ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

PHASE 1 INVESTIGATION

EMR Circuits

Site No. 152105

Town of Smithtown, Suffolk County

Final - June 1987

New York State
Department of
Environmental Conservation

50 Wolf Road, Albany, New York 12233
Henry G. Williams, Commissioner

Division of Solid and Hazardous Waste
Norman H. Nosenchuck, P.E., Director

Prepared by:

EA SCIENCE AND TECHNOLOGY
A Division of EA Engineering, Science, and Technology, Inc.

EA REPORT DEC63A

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES IN THE STATE OF NEW YORK PHASE I INVESTIGATIONS

EMR CIRCUITS
TOWN OF SMITHTOWN, SUFFOLK COUNTY
NEW YORK I.D. NO. 152105

Prepared for

Division of Solid and Hazardous Waste
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-0001

Prepared by

EA Science and Technology
R.D. 2, Goshen Turnpike
Middletown, New York 10940

A Division of EA Engineering, Science, and Technology, Inc.

September 1986

CONTENTS

1. EXECUTIVE SUMMARY

The EMR Circuits site (New York I.D. No. 152105 and EPA No. "New"), the former business location of EMR Circuits where they manufactured circuitboards, is located in an industrial park approximately 2,000 ft north of the Long Island Expressway, on the corner of Kennedy Drive and Marcus Boulevard, in the Town of Smithtown, Suffolk County, New York (Figures 1-1 and 1-2, and Photos 1-1 through 1-8). The property is owned by Grenlein Realty Co., c/o Neil H. Klein and Co., 175 Great Neck Road, Great Neck, New York, and managed by Mr. Ronald Finkelstein of Finkelstein Realty of Mineola, New York. EMR Circuits (Mr. Stewart Wood, President) leased the property and operated a business there from 1981 until 1984. During this time, the EMR Circuits operations were connected to two underground leachpools via a floor drain and piping, into which they repeatedly discharged liquid chemical wastes. The Suffolk County Department of Health Services (SCDHS) began to suspect EMR of illegally discharging hazardous wastes when liquids started bubbling up through the concrete driveway north of the building. In 1981, the SCDHS began sampling the potential industrial discharge locations at EMR. Unacceptable levels of heavy metals were detected in the two leachpools on the north side of the building. As a result, EMR entered into a Consent Order agreeing to cease all discharges until it had applied for and received a SPDES permit. The stipulations of the Consent Order were never met. Further inspections and sampling confirmed that EMR continued discharging hazardous materials to the leachpools. It was discovered that Stewart Wood was dumping chemicals down the floor drain on weekends and then cementing it over, only to chip away the concrete, discharge more chemicals, and then reseal the hole again and again. Criminal proceedings were filed against Mr. Wood. The exact quantity of the illegal discharge is unknown.

During 1983 and 1984, under the supervision of SCDHS, EMR had the contaminated leachpool cleaned out and filled with clean sand, and had the hazardous wastes removed by a licensed scavenger. In 1984, EMR moved from the property. After the company moved, Mr. Finkelstein arranged to have the building ventilated, and to have the walls and floors washed down. The SCDHS consider the facility to be clean (remediated) from the ground surface up, including the location of the former leachpools.

In March 1985, the SCDHS installed a 130-ft monitoring well adjacent to the former leachpools. During installation, the drillers noted a strong chemical odor emanating from the hole. Both soil boring and water samples taken at the time of installation contained elevated levels of metals and organics. No plume exploration has yet been accomplished.

The preliminary HRS scores for this site are as follows: Migration Score (S_M) = 27.82 (S_{gw} = 48.12, S_{sw} = 0, S_a = 0), Fire and Explosion Score (S_{FE} = N/A), and Direct Contact Score (S_{DC}) = 0. The site does not pose a significant fire or explosion threat. There is insufficient data available to confirm a release to ground water. Although analytical data are available for contaminated soils and ground water, ambient data are lacking. If ground-water contamination is confirmed, the maximum S_M would be 37.93. It is recommended that a Phase II study be initiated at the site to evaluate potential ground-water contamination. The proposed Phase II study would include the installation of three test borings/observation wells, and the collection and analysis of ground-water and surficial sediment samples. The estimated cost to complete the Phase II investigation is $98,420.

Coordinates:
Latitude: 40°48'44"
Longitude: 73°14'50"

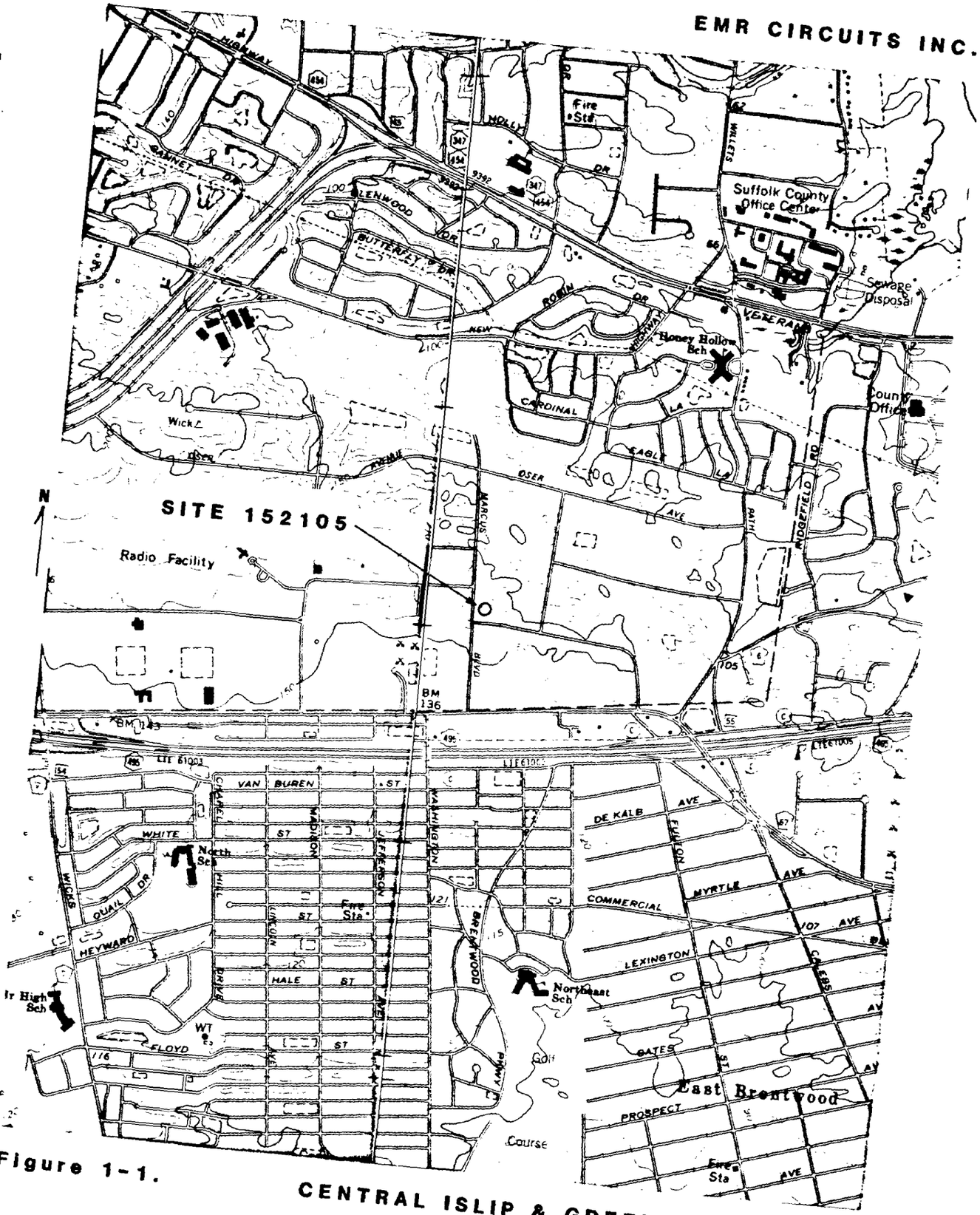


Figure 1-1. CENTRAL ISLIP & GREENLAWN QUADS.

Scale 1:24,000

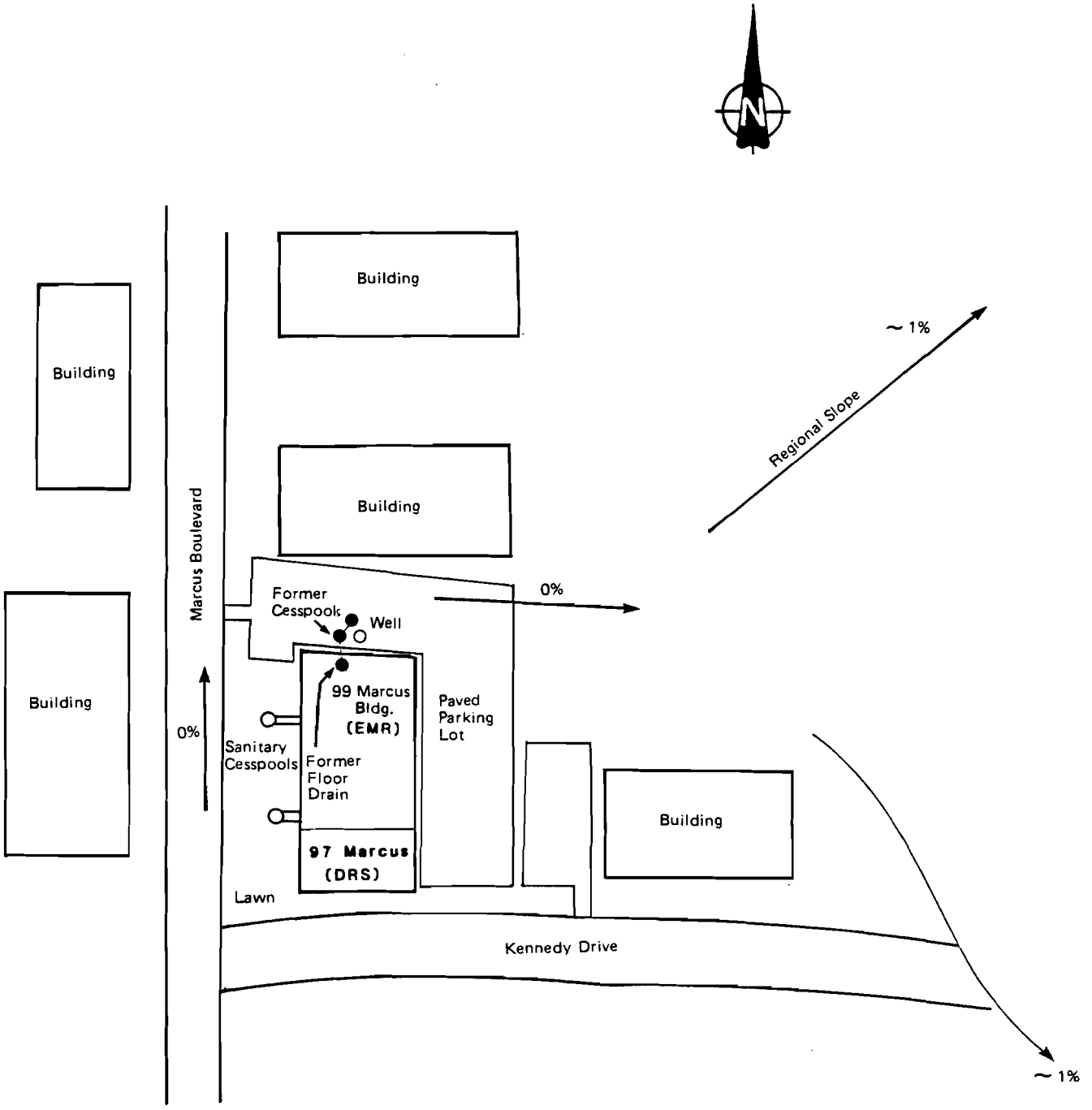
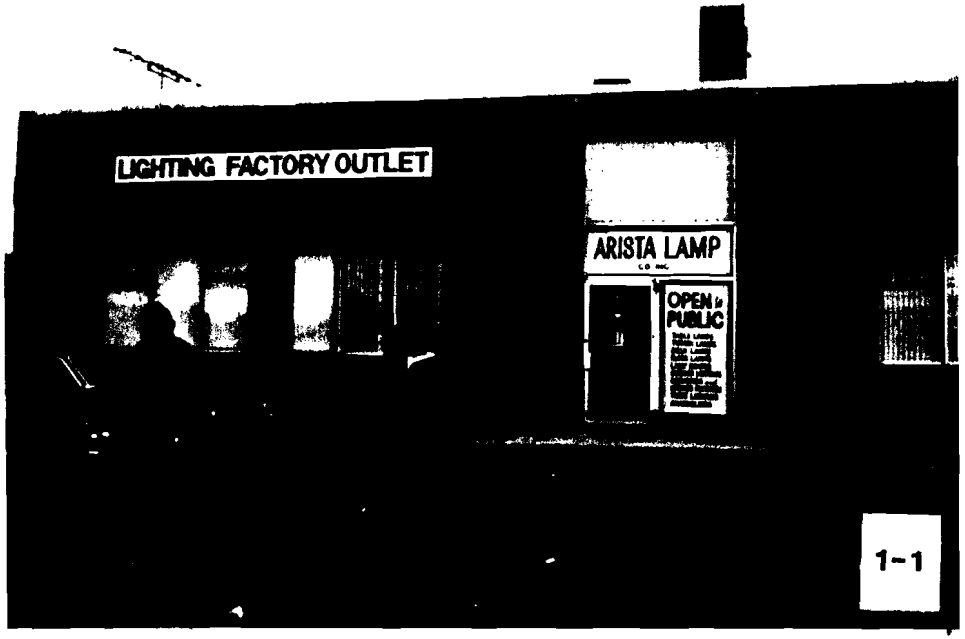
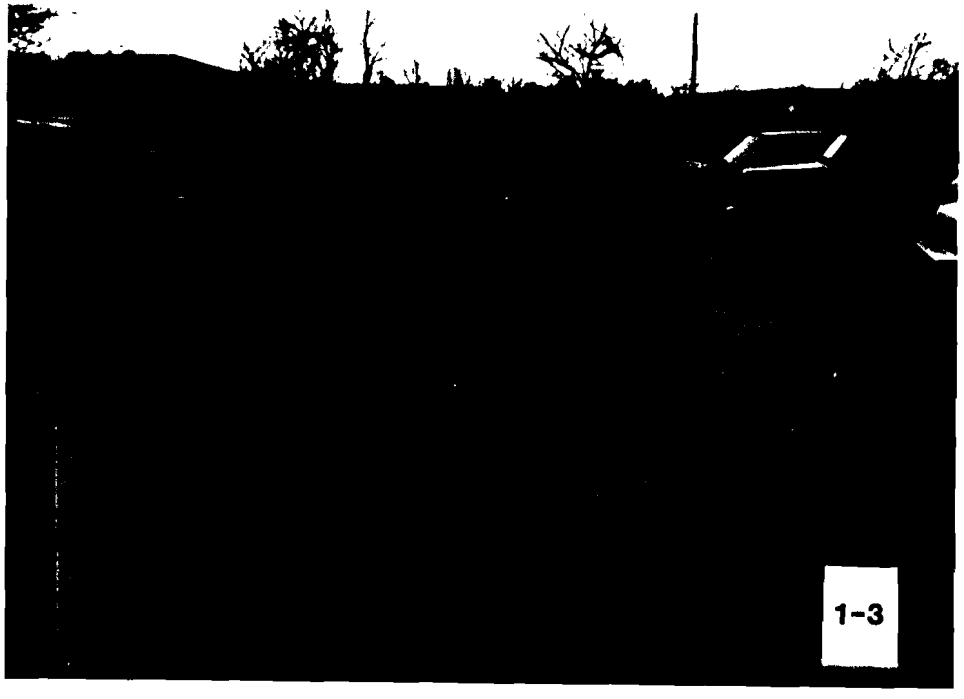


Figure 1-2. Site sketch. EMR Circuits, 23 January 1986. (Not to scale.)


LIGHTING FACTORY OUTLET
ARISTA LAMP
OPEN to PUBLIC
1-1


1-2


1-3


1-4


1-5


1-6


1-7

PHOTO LOG - EMR CIRUCITS

Photo	Description
1-1	This is view of the front of the building at 99 Marcus Boulevard where EMR Cirucits once conducted business. The photo was taken from Marcus Boulevard facing east.
1-2	This is another view of the front of the property at 99 Marcus Boulevard, facing south. There are two sanitary cesspools under this lawn, which have been sampled by SCDHS and found to be free of industrial waste contamination.
1-3	This is the paved parking lot along the north side of the brick building at 99 Marcus Boulevard. The photo faces west, toward Marcus Boulevard.
1-4	This photo shows the pipe which runs out through the north wall of the building and down into the ground in the parking lot. At one time, EMR Circuits discharged industrial waste through this pipe into two underground leachpools which are located under the pavement in the center of the photo.
1-5 and 1-6	Close-up pictures of the discharge pipe.
1-7	This photo shows the iron cap of the ground-water monitoring well that SCDHS drilled in the parking lot approximately 10 ft from the location of the cesspools.

2. PURPOSE

The EMR Circuits site was listed in the New York State Registry of Inactive Hazardous Wastes Sites because hazardous wastes were found in two leachpools at the site.

The goal of the Phase I investigation of this site was to: (1) obtain available records on the site history from state, federal, county, and local agencies; (2) obtain information on site topography, geology, local surface water and ground-water use, previous contamination assessments, and local demographics; (3) interview site owners, operators, and other groups or individuals knowledgeable of site operations; (4) conduct a site inspection to observe current conditions; and (5) prepare a Phase I report. The Phase I report includes a preliminary Hazard Ranking Score (HRS), an assessment of the available information, and a recommended work plan for Phase II studies.

3. SCOPE OF WORK

The Phase I investigation of the EMR Circuits site involved a site inspection by EA Science and Technology, as well as record searches and interviews. The following agencies or individuals were contacted:

Contact	Information Received
Mr. Ronald B. Finkelstein Finkelstein Realty Corp. 450 Jericho Turnpike Mineola, New York 11501 (516) 747-5544	Site history/interview
Ms. Eileen Governale Public Health Sanitarian Suffolk County Department of Health Services Bureau of Environmental Health 15 Horseblock Place Farmingville, New York 11738 (516) 451-4633	Site history/interview
Mr. Anthony Candela, P.E. Senior Sanitary Engineer New York State Department of Environmental Conservation Division of Solid Waste SUNY Campus - Building 40 Stony Brook, New York 11794 (516) 751-7900	Site file
Mr. James H. Pim, P.E. Suffolk County Department of Health Services Hazardous Materials Management 15 Horseblock Place Farmingville, New York 11738 (516) 451-4634	Interview and site file
Mr. Steve Carey/Mr. Dennis Moran Suffolk County Department of Health Services Bureau of Water Resources 225 Rabro Drive East Hauppauge, New York 11788 (516) 348-2893	Ground-water use; public water supplies and ground-water monitoring information

Contact	Information Received
Mr. Dan Fricke Suffolk County Cooperative Extension Association 264 Griffing Avenue Riverhead, New York 11901 (516) 727-7850	Ground-water and surface water use for irrigation
Mr. William Schickler/Mr. Robert Bowen Suffolk County Water Authority Sunrise Highway and Pond Road Oakdale, New York 11769 (516) 589-5200	Public water supply and distribution
Mr. Doug Pica New York State Department of Environmental Conservation Division of Water SUNY Campus - Building 40 Stony Brook, New York 11794 (516) 751-7900	Ground-water use for irrigation
Mr. Allan S. Connell District Conservationist U.S. Department of Agriculture Soil Conservation Survey 127 East Main Street Riverhead, New York 11901	Ground-water use for irrigation
Mr. Al Anderson Chief Fire Inspector Town of Smithtown 99 West Main Street Smithtown, New York 11787 (516) 360-7539	Information regarding the threat of fire and/or explosion at the site
Mr. Kevin Walter, P.E. New York State Department of Environmental Conservation Division of Hazardous Waste Enforcement 50 Wolf Road Albany, New York 12233-0001 (518) 457-4346	Site file
Mr. John Iannotti, P.E. New York State Department of Environmental Conservation Bureau of Remedial Action 50 Wolf Road Albany, New York 12233-0001 (518) 457-5637	No file/information

Contact	Information Received
Mr. Earl Barcomb, P.E. New York State Department of Environmental Conservation Bureau of Municipal Wastes Section of Landfill Operations Vatrano Road Albany, New York 12205 (518) 457-2051	No file/information
Mr. Peter Skinner, P.E. New York State Attorney General's Office Room 221 Justice Building Albany, New York 12224 (518) 474-2432	No file/information
Mr. Ron Tramontano/Mr. Charlie Hudson New York State Department of Health Bureau of Toxic Substances Assessment Nelson A. Rockefeller Empire State Plaza Corning Tower Building, Room 342 Albany, New York 12237 (518) 473-8427	No file/information
Mr. James Covey, P.E. New York State Department of Health Nelson A. Rockefeller Empire State Plaza Corning Tower Building Albany, New York 12237 (518) 473-4637	Community Water Supply Atlas
Mr. Rocky Paggione, Atty./ Mr. Louis A. Evans, Atty. New York State Department of Environmental Conservation Division of Environmental Enforcement 202 Mamaroneck Avenue White Plains, New York 10601-5381 (914) 761-6660	Site file/interview
Mr. Marsden Chen, P.E./Mr. Mike Komoroske New York State Department of Environmental Conservation Bureau of Hazardous Site Control 50 Wolf Road Albany, New York 12233-0001 (518) 457-0639	Registry form, site ownership

Contact	Information Received
Mr. John W. Ozard Senior Wildlife Biologist New York State Department of Environmental Conservation Wildlife Resources Center Significant Habitat Unit Delmar, New York 12054 (518) 439-7486	Significant habitats
Mr. Perry Katz U.S. Environmental Protection Agency Region II Room 757 26 Federal Plaza New York, New York 10278 (212) 264-4595	No file/information
Mr. Charles Guthrie Regional Fisheries Manager New York State Department of Environmental Conservation Region I SUNY Campus, Building 40 Stony Brook, New York 11794 (516) 751-7900	Surface water use for recreation
Mr. Brando Superintendent Brentwood Water District (516) 273-4565	Public water supply

4. SITE ASSESSMENT - EMR CIRCUITS, INC.

4.1 SITE HISTORY

The EMR Circuits site is the former business location of EMR Circuits, Inc., where they manufactured circuitboards. The site is a one-story brick building located in an industrial park approximately 2,000 ft north of the Long Island Expressway on the corner of Kennedy Drive and Marcus Boulevard, in the Town of Smithtown, Suffolk County, New York. The property is managed by Ronald B. Finkelstein, Finkelstein Realty Inc. of Mineola, New York (Appendix 1.1-1). The property is owned by Grenlein Realty Co., c/o Neil H. Klein and Co., 175 Great Neck Road, Great Neck, New York (Appendix 1.1-1a). EMR Circuits, Inc. (Mr. Stewart Wood, President) leased the property and operated a business at the site from 1981 until 1984, and then moved to 89 Cabot Court in the Town of Smithtown. Today, EMR Circuits is out of business (Appendixes 1.1-2 and 1.1-3). Prior to 1981, the company was known as Electro Motive Research Corporation and was located at 35 Davids Drive in Hauppauge (Appendix 1.1-2). That location is also presently being investigated as a potential hazardous waste disposal site.

The EMR circuitboard manufacturing operation that was housed in the one-story brick building at 99 Marcus Boulevard was connected to two underground leaching pools located under the driveway-parking lot on the north side of the building. The Suffolk County Department of Health Services (SCDHS) began to suspect EMR was illegally discharging hazardous waste when liquids started bubbling up through the cement driveway north of the building (Appendix 1.1-5.) In 1981, the SCDHS began sampling the potential industrial discharge points at the facility. It was determined that EMR was discharging chemical wastes into a

floor drain which lead to the leaching system on the north side of the building. Unacceptable levels of heavy metals were detected on several occasions in the two leachpools north of the building (Appendix 1.1-6).

When this illegal discharge was discovered, a case was filed against EMR by SCDHS. On 26 April 1982, EMR entered into an Consent Order and agreed to cease all discharges until it had applied for and received a SPDES permit; to hold all industrial waste and to maintain receipts for any pickup of this waste; to apply for a permit to store hazardous materials; and to submit an engineering report identifying all industrial processes and discharges at the facility (Appendix 1.1-7). Although EMR began to implement the Consent Order by cleaning up one of the contaminated leachpools and sealing the floor drain, the stipulated conditions were never completely met (Appendixes 1.1-7 through 1.1-10).

In 1983, the SCDHS began receiving complaints from both anonymous and named EMR employees that hazardous wastes were still being discharged into the leachpools (Appendixes 1.1-11 and 1.1-12). In addition, they received complaints from a neighboring company that fumes from the EMR facility were causing physical discomfort to the company's employees (Appendix 1.1-13). Further inspections and sampling by SCDHS confirmed these allegations (Appendix 1.1-14). It was discovered that the owner was dumping chemicals down the floor drain in the building on weekends and then cementing it over, only to chip away the concrete, discharge more chemicals, and then reseal the hole time after time (Appendixes 1.1-5, 1.1-11, and 1.1-12). The exact quantity of the illegal discharge is unknown. Criminal proceedings were filed against Stewart Wood (Appendixes 1.1-1, 1.1-2, and 1.1-4).

On 11 November 1983, EMR cleaned out a contaminated leachpool located approximately 10 ft north of the building. Three days later the leachpool was backfilled with sand (Appendix 1.1-14a). During the clean out, a second leachpool was discovered, approximately 2 ft from the building. This pool was sampled on 18 November 1983 and again on 25 January 1984. This second pool was cleaned out on 25 January 1984 (Appendixes 1.1-14 and 1.1-17). Directed by SCDHS personnel, the company then had hazardous materials removed from the site (Appendixes 1.1-15 through 1.1-18). In 1984, the company moved from the property (Appendixes 1.1-1 and 1.1-3). Mr. Finkelstein, manager of the property, arranged to have the building ventilated, and to have the walls and floor washed down (Appendix 1.1-1). The SCDHS consider the facility to be clean (remediated) from the ground surface up, including the location of the former leachpools (Appendixes 1.1-1 and 1.1-6).

In March 1985, a 130-ft monitoring well was drilled adjacent to the former leachpools on the north side of the building. While drilling, a very strong chemical odor emanated from the hole. Soil samples taken from the well borings were analyzed for metals and were found to contain elevated levels of iron (1,200 ug/g), copper (8 ug/g), and other heavy metals. Water samples taken at depths of 115 ft and 127 ft were analyzed for organics and metals and were found to contain 1,1,1-trichloroethane (390 ppb), iron (2.4 mg/liter), and trace levels of several other heavy metals (Appendix 1.1-19).

According to the SCDHS and the NYSDEC, heavy industrial discharge to the ground through hidden leaching pools for a 4-year period has certainly caused significant ground-water contamination but no plume exploration has yet been accomplished (Appendixes 1.1-2 and 1.1-4).

4.2 SITE TOPOGRAPHY

The EMR Circuits site is located in the western-central part of Long Island at an elevation of approximately 170 ft above MSL (Appendix 1.2-1). The regional slope of terrain is to the east at approximately 1 percent. The site, including the lawn, sidewalk, driveway, and parking lot which surround the building, is flat.

The site is located in an industrial park and is bordered by Marcus Boulevard to the west, Kennedy Drive to the south, and commercial establishments to the north and east. The nearest commercial establishment is located in the same building with EMR. The nearest private residence is located approximately 2,500 ft south of the site on Warren Street. The nearest surface waterbody is a tributary which runs into New Millpond which is approximately 6,500 ft to the northeast. However, there is no viable overland route to this surface waterbody because of intervening roads, highways, and ground-water recharge basins. The nearest well, a Suffolk County Water Authority well, is located on Falcon Drive, approximately 0.9 mi to the northeast of the site (Appendix 1.2-1, and EA Site Inspection).

4.3 SITE HYDROGEOLOGY

The site is directly underlain by Pleistocene deposits of glacial outwash. This deposit is then in turn underlain by Cretaceous Age Matawan Group-Magothy Formation (undifferentiated), the Clay Member and Lloyd Sand Member of the Raritan Formation, and finally by Precambrian Age gneiss and schist bedrock (Appendix 1.3-1). The Pleistocene deposit is estimated to be 200 ft in

thickness (ground surface elevation and Appendix 1.3-1) and largely comprised of stratified sand and gravel containing virtually no interstitial clay and silt. The Matawan Group-Magothy Formation (undifferentiated) is estimated to be approximately 650 ft in thickness in the vicinity of the site (Appendix 1.3-1). The upper surface of this deposit is irregular because of considerable erosion during the Tertiary and Pleistocene times. Therefore, accurate prediction of formation thickness between control points (boreholes) is difficult. This formation is generally composed of "beds and lenses of light gray fine to coarse sand and silt, intercalated with thin to thick beds and lenses of light-to dark-gray clay, silt, and clayey/silty sand." Thin beds of lignite are commonly found in the clay and silt beds, while disseminated lignite and pyrite are common in the sand beds. Gravelly coarse sand is commonly present in the basal portion of the Magothy Formation, along with abundant interstitial clay and silt and lenses of clay, silt, and clayey/silty sand. The clay and silt beds are often apparently discontinuous lenses and not possible to correlate over significant distances as indicated on the geologic logs (Appendix 1.3-2) for six nearby deep water supply wells: Well S-53360 (703-ft total borehole depth), Well S-22362 (315-ft total depth), and Well S-58708 (453-ft total borehole depth) located approximately 2-1/2, 2-1/4, and 1-1/2 mi, respectively, northwest of the site; Well S-32412 (755-ft total depth) and Well S-31104 (658-ft total depth) located about 1-1/4 and 2 mi, respectively, west- southwest of the site; and Well S-31624 (677-ft total borehole depth) located about 1-1/2 mi southeast of the site.

The Clay Member of the Raritan Formation is estimated to be 200 ft in thickness in the vicinity of the site (Appendix 1.3-1) and consists mostly of beds/lenses of light- to dark-gray clay, silt, and clayey/silty fine sand and occasional

thin to thick sandy lenses of limited lateral extent. Thin beds and disseminated particles of lignite and pyrite are common in the clay portion of this unit. The Lloyd Sand Member of the Raritan Formation is estimated to be 350 ft in thickness (Appendix 1.3-1) and "consists mostly of beds and lenses of light- to medium-gray sand and gravelly sand, commonly containing small to large amounts of interstratified clay and silt, that are intercalated with beds and lenses of light- to dark-gray clay, silt, and clayey/silty sand."

Water pumped from aquifers underlying Suffolk County is the sole source of water for public, agriculture, and industry (Appendix 1.3-3). The upper glacial and Magothy aquifers act as a single hydrological unit and are the only aquifers reportedly developed by wells for water supply within 3 mi of the site. Therefore, both the upper glacial and Magothy aquifers are designated as the aquifer of concern. The Lloyd aquifer, though moderately permeable (165 gpd/ft^2 estimated horizontal permeability at Brookhaven National Laboratory about 20 mi east of the site), has not been developed for water supply because more permeable aquifers are present at shallower depths, and water from the Lloyd commonly has undesirably high concentrations of iron. Additionally, the Lloyd aquifer is overlain by the extensive, thick, low permeability (confining) Raritan Clay (Appendix 1.3-1). Therefore, the Lloyd aquifer will not be considered further by this Phase I investigation.

The aquifers of Long Island are hydraulically interconnected and although beds and discontinuous layers of silt and clay within and between aquifers serve to confine water below them, they do not completely prevent the vertical movement of water through and around them. Soren (Appendix 1.3-1) presents data which reflect the high degree of hydraulic interconnection between the upper glacial

and Magothy aquifers in the vicinity: (1) for wells completed in the upper glacial and Magothy aquifers in nearby Brentwood and Hauppauge, the head in these two aquifers decrease at a fairly uniform rate with increasing depth, and (2) water-level fluctuation in the same well groups were very similar. Soren also reports that the estimated downward velocity of water through the Magothy aquifer in the vicinity of the ground-water divide in 1968 (along which the site is located) was 0.006 ft/day (approximately 2.2 ft/year).

Recharge to the upper glacial aquifer is derived entirely from precipitation. Recharge to the Magothy and Lloyd aquifers is derived entirely from the downward movement of water from the overlying aquifer (Appendix 1.3-4). In general, recharge to the lower aquifers occurs near the center of Long Island and discharge occurs along the edge of Long Island to the ocean and Long Island Sound. The average annual precipitation in the the area is 49 in., of which 21 in. is estimated to infiltrate to the water table (Appendix 1.3-4). The remainder of the precipitation is returned to the atmosphere by evaporation and transpiration, except for a small amount of runoff to streams.

The upper glacial aquifer is the most permeable aquifer on Long Island with an estimated horizontal permeability of 1,000-1,500 gpd/ft^2 (Appendix 1.3-1). The site is located near the center of Long Island in an area of recharge for the underlying aquifers. In 1968, it was estimated in the region that water in the upper glacial aquifer was moving horizontally at rates less than 0.5 ft/day in areas distant from centers of pumping and to hundreds of ft/day near the screens of pumping wells (Appendix 1.3-1). The permeability of the underlying Magothy aquifer ranges widely depending upon the presence and amount of clay and silt. In 1968, it was estimated in the region that water in the Magothy

aquifer was moving horizontally at rates less than 0.2 ft/day in areas distance from pumping, and to hundreds of ft/day near screens of pumping wells.

Based upon the March 1985 ground-water table contour map (Suffolk County Department of Health Services), the depth to ground water is estimated to be approximately 100 ft below ground surface, and the regional ground-water natural (unaffected by pumping) flow direction appears to be toward the northeast. Within 3 mi of the site, the upper glacial and Magothy aquifer of concern has been developed by 13 Suffolk County Water Authority well fields. Appendix 1.3-5 provides a list of the municipal wells and well fields located within 3 mi of the site. The area within 3 mi of the site appears to be served by public water systems, including Suffolk County Water Authority, Brentwood Water District, Dix Hills Water District, Greenlawn Water District, and the Smithtown Water District. There are also numerous private residences located northeast of the site which are not served by public water.

4.4 SITE CONTAMINATION

Waste Types and Quantities

The disposal of hazardous wastes at the site has been confirmed according to SCDHS and the NYSDEC Inactive Hazardous Waste Disposal Site Report (Appendixes 1.1-2 and 1.1-4), however, exact quantities are unknown. The following types of waste are those confirmed at the site: 1,1,1-trichloroethane, 1,1,2-trichloroethylene, tetrachloroethylene, p-ethyltoluene, 1,3,5- and 1,2,4-trimethylbenzene, 1,2,4- and 1,2,3-trichlorobenzene, methyl ethyl ketone, xylene, copper, lead, nickel, and chromium (Appendixes 1.1-6 and 1.1-14).

Ground Water

Analytical data from samples taken from a monitoring well drilled adjacent to the former leaching pools on the north side of the building indicate the presence of iron (2-2.4 mg/liter), trace levels of several other heavy metals, and 1,1,1-trichloroethane (390 ppb) (Appendix 1.1-19).

Surface Water

No data available.

Soil

Soil samples taken from the installation of the monitoring well at depths of 60 and 120 ft were analyzed for the presence of heavy metals (Appendix 1.1-19). The samples contained copper (8-16 ug/g), iron (930-1,200 ug/g), chromium (1.3-1.5 ug/g), nickel (2.6-3.8 ug/g), zinc (2.2-3.1 ug/g), and silver (0.4 ug/g).

Air

In September 1983, SCDHS received complaints from Data Recording Systems, Inc. (DRS) (97 Marcus Boulevard), a business next door to EMR Circuits, Inc., regarding odors that were making employees ill. SCDHS sampled the air at DRS and determined that there were some volatile organics in the work place and that they probably came from EMR (Appendix 1.1-13).

EMR CIRCUITS
TOWN OF SMITHTOWN, SUFFOLK COUNTY

The EMR Circuits site is located in an industrial park on the corner of Kennedy Drive and Marcus Boulevard, in the Town of Smithtown, Suffolk County, New York. EMR Circuits, Inc. (Mr. Stewart Wood, President) leased the property and operated a circuitboard manufacturing business there from 1981 until 1984. The EMR Circuits operations were connected to two underground leachpools via a floor drain and piping, into which they repeatedly discharged liquid chemical wastes. Grenlein Realty Co., c/o Neil H. Klein and Co., 175 Great Neck Road, Great Neck, New York owns the property. Mr. Ronald Finkelstein of Finkelstein Realty of Mineola, New York manages the property.

In 1981, the SCDHS began sampling the potential industrial discharge locations at EMR. Unacceptable levels of and heavy metals were detected in the two leachpools on the north side of the building. As a result, EMR entered into a Consent Order agreeing to cease all discharges until it had applied for and received a SPDES permit. The stipulations of the Consent Order were never met. Further inspections and sampling confirmed that EMR continued discharging hazardous materials to the leachpools. It was discovered that Stewart Wood was dumping chemicals down the floor drain on weekends and then cementing it over only to chip away the concrete, discharge more chemicals, and then reseal the hole again and again. Criminal proceedings were filed against Mr. Wood. The exact quantity of the illegal discharge is unknown.

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property. After the company moved, Mr. Finkelstein arranged to have the building ventilated, and to have the walls and floors washed down. The SCDHS consider the facility to be clean (remediated) from the ground surface up, including the location of the former leachpools.

In March 1985, the SCDHS installed a 130-ft monitoring well adjacent to the former leachpools. During installation, the drillers noted a strong chemical odor emanating from the hole. Both soil boring and water samples taken at the time of installation contained elevated levels of metals and organics. No plume has yet been accomplished.

Coordinates:
Latitude: 40°48'44"
Longitude: 73°14'50"

EMR CIRCUITS INC.

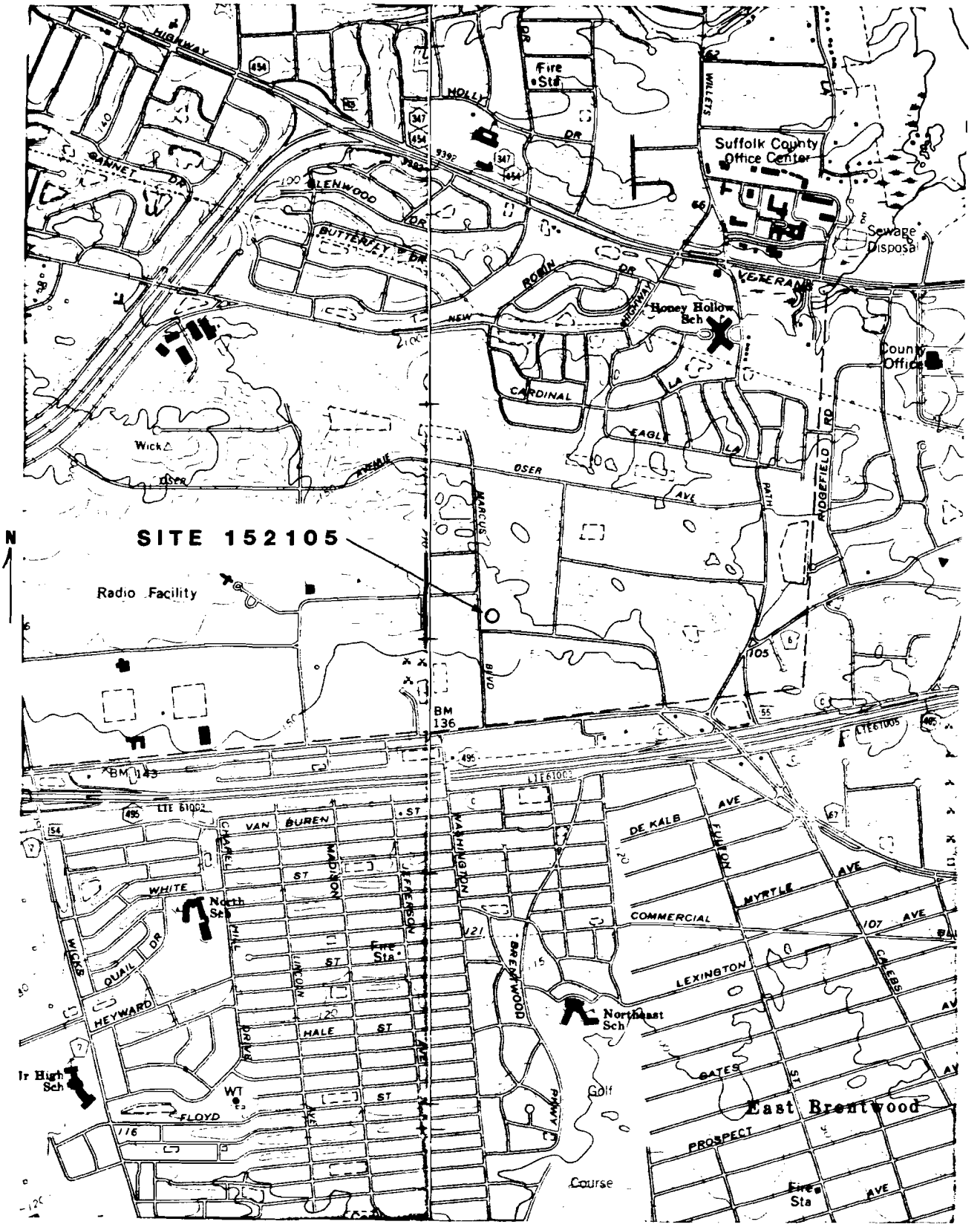

Figure 1-1. **CENTRAL ISLIP & GREENLAWN QUADS.**

Scale 1:24,000

Facility name: EMR Circuits

Location: Town of Smithtown, Suffolk County

EPA Region: II

Person(s) in charge of the facility: Mr. Ronald B. Finkelstein
450 Jericho Turnpike
Mineola, New York 11501

Name of Reviewer: EA Science and Technology Date: 9/24/86

General description of the facility:

(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility, contamination route of major concern; types of information needed for rating; agency action, etc.)

The site was a circuitboard manufacturing facility located approximately 2,000 ft north of the Long Island Expressway on the corner of Kennedy Drive and Marcus Boulevard. It was confirmed that the operation discharged hazardous waste into two leachpools. Analytical data from samples taken from the leachpools during 1981-1984 showed the presence of various solvents and metals. Limited ground-water analytical data exists from an onsite well.

Scores: S_M =27.82 S_{gw} =48.12 S_{sw} = 0 S_a = 0

S_{FE} = N/A

S_{DC} = 0

Maximum S_M = 37.93

FIGURE 1
HRS COVER SHEET

Ground Water Route Work Sheet							
Rating Factor		Assigned Value (Circle One)		Multi-plier	Score	Max Score	Ref. (Section)
1	Observed Release	(0)	45	1	0	45	3.1
If observed release is given a score of 45, proceed to line 4 If observed release is given a score of 0, proceed to line 2.							
2	Route Characteristics						3.2
	Depth to Aquifer of Concern	0 (1) 2 3		2	2	6	
	Net Precipitation	0 1 2 (3)		1	3	3	
	Permeability of the Unsaturated Zone	0 1 2 (3)		1	3	3	
	Physical State	0 1 2 (3)		1	3	3	
	Total Route Characteristics Score				11	15	
3	Containment	0 1 2 (3)		1	3	3	3.3
4	Waste Characteristics						3.4
	Toxicity/Persistence	0 3 6 9 12 15 (18)		1	18	18	
	Hazardous Waste Quantity	0 (1) 2 3 4 5 6 7 8		1	1	8	
	Total Waste Characteristics Score				19	26	
5	Targets						3.5
	Ground Water Use	0 1 2 (3)		3	9	9	
	Distance to Nearest Well/Population Served	0 4 6 8 10 12 16 18 20 24 30 32 (35) 40		1	35	40	
	Total Targets Score				44	49	
6	If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5				27,588	57,330	
7	Divide line 6 by 57,330 and multiply by 100			S_{gw} = 48.12			

Maximum Possible
45
19
44
37,620
65.62

FIGURE 2
GROUND WATER ROUTE WORK SHEET

Surface Water Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	45	4.1
If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.					
2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	(0) 1 2 3	1	0	3	
1-yr. 24-hr. Rainfall	0 1 (2) 3	1	2	3	
Distance to Nearest Surface Water	0 (1) 2 3	2	2	6	
Physical State	0 1 2 (3)	1	3	3	
Total Route Characteristics Score			7	15	
3 Containment	(0) 1 2 3	1	0	3	4.3
4 Waste Characteristics					4.4
Toxicity/Persistence	(0) 3 6 9 12 15 18	1	0	18	
Hazardous Waste Quantity	(0) 1 2 3 4 5 6 7 8	1	0	8	
Total Waste Characteristics Score			0	26	
5 Targets					4.5
Surface Water Use	0 1 (2) 3	3	6	9	
Distance to a Sensitive Environment	0 (1) 2 3	2	2	6	
Population Served/Distance to Water Intake Downstream	(0) 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40	
Total Targets Score			8	55	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			0	64,350	
7 Divide line 6 by 64,350 and multiply by 100		S_{sw} = 0			

FIGURE 7
SURFACE WATER ROUTE WORK SHEET

Air Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max Score	Ref. Section
[1] Observed Release	(0) 45	1	0	45	5.1
Date and Location:					
Sampling Protocol:					
If line [1] is 0, the S_a = 0. Enter on line [5]. If line [1] is 45, then proceed to line [2].					
[2] Waste Characteristics					5.2
Reactivity and Incompatibility	0 1 2 3	1		3	
Toxicity	0 1 2 3	3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
	Total Waste Characteristics Score			20	
[3] Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
	Total Targets Score			39	
[4] Multiply [1] x [2] x [3]				35,100	
[5] Divide line [4] by 35,100 and multiply by 100		S_a = 0			

FIGURE 9
AIR ROUTE WORK SHEET

	S	S^2
Groundwater Route Score (S_{gw})	48.12	2,315.53
Surface Water Route Score (S_{sw})	0	0
Air Route Score (S_a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		2,315.53
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		48.12
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		27.82

FIGURE 10
WORKSHEET FOR COMPUTING S_M

Maximum S_M = 37.93

Fire and Explosion Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Containment	1 3	1		3	7.1
2 Waste Characteristics					7.2
Direct Evidence	0 3	1		3	
Ignitability	0 1 2 3	1		3	
Reactivity	0 1 2 3	1		3	
Incompatibility	0 1 2 3	1		3	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score				20	
3 Targets					7.3
Distance to Nearest Population	0 1 2 3 4 5	1		5	
Distance to Nearest Building	0 1 2 3	1		3	
Distance to Sensitive Environment	0 1 2 3	1		3	
Land Use	0 1 2 3	1		3	
Population Within 2-Mile Radius	0 1 2 3 4 5	1		5	
Buildings Within 2-Mile Radius	0 1 2 3 4 5	1		5	
Total Targets Score				24	
4 Multiply 1 x 2 x 3				1,440	
5 Divide line 4 by 1,440 and multiply by 100		S_{FE} = N/A			

FIGURE 11
FIRE AND EXPLOSION WORK SHEET

Direct Contact Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max Score	Ref. (Section)
1 Observed Incident	(0) 45	1	0	45	8.1
If line 1 is 45, proceed to line 4 If line 1 is 0, proceed to line 2					
2 Accessibility	(0) 1 2 3	1	0	3	8.2
3 Containment	(0) 15	1	0	15	8.3
4 Waste Characteristics Toxicity	(0) 1 2 3	5	0	15	8.4
5 Targets					8.5
Population Within a 1-Mile Radius	0 1 2 3 4 (5)	4	20	20	
Distance to a Critical Habitat	0 1 2 3	4	0	12	
Total Targets Score			20	32	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			0	21,600	
7 Divide line 6 by 21,600 and multiply by 100	S_{DC} = 0				

FIGURE 12
DIRECT CONTACT WORK SHEET

DOCUMENTATION RECORDS
FOR
HAZARD RANKING SYSTEM

INSTRUCTIONS: As briefly as possible, summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference. Include the location of the document.

FACILITY NAME: EMR Circuits

LOCATION: Town of Smithtown, Suffolk County

DATE SCORED: 24 September 1986

PERSON SCORING: EA Science and Technology

PRIMARY SOURCES(S) OF INFORMATION (e.g., EPA region, state, FIT, etc.)

Mr. Ronald B. Finkelstein, Finkelstein Realty Corp.
EA Site Inspection, 23 January 1986
Suffolk County Department of Health Services

FACTORS NOT SCORED DUE TO INSUFFICIENT INFORMATION:

Air Route
Observed Release: ground water

COMMENTS OR QUALIFICATIONS:

Ambient ground-water quality data are unavailable. This route is scored on the basis of confirmed contamination in two outside leachpools.

The local fire marshal does not consider the site to be an imminent fire or explosion threat.

Direct contact scored on the basis that the leachpools have been adequately cleaned and covered.

GROUND WATER ROUTE

1 OBSERVED RELEASE

Contaminants detected (5 maximum):

Analytical data from an onsite ground-water monitoring well indicates the presence of iron (2-2.4 mg/liter), trace levels of several other heavy metals, and 1,1,1-trichloroethane in the ground water.

Reference: 2.

Rationale for attributing the contaminants to the facility:

No data available on ambient ground-water quality (Chapter 3) to confirm a release of contaminants from the site to ground water. Assigned value = 0.

Reference: 3.

***

2 ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifer(s) of concern:

The Pleistocene Age Upper Glacial Deposits and the Cretaceous Age Magothy Formation.

References: 4 and 5.

Depth(s) from the ground surface to the highest seasonal level of the saturated zone (water table[s]) of the aquifer of concern:

100-102.87 ft.

References: 2, 6, and 15.

Depth from the ground surface to the lowest point of waste disposal/storage:

9 ft depth of leachpool.

Reference: 10.

Depth to aquifer of concern = 100 ft - 9 ft = 91 ft.

Assigned value = 1.

Reference: 3.

Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

N/A.

Mean annual lake or seasonal evaporation (list months for seasonal):

N/A.

Net precipitation (subtract the above figures):

21 in.

Reference: 8.

Assigned value = 3.

Reference: 3.

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Sand and gravel.

Reference: 4.

Permeability associated with soil type:

$>10^{-3}$ cm/sec. Assigned value = 3.

Reference: 3.

Physical State

Physical state of substances at time of disposal (or at present time for generated gases):

Liquid.

Reference: 8.

Assigned value = 3.

Reference: 3.

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Leachpool.

References: 1 and 9.

Method with highest score:

Leachpool discharging directly to ground water. Assigned value = 3.

Reference: 3.

***

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

Chloroform, chromium, copper, lead, nickel, iron.

References: 2 and 10.

Compound with highest score:

All of the above = 18.

Reference: 3.

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

Unknown.

Reference: Chapter 3.

Basis of estimating and/or computing waste quantity:

Minimum quantity assumed. Assigned vaue = 1.

Reference: 3.

5 TARGETS

Ground Water Use

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:

Drinking water with municipal water from alternate sources presently unavailable.

References: 11, 12, 13, 14, 16, and 17.

Assigned value = 3.

Reference: 3.

Distance to Nearest Well

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply:

Suffolk County Water Authority well located on Falcon Drive.

References: 11, 12, and 14.

Distance to above well or building:

Approximately 0.9 mi (measured from the leachpool, the location of documented contamination).

References: 11, 14, and 15.

Assigned value = 3.

Reference: 3.

Population Served by Ground Water Wells Within a 3-Mile Radius

Identified water-supply well(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

Community supplies:	Population:
Suffolk County Water Authority	271,590
St. Josephs Convent L.I. University	1,177
Brentwood Water District	26,000
	298,767

(Appendix 1.3-5 provides a list of community well fields and wells.)

Numerous private residences located northeast of the site are not served by public water.

References: 11-14 and 29.

Computation of land area irrigated by supply well(s) drawing from aquifer(s) of concern within a 3-mile radius, and conversion to population (1.5 people per acre):

No agricultural land within 3 mi of the site.

Reference: 20.

Total population served by ground water within a 3-mile radius:

298,767. Assigned value = 5. Combined value = 35.

Reference: 3.

SURFACE WATER ROUTE

1 OBSERVED RELEASE

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

No data available (Chapter 3).

Assigned value = 0.

Reference: 3.

Rationale for attributing the contaminants to the facility:

***

2 ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

Average slope = 0 percent for below grade leaching pool.

Reference: 1.

Name/description of nearest downslope surface water:

Tributary of New Millpond.

Reference: 15.

Average slope of terrain between facility and above-cited surface water body in percent:

Average slope = <3 percent.

References: 1 and 15.

Is the facility located either totally or partially in surface water?

No.

References: 1 and 15.

Is the facility completely surrounded by areas of higher elevation?

No.

References: 1 and 15.

Combined assigned value = 0.

1-Year, 24-Hour Rainfall in Inches

2.5 in.

Assigned value = 2.

Reference: 3.

Distance to Nearest Downslope Surface Water

1.2 mi.

Reference: 15.

Assingned value = 1.

Reference: 3.

Physical State of Waste

Liquid.

Reference: 10.

Assigned value = 3.

References: 3.

***

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Leachpools are covered. Also, the overland route of runoff from the site is interrupted by many roads, highways, and ground-water recharge basins.

References: 1 and 15.

Method with highest score:

Intervening terrain precludes runoff to surface water.

Reference: 1.

Assigned value = 0.

Reference: 3.

***

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated

Contaminants score = 0. Therefore, waste characteristics are not evaluated.

Reference: 3.

Compound with highest score:

N/A.

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

N/A.

Basis of estimating and/or computing waste quantity:

N/A.

***

5 TARGETS

Surface Water Use

Use(s) of surface water within 3 miles downstream of the hazardous substance:

Recreational.

Reference: 21.

Assigned value = 2.

Reference: 3.

Is there tidal influence?

No.

Reference: 15.

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

1.44 mi.

Reference: 15.

Assigned value = 1.

Reference: 3.

Distance to 5-acre (minimum) freshwater wetland, if 1 mile or less:

None.

Reference: 15.

Distance to critical habitat of an endangered species or national wildlife refuge, if 1 mile or less:

None.

Reference: 22.

Population Served by Surface Water

Location(s) of water supply intake(s) within 3 miles (free-flowing bodies) or 1 mile (static waterbodies) downstream of the hazardous substance and population served by each intake:

None.

References: 12, 16, and 17.

Assigned value = 0.

Reference: 3.

Computation of land area irrigated by above-cited intake(s) and conversion to population (1.5 people per acre).

None. The major source of irrigation water in Suffolk County is ground water from wells. Generally, surface water is not utilized for this purpose.

References: 16 and 17.

Total population served:

Zero.

References: 11, 12, 16, and 17.

Assigned value = 0.

Reference: 3.

Name/description of nearest of above waterbodies:

Distance to above-cited intakes, measured in stream miles.

AIR ROUTE

In September 1983, SCDHS received complaints from Data Recording Systems, Inc. (97 Marcus Boulevard), a business next door to EMR Circuits, Inc., regarding odors that were making employees ill. SCDHS sampled the air at DRS and determined that there were some volatile organics in the workplace and that they probably came from EMR (Reference: 28). However, the site was remediated (above ground) in November 1983 (References: 24 and 26). There are no current data available in any of the agency files examined (Chapter 3). No HNU readings above background were obtained during EA's site inspection, 23 January 1986. Assigned value = 0. Reference: 3.

1 OBSERVED RELEASE

Contaminants detected:

Date and location of detection of contaminants

Methods used to detect the contaminants:

Rationale for attributing the contaminants to the site:

***

2 WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

Most incompatible pair of compounds:

Toxicity

Most toxic compound:

Hazardous Waste Quantity

Total quantity of hazardous waste:

Basis of estimating and/or computing waste quantity:

***

3 TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

0 to 4 mi 0 to 1 mi 0 to 1/2 mi 0 to 1/4 mi

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

Distance to 5-acre (minimum) freshwater wetland, if 1 mile or less:

Distance to critical habitat of an endangered species, if 1 mile or less:

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Distance to national or state park, forest, or wildlife reserve if 2 miles or less:

Distance to residential area, if 2 miles or less:

Distance to agricultural land in production within past 5 years, if 1 mile or less:

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

FIRE AND EXPLOSION

The local fire marshal has not certified that the site presents a significant fire or explosion threat (Reference: 23). There are no analytical data available in any of the agency files (Chapter 3).

1 CONTAINMENT

Hazardous substances present:

Type of containment, if applicable:

***

2 WASTE CHARACTERISTICS

Direct Evidence

Type of instrument and measurements:

Ignitability

Compound used:

Reactivity

Most reactive compound:

Incompatibility

Most incompatible pair of compounds:

***

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility:

Basis of estimating and/or computing waste quantity:

3 TARGETS

Distance to Nearest Population

Distance to Nearest Building

Distance to Sensitive Environment

Distance to wetlands:

Distance to critical habitat:

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Distance to residential area, if 2 miles or less:

Distance to agricultural land in production within past 5 years, if 1 mile or less:

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

Population Within 2-Mile Radius

Buildings Within 2-Mile Radius

DIRECT CONTACT

1 OBSERVED INCIDENT

Date, location, and pertinent details of incident:

No observed incident on record.

Reference: Section 3.

Site remediated above ground, i.e., leachpools cleaned out and filled with sand and paved over. References: 24 and 26.

Assigned value = 0.

Reference: 3.

***

2 ACCESSIBILITY

Describe type of barrier(s):

Leachpools have been cleaned and filled in.

References: 24 and 26.

Assigned value = 0.

Reference: 3.

***

3 CONTAINMENT

Type of containment, if applicable:

Leachpools have been cleaned and filled in.

References: 24 and 26.

Assigned value = 0.

Reference: 3.

***

4 WASTE CHARACTERISTICS

Toxicity

Compounds evaluated:

Containment score = 0. Therefore, waste characteristics are not evaluated.

Reference: 3.

Compound with highest score:

***

5 TARGETS

Population Within 1-Mile Radius

13,415. Estimated 30 percent of the population of Hauppauge (6,114), 2 percent of Central Islip (382), and 15 percent of Brentwood (6,649).

Reference: 25.

Assigned value = 5.

Reference: 3.

Distance to Critical Habitat (of Endangered Species)

None within 1 mi.

Reference: 22.

Assigned value = 0.

Reference: 3.

REFERENCES

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5. Jenson, H.M. and J. Soren. 1974. Hydrogeology of Suffolk County, Long Island, New York. U.S. Geological Survey. Hydrogeologic Investigations Atlas HA-501. (Appendix 1.3-3.)

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7. SCDHS. 1983. Field observations.

8. Lubke, E.R. 1964. Hydrogeology of the Huntington-Smithtown Area Suffolk County, New York. U.S. Geological Survey Water Supply Paper 1669-D. (Appendix 1.3-4.)

9. Governale, E. 1986. Public Health Sanitarian, SCDHS. Personal Communication, 23 January. (Appendix 1.1-5.)

10. SCDHS. Analytical data from leaching pool samples or holding tank, process tank, and discharge hose at EMR Circuits, Inc. on 16 December 1981, 5 May 1982, 23 March, 8 July, 10 August, 29 October, 18 November 1983, and 25 January and 17 August 1984. (Appendixes 1.1-6 and 1.1-14.)

11. SCDHS Water Resources Division. Supply and Monitoring Well Location Maps.

12. New York State Department of Health (NYSDOH). 1982. New York State Atlas of Community Water System Sources.

13. NYSDOH. 1984. Inventory-Community Water Systems.

14. Suffolk County Water Authority. 1985. Distribution of System Plates: 25N, 16N, 14M, 25M, and 26M. (Appendix 1.3-5.)

15. U.S. Geological Survey. 1979 photorevised. 7.5-Minute Series. Central Islip and Greenlawn Quads. (Appendix 1.2-1.)

16. Letter from A. Connell, District Conservationist, USDA Soil Conservation Service, to Mr. W. Going, EA Science and Technology, regarding irrigation in Suffolk County. 13 March. (Appendix 1.5-1.)

REFERENCES (Cont)

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18. Carey, S. 1986. Ground Water Section, Suffolk County Department of Health Services. Personal Communication. 7 April. (Appendix 1.5-3.)

19. Pica, D. 1986. Water Unit, Region I, NYSDEC. Personal Communication. 7 April. (Appendix 1.5-4.)

20. Long Island Regional Planning Board. 1982. Land Use in 1981, Quantification and Analysis of Land Use for Nassau and Suffolk Counties. Plates 5 and 6. (Appendix 1.5-9.)

21. Guthrie, C. 1986. Regional Fisheries Manager, Region I, NYSDEC. Personal Communication. 14 October. (Appendix 1.5-5.)

22. Ozard, J.W. 1986. Senior Wildlife Biologist. New York State Department of Environmental Conservation Wildlife Resources Center, Significant Habitat Unit. Personal Communication. 26 February. (Appendix 1.5-6.)

23. Anderson, A. 1986. Chief Fire Inspector, Town of Smithtown. Personal Communication. 21 April. (Appendix 1.5-7).

24. SCDHS. 1983. James. A. Whitney, Public Health Sanitarian. Notes on the cleaning of leachpools at EMR Circuits. (Appendix 1.1-14a.)

25. Long Island Regional Planning Board. 1985. Population Survey 1985. Current Population Esitmates for Nassau and Suffolk Counties. Hauppauge, Long Island, New York.

26. Letter from S. Wood, President, to J. Gladyse, SCDHS, regarding a hazardous waste manifest. 18 November. (Appendix 1.1-15.)

27. NYSDOT. 1981. 7.5-Minute Series Topographic: Central Islip Quad. Figure 1-1.)

28. SCDHS. 1983. Uniform complaint field report dated 17 August, and air quality data collected at EMR building and a nearby commercial establishment on 7 September 1983. (Appendix 1.1-13.)

29. Suffolk County Water Authority. 1985. Active Services. December. (Appendix 1.5-8).

United States
Environmental Protection
Agency

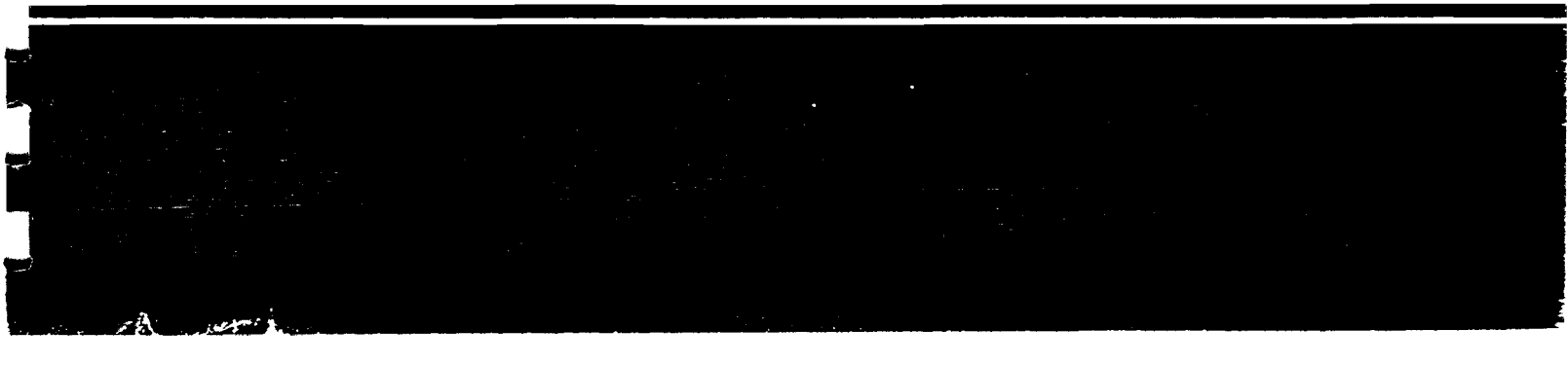
Office of Emergency and
Remedial Response
Washington, DC 20460

EPA Form 2070-12
July 1981

EPA

Potential Hazardous Waste Site

Preliminary Assessment



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	New

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
EMR Circuits	99 Marcus Boulevard				
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 COUNTY**	**07 COUNTY CODE**	**08 CONG DIST**
Hauppauge	NY	11788	Suffolk		
09 COORDINATES LATITUDE	LONGITUDE				
40° 48' 44."	73° 14' 50."				

10 DIRECTIONS TO SITE (Starting from nearest public road)

Property is on the corner of Kennedy Drive and (99) Marcus Boulevard in Hauppauge, New York.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)			
Manager; Owner Rep., Ronald B. Finkelstein	450 Jericho Turnpike			
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 TELEPHONE NUMBER**	
Mineola	NY	11501	516) 747-5544	
07 OPERATOR (If known and different from owner)	**08 STREET** (Business, mailing, residential)			
09 CITY	**10 STATE**	**11 ZIP CODE**	**12 TELEPHONE NUMBER**	
			( )	

13 TYPE OF OWNERSHIP (Check one)

☒ A. PRIVATE ☐ B. FEDERAL _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL

☐ F. OTHER: _____ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A. RCRA 3001 DATE RECEIVED: ___/___/___ MONTH DAY YEAR ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ___/___/___ MONTH DAY YEAR ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

☒ YES ☐ NO DATE 1/23/86 MONTH DAY YEAR

BY (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR ☐ C. STATE ☒ D. OTHER CONTRACTOR

☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)

CONTRACTOR NAME(S): EA Science and Technology

02 SITE STATUS (Check one)

☐ A. ACTIVE ☒ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION 1981 BEGINNING YEAR | 1984 ENDING YEAR ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Circuitboard manufacturing company discharged solvents and heavy metals into underground cesspools.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Potential for ground-water contamination; heavy metals and solvents found in ground-water monitoring well on site.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency, Organization)		03 TELEPHONE NUMBER
Rebecca Ligotino	EA Science and Technology		(914) 692-6706
04 PERSON RESPONSIBLE FOR ASSESSMENT	**05 AGENCY**	**06 ORGANIZATION**	**07 TELEPHONE NUMBER**	**08 DATE**
William Going		EA	(914) 692-6706	3/26/86 MONTH DAY YEAR

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	New

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☐ A SOLID
- ☐ B POWDER, FINES
- ☐ C SLUDGE
- ☐ D OTHER (Specify)
- ☐ E SLURRY
- X F LIQUID
- ☐ G GAS

02 WASTE QUANTITY AT SITE
(Measures of waste quantities must be independent)

TONS: _____
CUBIC YARDS: _____
NO. OF DRUMS: Unknown

03 WASTE CHARACTERISTICS (Check all that apply)

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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS	Unknown		
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	Unknown		

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SOL	Chloroform	67-66-3	TK	320	ppb
SOL	1,1,1 Trichloroethane	71-55-6	TK	1,600	ppb
SOL	1,1,2 Trichloroethylene	79-01-6	TK	270,000	ppb
SOL	Tetrachloroethylene	127-18-4	TK	1,200	ppb
SOL	X-ethyltoluene	---	TK	10,000	ppb
SOL	xylene(s)	1330-20-7	TK	1,400	ppb
SOL	1,3,5 Trimethylbenzene	---	TK	5,200	ppb
SOL	1,2,4 Trimethylbenzene	95-63-6	TK	11,000	ppb
SOL	1,2,4 Trichlorobenzene	120-82-1	TK	1,800	ppb
SOL	1,2,3 Trichlorobenzene	87-61-6	TK	1,900	ppb
SOL	Methyl Ethyl-ketone	78-93-3	TK	69,000	ppb
MES	Copper	7440-50-8	OD-Spill	110.0	mg/liter
MES	Lead	7439-92-1	OD Spill	1.0	mg/liter
MES	Nickel	7440-02-0	OD-Spill	2.4	mg/liter
MES	Chromium	7440-47-3	OD-Spill	0.03	mg/liter

V. FEEDSTOCKS (See Appendix for CAS Numbers) Unknown

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

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

New York State Department of Environmental Conservation Inactive Hazardous Waste Disposal Site Report
Suffolk County Department of Health Services file
EA site inspection, 23 January 1986.

United States
Environmental Protection
Agency

Office of Emergency and
Remedial Response
Washington, DC 20460

EPA Form 2070-13
July, 1981

EMR Circuits, Inc.

EPA

Potential Hazardous Waste Site

Site Inspection Report

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	NEW

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
EMR Circuits, Inc.	99 Marcus Boulevard				
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 COUNTY**	**07 COUNTY CODE**	**08 CONG DIST**
Hauppage (Town of Smithtown)	NY	11788	Suffolk		

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
40° 48' 44"	73° 14' 50"	☒ A. PRIVATE ☐ B. FEDERAL _____ ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER _____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
01 / 23 / 86 (MONTH DAY YEAR)	☐ ACTIVE ☒ INACTIVE	1981 (BEGINNING YEAR) 1984 (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR _____ (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
☐ E. STATE ☒ F. STATE CONTRACTOR EA Science and Tech (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO
William Going	Environmental Scientist	EA	(914) 692-6706
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO**
Ellen Bidwell	Geologist	EA	(914) 692-6706
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Ronald B. Finkelstein	Manager, Owner Rep	450 Jericho Turnpike	(516) 747-5544
		Mineola, New York 11501	( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	1300 hours	Sunny, cold (no snow cover)

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO
Rebecca Ligotino	EA Science and Technology	(914) 692-6706

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
William Going		EA	(914) 692-6706	09 / 24 / 86 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	NEW

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☐ C. SLUDGE
- ☐ D. OTHER (Specify)
- ☐ E. SLURRY
- ☒ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent.)

- TONS
- CUBIC YARDS
- NO. OF DRUMS unknown

03 WASTE CHARACTERISTICS (Check all that apply)

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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS	Unknown		
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	Unknown		

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SOL	Chloroform	67-66-3	TK	12	ppb
SOL	1,1,1 Trichloroethane	71-55-6	TK	4,300	ppb
SOL	1,1,2 Trichloroethylene	79-01-6	TK	13,000	ppb
SOL	Xylene	1330-20-7	TK	910	ppb
SOL	2-Butanone	1338-23-4	TK	860,000	ppb
SOL	Methyl Ethyl Ketone	78-93-3	TK	2,100	ppb
SOL	Ethylbenzene	100-41-4	TK	130	ppb
SOL	Methylene Chloride	74-87-3	TK	130	ppb
SOL	Phenol	108-95-2	TK	0.59	mg/liter
MES	Copper	7440-50-8	TK	1,340.0	mg/liter
MES	Lead	7439-92-1	TK	100.0	mg/liter
MES	Nickel	7440-02-0	TK	22.0	mg/liter
MES	Chromium	7440-47-3	TK	6.0	mg/liter
MES	Iron	7439-89-6	TK	22.0	mg/liter

V. FEEDSTOCKS (See Appendix for CAS Numbers) Unknown

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

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

Appendixes 1.1-7 and 1.1-16.

EPA

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

I. IDENTIFICATION	
01 STATE: NY	02 SITE NUMBER: NEW

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 298,767
04 NARRATIVE DESCRIPTION
Ground water in the aquifer of concern is the source for 13 Suffolk County Water Authority well fields, the Brentwood Water District (2 wells), and St. Joseph's Convent Long Island University (1 well). Plus an undetermined number of domestic wells also exist.

01 ☐ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION
No viable overland route to surface water.

01 ☒ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION
SCDHS took several samples at the site after receiving complaints of solvent odors. The samples contained excessive levels of several organic compounds.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION
No imminent threat.

01 ☐ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION
None known.

01 ☐ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE _____) — ☒ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: unknown (Acres)
04 NARRATIVE DESCRIPTION
SCDHS analyzed portions of the soil which resulted from the monitoring well installation. It contained elevated levels of several heavy metals

01 ☐ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 298,767
04 NARRATIVE DESCRIPTION
Limited to the population served by ground water from the aquifer of concern within a 3-mi radius of the site.

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION
In September 1983, SCDHS received complaints from Data Recording Systems, Inc. (97 Marcus Boulevard), a business next door to EMR Circuits, Inc., regarding odors that were making employees ill. SCDHS sampled the air at DRS and determined that there were some volatile organics in the workplace and that they probably came from EMR.

01 ☐ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION
None known.

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	NEW

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None known.

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
None known.

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None known.

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills, Runoff, Standing liquids, Leaking drums) — 02 ☒ OBSERVED (DATE: 1981-1984) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
Liquid industrial wastes containing metals and solvents discharged to leach-pools.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
No potential.
None known.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
No potential.

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☒ OBSERVED (DATE: 1981-1984) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
EMR repeatedly discharged hazardous chemicals into two leachpools on the north side of the building.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 298,767

IV. COMMENTS

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

EA Site Inspection, 23 January 1986
Appendixes 1.1-7, 1.1-13, and 1.1-16.
Chapter 4.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	NEW

II. PERMIT INFORMATION None

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☒ I. OTHER (Specify) leachpool	unknown	

04 TREATMENT (Check all that apply)

- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER _____ (Specify)

05 OTHER

- ☒ A. BUILDINGS ON SITE

06 AREA OF SITE

0.05 (Acres)

07 COMMENTS

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

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

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

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE ☐ YES ☒ NO

02 COMMENTS

Leachpools are adequately covered.

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

EA Site Inspection, 23 January 1986.
Appendixes 1.1-4 through 1.1-6.

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

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	NEW

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)	SURFACE	WELL	02 STATUS	ENDANGERED	AFFECTED	MONITORED	03 DISTANCE TO SITE
COMMUNITY	A. ☐	B. ☒	Unknown	A. ☐	B. ☐	C. ☐	A. 0.9 (mi)
NON-COMMUNITY	C. ☐	D. ☒		D. ☐	E. ☐	F. ☐	B. appr. 1.5 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☒ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER	03 DISTANCE TO NEAREST DRINKING WATER WELL
298,767	(mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
100 (ft)	NE	91 (ft)	unknown (gpd)	☒ YES ☐ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)

The Suffolk County Water Authority has 13 well fields; the Brentwood Water District, two wells; and St. Joseph's Convent Long Island University has one well within a 3-mi radius of the site. The wells pull water from the Upper Glacial and Magothy aquifers. There are also some residences served by private wells within a 3-mi radius of the site.

10 RECHARGE AREA		11 DISCHARGE AREA	
☒ YES ☐ NO	COMMENTS	☐ YES ☐ NO	COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☒ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME	AFFECTED	DISTANCE TO SITE
Tributary to New Millpond	☐	1.2 (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 13,145 NO. OF PERSONS	B. 49,010 NO. OF PERSONS	C. 93,817 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION: adjacent (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE	04 DISTANCE TO NEAREST OFF-SITE BUILDING
	adjacent (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural village, densely populated urban area)

Site located in an industrial park which is surrounded by medium and high density residential areas.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	NEW

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☒ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one) Unknown

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

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
1,400 (ft)	unknown (ft)	unknown	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
21 (in)	2.5-3.0 (in)	0 %	NE &SE	< 3 %

09 FLOOD POTENTIAL

SITE IS IN N/A YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE	OTHER
A. 1.44 (mi)	B. (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

(mi)

ENDANGERED SPECIES: None

13 LAND USE IN VICINITY

DISTANCE TO

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AG LAND
A. adjacent (mi)	B. 0.5 (mi)	C. 3.7 (mi)	D. 3.7 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Site is located in the western-central part of Long Island at an elevation of about 170 ft above mean sea level. The site is flat. Regional slope is approximately 1 percent to the east.

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

EA Site Inspection, 23 January 1986
USGS. 1979. 7.5-Minute Planimetric Series, Central Islip and Greenlawn Quads.
LIRPB. 1982. Quantification and Analysis of Land Use for Nassau and Suffolk Counties.
LIRPB. 1985. Population Survey. 1985: Current Population Estimates for Nassau and Suffolk Counties, Hauppage, New York.
U.S. Department of Interior Geological Survey. 1967. Map of Flood-prone Areas. 7.5-Minute Series, Central Islip Quad.

Ozard, J. 1986. NYSDEC, Personal Communication, 6 March.
NYSDOH. 1982. New York State Atlas of Community Water System Services.
SCWA. 1986. Acive Services Estimates.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	NEW

II. SAMPLES TAKEN None

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL			
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
Slope	Estimated with Suunto Clinometer.
Volatile organics	Measured with HNU. No readings above background.

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND ☒ AERIAL

02 IN CUSTODY OF EA Science and Technology
(Name of organization or individual)

03 MAPS
☒ YES
☐ NO

04 LOCATION OF MAPS
EA Science and Technology

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

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

EA Site Inspection, 23 January 1986.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	NEW

II. CURRENT OWNER(S) | **PARENT COMPANY** (If applicable)

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
Grenlein Realty Co. c/o Neil H. Klein Co.			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**10 STREET ADDRESS** (P.O. Box, RFD #, etc.)	**11 SIC CODE**
175 Great Neck Road			
05 CITY	**06 STATE** / **07 ZIP CODE**	**12 CITY**	**13 STATE** / **14 ZIP CODE**
Great Neck,	NY 11021		

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**10 STREET ADDRESS** (P.O. Box, RFD #, etc.)	**11 SIC CODE**
05 CITY	**06 STATE** / **07 ZIP CODE**	**12 CITY**	**13 STATE** / **14 ZIP CODE**

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**10 STREET ADDRESS** (P.O. Box, RFD #, etc.)	**11 SIC CODE**
05 CITY	**06 STATE** / **07 ZIP CODE**	**12 CITY**	**13 STATE** / **14 ZIP CODE**

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**10 STREET ADDRESS** (P.O. Box, RFD #, etc.)	**11 SIC CODE**
05 CITY	**06 STATE** / **07 ZIP CODE**	**12 CITY**	**13 STATE** / **14 ZIP CODE**

III. PREVIOUS OWNER(S) (List most recent first) | **IV. REALTY OWNER(S)** (If applicable, list most recent first)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**03 STREET ADDRESS** (P.O. Box, RFD #, etc.)	**04 SIC CODE**
05 CITY	**06 STATE** / **07 ZIP CODE**	**05 CITY**	**06 STATE** / **07 ZIP CODE**

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**03 STREET ADDRESS** (P.O. Box, RFD #, etc.)	**04 SIC CODE**
05 CITY	**06 STATE** / **07 ZIP CODE**	**05 CITY**	**06 STATE** / **07 ZIP CODE**

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**03 STREET ADDRESS** (P.O. Box, RFD #, etc.)	**04 SIC CODE**
05 CITY	**06 STATE** / **07 ZIP CODE**	**05 CITY**	**06 STATE** / **07 ZIP CODE**

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

Appendix1.1-1.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	NEW

II. CURRENT OPERATOR (If different from owner) N/A

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

01 NAME	02 D+B NUMBER
Mr. Stewart Wood	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
(Adress unknown)	

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

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

Appendixes 1.1-1 and 1.1-6.

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	NEW

II. ON-SITE GENERATOR N/A

01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	
05 CITY	06 STATE / 07 ZIP CODE	

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

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

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	NEW

II. PAST RESPONSE ACTIVITIES

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

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

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

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

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

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

01 ☒ G. WASTE DISPOSED ELSEWHERE — 02 DATE 1983-1984 — 03 AGENCY SCDHS
04 DESCRIPTION
Under the direction of SCDHS, the company had hazardous waste removed from site.

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

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

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

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

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

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

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

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

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

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

EPA

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

I. IDENTIFICATION
01 STATE: NY | 02 SITE NUMBER: NEW

II PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ S. CAPPING/COVERING 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ T. BULK TANKAGE REPAIRED 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ U. GROUT CURTAIN CONSTRUCTED 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ V. BOTTOM SEALED 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ W. GAS CONTROL 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ X. FIRE CONTROL 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ Y. LEACHATE TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ Z. AREA EVACUATED 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ 1. ACCESS TO SITE RESTRICTED 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ 2. POPULATION RELOCATED 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☒ 3. OTHER REMEDIAL ACTIVITIES 04 DESCRIPTION	02 DATE 1983-1984	03 AGENCY SCDHS

EMR had the contaminated leachpools cleaned and filled with clean sand and gravel.

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

Appendixes 1.1-15, 1.1-16, 1.1-17, and 1.1-17a.

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	NEW

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☒ YES ☐ NO

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

In April 1982, EMR entered into a Consent Order agreeing to cease all discharges until they had applied for and received a SPDES permit to hold all industrial waste and to maintain receipts for any pickup of this waste; to apply for a permit to store hazardous materials; and to submit an engineering report identifying all industrial processes and discharges at the facility. The stipulated conditions were never completely met.

After continuing to dispose of hazardous chemicals illegally, criminal proceedings were filed against the owner in 1983.

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

Appendixes 1.1-1, 1.1-2, 1.1-4, and 1.1-7 through 1.1-10.

6. ASSESSMENT OF DATA ADEQUACY AND RECOMMENDATIONS

6.1 ADEQUACY OF EXISTING DATA

The available data are considered insufficient to prepare a final HRS score for this site. Although analytical data are available for ground-water samples, ambient data are lacking. Soil sample analytical data area also available.

6.2 RECOMMENDATIONS

In order to prepare a final HRS score for this site, analytical data regarding the quality of the ambient ground water and additional sediment quality data will be necessary, thus requiring performance of a Phase II investigation. The proposed Phase II study would include the installation of three test borings/ observation wells, and the collection and analysis of ground-water and sediment samples.

6.3 PHASE II WORK PLAN

6.3.1 Task 1 - Mobilization and Site Reconnaissance

Project mobilization includes review of the Phase I report and updating the site database with any new information made available since completion of the Phase I report. Based on that review, a draft scope of work for this site will be agreed to and a project schedule developed. At this time, a draft Quality Assurance/Quality Control (QA/QC) document will be prepared in accordance with the most up-to-date NYSDEC guidelines.

Site reconnaissance will be performed to examine general site access for Phase II studies. Site reconnaissance will familiarize key project personnel with the site, enable the project geologists to evaluate potential boring/well locations, and enable the project Health and Safety Officer to develop specific health and safety requirements for the field activities. Emergency, fire, and hospital services will be identified. Standard practice during site reconnaissance is an air survey with a photoionization detector (HNU or similar instrument). The air survey would be performed around the site perimeter and throughout the site for safety purposes. Detection of releases to air during site reconnaissance may warrant further confirmation studies. Based on the Phase I study, it is expected that field activities will require only Level D health and safety protective measures.

6.3.2 Task 2 - Geophysics

Multidepth EM and earth resistivity surveying will be performed around the site area perimeter to evaluate the potential presence of ground-water contaminant plumes and stratigraphic conditions. The number of stations and value of depth settings will be determined on the basis of field conditions. Results of the geophysics will be used to refine the specifications for locations, depths, and number of observation wells to be installed.

6.3.3 Task 3 - Preparation of Final Sampling Plan

All data collected during Tasks 1 and 2 will be evaluated to finalize sampling and boring/well locations. The final sampling plan will be developed and submitted to NYSDEC for approval. The plan will include final sampling

locations, boring and well specifications, and reference pertinent portions of the QA/QC Plan. A final budget will be developed to complete the drilling and sampling program.

6.3.4 Task 4 - Test Borings and Observation Wells

Because there are hundreds of feet of unconsolidated sediment underlying the site, EA recommends that the subsurface investigation be confined, at this time, to the shallow glacial aquifer to confirm if ground-water contamination resulting from the site is present. If such contamination is confirmed, then the investigations could be expanded to include the installation and sampling of monitoring wells completed to greater depths. Although a monitoring well was installed onsite by the SCDHS, it was completed with only a screw-on plug and not secured with a locking device. Based upon currently available information, EA recommends the installation of three test borings/observation wells. This work would be performed under the fulltime supervision of a geologist. It is anticipated that the hollow-stem auger drilling method will be used. Prior to the drilling of each boring/well, and at the completion of the last boring/well, the drilling equipment which comes in contact with subsurface materials will be steam-cleaned, as well as the split-spoon sampler after obtaining each sample. Soil sampling will be performed using a split-spoon sampler at approximately 5-ft intervals and at detected major stratigraphic changes. An HNU, or similar instrument, would be used to monitor the potential organic vapors emitted during drilling operations and from each soil sample. Samples of major soil/unconsolidated sediments will be collected for grain-size and/or Atterburg Limits analysis.

It is anticipated that the wells to be installed at this site will be completed in the unconsolidated sediment, approximately 10-20 ft below the ground-water table. Standard construction of such a well would include 10-20 ft of 2-in. diameter threaded-joint PVC screen and an appropriate length of PVC riser with a bottom plug cap, sand pack, bentonite seal, and protective surficial steel casing with a locking cap.

Upon completion and development of the wells by air surging/pumping, the vertical elevation of the upper rim of each well casing and the horizontal location will be surveyed in order to aid in evaluation of the ground-water flow direction.

For cost estimating purposes, it is assumed that:

a. The depth of each of the three monitoring wells will be 120 ft below ground surface.

b. The 3 wells will require 13 days to install, develop, and survey.

c. All drill sites are accessible by truck-mounted drilling rigs as determined by the driller.

d. There are no excessive amounts of cobbles/boulders which would increase drilling time.

e. Steam-cleaning of drilling/sampling equipment will be performed at each boring/well location. The fluids will be discharged to ground surface.

f. All drill cuttings, fluids, and development water will be left on, or discharged to, the ground surface in the immediate area of the activity.

g. That permission from appropriate land owners to drill borings/wells on their property will be a simple process (expedited by the NYSDEC, if necessary) so that delays during field operations are not incurred.

6.3.5 Task 5 - Sampling

All sampling and analysis will be conducted in accordance with the project QA/QC Plan. The analytical program for every water and sediment sample will include the 130 organic and 25 inorganic parameters listed in Statement of Work No. 784, New York State Department of Environmental Conservation Superfund and Contract Laboratory Protocol, January 1985. Also, all additional non-priority pollutant GC/MS major peaks will be identified and quantified. Major peaks will be considered as those whose area is 10 percent or greater than the calibrating standard(s). Based upon the currently available information, collection and analysis of the following numbers and types of samples is recommended:

3 Ground-water samples (one from each Phase II well).

4 Sediment samples from the well to be installed near the old industrial leachpools.

6.3.6 Task 6 - Contamination Assessment

EA will evaluate the data obtained during the records search and field investigation: prepare final HRS scores and documentation forms; complete EPA Form 2070-13; summarize site history, site characteristics, available sampling and analysis data; and determine the adequacy of the existing data to confirm release, and if there is a population at risk.

6.3.7 Task 7 - Remedial Cost Estimate

EA will evaluate remedial alternatives for the site and develop a list of potential options given the information available on the nature and extent of contamination. Approximate cost estimates for the selected potential remedial options will be computed. This work is not intended to be, or a substitute for, a formal cost effectiveness analysis of potential remedial actions.

6.3.8 Task 8 - Final Phase II Report

In accordance with current (January 1985) NYSDEC guidelines, the Phase II report will include:

a. The results of the Phase II investigation, complete with boring logs, photos, and sketches developed as part of the Phase II field work.

b. Final HRS scores with detailed documentation.

c. Selected potential remedial alternatives and associated cost estimates.

In addition to the final Phase II report, the following raw data and resulting reduction would be provided to NYSDEC:

a. geophysical
b. well logs
c. all sampling forms and data
d. all analytical data
e. chain-of-custody forms
f. other pertinent collected information.

6.3.9 Task 9 - Project Management/Quality Assurance

A Project Manager will be responsible for the supervision, direction, and review of the project activities on a day-to-day basis. A Quality Assurance Officer will ensure that the QA/QC Program protocols are maintained and that the resultant analytical data are accurate.

6.4 PHASE II COST ESTIMATE

Based on the scope of work and assumptions described above, the estimated costs to complete the Phase II investigation of the EMR Circuits site are as follows:

Consultant Costs (including labor, direct costs, fee)	$37,580
Drilling Contractor	47,740
Laboratory	13,100
Total	$98,420

Appendix 1.1-1

RECEIVED MAR 17 1986

p.1-14

RIVKIN, RADLER, DUNNE & BAYH

100 GARDEN CITY PLAZA

GARDEN CITY, NEW YORK 11530

(516) 746-7500

TELEX: 645-074 • TELECOPIER: (516) 747-2843 • CABLE: AT LAW GRCY

275 MADISON AVENUE
NEW YORK, N.Y. 10016
(212) 696-9050

1575 EYE STREET, N.W.
WASHINGTON, D.C. 20005
(202) 289-8660

30 NORTH LA SALLE STREET
CHICAGO, ILLINOIS 60602
(312) 782-5680

WRITERS DIRECT DIAL

(516) 228-4314

March 11, 1986

Ms. Ellen Bidwell
Geologist
EA Science & Technology
R.D. 2, Box 91
Goshen Turnpike
Middletown, New York 10940

Re: EMR Circuits

Dear Ms. Bidwell:

This is in response to your letter of February 14, 1986 concerning the history of the above site. Your Interview Acknowledgement Form dated January 23, 1986 is completely inaccurate. Mr. Finkelstein has taken the time to completely correct and update the interview summary which is enclosed for your records.

Thank you for your attention to this matter.

Very truly yours,

Rhonda S Kahn

RIVKIN, RADLER, DUNNE & BAYH

RSK:nd

cc: Mr. Neil Klein
160 Peach Drive
Roslyn, New York 11576

p 2 of 4

INTERVIEW ACKNOWLEDGEMENT FORM

Site Name: EMR Circuits

I.D. Number: 152105

Person Contacted: Ronald B. Finkelstein

Date: 23 January 1986

Title:

Affiliation: Finkelstein Realty Incorporated

Phone No.: (516) 747-5544

Address: 450 Jericho Turnpike
Mineola, New York 11501

Persons Making Contact:
EA Representatives:

William Going
Ellen Bidwell

Type of Contact: In person

Interview Summary:

~~Mr. Finkelstein manages the property at 99 Marcus Boulevard for current owners (who are elderly and live in Florida, and are not identified by Mr. Finkelstein at this time). He realized in 1983 that EMR Circuits, Incorporated was discharging liquid wastes into a cesspool at the side of the building and that they were generally making a mess of the facilities with their waste disposal practices. He tried for months to evict them from the property and finally succeeded. He had to pay for complete renovation of the facility, i.e., removal of the two cesspools and surrounding soil, washdown of floors inside the building around floor drains, and ventilation of the building.~~
~~Mr. Finkelstein does not know the whereabouts of the president of his former tenant, EMR Circuits Incorporated, but would like to find him so that insurance matters could be discussed. Mr. Finkelstein has kept the Suffolk County Department of Health Services (SCDHS) informed of his renovations and the SCDHS have indicated to him that they consider the facility clean above ground.~~

Acknowledgement:

I have read the above transcript and I agree that it is an accurate summary of the information verbally conveyed to EA Science and Technology interviewers, or as I have revised below, is an accurate account.

Revisions (please write in corrections to above transcript):

The above interview summary is inaccurate and incomplete. Please see corrected interview summary attached.

Signature: Ronald B. Finkelstein Date: 3/14/86

8-11

INTERVIEW ACKNOWLEDGEMENT FORM

Site Name: EMR Circuits

I.D. Number: 152105

Person Contacted: Ronald B. Finkelstein

Date: 23 January 1986

Title:

Affiliation: Finkelstein Realty Incorporated

Phone No.: (516) 747-5544

Address: 450 Jericho Turnpike
Mineola, New York 11501

Person Making Contact:
EA Representatives:

Type of Contact: In person

William Going
Ellen Bidwell

Interview Summary:

Mr. Finkelstein manages the property at 99 Marcus Boulevard for current owners (who are elderly and live in Florida). When Mr. Finkelstein began managing this building in October, 1981, he visited the tenants and noticed that EMR Circuits, Inc. had a very filthy operation. Mr. Finkelstein was not aware that EMR was discharging liquid wastes into a cesspool. He repeatedly tried evicting EMR because of their failure to pay rent and their failure to properly maintain the building in satisfactory condition.

On March 14, 1984, the president of EMR Circuits was arrested, convicted and sentenced for dumping contaminated substances into a cesspool. This is the first time Mr. Finkelstein learned of EMR's illegal activities. Mr. Finkelstein did not remove the two cesspools and surrounding soil but arranged and paid for a washdown of floors and a cleanup of the inside of the building, including ventilating the building. EMR was subsequently evicted. Mr. Finkelstein does not know the

whereabouts of the president of his former tenant, EMR Circuits Inc., but would like to find him so that insurance matters can be discussed. Mr. Finkelstein has kept the Suffolk County Department of Health Services (SCDHS) informed of his cleanup activities and the SCDHS has indicated to him that they consider the facility clean above ground.

Appendix 1-1-1a.

EA SCIENCE AND TECHNOLOGY
A Division of EA Engineering, Science, and Technology, Inc.

COMMUNICATIONS RECORD FORM

Distribution: ( ) *EMR Circuits, Inc. , ( ) _____
( ) _____ , ( ) _____
( ) Author

Person Contacted: Mr. Mike Komoroske Date: 22 Oct 86

Phone Number: 518 457 0639 Title: Sanitary Engineer

Affiliation: NYSDEC Albany Type of Contact: Phone

Address: Albany (50 Wolf Rd) Person Making Contact: Gorny

Communications Summary: Mike indicated that the current owner of the property at 99 Marcus Blvd, in the Town of Smithtown, New York is

Grenlein Realty Co
c/o Neil H. Klein
175 Great Neck Rd
Great Neck, NY 11021

*NYCD No. 152105

(see over for additional space)

Signature: William Gorny

EA SCIENCE AND TECHNOLOGY
A Division of EA Engineering, Science, and Technology, Inc.

Appendix 1.1-2

p 1 of 3

COMMUNICATIONS RECORD FORM

Distribution: (✓ EMR Circuits Inc. (99 Marcus Blvd)
( ) _____, ( ) _____
( ) Author

Person Contacted: Jim Pinto PE/ John Gladysz Date: 12/10/85
12/11/85
Phone Number: 516 451 4634 Title P.H. Engineer / Sanitary engineer
Affiliation: SCDHS Hazardous Mat. Mngt. Type of Contact: In person
Address: 15 Horseblock Plaza Person Making Contact: Going/Ligotino
Farmingville NY 11738

Communications Summary: EMR Circuits 152105

EMR Circuits was formerly Electromotive Research. Current owners not to be Electromotive -- worker(?) bought out previous owners.

Site of concern is located at 99 Marcus. A hidden pool, county installed well(s) in March 1985, sampled at a couple of depths.

EMR is presently at 89 Cabot St. Recently moved (within last year) No problems at this site.

(see over for additional space)

Signature: William Going / W. J. Ligotino

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
INACTIVE HAZARDOUS WASTE DISPOSAL SITE REPORT

p2of3
(Continuation) by Pm

PRIORITY CODE: _____ SITE CODE: _____

NAME OF SITE: EMR CIRCUITS, INC. REGION: I

STREET ADDRESS: ~~89 CADET CT.~~ 99 MARCUS ST.

TOWN/CITY: HAUPPAUGE COUNTY: SUFFOLK

NAME OF CURRENT OWNER OF SITE: STEWART WOOD (FACILITY) KUKA MANAGEMENT CORP. (LAND)

ADDRESS OF CURRENT OWNER OF SITE: 105 OSER AVE, HAUPPAUGE, N.Y.

TYPE OF SITE: OPEN DUMP ☐ STRUCTURE ☑ LAGOON ☐
LANDFILL ☐ TREATMENT POND ☐

ESTIMATED SIZE: _____ ACRES

SITE DESCRIPTION:

CIRCUITBOARD MFG. FACILITY WITH DISCHARGE OF WASTES TO GROUNDWATER

HAZARDOUS WASTE DISPOSED: CONFIRMED ☑ SUSPECTED ☐

TYPE AND QUANTITY OF HAZARDOUS WASTES DISPOSED:

TYPE	QUANTITY (POUNDS, DRUMS, TONS, GALLONS)
TRICHLOROETHANE	
TRICHLOROETHYLENE	
TETRACHLOROETHYLENE	
ETHYLTOLUENE	
XYLENE	
TRIMETHYLBENZENE	
TRICHLOROBENZENE	
METHYLETHYL-KETONE	
~~BUTANONE~~	
COPPER	
NICKEL	
LEAD	
CHROMIUM	

PAGE

TIME PERIOD SITE WAS USED FOR HAZARDOUS WASTE DISPOSAL:

FEB, 19 81 TO PRESENT, 19 ?

OWNER(S) DURING PERIOD OF USE: SAME (SINCE 9/28/82)

SITE OPERATOR DURING PERIOD OF USE: EMR CIRCUITS (STEN WOOD)

ADDRESS OF SITE OPERATOR:

ANALYTICAL DATA AVAILABLE: AIR ☐ SURFACE WATER ☑ GROUNDWATER ☑
SOIL ☐ SEDIMENT ☐ NONE ☐

CONTRAVENTION OF STANDARDS: GROUNDWATER ☑ DRINKING WATER ☐
SURFACE WATER ☐ AIR ☐

SOIL TYPE: SAND

DEPTH TO GROUNDWATER TABLE: ≈ 35'

LEGAL ACTION: TYPE: CRIMINAL STATE ☐ FEDERAL ☐
STATUS: IN PROGRESS ☐ COMPLETED ☑ JAIL SENTANCE FOR STEN WOOD UNDER APPEA
REMEDIAL ACTION: PROPOSED ☐ UNDER DESIGN ☐
IN PROGRESS ☐ COMPLETED ☐

NATURE OF ACTION: NONE

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

HEAVY DISCHARGE TO GROUND THROUGH HIDDEN LEACHING POOLS FOR 4 YEAR PERIOD INTO CENTRAL PART OF DEEP RECHARGE AREA HAS CERTAINLY CAUSED SIGNIFICANT GROUNDWATER CONTAMINATION BUT NO PLUME EXPLORATION HAS YET BEEN ACCOMPLISHED.

ASSESSMENT OF HEALTH PROBLEMS:

PERSON(S) COMPLETING THIS FORM:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

NAME JAMES H. PIM
TITLE ASSOC. P.H. ENGINEER
NAME SUFFOLK CO. DEPT. OF HEALTH
TITLE
DATE:

NEW YORK STATE DEPARTMENT OF HEALTH

NAME
TITLE
NAME
TITLE
DATE:

EA SCIENCE AND TECHNOLOGY
A Division of EA Engineering, Science, and Technology, Inc.

Appendix 1.1-3

COMMUNICATIONS RECORD FORM

Distribution: ( ) EMR Cincinnati, OH ( ) _____
( ) _____ ( ) _____
( ) **Author**

Person Contacted: John Gladysz **Date:** 9/22/86

Phone Number: (516)451-4630 **Title:** Sanitary Engineer

Affiliation: SCDHS **Type of Contact:** phone

Address: 15 Horseblock Place **Person Making Contact:** Rogers

Communications Summary: Confirmed that EMR moved to 89 Cabot St after leaving Marcus Blvd. Stewart Wood was still the owner. Since that time company went out of business.

(see over for additional space)

Signature: Lon S Rogers

Appendix 1.1-4

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
INACTIVE HAZARDOUS WASTE DISPOSAL SITE REPORT

CLASSIFICATION CODE: 2a REGION: 1 SITE CODE: 152105

NAME OF SITE : EMR Circuits, Inc.
STREET ADDRESS: 89 Cabot Ct.
TOWN/CITY: Hauppage
COUNTY: Suffolk
ZIP:

SITE TYPE: Open Dump- Structure-X Lagoon- Landfill- Treatment Pond-
ESTIMATED SIZE: Acres

SITE OWNER/OPERATOR INFORMATION:
CURRENT OWNER NAME....: Stewart Wood(Facil.)Kinka Mang Corp.
CURRENT OWNER ADDRESS.: 105 Oser Ave, Hauppage, NY
OWNER(S) DURING USE...: Same (since 9/28/82)
OPERATOR DURING USE...: EMR Circuits (Stew Wood)
OPERATOR ADDRESS.....:
PERIOD ASSOCIATED WITH HAZARDOUS WASTE: From Feb 1981 To Present

SITE DESCRIPTION:
Circuitboard manufacturing facility with discharge of wastes to groundwater.

Jail sentence for Stew Wood under appeal

HAZARDOUS WASTE DISPOSED: Confirmed-X Suspected -

TYPE	QUANTITY (units)
trichloroethane	
t.ichloroethylene	
tetrachloroethylene	
ethyltoluene	
xylene	
trimethylbenzene	
trichlorobenzene	
methylethyl-keytone	
copper nickel	
lead chromium	

NYDEC Bureau of Hazardous Site Control

p.2 of 2

SITE CODE: 152105

ANALYTICAL DATA AVAILABLE:

Air- Surface Water- Groundwater-X Soil- Sediment- None-

CONTRAVENTION OF STANDARDS:

Groundwater-X Drinking Water- Surface Water- Air-

LEGAL ACTION:

TYPE..: Criminal State- Federal-
STATUS: In Progress- Completed-X

REMEDIAL ACTION:

Proposed- Under Design- In Progress- Completed-
NATURE OF ACTION: None

GEOTECHNICAL INFORMATION:
SOIL TYPE: Sand
GROUNDWATER DEPTH: about 35'

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

Heavy discharge to ground through hidden leaching pools for four year period into central part of deep recharge area has certainly caused significant groundwater contamination but no plume exploration has yet been accomplished.

ASSESSMENT OF HEALTH PROBLEMS:

Insufficient information

PERSON(S) COMPLETING THIS FORM:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION	NEW YORK STATE DEPARTMENT OF HEALTH
NAME.: James Pim	NAME.: Ronald Tramontano
TITLE: Assoc. Public Health Engr.	TITLE: Bur. of Toxic Sub. Asses.
NAME.: R.A. Olazagasti	NAME.:
TITLE: Solid Waste Mgmt.Spec.	TITLE:
DATE.: 01/24/85	DATE.: 01/24/85

Appendix 1.1-5

p 1 of 2

INTERVIEW ACKNOWLEDGEMENT FORM

Site Name: EMR Circuits

I.D. Number: 152105

Person Contacted: Eileen Governale

Date: 23 January 1986

Title: Public Health Sanitarian

Affiliation: Suffolk County Department of Health Services

Phone No.: (516) 451-4633

Address: 15 Horseblock Place
Farmingville, New York 11738

Persons Making Contact:
EA Representatives:

Type of Contact: In person

William Going
Ellen Bidwell

Interview Summary:

The Suffolk County Department of Health Services (SCDHS), represented by Eileen Governale, had long suspected that EMR Circuits was illegally discharging chemicals into their cesspools. These two shallow cesspools, hand dug and lined with concrete blocks, were installed by a pharmaceutical company previously occupying the premises. These cesspools were connected to a drain inside the building at 99 Marcus Avenue. It was this drain where the SCDHS caught Mr. Stew Wood illegally discharging the chemicals. Mr. Wood allegedly dumped thousands of gallons of solvents down the drain on weekends, and would then cement over the drain. The following weekend he would chip away the fresh concrete, dump more solvents, and reseal the hole. Excessive dumping into the two shallow cesspools resulted in liquids bubbling up through the cement driveway. This originally drew the attention of the SCDHS.

The SCDHS installed a 120 foot deep, 4 inch diameter monitoring well. Drillers found high vapors while intalling the well. Mr. Finkelstein, manager of the property, took remedial steps and had the cesspools and surrounding soil removed. The floors of the building were washed down and the entire facility was ventilated. The two sanitary cesspools at the front of the building were sampled found to be clean, and left alone. The SCDHS considers the present facility to be clean from ground surface up.

Acknowledgement:

I have read the above transcript and I agree that it is an accurate summary of the information verbally conveyed to EA Science and Technology interviewers, or as I have revised below, is an accurate account.

Revisions (please write in corrections to above transcript):

Discharge into leaching system initially occurred ~~not~~ via floor drain which was covered by a 55 gal Drum. When this transgression was discovered + company agreed to cease discharge by sealing floor drain, the company then resorted to the means of discharge described in your 1st P.

Signature: Eileen Governale **Date:** 2/21/86

Appendix 1.1-6

COUNTY OF SUFFOLK

Received from:
Suffolk Co. Dept. of Health

DEPARTMENT OF HEALTH SERVICES

NOTICE OF VIOLATION: N.Y.S. ENVIRONMENTAL CONSERVATION LAW

EMR Circuits, Inc.
99 Marcus Blvd.
Hauppauge, New York 11788

Date 1 15-82
SPDES NO.
Lab No. 12-81-129
Field No. 1 JW 12-16

Gentlemen:

On 12-16-81 samples of industrial waste were taken from your leaching pool in driveway via a tube through your floor drain. Upon analysis, the following parameters were found in concentrations above the maximum allowed in your SPDES permit or in groundwater effluent standards:

1. Copper - 44 mg/L
2. Iron - 3 mg/L
3. Nickel - 2.3 mg/L
4. Lead - 2.6 mg/L
5. pH - 5
6.
7.
8.
9.
10.

Please be advised that these unsatisfactory conditions constitute violations of the N.Y.S. Environmental Conservation Law. Please be further advised that the discharge of any water from an industrial process to the groundwater of Suffolk County without having first obtained a State Pollutant Discharge Elimination System (SPDES) permit for that discharge is also a violation of the N.Y.S.E.C.L. and S.C. Sanitary Code, Art. 12.

If you do not already possess a valid SPDES permit for the above discharge, then you should apply immediately, through this office, for said permit.

Since the above noted violations may subject you to legal action, it is expected that these violations cease immediately. A reinspection in the near future will determine your compliance in this matter.

Very truly yours,

(SEE REVERSE SIDE FOR STANDARDS)

John A. Gladysz
Acting Senior Sanitarian
Environmental Pollution Control

Central Islip, N. Y. 11722
Box G
(516) 234-1432

[FIELD]

FIELD NO. SC-12-16

CL BY _____ NAME, NOT INITIALS

ATE COL. 12-16-81

ME COL. 9:40 a.m.

Received from: Suffolk Co. Dept. of Health

[LABORATORY]

LAB NO. 12/1101

TYPE SAMPLE W

DATE REC'VD. 12/16/81

TIME REC'VD. 10:45 AM

DATE COMPLETED 1/4/82 EXCEPT Cr+6

SUFFOLK COUNTY HEALTH SERVICES LABORATORY
CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

NAME OR FIRM EMR Circuits Inc Addendum

ADDRESS OR LOCATION 99 Marcus Blvd Hauppauge

POINT OF COLLECTION leaching pool in driveway 10' N/O Bldg - ~~Sampled by tubing through~~ Fluorescein in solution

REMARKS INSTRUCTIONS results to John Gladysz Metals prescreen

TEST	RESULT		TEST	RESULT mg./liter		TEST	RESULT mg./liter
CONDUCT	umho		NITRATE-N		✓	COPPER	44
pH			NITRITE		✓	IRON	3.0
TEST	RESULT mg./liter		AMMONIA-N			MANGANESE	
ph. ALKALINITY			TKN		✓	CHROMIUM	32
T. ALKALINITY			O-PO_4-P		✓	NICKEL	2.3
CHLORIDE					✓	ZINC	1.0
FLUORIDE						MAGNESIUM	
CYANIDE			TOT. SOLIDS			CALCIUM	
			SUS. SOLIDS		✓	LEAD	2.6
SULFATE			DISS. SOLIDS		✓	CADMIUM	<.02
MBAS					✓	SILVER	.04
C.O.D.						SODIUM	
T.O.C.						POTASSIUM	
						BARIUM	
			FIELD D.O.		✓	Cr^{+6}	
			FIELD TEMP				
		✓	FIELD pH	5			
			FIELD COND.	umho			

304-1

38-112

CONTINUED: INSPECTORS OBSERVATIONS OR INTERVIEWS

Received from:
Suffolk Co. Dept. of Health

11-4-81 J.W. Discussed sampling of roof drain pool with Mr. Taub. He has run 3/8" plastic tubing thru floor drain and believes that end is in pool since 80' used. Has been unable to draw any liquid out with pumps he has tried. He said he would rent a pump if Department could suggest one which would work.

Mr. Taub expressed great reluctance to try to dig up pool because it is in driveway used by several businesses and because he feels any problem is due to previous owners of business.

He will be in again on Friday and would like to discuss sampling with Department

11/9/81 Spoke to Mr Taub told him the particulars of the pool in question & said that ~~I must cover~~ the ~~cost~~. I requested copy of my sketch/att. of floor drainage & pool at 99 Marcus. Inspector will deliver this on 11/13/81 & check for floor drain sealing

11-16-81 J.W. Delivered copy of sketch of Floor drainage and pool at 99 Marcus Blvd, Hauppauge. Noted that floor drains are sealed - (1 temporarily - closest to pool) Mr. Taub presented a copy of an advertisement for a pump that will draw liquid through the tubing which he has snaked out through Floor drain. He expects the catalogue by 11-18 and to immediately thereupon ~~order a pump~~. ~~He expects to~~ have pump no later than 11-27-81.

11-30-81 Mr. Taub will be in Wed 12-2 - on vacation

12-2-81 Mr. Taub should shipping paper - pump sent from Texas 11-24 said will call for sample when pump arrives

12-9-81 notified that pump in - appointment to sample 12-16-81 9 AM

12-16-81 J.W. ~~meter~~ sample taken through tubing ~~down floor drain~~

Received from: Suffolk Co. Dept. of Health

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
INDUSTRIAL WASTE AND HAZARDOUS MATERIALS CONTROL
65 JETSON LA., PO BOX G, CENTRAL ISLIP, NY 11722
(516) 234-2622

EJCP

NAME OF FACILITY: EMR Circuits Inc	OWNER/ OFFICER: [illegible]	PAGE 1 OF
COMPANY NAME:	CONTACT: Mr. Tank	TEL.
PLANT ADDRESS: 49 Harris Blvd	VILLAGE: Hauppauge TOWN: Smithtown	ZIP
MAILING ADDRESS:		

DATE	TIME			WASTE		SEWAGE SYSTEM	
1-13-82		ORIG.	PERIODIC (RE.)		NO WASTE H&H		PUBLIC PRIVATE

INDUSTRY: printed circuit boards

PDES OR APDES PERMIT?			PERMIT NO.	360 PERMIT?			PERMIT NO.
	YES	NO			YES	NO	

SCAVENGER: TEL.

SCAVENGER APPROVED		PICK UP RECORDS AVAILABLE		RECORDS CONSISTENT WITH EXPECTED WASTE GENERATION	
YES	NO	YES	NO	YES	NO

HEATING SYSTEM-MFG NAME	FUEL TYPE	FIRING RATE

INCIN. NAME	WASTE BURNED	RATE

DRUM STORAGE		NUMBER OF DRUMS STORED	TYPE OF MATERIAL STORED			
YES	NO		WASTE	RAW	BOTH	
TANK STORAGE		**ABOVE GROUND**	**UNDER GROUND**	**BOTH**	**TYPE OF MATERIAL STORED**	
YES	NO				WASTE	RAW BOTH
HAVE TANKS BEEN REGISTERED		**CONDITION OF ABOVEGROUND TANKS**			**ANY ART. XII VIOLATIONS**	
YES	NO	GOOD	FAIR	POOR	YES	NO

The purpose of this reinspection is to determine Article XII status of this company.

Etching solution from Hunt Chemical they take used solution when 10 drums on hand. ~~They~~ ~~test~~ approximate 180 gal

~~Sediment~~ of etching solution in plating room - 1" curb in plating room on interior walls

→ plating 15 - 25 gal tanks, 13 - 5 gal tank, 4 - 250 tank, ~~[illegible]~~

approximate 30 drums spent etch in drum storage area - Cement floor cracked - plans to remove spent material to get to 10 new etch - 10 spent etch

PERMISSION IS GRANTED BY THIS FACILITY TO THE SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES TO CONDUCT ROUTINE SAMPLING OF ESSPOOLS, STORMDRAINS, AND OTHER DISCHARGE POINTS AT THE FACILITY.

REINSPECTION SCHEDULED ON OR AFTER _____. FAILURE TO CORRECT UNSATISFACTORY CONDITIONS BY REINSPECTION DATE MAY RESULT IN A HEARING AND/OR FINE.

SIGN. OF PERSON REC. REPORT	TITLE	INSPECTOR
		J. Whitney

18-155: 6/81

1/13/82 TJK

LABORATORY

LAB NO 5-82-62

BY _____ NAME, INITIALS

TYPE SAMPLE Ind.

E COL. 5-5-82

DATE REC'VD. 5/5/82

Received from: Suffolk Co. Dept. of Health

TIME REC'VD. 11.00 AM

COL. 9:00 A.M.

DATE COMPLETED chlorine

J.S.M

SUFFOLK COUNTY HEALTH SERVICES LABORATORY
CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

F OR FIRM EMR Circuits

RESS OR LOCATION 99 Marcus Blvd Hauppauge

OF COLLECTION industrial pool (in driveway) 10' N/O bldg

ARKS/INSTRUCTIONS metals preserved results to J. Gladysz

TEST	RESULT		TEST	RESULT mg./liter		TEST	RESULT mg./liter
ONDUCT	umho		NITRATE-N		✓	COPPER	3.4×10^{-2}
p			NITRITE		✓	IRON	2.2×10^{-1}
TEST	RESULT m.g./liter		AMMONIA-N			MANGANESE	
pH ALKALINITY			TKN		✓	CHROMIUM	6.
T. ALKALINITY			$O\text{-}PO_4\text{-}P$		✓	NICKEL	2.2×10^{-1}
CHLORIDE					✓	ZINC	2.6
FLUORIDE						MAGNESIUM	
CYANIDE			TOT. SOLIDS			CALCIUM	
			SUS. SOLIDS		✓	LEAD	1.0×10^{-2}
SULFATE			DISS. SOLIDS		✓	CADMIUM	.05
BAS					✓	SILVER	.06
O.D						SODIUM	
O.C.						POTASSIUM	
			FIELD D.O.				
			FIELD TEMP				
		✓	FIELD pH	2			
			FIELD COND.	umho			

above limits set by NYS for comm. labs

38-112

Received from:
Suffolk Co. Dept. of
Health

NOTICE OF VIOLATION

COUNTY OF SUFFOLK

Received from:
Suffolk Co. Dept. of
Health

PETER F. COHALAN
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF HEALTH SERVICES

Date April 25, 1983
SPDES NO.
Lab. No. 3 83 261
Field No. 3 JW 3 23

E M R Circuits, Inc.
99 Marcus Blvd.
Hauppauge, NY 11788

Gentlemen:

On March 23, 1983, samples of industrial waste were taken from your industrial pool 10' north of building.
Upon analysis, the following parameters were found in concentrations above the maximum allowed in your SPDES Permit or in groundwater effluent standards:

1. Copper 5 mg/l
2. Iron 1.2 mg/l
3. Lead .8 mg/l
4.
5.
6.
7.
8.
9.
10.

Please be advised that these unsatisfactory conditions constitute violations of the N.Y.S. Environmental Conservation Law and/or the Suffolk County Sanitary Code. Please be further advised that the discharge of any water from an industrial process to the groundwater of Suffolk County without having first obtained a State Pollutant Discharge Elimination System (SPDES) Permit for that discharge is also a violation of the N.Y.S. E.C.L. and/or the Suffolk County Sanitary Code, Article 12.

If you do not already possess a valid SPDES Permit for the above discharge, then you should apply immediately through this office for said permit.

Since the above-noted violations may subject you to legal action, it is expected that these violations cease immediately. Violations of the Suffolk County Sanitary Code are subject to the imposition of a civil penalty of up to Five Hundred ($500) dollars per violation. E.C.L. violations are also subject to a civil penalty. A reinspection in the near future will determine your compliance in this matter.

Very truly yours,

John A. Gladysz
Environmental Pollution Control

(SEE REVERSE SIDE FOR STANDARDS)

15 Horseblock Place, Farmingville, N.Y. 11738 (516) 451-4600

Received from Suffolk Co. Dept. of Health

SUFFOLK COUNTY HEALTH SERVICES LABORATORY

CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

18-247-2182

FIELD NO. 3JW3-23 LAB NO. 3-83-261 DATE COMPLETED 3/30/83 pjw

NAME OR FIRM EMR Circuits Inc.

ADDRESS OR LOCATION 99 Marcus Blvd Hauppauge N.Y.

POINT OF COLLECTION industrial prod 10' N of bldg

REMARKS/INSTRUCTIONS metals not pres results to J. Gladys

TEST	RESULTS	TEST	RESULTS	TEST	RESULTS
pH(LAB)		TOTAL SOLIDS	Mg/l	✓ COPPER	5 Mg/l
CHLORIDE	Mg/l	SUSPENDED SOLIDS		✓ IRON	1.2
CYANIDE		DISSOLVED SOLIDS		MANGANESE	
MBAS				✓ CHROMIUM-TOT	.04
COD				✓ NICKEL	.7
TOC				ZINC	
				✓ LEAD	.8
				CADMIUM	
NITRATE-N				SILVER	
NITRITE				✓ CHROMIUM-+6	—
AMMONIA-N					
TKN		✓ pH (FIELD)	Neutral		
		TEMP. (FIELD)			

METHOD OF PRESERVATION ☐ HNO_3 TO pH <2 ☐ COOL 4° C

CUSTODY OF SAMPLE

DURING TRANSPORT OF THE SAMPLE FROM SAMPLING SITE TO LABORATORY, THE CHAIN OF CUSTODY MUST BE UNBROKEN. GENERALLY THIS WILL REQUIRE THAT THE SAMPLE BE DELIVERED BY THE SAMPLE COLLECTOR OR HIS DESIGNATED REPRESENTATIVE WHO WILL SIGN FOR THE RECEIPT, INTEGRITY AND TRANSFER OF THE SAMPLE DURING SHIPMENT.

	NAME	AFFILIATION	DATE - TIME	TO	DATE - TIME
1. COLLECTED BY	J. Whitney	S.C.D.H.S.	3-23-83 DATE		1140 TIME
2. POSSESSION BY	J. Whitney	S.C.D.H.S	3-23-85 DATE - TIME	TO	3-23 noon DATE - TIME
3. POSSESSION BY			DATE - TIME	TO	DATE - TIME
4. RECEIVED LAB BY	JM		3/23 12:00 DATE		TIME
5. POSSESSION BY			DATE - TIME	TO	DATE - TIME
6. POSSESSION BY			DATE - TIME	TO	DATE - TIME

THE HEARING OFFICER: At this time, I would like to open the matter in the Complaint against EMR Circuits, Inc., 99 Marcus Boulevard, Hauppauge, New York.

As the first order of business, I would like to introduce, into evidence as County's Exhibit 1, a Notice of Formal Hearing signed by myself. May 1st is the date of the letter, and it was received.

(Four-page Notice and receipt marked Department's Exhibit 1 in evidence as of this date.)

THE HEARING OFFICER: As the second order of business, for the record, my name is James L. Corbin. I am designated Hearing Officer in this matter. I have been so designated by the Commissioner of Health Services, Dr. David Harris.

Will those gentlemen present please identify themselves.

MR. GLADYSZ: I'm John Gladysz, and I'm an employee of the Health Department, and I am a Public Health Sanitarian.

MR. WHITNEY: My names is James Whitney.

I am an employee of the Suffolk County Department of Health Services, Public Health Sanitarian.

MR. PERRELLA: My name is Pat Perrella. I am Environmental Enforcement Specialist for the Suffolk County Department of Health Services.

MR. AKRIS: Peter Akris, Assistant Public Health Engineer, Hazardous Materials Management Section.

MR. GUILBERT: Richard Guilbert, attorney for EMR Circuits, 290 Old Country Road, Mineola.

MR. WINGLER: Paul Wingler, consulting engineer for EMR, Inc. Address is P.O. Box 608, Kings Park, New York.

THE HEARING OFFICER: Let the record indicate that the time is now 11:22. The Hearing was to start at 10:00 a.m., and all interested parties have conferenced this matter, and I believe they have come up with some type of a stipulation. Mr. Perella?

MR. PERELLA: Mr. Hearing Officer, I believe we did come up with some terms which I'd like to put on the record, terms of a stipulation agreement. And after I recite the terms of this agreement, I would request

you to ask the agents for EMR whether or not, one, they are authorized to speak for EMR in agreeing to these terms, and, two, whether or not they do agree to these terms.

THE HEARING OFFICER: So noted.

MR. PERRELLA: One, the first term is that the Respondent in this Hearing, EMR Circuits, Incorporated, agrees not to discharge from its industrial facility located at 99 Marcus Boulevard, Hauppauge, New York, any industrial waste and/or toxic or hazardous materials from its facility unless and until it has applied for and received a New York State Pollutant Discharge Elimination System Permit, also known as a SPDES;

Number two, that cessation of discharging shall be immediate as of this date, June 9, 1983;

Number three, the Respondent in this Hearing agrees immediately to hold all of its industrial waste rather than to discharge it and to hold and maintain receipts for any pickups of this waste. The receipts I have just referred to concern receipts for performance

of removal of industrial waste by a licensed industrial waste scavenger, licensed by the New York State Department of Environmental Conservation. The Respondent agrees to provide the Department with copies of these receipts upon request.

Off the record.

(Discussion off the record.)

MR. PERRELLA: Respondent agrees to submit to the Department, to the care of Mr. Peter Akris of this Department, complete applications for a permit to store toxic or hazardous materials at the Respondent's facility. These applications shall be submitted to the Department by July 9, 1983.

By July 9 -- this is a new paragraph.

THE HEARING OFFICER: Five or four?

MR. PERRELLA: This will be five. By July 9, 1983, the Respondent shall have submitted to the Department, to the care of Mr. Peter Akris, an engineering report which details, among other things, all the industrial processes at the Respondent's facility, a description of all industrial discharges, if

any, at the Respondent's facility, and if there are discharges, to where these discharges are routed, a description of all industrial wastes that are held, and the procedure by which they are removed from the site, a schematic of all plumbing which is interconnected to leaching facilities at the facility, including storm drains, cesspools, sumps, industrial leaching pools, et cetera. The schematic shall include the plumbing which is routed to the industrial leaching pool which is located on the north side of the Respondent's facility;

Six, by July 9, 1983, the Respondent shall have satisfactorily responded to --

MR. GUILBERT: I have a problem with the word "satisfactorily."

MR. PERRELLA: Okay.

MR. GUILBERT: Can we do this off the record?

MR. PERRELLA: Yes.

(Discussion off the record.)

MR. PERRELLA: Paragraph Number Six, by July 9, 1983, the Respondent, EMR Circuits, Incorporated, shall have completely responded

to Mr. Peter Akris' letter of August 17, 1982, which, on that date, was addressed to the Respondent.

I wish now to offer -- excuse me, there is a correction. That was addressed to Mr. Paul Wingler, the engineer for the Respondent, with a carbon copy to Stuart Wood of EMR.

I wish now to introduce a copy of that letter into evidence.

THE HEARING OFFICER: Would you show it to Counsel first.

MR. PERRELLA: Yes.

(Handed.)

MR. GUILBERT: Off the record.

(Discussion off the record.)

THE HEARING OFFICER: Would you mark this in evidence as County's Exhibit Number 2, please.

(1-page copy of letter dated August 17, 1982, marked Department's Exhibit 2 in evidence as of this date.)

THE HEARING OFFICER: Continue, please.

MR. PERRELLA: Mr. Hearing Officer, I believe that the aforementioned terms which I have just recited constitute the mean of the

matter, which the Department and the Respondent has seen fit to come to some agreement on. There is a part of the agreement where we are in conflict at this point. That part concerns any imposition of a Civil penalty in this matter. Perhaps maybe we should ask the attorney for EMR whether or not the preceding terms, which I have just recited, are accessible to them at this point, and then we will go on to the Civil penalty.

THE HEARING OFFICER: Yes. Okay, Mr. Guilbert, you heard Mr. Perrella's outline of the six items, and are you in agreement with what has been stated?

MR. GUILBERT: Yes. On behalf of EMR Circuits, by the authority of Stuart Wood, who is, I believe, President of the Corporation, I am authorized here to enter into a stipulation settlement as to these six items enumerated by Mr. Perrella.

THE HEARING OFFICER: Correct. And also present with you is Mr. Wingler, the engineer, who will be acting on his behalf with regards to the SPDES permits and the questions that

have been raised, and you feel that the timetable is both fair and workable?

MR. WINGLER: Correct.

MR. GUILBERT: Correct.

THE HEARING OFFICER: Fine.

MR. PERRELLA: Mr. Hearing Officer, presenting the Department's view, I feel that just the remedial action that apparently the Respondent EMR has agreed to, I don't feel that is sufficient to address the past history of this case.

It is the Department's position that an Order on Consent had been entered into over a year ago, on April 26, 1982, at which time the Respondent basically agreed to the same conditions that were just enumerated here, and over a year's period of time has gone by. And the Department's position is that these conditions have not been met.

In addition, it's the Department's position that there are -- there is evidence of possible other violations that we could present evidence of. For these reasons, we are asking for the imposition of Civil penalty in

any resolution of this case, in any agreement that the Commissioner sees countersign. And I am asking for th amount Civil penalty that was addres formal Hearing Notice for this Heari

MR. GUILBERT: Your Honor, i

THE HEARING OFFICER: Hold i

MR. GUILBERT: I'm sorry.

THE HEARING OFFICER: And tha noted as 2400?

MR. PERRELLA: 2,400.

THE HEARING OFFICER: Counsel you will.

MR. GUILBERT: Your Honor, i with regard to the situation at EMR C Inc., I would like to state, for the that for over the past year, EMR Circ retained Mr. Paul Wingler as their co to try and resolve both any problems of making a SPDES application, Artic application, and all other environmen lems that may have occurred at the pl

EMR Circuits purchased, from Bank of North America approximately a

all the equipment and goods of Electric Motor Research Corp., which was the prior party in this building. It is my understanding that Electric Motor Research Corp. allowed a very terrible pollution situation to exist, fully contaminated one of the industrial cesspools.

When EMR Circuits took over the operation approximately a year and two months ago, the pollution situation became eminently clear to Mr. Wood, and the Department of Environmental Control also noted to Mr. Wood the difficulties that he would have.

Mr. Wood proceeded to have the industrial leaching pool cleaned by a scavenger and tried to take whatever steps he could to comply. One of the steps he took was to retain Mr. Wingler. One of the problems, I think, has really manifested the bringing about this formal hearing is that the fact that it has been almost impossible for Mr. Wood to decide what approach he will use in this facility to control the environmental situation.

I have been advised by Mr. Wingler that at one time it was thought that everything would

become a hold and haul operation. Then Mr. Wood felt that he could buy some equipment which would eventually purge his discharges of copper and other contaminants. However, it appeared that this equipment was unfeasible and, therefore, was not purchased.

To some extent, Mr. Wood has suffered from a case of waffling as to what approach he will take in the plant. This may have caused some delays in getting to this point in time. However, after speaking to Mr. Wingler today, he indicates to me that the situation at EMR has solidified, and he feels that a comprehensive plan is now pretty much in order.

It's my understanding that the plan would be an application for a SPDES permit for certain discharges, and other discharges would be totally held and hauled pursuant to an Article 12 permit.

It is our intention, at this time, to go forward with both the SPDES permit and the Article 12 permit and to haul the more serious contaminants used in the plant.

Further, Mr. Wood has indicated to me

that he is in a tight financial situation, as many small corporations are on the Island. I feel, based upon that situation, that a lesser than $2400 Civil penalty would be in order, and I would request that whatever Civil penalty is imposed that it be suspended pending the compliance with the requirements contained herein.

If Mr. Wood is capable of responding within 30 days at this point in time and so does, I feel at that point in time we should consider suspension of any Civil penalty and allow the -- consider the funds that would be expended by Mr. Wood both for engineering services, any effort with regard to application for SPDES permits, Article 12 permits, and upgrading the facility to comply with these requirements would be best spent in the plant rather than being dissipated as a Civil penalty.

I might add that it took some time to get here, and Mr. Perrella indicated that the April 26, 1982 Consent Order has not been complied with. I do not wish to make a great issue of that, Your Honor. However, there has

been some correspondence and discussions between the County and the engineer for EMR, and I believe that these efforts by the engineer for EMR have been with a view towards meeting the requirements of that prior Consent Order.

I ask the Court to consider these matters, and I would also ask for the leniency of the Court towards EMR on the basis that they have made some effort, taking a situation which was inherited by them and trying to remedy it.

THE HEARING OFFICER: I just have a few questions to make certain that my notes are correct.

You indicated that EMR had purchased this from Electric Motor Research Corp. approximately one year and two months ago, did you say?

MR. GUILBERT: I don't have any records with me. I believe it's about 14 months ago.

THE HEARING OFFICER: And you had entered into a stipulated agreement with Mr. Perrella in his office on April 26th of this year? You did not give me a year.

MR. PERRELLA: Of '82.

MR. GUILBERT: Of '82.

MR. WINGLER: I would like to add, just for the clarity of the record, that we are willing to stipulate that the -- an application, Article 12 application, be submitted to Mr. Akris by July 9th. I would perhaps like to refer to that as a revised application, because the original application, plans, forms, were submitted June 18, 1982. I think that is important, and it has -- the permit has not been issued, because we did not fully respond to Mr. Akris' request for a completion due to internal thinking and reshaping within the company.

But an application was made. The kit was submitted June 18, 1982.

MR. PERRELLA: Mr. Hearing Officer, if I just may, muddying the waters here, the applications were submitted as were required in the April, '82 Orders on Consent. However, and the Department is not denying that, that the Order on Consent requested full, complete applications and that when they were received, one, they were received late, beyond the date entered

into the Order on Consent --

MR. WINGLER: That's not correct.

MR. PERRELLA: We are prepared to prove that.

MR. WINGLER: I want to state emphatically that this application was submitted on time because --

THE HEARING OFFICER: Excuse me, would you please swear in Mr. Wingler for the record.

(Paul Wingler was duly sworn by the Notary Public.)

THE HEARING OFFICER: Rather than go over your testimony thus far, Mr. Wingler, the testimony that you have given thus far, is that, to your knowledge, a true and factual statement?

MR. WINGLER: Yes, it is.

THE HEARING OFFICER: If you would like to present any and all information and evidence to this Hearing Officer, I would entertain anything on your behalf.

Off the record.

(Discussion off the record.)

THE HEARING OFFICER: We had an off-th

record discussion as to these dates and correspondence that may or may not have taker place.

Would you like to sum up what was sai

MR. WINGLER: Just with respect to my testimony, I was in error in that, as I recal the application was submitted after the stipu lated date, but to the best of my recollectio it was with a verbal permission due to schedu within my office.

THE HEARING OFFICER: And the verbal permission came from whom?

MR. WINGLER: Mr. Perrella.

THE HEARING OFFICER: Is there anythi else that you would like to present to the Hearing Officer at this time, or any documen tion, or is there any documentation you woul like to forward to me until I receive the tr cripts and make my recommendation to the Commissioner?

MR. PERRELLA: Being that Mr. Wingle has made an issue of having submitted the ap cations on time, I think we're going to have to try to rebut that. And I would like to,

this point, rather than asking Mr. Peter Akris to testify, just to introduce letters that were submitted to the Respondent's facility indicating that we were in need of information and that they were in violation.

THE HEARING OFFICER: Before we begin, Mr. Perrella, then do you recollect the telephone conversation that Mr. Wingler alluded to?

MR. PERRELLA: I have, in my records, a memo indicating that Paul Wingler called me after the date that he had violated -- the Respondent, that he has violated the Order on Consent, and that he, at that time, informed me that the engineering report would be submitted by June 21, '82. I did not give permission to waive any of the conditions of the Order on Consent. I just said send the -- what we were looking for at that time was compliance. And if they had been sent by June 21st and a whole year hadn't gone by, I don't think the Department would have pressed for a violation of that Order on Consent. But it was a violation on that Order on Consent, and in no way was it excused.

And I did receive, after the date when that Order -- application was supposed to be submitted, after it had gone by, I had received a memo, or rather a communication from Mr. Wingler saying it was coming June 23rd. The Department is alleging he was still in violation at the time I said "Okay" and that send it on. We never did receive --

THE HEARING OFFICER: Again, the date that it was to appear in your office was --

MR. PERRELLA: May 14, 1982.

THE HEARING OFFICER: Now, you wish to have Mr. Akris sworn in?

MR. PERRELLA: I think we just -- we have the copies of the letters.

MR. ~~AKRIS:~~ WINGLER What are you trying to establish?

THE HEARING OFFICER: Off the record.

(Discussion off the record.)

MR. PERRELLA: I don't think it's necessary to submit any more information.

THE HEARING OFFICER: Okay, Counselor, is there anything else you would like to provide me with?

MR. GUILBERT: No, Your Honor. At this time I will rely on the discretion of the Court.

THE HEARING OFFICER: Thank you very much. If there is nothing further brought before this Hearing Officer, I would like to close the Hearing at this time.

(Time Noted: 11:50 A.M.)

Appendix 1.1-8

8.1.13

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
INDUSTRIAL WASTE AND HAZARDOUS MATERIALS CONTROL
65 JETSON LA., PO BOX G, CENTRAL ISLIP, NY 11722
(516) 234-2622

Received from: Suffolk Co. Dept. of Health

NAME OF FACILITY: EMR Circuits Inc	OWNER/ OFFICER		
COMPANY NAME: 99 Marcus Blvd	CONTACT: Tricia Osani		TEL.
PLANT ADDRESS: Hauppauge	VILLAGE	TOWN: Smithtown	ZIP
MAILING ADDRESS			
DATE: 7-13-83	TIME	ORIG. / PERIODIC / (RE.)	WASTE / NO WASTE / (H&H)
SEWAGE SYSTEM: PUBLIC / PRIVATE			

INDUSTRY: Printed Circuit Boards

SPDES OR SPDES PERMIT? YES (NO) PERMIT NO.

360 PERMIT? YES NO PERMIT NO.

SCAVENGER: RCM- TEL.

SCAVENGER APPROVED YES NO

PICK UP RECORDS AVAILABLE YES NO

RECORDS CONSISTENT WITH EXPECTED WASTE GENERATION YES NO

HEATING SYSTEM-MFG NAME	FUEL TYPE	FIRING RATE
INCIN. NAME	WASTE BURNED	RATE

DRUM STORAGE YES NO — NUMBER OF DRUMS STORED — TYPE OF MATERIAL STORED WASTE RAW BOTH

TANK STORAGE YES NO — ABOVE GROUND UNDER GROUND BOTH — TYPE OF MATERIAL STORED WASTE RAW BOTH

HAVE TANKS BEEN REGISTERED YES NO — CONDITION OF ABOVEGROUND TANKS GOOD FAIR POOR — ANY ART. XII VIOLATIONS YES NO

Ms Ream has no knowledge of element that may have caused own husband ill at all.
Attempted to call PA's, line was apparently busy. I will call in AM

PERMISSION IS GRANTED BY THIS FACILITY TO THE SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES TO CONDUCT ROUTINE SAMPLING OF CESSPOOLS, STORMDRAINS, AND OTHER DISCHARGE POINTS AT THE FACILITY.

REINSPECTION SCHEDULED ON OR AFTER _____. FAILURE TO CORRECT UNSATISFACTORY CONDITIONS BY REINSPECTION DATE MAY RESULT IN A HEARING AND/OR FINE.

SIGN. OF PERSON REC. REPORT: [signature] — TITLE — INSPECTOR: Eileen Fahrenholz

18-155: 6/81 5/81 TJK

p2-13

COUNTY OF SUFFOLK

Received from:
Suffolk Co. Dept. of Health

DEPARTMENT OF HEALTH SERVICES

Date: June 28, 1982

Mr. Paul A. Wingler, P.E.
P.O. Box 608
Kings Park, N.Y. 11754

Article 12 Plans for:
[ ] Above Ground Tank(s)
[ ] Underground Tank(s)
[X] Drum/Bulk Storage
[ ] Other
[ ] As-Built Drawings
[ ] Contract Drawings

Hazardous Materials Management

S.C.D.H.S. Job No.: HM 82-71

ACKNOWLEDGEMENT OF RECEIPT

Your submission pertaining to the above has been received. It will be reviewed and processed as promptly as possible.

Company Name	Installation Address
LMR Circuits, Inc.	99 Marcus Blvd. Hauppauge, N.Y. 11788

It is your responsibility to determine and comply with the requirements of municipal and other state codes, ordinances, rules or regulations, which also apply to this installation. These include state industrial code rules, state conservation rules, state and municipal zoning and building codes, as well as municipal water pollution control codes, etc.

You are also required to instruct or provide instruction for the operator(s) of the installation so that it will be maintained and operated in conformance with applicable water pollution control codes.

Questions relating to this application or submission should be directed to Mr. Peter R. Akras, Ass't. Public Health Engineer, 15 Horseblock Pl., Farmingville, N.Y. 11738, telephone (516)451-4649.

PRA/rt
cc: Applicant - Stewart Worth

f313

Department of Health Servic
Industrial Waste and Hazardous
Materials Control Section
65 Jetson Lane
Hauppauge, New York 11787
234-2622

Received from: Suffolk Co. Dept. of Health

LETTER OF TRANSMITTAL

DATE	JOB NO.
ATTENTION	
RE	

NYSDEC Region 1
Bldg #40
SUNY Stony Brook

GENTLEMEN:

WE ARE SENDING YOU ☒ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO.	DESCRIPTION
			EMR Circuits file

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

☐ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19_____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS Application for routine processing. Two copies of [illegible] are enclosed, one copy has been retained by SCDHS.

COPY TO _____

SIGNED: [signature]

If enclosures are not as noted, kindly notify us at once.

38-116

Appendix 1.1-9

Received from:
Suffolk Co. Dept. of
Health

STATE OF NEW YORK: COUNTY OF SUFFOLK
DEPARTMENT OF HEALTH SERVICES

X

In the Matter of the Complaint

- against -

EMR Circuits, Inc.
99 Marcus Boulevard
Hauppauge, NY 11788

NOTICE OF
FORMAL HEARING

Respondent.

Under and Pursuant to the Public Health Law of the State of New York, the Sanitary Code of the County of Suffolk and the Statutes of the State of New York and the Laws and Ordinances of the County of Suffolk.

X

TO:

EMR Circuits, Inc.
99 Marcus Boulevard
Hauppauge, NY 11788

PLEASE TAKE NOTICE:

THAT YOU ARE DIRECTED TO APPEAR at the office of the Department of Health Services of the County of Suffolk at 225 Rabro Drive East, Hauppauge, New York, Room #300 on the 9th day of June, 1983 at 10:00 a.m. in connection with certain alleged violations of Article 12 &/or 2 of the Suffolk County Sanitary Code and/or ordinances, rules regulations and orders promulgated thereunder, to wit:

1. That on January 12, 1983 and May 5, 1982 the Respondent did discharge toxic or hazardous materials without a New York State Pollutant Discharge Elimination Systems (SPDES)

p.2 of 4

Permit and that these discharges exceeded New York State effluent standards in violation of Section 1205 of Article 12 (discharge of metals to subsurface leaching pool);

2. That on August 4, 1982 the Respondent did operate a storage facility for the storage of toxic or hazardous materials without a permit to operate in violation of Section 1207 of Article 12;

3. That on May 15, 1982 the Respondent did violate Paragraph No. 5 of the Order on Consent agreement No. IW 82-20 which the Respondent did enter into with the department on April 26, 1982 (Respondent failed to submit approvable applications for a permit to operate a storage facility for toxic or hazardous materials). The aforementioned Order on Consent agreement provided for a Four Hundred ($400) Dollar suspended civil penalty which was suspended contingent upon the Respondent's compliance with the terms and conditions of the agreement.

WHEREFORE, the department, as plaintiff in this matter, demands:

(a) findings of violation in the above numbered allegations;

(b) an Order requiring the payment of One Thousand ($1,000) Dollar civil penalty for the two violations of Section 1205, as detailed in Paragraph 1 above;

(c) an Order requiring the payment of Five Hundred ($500) Dollar civil penanty for the violation of Section 1207, as detailed in Paragraph No. 2 above;

(d) an Order requiring the payment of Five Hundred ($500) Dollar civil penalty for the violation of the Order on Consent agreement No. IW 82-20, as detailed in Paragraph No. 3 above;

(e) an Order requiring payment of the Four Hundred ($400) Dollar suspended civll penalty which is provided for in Order on Consent agreement No. IW 82-20 as detailed in Paragraph No. 3 above;

(f) an Order requiring immediate cessation of all violative discharges of toxic or hazardous materials at the Respondent's facility;

(g) an Order requiring the Respondent to immediately submit a complete approvable application for a permit to operate a storage facility for its storage of toxic or hazardous materials pursuant to the provisions of Article 12 (any questions concerning permit application requirements should be addressed to Mr. Peter Akras of this department at phone number (516) 451-4649); and

(h) such other and further relief that may be necessary and appropriate under the circumstances.

THAT, each day of violation constitutes a separate and distinct violation subject to a civil

penalty not to exceed the sum of Five Hundred ($500) Dollars for each day of violation, as prescribed by Article 2, Section 218, Paragraph 2 and 5 of the Sanitary Code of Suffolk County and Section 309 of the Public Health Law of the State of New York.

THAT, you may appear with or without counsel and you may produce any witnesses and evidence in your behllf.

THAT, you may contact the Hearing Coordination Officer at (516) 348-2778, if you have questions relative to the hearing or require additional information.

PLEASE TAKE NOTICE:

THAT, upon your failure to appear, the hearing may be held in your absence and a determination may be made, and such proceedings instituted under the law, either administrative, civil or criminal, as may be deemed necessary and appropriate in the circumstances.

James L. Corbin
Hearing Coordination Officer

DATED:
Hauppauge, NY

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
INDUSTRIAL WASTE AND HAZARDOUS MATERIALS CONTROL
65 JETSON LA., PO. BOX G, CENTRAL ISLIP, NY 11722
(516) 234-2622

Received from: Suffolk Co. Dept. of Health

NAME OF FACILITY: EMR Circuits Inc.	OWNER/ OFFICER: Pres, Stuart Wood		PAGE 1 OF
COMPANY NAME	CONTACT: Mrs. Pat Osani		TEL. 273-8880
PLANT ADDRESS: 99 Marcus Blvd	VILLAGE: Hauppauge	TOWN: Smithtown	ZIP: 11788
MAILING ADDRESS			
DATE: 10-4-82	TIME	ORIG. PERIODIC (RE.)	WASTE NO WASTE (H&H)	SEWAGE SYSTEM PUBLIC (PRIVATE)
INDUSTRY: plating + P.C. boards			
PDES OR PDES PERMIT? YES (NO)	PERMIT NO.	360 PERMIT? YES (NO)	PERMIT NO.	
SCAVENGER		TEL.	
SCAVENGER APPROVED YES NO	PICK UP RECORDS AVAILABLE YES NO	RECORDS CONSISTENT WITH EXPECTED WASTE GENERATION YES NO	
HEATING SYSTEM - MFG NAME		FUEL TYPE	FIRING RATE
INCIN. NAME		WASTE BURNED	RATE
DRUM STORAGE (YES) NO	NUMBER OF DRUMS STORED	TYPE OF MATERIAL STORED WASTE RAW BOTH	
TANK STORAGE (YES) NO	ABOVE GROUND UNDER GROUND BOTH	TYPE OF MATERIAL STORED WASTE RAW BOTH	
TANKS HAVE BEEN REGISTERED YES NO	CONDITION OF ABOVEGROUND TANKS GOOD FAIR POOR	ANY ART. XII VIOLATIONS YES NO	

The purpose of this reinspection is to determine if the following remaining conditions of consent order IW82-20 have been met.

1. Industrial waste leaching pool to be pumped by licensed industrial waste scavenger, contaminated soil at bottom of pool to be removed. - No, observed pool to still contain liquids.

2. Pool to be filled in with earth. Work to be completed by 10-1-82. No, observed pool not to be filled in 10-4-82

Mrs. Osani showed me a request for a 20 day extension on cleaning + backfilling of contaminated pool. Request was from Paul Wingler, dated 9-27-82. Mrs. Osani showed me contract with Chem. Mgmt.

PERMISSION IS GRANTED BY THIS FACILITY TO THE SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES TO CONDUCT ROUTINE SAMPLING OF ESSPOOLS, STORMDRAINS, AND OTHER DISCHARGE POINTS AT THE FACILITY.

REINSPECTION SCHEDULED ON OR AFTER _____. FAILURE TO CORRECT UNSATISFACTORY CONDITIONS BY REINSPECTION DATE MAY RESULT IN A HEARING AND/OR FINE.

SIGN. OF PERSON REC. REPORT	TITLE	INSPECTOR
[signature]	sec-tres	James A. Whitney

18-155: 6/81 5/81 JK

p 6/14

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES

MEMORANDUM

Received from:
Suffolk Co. Dept. of Health

TO: Jim Corbin

FROM: Pat Perrella

DATE: 7/29/83

RE: EMR Circuits - Formal Hearing Compliance

Attached find a copy of Peter Akras' letter of July 20, 1983 to Paul Wingler, P.E., the engineer for EMR Circuits.

It is the opinion of this Bureau that EMR Circuits has not complied with the terms of the Commissioner's Order. Therefore, I must recommend that the full amount of civil penalty be assessed.

PP:daf
Attachment
cc: P. Akras
G. Watt
J. Gladysz

Appendix 1.1-10

p.1 of 9

Received from:
Suffolk Co. Dept. of
Health

July 20, 1983

Mr. Paul Wingler, P.E.
P.O. Box 608
Kings Park, N.Y. 11754

Re: E M R Circuits, Inc.
SCDHS Job No. HM 82-71 (Revised)

Dear Mr. Wingler:

I have reviewed your report and revised drawing for the subject site for compliance with the Commissioner's Order dated June 17, 1983 and for compliance with Article 12 of the Suffolk County Sanitary Code. A copy of the Commissioner's Order is enclosed.

The following items in the Commissioner's Order have not been complied with:

1. An inspection of the subject site by Eileen Governale of this Department on July 11, 1983 revealed a discharge of "soapy water" to the industrial leaching pool on the north side of the building. This pool is connected to a floor drain in the plate washing area. No industrial wastewater is allowed to be discharged without a N.Y.S. SPDES permit. Samples taken from this pool at the time of the inspection are in the process of being analyzed. This discharge is in direct violation of items #1, 2 and 3 of the Commissioner's Order.

2. Item #6 in the Commissioner's Order requires a response to my letter of Aug. 17, 1982 which requests, among other things, a product bulletin on the type of impervious concrete coating that will be applied to the floor in the wet process areas. As of this date, this information has not been submitted.

In addition to the above, I have the following comments on the report and plans:

1. The report states that a 4000 gallon wastewater storage tank was installed in May, 1983. This tank was installed without a permit to construct required by Section 1206 of Article 12. Before a permit can be issued specifications on the tank must be submitted including materials of construction, piping, spill control measures and methods of waste transfer.

2. A review of the inspection report on file notes that this tank is 6000 gallon capacity rather than 4000 gallons. If this is the case, then the containment area must be increased accordingly. The report must provide information on the quantity of wastewater generated to insure that the tank capacity is adequate.

3. Based upon the information shown in the drawing, the capacity of the wet process room is 3025 gallons rather than 3300 gallons. This is less than the 110% required by Article 12.

4. The inspection report also notes that there are two 200 gallon waste scrub water tanks not shown on the plans. These tanks must also be contained.

5. All process or holding tanks in excess of 80 gallons and all drum storage areas in excess of 5 drums must be registered on the enclosed form. The registration fee is $25 for each tank or drum storage area. In addition, an application for a permit to construct must be submitted for the waste holding tank with a filing fee of $100.

6. The floor drain in the plate washing area must be sealed until a SPDES permit has been issued.

7. The concrete berm for the drum storage area must extend along the adjacent walls.

8. If the wet process room is serviced by a sprinkler system, then the sprinklers must be fitted with head deflectors or the open tanks must be fitted with automatic covers to prevent overflow in case of a fire.

Received from: INTER-OFFICE COMMUNICATION
Suffolk Co. Dept. of: County of Suffolk
Health

Date: 7/14/83

p. 3 of 9

TO: EMA FILE

FROM: Pat Bencle

(Tie Line Phone No. 77-)

bject: "Commissioner Order" EMA re result of Formal Hearing

Re: Determination of whether EMA is in Compliance with Commissioners Order (UNKNOWN)

(1) Engineering report was received by this Dept on July 11, 1983 (Still awaits review by Peter also to determine if approvable)

(2) Peter Bencle inspection of July 8, 1983 revealed "pink" colored liquid in pool and small "drip" from discharge pipe. Sample taken, (awaiting sample results to determine if still discharging & extent of such)

+ Report to Jim Corbin with final determination so that Civil Penalty can be determined

7/18/83 3 pm Spoke with Jim Corbin (for his report to Express $1,400 civil fine) Will hold up results of sample analysis & Peter's determination of engineering report all until time we find they will be received in acceptable fashion.

AMENDED + FULL FINE RECOMMENDED

SCIN FORM 63 (11-79) PRIOR EDITION MAY BE USED UNTIL SUPPLY IS DEPLETED. 4-464

Received from:
Suffolk Co. Dept. of Health

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
INDUSTRIAL WASTE AND HAZARDOUS MATERIALS CONTROL
15 HORSEBLOCK PLACE, FARMINGVILLE, N.Y. 11738
(516) 451-4633

p 4/9

NAME OF FACILITY: EMR Circuits, Inc	OWNER/ OFFICER		PAGE 1 OF
COMPANY NAME	CONTACT: Patricia Osani		TEL. 273-8880
PLANT ADDRESS: 99 Marcus Blvd	VILLAGE: Hauppauge	TOWN: Pelt Gi, Islip (See Treas pending SPDES genl mgr)	ZIP
MAILING ADDRESS			
DATE: 7-8-83	TIME	ORIG. (PERIODIC) RE	WASTE: NO apple. WASTE (H&H)	SEWAGE SYSTEM	PUBLIC (PRIVATE)

INDUSTRY: PC Bd mfg

SPDES OR PDES PERMIT? YES (NO) applic- PERMIT NO.

360 PERMIT? YES (NO) PERMIT NO.

SCAVENGER - no pick-ups in recent months TEL.

SCAVENGER APPROVED YES NO | PICK UP RECORDS AVAILABLE YES NO | RECORDS CONSISTENT WITH EXPECTED WASTE GENERATION YES NO

HEATING SYSTEM-MFG NAME	FUEL TYPE	FIRING RATE

INCIN. NAME	WASTE BURNED	RATE

DRUM STORAGE (YES) NO — NUMBER STORED INDOORS 25 OUTDOORS — TYPE OF MATERIAL STORED WASTE 3 RAW 25

STORAGE TANKS (YES) NO — NUMBER OF TANKS ABOVEGROUND 3 UNDERGROUND — TYPE OF MATERIAL STORED (WASTE) RAW

PROCESS TANKS (YES) NO — NUMBER OF OPEN PROCESS TANKS N 38 small TANKS — ANY ART. XII VIOLATIONS YES (NO) — Drum + TANK STORAGE IS NOT SHOWN

1. PC Bd. operation small - All TANKS inert material (poly prop or plastic) + small capacity (ie bottom 1-30 gallon).
2. Suggest ~~caulking~~ sealing floor drain with a more permanent substance to assure no further discharge until SPDES permit in force
3. Drum + TANK storage areas do not appear to meet Art XII spec w/ respect to berms + accessibility to drums.
4. Dumpster bottom rusted through, No recent staining at to indicate waste disposed of in this manner.
5. ~~B~~ 5. Samples TAKen - (metals + organics) from Ind pool

PERMISSION IS GRANTED BY THIS FACILITY TO THE SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES TO CONDUCT ROUTINE SAMPLING OF CESSPOOLS, STORMDRAINS, AND OTHER DISCHARGE POINTS AT THE FACILITY.

REINSPECTION SCHEDULED ON OR AFTER _____. FAILURE TO CORRECT UNSATISFACTORY CONDITIONS BY REINSPECTION DATE MAY RESULT IN A HEARING AND/OR FINE.

SIGN. OF PERSON REC. REPORT	TITLE	INSPECTOR
[signature]	Sec/Treas.	

Received from:
Suffolk Co. Dept. of Health

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
INDUSTRIAL WASTE AND HAZARDOUS MATERIALS CONTROL
15 HORSEBLOCK PLACE, FARMINGVILLE, N.Y. 11738
(516) 451-4633

1 of 9

NAME OF FACILITY	OWNER/ OFFICER	PAGE 1 OF
COMPANY NAME	CONTACT	TEL.
PLANT ADDRESS	VILLAGE TOWN	ZIP
MAILING ADDRESS		

DATE	TIME	ORIG. PERIODIC RE.	WASTE NO WASTE H&H	SEWAGE SYSTEM PUBLIC PRIVATE

INDUSTRY

SPDES OR SPDES PERMIT? YES NO PERMIT NO.	360 PERMIT? YES NO PERMIT NO.

SCAVENGER TEL.

SCAVENGER APPROVED YES NO	PICK UP RECORDS AVAILABLE YES NO	RECORDS CONSISTENT WITH EXPECTED WASTE GENERATION YES NO

HEATING SYSTEM-MFG NAME	FUEL TYPE	FIRING RATE
Back only		

INCIN. NAME	WASTE BURNED	RATE

DRUM STORAGE YES NO	NUMBER STORED INDOORS OUTDOORS	TYPE OF MATERIAL STORED WASTE RAW

STORAGE TANKS YES NO	NUMBER OF TANKS ABOVEGROUND UNDERGROUND	TYPE OF MATERIAL STORED WASTE RAW

OPEN PROCESS TANKS YES NO	NUMBER OF OPEN PROCESS TANKS	ANY ART. XII VIOLATIONS YES NO

PERMISSION IS GRANTED BY THIS FACILITY TO THE SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES TO CONDUCT ROUTINE SAMPLING OF CESSPOOLS, STORMDRAINS, AND OTHER DISCHARGE POINTS AT THE FACILITY.

REINSPECTION SCHEDULED ON OR AFTER _____. FAILURE TO CORRECT UNSATISFACTORY CONDITIONS BY REINSPECTION DATE MAY RESULT IN A HEARING AND/OR FINE.

SIGN. OF PERSON REC. REPORT	TITLE	INSPECTOR

INDUSTRIAL WASTE PROCESS

NO.	PROCESS	CHEMICALS USED AND APPROXIMATE QUANTITY	DISCHARGE	DISCHARGE TO
5	Etcher - Hunt Etchant sol'n -	(ammonium) Hunt Chem., Palisades Pk, NJ		
	- neutralizing rinse	=> 2 hand dragouts		
	- recirc	changed 2-3 days - (not all - spent etchant		
6	etchant shld recirc	bermed area - 2 dr waste - 1 row		
6a	Neutralizer (Lumac-mfg)	=> 3 rinses (before, after		
7	Reflow machine - acid	being shld		
8	degreasing - (grad instruct. no)	see item 2.		
9	oxidizing - 1 sol'n			
10	drilling - 1st step in process.			
11	~~-titanium-~~			
	1 poly prop 200 gal -	not used (used to be for scrub waters)		
		1 valve		
13	- gold plate - kane - Electroplate	- no waste - very small capacity tanks		(1-2 gal)
14				

AIR POLLUTION SOURCES

18-155:

NO.	PROCESS	CONTROL TYPE	EP'S	CHEMICALS OR PRODUCTS USED	AMOUNT CONSUM.	HOURS OF OPERA.	TYPE OF EMISSION
5	Hunt etcher -	fan	1				

Received from: Suffolk Co. Dept. of Health

1 of 4

p 2-19

Received from:
Suffolk Co. Dept. of Health

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
INDUSTRIAL WASTE AND HAZARDOUS MATERIALS CONTROL
15 HORSEBLOCK PLACE, FARMINGVILLE, N.Y. 11738
(516) 451-4633

NAME OF FACILITY: EMR Circuits	OWNER/ OFFICER	PAGE 1 OF 2 #3
COMPANY NAME: CPG Marcels	CONTACT: Patricia Osani	TEL.
PLANT ADDRESS: Hauppauge	VILLAGE / TOWN	ZIP
MAILING ADDRESS		

DATE	TIME	ORIG. PERIODIC RE.	WASTE NO WASTE H&H	SEWAGE SYSTEM PUBLIC PRIVATE
7-8-83				

INDUSTRY: PC Bd. Fabrication

SPDES OR NPDES PERMIT? YES NO PERMIT NO.	360 PERMIT? YES NO PERMIT NO

SCAVENGER — TEL.

SCAVENGER APPROVED YES NO	PICK UP RECORDS AVAILABLE YES NO	RECORDS CONSISTENT WITH EXPECTED WASTE GENERATION YES NO

HEATING SYSTEM-MFG NAME	FUEL TYPE	FIRING RATE

INCIN. NAME	WASTE BURNED	RATE

DRUM STORAGE YES NO	NUMBER STORED INDOORS OUTDOORS	TYPE OF MATERIAL STORED WASTE RAW

STORAGE TANKS YES NO	NUMBER OF TANKS ABOVEGROUND UNDERGROUND	TYPE OF MATERIAL STORED WASTE RAW

OPEN PROCESS TANKS YES NO	NUMBER OF OPEN PROCESS TANKS	ANY ART. XII VIOLATIONS YES NO

5- pool almost full of opaque creamy 'pinkish' colored Liquid - small drip from effluent pipe. There is some water on floor in area of floor drain, that may be causing drip.

6. The major problem this facility has is upgrading storage area for Art XII =

7. Will reinspect next week ~~8~~ for floor drain sealing.

8. One air source (The copper etcher ~~Step~~) may need a C.O.

PERMISSION IS GRANTED BY THIS FACILITY TO THE SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES TO CONDUCT ROUTINE SAMPLING OF CESSPOOLS, STORMDRAINS, AND OTHER DISCHARGE POINTS AT THE FACILITY.

REINSPECTION SCHEDULED ON OR AFTER _____. FAILURE TO CORRECT UNSATISFACTORY CONDITIONS BY REINSPECTION DATE MAY RESULT IN A HEARING AND/OR FINE.

SIGN. OF PERSON REC. REPORT	TITLE	INSPECTOR
		Eileen Governale

INDUSTRIAL WASTE PROCESS

NO.	PROCESS	CHEMICALS USED AND APPROXIMATE QUANTITY	DISCHARGE	DISCHARGE TO
13	Waste Storage - 1 - 6000 gal metal Tank - all solns cross current, added to 6000 gal Tank. 1 - 200 gal polypropylene Tank - for waste solns 10 - ½ gal glass bottles Drums - 3 Samurai Developer KB-1A 1 Sulfuric acid 1 - Sodium Hydroxide 1 - Crystal - Facile dup- 1 - high speed fixer 3 - high speed repl. 1 - dr Fix Rinse - 1	on Friday - all wastes yet - (changed daily). in Tank - for waste solns - emptied in Sodium area dup-	Waste not segregated Total 25 dr - + 125 5 gal containers 2 drums exploded	fluoroborate

AIR POLLUTION SOURCES

18-155:

NO.	PROCESS	CONTROL TYPE	EP'S	CHEMICALS OR PRODUCTS USED	AMOUNT CONSUM.	HOURS OF OPERA.	TYPE OF EMISSION
14	Dark Room - sink (no drains)		3	pans - developer, fixer Rinse held separately.	1 bucket		1 gal
15	Floor Washing - in plating area of 10 6000 gal Tanks.			waste water disposed			

Received from Suffolk Co. Dept. of Health

1 of 1

INDUSTRIAL WASTE PROCESS

NO.	PROCESS	CHEMICALS USED AND APPROXIMATE QUANTITY	DISCHARGE	DISCHARGE TO
1	a) Dry film area - developer, ~~Laminator~~			
	b) ~~Waterless~~ Riston coating machine - no liquid			
	c) riston developer - developer, fixer			
2	baking ovens (2) - no water			
3	Screening area - auto prep - etching resist, inks, solder mask, auto board bleach, Treating area -			
	→ 1 sink w/ ~~poly pipe~~ collection Tank beneath it. no drains used to clean screens. floor drains in this room where PC from ~~reflow~~ solder machine ~~rinse~~ ~~is not~~ Rinse is being held at this time. 1 5gal MEK cleaner			
4	a) PC Bd fab -		3 TANKS	
	Soap - 2 rinses ⇒ (micro etch + H_2O_2) + Rinse ⇒ 10% H_2SO_4 ⇒ $CuSO_4$ → 1 dragout			
	3 rinses ⇒ 10% Fluoroboric acid → 2 solder Tanks (Fluoroboric + Stannous 71 bath)			
	2 dragout Tanks ⇒ caustic strip Tank + 2 dragouts. - use copper etch TO remove Cu off racks - 2 drums 18-155:			

AIR POLLUTION SOURCES

NO.	PROCESS	CONTROL TYPE	EP'S	CHEMICALS OR PRODUCTS USED	AMOUNT CONSUM.	HOURS OF OPERA.	TYPE OF EMISSION
1	developer vented To	ceiling	??	interspace.		NOT TO	vented
2	riston coating, work table,	+ collected		(all vented) not known whether			
	vents into ceiling or	atmosphere					
3	riston developer - (vented)	(to ceiling ?)					
4	Baking ovens: 1 Electroven, 1 Despatch Hendry Co.						

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Appendix 1.1-11

Received from:
Suffolk Co. Dept. of
Health

COUNTY OF SUFFOLK

PETER F. COHALAN
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF HEALTH SERVICES

DAVID HARRIS, M.D., M.P.H.
COMMISSIONER

MEMORANDUM

TO: FRED EISENBUD, Esq.
Suffolk County Attorney's Office

FROM: WILLIAM C. ROBERTS, P.E., Chief
Bureau of Environmental Pollution Control

DATE: October 7, 1983

RE: EMR CIRCUITS, INC. (Possible Criminal Action)

As per your telephone conversation of October 5, 1983 with Mr. Patrick Perrella of this office. I am forwarding for your consideration this case report on EMR Circuits, Inc., 99 Marcus Boulevard, Hauppauge, NY.

Complaint Received

On October 4, 1983, James Pim, P.E., of this office, received a phone complaint registered against EMR Circuits. The caller stated that about once or twice a week EMR Circuits does discharge a 1,800 gallon chemical waste tank into a floor drain. This is accomplished by breaking out a cement plug from the floor drain and then after each discharge, the floor drain is again concreted over with a fresh "sac-crete" concrete patch. The complaintant stated that he has observed this occur regularly for the past three months.

When asked for his name, the caller freely identified himself as Michael Stas of 15 Morris Street, Brentwood, New York (phone 231-6985). I have attached a copy of the complaint.

On October 6, 1983 Mr. Perrella called the aforementioned complaintant's phone number and verified the complaint by speaking with Mr. Stas. He informed Mr. Perrella that the best time to observe a discharge was on a Saturday morning between 8 a.m. and 10 a.m.

EMR Circuits, Inc. (Case History)

On June 9, 1983 this department conducted a Formal Administrative Hearing charging EMR Circuits with discharging toxic or hazardous materials without a New York State Pollutant Discharge Elimination Systems (SPDES) Permit and with violating a prior Order on Consent agreement. At this hearing, and in a subsequent written communication,

Mr. Paul Wingler, the engineer hired by EMR Circuits informed this department that all industrial discharges had ceased. EMR Circuits was assessed and did pay a $2,400 civil penalty as a result of this hearing. In addition, the Commissioner's Order (actually a stipulation agreement) directed the Respondent to immediately cease all industrial discharges (copy of P. Wingler's letter and Commissioner's Order attached).

Subsequent to the June 17, 1983 Commissioner's Order, an inspection and a sample analysis of EMR Circuits's industrial leaching pool both indicated a continuing discharge of toxic or hazardous materials in violation of State and County law as well as the Commissioner's Order. Another pool sample taken on August 10,1983 by this department again substantiated the unpermitted discharge conditions (copies of lab reports and violation notices attached).

Additional Problems at EMR Circuits (Air Pollution)

In addition to the aforementioned discharge violations, the department has received complaints from commercial tenants sharing the building with EMR Circuits. The nature of these complaints are that industrial fumes from EMR Circuits are making their employees ill. The department has been able to substantiate one of these complaints as being caused by solvent fumes from EMR Circuits.

As a result of the air pollution violation, as well as the violations of the Commissioner's Order, another Formal Administrative Hearing will be scheduled as soon as it can be ascertained that such Formal Hearing will not interfere with a possible criminal investigation by your office (copy of hearing notice draft attached).

Conclusion

EMR Circuits has had ample notice of the applicable law concerning unpermitted discharges of toxic or hazardous materials. We believe that the two pool samples taken by our department are from the pool that is routed to the suspect floor drain in EMR Circuits' facility. If the allegations of intentional discharges to the floor drain at EMR Circuits can be substantiated, then I believe a criminal action is warranted.

WCR:PP:daf

Enclosures

Appendix 1.1-12

Received from: Suffolk Co. Dept. of Health

SUFFOLK COUNTY DEPT. OF HEALTH SERVICES
UNIFORM COMPLAINT FIELD REPORT

Received from: Suffolk Co. Dept. of Health

Air Pollution ☐

Hazardous Material & Industrial Waste Received from: Suffolk Co. Dept. of Health ☒

Internal Ventilation ☐

Sewage Treatment ☐

Assigned to Zone No. II

SCDHS No. 615 Letter ☐

SPILL No. _____ Telephone ☐

DOT No. _____ Person ☐

Date 2-25-83 Time 3:06 pm

Received from: Suffolk Co. Dept. of Health

Referred by: George Pazios Phone 979-5[illegible]

Complainant Anonymous - Worker at E M K

Address [illegible] (T.V.H.) Nesconset, 11767 Phone _____

Complaint Against E M K Circuits Inc.

Address 94 Marcus Blvd (T.V.H.) Hauppauge Phone _____

Nature of Request Toxic materials being dumped into floor drain which is covered up with cement block each night. One item dumped was PCB's. Some new cutter [illegible] Stencil machine has been installed outside of building - west side

RCV'D by P. Reilly Assigned to J. Guttadauro Date 2-25-83

Persons Interviewed	Address	Phone
B		

Information Obtained from Interviewed Individuals:

I received a phone call to my home at 7 pm Feb 18th 1983 by a worker at E.M.K Circuits located at 94 Marcus Blvd. The w.k. complained about fumes in the workplace. Many employees get nausea, no ventilation fans only 1 or 2 open windows. Waste materials from photographic emulsion and circuit plating is dumped on a daily basis into floor drain which leads to cesspool. Wastes are also being dumped in soil around building. 2 Suffolk County Deputy Sheriffs are often present in this facility and have done some construction work for Mark.

Please Check out before the Feb 28 1983 hearing -

INDW-1

Appendix 1.1-13

Received from: Suffolk Co. Dept. of Health

SUFFOLK COUNTY DEPT. OF HEALTH SERVICES
UNIFORM COMPLAINT FIELD REPORT

Air Pollution ☒
Hazardous Material & Industrial Waste ☐
Internal Ventilation ☐
Sewage Treatment ☐
Assigned to Zone No. _____

SCDHS No. 4129 Letter ☐
SPILL No. _____ Telephone ☒
DOT No. _____ Person ☐
Date Aug 17, 1983 Time 8:50 AM

Referred by: _____ Phone _____
Complainant Data Recording Systems - Linda Darmstadt
Address 97 Marcus Blvd (T.V.H.) Hauppauge Phone 516-231-1133

Complaint Against EMR Circuits (?)
Address _____ (T.V.H.) _____ Phone _____

Nature of Request 6 Workers getting headaches in the afternoon - Plants dying - Workers feel it may be from chemicals stored in yard of adjoining firm
RCV'D by JMM Assigned to ~~[redacted]~~ Gladys Z Date _____

Persons Interviewed	Address	Phone
David Spencer	97 Marcus Blvd Hauppauge	231-1133
Linda Darmstadt	97 Marcus Blvd Hauppauge	

Information Obtained from Interviewed Individuals:

David Spencer, President of Data Recording Systems, said that his business has been at 97 Marcus Blvd since April 1983. He said that odors have been a problem but have been especially bad this week. Employees have complained of headaches and nausea. A similar occurance happened one month ago.

Linda Darmstadt, sec from D.R.S., said that recently as many as 6 of the 12 employees have experienced illness in single day. She said that sometimes EMR has drums of sulfuric stored outside building.

Received from: Suffolk Co. Dept. of Health

INDW-1

18-1095: 3/81

9-14-83

1 of 4

Inspector's Observations No noticeable oder inside facility. Tested 2 areas for amines, acetic acid, and hydrogen cyanide. None detected. Some odors from plating next door are noticable outside building, but not especially intense. Wall between DRS & EMR seems to extend to roof with no openings visible.

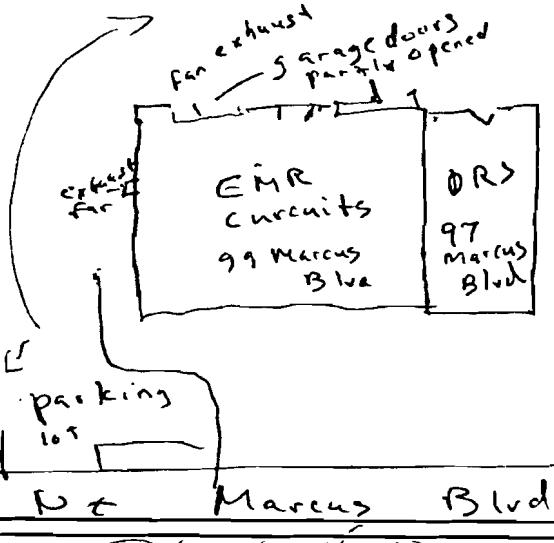
Received from:
Suffolk Co. Dept. of Health

Name of Responsible Individuals	Address	Tel. No.

Inspector's Recommendation to Persons Concerned

Information Related by Inspector to Complainant Further testing may be required.

Sketch:



Inspectors Signature [signature] Date 9-14-83

REC'D 9-7-83 BY [illegible]
FIELD NO. [illegible]

p 3 of 5

Received from: Suffolk Co. Dept. of Health

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF MEDICAL LEGAL INVESTIGATIONS & FORENSIC SCIENCES
PUBLIC HEALTH LABORATORY

TRACE ORGANIC ANALYSIS OF INDUSTRIAL WASTE / AIR

Name DATA RECORDING SYSTEMS

Location [illegible] 97 MARCUS BLVD HAUP.

Point of Collection AREA CEILING TILES IN [illegible] FRONT OFFICE

Remarks: Results to J. GLADYSZ (M.E.K. / TRICHLOR)

Compound	ppb	ppm	Compound	ppb	ppm
Methylene Chloride			Benzene	<0.4	
Freon 113	<0.005		Toluene	.11	
Chloroform	<0.01		o-Xylene	<0.3	
1,1,1 Trichloroethane	.01		m,p-Xylene	<0.3	
Carbon Tetrachloride	<0.002		Xylenes	—	
1,1,2 Trichloroethylene	.53		Chlorobenzene	<0.3	
Chlorodibromomethane	<0.002		Ethylbenzene	<0.3	
Tetrachloroethylene	.05		Chlorotoluenes	<0.3	
Bromoform	<0.005		1,3,5 Trimethylbenzene	<0.3	
Bromodichloromethane			1,2,4 Trimethylbenzene	<0.3	
1,1,2 Trichloroethane			m,p Dichlorobenzene	<0.3	
s-Tetrachloroethane			o-Dichlorobenzene	<0.3	
n-Decane			p-Diethylbenzene	<0.3	
Undecane			p-Ethyltoluene	—	
Dodecane			1,2,4,5 Tetramethylbenzene	<0.3	
n-Tridecane			Octane		
Bromobenzene			n-Nonane		
cis dichloroethylene			2.6 Hexane	.2	

During transport of the sample from collection point to laboratory, the chain of custody must not be broken. The sample should be delivered by the sample collector or a designated representative who will sign for the receipt, integrity and transfer of the sample during shipment.

	SIGNATURE	AFFILIATION	DATE	TIME
1. Collected by	[illegible]	[illegible]	[illegible]	[illegible]
2. Transfered to	Francis J Amendola	SCDHS PHL	9-7-83	11:11 PM
3. Transfered to				
4. Transfered to				

REC'D 9/7/83 BY FA
FIELD NO. [illegible]

ANALYZED BY FA LA

#415

Received from:
Suffolk Co. Dept. of Health

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF MEDICAL LEGAL INVESTIGATIONS & FORENSIC SCIENCES
PUBLIC HEALTH LABORATORY

TRACE ORGANIC ANALYSIS OF INDUSTRIAL WASTE / AIR

Name DATA Recording System

Location 97 Rocks Rd, Hauppauge

Point of Collection Desk in Lab Tech's office

Remarks: Results in ppb (ug/kg) (ug/l trip)

Compound	ppb ppm	Compound	ppb ppm
Methylene Chloride	___	Benzene	<0.4
Freon 113	<0.005	Toluene	.11
Chloroform	<0.01	o-Xylene	<0.3
1,1,1 Trichloroethane	.01	m,p-Xylene	<0.3
Carbon Tetrachloride	<0.002	Xylenes	—
1,1,2 Trichloroethylene	.52	Chlorobenzene	<0.3
Chlorodibromomethane	<0.002	Ethylbenzene	<0.3
Tetrachloroethylene	.005	Chlorotoluenes	<0.3
Bromoform	<0.005	1,3,5 Trimethylbenzene	<0.3
Bromodichloromethane	___	1,2,4 Trimethylbenzene	<0.3
1,1,2 Trichloroethane	___	m,p Dichlorobenzene	<0.3
s-Tetrachloroethane	___	o-Dichlorobenzene	<0.3
n-Decane	___	p-Diethylbenzene	<0.3
Undecane	___	p-Ethyltoluene	—
Dodecane	___	1,2,4,5 Tetramethylbenzene	<0.3
n-Tridecane	___	Octane	___
Bromobenzene	___	n-Nonane	___
cis-dichloroethylene	___	2-Ethanol	.05

During transport of the sample from collection point to laboratory, the chain of custody must not be broken. The sample should be delivered by the sample collector or a designated representative who will sign for the receipt, integrity and transfer of the sample during shipment.

	SIGNATURE	AFFILIATION	DATE	TIME
1. Collected by	[illegible]	[illegible]	9-7-83	[illegible]
2. Transfered to	Francis J Arienbla	SCHSPHL	9-7-83	11:10 Am
3. Transfered to				
4. Transfered to				

FIELD NO. _____ SAMPLED BY _____

p 5 of 5

Received from:
Suffolk Co. Dept. of Health

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF MEDICAL LEGAL INVESTIGATIONS & FORENSIC SCIENCES
PUBLIC HEALTH LABORATORY

TRACE ORGANIC ANALYSIS OF INDUSTRIAL WASTE / AIR

Name FMR Chemicals

Location 44 Maple Blvd, Hauppauge

Point of Collection From Leaky

Remarks: Solvent odor present Results to J. Gladys

Compound	ppb-ppm	Compound	ppb ppm
Methylene Chloride	___	Benzene	<0.4
Freon 113	<0.025	Toluene	.09
Chloroform	<0.05	o-Xylene	<0.3
1,1,1 Trichloroethane	<0.02	m,p-Xylene	<0.3
Carbon Tetrachloride	<0.01	Xylenes	___
1,1,2 Trichloroethylene	1.66	Chlorobenzene	<0.3
Chlorodibromomethane	<0.01	Ethylbenzene	<0.3
Tetrachloroethylene	<0.015	Chlorotoluenes	<0.3
Bromoform	<0.025	1,3,5 Trimethylbenzene	<0.3
Bromodichloromethane	___	1,2,4 Trimethylbenzene	<0.3
1,1,2 Trichloroethane	___	m,p Dichlorobenzene	<0.3
s-Tetrachloroethane	___	o-Dichlorobenzene	<0.3
n-Decane	___	p-Diethylbenzene	<0.3
Undecane	___	p-Ethyltoluene	___
Dodecane	___	1,2,4,5 Tetramethylbenzene	<0.3
n-Tridecane	___	Octane	___
Bromobenzene	___	n-Nonane	___
cis-dichloroethylene	___	2-Ethyl...	11.5

During transport of the sample from collection point to laboratory, the chain of custody must not be broken. The sample should be delivered by the sample collector or a designated representative who will sign for the receipt, integrity and transfer of the sample during shipment.

	SIGNATURE	AFFILIATION	DATE	TIME
1. Collected by	[illegible]	[illegible]	9-2-83	[illegible]
2. Transfered to	Francis J Arendola	SCDHS-PHL	9-7-83	11:10 AM
3. Transfered to				
4. Transfered to				

Appendix 1.1-14

COUNTY OF SUFFOLK

Received from:
Suffolk Co. Dept. of Health
8/30

PETER F. COHALAN
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF HEALTH SERVICES

EMR Circuits, Inc.
99 Marcus Blvd.
Hauppauge, New York 11788

Date 8/26/83
SPDES NO.
Lab. No. IW-783010
Field No. 1-EG-7-8

Gentlemen:

On 7/8/83 samples of industrial waste were taken from your industrial pool located on the south s/o building in parking lot driveway. Upon analysis, the following parameters were found in concentrations above the maximum allowed in your SPDES Permit or in groundwater effluent standards:

1.	1,1,2 Trichloroethylene	1200ppb	6.
2.	Xylenes	910ppb	7.
3.	Ethylbenzene	130ppb	8.
4.	2-Butanone (hek)	860,000ppb	9.
5.			10.

Please be advised that these unsatisfactory conditions constitute violations of the N.Y.S. Environmental Conservation Law and/or the Suffolk County Sanitary Code. Please be further advised that the discharge of any water from an industrial process to the groundwater of Suffolk County without having first obtained a State Pollutant Discharge Elimination System (SPDES) Permit for that discharge is also a violation of the N.Y.S. E.C.L. and/or the Suffolk County Sanitary Code, Article 12.

If you do not already possess a valid SPDES Permit for the above discharge, then you should apply immediately through this office for said permit.

Since the above-noted violations may subject you to legal action, it is expected that these violations cease immediately. Violations of the Suffolk County Sanitary Code are subject to the imposition of a civil penalty of up to Five Hundred ($500) dollars per violation. E.C.L. violations are also subject to a civil penalty. A reinspection in the near future will determine your compliance in this matter.

Very truly yours,

John A. Gladysz
Environmental Pollution Control

(SEE REVERSE SIDE FOR STANDARDS)

15 Horseblock Place, Farmingville, N.Y. 11738, (516) 451-4630

Received from: Suffolk Co. Dept. of Health

SUFFOLK COUNTY HEALTH SERVICES LABORATORY

CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

18-247. 2/82

FIELD NO. 1-EG-7-8 LAB NO. 7-83-48 DATE COMPLETED 7/21/83

NAME OR FIRM EMR Circuits Inc

ADDRESS OR LOCATION 99 Marcus Blvd. Hpp

POINT OF COLLECTION Ind pool - in North Driveway

REMARKS/INSTRUCTIONS Located approx 7' from Bldg

TEST	RESULTS	TEST	RESULTS	TEST	RESULTS
pH (LAB)		TOTAL SOLIDS	Mg/l	COPPER	3.2x10 Mg/l
CHLORIDE	Mg/l	SUSPENDED SOLIDS		IRON	
CYANIDE		DISSOLVED SOLIDS		MANGANESE	
MBAS				CHROMIUM-TOT	.3
COD				NICKEL	.7
TOC				ZINC	1.3
		Received from: Suffolk Co. Dept. of Health		LEAD	12
				CADMIUM	.1
NITRATE-N				SILVER	2.4
NITRITE				CHROMIUM-+6	
AMMONIA-N					
TKN		pH (FIELD)	7		
		TEMP. (FIELD)			

METHOD OF PRESERVATION ☑ HNO_3 TO pH <2 ☐ COOL 4° C

CUSTODY OF SAMPLE

DURING TRANSPORT OF THE SAMPLE FROM SAMPLING SITE TO LABORATORY, THE CHAIN OF CUSTODY MUST BE UNBROKEN. GENERALLY THIS WILL REQUIRE THAT THE SAMPLE BE DELIVERED BY THE SAMPLE COLLECTOR OR HIS DESIGNATED REPRESENTATIVE WHO WILL SIGN FOR THE RECEIPT, INTEGRITY AND TRANSFER OF THE SAMPLE DURING SHIPMENT.

	NAME	AFFILIATION	DATE	TIME
1. COLLECTED BY	Eileen Fivernale	SCDHS	7-8-83	12:10 PM
2. POSSESSION BY			DATE - TIME	TO DATE - TIME
3. POSSESSION BY			DATE - TIME	TO DATE - TIME
4. RECEIVED LAB BY			7/11/83	10 AM
5. POSSESSION BY			DATE - TIME	TO DATE - TIME
6. POSSESSION BY			DATE - TIME	TO DATE - TIME

OFFICE OF VIOLATION

COUNTY OF SUFFOLK

Received from:
Suffolk Co. Dept. of
Health

p 3-130

PETER F. COHALAN
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF HEALTH SERVICES

Date 8/26/83
SPDES NO.
Lab. No. 8-83-123
Field No. 1-JW-8-10

EMR Circuits
99 Marcus Blvd.
Hauppauge, New York 11788

Gentlemen:

On 8/10/83 samples of industrial waste were taken from your industrial pool located on south s/o building in parking lot driveway. Upon analysis, the following parameters were found in concentrations above the maximum allowed in your SPDES Permit or in groundwater effluent standards:

1.	Phenols	.59 mg/l	6.
2.	pH = 2		7.
3.			8.
4.			9.
5.			10.

Please be advised that these unsatisfactory conditions constitute violations of the N.Y.S. Environmental Conservation Law and/or the Suffolk County Sanitary Code. Please be further advised that the discharge of any water from an industrial process to the groundwater of Suffolk County without having first obtained a State Pollutant Discharge Elimination System (SPDES) Permit for that discharge is also a violation of the N.Y.S. E.C.L. and/or the Suffolk County Sanitary Code, Article 12.

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Very truly yours,

John A. Gladysz
Environmental Pollution Control

(SEE REVERSE SIDE FOR STANDARDS)

Received from: Suffolk Co. Dept. of Health

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
INDUSTRIAL WASTE AND HAZARDOUS MATERIALS CONTROL UNIT
15 HORSEBLOCK PLACE, FARMINGVILLE, N.Y. 11738
(516) 451-4633

(Log) New Reinsp 4/4/39
Letter
Sample
All JMM File - 22

NAME OF FACILITY: EMR Circuits	OWNER/ OFFICER		PAGE 1 OF
COMPANY NAME	CONTACT: Pat Osani		TEL.
PLANT ADDRESS: 99 Marcus Blvd	VILLAGE	TOWN: Sec. Twns	ZIP
MAILING ADDRESS			
DATE: 10/14/83	TIME	ORIG. PERIODIC RE.	WASTE NO WASTE H&H
SEWAGE SYSTEM: PUBLIC PRIVATE			

INDUSTRY: printed circuit boards.

SPDES OR SPDES PERMIT? YES (NO) PERMIT NO. | 360 PERMIT? YES (NO) PERMIT NO

SCAVENGER: RGM - Chemical Management. TEL.

SCAVENGER APPROVED (YES) NO | PICK UP RECORDS AVAILABLE YES NO | RECORDS CONSISTENT WITH EXPECTED WASTE GENERATION YES NO

HEATING SYSTEM - MFG. NAME	FUEL TYPE	FIRING RATE

INCIN. NAME	WASTE BURNED	RATE

DRUM STORAGE YES NO | NUMBER STORED INDOORS OUTDOORS | TYPE OF MATERIAL STORED WASTE RAW

STORAGE TANKS YES NO | NUMBER OF TANKS ABOVEGROUND UNDERGROUND | TYPE OF MATERIAL STORED WASTE RAW

OPEN PROCESS TANKS YES NO | NUMBER OF OPEN PROCESS TANKS | ANY ART. XII VIOLATIONS YES NO

1 Meeting, to review plans - for ART XII & AIR submissions.
a) noted Drum + TANK storage areas
b) noted floor drain concreted over.
c) Drum storage area cleaned up.
d) Screen booth newly erected + vented out North wall

EMR will pick up AIR 100 forms today + submit plans for ART XII storage. (½ way down)
Det - minimum color light - 6-ft below ground level

PERMISSION IS GRANTED BY THIS FACILITY TO THE SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES TO CONDUCT ROUTINE SAMPLING OF ESSPOOLS, STORMDRAINS, AND OTHER DISCHARGE POINTS AT THE FACILITY.

REINSPECTION SCHEDULED ON OR AFTER _____. FAILURE TO CORRECT UNSATISFACTORY CONDITIONS BY REINSPECTION DATE MAY RESULT IN A HEARING AND/OR FINE.

SIGN. OF PERSON REC. REPORT: P Osani | TITLE | INSPECTOR: Eileen Governale

SB-155: 9/82 - 5/81 TJK

REC'D [illegible] BY [illegible] EXAMINED BY IEF FF

FIELD NO. H1R28-05 E

1 of 30

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF MEDICAL LEGAL INVESTIGATIONS & FORENSIC SCIENCES
PUBLIC HEALTH LABORATORY

Received from:
Suffolk Co. Dept. of Health

TRACE ORGANIC ANALYSIS OF INDUSTRIAL WASTE

Name EMR Circuits Inc

Location 99 Marcus Blvd. Hauppauge

Point of Collection Holding TANK 4000 gal A.G. in rear of Shop
Bottom sample

Remarks: ph-2

Compound	ppb	Compound	ppb
Methylene Chloride	<54	Cis Dichloroethylene	<16
Freon 113	<4	Benzene	<10
Chloroform	—	Toluene	20
1,1,1 Trichloroethane	39.000	Chlorobenzene	<12
Carbon Tetrachloride		Ethylbenzene	<10
1,1,2 Trichloroethylene	1.500.000	Xylene(s)	<10
Bromodichloromethane	—	Bromobenzene	<16
1,1,2 Trichloroethane	—	Chlorotoluene(s)	<12
Chlorodibromomethane	—	1,3,5 Trimethylbenzene	<10
Tetrachloroethylene	—	1,2,4 Trimethylbenzene	<10
Bromoform	—	m,p-Dichlorobenzene	<14
1,1,2,2 Tetrachloroethane	—	o-Dichlorobenzene	16
Octane	<40	p-Diethylbenzene	<10
Styrene	27	1,2,4,5 Tetramethylbenzene	<10
n-Nonane	<40	1,2,4 Trichlorobenzene	<16
p-Ethyltoluene	<10	1,2,3 Trichlorobenzene	<18
n-Decane	<40	methyl Ethyl Ketone	530
n-Undecane	<40		

During transport of the sample from collection point to laboratory, the chain of custody must not be broken. The sample should be delivered by the sample collector or a designated representative who will sign for the receipt, integrity, and transfer of the sample during shipment.

	SIGNATURE	AFFILIATION	DATE	TIME
1. Collected by	Eileen Quennale	SCDHS	10/29/83	11:30 AM
2. Transfered to	Francis J Amendola	SCDHS-PHL	11-29-83	12:30 PM
3. Transfered to				
4. Transfered to				

REC'D BY — RECEIVED BY RF FF

FIELD NO. HJR28-CH

p6 1/30

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF MEDICAL LEGAL INVESTIGATIONS & FORENSIC SCIENCES
PUBLIC HEALTH LABORATORY

Received from:
Suffolk Co. Dept. of Health

TRACE ORGANIC ANALYSIS OF INDUSTRIAL WASTE

Name EMR Circuits Inc

Location 99 Marcus Blvd, Hauppauge

Point of Collection - from process tank (rinse) bottom (tank drained almost empty)
concentrate tank contains H_2SO_4, nucleorch, and H_2O_2.

Remarks:
pH-1

Compound	ppb	Compound	ppb
Methylene Chloride	<54	Cis Dichloroethylene	<16
Freon 113	<4	Benzene	<10
Chloroform	<5	Toluene	<10
1,1,1 Trichloroethane	17	Chlorobenzene	<12
Carbon Tetrachloride	<1	Ethylbenzene	<10
1,1,2 Trichloroethylene	8	Xylene(s)	<10
Bromodichloromethane	<3	Bromobenzene	<16
1,1,2 Trichloroethane	<5	Chlorotoluene(s)	<12
Chlorodibromomethane	<2	1,3,5 Trimethylbenzene	<10
Tetrachloroethylene	<2	1,2,4 Trimethylbenzene	<10
Bromoform	<5	m,p-Dichlorobenzene	<14
1,1,2,2 Tetrachloroethane	<3	o-Dichlorobenzene	<14
Octane	<40	p-Diethylbenzene	<10
Styrene	<10	1,2,4,5 Tetramethylbenzene	<10
n-Nonane	<40	1,2,4 Trichlorobenzene	<16
p-Ethyltoluene	<10	1,2,3 Trichlorobenzene	<18
n-Decane	<40	Methyl Ethyl Ketone	1200
n-Undecane	<40		

During transport of the sample from collection point to laboratory, the chain of custody must not be broken. The sample should be delivered by the sample collector or a designated representative who will sign for the receipt, integrity, and transfer of the sample during shipment.

	SIGNATURE	AFFILIATION	DATE	TIME
1. Collected by	Eileen Governale	SCDHS	10/29/83	11:05 AM
2. Transfered to	Francis J Amendola	SCDHS-PHL	10-29-83	12:30 PM
3. Transfered to				
4. Transfered to				

RECD BY — EXAMINED BY LF FA CM

FIELD NO. HTR28-C

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF MEDICAL LEGAL INVESTIGATIONS & FORENSIC SCIENCES
PUBLIC HEALTH LABORATORY

Received from:
Suffolk Co. Dept. of Health

TRACE ORGANIC ANALYSIS OF INDUSTRIAL WASTE

Name EMR Circuits Inc

Location 99 Marcus Blvd. Hauppauge

Point of Collection - from hose Attached To drumpump near vicinity of floor drain.

Remarks: pH 12+

Compound	ppb	Compound	ppb
Methylene Chloride	<54	Cis Dichloroethylene	<16
Freon 113	<4	Benzene	<10
Chloroform	<5	Toluene	<10
1,1,1 Trichloroethane	170	Chlorobenzene	<12
Carbon Tetrachloride	<1	Ethylbenzene	<10
1,1,2 Trichloroethylene	3300	Xylene(s)	<10
Bromodichloromethane	<3	Bromobenzene	<16
1,1,2 Trichloroethane	<5	Chlorotoluene(s)	<12
Chlorodibromomethane	<2	1,3,5 Trimethylbenzene	<10
Tetrachloroethylene	<2	1,2,4 Trimethylbenzene	<10
Bromoform	<5	m,p-Dichlorobenzene	<14
1,1,2,2 Tetrachloroethane	<5	o-Dichlorobenzene	<14
Octane	<40	p-Diethylbenzene	<10
Styrene	<10	1,2,4,5 Tetramethylbenzene	<10
n-Nonane	<40	1,2,4 Trichlorobenzene	<16
p-Ethyltoluene	<10	1,2,3 Trichlorobenzene	<18
n-Decane	<40	Methyl Ethyl Ketone	<40
n-Undecane	<40		

CYANIDE — 1.05 mg/l

During transport of the sample from collection point to laboratory, the chain of custody must not be broken. The sample should be delivered by the sample collector or a designated representative who will sign for the receipt, integrity, and transfer of the sample during shipment.

	SIGNATURE	AFFILIATION	DATE	TIME
1. Collected by	Eileen Guernale	SCDHS	10/25/83	10:45 AM
2. Transfered to	Frank D'Amicola	SCDHS-PHL	10-25-83	12:30 PM
3. Transfered to				
4. Transfered to				

REC'D [illegible] By FA
FIELD NO. HIR28-02

DATE COMPLETED 10/31/83
EXAMINED BY [illegible]

18/30

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF MEDICAL LEGAL INVESTIGATIONS & FORENSIC SCIENCES
PUBLIC HEALTH LABORATORY

Received from:
Suffolk Co. Dept. of Health

TRACE ORGANIC ANALYSIS OF INDUSTRIAL WASTE

Name EMR Circuits Inc

Location 99 Marcus Blvd, Hauppauge

Point of Collection - Leaching pool North s/o Bldg -

Remarks:
PH 1

Compound	ppb	Compound	ppb
Methylene Chloride	130	Cis Dichloroethylene	<16
Freon 113	<4	Benzene	<10
Chloroform	12	Toluene	<10
1,1,1 Trichloroethane	4300	Chlorobenzene	<12
Carbon Tetrachloride	<1	Ethylbenzene	<10
1,1,2 Trichloroethylene	13000	Xylene(s)	<10
Bromodichloromethane	<3	Bromobenzene	<16
1,1,2 Trichloroethane	<5	Chlorotoluene(s)	<12
Chlorodibromomethane	<2	1,3,5 Trimethylbenzene	<10
Tetrachloroethylene	<2	1,2,4 Trimethylbenzene	<10
Bromoform	<5	m,p-Dichlorobenzene	<14
1,1,2,2 Tetrachloroethane	<3	o-Dichlorobenzene	<14
Octane	<40	p-Diethylbenzene	<10
Styrene	<10	1,2,4,5 Tetramethylbenzene	<10
n-Nonane	<40	1,2,4 Trichlorobenzene	<16
p-Ethyltoluene	<10	1,2,3 Trichlorobenzene	<18
n-Decane	<40	Methyl Ethyl Ketone	3300
n-Undecane	<40		

During transport of the sample from collection point to laboratory, the chain of custody must not be broken. The sample should be delivered by the sample collector or a designated representative who will sign for the receipt, integrity, and transfer of the sample during shipment.

	SIGNATURE	AFFILIATION	DATE	TIME
1. Collected by	Eileen Governale	Suff Co D.H.S.	10/29/83	9:40 AM
2. Transfered to	Francis J Amendola	SCDHS-PHL	10-29-83	12:30 PM
3. Transfered to				
4. Transfered to				

RECD BY [illegible] EXAMINED BY [illegible]

FIELD NO. 111828-01

p. 9 of 30

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF MEDICAL LEGAL INVESTIGATIONS & FORENSIC SCIENCES
PUBLIC HEALTH LABORATORY

Received from:
Suffolk Co. Dept. of Health

TRACE ORGANIC ANALYSIS OF INDUSTRIAL WASTE

Name EMR Circuits Inc

Location 99 Marcus Blvd, Hauppauge

Point of Collection - Blue-Green fluid discharging from pipe entering leaching pool on North side of Bldg.

Remarks: PH-1

Compound	ppb	Compound	ppb
Methylene Chloride	73	Cis Dichloroethylene	<16
Freon 113	<4	Benzene	<10
Chloroform	<5	Toluene	<10
1,1,1 Trichloroethane	120	Chlorobenzene	<12
Carbon Tetrachloride	<1	Ethylbenzene	<10
1,1,2 Trichloroethylene	860	Xylene(s)	<10
Bromodichloromethane	<3	Bromobenzene	<16
1,1,2 Trichloroethane	<5	Chlorotoluene(s)	<12
Chlorodibromomethane	<2	1,3,5 Trimethylbenzene	<10
Tetrachloroethylene	<2	1,2,4 Trimethylbenzene	<10
Bromoform	<5	m,p-Dichlorobenzene	<14
1,1,2,2 Tetrachloroethane	<3	o-Dichlorobenzene	<14
Octane	<40	p-Diethylbenzene	<10
Styrene	<10	1,2,4,5 Tetramethylbenzene	<10
n-Nonane	<40	1,2,4 Trichlorobenzene	<16
p-Ethyltoluene	<10	1,2,3 Trichlorobenzene	<18
n-Decane	<40		
n-Undecane	<40	Methyl Ethyl Ketone	2100

During transport of the sample from collection point to laboratory, the chain of custody must not be broken. The sample should be delivered by the sample collector or a designated representative who will sign for the receipt, integrity, and transfer of the sample during shipment.

	SIGNATURE	AFFILIATION	DATE	TIME
1. Collected by	Eileen Governale	SCDHS	10/29/83	9:26 AM
2. Transfered to	Francis J Cimendola	SCDHS-PHL	10-29-83	12:30 PM
3. Transfered to				
4. Transfered to				

RECRA RESEARCH, INC.

Hazardous Waste And Toxic Substance Control

January 19, 1984

Samples collected 10/29/83

Mr. Edwin Perkins
New York State Department of
Environmental Conservation
50 Wolf Road
Albany, New York 12233

Dear Mr. Perkins:

Please find enclosed the report regarding the analysis performed on the sample labelled H-IR28-01B, H-IR28-02B, H-IR28-04B, H-IR28-05B, received at Recra Research, Inc. on October 30, 1983.

If you have any questions or if I can be of further assistance to you, please do not hesitate to contact me. We look forward to being of continued service to you in the future.

Sincerely,

RECRA RESEARCH, INC.

Brian C. Senefelder

Brian C. Senefelder
Laboratory Supervisor
Waste Materials Management

I.D. #3W-160

BCS/af
Enclosures

4248 Ridge Lea Road, Amherst, New York 14226 Telephone (716) 838-6200

RECEIVED FROM NYSDEC
DIVISION OF ENVIRONMENTAL
ENFORCEMENT
WHITE PLAINS

ANALYTICAL RESULTS

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
EP TOXICITY TEST EXTRACTS

p. 11 of 30

Report Date: 1/13/84

PARAMETER	UNITS OF MEASURE	SAMPLE IDENTIFICATION				EPA MAXIMUM CONCENTRATION (mg/1)
		H-1R28-01B	H-1R28-02B	H-1R28-04B	H-1R28-05B	
Total Arsenic	mg/1	<0.005	<0.005	<0.005	0.006	5.0
Total Barium	mg/1	0.96	0.69	0.21	0.57	100.0
Total Cadmium	mg/1	<0.006	<0.006	<0.006	0.030	1.0
Total Chromium	mg/1	0.356	4.03	1.23	17.3	5.0
Total Lead	mg/1	1.60	1.20	2.60	0.260	5.0
Total Mercury	mg/1	<0.001	<0.001	<0.001	<0.001	0.2
Total Silver	mg/1	0.026	<0.008	<0.5	<0.008	1.0
Total Selenium	mg/1	<0.005	<0.005	<0.005	<0.005	5.0
Hexavalent Chromium	mg/1	0.024	0.029	0.022	0.092	-

COMMENTS:

Mehtods used for the EP Toxicity Test procedure as well as the analysis of the resulting extracts were presented in U.S. Environmental Protection Agency publication, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods; SW-846, Second Edition, 1982. Metals analyses were performed utilizing the method of standard addition Values reported as "less than"(<) indicate the working detection limit for the particular sample or parameter. Upon receipt of samples, all legal tapes were intact and ice packs were still semi-frozen. The samples themselves were received cold.

FOR RECRA ENVIRONMENTAL LABORATORIES R. V. Finn

DATE 1/13/84

RECEIVED
FEB 10 1984

RECRA ENVIRONMENTAL LABORATORIES
I.D. #83-1171/3W160

p. 12-130

HAZARDOUS WASTE ASSESSMENT
performed for
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

RECEIVED FROM NYSDEC
DIVISION OF ENVIRONMENTAL
ENFORCEMENT
WHITE PLAINS

Report Date: January 19, 1984

SAMPLE IDENTIFICATION: H-IR28-05B

EP TOXICITY

The waste sample was subjected to the EP Toxicity Test procedure as defined in Test Method 1310 specified in Test Methods for Evaluating Solid Waste; Physical/Chemical Methods, SW 846, July 1982, 2nd edition.

The waste sample contained greater than 0.5 percent filterable solids; therefore, it was extracted according to protocol.

The resultant extract was analyzed for the metal contaminants only as listed in Test Method 1310. The results of these analyses are listed in this report.

The analyzed chromium concentration of the EP Toxicity Test Extract does exceed the maximum allowable concentration listed in the October 30, 1980 amended Title 40 CFR. Therefore, the sample does exhibit the characteristic of EP Toxicity and should be assigned an EPA Hazard Code of "E" and an EPA Hazardous Waste Number of "D007", designating chromium contamination.

RECRA RESEARCH, INC. Brian C. Armfelder

DATE 1-19-84

I.D. #3W-160

p 13 of 30

HAZARDOUS WASTE ASSESSMENT
performed for
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

RECEIVED FROM NYSDEC
DIVISION OF ENVIRONMENTAL
ENFORCEMENT
WHITE PLAINS

Report Date: January 19, 1984

SAMPLE IDENTIFICATION: H-IR28-01B, H-IR28-02B, H-IR28-04B

EP TOXICITY

The waste samples were subjected to the EP Toxicity Test procedure as defined in Test Method 1310 specified in Test Methods for Evaluating Solid Waste; Physical/Chemical Methods, SW 846, July 1982, 2nd edition.

The waste samples contained greater than 0.5 percent filterable solids; therefore, they were extracted according to protocol.

The resultant extracts were analyzed for the metal contaminants only as listed in Test Method 1310. The results of these analyses are listed in this report.

The analyzed metal contaminants of the EP Toxicity Test Extracts does not exceed the maximum allowable concentrations listed in the October 30, 1980 amended Title 40 CFR. Therefore, the samples do not exhibit the characteristic of EP Toxicity (for metals only).

RECRA RESEARCH, INC. Brian C. Engfelder

DATE 1/23/84

I.D. #3W-160

Received from:
Suffolk Co. Dept. of
Health

1 14:30

H1R28-01 taken from liquid running into pool from a pipe approximately 2 feet below the pipe.
9:26 AM pH = appx. 1
Pool on the north side of bldg.
smells like plating waste, mixed chemical smell.
bluish green clear liquid.

-01-A 2 x 250 ml plastic bottles for cyanide. Attempted to preserve with NaOH, but insufficient quantity to bring PH ↑.

01-B 1 x 500 ml glass bottle - no preserv. for metals - EPA Tox.

-01-C 1 x 250 ~~glass~~ bottle for phenols preserved with $CuSO_4$ & 4 drops H_3PO_4

01-D 1 pint glass - no preserv. for organics

01-E 1 x 250 plastic bottle - for metals - no pres.

at 9:28 am the discharge began to decrease. By 9.35 the discharge had just about stopped.

Received from:
Suffolk Co. Dept. of
Health

Received from:
Suffolk Co. Dept. of Health

H1R28-02 taken from the liquid in the pool sampled for #1 Bottom Samples.
The bottom seemed to be about 5½ feet below the surface of the liquid, or about 9 feet from the pavement.
9:40 am. pH appx 1
Cloudy Blue liquid

→ this (2 Bottles) Sample Taken Simultaneously, but at 2 levels near bottom.

02-A 2 x 250ml plastic bottles Cyanides from bottom. - Attempted to preserve with NaOH, but insufficient QUANTITY TO Bring pH ↑

02-B 1 x 500 ml glass bottle taken from about 3 feet deep in the pool because of sampler. for EP toxicity & Metals

02-C. 1 x 250 ml ~~plastic~~ glass from about 3 ft deep for phenols $CuSO_4$ & H_3PO_4 for pres.

02-D 1 x 250 ml plastic for metals - no preservatives

02-E 1 x 1 pint from bottom for organics.

H1R28-03 - Sample taken from drum pump hose after disconnecting it. 10⁴⁵ AM

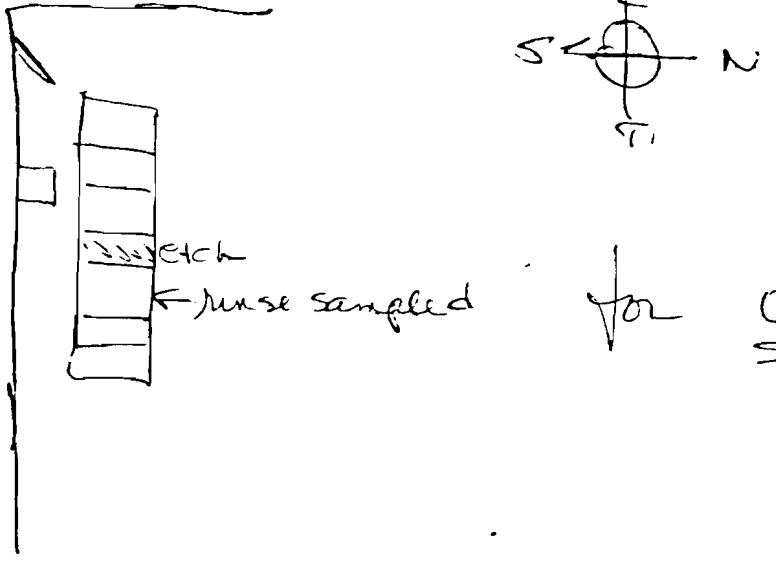
Received from:
Suffolk Co. Dept. of Health

no A B or C

D. 1 x 250 ml plastic for metals
no preservation.

E. 1 pint glass jar
for Organics.

at 10:23 dye was added to the inside drain -
At 10:28 the dye reached the outside pool.



for 04

were [illegible] this sample was in [illegible] by Transferring the [illegible]
be Larger bottle HIR-28-04-A1 glass + cap.

1/21/93

IR28-04

~~H-5~~

Received from:
Suffolk Co. Dept. of Health

taken from rinse tank next to the hea Ronal Microetch bath. The rinse tank was on the left of the concentrate bath.

11:05am pH 1

1 Sulfuric Acid and Hydrogen Peroxide were also in with the Microetch

04-A 2 x 250 ml plastic for cyanide

04-B 1 x 500 ml glass for EP Toxicity & metals

04-C 1 x 250 ml glass bottle ~~&~~ $CuSO_4$ H_3PO_4 for phenols

04-D 1 x 250 ml plastic bottle

04-E 1 pint glass jar for organics

The rinse tank contains clear blue liquid with a grey sand-like sediment on the bottom.

~~The Microetch is supposed to be Sulfuric Acid and Hydrogen Peroxide~~

#1 1K28-05

Received from:
Suffolk Co. Dept. of Health

taken from the bottom of a 4000 gallon indoor holding tank inside the rear door.
It holds mixed waste and is approximately 7ft high
It is filled to within 8 inches of the top.
11:30 am. pH approx 2

05-A(1) -A(2) 2 Separate grab samples in order to reach the bottom 250 ml plastic bottles

B.- Not a bottom sample taken from as close to the bottom as possible.
500 ml glass bottle for EP Toxicity & metals

C. 1 x 250 ml glass bottle for phenols + $CuSO_4$ & H_3PO_4

D. 1 x 250 ml plastic bottle for metals

E. 1 pint glass jar for organics

The liquid was cloudy green blue at the surface of the tank and grey, thick, opaque

at the bottom of the tank

p. 1 of 3

Received from:
Suffolk Co. Dept. of
Health

p21 of 38

An ISI Machine in the Dry Process room contained liquid (cloudy colorless) with a pH of approx 8 to 12 between the 2 sections.
A pipe led from the machine through a wall and to a outlet that could be drained into the open drain pipe.

All sampling was completed at 11:45 am.

Present on this day 10/29/83 were

John Gladys } SCHD
Eileen Governale }
Jim Whitney }
Joe Cantella } SC Investigators
James Dunbar }
Robert Agenjo }
Dorothy Thumm NYS DEC

Received from:
Suffolk Co. Dept. of Health

RECRA RESEARCH, INC.
CHAIN OF CUSTODY RECORD

PROJECT#: H1R28 PROJECT NAME: E.C.

STUDY AREA: _____ SAMPLERS SIGNATURE: Eileen Quevedo

STATION#		DATE	TIME	SUBSAMPLE CODES	TOTAL #OF SAMPLES	REMARKS
H1R28		10/29/83	11:45 AM	-01-B	1	1 Jar - 500 ml
H1R28		10/29/83	11:45 AM	-02-B	1	1 Jar - 500 ml
H1R28		10/29/83	11:45 AM	-04-B	1	1 Jar - 500 ml
H1R28		10/29/83	11:45 AM	-05-B	1	1 Jar - 500 ml

Relinquished By:	Date/Time:	Received By:	Comments:
Eileen Quevedo	10/29/83 1:40 pm	D. Thurm NYS. DEC	for transported Analysis
Relinquished By:	Date Time	Received By:	Comments:
Method of Shipment: FEDERAL EXPRESS	Shipped By: -	Received By:	Comments:

Recieved for Laboratory: _____ Authorization for Disposal: _____

Job #: _____ Type of Disposal: _____

Date Time: _____ Date of Disposal: _____

COUNTY OF SUFFOLK

Received from:
Suffolk Co. Dept. of
Health

12394 30

PETER F. COHALAN
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF HEALTH SERVICES

David Harris, M.D.,M.P.H.
Commissioner

January 4, 1984

EMR Circuits, Inc.
99 Marcus Blvd.
Hauppauge, New York 11788

Gentlemen:

On 11-18-83 samples taken from a newly exposed second leaching pool connected to floor drain, N side of building were collected by a representative in this Department. The laboratory analysis performed by this Department revealed that this pool is heavily contaminated with organic solvents.

Due to the excessive nature of this discharge, you are directed to have these leaching pools/holding tanks/storm drains pumped of all liquids and sludge by an industrial waste scavenger immediately. A list of approved scavengers may be obtained by calling James Heil, P.E., New York State Department of Environmental Conservation, 751-7900.

You are also directed to notify this office two workdays prior to the pumping of these pools so that an inspector may witness this operation. Please note that the hiring of a cesspool pumping service which is not licensed to haul toxic industrial waste is a violation of State and County law and may subject both you and the non-licensed hauler to civil liability (fines). It is your responsibility to determine if the scavenger is licensed to haul industrial waste.

If you have any questions, please call me at phone number (516)451-4630.

Very truly yours,

John A. Gladysz
Environmental Pollution Control

JAG/lc

cc: F. Esienbud, Esq.
Suffolk County DA's Office

Received from:
Suffolk Co. Dept. of
Health

COUNTY OF SUFFOLK

p 1 of 39

PETER F. COHALAN
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF HEALTH SERVICES

EMR Circuits, Inc.
99 Marcus Blvd.
Hauppauge, New York 11788

Date January 4, 1984
SPDES NO.
Lab. No. IW-1183025
Field No. 1-JG-11-18

Gentlemen:

On 11-18-83 samples of industrial waste were taken from your

Upon analysis, the following parameters were found in concentrations above the maximum allowed in your SPDES Permit or in groundwater effluent standards:

1.	Chloroform	320 ppb	6.	Xylene(s)	1400 ppb
2.	1,1,1 Trichloroethane	1600 ppb	7.	1,3,5 Trimethylbenzene	5200 ppb
3.	1,1,2 Trichloroethylene	270,000 ppb	8.	1,2,4 Trimethylbenzene	11,000 ppb
4.	Tetrachloroethylene	1200 ppb	9.	1,2,4 Trichlorobenzene	1800 ppb
5.	p-Ethyltoluene	10,000 ppb	10.	1,2,3 Trichlorobenzene	1900 ppb
			11.	Methyl Ethyl-Ketone	69,000 ppb

Please be advised that these unsatisfactory conditions constitute violations of the N.Y.S. Environmental Conservation Law and/or the Suffolk County Sanitary Code. Please be further advised that the discharge of any water from an industrial process to the groundwater of Suffolk County without having first obtained a State Pollutant Discharge Elimination System (SPDES) Permit for that discharge is also a violation of the N.Y.S. E.C.L. and/or the Suffolk County Sanitary Code, Article 12.

If you do not already possess a valid SPDES Permit for the above discharge, then you should apply immediately through this office for said permit.

Since the above-noted violations may subject you to legal action, it is expected that these violations cease immediately. Violations of the Suffolk County Sanitary Code are subject to the imposition of a civil penalty of up to Five Hundred ($500) dollars per violation. E.C.L. violations are also subject to a civil penalty. A reinspection in the near future will determine your compliance in this matter.

Very truly yours,

John A. Gladysz
Environmental Pollution Control

(SEE REVERSE SIDE FOR STANDARDS)

cc: F. Esienbud, Suffolk County DA's Office
Esq.
15 Horseblock Place, Farmingville, N.Y. 11738, (516) 451-4630

REC'D 11-[illegible]-83 By EB
FIELD NO. 1SG-11-16

Received from:
Suffolk Co. Dept. of Health

DATE COMPLETED 12-21-83
EXAMINED BY [illegible]

1 of 30

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF MEDICAL LEGAL INVESTIGATIONS & FORENSIC SCIENCES
PUBLIC HEALTH LABORATORY

TRACE ORGANIC ANALYSIS OF INDUSTRIAL WASTE

Name EMR

Location 99 MARCUS BLVD, HAUPP

Point of Collection 2ND POOL

Remarks: RESULTS TO J. GLADYSZ
ALL UHO, ALL BTX

Compound	ppb	Compound	ppb
Methylene Chloride		Cis Dichloroethylene	<400
Freon 113	<80	Benzene	<250
Chloroform	320	Toluene	<250
1,1,1 Trichloroethane	1600	Chlorobenzene	<300
Carbon Tetrachloride	<5	Ethylbenzene	<250
1,1,2 Trichloroethylene	270,000	Xylene(s)	1400
Bromodichloromethane	<15	Bromobenzene	<400
1,1,2 Trichloroethane	<25	Chlorotoluene(s)	<300
Chlorodibromomethane	<10	1,3,5 Trimethylbenzene	5200
Tetrachloroethylene	1200	1,2,4 Trimethylbenzene	11000
Bromoform	<25	m,p-Dichlorobenzene	<350
1,1,2,2 Tetrachloroethane	<15	o-Dichlorobenzene	<350
Octane	<1000	p-Diethylbenzene	<250
Styrene	1100	1,2,4,5 Tetramethylbenzene	<250
n-Nonane	<1000	1,2,4 Trichlorobenzene	1900
p-Ethyltoluene	10,000	1,2,3 Trichlorobenzene	1900
n-Decane	<1000		
n-Undecane	<1000	methyl Ethyl Ketone	69,000

During transport of the sample from collection point to laboratory, the chain of custody must not be broken. The sample should be delivered by the sample collector or a designated representative who will sign for the receipt, integrity, and transfer of the sample during shipment.

	SIGNATURE	AFFILIATION	DATE	TIME
1. Collected by				
2. Transfered to	E Curcio	S.C.D.H.S.	11/18/83	1:15 Pm
3. Transfered to	Francis J Amendola	SCDHS-PHL	11-18-83	2:05 Pm
4. Transfered to				

FIELD NO. 1-EG-1-05

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF MEDICAL LEGAL INVESTIGATIONS & FORENSIC SCIENCES
PUBLIC HEALTH LABORATORY

TRACE ORGANIC ANALYSIS OF INDUSTRIAL WASTE

Received from: Suffolk Co. Dept. of Health

Name EMP Circuits Inc

Location 99 Marcus Blvd. Haup.

Point of Collection - 1st ind. pool (precast) 2 ft from North to Bldg.

Remarks:

Compound	ppb	Compound	ppb
Methylene Chloride		Cis Dichloroethylene	<400
Freon 113	<20	Benzene	<250
Chloroform	<25	Toluene	<250
1,1,1 Trichloroethane	<10	Chlorobenzene	<300
Carbon Tetrachloride	<5	Ethylbenzene	<250
1,1,2 Trichloroethylene	750	Xylene(s)	<250
Bromodichloromethane	<15	Bromobenzene	<400
1,1,2 Trichloroethane	<25	Chlorotoluene(s)	<300
Chlorodibromomethane	<10	1,3,5 Trimethylbenzene	<250
Tetrachloroethylene	<10	1,2,4 Trimethylbenzene	<250
Bromoform	<25	m,p-Dichlorobenzene	<350
1,1,2,2 Tetrachloroethane	<15	o-Dichlorobenzene	<550
Octane	<1000	p-Diethylbenzene	<250
Styrene	<250	1,2,4,5 Tetramethylbenzene	<250
n-Nonane	<1000	1,2,4 Trichlorobenzene	<400
p-Ethyltoluene	<250	1,2,3 Trichlorobenzene	<450
n-Decane	<1000		
n-Undecane	<1000	methyl ethyl ketone	1200

Clearance 1-25-84
SHC

During transport of the sample from collection point to laboratory, the chain of custody must not be broken. The sample should be delivered by the sample collector or a designated representative who will sign for the receipt, integrity, and transfer of the sample during shipment.

	SIGNATURE	AFFILIATION	DATE	TIME
1. Collected by	Eileen Jovegnale	SCDHS	1-25-84	1:05 pm
2. Transfered to	Francis J Amendola	SCDHS-PHL	1-25-84	1:25 PM
3. Transfered to				
4. Transfered to				

COUNTY OF SUFFOLK
DEPARTMENT OF HEALTH SERVICES
ENVIRONMENTAL POLLUTION CONTROL
15 Horseblock Place
Farmingville, New York 11738
516/451-4633

Received from:
Suffolk Co. Dept. of Health

LETTER OF TRANSMITTAL

DATE 3/22/84 JOB NO

ATTENTION

RE EMR Circuits
Article 12
Applications
for road location
@ Cabot Ct. Hauppg.

Paul Winkler PE
471 Town Line Rd
Hauppauge 11788

GENTLEMEN:

WE ARE SENDING YOU ☒ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO.	DESCRIPTION
1			Article 12
2			Applications to construct
1			& re schedule
4			Registration Form & Instructions

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

☒ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution

☒ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19_____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS OIL tanks and drum storage areas must be protected and handled from to operation. 3 copies of same plans should be submitted for approval. See the appropriate section of the code for requirements.

COPY TO EMR, file

SIGNED: Peter F. Vaas

If enclosures are not as noted, kindly notify us at once.

18-1065: 9/82

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
INDUSTRIAL WASTE & HAZARDOUS MATERIALS CONTROL
15 HORSEBLOCK PLACE, FARMINGVILLE, N.Y. 11738
(516) 451-4633

Log ✓ Reinsp 4.25.84
Letter
Art XII Rec'd Sample
Air Jim M. File ZZ

NAME OF FACILITY	EMR Curcuits Inc.	OWNER/ OFFICER	Stu Wood, Pres.
COMPANY NAME		CONTACT	Pat Osani, Sec, Tres.
PLANT ADDRESS	99 Marcus Blvd	VILLAGE	Hauppauge
TOWN	Smithtown	ZIP	
MAILING ADDRESS			

DATE 3-5-84 | TIME | ORIG. (PERIODIC) RE. | (WASTE) NO WASTE (H&H) | SEWAGE SYSTEM (PUBLIC) PRIVATE

INDUSTRY P.C. board manufacturer

SPDES OR NPDES PERMIT? YES (NO) PERMIT NO. | 360 PERMIT? YES (NO) PERMIT NO.

SCAVENGER Envirite Old Waterbury Rd Thomason Ct. TEL.

SCAVENGER APPROVED (YES) NO | PICK UP RECORDS AVAILABLE (YES) NO | RECORDS CONSISTENT WITH EXPECTED WASTE GENERATION (YES) NO

HEATING SYSTEM - MFG NAME	FUEL TYPE	FIRING RATE
N. Gas		

INCIN. NAME NO | WASTE BURNED NO | RATE

DRUM STORAGE (YES) NO | NUMBER STORED INDOORS 53 OUTDOORS 0 | TYPE OF MATERIAL STORED (WASTE) RAW

STORAGE TANKS (YES) NO | NUMBER OF TANKS ABOVEGROUND 3 UNDERGROUND | TYPE OF MATERIAL STORED (WASTE) RAW

OPEN PROCESS TANKS (YES) NO | NUMBER OF OPEN PROCESS TANKS Many | ANY ART. XII VIOLATIONS (YES) NO

EMR Curcuits Inc. is trying to obtain new location by early summer.

Business to continue to obtain + hold on File Scavenger receipts for all waste pickups.

PERMISSION IS GRANTED BY THIS FACILITY TO THE SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES TO CONDUCT ROUTINE SAMPLING OF CESSPOOLS, STORMDRAINS, AND OTHER DISCHARGE POINTS AT THE FACILITY.

REINSPECTION SCHEDULED ON OR AFTER _____. FAILURE TO CORRECT UNSATISFACTORY CONDITIONS BY REINSPECTION DATE MAY RESULT IN A HEARING AND/OR FINE.

SIGN. OF PERSON REC. REPORT [signature] | TITLE President | INSPECTOR James A. Whitney

18-155: 9/82 5/81 TJK

INDUSTRIAL WASTE PROCESS

NO.	PROCESS	CHEMICALS USED AND APPROXIMATE QUANTITY	DISCHARGE	DI
1	Screen cleaning.	MEK	waste MEK	H+H
2	Developer dry film	film processor Pynachem., rinse	same	H+H
3	U.V. developers	none		
4	dark room	developer, fix, rinse	same	H+H
5	P.C. board drilling & cutting	none		
6	Plating room.	acids, rinses, bases	same	H+H
7	reflow machine rinse	soap Flux, rinse	rinse waste Flux	H+H
8	board scrubber	water	waste water	H
9.	aboveground waste tank	2 x 300 gal plastic 4000gal steel		
10.	Etch machine	etchant, rinse	same	H+H
	2x55gal repleisler 8x55	gal spent etch		
11.	inside drum storage	50 x 55 gal acids, rinse water, alcohol, activator.		

AIR POLLUTION SOURCES

18-155

NO.	PROCESS	CONTROL TYPE	EP'S	CHEMICALS OR PRODUCTS USED	AMOUNT CONSUM.	HOURS OF OPERA.	TYPE EMISS.
3	2 U.V. developers	none	2	Film		8hr/day	heat
10	etch machine	none	1	etchant		8hr/day	fume

Received from: Suffolk Co. Dept. of Health

1/4/82

SUFFOLK C NTY HEALTH SERVICES LABORATORY

Received from: Suffolk Co. Dept. of Health

CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

18-247 2-82

FIELD NO. 2EK8-17 LAB NO. 8-84-245 DATE COMPLETED 8/30/84 bia

NAME OR FIRM EMR CURCITS.

ADDRESS OR LOCATION 99 MARCUS BLVD

POINT OF COLLECTION WASH WATER DRUM

REMARKS/INSTRUCTIONS LAST WASH

TEST	RESULTS		TEST	RESULTS		TEST	RESULTS
pH (LAB)			TOTAL SOLIDS	Mg/l	✓	COPPER	1.1×10^{2} Mg/l
CHLORIDE	Mg/l		SUSPENDED SOLIDS		✓	IRON	3×10^{1}
CYANIDE			DISSOLVED SOLIDS		✓	MANGANESE	not for Ind. St
MBAS					✓	CHROMIUM-TOT	.4
COD					✓	NICKEL	2.4
TOC					✓	ZINC	1×10^{1}
					✓	LEAD	1.
					✓	CADMIUM	.4
NITRATE-N						SILVER	<.02
NITRITE					✓	CHROMIUM-+6	.03
AMMONIA-N						--	11/5/19
TKN			pH (FIELD)	neutral			
			TEMP. (FIELD)				

METHOD OF PRESERVATION ☑ ~~HNO_3~~ TO pH <2 ☐ COOL 4°C

CUSTODY OF SAMPLE

DURING TRANSPORT OF THE SAMPLE FROM SAMPLING SITE TO LABORATORY, THE CHAIN OF CUSTODY MUST BE UNBROKEN. GENERALLY THIS WILL REQUIRE THAT THE SAMPLE BE DELIVERED BY THE SAMPLE COLLECTOR OR HIS DESIGNATED REPRESENTATIVE WHO WILL SIGN FOR THE RECEIPT, INTEGRITY AND TRANSFER OF THE SAMPLE DURING SHIPMENT.

	NAME	AFFILIATION	DATE - TIME	TO	DATE - TIME
1. COLLECTED BY	Eileen Nolan	SCDHS	8/17/84 DATE		1:10 pm TIME
2. POSSESSION BY			DATE - TIME	TO	DATE - TIME
POSSESSION BY			DATE - TIME	TO	DATE - TIME
4. RECEIVED LAB BY			8/17 DATE		3:35 TIME
5. POSSESSION BY			DATE - TIME	TO	DATE - TIME
6. POSSESSION BY			DATE - TIME	TO	DATE - TIME

Appendix 1.1-14a

CONTINUED: INSPECTORS OBSERVATIONS OR INTERVIEWS

Received from:
Suffolk Co. Dept. of Health

For the Record Re: EMR Circuits Inc. 99 Marcus Blvd. Hauppauge N.Y.

On 11-11-83, I observed the cleaning of the contaminated cesspool located 10' North of EMR Circuits. The liquid contents of the pool were pumped out, the walls and leaching slots were cleaned with a high pressure water spray, and all sludges were removed from the pool bottom. This work was done by RGM. In my opinion the pool was adequately cleaned.

On 11-14-83 I again visited EMR Circuits Inc. At that time, I noted that the cesspool located 10' North of EMR Circuits had been completely filled in with clean sand + gravel.

11-15-83
James A. Whitney, P.H.S.

18-234: 2/82

Appendix 1.1-15

Received from:
Suffolk Co. Dept. of
Health

p1 of 3

EMR CIRCUITS INC.

QUALITY PRINTED WIRING BOARDS 99 Marcus Blvd. Hauppauge, N. Y. 11788 Phone: 516 273-8880

November 18, 1983

SUFFOLK COUNTY HEALTH DEPARTMENT
DIVISION OF ENVIRONMENTAL HEALTH
15 HORSEBLOCK PLACE
FARMINGVILLE, N.Y. 11738

Attn: Mr. John Gladyse - District Office

RE: HAZARDOUS WASTE MANIFEST;
EMR CIRCUITS, INC.

Dear Sir:

Please find a copy of Document No. 1567125 regarding the hauling of 4900 gallons of Hazardous Waste on 11/18/83 from 99 Marcus Blvd. by the Envirite Corp.

This is being supplied to you per your verbal request on 11/18/83.

Regards,

S. Wood

SW:an
Encl.

RECEIVED
NOV 23 1983
SUFFOLK COUNTY DEPT.
HEALTH SERVICES

Received from:
Suffolk Co. Dept. of
Health

12/13

14-1 (11/80)

See cover sheet for instructions before completing form

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

HAZARDOUS WASTE MANIFEST

Part A:

DOCUMENT NO. NY 156712 5

GENERATOR NAME	PHONE	EPA ID NO.
EMR Circuits	516 273 5500	NYD053217373

SITE ADDRESS: 99 Marcus Blvd Hauppauge LI NY

TRANSPORTER NO 1	PHONE	
Concrete	203-283-8235	CTD993461613

SITE ADDRESS: Old Waterbury Rd., Thomaston, Ct. 06787

TRANSPORTER NO 2	PHONE	

SITE ADDRESS:

TREATMENT STORAGE OR DISPOSAL/TSDF FACILITY	PHONE	
Envirite Corp		CTD091361461613

ADDRESS:

THIS FORM IS NO. ___ OF A TOTAL OF ___ THE FIRST MANIFEST DOCUMENT NO IS NY

PROPER SHIPPING NAME	US DOT HAZARD CLASS	UN/NA NUMBER	FORM	NET QUANTITY	UNITS	CONTAINERS NO.	CONTAINERS TYPE	EPA HAZ CODE	EPA WASTE TYPE
Corrosive Liquid, n.o.s. (Nitric Acid)	8	UN2031		04900	gal	001	CT	E	D002

SPECIAL HANDLING INSTRUCTIONS INCLUDING CONTAINER EXEMPTION IDENTIFICATION OF ADDITIONAL WASTES INCLUDED IN SHIPMENT OF A NONHAZARDOUS NATURE WHICH DO NOT HAVE TO BE MANIFESTED.

GENERATOR'S CERTIFICATION: This is to certify that the herein named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA. The wastes described herein were consigned to the transporter named. The TSD Facility can and will accept the shipment of hazardous waste, and has a valid permit to do so. This shipment also conforms with all applicable State regulations. I certify that the foregoing is true and correct to the best of my knowledge.

GENERATOR'S SIGNATURE	DATE SHIPPED	EXPECTED ARRIVAL DATE
C. Glinski C. Glinski Please type name also	12 18 83 Mo. Day Yr.	12 19 83 Mo. Day Yr.

TRANSPORTER NO. 1 SIGNATURE "To the best of my knowledge the contents of the shipment I have accepted for transport conforms with the description on the manifest."	TRANSPORTER NO. 1 PERMIT NUMBER	DATE RECEIVED
		Mo. Day Yr.

Received from:
Suffolk Co. Dept. of
Health

1313

ENVIRITE
OLD WATERBURY ROAD
THOMASTON, CT 06787

TF 1910

BILL OF LADING 170 8318

ORIGIN [illegible]

PICKUP DATE [illegible]

STINATION [illegible], CT

DELIVERY DATE 11/18/93

CONSIGNOR [illegible]

CONSIGNEE ENVIRITE

COMMODITY [illegible] waste liquid N.O.S.

QUANTITY

4 9100

55-4900 Lbs. ☐ Gal. ☐

$.- Lbs/Gal

TOTAL

ASK LOADER TO VERIFY PRODUCT SHOWN ABOVE SIGNATURE

TRACTOR TRAILER 8320 DRIVER

	YES	NO		YES	NO		YES	NO
JMP ORDERED	☐	☐				WEIGH CHARGE	☐	☐
USED TO LOAD	☐	☐	____ FT. HOSE	☐	☐	WEEKEND CHARGE	☐	☐
STOMER PUMP	☐	☐	VAC. ORDERED	☐	☐	DELAY CHARGE	☐	☐

DRIVERS MUST USE SPECIFIED SAFETY EQUIPMENT & PROCEDURES

RAILER TYPE 55 PLACARD NONE

ARD HAT	☒	RUBBER GLOVES	☒	FACE SHIELD	☒
ACID SUIT	☐	GAS MASK	☐	SAFETY WATER	☐

THER ** DRUM & RISER PICK UP

IF PRODUCT TEMPERATURE IS OVER 120 °F, CALL ENVIRITE

	A.M.	P.M.		A.M.	P.M.
EPARTED ENVIRITE			ARRIVE ENVIRITE		
ARRIVAL AT CUSTOMER			TIME SAMPLED		
TARTED LOADING			TIME UNHOOKED		
DEPARTED CUSTOMER			TIME DEPARTED		

1½ hr Drums

TOTAL ROUNDTRIP TIME ____ Hrs. ____ Min.

THIS IS TO CERTIFY THAT THE ABOVE NAMED ARTICLES ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED, AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION.

MILEAGE

END

START

TOTAL

Received from:
Suffolk Co. Dept. of Health

Log ✓ Appendix 1.1-16
New ___ Comp ___
Art XII ___ Letter ___
Air ___ Sample ___
p 1 of 2

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
INDUSTRIAL WASTE AND HAZARDOUS MATERIALS CONTROL
15 HORSEBLOCK PLACE, FARMINGVILLE, N.Y. 11738
(516) 451-4633

NAME OF FACILITY EMB Circuits-	OWNER/ OFFICER	PAGE 1 OF
COMPANY NAME	CONTACT Stuart Wood	TEL. 273-8880
PLANT ADDRESS 99 Marcus Blvd	VILLAGE TOWN pres.	ZIP
MAILING ADDRESS		

DATE 6-15-84 | TIME | ORIG. PERIODIC RE. | WASTE NO WASTE (H&H) | SEWAGE SYSTEM PUBLIC (PRIVATE)

INDUSTRY PC Boards

SPDES OR UPDES PERMIT? YES (NO) PERMIT NO. | 360 PERMIT? YES NO PERMIT NO.

SCAVENGER RGM TEL.

SCAVENGER APPROVED (YES) NO | PICK UP RECORDS AVAILABLE YES NO | RECORDS CONSISTENT WITH EXPECTED WASTE GENERATION YES NO

HEATING SYSTEM-MFG NAME	FUEL TYPE	FIRING RATE
Received from: Suffolk Co. Dept. of Health		
INCIN. NAME	WASTE BURNED	RATE

DRUM STORAGE YES NO | NUMBER STORED INDOORS OUTDOORS | TYPE OF MATERIAL STORED WASTE RAW

STORAGE TANKS YES NO | NUMBER OF TANKS ABOVEGROUND UNDERGROUND | TYPE OF MATERIAL STORED WASTE RAW

OPEN PROCESS TANKS YES NO | NUMBER OF OPEN PROCESS TANKS | ANY ART. XII VIOLATIONS YES NO

- Moving next week. plan to have RGM pump out all rinse tanks. ~~Will~~ by Thursday 6-21. SCDHS personell would want to attend pump out.
- Company must bring inside 2- cut off 55 gallon drums containing blue liquid & debris. This must be treated as a hazardous material.

Violation not issued

PERMISSION IS GRANTED BY THIS FACILITY TO THE SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES TO CONDUCT ROUTINE SAMPLING OF CESSPOOLS, STORMDRAINS, AND OTHER DISCHARGE POINTS AT THE FACILITY.

REINSPECTION SCHEDULED ON OR AFTER _____. FAILURE TO CORRECT UNSATISFACTORY CONDITIONS BY REINSPECTION DATE MAY RESULT IN A HEARING AND/OR FINE.

SIGN. OF PERSON REC. REPORT [signature] | TITLE [signature] | INSPECTOR Eileen Foverald

18-155: 9/82 5/81 TJK

1 2 of 2

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF ENVIRONMENTAL HEALTH SERVICES
BUREAU OF ENVIRONMENTAL POLLUTION CONTROL

Received from:
Suffolk Co. Dept. of Health

NOTICE OF VIOLATION

Issued to (Company) EMR Circuits

(address) 99 Marcus Blvd, Haup.

delivered to _____

On (date, time) 6-15-84

TAKE NOTICE THAT, on 6-15-84 at 11:30 (fore) (after) noon, at the location of 99 Marcus Blvd, Haup.,
you were found to be in violation of Article XII Section 1215 a of the Suffolk County Sanitary Code in that:

2 open cut off 55 gallon drums out back by dumpsters + containing metal SCRAP + garbage are 2/3 full of blue liquid - smelling of amonia with ph of 9. Drums are uncovered + unprotected

TAKE FURTHER NOTICE THAT, pursuant to Article 3 of the New York State Public Health Law, Article 2 of the Suffolk County Sanitary Code provides that any non-compliance or non-conformance with any provision of the Suffolk County Sanitary Code shall constitute a violation, punishable on conviction by a fine not exceeding $250 or by imprisonment for not exceeding 15 days or by both.

TAKE FURTHER NOTICE THAT, Article 2 of the Suffolk County Sanitary Code provides that any person violating its terms or a lawful order or regulation made thereunder, shall be subject to a civil penalty of not more than $500 per violation for each day such violation continues.

Issued by Eileen Governale

Appendix 1.1-17

EA SCIENCE AND TECHNOLOGY
A Division of EA Engineering, Science, and Technology, Inc.

COMMUNICATIONS RECORD FORM

Distribution: (X) File, ( ) _____
( ) _____, ( ) _____
( ) Author

Person Contacted: Eileen Gravesvale **Date:** 5/22/87 and 5/26/87

Phone Number: (516) 451-4633 **Title:** Public Health Sanitarian

Affiliation: SCDHS **Type of Contact:** Telephone

Address: 15 Horseblock Place, Farmingville, New York 11783 **Person Making Contact:** Ellen Metzger

Communications Summary: I called Eileen for confirmation on the clean out of the leachpools. She said that ENR pumped out the 1st leachpool (10 ft from the building) on 11/11/83. On 11/14/83, according to another SCDHSD inspector the leachpool was backfilled with sand. A second leachpool was discovered at this time (2 ft from the building). This pool was sampled on 11/18/83 and found to be contaminated. The 2nd leachpool was cleaned out on 1-25-84.

Eileen also confirmed that Stewart Wood pleaded guilty to charges and served a jail term.

(see over for additional space)

Signature: Ellen G. Metzger

Appendix 1.1-18

New York State Department of Environmental Conservation

Bureau of Environmental Conservation Investigation

RECEIVED FROM NYSDEC DIVISION OF ENVIRONMENTAL ENFORCEMENT WHITE PLAINS

Henry G. Williams
Commissioner

RECORD OF TELEPHONE CONVERSATION

CASE # _____

SUBJECT EMR Circuits | RGM - Results of DOH sampling ~~[illegible]~~

TIME OF CALL ~~am~~ (pm) DATE OF CALL 01/18/84

INDIVIDUAL CALLED Eileen Governale TITLE _____

REPRESENTING Suffolk County Dept of Health

PHONE # (516) 451-4632

NOTES: Samples were recently collected. EMR expects to be cleaning out at the end of this week. RGM is supposed to call DOH to confirm the date. Eileen will call White Plains when she ~~hears anything~~ learns the date.

Samples were analyzed for organics. The results are:

Chloroform	320 ppb	1,3,5-trimethylbenzene	5200
1,1,1-TCEA	1600 ppb	1,2,4 "	11,000
1,1,2-TCE	270,000 ppb	1,2,4 trichlorobenzene	1800
PCE	1200	1,2,3- "	1900
Styrene	1100	MEK	69,000
paraethyltolvene	10,000		
Xylene	1400		

Quantity in tank > 1000 lbs

INVESTIGATOR: T. Gerrish UNIT: D.E.E.

REC'D 3-22-85 BY BA
FIELD NO. 4-96-3-3a

Appendix 1.1-19

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF MEDICAL LEGAL INVESTIGATIONS & FORENSIC SCIENCES
PUBLIC HEALTH LABORATORY

p. 10/14

TRACE ORGANIC ANALYSIS OF INDUSTRIAL WASTE

Received from: Suffolk Co. Dept. of Health

Name (old) EMR Circuits, Inc

Location 99 Marcus Blvd. Hauppauge

Point of Collection monitoring + observ well - North s/o Bldg.

Remarks: Sample at 115' depth (depth to GW = 102.87')

Compound	ppb	Compound	ppb
Methylene Chloride	23	Cis Dichloroethylene	<20
Freon 113	<20	Benzene	<20
Chloroform	<20	Toluene	<20
1,1,1 Trichloroethane	390	Chlorobenzene	<20
Carbon Tetrachloride	<20	Ethylbenzene	<20
1,1,2 Trichloroethylene	<20	Xylene(s)	<20
Bromodichloromethane	—	Bromobenzene	<20
1,1,2 Trichloroethane	<20	Chlorotoluene(s)	<20
Chlorodibromomethane	—	1,3,5 Trimethylbenzene	<20
Tetrachloroethylene	<20	1,2,4 Trimethylbenzene	<20
Bromoform	<20	m,p-Dichlorobenzene	<20
1,1,2,2 Tetrachloroethane	<20	o-Dichlorobenzene	<20
Octane	<20	p-Diethylbenzene	<20
Styrene	<20	1,2,4,5 Tetramethylbenzene	<20
n-Nonane	<20	1,2,4 Trichlorobenzene	<20
p-Ethyltoluene	<20	1,2,3 Trichlorobenzene	<20
n-Decane	<20	1,1 Dichloroethane	<20
n-Undecane	<20	1,2 Dichloroethane	<2
		1,1 Dichloroethylene	<20

During transport of the sample from collection point to laboratory, the chain of custody must not be broken. The sample should be delivered by the sample collector or a designated representative who will sign for the receipt, integrity, and transfer of the sample during shipment.

	SIGNATURE	AFFILIATION	DATE	TIME
1. Collected by	Eileen Amendola	SCDHS	3-22-85	5:00 PM
2. Transfered to	Francis J Amendola	SCDHS-PHL	3-22-85	5:40PM
3. Transfered to				
4. Transfered to				

REC'D 3-22-85 By F
FIELD NO. 3 FG 3

REVIEWED BY
4/1/85

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF MEDICAL LEGAL INVESTIGATIONS & FORENSIC SCIENCES
PUBLIC HEALTH LABORATORY

1 of 4

TRACE ORGANIC ANALYSIS OF INDUSTRIAL WASTE

Received from: Suffolk Co. Dept. of Health

Name (old) Rte EMR Circuits

Location 99 Marcus Blvd, Hauppauge

Point of Collection monitoring & observ. well - on North s/o Bldg

Remarks: Sample at 127' depth - (depth to GW 102.87')

Compound	ppb	Compound	ppb
Methylene Chloride	<20	Cis Dichloroethylene	<20
Freon 113	<20	Benzene	<20
Chloroform	<20	Toluene	<20
1,1,1 Trichloroethane	<20	Chlorobenzene	<20
Carbon Tetrachloride	<20	Ethylbenzene	<20
1,1,2 Trichloroethylene	<20	Xylene(s)	<20
Bromodichloromethane	—	Bromobenzene	<20
1,1,2 Trichloroethane	<20	Chlorotoluene(s)	<20
Chlorodibromomethane	—	1,3,5 Trimethylbenzene	<20
Tetrachloroethylene	<20	1,2,4 Trimethylbenzene	<20
Bromoform	<20	m,p-Dichlorobenzene	<20
1,1,2,2 Tetrachloroethane	<20	o-Dichlorobenzene	<20
Octane	<20	p-Diethylbenzene	<20
Styrene	<20	1,2,4,5 Tetramethylbenzene	<20
n-Nonane	<20	1,2,4 Trichlorobenzene	<20
p-Ethyltoluene	<20	1,2,3 Trichlorobenzene	<20
n-Decane	<20	1,1 Dichloroethane	<20
n-Undecane	<20	1,2 Dichloroethane	<20
		1,1 Dichloroethylene	<20

During transport of the sample from collection point to laboratory, the chain of custody must not be broken. The sample should be delivered by the sample collector or a designated representative who will sign for the receipt, integrity, and transfer of the sample during shipment.

	SIGNATURE	AFFILIATION	DATE	TIME
1. Collected by	Eileen Lovemale	SCDHS	3-22-85	3:50 PM
2. Transfered to	Francis J Amendola	SCDHS-PHL	3-22-85	5:40PM
3. Transfered to				
4. Transfered to				

Received from:
Suffolk County Dept. of Health

SUFFOLK COUNTY HEALTH SERVICES LABORATORY

CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

18-247: 2/82

FIELD NO. 1-EG-3-22 LAB NO. 3-85-284 DATE COMPLETED 4/2/85 B. Gallo

NAME OR FIRM (old) EMR Circuits

ADDRESS OR LOCATION 99 Marcus Blvd Haup.

POINT OF COLLECTION ~~3~~. Soil from installation of monitoring well

REMARKS/INSTRUCTIONS at depth ~ 60 feet

	TEST	RESULTS		TEST	RESULTS		TEST	RESULTS
	pH(LAB)			TOTAL SOLIDS	mg/l	X	COPPER	1.6x10
	CHLORIDE	mg/l		SUSPENDED SOLIDS		X	IRON	1.2x10³
	CYANIDE			DISSOLVED SOLIDS			MANGANESE	
	MBAS					X	CHROMIUM-TOT	1.5
	COD			Results of metal analysis		X	NICKEL	3.8
	TOC			of Soil Sample are		X	ZINC	3.1
				approximate values.		X	LEAD	< 1.5
						X	CADMIUM	< .15
	NITRATE-N					X	SILVER	< .15
	NITRITE					X	CHROMIUM-+6	
	AMMONIA-N							
	TKN		X	pH (FIELD)	neutral			
				TEMP. (FIELD)				

METHOD OF PRESERVATION ☐ HNO_3 TO pH <2 ☐ COOL 4° C

CUSTODY OF SAMPLE

DURING TRANSPORT OF THE SAMPLE FROM SAMPLING SITE TO LABORATORY, THE CHAIN OF CUSTODY MUST BE UNBROKEN. GENERALLY THIS WILL REQUIRE THAT THE SAMPLE BE DELIVERED BY THE SAMPLE COLLECTOR OR HIS DESIGNATED REPRESENTATIVE WHO WILL SIGN FOR THE RECEIPT, INTEGRITY AND TRANSFER OF THE SAMPLE DURING SHIPMENT.

	NAME	AFFILIATION	DATE	TIME		DATE	TIME
1. COLLECTED BY	Eileen Gwernale	SCDHS	3-22-85	11:00 AM			
2. POSSESSION BY			DATE	TIME	TO	DATE	TIME
3. POSSESSION BY			DATE	TIME	TO	DATE	TIME
4. RECEIVED LAB BY			3/25 DATE	11:30 TIME			
5. POSSESSION BY			DATE	TIME	TO	DATE	TIME
6. POSSESSION BY			DATE	TIME	TO	DATE	TIME

Received from:
Suffolk Co. Dept. of
Health

SUFFOLK COUNTY HEALTH SERVICES LABORATORY

CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

18-247: 2/82

FIELD NO. 2-EG-3-22 LAB NO. 385-285 DATE COMPLETED 4/2/85 S. Hall

NAME OR FIRM (Old) EMR Circuits

ADDRESS OR LOCATION 99 Marcus Blvd, Haup.

POINT OF COLLECTION Soil from installation of monitoring well

REMARKS/INSTRUCTIONS at depth of 120 feet

	TEST	RESULTS		TEST	RESULTS		TEST	RESULTS
	pH(LAB)			TOTAL SOLIDS	mg/l	X	COPPER	8 ug/g
	CHLORIDE	1 mg/l		SUSPENDED SOLIDS		X	IRON	9.3×10^2
	CYANIDE			DISSOLVED SOLIDS			MANGANESE	
	MBAS					X	CHROMIUM-TOT	1.3
	COD			Results of metal analysis		X	NICKEL	2.6
	TOC			of soil sample are		X	ZINC	2.2
				approximate values.		X	LEAD	< 1.3
						X	CADMIUM	< .1
	NITRATE-N					X	SILVER	.4
	NITRITE					X	CHROMIUM-+6	
	AMMONIA-N							
	TKN			pH (FIELD)				
				TEMP. (FIELD)				

METHOD OF PRESERVATION ☐ HNO_3 TO pH <2 ☐ COOL 4° C

CUSTODY OF SAMPLE

DURING TRANSPORT OF THE SAMPLE FROM SAMPLING SITE TO LABORATORY, THE CHAIN OF CUSTODY MUST BE UNBROKEN. GENERALLY THIS WILL REQUIRE THAT THE SAMPLE BE DELIVERED BY THE SAMPLE COLLECTOR OR HIS DESIGNATED REPRESENTATIVE WHO WILL SIGN FOR THE RECEIPT, INTEGRITY AND TRANSFER OF THE SAMPLE DURING SHIPMENT.

	NAME	AFFILIATION	DATE	TIME
1. COLLECTED BY	Eileen Governale	SCDHS	3-22-85	12:45 pm
2. POSSESSION BY			DATE - TIME TO DATE - TIME	
3. POSSESSION BY			DATE - TIME TO DATE - TIME	
4. RECEIVED LAB BY			3/25	11:30
5. POSSESSION BY			DATE - TIME TO DATE - TIME	
6. POSSESSION BY			DATE - TIME TO DATE - TIME	

Received from: Suffolk Co. Dept. of Health

SUFFOLK COUNTY HEALTH SERVICES LABORATORY
CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

18-247: 2/82

FIELD NO. 3-EG-3-22 LAB NO. 3-85-286 DATE COMPLETED 4/2/85

NAME OR FIRM (old) EMR Circuits · Monitoring + Observation Well

ADDRESS OR LOCATION 99 Marcus Blvd. Hup.

POINT OF COLLECTION observation well located on North s/o Bldg

REMARKS/INSTRUCTIONS 127' depth (depth to GW 102.87')

	TEST	RESULTS		TEST	RESULTS		TEST	RESULTS
	pH (LAB)			TOTAL SOLIDS	Mg/l	X	COPPER	.08 Mg/l
	CHLORIDE	Mg/l		SUSPENDED SOLIDS		X	IRON	2x10'
	CYANIDE			DISSOLVED SOLIDS			MANGANESE	
	MBAS					X	CHROMIUM-TOT	.03
	COD					X	NICKEL	<.1
	TOC					X	ZINC	.13
						X	LEAD	<.2
						X	CADMIUM	<.02
	NITRATE-N					X	SILVER	<.02
	NITRITE					X	CHROMIUM-+6	
	AMMONIA-N				by meter on site		separate bottle	
	TKN		X	pH (FIELD)	6.5			
				TEMP. (FIELD)				

METHOD OF PRESERVATION ☒ HNO_3 TO pH <2 ☐ COOL 4°C

CUSTODY OF SAMPLE

DURING TRANSPORT OF THE SAMPLE FROM SAMPLING SITE TO LABORATORY, THE CHAIN OF CUSTODY MUST BE UNBROKEN. GENERALLY THIS WILL REQUIRE THAT THE SAMPLE BE DELIVERED BY THE SAMPLE COLLECTOR OR HIS DESIGNATED REPRESENTATIVE WHO WILL SIGN FOR THE RECEIPT, INTEGRITY AND TRANSFER OF THE SAMPLE DURING SHIPMENT.

	NAME	AFFILIATION	DATE - TIME	TO DATE - TIME
1. COLLECTED BY	Eileen Governale	SCDHS	3-22-85 / 3:50 PM	
2. POSSESSION BY				
3. POSSESSION BY				
4. RECEIVED LAB BY			3/25 / 11:30	
5. POSSESSION BY				
6. POSSESSION BY				

Received from:
Suffolk Co. Dept. of Health

SUFFOLK COUNTY HEALTH SERVICES LABORATORY

CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

18-247: 2/82

FIELD NO. 4-EG-3-22 LAB NO. 3-85-287 DATE COMPLETED 4/2/85

NAME OR FIRM (Old) EMR Circuits

ADDRESS OR LOCATION 99 Marcus Blvd. Hauppauge

POINT OF COLLECTION Obs monitoring well on North s/o Bldg

REMARKS/INSTRUCTIONS at 115' depth. (depth To GW 102.87')

TEST	RESULTS	TEST	RESULTS		TEST	RESULTS
pH (LAB)		TOTAL SOLIDS	Mg/l		COPPER	.09 Mg/l
CHLORIDE	Mg/l	SUSPENDED SOLIDS			IRON	2.4x10'
CYANIDE		DISSOLVED SOLIDS			MANGANESE	
MBAS					CHROMIUM-TOT	.03
COD					NICKEL	<.1
TOC					ZINC	.25
					LEAD	<.2
					CADMIUM	<.02
NITRATE-N					SILVER	<.02
NITRITE			5-6- by paper		CHROMIUM-+6	<.02
AMMONIA-N			by meter on site		(separate bottle)	
TKN		pH (FIELD)	5.2			
		TEMP. (FIELD)				

METHOD OF PRESERVATION ☒ HNO_3 TO pH <2 ☐ COOL 4° C

CUSTODY OF SAMPLE

DURING TRANSPORT OF THE SAMPLE FROM SAMPLING SITE TO LABORATORY, THE CHAIN OF CUSTODY MUST BE UNBROKEN. GENERALLY THIS WILL REQUIRE THAT THE SAMPLE BE DELIVERED BY THE SAMPLE COLLECTOR OR HIS DESIGNATED REPRESENTATIVE WHO WILL SIGN FOR THE RECEIPT, INTEGRITY AND TRANSFER OF THE SAMPLE DURING SHIPMENT.

	NAME	AFFILIATION	DATE	TIME
1. COLLECTED BY	Eileen Fivernale	SCDHS	3-22-85	5°° pm
2. POSSESSION BY			DATE - TIME	TO DATE - TIME
3. POSSESSION BY			DATE - TIME	TO DATE - TIME
4. RECEIVED LAB BY			3/25 DATE	11-30 TIME
5. POSSESSION BY			DATE - TIME	TO DATE - TIME
6. POSSESSION BY			DATE - TIME	TO DATE - TIME

Received from:
Suffolk Co. Dept. of Health

SUFFOLK COUNTY HEALTH SERVICES LABORATORY

CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

16-247: 2/82

FIELD NO. 1-EG-3-27 LAB NO. 3-85-358 DATE COMPLETED 4/2/85

NAME OR FIRM 40 Oser Ave (Clover Graphics, Advanced Purification Systems)

ADDRESS OR LOCATION Sump behind Bldg)

POINT OF COLLECTION ~~outfall~~ South east c/o sump.

REMARKS/INSTRUCTIONS

TEST	RESULTS		TEST	RESULTS		TEST	RESULTS
pH (LAB)			TOTAL SOLIDS	Mg/l	X	COPPER	< .02 Mg/l
CHLORIDE	Mg/l		SUSPENDED SOLIDS			IRON	
CYANIDE			DISSOLVED SOLIDS			MANGANESE	
X MBAS Sep. Bottle					X	CHROMIUM-TOT	< .02
COD					X	NICKEL	< .1
TOC						ZINC	1.1
					X	LEAD	< .2
					X	CADMIUM	< .02
NITRATE-N					X	SILVER	< .02
NITRITE					X	CHROMIUM-+6	
AMMONIA-N						Sep. Bottle	
TKN		X	pH (FIELD)	Neutral			
			TEMP. (FIELD)				

METHOD OF PRESERVATION ☒ HNO_3 TO pH <2 ☐ COOL 4°C

CUSTODY OF SAMPLE

DURING TRANSPORT OF THE SAMPLE FROM SAMPLING SITE TO LABORATORY, THE CHAIN OF CUSTODY MUST BE UNBROKEN. GENERALLY THIS WILL REQUIRE THAT THE SAMPLE BE DELIVERED BY THE SAMPLE COLLECTOR OR HIS DESIGNATED REPRESENTATIVE WHO WILL SIGN FOR THE RECEIPT, INTEGRITY AND TRANSFER OF THE SAMPLE DURING SHIPMENT.

	NAME	AFFILIATION	DATE	TIME
1. COLLECTED BY	Eileen Governale	SCDHS	3-27-85	11:00
2. POSSESSION BY			DATE - TIME TO	DATE - TIME
POSSESSION BY			DATE - TIME TO	DATE - TIME
4. RECEIVED LAB BY	S. Matthews		3/27	11:15
5. POSSESSION BY			DATE - TIME TO	DATE - TIME
6. POSSESSION BY			DATE - TIME TO	DATE - TIME

Received from:
Suffolk Co. Dept. of Health

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
INDUSTRIAL WASTE AND HAZARDOUS MATERIALS CONTROL
15 HORSEBLOCK PLACE, FARMINGVILLE, N.Y. 11738
(516) 451-4633

NAME OF FACILITY EMR Circuits	OWNER/ OFFICER	PAGE ___ OF ___
COMPANY NAME 99 Marcus Blvd -	CONTACT	TEL.
PLANT ADDRESS	VILLAGE TOWN	ZIP
MAILING ADDRESS well Drill.		

DATE 3-22-85	TIME	ORIG. PERIODIC RE.	WASTE NO WASTE H&H	SEWAGE SYSTEM PUBLIC PRIVATE

Drilling commenced at 9:15 AM: A chronology of events & findings follow:

→ 8' - bankrun
8 ⇒ 10' - sand
10' → very rocky
20' → sand
} no odor

note: auger threads greased with orange colored non-BTX lubricant

10:00 AM - @ 35' - sand coming up from drill beginning to have a slight chemical odor.

Increasingly strong odor.

55' - strong chem odor
60' - soil sample taken - metals only, 1-EG-3-22
65'
↓
80

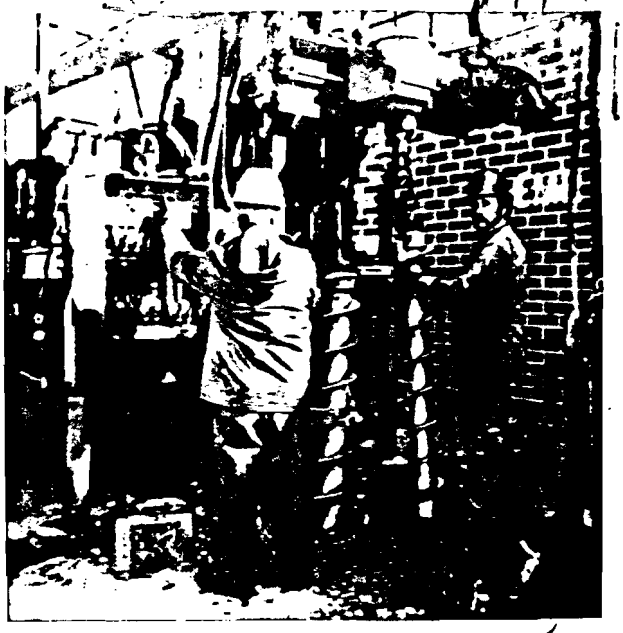
85' - noted visible fumes + heat coming up from center of augers.
95' - ceased drilling due to fumes in area. Operators claimed to feel light-headed. Gas masks acquired. 1 full face (Swen) + 2 ½ masks used. Drilling resumed.
105' - fumes no longer evident.

1:00 PM. depth 130' - put in casing. (use small amt 1-20 to knock dust plug out of casing) ⇒ (water from Robro Top)
- soil sample taken for metals (2-EG-3-22)

1:45 PM. began removing augers.

CONTINUED: INSPECTORS OBSERVATIONS OR INTE

Received from: Suffolk Co. Dept. of Health



1:50 PM 3-22-85
Removing AUGUR.

Hole
2:40 PM - backfilled with sand brought up with AUGUR.

2:50 PM - depth to G.W. measured at 102.87 feet

2:55 PM - started bailing WATER very SANDY. Very slight odor noted by 2 of 4 people present. Bailer used made of steel.

3:50 PM: AFTER bailing for nearly 1 hour, SAMPLE taken for metals and organics. SAMPLE split with Steven DeMaco of NY Testing - under contract to landlord of 99 Marcus Blvd. Several bails needed to obtain sufficient SAMPLE. Used a teflon bailer cleaned with distilled water - new nylon string used.

SAMPLE: @ 127 ft depth 3-EG-3-22
temp - 12° C
Spec. cond. 40
ph - 6.5

4:10 PM - Well tip elevated 12 feet. Began bailing with steel bailer.

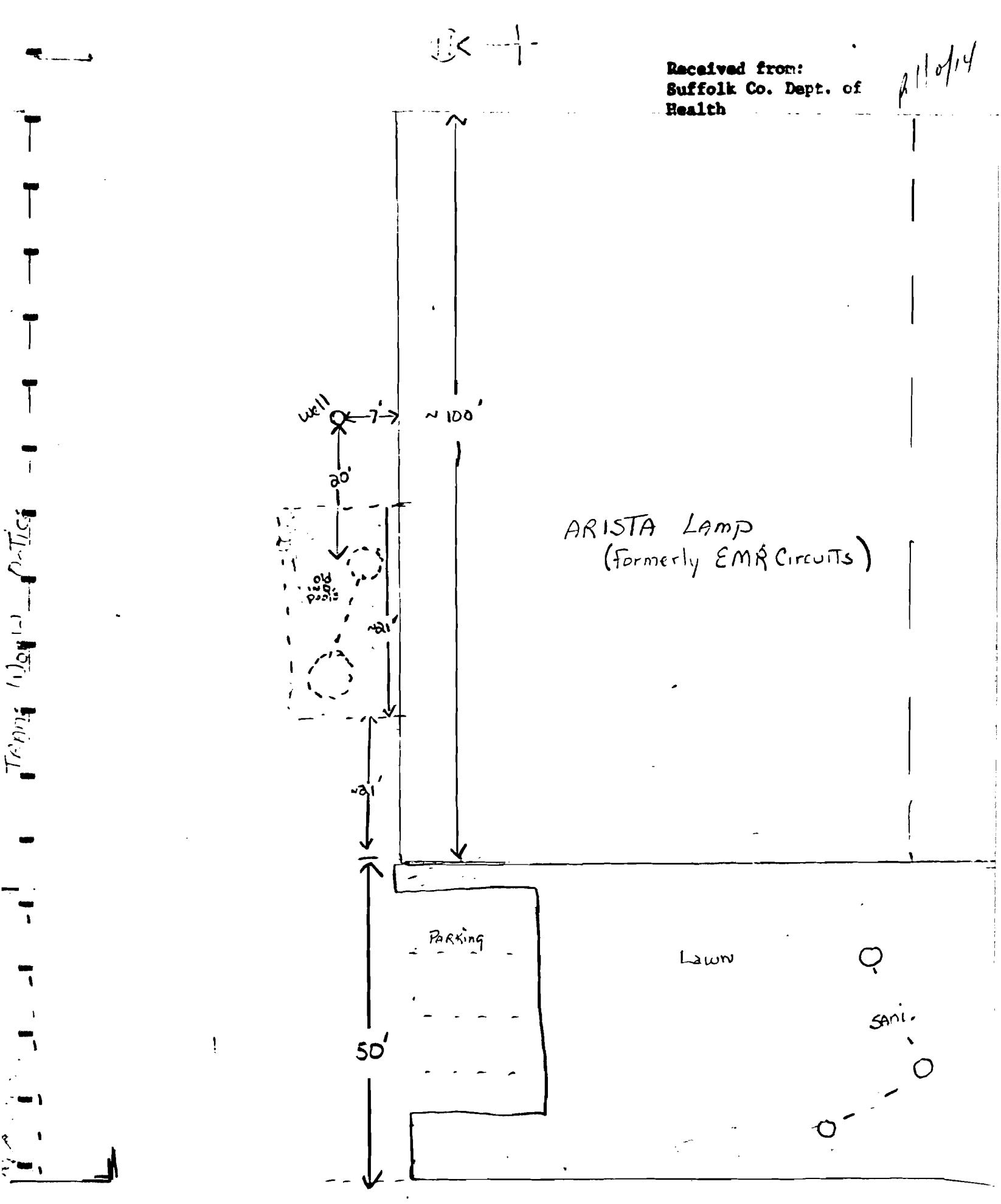
5:00 PM. SAMPLE #4 - EG - 3-22 clean teflon bailer, split sample with NY Testing. metals + organics
Temp = 12°
sp cond = 67
ph - 5.2 (6 by paper)

~ 6:00 PM Samples taken to ME Lab - organics only. Metals preserved + taken to Lab on 3-25.

Eileen Governale

Received from:
Suffolk Co. Dept. of
Health

3/10/14



Received from:
Suffolk Co. Dept. of
Health

File 1-120/14
EMR-C
Curaire

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
MEMORANDUM

TO: JOSEPH BAIER DATE: MARCH 25, 1985

FROM: RICHARD MARKEL RM

SUBJECT: OVERTIME - EMR DRILLING

On Friday, March 22, 1985 the B-53 drilling crew (Svend Hansen, Frank Iannazzo and Guy Flynn) drilled a 128-foot well at 99 Marcus Boulevard, Town of Smithtown, downstream of a cesspool which was used by EMR, the former tenant in the building.

While drilling between 60-90 feet below grade, a very strong chemical odor was emanating from the hole, which forced the crew to stop drilling. Eileen Governale, who was supervising the drilling crew at the time, came to the writer's office; a decision was made to supply the crew with face masks with organic cartridges so that drilling could continue. While the crew was waiting for the gas masks, the hole vented itself sufficiently so that drilling could continue without the masks.

The well was then drilled to 128 feet, and a 2-foot stainless steel screen installed at 125-127 feet. The well was bailed with a stainless steel bailer. This operation took approximately 1 1/2 hours since the well had to be bailed about 200 times to obtain clear water. Both organic and heavy metals samples were collected. The well was then pulled back 10 feet (115-117 screened interval) and the bailing procedure was repeated.

The crew left the site at approximately 6 p.m. Therefore, 2 hours of overtime were accrued on this drilling operation. The delay in the completion of this well was primarily due to the fact that we encountered the gaseous emissions from the bore hole which required us to obtain gas masks.

RM/jb

cc: S. Cary
W. Roberts

ucd 4/1/88

p. 13 of 14

SITE CIRCUITS

GG MARCUS

Received from:
Suffolk Co. Dept. of Health

LANDLORD — NAME NEIL H. Klein + Co.
ADD 160 Great Neck Rd
Great Neck, NY
Phone (516) 482-7877

Permission to Drill?

WHAT IS INVOLVED IF IT IS found?

BILL O'BRIEN VYS - STP N_2 LIST

Received from:
Suffolk Co. Dept. of
Health

p 1414

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
DIVISION OF ENVIRONMENTAL HEALTH SERVICES

TO: William C. Roberts, P.E.

FROM: Frank M. Randall

DATE: August 8, 1984

SUBJECT: EMR Circuits

The owner of EMR Circuits, Jack Klein, has asked us for permission to pave over the parking lot in preparing for new tenants to enter the building. However, there is a question of the installation of a monitoring well at that site.

As you are aware, the monitoring well installation was not addressed in the resolution of the case; therefore, it would appear to me that if a monitoring well is to be installed, Mr. Markel must be contacted for such installation. If you concur, I will contact Mr. Markel and ask him to install a monitoring well at that location with a manhole cover for accessibility. We will also direct a letter to Mr. Klein indicating that he can pave the parking lot area.

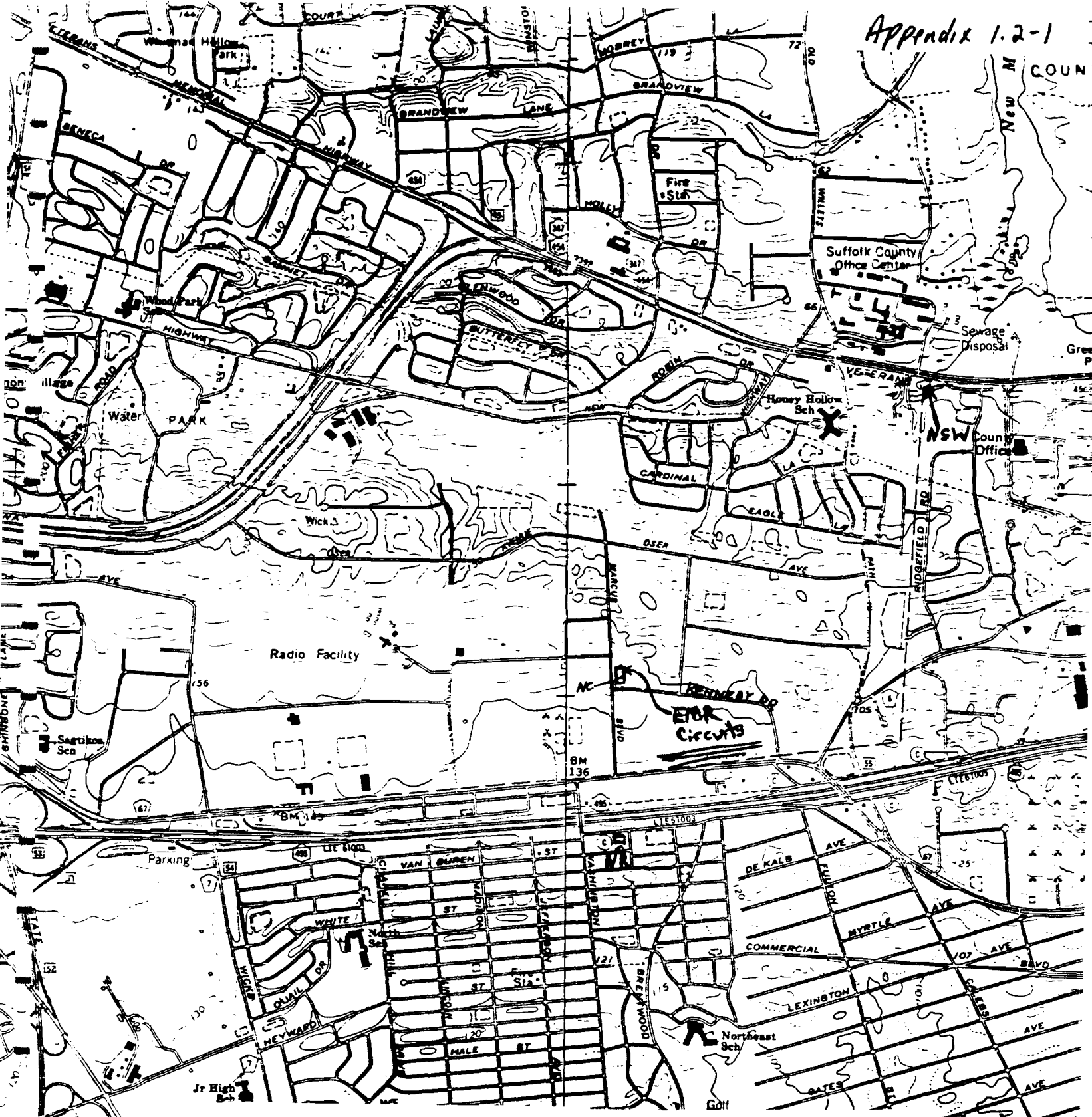
Please advise as soon as possible in this matter.

OK Bill

FMR/jhn

Frank

Appendix 1.2-1



GREENLAWN QUADRANGLE
NEW YORK – SUFFOLK CO.
7.5 MINUTE SERIES

CENTRAL ISLIP QUADRANGLE
NEW YORK – SUFFOLK CO.
7.5 MINUTE SERIES
1967, 1979 photorevised

SCALE 1:24000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 1 KILOMETER

Appendix 1.3-1
1 of 13

LONG ISLAND WATER RESOURCES
BULLETIN NUMBER 1

RESULTS OF SUBSURFACE EXPLORATION IN THE MID-ISLAND AREA OF WESTERN SUFFOLK COUNTY, LONG ISLAND, NEW YORK

BY
JULIAN SOREN
U. S. GEOLOGICAL SURVEY

WITH A SECTION ON
POTENTIAL DEVELOPMENT OF GROUNDWATER
IN THE MID-ISLAND AREA

BY
PHILIP COHEN
U. S. GEOLOGICAL SURVEY

PREPARED BY

U. S. GEOLOGICAL SURVEY

IN COOPERATION WITH

SUFFOLK COUNTY LEGISLATURE
SUFFOLK COUNTY WATER AUTHORITY

PUBLISHED BY

SUFFOLK COUNTY WATER AUTHORITY

1971

GEOHYDROLOGY

GEOLOGY AND AQUIFERS

Unconsolidated deposits, ranging in age from Late Cretaceous to Pleistocene, underlie the mid-island area. These deposits contain several major aquifers and constitute the ground-water reservoir. Thin surficial Holocene deposits of soil and some swamp accumulations occur from place to place, but these are of little significance to the ground-water reservoir. The unconsolidated deposits rest unconformably on crystalline bedrock consisting of Precambrian (?) schist and gneiss which is considered to be the bottom of the ground-water reservoir on Long Island.

The unconsolidated deposits, from the bedrock upward, include the Lloyd Sand Member and clay member of the Raritan Formation of Late Cretaceous age, the Matawan Group-Magothy Formation, undifferentiated, also of Late Cretaceous age, and glacial deposits of Pleistocene age. The major aquifers in the area are the deposits of sand and gravel in the Pleistocene and the Matawan-Magothy strata. The test drilling described previously was carried out mostly to the depth of the upper part of the clay member. Therefore, the drilling served to determine the base of the Matawan-Magothy deposits. The drilling also served to obtain information on the configuration of the top of the Matawan-Magothy deposits, which were deeply eroded during Tertiary and, probably, Pleistocene time.

BEDROCK OF THE PRECAMBRIAN (?) SYSTEM

The Precambrian (?) gneiss and schist which underlies Long Island is hard and dense. Virtually all the water in these rocks is found in joints, faults, and foliation planes. Because these openings are usually tight and poorly connected, the bedrock is practically impermeable, especially by comparison with the overlying unconsolidated formations. No wells are known to tap bedrock in the mid-island area.

The bedrock was eroded to a peneplain prior to the deposition of the Cretaceous strata. In the mid-island area, the bedrock surface dips gently southeast at an average slope of about 65 feet per mile (about two-thirds of a degree), and its altitude ranges from about 800 feet below sea level in the northwestern corner of the area to about 1,600 feet below sea level in the southeastern part (pl. 2).

3415

UPPER CRETACEOUS SERIES

Raritan Formation

Lloyd Sand Member

The Lloyd Sand Member of the Raritan Formation comprises the Lloyd aquifer on Long Island. This unit consists mostly of beds and lenses of light- to medium-gray sand and gravelly sand, commonly containing small to large amounts of interstitial clay and silt, that are intercalated with beds and lenses of light- to dark-gray clay, silt, and clayey and silty sand.

Only two drill holes are known to have penetrated the Lloyd in the mid-island area. One hole partly penetrated the unit at the Pilgrim State Hospital, in Brentwood. The second hole, which is in the village of Lake Ronkonkoma, and which was one of the test holes drilled as part of this study, fully penetrated the unit. A log of the test hole describing lithology of the Lloyd is shown in table 1, S33379.

The surface of the Lloyd is roughly parallel to the bedrock surface. The Lloyd surface dips from an altitude of about 550 feet below sea level in the northwestern part of the area, to an altitude of about 1,250 feet below sea level in the southeastern part (pl. 2), and the unit's thickness ranges from about 260 feet to 360 feet from northwest to southeast, respectively. Plate 2 shows contours on the Lloyd surface. Plate 2 also shows contours on the bedrock surface; therefore, the Lloyd's thickness, in any part of the area, can be estimated by computing the local difference between the altitudes of the bedrock and Lloyd surfaces.

The Lloyd aquifer is moderately permeable. Its average horizontal permeability has been estimated by Lusczynski and Swarzenski (1966, p. 19), Isbister (1966, p. 20), and Soren (in press) to range between 400 and 500 gpd per sq ft (gallons per day per square foot) in Queens and Nassau Counties, west of the mid-island area. Warren and others (1968, p. 102) estimated the Lloyd's horizontal permeability to be 165 gpd per sq ft at the Brookhaven National Laboratory, about 12 miles east of the mid-island area. The section of Lloyd penetrated by the test well near Lake Ronkonkoma was fairly sandy and gravelly (table 1, S33379), and at this site the average horizontal permeability of the Lloyd probably is considerably more than 500 gpd per sq ft. Wells tapping the Lloyd in other parts of Long Island have been pumped at rates of as much as 1,600 gpm (gallons per minute), and the specific capacities of these wells (pumpage, in gallons per minute, divided by drawdown, in feet) have been reported to range from 3 to 40 gpm per foot of drawdown.

At present, there is no pumpage from the Lloyd aquifer in the mid-island area, mainly because of the great depth of the aquifer, and because more permeable aquifers are found at shallower depths. In addition to being at a greater depth, the water from the Lloyd commonly has undesirably high concentrations of iron.

Clay Member

The clay member of the Raritan Formation (commonly referred to as the Raritan clay) completely covers the underlying Lloyd aquifer in the mid-island area, and confines water in that aquifer. The Raritan clay consists mostly of beds and lenses of light- to dark-gray clay, silt, and clayey and silty fine sand (table 1). Thin to thick sandy beds commonly occur in the unit from place to place, but these beds do not have great lateral extent. Laminae and thin beds of lignite and pyrite and disseminated particles of these substances are common in the clay beds of the unit. The thickness of the Raritan clay increases to the southeast, and ranges from about 150 feet in the northwestern part of the mid-island area to about 200 feet in the southeastern part.

The surface of the Raritan clay is roughly parallel to that of the underlying Lloyd Sand Member. The altitude of the surface of the Raritan clay ranges from about 300 feet below sea level in the northwestern part of the mid-island area, to about 1,050 feet below sea level in the southeastern part (pl. 3).

Matawan Group-Magothy Formation, Undifferentiated

The Matawan Group-Magothy Formation, undifferentiated, comprises the Magothy aquifer of Long Island. Deposits in this unit consist of beds and lenses of light-gray fine to coarse sand, containing traces to large amounts of interstitial clay and silt, intercalated with thin to thick beds and lenses of light- to dark-gray clay, silt, and clayey and silty sand (table 1). The clay and silt beds commonly contain laminae and thin beds of lignite. Disseminated lignite and pyrite also are common in the sand beds of the aquifer. Gravelly coarse sand is commonly found in the basal part of the aquifer. This coarse zone ranges in thickness from 100 to 150 feet west of the mid-island area to 150 to 200 feet in the mid-island area. The basal zone also commonly contains abundant interstitial clay and silt and many thin to thick beds and lenses of clay, silt, and clayey and silty sand.

The surface of the Magothy aquifer (pl. 4) is not planar as are the surfaces of the underlying units. The Magothy surface was deeply eroded during Tertiary time, and probably was considerably eroded in Pleistocene time. Consequently, the depth to the Magothy aquifer and the aquifer's thickness cannot be predicted as accurately as the depths and thicknesses of the underlying units. Many control points in addition to those already known are needed to accurately map the upper surface of the Magothy aquifer.

The highly irregular character of the surface of the Magothy aquifer is shown in plate 4. The upper surface of the aquifer ranges in altitude from as high as about 200 feet above sea level to as low as about 500 feet below sea level. The Magothy was completely removed by erosion in a buried valley near the South Huntington area, and in that area upper Pleistocene deposits lie directly on the Raritan clay. This buried valley was called the "Huntington buried valley" by Lubke (1964, pl. 3), and as mapped by Lubke, the valley extended about 2-1/2 miles south of the Northern State Parkway.

source of the rock materials in the outwash deposits is manifold. As the glaciers moved southward to Long Island, they plucked the bedrock and soils of the surfaces they slid over. Rock materials were incorporated into the ice in contact zones and were also pushed along the glacial front. As the ice melted in late Pleistocene time, the various rock materials were carried away by broad coalescing streams and sheets of water. Consequently, the outwash deposits are stratified, and because of the varied materials carried by the glacier, these deposits consist of a heterogeneous suite of rock types. The great diversity of rock and mineral suites in the Pleistocene deposits, along with the chemically unstable (easily decomposed) rocks and minerals, commonly facilitates differentiation of glacial from the Cretaceous deposits on Long Island.

Outwash deposits underlie the plain in the mid-island area south of the Ronkonkoma terminal moraine, where the major source of glacial deposition was material from the Ronkonkoma ice advance. A readvance of the glacial front followed recession of the Ronkonkoma ice front and resulted in the formation of the Harbor Hill terminal moraine. Lakes were formed in depressions and valleys between the Ronkonkoma and Harbor Hill terminal moraines, and clayey materials were deposited in these lakes. The intermorainal areas also contain recessional deposits of outwash and ground moraine (see the following section, "Ground-Moraine Deposits") from the Ronkonkoma and Harbor Hill deglaciations, and these materials buried the clayey lake deposits.

The outwash deposits are thickest in the buried valleys and thinnest where the Cretaceous surface is closest to land surface (pl. 5). These deposits generally extend below the water table, and are a major source of ground water. Outwash deposits comprise most of the so-called upper glacial aquifer of Long Island, and because these deposits of sand and gravel contain virtually no interstitial clay and silt, the upper glacial aquifer is the most permeable aquifer on Long Island. The estimated average horizontal permeability of the outwash deposits is about 1,000 to 1,500 gpd per sq ft (Lusczynski and Swarzenski, 1966, p. 17; and Soren, in press). Warren and others (1968, p. 75) computed the horizontal permeability of outwash to be about 1,300 gpd per sq ft at the Brookhaven National Laboratory, east of the mid-island area. A horizontal permeability for outwash as high as about 2,500 gpd per sq ft has been reported in Nassau County, west of the project area (Isbister, 1966, p. 29).

Public-supply and other high-capacity wells screened in glacial outwash on Long Island have yielded as much as 1,700 gpm, and reported specific capacities of such wells range from less than 10 gpm per foot of drawdown to as much as about 200 gpm per foot of drawdown; however, the specific capacities range mostly from 50 to 100 gpm per foot of drawdown. (See section "Yields of Individual Wells.")

the shorelines, the direction of flow is reversed, and ground-water movement is upward from the deeper aquifers toward the surface. Thus, because of the character of the flow system, under natural conditions virtually all the recharge to the Magothy and Lloyd aquifers in western Suffolk County originated in the mid-island area, and all of that recharge ultimately discharged from the ground-water system near the shorelines.

The movement of ground water through Long Island's aquifers in the horizontal direction is generally more rapid than movement in the vertical direction because of the occurrence of interbedded fine- and coarse-grained layers, and because the largest dimensions of unevenly shaped particles in the individual layers tend to be oriented horizontally. Approximate rates of ground-water movement can be computed from hydraulic gradients and estimated coefficients of permeability and porosities of the aquifers. In 1968, water in the upper glacial aquifers in the project area was moving horizontally at rates from less than 0.5 foot per day at points distant from centers of pumping, to hundreds of feet per day near the screens of pumping wells. At the same time, water in the Magothy aquifer was moving horizontally at rates from less than 0.2 foot per day at points distant from pumping, to hundreds of feet per day near the screens of pumping wells.

HYDRAULIC INTERCONNECTION OF AQUIFERS

The aquifers of Long Island are hydraulically interconnected. Layers of clay and silt within an aquifer or between aquifers serve to confine water below them, but they do not completely prevent the vertical movement of water through them. Ground water moves downward readily through coarse outwash deposits in the upper glacial aquifer. Vertical movement of water through the Magothy aquifer is impeded by beds and lenses of clay and silt. Because the clay and silt strata in the Magothy are not continuous, some water may move around lenses of this material in addition to moving slowly through the fine-grained strata.

The contact between the upper glacial and Magothy aquifers is not regular either in attitude or in composition of the contact surfaces. Glacial deposits in buried valleys are in lateral contact with truncated sandy beds in the Magothy. In the buried valleys water can laterally enter the Magothy at great depth directly from the glacial deposits, rather than the water having to move vertically to the same depth through less permeable Magothy beds. In the Huntington buried valley, glacial deposits extend completely through the Magothy aquifer to the underlying Raritan clay. (See plate 4.) In addition to the good hydraulic continuity between the upper glacial and Magothy aquifers in the buried valleys, good hydraulic continuity occurs between the aquifers outside the buried valleys where glacial sand and gravel deposits lie directly on Magothy sand beds. Thus, a fairly good hydraulic connection exists between the upper glacial and Magothy aquifers over large parts of the mid-island area, and the configuration of the piezometric surface of the Magothy aquifer is generally similar to that of the water table. However, in the mid-island area hydraulic heads in the Magothy are lower than those in the upper glacial aquifer because of the downward component of ground-water movement in the area.

The thick areally persistent Raritan clay that lies between the Magothy and Lloyd aquifers impedes but does not prevent downward movement of ground water into the Lloyd aquifer, and water in the Lloyd is tightly confined between the Raritan clay and bedrock. Downward leakage into the bedrock is negligible.

Figures 2 and 3 show hydrographs of wells screened in the upper glacial aquifer and the Magothy aquifer at the test-drilling sites in Brentwood and Hauppauge. At both sites, the heads in the deepest wells in the Magothy aquifer are about 2.5 to 3 feet lower than the heads in the shallowest wells in the upper glacial aquifer. The loss of head downward reflects the downward movement of ground water in the mid-island area. The hydrographs in figures 2 and 3 show that the heads in these two aquifers in the project area decrease at a fairly uniform rate with increasing depth. In addition, water-level fluctuations in the two groups of wells were very similar. Both of these facts, the uniform decrease in head and the similar water-level fluctuations, reflect the high degree of hydraulic interconnection between the upper glacial and Magothy aquifers.

The average vertical permeability of the Magothy aquifer is only poorly known. Estimates range from less than 1 to about 30 gpd per sq ft. Assuming that it averages about 5 gpd per sq ft in the mid-island area, the computed amount of downward ground-water movement through the Magothy aquifer in the vicinity of the ground-water divide in 1968 was about 0.4 mgd (million gallons per day) per square mile, and the estimated velocity of the downward movement was about 0.006 foot per day.

Because of the low permeability of the Raritan clay, the hydraulic-head loss across this unit is very much larger than the head loss across a comparable thickness of the Magothy and upper glacial aquifers. At the easternmost test site in the village of Lake Ronkonkoma, wells were screened near the base of the Magothy and near the top of the Lloyd aquifers (pl. 5, section A-A', S33379-80). In 1968, the head near the base of the Magothy aquifer (about 45.5 feet above sea level) was about 11.5 feet higher than the head in the Lloyd aquifer (about 34 feet above sea level). Head losses across the Raritan clay at localities east and west of the Lake Ronkonkoma area differ considerably. At Upton, about 12 miles east of the mid-island area, the head loss across the clay was about 6 feet in 1968; and at Plainview (in Nassau County), about 3 miles southwest of Melville, the head loss across the clay was about 42 feet. The differences in head loss from place to place are largely a result of differences in the vertical permeability and thickness of the Raritan clay.

The head in the Lloyd aquifer at Lake Ronkonkoma in 1968 (about 34 feet above sea level) was higher than either of the heads in the Lloyd at Upton (about 30.5 feet above sea level) and at the Suffolk-Nassau boundary (about 27.5 feet above sea level). The head in the Lloyd at Terryville, about 7 miles northeast of the Ronkonkoma area was about 21 feet above sea level in 1968, and it was 19 feet above sea level at Fire Island State Park in 1968, about 13 miles to the southwest. These data suggest that water in the Lloyd aquifer is moving radially from the Lake Ronkonkoma area. The estimated rate of horizontal movement of water in the Lloyd aquifer in the project area in 1968, was on the order of 0.1 foot per day.

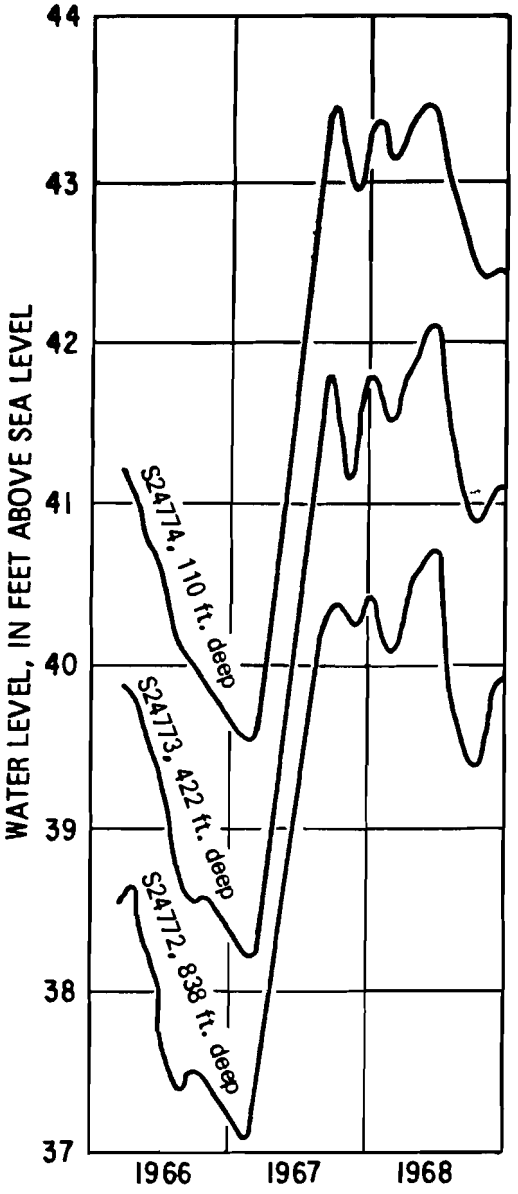


Figure 2.--Fluctuations of water levels in wells screened in the upper glacial aquifer and the Magothy aquifer at Brentwood, N. Y.

FLUCTUATIONS OF GROUND-WATER LEVELS

Fluctuations of water levels in the wells of the mid-island area reflect local variations in recharge to and discharge from the aquifers tapped by the wells. Therefore, changes in ground-water levels afford an insight into many aspects of the ground-water system. Furthermore, the information on water-level fluctuations can be used to help assess the impact of urbanization on the natural hydrologic system.

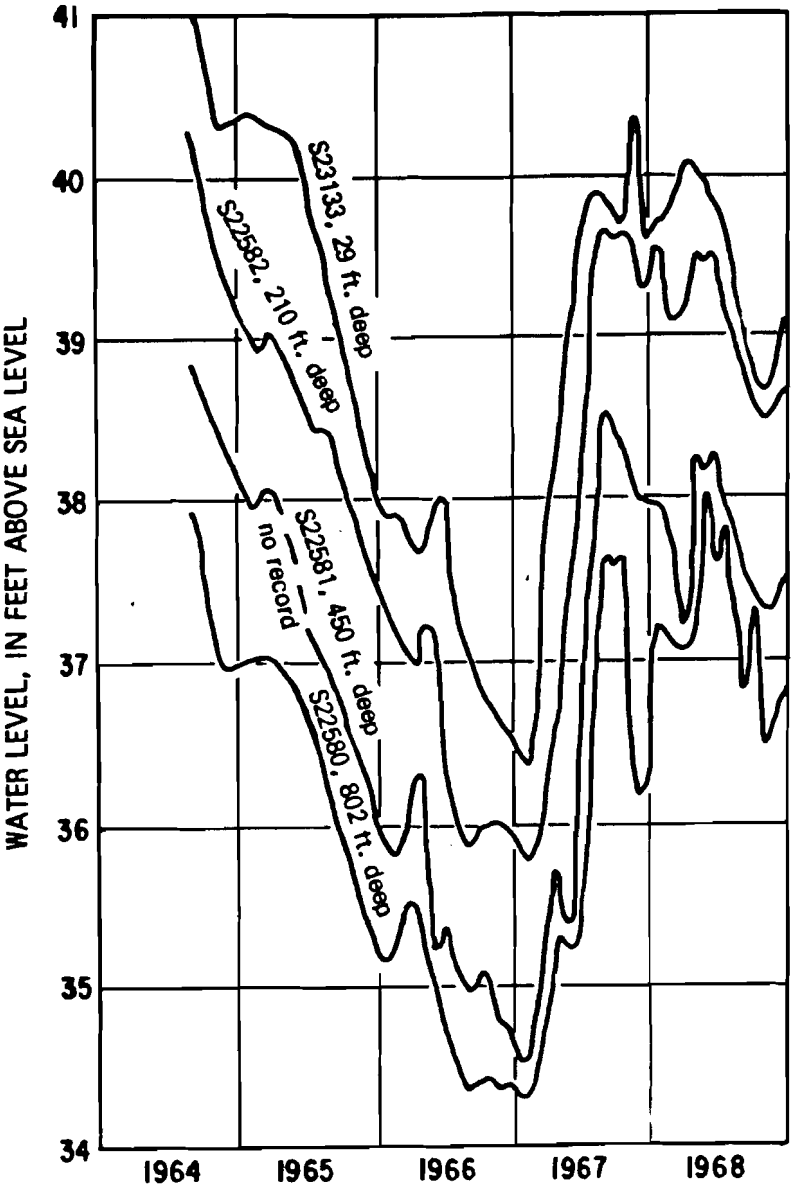
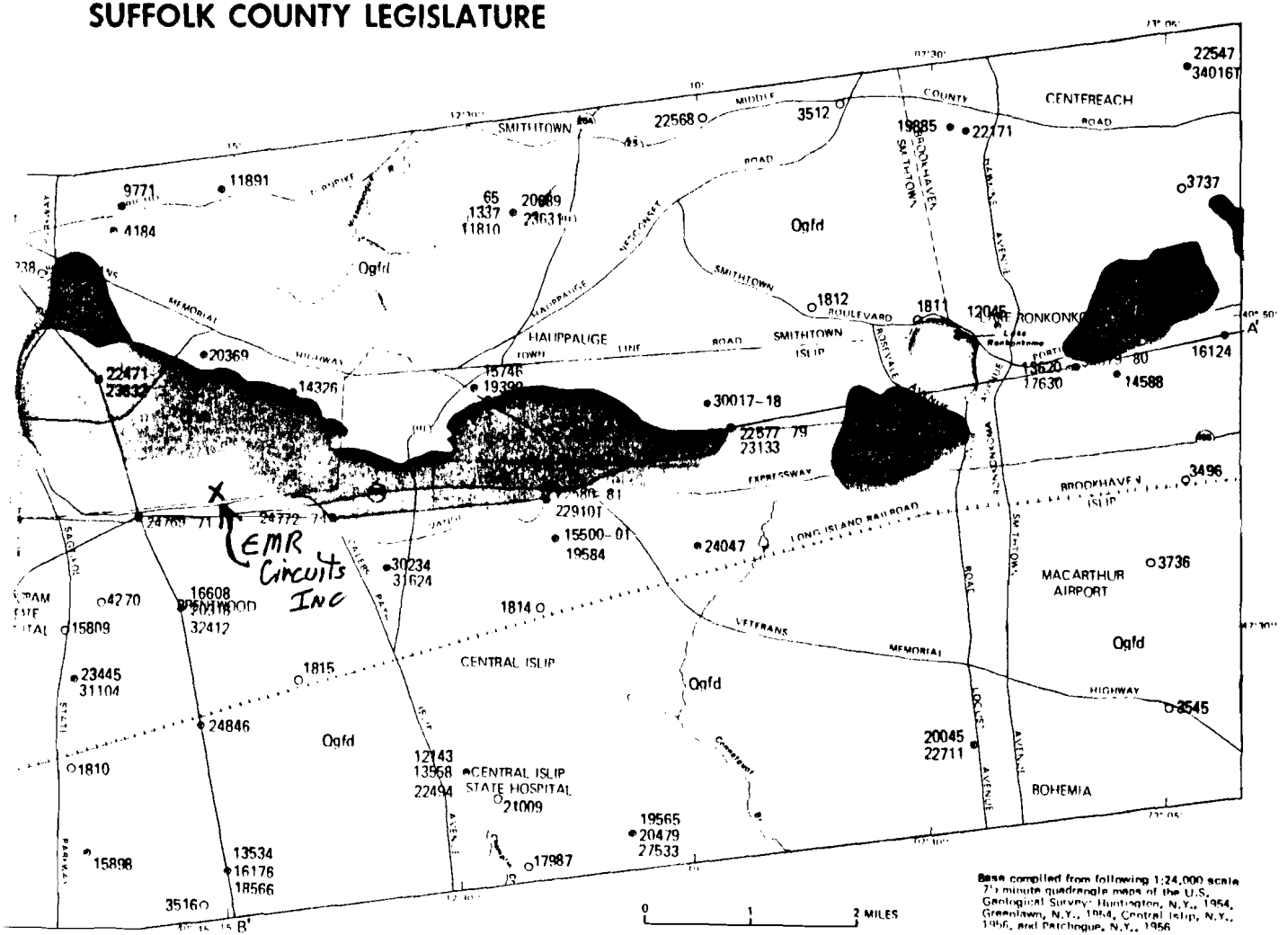


Figure 3.--Fluctuations of water levels in wells screened in the upper glacial aquifer and the Magothy aquifer at Hauppauge, N. Y.

Under natural conditions and in relatively undeveloped areas of Long Island, the water table fluctuates over a range of several feet during the year. Under such conditions, the water table has a rhythmic seasonal pattern; the lowest levels are in late autumn and highest levels are in early spring. This pattern of decline and recovery of the water table reflects the greatest losses of water through evapotranspiration during the growing season and the least such losses between growing seasons. The hydrologic systems in such undeveloped areas are in equilibrium, with inflow balancing outflow. However, if large amounts of water are continually pumped out of a ground-water system, the water table declines until equilibrium is reestablished at a lower level, reflecting a loss of ground water from storage and decreased subsurface and stream outflow from the system.

IN COOPERATION WITH THE
SUFFOLK COUNTY WATER AUTHORITY
AND
SUFFOLK COUNTY LEGISLATURE

LONG ISLAND WATER RESOURCES BULLETIN NUMBER 1 PLATE 1
PUBLISHED BY SUFFOLK COUNTY WATER AUTHORITY



Base compiled from following 1:24,000 scale 7½ minute quadrangle maps of the U.S. Geological Survey: Huntington, N.Y., 1954, Greenlawn, N.Y., 1954, Central Islip, N.Y., 1956, and Patchogue, N.Y., 1956

EXPLANATION

PLEISTOCENE

Qhlm
Harbor Hill terminal moraine
Crudely stratified sand and gravel; some boulders and till

Qrm
Ronkonkoma terminal moraine
Crudely stratified sand and gravel; some boulders and till

Qgm
Ground moraine and retreatal outwash
Till, some boulders, and some stratified sand and gravel

Ogfd
Glaciofluvial deposits
stratified sand and gravel in melt-water spillways and outwash plains

● 29852
Public-supply well
Number is well-identification number; Prefix "S" is omitted

● 29776–78
Test-drilling site and test well numbers

○ 21009
Miscellaneous well (observation, industrial, or institutional) and number

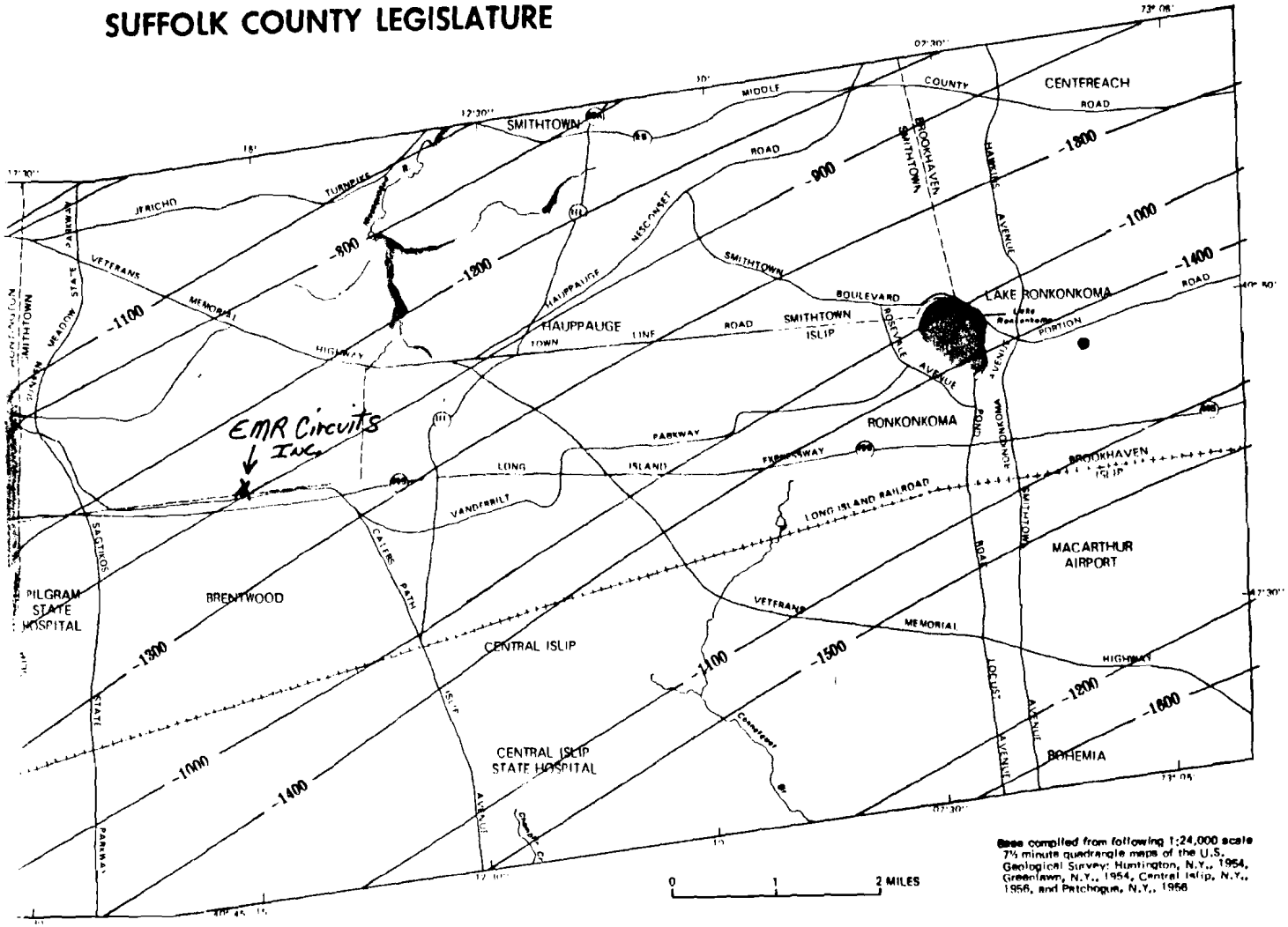
A ——— A'
Geologic section
(see plate 5)

Geologic contact

SURFICIAL GEOLOGY AND LOCATIONS OF SELECTED WELLS

IN COOPERATION WITH THE
SUFFOLK COUNTY WATER AUTHORITY
AND
SUFFOLK COUNTY LEGISLATURE

LONG ISLAND WATER RESOURCES BULLETIN NUMBER 1 PLATE 2
PUBLISHED BY SUFFOLK COUNTY WATER AUTHORITY



Base compiled from following 1:24,000 scale 7½ minute quadrangle maps of the U.S. Geological Survey: Huntington, N.Y., 1954, Greenlawn, N.Y., 1954, Central Islip, N.Y., 1956, and Patchogue, N.Y., 1956

EXPLANATION

— -1300 —
Bedrock contour
Shows altitude of bedrock surface. Contour interval, 100 feet. Datum is mean sea level. (Control based largely on data outside area.)

— -700 —
Structure contour
Shows altitude on top of Lloyd Sand Member. Contour interval, 100 feet. Datum is mean sea level. (Control based largely on data outside area.)

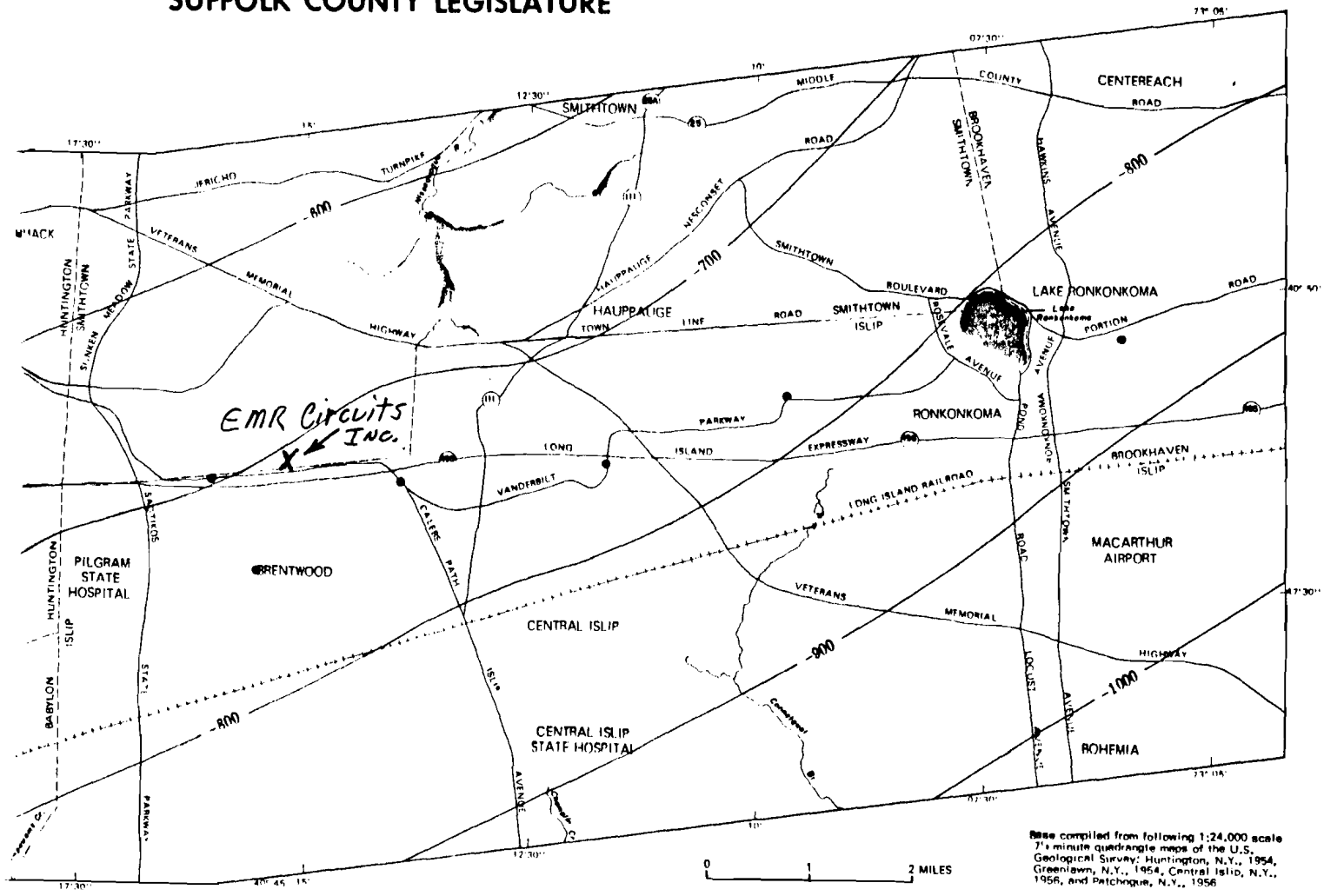
●
Well that penetrates the Lloyd aquifer and bedrock

11/9/15

ON THE SURFACE OF THE BEDROCK AND ON THE SURFACE OF THE LLOYD SAND MEMBER OF THE RARITAN FORMATION

IN COOPERATION WITH THE
SUFFOLK COUNTY WATER AUTHORITY
AND
SUFFOLK COUNTY LEGISLATURE

LONG ISLAND WATER RESOURCES BULLETIN NUMBER 1 PLATE 3
PUBLISHED BY SUFFOLK COUNTY WATER AUTHORITY



Base compiled from following 1:24,000 scale 7½ minute quadrangle maps of the U.S. Geological Survey: Huntington, N.Y., 1954, Greenlawn, N.Y., 1954, Central Islip, N.Y., 1956, and Patchogue, N.Y., 1956

EXPLANATION

—— -600 ——
Structure contour
Shows altitude of top of clay member of Raritan Formation. Contour interval, 100 feet. Datum is mean sea level. (Control based in part on data outside area.)

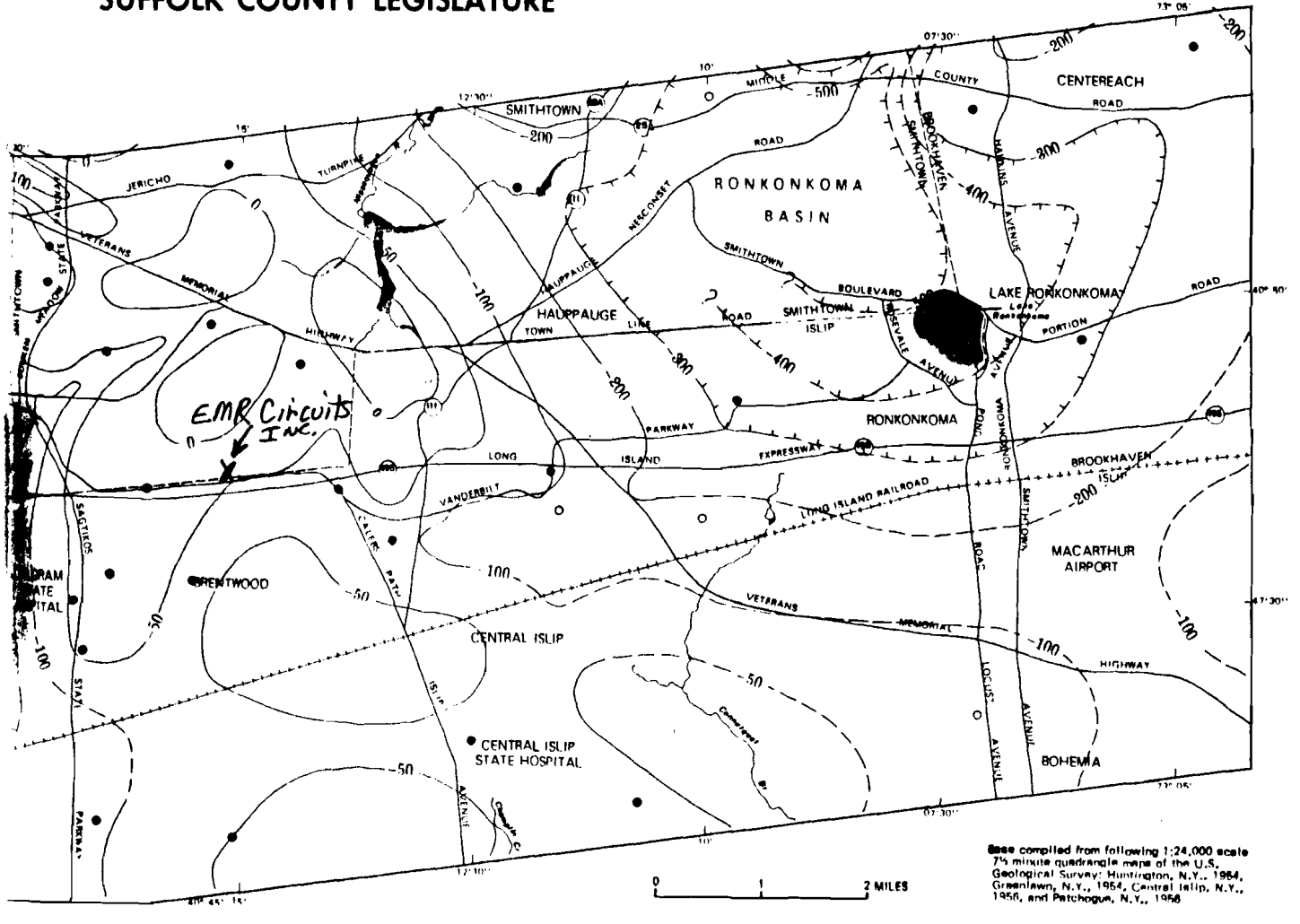
●
Well that penetrates clay member surface

o
Deep well that does not penetrate clay member surface

)URS ON THE SURFACE OF THE CLAY MEMBER OF THE RARITAN FORMATION

IN COOPERATION WITH THE
SUFFOLK COUNTY WATER AUTHORITY
AND
SUFFOLK COUNTY LEGISLATURE

LONG ISLAND WATER RESOURCES BULLETIN NUMBER 1 PLATE 4
PUBLISHED BY SUFFOLK COUNTY WATER AUTHORITY



Base compiled from following 1:24,000 scale 7½ minute quadrangle maps of the U.S. Geological Survey: Huntington, N.Y., 1964, Greenlawn, N.Y., 1954, Central Islip, N.Y., 1956, and Patchogue, N.Y., 1956

EXPLANATION

——— -100 ——— —

Approximate contour on Matawan Group-Magothy Formation, undifferentiated surface

Shows altitude of erosion surface developed on Matawan Group-Magothy Formation undifferentiated. Dashed where inferred. Contour interval, 50 and 100 feet. Datum is mean sea level.

●

Well that penetrates Matawan Group-Magothy Formation, undifferentiated surface

o

Deep well that does not penetrate Matawan Group-Magothy Formation, undifferentiated surface

———

Approximate geologic contact

SURFACE OF THE MATAWAN GROUP-MAGOTHY FORMATION, UNDIFFERENTIATED

Appendix 1.32

Mitsubishi Plan

ORIGINAL—TO COMMISSION

1626 Well No. S-53360 (on preliminary report)

County SUFFOLK

USA 645'

State of New York
Department of Conservation
Division of Water Resources

LOG

Ground Surf., El.....ft. above s

^
.....ft.
v
Top of Well

COMPLETION REPORT—LONG ISLAND WELL

Owner SUFFOLK COUNTY WATER AUTHORITY

Address POND ROAD, OAKDALE

Location of well N/s of WALTER COURT, 90' w/o SHIRLEY CT. Commack

Depth of well below surface 703' feet

Depth to ground water from surface 8 C-10"(11-24-75) 80' feet

SEE ATTACHED

CASINGS:

Diameter	20" in.	in.	in.	in.
Length	547' ft.	10" ft.	ft.	ft.
Sealing	50' CONCRETE			
Casings removed	NONE			

SCREENS: Make COOK 316 SS Openings #50 SLOT

Diameter	10" in.	I.D. in.	in.	in.
Length	90' ft.	ft.	ft.	ft.
Depth to top from top of casing	50' @ 548', 40' @ 627' ft.			

PUMPING TEST: Date 2/27/75 Test or permanent pump? TEST

Duration of Test ..... days 8 hours

Maximum Discharge ~2461 gallons per minute

Static level prior to test 80 ft. — in. below top of casing

Level during Max. Pumping 48 ft. in. below top of casing

Maximum Drawdown 32' ft.

Approx. time of return to normal level after cessation of pumping ..... hours ..... minutes

D. E. C. REGION 1
ENVIRONMENTAL ANALYSIS UNIT
MAR 24 1975
RECEIVED

PUMP INSTALLED:

Type DWT Make By Layne OTHERS Model No. TLC

Motive power Elec Make U.S. H.P. 150

Capacity 1400 g.p.m. against ..... ft. of discharge head

No. bowls or stages 6 336 TDH ft. of total head

Pump data submitted 3/12/75

DROP LINE:		SUCTION LINE:	
Diameter	10 in.	10"	in.
Length	159'9" ft.	9'-9"	ft.

Method of Drilling (Rotary, cable tool, etc.) REVERSE ROTARY

Use of Water PUBLIC SUPPLY

Work started 10/24/74 11/19/75 Completed 11/25/75 3/27/75

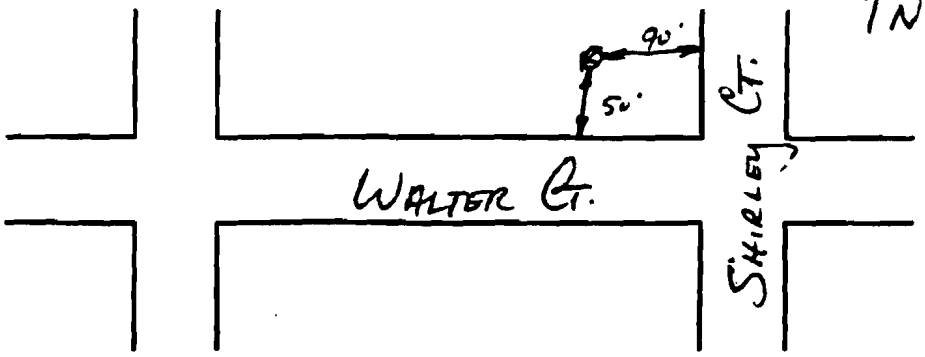
Date 8/9/76 3/12/75 Driller STRATA WELL CORP. Layne-N.Y.

License No. 10005

NOTE: Show log of well—materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

SKETCH OF LOCATION



20/26

Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

STRATA WELL CORP.

2 Beech St.
ISLIP, N. Y. 11751
Phone 516 581-7100

WELL LOG

NAME SCWA - WALTER COURT

LOCATION 90' W of Shirley Ct, Commack W.R.C. WELL NO. S-53360

REFERENCE PT. GRADE S. W. L. 8C'

DATE STARTED 12/24/74 COMPLETED 2/27/75 DRILLER Barnes, Butler, Timm

SAMPLE Dr F	No.	Actual Depth	Lgth	Blows	Formation	Thickness	Depth	Remarks
					CSE BR SD & GRAVEL W/ LARGE STONES & BOULDERS	149	149	V HARD
					F/MED BR SAND W/ STREAKS of BROWN CLAY	8	157	
					MULTI-COLORED CLAY (SANDY) W/ IRON OXIDE	30	187	
					FINE TO MED GREY SAND	9	196	GOOD
					SOLID BLACK CLAY	19	215	
					FINE GREY SAND W/ STREAKS CLAY	19	234	
					MULTICOLORED CLAY W/ LAYERS of FINE SAND	5	239	
					FINE GREY SAND	3	242	
					SOLID GREY CLAY	9	251	
					FINE GREY SAND W/ LAYERS of BROWN CLAY	2	253	
					WHITE & BROWN CLAY	13	266	
					FINE GREY SAND W/ STKS CLAY & IRON OXIDE	8	274	
					MULTI COLORED CLAY W/ SAND STRIPS	11	285	
					BROWN SAND W/ CLAY STRIPS	30	315	
					WHITE CLAY W/ LAYERS GREY SAND	15	330	
					GREY SAND W/ STRIPS WHITE CLAY	14	344	
					SOLID BLACK CLAY	4	348	
					MULTI COLORED CLAY SOME SAND	14	362	
					FINE GREY SAND W/ STREAKS of CLAY	32	394	
					SOLID BROWN CLAY	3	397	
					FINE GREY SAND W/ STKS of CLAY	53	450	
					FINE/MEDIUM GREY SAND	25	475	V GOOD
					SANDY WHITE CLAY & IRON OXIDE	4	479	
					MEDIUM GREY SAND	31	510	
					MED TO CASE GREYSAND & SM GRAVEL, STKS WHITE CLAY	5	515	
					FINE TO MEDIUM GREY SAND	10	525	GOOD
					CASE BR SAND & GRAVEL, STKS MULTI-COL SANDY CLAY	6	531	
					SOLID GREY CLAY	6	537	

CONTINUED

4 of 26

WELL CORP.

2 Beech St.
ISLIP, N. Y. 11751
Phone 516 581-7100

WELL LOG

JOB NAME SCWA - WALTER COURT

LOCATION 9 [illegible] SITARLOW CT., COMMACK W.R.C. WELL NO. S-53360

REFERENCE PT. GRADE S. W. L. 80'

STARTED 10/24/74 COMPLETED 2/27/75 DRILLER [illegible]

SAMPLE No.	SAMPLE Actual Depth	Lgth	Blows	Formation	Thickness	Depth	Remarks
				BROWN SOFT CLAY	7	54	
				MULTICOLORED SANDY CLAY	16	56	548
				COARSE GREY SAND, SOME CLAY	5	525	SCREEN
				COARSE GREY SAND	16	531	
				FINE GRAVEL	8	539	
				COARSE GREY SAND	30	614	598
				CRSE GR SAND, LAYERS of WHITE CLAY	40	654	627
				STKS WHITE CLAY INTO FINE GREY SAND	6	665	SCREEN
				COARSE GREY SAND, STKS of WHITE CLAY	6	671	667
				SOLID GREY CLAY	8	679	
				SANDY CLAY & GRAVEL			
				HOLE TERMINATED AT 703'			

5926

County Suffolk

WSA-4497

ORIGINAL—TO COMMISSION

State of New York
Department of Conservation
Division of Water Resources

Well No. S-22368 2
(as preliminary spec)
LOG
Ground Surf., El. ..... ft. above sea

^
..... ft.
v
Top of Well

COMPLETION REPORT—LONG ISLAND WELL

Owner Suffolk County Water Authority, Layne Well #18 (their #1)

Address Sunrise Highway at Pond Road, Oakdale, L. I., N. Y.

Location of well Schuyler Dr. Well Field, Northport Plant, Commack

Dept of well below surface 314' 6½" feet

Depth to ground water from surface 109 feet

STATE OF NEW YORK
FEB 3 1965
CONSERVATION
RECEIVED

Casings:

Diameter	16 in.	12 in.	in.	in.
Length	196 ft.	43 ft.	ft.	ft.

Sealing

Casings removed

Screens: Make Cook Openings 10" I. D. Wire Wrapped

Diameter	12 in.	in.	in.	in.
Length	68 ft.	ft.	ft.	ft.

Depth to top from top of casing 243' 3" ft.

Pumping Test: Date 5/25/64 Test or permanent pump? Test

Duration of Test days 8 hours

Maximum Discharge 1515 gallons per minute

Static level prior to test 109 ft. in. below top of casing

Level during Max. Pumping 155 ft. in. below top of casing

Maximum Drawdown 46 ft.

Approx. time of return to normal level after cessation of pumping hours 30 minutes

BLUEPRINT ATTACHED

Pump Installed: NONE

Type Ewt Make Peerless-Finkbeiner Model No.

Motive power Elec Make U H.P. 100

Capacity 920 g.p.m. against } ft. of discharge head

No. bowls or stages 6 } 373 ft. of total head

Drop Line:		Suction Line:	
Diameter	10 in.	10 in.	
Length	149± ft.	10 ft.	

Use of water Public Supply

Work started 4/20/64 Completed 5/25/64

Date 2/2/65 Driller Layne-New York Co., Inc.

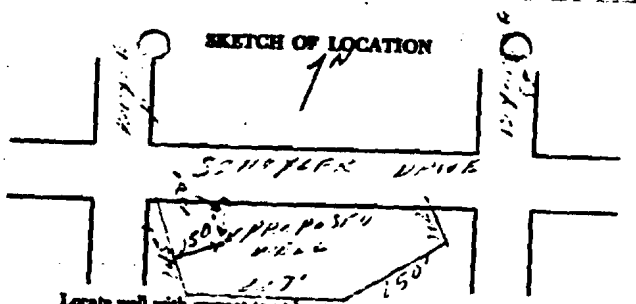
License No. 5

Note: Show log of well—materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

6 of 26

SKETCH OF LOCATION

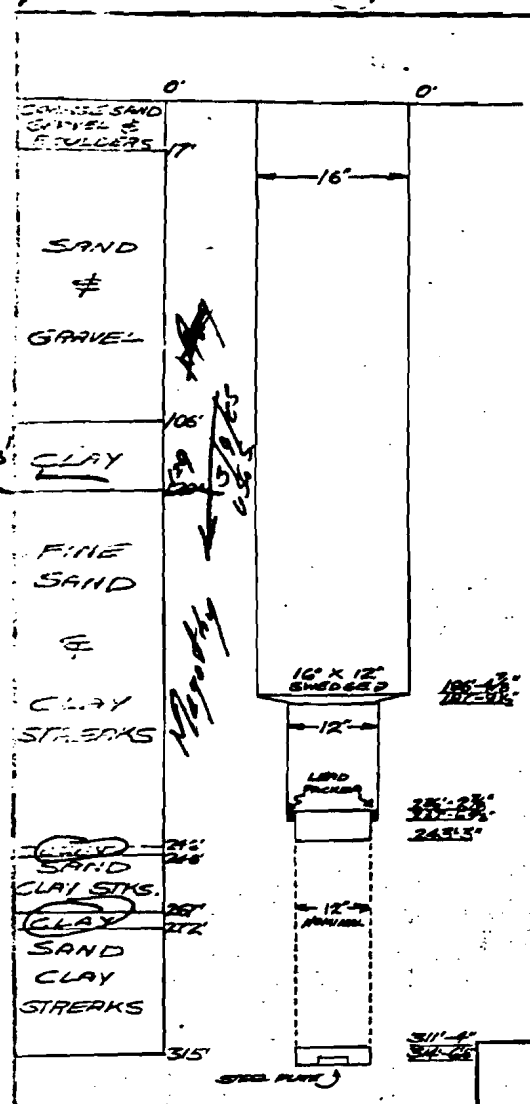


Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

7 of 26

Schuyler St, # 22362



Material

Pit: 196' of 16" STEEL PIPE WELDED
95' of 12" STEEL PIPE T&C.

Screen: 68' of 12" NOMINAL (10"-I.D.) COOK TYPE W.I. w/ 70-SLOT SHEROUR

Plug: 3'-2½" STEEL PLATE WELDED

Pump

Type	Shop No.
Setting	Size
Suction	Stages
Basket	Impellers
Discharge	Head
Tubing	Press B. P.
Shafting	Air Line

Motor

Make	Type
Volts	Cycle
Phase	Amp.
H. P.	R. P. M.
Frame	Form
Model	Serial
Upper Brg.	Lower Brg.

Well

Started 4-20-64	Static Level 109'
First Test 5-25-64	Production 1515
Final Test	Pumping Level 155'
Accepted	Guarantee
Clear Depth	Press.
Method REVERSE	

Driller: C. BOYER & E. BAKER

Installer:

LAYNE-NEW YORK CO., INC. LINDEN, N. J.
WATER SUPPLY CONTRACTORS

SUFFOLK COUNTY WATER CORP.
COMMACK, L.I., N.Y.

DRAWN BY ACM. APPROVED BY

LAYNE WELL NO. 70 DRAWING NO.

S54-CC52

8626

ORIGINAL—TO COMMISSION

County Suffolk

Well No. S-58708 (as preliminary report)

State of New York
Department of Conservation
Division of Water Resources

LOG

Ground Surf., El.....ft. above se

^
.....ft.
v

Top of Well

COMPLETION REPORT—LONG ISLAND WELL

Owner Suffolk County Water Authority

Address Road Road, Ridge

Location of well Autumn Drive, Smithtown

SEE ATTACHED

Depth of well below surface 423' feet

Depth to ground water from surface 76'-10" (8/5/77) 81½' feet

CASINGS:

Diameter	20" in.	in.	in.	in.
Length	315' ft.	ft.	ft.	ft.
Sealing	50' cement grout			
Casings removed	None			

SCREENS: Make Cook 316 SS Openings #50 slot

Diameter	10" in.	10 in.	in.	in.
Length	60' ft.	ft.	ft.	ft.
Depth to top from top of casing	328-9"	10" Blank Section 370-400'		ft.

PUMPING TEST: Date 9/23/76 Test or permanent pump? Test

Duration of Test days 8 hours

Maximum Discharge 1300+ gallons per minute

Static level prior to test 81' ft. 4½" in. below top of casing

Level during Max. Pumping 107' ft. in. below top of casing

Maximum Drawdown 26' ft.

Approx. time of return to normal level after cessation of pumping hours minutes

PUMP INSTALLED:

Type DNT Make Byron Jayne Others Model No. TLC

Motive power Elec. Make U.S. H.P. 125

Capacity 1300 g.p.m. against 285 TDH ft. of discharge head

No. bowls or stages 6 ft. of total head

DROP LINE:		SUCTION LINE:	
Diameter	10 in.	10	in.
Length	130 ft.	9'-11"	ft.

Method of Drilling (Rotary, cable tool, etc.) Reverse Rotary

Use of Water Public Supply

Work started 6/22/76 Completed 9/29/76 8/5/77

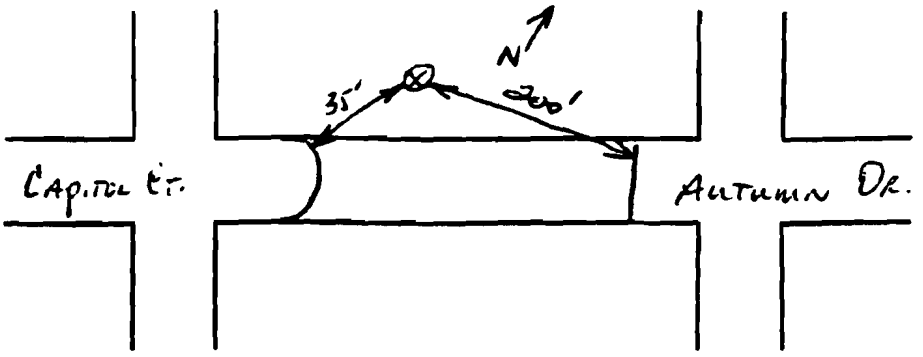
Date 10/22/76 8/25/77 Driller Strata Well Corp Layne-Newyork Co, Inc

License No. 1000 5

NOTE: Show log of well—materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

SKETCH OF LOCATION



Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

WELL CORP.

2 Beech St.
ISLIP, N. Y. 11751
Phone 516 581-7100

WELL LOG

JOB NAME SCWA - AUTUMN DRIVE #2

LOCATION NORTH END of CAPITOL COURT, HAUPPAUGE W.R.C. WELL NO. S-58708

REFERENCE PT. GRADE S. W. L. 81'-6"

DATE STARTED 6/22/76 COMPLETED 9/29/76 DRILLER BANKER, BUTLER

SAMPLE No.	SAMPLE Actual Depth	Lgth	Blows	Formation	(Feet) Thickness	(Feet) Depth	Remarks
				TOP SOIL & LOAM	2	2	
				FINE-MED CASE BROWN SAND & GRAVEL	33	35	
				CASE BR. SAND & GRAVEL W/ LARGE STONES	75	110	
				CASE BR SAND, GRAVEL, STONES, RED CLAY	3	113	
				CASE GR & RED SAND & GRAVEL, STKS CLAY	12	125	
				MED-CASE RED & BROWN SAND	10	135	
				SOLID LIGHT GREY CLAY	3	138	
				MED. GREY SAND, IRON OXIDE, STKS of CLAY	9	147	
				MED TO FI. GREY SAND, STKS MULTI-COLORED CLAY	4	151	
				MULTI-COL SOFT CLAY, STKS FINE SAND, IRON OXIDE	1	152	
				FI TO MED REDDISH SAND W/MULTI-COL. CLAY STKS	5	157	
				CASE GREY SAND W/ GREY CLAY	4	161	
				SOLID GREY CLAY	4	165	
				SOLID BLACK CLAY	3	168	
				MULTI-COLORED SOLID CLAY	6	174	
				CASE GREY SAND W/ GREY CLAY	5	179	
				MED-CASE GREY SAND, STKS of CLAY, IRON OXIDE	9	188	
				MULTI-COLORED SANDY CLAY	2	190	
				SOLID DARK CLAY	19	209	HARD
				SANDY MULTI-COLORED CLAY	7	216	
				SOLID DARK CLAY	8	224	FAIR
				LENS of FINE GREY SAND & SOLID GREY CLAY	2	226	
				FINE GREY SAND, STKS of GREY CLAY	11	237	
				MULTI-COLORED CLAY W/ STKS of FI-MED GR. SAND	22	259	
				FI. GREY SAND, STKS of MULTI-COLORED CLAY	16	275	
				FI/MED BROWN SAND/ STKS MULTI-COLORED CLAY	20	295	
				FINE GREY SAND, MULTI-COLORED CLAY	38	333	328
				FINE GREY SAND, STKS of CLAY, HARD PAN	17	350	338
				CONTINUED			

STRATA WELL CORP.

11926

2 Beech St.
ISLIP, N. Y. 11751
Phone 516 581-7100

WELL LOG

NAME _____

LOCATION _____ W.R.C. WELL NO. _____

ERENCE PT. _____ S. W. L. _____

TE STARTED _____ COMPLETED _____ DRILLER _____

SAMPLE No.	SAMPLE Actual Depth	Lgth	Blows	Formation	Thickness	Depth	Remarks
				F/MED GREY & MULTI-COLORED CLAYEY SAND	73	423	
				SOLID LIGHT & DARK GREY CLAY	3	426	
				F/MED SAND W/ STKS of CLAY	27	453	
				SILTY SANDY GREY CLAY			
				HOLE TERMINATED AT 453'			

12 of 26

County Suffolk

ORIGINAL—TO COMMISSION
WSA-5492

State of New York
Department of Conservation
Division of Water Resources

Well No. S-32412
(on preliminary report)

LOG

Ground Surf., El. _____ ft. above sea

^
_____ ft.
v
Top of Well

COMPLETION REPORT—LONG ISLAND WELL

See copy of well log attached.

Owner Brentwood Water District - Town of Islip

Address Town Hall, Islip, New York

Location of well WELL #2-3 - Morris/Carroll Strs. Brentwood

Dept of well below surface 755'-4"

Depth to ground water from surface 71

STATE OF NEW YORK
WATER RES...
JUN 17 1968
...SION
...EIVED

Casings:

Diameter	20 in.	in.	in.	in.
Length	675 ft.	ft.	ft.	ft.

Sealing

Casings removed

Screens: Make Johnson/Everdur Openings #60

Diameter	12 in.	in.	in.	in.
Length	70 ft.	ft.	ft.	ft.

Depth to top from top of casing ft.

Pumping Test: Date 5/27/68 Test or permanent pump? Test

Duration of Test 8 days hours

Maximum Discharge 1404 gallons per minute

Static level prior to test 71 ft. in. below top of casing

Level during Max. Pumping 109 ft. in. below top of casing

Maximum Drawdown 38 ft.

Approx. time of return to normal level after cessation of pumping hours minutes

Pump Installed: By Others

Type Turb. Make Peerless Model No. 14LC Pump data

Motive power Elec. Make U.S. H.P. 150 Subm. Turb

Capacity 1400 g.p.m. against 210 ft. of discharge head

No. bowls or stages 4 340 ft. of total head 1 of 7 10/30/69

Drop Line: Suction Line:

Diameter in. in.

Length ft. ft.

Use of water Municipal

Project Work started 2/6/68 11-5 Completed 5/29/68 12-9

Date 14 June 1968 12-23-9 Driller MATHIES WELL & PUMP CO., INC. Lowe...NY

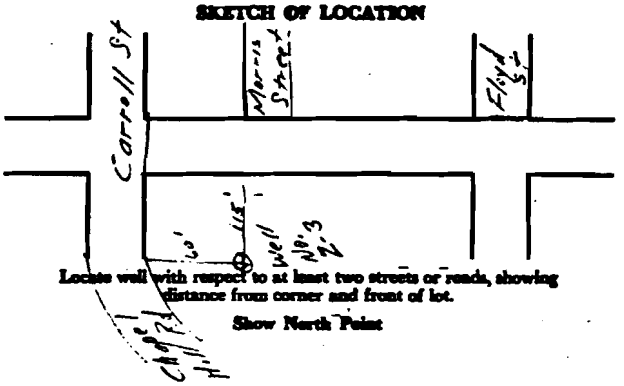
Water Temperature - 53° License No. 153 & 5

Note: Show log of well—materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

13626

SKETCH OF LOCATION



Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

USGS - 6/20/68
Hans N. Jensen

June 20, 1968

Well S-32412

Screened in Magothy.

T. D. - 755 ft below lsd.

Elev. - 110 ± feet above msl.

Yield - 1404 gpm dd: 38 ft.

Sp. Cap. - 37 gpm/ft dd.

Correlation (from GW-18, cores & drillers log of S-32412T, E & Gamma-logs S-24772). S-24772

U. P. 0 to 197 ft below lsd.

Magothy 197 to 858 ft below lsd.

Raritan 858-901 ft below lsd.

Correlation-Fair. S-32412T total depth 901 feet, but no E-log available. Lloyd should be about 1100 ft ± below lsd.

14,926

SUPPLY WELL LOG

MATHIES WELL & PUMP CO., INC.
LINDENHURST, N.Y. 11757

WRC #S-32412

Job Well #3 - Brentwood Water District Address Morris Street, Brentwood, N.Y.

Date Started April 6, 1968 Completed May 4, 1968 Driller D. Booth, D. Cicogna

Diameter 20" In. Measured from Grade ☒ Yes ☐ No

Depth 755' Ft. In. Above Ft. In. Below Ft. In.

Static Level 71' Ft. 0 In. Elevation Ft.

	STRATUM		TEMPERATURE	
	THICKNESS	DEPTH	SAND	WATER
Loam	3'	3'		
Coarse Brown Sand, Gravel & Boulders	15'	18'		
Med. to Coarse Br. Sand, Grits and Gravel	139'	157'		
Brown Clay	2'	159'		
Coarse Brown Sand (Streaks of Gray Clay)	1'	160'		
Coarse Brown Sand, Grits and Gravel	5'	165'		
Med. to Coarse Brown Sand and Gravel	14'	179'		
Gray Clay (Streaks of Fine Gray Sand)	8'	187'	UG	
Gray Clay mixed with Coarse Gravel	10'	197'	↑	
Gray Clay and Hard Pan ~50'	20'	217'	↓ Main?	
Gray Clay (Streaks of Fine Gray Sand)	2'	219'		
Dark Gray Clay (Solid)	12'	231'		
Multi Colored Clay, Pyrite & Hard Pan	3'	234'		
Fine Brown Sand (Streaks of Multi Colored Clay)	14'	248'		
Multi Colored Clay Strips of Fine Brown Sand	5'	253'		
Fine Brown Sand (Streaks of Multi Colored Clay)	7'	260'		
Fine Brown Sand, Bits of Brown Clay & Hard Pan	11'	271'		
Fine Brown Sand (Streaks of Brown Clay)	13'	284'		
Fine Gray Sand (Streaks of Gray Clay)	69'	353'		
Fine Brown Sand (Streaks of Brown Clay)	96'	449'		
Gray Clay (Solid)	4'	453'		
Fine Gray Sand (Streaks of Gray Clay)	12'	465'		
(Solid) Gray Clay	11'	476'		
Gray Clay (Streaks of Fine Gray Sand) ~50'	8'	484'		
Gray Clay (Solid) Hard	31'	515'		
Fine Gray Sand (Streaks of Gray Clay)	3'	518'		

WRC #S-32412

SUPPLY WELL LOG

MATHIES WELL & PUMP CO., INC.
LINDENHURST, N. Y. 11757

Job Well #3 - Brentwood Water District Address Morris Street, Brentwood, N.Y.

Date Started April 6, 1968 Completed May 4, 1968 Driller D. Booth D. Cicogna

Diameter 20" In.

Measured from Grade ☒ Yes ☐ No

Depth 755' Ft. In. Above Ft. In. Below Ft. In.

Static Level 71' Ft. 0 In. Elevation Ft.

	STRATUM		TEMPERATURE	
	THICKNESS	DEPTH	SAND	WATER
Med. Gray Sand (Streaks of Gray Clay & Lignite)	2'	520'		
Gray Clay	3'	523'		
Med. Br. Sand (Streaks of Gray Clay & Pyrite)	47'	570'		
Med. Br. Sand (Streaks of White Caly & Hardpan)	109'	679'		
Fine to Med. to Coarse Gray Sand	15'	694'		
Med. to Coarse Gray Sand (Small Streaks of white clay)	7'	701'		
Med. to Coarse Gravel and Coarse Brown Sand	11'	712'		
Fine to Med. Br. Sand, Gravel (Bits of White Clay)	19'	731'		
Fi..Med. to Coarse Br. Sand (Small Streak of White clay)	7'	738'		
Fi.to Med. Br.Sd., Lignite, Gravel (Small Streaks of White Clay)	14'	752'		
Fi. to Med. Br. Sand(Large Streaks of Br. & White Clay)				

1626

ORIGINAL—TO COMMISSION

County Suffolk

WSA-5373

State of New York
Department of Conservation
Division of Water Resources

Well No. S-31104
(see preliminary report)

LOG

Ground Surf., Elev. 110 ft. above sea

^ 0 ft.
v
Top of Well

COMPLETION REPORT—LONG ISLAND WELL

Owner SUFFOLK COUNTY WATER AUTHORITY

Address OAKDALE NEW YORK.

Location of well EMTAY BLVD. BRENTWOOD N.Y

Dept of well below surface 658 feet

Depth to ground water from surface 62 feet

CASINGS:

Diameter	16 in.	12 in.	12" in.	(BLANK) in.
Length	256 ft.	355 ft.	From 655-658	ft.

Sealing CLAY BACKFILL

Casings removed NONE

SCREENS: Make COOK Openings .070

Diameter	10 I.D. in.	in.	in.	in.
Length	63 ft.	ft.	ft.	ft.

Depth to top from top of casing 592' (TOP SLOT) ft.

PUMPING TEST: Date 9/29/67 Test or permanent pump? TEST

Duration of Test days 8 hours

Maximum Discharge 1500 gallons per minute

Static level prior to test 62 ft. in. below top of casing

Level during Max. Pumping 98 ft. in. below top of casing

Maximum Drawdown 36 ft.

Approx. time of return to normal level after cessation of pumping hours 10 minutes

STATE OF NEW YORK
WATER RESOURCES
OCT 5 1967
COMMISSION
RECEIVED

PUMP INSTALLED: BY OWNER

Type Make Model No.

Motive power Make H.P.

Capacity g.p.m. against } ft. of discharge head

No. bowls or stages } ft. of total head

DROP LINE: BY OWNER. SUCTION LINE:

Diameter in. in.

Length ft. ft.

Use of water MUNICIPAL SUPPLY

Work started July 26-67 Completed Oct 4-1967

Date Oct 4-67 Driller Water Well Corp.

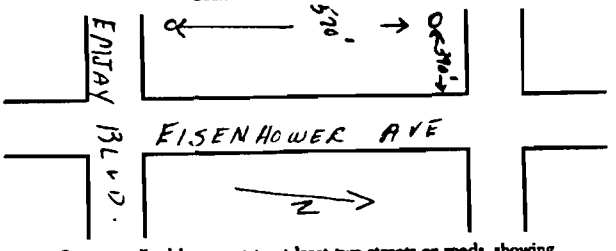
License No. 1022

NOTE: Show log of well—materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

SEE ATTACHED LOG

SKETCH OF LOCATION



Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

Well S-31,104

Screened in Basal Magothy

TD - 658 ft. below lsd.

Elev. + 105 ft ± above msl.

Yield - 1500 gpm dd: 36 ft.

Sp. Cap. - 41 gpm/ft of dd.

Correlation (from GW-18 Bull and driller's log)

U.P. 0 to 152 ft. below lsd.

Magothy 152 ft. " ft. " "

Basal Magothy 585 to 635 ft. (bottom of described log.).

(Raritan clay should be at 880± ft below lsd).

(Correlation fairly good, but Basal Magothy seems too thick - would be about 300 ft thick if above correlation is correct.)

USGS McClymonds 10/12/67

STRATA WELL CORP.

WELL LOG

BOX "N", DEER PARK, N.Y. 11729
516 MO 7-3700

NAME FINAY BLVD SCWA WELL # 2

LOCATION _____ W.R.C. WELL NO. S-31104

REFERENCE PT. + 11C MSL S. W. L. 62

STARTED July 26-67 COMPLETED Oct 4-1967 DRILLER Hyatt

SAMPLE Core No.	SAMPLE Actual Depth	Lgth	Blows	Formation	Thickness	Depth	Remarks
				SDY CLAY & TOP SOIL	3	3	
				CSE BR SD, GRAVEL & STONES	75	78	↑UPG
				CSE BR SD & GRAVEL	74	152	
				BR & GR CLAY	3	155	↓Mag ?
				CSE GR SD & STREAKS OF WHITE CLAY	5	163	
				BR SDY CLAY	2	165	
				BR CLAYEY SD & STREAKS OF BR CLAY	15	180	
				CSE BR SD	6	186	
				FI GR SD	20	208	
				MED BR SD	43	251	
				MULTI COL CLAY W/ STREAKS OF SD	2	253	
				FI GR SD, STREAKS OF MULTI COL CLAY	33	286	
				MED GR SD, STREAKS OF CLAY & H.P	13	299	
				BR CLAY	3	302	
				GR SILTY CLAY & STREAKS OF V.F. GR SD	13	315	
				FI GR CLAYEY SD	5	320	
				GR CLAY, GR SD & MULTI COL CLAY	8	328	
				FI GR SD	2	330	
				MULTI COL SILTY CLAY	9	339	
				FI BR SD	12	351	
				MULTI COL SILTY CLAY	4	355	
				DK GR CLAY	24	379	
				LNS OF GR CLAY, GR SD & PYRITE	3	382	
				FI BR SD	22	404	
				BR SILTY CLAY, STREAKS OF H.P.	2	406	
				GR CLAY, PYRITE & LIG, STREAKS OF GR SD	15	421	
				FI TO MED GR SD	7	431	
				MED GR SD STREAKS OF CLAY	7	438	
				GR CLAY	4	442	

STRATA WELL CORP.

WELL LOG

BOX "N", DEER PARK, N.Y. 11729
516 MO 7-3700

JOB NAME _____

LOCATION _____ W.R.C. WELL NO. _____

REFERENCE PT. _____ S. W. L. _____

STARTED _____ COMPLETED _____ DRILLER _____

SAMPLE Number or Type	Actual Depth	Lgth	Blows	Formation	Thickness	Depth	Remarks
				FI GR SD STREAKS OF GR CLAY	33	478	
				GR CLAY + STREAKS OF PYRITE	31	509	
				LYRS LT BR CLAY, FI GR SD + PYRITE	9	518	
				MED GR SD	27	545	
				WHITE CLAY	2	547	
				MED GR SD STREAKS OF CLAY	11	558	
				GR CLAY + PYRITE	7	565	
				CSE BR SD + WHITE CLAY	7	572	
				GR CLAY + LT GR SILTY CLAY	4	576	
				FI GR CLAYEY SD	3	579	
				LT GR SILTY CLAY	4	583	
				FI GR CLAYEY SD	2	585	592
				MED GR SD, FI GRAVEL + STREAKS OF WHITE SDY CLAY	17	602	
				CSE GR SD + SDY CLAY	1	603	Screen
				MED BR SD	32	635	
				MED GR SD, SOME SMALL GRAVEL + STREAKS OF WHITE CLAY			655

Considerable clay below 150' bgs 200

Cont. #1098 T-#2 (Not Layne)
LI-20-68

ORIGINAL—TO COMMISSION

County Suffolk WSA-5438 Well No. S-31624 (to preliminary report)

State of New York
Department of Conservation
Division of Water Resources

LOG
Ground Surf., El. ft. above sea

^
ft.
v
Top of Well

COMPLETION REPORT—LONG ISLAND WELL

Owner Suffolk County Water Authority

Address Sunrise Highway at Pond Rd., Oakdale, N. Y.

Location of well S/side Commercial Blvd., N/side Bedford Ave., Brentwood, NY

Dept of well below surface 440 approx feet

Depth to ground water from surface 75 feet

CASINGS: NOT A LAYNE WELL

Diameter	in.	in.	in.	in.
Length	ft.	ft.	ft.	ft.

Sealing

Casings removed

SCREENS: Make Openings

Diameter	in.	in.	in.	in.
Length	ft.	ft.	ft.	ft.

Depth to top from top of casing ft.

PUMPING TEST: Date 10/24/68 Test or permanent pump? Permanent

Duration of Test days hours

Maximum Discharge gallons per minute

Static level prior to test ft. in. below top of casing

Level during Max. Pumping ft. in. below top of casing

Maximum Drawdown ft.

Approx. time of return to normal level after cessation of pumping hours minutes

See Attached Record of Test

PUMP INSTALLED:

Type WGC Make Layne Model No. 59791

Motive power Electric Make G.E. H.P 100

Capacity 1200 g.p.m. against 257 ft. of discharge head

No. bowls or stages 5 ft. of total head

DROP LINE:		SUCTION LINE:	
Diameter	10 in.	10	in.
Length	~~XXX~~ 119'8" ft.	10	ft.

Use of water Public supply

Work started 4/11/68 Completed 6/25/68

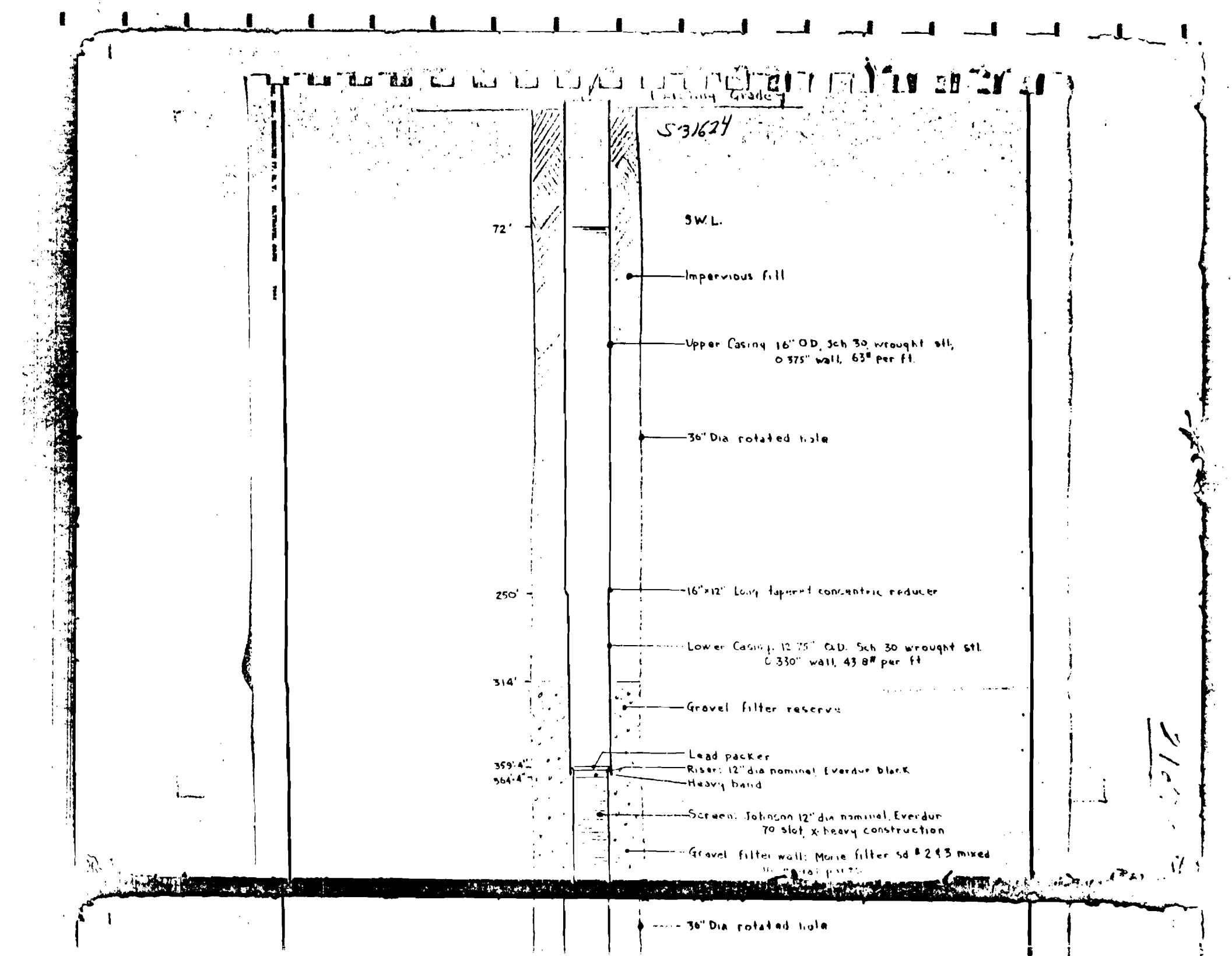
Date ~~XXXXXXXXX~~ 10/29/68 Driller Layne-New York Co., Inc.

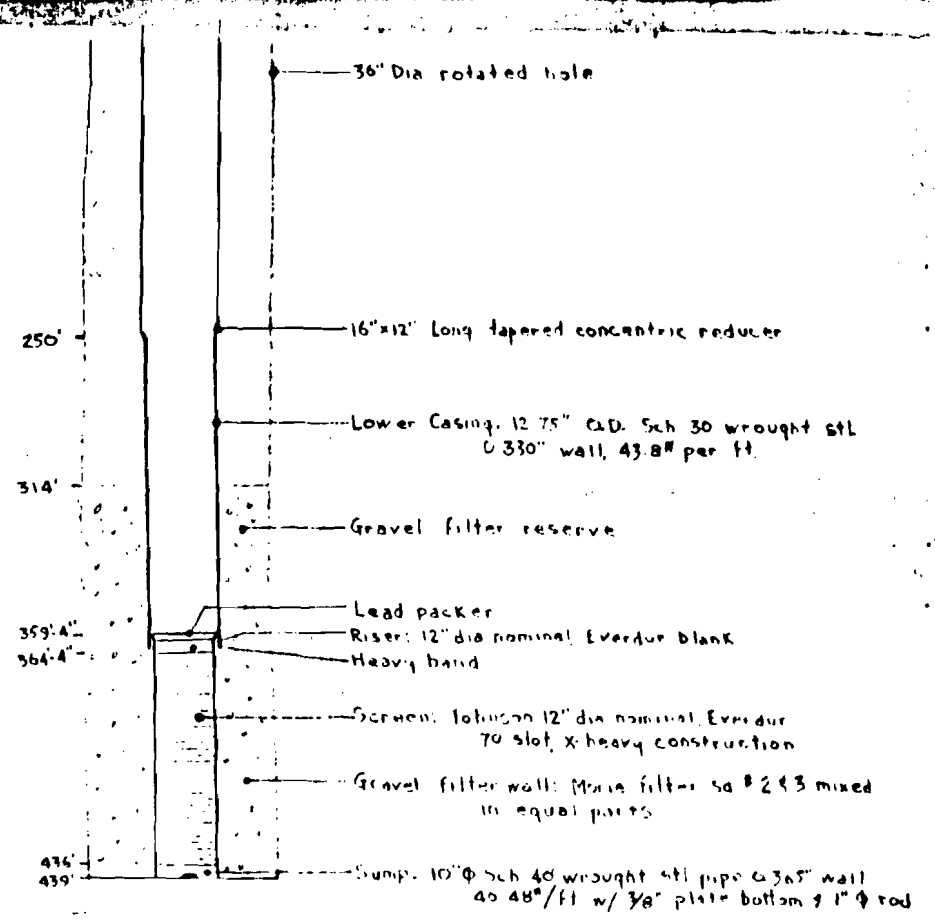
License No. 5

STATE OF NEW YORK
OCT 29 1968 ✓

NOTE: Show log of well—materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.


Existing Grade
S-31624
72'
S.W.L.
Impervious fill
Upper Casing 16" O.D. Sch 30 wrought stl.
0.375" wall, 63# per ft.
36" Dia rotated hole
250'
16"x12" Long tapered concentric reducer
Lower Casing 12.75" O.D. Sch 30 wrought stl.
0.330" wall, 43.8# per ft
314'
Gravel filter reserve
Lead packer
359'-4"
364'-4"
Riser: 12" dia nominal Everdur Black
Heavy band
Screen: Johnson 12" dia nominal Everdur
70 slot x heavy construction
Gravel filter wall: Morie filter sd # 2 & 3 mixed
36" Dia rotated hole



NO SCALE

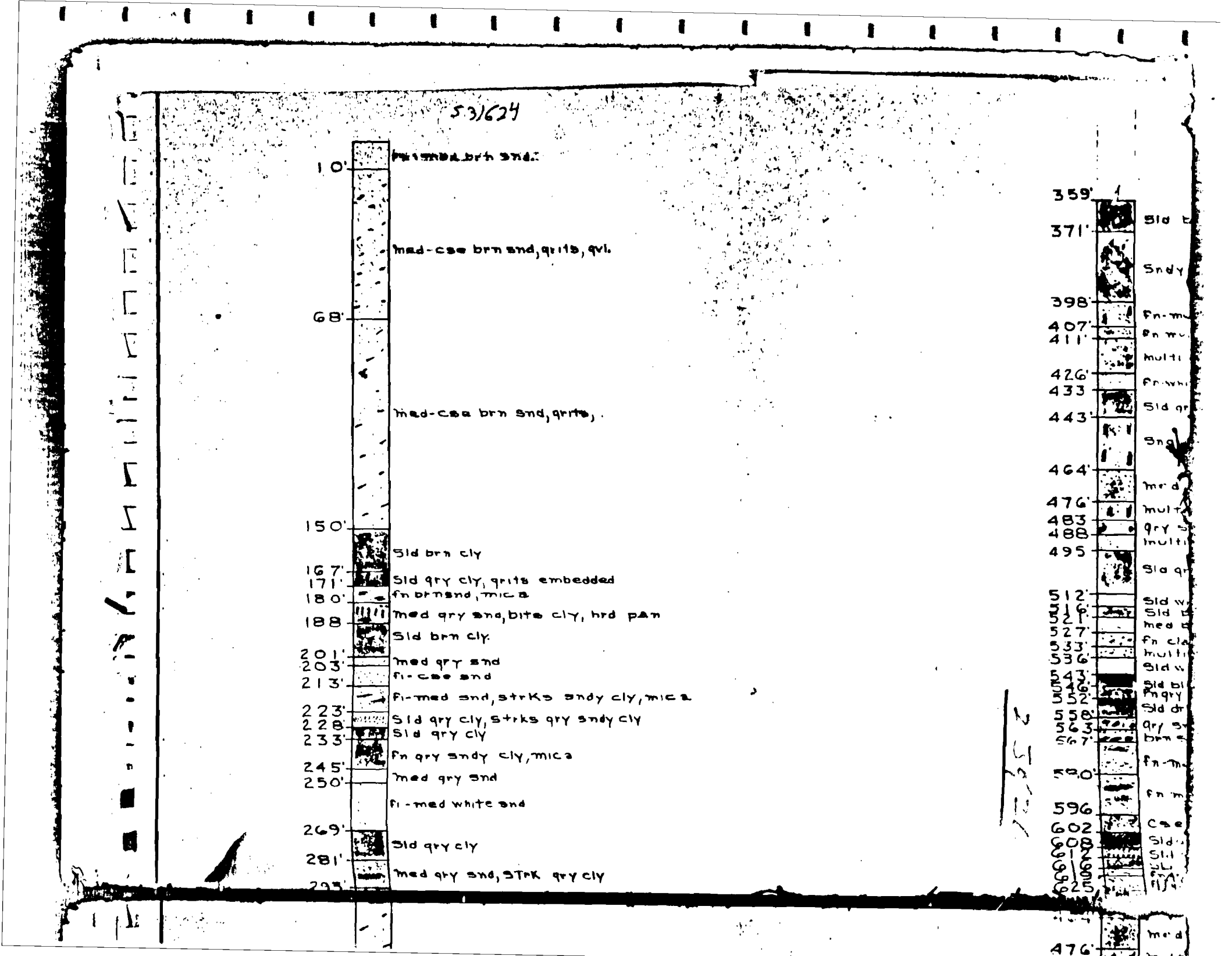
SUFFOLK COUNTY WATER AUTH
COMERCIAL BLVD BRENTWOOD

PROPOSED WELL DESIGN

C. W. LAUMAN & CO., INC.
80 CHURCH ST. NEW YORK 7, N. Y.
BETHPAGE LONG ISLAND, N. Y.

SCALE: NONE | DR. A.K. | CH. | DATE 11-2 | DWG. 9-6

FILE NO.


53624
10'
68'
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201'
203'
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med-cse brn snd, grits,
sld brn cly
sld gry cly, grits embedded
fn brn snd, mica
med gry snd, bits cly, hrd pan
sld brn cly.
med gry snd
fi-cse snd
fi-med snd, strks sndy cly, mica
sld gry cly, strks gry sndy cly
sld gry cly
fn gry sndy cly, mica
med gry snd
fi-med white snd
sld gry cly
med gry snd, strk gry cly
359'
371'
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443'
464'
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483
488
495
512'
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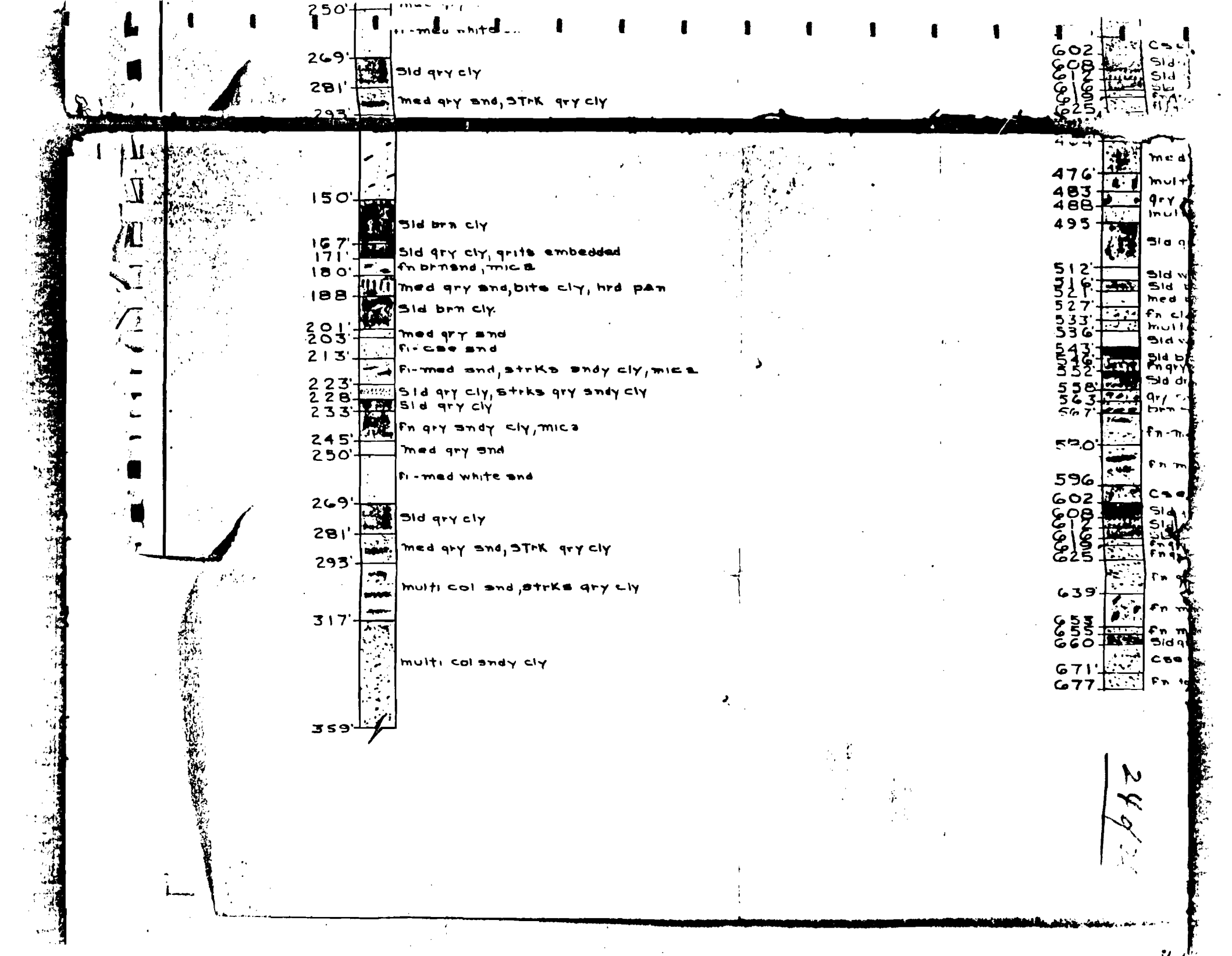
521'
527'
533'
536'
542'
546'
552'
558'
563'
567'
580'
596
602
608
669
695
725
476'


250'
fi-med white...
269'
Sld gry cly
281'
med gry snd, STRK gry cly
293'
150'
Sld brn cly
167'
171'
Sld gry cly, grits embedded
180'
fn brn snd, mica
188
med gry snd, bits cly, hrd pan
Sld brn cly.
201'
203'
med gry snd
fi-coe snd
213'
Fi-med snd, strks sndy cly, mica
223'
228'
Sld gry cly, strks gry sndy cly
233'
Sld gry cly
Fn gry sndy cly, mica
245'
250'
med gry snd
fi-med white snd
269'
Sld gry cly
281'
med gry snd, STRK gry cly
293'
multi col snd, strks gry cly
317'
multi col sndy cly
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602
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671'
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483
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512'
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527'
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543'
552
558'
563'
596
602
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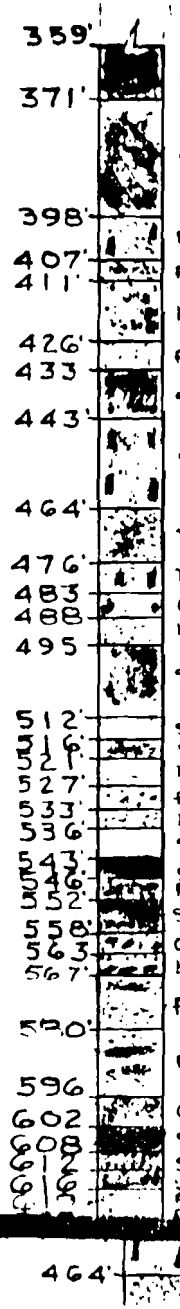
639
671'
677
2



Sld blk cly pyrite

Sndy multi col cly pyrite

Fn-med Cse Snd, mica

Fn multi col clayey Snd

multi col sndy cly

Fn-white snd

Sld gry cly

Sndy multi col cly - mica

med gry snd, sndy cly

multi col snd sndy cly, mica

gry snd, sndy cly mica

multi col snd - sndy cly

Sld gry cly

Sld white cly

Sld brn cly

med brn snd

fn clayey gry snd

multi col sndy cly

Sld white cly

Sld blk cly

Fn gry Sndy cly, mica, sld cly

Sld drk cly

gry sndy cly mica

brn sndy cly, strks snd - mica

fn-med snd, sndy cly

fn med snd strks sld gry cly

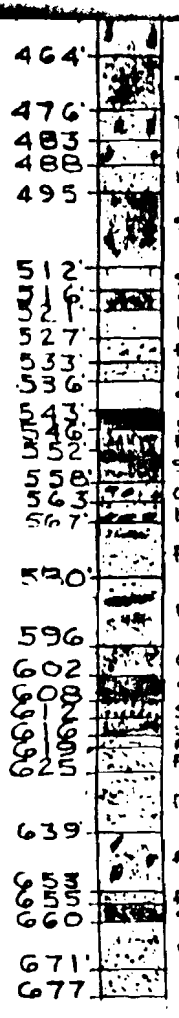
Cse sdy cly - strks

Sld gry cly

Sld gry cly - strks Cse snd

Sld gry cly strks sld gry cly

med gry snd, sndy cly



464'	med gry snd, sndy cly
476'	multi col snd, sndy cly, mica
483	gry snd, sndy cly mica
488	multi col snd - sndy cly
495	sld gry cly
512'	sld white cly
516	sld brn cly
521	med brn snd
527'	fn clayey gry snd
533'	multi col sndy cly
536'	sld wh tc cly
543'	sld blk cly
546	fn gry sndy cly, mica, sld cly
552	sld drk cly
558'	gry sndy cly mica
563	brn sndy cly, strks snd mica
567'	fn-med snd, sndy cly
580'	fn med snd strks sld gry cly
596	Cse sdy cly, strks cse snd
602	Sld gry cly
608	Sld gry cly - strks cse snd
612	Sld gry cly strks sld gry cly
616	fn gry snd, strks of sld gry cly
625	fn gry snd
639'	fn gry snd - strk sld gry cly
655	fn med snd - sndy cly mica
655	fn med snd
660	Sld gry cly - Strks med cse gry snd
671'	cse gry snd - strk sld gry cly
677	fn to cse snd, bits sld gry cly.

SUFFOLK COUNTY WATER AUTH.
COMERCIAL BLVD. BRENTWOOD

LOG OF TEST WELL

SCALE: 1" = 30'-0" DR. TJB CH. DATE 10-17-67

DWG. NO.

Hydrogeology of Suffolk County Long Island, NY

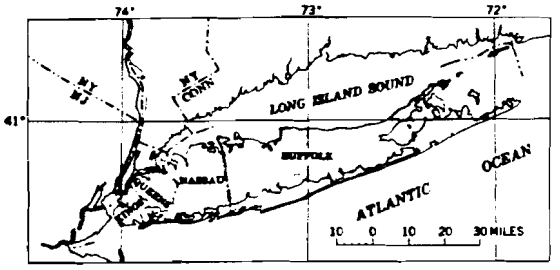
Appendix 1.3-3 1 of 1

Jensen & Soren, 1974

INTRODUCTION

WATER NEEDS OF SUFFOLK COUNTY

Water pumped from aquifers underlying Suffolk County (index map) is the sole source of water used for public supply, agriculture, and industry. The county's population grew from less than 200,000 in 1940 to 1.1 million in 1970. Most of the growth occurred after 1950. Ground-water pumpage increased from 40 mgd (million gallons per day) in 1950 to 155 mgd in 1970 (New York State Department of Environmental Conservation, written commun., June 1, 1971). The projected ground-water use for an anticipated population of 2 million in the county by 1990 is 300 mgd (New York State Conservation Department, 1970, p. 26–27).



INDEX MAP SHOWING LOCATION (SHADED) OF SUFFOLK COUNTY

PURPOSE AND SCOPE

The large and growing demand for ground water in Suffolk County has created a need for a detailed knowledge of the geometry and the hydrologic characteristics of the ground-water reservoir. Mapping of subsurface geology and hydraulic heads in the aquifers are important prerequisites to obtaining this information. Maps of the subsurface geologic units of Long Island were first shown in a report by Suter and others (1949, pls. VIII to XXI). But those maps were highly generalized, because there were few data on deep borings and wells in the county when the report was prepared. Since 1949, additional data from many deep borings and wells in the county have been collected.

In 1968, as part of a continuing cooperative program of water-resources studies with the Suffolk County Water Authority and Suffolk County Department of Environmental Control, the U.S. Geological Survey began an updating of the hydrogeologic and hydrologic maps of all the county. The basic data in Jensen and Soren (1971), the first product of the program, are the basis for the hydrologic maps in this report.

ACKNOWLEDGMENTS

The authors appreciate the cooperation of well-drilling companies, their employees, and the many officials of public and private water companies who furnished geologic and hydrologic data for use in this report.

GEOLOGIC AND HYDROGEOLOGIC UNITS

Pleistocene glacial drift generally mantles the county's surface. Pleistocene deposits overlie unconsolidated deposits of Late Cretaceous age. The Cretaceous strata lie on a peneplain that was developed on Precambrian(?) crystalline rocks.

Major landforms include ridges, valleys, and plains. These landforms are roughly oriented in belts parallel to the county's length. The northern and the central parts are traversed by irregular sandy and gravelly ridges of terminal moraine. The crest of the northern ridge ranges in height from 100 to 300 feet above sea level and the crest of the central ridge from 150 to 400 feet. The highest altitudes in the inter-ridge area range from 100 to 200 feet. Irregular plains and rolling hills, formed from sandy and gravelly ground moraine and outwash deposits of sand and gravel lie in the area between the ridges. An outwash plain slopes at a near-uniform gradient from the southern base of the central ridge, which is about 100 feet above sea level, southward to Great South Bay and the ocean. Along the north shore, steep bluffs as high as 100 feet and generally narrow sandy and gravelly beaches face Long Island Sound. The barrier-bar system at the southernmost side of the county is composed of sandy beach and dune deposits. The highest altitudes of the barrier bars generally range from 10 to 45 feet.

The ground-water reservoir system of Suffolk County is composed of hydrogeologic units that include lenses and layers of clay, silt, clayey and silty sand, sand, and gravel. A hydrogeologic unit consists of a geologic unit or a group of contiguous geologic units classified by hydraulic characteristics. These units include aquifers, which are principal water sources, and confining layers, which separate the aquifers. The aquifers are, from the land surface downward, the upper glacial aquifer, the Magothy aquifer, and the Lloyd aquifer. The major areal confining layers are, in descending order, the Gardiners Clay, the Monmouth greensand, and the Raritan clay. The base of the ground-water reservoir is the crystalline bedrock. Characteristics of the geologic and the hydrogeologic units are summarized in the table, and the following data of hydrologic significance are shown on the maps: base of ground-water reservoir, altitudes of aquifers, altitudes and limits of confining layers, and distribution of surficial deposits. The hydrogeologic sections show the vertical relations of the units to each other.

The sharp angular shapes of some of the contours reflect the fact that in places the contours are drawn on stratigraphic tops of the hydrogeologic units and in places the contours are drawn on erosional surfaces. The sharp angles result from the juncture of a stratigraphic top and an eroded surface.

Appendix 1.3-4
1 of 2

Hydrogeology of the Huntington-Smithtown area Suffolk County, New York

By E. R. LUBKE

CONTRIBUTIONS TO THE HYDROLOGY OF THE UNITED STATES

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1669-D

Prepared in cooperation with the Suffolk County Board of Supervisors, the Suffolk County Water Authority, and the New York Water Resources Commission

UNITED STATES GOVERNMENT PRINTING OFFICE. WASHINGTON : 1964

foot, and are commonly masked by fluctuations of larger amplitude. Cyclical fluctuations in pressure also result from ocean tides, particularly in wells screened in the intermediate and deep aquifers near Long Island Sound. For example, at well S2020 located on a promontory between Duck Island Harbor and Northport Bay and screened in the deep aquifer, water-level fluctuations caused by tidal loading have a daily amplitude of as much as 3 feet between high and low tide. Tidal changes in Lloyd and Cold Spring Harbors also influence the water levels of wells S9 and S4466, both of which are screened in the deep aquifer.

RECHARGE

All the fresh water in the ground-water reservoir of the project area, as well as the rest of Long Island, is derived from precipitation. However, only a part of the total precipitation that falls reaches the water table. The amount which percolates down to the water table and recharges the reservoir is the residual of the total precipitation not returned to the atmosphere by evapotranspiration or lost to the sea by overland runoff. Owing to the highly pervious nature of the soil and the substrata and to the gentle slopes of the land surface, infiltration is relatively high. Of an average annual precipitation on the project area of 49 inches, 21 inches, or about 43 percent, is estimated to reach the water table.

The catchment surface on which recharge presumably takes place includes most of the land area of the project, or about 146 square miles. This catchment includes Lloyd and Eatons Necks but does not include an additional 7 square miles of high water table and tidal marshes which fringe the northern shoreline. A considerable part of the catchment area, however, is made impervious by buildings and pavements, but much of the runoff from such covered areas is recovered in storm water disposal (recharge) basins or large-diameter diffusion wells. The natural recharge from precipitation on the project area, exclusive of the high water-table areas, the tidal marshes and of Lloyd and Eatons Necks, is estimated to average about 140 mgd (million gallons per day). In addition, the recharge on Lloyd Neck is estimated to average about 5 mgd and on Eatons Neck about 2 mgd. The total for the project area then would be about 147 mgd. The rate of natural recharge varies greatly from season to season and from year to year depending on such factors as evapotranspiration, air and soil temperatures, soil-moisture conditions, and the nature and seasonal distribution of precipitation. During dry years, recharge is substantially less than average, and conversely in wet years it is more.

Natural replenishment of the intermediate and deep aquifers takes place entirely by downward movement of water from the shallow aquifer through discontinuities in clayey and silty beds and probably directly by slow movement through these aquicludes. Recharge of the intermediate aquifer probably occurs chiefly in the areas where the water table lies above an altitude of about 60 feet (pl. 5). The deep aquifer, in turn, receives recharge by downward leakage from the intermediate aquifer through an extensive aquiclude formed chiefly by the clay member of the Raritan formation. This recharge, which probably proceeds at a very slow rate, occurs chiefly where the piezometric surface of the intermediate aquifer lies above an altitude of about 60 feet (fig. 6).

Artificial recharge of the ground-water reservoir is effected by means of cesspools and septic tanks, which ultimately receive most of the water pumped from public-supply and domestic wells. For example, during 1957 an estimated average of about 9.8 mgd was returned to the ground by this means in the project area, and at the same time about 2.5 mgd was discharged directly into Long Island Sound through sewage disposal systems at the villages of Huntington and Northport and at Kings Park State Hospital. Also, as required by law, an average of about 0.7 mgd of water pumped from privately owned wells for industrial and cooling purposes during 1957 was returned to the ground through sumps and diffusion wells.

MOVEMENT

In the ground-water reservoir, water moves vertically and laterally from points of high head to points of low head along flow lines whose direction is normal to the contour lines shown for the water table (pl. 5) and the piezometric surfaces (figs. 6 and 9). Water in the shallow aquifer flows away from the two major highs on the main watertable divide of Long Island, represented by areas above the 70-foot watertable contour in south-central Huntington and eastern Smithtown (pl. 5). The general directions of ground-water flow are north toward the Long Island Sound, south toward the Atlantic Ocean, and also a pronounced lateral movement toward the trough in the valley of the Nissequogue River. Local directions of flow, which may deviate substantially from these general directions, are indicated by arrows on the water-table contours (pl. 5). Also, the peninsulas of Lloyd, Eatons, and Little Necks each contain a ground-water mound in the shallow aquifer and from the crests of these mounds the shallow ground water moves laterally outward to bounding salt-water bodies. Within the area circumscribed by the 60-foot water-table contour (pl. 5), a downward head differential generally exists between the shallow and intermediate aquifers. Conse-

WORKSHEET: COMMUNITY WATER SUPPLIES WITHIN A 3-mi RADIUS OF THE SITE-EMR Circuits, INC

Community Water Supply	Water District	Well Field	Well	Depth (ft)	Aquifer
SCWA	Smithtown	Cornell Dr	1S-11891	119	Glacial
			2S-63996	654	Magothy
	Smithtown	Walter Ct	1S-4184	162	Glacial
			2S-53360	672	Magothy
	Huntington	Schuyler	1S-22362	314	Glacial
			2S-23715	313	Glacial
	Smithtown	Capital Ct.	1S-20361	312	Magothy
			2S-58708	424	Magothy
	Smithtown	Wicks Rd	1S-22471	375	Magothy
			2S-23832	409	Magothy
			3S-36976	418	Magothy
	Bayshore	Empay Blvd.	1S-23445	608	Magothy
			2S-31104	660	Magothy
			3S-57052	634	Magothy
	Bayshore	Commercial Blvd.	1S-30234	153	Glacial
			2S-31624	439	Magothy
			3S-37141	429	Magothy
	Bayshore	Delores Pl.	1S-54308	116	Magothy
			2S-65764	795	Magothy
	Bayshore	Orchard Drive	1S-15500	147	Glacial
			2S-15501	154	Glacial
			3S-19584	155	Glacial
			4S-51519	408	Magothy
	Smithtown	Falcon Dr.	1S-14326	225	Magothy
			2S-44774	293	Glacial
	Smithtown	Wheeler Rd	1S-15746	125	Glacial
			2S-19377	131	Glacial
			3S-23162	211	Magothy
			4S-32491	273	Magothy
Brentwood	Brentwood	Morris St	2-3S-32412	755	Magothy
		Third Ave	1-4S-43088	753	Magothy

WORKSHEET (cont.)

Community Water Supply	Water District	Well Field	Well	Depth (ft)	Aquifer
St. Joseph's Convent L.I. University	—	—	—	—	—

Sources:

SCDHS Water Resources Division. Supply and Monitoring Well Location Maps.

SCWA. 1984. Well Descriptions.

SCWA. 1985. Distribution System Plates. 16N, 25N, 14M, 25M, 26M.

SCWA. 1986. Active Services Estimates and Service Area Map.

Brando, 1986. Superintendant, Brentwood Water District. Personal Communication. 26 February.

NYSDOH. 1982. New York State Atlas of Community Water System Sources.

EA SCIENCE AND TECHNOLOGY
A Division of EA Engineering, Science, and Technology, Inc.

p. 3/4 ok

COMMUNICATIONS RECORD FORM

Distribution: (X) File, ( ) _____
( ) _____, ( ) _____
( ) Author

Person Contacted: Mr. Brando Date: 26 February 1986

Phone Number: (516) 273-4565 Title: Superintendent

Affiliation: Brentwood Water District Type of Contact: Telephone

Address: _____ Person Making Contact: E. Bidwell

Communications Summary: The 2 wellfields in our studies pull from the Magothy Aquifer. They own one other well and their system is fully integrated. They currently have 6,500 hookups approximately 26,000 consumers.

They are in the process of installing a system in an Industrial Park. This park will eventually house 150 buildings. The area is bounded on the north by Pilgrim State Hospital, the east by Sagtikos State Parkway, the south by Long Island Railroad and the west by Islip Town Line.

(see over for additional space)

Signature: Ellen Bidwell

EMR Circuit
15105
Old Line Mile
SCWA Service Area
Brentwood W.D.
SCWA
Greenhaven W.D.
Smithtown W.D.

Appendix 1.5-1

RECEIVED [illegible]

United States Department of Agriculture

Soil Conservation Service

127 East Main Street
Riverhead, New York 11901

March 13, 1986

Mr. William L. Going, Manager
Environmental Assessment Studies
EA Science and Technology
R.D. 2, Box 91
Middletown, New York 10940

Dear Mr. Going:

This office has not compiled any information on the number of acres irrigated based on specific locations in Suffolk County. The 1982 Census of Agriculture estimates that 23,232 acres are irrigated on 500 farms, however, the specific locations of this acreage is not readily available.

The major source of irrigation water in Suffolk County is groundwater through wells. There are literally thousands of wells scattered throughout the county. To locate wells within a three mile radius of the inactive hazardous waste sites would be an impossible task.

Just to inventory the irrigated acres in proximity to these sites would be very time consuming. I do not have the manpower nor the time at present to accomplish such a task.

I would be more than willing to provide you with access to our aerial photographs, soil maps, topographic surveys and other technical information which might be helpful to you in making this inventory.

If you have any questions or I may be of further assistance, call me at 516-727-2315.

Sincerely,

Allan S. Connell

Allan S. Connell,
District Conservationist

3/28/86 Mr. Connell says that the 23,232/500 farms represent the vast majority ... up to 90% ... for Suffolk Co. and that I can assume all irrigated ... and will comment ag. lands on the State (Combine) to irrigated acres.
William L. Going

The Soil Conservation Service is an agency of the Department of Agriculture

SCS-AS-1
10-79

Appendix 1.5-2

EA SCIENCE AND TECHNOLOGY
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COMMUNICATIONS RECORD FORM

Distribution: ( ) Suffolk Co. General, ( ) _____
( ) _____, ( ) _____
( ) Author

Person Contacted: Mr. Dan Fricke Date: 4-7-86

Phone Number: 516 727 7850 Title: Coop Ext. Ag. Agent

Affiliation: Suffolk Co. Coop Ext. Assn. Type of Contact: Phone

Address: 264 Griffing Ave. Riverhead NY Person Making Contact: Brad

Communications Summary: I asked Dan question about irrigation practices in Suffolk Co. ie could Coop Ext. identify sources of irrigation water (well + surface) and still use for all irrigated ~~acreage~~ acreage... which was in food production or dairy farms?

He said that all irrigation wells were supposed to be registered with the State and that perhaps SCDHS had the maps to indicate location and number (Joe Bair?) or (Steve Carey).

* He said there was no surface water used for irrigation on the Island.

He said that once we had located all the wells within required distance of sites; we would have to talk to Coop Ext about each well to find out about the use of the land; very time consuming process.

(see over for additional space)

Signature: William J. Gerry

Appendix 1.5-3

EA SCIENCE AND TECHNOLOGY
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COMMUNICATIONS RECORD FORM

Distribution: ( ) Suffolk Co. General Files
( ) _____, ( ) _____
( ) Author

Person Contacted: Steve Carey Date: 4-7-86

Phone Number: 516 348 2893 Title: Chief

Affiliation: SCDHS Groundwater Section Type of Contact: Phone

Address: 225 Rabro Dr. Person Making Contact: Bud Young
Hauppauge, NY

Communications Summary: I asked him question about sources of irrigation water for farm land in food production ---

Steve said wells greater than 45 gpm were registered by NYSDEC Reg I, except that farms were mostly exempted.

He suggested I contact Doug Pica NYSDEC for information.

(see over for additional space)

Signature: William Young

Appendix 1.5-4

EA SCIENCE AND TECHNOLOGY
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COMMUNICATIONS RECORD FORM

Distribution: ( ) Suffolk Co. General Files) _____
( ) _____, ( ) _____
( ) Author

Person Contacted: Mr. Doug Pica Date: 4-7-86

Phone Number: 516 751-7900 Title: _____

Affiliation: NYSDEC Reg 1 Water Unit Type of Contact: Phone

Address: Stonybrook NY Person Making Contact: Bud Young

Communications Summary: I asked questions about irrigation practices on Long Island and about regulations of wells (irrigation supply).

Doug said DEC regulated wells that supplied irrigation water to golf courses but did not regulate any farm supply wells because they are exempted from regulation. He therefore has no info on farm land irrigation sources.

(see over for additional space)

Signature: William Young

EA SCIENCE AND TECHNOLOGY
A Division of EA Engineering, Science, and Technology, Inc.

Appendix 1.5-5

COMMUNICATIONS RECORD FORM

Distribution: ( ) _____, ( ) _____
( ) _____, ( ) _____
( ) Author

Person Contacted: Mr Charles Guthrie Date: 10/14/86

Phone Number: (516) 751-7900 Title: Regional Fisheries Manager

Affiliation: NYSDEC Region I Type of Contact: phone

Address: SUNY Campus - Building 40 Person Making Contact: L. Rogers
Stony Brook, NY 11794

Communications Summary: Mr Guthrie indicated that New Mill Pond, also called Wells Stump Pond, is located in a County Park. Its recreational uses include fishing and boating.

(see over for additional space)

Signature: Lori Rogers

EA SCIENCE AND TECHNOLOGY
A Division of EA Engineering, Science, and Technology, Inc.

COMMUNICATIONS RECORD FORM

Distribution: ( ) DEC63A, ( ) _____
( ) _____, ( ) _____
( ) Author

Person Contacted: John Ozard Date: 3-6-86

Phone Number: 518439 7486 Title: Sr. Wildlife Biologist

Affiliation: NYS DEC Type of Contact: Phone

Address: Delmar NY Person Making Contact: W. Going

Communications Summary: Called John for clarification of the letter dated 26 February 1986, regarding "significant habitats" ...

Q. Don't see any reference to federally listed Threatened or Endangered spp. on any of the 42 site location maps you sent back w/ your letter ... does this mean there is no habitat of concern for these spp? A. yes ... there is no critical habitat for (Federal spp) at any of the sites being examined.

Q. Are all the wetlands on LI in the vicinity of our sites (refer to location maps) "coastal" wetlands? A. Yes. They all have varying amount of salt being that near the Sound or the Ocean, to be considered coastal wetlands ... also refer to the ("Natural Heritage") wetland marked in blue.

(see over for additional space)

Signature: William Going

Appendix 1.5-7

EA SCIENCE AND TECHNOLOGY
A Division of EA Engineering, Science, and Technology, Inc.

COMMUNICATIONS RECORD FORM

Distribution: ( ) EMR Circuits, Inc., ( ) _____
( ) _____, ( ) _____
( ) Author

Person Contacted: Mr. Al Anderson Date: 4-21-86

Phone Number: 516 360 7539 Title: Chief Fire Inspector

Affiliation: Town of Smithtown Type of Contact: Phone

Address: 99 West Main St Person Making Contact: Going
Smithtown NY 11787

Communications Summary: I explained our Phase I study and asked if the former location of EMR Circuit at 99 Marcus Blvd. was now an imminent threat from fire or explosion.

Mr. Anderson said that it was not.

(see over for additional space)

Signature: William Going

Appendix 1.5-8

p. 1-13

SUFFOLK COUNTY WATER AUTHORITY

Oakdale, New York

ACTIVE SERVICES

December 1985

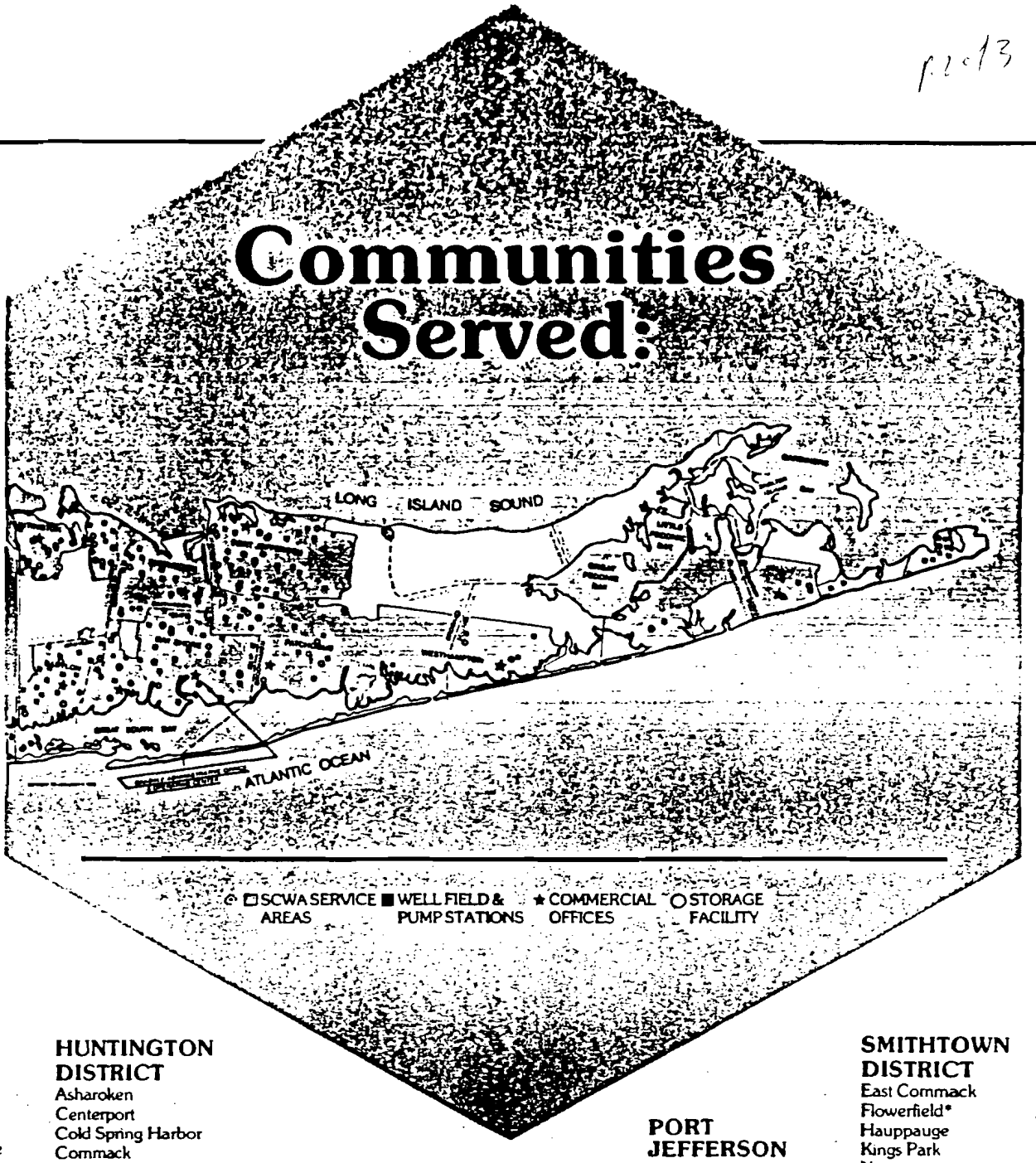
DISTRICT OFFICES	1983	1984	1985	Increase or Decrease 1985/84
BABYLON	53 647	53 995	54 655	660
BAY SHORE	46 846	47 269	47 830	561
PATCHOGUE	49 408	51 412	55 104*	3692
HUNTINGTON	28 303	28 530	28 794	264
PORT JEFFERSON	32 881	33 524	34 440	916
SMITHTOWN	22 832	23 257	23 641	384
WESTHAMPTON	4 089	4 451	4 984	533
EAST HAMPTON	10 245	10 523	10 841	318
TOTAL FOR AUTHORITY	248 251	252 961	260 289	7328

*Includes 970 Active Services Acquired from Shirley Water Works Co. 3/29/85

cc: Messrs. Hazlitt, Hanrahan, Sidoti, Schickler, Koehler, Dugan, Daly and Cannon
jh - 2/4/86

p. 1 of 3

Communities Served:



BABYLON DISTRICT
Amity Harbor
Amityville
Babylon
Copiague
Deer Park
Dix Hills
Lindenhurst
North Amityville
North Babylon
North Lindenhurst
Pinelawn
West Babylon
Wheatley Heights
Wyandanch

BAY SHORE DISTRICT
Bay Shore
Brentwood
Brightwaters
Central Islip
East Islip
Edgewood
Great River
Islip
Islip Terrace
North Bay Shore
North Great River
Oakdale
West Bay Shore
West Islip

HUNTINGTON DISTRICT
Asharoken
Centerport
Cold Spring Harbor
Commack
Crab Meadow
East Huntington
East Neck
East Northport
Eatons Neck
Fort Salonga
Halesite
Huntington
Huntington Bay
Huntington Station
Lloyd Harbor
Northport

EAST HAMPTON DISTRICT
Amagansett
East Hampton
Freetown
Montauk
North Sea
Sag Harbor
Southampton

PATCHOGUE DISTRICT
Bayport
Bellport
Blue Point
Bohemia
Brookhaven
Coram
East Holbrook
East Patchogue
Farmingville
Gordon Heights
Holbrook
Holtsville
Lakeland
Lake Ronkonkoma
Mastic
Mastic Beach
Medford
North Bellport
North Patchogue
Patchogue
Ronkonkoma
Sayville
Selden
Shirley
South Centereach
South Holbrook
South Yaphank
West Bellport
West Ronkonkoma
West Sayville
Yaphank

PORT JEFFERSON DISTRICT
Belle Terre
Centereach
Coram
East Setauket
Lake Grove
Middle Island
Miller Place
Mount Sinai
North Centereach
North Selden
Poquott
Port Jefferson
Port Jefferson Station
Ridge
Rocky Point
Setauket
South Setauket
Sound Beach
South Stony Brook
Stony Brook*
Strongs Neck
Terryville

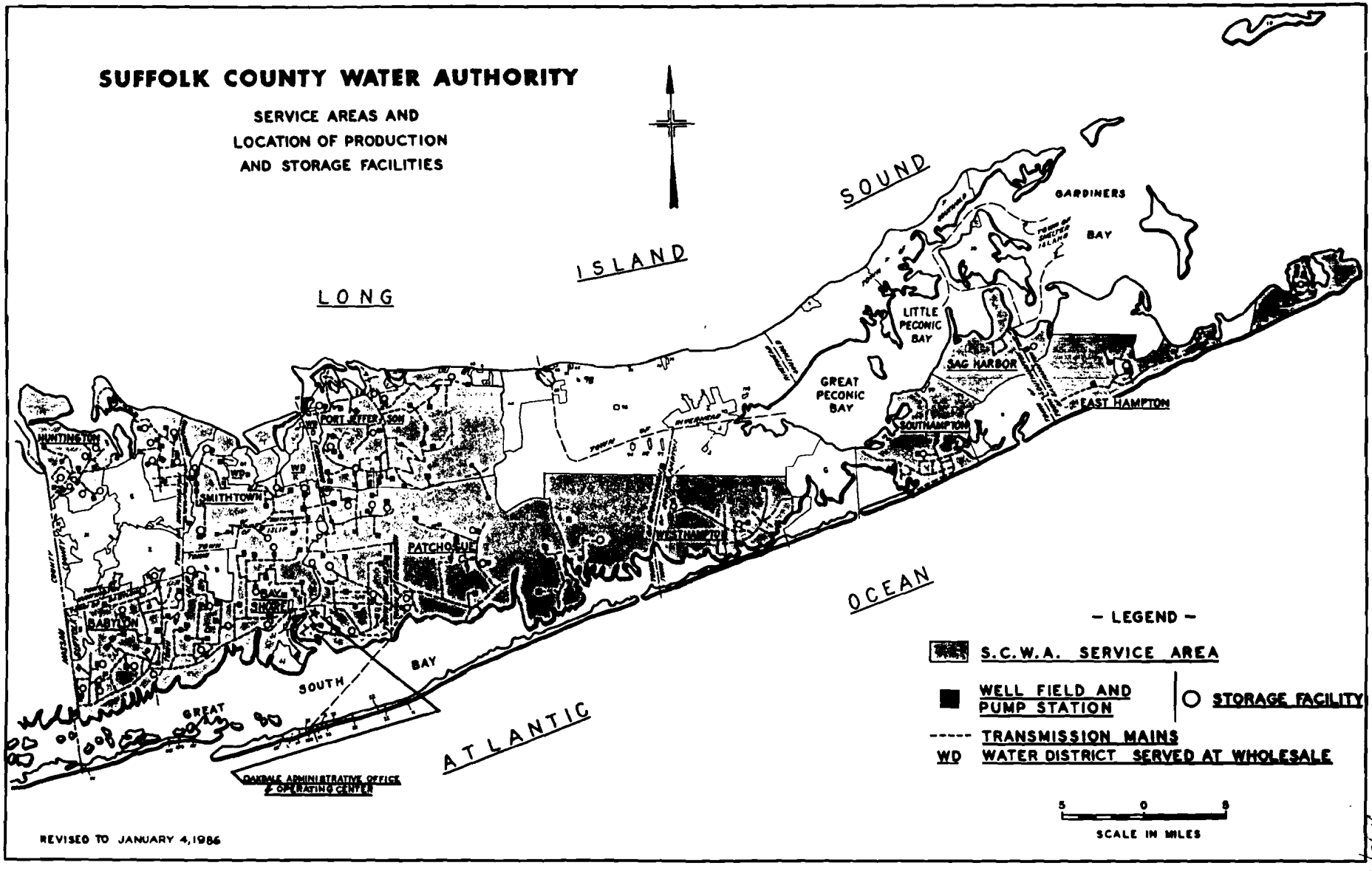
SMITHTOWN DISTRICT
East Commack
Flowerfield*
Hauppauge
Kings Park
Nesconset
Saint James*
San Remo*
Smithtown
South Hauppauge
West St. James
West Smithtown*
Village of Head of The Harbor
Village of The Branch

WESTHAMPTON DISTRICT
Center Moriches
East Moriches
Eastport
East Quogue
Moriches
South Manor
Quiogue
Quogue
Westhampton
Westhampton Beach

* Included in Wholesale Water District

SUFFOLK COUNTY WATER AUTHORITY

SERVICE AREAS AND
LOCATION OF PRODUCTION
AND STORAGE FACILITIES



REVISED TO JANUARY 4,1986

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Appendix 1.5-9

LAND USE - 1981

Quantification and Analysis of Land Use for Nassau and Suffolk Counties

AREAWIDE
WASTE TREATMENT
MANAGEMENT

December 1982

Long Island Regional Planning Board

2003

Scale: 1 in. = 4,650 ft

LEGEND

RESIDENTIAL

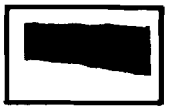

1 D.U. & Less/Acre (low density)


2–4 D.U./ Acre


5–10 D.U./ Acre


11 D.U. & Over/Acre (high density)

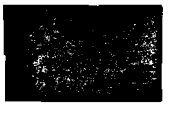

Commercial


Commercial Recreation


Industrial


Institutional


Open Space & Recreational


Agricultural


Transportation & Utilities


Vacant

(47-15-11 (10/83)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DIVISION OF SOLID AND HAZARDOUS WASTE

INACTIVE HAZARDOUS WASTE DISPOSAL SITE REPORT

PRIORITY CODE: _____ SITE CODE: 152105

NAME OF SITE: EMR Circuits REGION: 1

STREET ADDRESS: 99 Marcus Boulevard

TOWN/CITY: Smithtown COUNTY: Suffolk

NAME OF CURRENT OWNER OF SITE: Grenlein Realty Co. c/o Neil H. Klein Co.

ADDRESS OF CURRENT OWNER OF SITE: 175 Great Neck Road, Great Neck New York 11021

TYPE OF SITE: OPEN DUMP ☐ STRUCTURE ☒ LAGOON ☐
LANDFILL ☐ TREATMENT POND ☐

ESTIMATED SIZE: 0.05 ACRES

SITE DESCRIPTION:

The site was a circuitboard manufacturing operation which operated from 1981 until 1984. The owner of the site was found to be discharging hazardous chemicals into a floor drain leading to two leachpools. Samples of the contents of the pools which were taken from 1981 until 1984 contained various solvents and metals. Prior to EMR moving from the site, the company cleaned the leachpools and filled them in.

HAZARDOUS WASTE DISPOSED: CONFIRMED ☒ SUSPECTED ☐

TYPE AND QUANTITY OF HAZARDOUS WASTES DISPOSED:

TYPE	QUANTITY (POUNDS, DRUMS, TONS, GALLONS)
Various solvents	unknown
Heavy metals	unknown

TIME PERIOD SITE WAS USED FOR HAZARDOUS WASTE DISPOSAL:

_____, 19 81 TO _____, 19 84

OWNER(S) DURING PERIOD OF USE: Unknown/Ronald B. Finkelstein (Manager)

SITE OPERATOR DURING PERIOD OF USE: EMR Circuits, Inc., Mr. Stewart Wood (president)

ADDRESS OF SITE OPERATOR: _____

ANALYTICAL DATA AVAILABLE: AIR [X] SURFACE WATER [ ] GROUNDWATER [X]
SOIL [ ] SEDIMENT [ ] NONE [ ]

CONTRAVENTION OF STANDARDS: GROUNDWATER [ ] DRINKING WATER [ ]
SURFACE WATER [ ] AIR [ ]

SOIL TYPE: Sand

DEPTH TO GROUNDWATER TABLE: 100 ft

LEGAL ACTION: TYPE: _____ STATE [ ] FEDERAL [ ]
STATUS: IN PROGRESS [ ] COMPLETED [ ]
REMEDIAL ACTION: PROPOSED [ ] UNDER DESIGN [ ]
IN PROGRESS [ ] COMPLETED [ ]
NATURE OF ACTION: _____

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

Potential ground-water contamination.

ASSESSMENT OF HEALTH PROBLEMS:

PERSON(S) COMPLETING THIS FORM:

FOR NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

NAME EA Science and Technology
TITLE _____
NAME _____
TITLE _____
DATE: 24 September 1986

NEW YORK STATE DEPARTMENT OF HEALTH

NAME _____
TITLE _____
NAME _____
TITLE _____
DATE: _____