18.00% HARD SEED
88.0% TOTAL GERMINATION & HARD SEED
LOT 13556-57,11 TEST DATE - JAN, 1988

A/pS

C-14815

Chemrox Laboratory Services

July 12, 1988

Sealand Environmental Services, Inc
326 Derby Avenue
Derby Ct 06418

Attention: Kim Baldamarco

PRELIMINARY REPORT ON Job Number 453-038-069

Sample Description	Cation Exchange Capacity
Soil Sample from Gare Electric	9.76 meq/100 g.

926-9081

Prepared by

John T. Bennett, Jr.
Laboratory Manager

chemrox

Chemrox Laboratory Services

July 15, 1988

Sealand Environmental Services, Inc
326 Derby Avenue
Derby Ct 06418

Attention: Kim Saldamarco

PRELIMINARY REPORT ON Job Number 453-038-069

Sample Description	Potassium	Phosphorus
Soil Sample from Gare Electric	44.0 ug/g	0.69ug/g

Parameters were determined after extraction with Morgans Solution.

Prepared by

John T. Bennett, Jr.
Laboratory Manager

chemrox

Chemrox Laboratory Services

July 15, 1988

Sealand Environmental Services, Inc
326 Derby Avenue
Derby Ct 06418

Attention: Kim Saldamarco

PRELIMINARY REPORT ON Job Number 453-038-069

Sample Description	Potassium	Phosphorus
Soil Sample from Gare Electric	44.0 ug/g	0.69ug/g

Parameters were determined after extraction with Morgans Solution.

Prepared by

John T. Bennett, Jr.
Laboratory Manager

chemrox

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX C

CONNECTICUT DEP APPROVAL OF ALTERNATE GROUND WATER MONITORING PLAN

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

A P P R O V A L

June 13, 1990

Mr. Frank Ray
Compliance and Safety Officer
GAR Electroforming, Division
Electroformers, Inc.
11 Augusta Drive
Danbury, CT 06810

Dear Mr. Ray:

The "Upgraded Alternate Ground Water Monitoring System Plan", report dated March, 1990 revised May, 1990, with further modifications dated May 29, 1990, has been reviewed by the Department of Environmental Protection, Site Remediation Division. These documents were prepared for GAR Electroforming by Lancy Environmental Services Company.

This report, as modified, complies with Department of Environmental Protection, Administrative Order No. HM-641 to GAR Electroforming Division, Electroformers Incorporated entered on December 1, 1989 fulfilling the requirements of Paragraph 4, Step B of the Order. The Department has determined that this plan is consistent with the groundwater monitoring requirements of Section 22a-449(c)-28 of Connecticut's Hazardous Waste Management Regulations. Therefore, the report is hereby approved.

This approval does not relieve the facility of the obligation to obtain any other authorizations as may be required by other provisions of the Connecticut General Statutes, or regulations of Connecticut State Agencies.

Sincerely,

Richard J. Barlow

Richard J. Barlow
Chief
Bureau of Waste Management

RJB:RCH:mw

cc: Roger A. Dhonau, Lancy ESC

<GAR9006A.APV>

Phone:

165 Capitol Avenue • Hartford, Connecticut 06106

An Equal Opportunity Employer

Tom

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

February 7, 1985

APPROVAL

Mr. George Ray
% G.A.R. Electroforming
Augusta Drive, Commerce Park
Post Office Box 340
Danbury, Connecticut 06810

Dear Mr. Ray:

The Alternate Groundwater Monitoring System Plan prepared for G.A.R. Electroforming by Lancy International has been reviewed by the Department of Environmental Protection.

This report complies with Department of Environmental Protection, Hazardous Materials Managment's Order No. HM-49 to G.A.R. Electroforming entered on August 30, 1983.

The report is hereby approved in accordance with Sections 22a-449, 22a-432, and 22a-6 of the Connecticut General Statutes, as amended.

This APPROVAL does not relieve the facility of the obligation to obtain any other authorization as may be required by other provisions of the Connecticut General Statutes, or regulations of Connecticut State agencies.

Very truly yours,

S. W. Hitchcock

Stephen W. Hitchcock
Director
Hazardous Materials Management Unit

SWH:TFS:et
cc: Roger Dhonau, % Lancy International

Phone:
165 Capitol Avenue • Hartford, Connecticut 06106
An Equal Opportunity Employer

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX D

SURFACE WEATHER OBSERVATIONS
DANBURY, CONNECTICUT AIRPORT

MF1-10
(6-88)
PREP BY FMH NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

DANBURY CT

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

STATION: DANBURY, CT.

DATE: 1-1-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL OPAQUE SKY COVER (21)	TOTAL OPAQUE SKY COVER (22)	OBSERVER'S INITIALS (15)
SA	1145	E 40 OVC	7				40	M	28	10		952							TF
SA	1245	E 25 BKN 100 OVC	15				39	M	28	12		953							TF
SA	1345	E 30 BKN	20				39	M	30	10G	22	954							TF
SA	1445	E 40 BKN	20				41	M	28	10G	20	956							TF
SA	1545	E 40 BKN	20				40	M	30	VS G	35	958							BL
SA	1645	E 30 BKN	20				39	M	28	VS G	25	959							TF
SA	1745	40 SCT	20				37	M	30	VS G	20	961							BL
SA	1845	40 SCT	20				37	M	28	VS G	20	964							BL
SA	1945	40 SCT	20				35	M	31	VS G	20	970							BL
SA	2045	40 SCT	20				33	M	30	15G	20	975							LY
SA	2145	40 SCT	20				31	M	29	10G	15	977							LY
SA	2245	40 SCT	20				31	M	29	10G	20	984							LY
SA	2345	40 SCT	20				30	19	29	10G	15	990							LY
SA	0045	CLR	20				30	19	30	10		995							LY
SA	0145	CLR	20				30	19	29	10		999							LY
SA	0245	CLR	20				30	20	29	10		003	LAST						LY

BEST AVAILABLE REC'D

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)					
ATT. THERM. (60)					
OBSRVD. BAR. (61)					
TOTAL CORR. (62)					
STA. PRESS. (63)					
BAROGRAPH (64)					
BAR. CORR. (65)					

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

Dept OTS
PWPNT RTS 23457

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

MF1-1C (6-68)
PRES BY FMH NO 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

STATION: Danbury, CT

DATE: 01-08-90 1-8-90

DANBURY CT

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (15)
SA	1148	E150 BKN	7/6		F		27	25	00	00		996							PD
SA	1245	E150 BKN	6		F		26	25	00	00		996							PD
SA	1345	E150 BKN	7				29	27	00	00		999							TW
SA	1445	E150 BKN	7				33	28	00	00		999							PR
SA	1545	E150 BKN	7				35	30	00	00		997							PR
SA	1645	E150 OVC	6		H		37	30	00	00		993							PR
SA	1745	E150 OVC	6		H		38	29	11	04		989							PD
SA	1845	E150 OVC	6		H		38	29	00	00		988							PD
SA	1945	E150 OVC	7				37	29	00	00		985							TF
SA	2045	E 80 OVC	7				37	28	06	06		981							LY
SA	2145	E 80 OVC	6		H		36	29	04	04		984							PR
SA	2245	E50 OVC	7				37	29	00	00		981							BL
SP	2300	X W9X	1 1/2		S-F				00	00		979							BL
SA	2345	W4X	3/4		S-F		33	32	04	04		979							BL
SA	0045	W3X	3/4		SF		33	32	04	04		976							TF
SA	0145	W3X	3/4		SF		33	33	04	05		977							TF
SA	0245	W4X	1		SF		33	33	00	00		977	LAST						TF

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-68) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

MF1-1C
(0-80)
PREP BY FMH NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT

DATE: 1-15-90 1-15-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (Miles) SURFACE (4)	VISIBILITY (Miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (26)	OBSERVER'S INITIALS (15)
SA	1250	X+ W6X	3/4		S-		32	31	18	05		030							PR
SA	1245	W2X	1/4		SF		33	32	18	05		028							PR
SP SA	1310	E6 OVC	2		S+-F				20	05		028							PR
SA	1345	W6X	1 1/2		S-F		34	32	19	05		028							PR
SP	1400	W5X	3/4		S-F		34	32	18	05		028							TF
SA	1445	W6X	1 1/2		S-F		35	33	22	08		028							TF
SA	1545	E9 OVC	3		L-F		36	33	20	08		026							TF
SA	1645	E7 OVC	3		L-F		36	33	18	05		023							PR
SA	1745	E8 OVC	4		L-F		36	33	22	05		020							TF
SA	1845	E9 OVC	3		L-F		36	34	25	08		018							TF
SA	1945	E9 OVC	2 1/2		F		35	34	24	04		018							ML
SA	2045	E12 OVC	3		F		36	34	27	06		018							ML
SA	2145	E12 BKN 50 OVC	4		F		36	33	26	05		018							PD
SA	2245	E1 BKN +12 OVC	2		F		33	32	00	00		019							PD
SA	2345	E5 OVC	2		F		34	34	26	05		020							LY
SA	0045	E7 OVC	2		F		35	35	27	06		021							LY
SA	0145	E7 OVC	2		F		35	34	27	06		021							PD
SA	0245	-X E30 OVC	2 1/2		F		34	33	00	00		021	F4 LAST						

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (58)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

MF1-10C (0-80) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

MF1-10I (6-88) PRES. BY FMH No. 1

To convert LST to UTC ADD 5 hrs. | Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: Danbury, CT

DATE: 1/22/90 1/22/90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (38)	OBSERVER'S INITIALS (15)
SA	1148	W3X	1		F		28	27	14	06		990							PD
SA	1245	W4X	1		S-F		28	28	00	00		990							PD
SA	1345	W5X	3/4		S-F		29	28	00	00		990							PD
SA	1445	W5X	1 1/2		S-F		31	29	00	00		991							ZW
SA	1545	-X E6BKN 12OVC	2 1/2		F		33	31	20	05		989	F4						PR
SA	1645	-X E8OVC	2 1/2		F		34	33	20	05		988	F3						PR
SA	1745	W5X	1 1/2		F		35	34	22	05		981							PD
SA	1845	W6X	2		F		37	34	20	05		979							PR
SA	1945	-X E9BKN	2		F		35	34	00	00		980	F3						TF
SA	2045	E20 BKN 100 OVC	2 1/2		F		34	34	00	00		981							PR
SA	2145	40 SCT E100 OVC	3		F		34	33	00	00		979							GR
SA	2245	E80 BKN	3		F		33	33	00	00		980							GR
SA	2345	-X E40 BKN	2 1/2		GF		33	33	00	00		981	GF4 ~~FIRST~~						TF
SA	0045	-X E40 BKN	2		GF		34	33	00	00		983	GF4						TF
~~SA~~	~~0145~~	~~W5 OVC~~	~~1 1/2~~		~~S-F~~		~~34~~	~~33~~	~~00~~	~~00~~		~~985~~							~~GR~~
SA	0145	W5 X	1 1/2		S-F		34	33	00	00		985							GR
SA	0245	-X E40 BKN	2		F		33	33	26	04		984	F4 LAST						GR

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

1/29/90

MF1-1L (6-88) PREP BY FMH NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ___ LST ✓

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT.

DATE: 1-29-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (15)
SA	1145	E2 OVC	1/2		S		30	30	10	05		032							JB
SA	1245	E2 OVC	1/2		S		31	30	08	05		033							JB
SA	1345	E7 OVC	10				31	31	09	06		029	CIG RGD						JB
SA	1445	E8 OVC	10				32	30	09	10		027	CIG RGD						TF
SA	1545	10 SCT E30 OVC	10				33	31	09	10		023							TF
SA	1645	30 SCT E60 OVC	15				35	30	13	10		017							KS
SA	1745	30 SCT E60 OVC	15				36	30	12	10	G15	012							TF
SA	1845	E30 BKN E60 OVC	15				36	31	12	14		004							KS
SA	1945	E20 OVC	10		R-		37	33	12	10		002							LY
SA	2045	E20 OVC	7		R		37	34	11	10		997							LY
SA	2145	E15 OVC	5		R-F		37	34	10	12		995							LY
SA	2245	E10 OVC	2		R-F		37	35	12	10		991							LY
SA	2345	E10 OVC	2		RF		37	36	11	10		984							LY
SA	0045	E7 OVC	2		RF		37	36	10	12		978							LY
SA	0145	E6 OVC	2		R-F		37	37	08	10		977							LY
SA	0245	E6 OVC	1		RF		36	36	09	10		965	LAST						LY

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

MF1-10
(8-88)
PRES BY FMH NO 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

STATION: Danbury, CT

DATE: 02-05-90 2/5/90

DANBURY CT

TYPE (1)	TIME (2)	SKY AND CEILING (hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (36-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (23)	TOTAL OPAQUE SKY COVER (26)	OBSERVER'S INITIALS (15)
SA	1148	E 10 BKN	7				19	16	34	08		015							LY
SA	1245	10 SCT	10				19	16	35	08		020							LY
SA	1345	15 SCT	20				20	16	35	10		021							LY
SA	1445	20 SCT	20				22	17	36	12		022							LW
SA	1545	20 SCT	20				24	19	36	10		022							LW
SA	1645	E 2.5 BKN	20				26	21	35	08		022							LY
SA	1745	E25 BKN	20				27	21	35	07		020							PD
SA	1845	E25 BKN	20				28	22	35	09		019							PR
SA	1945	E25 BKN	20				29	22	36	07		019							GR
SA	2045	E25 BKN	20				29	23	31	06		020							GR
SA	2145	E25 BKN	20				28	24	28	04		022							PR
SA	2245	E25 OVC	20				28	24	00	00		023							PR
SA	2345	E25 BKN	20				29	25	25	05		024							GR
SA	0045	E30 BKN	20				27	24	26	05		024							GR
SA	0145	E50 BKN	20				26	24	00	00		023							GR
SA	0245	80 SCT	20				24	23	26	04		022	LAST						GR

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNRL.TD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (8-88)

SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

MF1-10C
(8-88)
PREP BY FMH NO :

To convert LST to UTC ADD 5 hrs. | Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT.
DATE: 2-12-90

2/12/90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (13)
SA	1148	E 50 OVC	15				31	21	01	05		996							PR
SA	1245	E 50 BKN	20				31	20	02	06		999							PR
SA	1345	E 50 BKN	20				32	21	06	06		000							KS
SA	1445	30 SCT E 50 BKN	20				32	21	03	08		002							TF
SA	1545	30 SCT	20				35	23	35	08		003							TF
SA	1645	30 SCT	20				36	24	35	10		003							TF
SA	1745	30 SCT	20				37	23	35	10		002							PR
SA	1845	30 SCT	20				37	24	34	10 G15		002							PR
SA	1945	30 SCT	20				38	24	30	08		004							KS
SA	2045	CLR	20				37	24	32	10		005	FEW CU ALQDS						PD
SA	2145	CLR	20				36	22	35	10		008							PD
SA	2245	70 SCT	20				34	22	36	05		013							LY
SA	2345	100 SCT	20				34	21	35	05		016							LY
SA	0045	CLR	20				32	20	35	07		019							LY
SA	0145	CLR	20				30	21	33	05		021							LY
SA	0245	CLR	20				29	20	00	00		021	LAST						LY

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1300 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (8-80) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

MF1-10L (6-88) PRED. BY FMH NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: Danbury, CT

DATE: 2-19-90 2/19/90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL OPAQUE SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (12)
SA	1148	E100 BKN 200 OVC	15				33	29	25	10		000							GR
SA	1245	100 SCT E 200 BKN	20				35	29	27	11		998							GR
SA	1345	E 100 BKN 200 BKN	20				38	30	27	11		997							GR
SA	1445	E 150 BKN	20				41	30	26	12		995							LY
SA	1545	150 SCT E 200. BKN	20				42	30	27	14		993							GR
SA	1645	200 - BKN	20				46	30	26	14		988							LW
SA	1745	200 - BKN	20				50	29	28	13		982							GR
SA	1845	200 - BKN	20				50	25	28	10G20		980							LY
SA	1945	200 - SCT	20				51	23	28	12G20		978							LW
SA	2045	200-SCT	20				50	25	27	10G20		978							RD
SA	2145	CLR	20				51	21	31	10G20		979							TF
SA	2245	CLR	20				47	21	33	10G20		983							TR
SA	2345	CLR	20				43	21	33	10G20		990							RD
SA	0045	CLR	20				38	16	28	20G30		993							RD
SA	0145	CLR	20				34	16	30	15G25		999							TF
SA	0245	CLR	20				32	15	30	10G20		002	CA ST.						TF

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (58)				
ATT. THERM. (59)				
OBSERVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	7:00 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

2/26/0

MF1-10C
(6-88)
PREG BY FMH NO 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT.

DATE: 2-26-90

TYPE (1)	TIME (2)	SKY AND CEILING (hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (19)
SA	1148	CLR	20				0	M	28	04		080							PD
SA	1245	CLR	20				5	M	32	08		082							TT
SA	1345	CLR	20				8	M	34	08		085							KS
SA	1445	CLR	20				10	M	34	09		084							PD
SA	1545	CLR	20				11	M	33	12		085							DR
SA	1645	CLR	20				12	M	31	12		083							KS
SA	1745	CLR	20				13	M	32	09		080							PD
SA	1845	CLR	20				13	M	36	12		079							DR
SA	1945	CLR	20				16	M	36	10		077							KS
SA	2045T	CLR	20				17	M	36	08		076							LY
SA	2145T	CLR	20				17	M	35	06		077							LY
SA	2245T	CLR	20				16	M	32	05		077							LY
SA	2345T	CLR	20				12	M	00	00		078							LW
SA	0045T	CLR	20				9	M	00	00		079							LY
SA	0145T	CLR	20				7	M	00	00		080							LY
SA	0245T	CLR	20				6	M	25	05		079	LAST						LW

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSERVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1300 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

1148 DWPNT OTS

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

MF1-1C
(6-80)
PRES BY FMH NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: Danbury, CT
DATE: 3-5-90 3-5-90

TYPE (1)	TIME (2)	SKY AND CEILING (hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (15)
SA	1148	E100 OVC	20				20	11	05	06		045							GR
SA	1245	E100 BKN	15				21	12	03	06		049							LY
SA	1345	E100 BKN	15				22	12	03	06		050							KS
SA	1445	E100 BKN	15				26	13	00	00		050							GR
SA	1545	E100 BKN	15				28	14	11	06		050							KS
SA	1645	E80 BKN 150 BKN	20				31	17	00	00		049							GR
SA	1745	E80 BKN 150 OVC	15				31	20	28	08		047							KS
SA	1845	E80 BKN 150 OVC	6		SW-		M	M	26	06		045							LY
SA	1945	E40 BKN 100 OVC	4		SW-		31	M	25	08		045							PD
SA	2045	E40 BKN 100 OVC	5		SW-		31	M	22	08		045							PD
SA	2145	40 SCT E 100 OVC	7				30	M	25	05		045							TF
SA	2245	40 SCT E 80 OVC	7				29	M	00	00		045							TF
SA	2345	40 SCT E 80 OVC	7				29	M	09	04		047							PD
SA	0045	30 SCT E80 OVC	7				28	M	13	04		047							PD
SA	0145	30 SCT E80 OVC	7		SW-		29	M	00	00		048							TF
SA	0245	E30 ~~SCT~~ BKN E80 OVC	10				29	M	00	00		049	LAST						TF

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (53)				
ATT. THERM. (60)				
OBSRVD. BAR. (51)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TEMP & DWPNT OTS 1845Z
TEMPRTS 1915

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-80) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

MF1-1G (8-88)
PREP BY FMH NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST ____

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

STATION: DANBURY CT

DATE: 3-12-90 3-12-90

DANBURY CT

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (38)	OBSERVER'S INITIALS (15)
SA	1148	E35 OVC	7		R-		44	41	10	05		021							TF
SA	1245	E40 OVC	7		R-		42	37	12	08		022							TF
SA	1345	E30 OVC	7				41	39	06	05		022							RS
SA	1445	E30 OVC	10				44	40	09	04		020	CIG RGD						PD
SA	1545	E30 OVC	10				46	39	00	00		018	CIG RGD						RS
SA	1645	E25 BKN 500 OVC	10				49	39	15	05		016							RW
SA	1745	E20 SCT E50 BKN	10				51	41	09	05		014							TF
SA	1845	E20 BKN 50 OVC	10				52	42	06	10		011							PD
SA	1945	20 SCT E50 BKN	10				52	41	10	06		011							RS
SA	2045	100 SCT	10				51	42	15	08		009							RW
SA	2145	40 SCT 100 SCT	10				53	42	15	07		007							LW
SA	2245	150 SCT	10				50	44	16	05		008							LW
SA	2345	150 SCT	10				47	40	16	08		009							LY
SA	0045	150 SCT	10				45	39	14	06		009							LY
SA	0145	150 SCT	10				43	39	14	07		009							LW
SA	0245	150 SCT	10				42	38	00	00		010	LAST						LY

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (80)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (8-88)

SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

MF1-1C
(6-88)
PREP BY Flex 3 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ___ LST ___

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: Danbury, CT

DATE: 3-19-90 3-19-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (38)	OBSERVER'S INITIALS (15)
SA	1148	E100 BKN	15				31	28	00	00		028							LY
SA	1245	E100 BKN	15				36	30	00	00		029							LY
SA	1345	E100 BKN	15				44	38	15	07G12		028							KS
SA	1445	E100 BKN	15				48	31	20	06		029							KS
SA	1545	E100 BKN	15				50	29	18	08		028							TF
SA	1645	E150 BKN	15				49	26	15	10		026							LY
SA	1745	E150 BKN	15				51	28	18	10G15		025							BW
SA	1845	E150 BKN	15				51	26	18	06G20		023							TF
SA	1945	E150 BKN 200 OVC	15				50	25	17	10		022							PD
SA	2045	E150 OVC	20				49	27	19	10		023							HL
SA	2145	E35 BKN 100 OVC	20				48	30	18	08		022							TF
SA	2245	E35 BKN 100 OVC	10				46	34	13	07		022	OCNL RW-						PD
SA	2345	E35 BKN 100 OVC	10				44	37	14	08		020	OCNL L-						HL
SA	0050	E40 BKN 100 OVC	10				44	38	13	08		021							HL
SA	0145	E40 BKN 100 OVC	10				44	37	09	06		019							PD
SA	0245	E40 BKN 100 OVC	10				44	38	08	07		017	LAST						HL

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNML.TO. (Ins.) (69)	1300 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (0-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

MF1-1C
(6-88)
PRES BY FMH NO 1

To convert LST to UTC
ADD 5 hrs.

Time in Column 2 is:
UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT
DATE: 3-26-90 3-26-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (18)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (13)
SA	1148	CLR	20				29	26	00	00		016							TF
SA	1245	CLR	20				40	27	25	06		016							TF
SA	1345	CLR	20				43	25	27	10		017							KS
SA	1445	CLR	20				46	22	28	10	G18	015							TF
SA	1545	30 SCT	20				46	23	28	10	G20	013							TF
SA	1645	50 SCT	20				48	24	29	12	G18	012							KS
SA	1745	50 SCT	20				49	23	28	10	G20	011							TF
SA	1845	50 SCT	20				48	21	29	15	G20	010							KS
SA	1945	50 SCT	20				49	22	28	15	G20	009							LY
SA	2045	E50 BKN	20				45	26	30	15	G20	013							LY
SA	2145	E50 BKN	20				42	21	30	15	G20	015							LW
SA	2245	CLR	20				40	16	30	15	G22	018							LW
SA	2345	CLR	20				36	17	31	13	G20	022							LW
SA	0045	CLR	20				34	16	31	10	G15	025							LY
SA	0145	CLR	20				32	16	35	10	G15	028							LY
SA	0245	CLR	20				30	14	35	10	G15	031	LAST						LY

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	5					
	6					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

MF1-10C
(6-88)
PRES. BY FMH NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: Danbury, CT

DATE: 4-02-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (15)
SA	1048	W3X	1		L-F		40	40	00	00		995							LY
SA	1145	W4X	1		L-F		40	40	12	06		995							LY
SA	1245	W3X	1/2		LF		41	40	17	06		995							KS
SA	1345	W4X	1		L-F		41	40	16	06		996							KS
SA	1445	W4X	1		L-F		42	40	14	06		996							KS
SA	1545	W3X	3/4		F		43	41	16	07		994							KS
SA	1645	W3X	1/2		F		43	42	15	06		993							KS
SA	1745	W3X	1/2		F		44	42	15	10		992							KS
SA	1845	WOX	1/2		F		44	43	15	08		991							ML
SA	1945	WOX	1/2		F		44	43	15	06		989							ML
SA	2045	WOX	1/4		F		44	43	15	10		989							JF
SA	2145	WOX	3/8		F		44	44	17	05		989							ML
SA	2245	WOX	1/4		F		44	43	15	05		992							DD
SA	2345	WOX	1/4		F		43	42	11	06		992							PD
SA	0045	WOX	1/4		F		42	42	13	08		991							ML
SA	0145	WOX	1/4		F		42	41	11	10		990	LAST						ML

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

MF1-10C
(6-88)
PREP BY FMH NO 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT
DATE: 4-9-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (15)
SA	1048	CLR	20				29	23	24	04		044							FD
SA	1145	CLR	20				35	25	00	00		045							PD
SA	1245	CLR	20				46	25	27	09		047							IGS
SA	1345	CLR	20				50	28	28	08		046							KS
SA	1445	CLR	20				52	29	26	12		046							KS
SA	1545	100 SCT	20				54	29	24	11		044							KS
SA	1645	100 SCT	20				54	28	25	10		042							KS
SA	1745	100 SCT	20				53	27	24	10G	15	040							NL
SA	1845	E100 BKN	20				57	28	24	10G	15	036							KS
SA	1945	E100 BKN	20				58	28	23	10G	15	033							LY
SA	2045	200 - BKN	20				56	28	19	13		032							LW
SA	2145	200 - SCT	20				53	31	18	13		031							LW
SA	2245	200 - BKN	20				51	33	19	12		029							LY
SA	2345	200 SCT	15				49	34	19	10		029							LY
SA	0045	100 SCT 200 - SCT	15				48	34	18	08		029							LW
SA	0145	200 SCT	15				49	35	19	08		030	LAST						LY

BEST AVAILABLE RECORD.

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

MF1-10C
(6-88)
PRES BY FMH NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

STATION: DANBURY, CT

DATE: 4-16-90 4-16-90

DANBURY CT

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (19)
SA	1048	150 SCT	5		F		46	M	22	04		996							LW
SA	1145	150 SCT	7				46	M	00	00		998							LY
SA	1245	CLR	10				52	M	33	08		999							LY
SA	1345	CLR	15				54	M	34	08		999							LW
SA	1445	30 SCT	10				56	M	35	08		000							LY
SA	1545	30 SCT	10				57	M	31	06		000							HL
SA	1645	30 SCT	10				59	M	31	06		000	WND 28V34						KS
SA	1745	CLR	10				59	M	31	07		999							LY
SA	1845	CLR	10				61	M	32	07		998	FEW CU ALQDS						PD
SA	1945	CLR	10				62	M	27	09		996							PD
SA	2045	CLR	15				62	M	32	09		996							PR
SA	2145	CLR	15				61	M	29	09		996							PR
SA	2245	CLR	15				60	M	28	09		996							PR
SA	2345	CLR	15				54	M	00	00		997							PD
SA	0045	CLR	15				52	M	00	00		998							PD
SA	0145	CLR	15				52	M	20	08		999	LAST						PR

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (80)

DUPNT OTS

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

MF1-10C
(5-88)
PRES BY FMH NO 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT

DATE: 4-23-90 4-23-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL OPAQUE SKY COVER (21)	TOTAL OPAQUE SKY COVER (38)	OBSERVER'S INITIALS (18)
SA	1045	CLR	20				44	41	26	05		001							HL
SA	1145	100 SCT	20				55	46	28	04		002							HL
SA	1245	100 SCT	20				61	46	33	09		003							KS
SA	1345	CLR	20				65	47	35	06		004							LY
SA	1445	100 SCT	20				67	44	35	10G	15	004							LY
SA	1545	100 SCT	20				67	43	35	08		003							HL
SA	1645	100 SCT	20				68	43	35	08		002							KS
SA	1745	CLR	20				70	42	36	15		002							KS
SA	1945	CLR	20				71	41	35	16G	16	000							KS
SA	1945	CLR	20				71	39	36	12G	20	000							LW
SA	2045	CLR	20				71	37	03	10G	15	000							LY
SA	2145	CLR	20				70	34	04	10		000							LW
SA	2245	CLR	20				70	37	06	08		000							PR
SA	2345	250 SCT	20				68	46	08	05		001							PR
SA	0045	250 SCT	20				58	44	09	09		005							LW
SA	0145	250 SCT	20				53	43	24	04		006	LAST						PR

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSERVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (0-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

MF1-1C
(6-88)
PREG BY FMH NO. 1

To convert LST to UTC ADD _____ hrs.

Time in Column 2 is: UTC _____ LST _____

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT

DATE: 4-30-90 4 30 90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (15)
SA	1048	E5 OVC	2 1/2		R-F		48	48	07	08		011							LW
SA	1145	E5 OVC	2		R-F		48	48	08	08		011							LW
SA	1245	E5 OVC	1 1/2		R-F		48	48	09	09		009							KS
SA	1345	E2 OVC	1		F		49	49	08	09		008							KS
SA	1445	WO X	1/2		RW-F		49	49	08	06		009							KS
SA	1545	E6 OVC	2 1/2		R-F		50	50	07	05		009	CIG RGD						LW
SA	1645	E6 OVC	3		RW-F		50	50	05	10		007	CIG RGD						KS
SA	1745	E7 OVC	4		LF		51	51	09	07		005							HL
SA	1845	E8 OVC	4		LF		53	51	08	07		004							HL
SA	1945	E7 OVC	4		F		54	52	07	07		003							PR
SA	2045	E6 OVC	2 1/2		F		54	52	05	06		001							PR
SA	2145	E6 OVC	3		F		54	52	07	06		003							PD
SA	2245	E6 OVC	3		F		54	52	06	08		002							PD
SA	2345	E6 OVC	2 1/2		F		53	51	07	05		001							PR
SA	0045	E7 OVC	2		F		53	51	10	06		001							PR
SA	0145	E6 OVC	2		F		52	51	07	06		001	LAST						PR

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88)

SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

MF1-10C
(6-88)
PRES BY FMH NO

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT

DATE: 5-7-90 5/7/90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVERS INITIALS (15)
SA	1048	E20 BKN 100 BKN	10				47	40	00	00		990							PD
SA	1145	E100 BKN 200 BKN	15				50	43	24	05		990							PD
SA	1245	200 SCT	20				57	42	29	10		990							PD
SA	1350	30 SCT 200 SCT	20				59	41	29	10G	20	990							ML
SA	1445	30 SCT 100 SCT	20				59	38	33	12G	20	989							ML
SA	1545	E30 BKN 100 OVC	20				58	37	31	07		988	BNOVC						PD
SA	1645	E30 BKN 100 OVC	20				61	39	27	08		986	~~24V37~~ WND 24V31						KS
SA	1745	E30 BKN 100 BKN	20				62	36	29	10G	20	986	WND 24V36						ML
SA	1845	E30 SCT E100 OVC	20				61	37	31	10G	16	985							KS
SA	1945	30 SCT E100 OVC	20				60	37	29	11G	18	986							KS
SA	2045	E30 BKN E100 OVC	20				58	40	29	08G	13	986							PR
SA	2145	E35 OVC	10		L-		52	45	30	06		989							PR
SA	2245	E50 BKN 100 OVC	10				50	46	29	04		987							KS
SA	2345	E70 BKN	10				49	47	00	00		987							KS
SA	0045	65 SCT	10				47	46	00	00		987							PR
SA	0145	150 SCT	5		F		46	45	24	05		985	LAST						PR

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNOFFICIAL (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88)

SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

MF1-10C
(6-88)
PRES BY FMH NO 1

To convert LST to UTC ADD 5 hrs. | Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: Danbury, CT
DATE: 5-14-90 5/14/90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (15)
SA	1048	E15 BKN	15				52	48	01	10		001							LW
SA	1145	E15 BKN	20				54	48	36	10		005							LW
SA	1245	15 SCT	20				57	49	35	12		008							LW
SA	1345	15 SCT	20				59	49	36	10		009							PD
SA	1445	30 SCT	20				61	50	02	11		010							PD
SA	1545	30 SCT	20				64	50	01	12		010							PR
SA	1645	30 SCT	20				65	49	36	11		012							PD
SA	1745	20 SCT	20				66	51	35	10		012							KS
SA	1845	CLR	20				68	52	33	10		012							ML
SA	1945	CLR	20				69	52	31	07		012							PD
SA	2045	250 - SCT	20				70	51	32	05		011							GR
SA	2145	250 - BKN	20				70	50	02	07		011							GR
SA	2245	250 - BKN	20				69	49	08	07		011							ML
SA	2345	200 - BKN	20				64	52	15	08		014							ML
SA	0045	200 - BKN	20				59	53	24	04		016							GR
SA	0145	200 - BKN	20				56	52	26	06		016	LAST						ML

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)					
ATT. THERM. (60)					
OBSRVD. BAR. (61)					
TOTAL CORR. (62)					
STA. PRESS. (63)					
BAROGRAPH (64)					
BAR. CORR. (65)					

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88)

SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

5/21/90

MF1-10C
(6-80)
PRES BY FAH NO 1

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

STATION: DANBURY, CT.

DATE: 5-21-90

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

DANBURY CT

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (Miles) SURFACE (4)	VISIBILITY (Miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (15)
SA	1045	E5 BKN 8 OVC	3		L-F		43	43	10	10		990							HL
SA	1145	E6 BKN 10 OVC	3		L-F		43	43	09	10		990							HL
SA	1245	E7 BKN 10 OVC	3		R-F		43	43	08	10		989							HL
SA	1347	E5 BKN 10 OVC	4		R-F		43	43	06	10		988							MT
SA	1447	E6 BKN 10 OVC	4		R-F		44	43	06	09		990							MT
SA	1552	E6 BKN 10 OVC	3		F		44	43	06	08		991							MT
SA	1646	E5 BKN 10 OVC	2		L-F		44	43	07	10		991							PD
SA	1753	E6 BKN 10 OVC	2		F		44	43	05	08		992							MT
SA	1845	E5 BKN 10 OVC	3		F		44	43	05	07		995							KS
SP	1906	E5 BKN 10 OVC	3		F				08	07		995							KS
SA	1945	E7 BKN 10 OVC	2½		F		43	42	08	07		996							KS
SA	2045	E7 BKN 10 OVC	2½		F		44	43	06	10		997							PR
SA	2145	E8 BKN 20 OVC	5		F		44	42	06	08		997							PR
SA	2245	E10 BKN 20 OVC	8				44	41	05	08		998							PR
SA	2345	E15 BKN 30 OVC	10				44	41	06	08		000							PR
SA	0045	E15 BKN 30 OVC	10				43	41	06	06		001							JW
SA	0445	E25 BKN 40 BKN	10				43	40	06	08		003	L-A.ST						JW

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-80) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1988-554-006/81012

MF1-10C (6-68)
PREP BY ESSA HQ

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST ____

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT

DATE: 5-28-90 5/28/90

TYPE (1)	TIME (2)	SKY AND CEILING (Thousands of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (tenths) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (24)	OBSERVER'S INITIALS (15)
SA	1015	W4X	1		F		50	50	00	00		995							LW
SA	1145	W2X	1/2		F		54	53	00	00		997							PD
SP	1217	E5 BKN	1/2		F		57	55	00	00		997							KS
SA	1245	E 5 SCT	7				60	56	00	00		997	F BANK NW						KS
SA	1345	250-SCT	7				61	60	00	00		997							PD
L	1400	250 -SCT	10				69	59	00	00		997	ACFT MISHAP						LW
SA	1445	250 -SCT	10				70	56	06	04		997							LW
SA	1545	40 SCT 250 - SCT	15				72	53	05	04		996							LW
SA	1645	40 SCT 250-SCT	15				73	56	11	08		995							PD
SA	1745	40 SCT 250-BKN	15				73	57	16	09		995							PD
SA	1845	35 SCT E250 BKN	15				72	54	14	12		994							PR
SA	1945	35 SCT 250-BKN	15				72	58	19	07		994							RS
SA	2045	250 -BKN	15				69	59	19	08		993							ML
SA	2145	200 - BKN	15				67	55	19	12		993							ML
SA	2245	200 - BKN	15				65	53	17	07		993							GR
SA	2345	200 - BKN	20				62	50	17	07		994							GR
SA	0045	70 SCT E200 OVC	20				59	49	15	06		995							ML
SA	0145	70 SCT E200 OVC	20				57	50	00	00		996	LAST						ML

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (51)				
ATT. THERM. (60)				
OBSERVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNREL TO. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-68) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1969-654-005/1010

MF1-10C
(6-88)
PRES BY FSM NC 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT

DATE: 6-4-90 6-4-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (Miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (6)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (99-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (19)
SA	1045	5 SCT E100 ~~OVC~~ BKN	6		FH		69	66	26	10		965							PD
SA	1145	E100 BKN	6		H		71	65	19	06		963							PD
SA	1245	15 SCT E100 BKN	7				68	64	26	06		965							HL
SA	1345	20 SCT E100 BKN	10				70	64	24	10		965							GR
SA	1445	30 SCT 100 SCT 250-BKN	20				75	62	29	10		964							GR
SA	1545	20 SCT E150 BKN	15				72	59	28	10	G20	965							HL
SA	1645	E35 BKN 100 OVC	15				67	57	29	12	G20	968							PD
SA	1745	35 SCT E100 OVC	15				63	53	29	26	G20	971							GR
SA	1845	35 SCT E100 BKN	15				65	53	30	10	G15	971							GR
SA	1945	E35 BKN 100 BKN	20				66	52	30	12		971							LW
SA	2045	E35 BKN 100 BKN	20				66	50	31	10		972							LW
SA	2145	E35 BKN 100 BKN	20				64	50	30	12		975							PR
SA	2245	25 SCT E35 BKN	20				61	49	29	10		978							PR
SA	2345	E45 BKN 100 BKN	20				59	47	31	10		980							LW
SA	0045	E45 BKN 100 OVC	20				57	47	31	08		983							LW
SA	0145	45 SCT E150 BKN	20				56	47	32	06		984	LAST						PR

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

U.S. GPO: 1989-654-001/1010

MF1-10C (5-68)
PRES BY FARM NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT

DATE: 6-11-90 6/11/90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (90-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (26)	OBSERVER'S INITIALS (15)
SA	1048	25 SCT E80 BKN	10				60	56	34	09		981							PR
SA	1145	E16 OVC	15				61	56	35	12		983							PR
SA	1245	E15 OVC	15				61	57	35	12		985							LW
SA	1350	E15 OVC	15				62	56	34	12		985							LW
SA	1445	E15 OVC	10				63	57	33	10		986							LW
SA	1545	E15 OVC	15				63	56	01	13		986							LW
SA	1645	E16 BKN 100 OVC	15				66	57	34	10		986							PR
SA	1750	E17 BKN 80 OVC	15				64	56	01	10		987							LW
SP	1852	E9 BKN 50 OVC	3		RW				01	13		988	CIG RGD						LW
SA	1850	E12 BKN 50 OVC	4		R-F		60	58	03	12		989	CIG RGD						LW
SA	1945	E10 BKN 50 OVC	3		R-F		59	58	02	08		991	CIG RGD						GR
SA	2045	E10 BKN 80 BKN	7				58	55	04	10		994	CIG RGD						GR
SA	2145	E25 BKN 100 BKN	7				59	53	05	11		997							KS
SA	2245	E25 BKN 100 OVC	10				59	53	04	08		999							GR
SA	2345	E25 BKN 100 OVC	15				58	52	04	08		002							BK
SA	0045	E25 BKN 100 OVC	20				57	53	03	07		004							GR
SA	0145	E25 BKN 100 OVC	15				56	51	01	10		007	LAST						HL

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSERVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (5-68) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1969-654-005/1010

6-18-90

MF1-10C (6-80) PRES BY FAH NO 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

STATION: DANBURY, CT

DATE: 6-18-90

DANBURY CT

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (26)	OBSERVER'S INITIALS (15)
SA	1048	-X 250 -BKN	4		F		64	63	00	00		000	F2						PR
SA	1145	100 SCT 250-BKN	5		F		69	64	18	05		999							ML
SA	1245	250-BKN	5		H		77	65	21	06		996							JF
SA	1345	250-BKN	6		H		81	68	25	10		993							JF
SA	1445	200-BKN	6		H		81	68	24	10		992							JF
SA	1545	50 SCT 150-BKN	5		H		80	68	22	11		990							JF
SA	1645	50 SCT 150-BKN	5		H		80	69	18	08		988							ML
SA	1745	50 SCT 150-BKN	5		H		81	69	19	12		986							KS
SA	1845	50 SCT 200-BKN	4		H		81	69	21	08		982							KS
SA	1945	E50 BKN	4		H		79	69	21	10		980	RW N						PR
SP SA	2034	E20 BKN 250 OVC	5		TH		75		25	12		983	TB32 TH N MOVG E						PR
SA	2045	E20 OVC	5		H		75	69	24	06		982	TE47 MOVG E						PR
SA	2145	E20 BKN 100 OVC	5		R-		70	70	18	06		976							TF
SA	2245	50 SCT E100 OVC	7				70	68	18	06		977							TF
SA	2345	E20 OVC	7				67	66	26	08		976							PR
SA	0045	E6 BKN 20 OVC	2½		F		66	66	14	05		977							PR
SA	0145	E6 OVC	2½		F		66	65	21	08		978	LAST						TF

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (53)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNRLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-80) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

MF1-10C
(6-88)
PRES BY FMH NO.

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

DANBURY CT

STATION: Danbury CT

DATE: 6-25-90 6-25-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (36-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (26)	OBSERVER'S INITIALS (15)
SA	1048	E 100 BKN	20				59	58	00	00		996							TF
SA	1145	E 100 BKN	15				67	61	26	05		998							TF
SA	1245	E100 BKN	15				73	60	28	07		999							TF
SA	1345	15 SCT E100 BKN	15				72	62	27	07		000							PR
SA	1445	25 SCT E100 BKN	15				75	62	28	08		001							TF
SA	1545	~~E20 BKN~~ E25 BKN	20				71	59	28	10		002							PR
SA	1645	E25 BKN 100 BKN	20				75	61	28	10		002							TF
SA	1745	E25 BKN	20				75	59	30	10		002							TF
SA	1845	E25 BKN 100 BKN	20				73	60	30	06		003							KS
SA	1945	E30 BKN	20				73	61	28	06		004							KS
SA	2045	E30 BKN 60 BKN	20				74	59	34	07		003							HL
SA	2145	30 SCT 200 - BKN	20				75	59	33	07		003							LW
SA	2245	E 30 SCT 200 - BKN	20				72	60	27	07		005							HL
SA	2345	30 SCT 200 - BKN	20				71	60	27	06		007							GR
SA	0045	200 - BKN	20				67	59	25	05		008							KS
SA	0145	200 - SCT	20				63	59	26	04		010	LAST						KS

TIME (L.S.T.) (62)	NO. (63)	PRECIP. (Ins.) (64)	SNOW FALL (Ins.) (65)	SNOW DEPTH (Ins.) (66)	MAX. TEMP. (°F) (67)	MIN. TEMP. (°F) (68)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (53)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNML'TD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

* .S.GPO: 1989-654-004/1010

MF1-10C
(9-88)
PRES BY FMH NO.

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT

DATE: 07-02-90 7-2-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (26)	OBSERVER'S INITIALS (15)
SA	1048	20 SCT E80 OVC	6		F		62	58	03	08		989							GR
SP	1130	E15 BKN 80 OVC	6		F				06	08		990							GR
SA	1145	E15 BKN 80 OVC	7				62	57	05	12		990	BINOVC						GR
SA	1245	E15 BKN 100 BKN	15				65	56	07	12		991							GR
SA	1345	E80 BKN	20				66	56	06	10		992							HL
SA	1445	E30 BKN 100 BKN	20				67	56	04	11		993							LW
SA	1545	30 SCT E50 BKN 100 BKN	20				68	57	05	08		993							GR
SA	1645	27 SCT E50 BKN	20				68	57	06	07		993							JF
SA	1745	30 SCT E60 OVC	20				70	57	02	09		993							GR
SA	1845	30 SCT E60 OVC	20				71	59	05	08		995							TF
L	1850	30 SCT E60 OVC	20				71	59	05	08		995	AIRCRAFT MISHAP						TF
SA	1945	30 SCT E60 OVC	20				71	58	08	08		997							TF
SA	2045	30 SCT E60 BKN	20				71	58	07	08		996							PR
SA	2145	30 SCT 80 SCT	20				71	58	06	08		996							TF
SA	2245	30 SCT 80 SCT	20				71	59	03	05		996							TF
SA	2345	100 SCT	20				69	59	13	05		998							PR
SA	0045	150 SCT	20				64	60	00	00		999							PR
SA	0145	150 SCT	20				61	59	00	00		000	LAST						TF

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
	MID.	X				

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-80) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

MF1-10C
(1-88)
PRES BY FMH NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT

DATE: 7-9-90 7-9-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (16)
SA	1048	W8X	1½		F		71	70	25	08		001							PR
SA	1145	~~W~~ -X E7BKN 50 OVC	2½		F		73	70	24	09		999	P2						PR
SA	1245	7 SCT E40 OVC	3		F		76	72	24	09		997							PR
SA	1345	8 SCT E40 OVC	3		F H		77	72	24	10		995							TF
SA	1445	10 SCT E40 OVC	4		H		80	74	24	10		995							TF
SA	1545	10 SCT E50 ~~OVC~~ BKN	4		H		87	74	27	10		993							PR
SP SA	1615	25 SCT E60 BKN	5		H				26	08		994							PR
SA	1645	-X 25 SCT E70 BKN	5		H		86	74	27	10		993	H3						PR
SA	1745	E30 BKN	5		H		85	73	28	10		993							TF
SA	1845	E30 BKN	4		H		87	74	26	08		992							LY
SA	1945	E25 BKN	4		H		87	75	29	08		991							ML
SA	2045	E25 BKN 50 OVC	5		H		84	76	27	08		990							ML
SA	2145	-X E25 BKN 50 OVC	4		H		84	77	25	04		989	H3						GR
SA	2245	-X E80 BKN 120 OVC	5		H		84	76	25	06		989	H2						GR
SA	2345	-X 80 SCT E120 BKN	5		H		82	77	22	08		989	H2						LY
SA	0045	-X 80 SCT E120 BKN	5		H		77	75	26	05		990	H2						LY
SA	0145	-X E120 BKN	4		H		77	74	22	06		991	H2 LAST						GR

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

U.S. GPO: 1989-651-001/1010

MF1-10C
(8-88)
PRES BY FMH NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: Danbury, CT.

DATE: 07-16-90 7-16-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (30)	OBSERVER'S INITIALS (14)
SA	1048	-X 6 SCT E200 BKN	3		F		75	73	26	07		008	F 2						KR
SA	1145	6 SCT E150 BKN	5		H		78	72	28	08		009							LY
SA	1245	6 SCT E150 BKN	6		H		78	71	27	07		011							KS
SA	1345	15 SCT E150 BKN	6		H		81	71	29	08		011							KR
SA	1445	E25 BKN 150 BKN	6		H		83	71	29	10		012							KR
SA	1545	E25 BKN 150 BKN	6		H		85	73	27	10		013							LY
SA	1645	E25 BKN 100 BKN 150 BKN	6		H		83	71	28	08		014							MT
SA	1745	25 SCT 100 SCT	6		H		82	68	29	08		015							KS
SA	1845	25 SCT E100 BKN	6		H		82	66	29	10		015							KS
SA	1945	25 SCT 100 SCT	6		H		81	65	29	09		016							KS
SA	2045	25 SCT E100 BKN	5		H		82	67	28	10		016							TF
SA	2145	25 SCT E100 BKN	5		H		81	65	28	08		017							TF
SA	2245	E100 BKN	5		H		78	65	28	08		018							TF
SA	2345	E100 BKN	5		H		75	65	27	07		020							JF
SA	0041	E100 BKN	5		H		70	64	26	05		021							JW
SA	0145	E100 BKN	5		H		70	63	27	05		023	LAST						JW

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (53)				
ATT. THERM. (60)				
OBSERVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNRL'TD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (8-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

U.S. GPO: 1989-654-005/1010

MF1-10C
(6-68)
PREP BY FMH HQ

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

STATION: Danbury, CT

DATE: 07-23-90 7-23-90

To convert LST to UTC ADD 5 hrs. | Time in Column 2 is: UTC ✓ LST

DANBURY CT

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (26)	OBSERVER'S INITIALS (28)
SA	1048	-X E5 OVC	1		FH		74	72	20	04		987	FH5						KS
SA	1145	E6 OVC	1½		H		76	72	20	08		987	BINOVC						KS
SA	1245	-X E6 OVC	1½		H		78	73	17	08		986	H4 BINOVC						KS
SA	1345	-X E9 BKN	2		H		78	73	16	07		985	H4						LY
SA	1445	E11 OVC	3		H		83	76	18	08		986							TF
SA	1545	E10 OVC	3		H		84	75	22	09		986							KS
SA	1645	E 15 BKN 30 OVC	4		H		85	75	18	10		984							NL
SA	1745	E 15 BKN 30 OVC	4		TR-H		81	74	18	10		982	L+GCC TW MOVG E						TF
SP	1800	E 15 BKN 30 OVC	1		TRHRWH				18	10		982	L+GCC TW MOVG E						TF
SP	1824	40 SCT E 15 BKN 30 OVC	3		TR-H				18	10		982	L+GCC TW MOVG E						TF
SA	1845	E15 BKN 30 OVC	3		R-H		81	75	17	06		983							GR
SA	1945	E12 BKN 30 OVC	3		L-H		80	75	20	08		984							GR
SA	2045	13 SCT E20 OVC	3		H		79	75	20	05		984							NL
SA	2145	20 SCT E60 OVC	4		H		77	74	24	05		983							NL
SA	2245	10 SCT E50 OVC	4		H		77	74	27	06		984							JF
SA	2345	E10 BKN 50 OVC	3		FH		76	73	28	04		987							JF
SA	0045	E10 BKN 50 OVC	2½		FH		74	72	27	04		987							GR
SA	0145	E8 BKN 50 OVC	2		FH		73	71	27	05		990	LAST						GR

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	2					
	3					
	4					
	5					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (53)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-68) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1969-655-001/1010

MF1-10C
(6-88)
PRES BY FUN NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ____ LST ____

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: Danbury, CT

DATE: 7-30-90 7-30-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Inc.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Inc.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (26)	OBSERVER'S INITIALS (15)
SA	1049	E 100 OVC	4		F		69	66	09	07		001	BINOVC						LY
SA	1145	E190VC	6		H		70	65	04	08		001							KO
SA	1245	E20 BKN	7				74	65	07	08		001							KO
SA	1345	E25 OVC	7				72	64	11	07		000							GR
SA	1450	E25 OVC	7				72	65	09	07		000							GR
SA	1550	E20 OVC	7				74	64	12	05		999							KO
~~SA~~	~~1645~~	~~E20 BKN~~	~~7~~						~~17~~	~~00~~		~~997~~							
SA	1645	E 20 BKN	7				77	65	00	00		997							KO
SA	1745	E20 BKN	10				77	63	00	00		995							KS
SA	1845	E25 BKN	10				80	67	25	07		993							GR
SA	1945	25 SCT	10				83	67	25	07		992							KS
SA	2045	25 SCT	7				79	65	18	05		990							TF
SA	2145	25 SCT	7				78	68	18	08		989							TF
SA	2245	25 SCT 100 SCT	10				77	68	17	07		988							PR
SA	2345	100 SCT	10				74	67	17	07		989							PR
SA	0045	100 SCT	10				71	66	20	05		989							TF
SA	0145	100 SCT	10				69	64	00	00		991	LAST						TF

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Inc.) (44)	SNOW FALL (Inc.) (45)	SNOW DEPTH (Inc.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Inc.) (68)	24-HR. SNOW FALL UNMLTD. (Inc.) (69)	1300 GMT SNOW DEPTH (Inc.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1989-654-005/1010

MF1-10L (6-80)
PRES BY FMH NO. 1

To convert LST to UTC ADD 5 hrs. | Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT.
DATE: 08-06-90 8-6-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (26)	OBSERVER'S INITIALS (15)
SA	1048	E6 OVC	1 1/2		RF		73	70	17	08		000							PR
SA	1145	E5 OVC	1 1/2		R-F		74	71	16	V0		999							PR
SA	1245	E6 OVC	1 1/2		RF		75	71	16	10		999							PR
SP	1320	E8 BKN 40 OVC	3		R-F		76	72	19	06		999	CIG RGD						JF
SA	1345	E8 BKN 40 OVC	3		F		78	73	20	06		999	CIG RGD						JF
SA	1445	E8 BKN 40 OVC	3		F		81	74	25	09		999	CIG RGD OCNL R-						JF
SA	1545	E8 BKN 40 OVC	3		FH		84	76	23	08		999	CIG RGD						JF
SA	1645	E8 BKN 40 OVC	3		H		81	74	24	10		998	CIG RGD OCNL L-						JF
SA	1749	E9 BKN 40 OVC	3		F		78	72	20	08		998	CIG RGD						JF
SA	1845	E9 BKN 80 OVC	3		~~H~~FH		79	73	19	08		998	CIG RGD						GP
~~SA~~	~~1945~~	~~E10 BKN 50 OVC~~	~~3~~		~~RW H~~		~~76~~	~~72~~	~~20~~	~~10~~		~~997~~	~~CIG RGD~~						~~GP~~
SA	1945	E9 BKN 50 OVC	3		RW FH		76	73	20	08		997	CIG RGD VS S 2						GP
SP	2010	E10 BKN 50 OVC	2 1/2		FH		77	74	18	06		996							GP
SA	2045	E8 BKN 50 OVC	2 1/2		FH		77	73	18	06		997							RS
SA	2145	E9 BKN 20 OVC	2		FH		77	73	14	07		996							LY
SP	2230	E9 OVC	2		R-FH				34	08		998	LTG CG						GP
SA	2245	E7 BKN 20 OVC	3		FH		74	70	34	05		997							GP
SA	2345	E7 BKN 20 OVC	3		FH		73	71	00	00		997	CIG RGD						RS
SA	0045	E7 BKN 10 OVC	2		F		73	71	16	00		998							RS
SA	0145	W2X	1		LF		73	72	16	05		998	LAST						GP

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (76)

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (0-80) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED. *U.S. GPO: 1989-654-005/1010

MF1-1
(9-88)
PRES BY FMH NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT

DATE: 08-13-90 8-13-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (36-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (38)	OBSERVER'S INITIALS (15)
SA	1048	-X 200SCT	1		F		66	64	00	00		011	F3						LY
SA	1145	-X 200 SCT	2		F		72	62	00	00		012	F4						PR
SA	1245	-X	2½		F		72	70	00	00		011	F4						PR
SA	1350	-X	3		FH		86	70	23	08		011	H4						KO
SA	1445	-X	3		H		87	70	24	07		011	H4						KO
SA	1545	-X 80 SCT	3		H		87	71	19	09		009	H3						KS
SA	1645	-X 60 SCT	2½		H		85	71	21	09		006	H4						KS
SA	1745	-X 60 SCT	2½		H		86	70	19	08		005	H4						KO
SA	1845	40 SCT	3		H		84	70	19	11		001							JF
SA	1945	-X	3		H		83	70	19	12		998	H4						TF
SA	2045	E20 BKN	3		H		82	70	20	10		997							TF
SA	2145	40 SCT	4½		H		81	71	20	10		997							KS
SA	2250	50 SCT	3		H		78	72	18	11		994							JF
SA	2345	50 SCT	3		H		77	71	18	08		993							TF
SP	0020	E40 BKN	2¾		TH		77	70	18	05		994	T N LTGCC						TF
SA	0050	E40 OVC	2½		TH		77	70	18	08		993	LTGCC						TF
SP	0114	W45X	1/2		TRF				27	15G30		995	LTGCLGG						TF
SA	0150	E90VC	3		TRF		71	68	26	15		996	LTGCC LAST						JF

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNML.TD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (95)

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S.GPO:1989-654-001/1010

MF1-10C
(6-88)
PRES BY FMH NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT

DATE: 8-20-90 8-20-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (15)
SA	1048	40 SCT E100 OVC	20				58	M	08	08		028							TF
SA	1145	40 SCT E100 OVC	20				59	M	08	08		028							TF
SA	1248	40 SCT E100 BKN	20				60	M	08	08		029							TF
SA	1345	E50 OVC	20				61	M	08	10		030							PR
SA	1445	E50 OVC	20				63	M	09	09		030							PR
SA	1545	E35 ~~SCT~~ BKN 70 OVC	20				65	M	08	08		030							TF
SA	1645	E23 BKN 70 OVC	20				66	M	09	10		030							PR
SA	1745	E23 BKN 70 OVC	20				68	M	07	09		029							KO
SA	1845	30 SCT E70 OVC	20				69	56	07	08		028							LY
SA	1945	30 SCT E100 OVC	20				68	55	09	10		026							LY
SA	2045	2500 SCT E40 OVC	20				69	57	10	07		026							KO
SA	2145	E40 OVC	20				68	56	09	10		026							KO
SA	2245	E35 OVC	20				67	55	09	08		025							KS
SA	2345	E35 OVC	15				66	51	10	08		025							KS
SA	0045	E30 OVC	15				65	54	09	08		026							GR
SA	0145	E25 OVC	15				64	53	09	08		026	LAST						GR

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (80)

Dupnt OTS
DUPNT RTS

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

U.S. GPO: 1989-655-000/7010

DANBURY CT

MF1-10C
(1-66)
PREV. BY FMH NO.

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

DANBURY CT

STATION: Danbury, CT

DATE: 8-27-90 8/27/90

To convert LST to UTC ADD 5 hrs. | Time in Column 2 is: UTC ✓ LST

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (26)	OBSERVER'S INITIALS (15)
SA	1048	-X	4		FH		66	64	25	04		998	FH 2						BK
SA	1145	-X	3		FH		74	68	25	05		999	FH 2						BK
SA	1245	150 SCT	4		H		81	70	00	00		997							BK
SA	1345	CLR	4		H		82	71	26	07		996							KO
SA	1445	-X	4		H		84	71	32	08		995	H2						KO
SA	1545	-X 40 SCT	4		H		85	71	35	06		993	H2						BK
SA	1645	-X 200 - SCT	4		H		86	71	35	06		989	H2						BK
SA	1745	-X 100 SCT	4		H		87	71	34	04		988	H2						KO
~~SP~~	~~1825~~	~~-X E10 BKN~~	~~3~~		~~TRW~~				~~27~~	~~10~~		~~989~~	~~TMOVE W-E LTG CCG H2~~						KO
~~SP~~	~~1828~~	~~-X E10 BKN~~	~~3~~		~~TRW~~				~~27~~	~~10~~		~~989~~	~~TW MOVG W-E LTG CCG H2~~						KO
SP	1828	-X E10 BKN	3		TRWH				27	10		989	TW MOVG E LTG CCG H2						KO
SA	1845	-X E100 BKN	4		H		78	71	21	05		986	~~TMOVG~~ EH2VSBY W2 TE43						KS
SA	1945	E100 BKN	3		H		82	73	00	00		984							TF
SA	2045	-X E100 BKN	3		H		83	74	28	06		983	H3						AD
SA	2145	-X E100 BKN	3		H		82	74	25	08		984	H3						TF
SA	2246	-X E100 BKN	3		TH		79	73	28	08		983	H3 TB46 LGTICCG						AD
SP	2311	-X 100 SCT	3		H				25	05		983	H3 TE10						KS
SA	0																		
SA	2345	-X E100 BKN	3		FH		74	71	26	05		983	FH3						AD
SA	0045	-X E100 BKN	3		FH		72	70	28	04		985	FH3						AD
SA	0145	CLR	2½		FH		72	70	00	00		985	LAST						TF

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNKL.TO. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-66) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

U.S. GPO: 1969-655-007/2010

DANBURY CT

MF1-10C
(5-80)
PRES. BY FMH NO. 1

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

STATION: DANBURY, CT.

DATE: 9-3-90

To convert LST to UTC: ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

DANBURY CT

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (23)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (15)
SA	1048	50 SCT 300 - BKN	6		H		65	61	00	00		011							JF
SA	1145	E50 BKN 300 BKN	6		H		67	61	34	05		013							JF
SA	1245	15 SCT 50 SCT 300 SCT	8				70	61	01	11		015							JF
SA	1345	E18 BKN 200 BKN	10				71	60	35	10		018							JF
SA	1445	E15 BKN 200 BKN	70				69	59	02	12		020							BR
SA	1545	23 SCT	10				71	59	35	10		020							JF
SA	1645	23 SCT	10				72	56	02	13		021							PD
SA	1745	30 SCT	20				71	57	02	15		022							BR
SA	1845	30 SCT	20				72	58	36	11		022							BR
SA	1945	30 SCT	20				73	59	36	07		022							LW
SA	2045	30 SCT	20				73	59	36	07		024							LY
SA	2145	35 SCT	20				73	60	36	12		026							KS
SA	2245	35 SCT	20				71	59	36	08		028							KS
SA	2345	35 SCT	20				67	59	36	05		030							LW
SA	0045	50 SCT	20				67	58	00	00		033							LW
SA	0145	50 SCT	20				66	57	18	05		035	LAST						LY

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (53)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNM. TD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (5-80) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

MF1-10C
(1-68)
PRIES BY FSH NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

DANBURY CT 9-10-90

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

STATION: DANBURY, CT-

DATE: 9-10-90 9-10-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Inc.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Inc.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (15)
SA	1045	W 5 X	1/4		R-F		63	62	00	00		006							GR
SA	1145	-X 6 SCT E50 BKN	2		R-F		64	63	00	00		005	FZ						GR
SP	1220	E6 BKN 50 OVC	3		F				00	00		006							GR
SA	1245	E 6 BKN 50 BKN	3		F		65	64	00	00		005							GR
SA	1345	E9 BKN 50 BKN	5		F		66	64	32	05		007							GR
SA																			
SP	1433	E10 BKN 50 BKN	7						31	06		007							KS
SA	1445	E10 BKN 50 OVC	7				67	62	35	09		007	B/N OVC						KS
SA	1545	E13 BKN 50 OVC	7				68	62	34	06		007							KS
SA	1645	E15 BKN 200 BKN	10				69	62	30	06		007	~~WND 20V80~~ WND 02 V08						KS
SA	1745	X 20 SCT 200-BKN	10				71	62	05	07		006							KS
SA	1845	30 SCT 250 -SCT	20				73	64	28	05		006							LW
SA	1945	250 - SCT	20				75	62	29	05		005							LW
SA	2050	250 - SCT	20				76	59	34	06		006							JF
SA	2145	250 - SCT	20				75	59	03	06		006							JF
SA	2245	250 - SCT	20				73	59	22	04		006							BW
SA	2345	250 - SCT	20				64	61	23	04		007							BW
SA	0045	250 SCT	20				62	59	00	00		009							JF
SA	0145	250 SCT	20				60	59	25	04		010	LAST						JF

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Inc.) (44)	SNOW FALL (Inc.) (45)	SNOW DEPTH (Inc.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Inc.) (68)	24-HR. SNOW FALL UNMLTD. (Inc.) (69)	1200 GMT SNOW DEPTH (Inc.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-68) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S.GPO: 1969-653-001/1010

MF1-1L (6-88) PRES BY FMH NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ____ LST ✓

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT

DATE: 9-17-90 9-17-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (26)	OBSERVER'S INITIALS (29)
SA	1048	100 SCT	20				47	44	35	08		996							JF
SA	1150	CLR	20				50	45	34	07		999							JF
SA	1245	CLR	20				52	44	35	08		002	CU SE						JF
SA	1345	40 SCT 150 SCT	20				55	41	33	10		004							BW
SA	1445	40 SCT 150 SCT	20				54	38	35	10	G20	004							BW
SA	1545	40 SCT 150 SCT	20				54	37	35	10	G20	005							JF
SA	1645	E40 BKN	20				54	38	39	13		006							KO
SA	1745	E40 BKN	20				56	38	35	09		006							KO
SA	1845	E40 BKN	20				57	37	31	12		005							LW
SA	1945	E48 BKN	20				55	38	33	10		006							KO
SA	2045	50 SCT	20				56	38	01	11		007							KO
SA	2145	50 SCT	20				51	37	33	08		008							KS
SA	2245	50 SCT	20				53	40	28	08		011							LW
SA	2345	50 SCT	20				49	40	30	07		014							LY
SA	0045	50 SCT	20				48	37	31	07		017							LY
SA	0145	CLR	20				45	36	31	05		020	LAST						LY

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSERVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNML TD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1989-654-001/1010

MF1-10C
(9-68)
PRES BY FAR NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT.
DATE: 9-24-90.

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (5)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (6)	SEA LEVEL PRESS (mb.) (6)	T Dew (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (36-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (22)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (25)	TOTAL OPAQUE SKY COVER (26)	OBSERVER'S INITIALS (15)
SA	1048	60 SCT	20				44	40	25	07		987							KO
SA	1145	60 SCT	20				50	43	24	07		990							KO
SA	1245	60 SCT	20				54	44	29	07		991							GR
SA	1345	30 SCT E 60 BKN	20				53	42	29	08		993							GR
SA	1445	E 35 BKN	20				55	43	29	08		993							GR
SA	1545	E35 BKN	20				55	42	29	08		993							KS
SA	1645	E35 BKN	20				58	43	31	07		992							KS
SA	1745	E35 BKN	20				56	43	30	07	G14	992							KS
SA	1845	BW ~~E33~~ E35 BKN	20				58	45	29	10		991							BW
SA	1945	~~BK~~ 35 SCT	20				57	43	28	11		991							BW
SA	2045	35 SCT	20				58	44	28	09		992							BW
SA	2145	CLR	20				56	44	28	07		993							PD
SA	2250	CLR	20				51	46	27	05		993							JF
SA	2345	CLR	20				48	45	00	00		994							JF
SA	0045	CLR	20				48	46	00	00		996							JF
SA	0145	CLR	20				47	44	00	00		998	LAST						PD
L	0150	CLR	20				47	44	00	00		998	ACFT MISHAP						PD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (53)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNML.TD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-68) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1969-654-005/1010

MF1-10C (8-88)
LINES BY FSH NO.

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT

DATE: 10-01-90 10-1-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Inch.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Inch.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (26)	OBSERVER'S INITIALS (13)
SA	1048	150 SCT	20				M	44	25	04		005	FOG BANK N						TF
SA	1145	150 SCT	20				M	47	25	04		007							TF
SA	1245	150 - BKN	20				M	48	85	10		007							TF
SA	1345	150 -BKN	20				M	46	33	09		008							BW
SA	1445	150 SCT	20				M	40	33	13		007							BW
SA	1545	150 SCT	20				M	42	34	07		005							PD
SA	1645	150 SCT	20				M	40	35	11		002							PD
SA	1745	200 SCT	20				M	42	32	08		000							PD
SA	1845	30 SCT 200 SCT	20				M	45	31	08		998							ML
SA	1945	100 SCT 200 -BKN	20				M	46	31	10		996							BW
SA	2045	40 SCT 100 SCT E200 BKN	20				M	45	29	09		996							JF
SA	2145	CLR	20				M	45	25	06		995							JF
SA	2245	CLR	20				M	48	23	04		995							KS
SA	2345	CLR	20				M	46	25	05		997							KS
SA	0045	CLR	20				M	46	30	00		997							JF
SA	0145	CLR	20				M	44	00	00		996	LAST						JF

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Inc.) (44)	SNOW FALL (Inc.) (45)	SNOW DEPTH (Inc.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	3					
	5					
	6					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)					
ATT. THERM. (60)					
OBSRVD. BAR. (61)					
TOTAL CORR. (62)					
STA. PRESS. (63)					
BAROGRAPH (64)					
BAR. CORR. (65)					

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Inc.) (68)	24-HR. SNOW FALL UNMLTD. (Inc.) (69)	1200 GMT SNOW DEPTH (Inc.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (50)

1048 TEMP 075

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (8-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

10-8-90

MF1-H (6-88) PRES BY FMH NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

STATION: Danbury, CT

DATE: 10-08-90

DANBURY CT

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Inc.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Inc.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL OPAQUE SKY COVER (21)	TOTAL OPAQUE SKY COVER (30)	OBSERVER'S INITIALS (15)
SA	1048	30 SCT E80 OVC	3		FH		59	58	00	00		016							LW
SA	1053	E80 OVC	2		FH		60	59	00	00		016	~~BYN~~-E 1/2 F RANK N-E						LW
SA	1245	10 SCT E80 BKN	2		F		63	61	00	00		017	F DSIPTG						LW
SA	1345	E 60 BKN 200 BKN	3		FH		66	64	00	00		017							GR
SA	1445	E 60 BKN 200 BKN	4		H		70	64	00	00		017							GR
SA	1550	80 SCT E200 BKN	15				79	64	27	04		016							LW
SA	1645	80 SCT E200 BKN	15				80	62	19	06		015							GR
SA	1745	80 SCT E200 BKN	15				80	62	23	08		013	WND 18V27						GR
SA	1845	80 SCT E150 BKN	15				79	60	23	05		013							PD
SA	1945	E80 BKN 150 OVC	10				77	64	17	06		013							PD
SA	2045	E80 BKN 150 BKN	7				75	65	18	08		012							TT
SA	2145	E80 BKN 150 BKN	6		H		73	66	19	06		013							PR
SA	2245	E80 OVC	3		H		71	66	18	07		014							PD
SA	2345	E80 OVC	3		F		70	66	00	00		016							PR
SA	0045	E80 OVC	3		FH		68	66	00	00		015							PR
SA	0145	E80 OVC	3		F		68	66	00	00		015	LAST						KS

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Inc.) (44)	SNOW FALL (Inc.) (45)	SNOW DEPTH (Inc.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Inc.) (68)	24-HR. SNOW FALL UNKL'TD. (Inc.) (69)	1200 GMT SNOW DEPTH (Inc.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (80)

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED. U.S. GPO: 1989-654-005/1010

MF1-1C (9-68)
PREP BY FMH-10 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT.

DATE: 10-15-90 10-15-90

TYPE (11)	TIME (12)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (15)
SA	1048	-X E30 BKN	1		F		M	M	00	00		981	F2						PD
SA	1145	E30 BKN	3		F		M	M	00	00		981							PD
SP	1123	E30 BKN	3		F				00	00		981							PD
SA	1145	30 SCT	3		FH		M	M	00	00		981							PD
SA	1245	CLR	5		H		M	M	00	00		982							BW
SA	1345	CLR	5		H		M	M	26	09		983							KS
SA	1450	CLR	6		H		M	M	27	08		983							PD
SA	1545	CLR	6		H		M	M	29	15		982							BW
SA	1645	40 SCT	10				M	M	28	10		981							BW
SA	1745	40 SCT	7				M	M	31	08		981							KS
SA	1850	40 SCT	7				M	M	30	10		982	WND 25V35						BW
SA	1945	40 SCT	10				M	M	30	10		983	WND 30V36						BW
SA	2045	40 SCT	20				M	M	30	10		985	WND 27V36						GR
SA	2145	100 SCT	20				M	M	30	08		988	WND 27V35						KO
SA	2245	100 SCT	20				M	M	31	05		993							LY
SA	2345	100 SCT	20				M	M	00	00		997							LY
SA	0015	150-SCT	20				M	M	00	00		000							PR
SA		CLR	15				M	M	26	04		003	LAST						PR

SNOW DEPTH (Ins.)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)					
ATT. THERM. (60)					
OBSRVD. BAR. (61)					
TOTAL CORR. (62)					
STA. PRESS. (63)					
BAROGRAPH (64)					
BAR. CORR. (65)					

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1300 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TEMP, DEW PT OTS 1048Z

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT / / /

SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

U.S. GPO: 1989-651-001/1010

MF1-10C (6-88)
PRES BY FMH NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: Danbury, CT
DATE: 10-22-90 10-22-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of Feet) (3)	VISIBILITY (Miles) SURFACE (4)	VISIBILITY (Miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL OPAQUE SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (15)
SA	1048	E10 OVC	4		F		M	M	00	00		016							LW
SP	1116	E5 OVC	2		F				00	00		016	CIG RGD						LW
SA	1145	E5 OVC	1/2		F		M	M	00	00		015	CIG RGD						LW
SP	1220	W3X	1/2		F				26	06		016							LW
SA	1248	E5 OVC	1		L-F		M	M	27	05		017							LW
SA	1345	E4 OVC	1		F		M	M	23	05		017							LW
SA	1445	E5 OVC	3		F		M	M	23	05		016	CIG RGD						KO
SA	1545	E4 OVC	2		F		M	M	22	06		014	CIG RGD						KO
SP	1630	E9 BKN 40 OVC	4		F				26	08		012	BINOVC						LW
SA	1645	E9 BKN 40 OVC	5		F		M	M	22	05		011							LW
SP	1705	10 SCT 150-BKN	6		H				27	08		011							LW
SA	1745	10 SCT 150-BKN	7				M	M	27	08		009							LW
SA	1845	E10 BKN 150 OVC	7				M	M	24	10		008							KO
~~SA~~	~~1950~~	~~15 SKY SCT E150 OVC~~	~~10~~				~~M~~	~~M~~	~~22~~	~~08~~		~~007~~							~~KO~~
SA	1950	15 SCT E150 OVC	10				M	M	22	08		007							KO
SA	2045	E150 OVC	10				M	M	20	10		006							KO
SA	2145	40 SCT E150 OVC	10				M	M	22	05		006							GR
SA	2245	E25 BKN 150 OVC	6		F		M	M	22	04		007							GR
SA	2345	E25 OVC	6		FH		M	M	00	00		007							GR
SA	0045	E25 OVC	6		FH		M	M	00	00		006							GR
SA	0145	E30 OVC	5		FH		M	M	00	00		006	LAST						GR

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	✓					
	1					
	2					
	3					
	4					
MID.	✓					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (58)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TEMP/DWPNT OTS

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

U.S. GPO: 1989-654-007/1010

MF1-10C
(0-68)
PHES BY FMH NO.

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT

DATE: 10-29-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL OPAQUE SKY COVER (21)	TOTAL OPAQUE SKY COVER (39)	OBSERVERS INITIALS (15)
SA	1148	150 SCT	20				M	M	30	04		007							PD
SA	1245	150 SCT	20				M	M	34	11		010							PD
SA	1350	40 SCT 150 SCT	20				M	M	33	13		012							RW
SA	1445	40 SCT	20				M	M	36	13G~~18~~ 20		012	WND33V03						KS
SA	1545	50 SCT	20				M	M	34	15G20		013							GR
SA	1645	50 SCT	20				M	M	33	15G21		012							PD
SA	1745	50 SCT	20				M	M	36	10G20		012							GR
SA	1845	CLR	20				M	M	33	15G~~25~~ 22		012	FEW CU NE						GR
SA	1945	300 -SCT	20				M	M	36	15G~~30~~ 25		014	FEW CU NE						LW
SA	2045	300 -SCT	20				M	M	34	12G25		016							LW
SA	2150	300 -SCT	20				M	M	36	08		019							LW
SA	2245	300 - SCT	20				M	M	01	12		021							LY
SA	2345	CLR	20				M	M	01	05		023							LY
SA	0045	CLR	20				M	M	33	04		023							LW
SA	0145	CLR	20				M	M	32	05		025							LW
SA	0245	CLR	20				M	M	34	10		025	LAST						LX

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNML TD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (80)

1148 TEMP/DWPNT OTS

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (0-68) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1989-651-001/1010

MF1-10C
(6-80)
PRES BY FILM NO.

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT

DATE: 11-05-90 11-5-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (Miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (Tenths) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (38)	OBSERVER'S INITIALS (15)
SA	1148	40 SCT	7				M	M	00	00		997							LY
SA	1245	50 SCT	7				M	M	00	00		999							LY
SA	1345	E50 BKN	7				M	M	08	08		999							LY
SA	1445	E50 BKN 250 BKN	15				M	M	07	08		998							~~GR~~
SA	1545	50 SCT E250 BKN	20				M	M	09	06		997							~~GR~~
SA	1645	80 SCT E250 BKN	20				M	M	10	08		995							MT
SA	1745	50 SCT E200 BKN	15				M	M	15	10		993							MT
SP	1815	E30 BKN 200 OVC	15				M	M	10	14		992							~~BR~~
SA	1845	E25 BKN 100 BKN	15				M	M	10	12		991							LW
SA	1950	E25 BKN 100 ~~B~~ OVC	10				M	M	12	12		990							JF
SA	2045	E20 BKN 100 OVC	10				M	M	13	11		990							JF
SA	2145	E12 OVC	7				M	M	12	10		990	CIG RGD ~~ENG~~ ~~RGGD~~						MT
SA	2245	E15 OVC	7				M	M	12	08		990							JF
SA	2345	E17 OVC	7				M	M	11	10		989	CIG RGD						JF
SA	0045	E12 OVC	6		F		M	M	11	10		986							HL
SA	0145	E9 OVC	4		F		M	M	11	10		986							HL
SA	0245	E9 OVC	3		F		M	M	13	10		982	LAST						JF

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TEMP/DWPNT OTS 11982

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-80) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

U.S. GPO: 1989-651-002/1010

MF1-10C (6-88)
PRES BY FMH NO. 1

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

STATION: DANBURY, CT

DATE: 11-12-90

To convert LST to UTC ADD 5 hrs. | Time in Column 2 is: UTC ✓ LST

DANBURY CT

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (30)	OBSERVER'S INITIALS (15)
SA	1150	35 SCT	20				M	M	29	12	G20	987							MK
SA	1245	E50 BKN	15				M	M	29	10	G20	988							HL
SA	1350	20 SCT E50 BKN	15				M	M	30	15		988	OCNL SW-						JF
SA	1445	25 SCT E50 BKN	7				M	M	30	15	G30	988	OCNL SW						JF
SA	1545	25 SCT E50 BKN	7				M	M	30	15	G22	987	OCNL SW						MT
SA	1645	25 SCT ~~50 SCT~~ E50 BKN	10				M	M	30	15	G25	985							KO
SA	1745	25 SCT E50 BKN	15				M	M	30	15	G25	982							KO
SA	1845	20 SCT	10				M	M	31	10	G25	982	OCNL SW						JF
SA	1945	30 SCT	15				M	M	29	20	G30	984	OCNL SW-						LY
SA	2045	30 SCT	15				M	M	28	20	G30	985	WND 25V33						MT
SA	2145	30 SCT	15				M	M	30	15	G25	987	WND 27V33						MT
SA	2245	40 SCT	15				M	M	29	15	G25	989							LY
SA	2345	40 SCT	20				M	M	31	10	G20	988							GR
SA	0045	40 SCT	20				M	M	28	15	G20	988							LY
SA	0145	40 SCT	20				M	M	30	10	G15	987							LY
SA	0245	E30 BKN	20				M	M	28	10	G15	986	LAST						BR

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	3					
	5					
	7					
	9					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSERVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (80)

DWPAT/TEMP OTS

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1989-654-001/2010

MF1-10L
(6-68)
PRES BY FASH NO. 1

To convert LST to LTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: Danbury, CT

DATE: 11-19-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (15)
SA	1148	200 SCT	15				29	23	33	07		995							KS
SA	1245	CLR	20				31	24	36	10		996							KO
SA	1345	CLR	20				33	24	33	10		996							LY
SA	1445	CLR	20				35	23	34	10		996							LY
SA	1545	CLR	20				36	23	35	11		995							KS
SA	1645	CLR	20				38	22	32	06G	14	992							KS
SA	1745	CLR	20				40	22	34	10		991							KS
SA	1845	CLR	20				40	20	32	15		991							MT
SA	1945	CLR	20				41	21	32	10		990							MT
SA	2045	CLR	20				41	18	34	10		992							[illegible]
SA	2145	CLR	20				38	19	30	05		994							[illegible]
SA	2245	CLR	20				36	21	31	05		996							JF
SA	2345	CLR	20				36	24	35	06		997							[illegible]
SA	0045	CLR	20				36	24	35	07		998							JF
SA	0145	150 - SCT	20				34	M	36	05		999							[illegible]
SA	0245	CLR	20				33	M	01	10		000	LAST						JF

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (58)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1300 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

0145Z DWPNT OTS

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-68) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

MF1-10C
(6-80)
PRES BY FMH NO. 1

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT

DATE: 11-26-90 11-26-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (15)
SA	1145	200 -BKN	20				37	26	29	04		015							LW
SA	1245	200 - BKN	20				38	27	30	05		019							JF
SA	1345	200 - BKN	20				40	27	35	08		022							JF
SA	1445	300 - SCT	20				42	30	02	08		024							LW
SA	1545	CLR	20				44	28	03	07		025							JF
SA	1645	CLR	20				45	29	02	08		023							JF
SA	1745	CLR	20				48	27	35	06		025							KO
SA	1845	CLR	20				48	28	30	06		025							JF
SA	1945	CLR	20				48	27	00	00		027							GR
SA	2045	CLR	20				48	27	00	00		029							GR
SA	2145	250 SCT	20				42	30	00	00		030							KO
SA	2245	250 - SCT	20				38	30	00	00		032							GR
SA	2345	CLR	20				34	30	26	04		035							GR
SA	0045	CLR	20				32	29	00	00		035							LY
SA	0145	CLR	20				31	28	25	05		036							LY
SA	0245	CLR	20				30	27	00	00		038	LAST						GR

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88)
PRES. BY FSH NO.

To convert LST to LTC ADD 0 hrs.

Time in Column 2 is: UTC ✓ LST

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

DANBURY CT

STATION: DANBURY, CT
DATE: 12-3-90 12-3-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (90-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (15)
SA	1145	100 SCT 250 SCT	20				32	M	08	10		056							KS
SA	1245	100 SCT E250 BKN	20				33	M	08	10		052							TF
SA	1345	100 SCT E250 BKN	20				34	M	08	12		054							TF
SA	1445	100 SCT E250 OVC	20				35	M	08	10		054							KS
SA	1545	E30 BKN 90 OVC	20				36	M	11	12		050							KS
SA	1645	E30 OVC	20				37	M	09	05		049							BW
SA	1745	E30 OVC	20				37	M	10	12		044							KS
SA	1845	E25 OVC	20				37	M	07	08		043							KS
SA	1945	E25 OVC	20				40	M	11	15		038							JF
SA	2045	E20 OVC	10				42	M	13	13		037							JF
SA	2145	E15 OVC	7		RW-		41	H	12	15	G25	035							HL
SA	2245	E15 OVC	6		RW-		41	H	13	10		032							HL
SA	2355	E10 OVC	3		RW-		42	M	12	13		027							MT
SA	0045	E10 OVC	3		RF		42	M	12	15		026	CIG RGO						JF
SA	0145	E8 OVC	2½		RF		42	M	12	14		023	CIG RGA						MT
SA	0245	E9 OVC	2½		RF		43	H	11	16	G25	018	LAST						HL

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (55)				
ATT. THERM. (56)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

DWPNT OTS 11482

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

U.S. GPO: 1989-654-002/1010

MF1-1 (6-80)
PRES BY FMH NO.

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT.

DATE: 12-10-90 12-10-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (15)
SA	1148	150 SCT	10				42	M	29	13		977							MT
SA	1245	100 SCT 200 SCT	15				42	M	29	11		976							MT
SA	1345	100 SCT E200 BKN	15				44	M	29	11	G21	976							MT
SA	1445	120 SCT	15				44	M	29	15	G25	977							JF
SA	1545	100 SCT	15				49	M	29	15	G28	974							BW
SA	1645	55 SCT 120 SCT	15				49	M	28	15	G20	973							JF
SA	1750	45 SCT 100 SCT	15				50	M	29	12	G20	972							ML
SA	1845	45 SCT 100 SCT	20				48	M	32	12	G30	972							BW
SA	1945	50 SCT 100 SCT	20				47	M	32	10	G26	974							KS
SA	2045	50 SCT 100 SCT	20				46	M	32	10	G22	976							KS
SA	2145	50 SCT 100 SCT	20				43	M	33	11	G21	981							BW
SA	2245	120 SCT	20				41	M	32	15		986							BW
SA	2345	120 SCT	20				39	M	33	11		990							JF
SA	0045	120 SCT	20				37	M	33	11		994							JF
SA	0145	120 SCT	20				33	M	35	15		998							JF
SA	0245	120 SCT	20				31	M	35	12		000	LAST						JF

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (80)

DWPNT OTS

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-80) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1979-651-085/1010

MF1-10C (6-88)
PRES BY F... IC

To convert ... IC
ADD 5 hrs.

Time in Column 2 is:
UTC ✓ LST

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

DANBURY CT

STATION: DANBURY CT
DATE: 12-17-90 12-17-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (26)	OBSERVER'S INITIALS (28)
SA	1148	80 SCT 250 -SCT	20				33	M	30	07		013							TF
SA	1245	50 SCT 200 SCT	20				33	M	00	00		014							TF
SA	1345	25 SCT 200 SCT	20				38	M	35	10		014							TF
SA	1445	~~25~~ 20 SCT E200 BKN	20				38	M	35	12		015							KS
SA	1545	E200 BKN	20				39	M	36	13		012							KS
SA	1645	200 SCT	20				39	M	35	11		013							TF
SA	1745	200 SCT	20				41	M	34	07		011							KS
SA	1845	200 SCT	20				42	M	35	07		008							MT
SA	1945	200 SCT	20				42	M	34	07		008							JF
SA	2045	200 -BKN	20				41	M	32	05		009							BW
SA	2145	200 SCT	20				39	M	00	00		009							BW
SA	2245	200 SCT	20				35	M	16	04		008							ML
SA	2345	150 SCT	20				31	M	25	06		008							ML
SA	0045	150 SCT	20				28	M	00	00		006							PD
SA	0145	150 SCT	20				29	M	00	00		005							PD
SA	0245	150 SCT	20				29	M	00	00		002	LAST						ML

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)					
ATT. THERM. (60)					
OBSRVD. BAR. (61)					
TOTAL CORR. (62)					
STA. PRESS. (63)					
BAROGRAPH (64)					
BAR. CORR. (65)					

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNRL'TD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

DUPUT OTS 11487

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED. U.S. GPO: 1989-654-005/1010

MID.	X					
		BAR. CORR. (65)				

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED. U.S. GPO: 1989-654-005/1010

12-24-90

MF1-10C (6-88) PRES BY EMH NC

To convert LST to UTC ADD 5 hrs. | Time in Column 2 is: UTC ✓ LST

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

DANBURY CT

STATION: DANBURY, CT.

DATE: 12-24-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09–36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (21)	TOTAL OPAQUE SKY COVER (36)	OBSERVER'S INITIALS (15)
SA	1150	E8 BKN 20 OVC	2		R-F		58	M	23	11		938	CIG RGD						JF
SA	1250	E8 BKN 20 OVC	4		R-F		50	M	30	15G30		945	CIG RGD						JF
SA	1345	8 SCT E20 OVC	3		RF		45	M	30	15G25		950							JF
SA	1445	20 SCT E50 OVC	10				41	M	29	15G23		959							HL
SA	1545	20 SCT E50 OVC	10				41	M	30	20		960							JF
SA	1651	E20 BKN 60 BKN	10				41	M	30	14G22		963							HL
SA	1745	20 SCT E60 BKN	10				39	M	30	12G22		968							JF
SA	1845	20 SCT 60 SCT	10				39	M	29	10G20		973							JF
SA	1945	40 SCT 200 SCT	20				36	M	30	15		979							BW
SA	2045	40 SCT	20				34	M	30	15		983							BW
SA	2145	40 SCT	20				32	M	30	08		989							KS
SA	2245	CLR	20				31	M	30	10		994							KS
SA	2345	CLR	20				30	M	30	14		999							KS
SA	0045	CLR	20				29	M	32	12		003							KS
SA	0145	CLR	20				28	M	31	10		007							KS
SA	0245	CLR	20				27	M	32	10		010	LAST						KS

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNMLTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (80)

DEW POINT OTS

TIME CHECK — CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1989-0-265-080/010

MF1-1 (6-88)
PRES BY FARM NO.

To convert LST to UTC ADD 5 hrs.

Time in Column 2 is: UTC ✓ LST

SURFACE WEATHER OBSERVATIONS
(Abridged for use at designated Civil Stations)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

DANBURY CT

STATION: DANBURY, CT.

DATE: 12-31-90 12-31-90

TYPE (1)	TIME (2)	SKY AND CEILING (Hundreds of feet) (3)	VISIBILITY (miles) SURFACE (4)	VISIBILITY (miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb.) (6)	TEMP. (°F) (7)	DEW PT. (°F) (8)	WIND DIRECTION (09-36) (9)	WIND SPEED (Kts.) (10)	WIND CHARACTER (11)	ALTIM. SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	STATION PRESSURE (Ins.) (17)	DRY BULB (°F) (18)	WET BULB (°F) (19)	TOTAL SKY COVER (20)	TOTAL OPAQUE SKY COVER (26)	OBSERVER'S INITIALS (15)
SA	1148	E30 BKN	20				34	M	32	10		000							KS
SA	1245	E25 BKN 120 BKN	20				33	M	35	08		007							KS
SA	1345	25 SCT 120 SCT	20				32	M	32	126	23	012	WND27V35						KS
SA	1445	35 SCT 120 SCT	20				34	M	35	11		018							BW
SA	1545	35 SCT	20				35	M	35	07		020							KS
SA	1645	35 SCT	20				34	M	32	10G	17	020							KS
SA	1745	35 SCT	20				35	M	32	09		021							KS
SA	1845	35 SCT	20				35	M	33	10		023							TF
SA	1945	30 SCT	20				34	M	35	10		028							LY
SA	2045	30 SCT	20				32	M	35	08		031							LY
SA	2145	30 SCT	20				30	M	35	07		034							LY
SA	2245	30 SCT	20				29	M	36	08		040							KO
SA	2345	30 SCT	20				27	M	35	08		043							KO
SA	0045	50 SCT	20				26	M	33	06		045							LY
SA	0145	CLR	20				24	M	30	08		050							LY
SA	0245	CLR	20				23	M	36	05		051	LAST						KO

BEST AVAILABLE RECORD

TIME (L.S.T.) (42)	NO. (43)	PRECIP. (Ins.) (44)	SNOW FALL (Ins.) (45)	SNOW DEPTH (Ins.) (46)	MAX. TEMP. (°F) (47)	MIN. TEMP. (°F) (48)
MID. TO	X					
	1					
	2					
	3					
	4					
MID.	X					

STATION PRESSURE COMPUTATIONS

TIME (L.S.T.) (59)				
ATT. THERM. (60)				
OBSRVD. BAR. (61)				
TOTAL CORR. (62)				
STA. PRESS. (63)				
BAROGRAPH (64)				
BAR. CORR. (65)				

SUMMARY OF DAY (Midnight to Midnight)

24-HR. MAX. TEMP. (°F) (66)	24-HR. MIN. TEMP. (°F) (67)	24-HR. PRECIP. WATER EQUIV. (Ins.) (68)	24-HR. SNOW FALL UNALTD. (Ins.) (69)	1200 GMT SNOW DEPTH (Ins.) (70)

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA (90)

DEW POINT OTS

TIME CHECK – CLOCK CORRECT TO NEAREST MINUTE AT: / / /

MF1-10C (6-88) SUPERSEDES MF1-10C (2-77) WHICH MAY BE USED.

*U.S. GPO: 1989-655-001/1010

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX E

MONITORING WELLS BORING LOGS

SOIL SAMPLING LOG

CONNECTICUT TEST BORINGS, INC.

Sub-Surface Specialists

P.O. BOX 69
SEYMOUR, CONNECTICUT
(203) 888-3857

SHEET 1 OF 1

DATE START 4-29-85
DATE FINISH 4-29-85
WEIGHT OF HAMMER 140 ~~200~~
HAMMER FALL .....30 ~~20~~

GROUND WATER OBSERVATIONS

DATE	TIME	DEPTH
4-29-85	0 hrs.	7'

SAMPLER O.D. 2" I.D. 1 3/8"
TYPE OF RIG Hydraulic Rotary

ESPECIALLY COMPILED FOR

Mr. Roger Dhonau
Lancy Laboratories
525 West New Castle Street
Zelienople, PA 16063

PROJ NO
LOCATION GAR Electro Forming, Inc.
~~XXXXXXXX~~ Danbury, CT
OFFSET
GROUND ELEVATION
HOLE NO. B-1

	CASING	SAMPLER	CORE BARREL
TYPE	HSA	SS	
SIZE I.D.	3¼"	1 3/8"	

DEPTH BELOW SURFACE	SAMPLE NO. DEPTHS ELEV FT	Type of Sample	BLOWS PER 6" ON SAMPLER From 0-6	TO 6-12	TO 12-18	DENSITY OR CONSIST. MOISTURE	PROFILE CHANGE DEPTH ELEV	FIELD IDENTIFICATION OF SOILS REMARKS	SAMPLE NO	PEN	REC
							6"	Topsoil.			
								Br. f-c sand and f-c gravel, some cobbles (fill).			
	5'to 6'6"	SS	13	18	24	Dense moist	5'		1	18	12
								Br. f-c sand, lit. f-m gravel.			
							8'				
10	10'to 11'6"	SS	8	7	8	M.Comp wet		Br. f-c sand, lit. f-m gravel, tr. silt.	2	18	18
	15'to 16'6"	SS	13	9	10	M.Comp wet		Br. f-c sand, tr. silt.	3	18	18
20	20'to 21'6"	SS	1	4	16	M.Comp wet		Same	4	18	18
							21'				
								Br. f-c sand, some f-c gravel, tr. silt.			
							23'				
	25'to 26'6"	SS	3	7	11	M.Comp wet		Gry v.f-sand and silt.	5	18	18
							26'6"				
30								Bottom of boring 26'6".			
								NOTE: Installed 2" PVC water observation pipe w/10' screen 25' below grade. Used filter fabric on entire length of screen. Installed 6" x 5'3" steel protective pipe w/locking cap.			
40											

Proportions used: trace = 0-10%, little = 10-20%, some = 20-35%, and = 35-50%

DRILLER: M.M.
HELPER: D.C.
SOILS ENGINEER
DRILLING INSPECTOR

SAMPLE TYPE
C = CORED W = WASHED
SS = SPLIT SPOON
UP = UNDISTURBED PISTON
TP = TEST PIT
UT = UNDISTURBED THINWALL

COHESIONLESS DENSITY
0-10 LOOSE
10-30 MED. COMP.
30-50 DENSE
50+ VERY DENSE

TOTAL FOOTAGE:
Earth Boring Ft.
Rock Coring Ft
HOLE NO

FOR SAMPLE STORAGE AFTER 30 DAYS
NOT RESPO

SOIL SAMPLING LOG

CONNECTICUT TEST BORINGS, INC.

Sub-Surface Specialists

P O BOX 69
SEYMOUR, CONNECTICUT
(203) 888-3857

SHEET 1 OF 1

DATE START 4-30-85
DATE FINISH 4-30-85
WEIGHT OF HAMMER 140 ~~300~~
HAMMER FALL 30" ~~24"~~

GROUND WATER OBSERVATIONS

DATE	TIME	DEPTH
4-30-85	0 hrs.	2'6"

SAMPLER O.D. 2" I.D. 1 3/8"
TYPE OF RIG Hydraulic Rotary

ESPECIALLY COMPILED FOR
Mr. Roger Dhonau
Lancy Laboratories
525 West New Castle Street
Zelienople, PA 16063

PROJ NO
LOCATION GAR Electro Forming, Inc.
~~XXXXXXXX~~ Danbury, CT
OFFSET
GROUND ELEVATION
HOLE. NO. B-2

	CASING	SAMPLER	CORE BARREL
TYPE	HSA	SS	
SIZE I.D.	3¼"	1 3/8"	

DEPTH BELOW SURFACE	SAMPLE NO. DEPTHS ELEV FT	Type of Sample	BLOWS PER 6" ON SAMPLER From 0-6	TO 6-12	TO 12-18	DENSITY OR CONSIST. MOISTURE	PROFILE CHANGE DEPTH ELEV	FIELD IDENTIFICATION OF SOILS REMARKS	SAMPLE NO	PEN	REC
							6"±	Drk br. topsoil.			
	9							Br. f-c sand and c-f gravel.			
							4'				
	5' to 6'6"	SS	1	1	1	Loose wet		Br. f-c sand w/gravel, tr. silt.	1	18	0
							7'				
10	10' to 11'6"	SS	10	11	10	M.Comp wet		Br. c-f sand w/gravel, tr. silt.	2	18	16
	15' to 16'6"	SS	5	4	7	M.Comp wet	16'4"	Same	3	18	16
	18' to 19'6"	SS	4	6	6	M.Comp wet	19'6"	Gry silt and v.f-sand.	4	18	18
20								Bottom of boring 19'6".			
30								NOTE: Installed 2" PVC water observation pipe w/10' screen 18' below grade, 2' above grade. Used filter fabric on entire length of screen. Installed 6" x 5'3" steel protective pipe w/locking cap.			
40											

Proportions used: trace = 0-10%, little = 10-20%, some = 20-35%, and = 35-50%

DRILLER: M.K.
HELPER: J.B.
SOILS ENGINEER
DRILLING INSPECTOR

SAMPLE TYPE
C = CORED W = WASHED
SS = SPLIT SPOON
UP = UNDISTURBED PISTON
TP = TEST PIT
UT = UNDISTURBED THINWALL

COHESIONLESS DENSITY
0-10 LOOSE
10-30 MED. COMP.
30-50 DENSE
50+ VERY DENSE

TOTAL FOOTAGE:
Earth Boring Ft
Rock Coring Ft
HOLE NO

FOR SAMPLE STORAGE AFTER 30 DAYS

NOT RESPO

SOIL SAMPLING LOG

CONNECTICUT TEST BORINGS, INC.

Sub-Surface Specialists

P.O BOX 69
SEYMOUR, CONNECTICUT
(203) 888-3857

SHEET 1 OF 1

DATE START 4-29-85
DATE FINISH 4-29-85
WEIGHT OF HAMMER 140 ~~X050~~
HAMMER FALL 30" ~~X4"~~

GROUND WATER OBSERVATIONS

DATE	TIME	DEPTH
4-29-85	0 hrs.	3'

SAMPLER O.D. 2" I.D. 1 3/8"
TYPE OF RIG Hydraulic Rotary

ESPECIALLY COMPILED FOR
Mr. Roger Dhonau
Lancy Laboratories
525 West New Castle Street
Zelienople, PA 16063

PROJ NO
LOCATION GAR Electro Forming, Inc
~~XXXXXXXX~~ Danbury, CT
OFFSET
GROUND ELEVATION
HOLE NO. B-3

	CASING	SAMPLER	CORE BARREL
TYPE	HSA	SS	
SIZE I.D.	3½"	1 3/8"	

DEPTH BELOW SURFACE	SAMPLE NO DEPTHS ELEV FT	Type of Sample	BLOWS PER 6" ON SAMPLER From 0-6	TO 6-12	TO 12-18	DENSITY OR CONSIST MOISTURE	PROFILE CHANGE DEPTH ELEV	FIELD IDENTIFICATION OF SOILS REMARKS	SAMPLE NO	PEN	REC.
							10"	Topsoil, w/boulder.			
							3'	Br. f-c sand, some silt, lit. f-c grav., tr. cobbles.			
	5' to 6'6"	SS	24	26	25	V.Dense wet	8'6"	Br. c-f sand, some f-c gravel, lit. cobbles, tr. silt.	1	18	15
10	10' to 11'6"	SS	9	10	14	M.Comp wet		Br. f-c sand, tr. silt.	2	18	17
	15' to 15'10"	SS	30	50/4		V.Dense wet	17'	Same	3	10	8
20	20' to 21'6"	SS	3	4	5	Loose wet	21'6"	Gry v.f-sand, some silt.	4	18	16
30								Bottom of boring 21'6". NOTE: Installed 2" PVC water observation pipe w/10' screen 20'4" below grade, 8" above grade. Used filter fabric on entire length of screen. Installed 6" x 5'3" steel protective pipe w/locking cap.			
40											

Proportions used: trace = 0-10%, little = 10-20%, some = 20-35%, and = 35-50%

DRILLER: M.K.
HELPER: J.B.
SOILS ENGINEER
DRILLING INSPECTOR

SAMPLE TYPE
C = CORED W = WASHED
SS = SPLIT SPOON
UP = UNDISTURBED PISTON
TP = TEST PIT
UT = UNDISTURBED THINWALL

COHESIONLESS DENSITY
0-10 LOOSE
10-30 MED. COMP.
30-50 DENSE
50+ VERY DENSE

TOTAL FOOTAGE:
Earth Boring Ft.
Rock Coring Ft.
HOLE NO.

FOR SAMPLE STORAGE AFTER 30 DAYS

NOT RESPO

SOIL SAMPLING LOG

CONNECTICUT TEST BORINGS, INC.

Sub-Surface Specialists

P.O. BOX 69
SEYMOUR, CONNECTICUT
(203) 888-3857

SHEET 1 OF 1

DATE START 4-29-85
DATE FINISH 4-29-85
WEIGHT OF HAMMER 140 ~~200~~
MER FALL .....30" ~~20"~~ .....

GROUND WATER OBSERVATIONS

DATE	TIME	DEPTH
4-29-85	0 hrs.	6'6"

SAMPLER O.D. 2" I.D. 1 3/8"
TYPE OF RIG Hydraulic Rotary

ESPECIALLY COMPILED FOR
Mr. Roger Dhonau
Lancy Laboratories
525 West New Castle Street
Zelienople, PA 16063

PROJ NO
LOCATION GAR Electro Forming, Inc
~~XXXXXXX~~ Danbury, CT
OFFSET
GROUND ELEVATION
HOLE NO. B-4

	CASING	SAMPLER	CORE BARREL
TYPE	HSA	SS	
SIZE I.D.	3¼"	1 3/8"	

DEPTH BELOW SURFACE	SAMPLE NO DEPTHS ELEV FT	Type of Sample	BLOWS PER 6" ON SAMPLER From 0-6	TO 6-12	TO 12-18	DENSITY OR CONSIST MOISTURE	PROFILE CHANGE DEPTH ELEV	FIELD IDENTIFICATION OF SOILS REMARKS	SAMPLE NO	PEN	REC
							1'	Topsoil.			
								Br. blk f-c sand, some f-m gravel, tr. cobbles, tr. silt (fill).			
	5' to 6'6"	SS	24	30	24	V.Dense wet		Same	1	18	18
							7'				
10	10' to 11'6"	SS	12	14	13	M.Comp wet		Br. f-c sand, some f-m gravel, tr. silt.	2	18	12
	15' to 16'6"	SS	19	12	13	M.Comp wet		Same (no silt)	3	18	181
20	20' to 21'6"	SS	12	11	12	M.Comp wet	21'		4	18	6
							21'6"	Gry silt, tr. v.f-sand.			
								Bottom of boring 21'6".			
30								NOTE: Installed 2" PVC water observation pipe w/10' screen 20' below grade. Used filter fabric on entire length of screen. Installed 6" x 5'3" steel protective pipe w/locking cap.			
40											

Proportions used: trace = 0-10%, little = 10-20%, some = 20-35%, and = 35-50%

DRILLER: M.M.
HELPER: D.C.
SOILS ENGINEER
DRILLING INSPECTOR

SAMPLE TYPE
C = CORED W = WASHED
SS = SPLIT SPOON
UP = UNDISTURBED PISTON
TP = TEST PIT
UT = UNDISTURBED THINWALL

COHESIONLESS DENSITY
0-10 LOOSE
10-30 MED. COMP.
30-50 DENSE
50+ VERY DENSE

TOTAL FOOTAGE:
Earth Boring Ft
Rock Coring Ft
HOLE NO

FOR SAMPLE STORAGE AFTER 30 DAYS

NOT RESPO

SOIL SAMPLING LOG

CONNECTICUT TEST BORINGS, INC.

Sub-Surface Specialists

P.O. BOX 69
SEYMOUR, CONNECTICUT
(203) 888-3857

SHEET 1 OF 1

DATE START 4-29-85
DATE FINISH 4-29-85
WEIGHT OF HAMMER 140 ~~300~~
HAMMER FALL 30" ~~24"~~

GROUND WATER OBSERVATIONS

DATE	TIME	DEPTH
4-29-85	0 hrs.	3'6"

SAMPLER O.D. 2" I.D. 1 3/8"
TYPE OF RIG Hydraulic Rotary

ESPECIALLY COMPILED FOR
Mr. Roger Dhonau
Lancy Laboratories
525 West New Castle Street
Zelienople, PA 16063

PROJ NO
LOCATION GAR Electro Forming, Inc
~~LINE & STA~~ Danbury, CT
OFFSET
GROUND ELEVATION
HOLE NO. B-5

	CASING	SAMPLER	CORE BARREL
TYPE	~~HWS~~	SS	
SIZE I.D.	4"	1 3/8"	

DEPTH BELOW SURFACE	SAMPLE NO DEPTHS ELEV FT	Type of Sample	BLOWS PER 6" ON SAMPLER From 0-6	TO 6-12	TO 12-18	DENSITY OR CONSIST. MOISTURE	PROFILE CHANGE DEPTH ELEV	FIELD IDENTIFICATION OF SOILS REMARKS	SAMPLE NO	PEN	REC
							10"	Topsoil w/boulder.			
10								Refer to B-3			
20											
	25' to 26'6"	SS	6	7	10	M.Comp wet	28'	Gry silt and v.f-sand.	1	18	14
30	30' to 31'6"	SS	15	25	25	Dense wet	34'	Gry f-c sand, some f-c grav., tr. cobs. tr. silt.	2	18	15
40								Refusal on FWC. Bottom of boring 34'. NOTE: Installed 2" PVC water observation pipe w/5' screen 34' below grade, 1' above grade. Installed 6" x 5'3" steel protective pipe w/locking cap.			

Proportions used: trace = 0-10%, little = 10-20%, some = 20-35%, and = 35-50%

NOT RESPONSIBLE FOR SAMPLE STORAGE AFTER 30 DAYS

DRILLER: M.K.
HELPER: J.B.
SOILS ENGINEER
DRILLING INSPECTOR

SAMPLE TYPE
C = CORED W = WASHED
SS = SPLIT SPOON
UP = UNDISTURBED PISTON
TP = TEST PIT
UT = UNDISTURBED THINWALL

COHESIONLESS DENSITY
0-10 LOOSE
10-30 MED. COMP.
30-50 DENSE
50+ VERY DENSE

TOTAL FOOTAGE:
Earth Boring Ft
Rock Coring Ft
HOLE NO

SOIL SAMPLING LOG

CONNECTICUT TEST BORINGS, INC.

Sub-Surface Specialists
P. O. Box 69
SEYMOUR, CONNECTICUT
(203) 888-3857

SHEET 1 of 1

DATE START 8/21/90
DATE FINISH 8/21/90
WEIGHT OF HAMMER 140 ~~300~~
HAMMER FALL 30" ~~28"~~

GROUND WATER OBSERVATIONS

DATE	TIME	DEPTH
8/21/90	0 hrs.	5'

SAMPLER O.D. 2" I.D. 1 3/8"
TYPE OF RIG Hydraulic Rotary

Pace Incorporated
181 Thorn Hill Road
Warrendale, PA 15086-7527

PROJ. NO.
LOCATION GAR Electroforming
~~XXXXXXXXXX~~ Danbury, Ct.
OFFSET
GROUND ELEVATION
HOLE NO. MW-6

	CASING	SAMPLER	CORE BARREL
TYPE	HSA	SS	
SIZE I.D	2¼	1 3/8	

Depth Below Surface	SAMPLE NO. DEPTHS ELEV. FT.	Type of Sample	BLOWS PER 6" ON SAMPLER From 0-6	To 6-12	To 12-18	DENSITY OR CONSIST. MOISTURE	PROFILE CHANGE DEPTH ELEV	FIELD IDENTIFICATION OF SOILS REMARKS	SAMPLE NO	PEN	REC
							2'	Topsoil			
								Br. silty sand, gravel, cobbles.			
	5' to 7'	SS	77	28	12 / 14	Dense Wet		Br. f-c sand, little f-c gravel, few cobbles.	1	24	18
10	10' to 12'	SS	8	8	15 / 15	M.Comp. Wet		Br. f-c sand, little f-c gravel, few cobbles.	2	24	24
	15' to 17'	SS	20	15	7 / 7	M.Comp. Wet	16'	Br. f-c sand, little f-c gravel, tr. silt, occasional cobble.	3	24	18
								Gry. silt, seams of clay & f-sand.			
20	20' to 22'	SS	3	5	7 / 8	M.Comp. Wet	22'		4	24	18
30								Bottom of boring 22'.			
40								Note: Installed 22' well, 20' below grade, 2' above grade.			

Proportions used: trace = 0-10%, little = 10-20%, some = 20-35%, and = 35-50%

DRILLER: S.A.
HELPER: V.C.
SOILS ENGINEER: G.A.
DRILLING INSPECTOR:

SAMPLE TYPE
C = CORED W = WASHED
SS = SPLIT SPOON
UP = UNDISTURBED PISTON
TP = TEST PIT
UT = UNDISTURBED THINWALL

COHESIONLESS DENSITY
0-10 LOOSE
10-30 MED. COMP.
30-50 DENSE
50+ VERY DENSE

TOTAL FOOTAGE:
Earth Boring Ft
Rock Coring Ft
HOLE NO

RESPONSIBLE FOR SAMPLE STORAGE AFTER 30 DAYS

SOIL SAMPLING LOG

CONNECTICUT TEST BORINGS, INC.

Sub-Surface Specialists
P. O. Box 69
SEYMOUR, CONNECTICUT
(203) 888-3857

SHEET 1 of 1

DATE START 8/21/90
DATE FINISH 8/21/90
WEIGHT OF HAMMER 140 ~~300~~
HAMMER FALL 30" ~~30"~~

GROUND WATER OBSERVATIONS

DATE	TIME	DEPTH
8/21/90	0 hrs.	3'

SAMPLER O.D. 2" I.D. 1 3/8"
TYPE OF RIG Hydraulic Rotary

Pace Incorporated
181 Thorn Hill Road
Warrendale, PA 15086-7527

PROJ. NO.
LOCATION GAR Electroforming
~~LINE & STA.~~ Danbury, Ct.
OFFSET
GROUND ELEVATION
HOLE NO. MW-7

	CASING	SAMPLER	CORE BARREL
TYPE	HSA	SS	
SIZE I.D.	4¼	1 3/8	

Depth Below Surface	SAMPLE NO. DEPTHS ELEV FT.	Type of Sample	BLOWS PER 6" ON SAMPLER From 0-6	To 6-12	To 12-18	DENSITY OR CONSIST. MOISTURE	PROFILE CHANGE DEPTH ELEV	FIELD IDENTIFICATION OF SOILS REMARKS	SAMPLE NO.	PEN	REC.
								Topsoil			
							1'6"				
							3'	Lt. br. silty f-sand.			
	5' to 7'	SS	21	28	40 / 32	V.Dnse. Wet		Br. f-c sand, little f-m gravel, silt, occasional cobble.	1	24	24
10	10' to 12'	SS	8	9	9 / 8	M.Comp. Wet		Br. f-c sand, little f-m gravel.	2	24	24
	15' to 17'	SS	7	12	15 / 17	M.Comp. Wet	15'6"	Same	3	24	18
								Gry. silt.			
20	20' to 22'	SS	2	4	6 / 7	Loose Wet		Gry. silt, seams of f-sand.	4	24	12
							22'				
30								Bottom of boring 22'.			
								Note: Installed 22' well 20' below grade, 2' above grade.			
40											

Proportions used: trace = 0-10%, little = 10-20%, some = 20-35%, and = 35-50%

DRILLER: S.A.
HELPER: V.C.
SOILS ENGINEER: G.A.
DRILLING INSPECTOR:

SAMPLE TYPE
C = CORED W = WASHED
SS = SPLIT SPOON
UP = UNDISTURBED PISTON
TP = TEST PIT
UT = UNDISTURBED THINWALL

COHESIONLESS DENSITY
0-10 LOOSE
10-30 MED. COMP.
30-50 DENSE
50+ VERY DENSE

TOTAL FOOTAGE:
Earth Boring Ft.
Rock Coring Ft.
HOLE NO

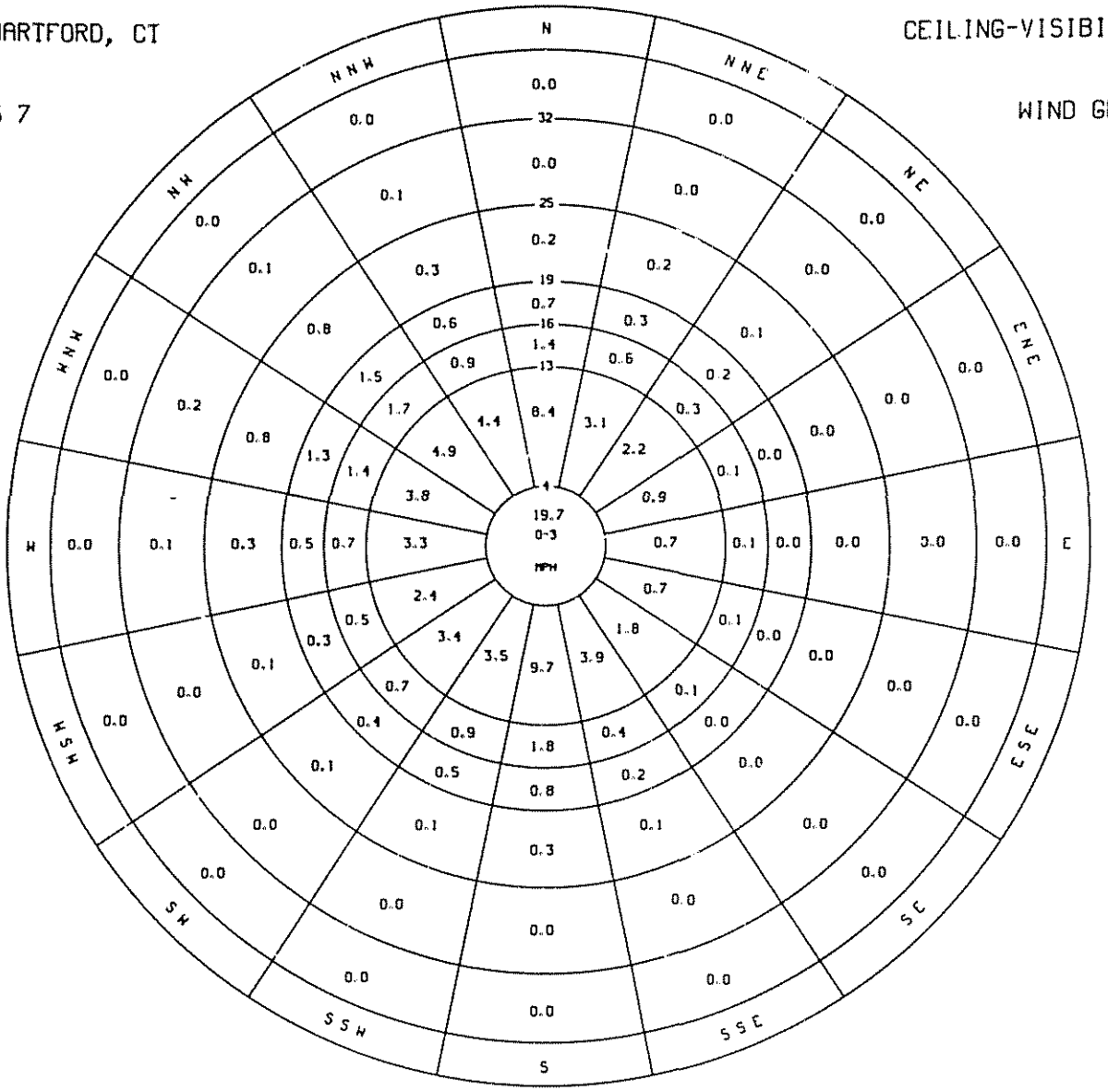
RESPONSIBLE FOR SAMPLE STORAGE AFTER 30 DAYS

BDL HARTFORD, CT

CLASS 7

CEILING-VISIBILITY

WIND GRAPH



2

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX F

SITE EVALUATION ANALYSIS

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

Report Date 2/27/86

GAR Electroforming
P. O. Box 340
Danbury, CT 06810

Attention: George A. Ray

Collected 12/12/85 by RD
Received 12/18/85 by LS
Analyzed 12/18 - 2/7/86 by Staff
No. of Samples 19
P.O. # 21365

Site Evaluation Samples

Sample #	A-1-1	A-1-2	A-1-3	A-1-4
Lab Reference #	17324	17325	17326	17327
Parameter	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
pH (SU)	8.8	8.9	8.9	9.0
Solids, Total	73 %	86 %	78 %	65 %
Cyanide, Total	4.0	0.5	4.1	65
Cadmium	5.8	<2.0	1.6	<1.5
Chromium	110	8.4	110	90
Nickel	8300	635	5800	3200
Aluminum	10000	3000	7800	3200
Copper	5400	575	2000	2500
Silver	100	14	95	610

Sample #	A-2-1	A-2-2	A-3-1	B-2-1
Lab Reference #	17328	17329	17330	17331
Parameter	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
pH (SU)	8.6	8.4	8.3	8.6
Solids, Total	82 %	81 %	36 %	76 %
Cyanide, Total	2.4	29	9.6	1.5
Cadmium	<2.0	<2.0	5.8	3.0
Chromium	49	100	325	52
Nickel	2800	3600	12000	6300
Aluminum	4800	5400	5000	3800
Copper	815	1000	7100	2900
Silver	37	76	115	22

Note: Analyses reported on a Wet Weight Basis

C. John Ritzert, Manager-Technical Services

Form 9810-0983-2M

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.

Company: GAR Electroforming — Report Date: 2/27/86

Description: Site Evaluation Samples — PO#/Chg.#: 21365

Sample #	B-3-1	BAC-1	C-1	C-2
Lab Reference #	17332	17333	17334	17335
Parameter	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
pH (SU)	8.7	5.3	7.7	7.5
Solids, Total	81 %	85 %	90 %	75 %
Cyanide, Total	<0.5	<0.5	<0.5	<0.5
Cadmium	4.9	<2.0	<2.0	<1.5
Chromium	57	16	18	15
Nickel	2400	<10	18	7.5
Aluminum	4100	13000	9000	9600
Copper	1200	9.9	18	16
Silver	14	3.3	3.6	3.0

Sample #	C-3	C-4	C-5	C-6
Lab Reference #	17336	17337	17338	17339
Parameter	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
pH (SU)	7.2	6.1	7.0	7.3
Solids, Total	87 %	84 %	81 %	90 %
Cyanide, Total	<0.5	<0.5	<0.5	<0.5
Cadmium	<2.0	18	<2.0	<2.0
Chromium	26	25	23	27
Nickel	8.7	420	16	44
Aluminum	13000	14000	12500	12000
Copper	16	15	14	27
Silver	3.5	3.4	1.6	1.8

Note: Analyses reported on a Wet Weight Basis

C. John Ritzert, Manager-Technical Services

Form 9824-0583-500

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.

Company: GAR Electroforming — Report Date: 2/27/86

Description: EP TOX and ASTM Leachates — PO#/Chg.#: 21365

EP TOX Leachates

Sample #	BAC-1	C-1	C-2	C-3
Lab Reference #	17340	17341	17342	17343
Parameter	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic	<0.05	<0.05	<0.05	<0.05
Barium	<2.0	<2.0	2.0	2.0
Cadmium	<0.1	<0.1	<0.1	<0.1
Chromium	<0.5	<0.5	<0.5	<0.5
Lead	<0.5	<0.5	<0.5	<0.5
Mercury	<0.002	<0.002	<0.002	<0.002
Selenium	<0.05	<0.05	<0.05	<0.05
Silver	<0.1	<0.1	<0.1	<0.1
Nickel	<0.5	<0.5	<0.5	<0.5
Aluminum	<1.0	<1.0	<1.0	<1.0
Copper	<0.1	<0.1	<0.1	<0.1
Zinc	0.6	<0.5	<0.5	0.7

ASTM Leachates

Sample #	BAC-1	C-1	C-2	C-3
Lab Reference #	17347	17348	17349	17350
Parameter	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Cyanide, Total	0.01	0.02	<0.01	0.02
Chromium, Hexavalent	<0.01	<0.01	<0.01	<0.01

C. John Ritzert, Manager-Technical Services

Form 9824-0583-500

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.

Company: GAR Electroforming — Report Date: 2/27/86

Description: EP TOX and ASTM Leachates — PO#/Chg.#: 21365

EP TOX Leachates

Sample #	C-4	C-5	C-6
Lab Reference #	17344	17345	17346
Parameter	(mg/L)	(mg/L)	(mg/L)
Arsenic	<0.05	<0.05	<0.05
Barium	<2.0	<2.0	<2.0
Cadmium	<0.1	<0.1	<0.1
Chromium	<0.5	<0.5	<0.5
Lead	<0.5	<0.5	<0.5
Mercury	<0.002	<0.002	<0.002
Selenium	<0.05	<0.05	<0.05
Silver	<0.1	<0.1	<0.1
Nickel	7.7	<0.5	<0.5
Aluminum	<1.0	<1.0	<1.0
Copper	<0.1	0.2	<0.1
Zinc	0.5	0.9	<0.5

ASTM Leachates

Sample #	C-4	C-5	C-6
Lab Reference #	17351	17352	17353
Parameter	(mg/L)	(mg/L)	(mg/L)
Cyanide, Total	0.02	0.01	<0.01
Chromium, Hexavalent	<0.01	0.02	<0.01

C. John Ritzert, Manager-Technical Services

Form 9824-0583-500

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.

Company: GAR Electroforming — Report Date: 2/27/86

Description: Sludges A & B — PO#/Chg.#: 21365

Sample	Sludge A	Sludge B
Lab Reference #	17356	17357
Parameter		
Physical State	Semi-Solid	Semi-Solid
Specific Gravity	1.17	1.24
Flash Point	N/A*	N/A*
Viscosity	N/A*	N/A*
pH (SU)	7.9	8.0
Layering	None	None
Solids, Total	21%	30%
Ash	18%	26%
Water	79%	70%
	(mg/Kg)	(mg/Kg)
Carbonate	<35 (g/Kg)	<35 (g/Kg)
Sulfate	3.2	3.9
Calcium	910	1400
Chromium	230	320
Iron	6300	2000
Nickel	31.5 (g/Kg)	44 (g/Kg)
Arsenic	18	20
Cadmium	15	5.6
Chloride	640	390
Chromium, Hexavalent	<0.15	0.88
Copper	38 (g/Kg)	22 (g/Kg)
Cyanide, Total	9.8	5.6
Lead	46	18
Mercury	0.24	0.20
Sulfur	1070	1300
Sulfide	<10	<10
Zinc	1000	160
Corrosivity	Non-Corrosive	Non-Corrosive
Ignitability	Non-Ignitable	Non-Ignitable
Reactivity	Non-Reactive	Non-Reactive

* Not Applicable

Analyses reported on a wet weight basis.

C. John Ritzert, Manager-Technical Services

Form 9824-0583-500

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.

Company: GAR Electroforming — Report Date: 2/27/86

Description: Volatile Organics — PO#/Chg.#: 21365

Sample #	Sludge A	Sludge B
Lab Reference #	17356	17357
Parameter	(ug/L)	(ug/L)
Benzene	<20	<20
Bromoform	<500	<500
Carbon tetrachloride	<500	<500
Chlorobenzene	<20	<20
Chlorodibromomethane	<500	<500
Chloroform	<100	<100
1,2-Dichlorobenzene	<100	<100
1,3-Dichlorobenzene	<100	<100
1,4-Dichlorobenzene	<100	<100
Dichlorobromomethane	<250	<250
1,1-Dichloroethane	<100	<100
1,2-Dichloroethane	<100	<100
1,1-Dichloroethylene	<250	<250
1,2-Dichloropropane	<100	<100
Ethylbenzene	<20	<20
Methylene chloride	<250	<250
Trans-1,3-Dichloropropylene	<250	<250
Tetrachloroethylene	<250	<250
Toluene	<20	<20
1,2-trans-Dichloroethylene	<100	<100
1,1,1-Trichloroethane	<100	<100
1,1,2-Trichloroethane	<100	<100
Trichloroethylene	<100	<100

C. John Ritzert, Manager-Technical Services

Form 9824-0583-500

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.

Company: GAR Electroforming — Report Date: 2/27/86

Description: EPTOX Leachates — PO#/Chg.#: 21365

Sample	EPTOX Leach Sludge A	EPTOX Leach Sludge B
Lab Reference #	17358	17359
	(mg/L)	(mg/L)
Parameter		
Arsenic	<0.05	<0.05
Barium	2.0	<2.0
Cadmium	0.4	0.3
Chromium	<0.5	<0.5
Lead	<0.5	<0.5
Mercury	<0.004	<0.004
Nickel	185	405
Selenium	<0.05	<0.05
Silver	<0.1	<0.1

C. John Ritzert, Manager-Technical Services

Form 9824-0583-500

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.

Company: GAR Electroforming — Report Date: 2/27/86

Description: Pumice Lagoon — PO#/Chg.#: 21365

Sample	Pumice Lagoon
Lab Reference #	17354 (mg/Kg)
Parameter	
pH (SU)	7.2
Cyanide, Total	4.8
Sulfur	53
Cadmium	8.4
Chromium	70
Nickel	630
Corrosivity	Non-Corrosive
Ignitability	Non-Ignitable
Reactivity	Non-Reactive

Sample	EPTOX Pumice Sludge A
Lab Reference #	17355 (mg/L)
Parameter	
Arsenic	<0.05
Barium	2.0
Cadmium	0.2
Chromium	<0.5
Lead	<0.5
Mercury	<0.002
Nickel	11
Selenium	<0.05
Silver	<0.1

C. John Ritzert, Manager-Technical Services

Form 9824-0583-500

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX G

HAZARDOUS WASTE MANIFESTS

PRESS HARD - YOU ARE WRITING THROUGH EIGHT COPIES SEE REVERSE SIDE FOR DIRECTIONS

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING
DIVISION OF SOLID AND HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No. 3 4 9 1 4 G T D 0 6 4 8 [redacted] 4 0 0 0 0 1 Manifest Document No.

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
GAR Electroforming, Augusta Drive
[redacted] Danbury, CT 06810

4. Generator's Phone 203) 744-[redacted]

A. State Manifest Document Number MA C028317

[redacted] Gen. ID

5. Transporter 1 Company Name: Service Sanitare Blainville

6. US EPA ID Number: N Y D 9 8 0 7 6 2 1 1 4 0

C. State Trans. ID

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone (413) 527-5600

E. State Trans. ID

9. Designated Facility Name and Site Address
Stablex Canada
760 Boulldindustriel
Blainville, Quebec Canada

10. US EPA ID Number: N Y D 9 8 0 7 5 6 4 7 5

F. Transporter's Phone ( )

G. State Facility's ID: Not Required

H. Facility's Phone (413) 430-9230

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Hazardous Waste Solid, N.O.S. ORM-E 9189	0 0 1	C,M	30	Y	F090
b. Trailer # 1292711 25=00 - Gross					
c. 31,000 - 1215					
d. 30,700 lbs					

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.)
a. CT Manifest Unavailable
BSKGARD01 - Shipping Clerk
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. c.
b. d.

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws/regulations. Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently avilable to me which minimizes the present and future threat to human health and the environment.

GENERATOR

Printed/Typed Name: X George A. Ray, President
Signature: X
Date: Month 1 1 Day 0 3 Year 8 6

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Real Poirier
Signature:
Date: Month 1 1 Day 0 3 Year 8 6

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Date: Month Day Year

In Case of Emergency or Spill, Immediately call the National Response Center (800) 424-8802.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING
DIVISION OF SOLID AND HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12 pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No. 3 4 9 1 4 C T D 0 6 4 8 [redacted] Manifest Document No. 0 0 0 0 1

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
GAR Electroforming , Augusta Drive
[redacted] Danbury, CT 06810

4. Generator's Phone (203) 744-4300

A. State Manifest Document Number: MA C028318

B. State Gen. ID: [redacted]

5. Transporter 1 Company Name: Service Sanitare Blainville

6. US EPA ID Number: N Y D 9 8 0 7 6 2 1 4 0

C. State Trans. ID: R 9 0 0 9 8 6

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone: 413 527-5600

E. State Trans. ID

9. Designated Facility Name and Site Address
Stablex Canada
760 Boul Industrial
Blainville, Quebec Canada

10. US EPA ID Number: N Y D 9 8 0 7 5 6 4 1 5

F. Transporter's Phone ( )

G. State Facility's ID: Not Required

H. Facility's Phone: (413) 430-9230

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Hazardous Waste Solid, N.O.S. ORM-E 9189	01	CM	30	Y	F 006
b. Trailer # R9009986 39,200 - Gross					
c. 31000 lbs 39,200 lbs					
d.					

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.)
a. CT Manifest Unavailable
b. BSKGARD01

K. Handling Codes for Wastes Listed Above
a. c.
b. d.

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws/regulations. Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently avilable to me which minimizes the present and future threat to human health and the environment.

GENERATOR — Printed/Typed Name: George A. Ray, President — Signature — Date: Month 11 Day 03 Year 86

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials — Printed/Typed Name: DENIS MAUOR — Signature — Date: Month 11 Day 03 Year 86

18. Transporter 2 Acknowledgement of Receipt of Materials — Printed/Typed Name — Signature — Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name — Signature — Date: Month Day Year

In case of emergency or spill, immediately call the National Response Center (800) 424-8802.

Form Approved OMB No. 2000-0404, Expires 7-31-86
EPA Form 8700-22 (Rev. 4-85 Previous edition is obsolete)

COPY 6: DESTINATION STATE - MAILED BY GENERATOR

PRESS HARD - YOU ARE WRITING THROUGH EIGHT COPIES SEE REVERSE SIDE FOR DIRECTIONS

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING
DIVISION OF SOLID AND HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No. 3 4 9 1 4 CTD064818 Manifest Document No. 00001

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
GAR Electroforming 7 Augusta Drive
Danbury, CT 06810

4. Generator's Phone 203 744-4300

A. State Manifest Document Number MA C028319

B. State Gen. ID same

5. Transporter 1 Company Name: Service Sanitare Blainville

6. US EPA ID Number: NYD980762140

C. State Trans. ID R762305

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone 813 527-5600

E. State Trans. ID

9. Designated Facility Name and Site Address
Stablex Canada
760 Boul Industriel
Blainville, Qdebec, Canada

10. US EPA ID Number: NYD980756415

F. Transporter's Phone ( )

G. State Facility's ID Not Required

H. Facility's Phone (413) 430-9230

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Hazardous Waste Solid, N.O.S. ORM-E 9189	001	CM	30	Y	F006
b. Trailer 1276 2305 72950 - Gross					
c. 31000 - Net					
d.					

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.)
CT Manifest Unavailable
a.
c.
BSKGARDO1
b.
d.

K. Handling Codes for Wastes Listed Above
a.
c.
b.
d.

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws/regulations. Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: George A. Ray, President
Signature
Date: Month Day Year 1 1 0 3 8 6

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: [illegible]
Signature
Date: Month Day Year 1 1 0 3 8 6

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Date: Month Day Year

In case of emergency or spill, immediately call the Nation esponse Center (800) 424-8802.

PRESS HARD - YOU ARE WRITING THROUGH EIGHT COPIES SEE REVERSE SIDE FOR DIRECTIONS

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING
DIVISION OF SOLID AND HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No. 4914 CTD064800001 Manifest Document No.

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
GAR Electroforming, Aggusta Drive
Banbury, CT 06810

4. Generator's Phone (203) 744-4300

A. State Manifest Document Number MA C028320

B. State Gen. ID None

5. Transporter 1 Company Name: Service Sanitare Blainville

6. US EPA ID Number: NYD980761240

C. State Trans. ID

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone (413) 527-5600

E. State Trans. ID

9. Designated Facility Name and Site Address
Stablex Canada
760 Boul Industriel
Blainville, Quebec Canada

10. US EPA ID Number: NYD980756415

F. Transporter's Phone ( )

G. State Facility's ID: Not Required

H. Facility's Phone (413) 430-9230

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No
a. Hazardous Waste Solid, N.O.S. 8189 ORM-E	001	CM	30	Y	F006
b. Trailer # 12806505 Gross 73940 + 2400					
c. 31000 - Rig					
d. 42940					

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.)
a.
b. CT Manifest Unavailable BSKGARD01
c.
d.

K. Handling Codes for Wastes Listed Above
a.
b.
c.
d.

15. Special Handling Instructions and Additional Information

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Printed/Typed Name: George A. Ray, President
Signature
Date: Month 11 Day 03 Year 86

TRANSPORT

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Pierre Poirier
Signature
Date: Month 11 Day 03 Year 86

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Date: Month Day Year

GENERATOR

MA C028320 COPY>b: DESTINATION STATE-MAILED BY GENERATOR

PRESS HARD - YOU ARE WRITING THROUGH EIGHT COPIES SEE REVERSE SIDE FOR DIRECTIONS

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING
DIVISION OF SOLID AND HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID: 3 0 4 9 1 4 C T D 0 6 4 8 [illegible] 0 0 0 0 1 — Manifest Document No.

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
GAR Electroforming, Augusta Drive
~~Blanchard Drive~~ Danbury, CT 06810

4. Generator's Phone ( )

A. State Manifest Document Number: MA C028321

B. State Gen. ID

5. Transporter 1 Company Name: SERvice Sanitaire Blainville

6. US EPA ID Number: N Y D 9 8 0 8 6 2 1 4 0

C. State Trans. ID

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone (413) 527-5600

E. State Trans. ID

9. Designated Facility Name and Site Address
Stablex Canada
760 Boul Industriel
Blainville, Quebec Canada

10. US EPA ID Number: N Y D 9 8 0 7 5 6 4 1 5

F. Transporter's Phone ( )

G. State Facility's ID: Not Required

H. Facility's Phone (413) 430-9230

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Hazardous Waste Solid, N.O.S. [illegible] E	001	CM	30	Y	F006
b. Trailer # RGG4691 71820 - Gross					
c. 31000 lbs					
d.					

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.)
a.
c.
b. CT Manifest Unavailable
BSKGARD01
d.

K. Handling Codes for Wastes Listed Above
a.
c.
b.
d.

15. Special Handling Instructions and Additional Information

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GENERATOR

Printed/Typed Name: George A. Ray, President
Signature:
Date: Month 1 1 Day 0 3 Year 8 6

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: GUY POIRIER
Signature:
Date: Month 1 1 Day 0 3 Year 8 6

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name:
Signature:
Date: Month Day Year

In case of emergency or spill, immediately call the National Response Center (800) 424-8802.

PRESS HARD - YOU ARE WRITING THROUGH LIGHT COPIES SEE REVERSE SIDE FOR DIRECTIONS

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING
DIVISION OF SOLID AND HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No. CTD064834914 Manifest Document No. 001

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
GAR Electroforming Division
Augusta Drive Danbury, CT 06810

4. Generator's Phone (203) 744-4300

A. State Manifest Document Number MA CD28326

B. State Gen. ID

5. Transporter 1 Company Name
SErvice Sanitare Blainville

6. US EPA ID Number NYD980762140

C. State Trans. ID

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone (413) 527-5600

E. State Trans. ID

9. Designated Facility Name and Site Address
Stablex Candda Inc.
760 Boul Industairel
Blainville, Canada Quebec

10. US EPA ID Number NYD980756415

F. Transporter's Phone ( )

G. State Facility's ID Not Required

H. Facility's Phone (413) 430-9230

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I Waste No
a. Hazardous Waste Solid, N.O.S. 9189 ORM-E	001	CM	30	Y	F006
b. Trailer R906836 71500 Total					
c. 31000 lbs					
d.					

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code)
a. ~~CT Manifest Unavailable~~
BSKGARDO1
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a.
b.
c.
d.

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws/regulations. Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently avilable to me which minimizes the present and future threat to human health and the environment.

GENERATOR

Printed/Typed Name: GEORGE A RAY
Signature:
Date: Month 11 Day 01 Year 86

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: GILLES BOYER
Signature:
Date: Month 11 Day 01 Year 86

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Date: Month Day Year

TRANSPORTER

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name:
Signature:
Date: Month Day Year

FACILITY

In case of emergency or spill, immediately call the National Response Center (800) 424-8802.

PRESS HARD - YOU ARE WRITING THROUGH EIGHT COPIES SEE REVERSE SIDE FOR DIRECTIONS

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING
DIVISION OF SOLID AND HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No. CTD064834914 Manifest Document No. 000001

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
GAR Electroforming Division
Augusta Drive Danbury, CT 06810

4. Generator's Phone (203) 744-4300

A. State Manifest Document Number MA C028324

B. State Gen. ID same

5. Transporter 1 Company Name: Service Sanitare Blainville

6. US EPA ID Number: NYD980762140

C. State Trans. ID R845768

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone (413) 527-5600

E. State Trans. ID

9. Designated Facility Name and Site Address
Stablex Canada Inc.
760 Boul Industriel
Blainville, Quebec Canada

10. US EPA ID Number: NYD980756415

F. Transporter's Phone ( )

G. State Facility's ID Not Required

H. Facility's Phone (413) 430-9230

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No
a. Hazardous Waste Solid, N.O.S. 9189, ORM-E	001	CM	30	Y	F006
b. Tm. 1x ~~R7000~~ 72000					
c. 12848968 3L					
d.					

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.)
a. CT Manifest Unavailable
BSKGARDOI
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a.
b.
c.
d.

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws/regulations. Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently avilable to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: GEORGE A DAY
Signature:
Date: Month 11 Day 24 Year 86

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Date: Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: JERAMIAH DEBAR
Signature:
Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name:
Signature:
Date: Month Day Year

GENERATOR

TRANSPORTER

FACILITY

MA C028324 COPY 6: DESTINATION STATE-MAILED BY GENERATOR

In case of emergency or spill, immediately call the National Response Center (800) 424-8802.

PRESS HARD - YOU ARE WRITING THROUGH EIGHT COPIES SEE REVERSE SIDE FOR DIRECTIONS

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING
DIVISION OF SOLID AND HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No: CTD064834914 Manifest Document No: 0000
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
GAR Electroforming Division
Augusta Drive Danbury, CT 06810
4. Generator's Phone (203) 744-4300

A. State Manifest Document Number: MA C028325
B. State Gen. ID: same

5. Transporter 1 Company Name: Service Sanitare Blainville
6. US EPA ID Number: NYD980762140
C. State Trans. ID:
D. Transporter's Phone (413) 527-5600

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Trans. ID:
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
Stablex Canada Inc.
760 Boul Industriel
Blainville, Quebec Canada
10. US EPA ID Number: NYD980756415
G. State Facility's ID: Not Required
H. Facility's Phone 413 430-9230

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Hazardous Waste Solid, N.O.S. ORM-E 9189	001	CM	30	Y	F006
b. Trailer R120-505 78920 - Full					
c. 32 [illegible]					
d.					

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.)
a. CT Manifest Unavailable
b. BSKGARD01
c.
d.

K. Handling Codes for Wastes Listed Above
a.
b.
c.
d.

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws/regulations. Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently avilable to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: GEORGE A RAY
Signature:
Date: Month 1 Day 4 Year 86

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: PIERRE BIRIER
Signature:
Date: Month 1 Day 1 Year 86

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name:
Signature:
Date: Month Day Year

GENERATOR
TRANSPORTER
FACILITY

In case of emergency or spill, immediately call the National Response Center (800) 424-8802.

PRESS HARD - YOU ARE WRITING THROUGH EIGHT COPIES SEE REVERSE SIDE FOR DIRECTIONS

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING
DIVISION OF SOLID AND HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No: CTD064834914 Manifest Document No: 0001

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
GAR Electroforming Division
Augusta Drive DAnbury, CT 06810

4. Generator's Phone (203) 744-4300

A. State Manifest Document Number: MA C028329

B. State Gen ID: same

5. Transporter 1 Company Name: Service Sanitare Blainville

6. US EPA ID Number: NYD980762140

C. State Trans. ID

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone (413) 527-5600

E. State Trans. ID

9. Designated Facility Name and Site Address
Stablex Canada Inc.
760 Boul Industriel
Blainville, Quebec Canada

10. US EPA ID Number: NYD980756415

F. Transporter's Phone ( )

G. State Facility's ID: Not Required

H. Facility's Phone (413) 430-9230

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Hazarddus Waste Solid, N.O.S. 9189, ORM-E	001	CM	30	Y	F006
b. Trailer R964671					
c.					
d.					

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.)
a. CT Manifest Unavailable
b. BSKGARDO1
c.
d.

K. Handling Codes for Wastes Listed Above
a.
b.
c.
d.

15. Special Handling Instructions and Additional Information

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Printed/Typed Name: GEORGE A RAY
Signature:
Date: Month 11 Day 04 Year 86

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: GUY POIRIER
Signature:
Date: Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name:
Signature:
Date: Month Day Year

GENERATOR

TRANSPORTER

FACILITY

In case of emergency or spill, immediately call the National Response Center (800) 424-8802.

MA C028329

PRESS HARD - YOU ARE WRITING THROUGH EIGHT COPIES SEE REVERSE SIDE FOR DIRECTIONS

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING
DIVISION OF SOLID AND HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No. CTD064834914 — Manifest Document No. 000001

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
GAR Electroforming Division
Augusta Drive Danbury, CT 06810

4. Generator's Phone (203) 744-4300

A. State Manifest Document Number: MA CD28327

B. State Gen. ID: same

5. Transporter 1 Company Name: Service Sanitare Blainville

6. US EPA ID Number: NYD980762140

C. State Trans. ID

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone (413) 527-5600

E. State Trans. ID

9. Designated Facility Name and Site Address
Sexblex Canada Inc.
760 Boul Industriel
Blainville Quebec Canada

10. US EPA ID Number: NYD980756415

F. Transporter's Phone ( )

G. State Facility's ID: Not Required

H. Facility's Phone (413) 430-9230

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No
a. Hazardous Waste Solid, N.O.S. 9189 ORM-E	001	CM	30	Y	F006
b. Trailer R926711 Total 71 64580 Unit 31,000 40580					
c.					
d.					

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.)
CT Manifest Unavailable
a.
c.
BSKGARD01
b.
d.

K. Handling Codes for Wastes Listed Above
a.
c.
b.
d.

15. Special Handling Instructions and Additional Information

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GENERATOR — Printed/Typed Name: GEORGE A. RAY — Signature — Date: Month 11 Day 04 Year 86

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials — Printed/Typed Name: RCHL Poirier — Signature — Date: Month 11 Day 04 Year 86

18. Transporter 2 Acknowledgement of Receipt of Materials — Printed/Typed Name — Signature — Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name — Signature — Date: Month Day Year

In case of emergency or spill, immediately call the National Response Center (800) 424-8802.

PRESS HARD - YOU ARE WRITING THROUGH EIGHT COPIES SEE REVERSE SIDE FOR DIRECTIONS

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING
DIVISION OF SOLID AND HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

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UNIFORM HAZARDOUS WASTE MANIFEST

1 Generator US EPA ID No. / Manifest Document No.: CTD064834140 0001

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3 Generator's Name and Mailing Address
GAR Electroforming Division
Augusta Drive Danbury, CT 06810

4. Generator's Phone (203) 744-4300

A. State Manifest Document Number: MA C028328

State Gen. ID: R877-016

5 Transporter 1 Company Name: Service Sanitare Blainville

6. US EPA ID Number: NYD980762120

C. State Trans. ID

7. Transporter 2 Company Name

8 US EPA ID Number

D. Transporter's Phone (413) 527-5600

E. State Trans. ID

9 Designated Facility Name and Site Address
Stablex Canada Inc.
760 Boul Industriel
Blainville, Quebec Canada

10 US EPA ID Number: NYD980756415

F. Transporter's Phone ( )

G. State Facility's ID: Not Required

H. Facility's Phone 413) 430-9230

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I Waste No
a Hazardous Waste Solid, N.O.S. 9189, ORM-E	001	CM	30	Y	F006
b Tom Smith R877-016					
c Total 7 [illegible]					
d 3,000 [illegible]					

J Additional Descriptions for Materials Listed Above (include physical state and hazard code.)

a. CT Manifest Unavailable

b. BSKGARD01

c.

d.

K. Handling Codes for Wastes Listed Above

a. c.

b. d.

15 Special Handling Instructions and Additional Information

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GENERATOR

Printed/Typed Name: GEORGE A RAY — Signature — Date (Month Day Year): 11 4 86

TRANSPORT

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: SERGE LAJOIE — Signature — Date (Month Day Year): 11 10 86

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Date (Month Day Year)

FACILITY

19 Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19

Printed/Typed Name — Signature — Date (Month Day Year)

In case of emergency or spill, immediately call the National Response Center (800) 424-8802.

DISTRIBUTION: 1 TO DEPARTMENT, 2 TO GENERATOR

PRESS HARD - YOU ARE WRITING THROUGH EIGHT COPIES SEE REVERSE SIDE FOR DIRECTIONS

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING
DIVISION OF SOLID AND HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No: CTD064883912 — Manifest Document No: 40000 1

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
GAR Electroforming Division
Augusta Drive Danbury, CT 06810

4. Generator's Phone 203) 744-4300

A. State Manifest Document Number: MA C028323

B. State Gen. ID: same

5. Transporter 1 Company Name: Sealand Environmental Services Inc.

6. US EPA ID Number: NYD980528280

C. State Trans. ID:

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone (203) 333-5807

E. State Trans. ID

9. Designated Facility Name and Site Address
Stablex Canada Inc.
760 Boul Industriel
Blainville, Quebec Canada

10. US EPA ID Number: NYD980756415

F. Transporter's Phone ( )

G. State Facility's ID 413 Non-Resident

H. Facility's Phone ( ) 450-9230

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No
a. Hazardous Waste Solid, N.O.S. 9189 ORM-E	001	CM	30	Y	F005
b. Trailer 12156830 71080 - Total					
c. 31000 - Vehicle					
d.					

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code.)
a. CT Manifest Unavailable
BSKGARD01
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a.
b.
c.
d.

15. Special Handling Instructions and Additional Information

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Printed/Typed Name: GEORGE A RAY — Signature — Date: Month 11 Day 4 Year 86

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: CLEANUT & LINE — Signature — Date: Month 11 Day 4 Year 86

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Date: Month Day Year

In case of emergency or spill, immediately call the National Response Center (800) 424-8802.

MA C028323

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX H

CONFIRMATIONAL SOILS TESTING DATA

LANCY ENVIRONMENTAL SERVICES
DIVISION OF LANCY INTERNATIONAL, INC.
An Alcoa Separations Technology Company
P.O. Box 419
Pittsburgh, PA 15230-0419
Phone (412) 772-0044 • FAX (412) 772-0055

ANALYSIS REPORT

Report Date 8/6/87

GAR Electroforming Division
Augusta Drive - Commerce Park
Danbury, CT 06810

Attention: George A. Ray

Sample Date 7/9/87 by CL
Received 7/10/87 by FM
Analyzed 7/10 - 8/4/87 by Staff
No. of Samples 36
Purchase Order # Verbal

Lagoon Area Soils

Project #20316

Sample	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6
Lab Reference #	28726	28727	28728	28729	28761	28730
	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
Parameter						
Arsenic	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Barium	73	32	99	71	45	43
Cadmium	1.3	<1.0	<1.0	1.0	2.1	<1.0
Chromium, Total	210	31	280	130	390	24
Copper	920	550	640	670	2000	1000
Lead	41	13	52	47	70	15
Nickel	1500	910	2100	1500	3400	800
Selenium	4.0	4.0	5.0	1.0	1.0	1.0
Silver	20	49	19	49	88	4.1

Sample	SB-7	SB-8	SB-9	SB-10	SB-11	SB-12
Lab Reference #	28731	28732	28733	28734	28735	28736
	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
Parameter						
Arsenic	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Barium	42	82	59	38	24	42
Cadmium	<1.0	<1.0	<1.0	1.0	<1.0	<1.0
Chromium, Total	67	78	190	21	9	180
Copper	200	830	640	210	9.8	310
Lead	19	14	40	13	<10	31
Nickel	1100	380	1000	270	27	670
Selenium	2.0	2.0	1.0	1.0	2.0	<1.0
Silver	3.9	8.9	5.3	4.3	<20	26

C. John Ritzert, Manager-Technical Operations

LANCY ENVIRONMENTAL SERVICES
DIVISION OF LANCY INTERNATIONAL, INC.
An Alcoa Separations Technology Company
P.O. Box 419
Pittsburgh, PA 15230-0419
Phone (412) 772-0044 • FAX (412) 772-0055

ANALYSIS REPORT

GAR Electroforming Division
Lagoon Area Soils

8/6/87
Verbal

Project #20316

Sample	SB-13	SB-14	SB-15	SB-16	SB-17	SB-18
Lab Reference #	28737	28738	28739	28740	28741	28742
	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
Parameter						
Arsenic	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Barium	64	26	20	20	100	60
Cadmium	<1.0	1.4	1.7	<1.0	<1.0	<1.0
Chromium, Total	31	50	85	10	120	150
Copper	12	900	1000	63	96	1200
Lead	14	12	19	<10	38	32
Nickel	14	1600	7300	140	460	1600
Selenium	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Silver	5.6	21	40	3.6	<2.0	25

EP TOX LEACHATES

Sample	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6
Lab Reference #	28743	28744	28745	28746	28747	28748
	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
Parameter						
Arsenic	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Barium	0.054	0.160	0.020	0.130	0.005	0.270
Cadmium	<0.005	0.014	<0.005	0.006	0.007	0.005
Chromium, Total	0.020	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	2.8	5.7	0.66	2.8	3.4	0.71
Lead	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Mercury	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Nickel	4.2	2.3	4.7	6.8	14	0.63
Selenium	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Silver	0.017	<0.010	<0.010	<0.010	0.15	0.016

Joyce R Waddell

C. John Ritzert, Manager-Technical Operations

LANCY ENVIRONMENTAL SERVICES
DIVISION OF LANCY INTERNATIONAL, INC.
An Alcoa Separations Technology Company
P.O. Box 419
Pittsburgh, PA 15230-0419
Phone (412) 772-0044 • FAX (412) 772-0055

ANALYSIS REPORT

GAR Electroforming Division
Lagoon Area Soils

8/6/87
Verbal

Project #20316

EP TOX LEACHATES

Sample	SB-7	SB-8	SB-9	SB-10	SB-11	SB-12
Lab Reference #	28749	28750	28751	28752	28753	28754
	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
Parameter						
Arsenic	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Barium	0.130	0.086	0.012	0.210	0.120	0.200
Cadmium	0.014	<0.005	<0.005	0.006	<0.005	0.008
Chromium, Total	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	0.30	0.47	0.58	0.76	0.03	0.35
Lead	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Mercury	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Nickel	2.3	3.5	4.2	0.90	0.10	2.0
Selenium	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Silver	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010

EP TOX LEACHATES

Sample	SB-13	SB-14	SB-15	SB-16	SB-17	SB-18
Lab Reference #	28755	28756	28757	28758	28759	28760
	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
Parameter						
Arsenic	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Barium	0.110	0.190	0.210	0.160	0.240	0.230
Cadmium	<0.005	0.034	0.019	0.005	<0.005	0.006
Chromium, Total	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	0.02	7.6	6.8	1.9	0.28	4.2
Lead	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Mercury	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Nickel	0.01	5.3	9.1	0.88	1.2	1.7
Selenium	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Silver	<0.010	<0.010	<0.010	<0.010	<0.010	0.044

C. John Ritzert, Manager-Technical Operations

LANCY ENVIRONMENTAL SERVICES
DIVISION OF LANCY INTERNATIONAL, INC.
An Alcoa Separations Technology Company
P.O. Box 419
Pittsburgh, PA 15230-0419
Phone (412) 772-0044 • FAX (412) 772-0055

ANALYSIS REPORT

GAR Electroforming Division
Lagoon Area Soils

8/6/87
Verbal

Project #20316

Sample	SB-2	SB-3	SB-4	SB-5	SB-14	SB-15
Lab Reference #	28727	28728	28729	28761	28738	28739
	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)
Volatile Organics						
Chloromethane	<5	<5	<5	<5	<5	<5
Bromomethane	<5	<5	<5	<5	<5	<5
Dichlorodifluoromethane	<5	<5	<5	<5	<5	<5
Vinyl Chloride	<5	<5	<5	<5	<5	<5
Chloroethane	<5	<5	<5	<5	<5	<5
Methylene Chloride	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	<5	<5	<5	<5	<5	<5
1,1-Dichloroethylene	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	<5	<5	<5	<5	<5	<5
Trans-1,2-Dichloroethylene	<5	<5	<5	<5	<5	<5
Chloroform	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane	<5	<5	<5	<5	<5	<5
1,1,1-Trichloroethane	5.6	<5	<5	<5	<5	<5
Carbon Tetrachloride	<5	<5	<5	<5	<5	<5
Bromodichloromethane	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	<5	<5	<5	<5	<5	<5
Cis-1,3-Dichloropropene	<5	<5	<5	<5	<5	<5
Trichloroethylene	<5	<5	<5	5.1	<5	10.1
Chlorodibromomethane	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	<5	<5	<5	<5	<5	<5
Trans-1,3-Dichloropropene	<5	<5	<5	<5	<5	<5
2-Chloroethylvinyl Ether	<5	<5	<5	<5	<5	<5
Bromoform	<50	<50	<50	<50	<50	<50
1,1,2,2-Tetrachloroethane	<5	<5	<5	<5	<5	<5
Tetrachloroethylene	<5	<5	<5	<5	<5	<5
Chlorobenzene	<5	<5	<5	<5	<5	<5
1,3-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,2-Dichlorobenzene	<25	<25	<25	<25	<25	<25
1,4-Dichlorobenzene	<25	<25	<25	<25	<25	<25
Benzene	<5	<5	<5	<5	<5	<5
Toluen	<5	<5	<5	<5	<5	<5
Ethylbenzene	<5	<5	<5	<5	<5	<5

C. John Ritzert, Manager-Technical Operations

LANCY ENVIRONMENTAL SERVICES
DIVISION OF LANCY INTERNATIONAL, INC.
An Alcoa Separations Technology Company
P.O. Box 419
Pittsburgh, PA 15230-0419
Phone (412) 772-0044 • FAX (412) 772-0055

ANALYSIS REPORT

GAR Electroforming Division
Lagoon Area Soils

8/6/87
Verbal

Project #20316

Sample	SB-16	SB-17
Lab Reference #	28740	28741
	(ug/Kg)	(ug/Kg)
Volatile Organics		
Chloromethane	<5	<5
Bromomethane	<5	<5
Dichlorodifluoromethane	<5	<5
Vinyl Chloride	<5	<5
Chloroethane	<5	<5
Methylene Chloride	<5	<5
Trichlorofluoromethane	<5	<5
1,1-Dichloroethylene	<5	<5
1,1-Dichloroethane	<5	<5
Trans-1,2-Dichloroethylene	<5	<5
Chloroform	<5	<5
1,2-Dichloroethane	<5	<5
1,1,1-Trichloroethane	<5	<5
Carbon Tetrachloride	<5	<5
Bromodichloromethane	<5	<5
1,2-Dichloropropane	<5	<5
Cis-1,3-Dichloropropene	<5	<5
Trichloroethylene	<5	<5
Chlorodibromomethane	<5	<5
1,1,2-Trichloroethane	<5	<5
Trans-1,3-Dichloropropene	<5	<5
2-Chloroethylvinyl Ether	<5	<5
Bromoform	<50	<50
1,1,2,2-Tetrachloroethane	<5	<5
Tetrachloroethylene	<5	<5
Chlorobenzene	<5	<5
1,3-Dichlorobenzene	<25	<25
1,2-Dichlorobenzene	<25	<25
1,4-Dichlorobenzene	<25	<25
Benzene	<5	<5
Toluene	<5	<5
Ethylbenzene	<5	<5

C. John Ritzert, Manager-Technical Operations

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX I

1991 GROUND WATER MONITORING ANALYSIS

pace INCORPORATED
THE ASSURANCE OF QUALITY

REPORT OF LABORATORY ANALYSIS

GAR Electroforming Division
P.O. Box 340
Augusta Drive - Commerce Park
Danbury, CT 06810

October 18, 1991
PACE Project Number: 110926507

Attn: Mr. Frank E.Ray

Client Reference: 100724.201

PACE Sample Number:			97 0070010	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 1	
Parameter	Units	MDL		DATE ANALYZED
FIELD ANALYSIS				
INDIVIDUAL PARAMETERS				
pH	SU	1.0	5.8	09/24/91
INORGANIC ANALYSIS				
INDIVIDUAL PARAMETERS				
Aluminum	mg/L	0.04	0.20	10/02/91
Cadmium	mg/L	0.004	ND	10/02/91
Chromium	mg/L	0.006	0.007	10/02/91
Chromium, Hexavalent	mg/L	0.01	ND	09/26/91
Copper	mg/L	0.007	0.099	10/02/91
Cyanide, Total	mg/L	0.01	ND	10/10/91
Iron	mg/L	0.006	0.26	10/02/91
Nickel	mg/L	0.02	0.43	10/02/91
Silver	mg/L	0.01	ND	10/04/91
Specific Conductance	umhos/cm	1.0	750	10/01/91
Total Organic Carbon	mg/L	1.0	5.3	10/08/91
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Chloromethane	ug/L	10	ND	10/11/91
Bromomethane	ug/L	10	ND	10/11/91
Dichlorodifluoromethane	ug/L	25	ND	10/11/91
Vinyl chloride	ug/L	25	ND	10/11/91
Chloroethane	ug/L	10	ND	10/11/91
Methylene chloride	ug/L	25	ND	10/11/91
Trichlorofluoromethane	ug/L	10	ND	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL

REPORT OF LABORATORY ANALYSIS

Mr. Frank E.Ray
Page 2

October 18, 1991
PACE Project Number: 11092650

Client Reference: 100724.201

PACE Sample Number:			97 0070010	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 1	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
1,1-Dichloroethylene	ug/L	10	30	10/11/91
1,1-Dichloroethane	ug/L	10	ND	10/11/91
1,2-Dichloroethylene(total)	ug/L	10	27	10/11/91
Chloroform	ug/L	10	ND	10/11/91
1,2-Dichloroethane	ug/L	10	12	10/11/91
1,1,1-Trichloroethane	ug/L	10	96	10/11/91
Carbon tetrachloride	ug/L	10	ND	10/11/91
Bromodichloromethane	ug/L	10	ND	10/11/91
1,2-Dichloropropane	ug/L	10	ND	10/11/91
Cis-1,3-dichloropropene	ug/L	10	ND	10/11/91
Trichloroethylene	ug/L	10	620	10/11/91
Chlorodibromomethane	ug/L	10	ND	10/11/91
1,1,2-Trichloroethane	ug/L	10	ND	10/11/91
Trans-1,3-dichloropropene	ug/L	10	ND	10/11/91
2-Chloroethylvinyl ether	ug/L	10	ND	10/11/91
Bromoform	ug/L	25	ND	10/11/91
1,1,2,2-Tetrachloroethane	ug/L	10	ND	10/11/91
Tetrachloroethylene	ug/L	10	68	10/11/91
Chlorobenzene	ug/L	10	ND	10/11/91
1,3-Dichlorobenzene	ug/L	25	ND	10/11/91
1,2-Dichlorobenzene	ug/L	25	ND	10/11/91
1,4-Dichlorobenzene	ug/L	25	ND	10/11/91
1,1,1,2-Tetrachloroethane	ug/L	10	ND	10/11/91
Dibromomethane	ug/L	10	ND	10/11/91
1,2,3-Trichloropropane	ug/L	10	ND	10/11/91
Bromobenzene	ug/L	10	ND	10/11/91
m-Chlorotoluene	ug/L	25	ND	10/11/91
o-Chlorotoluene	ug/L	25	ND	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

Mr. Frank E.Ray
Page 3

October 18, 1991
PACE Project Number: 110926507

Client Reference: 100724.201

PACE Sample Number:			97 0070010	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 1	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
p-Chlorotoluene	ug/L	25	ND	10/11/91
1-Chlorohexane	ug/L	25	ND	10/11/91
Benzene	ug/L	10	ND	10/11/91
Toluene	ug/L	10	ND	10/11/91
Ethylbenzene	ug/L	10	ND	10/11/91
Xylenes(total)	ug/L	25	ND	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

Mr. Frank E.Ray
Page 4

October 18, 1991
PACE Project Number: 11092650

Client Reference: 100724.201

PACE Sample Number:			97 0070028	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 2	
Parameter	Units	MDL		DATE ANALYZED
FIELD ANALYSIS				
INDIVIDUAL PARAMETERS				
pH	SU	1.0	5.6	09/24/91
INORGANIC ANALYSIS				
INDIVIDUAL PARAMETERS				
Aluminum	mg/L	0.04	0.22	10/02/91
Cadmium	mg/L	0.004	ND	10/02/91
Chromium	mg/L	0.006	ND	10/02/91
Chromium, Hexavalent	mg/L	0.01	ND	09/26/91
Copper	mg/L	0.007	0.032	10/02/91
Cyanide, Total	mg/L	0.01	0.01	10/10/91
Iron	mg/L	0.006	0.32	10/02/91
Nickel	mg/L	0.02	0.35	10/02/91
Silver	mg/L	0.01	ND	10/04/91
Specific Conductance	umhos/cm	1.0	540	10/01/91
Total Organic Carbon	mg/L	1.0	10	10/08/91
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Chloromethane	ug/L	2.0	ND	10/15/91
Bromomethane	ug/L	2.0	ND	10/15/91
Dichlorodifluoromethane	ug/L	5.0	ND	10/15/91
Vinyl chloride	ug/L	5.0	ND	10/15/91
Chloroethane	ug/L	2.0	ND	10/15/91
Methylene chloride	ug/L	5.0	ND	10/15/91
Trichlorofluoromethane	ug/L	2.0	ND	10/15/91
1,1-Dichloroethylene	ug/L	2.0	ND	10/15/91
1,1-Dichloroethane	ug/L	2.0	ND	10/15/91
1,2-Dichloroethylene(total)	ug/L	2.0	4.5	10/15/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

Mr. Frank E.Ray
Page 5

October 18, 1991
PACE Project Number: 110926507

Client Reference: 100724.201

PACE Sample Number:			97 0070028	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 2	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Chloroform	ug/L	2.0	ND	10/15/91
1,2-Dichloroethane	ug/L	2.0	ND	10/15/91
1,1,1-Trichloroethane	ug/L	2.0	ND	10/15/91
Carbon tetrachloride	ug/L	2.0	ND	10/15/91
Bromodichloromethane	ug/L	2.0	ND	10/15/91
1,2-Dichloropropane	ug/L	2.0	ND	10/15/91
Cis-1,3-dichloropropene	ug/L	2.0	ND	10/15/91
Trichloroethylene	ug/L	2.0	83	10/15/91
Chlorodibromomethane	ug/L	2.0	ND	10/15/91
1,1,2-Trichloroethane	ug/L	2.0	ND	10/15/91
Trans-1,3-dichloropropene	ug/L	2.0	ND	10/15/91
2-Chloroethylvinyl ether	ug/L	2.0	ND	10/15/91
Bromoform	ug/L	5.0	ND	10/15/91
1,1,2,2-Tetrachloroethane	ug/L	2.0	ND	10/15/91
Tetrachloroethylene	ug/L	2.0	9.7	10/15/91
Chlorobenzene	ug/L	2.0	ND	10/15/91
1,3-Dichlorobenzene	ug/L	5.0	ND	10/15/91
1,2-Dichlorobenzene	ug/L	5.0	ND	10/15/91
1,4-Dichlorobenzene	ug/L	5.0	ND	10/15/91
1,1,1,2-Tetrachloroethane	ug/L	2.0	ND	10/15/91
Dibromomethane	ug/L	2.0	ND	10/15/91
1,2,3-Trichloropropane	ug/L	2.0	ND	10/15/91
Bromobenzene	ug/L	2.0	ND	10/15/91
m-Chlorotoluene	ug/L	5.0	ND	10/15/91
o-Chlorotoluene	ug/L	5.0	ND	10/15/91
p-Chlorotoluene	ug/L	5.0	ND	10/15/91
1-Chlorohexane	ug/L	5.0	ND	10/15/91
Benzene	ug/L	2.0	ND	10/15/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

Mr. Frank E.Ray
Page 6

October 18, 1991
PACE Project Number: 11092650

Client Reference: 100724.201

PACE Sample Number:			97 0070028	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 2	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Toluene	ug/L	2.0	ND	10/15/91
Ethylbenzene	ug/L	2.0	ND	10/15/91
Xylenes(total)	ug/L	5.0	ND	10/15/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

Mr. Frank E.Ray
Page 7

October 18, 1991
PACE Project Number: 11092650

Client Reference: 100724.201

PACE Sample Number:			97 0070036	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 3	
Parameter	Units	MDL		DATE ANALYZED
FIELD ANALYSIS				
INDIVIDUAL PARAMETERS				
pH	SU	1.0	5.9	09/24/91
INORGANIC ANALYSIS				
INDIVIDUAL PARAMETERS				
Aluminum	mg/L	0.04	0.46	10/02/91
Cadmium	mg/L	0.004	ND	10/02/91
Chromium	mg/L	0.006	ND	10/02/91
Chromium, Hexavalent	mg/L	0.01	ND	09/26/91
Copper	mg/L	0.007	0.039	10/02/91
Cyanide, Total	mg/L	0.01	ND	10/10/91
Iron	mg/L	0.006	0.57	10/02/91
Nickel	mg/L	0.02	0.03	10/02/91
Silver	mg/L	0.01	ND	10/04/91
Specific Conductance	umhos/cm	1.0	330	10/01/91
Total Organic Carbon	mg/L	1.0	5.0	10/08/91
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Chloromethane	ug/L	2.0	ND	10/11/91
Bromomethane	ug/L	2.0	ND	10/11/91
Dichlorodifluoromethane	ug/L	5.0	ND	10/11/91
Vinyl chloride	ug/L	5.0	ND	10/11/91
Chloroethane	ug/L	2.0	ND	10/11/91
Methylene chloride	ug/L	5.0	ND	10/11/91
Trichlorofluoromethane	ug/L	2.0	ND	10/11/91
1,1-Dichloroethylene	ug/L	2.0	ND	10/11/91
1,1-Dichloroethane	ug/L	2.0	ND	10/11/91
1,2-Dichloroethylene(total)	ug/L	2.0	ND	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

Mr. Frank E.Ray
Page 8

October 18, 1991
PACE Project Number: 11092650

Client Reference: 100724.201

PACE Sample Number:			97 0070036	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 3	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Chloroform	ug/L	2.0	ND	10/11/91
1,2-Dichloroethane	ug/L	2.0	ND	10/11/91
1,1,1-Trichloroethane	ug/L	2.0	ND	10/11/91
Carbon tetrachloride	ug/L	2.0	ND	10/11/91
Bromodichloromethane	ug/L	2.0	ND	10/11/91
1,2-Dichloropropane	ug/L	2.0	ND	10/11/91
Cis-1,3-dichloropropene	ug/L	2.0	ND	10/11/91
Trichloroethylene	ug/L	2.0	50	10/11/91
Chlorodibromomethane	ug/L	2.0	ND	10/11/91
1,1,2-Trichloroethane	ug/L	2.0	ND	10/11/91
Trans-1,3-dichloropropene	ug/L	2.0	ND	10/11/91
2-Chloroethylvinyl ether	ug/L	2.0	ND	10/11/91
Bromoform	ug/L	5.0	ND	10/11/91
1,1,2,2-Tetrachloroethane	ug/L	2.0	ND	10/11/91
Tetrachloroethylene	ug/L	2.0	ND	10/11/91
Chlorobenzene	ug/L	2.0	ND	10/11/91
1,3-Dichlorobenzene	ug/L	5.0	ND	10/11/91
1,2-Dichlorobenzene	ug/L	5.0	ND	10/11/91
1,4-Dichlorobenzene	ug/L	5.0	ND	10/11/91
1,1,1,2-Tetrachloroethane	ug/L	2.0	ND	10/11/91
Dibromomethane	ug/L	2.0	ND	10/11/91
1,2,3-Trichloropropane	ug/L	2.0	ND	10/11/91
Bromobenzene	ug/L	2.0	ND	10/11/91
m-Chlorotoluene	ug/L	5.0	ND	10/11/91
o-Chlorotoluene	ug/L	5.0	ND	10/11/91
p-Chlorotoluene	ug/L	5.0	ND	10/11/91
1-Chlorohexane	ug/L	5.0	ND	10/11/91
Benzene	ug/L	2.0	ND	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

Mr. Frank E.Ray
Page 9

October 18, 1991
PACE Project Number: 110926507

Client Reference: 100724.201

PACE Sample Number:			97 0070036	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 3	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Toluene	ug/L	2.0	ND	10/11/91
Ethylbenzene	ug/L	2.0	ND	10/11/91
Xylenes(total)	ug/L	5.0	ND	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

Mr. Frank E.Ray
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October 18, 1991
PACE Project Number: 11092650

Client Reference: 100724.201

PACE Sample Number:			97 0070044	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 4	
Parameter	Units	MDL		DATE ANALYZED
FIELD ANALYSIS				
INDIVIDUAL PARAMETERS				
pH	SU	1.0	5.6	09/24/91
INORGANIC ANALYSIS				
INDIVIDUAL PARAMETERS				
Aluminum	mg/L	0.04	0.13	10/02/91
Cadmium	mg/L	0.004	ND	10/02/91
Chromium	mg/L	0.006	ND	10/02/91
Chromium, Hexavalent	mg/L	0.01	ND	09/26/91
Copper	mg/L	0.007	0.039	10/02/91
Cyanide, Total	mg/L	0.01	ND	10/10/91
Iron	mg/L	0.006	0.18	10/02/91
Nickel	mg/L	0.02	0.04	10/02/91
Silver	mg/L	0.01	ND	10/04/91
Specific Conductance	umhos/cm	1.0	460	10/01/91
Total Organic Carbon	mg/L	1.0	9.9	10/08/91
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Chloromethane	ug/L	2.0	ND	10/11/91
Bromomethane	ug/L	2.0	ND	10/11/91
Dichlorodifluoromethane	ug/L	5.0	ND	10/11/91
Vinyl chloride	ug/L	5.0	ND	10/11/91
Chloroethane	ug/L	2.0	ND	10/11/91
Methylene chloride	ug/L	5.0	ND	10/11/91
Trichlorofluoromethane	ug/L	2.0	ND	10/11/91
1,1-Dichloroethylene	ug/L	2.0	ND	10/11/91
1,1-Dichloroethane	ug/L	2.0	ND	10/11/91
1,2-Dichloroethylene(total)	ug/L	2.0	3.1	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

Mr. Frank E.Ray
Page 11

October 18, 1991
PACE Project Number: 110926507

Client Reference: 100724.201

PACE Sample Number:			97 0070044	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 4	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Chloroform	ug/L	2.0	3.1	10/11/91
1,2-Dichloroethane	ug/L	2.0	ND	10/11/91
1,1,1-Trichloroethane	ug/L	2.0	ND	10/11/91
Carbon tetrachloride	ug/L	2.0	ND	10/11/91
Bromodichloromethane	ug/L	2.0	ND	10/11/91
1,2-Dichloropropane	ug/L	2.0	ND	10/11/91
Cis-1,3-dichloropropene	ug/L	2.0	ND	10/11/91
Trichloroethylene	ug/L	2.0	80	10/11/91
Chlorodibromomethane	ug/L	2.0	ND	10/11/91
1,1,2-Trichloroethane	ug/L	2.0	ND	10/11/91
Trans-1,3-dichloropropene	ug/L	2.0	ND	10/11/91
2-Chloroethylvinyl ether	ug/L	2.0	ND	10/11/91
Bromoform	ug/L	5.0	ND	10/11/91
1,1,2,2-Tetrachloroethane	ug/L	2.0	ND	10/11/91
Tetrachloroethylene	ug/L	2.0	96	10/11/91
Chlorobenzene	ug/L	2.0	ND	10/11/91
1,3-Dichlorobenzene	ug/L	5.0	ND	10/11/91
1,2-Dichlorobenzene	ug/L	5.0	ND	10/11/91
1,4-Dichlorobenzene	ug/L	5.0	ND	10/11/91
1,1,1,2-Tetrachloroethane	ug/L	2.0	ND	10/11/91
Dibromomethane	ug/L	2.0	ND	10/11/91
1,2,3-Trichloropropane	ug/L	2.0	ND	10/11/91
Bromobenzene	ug/L	2.0	ND	10/11/91
m-Chlorotoluene	ug/L	5.0	ND	10/11/91
o-Chlorotoluene	ug/L	5.0	ND	10/11/91
p-Chlorotoluene	ug/L	5.0	ND	10/11/91
1-Chlorohexane	ug/L	5.0	ND	10/11/91
Benzene	ug/L	2.0	ND	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

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October 18, 1991
PACE Project Number: 11092650

Client Reference: 100724.201

PACE Sample Number:			97 0070044	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 4	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Toluene	ug/L	2.0	ND	10/11/91
Ethylbenzene	ug/L	2.0	ND	10/11/91
Xylenes(total)	ug/L	5.0	ND	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

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October 18, 1991
PACE Project Number: 110926507

Client Reference: 100724.201

PACE Sample Number:			97 0070052	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 5	
Parameter	Units	MDL		DATE ANALYZED
FIELD ANALYSIS				
INDIVIDUAL PARAMETERS				
pH	SU	1.0	6.5	09/24/91
INORGANIC ANALYSIS				
INDIVIDUAL PARAMETERS				
Aluminum	mg/L	0.04	0.14	10/02/91
Cadmium	mg/L	0.004	0.004	10/02/91
Chromium	mg/L	0.006	ND	10/02/91
Chromium, Hexavalent	mg/L	0.01	ND	09/26/91
Copper	mg/L	0.007	0.067	10/02/91
Cyanide, Total	mg/L	0.01	ND	10/10/91
Iron	mg/L	0.006	0.15	10/02/91
Nickel	mg/L	0.02	0.10	10/02/91
Silver	mg/L	0.01	ND	10/04/91
Specific Conductance	umhos/cm	1.0	3100	10/01/91
Total Organic Carbon	mg/L	1.0	6.7	10/08/91
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Chloromethane	ug/L	4.0	ND	10/11/91
Bromomethane	ug/L	4.0	ND	10/11/91
Dichlorodifluoromethane	ug/L	10	ND	10/11/91
Vinyl chloride	ug/L	10	ND	10/11/91
Chloroethane	ug/L	4.0	ND	10/11/91
Methylene chloride	ug/L	10	ND	10/11/91
Trichlorofluoromethane	ug/L	4.0	ND	10/11/91
1,1-Dichloroethylene	ug/L	4.0	6.2	10/11/91
1,1-Dichloroethane	ug/L	4.0	ND	10/11/91
1,2-Dichloroethylene(total)	ug/L	4.0	6.8	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

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October 18, 1991
PACE Project Number: 110926507

Client Reference: 100724.201

PACE Sample Number:			97 0070052	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 5	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Chloroform	ug/L	4.0	ND	10/11/91
1,2-Dichloroethane	ug/L	4.0	ND	10/11/91
1,1,1-Trichloroethane	ug/L	4.0	6.9	10/11/91
Carbon tetrachloride	ug/L	4.0	ND	10/11/91
Bromodichloromethane	ug/L	4.0	ND	10/11/91
1,2-Dichloropropane	ug/L	4.0	ND	10/11/91
Cis-1,3-dichloropropene	ug/L	4.0	ND	10/11/91
Trichloroethylene	ug/L	4.0	150	10/11/91
Chlorodibromomethane	ug/L	4.0	ND	10/11/91
1,1,2-Trichloroethane	ug/L	4.0	ND	10/11/91
Trans-1,3-dichloropropene	ug/L	4.0	ND	10/11/91
2-Chloroethylvinyl ether	ug/L	4.0	ND	10/11/91
Bromoform	ug/L	10	ND	10/11/91
1,1,2,2-Tetrachloroethane	ug/L	4.0	ND	10/11/91
Tetrachloroethylene	ug/L	4.0	69	10/11/91
Chlorobenzene	ug/L	4.0	ND	10/11/91
1,3-Dichlorobenzene	ug/L	10	ND	10/11/91
1,2-Dichlorobenzene	ug/L	10	ND	10/11/91
1,4-Dichlorobenzene	ug/L	10	ND	10/11/91
1,1,1,2-Tetrachloroethane	ug/L	4.0	ND	10/11/91
Dibromomethane	ug/L	4.0	ND	10/11/91
1,2,3-Trichloropropane	ug/L	4.0	ND	10/11/91
Bromobenzene	ug/L	4.0	ND	10/11/91
m-Chlorotoluene	ug/L	10	ND	10/11/91
o-Chlorotoluene	ug/L	10	ND	10/11/91
p-Chlorotoluene	ug/L	10	ND	10/11/91
1-Chlorohexane	ug/L	10	ND	10/11/91
Benzene	ug/L	4.0	ND	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

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October 18, 1991
PACE Project Number: 110926507

Client Reference: 100724.201

PACE Sample Number:			97 0070052	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 5	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Toluene	ug/L	4.0	ND	10/11/91
Ethylbenzene	ug/L	4.0	ND	10/11/91
Xylenes(total)	ug/L	10	ND	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

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October 18, 1991
PACE Project Number: 11092650

Client Reference: 100724.201

PACE Sample Number:			97 0070060	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 6	
Parameter	Units	MDL		DATE ANALYZED
FIELD ANALYSIS				
INDIVIDUAL PARAMETERS				
pH	SU	1.0	5.7	09/24/91
INORGANIC ANALYSIS				
INDIVIDUAL PARAMETERS				
Aluminum	mg/L	0.04	0.39	10/02/91
Cadmium	mg/L	0.004	ND	10/02/91
Chromium	mg/L	0.006	ND	10/02/91
Chromium, Hexavalent	mg/L	0.01	ND	09/26/91
Copper	mg/L	0.007	0.038	10/02/91
Cyanide, Total	mg/L	0.01	ND	10/10/91
Iron	mg/L	0.006	0.41	10/02/91
Nickel	mg/L	0.02	0.50	10/02/91
Silver	mg/L	0.01	ND	10/04/91
Specific Conductance	umhos/cm	1.0	500	10/01/91
Total Organic Carbon	mg/L	1.0	6.2	10/08/91
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Chloromethane	ug/L	2.0	ND	10/11/91
Bromomethane	ug/L	2.0	ND	10/11/91
Dichlorodifluoromethane	ug/L	5.0	ND	10/11/91
Vinyl chloride	ug/L	5.0	ND	10/11/91
Chloroethane	ug/L	2.0	ND	10/11/91
Methylene chloride	ug/L	5.0	ND	10/11/91
Trichlorofluoromethane	ug/L	2.0	ND	10/11/91
1,1-Dichloroethylene	ug/L	2.0	ND	10/11/91
1,1-Dichloroethane	ug/L	2.0	ND	10/11/91
1,2-Dichloroethylene(total)	ug/L	2.0	3.3	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

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October 18, 1991
PACE Project Number: 110926507

Client Reference: 100724.201

PACE Sample Number:			97 0070060	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 6	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Chloroform	ug/L	2.0	ND	10/11/91
1,2-Dichloroethane	ug/L	2.0	ND	10/11/91
1,1,1-Trichloroethane	ug/L	2.0	ND	10/11/91
Carbon tetrachloride	ug/L	2.0	ND	10/11/91
Bromodichloromethane	ug/L	2.0	ND	10/11/91
1,2-Dichloropropane	ug/L	2.0	ND	10/11/91
Cis-1,3-dichloropropene	ug/L	2.0	ND	10/11/91
Trichloroethylene	ug/L	2.0	150	10/11/91
Chlorodibromomethane	ug/L	2.0	ND	10/11/91
1,1,2-Trichloroethane	ug/L	2.0	ND	10/11/91
Trans-1,3-dichloropropene	ug/L	2.0	ND	10/11/91
2-Chloroethylvinyl ether	ug/L	2.0	ND	10/11/91
Bromoform	ug/L	5.0	ND	10/11/91
1,1,2,2-Tetrachloroethane	ug/L	2.0	ND	10/11/91
Tetrachloroethylene	ug/L	2.0	14	10/11/91
Chlorobenzene	ug/L	2.0	ND	10/11/91
1,3-Dichlorobenzene	ug/L	5.0	ND	10/11/91
1,2-Dichlorobenzene	ug/L	5.0	ND	10/11/91
1,4-Dichlorobenzene	ug/L	5.0	ND	10/11/91
1,1,1,2-Tetrachloroethane	ug/L	2.0	ND	10/11/91
Dibromomethane	ug/L	2.0	ND	10/11/91
1,2,3-Trichloropropane	ug/L	2.0	ND	10/11/91
Bromobenzene	ug/L	2.0	ND	10/11/91
m-Chlorotoluene	ug/L	5.0	ND	10/11/91
o-Chlorotoluene	ug/L	5.0	ND	10/11/91
p-Chlorotoluene	ug/L	5.0	ND	10/11/91
1-Chlorohexane	ug/L	5.0	ND	10/11/91
Benzene	ug/L	2.0	ND	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

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October 18, 1991
PACE Project Number: 110926507

Client Reference: 100724.201

PACE Sample Number:			97 0070060	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 6	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Toluene	ug/L	2.0	ND	10/11/91
Ethylbenzene	ug/L	2.0	ND	10/11/91
Xylenes(total)	ug/L	5.0	ND	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

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October 18, 1991
PACE Project Number: 11092650

Client Reference: 100724.201

PACE Sample Number:			97 0070079	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 7	
Parameter	Units	MDL		DATE ANALYZED
FIELD ANALYSIS				
INDIVIDUAL PARAMETERS				
pH	SU	1.0	5.7	09/24/91
INORGANIC ANALYSIS				
INDIVIDUAL PARAMETERS				
Aluminum	mg/L	0.04	0.28	10/02/91
Cadmium	mg/L	0.004	ND	10/02/91
Chromium	mg/L	0.006	ND	10/02/91
Chromium, Hexavalent	mg/L	0.01	ND	09/26/91
Copper	mg/L	0.007	0.056	10/02/91
Cyanide, Total	mg/L	0.01	0.03	10/10/91
Iron	mg/L	0.006	0.55	10/02/91
Nickel	mg/L	0.02	0.70	10/02/91
Silver	mg/L	0.01	ND	10/04/91
Specific Conductance	umhos/cm	1.0	480	10/01/91
Total Organic Carbon	mg/L	1.0	6.6	10/08/91
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Chloromethane	ug/L	2.0	ND	10/11/91
Bromomethane	ug/L	2.0	ND	10/11/91
Dichlorodifluoromethane	ug/L	5.0	ND	10/11/91
Vinyl chloride	ug/L	5.0	ND	10/11/91
Chloroethane	ug/L	2.0	ND	10/11/91
Methylene chloride	ug/L	5.0	ND	10/11/91
Trichlorofluoromethane	ug/L	2.0	ND	10/11/91
1,1-Dichloroethylene	ug/L	2.0	ND	10/11/91
1,1-Dichloroethane	ug/L	2.0	ND	10/11/91
1,2-Dichloroethylene(total)	ug/L	2.0	2.5	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

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October 18, 1991
PACE Project Number: 11092650

Client Reference: 100724.201

PACE Sample Number:			97 0070079	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 7	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Chloroform	ug/L	2.0	ND	10/11/91
1,2-Dichloroethane	ug/L	2.0	ND	10/11/91
1,1,1-Trichloroethane	ug/L	2.0	ND	10/11/91
Carbon tetrachloride	ug/L	2.0	ND	10/11/91
Bromodichloromethane	ug/L	2.0	ND	10/11/91
1,2-Dichloropropane	ug/L	2.0	ND	10/11/91
Cis-1,3-dichloropropene	ug/L	2.0	ND	10/11/91
Trichloroethylene	ug/L	2.0	89	10/11/91
Chlorodibromomethane	ug/L	2.0	ND	10/11/91
1,1,2-Trichloroethane	ug/L	2.0	ND	10/11/91
Trans-1,3-dichloropropene	ug/L	2.0	ND	10/11/91
2-Chloroethylvinyl ether	ug/L	2.0	ND	10/11/91
Bromoform	ug/L	5.0	ND	10/11/91
1,1,2,2-Tetrachloroethane	ug/L	2.0	ND	10/11/91
Tetrachloroethylene	ug/L	2.0	10	10/11/91
Chlorobenzene	ug/L	2.0	ND	10/11/91
1,3-Dichlorobenzene	ug/L	5.0	ND	10/11/91
1,2-Dichlorobenzene	ug/L	5.0	ND	10/11/91
1,4-Dichlorobenzene	ug/L	5.0	ND	10/11/91
1,1,1,2-Tetrachloroethane	ug/L	2.0	ND	10/11/91
Dibromomethane	ug/L	2.0	ND	10/11/91
1,2,3-Trichloropropane	ug/L	2.0	ND	10/11/91
Bromobenzene	ug/L	2.0	ND	10/11/91
m-Chlorotoluene	ug/L	5.0	ND	10/11/91
o-Chlorotoluene	ug/L	5.0	ND	10/11/91
p-Chlorotoluene	ug/L	5.0	ND	10/11/91
1-Chlorohexane	ug/L	5.0	ND	10/11/91
Benzene	ug/L	2.0	ND	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

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October 18, 1991
PACE Project Number: 110926507

Client Reference: 100724.201

PACE Sample Number:			97 0070079	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Well 7	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Toluene	ug/L	2.0	ND	10/11/91
Ethylbenzene	ug/L	2.0	ND	10/11/91
Xylenes(total)	ug/L	5.0	ND	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

Mr. Frank E.Ray
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October 18, 1991
PACE Project Number: 110926507

Client Reference: 100724.201

PACE Sample Number:			97 0070087	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Equipment	
Parameter	Units	MDL	Blank	DATE ANALYZED
INORGANIC ANALYSIS				
INDIVIDUAL PARAMETERS				
Aluminum	mg/L	0.04	0.13	10/02/91
Cadmium	mg/L	0.004	ND	10/02/91
Chromium	mg/L	0.006	ND	10/02/91
Chromium, Hexavalent	mg/L	0.01	ND	09/26/91
Copper	mg/L	0.007	0.012	10/02/91
Cyanide, Total	mg/L	0.01	ND	10/10/91
Iron	mg/L	0.006	0.068	10/02/91
Nickel	mg/L	0.02	ND	10/02/91
Silver	mg/L	0.01	ND	10/04/91
Specific Conductance	umhos/cm	1.0	4.6	10/01/91
Total Organic Carbon	mg/L	1.0	36	10/08/91
pH (Laboratory)	SU	1.0	4.8	09/27/91
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Chloromethane	ug/L	2.0	ND	10/11/91
Bromomethane	ug/L	2.0	ND	10/11/91
Dichlorodifluoromethane	ug/L	5.0	ND	10/11/91
Vinyl chloride	ug/L	5.0	ND	10/11/91
Chloroethane	ug/L	2.0	ND	10/11/91
Methylene chloride	ug/L	5.0	ND	10/11/91
Trichlorofluoromethane	ug/L	2.0	ND	10/11/91
1,1-Dichloroethylene	ug/L	2.0	ND	10/11/91
1,1-Dichloroethane	ug/L	2.0	ND	10/11/91
1,2-Dichloroethylene(total)	ug/L	2.0	ND	10/11/91
Chloroform	ug/L	2.0	ND	10/11/91
1,2-Dichloroethane	ug/L	2.0	ND	10/11/91
1,1,1-Trichloroethane	ug/L	2.0	ND	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

REPORT OF LABORATORY ANALYSIS

Mr. Frank E.Ray
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October 18, 1991
PACE Project Number: 110926507

Client Reference: 100724.201

PACE Sample Number:			97 0070087	
Date Collected:			09/24/91	
Date Received:			09/26/91	
Client Sample ID:			Equipment	
Parameter	Units	MDL	Blank	DATE ANALYZED
ORGANIC ANALYSIS				
HALOGENATED & AROMATIC VOLATILES				
Carbon tetrachloride	ug/L	2.0	ND	10/11/91
Bromodichloromethane	ug/L	2.0	ND	10/11/91
1,2-Dichloropropane	ug/L	2.0	ND	10/11/91
Cis-1,3-dichloropropene	ug/L	2.0	ND	10/11/91
Trichloroethylene	ug/L	2.0	14	10/11/91
Chlorodibromomethane	ug/L	2.0	ND	10/11/91
1,1,2-Trichloroethane	ug/L	2.0	ND	10/11/91
Trans-1,3-dichloropropene	ug/L	2.0	ND	10/11/91
2-Chloroethylvinyl ether	ug/L	2.0	ND	10/11/91
Bromoform	ug/L	5.0	ND	10/11/91
1,1,2,2-Tetrachloroethane	ug/L	2.0	ND	10/11/91
Tetrachloroethylene	ug/L	2.0	ND	10/11/91
Chlorobenzene	ug/L	2.0	ND	10/11/91
1,3-Dichlorobenzene	ug/L	5.0	ND	10/11/91
1,2-Dichlorobenzene	ug/L	5.0	ND	10/11/91
1,4-Dichlorobenzene	ug/L	5.0	ND	10/11/91
1,1,1,2-Tetrachloroethane	ug/L	2.0	ND	10/11/91
Dibromomethane	ug/L	2.0	ND	10/11/91
1,2,3-Trichloropropane	ug/L	2.0	ND	10/11/91
Bromobenzene	ug/L	2.0	ND	10/11/91
m-Chlorotoluene	ug/L	5.0	ND	10/11/91
o-Chlorotoluene	ug/L	5.0	ND	10/11/91
p-Chlorotoluene	ug/L	5.0	ND	10/11/91
1-Chlorohexane	ug/L	5.0	ND	10/11/91
Benzene	ug/L	2.0	ND	10/11/91
Toluene	ug/L	2.0	ND	10/11/91
Ethylbenzene	ug/L	2.0	ND	10/11/91
Xylenes(total)	ug/L	5.0	ND	10/11/91

MDL Method Detection Limit
ND Not detected at or above the MDL.

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October 18, 1991
PACE Project Number: 11092650

Client Reference: 100724.201

These data have been reviewed and are approved for release.

David Berger
Manager, Inorganic Chemistry

Frank J. Resnick
Manager, Organic Chemistry

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pace INCORPORATED
THE ASSURANCE OF QUALITY
181 Thorn Hill Road
Warrendale, PA 15086-7527
TEL: 412-772-1214
412-772-1390

Ground Water Monitoring
Field Log Data Sheet

Client GAR Electroforming Project # _____ Lab Reference # _____

Address Augusta Drive, Commerce Park
P. O. Box 340
Danbury, CT 06813

Well # One (1)

Time: 3:00 PM

Reason sampled: Quarterly Analysis

Date: 24 SEPT '91

Weather Conditions SEASONAL; CLEAR (temp. 65° F)

Depth of Cased Hole: 26.25 ft.
Depth to Water: 8.66 ft.
Height of Water: 17.59 ft.
Well Diameter: .16 ft.
Volume of Water: 2.81 gal.

Sample Containers

AA EB BC ID-TOC VOL

GN 36V
AM
CN
OC

Volume of Water removed before sampling: 8.4 gal.
Depth to water at time of sampling: _____ ft.

Date Prepumped: _____ Time Prepumped: _____ Pump Rate: _____
Prepumping (equipment) method used: Hand pump
Calibration of pH meter: pH7= 7.0 pH4= _____ pH10= _____ Temp= _____ °C
Calibration of specific conductance meter: _____ umhos/um. Temp. of Standard _____ °C
Ground Water: pH 1. 5.8 2. _____ 3. _____ 4. _____ Ground Water Temp. 17 °C
Ground Water specific conductance: 1. _____ 2. _____ 3. _____ 4. _____
Metals filtered in field: yes _____ no X
Sample Description: CLEAR

Observations: 8.4 GALLONS PUMPED; FULL RECOVERY

Type of Sampler _____ Type of Bailer Stainless Steel Filter Media .40 Micron

Sample Taken by GUY A. ROSATO Witness Frank Ray

For Laboratory Use Only

Date Received 9-26-91 By Frances O. McCarthy

Conditions of samples: _____

Date analyzed: 9/26-10/18/91 By staff authorized signature Frank Ramsch

PLEASE LIST ANY KNOWN HAZARDS OR CONSTITUENTS _____

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin; flush with water.

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TEL: 412 772 1214
412 772 1390

Ground Water Monitoring
Field Log Data Sheet

Client GAR Electroforming Project # _____ Lab Reference # _____

Address Augusta Drive, Commerce Park
P. O. Box 340
Danbury, CT 06813

Well # Two (2)

Time: 3:15 PM

Reason sampled: Quarterly analysis

Date: 24 SEPT '91

Weather Conditions SEASONAL; CLEAR (temp. 65° F)

Depth of Cased Hole: 20.25 ft.
Depth to Water: 5.16 ft.
Height of Water: 15.09 ft.
Well Diameter: .16 ft.
Volume of Water: 2.41 gal.

Sample Containers

AA EB BC ID-TOC VOL

Volume of Water removed before sampling: 7.24 gal.
Depth to water at time of sampling: _____ ft.

Date Prepumped: _____ Time Prepumped: _____ Pump Rate: _____
Prepumping (equipment) method used: Hand pump
Calibration of pH meter: pH7= 7.0 pH4= _____ pH10= _____ Temp= _____ °C
Calibration of specific conductance meter: _____ umhos/um. Temp. of Standard _____ °C
Ground Water: pH 1. 5.6 2. _____ 3. _____ 4. _____ Ground Water Temp. 14 °C
Ground Water specific conductance: 1. _____ 2. _____ 3. _____ 4. _____
Metals filtered in field: yes _____ no X
Sample Description: TURBID

Observations: 4.5 GALLONS PUMPED; 15 MINUTE RECOVERY

Type of Sampler _____ Type of Bailer Stainless Steel Filter Media .40 Micron

Sample Taken by [signature] GUY A. ROSATO Witness [signature]

For Laboratory Use Only

Date Received 9-26-91 By [signature]

Conditions of samples: _____

Date analyzed: 9/26 – 10/18/91 By staff authorized signature [signature]

PLEASE LIST ANY KNOWN HAZARDS OR CONSTITUENTS _____

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Ground Water Monitoring
Field Log Data Sheet

Client GAR Electroforming Project # _____ Lab Reference # _____

Address Augusta Drive, Commerce Park
P. O. Box 340
Danbury, CT 06813

Well # Three (3)

Time: 3:30 PM

Reason sampled: Quarterly analysis

Date: 24 SEPT '91

Weather Conditions SEASONAL; CLEAR (temp. 65° F)

Depth of Cased Hole: 21.66 ft.
Depth to Water: 6.16 ft.
Height of Water: 15.5 ft.
Well Diameter: .16 ft.
Volume of Water: 2.48 gal.

Sample Containers

AA EB BC ID-TOC VOL

Volume of Water removed before sampling: 7.44 gal.
Depth to water at time of sampling: _____ ft.

Date Prepumped: _____ Time Prepumped: _____ Pump Rate: _____
Prepumping (equipment) method used: Hand pump
Calibration of pH meter: pH7= 7.0 pH4= _____ pH10= _____ Temp= _____ °C
Calibration of specific conductance meter: _____ umhos/um. Temp. of Standard _____ °C
Ground Water: pH 1. 5.9 2. _____ 3. _____ 4. _____ Ground Water Temp. 14 °C
Ground Water specific conductance: 1. _____ 2. _____ 3. _____ 4. _____
Metals filtered in field: yes _____ no X
Sample Description: TURBID

Observations: 7.44 GALLONS PUMPED; FULL RECOVERY

Type of Sampler _____ Type of Bailer Stainless Steel Filter Media .40 Micron

Sample Taken by [signature] GUY A. ROSATO Witness Frank Ray

For Laboratory Use Only

Date Received 9-26-91 By Francis P. McCarthy

Conditions of samples: _____

Date analyzed: 9/26–10/18/91 By staff authorized signature Frank Reznik

PLEASE LIST ANY KNOWN HAZARDS OR CONSTITUENTS _____

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin; flush with water.

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412-772-1390

Ground Water Monitoring
Field Log Data Sheet

Client GAR Electroforming Project # _____ Lab Reference # _____

Address Augusta Drive, Commerce Park
P. O. Box 340
Danbury, CT 06813

Well # Four (4)

Time: 3:45 PM

Reason sampled: Quarterly analysis

Date: 24 SEPT. '91

Weather Conditions SEASONAL; CLEAR (temp. 65° F)

Depth of Cased Hole: 22.16 ft.
Depth to Water: 8.33 ft.
Height of Water: 13.83 ft.
Well Diameter: .16 ft.
Volume of Water: 2.21 gal.

Sample Containers

AA EB BC ID-TOC VOL

Volume of Water removed before sampling: 6.4 gal.
Depth to water at time of sampling: _____ ft.

Date Prepumped: _____ Time Prepumped: _____ Pump Rate: _____
Prepumping (equipment) method used: Hand pump
Calibration of pH meter: pH7= 7.0 pH4= _____ pH10= _____ Temp= _____ °C
Calibration of specific conductance meter: _____ umhos/um. Temp. of Standard _____ °C
Ground Water: pH 1. 5.6 2. _____ 3. _____ 4. _____ Ground Water Temp. 16 °C
Ground Water specific conductance: 1. _____ 2. _____ 3. _____ 4. _____
Metals filtered in field: yes _____ no X
Sample Description: TURBID

Observations: 6.4 GALLONS PUMPED; FULL RECOVERY

Type of Sampler _____ Type of Bailer Stainless Steel Filter Media .40 Micron

Sample Taken by GUY A. ROSATO Witness Frank Ray

For Laboratory Use Only

Date Received 9-26-91 By Frances F. McCarthy

Conditions of samples: _____

Date analyzed: 9/26 – 10/18/91 By staff authorized signature Frank Resnick

PLEASE LIST ANY KNOWN HAZARDS OR CONSTITUENTS _____

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin; flush with water.

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Ground Water Monitoring
Field Log Data Sheet

Client GAR Electroforming Project # _____ Lab Reference # _____

Address Augusta Drive, Commerce Park
P. O. Box 340
Danbury, CT 06813

Well # Five (5)

Time: 4:00 PM

Reason sampled: Quarterly analysis

Date: 24 SEPT. '91

Weather Conditions SEASONAL; CLEAR (temp. 64° F)

Depth of Cased Hole: 34.91 ft.
Depth to Water: 6.25 ft.
Height of Water: 28.66 ft.
Well Diameter: .16 ft.
Volume of Water: 4.58 gal.

Sample Containers

AA EB BC ID-TOC VOL

Volume of Water removed before sampling: 13.75 gal.
Depth to water at time of sampling: _____ ft.

Date Prepumped: _____ Time Prepumped: _____ Pump Rate: _____
Prepumping (equipment) method used: Hand pump
Calibration of pH meter: pH7= 7.0 pH4= _____ pH10= _____ Temp= _____ °C
Calibration of specific conductance meter: _____ umhos/um. Temp. of Standard _____ °C
Ground Water: pH 1. 6.5 2. _____ 3. _____ 4. _____ Ground Water Temp. 15 °C
Ground Water specific conductance: 1. _____ 2. _____ 3. _____ 4. _____
Metals filtered in field: yes _____ no X
Sample Description: CLEAR

Observations: 13.75 GALLONS PUMPED; FULL RECOVERY

Type of Sampler _____ Type of Bailer Stainless Steel Filter Media .40 Micron

Sample Taken by Guy A. Rosato GUY A. ROSATO Witness Frank Ray

For Laboratory Use Only

Date Received 9-26-91 By Francis J. McCarthy

Conditions of samples: _____

Date analyzed: 9/26 - 10/18/91 By staff authorized signature Frank Ramock

PLEASE LIST ANY KNOWN HAZARDS OR CONSTITUENTS _____

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin; flush with water.

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Ground Water Monitoring
Field Log Data Sheet

Client GAR Electroforming Project # _____ Lab Reference # _____

Address Augusta Drive, Commerce Park
P. O. Box 340
Danbury, CT 06813

Well # Six (6)

Time: 4:15 PM

Reason sampled: Quarterly Analysis

Date: 24 SEPT '91

Weather Conditions SEASONAL; CLEAR (temp. 64° F)

Depth of Cased Hole: 19.58 ft.
Depth to Water: 7.41 ft.
Height of Water: 13.41 ft.
Well Diameter: .16 ft.
Volume of Water: 2.14 gal.

Sample Containers

AA EB BC ID-TOC VOL

Volume of Water removed before sampling: 6.4 gal.
Depth to water at time of sampling: _____ ft.

Date Prepumped: _____ Time Prepumped: _____ Pump Rate: _____
Prepumping (equipment) method used: Hand pump
Calibration of pH meter: pH7= 7.0 pH4= _____ pH10= _____ Temp= _____ °C
Calibration of specific conductance meter: _____ umhos/um. Temp. of Standard _____ °C
Ground Water: pH 1. 5.7 2. _____ 3. _____ 4. _____ Ground Water Temp. 15 °C
Ground Water specific conductance: 1. _____ 2. _____ 3. _____ 4. _____
Metals filtered in field: yes _____ no X
Sample Description: TURBID

Observations: 6.4 GALLONS PUMPED; FULL RECOVERY

Type of Sampler _____ Type of Bailer Stainless Steel Filter Media .40 Micron

Sample Taken by GUY A. ROSATO Witness Frank Ray

For Laboratory Use Only

Date Received 9-26-91 By Francis B. McCormack

Conditions of samples: _____

Date analyzed: 9/26 – 10/18/91 By staff authorized signature Frank Reasnick

PLEASE LIST ANY KNOWN HAZARDS OR CONSTITUENTS _____

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin; flush with water.

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Ground Water Monitoring
Field Log Data Sheet

Client GAR Electroforming Project # _____ Lab Reference # _____

Address Augusta Drive, Commerce Park
P. O. Box 340
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Well # Seven (7)

Time: 4:30 PM

Reason sampled: Quarterly analysis

Date: 24 SEPT. '91

Weather Conditions SEASONAL; CLEAR (temp. 63° F)

Depth of Cased Hole: 20.82 ft.
Depth to Water: 6.25 ft.
Height of Water: 13.33 ft.
Well Diameter: .16 ft.
Volume of Water: 2.13 gal.

Sample Containers

AA EB BC ID-TOC VOL

Volume of Water removed before sampling: 6.4 gal.
Depth to water at time of sampling: _____ ft.

Date Prepumped: _____ Time Prepumped: _____ Pump Rate: _____
Prepumping (equipment) method used: Hand pump
Calibration of pH meter: pH7= 7.0 pH4= _____ pH10= _____ Temp= _____ °C
Calibration of specific conductance meter: _____ umhos/um. Temp. of Standard _____ °C
Ground Water: pH 1. 5.7 2. _____ 3. _____ 4. _____ Ground Water Temp. 14 °C
Ground Water specific conductance: 1. _____ 2. _____ 3. _____ 4. _____
Metals filtered in field: yes _____ no X
Sample Description: TURBID

Observations: 6.4 GALLONS PUMPED; FULL RECOVERY

Type of Sampler _____ Type of Bailer Stainless Steel Filter Media .40 Micron

Sample Taken by [signature] GUY A. ROSATO Witness Frank Ray

For Laboratory Use Only

Date Received 9-26-91 By Francis B. McCoraly

Conditions of samples: _____

Date analyzed: 9/26-10/18/91 By staff authorized signature Frank Resnick

PLEASE LIST ANY KNOWN HAZARDS OR CONSTITUENTS _____

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin; flush with water.

TABLE 5-1
ANALYTICAL DATA SUMMARY
MW-1

PARAMETER	SAMPLE EVENT DATE				
	UNITS	9/26/90	12/17/90	3/25/91	6/24/91
GW Elevation (MSL)	Ft	287.15	288.37	288.12	286.87
Depth to GW	Ft	8.22	7.0	7.25	8.50
Specific Cond	umho/cm	620	490	470	570
pH	SU	6.7	6.1	5.8	5.8
Aluminum	mg/L	0.42	0.10	0.24	0.25
Bicarbonate	mg/L	160	140	140	170
Cadmium	mg/L	0.008	ND	0.006	ND
Calcium	mg/L	82	47	53	69
Carbonate	mg/L	ND	ND		ND
Chloride	mg/L	58	34	36	59
Chromium, Total	mg/L	0.01	0.009	0.011	ND
Chromium, Hexavalent	mg/L	ND	ND	ND	ND
Copper	mg/L	0.12	0.10	0.066	0.031
Cyanide, Total	mg/L	ND	ND	ND	ND
Iron	mg/L	0.57	0.29	0.21	0.036
Magnesium	mg/L	25	14	13	18
Nickel	mg/L	0.23	0.32	0.15	0.12
Nitrogen, Nitrate	mg/L	7.7	1.8	1.8	6.7
Potassium	mg/L	3.0	2.6	2.2	2.2
Silver	mg/L	0.01	ND	ND	ND
Sodium	mg/L	34	28	24	32
Sulfate	mg/L	100	72	54	84
Total Organic Carbon	mg/L	20	11	33	5.7
1,1-Dichlorethylene	ug/L	68	7.1	5.0	14
1,1-Dichloroethane	ug/L	31	7.9	8.6	7.5
1,2-Dichloroethylenes	ug/L	72	13	12	ND
1,1,1-Trichloroethane	ug/L	280	59	62	71
Trichloroethylene	ug/L	1100	180	240	350
Tetrachloroethylene	ug/L	ND	18	27	33
Toluene	ug/L	ND	ND	18	ND

ND = Not Detected

TABLE 5-2
ANALYTICAL DATA SUMMARY
MW-2

PARAMETER	SAMPLE EVENT DATE				
	UNITS	9/26/90	12/17/90	3/25/91	6/24/91
GW Elevation (MSL)	Ft	286.93	287.62	287.87	286.46
Depth to GW	Ft	4.69	4.0	3.75	5.16
Specific Cond	umho/cm	410	530	570	490
pH	SU	7.0	6.3	6.0	6.0
Aluminum	mg/L	0.06	0.78	0.29	0.67
Bicarbonate	mg/L	-160	180	160	180
Cadmium	mg/L	ND	ND	0.004	ND
Calcium	mg/L	44	38	49	46
Carbonate	mg/L	ND	ND		ND
Chloride	mg/L	37	45	54	31
Chromium, Total	mg/L	ND	ND	ND	ND
Chromium, Hexavalent	mg/L	ND	ND	ND	ND
Copper	mg/L	0.04	0.058	0.050	0.020
Cyanide, Total	mg/L	ND	ND	ND	ND
Iron	mg/L	0.23	1.1	0.32	0.91
Magnesium	mg/L	12	14	14	13
Nickel	mg/L	0.38	0.49	0.54	0.44
Nitrogen, Nitrate	mg/L	0.12	0.29	0.53	0.13
Potassium	mg/L	1.5	2.0	1.6	1.8
Silver	mg/L	0.01	ND	ND	ND
Sodium	mg/L	46	56	50	45
Sulfate	mg/L	60	67	86	85
Total Organic Carbon	mg/L	16	15	24	9.1
1,1-Dichlorethylene	ug/L	ND	ND	ND	ND
1,1-Dichloroethane	ug/L	ND	ND	ND	ND
1,2-Dichloroethylenes	ug/L	4.2	4.1	3.7	4.3
1,1,1-Trichloroethane	ug/L	ND	3.6	2.4	ND
Trichloroethylene	ug/L	40	80	120	61
Tetrachloroethylene	ug/L	7.8	12	16	11
Toluene	ug/L	ND	ND	10	ND

ND = Not Detected

TABLE 5-3
ANALYTICAL DATA SUMMARY
MW-3

PARAMETER	UNITS	SAMPLE EVENT DATE			
		9/26/90	12/17/90	3/25/91	6/24/91
GW Elevation (MSL)	Ft	287.00	288.08	288.08	286.58
Depth to GW	Ft	5.83	4.75	4.75	6.25
Specific Cond.	umho/Cm	300	330	270	290
pH	SU	7.1	6.5	5.9	5.8
Aluminum	mg/L	2.2	0.14	0.60	0.21
Bicarbonate	mg/L	-120	120	87	120
Cadmium	mg/L	ND	ND	ND	ND
Calcium	mg/L	15	9.8	8.2	16
Carbonate	mg/L	ND	ND		ND
Chloride	mg/L	23	18	14	25
Chromium, Total	mg/L	0.007	ND	ND	ND
Chromium, Hexavalent	mg/L	ND	ND	ND	ND
Copper	mg/L	0.13	0.039	0.037	0.031
Cyanide, Total	mg/L	ND	ND	ND	ND
Iron	mg/L	3.4	0.44	0.61	0.60
Magnesium	mg/L	7.9	5.6	4.2	3.8
Nickel	mg/L	0.20	0.11	0.12	0.05
Nitrogen, Nitrate	mg/L	0.12	0.23	0.35	0.15
Potassium	mg/L	1.7	0.9	0.8	1.0
Silver	mg/L	ND	ND	ND	ND
Sodium	mg/L	50	54	44	40
Sulfate	mg/L	33	37	26	32
Total Organic Carbon	mg/L	15	8.6	13	3.5
1,1-Dichloroethylene	ug/L	ND	ND	ND	ND
1,1-Dichloroethane	ug/L	ND	ND	ND	ND
1,2-Dichloroethylenes	ug/L	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/L	ND	ND	ND	ND
Trichloroethylene	ug/L	17	15	56	32
Tetrachloroethylene	ug/L	ND	ND	ND	ND
Toluene	ug/L	ND	ND	14	ND

ND = Not Detected

TABLE 5-4
ANALYTICAL DATA SUMMARY
MW-4

PARAMETER	SAMPLE EVENT DATE				
	UNITS	9/26/90	12/17/90	3/25/91	6/24/91
GW Elevation (MSL)	Ft	286.92	288.25	288.20	286.50
Depth to GW	Ft	8.08	6.75	6.80	8.5
Specific Cond	umho/cm	310	290	230	260
pH	SU	6.4	6.2	5.5	5.8
Aluminum	mg/L	0.06	ND	0.16	0.13
Bicarbonate	mg/L	-95	87	74	91
Cadmium	mg/L	ND	ND	ND	ND
Calcium	mg/L	36	21	20	24
Carbonate	mg/L	ND	ND		ND
Chloride	mg/L	27	24	12	19
Chromium, Total	mg/L	ND	ND	ND	ND
Chromium, Hexavalent	mg/L	ND	ND	ND	ND
Copper	mg/L	0.08	0.047	0.032	0.028
Cyanide, Total	mg/L	ND	ND	ND	ND
Iron	mg/L	0.20	0.20	0.19	0.18
Magnesium	mg/L	13	9.6	7.1	8.4
Nickel	mg/L	0.11	0.12	0.11	0.06
Nitrogen, Nitrate	mg/L	0.06	0.30	0.60	0.40
Potassium	mg/L	1.8	1.4	1.2	1.4
Silver	mg/L	0.01	ND	ND	ND
Sodium	mg/L	18	17	13	20
Sulfate	mg/L	35	35	18	38
Total Organic Carbon	mg/L	14	11	13	8.4
1,1-Dichlorethylene	ug/L	ND	ND	ND	ND
1,1-Dichloroethane	ug/L	ND	ND	ND	ND
1,2-Dichloroethylenes	ug/L	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/L	ND	ND	ND	ND
Trichloroethylene	ug/L	48	43	50	33
Tetrachloroethylene	ug/L	4.8	4.1	2.4	4.2
Toluene	ug/L	ND	ND	5.3	ND

ND = Not Detected

TABLE 5-5
ANALYTICAL DATA SUMMARY
MW-5

PARAMETER	SAMPLE EVENT DATE				
	UNITS	9/26/90	12/17/90	3/25/91	6/24/91
GW Elevation (MSL)	Ft	287.09	288.09	287.99	286.76
Depth to GW	Ft	6.0	5.0	5.10	6.33
Specific Cond	umho/cm	4900	2800	2800	2100
pH	SU	7.3	7.1	6.0	5.8
Aluminum	mg/L	0.09	ND	0.22	0.19
Bicarbonate	mg/L	-290	210	200	220
Cadmium	mg/L	ND	ND	0.010	0.008
Calcium	mg/L	170	81	96	78
Carbonate	mg/L	ND	ND		ND
Chloride	mg/L	1800	850	880	660
Chromium, Total	mg/L	ND	ND	ND	0.006
Chromium, Hexavalent	mg/L	ND	0.01	ND	ND
Copper	mg/L	0.04	0.041	0.051	0.037
Cyanide, Total	mg/L	0.01	0.01	ND	ND
Iron	mg/L	0.13	0.16	0.22	0.28
Magnesium	mg/L	75	34	32	26
Nickel	mg/L	0.05	0.12	0.12	0.06
Nitrogen, Nitrate	mg/L	5.4	1.6	2.6	1.7
Potassium	mg/L	7.0	5.7	4.6	4.0
Silver	mg/L	ND	ND	ND	ND
Sodium	mg/L	1000	520	540	370
Sulfate	mg/L	170	89	90	69
Total Organic Carbon	mg/L	24	12	18	9.8
1,1-Dichlorethylene	ug/L	ND	ND	ND	ND
1,1-Dichloroethane	ug/L	ND	2.2	ND	ND
1,2-Dichloroethylenes	ug/L	ND	6.0	5.5	6.0
1,1,1-Trichloroethane	ug/L	48	8.9	7.8	ND
Trichloroethylene	ug/L	350	96	140	80
Tetrachloroethylene	ug/L	240	51	73	39
Toluene	ug/L	ND	ND	5.2	ND

ND = Not Detected

TABLE 5-6
ANALYTICAL DATA SUMMARY
MW-6

PARAMETER	SAMPLE EVENT DATE				
	UNITS	9/26/90	12/17/90	3/25/91	6/24/91
GW Elevation (MSL)	Ft	286.99	289.27	288.02	286.62
Depth to GW	Ft	7.04	4.75	6.00	7.4
Specific Cond.	umho/cm	510	550	570	480
pH	SU	6.9	5.9	5.7	6.0
Aluminum	mg/L	0.26	0.54	0.7	7.0
Bicarbonate	mg/L	-360	140	120	150
Cadmium	mg/L	ND	ND	ND	ND
Calcium	mg/L	50	46	48	42
Carbonate	mg/L	ND	ND		ND
Chloride	mg/L	47	52	52	37
Chromium, Total	mg/L	ND	ND	0.006	0.019
Chromium, Hexavalent	mg/L	ND	ND	ND	ND
Copper	mg/L	0.06	0.047	0.14	0.15
Cyanide, Total	mg/L	ND	ND	ND	ND
Iron	mg/L	0.50	1.2	0.77	14
Magnesium	mg/L	16	13	16	16
Nickel	mg/L	0.53	0.55	0.66	0.55
Nitrogen, Nitrate	mg/L	0.55	0.57	0.66	0.60
Potassium	mg/L	2.2	1.8	1.9	3.0
Silver	mg/L	ND	ND	ND	ND
Sodium	mg/L	45	46	44	40
Sulfate	mg/L	76	89	110	100
Total Organic Carbon	mg/L	26	10	23	9.2
1,1-Dichloroethylene	ug/L	ND	ND	ND	ND
1,1-Dichloroethane	ug/L	ND	ND	ND	ND
1,2-Dichloroethylenes	ug/L	3.9	3.7	4.1	5.3
1,1,1-Trichloroethane	ug/L	10	4.6	4.3	3.0
Trichloroethylene	ug/L	150	130	170	87
Tetrachloroethylene	ug/L	28	25	31	19
Toluene	ug/L	ND	ND	5.2	ND

ND = Not Detected

TABLE 5-7
ANALYTICAL DATA SUMMARY
MW-7

PARAMETER	SAMPLE EVENT DATE				
	UNITS	9/26/90	12/17/90	3/25/91	6/24/91
GW Elevation (MSL)	Ft	286.92	286.92	287.84	286.42
Depth to GW	Ft	5.83	5.83	4.91	6.33
Specific Cond	umho/cm	390	440	370	370
pH	SU	6.8	5.8	5.4	5.8
Aluminum	mg/L	0.10	0.26	2.1	0.52
Bicarbonate	mg/L	290	140	120	150
Cadmium	mg/L	ND	ND	ND	ND
Calcium	mg/L	34	30	280	31
Carbonate	mg/L	ND	ND		ND
Chloride	mg/L	29	34	25	23
Chromium, Total	mg/L	ND	ND	0.010	ND
Chromium, Hexavalent	mg/L	ND	ND	ND	0.01
Copper	mg/L	0.03	0.029	0.087	0.019
Cyanide, Total	mg/L	ND	ND	ND	ND
Iron	mg/L	0.22	0.70	26	0.76
Magnesium	mg/L	1.2	11	97	11
Nickel	mg/L	0.56	0.61	0.62	0.55
Nitrogen, Nitrate	mg/L	0.02	0.22	1.1	0.88
Potassium	mg/L	1.5	1.4	1.8	1.3
Silver	mg/L	0.01	ND	ND	ND
Sodium	mg/L	26	78	36	35
Sulfate	mg/L	56	53	41	52
Total Organic Carbon	mg/L	16	4.4	14	7.2
1,1-Dichlorethylene	ug/L	ND	ND	ND	3.0
1,1-Dichloroethane	ug/L	ND	ND	ND	ND
1,2-Dichloroethylenes	ug/L	ND	ND	2.7	ND
1,1,1-Trichloroethane	ug/L	2.8	2.4	ND	ND
Trichloroethylene	ug/L	73	65	74	55
Tetrachloroethylene	ug/L	5.5	7.8	6.8	8.5
Toluene	ug/L	ND	ND	4.9	ND

ND = Not Detected

TABLE 5-8
SECOND QUARTER ANALYTICAL DATA SUMMARY

PARAMETER	UNITS	WELL 1	WELL 2	WELL 3	WELL 4
GW Elevation (MSL)	Ft	286.87	286.46	286.58	286.50
Depth to GW	Ft	8.50	5.16	6.25	8.5
Specific Cond	umho/cm	570	490	290	260
pH	SU	5.8	6.0	5.8	5.8
Aluminum	mg/L	0.25	0.67	0.21	0.13
Bicarbonate	mg/L	170	180	120	91
Cadmium	mg/L	ND	ND	ND	ND
Calcium	mg/L	69	46		24
Carbonate	mg/L	ND	ND	ND	ND
Chloride	mg/L	59	31	25	19
Chromium, Total	mg/L	ND	ND	ND	ND
Chromium, Hexavalent	mg/L	ND	ND	ND	ND
Copper	mg/L	0.031	0.020	0.031	0.028
Cyanide, Total	mg/L	ND	ND	ND	ND
Iron	mg/L	0.036	0.91	0.60	0.18
Magnesium	mg/L	18	13	3.8	8.4
Nickel	mg/L	0.12	0.44	0.05	0.06
Nitrogen, Nitrate	mg/L	6.7	0.13	0.15	0.40
Potassium	mg/L	2.2	1.8	1.0	1.4
Sliver	mg/L	ND	ND	ND	ND
Sodium	mg/L	32	45	40	20
Sulfate	mg/L	84	85	32	38
Total Organic Carbon	mg/L	5.7	9.1	3.5	8.4
1,1-Dichlorethylene	ug/L	14	ND	ND	ND
1,1-Dichloroethane	ug/L	7.5	ND	ND	ND
1,2-Dichloroethylenes	ug/L	ND	4.3	ND	ND
1,1,1-Trichloroethane	ug/L	71	ND	ND	ND
Trichloroethylene	ug/L	350	61	32	33
Tetrachloroethylene	ug/L	33	11	ND	4 2
Toluene	ug/L	ND	ND	ND	ND

ND = Not Detected

TABLE 5-8
SECOND QUARTER ANALYTICAL DATA SUMMARY
(continued)

PARAMETER	UNITS	WELL 5	WELL 6	WELL 7
GW Elevation (MSL)	Ft	286.76	286.62	286.42
Depth to GW	Ft	6.33	7.4	6.33
Specific Cond	umho/cm	2100	480	370
pH	SU	5.8	6.0	5.8
Aluminum	mg/L	0.19	7.0	0.52
Bicarbonate	mg/L	220	150	150
Cadmium	mg/L	0.008	ND	ND
Calcium	mg/L	78	42	31
Carbonate	mg/L	ND	ND	ND
Chloride	mg/L	660	37	23
Chromium, Total	mg/L	0.006	0.019	ND
Chromium, Hexavalent	mg/L	ND	ND	0 01
Copper	mg/L	0.037	0.15	0 019
Cyanide, Total	mg/L	ND	ND	ND
Iron	mg/L	0.28	14	0.76
Magnesium	mg/L	26	16	11
Nickel	mg/L	0.06	0.55	0.55
Nitrogen, Nitrate	mg/L	1.7	0.60	0.88
Potassium	mg/L	4.0	3.0	1.3
Silver	mg/L	ND	ND	ND
Sodium	mg/L	370	40	35
Sulfate	mg/L	69	100	52
Total Organic Carbon	mg/L	9.8	9.2	9.2
1,1-Dichlorethylene	ug/L	ND	ND	3.0
1,1-Dichloroethane	ug/L	ND	ND	ND
1,2-Dichloroethylenes	ug/L	6.0	5.3	ND
1,1,1-Trichloroethane	ug/L	ND	3.0	ND
Trichloroethylene	ug/L	80	87	55
Tetrachloroethylene	ug/L	39	19	8.5
Toluene	ug/L	ND	ND	ND

ND = Not detected

GARTBLES

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX J

1990 GROUND WATER MONITORING ANALYSIS

GAR Electroforming
Monitoring Well #1 MW1

Sample Date	3/25/90	6/25/90	9/26/90	12/17/90
Monitoring Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Reference #	30582	87084	0903259	0933662
	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Ground Water Elevation (Feet above Sea Level)	288.07	287.29	287.15	288.32
Parameter (mg/L)				
*pH (SU)	5.6	5.6	6.7	6.1
Specific Cond. (umhos)	630	550	620	490
Cyanide, Total	<0.01	<0.01	<0.01	<0.01
Total Organic Carbon	16	15	20	11
Chromium, Hexavalent	0.01	<0.01	<0.01	<0.01
Chromium, Total	0.008	<0.006	0.01	0.009
Copper, Total	0.02	0.10	0.12	0.10
Nickel, Total	0.20	0.25	0.23	0.32
Silver, Total	<0.01	<0.01	0.01	<0.01

*Field pH (SU) = Field Measurement (Average of 4 pH Readings)

GAR Electroforming
Monitoring Well #1 MW1

Sample Date	3/25/90	6/25/90	9/26/90	12/17/90
Monitoring Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Reference #	30582	87084	0903259	0933662
	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Ground Water Elevation (Feet above Sea Level)	288.07	287.29	287.15	288.32
Volatile Organics (ug/L)				
Chloromethane	<2	<10	<20	<4
Bromomethane	<2	<10	<20	<4
Dichlorodifluoromethane	<5	<25	<50	<10
Vinyl Chloride	<5	<25	<50	<10
Chloroethane	2	<10	<20	<4
Methylene Chloride	<5	<25	<50	<10
1,1-Dichloroethylene	12	<10	68	7.1
1,1-Dichloroethane	12	14	31	7.7
Trans-1,2-Dichloroethylene	17	15	72	13
Chloroform	<2	<10	<20	<4
1,2-Dichloroethane	<2	<10	<20	<4
1,1,1-Trichloroethane	180	86	280	59
Carbon Tetrachloride	<2	<10	<20	<4
Bromodichloromethane	<2	<10	<20	<4
1,2-Dichloropropane	<2	<10	<20	<4
Cis-1,3-Dichloropropene	<2	<10	<20	<4
Trichloroethylene	250	250	1100	180
Chlorodibromomethane	<2	<10	<20	<4
1,1,2-Trichloroethane	<2	<10	<20	<4
Trans-1,3-Dichloropropene	<2	<10	<20	<4
2-Chloroethylvinyl Ether	<2	<10	<20	<4
Bromoform	<5	<25	<50	<10
1,1,2,2-Tetrachloroethane	*	<10	<20	<4
Tetrachloroethylene	46	25	<20	18
Chlorobenzene	<2	<10	<20	<4
1,3-Dichlorobenzene	<5	<25	<50	<10
1,2-Dichlorobenzene	<5	<25	<50	<10
1,4-Dichlorobenzene	<5	<25	<50	<10
Benzene	<2	<10	<20	<4
Toluene	<2	<10	<20	<4
Ethyl Benzene	<2	<10	<20	<4

*Due to the chemical similarity of Tetrachloroethylene and 1,1,2,2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of either Tetrachloroethylene or 1,1,2,2-Tetrachloroethane or a combination of these two compounds.

GAR Electroforming
Monitoring Well #1 MW1

Sample Date	3/25/90	6/25/90	9/26/90	12/17/90
Monitoring Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Reference #	30582	87084	0903259	0933662
	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Ground Water Elevation (Feet above Sea Level)	288.07	287.29	287.15	288.32
Volatile Organics (ug/L) (Cont'd)				
Trichlorofluoromethane	N/A	N/A	<20	<4
1,1,1,2-Tetrachloroethane	N/A	N/A	<20	<4
Dibromomethane	N/A	N/A	<20	<4
1,2,3-Trichloropropane	N/A	N/A	<20	<4
Bromobenzene	N/A	N/A	<20	<4
1,3-Chlorotoluene	N/A	N/A	<50	<10
1,2-Chlorotoluene	N/A	N/A	<50	<10
1,4-Chlorotoluene	N/A	N/A	<50	<10
1-Chlorohexane	N/A	N/A	<50	<10
Xylenes (Total)	N/A	N/A	<50	<10

N/A = Not Available

GAR Electroforming
Monitoring Well #2 MW2

Sample Date	3/25/90	6/25/90	9/26/90	12/17/90
Monitoring Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Reference #	30583	87085	0903267	0933670
	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Ground Water Elevation (Feet above Sea Level)	287.76	287.13	286.93	287.62
Parameter (mg/L)				
*pH (SU)	5.3	5.8	7.0	6.3
Specific Cond. (umhos)	730	500	410	530
Cyanide, Total	<0.01	0.02	<0.01	<0.01
Total Organic Carbon	18	16	16	15
Chromium, Hexavalent	0.01	<0.01	<0.01	<0.01
Chromium, Total	<0.006	<0.006	<0.006	<0.006
Copper, Total	0.02	0.06	0.04	0.058
Nickel, Total	0.51	0.37	0.38	0.49
Silver, Total	<0.01	<0.01	0.01	<0.01

*Field pH (SU) = Field Measurement (Average of 4 pH Readings)

GAR Electroforming
Monitoring Well #2 MW2

Sample Date	3/25/90	6/25/90	9/26/90	12/17/90
Monitoring Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Reference #	30583	87085	0903267	0933670
	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Ground Water Elevation (Feet above Sea Level)	287.76	287.13	286.93	287.62
Volatile Organics (ug/L)				
Chloromethane	<2	<2	<2	<2
Bromomethane	<2	<2	<2	<2
Dichlorodifluoromethane	<5	<5	<5	<5
Vinyl Chloride	<5	<5	<5	<5
Chloroethane	<2	<2	<2	<2
Methylene Chloride	<5	<5	<5	<5
1,1-Dichloroethylene	<2	<2	<2	<2
1,1-Dichloroethane	<2	<2	<2	<2
Trans-1,2-Dichloroethylene	2.6	2.9	4.2	4.1
Chloroform	<2	<2	<2	<2
1,2-Dichloroethane	<2	<2	<2	<2
1,1,1-Trichloroethane	<2	<2	<2	3.6
Carbon Tetrachloride	<2	<2	<2	<2
Bromodichloromethane	<2	<2	<2	<2
1,2-Dichloropropane	<2	<2	<2	<2
Cis-1,3-Dichloropropene	<2	<2	<2	<2
Trichloroethylene	36	26	40	80
Chlorodibromomethane	<2	<2	<2	<2
1,1,2-Trichloroethane	<2	<2	<2	<2
Trans-1,3-Dichloropropene	<2	<2	<2	<2
2-Chloroethylvinyl Ether	<2	<2	<2	<2
Bromoform	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	*	<2	<2	<2
Tetrachloroethylene	7.2	5	7.8	12
Chlorobenzene	<2	<5	<5	<2
1,3-Dichlorobenzene	<5	<5	<5	<5
1,2-Dichlorobenzene	<5	<5	<5	<5
1,4-Dichlorobenzene	<5	<2	<2	<5
Benzene	<2	<2	<2	<2
Toluene	<2	<2	<2	<2
Ethyl Benzene	<2	<2	<2	<2

*Due to the chemical similarity of Tetrachloroethylene and 1,1,2,2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of either Tetrachloroethylene or 1,1,2,2-Tetrachloroethane or a combination of these two compounds.

GAR Electroforming
Monitoring Well #2 MW2

Sample Date	3/25/90	6/25/90	9/26/90	12/17/90
Monitoring Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Reference #	30583	87085	0903267	0933670
	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Ground Water Elevation (Feet above Sea Level)	287.76	287.13	286.93	287.62
Volatile Organics (ug/L) (Cont'd)				
Trichlorofluoromethane	N/A	N/A	<2	<2
1,1,1,2-Tetrachloroethane	N/A	N/A	<2	<2
Dibromomethane	N/A	N/A	<2	<2
1,2,3-Trichloropropane	N/A	N/A	<2	<2
Bromobenzene	N/A	N/A	<2	<2
1,3-Chlorotoluene	N/A	N/A	<5	<5
1,2-Chlorotoluene	N/A	N/A	<5	<5
1,4-Chlorotoluene	N/A	N/A	<5	<5
1-Chlorohexane	N/A	N/A	<5	<5
Xylenes (Total)	N/A	N/A	<5	<5

N/A = Not Available

GAR Electroforming
Monitoring Well #3 MW3

Sample Date	3/25/90	6/25/90	9/26/90	12/17/90
Monitoring Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Reference #	30584	87086	0903275	0933689
	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Ground Water Elevation (Feet above Sea Level)	287.84	287.14	286.93	287.62
Parameter (mg/L)				
*pH (SU)	5.8	5.8	7.1	6.5
Specific Cond. (umhos)	410	320	300	330
Cyanide, Total	<0.01	<0.01	<0.01	<0.01
Total Organic Carbon	11	9.6	15	8.6
Chromium, Hexavalent	0.05	<0.01	<0.01	<0.01
Chromium, Total	<0.006	<0.006	0.007	<0.006
Copper, Total	0.48	0.04	0.13	0.039
Nickel, Total	0.99	0.06	0.20	0.11
Silver, Total	<0.01	<0.01	<0.01	<0.01

*Field pH (SU) = Field Measurement (Average of 4 pH Readings)

GAR Electroforming
Monitoring Well #3 MW3

Sample Date	3/25/90	6/25/90	9/26/90	12/17/90
Monitoring Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Reference #	30584	87086	0903275	0933689
	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Ground Water Elevation (Feet above Sea Level)	287.84	287.14	286.93	287.62
Volatile Organics (ug/L)				
Chloromethane	<2	<2	<2	<2
Bromomethane	<2	<2	<2	<2
Dichlorodifluoromethane	<5	<5	<5	<5
Vinyl Chloride	<5	<5	<5	<5
Chloroethane	<2	<2	<2	<2
Methylene Chloride	<5	<5	<5	<5
1,1-Dichloroethylene	<2	<2	<2	<2
1,1-Dichloroethane	<2	<2	<2	<2
Trans-1,2-Dichloroethylene	<2	<2	<2	<2
Chloroform	<2	<2	<2	<2
1,2-Dichloroethane	<2	<2	<2	<2
1,1,1-Trichloroethane	<2	<2	<2	<2
Carbon Tetrachloride	<2	<2	<2	<2
Bromodichloromethane	<2	<2	<2	<2
1,2-Dichloropropane	<2	<2	<2	<2
Cis-1,3-Dichloropropene	<2	<2	<2	<2
Trichloroethylene	13	18	17	15
Chlorodibromomethane	<2	<2	<2	<2
1,1,2-Trichloroethane	<2	<2	<2	<2
Trans-1,3-Dichloropropene	<2	<2	<2	<2
2-Chloroethylvinyl Ether	<2	<2	<2	<2
Bromoform	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	*	<2	<2	<2
Tetrachloroethylene	2.6	<2	<2	<2
Chlorobenzene	<2	<2	<2	<2
1,3-Dichlorobenzene	<5	<5	<5	<5
1,2-Dichlorobenzene	<5	<5	<5	<5
1,4-Dichlorobenzene	<5	<5	<5	<5
Benzene	<2	<2	<2	<2
Toluene	<2	<2	<2	<2
Ethyl Benzene	<2	<2	<2	<2

*Due to the chemical similarity of Tetrachloroethylene and 1,1,2,2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of either Tetrachloroethylene or 1,1,2,2-Tetrachloroethane or a combination of these two compounds.

GAR Electroforming
Monitoring Well #3 MW3

Sample Date	3/25/90	6/25/90	9/26/90	12/17/90
Monitoring Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Reference #	30584	87086	0903275	0933689
	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Ground Water Elevation (Feet above Sea Level)	287.84	287.14	286.93	287.62
Volatile Organics (ug/L) (Cont'd)				
Trichlorofluoromethane	N/A	N/A	<2	<2
1,1,1,2-Tetrachloroethane	N/A	N/A	<2	<2
Dibromomethane	N/A	N/A	<2	<2
1,2,3-Trichloropropane	N/A	N/A	<2	<2
Bromobenzene	N/A	N/A	<2	<2
1,3-Chlorotoluene	N/A	N/A	<5	<5
1,2-Chlorotoluene	N/A	N/A	<5	<5
1,4-Chlorotoluene	N/A	N/A	<5	<5
1-Chlorohexane	N/A	N/A	<5	<5
Xylenes (Total)	N/A	N/A	<5	<5

N/A = Not Available

GAR Electroforming
Monitoring Well #4 MW4

Sample Date	3/25/90	6/25/90	9/26/90	12/17/90
Monitoring Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Reference #	30585	87087	0903283	0933697
	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Ground Water Elevation (Feet above Sea Level)	287.73	287.03	286.92	286.25
Parameter (mg/L)				
*pH (SU)	5.0	5.6	6.4	6.2
Specific Cond. (umhos)	280	260	310	290
Cyanide, Total	<0.01	<0.01	<0.01	<0.01
Total Organic Carbon	9.6	10	14	11
Chromium, Hexavalent	0.03	<0.01	<0.01	<0.01
Chromium, Total	<0.006	<0.006	<0.006	<0.006
Copper, Total	0.05	0.04	0.08	0.047
Nickel, Total	0.12	0.07	0.11	0.12
Silver, Total	<0.01	<0.01	0.01	0.01

*Field pH (SU) = Field Measurement (Average of 4 pH Readings)

GAR Electroforming
Monitoring Well #4 MW4

Sample Date	3/25/90	6/25/90	9/26/90	12/17/90
Monitoring Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Reference #	30585	87087	0903283	0933697
	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Ground Water Elevation (Feet above Sea Level)	287.73	287.03	286.92	286.25
Volatile Organics (ug/L)				
Chloromethane	<2	<2	<2	<2
Bromomethane	<2	<2	<2	<2
Dichlorodifluoromethane	<5	<5	<5	<5
Vinyl Chloride	<5	<5	<5	<5
Chloroethane	<2	<2	<2	<2
Methylene Chloride	<5	<5	<5	<5
1,1-Dichloroethylene	<2	<2	<2	<2
1,1-Dichloroethane	<2	<2	<2	<2
Trans-1,2-Dichloroethylene	<2	<2	<2	<2
Chloroform	<2	<2	<2	<2
1,2-Dichloroethane	<2	<2	<2	<2
1,1,1-Trichloroethane	<2	<2	<2	<2
Carbon Tetrachloride	<2	<2	<2	<2
Bromodichloromethane	<2	<2	<2	<2
1,2-Dichloropropane	<2	<2	<2	<2
Cis-1,3-Dichloropropene	<2	<2	<2	<2
Trichloroethylene	18	19	48	43
Chlorodibromomethane	<2	<2	<2	<2
1,1,2-Trichloroethane	<2	<2	<2	<2
Trans-1,3-Dichloropropene	<2	<2	<2	<2
2-Chloroethylvinyl Ether	<2	<2	<2	<2
Bromoform	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	<2	<2	<2	<2
Tetrachloroethylene	<2	<2	4.8	4.1
Chlorobenzene	<2	<2	<2	<2
1,3-Dichlorobenzene	<5	<5	<5	<5
1,2-Dichlorobenzene	<5	<5	<5	<5
1,4-Dichlorobenzene	<5	<5	<5	<5
Benzene	<2	<2	<2	<2
Toluene	<2	<2	<2	<2
Ethyl Benzene	<2	<2	<2	<2

*Due to the chemical similarity of Tetrachloroethylene and 1,1,2,2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of either Tetrachloroethylene or 1,1,2,2-Tetrachloroethane or a combination of these two compounds.

GAR Electroforming
Monitoring Well #4 MW4

Sample Date	3/25/90	6/25/90	9/26/90	12/17/90
Monitoring Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Reference #	30585	87087	0903283	0933697
	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Ground Water Elevation (Feet above Sea Level)	287.73	287.03	286.92	286.25
Volatile Organics (ug/L) (Cont'd)				
Trichlorofluoromethane	N/A	N/A	<2	<2
1,1,1,2-Tetrachloroethane	N/A	N/A	<2	<2
Dibromomethane	N/A	N/A	<2	<2
1,2,3-Trichloropropane	N/A	N/A	<2	<2
Bromobenzene	N/A	N/A	<2	<2
1,3-Chlorotoluene	N/A	N/A	<5	<5
1,2-Chlorotoluene	N/A	N/A	<5	<5
1,4-Chlorotoluene	N/A	N/A	<5	<5
1-Chlorohexane	N/A	N/A	<5	<5
Xylenes (Total)	N/A	N/A	<5	<5

N/A = Not Available

GAR Electroforming
Monitoring Well #5 MW5

Sample Date	9/26/90	12/17/90
Monitoring Period	3rd Qtr.	4th Qtr.
Lab Reference #	0903291	0933700
	(mg/L)	(mg/L)
Ground Water Elevation (Feet above Sea Level)	N/A	288.09'
Parameter (mg/L)		
*pH (SU)	7.3	7.1
Specific Cond. (umhos)	4900	2800
Cyanide, Total	0.01	0.01
Total Organic Carbon	24	12
Chromium, Hexavalent	<0.01	0.01
Chromium, Total	<0.006	<0.006
Copper, Total	0.04	0.041
Nickel, Total	0.05	0.12
Silver, Total	<0.01	<0.01

*Field pH (SU) = Field Measurement (Average of 4 pH Readings)

N/A = Not Available

GAR Electroforming
Monitoring Well #5 MW5

Sample Date	9/26/90	12/17/90
Monitoring Period	3rd Qtr.	4th Qtr.
Lab Reference #	0903291	0933700
	(ug/L)	(ug/L)
Ground Water Elevation (Feet above Sea Level)	N/A	288.09
Volatile Organics (ug/L)		
Chloromethane	<20	<2
Bromomethane	<20	<2
Dichlorodifluoromethane	<50	<5
Vinyl Chloride	<50	<5
Chloroethane	<20	<2
Methylene Chloride	<50	<5
1,1-Dichloroethylene	<20	<2
1,1-Dichloroethane	<20	<2
Trans-1,2-Dichloroethylene	<20	2.2
Chloroform	<20	6
1,2-Dichloroethane	<20	<2
1,1,1-Trichloroethane	48	<2
Carbon Tetrachloride	<20	8.9
Bromodichloromethane	<20	<2
1,2-Dichloropropane	<20	<2
Cis-1,3-Dichloropropene	<20	<2
Trichloroethylene	350	96
Chlorodibromomethane	<20	<2
1,1,2-Trichloroethane	<20	<2
Trans-1,3-Dichloropropene	<20	<2
2-Chloroethylvinyl Ether	<20	<2
Bromoform	<50	<5
1,1,2,2-Tetrachloroethane	<20	<2
Tetrachloroethylene	240	51
Chlorobenzene	<20	<2
1,3-Dichlorobenzene	<50	<5
1,2-Dichlorobenzene	<50	<5
1,4-Dichlorobenzene	<50	<5
Benzene	<20	<2
Toluene	<20	<2
Ethyl Benzene	<20	<2

*Due to the chemical similarity of Tetrachloroethylene and 1,1,2,2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of either Tetrachloroethylene or 1,1,2,2-Tetrachloroethane or a combination of these two compounds.

GAR Electroforming
Monitoring Well #5 MW5

Sample Date	9/26/90	12/17/90
Monitoring Period	3rd Qtr.	4th Qtr.
Lab Reference #	0903291	0933700
	(ug/L)	(ug/L)
Ground Water Elevation (Feet above Sea Level)	N/A	288.09
Volatile Organics (ug/L) (Cont'd)		
Trichlorofluoromethane	<20	<2
1,1,1,2-Tetrachloroethane	<20	<2
Dibromomethane	<20	<2
1,2,3-Trichloropropane	<20	<2
Bromobenzene	<20	<2
1,3-Chlorotoluene	<50	<5
1,2-Chlorotoluene	<50	<5
1,4-Chlorotoluene	<50	<5
1-Chlorohexane	<50	<5
Xylenes (Total)	<50	<5

N/A = Not Available

GAR Electroforming
Monitoring Well #6 MW6

Sample Date	9/26/90	12/17/90
Monitoring Period	3rd Qtr.	4th Qtr.
Lab Reference #	0903291	0933700
	(mg/L)	(mg/L)
Ground Water Elevation (Feet above Sea Level)	286.98	289.28
Parameter (mg/L)		
*pH (SU)	6.9	5.9
Specific Cond. (umhos)	510	550
Cyanide, Total	<0.01	<0.01
Total Organic Carbon	26	10
Chromium, Hexavalent	<0.01	<0.01
Chromium, Total	<0.006	<0.006
Copper, Total	0.06	0.047
Nickel, Total	0.53	0.55
Silver, Total	<0.01	<0.01

*Field pH (SU) = Field Measurement (Average of 4 pH Readings)

GAR Electroforming
Monitoring Well #6 MW6

Sample Date	9/26/90	12/17/90
Monitoring Period	3rd Qtr.	4th Qtr.
Lab Reference #	0903291	0933700
	(ug/L)	(ug/L)
Ground Water Elevation (Feet above Sea Level)	286.98	289.28
Volatile Organics (ug/L)		
Chloromethane	<2	<2
Bromomethane	<2	<2
Dichlorodifluoromethane	<5	<5
Vinyl Chloride	<5	<5
Chloroethane	<2	<2
Methylene Chloride	<5	<5
1,1-Dichloroethylene	<2	<2
1,1-Dichloroethane	<2	<2
Trans-1,2-Dichloroethylene	3.9	3.7
Chloroform	<2	<2
1,2-Dichloroethane	<2	<2
1,1,1-Trichloroethane	10	4.6
Carbon Tetrachloride	<2	<2
Bromodichloromethane	<2	<2
1,2-Dichloropropane	<2	<2
Cis-1,3-Dichloropropene	<2	<2
Trichloroethylene	150	130
Chlorodibromomethane	<2	<2
1,1,2-Trichloroethane	<2	<2
Trans-1,3-Dichloropropene	<2	<2
2-Chloroethylvinyl Ether	<2	<2
Bromoform	<5	<5
1,1,2,2-Tetrachloroethane	<2	<2
Tetrachloroethylene	28	25
Chlorobenzene	<2	<2
1,3-Dichlorobenzene	<5	<5
1,2-Dichlorobenzene	<5	<5
1,4-Dichlorobenzene	<5	<5
Benzene	<2	<2
Toluene	<2	<2
Ethyl Benzene	<2	<2

*Due to the chemical similarity of Tetrachloroethylene and 1,1,2,2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of either Tetrachloroethylene or 1,1,2,2-Tetrachloroethane or a combination of these two compounds.

GAR Electroforming
Monitoring Well #6 MW6

Sample Date	9/26/90	12/17/90
Monitoring Period	3rd Qtr.	4th Qtr.
Lab Reference #	0903291	0933700
	(ug/L)	(ug/L)
Ground Water Elevation (Feet above Sea Level)	286.98	289.28
Volatile Organics (ug/L) (Cont'd)		
Trichlorofluoromethane	<2	<2
1,1,1,2-Tetrachloroethane	<2	<2
Dibromomethane	<2	<2
1,2,3-Trichloropropane	<2	<2
Bromobenzene	<2	<2
1,3-Chlorotoluene	<5	<5
1,2-Chlorotoluene	<5	<5
1,4-Chlorotoluene	<5	<5
1-Chlorohexane	<5	<5
Xylenes (Total)	<5	<5

GAR Electroforming
Monitoring Well #7 MW7

Sample Date	9/26/90	12/17/90
Monitoring Period	3rd Qtr.	4th Qtr.
Lab Reference #	0903313	0933719
	(mg/L)	(mg/L)
Ground Water Elevation (Feet above Sea Level)	286.92	286.92
Parameter (mg/L)		
*pH (SU)	6.8	5.8
Specific Cond. (umhos)	390	440
Cyanide, Total	<0.01	<0.01
Total Organic Carbon	16	4.4
Chromium, Hexavalent	<0.01	<0.01
Chromium, Total	<0.006	<0.006
Copper, Total	0.03	0.029
Nickel, Total	0.56	0.61
Silver, Total	<0.01	<0.01

*Field pH (SU) = Field Measurement (Average of 4 pH Readings)

GAR Electroforming
Monitoring Well #7 MW7

Sample Date	9/26/90	12/17/90
Monitoring Period	3rd Qtr.	4th Qtr.
Lab Reference #	0903313	0933719
	(ug/L)	(ug/L)
Ground Water Elevation (Feet above Sea Level)	286.92	286.92
Volatile Organics (ug/L)		
Chloromethane	<2	<2
Bromomethane	<5	<5
Dichlorodifluoromethane	<5	<5
Vinyl Chloride	<2	<2
Chloroethane	<5	<5
Methylene Chloride	<2	<2
1,1-Dichloroethylene	<2	<2
1,1-Dichloroethane	<2	<2
Trans-1,2-Dichloroethylene	<2	<2
Chloroform	<2	<2
1,2-Dichloroethane	2.8	2.4
1,1,1-Trichloroethane	<2	<2
Carbon Tetrachloride	<2	<2
Bromodichloromethane	<2	<2
1,2-Dichloropropane	<2	<2
Cis-1,3-Dichloropropene	<2	<2
Trichloroethylene	73	65
Chlorodibromomethane	<2	<2
1,1,2-Trichloroethane	<2	<2
Trans-1,3-Dichloropropene	<2	<2
2-Chloroethylvinyl Ether	<2	<2
Bromoform	<5	<5
1,1,2,2-Tetrachloroethane	<2	<2
Tetrachloroethylene	5.5	7.8
Chlorobenzene	<2	<2
1,3-Dichlorobenzene	<5	<5
1,2-Dichlorobenzene	<5	<5
1,4-Dichlorobenzene	<5	<5
Benzene	<2	<2
Toluene	<2	<2
Ethyl Benzene	<2	<2

*Due to the chemical similarity of Tetrachloroethylene and 1,1,2-2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of either Tetrachloroethylene, or 1,1,2,2-Tetrachloroethane or a combination of these two compounds.

GAR Electroforming

Monitoring Well #7 MW7

Sample Date	9/26/90	12/17/90
Monitoring Period	3rd Qtr.	4th Qtr.
Lab Reference #	0903313	0933719
	(ug/L)	(ug/L)
Ground Water Elevation (Feet above Sea Level)	286.92	286.92
Volatile Organics (ug/L) (Cont'd)		
Trichlorofluoromethane	<2	<2
1,1,1,2-Tetrachloroethane	<2	<2
Dibromomethane	<2	<2
1,2,3-Trichloropropane	<2	<2
Bromobenzene	<2	<2
1,3-Chlorotoluene	<5	<5
1,2-Chlorotoluene	<5	<5
1,4-Chlorotoluene	<5	<5
1-Chlorohexane	<5	<5
Xylenes (Total)	<5	<5

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX K

1989 GROUND WATER MONITORING ANALYSIS

GAR Electroforming
Monitoring Well #1 MW1

Sample Date	3/14/89	6/07/89	9/25/89	12/19/89
Monitoring Period	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Lab Reference #	9030435	9060270	9091126	9120679
	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Ground Water Elevation (Feet above Sea Level)	287.37	288.37	287.87	287.37
Parameter (mg/L)				
*pH (SU)	5.8	6.2	6.0	5.8
Specific Conductance	550	540	800	730
Cyanide, Total	<0.01	<0.01	<0.01	<0.01
Organic Carbon, Total	8.7	13	4.1	18
Chromium, Hexavalent	<0.01	<0.01	<0.01	<0.01
Chromium, Total	0.01	0.01	0.007	0.06
Copper	0.04	0.04	0.02	0.06
Nickel	0.19	0.23	0.19	0.18
Silver	<0.01	<0.01	<0.01	0.01

Field pH (SU) = Field Measurement (average of 4 pH readings)

GAR Electroforming
Monitoring Well #1 MW1

Sample Date	3/14/89	6/07/89	9/25/89	12/19/89
Monitoring Period	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Lab Reference #	9030435	9060270	9091126	9120679
	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Ground Water Elevation (Feet above Sea Level)	287.37	288.37	287.87	287.37
Volatile Organics (µg/L)				
Chloromethane	<2.0	<2.0	<2.0	<2.0
Bromomethane	<2.0	<2.0	<2.0	<2.0
Dichlorodifluoromethane	<5.0	<5.0	<5.0	<5.0
Vinyl Chloride	<5.0	<5.0	<5.0	<5.0
Chloroethane	<2.0	<2.0	<2.0	<2.0
Methylene Chloride	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethylene	13	16	76	15
1,1-Dichloroethane	6.7	13	50	13
Trans-1,2-Dichloroethylene	19	22	93	21
Chloroform	<2.0	4.9	4.9	<2.0
1,2-Dichloroethane	<2.0	<20.0	<2.0	<2.0
1,1,1-Trichloroethane	120	90	160	110
Carbon Tetrachloride	<2.0	<2.0	<2.0	<2.0
Bromodichloromethane	<2.0	<2.0	<2.0	<2.0
1,2-Dichloropropane	<2.0	<2.0	<2.0	<2.0
Cis-1,3-Dichloropropene	<2.0	<2.0	<2.0	<2.0
Trichloroethylene	270	250	1300	270
Chlorodibromomethane	<2.0	<2.0	<2.0	<2.0
1,1,2-Trichloroethane	<2.0	<2.0	18	<2.0
Trans-1,3-Dichloropropene	<2.0	<2.0	<2.0	<2.0
2-Chloroethylvinylether	<2.0	<2.0	<2.0	<2.0
Bromoform	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	*	*	*	*
Tetrachloroethylene	50	58	72	61
Chlorobenzene	<2.0	<2.0	<2.0	<2.0
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0
Benzene	<2.0	<2.0	<2.0	<2.0
Toluene	<2.0	<2.0	<2.0	<2.0
Ethylbenzene	<2.0	<2.0	<2.0	<2.0

* Due to the chemical similarity of Tetrachloroethylene and 1,1,2,2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of <u>either</u> Tetrachloroethylene <u>or</u> 1,1,2,2-Tetrachloroethane <u>or</u> a combination of these two compounds.

GAR Electroforming
Monitoring Well #2 MW2

Sample Date	3/14/89	6/07/89	9/25/89	12/19/89
Monitoring Period	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Lab Reference #	9030436	9060271	9091127	9120680
	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Ground Water Elevation (Feet above Sea Level)	287.30	288.13	287.63	287.22
Parameter (mg/L)				
* pH (SU)	5.9	6.4	6.0	6.0
Specific Conductance (umhos)	560	590	530	640
Cyanide, Total	<0.01	<0.01	<0.01	0.01
Total Organic Carbon	11	17	4.4	48
Chromium, Hexavalent	<0.01	<0.01	<0.01	<0.01
Chromium, Total	<0.006	<0.006	<0.006	0.01
Copper, Total	0.02	0.02	0.03	<0.007
Nickel, Total	0.41	0.38	0.26	0.48
Silver, Total	<0.01	<0.01	<0.01	<0.01

* Field pH (SU) = Field Measurement (Average of 4 pH Readings)

Gar Electroforming
Monitoring Well #2 MW2

Sample Date	3/14/89	6/07/89	9/25/89	12/19/89
Monitoring Period	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Lab Reference #	9030436	9060271	9091127	9120680
	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Ground Water Elevation (Feet above Sea Level)	287.30	288.13	287.63	287.22
Volatiles Organics (µg/L)				
Chloromethane	<2.0	<2.0	<2.0	<2.0
Bromomethane	<2.0	<2.0	<2.0	<2.0
Dichlorodifluoromethane	<2.0	<5.0	<5.0	<5.0
Vinyl Chloride	<5.0	<5.0	<5.0	<5.0
Chloroethane	<2.0	<2.0	<2.0	<2.0
Methylene Chloride	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethylene	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethane	<2.0	<2.0	<2.0	<2.0
Trans-1,2-Dichloroethylene	2.8	6.0	4.3	2.8
Chloroform	<2.0	<2.0	<2.0	<2.0
1,2-Dichloroethane	<2.0	<2.0	<2.0	<2.0
1,1,1-Trichloroethane	2.0	2.6	<2.0	2.4
Carbon Tetrachloride	<2.0	<2.0	<2.0	<2.0
Bromodichloromethane	<2.0	<2.0	<2.0	<2.0
1,2-Dichloropropane	<2.0	<2.0	<2.0	<2.0
Cis-1,3-Dichloropropene	<2.0	<2.0	<2.0	<2.0
Trichloroethylene	45	67	41	32
Chlorodibromomethane	<2.0	<2.0	<2.0	<2.0
1,1,2-Trichloroethane	<2.0	<2.0	<2.0	<2.0
Trans-1,3-Dichloropropene	<2.0	<2.0	<2.0	<2.0
2-Chloroethylvinyl Ether	<2.0	<2.0	<2.0	<2.0
Bromoform	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	*	*	*	*
Tetrachloroethylene	9.6	20	10	8.3
Chlorobenzene	<2.0	<2.0	<2.0	<2.0
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0
Benzene	<2.0	<2.0	<2.0	<2.0
Toluene	<2.0	<2.0	<2.0	<2.0
Ethylbenzene	<2.0	<2.0	<2.0	<2.0

* Due to the chemical similarity of Tetrachloroethylene and 1,1,2,2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of either Tetrachloroethylene or 1,1,2,2-Tetrachloroethane or a combination of these two compounds.

Gar Electroforming
Monitoring Well #3 MW3

Sample Date	3/14/89	6/07/89	9/25/89	12/19/89
Monitoring Period	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Lab Reference #	9030437	9060272	9091128	9120687
	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Ground Water Elevation (Feet above Sea Level)	287.34	288.34	287.59	287.18
Parameter (mg/L)				
pH (SU)	6.0	6.0	6.2	5.9
Specific Conductance (umhos)	390	240	460	420
Cyanide	<0.01	<0.01	<0.01	<0.01
Total Organic Carbon	5.5	8.6	3.2	17
Chromium, Hexavalent	<0.01	<0.01	<0.01	<0.01
Chromium, Total	<0.006	<0.006	<0.006	<0.006
Copper	0.02	0.04	0.05	<0.007
Nickel	<0.02	0.08	0.11	0.08
Silver	<0.01	<0.01	<0.01	<0.01

Field pH (SU)= Field Measurement (Average of 4 pH Readings)

Gar Electroforming
Monitoring Well #3 MW3

Sample Date	3/14/89	6/07/89	9/25/89	12/19/89
Monitoring Period	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Lab Reference #	9030437	9060272	9091128	9120681
	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Ground Water Elevation (Feet above Sea Level)	287.34	288.34	287.59	287.18
Volatile Organics (µg/L)				
Chloromethane	<2.0	<2.0	<2.0	<2.0
Bromomethane	<2.0	<2.0	<2.0	<2.0
Dichlorodifluoromethane	<2.0	<5.0	<5.0	<5.0
Vinyl Chloride	<5.0	<5.0	<5.0	<5.0
Chloroethane	<2.0	<2.0	<2.0	<2.0
Methylene Chloride	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethylene	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethane	<2.0	<2.0	<2.0	<2.0
Trans-1,2-Dichloroethylene	<2.0	<2.0	<2.0	<2.0
Chloroform	<2.0	<2.0	<2.0	<2.0
1,2-Dichloroethane	<2.0	<2.0	<2.0	<2.0
1,1,1-Trichloroethane	<2.0	<2.0	<2.0	<2.0
Carbon Tetrachloride	<2.0	<2.0	<2.0	<2.0
Bromodichloromethane	<2.0	<2.0	<2.0	<2.0
1,2-Dichloropropane	<2.0	<2.0	<2.0	<2.0
Cis-1,3-Dichloropropene	<2.0	<2.0	<2.0	<2.0
Trichloroethylene	10	18	29	16
Chlorodibromomethane	<2.0	<2.0	<2.0	<2.0
1,1,2-Trichloroethane	<2.0	<2.0	<2.0	<2.0
Trans-1,3-Dichloropropene	<2.0	<2.0	<2.0	<2.0
2-Chloroethylvinyl Ether	<2.0	<2.0	<2.0	<2.0
Bromoform	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	*	*	*	*
Tetrachloroethylene	2.1	3.7	4.7	3.1
Chlorobenzene	<2.0	<2.0	<2.0	<2.0
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0
Benzene	<2.0	<2.0	<2.0	<2.0
Toluene	<2.0	<2.0	<2.0	<2.0
Ethylbenzene	<2.0	<2.0	<2.0	<2.0

* Due to the chemical similarity of Tetrachloroethylene and 1,1,2,2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of <u>either</u> Tetrachloroethylene <u>or</u> 1,1,2,2-Tetrachloroethane <u>or</u> a combination of these two compounds.

Gar Electroforming
Monitoring Well #4 MW4

Sample Date	3/14/89	6/07/89	9/25/89	12/19/89
Monitoring Period	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Lab Reference #	9030438	9060273	9091129	9120682
	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Ground Water Elevation (Feet above Sea Level)	287.23	288.39	287.73	287.23
Parameter (mg/L)				
* pH (SU)	5.8	6.4	5.8	5.5
Specific Conductance (umhos)	260	350	330	340
Cyanide, Total	<0.01	<0.01	<0.01	<0.01
Total Organic Carbon	8.2	11	3.8	13
Chromium, Hexavalent	<0.01	<0.01	<0.01	<0.01
Chromium, Total	<0.006	<0.006	<0.006	0.04
Copper, Total	0.02	0.11	0.03	0.05
Nickel, Total	0.04	0.09	0.07	0.14
Silver, Total	<0.01	<0.01	<0.01	<0.01

* Field pH (SU)= Field Measurement (Average of 4 pH Readings)

Gar Electroforming
Monitoring Well #4 MW4

Sample Date	3/14/89	6/07/89	9/25/89	12/19/89
Monitoring Period	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Lab Reference #	9030438	9060273	9091129	9120682
	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Ground Water Elevation (Feet above Sea Level)	287.23	288.39	287.73	287.23
Volatile Organics (µg/L)				
Chloromethane	<2.0	<2.0	<2.0	<2.0
Bromomethane	<2.0	<2.0	<2.0	<2.0
Dichlorodifluoromethane	<2.0	<5.0	<5.0	<5.0
Vinyl Chloride	<5.0	<5.0	<5.0	<5.0
Chloroethane	<2.0	<2.0	<2.0	<2.0
Methylene Chloride	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethylene	13	<2.0	<2.0	<2.0
1,1-Dichloroethane	6.7	<2.0	<2.0	<2.0
Trans-1,2-Dichloroethylene	19	<2.0	<2.0	<2.0
Chloroform	<2.0	<2.0	<2.0	<2.0
1,2-Dichloroethane	<2.0	<2.0	<2.0	<2.0
1,1,1-Trichloroethane	120	<2.0	<2.0	<2.0
Carbon Tetrachloride	<2.0	<2.0	<2.0	<2.0
Bromodichloromethane	<2.0	<2.0	<2.0	<2.0
1,2-Dichloropropane	<2.0	<2.0	<2.0	<2.0
Cis-1,3-Dichloropropene	<2.0	<2.0	<2.0	<2.0
Trichloroethylene	270	20	30	25
Chlorodibromomethane	<2.0	<2.0	<2.0	<2.0
1,1,2-Trichloroethane	<2.0	<2.0	<2.0	<2.0
Trans-1,3-Dichloropropene	<2.0	<2.0	<2.0	<2.0
2-Chloroethylvinyl Ether	<5.0	<2.0	<2.0	<2.0
Bromoform	*	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	<2.0	<2.0	*	*
Tetrachloroethylene	<5.0	3.9	2.9	2.3
Chlorobenzene	<5.0	<2.0	<2.0	<2.0
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0
1,2-dichlorobenzene	<5.0	<5.0	<5.0	<5.0
1,4-dichlorobenzene	<5.0	<5.0	<5.0	<5.0
Benzene	<2.0	<2.0	<2.0	<2.0
Toluene	2.0	<2.0	<2.0	<2.0
Ethylbenzene	<2.0	<2.0	<2.0	<2.0

* Due to the chemical similarity of Tetrachloroethylene and 1,1,2,2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of either Tetrachloroethylene or 1,1,2,2-Tetrachloroethane or a combination of these two compounds.

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX L

1988 GROUND WATER MONITORING ANALYSIS

GAR Electroforming
Monitoring Well #1 MW1

July 17, 1989

Sample Date	01/25/88	06/20/88	09/07/88	12/08/88
Monitoring Period	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Lab Reference #	33792	8060507	8090405	8120300
	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Ground Water Elevation (Feet above Sea Level)	288.04	286.71	286.87	287.87
Parameter (mg/L)				
*pH (SU)	6.6	6.1	6.2	6.0
Specific Conductance	700	720	721	660
Cyanide, Total	<0.01	<0.01	<0.01	0.01
Organic Carbon, Total	43	7.7	16	10
Chromium, Hexavalent		<0.01	<0.01	<0.01
Chromium, Total	<0.01	0.01	0.01	0.01
Copper	<0.06	0.09	0.18	<0.007
Nickel	0.008	0.24	0.57	0.19
Silver	<0.01	<0.01	<0.01	<0.01

Field pH (SU) = Field Measurement (average of 4 pH readings)

GAR Electroforming
Monitoring Well #1 MW1

July 17, 1989

Sample Date	1/25/88	6/20/88	9/7/88	12/8/88
Monitoring Period	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Lab Reference #	33792	8060507	8090405	8120300
	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Ground Water Elevation (Feet above Sea Level)	288.04	286.71	286.87	287.87
Volatile Organics (µg/L)				
Chloromethane	<10	<20.0	<10	<2.0
Bromomethane	<10	<20.0	<10	<2.0
Dichlorodifluoromethane	<10	<50.0	<25	<5.0
Vinyl Chloride	<10	<50.0	<25	<5.0
Chloroethane	<10	<20.0	<10	<2.0
Methylene Chloride	<10	<50.0	<25	<5.0
1,1-Dichloroethylene	13	55.0	75	26
1,1-Dichloroethane	13	<20.0	48	16
Trans-1,2-Dichloroethylene	73	40.0	80	33
Chloroform	<10	<20.0	<10	<2.0
1,2-Dichloroethane	<10	<20.0	<10	<2.0
1,1,1-Trichloroethane	178	450.0	430	160
Carbon Tetrachloride	<10	<20.0	<10	<2.0
Bromodichloromethane	<10	<20.0	<10	<2.0
1,2-Dichloropropane	<10	<20.0	<10	<2.0
Cis-1,3-Dichloropropene	<10	<20.0	<10	<2.0
Trichloroethylene	440	600.0	820	330
Chlorodibromomethane	<10	<20.0	<10	<2.0
1,1,2-Trichloroethane	<10	<20.0	<10	<2.0
Trans-1,3-Dichloropropene	<10	<20.0	<10	<2.0
2-Chloroethylvinylether	<10	<20.0	<10	<2.0
Bromoform	<25	<50.0	<25	<5.0
1,1,2,2-Tetrachloroethane	*	*	*	*
Tetrachloroethylene	140	110	54	65
Chlorobenzene	<10	<20.0	<10	<2.0
1,3-Dichlorobenzene	<25	<50.0	<10	<5.0
1,2-Dichlorobenzene	<25	<50.0	<25	<5.0
1,4-Dichlorobenzene	<25	<50.0	<25	<5.0
Benzene	<10	<2.0	<10	<2.0
Toluene	<10	<2.0	<10	<2.0
Ethylbenzene	<10	<2.0	<10	<2.0

* Due to the chemical similarity of Tetrachloroethylene and 1,1,2,2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of either Tetrachloroethylene or 1,1,2,2-Tetrachloroethane or a combination of these two compounds.

GAR Electroforming
Monitoring Well #2 MW2

July 17, 1989

Sample Date	2/25/88	6/20/88	9/7/88	12/8/88
Monitoring Period	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Lab Reference #	8020488	8060508	8090406	8120301
	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Ground Water Elevation (Feet above Sea Level)	288.30	286.63	285.88	286.80
Parameter (mg/L)				
* pH (SU)	6.9	6.6	6.7	6.2
Specific Conductance (umhos)	590	580	520	630
Cyanide, Total	<0.01	<0.01	<0.01	0.01
Total Organic Carbon	13	13	21	21
Chromium, Hexavalent	<0.01	<0.01	<0.01	<0.01
Chromium, Total	0.03	<0.006	<0.006	<0.006
Copper, Total	0.21	0.05	0.04	<0.007
Nickel, Total	1.1	0.43	0.45	0.52
Silver, Total	0.02	<0.01	<0.01	<0.01

* Field pH (SU) = Field Measurement (Average of 4 pH Readings)

Gar Electroforming
Monitoring Well #2 MW2

July 17, 1989

Sample Date	2/25/88	6/20/88	9/7/88	12/8/88
Monitoring Period	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Lab Reference #	8020488	8060508	8090406	8120301
	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Ground Water Elevation (Feet above Sea Level)	288.30	286.63	285.88	286.80
Volatiles Organics (µg/L)				
Chloromethane	<2.0	<2.0	<2.0	<2.0
Bromomethane	<2.0	<2.0	<2.0	<2.0
Dichlorodifluoromethane	<2.0	<5.0	<5.0	<5.0
Vinyl Chloride	<5.0	<5.0	<5.0	<5.0
Chloroethane	<2.0	<2.0	<2.0	<2.0
Methylene Chloride	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethylene	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethane	<2.0	<2.0	<2.0	<2.0
Trans-1,2-Dichloroethylene	4.1	4.3	3.2	6.9
Chloroform	<2.0	<2.0	<2.0	<2.0
1,2-Dichloroethane	<2.0	<2.0	<2.0	<2.0
1,1,1-Trichloroethane	2.0	2.6	<2.0	2.4
Carbon Tetrachloride	<2.0	<2.0	<2.0	<2.0
Bromodichloromethane	<2.0	<2.0	<2.0	<2.0
1,2-Dichloropropane	<2.0	<2.0	<2.0	<2.0
Cis-1,3-Dichloropropene	<2.0	<2.0	<2.0	<2.0
Trichloroethylene	49	48.0	41	96
Chlorodibromomethane	<2.0	<2.0	<2.0	<2.0
1,1,2-Trichloroethane	<2.0	<2.0	<2.0	<2.0
Trans-1,3-Dichloropropene	<2.0	<2.0	<2.0	<2.0
2-Chloroethylvinyl Ether	<2.0	<2.0	<2.0	<2.0
Bromoform	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	*	*	*	*
Tetrachloroethylene	3.3	<2.0	3.4	32
Chlorobenzene	<2.0	<2.0	<2.0	<2.0
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0
Benzene	<2.0	<2.0	<2.0	<2.0
Toluene	<2.0	<2.0	<2.0	<2.0
Ethylbenzene	<2.0	<2.0	<2.0	<2.0

* Due to the chemical similarity of Tetrachloroethylene and 1,1,2,2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of either Tetrachloroethylene or 1,1,2,2-Tetrachloroethane or a combination of these two compounds.

Gar Electroforming
Monitoring Well #3 MW3

July 17, 1989

Sample Date	2/25/88	6/20/88	9/7/88	12/8/88
Monitoring Period	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Lab Reference #	8020489	8060509	8090407	8120302
	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Ground Water Elevation (Feet above Sea Level)	288.34	286.51	286.68	287.84
Parameter (mg/L)				
pH (SU)	7.2	6.5	6.5	6.3
Specific Conductance (umhos)	490	660	500	410
Cyanide	<0.01	<0.01	<0.01	0.01
Total Organic Carbon	12	40	11	7.4
Chromium, Hexavalent	<0.01	<0.01	<0.01	<0.01
Chromium, Total	0.02	<0.006	<0.006	<0.006
Copper	0.20	0.04	0.02	0.08
Nickel	0.15	0.15	0.14	0.12
Silver	0.01	<0.01	<0.01	<0.01

Field pH (SU)= Field Measurement (Average of 4 pH Readings)

Gar Electroforming
Monitoring Well #3 MW3

July 17, 1989

Sample Date	2/25/88	6/20/88	9/7/88	12/89/88
Monitoring Period	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Lab Reference #	8020489	8060509	8090407	8120302
	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Ground Water Elevation (Feet above Sea Level)	288.34	286.51	286.68	287.84
Volatile Organics (µg/L)				
Chloromethane	<2.0	<2.0	<2.0	<2.0
Bromomethane	<2.0	<2.0	<2.0	<2.0
Dichlorodifluoromethane	<2.0	<5.0	<5.0	<5.0
Vinyl Chloride	<5.0	<5.0	<5.0	<5.0
Chloroethane	<2.0	<2.0	<2.0	<2.0
Methylene Chloride	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethylene	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethane	<2.0	<2.0	<2.0	<2.0
Trans-1,2-Dichloroethylene	<2.0	2.3	2.8	<2.0
Chloroform	<2.0	<2.0	<2.0	<2.0
1,2-Dichloroethane	<2.0	<2.0	<2.0	<2.0
1,1,1-Trichloroethane	<2.0	<2.0	<2.0	<2.0
Carbon Tetrachloride	<2.0	<2.0	<2.0	<2.0
Bromodichloromethane	<2.0	<2.0	<2.0	<2.0
1,2-Dichloropropane	<2.0	<2.0	<2.0	<2.0
Cis-1,3-Dichloropropene	<2.0	<2.0	<2.0	<2.0
Trichloroethylene	20	68.0	39	19
Chlorodibromomethane	<2.0	<2.0	<2.0	<2.0
1,1,2-Trichloroethane	<2.0	<2.0	<2.0	<2.0
Trans-1,3-Dichloropropene	<2.0	<2.0	<2.0	<2.0
2-Chloroethylvinyl Ether	<2.0	<2.0	<2.0	<2.0
Bromoform	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	*	*	*	*
Tetrachloroethylene	4.0	7.7	6.6	4.3
Chlorobenzene	<2.0	<2.0	<2.0	<2.0
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0
Benzene	<2.0	<2.0	<2.0	<2.0
Toluene	5.2	<2.0	<2.0	<2.0
Ethylbenzene	<2.0	<2.0	<2.0	<2.0

* Due to the chemical similarity of Tetrachloroethylene and 1,1,2,2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of <u>either</u> Tetrachloroethylene <u>or</u> 1,1,2,2-Tetrachloroethane <u>or</u> a combination of these two compounds.

Gar Electroforming
Monitoring Well #4 MW4

July 17, 1989

Sample Date	2/25/88	6/20/88	9/7/88	12/8/88
Monitoring Period	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Lab Reference #	8020490	8060510	8090408	8120303
	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Ground Water Elevation (Feet above Sea Level)	288.39	286.56	286.73	287.73
Parameter (mg/L)				
* pH (SU)	7.4	5.6	5.5	5.6
Specific Conductance (umhos)	5000	280	290	270
Cyanide, Total	0.01	<0.01	<0.01	0.01
Total Organic Carbon	14	8.5	12	9.8
Chromium, Hexavalent	<0.01	<0.01	<0.01	<0.01
Chromium, Total	0.008	<0.006	<0.006	<0.006
Copper, Total	0.03	0.04	0.03	0.04
Nickel, Total	0.06	0.08	0.14	0.14
Silver, Total	0.01	<0.01	<0.01	<0.01

* Field pH (SU)= Field Measurement (Average of 4 pH Readings)

Gar Electroforming
Monitoring Well #4 MW4

July 17, 1989

Sample Date	2/25/88	6/20/88	9/7/88	12/8/88
Monitoring Period	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Lab Reference #	8020490	8060510	8090408	8120303
	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Ground Water Elevation (Feet above Sea Level)	288.39	286.56	286.73	287.73
Volatile Organics (µg/L)				
Chloromethane	<2.0	<2.0	<2.0	<2.0
Bromomethane	<2.0	<2.0	<2.0	<2.0
Dichlorodifluoromethane	<2.0	<5.0	<5.0	<5.0
Vinyl Chloride	<5.0	<5.0	<5.0	<5.0
Chloroethane	<2.0	<2.0	<2.0	<2.0
Methylene Chloride	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethylene	9.9	<2.0	<2.0	<2.0
1,1-Dichloroethane	4.9	<2.0	<2.0	<2.0
Trans-1,2-Dichloroethylene	23	<2.0	<2.0	<2.0
Chloroform	<2.0	<2.0	<2.0	<2.0
1,2-Dichloroethane	<2.0	<2.0	<2.0	<2.0
1,1,1-Trichloroethane	27	<2.0	<2.0	<z2.0
Carbon Tetrachloride	<2.0	<2.0	<2.0	<2.0
Bromodichloromethane	<2.0	<2.0	<2.0	<2.0
1,2-Dichloropropane	<2.0	<2.0	<2.0	<2.0
Cis-1,3-Dichloropropene	270	<2.0	<2.0	<2.0
Trichloroethylene	<2.0	23.0	48	33
Chlorodibromomethane	<2.0	<2.0	<2.0	<2.0
1,1,2-Trichloroethane	<2.0	<2.0	<2.0	<2.0
Trans-1,3-Dichloropropene	<2.0	<2.0	<2.0	<2.0
2-Chloroethylvinyl Ether	<5.0	<2.0	<2.0	<2.0
Bromoform	*	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	180	<2.0	*	*
Tetrachloroethylene	<2.0	<2.0	6.3	3.7
Chlorobenzene	<5.0	<2.0	<2.0	<2.0
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0
1,2-dichlorobenzene	<5.0	<5.0	<5.0	<5.0
1,4-dichlorobenzene	<5.0	<5.0	<5.0	<5.0
Benzene	<2.0	<2.0	<2.0	<2.0
Toluene	2.0	<2.0	<2.0	2.1
Ethylbenzene	<2.0	<2.0	<2.0	<2.0

* Due to the chemical similarity of Tetrachloroethylene and 1,1,2,2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of <u>either</u> Tetrachloroethylene <u>or</u> 1,1,2,2-Tetrachloroethane <u>or</u> a combination of these two compounds.

Gar Electroforming
Monitoring Well #5 MW5

July 17, 1989

Sample Date	2/25/88	6/20/88	9/7/88
Monitoring Period	1st Qtr	2nd Qtr	3rd Qtr
Lab Reference #	8020491	8060511	8090409
	(mg/L)	(mg/L)	(mg/L)
Ground Water Elevation (Feet above Sea Level)	288.10	286.60	287.10
Parameter (mg/L)			
pH (SU)	6.4	6.9	5.8
Specific Conductance (umhos)	300	6000	>2100
Cyanide	<0.01	<0.01	<0.01
Total Organic Carbon	34	8.8	12
Chromium, Hexavalent	<0.01	<0.01	<0.01
Chromium, Total	0.01	<0.006	0.02
Copper	0.24	0.02	0.02
Nickel	0.10	0.06	0.10
Silver	<0.01	<0.01	<0.01

Field pH (SU) = Field Measurement (Average of 4 pH Readings)

Gar Electroforming
Monitoring Well #5 MW5

July 17, 1989

Sample Date	2/25/88	6/20/88	9/7/88
Monitoring Period	1st Qtr	2nd Qtr	3rd Qtr
Lab Reference #	8020491	8060511	8090409
	(µg/L)	(µg/L)	(µg/L)
Ground Water Elevation (Feet above Sea Level)	288.10	286.60	287.10
Volatile Organics (µg/L)			
Chloromethane	<2.0	<10.0	<10
Bromomethane	<2.0	<10.0	<10
Dichlorodifluoromethane	<2.0	<25.0	<25
Vinyl Chloride	<5.0	<25.0	<25
Chloroethane	<2.0	<10.0	<10
Methylene Chloride	<5.0	<25.0	<25
1,1-dichloroethylene	<2.0	<10.0	<10
1,1-Dichloroethane	<2.0	<10.0	14
Trans-1,2-Dichloroethylene	<2.0	12.0	16
Chloroform	<2.0	<10.0	<10
1,2-Dichloroethane	<2.0	<10.0	<10
1,1,1-Trichloroethane	<2.0	28.0	19
Carbon Tetrachloride	<2.0	<10.0	<10
Bromodichloromethane	<2.0	<10.0	<10
1,2-Dichloropropane	<2.0	<10.0	<10
Cis-1,3-Dichloropropene	26	250.0	270
Chlorodibromomethane	<2.0	<10.0	<10
1,1,2-Trichloroethane	<2.0	<10.0	<10
Trans-1,3-Dichloropropene	<2.0	<10.0	<10
2-Chloroethylvinyl Ether	<2.0	<10.0	<10
Bromoform	<5.0	<25.0	<25
1,1,2,2-Tetrachloroethane	<2.0	*	*
Tetrachloroethylene	<2.0	130	110
Chlorobenzene	<2.0	<10.0	<10
1,3-Dichlorobenzene	<5.0	<25.0	<25
1,2-Dichlorobenzene	<5.0	<25.0	<25
1,4-Dichlorobenzene	<5.0	<25.0	<25
Trichloroethylene	27.0	250.0	270.0
Benzene	<2.0	<2.0	<10
Toluene	<2.0	<2.0	<10
Ethylbenzene	<2.0	<2.0	<10

* Due to the chemical similarity of Tetrachloroethylene and 1,1,2,2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of <u>either</u> Tetrachloroethylene <u>or</u> 1,1,2,2-Tetrachloroethane <u>or</u> a combination of these two compounds.

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX M

1987 GROUND WATER MONITORING ANALYSIS

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063
An Alcoa Separations Technology Company

Report Date 2/17/87

GAR Electroforming
P. O. Box 340
Danbury, CT 06810

Collected 1/21/87 by JO
Received 1/23/87 by LS
Analyzed 1/23 - 2/16/87 by Staff
No. of Samples 5
P.O. # 22416 FR, Slip #15105

Attention: George A. Ray

First Quarter, 1987 Groundwater Monitoring Project #00829

Well #	1	2	3	4	5
Lab Reference #	24072 (mg/L)	24073 (mg/L)	24074 (mg/L)	24075 (mg/L)	24076 (mg/L)
Parameter					
*pH (SU)	6.5	7.2	6.9	6.9	7.2
Specific Conductivity (umhos/cm)	815	1010	625	350	6850
Organic Carbon, Total	5.2	5.1	8.8	5.0	14
Cyanide, Total	<0.01	<0.01	<0.01	<0.01	0.01
Chromium, Hexavalent	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium, Total	0.05	<0.05	<0.05	<0.05	<0.05
Copper	0.12	0.09	0.12	0.11	0.09
Nickel	0.10	0.25	0.10	0.10	0.15
Silver	<0.01	<0.01	<0.01	<0.01	0.01
*Depth of Cased Hole (ft)	26.25	20.25	21.66	22.16	34.91
*Depth to Water (ft)	7.8	3.66	4.75	6.75	5.0

*On site measurements

C. John Ritzert, Manager-Technical Services

Form 9810-0983-2M

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.

Company: GAR Electroforming
Report Date: 2/17/87
Description: Halogenated Volatile Organics
PO#/Chg.#: 22416 FR, Slip 15105

Well #	1	2	3	4	5
Lab Reference #	24072 (ug/L)	24073 (ug/L)	24074 (ug/L)	24075 (ug/L)	24076 (ug/L)
Chloromethane	<5.0	<1.0	<1.0	<1.0	<5.0
Bromomethane	<5.0	<1.0	<1.0	<1.0	<5.0
Dichlorodifluoromethane	<5.0	<1.0	<1.0	<1.0	<5.0
Vinyl Chloride	<5.0	<1.0	<1.0	<1.0	<5.0
Chloroethane	<5.0	<1.0	<1.0	<1.0	<5.0
Methylene Chloride	<5.0	<1.0	<1.0	<1.0	<5.0
Trichlorofluoromethane	<5.0	<1.0	<1.0	<1.0	<5.0
1,1-Dichloroethylene	<5.0	<1.0	<1.0	<1.0	<5.0
1,1-Dichloroethane	<5.0	<1.0	<1.0	<1.0	<5.0
Trans-1,2-Dichloroethylene	36	4.7	2.1	<1.0	27
Chloroform	<5.0	<1.0	<1.0	<1.0	<5.0
1,2-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<5.0
1,1,1-Trichloroethane	130	26	<1.0	<1.0	70
Carbon Tetrachloride	<5.0	<1.0	<1.0	<1.0	<5.0
Bromodichloromethane	<5.0	<1.0	<1.0	<1.0	<5.0
1,2-Dichloropropane	<5.0	<1.0	<1.0	<1.0	<5.0
Cis-1,3-Dichloropropene	<5.0	<1.0	<1.0	<1.0	<5.0
Trichloroethylene	310	25	19	16	345
Chlorodibromomethane	<5.0	<1.0	<1.0	<1.0	<5.0
1,1,2-Trichloroethane	<5.0	<1.0	<1.0	<1.0	<5.0
Trans-1,3-Dichloropropene	<5.0	<1.0	<1.0	<1.0	<5.0
2-Chloroethylvinyl Ether	<5.0	<1.0	<1.0	<1.0	<5.0
Bromoform	<50	<10	<10	<10	<50
1,1,2,2-Tetrachloroethane	*	<1.0	*	<1.0	*
Tetrachloroethylene	77	<1.0	2.6	<1.0	105
Chlorobenzene	<5.0	<1.0	<1.0	<1.0	<5.0
1,3-Dichlorobenzene	<25	<5.0	<5.0	<5.0	<25
1,2-Dichlorobenzene	<25	<5.0	<5.0	<5.0	<25
1,4-Dichlorobenzene	<25	<5.0	<5.0	<5.0	<25
Benzene	<5.0	<1.0	<1.0	<1.0	<5.0
Toluene	<5.0	<1.0	<1.0	<1.0	<5.0
Ethylbenzene	<5.0	<1.0	<1.0	<1.0	<5.0

*Due to the chemical similarity of Tetrachloroethylene and 1,1,2,2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of either Tetrachloroethylene or 1,1,2,2-Tetrachloroethane or a combination of these two compounds.

C. John Ritzert, Manager-Technical Services

Form 9824-0583-500

LANCY LABORATORIES
Division, Lancy International, Inc
525 W. New Castle St., P.O. Box 41
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR Electroforming

Lab Ref # 24072

Address Augusta Dr. Po Box 340
Danbury, CT.
06810

Well # 1

Well Location

Telephone # 203-744-4300

Time 9:30 Am Date 1-21-86

Reason Sampled Analysis

Weather Conditions Cloudy - cold

Sample Containers and Stabilizers

Depth of Cased Hole:	26.25	ft.	AA VOI
Depth to Water:	7.68'	ft.	EB
Height of Water:	18.4	ft.	BC
Well Diameter:	.16	ft.	ID-TOC
Volume of Water:	2.9	gal. OUT 8.7	

Field pH Measurement: 1. 6.47 2. 3. 4.

Specific Conductance: 1. 2. 3. 4.

COmments:

Temperature: 12°C

Sample Appearance: (Color, Turbid, etc.)

Sample Taken By: John R Olmstead

Witness to Sampling: Frank Ray

For Laboratory Use Only

Date Received: Nicole Houghton By 1-23-87

Condition of Sample: OK

Date Analyzed: By Staff Authorized Signature

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International, Inc
525 W. New Castle St., P.O. Box 49
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR Electroforming

Address Augusta Dr. Po Box 340
Danbury, CT. 06810

Telephone # 203-744-4300

Lab Ref # 24074

Well # C3

Well Location

Time 10:30 AM Date 1-21-87

Reason Sampled Analysis

Weather Conditions Cloudy-Cold

Sample Containers and Stabilizers

AA ID-TOC
EB
BC
VOC

Depth of Cased Hole: 21.66 ft.
Depth to Water: 4.75 ft.
Height of Water: 16.9 ft.
Well Diameter: 16 ft.
Volume of Water: 2.6 gal. out 8

Field pH Measurement: 1. 6.93 2. 3. 4.
Specific Conductance: 1. 2. 3. 4.
COmments:

Temperature: 8°C
Sample Appearance: (Color, Turbid, etc.)

Sample Taken By: John R Olmstead
Witness to Sampling: Frank Ray

For Laboratory Use Only

Date Received: Susan Houghton By 1-23-87

Condition of Sample: CK

Date Analyzed: By Staff Authorized Signature

CAUTION: Stabilizing reagents are corrosive and should be handled carefully.
If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International, Inc
525 W. New Castle St., P.O. Box 45
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR Electroforming

Address Augusta Dr. PO Box 340
Danbury, CT 06810

Telephone # 203-744-6300

Lab Ref # 24074

Well # 5

Well Location

Time 11:30 AM Date 1-21-87

Reason Sampled Analysis

Weather Conditions Cloudy - Cold

				Sample Containers and Stabilizers	
Depth of Cased Hole:	34.91	ft.		AA	ID-TOC
Depth to Water:	5.0	ft.		EB	
Height of Water:	29.91	ft.		BC	
Well Diameter:	1½	ft.		VOI.	
Volume of Water:	4.7	gal.	14 out		

Field pH Measurement: 1. 7.16 2. 3. 4.

Specific Conductance: 1. 2. 3. 4.

COmments:

Temperature: 10°C

Sample Appearance: (Color, Turbid, etc.) Turbid

Sample Taken By: John R. Olmstead

Witness to Sampling: Frank Ray

For Laboratory Use Only

Date Received: [illegible] By 1-23-87

Condition of Sample: OK

Date Analyzed: By Staff Authorized Signature [illegible]

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zellenople, Pennsylvania 16063
An Alcoa Separations Technology Company

Report Date 5/13/87

GAR Electroforming
P. O. Box 340
Danbury, CT 06810

Collected 4/22/87 by JO
Received 4/24/87 by LS
Analyzed 4/24 - 5/12/87 by Staff
No. of Samples 5
P.O. # 22416 FR, Slip #14203

Attention: George A. Ray

Second Quarter, 1987
Groundwater Monitoring

Project #20004

Well #	1	2	3	4	5
Lab Reference #	26431 (mg/L)	26432 (mg/L)	26433 (mg/L)	26434 (mg/L)	26435 (mg/L)
Parameter					
*pH (SU)	6.5	6.6	7.1	6.7	7.3
Specific Conductivity (umhos/cm)	680	828	442	298	4490
Organic Carbon, Total	6.8	5.6	6.2	4.5	6.5
Cyanide, Total	<0.01	<0.01	<0.01	<0.01	0.01
Chromium, Hexavalent	0.02	0.01	0.01	0.04	<0.01
Chromium, Total	<0.05	<0.05	<0.05	<0.05	0.05
Copper	0.04	0.05	0.03	0.05	0.04
Nickel	0.50	0.55	<0.05	<0.05	<0.05
Silver	<0.01	<0.01	<0.01	<0.01	0.01
*Depth of Cased Hole (ft)	26.25	20.25	21.66	22.16	34.91
*Depth to Water (ft)	7.0	3.4	4.5	6.0	3.0

*On site measurements

C. John Ritzert, Manager-Technical Operations

Form RR10 2083 2M

LANCY ENVIRONMENTAL SERVICES
DIVISION OF LANCY INTERNATIONAL, INC.
An Alcoa Separations Technology Company
P.O. Box 419
Pittsburgh, PA 15230-0419
Phone (412) 772-0044 • FAX (412) 772-0055

ASIS REPORT

Report Date 7/28/87

GAR Electroforming
P. O. Box 340
Danbury, CT 06810

Attention: George A. Ray

Sample Date 7/6/87 by JO
Received 7/9/87 by FM
Analyzed 7/9 - 7/28/87 by Staff
No. of Samples 5
Purchase Order # 22416FR, Slip 14302

1987 Ground Water Monitoring

Project #00829

Well #	1	2	3	4	5
Lab Reference #	28563	28564	28565	28566	28567
Parameter	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
*pH (SU)	6.4	6.7	6.7	6.3	7.3
Specific Conductance (umhos/cm)	720	750	440	275	3650
Organic Carbon, Total	31	21	26	19	43
Cyanide, Total	0.01	0.03	0.09	0.23	0.08
Chromium, Hexavalent	0.01	<0.01	<0.01	<0.01	<0.01
Chromium, Total	0.05	<0.05	<0.05	<0.05	0.05
Copper	0.03	0.03	0.02	0.02	0.08
Nickel	<0.05	0.30	<0.05	<0.05	0.10
Silver	<0.01	<0.01	<0.01	<0.01	<0.01
*Depth of Casing Hole (ft)	26.25	20.25	21.66	22.16	34.91
*Depth to Water (ft)	8.3	4.8	5.8	8.0	6.1

*On Site Measurements

for C. John Ritzert, Manager-Technical Operations

LANCY ENVIRONMENTAL SERVICES
DIVISION OF LANCY INTERNATIONAL, INC.
An Alcoa Separations Technology Company
P.O. Box 419
Pittsburgh, PA 15230-0419
Phone (412) 772-0044 • FAX (412) 772-0055

ANALYSIS REPORT

GAR Electroforming Division
Augusta Drive - Commerce Park
Danbury, CT 06810

Attention: George A. Ray

Report Date 12/1/87

Sample Date 11/3/87 by JO
Received 11/9/87 by FM
Analyzed 11/9 - 11/30/87 by Staff
No. of Samples 5
Purchase Order # 22416FR
Packaging Slip # 14369

Quarterly Analysis of Ground Water Monitoring Wells

Project #20004

Lab Reference #	Well 1 31913 (mg/L)	Well 2 31914 (mg/L)	Well 3 31915 (mg/L)	Well 4 31916 (mg/L)	Well 5 31917 (mg/L)
Parameter					
*pH (SU)	6.4	7.2	6.9	6.8	7.3
Specific Conductance (umhos)	720	660	450	300	4300
Total Organic Carbons	13	15	22	11	19
Cyanide, Total	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium, Hexavalent	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium, Total	0.013	<0.006	<0.006	<0.006	<0.006
Copper, Total	0.036	0.044	0.052	0.055	0.059
Nickel, Total	0.075	0.66	0.078	0.055	0.095
Silver, Total	0.02	<0.01	0.01	0.01	0.02
Volatile Organics	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene Chloride	<5.0	<5.0	7.8	<5.0	<.50
Trichlorofluoromethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	13	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	24	<1.0	<1.0	<1.0	<1.0
Trans-1,2-Dichloroethylene	62	3.1	<1.0	1.6	40
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	95	<1.0	<1.0	<1.0	15
Carbon Tetrachloride	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0	<1.0	<1.0
Cis-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0

C. John Ritzert, Manager-Technical Operations

LANCY ENVIRONMENTAL SERVICES
DIVISION OF LANCY INTERNATIONAL, INC.
An Alcoa Separations Technology Company
P.O. Box 419
Pittsburgh, PA 15230-0419
Phone (412) 772-0044 • FAX (412) 772-0055

ANALYSIS REPORT

GAR Electroforming Division — 12/1/87
Quarterly Analysis of Ground Water Monitoring Wells — 22416FR

Project #20004

Lab Reference #	31913 (ug/L)	31914 (ug/L)	31915 (ug/L)	31916 (ug/L)	31917 (ug/L)
Volatile Organics					
Trichloroethylene	210	22	15	20	157
Chlorodibromomethane	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0
Trans-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1.0
2-Chloroethylvinylether	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	**	<1.0	<1.0	<1.0	**
Tetrachloroethylene	91	<1.0	<1.0	<1.0	71
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10
Benzene	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene	>2.0	<2.0	<2.0	<2.0	<2.0

* Field measurement

** Due to the chemical similarity of Tetrachloroethylene and 1,1,2,2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of either Tetrachloroethylene or 1,1,2,2-Tetrachloroethane or a combination of these two compounds.

C. John Ritzert, Manager-Technical Operations

LANCY ENVIRONMENTAL SERVICES
DIVISION OF LANCY INTERNATIONAL, INC.
An Alcoa Separations Technology Company
181 Thorn Hill Road
Warrendale, Pennsylvania 15086-7527

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR Electroforming
Address Augusta Dr. PO Box 340
Danbury, CT 06810

Telephone # 203-744-4300

Lab Ref # 31913
Well # NO. 1
Well Location

Time 11 AM Date 11/3/87

Reason Sampled Analysis
Weather Conditions PARTLY CLOUDY

		Sample Containers & Stabilizer	
Depth of Cased Hole:	26.25 ft.		
Depth to Water:	7.24 ft.	AA	IO-TOC
Height of Water:	19.01 ft.	EB	VOL
Well Diameter:	.16 ft.		
Volume of Water:	3.2 gal.	BC	

Fi 1 pH measurement: 1. 6.47 2. 3. 4.
Specific Conductance: 1. 2. 3. 4.
Comments:

Temperature: 13°C
Sample Appearence: (Color, Turbid, etc.)

Sample Taken By: John R Olmstead

Witness to Sampling: F. Ray Wendy Stearns

For Laboratory Use Only

Date Received: 11-9-87 By: Frances P. McCarthy
Condition of Samples: Good

Date Analyzed: 11-9-11-30 By Staff Authorized Signature

CAUTION: Stabilizing Reagents are corrosive and should be handled carefully. If Reagents come in contact with skin, flush with water.

LANCY ENVIRONMENTAL SERVICES
DIVISION OF LANCY INTERNATIONAL, INC.
An Alcoa Separations Technology Company
181 Thorn Hill Road
Warrendale, Pennsylvania 15086-7527

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR Electroforming
Address Augusta Dr Po Box 340
Danbury, CT 06810

Telephone # 203-744-4300

Lab Ref # 31914
Well # NO. 2
Well Location

Time 11:35 Date [illegible]

Reason Sampled Analysis
Weather Conditions Partly Cloudy

		Sample Containers & Stabilizer	
Depth of Cased Hole:	20.25 ft.	AA	ID - TOC
Depth to Water:	3.75 ft.	EB	VOL - (1 broken)
Height of Water:	16.5 ft.	BC	
Well Diameter:	.16 ft.		
Volume of Water:	2.6 ~~ft~~. Removed 8 gals.		

ield pH measurement: 1. 7.2 2. 3. 4.
Specific Conductance: 1. 2. 3. 4.
Comments:

Temperature: 10°C
Sample Appearence: (Color, Turbid, etc.) Clear

Sample Taken By: John R Olmstead

Witness to Sampling: J. Ray Wendy Stearns

For Laboratory Use Only

Date Received: 11-9-87 By: Francis P. McCarthy
Condition of Samples: 1 broken vol. vial

Date Analyzed: 11-9-11-30 By Staff Authorized Signature [illegible]

CAUTION: Stabilizing Reagents are corrosive and should be handled carefully. If Reagents come in contact with skin, flush with water.

LANCY ENVIRONMENTAL SERVICES
DIVISION OF LANCY INTERNATIONAL, INC.
An Alcoa Separations Technology Company
181 Thorn Hill Road
Warrendale, Pennsylvania 15086-7527

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR Electroforming
Address Augusta Dr PO Box 340
Danbury, CT 06810

Telephone # 203-744-4300

Lab Ref # 31915
Well # NO. 3
Well Location

Time 1 PM Date 1/3/-7

Reason Sampled Analysis
Weather Conditions Partly Cloudy

		Sample Containers & Stabilizer	
Depth of Cased Hole:	21.66 ft.	AA	IO-TOC
Depth to Water:	4.20 ft.	EB	VOL
Height of Water:	16.86 ft.	BC	
Well Diameter:	.16 ft.		
Volume of Water:	2.5 ~~ft~~ .8 gal		

Field pH measurement: 1. 6.9 2. 3. 4.
ecific Conductance: 1. 2. 3. 4.
Comments:

Temperature: 10°C
Sample Appearence: (Color, Turbid, etc.)

Sample Taken By: John R Olmstead

Witness to Sampling: Wendy Stearns F. Ray

For Laboratory Use Only

Date Received: 11-9-87 By: Francis A. McConaby
Condition of Samples: Good

Date Analyzed: 11-9-11-30 By Staff Authorized Signature

CAUTION: Stabilizing Reagents are corrosive and should be handled carefully. If Reagents come in contact with skin, flush with water.

LANCY ENVIRONMENTAL SERVICES
DIVISION OF LANCY INTERNATIONAL, INC.
An Alcoa Separations Technology Company
181 Thorn Hill Road
Warrendale, Pennsylvania 15086-7527

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR Electroforming
Address Augusta Dr. Po Box 340
Danbury, CT. 06810

Telephone # 203-744-4320

Lab Ref # 31916
Well # 4
Well Location

Time 1:15 Date 11/3/87

Reason Sampled Analysis
Weather Conditions Partly Cloudy

		Sample Containers & Stabilizer	
Depth of Cased Hole:	22.16 ft.	AA	IO-TOC
Depth to Water:	6.12 ft.	EB	VOL.
Height of Water:	15.24 ft.		
Well Diameter:	2" ft.	BC	
Volume of Water:	ft.		

Field pH measurement: 1. 6.85 2. 3. 4.
Specific Conductance: 1. 2. 3. 4.
Comments:

Temperature: 10°C
Sample Appearence: (Color, Turbid, etc.)

Sample Taken By: John R Olmstead
Witness to Sampling: Wendy J Tearnes

For Laboratory Use Only

Date Received: 11-9-87 By: Francis P. McConaly
Condition of Samples: Good

Date Analyzed: 11-9-11-30 By Staff Authorized Signature

CAUTION: Stabilizing Reagents are corrosive and should be handled carefully. If Reagents come in contact with skin, flush with water.

EB bottle was <1.0 pH. Therefore caustic added. Ann Boog

LANCY ENVIRONMENTAL SERVICES
DIVISION OF LANCY INTERNATIONAL, INC.
An Alcoa Separations Technology Company
181 Thorn Hill Road
Warrendale, Pennsylvania 15086-7527

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR Electroforming
Address Augusta Dr. PO Box 340
Danbury, CT. 06810

Telephone # 203-744-4300

Lab Ref # 31917
Well # no 5
Well Location

Time 1:30 Date 11/3/87

Reason Sampled Analysis
Weather Conditions Partly Cloudy

		Sample Containers & Stabilizer	
Depth of Cased Hole:	34.91 ft.	AA	ID-TOC
Depth to Water:	5.16 ft.	EB	VOL.
Height of Water:	29.75 ft.	BC	
Well Diameter:	6.16 ft.		
Volume of Water:	4.[illegible] ft.		

ield pH measurement: 1. [illegible] 2. 3. 4.
Specific Conductance: 1. 2. 3. 4.
Comments:

Temperature: [illegible]
Sample Appearence: (Color, Turbid, etc.) [illegible]

Sample Taken By: John R Olmstead

Witness to Sampling: F. Ray, Wendy Stearns

For Laboratory Use Only

Date Received: 11-9-87 By: Francis P. McCarthy
Condition of Samples: Good

Date Analyzed: 11-9 - 11-30 By Staff Authorized Signature [illegible]

CAUTION: Stabilizing Reagents are corrosive and should be handled carefully. If Reagents come in contact with skin, flush with water.

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX N

1986 GROUND WATER MONITORING ANALYSIS

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

Report Date 2/18/86

GAR Electroforming
P. O. Box 340
Danbury, CT 06810

Attention: George A. Ray

Collected 1/13/86 by JK
Received 1/16/86 by LS
Analyzed 1/16 - 2/6/86 by Staff
No. of Samples 5
P.O. # 21363, Slip #14251

First Quarter 1986 Groundwater Monitoring

Well #	1	2	3	4	5
Lab Reference #	17736	17737	17738	17739	17740
Parameter	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
*pH (SU)	6.1	6.9	7.6	6.8	7.2
Specific Conductivity (umhos/cm)	730	1600	1200	530	4100
Organic Carbon, Total	4.1	6.7	7.3	7.2	6.5
Cyanide, Total	<0.01	<0.01	<0.01	<0.01	0.01
Chromium, Hexavalent	0.01	<0.01	<0.01	0.01	<0.01
Chromium, Total	0.05	0.20	0.20	0.10	0.15
Copper	0.05	1.0	3.2	0.59	0.18
Nickel	<0.05	1.8	0.90	0.15	0.05
Silver	<0.01	0.02	0.03	<0.01	0.09
*Depth of Cased Hole (ft)	26.30	20.25	21.83	22.2	34.94
*Depth to Water (ft)	7.83	4.25	5.42	7.5	5.6

*Field Measurements

C. John Ritzert, Manager-Technical Services

Form 9810-0983-2M

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.

Company: GAR Electroforming — Report Date: 2/18/86

Description: Volatile Organics — PO#/Chg.#: 21363, Slip #14251

Well #	1	2*	3	4	5
Lab Reference #	17736	17737	17738	17739	17740
Parameter	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Benzene	<1	<1	<1	<1	<1
Bromoform	<10	<10	<10	<10	<10
Carbon tetrachloride	<10	<10	<10	<10	<10
Chlorobenzene	<1	<1	<1	<1	<1
Chlorodibromomethane	<10	<10	<10	<10	<10
Chloroform	<2	<2	<2	<2	<2
1,2-Dichlorobenzene	<2	<2	<2	<2	<2
1,3-Dichlorobenzene	<2	<2	<2	<2	<2
1,4-Dichlorobenzene	<2	<2	<2	<2	<2
Dichlorobromomethane	<5	<5	<5	<5	<5
1,1-Dichloroethane	85	4.0	2.7	<2	22
1,2-Dichloroethane	<2	<2	<2	<2	<2
1,1-Dichloroethylene	89	<5	2.1	<5	58
1,2-Dichloropropane	<2	<2	<2	<2	<2
Ethylbenzene	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5
Trans-1,3-Dichloropropylene	<5	<5	<5	<5	<5
Tetrachloroethylene	93	<5	10	5.9	200
Toluene	<1	<1	<1	<1	<1
1,2-trans-Dichloroethylene	720	21	30	20	325
1,1,1-Trichloroethane	340	5.2	5.0	1.1	82
1,1,2-Trichloroethane	<2	<2	<2	<2	<2
Trichloroethylene	725	14	57	34	730

* All three septum vials for volatile organics analyses were received broken.

Volatile organics were analyzed from another sample bottle in lieu of a septum vial.

C. John Ritzert-Technical Services

Form 9824-0583-500

PACKING SLIP

GAR Electroforming Division

AUGUSTA DRIVE · COMMERCE PARK · AREA CODE 203: 744-4300 · DANBURY, CONN. 06810

SHIP TO

LANCY LABORATORIES
525 West New Castle St.
P.O. Box 490
Zelienople, Pennsylvania 16063

№ 14251

INVOICE
DATE 1/14/86
ORDER NO.
SHIPPED

SHIPPED VIA UPS

QUANTITY	DESCRIPTION	PRICE	AMOUNT
5boxes	Well water Samples		
1box	Tools (return of your property)		

VENDOR

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR Electroforming

Address

DANBURY CONN

Telephone #

Lab Ref # 17736

Well # 1

Well Location

Time 356 Date 13 JAN 86

Reason Sampled Quarterly Monitoring

Weather Conditions

Sample Containers and Stabilizers

Depth of Cased Hole:	26.30	ft.		
Depth to Water:	7.83	ft.	7'10"	3
Height of Water:	18.43	ft.		
Well Diameter:	2	ft.		
Volume of Water:	3.1	gal.	× 3 = 54 gallons	

Field pH Measurement: 1. 6.10 2. 6.11 3. 6.12 4. 6.13

Temperature: 11.0

Sample Appearance: (Color, Turbid, etc.)

~~Sample Taken By:~~

Witness to Sampling:

Notes: 30 gallons bailed

For Laboratory Use Only AA, EB, BC, 2D 1 vol only

Date Received: 1/16/86 By

Condition of Sample:

Date Analyzed: By Staff Authorized Signature

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company BAR [illegible]

Lab Ref # 17737

Address

Well # 2

Well Location

Telephone #

Time [illegible] Date 13 JAN 86

Reason Sampled Quarterly Monitoring

Weather Conditions

Sample Containers and Stabilizers

Depth of Cased Hole: 20.25 ft.
Depth to Water: 4.25 ft.
Height of Water: 16.00 ft.
Well Diameter: 2.17 ft.
Volume of Water: 18.7 gal. x 3 = 8.1 gallons

Field pH Measurement: 1. [illegible] 2. [illegible] 3. [illegible] 4.
Temperature: [illegible]
Sample Appearance: (Color, Turbid, etc.) [illegible]

~~Sample Taken By:~~
Witness to Sampling:

Notes: 5 gallons bailed -

For Laboratory Use Only

Date Received: 1/16/86 By Linda [illegible] AA, EB, BC, SP Inval

Condition of Sample:

Date Analyzed: By Staff Authorized Signature [illegible]

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR Electroforming

Lab Ref # 17738

Address

Well # 3

Well Location

Telephone #

Time Date

Reason Sampled

Weather Conditions

Sample Containers and Stabilizers

Depth of Cased Hole: 21.23 ft.
Depth to Water: 5.42 ft.
Height of Water: 16.41 ft.
Well Diameter: 2.17 ft.
Volume of Water: 2.7 gal. x3 = 8.1 gallons

Field pH Measurement: 1. 7.58 2. 7.58 3. 7.58 4. 7.58
Temperature: 7.8
Sample Appearance: (Color, Turbid, etc.)

Sample Taken By:
Witness to Sampling:

Notes: A

For Laboratory Use Only

Date Received: 1/16/86 By Linda Shingler AA, EB, BC, & D vol

Condition of Sample:

Date Analyzed: By Staff Authorized Signature

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GHR [illegible]

Lab Ref # 17739

Address [illegible]

Well # 4

Well Location

Telephone #

Time 1435 Date [illegible]

Reason Sampled

Weather Conditions [illegible]

Sample Containers and Stabilizers

Depth of Cased Hole: 33.2 ft.
Depth to Water: 7.5 ft.
Height of Water: 14.7 ft.
Well Diameter: 4.7 ft.
Volume of Water: 2.4 gal.

Field pH Measurement: 1. 6.81 2. 6.77 3. 6.80 4. 6.80
Temperature: 7.0
Sample Appearance: (Color, Turbid, etc.) Clear

Sample Taken By: [illegible]
Witness to Sampling: [illegible]

Notes: 9 gal. bailed

For Laboratory Use Only

Date Received: 1/16/86 By Linda Shenglet AA, EB, BC, DD

Condition of Sample:

Date Analyzed: By Staff Authorized Signature [illegible]

CAUTION: Stabilizing reagents are corrosive and should be handled carefully.
If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GHR [illegible]

Lab Ref # 17740

Address [illegible]

Well # 5

Well Location

Telephone #

Time Date

Reason Sampled

Weather Conditions [illegible] CLOUDY

Sample Containers and Stabilizers

Depth of Cased Hole: 34.94 ft.
Depth to Water: 5.6 ft.
Height of Water: [illegible] ft.
Well Diameter: 1.7 ft.
Volume of Water: 4.9 gal.

Field pH Measurement: 1. 7.15 2. 7.15 3. [illegible] 4. [illegible]
Temperature: 7.4
Sample Appearance: (Color, Turbid, etc.) TURBID

Sample Taken By: [illegible]
Witness to Sampling: [illegible]

Notes: 15 gal bailed

For Laboratory Use Only

Date Received: 1/16/86 By Linda Shingle [illegible]

Condition of Sample:

Date Analyzed: By Staff Authorized Signature [illegible]

CAUTION: Stabilizing reagents are corrosive and should be handled carefully.
If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

ANALYSIS REPORT

GAR Electroforming
P. O. Box 340
Danbury, CT 06810

Attention: George A. Ray

Report Date 5/15/86

Collected 4/10/86 by JO
Received 4/15/86 by LS
Analyzed 4/15 - 5/14/86 by Staff
No. of Samples 5
P.O. # Verbal/George Ray

Second Quarter 1986 Groundwater Monitoring

Well #	1	2	3	4	5
Lab Reference #	19215	19216	19217	19218	19219
Parameter	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
*pH (SU)	6.4	6.4	6.5	6.3	7.0
Specific Conductivity (umhos/cm)	775	1350	4860	390	740
Organic Carbon, Total	7.5	7.0	5.3	6.9	5.7
Cyanide, Total	<0.01	<0.01	0.01	<0.01	<0.01
Chromium, Hexavalent	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium, Total	0.05	<0.05	<0.05	<0.05	0.10
Copper	0.20	0.25	0.28	0.24	1.91
Nickel	0.10	0.50	0.15	0.10	0.50
Silver	<0.01	<0.01	0.03	<0.01	0.01
*Depth of Cased Hole (ft)	26.25	20.25	21.66	22.16	34.91
*Depth to Water (ft)	7.5	4.0	5.0	6.91	5.15

*Field Measurements

C. John Ritzert, Manager-Technical Services

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.

Company: GAR Electroforming — Report Date: 5/15/86

Description: Volatile Organics — PO#/Chg.#: Verbal/George Ray

Well #	1	2	3	4	5
Lab Reference #	19215	19216	19217	19218	19219
Parameter	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Benzene	<2	<1	<1	<1	<1
Bromoform	<50	<10	<10	<10	<10
Carbon tetrachloride	<50	<10	<10	<10	<10
Chlorobenzene	<2	<1	<1	<1	<1
Chlorodibromomethane	<50	<10	<10	<10	<10
Chloroform	<10	<2	<2	<2	<2
1,2-Dichlorobenzene	<10	<2	<2	<2	<2
1,3-Dichlorobenzene	<10	<2	<2	<2	<2
1,4-Dichlorobenzene	<10	<2	<2	<2	<2
Dichlorobromomethane	<25	<5	<5	<5	<5
1,1-Dichloroethane	47	<2	4.1	<2	<2
1,2-Dichloroethane	<10	<2	<2	<2	<2
1,1-Dichloroethylene	50	<5	21	<5	<5
1,2-Dichloropropane	<10	<2	<2	<2	<2
Ethylbenzene	<2	<1	<1	<1	<1
Methylene chloride	<25	<5	<5	<5	<5
Trans-1,3-Dichloropropylene	<25	<5	<5	<5	<5
Tetrachloroethylene	165	5.2	170	<5	3.1
Toluene	<2	<1	<1	<1	<1
1,2-trans-Dichloroethylene	135	4.2	30	<2	2.0
1,1,1-Trichloroethane	435	11	78	<2	2.2
1,1,2-Trichloroethane	<10	<2	<2	<2	<2
Trichloroethylene	935	64	695	24	23

C. John Ritzert-Technical Services

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GHR ELECTRO FORMING

Address PO BOX 340
AUGUSTA DRIVE
DANBURY CT 06810

Telephone # 203-744-4800

Lab Ref # 19215

Well # CNE

Well Location

Time 11:4 Date 4-15-86

Reason Sampled Analysis

Weather Conditions CLOUDY, COLD, SPRINKLES

Depth of Cased Hole:	26.25	ft.
Depth to Water:	7.5	ft.
Height of Water:	18.75	ft.
Well Diameter:	2"	ft.
Volume of Water:	3	gal.

Sample Containers and Stabilizers
AA - no stab
SD - sulfuric acid
BC - nitric acid
VOC - no stab
EB - [illegible]

Field pH Measurement: 1. 6.45 2. 6.45 3. 6.45 4. 6.45
Temperature: 10°C
Sample Appearance: (Color, Turbid, etc.) Turbid

Sample Taken By: JOHN R. CLUNSTEAD
Witness to Sampling: [illegible]

Notes: Bailed 9 gals.

For Laboratory Use Only

Date Received: 4/15/86 By [illegible]

Condition of Sample:

Date Analyzed: _____ By Staff Authorized Signature [illegible]

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

LANCY
LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR ELECTROFORMING

Lab Ref # 19216

Address Augusta Drive Po. Box 340
Danbury CT 06810

Well # TWO
Well Location

Telephone # 203-744-4300

Time 3:00 PM Date 4-10-86

Reason Sampled Analysis
Weather Conditions CLOUDY, COOL, SPRINKLES

Sample Containers and Stabilizers
AA - no stab
SD - sulfuric acid
BC - nitric acid
nl - no stab
EB - [illegible]

Depth of Cased Hole: 20.25 ft.
Depth to Water: 4 ft.
Height of Water: 16.25 ft.
Well Diameter: 2" ft.
Volume of Water: 2.6 gal.

Field pH Measurement: 1. 6.45 2. 6.45 3. 6.45 4. 6.45
Temperature: 8°C
Sample Appearance: (Color, Turbid, etc.) Clear

Sample Taken By: JOHN R. OLMSTEAD
Witness to Sampling: R.A. [illegible]

Notes: Bailed 8 gals

For Laboratory Use Only

Date Received: 4/15/86 By Linda Shengeld

Condition of Sample:

Date Analyzed: By Staff Authorized Signature

CAUTION: Stabilizing reagents are corrosive and should be handled carefully.
If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR ELECTROFORMING

Address PO BOX 340
AUGUSTA DRIVE
DANBURY CT. 06810

Telephone # 203-744-4300

Lab Ref # 19217

Well # THREE

Well Location

Time 12:40 PM Date 4-10-86

Reason Sampled Analysis

Weather Conditions CLOUDY, COLD, SPRINKLES

Depth of Cased Hole:	21.66	ft.
Depth to Water:	5	ft.
Height of Water:	16.66	ft.
Well Diameter:	2"	ft.
Volume of Water:	2.4	gal.

Sample Containers and Stabilizers

AH - no stab
SP - sulfuric acid
BC - nitric acid
nal - no stab
EB - sodium hydroxide + chloroform

Field pH Measurement: 1. 6.54 2. 6.54 3. 6.54 4. 6.54

Temperature: TC

Sample Appearance: (Color, Turbid, etc.) Clear

Sample Taken By: JOHN R GIMSTEAD

Witness to Sampling: R A Roth

Notes: Bottles & gals

For Laboratory Use Only

Date Received: 4/15/86 By Linda Shingleton

Condition of Sample:

Date Analyzed: _____ By Staff Authorized Signature

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR ELECTROFORMING

Address PO BOX 340
AUGUSTA DRIVE
DANBURY CT. 06810

Telephone # 203-744-4300

Lab Ref # 19218

Well # FOUR

Well Location

Time 2:00 Date 4-10-86

Reason Sampled Analysis

Weather Conditions COLDY, CLD, SNOWFLKES

Depth of Cased Hole:	22.16	ft.
Depth to Water:	6.90	ft.
Height of Water:	15.25	ft.
Well Diameter:	2"	ft.
Volume of Water:	2.4	gal.

Sample Containers and Stabilizers
AA - no stab
SP - sulfuric acid
BC - nitric acid
vol - no stab
EB - sodium hydroxide + acetic acid

Field pH Measurement: 1. 6.29 2. 6.29 3. 6.29 4. 6.26
Temperature: 7°C
Sample Appearance: (Color, Turbid, etc.) Clear

Sample Taken By: JOHN BOWSTEAD
Witness to Sampling: PA Pack

Notes: Bailed 7 gals.

For Laboratory Use Only

Date Received: 4/15/86 By Linda Shenglito

Condition of Sample:

Date Analyzed: By Staff Authorized Signature

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Lab Ref # 19219

Company GM ELECTROFINISHING

Address PO BOX 340
AUGUSTA DRIVE
DANBURY CT. 06810

Telephone # 203-744-4300

Well # FIVE
Well Location

Time 12:00 PM Date 4-10-86

Reason Sampled Analysis
Weather Conditions CLOUDY CAD SPRINKLES

Depth of Cased Hole: 34.91 ft.
Depth to Water: 5.15 ft.
Height of Water: 29.76 ft.
Well Diameter: 2" ft.
Volume of Water: 4 gal.

Sample Containers and Stabilizers
AA - no stab
SD - sulfuric acid
BC - nitric acid
nd - no stab
EB - sodium hydroxide + ascorbic acid

Field pH Measurement: 1. 7.03 2. 7.03 3. 7.03 4. 7.03
Temperature: 10°C
Sample Appearance: (Color, Turbid, etc.) Clear

Sample Taken By: JOHN R OLMSTEAD
Witness to Sampling: [illegible] 4-16-86 [illegible] sample to SAC

Notes: Bailed 14 gal

For Laboratory Use Only

Date Received: 4/15/86 By Linda Shurgitts

Condition of Sample:

Date Analyzed: _____ By Staff Authorized Signature

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063
An Alcoa Separations Technology Company

Report Date 8/12/86

GAR Electroforming
P. O. Box 340
Danbury, CT 06810

Collected 7/10/86 by JO
Received 7/14/86 by LS
Analyzed 7/14 - 8/6/86 by Staff
No. of Samples 5
P.O. # Verbal, Slip #14091

Attention: George A. Ray

Third Quarter 1986 Groundwater Monitoring Order Entry #268

Well #	1	2	3	4	5
Lab Reference #	20871	20872	20873	20874	20875
Parameter	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
*pH (SU)	6.8	7.1	6.7	6.9	7.2
Specific Conductivity (umhos/cm)	700	1750	680	360	4600
Organic Carbon, Total	<5.0	5.0	6.1	<5.0	<5.0
Cyanide, Total	0.06	0.01	0.01	0.03	0.03
Chromium, Hexavalent	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium, Total	0.05	0.05	0.05	0.05	0.05
Copper	0.15	0.25	0.70	0.15	0.17
Nickel	0.10	0.70	0.30	0.05	0.10
Silver	<0.01	<0.01	<0.01	<0.01	0.01
*Depth of Cased Hole (ft)	26.25	20.25	21.66	22.16	34.91
*Depth to Water (ft)	17.5	5.083	6.33	8.16	6.29

*Field Measurements

C. John Ritzert, Manager-Technical Services

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.

Company: GAR Electroforming — Report Date: 8/12/86

Description: Halogenated Volatile Organics — PO#/Chg.#: Verbal, Slip #14091

Well #	1	2	3	4	5
Lab Reference #	20871	20872	20873	20874	20875
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Parameter					
Benzyl Chloride	<10	<10	<10	<10	<10
Bis(2-chloroethoxy) methane	<10	<10	<10	<10	<10
Bis(2-chloroisopropyl) ether	<10	<10	<10	<10	<10
Bromobenzene	<10	<10	<10	<10	<10
Bromodichloromethane	<10	<10	<10	<10	<10
Bromoform	<10	<10	<10	<10	<10
Bromomethane	<25	<25	<25	<25	<25
Carbon Tetrachloride	<10	<10	<10	<10	<10
Chloracetaldehyde	<10	<10	<10	<10	<10
Chloral	<10	<10	<10	<10	<10
Chlorobenzene	<10	<10	<10	<10	<10
Chloroethane	<10	<10	<10	<10	<10
Chloroform	<10	<10	<10	<10	<10
1-Chlorohexane	<10	<10	<10	<10	<10
2-Chloroethyl vinyl ether	<10	<10	<10	<10	<10
Chloromethane	<25	<25	<25	<25	<25
Chloromethyl methyl ether	<10	<10	<10	<10	<10
Chlorotoluene	<10	<10	<10	<10	<10
Dibromochloromethane	<10	<10	<10	<10	<10
Dibromomethane	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	<10	<10	<10	<10	<10
Dichlorodifluoromethane	<10	<10	<10	<10	<10
1,1-Dichloroethane	89	<10	<10	<10	<10
1,2-Dichloroethane	<10	<10	<10	<10	<10
1,1-Dichloroethylene	135	<10	<10	<10	40
trans-1,2-Dichloroethylene	200	<10	15	<10	140
Dichloromethane	<10	<10	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10	<10	<10
1,3-Dichloropropylene	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10
Tetrachloroethylene	112	<10	12	<10	160
1,1,1-Trichloroethane	145	9.1	<10	<10	60
1,1,2-Trichloroethane	30	<10	<10	<10	21
Trichloroethylene	190	70	90	41	200
Trichlorofluoromethane	<10	<10	<10	<10	<10
Trichloropropane	<10	<10	<10	<10	<10
Vinyl Chloride	<50	<50	<50	<50	<50

C. John Ritzert, Manager-Technical Services

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR Electroforming

Address Augusta Dr. Po Box 340
Danbury, CT. 06810

Telephone # 203-744-4300

Lab Ref # 20871

Well # ~~GAR TWO~~ ONE

Well Location

Time 1:15 PM Date 7/10/86

Reason Sampled Analysis

Weather Conditions Clear

Sample Containers and Stabilizers

AA EB BC

ID-TOC VOL

Depth of Cased Hole:	26.25	ft.	
Depth to Water:	~~5.683~~	ft.	17.5
Height of Water:	2.8 ~~21.16~~	ft.	8.66
Well Diameter:	.166 ~~.166~~	ft.	
Volume of Water:	3 ~~3.3~~	gal.	

Field pH Measurement: 1. 6.8 2. 6.8 3. 6.8 4. 6.8

Specific Conductance: 1. 2. 3. 4.

Comments: Removed 8.5 gal water

Temperature: 13°C

Sample Appearance: (Color, Turbid, etc.) TURBID

Sample Taken By: JOHN R. OLMSTEAD

Witness to Sampling: FRANK RAY

For Laboratory Use Only

Date Received: 7/14/86 By Linda Sheridan

Condition of Sample:

Date Analyzed: 7/14-8/6/86 By Staff Authorized Signature

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR Electroforming

Address Augusta Dr. P.O. Box 340
Danbury CT. 06810

Telephone # 203-744-4300

Lab Ref # 200272

Well # ~~[illegible]~~ ~~[illegible]~~ TW0

Well Location

Time 10:20 AM Date 7-10-86

Reason Sampled Analysis

Weather Conditions Clear

Sample Containers and Stabilizers

AA EB BC

IO-TOC VOT.

Depth of Cased Hole:	20.25	ft.
Depth to Water:	5.083	ft.
Height of Water:	15.167	ft.
Well Diameter:	6.66	ft.
Volume of Water:	~ 2.4	gal.

Field pH Measurement: 1. 7.08 2. 7.08 3. 7.08 4. 7.08

Specific Conductance: 1. 2. 3. 4.

COmments: Removed 7.5 gal. water

Temperature: 13°C

Sample Appearance: (Color, Turbid, etc.) TURBID

Sample Taken By: JOHN A OLMSTEAD

Witness to Sampling: FRANK TRAY

For Laboratory Use Only

Date Received: 7/14/86 By [signature]

Condition of Sample: OK

Date Analyzed: 7/14-8/6/86 By Staff Authorized Signature [signature]

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zellenople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR Electroforming

Lab Ref # 20873

Address Augusta Dr. P.O. Box 340
Danbury, Ct. 06810

Well # THREE
Well Location

Telephone # 203-744-4300

Time 10 45 AM Date 7-10-86

Reason Sampled Analysis
Weather Conditions Clear

Depth of Cased Hole:	21.66	ft.
Depth to Water:	6.33	ft.
Height of Water:	15.33	ft.
Well Diameter:	.166	ft.
Volume of Water:	2.4	gal.

Sample Containers and Stabilizers

AA
EB
1 ID
vol

no metals bottle

Field pH Measurement: 1. 6.75 2. 6.75 3. 6.75 4. 6.75
Specific Conductance: 1. 2. 3. 4.
COmments: REMOVED 7.5 GAL

Temperature: 12°C
Sample Appearance: (Color, Turbid, etc.) TURBID

Sample Taken By: JOHN R OLMSTEAD
Witness to Sampling: FRANK RAY

For Laboratory Use Only

Date Received: 7/14/86 By Linda Shingles

Condition of Sample: metals bottle missing, unstab sample transferred to BC bottle,

Date Analyzed: 7/14-8/6/86 By Staff Authorized Signature

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zellenople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR Electroforming

Address Augusta Dr. PO Box 340
Danbury, CT. 06810

Telephone # 203-744-4300

Lab Ref # 20874

Well # FOUR

Well Location

Time 11:15 AM Date 7-10-86

Reason Sampled Analysis

Weather Conditions Clear

Depth of Cased Hole:	22.16	ft.
Depth to Water:	8.16	ft.
Height of Water:	14.00	ft.
Well Diameter:	.166	ft.
Volume of Water:	2.2	gal.

Sample Containers and Stabilizers

AA
EB
BC
IID
Vol

Field pH Measurement: 1. 6.9 2. 6.9 3. 6.9 4. 6.9

Specific Conductance: 1. 2. 3. 4.

COmments: Removed 7 gal of water

Temperature: 13°C

Sample Appearance: (Color, Turbid, etc.)

Sample Taken By: JOHN R OLMSTEAD

Witness to Sampling: FRANK RAY

For Laboratory Use Only

Date Received: 7/14/86 By Linda Shingleton

Condition of Sample: OK

Date Analyzed: 7/14-8/6/86 By Staff Authorized Signature

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR Electroforming

Address Augusta Dr. Po Box 340
Danbury, CT. 06810

Telephone # 203-744-4300

Lab Ref # 20875

Well # Five

Well Location

Time 11:45 AM Date 7-10-86

Reason Sampled Analysis

Weather Conditions Clear

Depth of Cased Hole:	34.91	ft.
Depth to Water:	6.29	ft.
Height of Water:	28.62	ft.
ll Diameter:	.1666	ft.
Volume of Water:	4.5	gal.

Sample Containers and Stabilizers
AA
EB
BC
ID-1
vol

Field pH Measurement: 1. 7.25 2. 7.25 3. 7.25 4. 7.25

Specific Conductance: 1. 2. 3. 4.

COmments: Removed 14 gals

Temperature: 12°C

Sample Appearance: (Color, Turbid, etc.) TURBID

Sample Taken By: JOHN K. OLMSTEAD

Witness to Sampling: FRANK RAY, G. ANTHONY ROSATO

For Laboratory Use Only

Date Received: 7/14/86 By [illegible]

Condition of Sample: OK

Date Analyzed: 7/14-8/6/86 By Staff Authorized Signature [illegible]

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063
An Alcoa Separations Technology Company

Report Date 11/6/86

GAR Electroforming
P. O. Box 340
Danbury, CT 06810

Collected 10/7/86 by JO
Received 10/9/86 by LS
Analyzed 10/9 - 11/3/86 by Staff
No. of Samples 5
P.O. # Verbal, Slip #15077

Attention: George A. Ray

Fourth Quarter 1986 Groundwater Monitoring Order Entry #268

Well #	1	2	3	4	5
Lab Reference #	22405 (mg/L)	22406 (mg/L)	22407 (mg/L)	22408 (mg/L)	22409 (mg/L)
Parameter					
*pH (SU)	6.8	7.1	7.6	7.1	7.0
Specific Conductivity (umhos/cm)	710	145	850	400	5800
Organic Carbon, Total	<5.0	<5.0	<5.0	<5.0	<5.0
Cyanide, Total	<0.01	<0.01	<0.01	<0.01	0.02
Chromium, Hexavalent	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium, Total	<0.05	<0.05	<0.05	0.05	<0.05
Copper	0.05	0.04	0.02	0.04	0.02
Nickel	0.10	0.40	0.15	0.10	0.20
Silver	<0.01	<0.01	<0.01	<0.01	0.01
*Depth of Cased Hole (ft)	26.25	20.25	21.66	22.2	34.91
*Depth to Water (ft)	8.25	4.7	5.83	8.0	6.0

*On site measurements

Lance S. Grove, Laboratory Supvr. for CJR

C. John Ritzert, Manager-Technical Services

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.

Company: GAR Electroforming — Report Date: 11/6/86

Description: Halogenated Volatile Organics — PO#/Chg.#: Verbal, Slip #15077

Well #	1	2	3	4	5
Lab Reference #	22405	22406	22407	22408	22409
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Chloromethane	<5.0	<1.0	<1.0	<1.0	<2.0
Bromomethane	<5.0	<1.0	<1.0	<1.0	<2.0
Dichlorodifluoromethane	<5.0	<1.0	<1.0	<1.0	<2.0
Vinyl Chloride	<5.0	<1.0	<1.0	<1.0	<2.0
Chloroethane	<5.0	<1.0	<1.0	<1.0	<2.0
Methylene Chloride	<5.0	<1.0	<1.0	<1.0	<2.0
Trichlorofluoromethane	<5.0	<1.0	<1.0	<1.0	<2.0
1,1-Dichloroethylene	170	<1.0	<1.0	<1.0	24
1,1-Dichloroethane	195	<1.0	<1.0	<1.0	<2.0
Trans-1,2-Dichloroethylene	510	13	2.7	11	68
Chloroform	<5.0	<1.0	<1.0	<1.0	<2.0
1,2-Dichloroethane	1.0	1.0	<1.0	<1.0	<2.0
1,1,1-Trichloroethane	905	6.3	2.4	2.7	76
Carbon Tetrachloride	<5.0	<1.0	<1.0	<1.0	<2.0
Bromodichloromethane	<5.0	<1.0	<1.0	<1.0	<2.0
1,2-Dichloropropane	<5.0	<1.0	<1.0	<1.0	<2.0
Cis-1,3-Dichloropropene	<5.0	<1.0	<1.0	<1.0	<2.0
Trichloroethylene	595	77	30	66	415
Chlorodibromomethane	<5.0	<1.0	<1.0	<1.0	<2.0
1,1,2-Trichloroethane	<5.0	<1.0	<1.0	<1.0	<2.0
Trans-1,3-Dichloropropene	<5.0	<1.0	<1.0	<1.0	<2.0
2-Chloroethylvinyl Ether	<5.0	<1.0	<1.0	<1.0	<2.0
Bromoform	<25	<5.0	<5.0	<5.0	<10
1,1,2,2-Tetrachloroethane	*	*	*	*	*
Tetrachloroethylene	135	11	6.7	6.8	275
Chlorobenzene	<5.0	<1.0	<1.0	<1.0	<2.0
1,3-Dichlorobenzene	<5.0	<1.0	<1.0	<1.0	<2.0
1,2-Dichlorobenzene	<5.0	<1.0	<1.0	<1.0	<2.0
1,4-Dichlorobenzene	<5.0	<1.0	<1.0	<1.0	<2.0
Benzene	<5.0	<1.0	<1.0	<1.0	<2.0
Toluene	<5.0	<1.0	<1.0	<1.0	<2.0
Ethylbenzene	<5.0	<1.0	<1.0	<1.0	<2.0

*Due to the chemical similarity of Tetrachloroethylene and 1,1,2,2-Tetrachloroethane and the inherent limitations of gas chromatography methods, the separation of these two compounds is not always possible. Therefore, the concentration reported for Tetrachloroethylene represents that of <u>either</u> Tetrachloroethylene <u>or</u> 1,1,2,2-Tetrachloroethane <u>or</u> a combination of these two compounds.

Lana S. Ihoe, Laboratory Supv. for C.J.
C. John Ritzert, Manager-Technical Services

LANCY LABORATORIES
Division, Lancy International
525 W. New Castle St., P.O. Bo
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR ELECTROFORMING

Address P.O. BOX 340
AUGUSTA DRIVE, COMMERCE PARK
DANBURY, CT. 06813

Telephone # (203) 744-4300

Lab Ref # 22405

Well # ONE (1)
Well Location

Time 10:45 AM Date 7 OCT. '86

Reason Sampled ANALYSIS
Weather Conditions SUNNY, BREEZY, COOL

Sample Containers and Stabiliz

ID VOL. EB BC AA

Depth of Cased Hole:	26.25	ft.
Depth to Water:	8.25	ft.
Height of Water:	16.0	ft.
Well Diameter:	2 IN.	ft.
Volume of Water:	2.5	gal.

Field pH Measurement: 1. 6.8 2. 6.8 3. 6.8 4. 6.8
Specific Conductance: 1. 2. 3. 4.
COmments:

Temperature: 16° C
Sample Appearance: (Color, Turbid, etc.) TURBID

Sample Taken By: JOHN K. OLMSTEAD
Witness to Sampling: Frank Ray

For Laboratory Use Only

Date Received: 10/9/86 By Linda Slaughter

Condition of Sample: OK

Date Analyzed: 10/9 - 11/3/86 By Staff Authorized Signature L S Gross for C/M

CAUTION: Stabilizing reagents are corrosive and should be handled carefully.
If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International,
525 W. New Castle St., P.O. Box
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR ELECTROFORMING

Address Augusta Drive P.O. 340
Danbury CT 06810

Telephone # 203-744-4300

Lab Ref # 22406

Well # 2

Well Location

Time 12:30 Date 10-7-86

Reason Sampled Analysis

Weather Conditions CLEAR

Sample Containers and Stabilize

ID. UCL EB BC AN

Depth of Cased Hole:	20.25	ft.
Depth to Water:	4.7	ft.
Height of Water:	15.8	ft.
Well Diameter:	2"	ft.
Volume of Water:	2.5	gal.

Field pH Measurement: 1. 7.05 2. 7.05 3. 7.05 4. 7.05

Specific Conductance: 1. 2. 3. 4.

COmments:

Temperature: 14°C

Sample Appearance: (Color, Turbid, etc.) Turbid

Sample Taken By: JOHN R CIMSTEAD

Witness to Sampling: GUY A. ROSATO

For Laboratory Use Only

Date Received: 10/9/86 By [illegible]

Condition of Sample: OK

Date Analyzed: 10/9/86 - 11/3/86 By Staff Authorized Signature [illegible] for CJR

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

LANCY
LABORATORIES
Division, Lancy International, I
525 W. New Castle St., P.O. Box
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR ELECTROFORMING

Lab Ref # 22407

Address Augusta Dr PO BOX 340
Berkeley, Ct.

Well # 3.
Well Location

Telephone # 203 - 744 - 4300

Time 1:15 Date 10 7-86

Reason Sampled Analysis
Weather Conditions CLEAR

Sample Containers and Stabilizer
AA - BC - EB - VOI

Depth of Cased Hole: 21.66 ft.
Depth to Water: 5.83 ft.
Height of Water: 15.83 ft.
Well Diameter: 2" ft.
Volume of Water: 2.5 gal.

Field pH Measurement: 1. 7.60 2. 7.60 3. 7.60 4. 7.60
Specific Conductance: 1. 2. 3. 4.
COmments:

Temperature: 13° C
Sample Appearance: (Color, Turbid, etc.)

Sample Taken By: JOHN R CIMSTEAD
Witness to Sampling: GUY A. ROSATO
For Laboratory Use Only

Date Received: 10/9/86 By [illegible]

Condition of Sample: OK

Date Analyzed: 10/9-11/3/86 By Staff Authorized Signature [illegible] for GJR

CAUTION: Stabilizing reagents are corrosive and should be handled carefully.
If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International
525 W. New Castle St., P.O. Box
Zellenople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR ELECTROFORMING

Lab Ref # 22408

Address P.O. BOX 340
AUGUSTA DRIVE, COMMERCE PARK
DANBURY, CT. 06813

Well # 4
Well Location

Telephone # (203) 744-4300

Time 2:30 PM Date 7 OCT. 86

Reason Sampled ANALYSIS
Weather Conditions CLEAR

Sample Containers and Stabilize

ID VOL. BC AA EB

Depth of Cased Hole:	22.2	ft.
Depth to Water:	8.0	ft.
Height of Water:	14.2	ft.
Well Diameter:	2"	ft.
Volume of Water:	2.27	gal.

Field pH Measurement: 1. 7.1 2. 7.1 3. 7.1 4. 7.1
Specific Conductance: 1. 2. 3. 4.
COmments:

Temperature: 12°C
Sample Appearance: (Color, Turbid, etc.) TURBID

Sample Taken By: JOHN R GIMSTEAD
Witness to Sampling: Frank Ray

For Laboratory Use Only

Date Received: 10/9/86 By Linda Shenfelter

Condition of Sample: OK

Date Analyzed: 10/9 - 11/3/86 By Staff Authorized Signature [illegible] for CJR

CAUTION: Stabilizing reagents are corrosive and should be handled carefully.
If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International,
525 W. New Castle St., P.O. Box
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR ELECTROFORMING

Address Augusta Dr. PO Box 340
Danbury CT 06810

Telephone # 203-744-4320

Lab Ref # 22409

Well # 5.

Well Location

Time 2:00 Date 10-7-86

Reason Sampled Hydrolysis

Weather Conditions CLEAR

Depth of Cased Hole:	34.91	ft.
Depth to Water:	6.0	ft.
Height of Water:	28.91	ft.
Well Diameter:	2"	ft.
Volume of Water:	4.6	gal.

Sample Containers and Stabilizer

ID
vol.
EB
BC
AA

Field pH Measurement: 1. 7.02 2. 7.02 3. 7.02 4. 7.02

Specific Conductance: 1. 2. 3. 4.

COmments:

Temperature: 11°C

Sample Appearance: (Color, Turbid, etc.)

Sample Taken By: JOHN R CIMSTEAD

Witness to Sampling: G. ANTHONY ROSATO

For Laboratory Use Only

Date Received: 10/9/86 By [illegible]

Condition of Sample: OK

Date Analyzed: 10/9-11/3/86 By Staff Authorized Signature [illegible]

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX O

1985 GROUND WATER MONITORING ANALYSIS

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zellenople, Pennsylvania 16063

Report Date 6/14/85

GAR Electroforming
P. O. Box 340
Danbury, CT 06810

Collected 5/28/85 by JD
Received 6/3/85 by LS
Analyzed 6/3 - 6/12/85 by Staff
No. of Samples 5
P.O. # 20871, Slip #13927

Attention: George A. Ray

Groundwater Monitoring

Sample Lab Reference #	Well #1 12906 (mg/L)	Well #2 12909 (mg/L)	Well #3 12905 (mg/L)	Well #4 12908 (mg/L)	Well #5 12907 (mg/L)
Parameter					
pH (SU)	8.1	7.2	7.8	7.7	7.2
Organic Carbon, Total	4.7	12	7.1	7.5	3.5
Cyanide, Total	<0.01	<0.01	0.02	<0.01	0.02
Chromium, Hexavalent	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium, Total	0.05	0.20	0.15	0.15	0.05
Copper	0.04	0.71	1.2	0.59	0.08
Nickel	<0.05	2.5	0.60	0.20	<0.05
Silver	<0.01	0.01	0.02	0.01	0.02

C. John Ritzert, Manager-Technical Services

Form 9810-0983-2M

ANALYSIS REPORT

LANCY LABORATORIES
Division, Lancy International, Inc.

Company: GAR Electroforming
Report Date: 6/14/85
Description: Groundwater Monitoring-Volatile Organics
PO#/Chg.#: 20871, Slip #13927

Sample	Well #1	Well #2	Well #3	Well #4	Well #5
Lab Reference #	12906	12909	12905	12908	12907
Parameter	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Benzene	<2	<2	<2	<2	<2
Bromoform	<50	<10	<10	<10	<50
Carbon tetrachloride	<50	<10	<10	<10	<50
Chlorobenzene	<2	<2	<2	<2	<2
Chlorodibromomethane	<50	<10	<10	<10	<50
Chloroform	<10	<2	<2	<2	<10
Dichlorobromomethane	<25	<5	<5	<5	<25
1,1-Dichloroethane	150	8.4	<2	<2	<10
1,2-Dichloroethane	<10	<2	<2	<2	<10
1,1-Dichloroethylene	170	<5	<5	<5	49
1,2-Dichloropropane	<10	<2	<2	<2	<10
Ethylbenzene	<2	<2	<2	<2	<2
Methylene chloride	<25	<5	<5	<5	<25
Trans-1,3-Dichloropropylene	<25	<5	<5	<5	<25
Tetrachloroethylene	115	2.5	7.5	5.7	170
Toluene	4.6	3.0	1.5	2.1	4.0
1,2-trans-Dichloroethylene	680	19	16	25	180
1,1,1-Trichloroethane	920	52	6.1	5.7	110
1,1,2-Trichloroethane	<10	<2	<2	<2	<10
Trichloroethylene	1400	82	65	74	800

C. John Ritzert-Technical Services

Form 9824-0583-500

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

12905

Company GAR Electric

Lab Ref # B

Address

Well #

Well Location

Telephone #

Time Date

Reason Sampled

Weather Conditions

Sample Containers and Stabilizers

Depth of Cased Hole: ft.
Depth to Water: ft.
Height of Water: ft.
Well Diameter: ft.
Volume of Water: gal.

Field pH Measurement: 1. 7.90 2. 7.78 3. 7.77 4.
Temperature:
Sample Appearance: (Color, Turbid, etc.)

Sample Taken By:
Witness to Sampling:

Notes: 4.973 < 100

For Laboratory Use Only

Date Received: 5/31/85 By

Condition of Samples:

Date Analyzed: 6/3-6/12/85 By Staff Authorized Signature

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company NK Coal

Address

Telephone #

Lab Ref #

Well # 7

Well Location

Time 4:15 Date

Reason Sampled

Weather Conditions

Sample Containers and Stabilizers

Depth of Cased Hole: 14 ft.
Depth to Water: 5'10" ft.
Height of Water: ft.
Well Diameter: ft.
Volume of Water: gal.

Field pH Measurement: 1. 7.2 2. 3. 7.2 4. 7.4
Temperature:
Sample Appearance: (Color, Turbid, etc.)

Sample Taken By:
Witness to Sampling:

Notes:

For Laboratory Use Only

Date Received: 5/31/85 By Linda Shingleton

Condition of Samples:

Date Analyzed: 6/5 - 6/12/85 By Staff Authorized Signature

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company: [illegible]

Address:

Telephone #:

Lab Ref #: 4

Well #:

Well Location:

Time: 3.30 Date: 11/1/87

Reason Sampled: Rainy

Weather Conditions:

Sample Containers and Stabilizers

Depth of Cased Hole: ft. 20'.03
Depth to Water: ft. 6' 11.5"
Height of Water: ft.
Well Diameter: ft.
Volume of Water: gal.

Field pH Measurement: 1. 7.71 2. 7.67 3. 8.05 4. 3.30
Temperature: 8°C
Sample Appearance: (Color, Turbid, etc.) Cloudy Turbid

Sample Taken By:
Witness to Sampling:

Notes: 8.562 x 10 cond

For Laboratory Use Only

Date Received: 5/31/85 By [illegible]

Condition of Samples:

Date Analyzed: 6/3-6/12/85 By Staff Authorized Signature [illegible]

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W. New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company _____ Lab Ref # _____

Address _____ Well # _____
_____ Well Location _____
_____

Telephone # _____ Time _____ Date _____

Reason Sampled _____
Weather Conditions _____

Sample Containers and Stabilizers

Depth of Cased Hole: 9.5 ft.
Depth to Water: _____ ft.
Height of Water: _____ ft.
Well Diameter: _____ ft.
Volume of Water: _____ gal.

Field pH Measurement: 1. 7.31 2. 7.2 3. 7.20 4. _____
Temperature: _____
Sample Appearance: (Color, Turbid, etc.) _____
Sample Taken By: _____
Witness to Sampling: _____

Notes: _____

For Laboratory Use Only

Date Received: 5/31/85 By _____

Condition of Samples: _____

Date Analyzed: 6/3-6/12/85 By Staff Authorized Signature _____

CAUTION: Stabilizing reagents are corrosive and should be handled carefully.
If reagents come in contact with skin, flush with water.

LANCY LABORATORIES
Division, Lancy International, Inc.
525 W New Castle St., P.O. Box 490
Zelienople, Pennsylvania 16063

SAMPLE INFORMATION SHEET
Ground Water Monitoring

Company GAR Electroph.

Address

Telephone #

Lab Ref #

Well # 1

Well Location

Time 14:45 Date 05/28

Reason Sampled

Weather Conditions Rain

Sample Containers and Stabilizers

Depth of Cased Hole: 25.0 ft.
Depth to Water: 7.9 ft.
Height of Water: ft.
Well Diameter: ft.
Volume of Water: gal.

Field pH Measurement: 1. 8.37 2. 8.20 3. 8.10 4. 7.96
Temperature: 10°C
Sample Appearance: (Color, Turbid, etc.) Brown Turbid

Sample Taken By: T. Toskos
Witness to Sampling:

Notes: 6.423 X 100 cond

For Laboratory Use Only

Date Received: 5/31/85 By [illegible]

Condition of Samples:

Date Analyzed: 6/3 6/12/85 By Staff Authorized Signature [illegible]

CAUTION: Stabilizing reagents are corrosive and should be handled carefully. If reagents come in contact with skin, flush with water.

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX P

CERTIFICATION OF CLOSURE

GAR ELECTROFORMING DIVISION
Electroformers, Inc.
P.O. Box 340
Danbury, Connecticut 06813
Tel. (203) 744-4300

CERTIFIED MAIL
RETURN RECEIPT

July 22, 1988

Mr. Stephen W. Hitchcock, Director
Hazardous Materials Management Unit
Department of Environmental Protection
State of Connecticut
165 Capitol Avenue
Hartford, Connecticut 06106

Dear Mr. Hitchcock: Re: Closure Certification for Electroforming Sludge Lagoons CTD064834914

Closure of our lagoons was completed June 9, 1988. This was done in accordance with the Closure Plan prepared by Lancy Environmental Services Company, Division of Lancy International, Inc.

The Plan dated August 1987, amended September 1987, was approved by Connecticut Department of Environmental Protection's letter of September 29, 1987, signed by Stephen W. Hitchcock, Connecticut DEP, and Merrill S. Hohman, USEPA.

The following documents are enclosed showing that this closure has been made in accordance with the approved plans:

1. Owner certification signed by George A. Ray, President, GAR Electroforming Division, Electroformers Inc., dated July 18, 1988.

2. Connecticut Professional Engineer Certification of Closure signed July 18, 1988, by Jeffrey S. Holmes, Connecticut Professional Engineering License No. 15046.

3. Plat plan and certification letter showing that plat plan was filed with the City of Danbury for recording with deed are enclosed herewith.

A letter from you acknowledging that this lagoon closure has been completed in accordance with the approved plans would be appreciated.

Sincerely yours,

George A. Ray
President

GAR:dr

Enclosures

cc: Ms. Rhona Julien, USEPA (with enclosures)
Mr. Merrill S. Hohman, USEPA

bcc: Mr. Jeffrey S. Holmes, Lancy Environmental Services Co.

OWNER CERTIFICATION OF CLOSURE

I, George A. Ray, President, of

(Owner or Operator)

GAR Electroforming Division, Electroformers Inc.
Augusta Drive, Danbury, Connecticut, hereby

(Name and Address of Facility)

state and certify that, to the best of my knowledge and belief, the Electroforming Sludge Lagoons at the above named facility have been closed in accordance with Connecticut Hazardous Waste Management Regulations, Title 22a, Chapter 449, Federal Regulations 40 CFR 265.111, et. seq., the facility's closure plan dated August 1987, amended September 1987, and the Connecticut Department of Environmental Protection (CTDEP) written approval letter of September 29, 1987, signed by Stephen W. Hitchcock, Director of the Hazardous Materials Management Unit for CTDEP and Merrill S. Hohman, Director of the Waste Management Division, USEPA Region I. Closure was completed on the 9th day of June, 1988.

Signature

July 18, 1988

Date

PROFESSIONAL ENGINEER CERTIFICATION OF CLOSURE

I, Jeffrey Scott Holmes, a registered professional engineer, hereby certify, to the best of my knowledge and belief, that I was present and witnessed closure activities associated with the Electroforming Sludge Lagoons at GAR Electroforming, Inc., Danbury, Connecticut, during backfilling and compaction, cap placement, and re-vegetation. Closure of the Electroforming Sludge Lagoons has been performed in accordance with Connecticut Hazardous Waste Management Regulations, Title 22a, Chapter 449(c)-29, Federal Regulations 40 CFR 265.111 et. seq., the facility's closure plan dated August 1987, amended September 1987, and the Connecticut Department of Environmental Protection (CTDEP) written approval letter dated September 29, 1987, signed by Stephen W. Hitchcock, Director of the Hazardous Materials Management Unit for CTDEP and Merrill S. Hohman, Director of the Waste Management Division, USEPA Region I. Closure activities were completed on June 9, 1988.

Jeffrey Scott Holmes — July 18, 1988

Signature — Date

15046 — Connecticut

Professional Engineering License Number — For State of

Lancy Environmental Services Company
181 Thorn Hill Road
Warrendale, Pennsylvania 15086
Telephone Number: 412/772-1260

STATE OF CONNECTICUT
JEFFREY SCOTT HOLMES
15046
REGISTERED
PROFESSIONAL ENGINEER

GAR ELECTROFORMING DIVISION
Electroformers, Inc.
P.O. Box 340
Danbury, Connecticut 06813
Tel. (203) 744-4300

OWNER CERTIFICATION THAT SURVEY PLAT
HAS BEEN RECORDED. REFERENCE FED.REG. 265.119

This certifies that I have complied with Fed. Reg. paragraph (b)(1) of Section 265.119. This mylar plat plan was filed with the Town Clerk, City of Danbury, Connecticut, July 22, 1988.

George A. Ray
President

This information received.

CITY OF DANBURY

By Ronnie D. Silva Cert

Date July 22 1988

RECEIVED AND FILED

JUL 22 1988
At 1:30 PM o'clock M. No. 8944
TOWN CLERK'S OFFICE
DANBURY, CT

Town Clerk

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX Q

SITE INSPECTION LOG SHEET

LAGOON POST CLOSURE CARE SITE INSPECTION

The following areas will be evaluated twelve (12) times per year. GATE and LOCK, WARNING SIGN, LOGOON COVER AREAS, GROUND WATER MONITORING WELL CONDITION, BENCH MARK INTEGRITY, GENERAL SITE CONDITION per pages forty five (45) and forty six (46) of Lancy Closure Plan of August,1987.

	1989	1990	1991	1992	1993	1994	1995	1996	1997
Jan.	OK F.RAY 1-3-89	O.K. F Ray 1-2-90	OK F Ray 1-2-91						
FEB.	✓ FINE 6 FEB '89	OK 2-5-90	2-4-91						
MARCH	✓ OK 6 MAR '89	3-90	3-4-91						
APRIL	✓ OK 3 APR 89	4-2-90	O.K F Ray 4-22-91						
MAY	OK FR MAY 1, 1989	OK FR. May 9, 1990	OK F. Ray 5-1-91						
JUNE	OK F.R June 6, 1989	OK June 6, 1990	OK F Ray 6-3-91						
JULY	OK F Ray July 5, 1989	OK July 2, 1990	OK F Ray 7-1-91						
AUG.	OK F Ray AUG 7, 1989	✓ OK 2 AUG 90	OK F Ray 8-5-91						
SEPT.	OK FRAY SEPT. 5 1989	OK F Ray Sept 17 '90	OK F. Ray 9-3-91						
OCT.	OK F. Ray Oct 2, 1989	OK F Ray Oct 1, 1990	OK F. RAY OCT 3, 1991						
NOV.	OK F. Ray NOV. 1, 1989	OK F.RAY NOV 5, 1990							
DEC.	OK F Ray Dec 6, 1989	OK F Ray Dec 5, 1990							

COMMENTS:

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX R

POST-CLOSURE FINANCIAL ASSURANCE

- o IRREVOCABLE STANDBY LETTER OF CREDIT
- o TRUST AGREEMENT

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Trust Agreement

Trust agreement, the "Agreement," entered into as of

November 10, 1988
(date)

by and between GAR Electroforming Division
Electroformers Inc.
(name of the owner or operator)

a Connecticut corporation
"(Name of State) (insert "corporation," "partnership," "association," or "proprietorship")

the "Grantor," and The North American Bank & Trust Company
(name of corporate trustee)

(insert "incorporated in the State of Connecticut"
or "a national bank")

the "Trustee."

Whereas, the Connecticut Department of Environmental Protection an agency of the State of Connecticut has established certain regulations applicable to the Grantor, requiring that an owner or operator of a hazardous waste management facility shall provide assurance that funds will be available when needed for closure and/or post-closure care of the facility.

Whereas, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facilities identified herein,

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this Agreement, and the Trustee is willing to act as trustee,

Now, Therefore, the Grantor and the Trustee agree as follows:

SECTION 1. Definitions. As used in this Agreement:

(a) The term "Grantor" means the owner or operator who enters into this agreement and any successors or assigns of the Grantor.

(b) The term "Trustee" means the Trustee who enters into this Agreement and any successor trustee.

SECTION 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the facilities and cost estimates identified on attached Schedule A (on Schedule A, for each facility list the EPA Identification Number, name, address, and the current closure and/or post-closure cost estimates, or portions thereof, for which financial assurance is demonstrated by this Agreement).

SECTION 3. Establishment of Fund. The Grantor and the Trustee hereby establish a Trust Fund, the "Fund", for the benefit of the Department of Environmental Protection. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the Department of Environmental Protection.

SECTION 4. Payment for Closure and Post-Closure Care. The Trustee shall make payments from the Fund as the Commissioner of Environmental Protection shall direct, in writing, to provide for the payment of the costs of closure and/or post-closure care of the facilities covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the Commissioner of Environmental Protection from the Fund for closure and post-closure expenditures in such amounts as the Commissioner of Environmental Protection shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the Commissioner of Environmental Protection specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

SECTION 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

SECTION 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this SECTION. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the Trust Fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 USC 80a-2(a) shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and

(iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

SECTION 7. Commingling and Investment. The Trustee is expressly authorize in its discretion.

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled or collective Trust Fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 USC 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the

Trustee. The Trustee may vote such shares in its discretion.

SECTION 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depositary even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depositary with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the federal or state government; and

(e) To compromise or otherwise adjust all claims in favor of or against the fund.

SECTION 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with

the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

SECTION 10. Annual Valuation. The Trustee shall annually, at least thirty (30) days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the Commissioner of Environmental Protection a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than sixty (60) days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within ninety (90) days after the statement has been furnished to the Grantor and the Commissioner of Environmental Protection shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

SECTION 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee will be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

SECTION 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

SECTION 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the Trust in a writing sent to the Grantor, the Commissioner of Environmental Protection and the present Trustee by certified mail ten (10) days before such change becomes

effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

SECTION 14. Instructions to the Trustee. All orders, requests and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests and instructions. All orders, requests, and instructions by the Commissioner of Environmental Protection to the Trustee shall be in writing, signed by the Commissioner of Environmental Protection or his/her Designee and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or the Department of Environmental Protection hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or the Department of Environmental Protection except as provided for herein.

SECTION 15. Notice of Nonpayment. The Trustee shall notify the Grantor and the Commissioner of Environmental Protection by certified mail within ten (10) days following the expiration of the thirty (30) day period after the anniversary of the establishment of the Trust, if no payment is received from the Grantor during that period. After the pay-in period is completed, the Trustee shall not be required to send a notice of nonpayment.

SECTION 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the Commissioner of Environmental Protection or by the Trustee and Commissioner of Environmental Protection if the Grantor ceases to exist.

SECTION 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in SECTION 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the Commissioner of Environmental Protection, or by the Trustee and the Commissioner of Environmental Protection if the Grantor ceases to exist. Upon

termination of the Trust, all remaining Trust property, less final trust administration expenses, shall be delivered to the Grantor.

SECTION 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the Commissioner of Environmental Protection issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

SECTION 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the STATE OF CONNECTICUT.

SECTION 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of the Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this Agreement is identical to the wording as specified in 40 CFR Part 264.151(a)(1) as such regulation was constituted on the date first above written.

By

George A. Ray
(Signature of Grantor)

President
(Title)

Attest:

Doris E. Ray

Doris E. Ray

(Signature)

Vice President and Treasurer

(Title)

(Seal)

By NORTH AMERICAN BANK AND TRUST COMPANY
WALDO W. ROBISON

(Signature of Trustee)

VICE PRESIDENT

(Title)

Attest:

MARGOT J. MELAAS

Margot J. Melaas

(Signature)

ASSISTANT TREASURER

(Title)

(Seal)

CERTIFICATION OF ACKNOWLEDGEMENT

STATE OF CONNECTICUT

County of New Haven

(insert name of county)

On this 10th day of November 1988

(date)

before me personally came George A. Ray

(owner or operator)

to me known, who, being by me duly sworn, did depose and say that she/he

resides at Artillery Road
Middlebury, Connecticut

(address)

that she/he is President

(title)

of GAR Electroforming Division
Electroformers Inc.

(corporation)

the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation; and that she/he signed her/his name thereto by like order.

(Signature of Notary Public)

Mar 30 1990

(Date Notary Public Commission Expires)

(Seal of Notary Public)

TRUST FUND SCHEDULE A

CTD064834914

(EPA Identification Number)

GAR Electroforming Division
Electroformers Inc.

(Facility Name)

Augusta Drive, Commerce Park

(Street Name)

Danbury, Connecticut 06810

(City, State, Zip)

Not applicable

(Closure Cost Estimate)

$73,240.00

(Post-Closure Cost Estimate)

12914

TRUST FUND SCHEDULE B

The Fund consists of $ 73,240.00.

TRUST FUND EXHIBIT A

The following is a list of all persons who are authorized by the Grantor to give orders, requests, and instructions to the Trustee:

George A. Ray

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IRREVOCABLE STANDBY LETTER OF CREDIT

Commissioner

Environmental Protection

State Office Building

165 Capitol Avenue

Hartford, Connecticut 06106

Dear Commissioner:

We hereby establish our Irrevocable Standby Letter of Credit No.

800310

in your favor, at the request and for the account of

GAR Electroforming Division
Electroformers Inc.
Augusta Drive, Commerce Park
Danbury, Connecticut 06810

(owner's or operator's name and address)

up to the aggregate amount of

Seventy-three Thousand Two Hundred Forty U.S. dollars,
and no/100- - - - - - - - - - - - - - - - - -

(in words)

$ 73,240.00 , available upon presentation of:

(in numbers)

(1) Your sight draft, bearing reference to this Letter of Credit No. 800310, and

(2) Your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to the regulations issued under the authority of the Resource Conservation and Recovery Act of 1976 as amended.

This Letter of Credit is effective as of NOVEMBER 10, 1988
(date)

and shall expire on NOVEMBER 10, 1989,
(date at least one (1) year later)

but such expiration date shall be automatically extended for a period of ONE YEAR, on NOVEMBER 10, 1989
(insert period of at least "one (1) year) (date)

and on each successive expiration date, unless, at least 120 days before the expiration date, we notify both you and GAR Electroforming Division Electroformers Inc.
(owner's or operator's name)

by certified mail that we have decided not to extend this Letter of Credit beyond the current expiration date. In the event you are so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both you and GAR Electroforming Division Electroformers Inc.,
(owner's or operator's name)

as shown on the signed return receipts.

Whenever this Letter of Credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation

to us, and we shall deposit the amount of the draft directly into the standby trust fund of GAR Electroforming Division
Electroformers Inc.

(owner's or operator's name)

in accordance with your instructions.

We certify that the wording of this Letter of Credit is identical to the wording specified in 40 CFR 264.151(d) as such regulations were constituted on the date shown immediately below.

(Signature(s) of NORTH AMERICAN BANK AND TRUST COMPANY
WALDO W. ROBISON

(Title(s) of official of issuing institution) VICE PRESIDENT

NOVEMBER 10, 1988

(Date)

This credit is subject to

UNIFORM COMMERCIAL CODE

(insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce," or the "Uniform Commercial Code")

(NOTE: Enclose standby trust agreement)

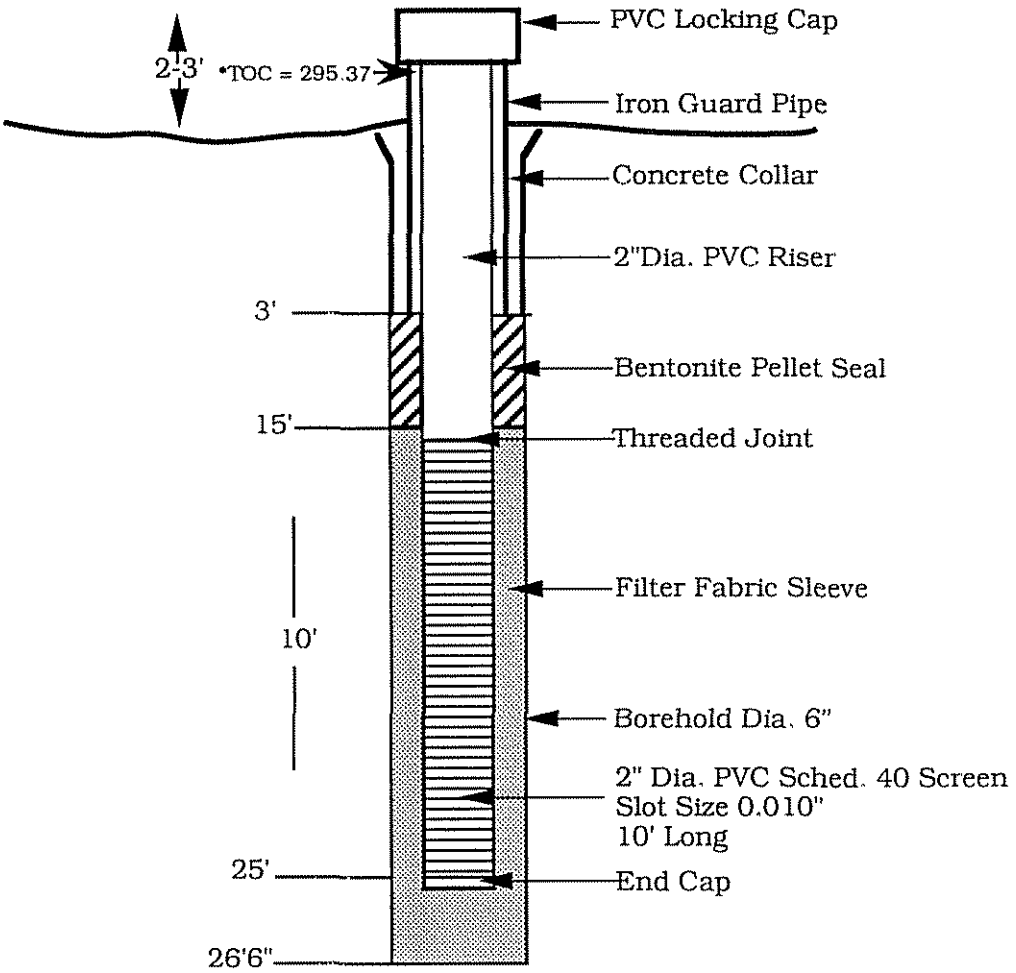
GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX S

MONITORING WELLS CONSTRUCTION DETAILS

MONITORING WELL CONSTRUCTION

DETAILS FOR WELL # 1



*Surveyed Elevations 9/20/90

NOT TO SCALE

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CLIENT GAR ELECTROFORMING				
DRAWN	DATE	PROJECT NO.	DRAWING NO.	REV.
HJ/HM	7/91	100627.508		1

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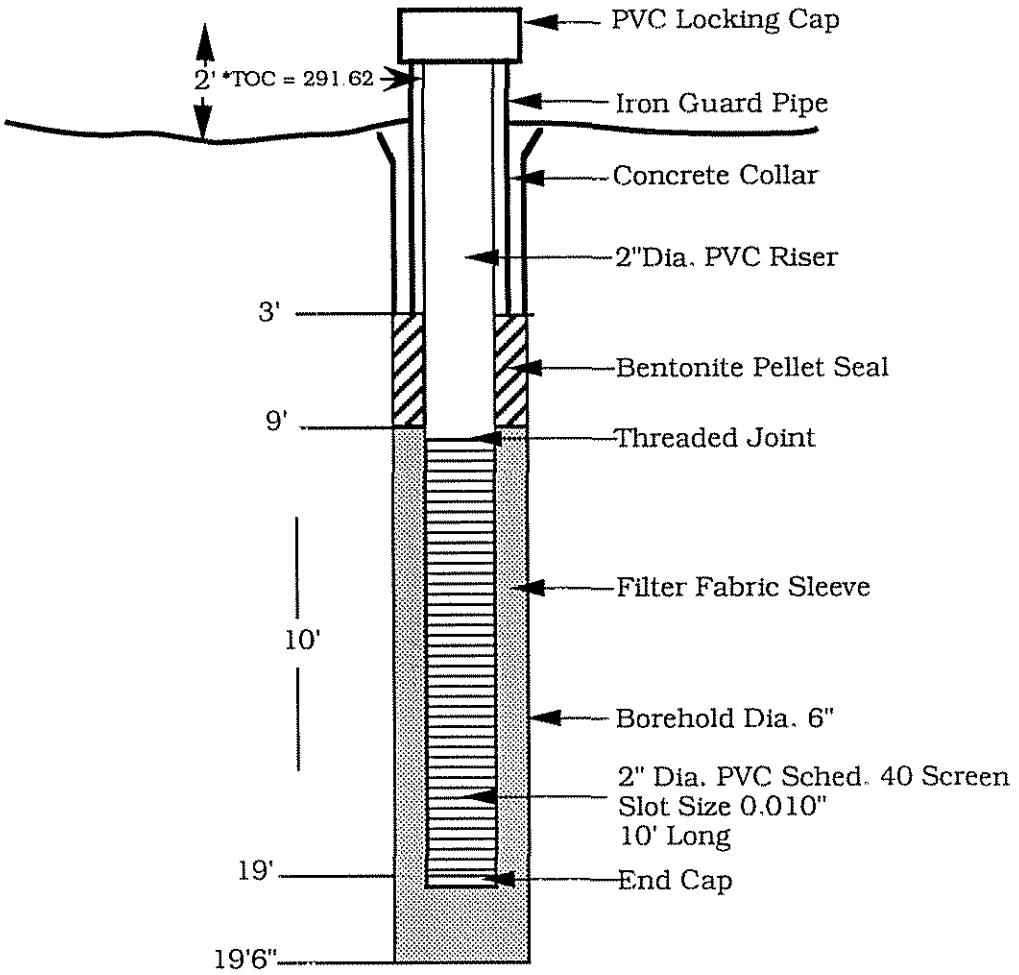
DETAILS FOR WELL # 2



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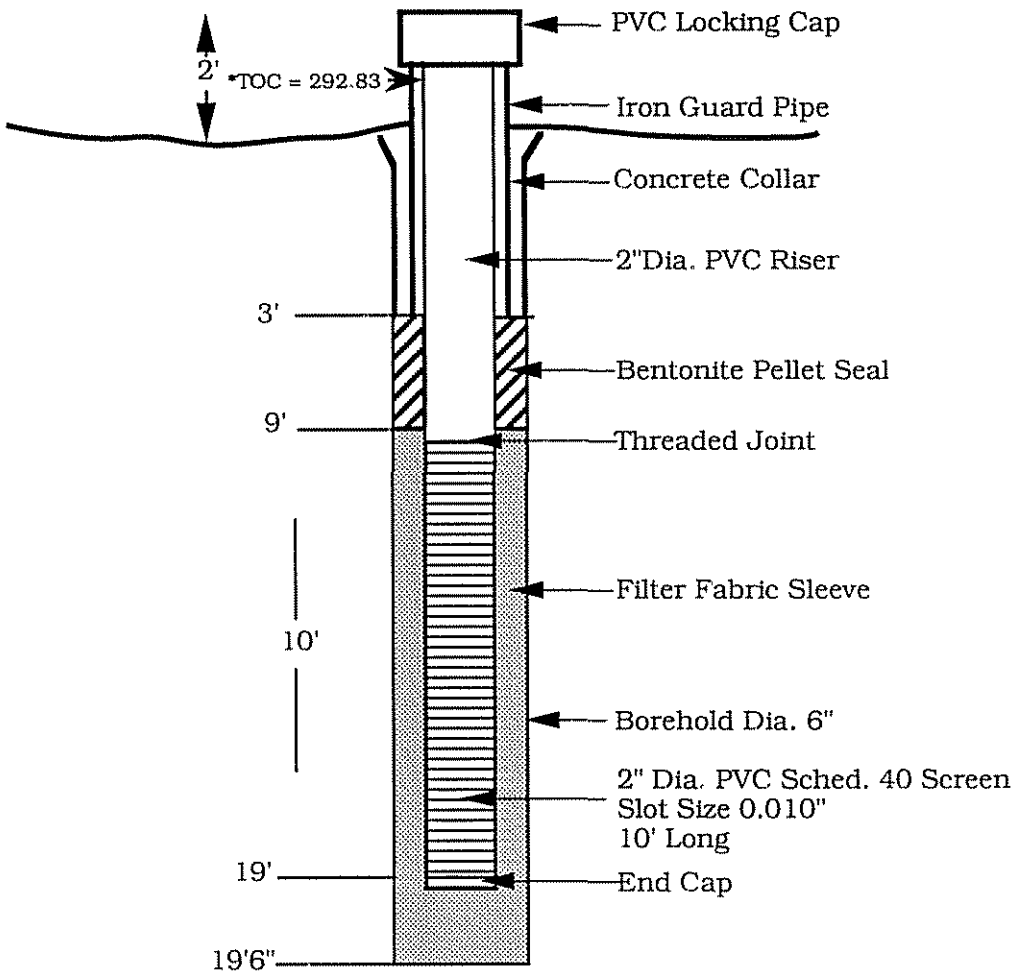
DETAILS FOR WELL # 3



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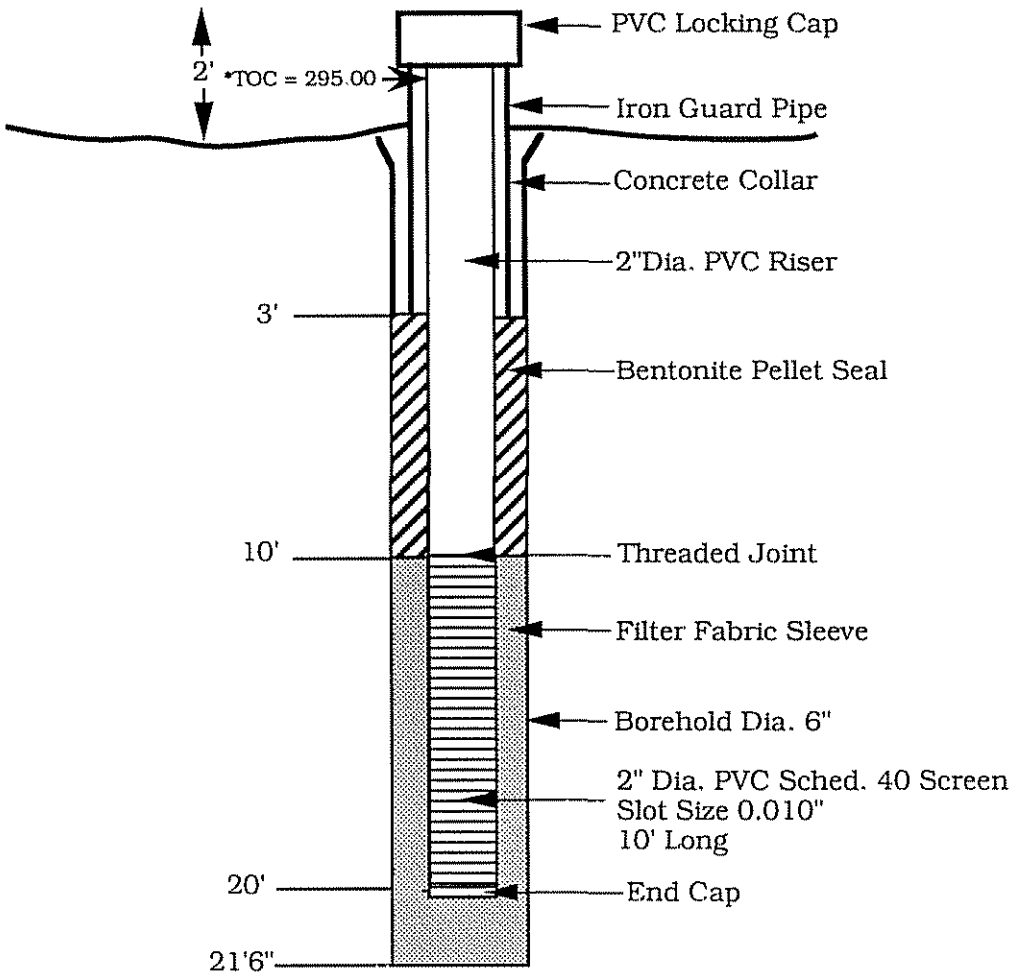
DETAILS FOR WELL # 4



*Surveyed Elevation 9/20/90

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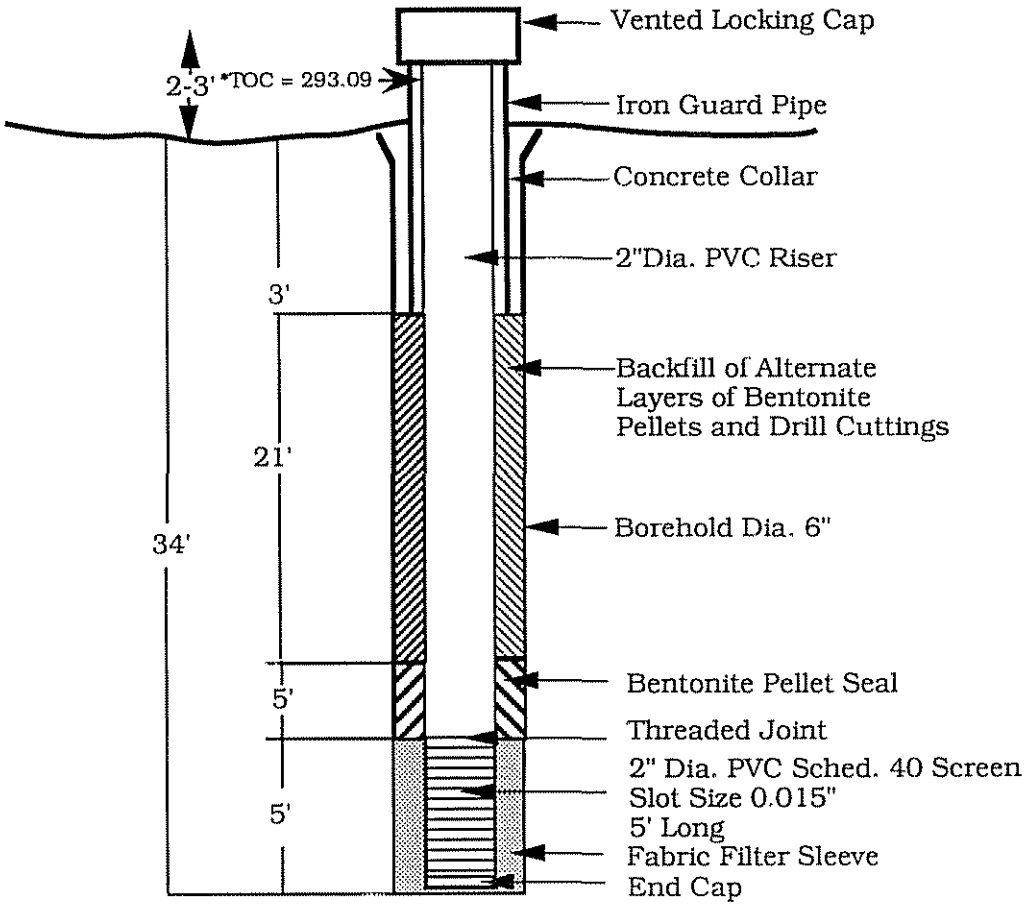
MONITORING WELL CONSTRUCTION

DETAILS FOR WELL # 5



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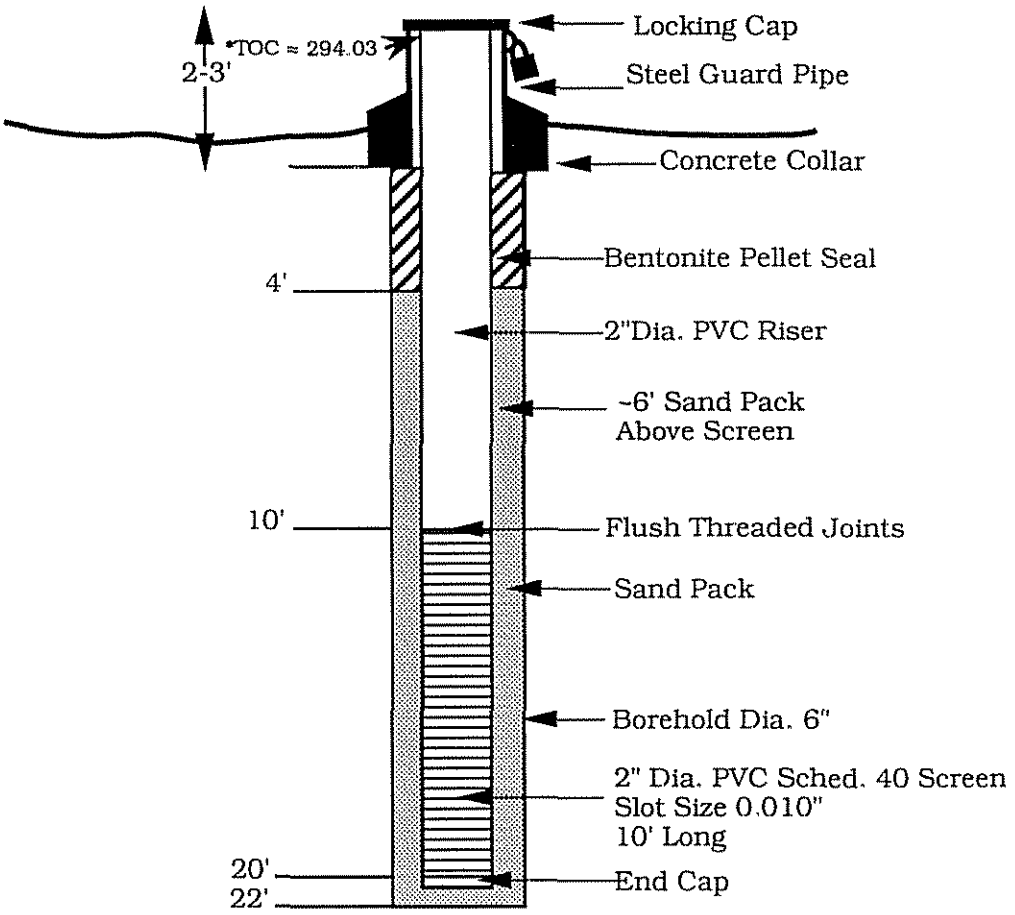
DETAILS FOR WELL # 6



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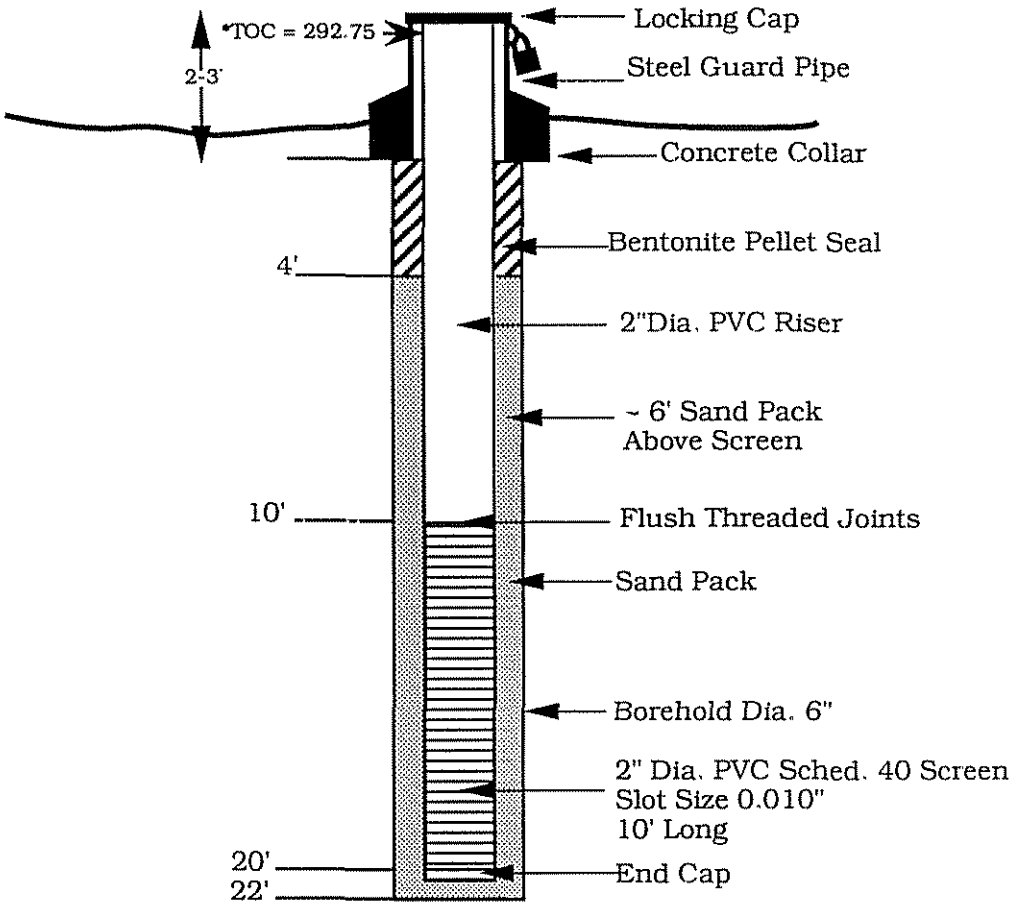
DETAILS FOR WELL # 7



*Surveyed Elevation 9/20/90

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HJ/HM	10/91	100627.508		1

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THE ASSURANCE OF QUALITY

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX T

HAZARDOUS MATERIALS TRAINING MANUAL

HAZARDOUS MATERIALS TRAINING MANUAL

GAR Electroforming Division
Danbury, Connecticut

April, 1986

Prepared by
LANCY LABORATORIES DIVISION
Lancy International, Inc.
Project #4977

LANCY LABORATORIES DIVISION
LANCY INTERNATIONAL, INC.
An Alcoa Separations Technology Company

The Hazardous Materials Training Manual contained within has been prepared for GAR Electroforming Division by Lancy Laboratories, a Division of Lancy International, Inc. under Project No. 004977. This training program updates all previous employee training activities and has been prepared and submitted in accordance with the Connecticut Hazardous Waste Management Regulations, Title 25, Chapter 54-cc(c).

F. Ray Reviewed May 12, 1987
F. Ray " May 31, 1988
F. Ray Reviewed May 30, 1989 with all employees with PP+C plan.
F Ray Reviewed May 30, 1990 with all employees at Safety Meeting.
F Ray Reviewed May 29, 1991 with all Employees at Safety meeting. & the Preparedness, Prevention + Contingency Plan (PP+C)

April, 1986

GAR ELECTROFORMING DIVISION
HAZARDOUS MATERIALS
TRAINING MANUAL

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9. Spill and Leak Prevention and Response
10. List of Emergency Coordinators
11. List of Agencies to be Notified
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1.0 INTRODUCTION

The Resource Conservation and Recovery Act (RCRA) is a federal law aimed at solving the nation's solid waste disposal problems, particularly hazardous waste disposal problems. To accomplish this goal, the United States Environmental Protection Agency (EPA) was given the responsibility of regulating all aspects of the management of hazardous wastes from the time of generation to the time of disposal. Regulations promulgated by EPA, and by the Connecticut Department of Environmental Protection (CTDEP) under an EPA approved program, require that generators of hazardous waste and owners or operators of hazardous waste management facilities train their employees to respond to emergencies involving hazardous materials. As a preventive measure, the training must also include instruction in the proper procedures for routine handling of hazardous materials. GAR Electroforming Division, located in Danbury, Connecticut is currently classified as a generator of hazardous waste and is, therefore, required by law to provide such training to employees whose jobs involve contact with hazardous materials.

The purpose of such training is to minimize and/or abate hazards to human health and the environment resulting from accidents or mismanagement of hazardous materials. The training program helps to ensure that employees will be able to respond in a coordinated and effective manner during an emergency. This training manual has been prepared as the basis of GAR's training program for their employees.

3.0 HAZARDOUS MATERIALS AT GAR ELECTROFORMING

In the electroforming of metal parts, GAR generates two (2) types of wastes which are regulated by the hazardous waste management regulations: wastewater treatment sludge and spent solvents. Summary information on these wastes, including source of generation, EPA Hazardous Waste Number, DOT Shipping Number, and basis for hazard designation is given below.

Wastewater Treatment Sludge

Source: This waste is produced from the treatment of metal finishing wastes, specifically, the treatment of cyanide and non-cyanide bearing wastes from copper-nickel, and chromium plating solutions. This waste is listed by the USEPA and Connecticut DEP as wastewater treatment sludge from electroplating operations.

EPA Hazardous Waste Number: F006

DOT Shipping Number: NA9189

Hazard Code: Toxic (T)

Constituents for which F006 wastes are listed: cadmium, chromium, (hexavalent), cyanide (complexed), nickel.

Spent Trichloroethylene

Source: Trichloroethylene is utilized in cleaning and degreasing operations at the GAR facility: spent solutions are collected in 55 gallon drums, labeled and handled as a hazardous waste. This waste is listed by USEPA and Connecticut DEP as a spent halogenated solvent.

EPA Hazardous Waste Number: F001

DOT Shipping Number: Acetone - UN2831

Hazard Code: Toxic (T)

ATTACHMENT 10

LIST OF EMERGENCY COORDINATORS

LIST OF EMERGENCY COORDINATORS/CHAIN OF COMMAND

The following individuals have been designated as Primary Spill Coordinator, Primary Alternate Coordinators and Secondary Alternate Coordinators. In the event of an emergency or spill, they will have primary responsibility of implementing the PPC Plan. If such an event occurs, these individuals should be contacted in the order listed below.

Compliance and Safety Officer:

Mr. Frank E. Ray
Phone No. 203/744-4300 (work)
203/677-2287 (home)

Primary Emergency Coordinator:

Mr. Russell A. Richter
General Manager
Phone No. 203/744-4300 (work)
203/791-0392 (home)

Primary Alternate Coordinators:

Mr. Arthur S. Travis
Manager - Administration
Phone No. 203/744-4300 (work)
203/744-4047 (home)

Mr. Guy A. Rosato
Quality Control Engineer
Phone No. 203/744-4300 (work)
203/350-1001 (home)

Mr. Paul L. Strout
Plant Engineer
Phone No. 203/744-4300 (work)
203/792-3034 (home)

Secondary Alternate Coordinators:

Mr. David A. Strout - 203/794-9038
Mr. George A. Ray - 203/758-9843

* * * * * * *

ADT - 1-800-344-3467

Fire Department - Emergency 911 - Routine 796-1550

Police Department - Emergency 911 - Routine 797-4614

Connecticut DEP Oils and Chemical Spills Section - 1-566-3338

National Response Center - 1-800-424-8802

Civil Preparedness Department - 743-6343

Corporate Health Care Priority Care - 797-7200

Ambulance - 797-4616

POTW - 797-4635; 797-4637; 797-4615 (between 4:00 P.M. and 7:00 A.M.)

ATTACHMENT 11

List of Agencies to be Notified

Revised
5/29/91

LIST OF AGENCIES TO BE NOTIFIED

In the event of an emergency or spill, the following local, state and federal agencies will be notified as deemed appropriate. In the event of a major spill, at a minimum, the National Response Center and the Connecticut Department of Environmental Protection should be notified.

- Danbury Fire Department
  203/797-4616
- Civil Preparedness Department
  203/743-6343
- Danbury Police Department
  203/797-4611
- Connecticut State Police
  203/566-4240
- Health Department
  203/797-4625
- Connecticut Department of Environmental Protection
  Hazardous Waste Management Section
  203/566-5712
  Oil and Chemical Spill Division
  203/566-3338
- United States Environmental Protection Agency - Region I
  617/573-9653
- National Response Center
  800/424-8802
- Connecticut Poison Information Center
  203/674-3456
- Public Owned Treatment Works
  203/797-4635; 203/797-4637
  203/797-4615 (Between 4:00 P.M. and 7:00 A.M.)

ATTACHMENT 12

EMERGENCY EQUIPMENT

Room

Room
Shop

end

GAR ELECTROFORMING
DANBURY, CONNECTICUT

APPENDIX U

PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLAN

PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLAN

GAR Electroforming Division
Danbury, Connecticut

April, 1986

Prepared by
LANCY LABORATORIES DIVISION
Lancy International, Inc.
Project #4977

LANCY LABORATORIES DIVISION
LANCY INTERNATIONAL, INC.
An Alcoa Separations Technology Company

This Preparedness, Prevention, and Contingency (PPC) Plan has been prepared for GAR Electroforming Division by Lancy Laboratories, a Division of Lancy International, Inc., under Project No. 004977. The PPC Plan has been prepared and submitted in accordance with the Connecticut Hazardous Waste Management Regulations, Title 25, Chapter 54.

April, 1986

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INTRODUCTION

This Preparedness, Prevention, and Contingency (PPC) Plan was prepared in compliance with the Connecticut Hazardous Waste Management Regulations [Title 25, Chapter 54cc(c)].

The purpose of the Plan is to minimize and abate hazards to human health and the environment from spills, fire, explosion, emission or discharge of polluting materials to air, soil, surface water, or groundwater. The Plan contains preventive action and emergency response procedures to be followed in the event of such an emergency. Employees shall be given training in all aspects of the PPC Plan so that these procedures are carried out in an effective and coordinated manner. In addition, the Plan must be reviewed with local emergency response agencies to familiarize them with the facility and its operations, and updated on a routine basis.

1.0 GENERAL DESCRIPTION OF INDUSTRIAL ACTIVITY

1.1 Manufacturing Operations

GAR Electroforming Division, located in Danbury, Connecticut has operated at its present site since 1963. GAR's business is the manufacturing of high precision metal parts which are produced by electroforming on a mandrel to create a desired shape and surface finish. Electroforming at the facility, illustrated in Figure 1, involves the following processes:

- Sulfamate Nickel Plating
- Cyanide Copper Plating
- Pyrophosphate Copper Plating
- Acid Copper Plating

In addition, trace amounts of metal wastes are generated from chromium plating solutions, nickel chloride plating solutions, silver conductive coatings, and the caustic dissolution of aluminum mandrels.

All non-cyanide bearing wastes are collected and batch treated for hexavalent chromium, then neutralized. Cyanide bearing wastes are collected in a separate tank, where sodium hypochlorite is added at an elevated pH to destroy the cyanide. These two treated waste streams are then combined in a sludge thickening tank, and the supernatant water is discharged to the sanitary sewer under permit from the local sanitary sewage authority. Accumulated sludge is discharged to a temporary holding tank. This tank is emptied on a frequency of 90 days or less by a licensed transport and disposal firm.

Prior to October 28, 1985, the resultant sludge was discharged to one of two sludge beds located on the property. These sludge beds were used for the final dewatering and storage of the sludge. However, these beds have been inactive since October 28, 1985 and will be closed under a plan already approved by CTDEP. Closure of the sludge beds is scheduled for the spring of 1986.

1.2 Regulatory Status

- Wastes Generated

  As a result of GAR's manufacturing and waste treatment activities, the following hazardous wastes are generated:

  - wastewater treatment sludge from electroplating operations (EPA Hazardous Waste No. F006)
  - waste trichloroethylene (EPA Hazardous Waste No. F001)

- Sludge Beds

  As discussed in Section 1.1, the treated sludge from electroforming operations was discharged to two sludge beds prior to October, 1985. These sludge beds are considered hazardous waste storage units, thereby classifying GAR as a hazardous waste storage facility as well as a hazardous waste generator. Upon completion of the sludge bed closure in mid-1986, GAR will no longer be a hazardous waste storage facility and need only submit to generator regulations.

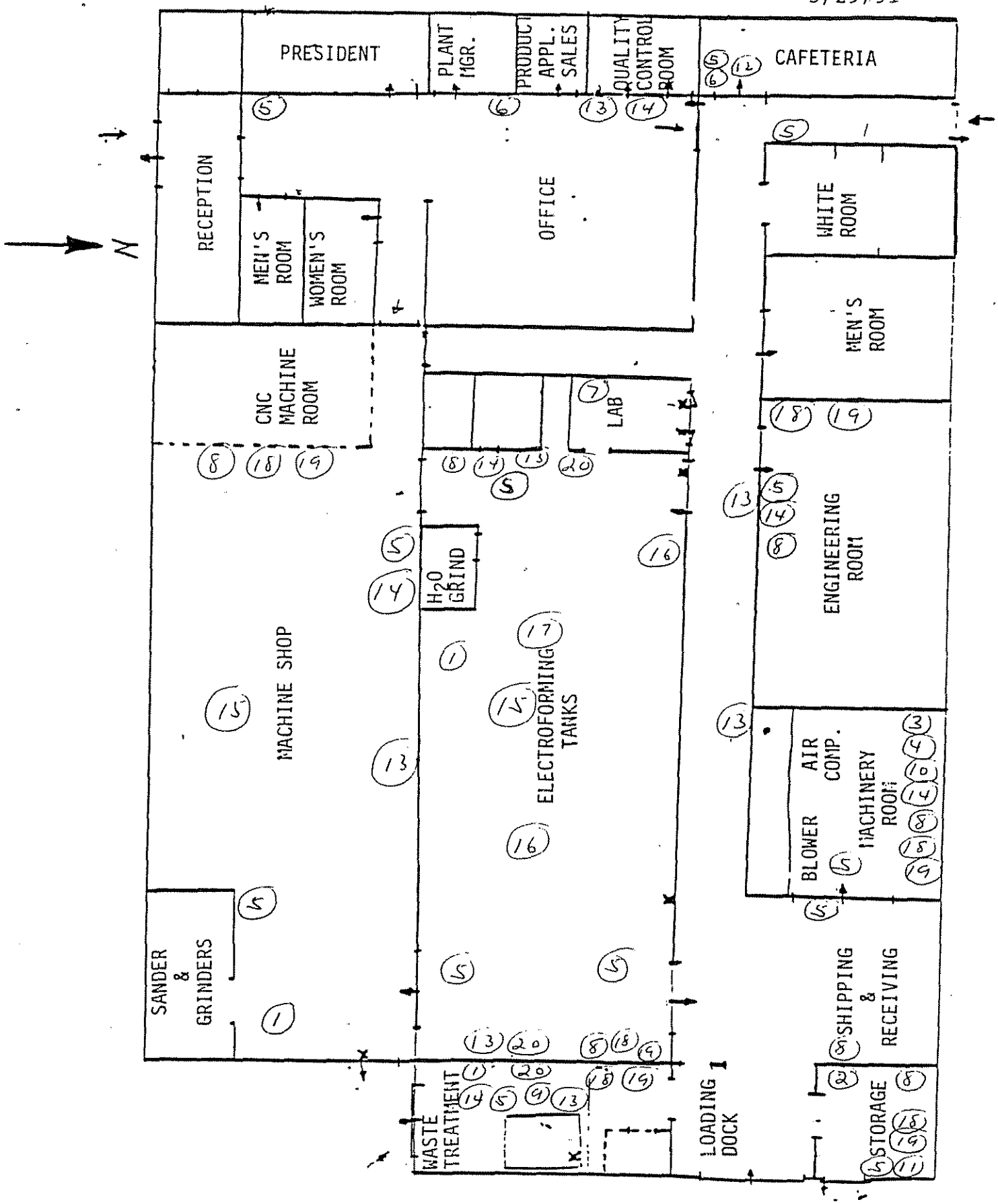
- Waste Treatment System

  Although GAR utilizes a waste treatment system for treatment of metal finishing wastes, it is excluded from federal and state hazardous waste regulations. This is because it is covered by what is generically referred to as Permits by Rule.

  As a result, according to federal and state regulations, and once closure of the sludge beds is completed, GAR will be subject only to the regulations for generators of hazardous waste.

In the State of Connecticut, industrial installations which generate, treat, store, transport, or dispose of hazardous wastes must develop and implement a Preparedness, Prevention, and Contingency (PPC) Plan in accordance with the State of Connecticut hazardous waste management regulations. The purpose of a PPC Plan is twofold: 1) to encourage the use of preventive approaches to limit the potential for accidental discharges of hazardous substances to the environment, and 2) to develop emergency response procedures to be followed by company personnel in the event of an emergency. In accordance with these objectives, this PPC plan has been prepared.

Revised
5/29/91



Numbers in circle identify emergency equipment. See page 24 of PPC Plan for list and legend of emergency equipment.

Figure 1. Gar Plant Layout Drawing

2.0 ORGANIZATIONAL STRUCTURE FOR IMPLEMENTATION OF THE PPC PLAN

Preparation and review of the PPC Plan will be the responsibility of the PPC Plan Committee. This committe consists of the following employees:

Russell A. Richter	- General Manager Primary Coordinator
Guy A. Rosato	- Quality Control Engineer #2 Assistant Coordinator

These persons will have responsibilities which are related to emergency prevention and response on a continual basis.

Russell A. Richter is designated as the primary coordinator and he will have the responsibility for implementing the plan including:

- Identify materials and wastes handled.
- Identify potential spill sources.
- Coordinate spill cleanup activities.
- Establish spill reporting procedures.
- Conduct visual inspections.
- Develop emergency response procedures to be followed in the event of an emergency.
- Establish employee training programs which will familiarize employees with the PPC Plan.
- Notify appropriate authorities when a spill has occurred.
- Document incidents and spills.

3.0 DESCRIPTION OF EXISTING EMERGENCY RESPONSE PLANS

This PPC Plan is the first formal emergency response plan developed for GAR's Danbury, Connecticut facility. Past emergency response practices and procedures have been reviewed, updated, and included in this comprehensive plan.

4.0 MATERIAL AND WASTE INVENTORY

A complete list of all potentially hazardous chemical substances stored or generated at the GAR facility from production and/or waste treatment is presented in Table 1. This table lists the chemicals used and their area of use, united nations shipping number (Department of Transportation Regulations) and the associated hazard class.

Because some chemicals used at GAR have the potential for causing environmental degradation through accidental releases, GAR has implemented strict materials identification, handling, storage, and disposal procedures to reduce the potential for such occurrences. For example, GAR requires that all chemicals, samples or bulk received at the plant site be accompanied by a Material Safety Data Sheet (MSDS). Copies of the MSDS are readily available for review.

TABLE 1

PROCESS MATERIALS AND WASTES

I. Raw Process Materials

Copper Sheeting	Steel Sheeting
Brass Sheeting	Nickel Sheeting
Aluminum Sheeting	Polypropylene Sheets

II. Chemical Storage Area (Rear of Building)

Name	Shipping Number	Hazard Class*
BCB Chemical Polish	NA1760	ORM
Hydrochloric Acid	UN1789	C
Sulfuric Acid	UN1830	C
Nitric Acid	UN2031	C
Aqua Ammonia	NA2672	C
Hypochlorite 15%	NA1791	ORM
Sodium Hydroxide	UN1823	C
Methyl ethyl ketone (MEK)	UN1193	F
Trichloroethylene	UN1710	ORM
Sodium Cyanide	UN1689	C
Copper Cyanide	UN1587	C
Sodium Hydrosulfite	UN1384	F
Zincate Alumon EN	UN1760	C
Endox 214 NaCN	UN1588	P
Chromic Acid Flakes	NA1463	O
Solder Stripper	NA1760	C
Acetane 97A	UN1479	O
Endbond E14	UN1759	C
Endox 214	UN1588	P
Sodium Bisulfite	NA2693	ORM

III. Plating Room Tank Solutions

Copper Baths	NA9118	ORM
Nickel Baths	NA9118	ORM
Copper Cyanide Baths	NA9118	ORM
Pyrophosphate	NA9118	ORM

IV. Process Wastes

Wastewater Treatment Sludge	NA9189	ORM
Spent Solvents	UN2831	ORM
Spent Bathwaters	UN2810	P

*Legend
C - Corrosive
F - Flammable
ORM - Other Regulated Material
O - Oxidizer
P - Poisons

5.0 MATERIAL COMPATIBILITY

Few chemicals used at the GAR facility present any serious compatability problems. Chemicals of concern, however, include acids which may be corrosive to any metals present, and cyanide salts which are potentially hazardous when exposed to moisture in an uncontrolled environment. It is company practice to minimize the hazard potential by physically isolating those chemicals which may react with each other, resulting in the creation of a potentially hazardous situation.

Table 2 identifies some of the major chemicals of concern which are used at GAR and which are potentially reactive.

TABLE 2

Chemical Incompatibilities

Chemical Name	Incompatibilities
Cyanide (Copper, Sodium)	Strong oxidizers, such as nitrates, chlorates, acids and acid salts
Hydrochloric Acid	Most metals, alkali or active
Trichloroethylene	Strong caustics; when acids react with aluminum; chemically active metals
Sodium Hydroxide	Water, acids, flammable liquids, organic halogens, metals
Sulfuric Acid	Organics, chlorates, carbides, fulminates, picrates, metals

6.0 INSPECTION PROGRAM

Although GAR is not required to maintain a written inspection schedule for their facility, routine inspections are conducted on a regular basis for malfunctions and deterioration, operator errors and discharges that may cause or lead to release of hazardous materials to the environment or cause harm to human health.

The principle areas of concern with respect to these objectives are the waste treatment and chemical storage areas. Every day, a walk through inspection is made of these areas. At that time, all production, treatment, safety, and emergency equipment is inspected; any problems observed are immediately reported to the supervisors in charge and are corrected promptly.

7.0 PREVENTIVE MAINTENANCE/HOUSEKEEPING

The focus of a preventive maintenance program and good housekeeping practices is to eliminate conditions that could lead to accidental spills and safety hazards to plant personnel. GAR administers their preventive maintenance program as described below.

In addition to making daily inspections of all areas of the facility, GAR also employs a routine housekeeping program which includes the following plant rules and safety practices:

- Safety hats, glasses, and protective clothing, as necessary, will be worn at all times in operating production areas.
- All employees will be familiar with appropriate preventive maintenance procedures for their particular work area.
- All work areas are to be kept clean and free of debris.
- No Smoking signs are located in appropriate places and obeyed.
- Correct labeling and placarding shall be placed on all tanks, process areas, work stations, buildings, exits and entry points throughout the plant.
- Emergency equipment such as fire hydrants, extinguishers and hose stations will be kept accessible at all times and each person is required to know their location, use, and how to sound an alarm for help.
- All injuries will be reported at once to the shift supervisor.

The shift supervisor is primarily responsible for maintaining a good housekeeping program in his or her respective area.

8.0 SECURITY

The hours of operation for the plant are from approximately 7:00 AM to 5:30 PM, Monday through Friday. In addition, designated personnel continue surveillance inspections of the plant for approximately two hours on Saturdays, Sundays, and holidays.

GAR has installed a national security alert system (ADT Alarm System) to notify proper personnel in the event of an emergency during non-working hours. Security for the entire plant is enforced through automatic outside lighting and the requirement that all visitors to the GAR facility be logged in.

9.0 EXTERNAL FACTORS

The physical location of the GAR facility may cause potential problems resulting from extreme weather conditions. The plant is located in the flood plain of the Still River and the plant grounds are flat in nature. Consequently, the possibility for flooding exists in the event of heavy rains or sudden thaws. All reasonable measures are taken at the facility to minimize exposure of production chemicals to flood waters. All other external factors should have little effect on plant operations.

10.0 INTERNAL AND EXTERNAL COMMUNICATIONS AND ALARM SYSTEMS

GAR is equipped with an internal and an external phone system, and an emergency alarm system. The internal phone system allows for communication with the shift supervisor for immediate emergency response. During non-working hours, the plant is connected to a national security system (ADT), combination security and fire alarm system, which in turn notifies the proper emergency personnel.

In the event of an emergency, facility personnel are instructed to immediately contact the shift supervisor who in turn will contact the emergency coordinators. Specific emergency response procedures to be followed are outlined in Section 14.0 of this plan.

11.0 EMPLOYEE TRAINING PROGRAM

Although informal, on-the-job training for employees has been practiced at the GAR facility for some time, they are now in the process of implementing formal training through both periodic and on-going training in hazardous waste management for the employees at its Danbury, Connecticut facility.

The purpose of this training is to enable personnel to understand the nature of the chemicals and processes with which they are working, associated health and safety hazards, and safe working practices to be followed for preventing and responding to emergency situations. Most of this information is contained in the Hazardous Waste Training Manual which addresses the following:

- Identification of Hazardous Wastes
- Hazardous Materials at C.E.M.
- Pretransport Requirements
- Storage of Hazardous Waste
- Nature of Fire, Explosions and Plant Chemicals
- Prevention and Emergency Response

12.0 LIST OF EMERGENCY COORDINATORS/CHAIN OF COMMAND

The following individuals have been designated as Primary Spill Coordinator, Primary Alternate Coordinators and Secondary Alternate Coordinators. In the event of an emergency or spill, they will have primary responsibility of implementing the PPC Plan. If such an event occurs, these individuals should be contacted in the order listed below.

Compliance and Safety Officer:

Mr. Frank E. Ray
Phone No. 203/744-4300 (work)
203/677-2287 (home)

Primary Emergency Coordinator:

Mr. Russell A. Richter
General Manager
Phone No. 203/744-4300 (work)
203/791-0392 (home)

Primary Alternate Coordinators:

Mr. Arthur S. Travis
Manager - Administration
Phone No. 203/744-4300 (work)
203/744-4047 (home)

Mr. Guy A. Rosato
Quality Control Engineer
Phone No. 203/744-4300 (work)
203/350-1001 (home)

Mr. Paul L. Strout
Plant Engineer
Phone No. 203/744-4300 (work)
203/792-3034 (home)

Secondary Alternate Coordinators:

Mr. David A. Strout - 203/794-9038
Mr. George A. Ray - 203/758-9843

* * * * * * *

ADT - 1-800-344-3467

Fire Department - Emergency 911 - Routine 796-1550

Police Department - Emergency 911 - Routine 797-4614

Connecticut DEP Oils and Chemical Spills Section - 1-566-3338

National Response Center - 1-800-424-8802

Civil Preparedness Department - 743-6343

Corporate Health Care Priority Care - 797-7200

Ambulance - 797-4616

POTW - 797-4635; 797-4637; 797-4615 (between 4:00 P.M. and 7:00 A.M.)

13.0 DUTIES & RESPONSIBILITIES OF THE EMERGENCY COORDINATOR

Under normal conditions, either the emergency coordinator or his designated alternate will be at the facility. The emergency coordinator is familiar with all aspects of the facility's PPC plan, plant processes and activities, the location and characteristics of chemical materials handled, the location of all records within the facility, and the facility layout.

In the event of an emergency, the emergency coordinator will immediately activate facility alarms or communication systems to notify all facility personnel, and notify local emergency response agencies (if their help is needed) should the automatic notification system fail. Then the emergency coordinator will, either personally or through subordinates, immediately identify by visual analysis the following:

- Type of material involved
- Source of material involved
- Location of spill
- Estimate of quantity spilled
- Direction of spill flow or vapor release
- Injuries involved

Assessment

The Emergency Coordinator is responsible for assessing the situa- tion to determine the extent to which the incident could threaten human health or the environment. The secondary response is to determine the identification, continment, treatment and disposal alternatives available, and to assess the potential environmental threat to groundwater or surface water.

If the emergency coordinator determines that the facility has had an incident which could threaten human health or the environment, he will report his findings as follows:

- If his assessment indicates that evacuation of local areas is advisable, he will immediately notify appropriate local authorities. He will be available to help appropriate officials decide whether local areas should be evacuated, and

- He will immediately notify the Connecticut Department of Environmental Protection (CTDEP) (203/566-5712), and the National Response Center (800/424-8802).

During an emergency, the emergency coordinator will take all reasonable measures necessary to ensure that spills, fire, explosion, emissions, or discharges do not occur, recur, or spread to other hazardous materials at the facility. These measures will include, where applicable, stopping processes and operations, collecting and containing discharged materials, and removing or isolating incompatible chemicals. If the facility stops operations, the emergency coordinator will ensure that monitoring for leaks, pressure buildup, gas generation, ruptures in valves, pipes, or other equipment, is performed.

The emergency coordinator will ensure that, in the affected area of the facility:

- No material that may be incompatible with the emitted or discharged material is used in any plant operations until cleanup procedures are completed, and

- All emergency equipment listed in the PPC plan is cleaned, replaced if necessary, and fit for its intended use before operations are resumed.

Immediately after an emergency, the emergency coordinator will, with CTDEP approval, provide for treating, storing, or disposing of recovered materials, contaminated soil or surface water. In addition, following the incident, a report concerning the event and any remedial actions taken will be prepared and will include the following information:

- Name of the person reporting the incident.
- Name, address, and identification number of facility.
- Phone number where the person reporting the spill can be reached.
- Date, time, and location of the incident.
- A brief description of the incident including type of incident, nature of hazardous material involvement and possible hazards to human health or the environment.
- The extent of injuries, if any.
- For each material involved in the incident, the shipping name, hazard class, and quantity of the waste involved.

The report will be maintained in the facility files and shall be referenced when the PPC Plan is updated annually.

14.0 EMERGENCY RESPONSE

In the event that a spill or emergency situation occurs that should influence plant operations, GAR has developed the following employee emergency response procedures which must be implemented.

- Employee Response - if such a situation arises, all employees are instructed to immediately contact the shift supervisor in charge or one of the individuals listed in Section 12.0 of this plan.
- Spill Coordinator - Russell A. Richter

Mr. Richter's function will be to make the determination as to the seriousness of the spill and to make sure that the proper personnel perform their appropriate functions. He will also make the determination as to whether or not the company's laboratory analysis team should be notified, i.e. Pace Incorporated, 100 Marshall Drive, Warrendale, Pennsylvania 15086-7527, Roger A. Dhonau, Project Engineer assigned to GAR Electroforming. Mr. Richter will also determine whether or not it will be necessary to call in a professional waste removal team. We are presently using the services of EWR of Waterbury, Connecticut.

If it is determined that assistance beyond plant capabilities is necessary, the following agencies will be contacted:

Fire Department - 797-4616
Police Department - 797-4611
Health Department - 797-4625
Civil Preparedness Department - 743-6343
Connecticut DEP Oils and Chemical Spills Section - 1-566-3338
POTW - 797-4635; 797-4637; 797-4615 (between 4:00 P.M. and 7:00 A.M.)

° Spill Control Team - Members of the Spill Control Team are:

Russell A. Richter, General Manager, Team Captain - 791-0392
Guy A. Rosato, Quality Control Engineer - 350-1001
Paul L. Strout, Plant Engineer - 792-3034

The above individuals working under the direction of Mr. Richter will perform the hands-on functions to contain any potentially dangerous spill. They are acquainted with the location and effectiveness of speedi-dri located in several sites throughout the plant. They will see that any spillage is contained by mechanical means and also that it is diverted to appropriate areas within the berms located in the plant.

° Spill Reporting

The following format is to be completed when reporting spills, of a serious nature, to the City Health Department, Danbury, Connecticut:

NOTIFY POLICE DEPARTMENT - 797-4611

Inform dispatcher of spill, ask him to notify the City's Emergency Response Team for Hazardous Spills.

Provide them with the following information:

- Location of spill.
- Substance spilled and quantity.
- Approximate time when spill occurred or when first noticed.
- Party responsible for spill.
- Outstanding hazards.
- Is the spill contained or is it leaking to the external environment.
- Any action you have taken.
- Your name and a phone number where you can be contacted.

15.0 LIST OF AGENCIES TO BE NOTIFIED

In the event of an emergency or spill, the following local, state and federal agencies will be notified as deemed appropriate. In the event of a major spill, at a minimum, the National Response Center and the Connecticut Department of Environmental Protection should be notified.

- Danbury Fire Department
  203/797-4616
- Civil Preparedness Department
  203/743-6343
- Danbury Police Department
  203/797-4611
- Connecticut State Police
  203/566-4240
- Health Department
  203/797-4625
- Connecticut Department of Environmental Protection
  Hazardous Waste Management Section
  203/566-5712
  Oil and Chemical Spill Division
  203/566-3338
- United States Environmental Protection Agency - Region I
  617/573-9653
- National Response Center
  800/424-8802
- Connecticut Poison Information Center
  203/674-3456
- Public Owned Treatment Works
  203/797-4635; 203/797-4637
  203/797-4615 (Between 4:00 P.M. and 7:00 A.M.)

16.0 EMERGENCY EQUIPMENT

Emergency equipment is available to allow personnel to respond safely and quickly to emergency situations. Fire extinguishers, sprinklers, and hoses are located throughout the plant and meet NFPA and OSHA standards. This equipment is maintained and inspected regularly.

In addition to the above-mentioned equipment, the following emergency equipment is available:

	EQUIPMENT	LOCATION
01	Chain Hoist	Waste Treatment Room, Tank Room, Machine Shop
02	Chemical Neutralizers	Storage Room
03	Cutters (Bolt)	Machinery Room
04	Fans (Portable)	Tank Room, Machinery Room
05	Fire Extinguishers	Office, Engineering Room, Machine Shop, Shipping, Storage, Tank Room, Cafeteria, Machinery Room
06	First Aid Supplies	Cafeteria, Office
07	Portable Gas Masks	Laboratory
08	Chemical Absorbants	Shipping, Tank Room, Machine Shop, Storage Room, Engineering,MachineryRoom
09	Submersible Pump	Waste Treatment Room
10	Welding/Cutting Equipment	Machinery Room
11	Ladders	Storage Room
12	Basket Stretcher	Cafeteria
13	Emergency Lighting	Office, Hallways, Machine Shop, Tank Room, Waste Treatment Room
14	Public Address System	Office, Machine Shop, Tank Room, Engineering Room, Waste Treatment Room
15	Crane	Waste Treatment,Tank Room, MachineShop
16	Eye Wash	Tank Room (2)
17	Overhead Shower	Tank Room
18	Brooms	All departments
19	Shovels	All departments
20	Emergency Alarm Buttons(3)	Waste Treatment Room, and at each end of Tank Room

See Page 4 of GAR Plant Layout for exact location of emergency equipment.

17.0 EVACUATION PLAN FOR INSTALLATION PERSONNEL

The following personnel evacuation plan has been devised for the GAR facility in the event of an emergency. All plant personnel should become familiar with the plan and routine evacuation rehearsals should be practiced.

If an emergency situation arises, the emergency alarm will sound. All personnel, except those engaged in emergency service, fire fighting, rescue, etc. should immediately leave the building from the nearest exit. All personnel shall then proceed to an area predetermined according to work area for a roll call by department supervisors. All supervisors must then report to a designated emergency response member to verify that all personnel have been evacuated and accounted for. No one shall re-enter the building until given permission to do so by the emergency coordinator.

A facility layout map designating all exit areas, such as that provided in Figure 2, shall be provided for each work area so that all personnel may determine primary and secondary evacuation routes.

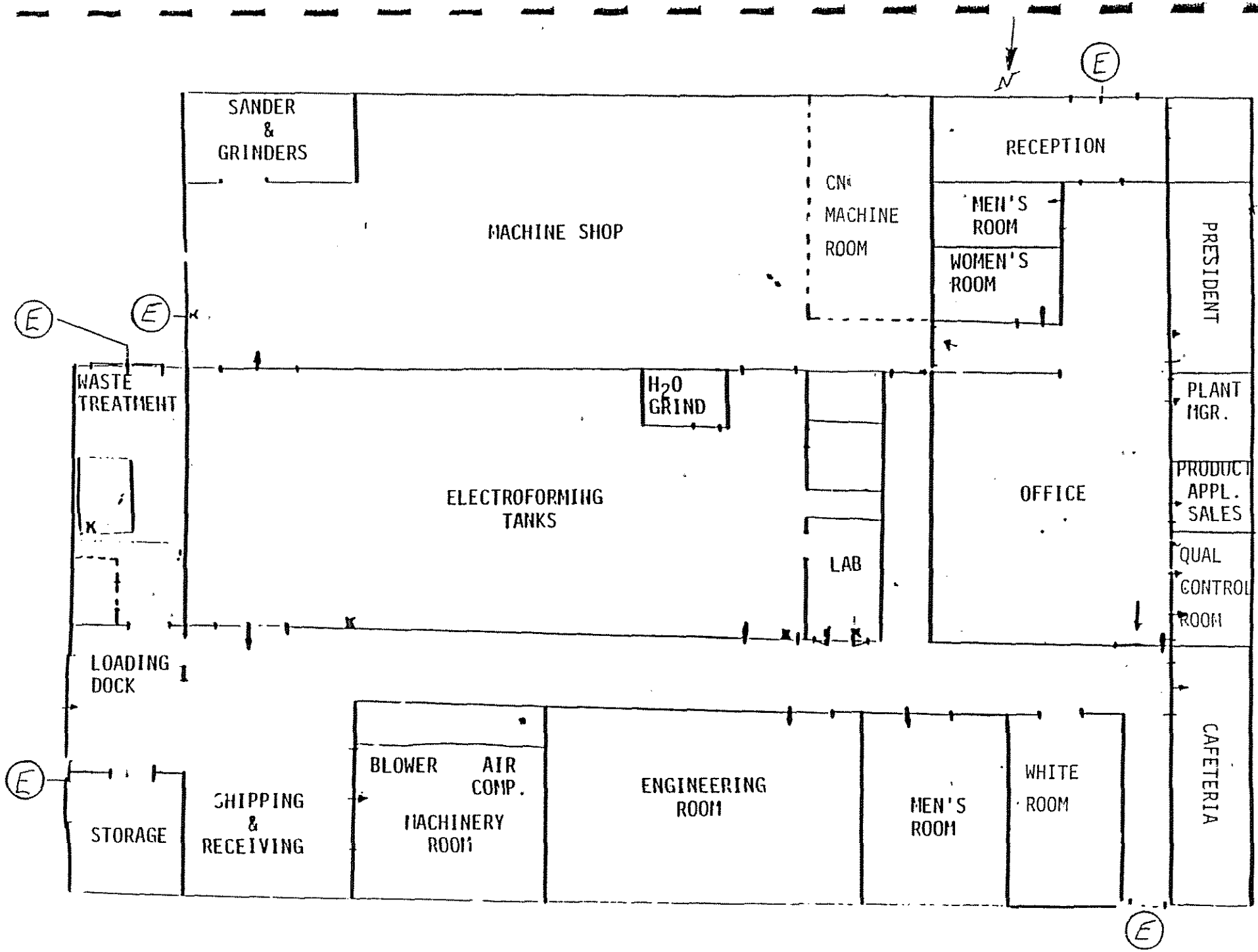


Figure 2. GAR Evacuation Exits

18.0 ARRANGEMENTS WITH EMERGENCY RESPONSE CONTRACTORS

The following contractors are available to assist with the clean-up of any chemical spills or leaks in the event of an emergency. Although not required, most emergency response contractors prefer prior contact to provide general information about the facility such as materials handled, manufacturing processes, and facility layout, to enhance emergency preparedness. A brief description of two emergency response contractors available for the GAR facility, services provided, and area served is described below:

1. Environmental Waste Removal, Inc.

   130 Freight Street
   Waterbury, Connecticut 06702
   Phone 203/755-2283

   Services Provided: Collection, hauling, processing, treatment, reclamation, recycling, disposal, storage, lab analysis

   Service Area: CT, IL, ME, MD, MA, NH, NJ, NY, PA, OH, RI, VT

2. East Coast Environmental Service Corporation

   454 Quinnipiac Avenue
   New Haven, CT
   Phone 203/469-2376 (24 hour number)

   Services provided: Collection, transporting, treatment, laboratory analysis, spill response/clean up

   Service Area: CT, MA, NJ, NY, RI

19.0 POLLUTION INCIDENT HISTORY

Any spills, leaks, accidents or incidents which occur at the GAR facility must be reported to the primary emergency coordinator and recorded on Pollution Incident Report Forms located in the Facility Operating Record. Facility records indicate that no pollution incidents which have resulted in environmental damage have been reported for the GAR facility.

20.0 PPC PLAN REVIEW

At least once each year, the PPC Plan shall be reviewed and updated, where necessary. The appropriate modifications will be made to reflect changes in plant operations or materials handling procedures. It will be the responsibility of the Primary Emergency Coordinator to initiate this review process.

In the space provided below, the Primary Coordinator or authorized designate will document that the review took place by signing his name and the date of the review.

Authorized Signature	Review Date
1. Frank Ray	May 12, 1987 + May 26, 1987 with Amy Devine CTDEP
2. Frank Ray	May 31, 1988
3. Frank Ray	May 11 + May 30, 1989
4. Frank Ray	May 30, 1990
5. Frank Ray	May 29, 1991
6.	
7.	
8.	

GAR ELECTROFORMING DIVISION
Electroformers, Inc.
Augusta Drive, Commerce Park
P.O. Box 340
Danbury, Connecticut 06813-0340
Tel. (203) 744-4300
FAX (203) 790-0700

GAR

M E M O R A N D U M

To: FILE

From: Frank E. Ray

Re: Monthly safety meeting and annual review of Preparedness, Prevention and Contingency (PPC) Plan and the Hazardous Material Training Manual held on May 29, 1991. Employees per attendance sheet were present.

Date: May 29, 1991

The monthly safety meeting was held on May 29, 1991, and at the same time the annual review of the Preparedness, Prevention and Contingency (PPC) Plan was done and the Hazardous Material Training Manual was updated. This was presented to all employees along with the updated 1990 New Hazard Communications film from the Don Brown Studios. There was a question and answer period and everyone felt that they were up to date and obviously would be able to respond if there should be an emergency.

The eye wash stations and emergency shower were tested and found to be satisfactory. The three emergency alarm buttons were tested and found to be in working order.

Management told the employees that they appreciated their co-operation and that we look forward to another safe and sound year.

Frank Ray

Frank E. Ray

FER:dr

MAY 29, 1991

MONTHLY SAFETY MEETING AND ANNUAL REVIEW OF PREPAREDNESS, PREVENTION & CONTINGENCY PLAN (PP&C) AND REVIEW OF THE HAZARDOUS MATERIAL TRAINING MANUAL

MICHAEL BRICH

RON CUTRONE

DIANA DEANGELIS

RITA FRANCIS

DAVID MARTEL

FRANK RAY

GEORGE RAY

KEITH RAY

TODD RAY

RUSSELL RICHTER

GUY ROSATO

DAVE STROUT

PAUL STROUT

MICHAEL STRYKER

ART TRAVIS

BARBARA WALDO