SITE INSPECTION

Kurt Versen Company

WESTWOOD, BERGEN COUNTY

EPA ID No.: NJD001471614

New Jersey Department of Environmental Protection
Division of Hazardous Waste Management
Bureau of Planning and Assessment

Agrees w/CERCLIS qual. 12/10/91
Priority-High SI I G.F.

235361

KURT VERSEN COMPANY
10 CHARLES STREET
WESTWOOD, BERGEN COUNTY, NEW JERSEY
EPA ID NO. NJD001471614

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NARRATIVE

KURT VERSEN COMPANY
10 CHARLES STREET
WESTWOOD, BERGEN COUNTY, NEW JERSEY
EPA ID NO. NJD001471614

GENERAL INFORMATION AND SITE HISTORY

The Kurt Versen Company (Kurt Versen) site, 6.50 acres, is located on Block 1111, Lot 11.01, in an industrial/commercial/residential area of Westwood, Bergen County. The site was vacant undeveloped land prior to 1964, at which time Kurt Versen occupied the site. In 1984 an addition was constructed on the southern portion of the building. The site fronts to the east on Charles Street. To the north the site is bordered by an apartment complex, to the south by the Haunsman Ditch and to the west by the Westwood Cemetary. The current owner of the property, Mr. Richard Anisfield is also the owner of Kurt Versen. The population within a 4-mile radius of the site is approximately 80,000.

SITE OPERATIONS OF CONCERN

Kurt Versen manufactures aluminum industrial light fixtures. As part of this process the aluminum is first treated in acid baths then metal plated or painted. The phosphoric acid used is stored in one 2,000-gallon aboveground storage tank, while the nitric and sulfuric acids used are stored in 15-gallon kegs and 55-gallon drums, respectively.

Arsenic, copper, mercury and zinc are produced as by-products of the metal plating operation and are discharged to the sanitary sewer along with the preneutralized acids (Attachment A).

Approximately five or six 55-gallon drums of water soluble waste oil from the grinders and polishers used at the site are stored inside the facility. Every six months the oil is removed from the site by the Arthur Loeffel Company of West Milford, New Jersey.

On March 18, 1981 the New Jersey Department of Environmental Protection (NJDEP), Division of Water Resources (DWR), Bureau of Metro Enforcement (BME) conducted an investigation at the site which disclosed that untreated sewage and industrial wastewater was being discharged to the Haunsman Ditch, a tributary of the Oradell Reservoir, from a broken sanitary sewer line owned by Kurt Versen. Analysis of samples collected by the NJDEP, DWR, BME revealed arsenic and chromium contamination in the discharged wastewater. The NJDEP, DWR, BME issued a Telegram Order to Kurt Versen on March 19, 1981 requiring the company to cease the discharge and to perform a spill cleanup (Attachment B).

Remedial activities at the site began on March 19, 1981, with the temporary shut-down of plant operations and the installation of a sewer by-pass line. On March 27, 1981 All County Environmental Service Corporation of New Milford, New Jersey removed approximately 11,000 gallons of sludge and water from the ditch. The contaminated material was disposed of at Chem-Clear Inc., of Chester, Pennsylvania. The NJDEP, DWR, BME was on site and verified that the cleanup was completed (Attachment C). The 1984 building addition was constructed over the area where the discharge occurred.

The NJDEP, DWR, BME conducted another investigation at the site on February 25, 1985. This investigation disclosed that compressor cooling wastewater obtained from an on-site well was being discharged to the Haunsman Ditch. Results of samples collected by the NJDEP, DWR, BME revealed that the wastewater contained volatile organic compounds (VOCs) including 1,2 - dichloroethane, tetrachloroethane, toluene and trichloroethane (Attachment B).

On March 5, 1985 the NJDEP, DWR, BME issued another Telegram Order to Kurt Versen requiring that corrective action be implemented to cease the discharge. Kurt Versen then repiped the discharge to the sanitary sewer, thus eliminating the surface water discharge (Attachment B). Kurt Versen maintained that the VOC contamination was already present in the groundwater and since they do not use any VOCs in their process, they were not the source of the contamination.

The NJDEP, DWR, BME conducted a regional groundwater contamination investigation in 1985 in the area surrounding Kurt Versen. Although potential sources were identified, the NJDEP, DWR, BME was unable to determine the source of the contamination; thus, the investigation was discontinued.

In June 1988 one 10,000-gallon #2 fuel oil underground storage tank (UGST), which had been empty for 2 to 3 years was removed from the site by American Environmental Technology (AET) of Norwood, New Jersey. Approximately 26 tons of petroleum hydrocarbon (PHC) contaminated soil was excavated from the site and disposed of at the Breitenstine's Landfill in Pennsylvania (Attachment D).

GROUNDWATER ROUTE

The Kurt Versen facility is located in the Piedmont Physiographic Province. Mudstone, sandstone and conglomerate rock interlayered with igneous rock characterize this area. The dominant formation in the province is the Brunswick Formation consisting of red shale rocks of Triassic age and believed to be approximately 8,000 feet thick.

The Brunswick Formation has little effective porosity, but the rock has been well fractured so that closely spaced joints and fractures occur throughout the formation. Because the rock weathers so easily, the fractures are usually quite open in the zone of weathering and they may extend down to several hundred feet. Overlying the consolidated rocks of the Brunswick Formation are glacial stratified drift deposits. Recharge to the Brunswick Formation is from precipitation infiltrating through the overburden.

In February and March 1985 groundwater samples collected from the on-site well by the NJDEP, DWR, BME and the Hackensack Water Company revealed VOC contamination ranging from 3.0 parts per billion (ppb) toluene to 1,200 ppb trichloroethene. In addition, the Bergen County Utilities Authority (BCUA) required Kurt Versen to obtain an Industrial Wastewater Discharge (IWD) Permit for discharging the process wastewater into the sanitary sewer. This annual permit #90-192 expires on August 8, 1991 (Attachment E).

Periodic sampling of the wastewater by Kurt Versen and the BCUA as a requirement of the IWD permit has revealed chromium and VOC contamination with trichloroethene being the most prevalent contaminant detected.

Concentrations detected range from 100 ppb to 700 ppb for chromium and 0.15 parts per million (ppm) to 0.67 ppm for trichloroethene. While these levels exceed the NJDEP groundwater action levels of 0.0005 to 0.050 ppm for VOCs and 50 ppb for chromium, they are within the regulated limits of the BCUA.

There have been no monitoring wells installed at the site.

The public water supplies located within a 4-mile radius of the site are:

OWNER	DEPTH (feet)	FORMATION*	DISTANCE (miles)
Ridgewood Village	300	GTRB	3.9
Ridgewood Village	320	GTRB	3.6
Waldwick Water Dept.	300	GTRB	3.2
Park Ridge Water Dept.	252	GTRB	3.6
Park Ridge Water Dept.	435	GTRB	3.8
Park Ridge Water Dept.	445	GTRB	3.6
Park Ridge Water Dept.	24	GQSD	3.7
Park Ridge Water Dept.	30	GQSD	3.6
Park Ridge Water Dept.	36	GQSD	3.6
Park Ridge Water Dept.	665	GTRB	3.6
Park Ridge Water Dept.	300	GTRB	3.9
Park Ridge Water Dept.	400	GTRB	2.9
Park Ridge Water Dept.	300	GTRB	3.2
Park Ridge Water Dept.	325	GTRB	2.7
Park Ridge Water Dept.	300	GTRB	3.7

* GTRB = Brunswick Formation
GQSD = Stratified Drift

The population served by these water supplies is approximately 100,000.

The area surrounding the site is served predominantly by public water supplies; however, the following private domestic wells were identified within a 4-mile radius of the site:

OWNER	LOCATION	DEPTH (feet)
F. Rochester	654 Emerson Road, Westwood	150
F. Dietl	639 Broadway, Westwood	150
J. Paydinecy	Lincoln Boulevard, Emerson	115
R. Lebel	78 Lindy Avenue, Rivervale	120
J. Gribbon	155 Washington Avenue, Westwood	75
V. Caggia	23 Beach Street, Westwood	170
K. Tarsio	440 Anstatt Way, Haworth	150
F. Martucci	145 Eagle Drive, Emerson	183
F. Wendell	798 East Drive, Oradell	365
J. Riley	33 Dean Street, Westwood	125
L. Rouberg	521 Rustic Drive, Oradell	150

It is not known if these wells are used as a potable water supply.

The following industrial/irrigation wells were identified within a 4-mile radius of the site:

OWNER	DEPTH (feet)	FORMATION*	DISTANCE (miles)
Brewster & Son, Inc.	360	Trb	3.8
J. Dugan	308	Trb	3.7
Westwood Fuel Co.	236	Trb	1.5
McKenna	605	Trb	2.4
Great Eastern Mills, Inc.	200	Trb	3.3
Great Eastern Mills, Inc.	203	Trb	3.5
N.Y. Twist Drill Co.	200	Trb	3.8
Hackensack Golf Club	532	Trb	1.5
Paramus Freeholders	300	Trb	3.0
Westwood Laundry Co.	125	Trb	0.4
Py Co. Mills, Inc.	150	Trb	3.5
Oldroyd Co.	279	Trb	3.9
Hoke, Inc.	279	Trb	4.0
Hoke, Inc.	276	Trb	4.0
Teledyne Isotopes	400	Trb	0.2
Westwood Swim Club	250	Trb	0.6

* Trb = Brunswick Formation

As part of the NJDEP, DWR, BME regional groundwater investigation, sampling was conducted on the Teledyne Isotopes and Westwood Swim Club wells. The sample results revealed VOC contamination, 3.5 ppb chloroform, 22.5 ppb 1,1,1-trichloroethane and 4.0 ppb trichloroethene, from the Teledyne Isotope well only. These wells are located less than 1 mile from the site and are screened in the same aquifer as the Kurt Versen well.

SURFACE WATER ROUTE

The Haunsman Ditch, which is located downslope, adjacent to the site is part of the local storm sewer system and drains into the Oradell Reservoir, a potable water supply for the Hackensack Water Company, located approximately 1 mile downslope of the site. The only other surface water body located within 15 miles downstream of the site is the Hackensack River, which is the outflow for the Oradell Reservoir and is located approximately 2.5 miles from the site. There is a surface water intake, utilized by the Hackensack Water Company, located on the Hackensack River approximately 3.0 miles from the site. Fifty-nine municipalities, with approximately 700,000 people are served by the Oradell Reservoir and the Hackensack River (Attachment L). The Hackensack River also supports recreational and industrial usage.

A potential does not exist for the contamination of downstream surface waters via runoff from the site. All hazardous wastes generated at the site are stored indoors. The surface water discharges that occurred in 1981 and 1985 were from the direct dumping of wastewater into floor drains that discharge to the storm sewer, which has since ceased.

There are palustrine open water, scrub/shrub broad-leaved deciduous, emergent and forested broad-leaved deciduous freshwater wetlands located within 1 mile of the site, but no coastal wetlands located within 2 miles of the site.

This site is located in the United States Geologic Survey (USGS) Hackensack Quadrangle. In this quadrangle, within 1 mile of the site, is habitat associated with the following federal and state endangered species: bog turtle and upland sandpiper.

AIR ROUTE

The Kurt Versen facility, NJDEP, Air Pollution Control (APC) ID #00615, has nine air pollution control permits issued by the NJDEP, Division of Environmental Quality (DEQ) for tanks and emission control equipment associated with the metal anodizing process line and for two boilers (Attachment F). Since this is an active facility a potential exists for air contamination from the site.

SOIL

The soil underlying the site is classified as Adrian muck, which is typically level or nearly level and very poorly drained. It is generally found in depressional areas on outwash plains. Most areas are oval or elongated in shape and range from 5 to more than 150 acres in size. These soils which are frequently flooded have slopes ranging from 0 to 3 percent.

Permeability is rapid. Surface runoff is slow when this soil is drained. The water erosion hazard is slight, but the wind erosion hazard is high when this soil is cleared and drained. The available water capacity is high. In unlimed areas the reaction is moderately acid to neutral in the organic material and neutral or mildly alkaline in the mineral substratum. The seasonal high water table is ponded or immediately below the surface from November to June in most years. Frost action potential is high. The organic surface layer and subsoil layers have low bearing strength.

Soil sampling was conducted at the site in June and July of 1988 during the excavation of the #2 fuel oil UGST by AET, and by Kurt Versen. The sample results from the June 1988 sampling episode revealed PHC contamination ranging from 10 ppm at the southeast corner of the excavated area to 1,465 ppm at the northwest section of the excavated area (Attachment G). After additional excavation, two samples collected by Kurt Versen in July 1988 at the northwest section of the excavated area revealed PHC contamination of 35 ppm and 102 ppm (Attachment H). This area was subsequently repaved.

Presently all hazardous waste is stored indoors and a potential for future soil contamination from normal plant operations does not exist.

DIRECT CONTACT

Although this site is not fenced or guarded there are no hazardous substances being stored outdoors at the site. The only hazardous waste being stored at the site is waste oil which is stored in 55-gallon drums indoors. During a Pre-Sampling Assessment (PSA) conducted by the NJDEP, Division of Hazardous Waste Management (DHWM), Bureau of Planning and Assessment (BPA) on March 19, 1991, this area was observed to be clean with no evidence of spillage. Therefore, a potential for employee contact with hazardous substances is minimal, while a potential for the off-site population to come into contact with hazardous substances does not exist.

FIRE AND EXPLOSION

There have been no reported fires or explosions at the site and current manufacturing and storage activities would not support a fire or explosion.

ADDITIONAL CONSIDERATIONS

While it is likely that damage occurred to vegetation in and around the Haunsman Ditch during the discharge in 1981, it appears to have been a one time incident that was not indicative of plant operations and was subsequently corrected. A potential for damage to flora, fauna, or off-site property or for contamination of the food chain does not exist at the present time.

ENFORCEMENT ACTIONS

Enforcement actions initiated against Kurt Versen by the NJDEP include a Cease and Desist Order issued in June 1977 by the NJDEP, DEQ for the construction and use of process equipment without the required NJDEP, DEQ air pollution control permits (Attachment I); the previously mentioned two Telegram Orders issued by the NJDEP, DWR regarding the discharges in 1981 and 1985 (Attachment J); and an Administrative Consent and Notice of Civil Administrative Penalty Assessment issued by the NJDEP, DWR in October 1985, also regarding the discharges in 1981 and 1985 (Attachment B).

SUMMARY OF SAMPLING DATA

1.	Sampling date:	March 18, 1981
	Sampled by:	NJDEP/DWR/BME Newark, New Jersey
	Samples:	One aqueous sample
	Laboratory:	New Jersey Department of Health Environmental Chemistry Laboratory (NJDOH, ECL) Trenton, New Jersey Lab Certification #11148
	Parameters:	Arsenic, chromium and lead
	Sample description:	Aqueous sample #C32646 from the storm sewer outfall from the site.
	Contaminants detected:	Arsenic 4.0 ppb, chromium 788 ppb and lead 84 ppb were detected in this sample.
	QA/QC:	The sample results did not undergo a formal review by the NJDEP.
	File location:	NJDEP/DWR/BME West Orange, New Jersey (Attachment K)
2.	Sampling dates:	February 19, 20 and 25, 1985
	Sampled by:	Hackensack Water Company Harrington Park, New Jersey
	Samples:	Four aqueous samples

Laboratory: Hackensack Water Company
Oradell, New Jersey
Lab Certification #02074

Parameters: Trichloroethene (TCE) and tetrachloroethene (PCE).

Sample description: A catch basin located on Charles Street, a 4-inch discharge pipe and a discharge to the Haunsman Ditch were sampled.

Contaminants detected:

DATE	LOCATION	TCE (ppb)	PCE (ppb)
February 19, 1985	Catch Basin on Charles Street	980	11
February 20, 1985	4-inch discharge pipe	353	17
February 20, 1985	Discharge to Haunsman Ditch	454	ND
February 25, 1985	4-inch discharge pipe	1,200	13

ND = Not detected

QA/QC: The sample results did not undergo a formal review by the NJDEP.

File location: NJDEP/DWR/BME
West Orange, New Jersey
(Attachment K)

3. Sampling date: February 25, 1985

Sampled by: NJDEP/DWR/BME
Newark, New Jersey

Samples: Two groundwater samples

Laboratory: NJDOH, ECL
Trenton, New Jersey
Lab Certification #11148

Parameters: VOCs, metals, PHCs

Sample description: Samples #26088 and #26089, wastewater effluent that originated from an on-site well.

Contaminants detected:

(ppb)

PARAMETER	SAMPLE ID 26088	26089
arsenic	5	NA
cadmium	2	NA
chromium	10	NA
copper	72	NA
mercury	0.2	NA
nickel	10	NA
lead	59	NA
zinc	724	NA
1,2-dichloroethene	NA	17
tetrachloroethene	NA	4.0
toluene	NA	3.0
trichloroethene	NA	280
PHCs	80.43	NA

NA = Contaminant not analyzed

QA/QC: The sample results did not undergo a formal QA/QC review by the NJDEP.

File location: NJDEP/DWR/BME
West Orange, New Jersey
(Attachment L)

4. Sampling date: June 1985

Sampled by: Garden State Laboratories
Irvington, New Jersey

Samples: One groundwater sample

Laboratory: Garden State Laboratories
Irvington, New Jersey
Lab Certification #07044

Parameters: VOCs, metals, pesticides and herbicides

Sample description: Well water sample from Teledyne Isotopes, Inc.

Contaminants detected: Chloroform, 3.5 ppb, 1,1,1-trichloroethane, 22.5 ppb and trichloroethene, 4.0 ppb were detected. Metals, pesticides and herbicides were not detected in the sample.

QA/QC: The sample results did not undergo a formal review by the NJDEP.

File location:	NJDEP/DWR/BME West Orange, New Jersey (Attachment L)

5.

Sampling date:	July 1985
Sampled by:	Laboratory Resources, Inc. Westwood, New Jersey
Samples:	One groundwater sample
Laboratory:	Laboratory Resources, Inc. Westwood, New Jersey Lab Certification #02046
Parameters:	VOCs
Sample description:	Well water sample from the Westwood Swim Club
Contaminants detected:	Sample results revealed no VOCs detected
QA/QC:	The sample results did not undergo a formal review by the NJDEP.
File location:	NJDEP/DWR/BME West Orange, New Jersey (Attachment L)

The following is a summary of the aqueous samples collected from the sanitary sewer discharge from Kurt Versen:

6.

Sampling dates:	April 1985 to December 1990
Sampled by:	BCUA, Little Ferry, New Jersey and Kurt Versen, Westwood, New Jersey
Samples:	Twenty-nine groundwater samples
Laboratories:	BCUA, Little Falls, New Jersey Lab Certification #02268 and Laboratory Resources, Inc., Westwood, New Jersey Lab Certification #02046
Parameters:	Metals and VOCs
Sample description:	Wastewater effluent that originates from an on-site well.
Contaminants detected:	Major contaminants detected are summarized below.

PARAMETERS	SAMPLE ID	DATE	CONCENTRATION (ppb)
chromium	16372	5/85	160
	17481	12/85	213
	18786	4/86	160
	19737	8/86	115
	21669	4/87	135
	22862	9/87	607
	5230	6/88	78
	26410	11/88	100
	88122228-01	12/88	68
	35040	9/90	90
trichloroethene	6442	12/85	670
	4631	9/87	33
	4700	9/87	42
	4701	9/87	15
	6350	12/87	33
	9197	11/88	40
	1	12/88	29
	8904379-01	4/89	15
	2	6/89	50
	30445	10/89	30
	01	12/89	33
	32596	3/90	60.9
	01	6/90	37
	35040	11/90	21.3
	02	12/90	25
1,1,1-trichloro-ethane	4631	9/87	116
	4700	9/87	770
	4701	9/87	170

QA/QC: The sample results did not undergo a formal review by the NJDEP.

File location: BCUA
Little Ferry, New Jersey
(Attachment L)

7. Sampling date: June 21, 1988

Sampled by: AETC
Norwood, New Jersey

Samples: Seven soil samples

Laboratory: Wastex Industries, Inc.
Pottstown, Pennsylvania
Lab Certification #77371

Parameters: PHCs

Sample description: Samples #087, #088, #089, #090, #091, #092 and #093 collected from the #2 fuel oil UGST excavation area.

Contaminants detected:

SAMPLE #	PHC CONCENTRATION (ppm)
087	70
088	15
089	10
090	230
091	75
092	1,465
093	1,250

QA/QC: The sample results did not undergo a formal review by the NJDEP.

File location: NJDEP/DHWM/BPA
Trenton, New Jersey
(Attachment G)

8. Sampling date: June 23 and 24, 1988

Sampled by: Kurt Versen Company
Westwood, New Jersey

Samples: Four soil samples

Laboratory: Laboratory Resources, Inc.
Westwood, New Jersey
Lab Certification #02046

Parameters: PHCs

Sample description: Samples #4A, #4B, #6A and #6B, #6C and #6D collected from the #2 fuel oil UGST excavation area.

Contaminants detected:

JUNE 23, 1988

SAMPLE ID	PHC CONCENTRATION (ppm)
4A	72.5
4B	103

JUNE 24, 1988

SAMPLE ID	PHC CONCENTRATION (ppm)
6A	51
6B	1,140
6C	35
6D	102

QA/QC: The sample results did not undergo a formal review by the NJDEP.

File location: NJDEP/DHWM/BPA
Trenton, New Jersey
(Attachments G and H)

RECOMMENDATIONS

At present there is no active lead agency for the site. The NJDEP, Division of Water Resources, Bureau of Metro Enforcement was the lead agency for this site; however, this case was closed upon completion of the remediation of the wastewater discharges in 1981 and 1985. In addition, the NJDEP, DWR, BME conducted a regional groundwater contamination investigation to determine the source of the VOC contamination in the area groundwater. A definite source could not be determined; therefore, this investigation was discontinued.

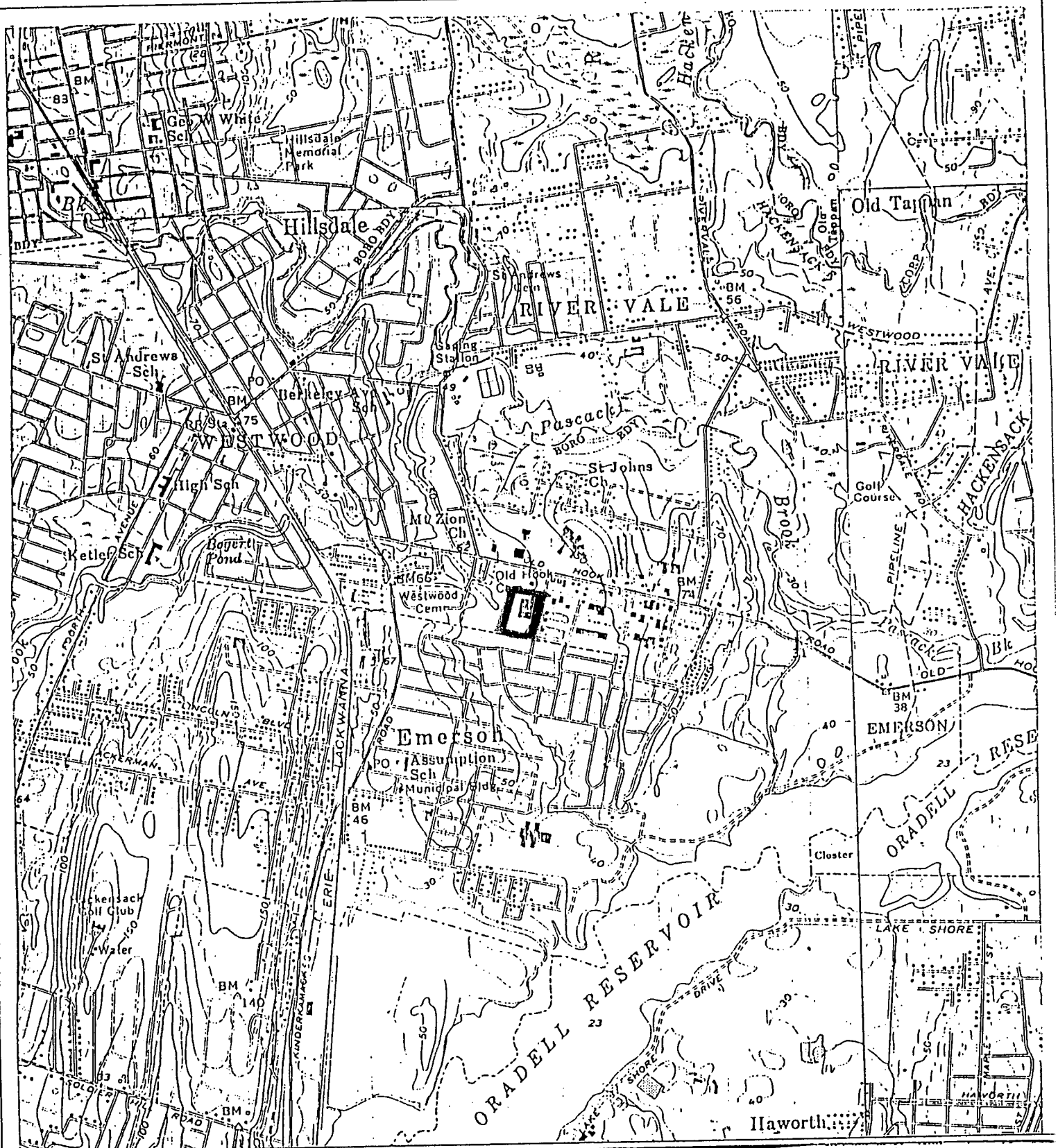
This case will be referred to the NJDEP, Division of Water Resources, Bureau of Groundwater Pollution Assessment for further investigation to determine the source contaminating the groundwater in the area of the site.

Based on previous sampling data, no further action is required by the NJDEP, DHWM, Bureau of Planning and Assessment.

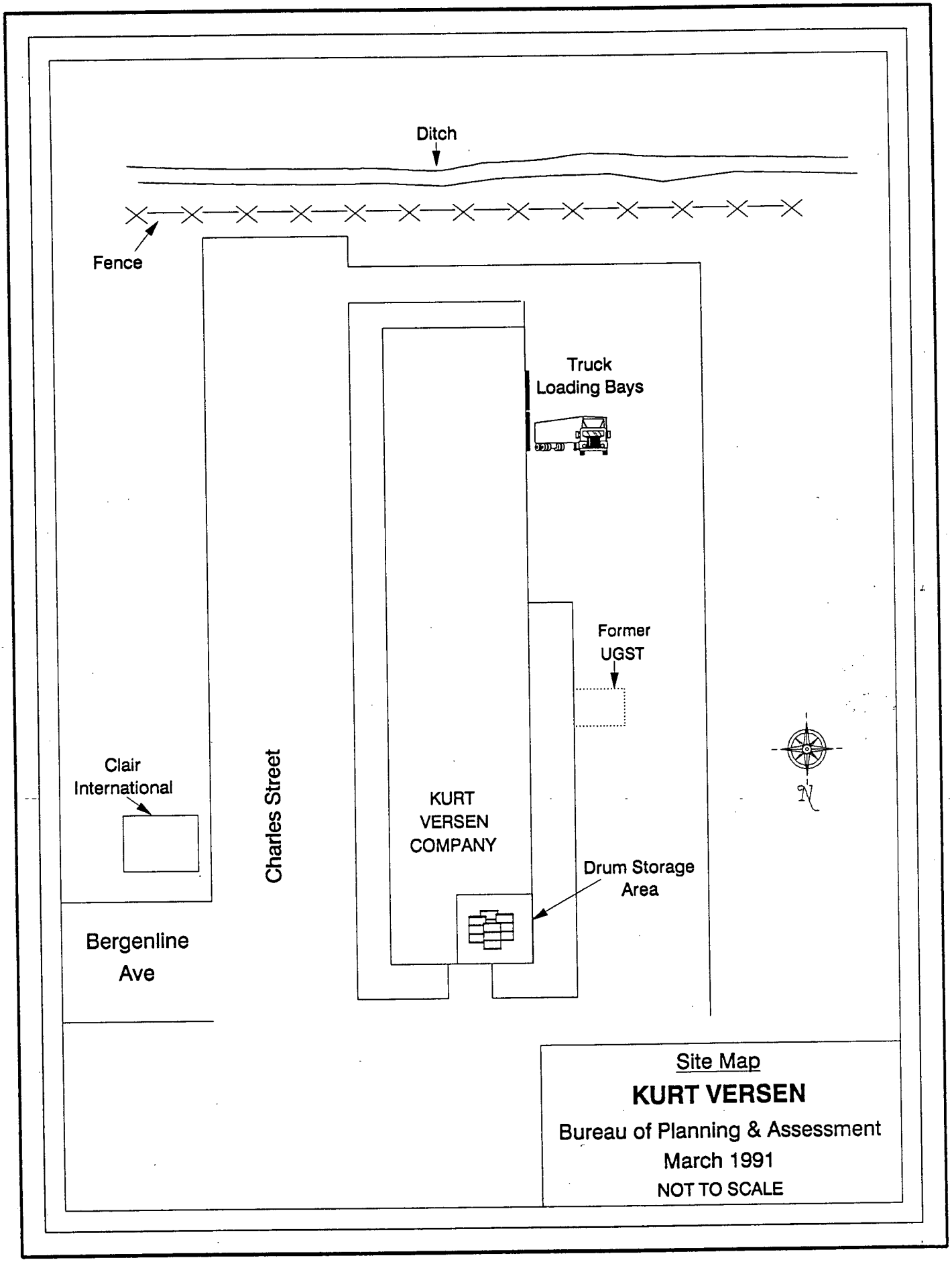
Submitted by:

Michael DiGiore
HSMS IV
NJDEP/Bureau of Planning and Assessment
March 1991

MAPS



Kurt Versen Company
10 Charles Street
Westwood, Bergen County
EPA ID# NJD001471614
USGS Topographic Map
Hackensack, Nyack, Park Ridg
and Yonkers Quadrangles
Lat.- 40° 58' 53"
Long.- 74° 01' 02'
Scale = 1:24,000


Ditch
Fence
Truck
Loading Bays
Former
UGST
Clair
International
Charles Street
KURT
VERSEN
COMPANY
Drum Storage
Area
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Ave
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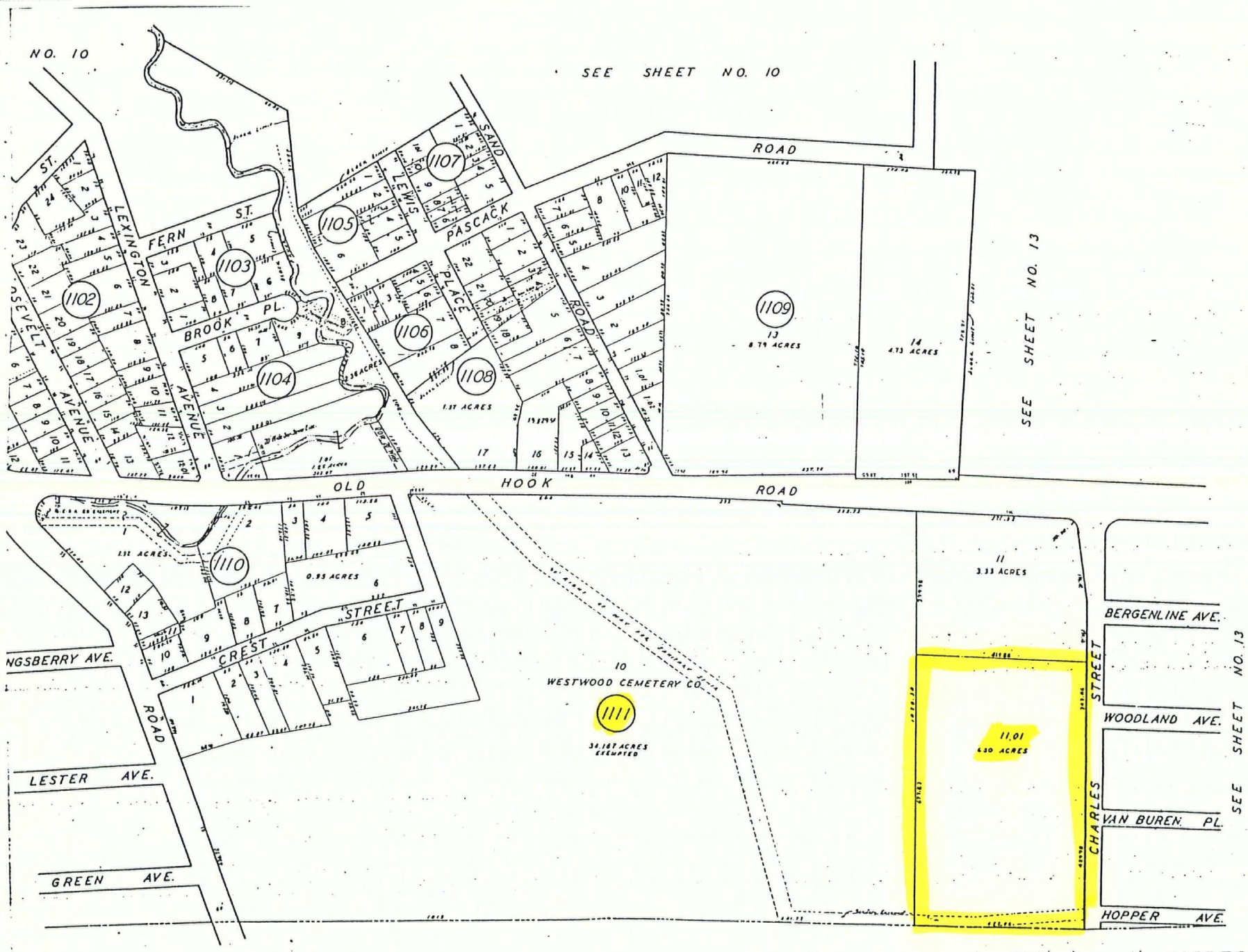
Site Map
KURT VERSEN
Bureau of Planning & Assessment
March 1991
NOT TO SCALE



BOROUGH OF EMERSON

ASSESSMENT of THE BOROUGH OF WEST

Kurt Versen Company
10 Charles Street
Westwood, Bergen County
EPA ID# NJD001471614
Bergen County Road Map
Scale = 1.5 inches = 1 Mile

Scale: 1 Mile to an Inch.

Miles 1 3/4 1/2 1/4 0 1 2 3

Yards 1000 500 0 1000 2000 3000

Meters 1000 500 0 1000 2000 3000

A. HOEN & CO. BALTIMORE, MD.

Contour Interval: 20 feet

KURT VERSEN COMPANY
10 CHARLES STREET
WESTWOOD, BERGEN COUNTY
NEW JERSEY ATLAS
BASE MAP-SHEETS 23 & 26

LEGEND FOR ATLAS SHEET 23

△ — INDUSTRIAL WELL YIELD OVER 70 GALLONS PER MINUTE

□ — PUBLIC SUPPLY WELL YIELDING OVER 70 GALLONS PER MINUTE

⊕ — UNSUCCESSFULL ROCK WELL YIELDING LESS THAN 70 GALLONS PER MINUTE

⊙ — UNSUCCESSFULL SAND WELL YIELDING LESS THAN 70 GALLONS PER MINUTE

⊡ — NO TEST – NO DATA ON YIELD

——— — FAULT (DASHED WHERE INFERRED)

——— — CONTACT (DASHED WHERE INFERRED)

HIGHLANDS / PIEDMONT — PHYSIOGRAPHIC PROVINCE BOUNDARY

WATER SUPPLY TRANSMISSION LINE

Ꞧb — TRIASSIC BRUNSWICK FORMATION

Ꞧdb — TRIASSIC DIABASE

Ꞧbs — TRIASSIC BASALT FLOWS

PRECAMBRIAN

gh — MOSTLY HORNBLENDE GRANITE AND GRANITE GNEISS

am — AMPHIBOLITE

pqo — PYROXENE GNEISS; MAINLY QUARTZ-OLIGOCLASE-CLINOPYROXENE GNEISS

hqa — PYROXENE GNEISS; MAINLY QUARTZ-ANDESINE GNEISS WITH BOTH ORTHO AND CLINOPYROXENE

qo — QUARTZ-OLIGOCLASE GNEISS

qob — QUARTZ-OLIGOCLASE-BIOTITE GNEISS

qs — SILLIMANITE GNEISS

sk — MARBLE AND SKARN

LEGEND FOR ATLAS SHEET 26 (GEOLOGY)

△ — INDUSTRIAL WELL YIELD OVER 70 GALLONS PER MINUTE (INCLUDING PRIVATE WELLS)

□ — PUBLIC SUPPLY WELL YIELDING OVER 70 GALLONS PER MINUTE

⊕ — UNSUCCESSFUL ROCK WELL YIELDING LESS THAN 70 GALLONS PER MINUTE

⊙ — UNSUCCESSFUL SAND WELL YIELDING LESS THAN 70 GALLONS PER MINUTE

⊡ — NO TEST — NO DATA ON YIELD

——— FAULT (DASHED WHERE INFERRED)

——— CONTACT (DASHED WHERE INFERRED)

PHYSIOGRAPHIC PROVINCE BOUNDARY

WATER SUPPLY TRANSMISSION LINE

NOTE: WHERE THE PRECAMBRIAN FORMATION BOUNDARIES TERMINATE ABRUPTLY, IT IS THE GEOLOGIST'S OPINION THAT THE GEOLOGICAL COMPLEXITY OF THE AREA PREVENTS FURTHER INTERPRETATIONS.

Kmr — CRETACEOUS MAGOTHY AND RARITAN FORMATIONS (SAND AND CLAY)

Ꞧb — TRIASSIC BRUNSWICK FORMATION

Ꞧc — TRIASSIC CONGLOMERATE BEDS OF THE STOCKTON FORMATION

Ꞧl — TRIASSIC LOCKATONG FORMATION

Ꞧdb — TRIASSIC DIABASE

Ꞧbs — TRIASSIC BASALT FLOWS

Sd — SILURIAN DECKER LIMESTONE AND LONGWOOD SHALE FORMATIONS

Sgp — SILURIAN GREEN POND CONGLOMERATE

Omb — ORDOVICIAN MARTINSBURG SHALE

€Ok — CAMBRO ORDOVICIAN KITTATINNY LIMESTONE

€h — CAMBRIAN HARDYSTON SANDSTONE

PRECAMBRIAN:

gh - HORNBLENDE GRANITE WITH PYROXENE GRANITE

ga - ALASKITE

am - AMPHIBOLITE

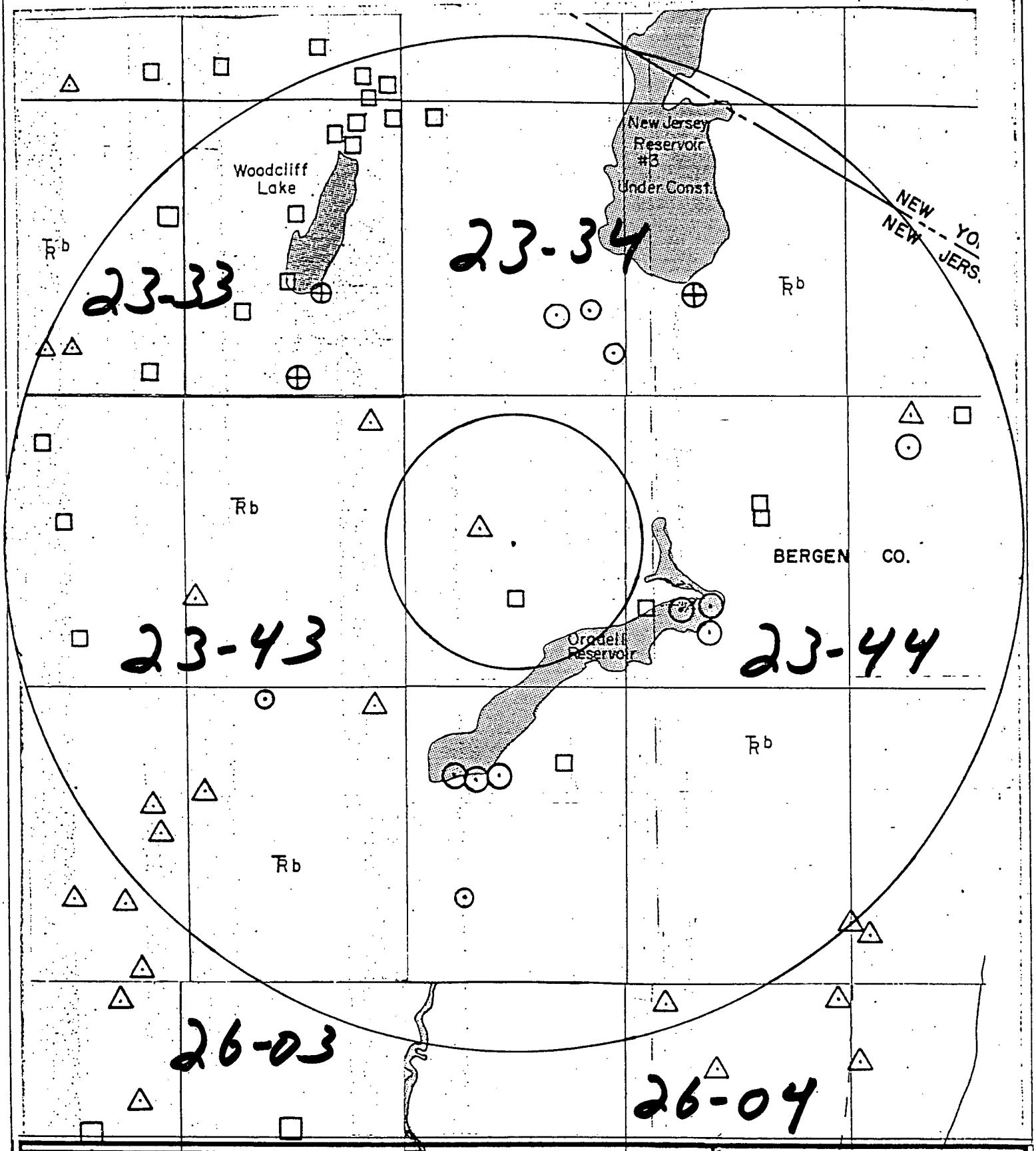
px - PYROXENE GNEISS

gnq - QUARTZ PLAGIOCLASE GNEISS

gnb - BIOTITE GNEISS

sk - SKARN, GRAPHITE SCHIST

fnd — FORMATION NOT DETERMINED



Scale: 1 Mile to an Inch.

Miles 1 3/4 1/2 1/4 0 1 2 3

Yards 1000 500 0 1000 2000 3000

Meters 1000 500 0 1000 2000 3000

A. HOEN & CO. BALTIMORE, MD.

Contour Interval: 20 feet

KURT VERSEN COMPANY
10 CHARLES STREET
WESTWOOD, BERGEN COUNTY
NEW JERSEY ATLAS GEOLOGIC
OVERLAY SHEETS 23 & 26

LEGEND

WATER SUPPLY

- AREA SERVED BY PRIVATE WATER SERVICE COMPANIES
- AREA SERVED BY REGIONALLY OWNED WATER SERVICE COMPANI
- AREA SERVED BY MUNICIPALLY OWNED WATER SERVICE COMPAN
- AREA NOT PRESENTLY SERVED BY WATER SERVICE
- PUBLIC SUPPLY WELLS
- WATER MAIN ACROSS HIGHWA FOR FUTURE USE
- SURFACE WATER INTAKE
- —W— MAJOR WATER MAINS

SEWAGE, LANDFILL

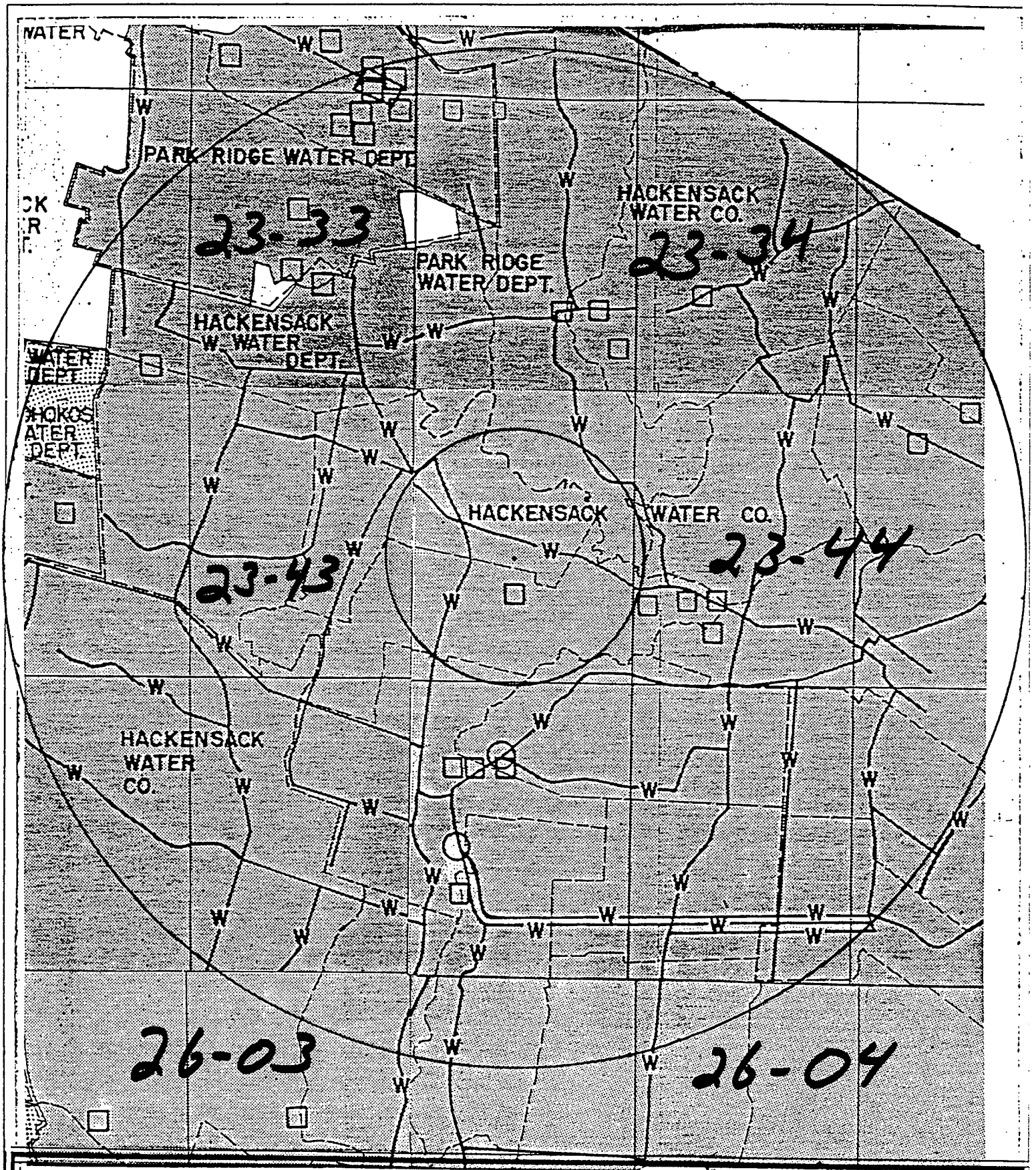
- AREA SERVED BY PUBLIC SEWAGE SERVICE
- AREA NOT PRESENTLY SERVED BY SEWAGE SERVICE
- SANITARY LANDFILLS
- SEWAGE TREATMENT PLANTS (CAPACITY <0.3mgd)
- SEWAGE TREATMENT PLANTS (CAPACITY ≥0.3mgd)
- —S— MAJOR SEWAGE TRANSMISSION LINES

AINAGE BASIN

- DRAINAGE BASIN BOUNDARY
- RIVER BASIN BOUNDARY
- HUDSON DRAINAGE BASIN NAME
- STREAMS AND RIVERS
- FLOOD PRONE AREAS

POPULATION

- COUNTY BOUNDARY
- MUNICIPAL BOUNDARY
- ( ) POPULATION DENSITY IN PERSONS PER SQUARE MILE
- [ ] AREA IN SQUARE MILES
- % PERCENT AREA OF MUNICIPALITY ON BLOCK
- MARKET ROADS
- BUILT UP AREAS
- STATE BOUNDARY



Scale: 1 Mile to an Inch.

Miles

Yards

Meters

Contour Interval: 20 feet

KURT VERSEN COMPANY
10 CHARLES STREET
WESTWOOD, BERGEN COUNTY
NEW JERSEY ATLAS WATER
SUPPLY OVERLAY
SHEETS 23 & 26

Location	Owner	Year Drilled	Screen Setting or Depth of Casing	Total Depth	g/m Yield	Forma
23-33-117	Cragmere Water Co.			300	200	Trb
23-33-118	Mahwah Twp.			200	250	"
23-33-175	Ramsey Boro			500	105	"
23-33-175	"			Test		Qp
				Negative		
23-33-178	"			61	0	"
23-33-183	Carlough, C.			400	275	Trb
23-33-187	Ramsey Boro	1956	20	400	220	"
23-33-247	Gibbs, A.	1962	77	205	200	"
23-33-298	VanWyk, E.	1961	22	105	75	"
23-33-418	Ramsey Boro	1965	25/111	400	151	"
23-33-421	"	1965	16/37	440	110	"
23-33-436	L.G.M. Constr.Corp.	1962	33	122	125	"
23-33-446	Erie R.R.			-	200	"
23-33-473	Allendale Boro			300	41	"
23-33-513	Knight's Day Camp	1962	39	105	200	"
23-33-514	Hackensack Water Co.	1956	48	85	450	Qp
23-33-517	"	1965	56	70	1750	"
23-33-541	"	1974	47/67	68	1000	Qsd
23-33-588	Parisi, C. J.	1962	174	235	100	Qp-Trb
23-33-599	Tice Farms			326	150	Trb
23-33-624	Jerry's Inn	1959	12	195	172	"
23-33-627	Murray, F.	1960	24	285	75	"
23-33-643	Simpson, K.	1963	43	100	100	"
23-33=653	Ramada Inn	1973	89	400	75	"
23-33-678	Park Ridge Boro			500	150	"
23-33-686	"	1965	47	300	151	"
23-33-698	"			435	185	"
23-33-698	"			252	200	"
23-33-699	"			28	100	Qp
23-33-711	Allendale Boro	1955	99	504	60	Trb
23-33-711	"			450	225	"
23-33-747	Waldwick Boro			360	250	"
23-33-749	"			500	55	"
23-33-755	Allendale Boro	1959	21	303	162	"
23-33-766	Waldwick Boro	1957	70	290	75	"
23-33-771	"	1958	96	300	226	"
23-33-863	Park Ridge Water Co.	1973	54	300	425	"
23-33-884	Brewster & Son, Inc.			360	80	"
23-33-885	Dugan, J.	1959	22	308	100	"
23-33-898	Park Ridge Boro	1963	18	303	195	"
23-33-931	"			24	210	Qp
23-33-932	"			30	207	"
23-33-933	"			36	200	"
23-33-935	"			-	0	"
23-33-952	Hackensack Water Co.			440	178	Trb
23-33-958	"			456	190	"
23-33-959	"			400	55	"
23-33-973	Lock, H.			205	75	"
23-33-988	Hackensack Water Co.	1973	50	348	40	"

J. Geodetic Control Survey monuments described
Index Map 10; adjacent Index Maps 9,15

I. Water Well Records

Location	Owner	Year Drilled	Screen Setting Depth of of Casing	Total Depth	g/m Yield	Formation
23-43-114	Ridgewood Village			402	350	Trb
23-43-123	Hohokus Boro	1963	52	300	411	"
23-43-127/8	Ridgewood Village (8 wells)			150(av)	95(av)	"
23-43-131	Hohokus Boro			300	200	"
23-43-133	"	1955	39	301	288	"
23-43-158	Grand Union			178	190	"
23-43-159	Food Fair Stores	1955	71	310	250	"
23-43-174	Ridgewood Village	1955	35/56	300	43	"
23-43-177	"			300	198	"
23-43-191	"	1964	52/54	300	1230	"
23-43-198	"			298	200	"
23-43-212	Hohokus Boro			412	105	"
23-43-215	"			314	245	"
23-43-224	Sher, M.	1963	30	205	100	"
23-43-245	Ridgewood Village	1955	42/64	300	200	"
23-43-248	"			201	500	"
23-43-252	"	1964	18/42	320	390	"
23-43-275	"			210	250	"
23-43-285	Peterman, J.	1961	30	165	100	"
23-43-332	Westwood Fuel Co.	1960	56	236	75	"
23-43-371	McKenna			605	210	"
23-43-431	Faber, J.	1964	52	85	75	"
23-43-434	Ridgewood Village			300	162	"
23-43-436	"	1955	44/64	300	165	"
23-43-437	"	1957	36/40	303	340	"
23-43-438	"	1965	51/73	300	254	"
23-43-457	City Housing Corp.			300	30	"
23-43-462	Ridgewood Village			300	151	"
23-43-463	"	1965	65/86	300	151	"
23-43-473	Einson & Freeman Co.			325	168	"
23-43-482	City Housing Corp.		---	250	30	"
23-43-487	"			378	137	"
23-43-488	Fairlawn Boro			350	385	"
23-43-489	"			250	125	"
23-43-511	Ridgewood, Village of	1973	78	300	159	"
23-43-562	Great Eastern Mills, Inc.	1956	21	200	250	"
23-43-565	"	1956	34	203	250	"
23-43-582	Ridgewood Country Club	1964	29	500	250	"
23-43-591	N.Y. Twist Drill Co.			200	125	"
23-43-598	N.J. 17 Corp.			245	80	"
23-43-632	Hackensack Golf Club	1958	81	532	172	"
23-43-641	Paramus Bd.of Ch.Freeholders	1957	54	300	150	"

J. Geodetic Control Survey monuments described
Index Map 15; adjacent Index Maps 9,10,16

I. Water Well Records

Location	Owner	Year Drilled	Screen Setting or Depth of Casing	Total Depth	g/m Yield	Format
23-44-154	Westwood Laundry Co.			125	250	Trb
23-44-182	Hackensack Water Co.	1965	77	478	200	"
23-44-253	"	1973	43	348	120	"
23-44-253	"	1973	43	348	175	"
23-44-271	"			106	123	Qp
23-44-273	"	1954	82	Test negative		Trb
23-44-281	"	1954	-	"	"	Qsd
23-44-284	"	1954	72	"	"	"
23-44-313	Py Co. Mills, Inc.	1958	52	150	200	Trb
23-44-316	Hackensack Water Co.	1955	54	Test negative		Qsd
23-44-322	"	1955	-	401	75	Trb
23-44-419	"	1954	154	Test negative		Qsd
23-44-427	"	1954	168	"	"	"
23-44-428	"			"	"	"
23-44-437	White Beeches Golf & Country Club	1965	40	171	250	Qsd-Tr
23-44-473	Hackensack Water Co.	1964	95	Test negative		Qsd
23-44-674	Oldroyd Co.			279	250	Trb
23-44-674	Hoke Valve Co.			276	329	"

J. Geodetic Control Survey monuments described
Index Maps 15, 16; adjacent Index Map 10

I. Water Well Records

Location	Owner	Year Drilled	Screen Setting or Depth of Casing	Total Depth	g/m Yield	Formation
26-04-144	Silver Park Record Co.	1958	44	335	185	Trb
26-04-174	Federated Dept.Stores Inc.	1959	117'11"	147	254	Q
26-04-196	Englewood Hospital Assn.	1968	53'3"	230	222	Trb
26-04-212	Food Fair Stores	1958	25	300	172	"
26-04-227	Patterson, H & Sons	1966	20	198	225	"
26-04-233	Grand Union Co.			50	82	Trs
26-04-296	Englewood Hospital Assn.			218	89	"
26-04-317	Clinton Inn	1963	39	107	402	"
26-04-432	Grand Union Co.	1953	35	150	75	Trb
26-04-451	Home Town Laundries, Inc.			240	150	"
26-04-474	Bogota Water Co.			275	160	"
26-04-516	Tenafly Enterprises	1970	33	168	70	?
26-04-543	Spiegel Mfg.Corp.	1963	135	145	150	Q
26-04-556	Scharf, Charles	1955	64	250	100	Trs
26-04-557	Cart-Wright, Inc.	1960	115	298	100	"
26-04-744	Flinkote Co.	1955	38	38	No test	Q
26-04-745	Hygenic Ice Co.			750	7	Trb
26-04-767	Schonbrunn Co., Inc.	1965	40	291	60	Trs
26-04-795	J.G.Knits, Inc.	1972	50	300	250	Trb
26-04-789	Grove Pine Corp.	1966	88	315	200+	Trs
26-04-799	Great Bear Spring Co.	1965	30	95	178	Trb
26-04-816	Leonia Board of Education	1968	58	350	52	Trs

J. Geodetic Control Survey monuments described
Index Maps 15,16,21

SUBJECT TO REVISION

WATER WITHDRAWAL POINTS AND NJGS CASE INDEX SITES WITHIN 5.0 MILES OF:

LATITUDE 405853
LONGITUDE 740102

DRAFT

SCALE: 1:63,360
(1 Inch = 1 Mile)

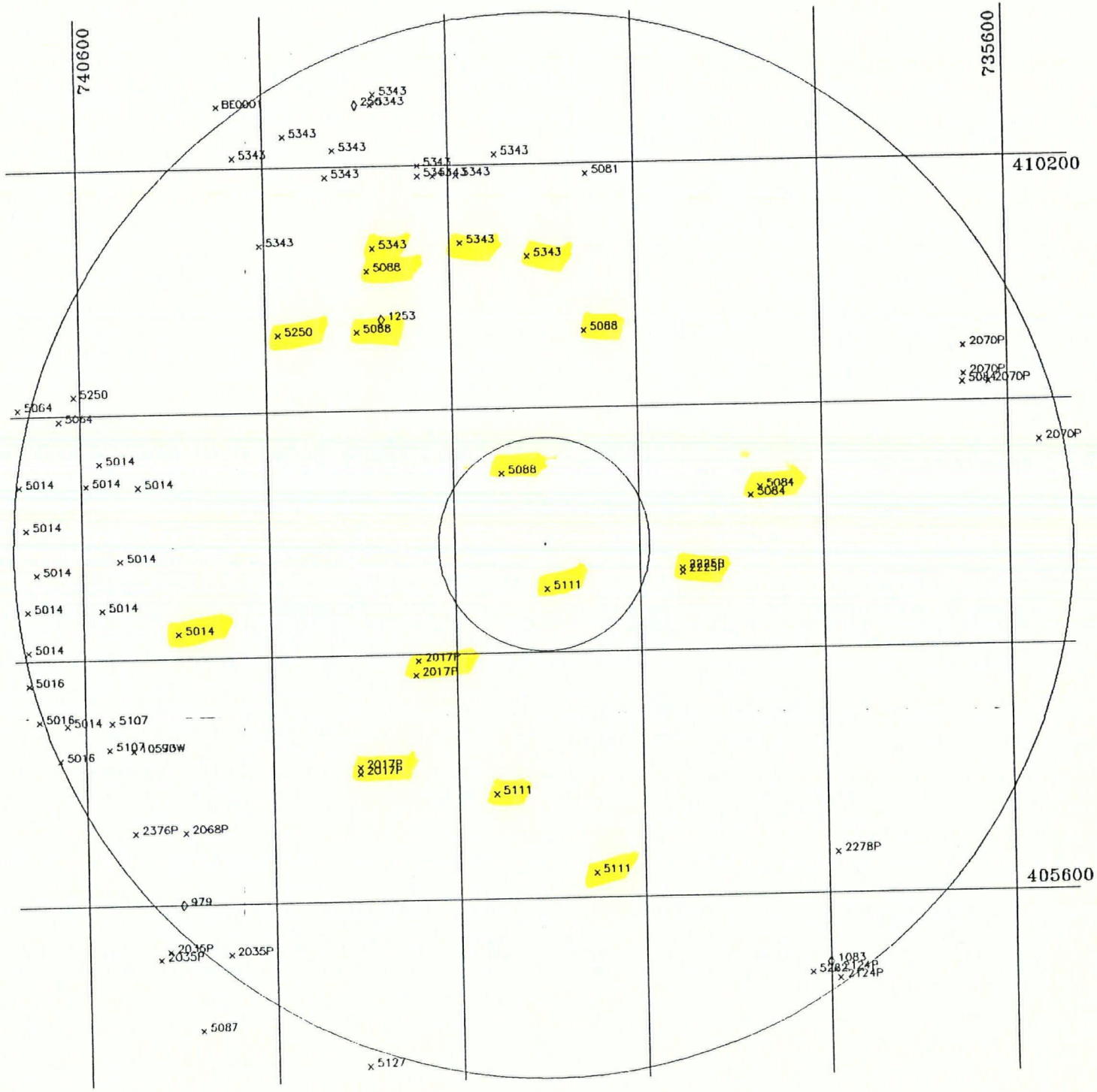
0 1
mile

× WATER WITHDRAWAL POINTS
◊ NJGS CASE INDEX SITES
1 MILE AND 5 MILE RADII INDICATED

NJGS CASE INDEX DATA RETRIEVED FROM:
NEW JERSEY GEOLOGICAL SURVEY
ON 12/22/87

PLOT PRODUCED BY:
NJDEP
DIVISION OF WATER RESOURCES
BUREAU OF WATER ALLOCATION
CN-029
TRENTON, NJ 08625

DATE: 01/30/91



SUBJECT TO REVISION

 PRELIMINARY SURVEY OF WATER WITHDRAWAL POINTS WITHIN 5.0 MILES OF 405853 LAT. 740102 LON. (IN ORDER BY PERMIT NUMBER) - 01/30/91

NUMBER	NAME	SOURCEID	LOCID	LAT	LON	LLACC	DISTANCE	COUNTY	MUN	DEPTH	GED1	GED2	CAPACITY
10573W	BERGEN CO. COMMUNITY COLLEGE	4300101		405715	740530	F	4.3	03	46	200	GTRB		180
10590W	BERGEN CO. DIV. OF PARKS	4300100		405715	740530	F	4.3	03	46	210	GTRB		275
2017P	HACKENSACK GOLF CLUB	2302297	1	405757	740225	S	1.6	03	44	532	GTRB		150
	HACKENSACK GOLF CLUB	2305058	2	405702	740304	S	2.8	03	44	320	GTRB		60
	HACKENSACK GOLF CLUB	LOWER LAKE	1	405705	740304	F	2.7	03	44		GTRB		300
	HACKENSACK GOLF CLUB	UPPER LAKE	2	405750	740227	F	1.7	03	44		GTRB		300
2035P	ARCOLA COUNTRY CLUB	4600126	3	405533	740515	S	5.3	03	46	200	GTRB		160
	ARCOLA COUNTRY CLUB	2603572	4	405537	740509	S	5.2	03	46	208	GTRB		125
	ARCOLA COUNTRY CLUB	POND	1	405535	740430	U	4.9	03	46	5	GTRB		200
	ARCOLA COUNTRY CLUB	POND	2	405535	740430	U	4.9	03	46	15	GTRB		200
2068P	RIDGEWOOD COUNTRY CLUB	4300032	1	405635	740458	U	4.3	03	46	306	GTRB		120
	RIDGEWOOD COUNTRY CLUB	4300033	2	405635	740458	U	4.3	03	46	275	GTRB		275
	RIDGEWOOD COUNTRY CLUB	2303832	3	405635	740458	S	4.3	03	46	500	GTRB		250
	RIDGEWOOD COUNTRY CLUB	POND		405635	740458	U	4.3	03	46	8	GTRB		500
2070P	BERGEN COUNTY DIV. OF PARKS	2302807	1	410009	735612	S	4.5	03	55	300	GTRB		100
	BERGEN COUNTY DIV. OF PARKS	2302599	2	405940	735540	S	4.8	03	55	150	GTRB		65
	BERGEN COUNTY DIV. OF PARKS	POND	1	410027	735628	U	4.4	03	55		S		750
	BERGEN COUNTY DIV. OF PARKS	POND	2	410013	735629	U	4.3	03	55		S		150
2124P	CLINTON INN MOTOR HOTEL	2602787	1	405522	735757		4.9	03	61	106	GTRB		400
	CLINTON INN MOTOR HOTEL	2604394	2	405518	735754	S	4.9	03	61	107	GTRB		175
2225P	HACKENSACK WATER COMPANY	2306433	H. PARK #1	405840	735932	S	1.3	03	24	95	GOSD		150
	HACKENSACK WATER COMPANY	2306434	H. PARK #2	405838	735932	S	1.3	03	24	82	GOSD		150
2278P	HOKE, INC.	2302273	1	405620	735754	S	4.0	03	08	279	GTRB		250
	HOKE, INC.	2302348	2	405620	735754	S	4.0	03	08	276	GTRB		250
2376P	PARAMUS GOLF AND COUNTRY CLUB	4300095	2	405635	740530	F	4.7	03	46	200	GTRB		200
	PARAMUS GOLF AND COUNTRY CLUB	STORAGE POND		405635	740530	F	4.7	03	46		GTRB		350
5014	RIDGEWOOD VILLAGE	4300004	CARR 1	405925	740640		5.0	03	51	250	GTRB		
	RIDGEWOOD VILLAGE	4300005	CARR 2	405925	740640		5.0	03	51	250	GTRB		
	RIDGEWOOD VILLAGE	4300006	CARR 3	405925	740640		5.0	03	51	250	GTRB		
	RIDGEWOOD VILLAGE	4300007	CARR 4	405925	740640		5.0	03	51	200	GTRB		
	RIDGEWOOD VILLAGE	4300008	CARR 5	405925	740640		5.0	03	51	218	GTRB		
	RIDGEWOOD VILLAGE	4300009	CARR 6	405925	740640		5.0	03	51	150	GTRB		
	RIDGEWOOD VILLAGE	4300010	CARR 7	405925	740640		5.0	03	51	175	GTRB		
	RIDGEWOOD VILLAGE	4300011	CARR 8	405925	740640		5.0	03	51	175	GTRB		
	RIDGEWOOD VILLAGE	4300012	CARR 9	405925	740640		5.0	03	51	175	GTRB		
	RIDGEWOOD VILLAGE	4300013	GROVE ST.	405804	740636		5.0	03	51	298	GTRB		200
	RIDGEWOOD VILLAGE	4300014	E. RDGEWD.	405824	740548		4.2	03	51	201	GTRB		600
	RIDGEWOOD VILLAGE	4300015	LINWOOD	405904	740636		4.9	03	51	261	GTRB		700
	RIDGEWOOD VILLAGE	2300333	E SADDLE R	405924	740524		3.9	03	51	300	GTRB		300
	RIDGEWOOD VILLAGE	2301644	SPRING	405824	740636		4.9	03	51	300	GTRB		300
	RIDGEWOOD VILLAGE	2301643	WALTHERY	405936	740548		4.3	03	51	300	GTRB		175
	RIDGEWOOD VILLAGE	2301445	PARAMUS	405848	740536		4.0	03	51	300	GTRB		150
	RIDGEWOOD VILLAGE	2303903	IRVING	405842	740630		4.8	03	51	300	GTRB		380
	RIDGEWOOD VILLAGE	2303902	SALEM	405812	740500		3.6	03	51	330	GTRB		225
	RIDGEWOOD VILLAGE	2304456	TWINNY	405925	740557		4.3	03	51	298	GTRB		950
	RIDGEWOOD VILLAGE	2304170	STEVENS	405728	740612		4.8	03	51	300	GTRB		225
5016	RIDGEWOOD VILLAGE	2301770	PROSPECT	405748	740636		5.0	03	22	300	GTRB		400
	RIDGEWOOD VILLAGE	2302227	AKERMAN	405730	740630		5.0	03	22	303	GTRB		250
	RIDGEWOOD VILLAGE	2304171	LEIGH	405711	740617		5.0	03	22	300	GTRB		125
5064	HOHOKUS BOROUGH WATER DEPT.	2301592	4	405957	740614		4.7	03	28	307	GTRB		275
	HOHOKUS BOROUGH WATER DEPT.	2307356	6	410003	740640		5.1	03	28	300	GTRB		325
5081	HACKENSACK WATER COMPANY	2302022	2 LAKES W	410155	740631	F	5.5	03	30	92	GISD		275
5084	HACKENSACK WATER COMPANY	2305938	6	405915	735847	U	2.0	03	24	348	GTRB		250
	HACKENSACK WATER COMPANY	2305939	0	405919	735841	U	2.1	03	24	346	GTRB		150
	HACKENSACK WATER COMPANY	SPARKILL CREEK		410009	735629	U	4.2	03	40		SHLD		

 PRELIMINARY SURVEY OF WATER WITHDRAWAL POINTS WITHIN 5.0 MILES OF 405853 LAT. 740102 LON. (IN ORDER BY PERMIT NUMBER) - 01/30/91

NUMBER	NAME	SOURCEID	LOCID	LAT	LON	LLACC	DISTANCE	COUNTY	MUN	DEPTH	GEO1	GEO2	CAPACITY
5087	HACKENSACK WATER COMPANY	2603017	ROCHELLE R	405458	740449		5.6	03	54	473	GTRB		200
5088	HACKENSACK WATER COMPANY	2304319	WESTWOOD	405928	740129		0.8	03	67	428	GTRB		550
	HACKENSACK WATER COMPANY	2304083	WOODCLIFFE	410109	740254		3.1	03	69	440	GTRB		150
	HACKENSACK WATER COMPANY	2304102	HILLSDALE	410039	740301		2.7	03	27	456	GTRB		150
	HACKENSACK WATER COMPANY	2301215	OLD TAPPAN	410038	740034		2.0	03	43	451	GTRB		150
5107	HACKENSACK WATER COMPANY	2304260	PARAMUS 1	405716	740545		4.5	03	46	28	GOSD		200
	HACKENSACK WATER COMPANY	2305502	PARAMUS 2	405716	740545		4.5	03	46	388	GTRB		150
	HACKENSACK WATER COMPANY	SADDLE RIVER		405729	740543		4.4	03	46		SPSAD		
5117	HACKENSACK WATER COMPANY	2304135		405831	740101		0.4	03	14	479	GTRB		170
	HACKENSACK WATER COMPANY	2304815		405612	740032		3.1	03	26	403	GTRB		160
	HACKENSACK WATER COMPANY	HACKENSACK RIV		405651	740136	U	2.4	03	38		SKHAC		
	HACKENSACK WATER COMPANY	HIRSCHFIELD BR		405651	740136	U	2.4	03	38		SKHAC		
5127	LODI BOROUGH	2603185	HOME PLACE	405439	740301		5.2	03	31	450	GTRB		175
5250	WALDWICK WATER DEPARTMENT	2302291	4	410009	740604		4.6	03	64	300	GTRB		300
	WALDWICK WATER DEPARTMENT	2302349	5	410038	740352		3.2	03	64	300	GTRB		200
5282	GARFIELD WATER DEPARTMENT	2604103	6	405521	735812		4.9	03	21	300	GTRB		150
5343	PARK RIDGE WATER DEPARTMENT	4300089	1	410155	740210	F	3.6	03	47	252	GTRB		150
	PARK RIDGE WATER DEPARTMENT	4300090	2	410200	740220	F	3.8	03	47	435	GTRB		150
	PARK RIDGE WATER DEPARTMENT	4300091	3	410206	740315	F	4.2	03	47	500	GTRB		165
	PARK RIDGE WATER DEPARTMENT	4300092	4	410155	740155	F	3.6	03	47	445	GTRB		105
	PARK RIDGE WATER DEPARTMENT	2303839	5	410155	740220		3.7	03	47	24	GOSD		200
	PARK RIDGE WATER DEPARTMENT	2301280	6	410155	740155	F	3.6	03	47	30	GOSD		200
	PARK RIDGE WATER DEPARTMENT	2301281	7	410155	740155	F	3.6	03	47	36	GOSD		200
	PARK RIDGE WATER DEPARTMENT	2302181	8	410155	740155	F	3.6	03	47	665	GTRB		300
	PARK RIDGE WATER DEPARTMENT	2302942	9	410122	740403	F	3.9	03	69	300	GTRB		195
	PARK RIDGE WATER DEPARTMENT	2303748	10	410205	740420		4.7	03	69	303	GTRB		150
	PARK RIDGE WATER DEPARTMENT	2304371	11	410230	740250	F	4.4	03	47	450	GTRB		170
	PARK RIDGE WATER DEPARTMENT	2304806	12	410155	740320	T	4.0	03	47	305	GTRB		140
	PARK RIDGE WATER DEPARTMENT	2305113	13	410122	740153	F	2.9	03	47	400	GTRB		300
	PARK RIDGE WATER DEPARTMENT	2305487	14	410235	740248	F	4.5	03	48	350	GTRB		150
	PARK RIDGE WATER DEPARTMENT	2305963	15	410120	740250	F	3.2	03	69	300	GTRB		325
	PARK RIDGE WATER DEPARTMENT	2306669	16	410115	740110	F	2.7	03	47	325	GTRB		520
	PARK RIDGE WATER DEPARTMENT	2307136	17	410215	740347	F	4.6	03	47	350	GTRB		250
	PARK RIDGE WATER DEPARTMENT	2308797	18	410205	740130	F	3.7	03	47	300	GTRB		300
BE0001	TICE FARMS	2333599	WELL 1	410230	740430	F	5.1	03	69	420	GTRB		175
	TICE FARMS	POND	1	410230	740430	F	5.1	03	69	6	GTRB		

Number of Observations: 91

ATTACHMENT A

Rev. 2/80

State of New Jersey
Department of Environmental Protection

ID 00615
CM

OFFICE OF THE COMMISSIONER

Return forms to:
INDUSTRIAL SURVEY PROJECT
P.O. BOX 251
TRENTON, NEW JERSEY 08602

SELECTED SUBSTANCE REPORT

PART I – General Plant Information

COMPLETE ONE REPORT FOR EACH PLANT SITE OR FACILITY LOCATION

1. Company Name Kurt Versen Company
2. Division or Plant Name
3. Mailing Address (Street) 10 Charles Street,
   (City/Town) Westwood County Bergen State N.J. Zip Code 07675
4. Plant Location Address (Street) (same)
   (If not as above)
   (City/Town) County State Zip Code
5. Date Plant Began Operations At This Location June, 1964
6. Person to Contact Regarding this Report John Pecoraro Title Plant Engineer
7. Phone Number (Area Code) 201-664-8200
8. SIC Code (Four Digit) Standard Industrial Classification (if available)
9. Nature of Business Manufacturer of Industrial Lighting Fixtures
10. Number of Production Employees at this Plant Site 108
11. Does this plant manufacture, process, form, repackage, release, use, dispose of or store any of the selected substances shown on Table I of the enclosed instructions? (Check One) YES ☒ NO ☐

    If your answer to number 11 is "YES", complete the Entire Report for your facility, sign and return.

    If your answer to number 11 is "NO", complete Question 15, sign and return.

I, HEREBY, CERTIFY THAT ALL STATEMENTS MADE BY ME IN THIS REPORT ARE TRUE, COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND THAT ESTIMATES WHERE USED HAVE BEEN MADE IN GOOD FAITH.

NAME (Print) John P. Pecoraro Signature John P. Pecoraro

Title Plant Engineer Date 6/15/82

12A. Sketch (On the reverse side of this page) or attach a copy of a map indicating the exact location of the plant site.

12B. Supply your Dun & Bradstreet number if available.

FOR OFFICIAL USE ONLY

E	5826	S		N	453711
B	301	O		A	
C	0			X	
V				D&B	001471614

Due date: 9/18/82

HACKENSACK

37155900 3 073 3648
AMBER ALUMINUM CO
-CORP-
50 CHARLES ST
WESTWOOD N J 07675

WESTWOOD N J 80665

ATTACHMENT A-5

7

List all of the selected substances included in this report along with their CAS Numbers (From Table I of the instructions) which are manufactured, processed, formed, repackaged, released, used, disposed of or stored at the plant site:

7440-38-2 Arsenic

7440-50-8 Copper

7439-97-6 Mercury

7440-66-6 Zinc

14. Wastewater Discharges — Complete the following information:

A. Discharge to publicly owned treatment works (POTW):

1. Name of Utility (POTW) Bergen County Utilies Authority

Address/Location Box 122, Little Ferry, New Jersey

2. Estimated Average Volume of Wastewater Discharged to POTW in a day

10,000 gallons.

3. Briefly describe any pretreatment methods controlled addition of caustic solution to insure an acceptable pH reading of waste solution being discharged into the sewer.

4. Wastewater consists of: (X) Process Water, ( ) Contact Cooling, ( ) Non-Contact Cooling, ( ) Domestic Sewage, ( ) Contaminated Storm Water, ( ) Washdown Water, ( ) Scrubber Water, ( ) Other:

B. Discharge to Navigable Waterway or Tributary Stream:

1. Name of Receiving Stream N/A

2. NPDES Permit Number

3. Estimated average volume of wastewater discharged to receiving stream in a day

gallons.

4. Briefly describe any treatment methods controlled additions of caustic solution to neutralize wastewater

5. Wastewater consists of: (X) Process Water, ( ) Contact Cooling, ( ) Non-Contact Cooling, ( ) Domestic Sewage, ( ) Contaminated Storm Water, ( ) Washdown Water, ( ) Scrubber Water, ( ) Other:

15. Previous disposal practices (1930—1977). Has this plant previously disposed of wastes containing any of the selected substances at any land disposal site (i.e. by land spreading or burial, landfilling, lagoon or seepage pit) either on or off site?

YES ___ NO X

If available provide the following information for each disposal site. Use additional pages if necessary.

Name and Location of Site

Time period site was used

Name of selected substances disposed of at this site	Physical State	Amount of selected substance disposed at site (pounds)

ATTACHMENT A-6

Department of Environmental Protection

SELECTED SUBSTANCE REPORT

FOR DEP USE

COMPLETE ONE FORM FOR EACH SELECTED SUBSTANCE

Name and Location of Plant: Kurt Versen Company 10 Charles St. Westwood, N. J.

I.D.

Selected Substance Name: Arsenic

CAS #: 7440-38-2

Briefly Describe Its Use On The Site: Produced as a By-Product of Plating operation and disposal is by means of sanitary sewer in amounts acceptable by E.P.A.

COMPLETE THE FOLLOWING INFORMATION FOR THE PLANT BASED ON 1978 USAGE		ENTER THE ACTUAL OR ESTIMATED AMOUNTS	USE THE REQUESTED UNITS	CHECK ONE: ACTUAL	CHECK ONE: ESTIMATED
QUANTITIES	4. QUANTITY PRODUCED ON SITE	in acceptable limits	lbs/yr.		
	5. QUANTITY BROUGHT ONTO SITE	N/A	lbs/yr.		
	6. QUANTITY CONSUMED ON SITE	N/A	lbs/yr.		
	7. QUANTITY SHIPPED OFF SITE AS (OR IN) PRODUCT	N/A	lbs/yr.		
	8. MAXIMUM INVENTORY	N/A	lbs		
EMISSIONS	9. TOTAL STACK EMISSIONS OF SELECTED SUBSTANCE	N/A	lbs/yr.		
		N/A	max lbs/day		
	10. TOTAL FUGITIVE EMISSIONS OF SELECTED SUBSTANCE	N/A	lbs/yr.		
		N/A	max lbs/day		
WASTEWATER DISCHARGE	11. TOTAL DISCHARGE OF SELECTED SUBSTANCE INTO SURFACE WATER	N/A	lbs/yr.		
		N/A	max lbs/day		
	12. TOTAL DISCHARGE OF SELECTED SUBSTANCE INTO PUBLICLY OWNED TREATMENT WORKS	in acceptable limits	lbs/yr.		
		in acceptable limits	max lbs/day		

13. DISPOSAL OF WASTE CONTAINING THE SELECTED SUBSTANCE

LOCATION OF FINAL DISPOSAL SITE NAME AND ADDRESS	PHYSICAL STATE TABLE A	DISPOSAL METHOD TABLE B	QUANTITY OF SELECTED SUBSTANCE DISPOSED (lbs)	FOR DEP USE
1.				
2.				
3.				
4.				
5.				

TABLE A
PHYSICAL STATE
W-01 Solid
W-02 Liquid
W-03 Slurry
W-04 Sludge
W-09 Other (specify)

TABLE B
DISPOSAL METHODS
M-01 Composting
M-02 Evaporation
M-03 Holding Tank
M-04 Incineration
M-05 Injection Well
M-06 Lagoon
M-07 Land Burial
M-08 Land Spreading
M-09 Neutralization
M-10 Ocean [illegible]
M-11 Recycling
M-12 Sanitary Landfill
M-13 Surface Water
M-14 Subsurface System
M-15 Pyrolysis
M-16 Spray Irrigation
M-17 Stored On Site
M-99 Other (specify)

ATTACHMENT A-7

Department of Environmental Protection

SELECTED SUBSTANCE REPORT

LETE ONE FORM FOR EACH SELECTED SUBSTANCE

FOR DEP USE

Name and Location of Plant: Kurt Versen Company 10 Charles Street Westwood, N.J.

I.D.

2. Selected Substance Name: Copper

CAS #: 7440-50-8

3. Briefly Describe Its Use On The Site:

Produced as a By-Product of Plating operation and diposal is by means of sanitary sewer in amounts acceptable by E.P.A.

	COMPLETE THE FOLLOWING INFORMATION FOR THE PLANT BASED ON 1978 USAGE	ENTER THE ACTUAL OR ESTIMATED AMOUNTS	USE THE REQUESTED UNITS	CHECK ONE: ACTUAL	CHECK ONE: ESTIMATED
QUANTITIES	4. QUANTITY PRODUCED ON SITE	in acceptable limits	lbs/yr.		
	5. QUANTITY BROUGHT ONTO SITE	N/A	lbs/yr.		
	6. QUANTITY CONSUMED ON SITE	N/A	lbs/yr.		
	7. QUANTITY SHIPPED OFF SITE AS (OR IN) PRODUCT	N/A	lbs/yr.		
	8. MAXIMUM INVENTORY	N/A	lbs		
EMISSIONS	9. TOTAL STACK EMISSIONS OF SELECTED SUBSTANCE	N/A	lbs/yr.		
		N/A	max lbs/day		
	10. TOTAL FUGITIVE EMISSIONS OF SELECTED SUBSTANCE	N/A	lbs/yr.		
		N/A	max lbs/day		
DISCHARGE	11. TOTAL DISCHARGE OF SELECTED SUBSTANCE INTO SURFACE WATER	N/A	lbs/yr.		
		N/A	max lbs/day		
	12. TOTAL DISCHARGE OF SELECTED SUBSTANCE INTO PUBLICLY OWNED TREATMENT WORKS	in acceptable limits	lbs/yr.		
		in acceptable limits	max lbs/day		

13. DISPOSAL OF WASTE CONTAINING THE SELECTED SUBSTANCE

LOCATION OF FINAL DISPOSAL SITE NAME AND ADDRESS	PHYSICAL STATE TABLE A	DISPOSAL METHOD TABLE B	QUANTITY OF SELECTED SUBSTANCE DISPOSED (lbs)	FOR DEP USE
1.				
2.				
3.				
4.				
5.				

TABLE A
PHYSICAL STATE

W-01 Solid
W-02 Liquid
W-03 Slurry
W-04 Sludge
W-09 Other (specify)

TABLE B
DISPOSAL METHODS

M-01 Composting
M-02 Evaporation
M-03 Holding Tank
M-04 Incineration
M-05 Injection Well
M-06 Lagoon
M-07 Land Burial
M-08 Land Spreading
M-09 Neutralization
M-10 Ocean
M-11 Recycling
M-12 Sanitary Landfill
M-13 Surface Water
M-14 Subsurface System
M-15 Pyrolysis
M-16 Spray Irrigation
M-17 Stored On Site
M-98 Other (specify)

ATTACHMENT A-8

State of New Jersey
Department of Environmental Protection

SELECTED SUBSTANCE REPORT

FOR DEP USE

LETE ONE FORM FOR EACH SELECTED SUBSTANCE

Name and Location of Plant
ırt Versen Company 10 Charles St. Westwood, N.J.

I.D.

2. Selected Substance Name: Mercury
CAS #: 7439-97-6

3. Briefly Describe Its Use On The Site:

Produced as a By-Product of Plating operation and disposal is by means of sanitary sewer in amounts acceptable by E.P.A.

	COMPLETE THE FOLLOWING INFORMATION FOR THE PLANT BASED ON 1978 USAGE	ENTER THE ACTUAL OR ESTIMATED AMOUNTS	USE THE REQUESTED UNITS	CHECK ONE: ACTUAL	CHECK ONE: ESTIMATED
THROUGHPUT QUANTITIES	4. QUANTITY PRODUCED ON SITE	in acceptable limits	lbs/yr.		
	5. QUANTITY BROUGHT ONTO SITE	N/A	lbs/yr.		
	6. QUANTITY CONSUMED ON SITE	N/A	lbs/yr.		
	7. QUANTITY SHIPPED OFF SITE AS (OR IN) PRODUCT	N/A	lbs/yr.		
	8. MAXIMUM INVENTORY	N/A	lbs		
AIR EMISSIONS	9. TOTAL STACK EMISSIONS OF SELECTED SUBSTANCE	N/A	lbs/yr.		
		N/A	max lbs/day		
	10. TOTAL FUGITIVE EMISSIONS OF SELECTED SUBSTANCE	N/A	lbs/yr.		
		N/A	max lbs/day		
WASTEWATER DISCHARGE	11. TOTAL DISCHARGE OF SELECTED SUBSTANCE INTO SURFACE WATER	N/A	lbs/yr.		
		N/A	max lbs/day		
	12. TOTAL DISCHARGE OF SELECTED SUBSTANCE INTO PUBLICLY OWNED TREATMENT WORKS	in acceptable limits	lbs/yr.		
		in acceptable limits	max lbs/day		

13. DISPOSAL OF WASTE CONTAINING THE SELECTED SUBSTANCE

LOCATION OF FINAL DISPOSAL SITE NAME AND ADDRESS	PHYSICAL STATE TABLE A	DISPOSAL METHOD TABLE B	QUANTITY OF SELECTED SUBSTANCE DISPOSED (lbs)	FOR DEP USE
1.				
2.				
3.				
4.				
5.				

TABLE A
PHYSICAL STATE
W-01 Solid
W-02 Liquid
W-03 Slurry
W-04 Sludge
W-09 Other (specify)

TABLE B
DISPOSAL METHODS
M-01 Composting
M-02 Evaporation
M-03 Holding Tank
M-04 Incineration
M-05 Injection Well
M-06 Lagoon
M-07 Land Burial
M-08 Land Spreading
M-09 Neutralization
M-10 Ocean
M-11 Recycling
M-12 Sanitary Landfill
M-13 Surface Water
M-14 Subsurface System
M-15 Pyrolysis
M-16 Spray Irrigation
M-17 Stored On Site
M-98 Other (specify)

ATTACHMENT A-9

State of New Jersey
Department of Environmental Protection

SELECTED SUBSTANCE REPORT

FOR DEP USE

.II

LETE ONE FORM FOR EACH SELECTED SUBSTANCE

Name and Location of Plant
Kurt Versen Company 10 Charles Street Westwood, N.J.

I.D.

2. Selected Substance Name
Zinc

CAS #
7440-66-6

3. Briefly Describe Its Use On The Site:
Produced as a By-Product of Plating operation and disposal is by means of sanitary sewer in amounts acceptable by E.P.A.

	COMPLETE THE FOLLOWING INFORMATION FOR THE PLANT BASED ON 1978 USAGE	ENTER THE ACTUAL OR ESTIMATED AMOUNTS	USE THE REQUESTED UNITS	CHECK ONE: ACTUAL	CHECK ONE: ESTIMATED
THROUGH-PUT QUANTITIES	4. QUANTITY PRODUCED ON SITE	in acceptable limits	lbs/yr.		
	5. QUANTITY BROUGHT ONTO SITE	N/A	lbs/yr.		
	6. QUANTITY CONSUMED ON SITE	N/A	lbs/yr.		
	7. QUANTITY SHIPPED OFF SITE AS (OR IN) PRODUCT	N/A	lbs/yr.		
	8. MAXIMUM INVENTORY	N/A	lbs		
AIR EMISSIONS	9. TOTAL STACK EMISSIONS OF SELECTED SUBSTANCE	N/A	lbs/yr.		
		N/A	max lbs/day		
	10. TOTAL FUGITIVE EMISSIONS OF SELECTED SUBSTANCE	N/A	lbs/yr.		
		N/A	max lbs/day		
WASTEWATER DISCHARGE	11. TOTAL DISCHARGE OF SELECTED SUBSTANCE INTO SURFACE WATER	N/A	lbs/yr.		
		N/A	max lbs/day		
	12. TOTAL DISCHARGE OF SELECTED SUBSTANCE INTO PUBLICLY OWNED TREATMENT WORKS	in acceptable limits	lbs/yr.		
		in acceptable limits	max lbs/day		

13. DISPOSAL OF WASTE CONTAINING THE SELECTED SUBSTANCE

LOCATION OF FINAL DISPOSAL SITE NAME AND ADDRESS	PHYSICAL STATE TABLE A	DISPOSAL METHOD TABLE B	QUANTITY OF SELECTED SUBSTANCE DISPOSED (lbs)	FOR DEP USE
1.				
2.				
3.				
4.				
5.				

TABLE A
PHYSICAL STATE
W-01 Solid
W-02 Liquid
W-03 Slurry
W-04 Sludge
W-09 Other (specify)

TABLE B
DISPOSAL METHODS
M-01 Composting
M-02 Evaporation
M-03 Holding Tank
M-04 Incineration
M-05 Injection Well
M-06 Lagoon
M-07 Land Burial
M-08 Land Spreading
M-09 Neutralization
M-10 Ocean
M-11 Recycling
M-12 Sanitary Landfill
M-13 Surface Water
M-14 Subsurface System
M-15 Pyrolysis
M-16 Spray Irrigation
M-17 Stored On Site
M-98 Other (specify)

ATTACHMENT A-10

ATTACHMENT B

RECEIVED
OCT 24 1985
DEPT. ENVIRON. PROTECTION
Division Water Resources
WQM - Administration

To Bureau

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
CN 029
TRENTON, NEW JERSEY 08625

JOHN W. GASTON JR., P.E.
DIRECTOR

DIRK C. HOFMAN, P.E.
DEPUTY DIRECTOR

OCT 22 1985

RECEIVED
DEC 05 1985
STATE OF NEW JERSEY
DEPT. ENVIRONMENTAL PROTECTION
DIVISION WATER RESOURCES
BUR. OF IND. WASTE MGMT.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Kurt Versen Company
10 Charles Street
Westwood, NJ 07675

Attention: Mr. John Pecoraro, Plant Engineer

Re: Illegal Surface Water Discharge
Kurt Versen Company
Westwood/Bergen County

Dear Mr. Pecoraro:

There is enclosed for service upon you an Administrative Order and Notice of Civil Administrative Penalty Assessment, issued by this Department pursuant to the provisions of N.J.S.A. 58:10A-10(b) and N.J.S.A. 58:10A-10(d).

If you have any questions concerning this Order, contact Peter T. Lynch, Chief, Metro Bureau of Regional Enforcement, 1100 Raymond Boulevard, Room 510, Newark, NJ 07102 or by telephoning (201) 648-2030.

Very truly yours,

John W. Gaston, Jr.

John W. Gaston, Jr., P.E.
Director

cc: USEPA
Paul DeStefano, H.O.
Marianne Montgomery

RECEIVED
DEC 09 1985
Dept. Environmental Protection
Division Water Resources
Bureau of Water Discharge Permits

RECEIVED
DEC 06 1985
DEPT. ENVIRON. PROTECTION
Division Water Resources
Bureau of Permits Admin.

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
CN 029
TRENTON, NEW JERSEY 08625

JOHN W. GASTON JR., P.E.
DIRECTOR

DIRK C. HOFMAN, P.E.
DEPUTY DIRECTOR

IN THE MATTER OF
KURT VERSEN COMPANY

****
* ADMINISTRATIVE ORDER AND *
* NOTICE OF CIVIL ADMINISTRATIVE *
* PENALTY ASSESSMENT *
****

The following FINDINGS are made and ORDER and NOTICE issued pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection (NJDEP) by N.J.S.A. 13:1D-1 et seq., and the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., and duly delegated to the Director of the Division of Water Resources pursuant to N.J.S.A. 13:1B-4.

FINDINGS

1. Kurt Versen Company ("Kurt Versen") operates an aluminum light fixture manufacturing facility located at 10 Charles Street, Lot No. 11A and Block No. 1111, Westwood, Bergen County, New Jersey.

2. On March 18, 1981 an inspection was conducted by a representative of NJDEP's Division of Water Resources (DWR) at Kurt Versen. The inspection revealed that untreated sewage and industrial wastewaters were being discharged from a sanitary sewer line owned by the Kurt Versen Company to Haunsman's Ditch without a New Jersey Pollutant Discharge Elimination System (NJPDES) permit as required by the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq. Haunsman's Ditch is

a tributary of the Oradell Reservoir and a source of potable water. Mr. Emil Loeffel, the plant manager, was informed at the time of the inspection that the discharge constituted a violation of N.J.S.A. 58:10A-1 et seq.

3. On March 19, 1981 DWR issued a Telegram Order to the Kurt Versen Company requiring the company to immediately cease the discharge of pollutants, perform necessary repairs to the subject sewer line, remove accumulated solids from Haunsman's Ditch, and upon completion of these actions, submit a report regarding the discharge incident of March 18, 1981 to DWR.

4. On April 7, 1981 Kurt Versen submitted to DWR a memorandum summarizing the conditions which led to the discharge and the corrective actions taken to comply with the DWR's Telegram Order noted in paragraph 3 of this Order. According to the memorandum, these actions included: 1) the elimination of the discharge by the discontinuation of production; 2) the installation of a temporary pipeline to bypass the storm sewer; 3) the construction of containment barriers; 4) the clean-up of contaminated water and sludge from Haunsman's Ditch; and, 5) the completion of a new sewer line on April 10, 1981. A representative of the DWR verified completion of the clean-up on March 27, 1981.

5. On February 25, 1985 an inspection of Kurt Versen was conducted by DWR in response to a complaint received from the Hackensack Water Company. The inspection revealed that compressor cooling wastewater was being discharged by Kurt Versen to Haunsman's Ditch. Analysis of samples collected during the inspection revealed the following pollutants:

Parameter	Concentration
trichloroethene	280 ug/l
1,2 dichloroethene	17 ug/l
tetrachloroethene	4.0 ug/l
toluene	3.0 ugl/
total suspended solids	42 mg/l
petroleum hydrocarbons	80.43 mg/l
chemical oxygen demand	44 mg/l
iron	1177 ug/l
lead	59 ug/l
temperature	30°C

6. On March 5, 1985 DWR issued a Telegram Order requiring Kurt Versen to immediately cease the discharge of pollutants and submit a report detailing the corrective measures implemented.

7. In response to DWR's Telegram Order referenced in paragraph 6 of this Order, on March 11, 1985 Kurt Versen submitted a letter indicating that the discharge to surface waters had been eliminated and that the wastewater had been repiped to the sanitary sewer system. Representatives of DWR inspected Kurt Versen on March 14, 1985 and confirmed that the corrective action had been taken.

8. Kurt Versen does not have, nor has it ever applied for, a New Jersey Pollutant Discharge Elimination System (NJPDES) Permit to discharge to surface waters. Kurt Versen has violated N.J.S.A. 58:10A-6(a) and N.J.A.C. 7:14A-1.2(c) in that it has discharged pollutants, including hazardous substances as identified by N.J.A.C. 7:1E-1.3(j), without having obtained a valid NJPDES permit.

ORDER

NOW, THEREFORE, IT IS HEREBY ORDERED THAT Kurt Versen Company shall:

9. Cease all discharges of pollutants except in conformity with a valid New Jersey Pollutant Discharge Elimination System Permit that has been issued by DWR pursuant to the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 *et seq*.

NOTICE OF CIVIL

ADMINISTRATIVE PENALTY ASSESSMENT

10. Based upon the above FINDINGS, the NJDEP has determined that a Civil Administrative Penalty should be assessed against you pursuant to N.J.S.A. 58:10A-10(d) and N.J.A.C. 7:14-8.1 *et seq*.

11. Based upon a review of the criteria contained in N.J.A.C. 7:14-8.1 *et seq*., the NJDEP has determined that the amount of the penalty should be set at $3750.00. Payment must be made by check or money order to "Treasurer, State of New Jersey" and submitted to NJDEP at the address in the following paragraph.

12. Any submission of information required by this ORDER and NOTICE OF CIVIL ADMINISTRATIVE PENALTY ASSESSMENT shall be made to:

Mr. Peter T. Lynch, Chief
Metro Bureau of Regional Enforcement
NJDEP - Division of Water Resources
1100 Raymond Boulevard, Room 510
Newark, NJ 07102

13. NOTICE IS HEREBY GIVEN that pursuant to N.J.S.A. 52:14B-1 et seq., and N.J.S.A. 58:10A-10(b) and (d), Kurt Versen Company is entitled to a hearing before NJDEP. Any hearing request must be delivered to the person and address listed in the preceding paragraph within twenty (20) calendar days from receipt of this ORDER and NOTICE. A hearing request does not stay the terms or effect of this ORDER.

14. NOTICE IS FURTHER GIVEN that pursuant to N.J.S.A. 52:14B-9(b) and N.J.A.C. 1:1-6.1(b), the applicant in its application for a hearing shall furnish NJDEP with the following:

(a) A statement of the legal authority and jurisdiction under which the hearing or action to be held is requested pursuant to N.J.A.C. 1:1-6.1(b)(1);

(b) A reference to the particular sections of the statutes and rules involved;

(c) A short and plain statement of the matters of fact and law asserted; and,

(d) The Order provisions to which the applicant objects, the reasons for such objections, and any alternative provisions proposed by the applicant.

15. The provisions of this ADMINISTRATIVE ORDER and PENALTY ASSESSMENT shall be binding on Kurt Versen Company, its principals, agents, employees, successors, assigns, tenants and any trustee in bankruptcy or receiver appointed pursuant to a proceeding in law or equity.

16. No obligations imposed by this Order (with the exception of Paragraph No. 10) are intended to constitute a debt, damage claim, penalty or other civil action which should be limited

or discharged in a bankruptcy proceeding. All obligations imposed by this Order shall constitute continuing regulatory obligations imposed pursuant to the police powers of the State of New Jersey, intended to protect the public, health, safety and welfare.

17. NOTICE IS FURTHER GIVEN, that if no request for a hearing is received within twenty (20) calendar days, this NOTICE shall become a final Order and the Penalty would become due and payable.

18. NOTICE IS FURTHER GIVEN, that pursuant to N.J.S.A. 58:10A-10 (d), NJDEP is authorized to assess a Civil Administrative Penalty of up to $5,000 for each violation, and additional penalties of up to $500 for each day during which such violation continues after receipt of an Administrative Order from NJDEP.

19. NOTICE IS FURTHER GIVEN, that pursuant to N.J.S.A. 58:10A-10(e), any person who violates this Administrative Order (or who fails to pay an Administrative Penalty in full) shall be subject to civil penalties of up to $10,000 per day for each day of violation.

20. NOTICE IS FURTHER GIVEN, that pursuant to N.J.S.A. 58:10A-10 (f), any person who willfully or negligently violates N.J.S.A. 58:10A-1 et seq., shall, upon conviction, be guilty of a misdemeanor and shall be punished by fine of not less than $2,500, nor more than $25,000 per day of violation, or by imprisonment for not more than one (1) year, or by both.

DATE OCT 22 1985

John W. Gaston, Jr.

JOHN W. GASTON, JR., P.E.
DIRECTOR

ATTACHMENT C

ADM-012

MEMO

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO Mr. Tan

FROM Mr. Plumb RP DATE March 31, 1981

SUBJECT Kurt Versen Company, Clean-up of Haunsman's Ditch

On March 27, 1981 a clean up was conducted of Haunsman's Ditch by All County Environmental, contractor for the Kurt Versen Company. Present for the clean-up were the following:

Robert Plumb, N. J. Department of Environmental Protection
Emil Loeffel, Kurt Versen Company, Plant Manager
Steve Silverstein, Kurt Versen Company
Frank Coppola, All County Environmental
Bruce Miller. All County Environmental, Crew Supervisor
Richard Quinn, Hackensack Water Company

The clean-up was conducted in response to a Departmental Telegram Order dated 3/19/81. Detailed below are the corrective measures initiated which resulted in the removal of solids from the waterway.

March 25, 1981 - Three containment barriers were constructed in Haunsman's Ditch

March 26, 1981 - The storm sewer between Charles Street and Daned Road was flush to consolidate the solids in the containment areas. All County Environmental was hired for the clean-up.

March 27, 1981 - The clean-up was initiated at approximately 10:30 am. The majority of the solids were concentrated in two quiescent sections of the tributary. The first area cleaned was adjacent to Daned Road. The pool involved was approximately 15X10 ft and contained approximately 6 to 8 inches of sludge in the center. The second area was adjacent to Main Street at the Emerson High School and measures approximately 50 by 20 ft. Approximately 8 inches of sludge was observed in the deepest area. All County removed all water and sludge from these two sections of the tributary amounting to 10,800 gallons. The material was manifested and delivered to Chem-Clear in Chester Pa. The clean-up was completed by 1:27 pm.

A4:G19

ATTACHMENT E-1

ATTACHMENT D

CONTAMINATED SOIL DISPOSAL

JERSEY ENVIRONMENTAL CONTRACTING, INC.

This is to certify that the material removed from

KURT VERSEN

CHARLES ST. WESTWOOD, N. J.

has been disposed of in accordance with all applicable local, state and federal regulations in the following manner

Date	Type	Quantity	Location
8/4/88	PETROLEUM HYDROCARBON CONTAMINATED SOIL	25.74 TONS	BREITENSTINE'S LANDFILL

MATTHEW J. BOESE M.J.B.
Project Manager

Certificate No. 1063 A

b

ATTACHMENT E

BERGEN COUNTY UTILITIES AUTHORITY
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

Permit No.: 90-192

Effective Date: 8/22/90

Expiration Date: 8/22/91

Company I.D. No.: 0003

Name and Address of Owner: Kurt Versen Company
10 Charles Street
Westwood, New Jersey 07675

Location of Activity/Facility: 10 Charles Street
Westwood, New Jersey 07675

Type of Permit: Categorical/ >25,000 gpd

In accordance with all terms and conditions in the "Rules and Regulations for the Direct and Indirect Discharge of Wastewater to the Bergen County Utilities Authority Treatment Works", the provisions by which are incorporated in this permit, and applicable provisions of Federal and/or State regulation, permission is hereby granted to discharge industrial process wastewater into the Bergen County Utilities Authority Little Ferry Treatment Plant, via the Borough of Westwood sanitary sewer collection system, in accordance with wastewater discharge limitations, monitoring requirements, and other requirements set forth in the following tables hereof.

This permit is granted in accordance with the Industrial Wastewater Discharge Permit Application and Questionnaire and accompanying documentation, filed with the Authority, and are considered part of this permit.

Be advised that while the permit is in force, additional information may be required to be submitted and/or discharge limitations may be changed to reflect changes in applicable Federal, State and local regulations. The Permittee hereby agrees to the aforementioned.

Steven M. Mizerek

STEVEN M. MIZEREK
PRINCIPAL ENGINEER
BERGEN COUNTY UTILITIES AUTHORITY

E

Table - 1 Discharge Limitations

Parameter	Limitation	
	Daily Maximum (mg/l)	Monthly Average (mg/l)
Cadmium (T)	0.69	0.26
Chromium	2.77	1.71
Copper (T)	3.38	2.07
Lead (T)	0.69	0.43
Nickel (T)	3.98	2.38
Silver (T)	0.43	0.24
Zinc (T)	2.61	1.48
Cyanide (T) 1	0.50	—
Total Toxic Organics (TTO) 2	2.13	
		Maximum Single Sample (mg/l)
Arsenic (T)	0.050	0.250
Chromium, Hexavalent	0.050	0.250
Mercury (T)	0.002	0.010
Phenol	0.05	0.25

Additional Parameters

Biochemical Oxygen Demand, BOD	BCUA must be notified if over 350 mg/l
Suspended Solids, S.S.	BCUA must be notified if over 350 mg/l
pH	5.5 - 9.5 Daily Range
Total Kjeldahl Nitrogen	200 mg/l Single Sample
Ammonia Nitrogen	100 mg/l Single Sample
Oil or Grease	
Non-petroleum origin	200 mg/l Daily Maximum
Petroleum origin	100 mg/l Monthly Average
	150 mg/l Single Sample
Explosivity	5% LEL any 2 successive Readings
	10% LEL any 1 reading

Note:
(T) = Total
1. No regulation of the monthly average for cyanide.
2. No regulation of the monthly average for TTO.

Table - 2 Monitoring Schedule

The company being Kurt Versen Company, shall monitor its effluent wastestream per the following schedule. All sampling and analysis shall be performed in accordance with 40 CFR Part 136 or the approved equivalent method.

Samples taken in compliance with the specified monitoring requirements shall be taken at the following location: The manhole, located at the southeast corner of Kurt Versen's parking lot. However, self-monitoring for cyanide must be conducted after cyanide treatment or before dilution with other wastestreams.

During the Months of: June and December

Parameter	Sample Type	Sample Frequency	Monitoring Frequency
Cadmium (T)	Composite	8 Hour	One day per month
Chromium (T)	Composite	8 Hour	One day per month
Copper (T)	Composite	8 Hour	One day per month
Lead (T)	Composite	8 Hour	One day per month
Nickel (T)	Composite	8 Hour	One day per month
Zinc (T)	Composite	8 Hour	One day per month
Cyanide (T)	Grab	1 per 8 Hours	One day per month
Chromium, Hexavalent	Grab	1 per 8 Hours	One day per month
Biological Oxygen Demand	Composite	8 Hour	One day per month
Suspended Solids	Composite	8 Hour	One day per month
pH	Grab/Continuous	3 per 8 Hours or continuous	One day per month
Total Toxic Organics*	Grab	1 per 8 Hours	One day per month

Note:
(T) = Total

*Total Toxic Organics Monitoring shall be the sum of the volatile fractions of the priority pollutants.

Table - 2 Monitoring Schedule (Con't)

Not later than fourteen (14) days following each month in the Monitoring Schedule the industrial user shall submit to Bergen County Utilities Authority a compliance report consisting at minimum of the following items:

1) Has the company name, ownership, contact person or authorized representative changed?

2) Average and maximum daily regulated wastewater flow, with an explanation of how obtained. (flow meter, volume displacement, water bills, etc.).

3) An accounting of each regulated pollutant either by analysis or by statement of non-use. In addition, if any pollutant is monitored more frequently than required by Table - 2 Monitoring Schedule, the results of this monitoring shall be included.

4) A copy of the chain of custody form shall be included, as well as the date and time of initiation of analysis.

5) The name of the certified laboratory that performed the analysis.

6) A statement of consistent compliance or a compliance schedule.

7) The signature of an authorized representative and the following certification statement as set forth in 40 CFR 403.6(a)(2)(ii):

"I have personally examined and am familiar with the information submitted in the attached document, and I hereby certify under penalty of law that this information was obtained in accordance with the requirements of 403.6(a). Moreover, based upon my inquiry of those individuals immediately responsible for obtaining the information reported herein, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Note: If sampling indicates a violation, you must notify the Authority within twenty-four (24) hours of becoming aware of such. In addition, sampling and analysis must be repeated for those pollutants found to be in violation and the results submitted within thirty (30) days of receipt of the original analytical report.

ATTACHMENT F

Form VEM-017

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL PROGRAM

All Correspondence must indicate your APC PLANT ID NUMBER

Certificate Number 034917 APC PLANT ID 00615

(Mailing Address)

KURT VERSEN COMPANY
10 CHARLES STREET
WESTWOOD NJ 07675

(Plant Location)

VERSEN COMPANY,KURT
10 CHARLES STREET
WESTWOOD

Applicant's Designation of Equipment ANODIZING TANKS DUAL 14000 CFM
N.J. Stack No. 001 No. of Stacks 001 No. of Sources 01
Approval 10/13/77 Effective 10/13/77 Expiration 10/13/92

* CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT *

* FIVE YEAR RENEWAL *

THIS RENEWED FIVE YEAR CERTIFICATE IS BEING ISSUED UNDER THE AUTHORITY OF CHAPTER 106, P.L. 1967 (N.J.S.A.26:2C-9.2). THE POSSESSION OF THIS DOCUMENT DOES NOT RELIEVE YOU FROM THE OBLIGATION OF COMPLYING WITH ALL PROVISIONS OF THE NEW JERSEY ADMINISTRATIVE CODE, TITLE 7, CHAPTER 27.

IN ACCORDANCE WITH N.J.S.A. 54:4-3.66 TO 3.58, YOU MAY BE ENTITLED TO AN EXEMPTION OF TAXATION IF YOUR EQUIPMENT IS TAXED AND IS CONSIDERED TO BE AN AIR POLLUTION CONTROL DEVICE. A TAX EXEMPTION APPLICATION MAY BE OBTAINED FROM THE BUREAU OF NEW SOURCE REVIEW.(SEE OTHER SIDE)

IF IT IS NECESSARY TO AMEND YOUR EMERGENCY STANDBY PLANS, PLEASE CONSULT WITH THE APPROPRIATE REGIONAL OFFICE. (SEE OTHER SIDE)

IN ACCORDANCE WITH N.J.A.C. 7:27-8.3(D), THIS PERMIT AND CERTIFICATE MUST BE READILY AVAILABLE FOR INSPECTION ON THE OPERATING PREMISES.

N.J. Department of Environmental Protection
Division of Environmental Quality
CN-027, 401 East State Street
Trenton, New Jersey 08625

Approved by: _____

F

07/15/87-12

Form VEM-017

2

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL PROGRAM

All Correspondence must indicate your APC PLANT ID NUMBER

Certificate Number 034918 APC PLANT ID 00615

(Mailing Address)

KURT VERSEN COMPANY
10 CHARLES STREET
WESTWOOD NJ 07675

(Plant Location)

VERSEN COMPANY,KURT
10 CHARLES STREET
WESTWOOD

Applicant's Designation of Equipment ANODIZING ROOM EXHAUST FAN
N.J. Stack No. 002 No. of Stacks 001 No. of Sources 01
Approval 10/13/77 Effective 10/13/77 **Expiration** 10/13/92

* CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT *

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IF IT IS NECESSARY TO AMEND YOUR EMERGENCY STANDBY PLANS, PLEASE CONSULT WITH THE APPROPRIATE REGIONAL OFFICE. (SEE OTHER SIDE)

IN ACCORDANCE WITH N.J.A.C. 7:27-8.3(D), THIS PERMIT AND CERTIFICATE MUST BE READILY AVAILABLE FOR INSPECTION ON THE OPERATING PREMISES.

N.J. Department of Environmental Protection
Division of Environmental Quality
CN-027, 401 East State Street
Trenton, New Jersey 08625

Approved by: _____

07/15/87-12

Form VEM-017

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

3

DIVISION OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL PROGRAM

All Correspondence must indicate your APC PLANT ID NUMBER

Certificate Number 041338 APC PLANT ID 00619

(Mailing Address)	(Plant Location)
KURT VERSEN COMPANY 10 CHARLES STREET WESTWOOD NJ 07675	VERSEN COMPANY,KURT 10 CHARLES STREET WESTWOOD

Applicant's Designation of Equipment GRINDING & POLISHING
N.J. Stack No. 003 No. of Stacks 001 No. of Sources 13
Approval 01/19/79 Effective 01/19/79 Expiration 01/19/94

* CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT *

* FIVE YEAR RENEWAL *

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IF IT IS NECESSARY TO AMEND YOUR EMERGENCY STANDBY PLANS, PLEASE CONSULT WITH THE APPROPRIATE REGIONAL OFFICE. (SEE OTHER SIDE)

IN ACCORDANCE WITH N.J.A.C. 7:27-8.3(D), THIS PERMIT AND CERTIFICATE MUST BE READILY AVAILABLE FOR INSPECTION ON THE OPERATING PREMISES.

N.J. Department of Environmental Protection
Division of Environmental Quality
CN-027, 401 East State Street
Trenton, New Jersey 08625

Approved by: _____

HRO - BERGEN COUNTY HEALTH DEPARTMENT 09/14/88-12

Form VEM-017

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL PROGRAM

All Correspondence must indicate your APC PLANT ID NUMBER

Certificate Number 041339 APC PLANT ID 00615

(Mailing Address)

KURT VERSEN COMPANY
10 CHARLES STREET
WESTWOOD NJ 07675

(Plant Location)

VERSEN COMPANY,KURT
10 CHARLES STREET
WESTWOOD

Applicant's Designation of Equipment FIBERGLASS FILTERS
N.J. Stack No. 004 No. of Stacks 001 No. of Sources 01
Approval 01/19/79 Effective 01/19/79 Expiration 01/18/94

☆ CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT ☆

☆ FIVE YEAR RENEWAL ☆

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N.J. Department of Environmental Protection
Division of Environmental Quality
CN-027, 401 East State Street
Trenton, New Jersey 08625

Approved by: _____

MRO - BERGEN COUNTY HEALTH DEPARTMENT 09/14/88-12

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL PROGRAM

All Correspondence must indicate your APC PLANT ID NUMBER

Certificate Number 034922

APC PLANT ID 00615

(Mailing Address)

KURT VERSEN COMPANY
10 CHARLES STREET
WESTWOOD NJ 07675

(Plant Location)

VERSEN COMPANY,KURT
10 CHARLES STREET
WESTWOOD

Applicant's Designation of Equipment ANODIZING TANK DUAL 16000 CFM
N.J. Stack No. 005 No. of Stacks 001 No. of Sources 01
Approval 11/21/78 Effective 11/21/78 Expiration 11/21/93

* CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT *

* FIVE YEAR RENEWAL *

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IN ACCORDANCE WITH N.J.S.A. 54:4-3.55 TO 3.58, YOU MAY BE ENTITLED TO AN EXEMPTION OF TAXATION IF YOUR EQUIPMENT IS TAXED AND IS CONSIDERED TO BE AN AIR POLLUTION CONTROL DEVICE. A TAX EXEMPTION APPLICATION MAY BE OBTAINED FROM THE BUREAU OF NEW SOURCE REVIEW.(SEE OTHER SIDE)

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N.J. Department of Environmental Protection
Division of Environmental Quality
CN-027, 401 East State Street
Trenton, New Jersey 08625

Approved by: _____

NRG - BERGEN COUNTY HEALTH DEPARTMENT

08/13/85-12

Form VEM-017

6

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL PROGRAM

All Correspondence must indicate your APC PLANT ID NUMBER

Certificate Number 034920 APC PLANT ID 00419

(Mailing Address)

KURT VERSEN COMPANY
10 CHARLES STREET
WESTWOOD NJ 07675

(Plant Location)

VERSEN COMPANY,KURT
10 CHARLES STREET
WESTWOOD

Applicant's Designation of Equipment ANODIZING TANKS CLEANING & DYING
N.J. Stack No. 006 No. of Stacks 001 No. of Sources 01
Approval 11/21/73 Effective 11/21/78 Expiration 11/21/93

* CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT *

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IF IT IS NECESSARY TO AMEND YOUR EMERGENCY STANDBY PLANS, PLEASE CONSULT WITH THE APPROPRIATE REGIONAL OFFICE. (SEE OTHER SIDE)

IN ACCORDANCE WITH N.J.A.C. 7:27-6.3(D), THIS PERMIT AND CERTIFICATE MUST BE READILY AVAILABLE FOR INSPECTION ON THE OPERATING PREMISES.

N.J. Department of Environmental Protection
Division of Environmental Quality
CN-027, 401 East State Street
Trenton, New Jersey 08625

Approved by: _____

MRO - BERGEN COUNTY HEALTH DEPARTMENT 06/13/88-12

Form VEM-01

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL PROGRAM

All Correspondence must indicate your APC PLANT ID NUMBER

Certificate Number 035524 APC PLANT ID 00615

(Mailing Address)

KURT VERSEN COMPANY
10 CHARLES STREET
WESTWOOD NJ 07675

(Plant Location)

VERSEN COMPANY,KURT
10 CHARLES STREET
WESTWOOD

Applicant's Designation of Equipment 50 H.P. STEAM BOILER
N.J. Stack No. 007 No. of Stacks 001 No. of Sources 01
Approval 11/23/77 Effective 11/23/77 Expiration 11/23/92

* CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT *

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N.J. Department of Environmental Protection
Division of Environmental Quality
CN-027, 401 East State Street
Trenton, New Jersey 08625

Approved by: _____

07/15/87-12

Form VEM-017

8

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL PROGRAM

All Correspondence must indicate your APC PLANT ID NUMBER

Certificate Number 065739 APC PLANT ID 00615

(Mailing Address)

KURT VERSEN COMPANY
10 CHARLES STREET
WESTWOOD NJ 07675

(Plant Location)

VERSEN COMPANY,KURT
10 CHARLES STREET
WESTWOOD

Applicant's Designation of Equipment THREE STAGE PARTS WASHER
N.J. Stack No. 008 No. of Stacks 002 No. of Sources 01
Approval 08/30/83 Effective 11/28/83 Expiration 11/21/94

* CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT *

* FIVE YEAR RENEWAL *

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IN ACCORDANCE WITH N.J.A.C. 7:27-8.3(D), THIS CERTIFICATE MUST BE READILY AVAILABLE FOR INSPECTION ON THE OPERATING PREMISES.

N.J. Department of Environmental Protection
Division of Environmental Quality
CN-027, 401 East State Street
Trenton, New Jersey 08625

Approved by: _____

MRO - BERGEN COUNTY HEALTH DEPARTMENT 07/11/89-12

Form VEM-017

9

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL PROGRAM

All Correspondence must indicate your APC PLANT ID NUMBER

Certificate Number 069859 APC PLANT ID 00615

(Mailing Address)

KURT VERSEN COMPANY
10 CHARLES STREET
WESTWOOD NJ 07675

(Plant Location)

VERSEN COMPANY,KURT
10 CHARLES STREET
WESTWOOD

Applicant's Designation of Equipment BOILER #2
N.J. Stack No. 009 No. of Stacks 001 No. of Sources 01
Approval 10/10/84 Effective 10/10/84 Expiration 10/10/94

* CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT *

* FIVE YEAR RENEWAL *

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N.J. Department of Environmental Protection
Division of Environmental Quality
CN-027, 401 East State Street
Trenton, New Jersey 08625

Approved by: _____

MRO - BERGEN COUNTY HEALTH DEPARTMENT 06/01/89-12

ATTACHMENT G

TO: American Environment Tech

ATTENTION: Mike Toder

FROM: Diana

WASTEX INDUSTRIES, INC.

Licensed Analytical Laboratories

MICHELLE D. DIENER
OFFICE MANAGER

PHONE: 215-327-0880
28 S. HANOVER STREET
POTTSTOWN, PA 19464

FAX NUMBER: 215-327-9608 to 201-664-4801

DATE: 6-22-88

NUMBER OF PAGES: 8

Industries, Inc.

P.A. DER 46005
N.J. DEP 77371

Licensed Analytical Laboratories

28 S. Hanover Street Pottstown, PA. 19464 215/327-0880 FAX 215/327-9608
125 Main Avenue Elmwood Park, N.J. 07407 201/791-6700

P.O. #
Sample # 880622.087

Customer # aetc
For American Environment Tech
38-40 Oak Street
Norwood NJ 07648
Attn: Debbie

Date Sampled 6-21-88 2:50 PM Date Rec. 6-22-88 10:50 AM
Sampled By Vinnie Rec by SLG
Sample grab PWS ID :
Sample ID Kurt Versen Charles St. Westwood NJ
C8425 Sample 1 Inside Hole North

General

Petroleum Hydrocarbons	70	mg/kg

Signature DJones

Industries, Inc.

P.A. DER 46005
N.J. DEP 77371

ensed Analytical Laboratories

28 S. Hanover Street Pottstown, PA. 19464 215/327-0880 FAX 215/327-9608
125 Main Avenue Elmwood Park, N.J. 07407 201/791-6700

P.O. #
Sample # 880622.088

stomer # aetc
For American Environment Tech
38-40 Oak Street
Norwood NJ 07648
Attn: Debbie

te Sampled 6-21-88 2:50 PM Date Rec. 6-22-88 10:50 AM
Sampled By Vinnie Rec by SLG
Sample grab PWS ID :
Sample ID Kurt Versen Charles St. Westwood NJ
C8426 Sample 2 Inside Hole NE

General		
Petroleum Hydrocarbons	15	mg/kg

Signature D Jones

Industries, Inc.
Licensed Analytical Laboratories

P.A. DER 46005
N.J. DEP 77371

28 S. Hanover Street Pottstown, PA. 19464 215/327-0880 FAX 215/327-9608
125 Main Avenue Elmwood Park, N.J. 07407 201/791-6700

P.O. #
Sample # 880622.090

Customer # aetc
For American Environment Tech
38-40 Oak Street
Norwood NJ 07648
Attn: Debbie

Date Sampled 6-21-88 2:50 PM
Sampled By Vinnie
Sample grab
Sample ID

Date Rec. 6-22-88 10:50 AM
Rec by SLG
PWS ID :

Kurt Versen Charles St. Westwood NJ
C8428 Sample 4 Inside Hole South

	General	
Petroleum Hydrocarbons	230	mg/kg

Signature

28 S. Hanover Street Pottstown, PA. 19464 215/327-0880 FAX 215/327-9608
125 Main Avenue Elmwood Park, N.J. 07407 201/791-6700

P.O. #
Sample # 880622.089

Customer # aetc
For American Environment Tech
38-40 Oak Street
Norwood NJ 07648
Attn: Debbie

Date Sampled 6-21-88 2:50 PM Date Rec. 6-22-88 10:50 AM
Sampled By Vinnie Rec by SLG
Sample grab PWS ID :
Sample ID Kurt Versen Charles St. Westwood NJ
C8427 Sample 3 Inside Hole SE

General

Petroleum Hydrocarbons	10	mg/kg

Signature

ex Industries, Inc.
Licensed Analytical Laboratories

P.A. DER 46005
N.J. DEP 77371

28 S. Hanover Street Pottstown, PA. 19464 215/327-0880 FAX 215/327-9608
125 Main Avenue Elmwood Park, N.J. 07407 201/791-6700

P.O. #
Sample # 880622.091

Customer # aetc
For American Environment Tech
38-40 Oak Street
Norwood NJ 07648
Attn: Debbie

Date Sampled 6-21-88 2:50 PM Date Rec. 6-22-88 10:50 AM
Sampled By Vinnie Rec by SLG
Sample grab PWS ID :
Sample ID Kurt Versen Charles St. Westwood NJ
C8429 Sample 5 Inside Hole SW

General		
Petroleum Hydrocarbons	75	mg/kg

Signature _____

Lcex Industries, Inc.

Licensed Analytical Laboratories

P.A. DER 460
N.J. DEP 773

28 S. Hanover Street Pottstown, PA. 19464 215/327-0880 FAX 215/327-9608
125 Main Avenue Elmwood Park, N.J. 07407 201/791-6700

P.O. #
Sample # 880622.092

Customer # aetc
For American Environment Tech
38-40 Oak Street
Norwood NJ 07648
Attn: Debbie

Date Sampled 6-21-88 2:50 PM Date Rec. 6-22-88 10:50 AM
Sampled By Vinnie Rec by SLG
Sample grab PWS ID :
Sample ID Kurt Versen Charles St. Westwood NJ
C8430 Sample 6 Inside Hole NW

General

Petroleum Hydrocarbons	1,465	mg/kg

Signature

...ex Industries, Inc.

...icensed Analytical Laboratories

P.A. DER 46005
N.J. DEP 77371

28 S. Hanover Street Pottstown, PA. 19464 215/327-0880 FAX 215/327-9608
125 Main Avenue Elmwood Park, N.J. 07407 201/791-6700

...stomer # aetc
For American Environment Tech
38-40 Oak Street
Norwood NJ 07648
Attn: Debbie

P.O. #
Sample # 880622.093

...e Sampled 6-21-88 2:50 PM
...ampled By Vinnie
Sample grab
...ample ID

Date Rec. 6-22-88 10:50 AM
Rec by SLG
PWS ID :

Kurt Versen Charles St. Westwood NJ
C8431 Sample 7 Inside Hole Center Floor

General

Petroleum Hydrocarbons	1,250	mg/kg

Signature [signature]

Laboratory Resources INC
363 Old Hook Road
Westwood, New Jersey 07675
201-666-6644

CLIENT: 001170
Kurt Versen
10 Charles Street PO Box 677
Westwood, New Jersey 07675

Date of Report: 07/05/88
Sample ID No. 5203-5206
Date Sample Received: 06/23/88
Collected From: See Below
Sample Collected by:
Laboratory Resources [ ]
Client [✓]

Location	Petroleum Hydrocarbons
6 A	51.0
6 B	1140
4 A	72.5
4 B	103

Patrick A. Conlon
Manager

All results expressed in mg/ℓ unless otherwise stated.
All analysis performed in accordance with the latest edition of Standard Methods for the Examination of Water and Waste and the EPA Methods for Chemical Analysis of Water and Wastes.

Certification No. N.J. - 02046
N.Y. - 10588

P.O. 37092

Laboratory Resources, Inc.

363 Old Hook Road Westwood, New Jersey 07675 201/666-6644

CHAIN OF CUSTODY RECORD

Organization	Date Collected	Collected By
KURT VERSEN Co.	6/23/88	ANDREW NAZARI

Sample Container/Preservation *(Circle one for each category)*
GLASS, PLASTIC // 4°C, pH<2--H_2SO_4, HNO_3

Method of Shipment *(Circle one)*
HAND-DELIVERED, CARRIER

Lab No.	Sample I.D.	Time Collected	Analyses Required
	GRAB SAMPLE (Soil)	2 00 pm	Petroleum HYDROCARBON
5203-5204	*6A, *6B N.W.		
5205-5206	*4A, *4B South		
			$100 per sample

Relinquished By	Received By	Date/Time
[illegible]	Roseann Morra	6/23/88 2:45 p.m.

Lab No.	
Analyses	

Relinquished By	Received By	Date/Time

Lab No.	
Analyses	

Relinquished By	Received By	Date/Time

Lab No.	
Analyses	

Relinquished By	Received By	Date/Time

Remarks

Laboratory Resources INC
363 Old Hook Road
Westwood, New Jersey 07675
201-666-6644

RECEIVED
JUL 8 1988
KURT VERSEN CO
WESTWOOD, NEW JERSEY

001170

CLIENT: Kurt Versen
10 Charles Street PO Box 677
Westwood, New Jersey 07675

Date of Report: 07/08/[illegible]
Sample ID No. 5228-52[illegible]
Date Sample Received: 06/24/88
Collected From: See Below
Sample Collected by:
Laboratory Resources [ ]
Client [✓]

Location	Petroleum Hydrocarbons
6 C	35
6 D	102

Patrick A. Carlson
Manager

All results expressed in mg/ℓ unless otherwise stated.
All analysis performed in accordance with the latest edition of Standard Methods for the Examination of Water and Waste and the EPA Methods for Chemical Analysis of Water and Wastes.

Certification No. N.J. - 02046
N.Y. - 10588

P.O. 37092

Laboratory Resources INC.

363 Old Hook Road Westwood, New Jersey 07675 201/666-664[illegible]

Organization	Date Collected	Collected By
Kurt Versen Co.	6/24/88	Andrew Nozari

Sample Container/Preservation *(Circle one for each category)*

GLASS, PLASTIC // 4°C, pH<2--H_2SO_4, HNO_3

Method of Shipment *(Circle one)*

HAND-DELIVERED, CARRIER

Lab No.	Sample I.D.	Time Collected	Analyses Required
	2 GRAB SAMPLE (Soil)	7 AM	Petrolum HydroCarbonte
5228	6C 6D		
5229			
	North West Section		

Relinquished By	Received By	Date/Time
[signature]	Christine LaRocca	6/24 10:00 AM

Lab No.

Analyses

Relinquished By	Received By	Date/Time

Lab No.

Analyses

Relinquished By	Received By	Date/Time

Lab No.

Analyses

Relinquished By	Received By	Date/Time

Remarks

ATTACHMENT H

13437

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF ENVIRONMENTAL QUALITY
JOHN FITCH PLAZA, P. O. BOX 2807, TRENTON, N. J. 08625

ORDER

To: Kurt Versen Company
Richard C. Anisfield, Registered Agent
10 Charles Street
Westwood, New Jersey 07675
and
Richard C. Anisfield
Yantachaw Brood Road
Montclair, New Jersey 07092

Re: N.J.A.C. 7:27- 8.3(a)&(b)
Plant Identification No. 00615
Violation Occured on Premises Known As:
10 Charles Street, Block 1111, Lot 11A, Westwood Borough, Bergen County, New Jersey

WHEREAS, the State Department of Environmental Protection has determined by investigation(s) or inspection(s) made pursuant to the Provisions of the New Jersey Air Pollution Control Act that on June 8, 1977 you did violate Title 7, Chapter 27, Subchapter 8, Section 8.3(a)&(b), of the New Jersey Administrative Code.

The investigation(s) discloses (a) that 2 grinders, 4 polishers & 4 automatic polishers serviced by a cyclone and a baghouse, 2 cut off saws serviced by a filter, a 7 tank bright dip operation serviced by a Duall scrubber, a 6 tank dyeing & cleaning operation serviced by a Duall scrubber, a 4 tank anodizing system serviced by a Duall scrubbe and a roof fan venting all 3 tank & scrubber systems were constructed, installed or altered on the premises identified above without first having obtained a "Permit to Construct, Install or Alter Control Apparatus or Equipment" from the Department.

and

(b) that 4 polishers & 2 automatic polishers serviced by a cyclone & a baghouse, a cleaning tank & scrubber and an anodizing tank & scrubber were used or caused to be used on the premises identified above without first having obtained a "Certificate to Operate Control Apparatus or Equipment" from the Department.

NOW, THEREFORE, YOU ARE HEREBY ORDERED, to cease violation of said Subchapter on the premises owned, leased, operated or maintained by you on or before September 14, 1977.

Dated: July 15, 1977

Herbert Wortreich
Herbert Wortreich, Chief
Bureau of Air Pollution Control

c: Local District Westwood Borough
Field Office Newark

CERTIFIED MAIL

P001
76

FIELD OFFICE - ENFORCEMENT FILE

ATTACHMENT I

MT I have a copy
M. TAN & ORDER FILE

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
TRENTON, NEW JERSEY 08625

Arnold Schiffman
Director

TELEGRAM ORDER

Mr. Emil Loeffel, Plant Manager
Kurt Versen Company
10 Charles Street
Westwood, New Jersey 07675
(201) 664-8200

An investigation conducted by a representative of this Department on March 18, 1981, revealed that untreated sewage and industrial wastewater is being discharged to Haunsman's Ditch, a tributary of the Oradell Reservior. The discharge has been found to originate from a sanitary sewer line owned by the Kurt Versen Company. Partial analysis of the discharge collected on March 10, 1981 by the Hackensack Water Company revealed that it contained 232 mg/l of aluminum, 25 mg/l of total chromium, 0.33 mg/l of arsenic and 0.15 mg/l of lead. Solids were also observed deposited in the quiescent sections of Haunsman's Ditch.

This discharge is in such a manner as to cause or threaten injury to the environment and the inhabitants of this State in their health, comfort or property in violation of N.J.S.A. 58:10A-1 et seq.

The Kurt Versen Company is therefore ORDERED to immediately institute all measures necessary to:

1. Cease said discharge.

I

2. Minimize the adverse effects of said discharge on public health and the environment until it is ceased.

3. Repair and return the subject sewer line to complete and proper operation.

4. Remove accumulated solids from Haunsman's Ditch immediately after the discharge is eliminated and dispose of same in accordance with Departmental regulations. The clean up is to be in areas designated by this Department and conducted under its supervision.

It is further ORDERED that the Kurt Versen Company make daily progress reports to Mr. Robert Plumb at (201) 648-2200 until this matter is corrected and upon correction, submit a detailed written report of the entire incident.

Failure to comply with this ORDER will result in appropriate enforcement action. Compliance, however, shall not be construed to relieve the Kurt Versen Company from appropriate penalties for the cited statutory violations.

Peter T. Lynch, Chief
Region I
Enforcement & Regulatory
Services Element

A4:G25

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
CN 029
TRENTON, NEW JERSEY 08625

JOHN W. GASTON JR., P.E.
DIRECTOR

DIRK C. HOFMAN, P.E.
DEPUTY DIRECTOR

TELEGRAM ORDER

Mr. Emil Loeffel, Plant Manager
Kurt Versen Company
10 Charles Street
Westwood, New Jersey 07675
(201) 664-8200

An inspection of your facility was conducted by representatives of the Division of Water Resources of the Department of Environmental Protection on February 25, 1985. This inspection revealed that your facility is discharging contaminated cooling water into the waters of this State which are utilized as a source of potable water. Kurt Versen Company does not have a permit allowing such a discharge.

An analysis by the Hackensack Water Company has found that this discharge contains pollutants including trichloroethylene.

This discharge is in such a manner as to cause or threaten injury to the Environment and the inhabitants of this State in their health, comfort or property and is in violation of N.J.S.A. 58:10A-6.a. and N.J.A.C. 14A-1:2(c).

Kurt Versen Company is therefore ORDERED to:

1. Immediately cease the discharge of wastewater to the waters of this State.
2. Submit a written report to this office (1100 Raymond Boulevard, Room 510, Newark, New Jersey 07102) within ten (10) days of the issuance of this Telegram Order detailing the nature of this

discharge and the corrective measures implemented to cease it.

Failure to comply with this Order will result in appropriate enforcement action including the imposition of penalties as provided for in N.J.S.A. 58:10A-10. Compliance, however, shall not be construed to relieve Kurt Versen Company from appropriate penalties for the cited statutory violations.

Peter T. Lynch, Chief
Metro Region
Enforcement Element
Division of Water Resources

TIME: 3:26 pm

DATE: March 5, 1985

cc: John A. Hroncich, Asst. Sanitary Engineer
Paul DeStefano, Boro of Westwood, H.O.

ATTACHMENT J

Department of Environmental Protection
Water Analysis

TYPE OR PRINT
ALLPOINT PEN

FACILITY: STWOOD	COUNTY: BERGEN	STREAM: TRIB TO ORADELL RES
FACILITY: KURT VERSEN	LOCATION: CHARLES AVE	
REPRESENTATIVE: EMIL LOEFFEL	TITLE: PLT MGR	COLL NAME: HARRINGTON / PEZONNE
REMARKS: STORM SEWER		

RECEIVED APR 30 12 PM NJ DEPT. DIV WATER RESOURCES MS&E

BACT. LAB NO. ____
DATE REC'D. ____
BOTTLE NO. ____
DATE REC'D. ____
STORET ENT. ____ READ ____

Station Identification Number	YR. MO. DAY	HOUR	Sample No.
SC,	810318	1315	P8, C32646

FIELD ANALYSIS

- ☐ Water Temp °C P00010,
- ☐ D.O. - Winkler P00300,
- ☐ D.O. - Probe P00299,
- ☐ pH (Field) P00400,
- ☐ Sample Depth-ft. P00003,
- ☐ Stream Flow-CFS P00061,
- ☐ Gage Height-ft. P00065,
- ☐ Spec. Cond. @ 25°C P00095,
- ☐ Salinity 0/00 P00480,
- ☐ Tide Stage P70211,

CONDITION CODES

- ☐ Weather Conditions P00041,
- ☐ Flow Severity P01351,
- ☐ _____ Severity P013__,
- ☐ _____ Severity P013__,

NUTRIENTS

LEVEL ☐ HIGH ☐ LOW

- ☐ NO_2 - N P00615,
- ☐ $NO_2 + NO_3$ - N P00630,
- ☐ NH_3 - N P00610,
- ☐ Tot Kjeldhal N P00625,
- Ortho - PO_4 as P / PO_4 ☑ P671, ☑ P660, 1080J
- Phosphorus-tot as P / PO_4 ☑ P665, ☑ P650, 1120

BACTERIOLOGICAL – DILUTIONS (REQUESTED)

	10	1	-1 10	-2 10	-3 10	-4 10	-5 10	-6 10
Fecal Coliform / Total Coliform								
Fecal Streptococci								

- Fecal coli #100 ml ☐ MPN P31615, ☐ MF P31613,
- ☐ Fecal Strept MPN/100ml P31677,
- ☐ Tot coli MPN/100 ml P31505,

BIOCHEMICAL OXYGEN DEMAND

INITIAL D.O. (lab.) _____ SAMPLE

SEED YES ☐ NO ☐

CONC. %			
BOD			

- ☐ BOD ☐ 5-DAY P310, ☐ 6-DAY P312,
- COD ☐ Low Level P335, ☑ High Level P340, 88
- ☐ TOC P00680,
- ☐ Color Pt - Cou P00080,
- ☐ Turbidity P00070,
- ☐ Suspended Solids P00530,
- ☐ Suspended Solids fixed P00540,
- ☐ Tot. Solids P00500,
- ☐ Tot. Solids - fixed P00510,
- ☐ Tot. Dissolved Solids (TDS) P70300,

REPORT SUBMITTED APR 22 1981 NJDOH Environmental Chemistry Laboratory

- ☑ pH (LAB) P00400, 2.6
- ☐ Alkalinity as $CaCO_3$ P00410,
- ☐ Min. Acidity as $CaCO_3$ P00436,
- ☑ Chloride P00940, 60
- ☐ MBAS P38260,
- ☐ Phenols P32730,
- ☐ Hardness - tot as $CaCO_3$ P00900,
- ☐ Sulfate P00945,
- ☐ Oil & Grease P00556,
- ☐ Petroleum Hydrocarbons P45501,
- ☐ Cyanide P00720,
- ☑ As - tot ug/l P01002, 4
- ☐ Cd - tot ug/l P01027,
- ☑ Cr - tot ug/l P01034, 788
- ☐ Cu - tot ug/l P01042,
- ☐ Fe - tot ug/l P01045,
- ☐ Hg - tot ug/l P71900,
- ☐ Mn - tot ug/l P01055,
- ☐ Ni - tot ug/l P01067,
- ☑ Pb - tot ug/l P01051, 84
- ☐ Zn - tot ug/l P01092,

ADDITIONAL ANALYSIS

- ☑ AL P____, 18.420
- ☑ CRH P____, .021
- ☑ FLORIDE P____, .2K

RESULTS mg/L unless otherwise noted

CHAIN OF CUSTODY

Date	Time	From (Name)	To (Name)

Chemist Review _____

Part 1(White) - Water Quality Inventory Copy
Part 2(Green) - Chemistry Copy
Part 3(Pink) - Water Resources Copy(For Transmission)
Part 4(Yellow) - Bacteriology Copy

ATTACHMENT K

Hackensack Water Company
200 Old Hook Road
Harrington Park, N.J. 07640
201-767-9300

PURVEYORS OF PURE WATER SINCE 1869

March 5, 1985

Division of Water Resources
c/o Mr. Peter Lynch
1100 Raymond Blvd.
Newark, NJ 07102

Dear Mr. Lynch:

Following are the sampling analyses for TCE and PCE found discharging from a 4-inch diameter pipe to a catch basin located on the west side of Charles Street in Westwood, approximately 500 feet north of the Haunsman's Ditch:

Date	Sample Location	TCE (ppb)	PCE (ppb)
2/19/85	Catch Basin, Charles Street	980	11
2/20/85	4-inch discharge pipe	353	17
2/20/85	Discharge to Haunsman's Ditch	454	* ND
2/25/95	4-inch discharge pipe	1,200	13

* ND - not detected

Subsequent to the initial investigation and sampling conducted by Mr. Richard White from your office on February 26, 1985, the discharge has not ceased. We will continue to monitor the discharge with a weekly sample and the results will be forwarded to your office.

Very truly yours,

John A. Hroncich

John A. Hroncich
Assistant Sanitary Engineer

JAH:ek

RECEIVED
MAR 11 1985
DEPT. ENVIRONMENTAL PROTECTION
NEWARK OFFICE

ATTACHMENT C-7

CHAIN OF CUSTODY

Form VST-010
8/79

PLEASE TYPE OR PRINT
WITH BALLPOINT PEN

STATE OF NEW JERSEY
Department of Environmental Protection
Division of Water Resources
WATER ANALYSIS

BACT. LAB NO.
DATE REC'D.
BOTTLE NO. 26089
DATE REC'D.
STORET ENT.
READ

MUNICIPALITY: WESTWOOD
COUNTY: BERGEN
STREAM: HAUNSMANS DITCH
FACILITY: KURT VERSEN CO.
LOCATION: 10 CHARLES ST.
REPRESENTATIVE: EMIL LOEFFEL
TITLE: PLANT MANAGER
COLL NAME: WHITE + PIERDINOCK
REMARKS: OUTFALL PIPE INTO CATCH BASIN IN FRONT OF THE ABOVE COMPANY (EAST SIDE)
221
24d

STATION IDENTIFICATION NUMBER: SC, 26089
YR. MO. DAY: 850225
HOUR: 1055

FIELD ANALYSIS

Water Temp °C	P10,	
☐ D.O.-Winkler	P300,	
D.O.-Probe	P299,	
☐ pH (Field)	P400,	
Sample Depth-ft.	P3,	
Gage Height-ft.	P65,	
☐ Spec. Cond. @ 25°C	P95,	
Salinity ‰	P480,	
☐ Tide Stage	P70211,	

BACTERIOLOGICAL - DILUTIONS (REQUESTED)

	10	1	-1 10	-2 10	-3 10	-4 10	-5 10	-6 10
Fecal Coliform / Total Coliform								
Fecal Streptococci								

Fecal coli /100 ml ☐ MPN P31615, ☐ MF P31613,

☐ Fecal Strept MPN /100 ml P31677,

☐ Tot coli MPN /100 ml P31505,

BIOCHEMICAL OXYGEN DEMAND

INITIAL D.O. (lab.) _____ SAMPLE
SEED YES ☐ NO ☐

CONC.%
BOD

☐ BOD ☐ 5-DAY P310, ☐ 6-DAY P312,

ANALYSIS	UNITS	PARAMETER	VALUE	RMKS.
☐ VO SCAN	ppb			
☐				
☐ 1,2 dichloroethene			17	
☐ Tetrachloroethene			4.0	
☐ Toluene			3.0	
☐ Trichloroethene			280	
☐ Blank # 26274	MR IN ONE			

RECEIVED
APR 26 1985
DEPT. ENVIRONMENTAL PROTECTION
NEWARK OFFICE

DATE	TIME	CHAIN OF CUSTODY FROM (NAME)	(NAME)

ATTACHMENT C-6

REPORT SUBMITTED
APR 11 1985
NJDOH Environmental Chemistry Laboratory

Chemist Review _____

Part 1(White) - Water Quality Inventory Copy
Part 2(Green) - Chemistry Copy
Part 3(Pink) - Water Resources Copy(For Transmission)
Part 4(Yellow) - Bacteriology Copy

Form VST-001
7/81

STATE OF NEW JERSEY
Department of Environmental Protection
Water Analysis

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

CHAIN OF CUSTODY
BACT. LAB NO. ____
DATE REC'D. ____
BOTTLE NO. 26088
DATE REC'D. ____
STORET ENT. ____ READ ____

MUNICIPALITY WESTWOOD	COUNTY BERGEN	STREAM HAUNSMANS DITCH
FACILITY KURT VERSEN CO.	LOCATION 70 CHARLES ST.	
REPRESENTATIVE EMIL LOEFFEL	TITLE PLANT MANAGER	COLL NAME DICK WHITE + H. MIERDINCK
REMARKS OUTFALL PIPE INTO CATCH BASIN IN FRONT OF THE ABOVE COMPANY (EAST SIDE)	221 24d	

Station Identification Number	YR. MO. DAY	HOUR	Sample No.
SC,	850225	1045,	(1) P8, 26088,

FIELD ANALYSIS

☑ Water Temp. °C.	(2) P00010,	30 C
☐ D.O. - Winkler	(3) P00300,	
☐ D.O. - Probe	(4) P00299,	
☐ pH (Field)	(5) P00400,	
☐ Sample Depth-ft.	(6) P00003,	
☐ Stream Flow-CFS	(7) P00061,	
☐ Gage Height-ft.	(8) P00065,	
☐ Spec. Cond. @ 25°C	(9) P00095,	
☐ Salinity °/00	(10) P00480,	
☐ Tide Stage	(11) P70211,	

BACTERIOLOGICAL – DILUTIONS (REQUESTED)

	10	1	-1 10	-2 10	-3 10	-4 10	-5 10	-6 10
Fecal Coliform / Total Coliform								
Fecal Streptococci								

Fecal coli #100 ml	☐ MPN (24) P31615, ☐ MF (25) P31613,	
☐ Fecal Strept MPN/100ml	(26) P31677,	
☐ Tot coli MPN/100 ml	(27) P31505,	

BIOCHEMICAL OXYGEN DEMAND

INITIAL D.O. (lab.) ____ SAMPLE ____

SEED YES ☐ NO ☐

CONC. % ____

BOD ____

☐ BOD 5-DAY (28) P310, 6-DAY (29) P312,

☑ COD	(30) P340,	44
☑ TOC	(31) P00680,	6.3

☐ Color Pt - Cou	(32) P00080,	
☐ Turbidity	(33) P00076,	
☑ Suspended Solids	(34) P00530,	42
☐ Suspended Solids Ash	(35) P00540,	
☐ Tot. Solids	(36) P00500,	
☐ Tot. Solids Ash	(37) P00505,	
☐ Tot. Dissolved Solids (TDS)	(38) P70300,	

☑ pH (LAB)	(39) P00403,	8.1
☐ Alkalinity as $CaCO_3$	(40) P00410,	
☐ Min. Acidity as $CaCO_3$	(41) P00436,	
☑ Chloride	(42) P00940,	18
☐ MBAS	(43) P38260,	
☐ Phenols	(44) P32730,	
☐ Hardness - tot as $CaCO_3$	(45) P00900,	
☐ Sulfate	(46) P00945,	
☐ Oil & Grease	(47) P00556,	
☑ Petroleum Hydrocarbons	(48) P45501,	80.43J
☐ Cyanide	(49) P00720,	

CONDITION CODES

☐ Weather Conditions	(12) P00041,	
☐ Flow Severity	(13) P01351,	
☐ ____ Severity	(14) P013__,	
☐ ____ Severity	(15) P013__,	

NUTRIENTS

LEVEL ☐ HIGH ☐ LOW

☐ NO_2 - N	(16) P00615,	
☐ $NO_2 + NO_3$ - N	(17) P00630,	
☐ NH_3 - N	(18) P00610,	
☐ Tot. Kjeldahl N	(19) P00625,	
Ortho-PO_4 as P / PO_4	☐ (20) P70507, ☐ (21) P00660,	
Phosphorus-tot as P / PO_4	☐ (22) P00665, ☐ (23) P00650,	

☑ As - tot ug/l	(50) P01002,	5K
☑ Cd - tot ug/l	(51) P01027,	2
☑ Cr - tot ug/l	(52) P01034,	10K
☑ Cu - tot ug/l	(53) P01042,	72
☑ Fe - tot ug/l	(54) P01045,	1177
☑ Hg - tot ug/l	(55) P71900,	0.2K
☑ Mn - tot ug/l	(56) P01055,	23
☑ Ni - tot ug/l	(57) P01067,	10K
☑ Pb - tot ug/l	(58) P01051,	59
☑ Zn - tot ug/l	(59) P01092,	724

ADDITIONAL ANALYSIS

☐ Cr (HEX)	P____,	0.005K
☐ ____	P____,	
☐ ____	P____,	
☐ ____	P____,	
☐ ____	P____,	

RESULTS mg/l unless otherwise noted

RECEIVED
APR 26 1985
DEPT. ENVIRONMENTAL PROTECTION
NEWARK OFFICE

REPORT SUBMITTED
APR 11 1985

ATTACHMENT

Chemist Review ____

Part 1 (White) - Water Quality Inventory Copy
Part 2 (Canary) - Laboratory Copy
Part 3 (Pink) - Laboratory Copy
Part 4 (Goldenrod) - Field Sampling Copy

ATTACHMENT A-4

NJDOH Environmental Chemistry Laboratory

GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing

399 Stuyvesant Avenue
Irvington, N.J. 07111

PUREST SYSTEM OF LABORATORY CONTROL

MATHEW KLEIN, M.S., Director

Telephone
201-373-8007

RECEIVED
JUL 18 1985
DEPT. ENVIRONMENTAL PROTECTION
NEWARK OFFICE

TELEDYNE ISOTOPES
50 VAN BUREN AVENUE
WESTWOOD, NJ 07675

SAMPCE SUBMITTED: THURS. JUNE 20, 1985

WELL WATER SMAPLE

VOLATILE ORGANIC ANALYSIS BY GC/MS

COMPOUND	RESULT	COMPOUND	RESULT
CHLOROMETHANE	<1.0	1,1,2 TRICHLOROETHANE	<1.0
BROMOMETHANE	<1.0	CIS-1,3 DICHLOROPROPYLENE	<1.0
DICHLORODIFLUOROMETHANE	<1.0	BENZENE	<1.0
VINYL CHLORIDE	<1.0	2-CHLOROETHYLVINYL ETHER	<1.0
CHLOROETHANE	<1.0	BROMOFORM	<1.0
METHYLENE CHLORIDE	<1.0	1,1,2,2 TETRACHLOROETHANE	<1.0
TRICHLOROFLUOROMETHANE	<1.0	TETRACHLOROETHYLENE	<1.0
1,1 DICHLOROETHYLENE	<1.0	TOLUENE	<1.0
1,1 DICHLOROETHANE	<1.0	CHLOROBENZENE	<1.0
TRANS-1,2 DICHLOROETHYLENE	<1.0	ETHYLBENZENE	<1.0
CHLOROFORM	3.5	P-XYLENE	<1.0
1,2 DICHLOROETHANE	<1.0	M-XYLENE	<1.0
1,1,1 TRICHLOROETHANE	22.5	O-XYLENE	<1.0
CARBON TETRACHLORIDE	<1.0	1,2 DICHLOROBENZENE	<1.0
BROMODICHLOROMETHANE	<1.0	1,3 DICHLOROBENZENE	<1.0
1,2 DICHLOROPROPANE	<1.0	1,4 DICHLOROBENZENE	<1.0
TRANS-1,3 DICHLOROPROPENE	<1.0	1,2,4 TRICHLOROBENZENE	<1.0
TRICHLOROETHYLENE	4.0	ACROLEIN	<100.
DIBROMOCHLOROMETHANE	<1.0	ACRYLONITRILE	<100.

ALL RESULTS ARE IN MICROGRAMS/LITER (PARTS PER BILLION).
< = LESS THAN, NONE DETECTED.
ANALYSIS PERFORMED BY PURGE AND TRAP GAS CHROMATOGRAPHY/MASS SPECTROMETRY, USEPA 624.

ATTACHMENT D-6

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE INVOICE.

GARDEN STATE LABORATORIES, INC.
Bacteriological and Chemical Testing
399 Stuyvesant Avenue
Irvington, N.J. 07111

PUREETEST SYSTEM OF LABORATORY CONTROL

MATHEW KLEIN, M.S., Director

Telephone
201-373-8007

TELEDYNE ISOTOPES
50 VAN BUREN AVENUE
WESTWOOD, NJ 07675

SAMPLE SUBMITTED: THURS. JUNE 20, 1985

WELL WATER SAMPLE

RESULTS ARE IN PARTS PER BILLION.

PESTICIDES

LINDANE	<0.1
ENDRIN	<0.1
TOXAPHENE	<0.1
METHOXYCHLOR	<0.1

HERBICIDES

2,4 - D	<0.1
2,4,5 - TP SILVEX	<0.1

ATTACHMENT D-7

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE INVOICE.
Certified by U.S. Public Health Service, N.J. Dept. of Health and N.J.D.E.P. – Lab #07044

OVER PLEASE

GARDEN STATE LABORATORIES, INC.
Bacteriological and Chemical Testing
399 Stuyvesant Avenue
Irvington, N.J. 07111

PURETEST SYSTEM OF LABORATORY CONTROL

Telephone
201-373-8007

MATHEW KLEIN, M.S., Director

TELEDYNE ISOTOPES
50 VAN BUREN AVENUE
WESTWOOD, NJ 07675

SAMPLE SUBMITTED: THURS. JUNE 20, 1985

RESULTS ARE IN MG/L UNLESS NOTED.

WELL WATER SAMPLE

ARSENIC	0.001	SODIUM	26.7
BARIUM	<0.1	TURBIDITY	0.11
CADMIUM	<0.001	COLOR	2.5
CHROMIUM	<0.02	MBAS	<0.1
LEAD	<0.02	FLUORIDE	<1.0
MERCURY	<0.0002	NITRATE	3.7
SILVER	<0.02	SULFATE	40.3
SELENIUM	<0.001	CHLORIDE	48.6
IRON	<0.05	TOTAL DISSOLVED SOLIDS	298.
MANGANESE	<0.02	TOTAL HARDNESS	240.
COPPER	<0.05	PH - STANDARD UNITS	7.73
ZINC	0.01	CORROSIVITY	POSITIVE 0.17

ATTACHMENT D-8

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE INVOICE.

Certified by U.S. Public Health Service, N.J. Dept. of Health and N.J.D.E.P. – Lab #07044

OVER PLEASE

Client:

Westwood Swim Club
Tillman Road
Westwood, N.J.

Date of Report: July 12, 1985
Sample Identification: 3708
Date Sample Received: July 1, 1985
Collected From: Westwood Swim Club

602 METHOD

Parameter	Westwood Swim Club
Benzene	<0.002
Toluene	<0.002
Ethyl benzene	<0.002
1,2- Dichlorobenzene	<0.002
1,3- Dichlorobenzene	<0.002
1,4- Dichlorobenzene	<0.002
o- Xylene	<0.002
m- Xylene	<0.002
p- Xylene	<0.002

All results expressed in mg/l

Certification No. 02046

Laboratory Resources Inc.

Carol A. Price
Manager/Laboratory Services

D-5

Client:

Westwood Swim Club
Tillman Road
Westwood, N.J.

Date of Report: July 12, 1985
Sample Identification No. 3708
Date Sample Received: July 1, 1985
Collected From: Westwood Swim Club

601 METHOD

Parameter	Westwood Swim Club
Chloromethane	<0.002
Bromomethane	<0.002
Dichlorodifluoromethane	<0.002
Vinyl Chloride	<0.002
Chloroethane	<0.002
Methylene Chloride	<0.002
Trichlorofluoromethane	<0.002
1,1-Dichloroethene	<0.002
1,1-Dichloroethane	<0.002
trans-1,2-Dichloroethene	<0.002
Chloroform	<0.002
1,2-Dichloroethane	<0.002
1,1,1-Trichloroethane	<0.002
Carbon tetrachloride	<0.002
Bromodichloromethane	<0.002
1,2-Dichloropropane	<0.002
trans-1,3-Dichloropropene	<0.002
Trichloroethene	<0.002
Dibromochloromethane	<0.002
1,1,2-Trichloroethane	<0.002
cis-1,3-Dichloropropene	<0.002
2-Chloroethylvinyl ether	<0.002
Bromoform	<0.002
1,1,2,2-Tetrachloroethane	<0.002
Tetrachloroethene	<0.002
Chlorobenzene	<0.002

ATTACHMENT D-4

All results expressed in mg/l

Certification No. 02046

Laboratory Resources Inc.

Carol A. Price
Manager/Laboratory Services

STANDARD WORK ORDER

WORK ORDER NO. 1637[illegible]

LOCATION Amber Aluminum Co.
50 Charles St.
Westwood, N.J.
I.P.P. # 0003 ~~METER NO.~~

SAMPLE DATES
REQUESTED 5-21-85, PLACED 5.2[illegible]
DELIVERED 5-23-85, TIME 12:49
SAMPLED BY JB-WF-DM, TYPE Flow Prop. Comp

APPEARANCE

ACIDS AND BASES (PPM)	RESULT	INT
✓ PH (UNITS)	2.37	AD
ACIDITY-TOTAL		
ALKALINITY-TOTAL		
HARDNESS AS CaCO3		

BIOLOGICAL (MPN/100ML)	RESULT	INT
TOTAL COLIFORM		
FECAL COLIFORM		
FECAL STREP.		

CLARITY	RESULT	INT
✓ COLOR (UNITS)	5 *	JD
TURBIDITY (NTU)		

HALOGENS (PPM)	RESULT	INT
CHLORIDE		
FLUORIDE		

NITROGEN (PPM)	RESULT	INT
✓ T.K.N.	0.56	JJ*
✓ AMMONIA-N	0.28	JJ*
ORGANIC-N	0.28	JJ
NITRATE		
NITRITE		

OXYGEN DEMAND (PPM)	RESULT	INT
✓ BOD	10	AP
COD		
TOC		

TOXIC NON-METAL (PPM)	RESULT	INT
✓ CYANIDE	0.03	JD
PHENOL		

SOLIDS (PPM)	RESULT	INT
T.S.		
T.M.S.		
✓ T.V.S.		
✓ S.S.	10	JeH
M.S.S.		
V.S.S.		
T.D.S.		
SETABLE		

PHOSPHOROUS (PPM)	RESULT	INT
T. PHOSPHOROUS		
O-PHOSPHATE		
POLY-PHOSPHATE		

OTHERS (PPM)	RESULT	INT
OIL AND GREASE-TOTAL		
PET.HYDROCARB.S-TOTAL		
T. SULFIDE		
SULFATE		
M.B.A.S.		
✓ CONDUCTIVITY (μMHO)	NR	

ORGANICS (PPM)	RESULT	INT
T.V.S.		

METALS (PPB)	RESULT	INT
ALUMINUM		
ANTIMONY		
ARSENIC		
BARIUM		
BERYLLIUM		
✓ CADMIUM	5	1M
✓ CHROMIUM	160	1M
CHROMIUM +6		
✓ COPPER	403	1M
IRON		
✓ LEAD	<100	1M
MANGANESE		
MERCURY		
✓ NICKEL	60	1M
SELENIUM		
✓ SILVER	<10	1M
SODIUM		
THALLIUM		
✓ VANADIUM		
✓ ZINC	303	1M
✓ T.T.O. (Priority Pollutants)	Received	

FLOW METER READING:
AFTER 47432
BEFORE 47294
TOTAL 13800 G.P.D.

	IN	OUT
TIME	11:58	12:00
TEMP.	23.9°	23.4°
PH	2.22	2.23

COMMENTS:
* Color by Tristimulus: DCM WV = 582 (PH=2.11) 582 (PH=7.6)
Cmp. WV = 481 482
Purity = 11.8 11.2

Conductivity not run.

P.T.O. P.P. T.S. 142

SAMPLES PRESERVED

BOTTLE #	PH
#3	0.79
#4	12.09
#5	1.05
#6	—
#7	—

1PP

BER EN COUNTY UTILITIES AUT..ORITY

STANDARD WORK ORDER

WORK ORDER NO. 17481

LOCATION AMBER ALUMINUM
30 CHARLES ST.
WESTWOOD, N.J.
~~METER NO.~~ 0003

SAMPLE DATES
REQUESTED 12-1-85, PLACED 12-5-85
DELIVERED 12-6-85, TIME 11:30 am
SAMPLED BY JB-WF-FL, TYPE Flow Prop Comp

APPEARANCE

ACIDS AND BASES (PPM)	RESULT	INT
✓ PH (UNITS)	3.59	WF
ACIDITY-TOTAL		
ALKALINITY-TOTAL		
HARDNESS AS CaCO3		

BIOLOGICAL(MPN/100ML)	RESULT	INT
TOTAL COLIFORM		
FECAL COLIFORM		
FECAL STREP.		

CLARITY	RESULT	INT
✓ COLOR (UNITS)	15	HD
TURBIDITY (NTU)		

HALOGENS (PPM)	RESULT	INT
CHLORIDE		
FLUORIDE		

NITROGEN (PPM)	RESULT	INT
✓ T.K.N.	4.2	JB
✓ AMMONIA-N	2.0	JB
ORGANIC-N		
NITRATE		
NITRITE		

OXYGEN DEMAND (PPM)	RESULT	INT
✓ BOD	13	gosl
✓ COD	96.8	JB
TOC		

TOXIC NON-METAL(PPM)	RESULT	INT
✓ CYANIDE	<0.01	AD
✓ PHENOL GRAB	0.04	BAO

SOLIDS (PPM)	RESULT	INT
T.S.		
T.M.S.		
T.V.S.		
✓ S.S.	14	jeh
M.S.S.		
V.S.S.		
T.D.S.		
SETABLE		

PHOSPHOROUS (PPM)	RESULT	INT
T. PHOSPHOROUS		
O-PHOSPHATE		
POLY-PHOSPHATE		

OTHERS (PPM)	RESULT	INT
✓ OIL AND GREASE-TOTAL	8.9	BAO
✓ PET.HYDROCARB.S-TOTAL GRAB SAMPLES	2.3	BAO
T. SULFIDE		
SULFATE		
M.B.A.S.		
CONDUCTIVITY (UMHO)		

ORGANICS (PPM)	RESULT	INT
T.V.S.		

METALS (PPB)	RESULT	INT
ALUMINUM		
ANTIMONY		
✓ ARSENIC	*<2	Im
BARIUM		
BERYLLIUM		
✓ CADMIUM	<5	Im
✓ CHROMIUM	213	Im
CHROMIUM +6		
✓ COPPER	675	Im
IRON		
✓ LEAD	203	Im
MANGANESE		
✓ MERCURY	≤0.2	IM
✓ NICKEL	466	Im
SELENIUM		
✓ SILVER	<10	Im
SODIUM		
THALLIUM		
VANADIUM		
✓ ZINC	1464	Im
✓ T.T.O.		

	IN	OUT
TIME	11:30	9:30
TEMP.	60°F	63°F
PH	2.30	2.10

FLOW METER READING:
AFTER 64315
BEFORE 64186
COMMENTS: 12.900
* Doubtful result because of interferences

SAMPLES PRESERVED

BOTTLE #	PH
#3	<2
#4	>12
#5	<2
#6	<2
#7	

OIL+GRAB <2
TS 37.5

P.T.O.

Client:

Kurt Versen
10 Charles Street
P.O. Box 677
Westwood, New Jersey 07675

Date of Report: 1/14/86
Sample Identification No. 6442
Date Sample Received: 12/10/85
Collected From: 10 Charles Street

601 METHOD

Parameter	Results
Chloromethane	<0.01
Bromomethane	<0.01
Dichlorodifluoromethane	<0.01
Vinyl Chloride	<0.01
Chloroethane	<0.01
lethylene Chloride	<0.01
Trichlorofluoromethane	<0.01
1,1-Dichloroethene	<0.01
1,1-Dichloroethane	<0.01
trans-1,2-Dichloroethene	<0.01
Chloroform	<0.01
1,2-Dichloroethane	<0.01
1,1,1-Trichloroethane	<0.01
Carbon tetrachloride	<0.01
Bromodichloromethane	<0.01
1,2-Dichloropropane	<0.01
trans-1,3-Dichloropropene	<0.01
Trichloroethene	0.67
Dibromochloromethane	<0.01
1,1,2-Trichloroethane	<0.01
cis-1,3-Dichloropropene	<0.01
-Chloroethylvinyl ether	<0.01
Bromoform	<0.01
1,1,2,2-Tetrachloroethane	<0.01
Tetrachloroethene	<0.01
Chlorobenzene	<0.01

Laboratory Resources Inc.

Carol A. Price
Manager/Laboratory Services

All results expressed in mg/l

Certification No. 02046

1PP

BER N COUNTY UTILITIES AUT. RITY

STANDARD WORK ORDER

18786

WORK ORDER NO. _____

LOCATION AMBER ALUMINUM
50 CHARLES ST
WESTON N.J.
~~METER NO.~~ #5003

SAMPLE DATES
REQUESTED 4-1-86, PLACED 4-10-
DELIVERED 4-11-86, TIME 11:15
SAMPLED BY JB WF, TYPE Flow Prop Comp

APPEARANCE _____

ACIDS AND BASES (PPM)	RESULT	INT
✓ PH (UNITS)	2.58	JB
ACIDITY-TOTAL		
ALKALINITY-TOTAL		
HARDNESS AS CaCO3		

BIOLOGICAL(MPN/100ML)	RESULT	INT
TOTAL COLIFORM		
FECAL COLIFORM		
FECAL STREP.		

CLARITY	RESULT	INT
✓ COLOR (UNITS)	5.0	JB
TURBIDITY (NTU)		

HALOGENS (PPM)	RESULT	INT
CHLORIDE		
FLUORIDE		

NITROGEN (PPM)	RESULT	INT
✓ T.K.N.	1.7	PSU
✓ AMMONIA-N	1.0	PSU
ORGANIC-N		
NITRATE		
NITRITE		

OXYGEN DEMAND (PPM)	RESULT	INT
✓ BOD	1	DM
COD		
TOC		

TOXIC NON-METAL(PPM)	RESULT	INT
✓ CYANIDE COMP.	.027	AD
✓ PHENOL	0.16	PSU

SOLIDS (PPM)	RESULT	INT
T.S.		
T.M.S.		
T.V.S.		
✓ S.S.	15	JEK
M.S.S.		
V.S.S.		
T.D.S.		
SETABLE		

PHOSPHOROUS (PPM)	RESULT	INT
T. PHOSPHOROUS		
O-PHOSPHATE		
POLY-PHOSPHATE		

OTHERS (PPM)	RESULT	INT
✓ OIL AND GREASE-TOTAL	<0.1	JB
✓ PET.HYDROCARB.S-TOTAL	<0.1	JB
T. SULFIDE		
SULFATE		
M.B.A.S.		
CONDUCTIVITY (UMHO)		

ORGANICS (PPM)	RESULT	INT
T.V.S.		

METALS (PPB)	RESULT	INT
✓ ALUMINUM Ca		
ANTIMONY		
✓ ARSENIC	20	DM
BARIUM		
BERYLLIUM		
✓ CADMIUM	5	DM
✓ CHROMIUM	160	DM
CHROMIUM +6		
✓ COPPER	943	DM
IRON		
✓ LEAD	<100	DM
MANGANESE		
✓ MERCURY	<0.2	DM
✓ NICKEL	57	DM
SELENIUM		
✓ SILVER	<10	DM
SODIUM		
THALLIUM		
VANADIUM		
✓ ZINC	417	DM
✓ T.T.O.		
VOTEGA	.031	AD
Cu Geop		

FLOW METER READING:
AFTER 7 1 1 6 4
BEFORE 7 1 0 3 5
COMMENTS: 129 [illegible]

	IN	OUT
TIME	10:00	9:50
TEMP.	18°C	18°C
PH	2.60	2.53

SAMPLES PRESERVED

BOTTLE #	PH
#3	1.98
#4	12.88
#5	2.00
#6	1.97
~~#7~~	1.99

TS 505

P.T.O.

BE GEN COUNTY UTILITIES AUTHORITY

STANDARD WORK ORDER

WORK ORDER NO. 19737

LOCATION AMBER ALUMINUM
50 CHARLES ST.
WESTWOOD, N.J.
~~METER NO.~~ #0003

SAMPLE DATES
REQUESTED 8-1-86, PLACED 8-28-
DELIVERED 8-29-86, TIME 12:15 p
SAMPLED BY BWF-PB, TYPE F.P.C.

APPEARANCE

ACIDS AND BASES (PPM)	RESULT	INT
✓ PH (UNITS)	2.00	WF
ACIDITY-TOTAL		
ALKALINITY-TOTAL		
HARDNESS AS CaCO3		

BIOLOGICAL(MPN/100ML)	RESULT	INT
TOTAL COLIFORM		
FECAL COLIFORM		
FECAL STREP.		

CLARITY	RESULT	INT
✓ COLOR (UNITS)	≤5	DD
TURBIDITY (NTU)		

HALOGENS (PPM)	RESULT	INT
CHLORIDE		
FLUORIDE		

NITROGEN (PPM)	RESULT	INT
✓ T.K.N.	4.2	AD
✓ AMMONIA-N	0.5	AD
ORGANIC-N		
NITRATE		
NITRITE		

OXYGEN DEMAND (PPM)	RESULT	INT
✓ BOD	51	Lar
COD		
TOC		

TOXIC NON-METAL(PPM)	RESULT	INT
✓ CYANIDE	≤0.02	DD
✓ PHENOL	<0.05	DD

SOLIDS (PPM)	RESULT	INT
T.S.		
T.M.S.		
T.V.S.		
✓ S.S.	166	Ash
M.S.S.		
V.S.S.		
T.D.S.		
SETABLE		

PHOSPHOROUS (PPM)	RESULT	INT
T. PHOSPHOROUS		
O-PHOSPHATE		
POLY-PHOSPHATE		

OTHERS (PPM)	RESULT	INT
✓ OIL AND GREASE-TOTAL	4.87	AD
✓ PET.HYDROCARB.S-TOTAL	≤2	AD
T. SULFIDE		
SULFATE		
M.B.A.S.		
CONDUCTIVITY (µMHO)		

ORGANICS (PPM)	RESULT	INT
T.V.S.		

METALS (PPB)	RESULT	INT
ALUMINUM		
ANTIMONY		
✓ ARSENIC	≤2	Ih
BARIUM		
BERYLLIUM		
✓ CADMIUM	10	Ih
✓ CHROMIUM	115	Ih
✓ CHROMIUM +6	≤25	DD
✓ COPPER	940	Ih
IRON		
✓ LEAD	240	I.
MANGANESE		
✓ MERCURY	0.3	I.
✓ NICKEL	132	I.
SELENIUM		
✓ SILVER	12	I.
SODIUM		
THALLIUM		
VANADIUM		
✓ ZINC	386	I
✓ T.T.O.		

FLOW METER READING:
AFTER 23,800 gals.
BEFORE × .89 CORRECTION FACTOR

COMMENTS: 21,182 - TOTAL GALS.

	IN	OUT
TIME	12:15	11:00
TEMP.	72°F	70°F
PH	2.23	3.10

SAMPLES BOTTLE #	PRESERVE PH
#3	1.55
#4	12.36
#5	1.85
#6	1.80
#7 O+G.	1.80

P.T.O.

TS. 633

1PP

BERGEN COUNTY UTILITIES AUTHORITY

STANDARD WORK ORDER

WORK ORDER NO. 21669

LOCATION Amber Aluminum
50 Charles St.
Westwood, N.J.
~~METER NO.~~ 0003

SAMPLE DATES
REQUESTED 4.1.87, PLACED 4.1.8
DELIVERED 4.22.87, TIME 10:00
SAMPLED BY JB.DH.CB, TYPE FPC

APPEARANCE

ACIDS AND BASES (PPM)	RESULT	INT
✓ PH (UNITS)	2.45	JB
ACIDITY-TOTAL		
ALKALINITY-TOTAL		
HARDNESS AS CaCO3		

BIOLOGICAL(MPN/100ML)	RESULT	INT
TOTAL COLIFORM		
FECAL COLIFORM		
FECAL STREP.		

CLARITY	RESULT	INT
✓ COLOR (UNITS)	≤5	~~SD~~
TURBIDITY (NTU)		

HALOGENS (PPM)	RESULT	INT
CHLORIDE		
FLUORIDE		

NITROGEN (PPM)	RESULT	INT
✓ T.K.N.	1.4	~~SD~~
✓ AMMONIA-N	≤1	~~SD~~
ORGANIC-N		
NITRATE		
NITRITE		

OXYGEN DEMAND (PPM)	RESULT	INT
✓ BOD	16	SP
COD		
TOC		

TOXIC NON-METAL(PPM)	RESULT	INT
✓ CYANIDE	≤0.02	~~SD~~
✓ PHENOL	≤0.05	~~SD~~ FC

SOLIDS (PPM)	RESULT	INT
T.S.		
T.M.S.		
T.V.S.		
✓ S.S.	36	WF
M.S.S.		
V.S.S.		
T.D.S.		
SETABLE		

PHOSPHOROUS (PPM)	RESULT	INT
T. PHOSPHOROUS	(FC) ~~≤2~~	~~FC~~
O-PHOSPHATE	~~≤2~~	~~FC~~
POLY-PHOSPHATE		

OTHERS (PPM)	RESULT	INT
✓ OIL AND GREASE-TOTAL	≤2.0	FC
✓ PET.HYDROCARB.S-TOTAL	≤2.0	FC
T. SULFIDE		
SULFATE		
M.B.A.S.		
CONDUCTIVITY (µMHO)		

ORGANICS (PPM)	RESULT	INT
T.V.S.		

METALS (PPB)	RESULT	INT
ALUMINUM		
ANTIMONY		
✓ ARSENIC	≤2	Hm
BARIUM		
BERYLLIUM		
✓ CADMIUM	≤5	Hm
✓ CHROMIUM	135	Hm
✓ CHROMIUM +6	≤25	~~SD~~
✓ COPPER	590	Hm
IRON		
✓ LEAD	≤100	Hm
MANGANESE		
✓ MERCURY	≤0.2	Hm
✓ NICKEL	2780	Hm
SELENIUM		
✓ SILVER	≤10	Hm
SODIUM		
THALLIUM		
VANADIUM		
✓ ZINC	290	Hm
✓ T.T.O.		

FLOW METER READING:
AFTER 128313
BEFORE 128016

COMMENTS: 29700 gals

SAMPLES PRESERVED

BOTTLE #	PH
#3	1.90
#4	12.19
#5	1.80
#6	1.46
#7	1.48

	IN	OUT
TIME	10:00	1:05
TEMP.	67°F	72°F
PH	2.31	2.15

P.T.O.

TS 128

188

BERGEN COUNTY UTILITIES AUTHORITY

STANDARD WORK ORDER

22862

WORK ORDER NO. _____

LOCATION Amber Aluminum
50 Charles St
Westwood

METER NO. _____

SAMPLE DATES
REQUESTED 9-1-87, PLACED 8/31
DELIVERED 9-1-87, TIME 11:45
SAMPLED BY SN WTDM, TYPE Comp

APPEARANCE _____

ACIDS AND BASES (PPM)	RESULT	INT
✓ PH (UNITS)	2.30	DM
ACIDITY-TOTAL		
ALKALINITY-TOTAL		
HARDNESS AS CaCO3		

BIOLOGICAL(MPN/100ML)	RESULT	INT
TOTAL COLIFORM		
FECAL COLIFORM		
FECAL STREP.		

CLARITY	RESULT	INT
✓ COLOR (UNITS)	N/S	
TURBIDITY (NTU)		

HALOGENS (PPM)	RESULT	INT
CHLORIDE		
FLUORIDE		

NITROGEN (PPM)	RESULT	INT
✓ T.K.N.	2.57	JEH
✓ AMMONIA-N	1.12	JEH
ORGANIC-N		
NITRATE		
NITRITE		

OXYGEN DEMAND (PPM)	RESULT	INT
✓ BOD	12	JEH
COD		
TOC		

TOXIC NON-METAL(PPM)	RESULT	INT
✓ CYANIDE	≤.02	FC
✓ PHENOL	<0.05	[illegible]

SOLIDS (PPM)	RESULT	INT
T.S.		
T.M.S.		
T.V.S.		
✓ S.S.	50	AD
M.S.S.		
V.S.S.		
T.D.S.		
SETABLE		

PHOSPHOROUS (PPM)	RESULT	INT
T. PHOSPHOROUS		
O-PHOSPHATE		
POLY-PHOSPHATE		

OTHERS (PPM)	RESULT	INT
✓ OIL AND GREASE-TOTAL	≤2.0	SD
✓ PET.HYDROCARB.S-TOTAL	≤2.0	SD
T. SULFIDE		
SULFATE		
M.B.A.S.		
CONDUCTIVITY (µMHO)		

ORGANICS (PPM)	RESULT	INT
T.V.S.		

METALS (PPB)	RESULT	INT
ALUMINUM		
ANTIMONY		
✓ ARSENIC	≤2	Pb
BARIUM		
BERYLLIUM		
✓ CADMIUM	≤5	Pb
✓ CHROMIUM	607	Pb
✓ CHROMIUM +6	<25	SD
✓ COPPER	577	Pb
IRON		
✓ LEAD	140	Pb
MANGANESE		
✓ MERCURY	≤0.2	Pb
✓ NICKEL	164	Pb
SELENIUM		
✓ SILVER	≤5	Pb
SODIUM		
THALLIUM		
VANADIUM		
✓ ZINC	707	Pb
✓ TTC	26	

FLOW METER READING:
AFTER _____
BEFORE _____

	IN	OUT
TIME	10:45	11:38
TEMP.	23°c	21°c
PH	4.35	2.24

COMMENTS:
Flow Chart
NO Recording PH.
N/S = No Sample - another sample will be collected for this test.

P.T.O.

SAMPLES PRESERVED

BOTTLE #	PH
#3	1.50
#4	12.34
#5	1.83
#6	1.61
#7	1.67

TS 250

Laboratory Resources INC
363 Old Hook Road
Westwood, New Jersey 07675
201-666-6644

CLIENT: 001170
Kurt Versen
10 Charles Street PO Box 677
Westwood, New Jersey 07675

Date of Report: 07/13/88
Sample ID No. 5230
Date Sample Received: 6/24/88
Collected From: See Below
Sample Collected by:
Laboratory Resources [ ]
Client [ ]

Parameter	Results
Cadmium	<0.010
Chromium	0.078
Copper	0.930
Lead	0.022
Nickel	0.144
Silver	0.050
Zinc	0.313

Patrick H. Carlo
Manager

All results expressed in mg/ℓ unless otherwise stated.
All analysis performed in accordance with the latest edition of Standard Methods for the Examination of Water and Waste and the EPA Methods for Chemical Analysis of Water and Wastes.

Certification No. N.J. - 02046
N.Y. - 10588

BERGEN COUNTY UTILITIES AUTHORITY

STANDARD WORK ORDER

WORK ORDER NO. 26410

LOCATION Kurt Versen

SAMPLE DATES

REQUESTED 11-1-88, PLACED 11/2

DELIVERED 11-3-88, TIME 11:51

METER NO. #0003 SAMPLED BY LW/WF/DMP TYPE Comp 2700

APPEARANCE

ACIDS AND BASES (PPM)	RESULT	INT
PH (UNITS)		
ACIDITY-TOTAL		
ALKALINITY-TOTAL		
HARDNESS AS CaCO3		
BIOLOGICAL(MPN/100ML)	**RESULT**	**INT**
TOTAL COLIFORM		
FECAL COLIFORM		
FECAL STREP.		
CLARITY	**RESULT**	**INT**
COLOR (UNITS)	40	pt/c
TURBIDITY (NTU)		
HALOGENS (PPM)	**RESULT**	**INT**
CHLORIDE		
FLUORIDE		
NITROGEN (PPM)	**RESULT**	**INT**
T.K.N.	1.1	mg/l
AMMONIA-N	≤1.0	BD
ORGANIC-N		
NITRATE		
NITRITE		
OXYGEN DEMAND (PPM)	**RESULT**	**INT**
BOD	6.3	mg/l
COD		
TOC		
TOXIC NON-METAL(PPM)	**RESULT**	**INT**
CYANIDE	≤.02	FC
PHENOL	≤.05	µg/l

SOLIDS (PPM)	RESULT	INT
T.S.		
T.M.S.		
T.V.S.		
S.S.	63	DMC
M.S.S.		
V.S.S.		
T.D.S.		
SETABLE		
PHOSPHOROUS (PPM)	**RESULT**	**INT**
T. PHOSPHOROUS		
O-PHOSPHATE		
POLY-PHOSPHATE		
OTHERS (PPM)	**RESULT**	**INT**
OIL AND GREASE-TOTAL	5.0	AD
PET.HYDROCARB.S-TOTAL	≤2.0	AD
T. SULFIDE		
SULFATE		
M.B.A.S.		
CONDUCTIVITY (µMHO)		
Microtox 2.1	~~73~~	µg/l
ORGANICS (PPM)	**RESULT**	**INT**
GC/MS		

METALS (PPB)	RESULT	INT
ALUMINUM		
ANTIMONY		
ARSENIC	≤2	µg/l
BARIUM		
BERYLLIUM		
CADMIUM	≤5	µg/l
CHROMIUM	100	µg/l
CHROMIUM +6	≤25	µg/l
COPPER	220	µg/l
IRON		
LEAD	≤100	µg/l
MANGANESE		
MERCURY	≤0.2	µg/l
NICKEL	130	µg/l
SELENIUM		
SILVER	≤10	µg/l
SODIUM		
THALLIUM		
VANADIUM		
ZINC	1810	µg/l
TTO	0.063	mg/l
TS105		

FLOW METER READING:

AFTER

BEFORE FPC

	IN	OUT
TIME	11:51	12:28
TEMP.	15°C	18°C
PH	2.40	11.89

COMMENTS: pH METER SHOULD BE PLACED IN CHAMBER TO MONITOR pH

P.T.O.

SAMPLES PRESERVED

BOTTLE #	PH
#3	1.65
#4	12.60
#5	1.88
#6	1.97
#7	1.97
#2	5.47

Laboratory Resources INC
363 Old Hook Road
Westwood, New Jersey 07675
201-666-6644

JAN 10 1989

CLIENT: 001170
Kurt Versen
10 Charles Street PO Box 677
Westwood, New Jersey 07675

Date of Report: 01/06/89
Sample ID No. 88122228,01-04
Date Sample Received: 12/15/88
Collected From: See Below
Sample Collected by:
Laboratory Resources [ ]
Client [✓]

Parameter	#1	#2	#3	#4
BOD 5-Day	1.0	-	-	-
Total Cyanide	<0.01	-	-	-
Ammonia	0.61	-	-	-
TKN	0.71	-	-	-
Oil & Grease	<5.0	-	-	-
Petroleum Hydrocarbons	<5.0	-	-	-
pH	6.8	6.4	6.4	6.4
Suspended Solids	16.0	-	-	-
Cadmium	0.011	-	-	-
Chromium	0.068	-	-	-
Copper	0.406	-	-	-
Lead	<0.020	-	-	-
Nickel	0.165	-	-	-
Zinc	0.527	-	-	-
Chromium Hexavalent	<0.050	-	-	-

Manager

All results expressed in mg/ℓ unless otherwise stated.
All analysis performed in accordance with the latest edition of Standard Methods for the Examination of Water and Waste and the EPA Methods for Chemical Analysis of Water and Wastes.

Certification No. N.J. - 02046
N.Y. - 10588

ID 121531

BERGEN COUNTY UTILITIES AUTHORITY

STANDARD WORK ORDER

WORK ORDER NO. 35045

LOCATION Kurt Versen Co
50 Charles St
Westwood

METER NO. 0003

SAMPLE DATES
REQUESTED 9/10/90, PLACED 9/2
DELIVERED 9/20/90, TIME FPC
SAMPLED BY JW/WF, TYPE Comp

APPEARANCE

ACIDS AND BASES (PPM)	RESULT	INT
✓ PH (UNITS)		
ACIDITY-TOTAL		
ALKALINITY-TOTAL		
HARDNESS AS CaCO3		
BIOLOGICAL(MPN/100ML)	**RESULT**	**INT**
TOTAL COLIFORM		
FECAL COLIFORM		
FECAL STREP.		
CLARITY	**RESULT**	**INT**
COLOR (UNITS)		
TURBIDITY (NTU)		
HALOGENS (PPM)	**RESULT**	**INT**
CHLORIDE		
FLUORIDE		
NITROGEN (PPM)	**RESULT**	**INT**
✓ T.K.N.	1.8	RTL
✓ AMMONIA-N	≤1.0	RTL
ORGANIC-N		
NITRATE		
NITRITE		
OXYGEN DEMAND (PPM)	**RESULT**	**INT**
✓ BOD	*30	AL
COD		
TOC		
TOXIC NON-METAL(PPM)	**RESULT**	**INT**
✓ CYANIDE	0.02	RTL
✓ PHENOL	≤.05	JL

SOLIDS (PPM)	RESULT	INT
T.S.		
T.M.S.		
T.V.S.		
✓ S.S.	65	DMC
M.S.S.		
V.S.S.		
T.D.S.		
SETABLE		
PHOSPHOROUS (PPM)	**RESULT**	**INT**
T. PHOSPHOROUS		
O-PHOSPHATE		
POLY-PHOSPHATE		
OTHERS (PPM)	**RESULT**	**INT**
✓ OIL AND GREASE-TOTAL	14.9	JL
✓ PET.HYDROCARB.S-TOTAL	12.2	JL
T. SULFIDE		
SULFATE		
M.B.A.S.		
CONDUCTIVITY (UMHO)		
✓ microtox	0.8	JL
ORGANICS (PPM)	**RESULT**	**INT**
✓ ~~T.V.S.~~ GC/MS	SR	AD

METALS (PPB)	RESULT	INT
ALUMINUM		
ANTIMONY		
✓ ARSENIC	≤2	MB
BARIUM		
BERYLLIUM		
✓ CADMIUM	≤5	MB
✓ CHROMIUM	90	MB
✓ CHROMIUM +6	≤25	RTL
✓ COPPER	526	MB
IRON		
✓ LEAD	≤100	MB
MANGANESE		
✓ MERCURY	≤0.2	MB
✓ NICKEL	40	MB
SELENIUM		
✓ SILVER	≤10	MB
SODIUM		
THALLIUM		
VANADIUM		
✓ ZINC	849	MB
✓ TTO		

FLOW METER READING:
AFTER 115741
BEFORE 115495

	IN	OUT
TIME	10:30	9:30
TEMP.	23.7	24.
PH	2.18	6.24

COMMENTS:
TTO
Record D.H. Meter 9/24-9/25
*not enough to deplete test TS-1

SAMPLES PRESERVED

BOTTLE #	PH
#3	1.4
#4	12.50
#5	1.30
#6	1.0
Phenol #7	1.34
2	2.0

P.T.O.

LABORATORY RESOURCES, INC.
787 OLD HOOK ROAD
WESTWOOD, NJ 07675
(201) 666-8848
LAB CERTIFICATION NO. 20066

DATE OF REPORT: 07/17/87
DATE SA. COLLECTED: 07/06/87
DATE SA. RECEIVED: 07/06/87
DATE OF ANALYSIS: 07/10/87

CLIENT KURT VERSEN

WESTWOOD, NJ 07675

PARAMETER	SAMPLE ID. 4601	ANALYZED BY
CHLOROMETHANE	< 0.010	J.W.H.
BROMOMETHANE	< 0.010	J.W.H.
DICHLOROFLUOROMETHANE	< 0.010	J.W.H.
VINYL CHLORIDE	< 0.010	J.W.H.
CHLOROETHANE	< 0.010	J.W.H.
METHYLENE CHLORIDE	< 0.010	J.W.H.
TRICHLOROFLUOROMETHANE	< 0.010	J.W.H.
1,1 - DICHLOROETHENE	< 0.010	J.W.H.
1,1 - DICHLOROETHANE	< 0.010	J.W.H.
TRANS-1,2-DICHLOROETHENE	< 0.010	J.W.H.
CHLOROFORM	< 0.010	J.W.H.
1,2-DICHLOROETHANE	< 0.010	J.W.H.
1,1,1-TRICHLOROETHANE	0.115	J.W.H.
CARBON TETRACHLORIDE	< 0.010	J.W.H.
BROMODICHLOROMETHANE	< 0.010	J.W.H.
1,2-DICHLOROPROPANE	< 0.010	J.W.H.
TRANS-1,3-DICHLOROPROPENE	< 0.010	J.W.H.
TRICHLOROETHENE	0.033	J.W.H.
DIBROMOCHLOROMETHANE	< 0.010	J.W.H.
1,1,2-TRICHLOROETHANE	0.010	J.W.H.
CIS-1,3-DICHLOROPROPENE	< 0.010	J.W.H.
2-CHLOROETHYLVINYL ETHER	< 0.010	J.W.H.
BROMOFORM	< 0.010	J.W.H.
1,1,2,2-TETRACHLOROETHANE	< 0.010	J.W.H.
TETRACHLOROETHENE	< 0.010	J.W.H.
CHLOROBENZENE	< 0.010	J.W.H.

ALL RESULTS EXPRESSED IN MG/L
METHOD 601.1

C. A. PRICE
MANAGER/LABORATORY SERVICES

LABORATORY RESOURCES, INC.
310 OLD HOOK ROAD
WESTWOOD, NJ 07675
(201) 666-6644
LAB CERTIFICATION NO. 02046

DATE OF REPORT: 12/10/87
DATE SA. COLLECTED: 12/02/87
DATE SA. RECEIVED: 12/02/87
DATE OF ANALYSIS: 12/04/87

CLIENT KURT VERSEN
12 CHARLES STREET
WESTWOOD, NJ 07675

PARAMETER	SAMPLE ID > 6350	ANALYZED BY
CHLOROMETHANE	< 0.005	F.W.B.
BROMOMETHANE	< 0.005	F.W.B.
DICHLOROFLUOROMETHANE	< 0.005	F.W.B.
VINYL CHLORIDE	< 0.005	F.W.B.
CHLOROETHANE	< 0.005	F.W.B.
METHYLENE CHLORIDE	< 0.005	F.W.B.
TRICHLOROFLUOROMETHANE	< 0.005	F.W.B.
1,1 - DICHLOROETHENE	< 0.005	F.W.B.
1,1 - DICHLOROETHANE	< 0.005	F.W.B.
TRANS-1,2-DICHLOROETHENE	< 0.005	F.W.B.
CHLOROFORM	< 0.005	F.W.B.
1,2-DICHLOROETHANE	< 0.005	F.W.B.
1,1,1-TRICHLOROETHANE	< 0.005	F.W.B.
CARBON TETRACHLORIDE	< 0.005	F.W.B.
BROMODICHLOROMETHANE	< 0.005	F.W.B.
1,2-DICHLOROPROPANE	< 0.005	F.W.B.
TRANS-1,3-DICHLOROPROPENE	< 0.005	F.W.B.
TRICHLOROETHENE	0.033	F.W.B.
DIBROMOCHLOROMETHANE	< 0.005	F.W.B.
1,1,2-TRICHLOROETHANE	< 0.005	F.W.B.
CIS-1,3-DICHLOROPROPENE	< 0.005	F.W.B.
2-CHLOROETHYLVINYL ETHER	< 0.005	F.W.B.
BROMOFORM	< 0.005	F.W.B.
1,1,2,2-TETRACHLOROETHANE	< 0.005	F.W.B.
TETRACHLOROETHENE	< 0.005	F.W.B.
CHLOROBENZENE	< 0.005	F.W.B.

ALL RESULTS EXPRESSED IN MG/L
METHOD 502.1

E. A. PRICE
MANAGER/LABORATORY SERVICES

LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
(201) 666-6644
LAB CERTIFICATION NO. 02046

DATE OF REPORT: 01/03/88
DATE SA. COLLECTED: 12/15/88
DATE SA. RECEIVED: 12/15/88
DATE OF ANALYSIS: 12/28/88
WORK ORDER #: 8812223

CLIENT KURT VERSEN

PARAMETER	SAMPLE ID > 1					ANALYZED BY
CHLOROMETHANE	< 0.001					J.N.C.
BROMOMETHANE	< 0.001					J.N.C.
DICHLOROFLUOROMETHANE	< 0.001					J.N.C.
VINYL CHLORIDE	< 0.001					J.N.C.
CHLOROETHANE	< 0.001					J.N.C.
METHYLENE CHLORIDE	< 0.001					J.N.C.
TRICHLOROFLUOROMETHANE	< 0.001					J.N.C.
1,1 - DICHLOROETHENE	< 0.001					J.N.C.
1,1 - DICHLOROETHANE	< 0.001					J.N.C.
TRANS-1,2-DICHLOROETHENE	< 0.001					J.N.C.
CHLOROFORM	< 0.001					J.N.C.
1,2-DICHLOROETHANE	< 0.001					J.N.C.
1,1,1-TRICHLOROETHANE	< 0.001					J.N.C.
CARBON TETRACHLORIDE	< 0.001					J.N.C.
BROMODICHLOROMETHANE	< 0.001					J.N.C.
1,2-DICHLOROPROPANE	< 0.001					J.N.C.
TRANS-1,3-DICHLOROPROPENE	< 0.001					J.N.C.
TRICHLOROETHENE	0.029 *					J.N.C.
DIBROMOCHLOROMETHANE	< 0.001					J.N.C.
1,1,2-TRICHLOROETHANE	< 0.001					J.N.C.
1,3-DICHLOROPROPENE	< 0.001					J.N.C.
2-CHLOROETHYLVINYL ETHER	< 0.001					J.N.C.
BROMOFORM	< 0.001					J.N.C.
1,1,2,2-TETRACHLOROETHANE	< 0.001					J.N.C.
TETRACHLOROETHENE	< 0.001					J.N.C.
CHLOROBENZENE	< 0.001					J.N.C.

William Jenning
GC SUPERVISOR

LABORATORY MANAGER

"*" INDICATES CONCENTRATION ABOVE MINIMUM DETECTION LIMIT

ALL RESULTS EXPRESSED IN MG/L
METHOD 601

LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE OF REPORT: 05/11/89
DATE RECEIVED : 04/28/89
DATE ANALYZED : 05/02/89

CLIENT : BCUA 28439 TS-2E
LAB SAMPLE : 8904379-01
ANALYST : FEKETE WJ
FILE NAME : >82725

GC/MS VOLATILE ORGANICS REPORT

COMPOUND NAME	CONC. UG/L	
CHLOROMETHANE	10.	U
VINYL CHLORIDE	10.	U
BROMOMETHANE	10.	U
CHLOROETHANE	10.	U
ACROLEIN	10.	U
TRICHLOROFLUOROMETHANE	5.	U
1,1-DICHLOROETHENE	5.	U
CARBON DISULFIDE	5.	U
ACETONE	10.	U
ACRYLONITRILE	10.	U
METHYLENE CHLORIDE	11.	B
TRANS-1,2-DICHLOROETHENE	5.	U
1,1-DICHLOROETHANE	5.	U
CHLOROFORM	5.	
1,2-DICHLOROETHANE	5.	U
VINYL ACETATE	10.	U
2-BUTANONE	10.	U
1,1,1-TRICHLOROETHANE	5.	U
CARBON TETRACHLORIDE	5.	U
BENZENE	5.	U
TRICHLOROETHENE	15.	

COMPOUND NAME	CONC. UG/L	
1,2-DICHLOROPROPANE	5.	U
BROMODICHLOROMETHANE	2.	J
2-CHLOROETHYLVINYLETHER	5.	U
TRANS-1,3-DICHLOROPROPENE	5.	U
CIS-1,3-DICHLOROPROPENE	5.	U
1,1,2-TRICHLOROETHANE	5.	U
DIBROMOCHLOROMETHANE	5.	U
BROMOFORM	5.	U
4-METHYL-2-PENTANONE	10.	U
TOLUENE	1.	J
TETRACHLOROETHENE	5.	U
2-HEXANONE	10.	U
CHLOROBENZENE	5.	U
ETHYLBENZENE	5.	U
M,P-XYLENE	1.	J
O-XYLENE	4.	J
STYRENE	5.	U
1,1,2,2-TETRACHLOROETHANE	5.	U
1,3-DICHLOROBENZENE	5.	U
1,4-DICHLOROBENZENE	5.	U
1,2-DICHLOROBENZENE	5.	U

SURROGATE RECOVERY REPORT

COMPOUND NAMES	CONC UG/L	%REC
1,2-DICHLOROETHANE-D4	52.01	104
TOLUENE-D8	52.39	105
4-BROMOFLOUROBENZENE	50.93	102

==========> Qualifiers <==========

U - Compound analyzed for and not detected; detection limit shown
J - Estimated value; less than detection limit
B - Compound also present in blank

LABORATORY RESOURCES, INC.
760 OLD HOOK ROAD
WESTWOOD, NJ 07675
(201) 666-6644
LAB CERTIFICATION NO. 30946

DATE OF REPORT: 09/21/87
DATE SA. COLLECTED: 09/09/87
DATE SA. RECEIVED: 09/09/87
DATE OF ANALYSIS: 09/11/87

CLIENT KURT HERSEN
10 CHARLES ST
WESTWOOD, NJ 07675

PARAMETER	SAMPLE ID >	4730	4731				ANALYZED BY
CHLOROMETHANE		< 0.010	< 0.001				J.W.H.
BROMOMETHANE		0.010	< 0.001				J.W.H.
DICHLOROFLUOROMETHANE		< 0.010	< 0.001				J.W.H.
VINYL CHLORIDE		< 0.010	< 0.001				J.W.H.
CHLOROETHANE		< 0.010	< 0.001				J.W.H.
METHYLENE CHLORIDE		< 0.010	< 0.001				J.W.H.
TRICHLOROFLUOROMETHANE		< 0.010	< 0.001				J.W.H.
1,1 - DICHLOROETHENE		0.047	0.006				J.W.H.
1,1 - DICHLOROETHANE		0.064	0.009				J.W.H.
TRANS-1,2-DICHLOROETHENE		< 0.010	< 0.001				J.W.H.
CHLOROFORM		0.010	0.007				J.W.H.
1,2-DICHLOROETHANE		< 0.010	< 0.001				J.W.H.
1,1,1-TRICHLOROETHANE		0.170	0.170				J.W.H.
CARBON TETRACHLORIDE		< 0.010	< 0.001				J.W.H.
BROMODICHLOROMETHANE		< 0.010	0.005				J.W.H.
1,2-DICHLOROPROPANE		< 0.010	< 0.001				J.W.H.
TRANS-1,3-DICHLOROPROPENE		< 0.010	< 0.001				J.W.H.
TRICHLOROETHENE		0.042	0.015				J.W.H.
DIBROMOCHLOROMETHANE		< 0.010	< 0.001				J.W.H.
1,1,2-TRICHLOROETHANE		< 0.010	< 0.001				J.W.H.
CIS-1,3-DICHLOROPROPENE		< 0.010	< 0.001				J.W.H.
2-CHLOROETHYLVINYL ETHER		< 0.010	< 0.001				J.W.H.
BROMOFORM		< 0.010	< 0.001				J.W.H.
1,1,2,2-TETRACHLOROETHANE		< 0.010	< 0.001				J.W.H.
TETRACHLOROETHENE		< 0.010	< 0.001				J.W.H.
CHLOROBENZENE		< 0.010	0.001				J.W.H.

ALL RESULTS EXPRESSED IN MG/L
METHOD 502.1

G. A. PRICE
MANAGER/LABORATORY SERVICES

LABORATORY RESOURCES, INC.
763 OLD HOOK ROAD
WESTWOOD, NJ 07675
LAB. CERTIFICATION: NJ 02046
NY 10588

DATE OF REPORT: 11/15/88
DATE RECEIVED : 11/04/88
DATE ANALYZED : 11/08/88

CLIENT : BCUA #26410 TS-10
LAB SAMPLE : #9197
ANALYST : FEKETE WJ
FILE NAME : >81553

TS-10

VOLATILE ORGANICS REPORT

COMPOUND NAME	CONC. UG/L	
CHLOROMETHANE	10.	U
VINYL CHLORIDE	10.	U
BROMOMETHANE	10.	U
CHLOROETHANE	10.	U
ACROLEIN	10.	U
TRICHLOROFLUOROMETHANE	5.	U
1,1-DICHLOROETHENE	5.	U
CARBON DISULFIDE	5.	U
ACETONE	50.	
ACRYLONITRILE	10.	U
METHYLENE CHLORIDE	7.	B
TRANS-1,2-DICHLOROETHENE	5.	U
1,1-DICHLOROETHANE	5.	U
CHLOROFORM	7.	
1,2-DICHLOROETHANE	5.	U
VINYL ACETATE	10.	U
2-BUTANONE	10.	U
1,1,1-TRICHLOROETHANE	5.	U
CARBON TETRACHLORIDE	5.	U
BENZENE	5.	U
TRICHLOROETHENE	40.	

COMPOUND NAME	CONC. UG/L	
1,2-DICHLOROPROPANE	5.	U
BROMODICHLOROMETHANE	2.	J
2-CHLOROETHYLVINYLETHER	5.	U
TRANS-1,3-DICHLOROPROPENE	5.	U
CIS-1,3-DICHLOROPROPENE	5.	U
1,1,2-TRICHLOROETHANE	5.	U
DIBROMOCHLOROMETHANE	5.	U
BROMOFORM	5.	U
4-METHYL-2-PENTANONE	10.	U
TOLUENE	5.	U
TETRACHLOROETHENE	5.	U
2-HEXANONE	10.	U
CHLOROBENZENE	5.	U
ETHYLBENZENE	5.	U
M,P-XYLENE	4.	J
O-XYLENE	2.	J
STYRENE	5.	U
1,1,2,2-TETRACHLOROETHANE	5.	U
1,3-DICHLOROBENZENE	5.	U
1,4-DICHLOROBENZENE	5.	U
1,2-DICHLOROBENZENE	5.	U

SURROGATE RECOVERY REPORT

COMPOUND NAMES	CONC UG/L	%REC
1,2-DICHLOROETHANE-D4	49.69	99
TOLUENE-D8	47.35	95
4-BROMOFLOUROBENZENE	48.03	96

==========> Qualifiers <==========

U - Compound analyzed for and not detected; detection limit shown
J - Estimated value; less than detection limit
B - Compound also present in blank

LABORATORY RESOURCES, INC.
363 OLD HOOK ROAD
WESTWOOD, NJ 07675
(201) 666-6644
LAB CERTIFICATION NO. 02046

DATE OF REPORT: 06/26/89
DATE SA. COLLECTED: 06/16/89
DATE SA. RECEIVED: 06/16/89
DATE OF ANALYSIS: 06/20/89
WORK ORDER #: 8906244

CLIENT KURT VERSEN
ANALYST: J.N.C.

PARAMETER	SAMPLE ID > 2					MDL
CHLOROMETHANE	ND					0.001
BROMOMETHANE	ND					0.001
DICHLOROFLUOROMETHANE	ND					0.001
VINYL CHLORIDE	ND					0.001
CHLOROETHANE	ND					0.001
METHYLENE CHLORIDE	ND					0.001
TRICHLOROFLUOROMETHANE	ND					0.001
1,1 - DICHLOROETHENE	ND					0.001
1,1 - DICHLOROETHANE	ND					0.001
TRANS-1,2-DICHLOROETHENE	ND					0.001
CHLOROFORM	0.021					0.001
1,2-DICHLOROETHANE	ND					0.001
1,1,1-TRICHLOROETHANE	ND					0.001
CARBON TETRACHLORIDE	ND					0.001
BROMODICHLOROMETHANE	0.006					0.001
1,2-DICHLOROPROPANE	ND					0.001
TRANS-1,3-DICHLOROPROPENE	ND					0.001
TRICHLOROETHENE	0.050					0.001
DIBROMOCHLOROMETHANE	ND					0.001
1,1,2-TRICHLOROETHANE	ND					0.001
1,3-DICHLOROPROPENE	ND					0.001
2-CHLOROETHYLVINYL ETHER	ND					0.001
BROMOFORM	ND					0.001
1,1,2,2-TETRACHLOROETHANE	ND					0.001
TETRACHLOROETHENE	ND					0.001
CHLOROBENZENE	ND					0.001

William Jemene
ORGANICS MANAGER

"MDL"=MINIMUM DETECTION LIMIT
"ND"=NOT DETECTED AT MDL

ALL RESULTS EXPRESSED IN MG/L
METHOD 601

B.C.U.A. Volatile Organic Compounds Report
FILE: DATA:1027A09A.I - W.O. 30445 Kurt Version #0004 10/26/89 11:10am (1:2)

ANALYTE COMPOUNDS

PEAK NUM.	COMPOUND NAME	RET TIME	QUANT ION	CONC. uG/L	QUAL ION1	QUAL/ QUANT%	QUAL ION2	QUAL/ QUANT%	OK INI
1	Chloromethane	1.123	50.0	2.24U	52.0	-	—	-	
2	Bromomethane	1.878	94.0	1.46U	96.0	-	—	-	
3	Vinyl Chloride	2.409	62.0	1.40U	64.0	-	—	-	
4	Chloroethane	3.334	64.0	0.90U	66.0	-	—	-	
5	Methylene Chloride	5.167	84.0	3.40U	49.0	-	51.0	-	
6	Trichlorofluoromethane	7.353	101.0	3.84U	103.0	-	—	-	
7	1,1-DichloroethEne	8.125	96.0	5.18U	61.0	-	98.0	-	
9	1,1-DichloroehtAne	9.420	63.0	3.14U	65.0	-	83.0	-	
10	1,2-DichloroethEne, trans-	10.171	96.0	6.36U	61.0	-	98.0	-	
11	Chloroform	10.756	83.0	3.18U	85.0	-	—	-	
12	1,2-DichloroethAne	11.525	62.0	4.24U	64.0	-	98.0	-	
13	1,1,1-TrichloroethAne	12.731	97.0	1.92U	99.0	-	117.0	-	
14	Carbon Tetrachloride	13.106	117.0	2.50U	119.0	-	121.0	-	
15	Bromodichloromethane	13.775	83.0	1.38U	85.0	-	127.0	-	
16	1,2-DichloropropAne	15.119	63.0	1.28U	65.0	-	112.0	-	
17	1,3-DichloropropEne, cis-	15.418	75.0	2.42U	77.0	-	—	-	
18	TrichloroethEne	16.028	130.0	30.0	97.0	63.8	132.0	99.7	
19	Benzene	16.387	78.0	1.36U	—	-	—	-	
20	Dibromochloromethane	16.544	127.0	1.80U	129.0	-	208.0	-	
21	1,1,2-TrichloroethAne	16.687	97.0	1.54U	99.0	-	83.0	-	
22	1,3-DichloropropEne, trans-	16.738	75.0	2.24U	77.0	-	110.0	-	
23	2-Chloroethylvinyl Ether	17.812	106.0	2.90U	63.0	-	65.0	-	
25	Bromoform	19.309	173.0	1.26U	171.0	-	175.0	-	
26	1,1,2,2-TetrachloroethAne	21.478	85.0	3.58U	83.0	-	131.0	-	
27	TetrachloroethEne	21.481	164.0	4.60U	129.0	-	131.0	-	
29	Toluene	22.779	92.0	3.40U	91.0	-	—	-	
30	Chlorobenzene	23.901	112.0	3.82U	114.0	-	—	-	
31	Ethylbenzene	25.695	106.0	4.84U	91.0	-	—	-	
32	M-Xylene	29.132	106.0	7.00U	91.0	-	—	-	
33	O,P-Xylenes	29.893	106.0	7.00U	91.0	-	—	-	
34	1,3-Dichlorobenzene	32.758	146.0	5.40U	148.0	-	113.0	-	
35	1,2-Dichlorobenzene	33.536	146.0	5.40U	148.0	-	113.0	-	
36	1,4-Dichlorobenzene	34.010	146.0	5.40U	148.0	-	113.0	-	

QUALIFIERS:
"U" - Compound not detected, detection limit reported.
"J" - Reported concentration is less than detection limit.
"B" - Compound found in blank.
"*" - (In Qual/Quant% column) Qualifier ion not found - Compound I.D. may be suspect.

ertific

ATORY RESOURCES, INC.	DATE OF REPORT:	12/06/89	CLIENT	KURT VERSEN
OLD HOOK ROAD	DATE SA. COLLECTED:	11/29/89		
ESTWOOD, NJ 07675	DATE SA. RECEIVED:	11/29/89	ANALYST:	SGC
(201) 666-6644	DATE OF ANALYSIS:	12/01/89		
LAB CERTIFICATION NO. 02046	WORK ORDER #:	8911296		

PARAMETER	CLIENT ID.> GRAB 1 SAMPLE ID > 01	BLANK	MDL
CHLOROMETHANE	ND	ND	0.001
BROMOMETHANE	ND	ND	0.001
DICHLOROFLUOROMETHANE	ND	ND	0.001
VINYL CHLORIDE	ND	ND	0.001
CHLOROETHANE	ND	ND	0.001
METHYLENE CHLORIDE	ND	ND	0.001
TRICHLOROFLUOROMETHANE	ND	ND	0.001
1,1 - DICHLOROETHENE	ND	ND	0.001
1,1 - DICHLOROETHANE	ND	ND	0.001
TRANS-1,2-DICHLOROETHENE	ND	ND	0.001
CHLOROFORM	0.007	ND	0.001
1,2-DICHLOROETHANE	ND	ND	0.001
1,1,1-TRICHLOROETHANE	ND	ND	0.001
CARBON TETRACHLORIDE	ND	ND	0.001
BROMODICHLOROMETHANE	0.003	ND	0.001
1,2-DICHLOROPROPANE	ND	ND	0.001
TRANS-1,3-DICHLOROPROPENE	ND	ND	0.001
TRICHLOROETHENE	0.033	ND	0.001
DIBROMOCHLOROMETHANE	ND	ND	0.001
1,1,2-TRICHLOROETHANE	ND	ND	0.001
1,3-DICHLOROPROPENE	ND	ND	0.001
2-CHLOROETHYLVINYL ETHER	ND	ND	0.001
BROMOFORM	ND	ND	0.001
1,1,2,2-TETRACHLOROETHANE	ND	ND	0.001
TETRACHLOROETHENE	ND	ND	0.001
CHLOROBENZENE	ND	ND	0.001

William Jenner
ORGANICS MANAGER

"MDL"=MINIMUM DETECTION LIMIT
"ND"=NOT DETECTED AT MDL

ALL RESULTS EXPRESSED IN MG/L
METHOD 601

tile Organic Compounds Report
328A08A.I - WO 32596 Kurt Versen #003 3/27/90 11:50 am 1:2

ANALYTE COMPOUNDS

	COMPOUND NAME	RET TIME	QUANT ION	CONC. uG/L	QUAL ION1	QUAL/ QUANT%	QUAL ION2	QUAL/ QUANT%	OK INI
	Chloromethane	1.187	50.0	2.24U	52.0	-	—	-	
2	Bromomethane	1.999	94.0	1.46U	96.0	-	—	-	
3	Vinyl Chloride	2.560	62.0	1.40U	64.0	-	—	-	
4	Chloroethane	3.557	64.0	0.90U	66.0	-	—	-	
5	Methylene Chloride	5.674	84.0	3.40U	49.0	-	51.0	-	
6	Trichlorofluoromethane	7.756	101.0	3.84U	103.0	-	—	-	
7	1,1-DichloroethEne	8.475	96.0	5.18U	61.0	-	98.0	-	
9	1,1-DichloroehtAne	9.733	63.0	3.14U	65.0	-	83.0	-	
10	1,2-DichloroethEne, trans-	10.476	96.0	6.36U	61.0	-	98.0	-	90
11	Chloroform	11.064	83.0	2.15J	85.0	*	—	-	
12	1,2-DichloroethAne	11.765	62.0	4.24U	64.0	-	98.0	-	
13	1,1,1-TrichloroethAne	12.992	97.0	1.92U	99.0	-	117.0	-	
14	Carbon Tetrachloride	13.375	117.0	2.50U	119.0	-	121.0	-	
15	Bromodichloromethane	13.949	83.0	1.38U	85.0	-	127.0	-	
16	1,2-DichloropropAne	15.264	63.0	1.28U	65.0	-	112.0	-	
17	1,3-DichloropropEne, cis-	15.532	75.0	2.42U	77.0	-	—	-	
18	TrichloroethEne	16.121	130.0	60.9	97.0	63.3	132.0	97.0	90
19	Benzene	16.586	78.0	1.36U	—	-	—	-	
20	Dibromochloromethane	16.721	127.0	1.80U	129.0	-	208.0	-	
21	1,3-DichloropropEne, trans-	16.812	75.0	2.24U	77.0	-	110.0	-	
22	1,1,2-TrichloroethAne	16.825	97.0	1.54U	99.0	-	83.0	-	
23	2-Chloroethylvinyl Ether	17.883	106.0	2.90U	63.0	-	65.0	-	
25	Bromoform	19.391	173.0	1.26U	171.0	-	175.0	-	
26	1,1,2,2-TetrachloroethAne	21.683	85.0	3.58U	83.0	-	131.0	-	
27	TetrachloroethEne	21.745	164.0	4.60U	129.0	-	131.0	-	
29	Toluene	23.002	92.0	3.40U	91.0	-	—	-	
30	Chlorobenzene	24.138	112.0	3.82U	114.0	-	—	-	
31	Ethylbenzene	25.955	106.0	4.84U	91.0	-	—	-	
32	M-Xylene	29.610	106.0	7.00U	91.0	-	—	-	
33	O,P-Xylenes	30.431	106.0	7.00U	91.0	-	—	-	
34	1,3-Dichlorobenzene	33.553	146.0	5.40U	148.0	-	113.0	-	
35	1,2-Dichlorobenzene	34.446	146.0	5.40U	148.0	-	113.0	-	
36	1,4-Dichlorobenzene	34.902	146.0	5.40U	148.0	-	113.0	-	

QUALIFIERS:
"U" - Compound not detected, detection limit reported.
"J" - Reported concentration is less than detection limit.
"B" - Compound found in blank.
"*" - (In Qual/Quant% column) Qualifier ion not found - Compound I.D. may be suspect.

ratory Resources INC
A UNITED WATER RESOURCES COMPANY
363 Old Hook Road
Westwood, New Jersey 07675-3235
(201) 666-6644 • FAX: (201) 666-7978

NJ Certification # 02046
NY Certification # 10588

DATE OF REPORT: 06/08/90
DATE SA. COLLECTED: 06/01/90
DATE SA. RECEIVED: 06/01/90
DATE OF ANALYSIS: 06/04/90
WORK ORDER #: 9006019

CLIENT: K VERSEN
ANALYST: E. SALERNO

PARAMETER	CLIENT ID.> GRAB 1 SAMPLE ID > 01	BLANK	MDL
BROMODICHLOROMETHANE	0.001	ND	0.001
BROMOFORM	ND	ND	0.001
BROMOMETHANE	ND	ND	0.001
CARBON TETRACHLORIDE	ND	ND	0.001
CHLOROBENZENE	ND	ND	0.001
CHLOROETHANE	ND	ND	0.001
2-CHLOROETHYLVINYL ETHER	ND	ND	0.001
CHLOROFORM	0.004	ND	0.001
CHLOROMETHANE	ND	ND	0.001
DIBROMOCHLOROMETHANE	ND	ND	0.001
1,2-DICHLOROBENZENE	ND	ND	0.001
1,3-DICHLOROBENZENE	ND	ND	0.001
1,4-DICHLOROBENZENE	ND	ND	0.001
DICHLORODIFLUOROMETHANE	ND	ND	0.001
1,1-DICHLOROETHANE	ND	ND	0.001
1,2-DICHLOROETHANE	ND	ND	0.001
1,1-DICHLOROETHENE	ND	ND	0.001
TRANS-1,2-DICHLOROETHENE	ND	ND	0.001
1,2-DICHLOROPROPANE	ND	ND	0.001
CIS-1,3-DICHLOROPROPENE	ND	ND	0.001
TRANS-1,3-DICHLOROPROPENE	ND	ND	0.001
METHYLENE CHLORIDE	0.025	0.002	0.001
1,1,2,2-TETRACHLOROETHANE	ND	ND	0.001
TETRACHLOROETHENE	ND	ND	0.001
1,1,1-TRICHLOROETHANE	ND	ND	0.001
1,1,2-TRICHLOROETHANE	ND	ND	0.001
TRICHLOROETHENE	0.037	ND	0.001
TRICHLOROFLUOROMETHANE	ND	ND	0.001
VINYL CHLORIDE	ND	ND	0.001

William Jimenez
ORGANICS MANAGER

MDL=MINIMUM DETECTION LIMIT
ND = NOT DETECTED AT MDL

METHOD 601

All results expressed as mg/L unless otherwise stated
(See reverse for additional information)

atile Organic Compounds Report
0928A11A.I - WO# 35040 Kurtt Versen Co. #0003

ANALYTE COMPOUNDS

COMPOUND NAME	RET TIME	QUANT ION	CONC. uG/L	QUAL ION1	QUAL/ QUANT%	QUAL ION2	QUAL/ QUANT%	OK? INIT
Chloromethane	1.400	50.0	2.24U	52.0	-	—	-	
Bromomethane	2.512	94.0	1.46U	96.0	-	—	-	
Vinyl Chloride	3.233	62.0	1.40U	64.0	-	—	-	
Chloroethane	4.373	64.0	0.90U	66.0	-	—	-	
Methylene Chloride	6.649	84.0	3.40U	49.0	-	51.0	-	
Trichlorofluoromethane	8.719	101.0	3.84U	103.0	-	—	-	
1,1-DichloroethEne	9.399	96.0	5.18U	61.0	-	98.0	-	
1,1-DichloroethAne	10.673	63.0	3.14U	65.0	-	83.0	-	
1,2-DichloroethEne, trans-	11.379	96.0	6.36U	61.0	-	98.0	-	
Chloroform	11.969	83.0	4.66	85.0	62.8	—	-	
1,2-DichloroethAne	12.674	62.0	4.24U	64.0	-	98.0	-	
1,1,1-TrichloroethAne	13.907	97.0	1.92U	99.0	-	117.0	-	
Carbon Tetrachloride	14.286	117.0	2.50U	119.0	-	121.0	-	
Bromodichloromethane	14.851	83.0	1.38U	85.0	-	127.0	-	
1,2-DichloropropAne	16.140	63.0	1.28U	65.0	-	112.0	-	
1,3-DichloropropEne, cis-	16.401	75.0	2.42U	77.0	-	—	-	
TrichloroethEne	16.955	130.0	21.3	97.0	76.8	132.0	98.8	
Benzene	17.427	78.0	1.36U	—	-	—	-	
Dibromochloromethane	17.608	127.0	1.80U	129.0	-	208.0	-	
1,3-DichloropropEne, trans-	17.665	75.0	2.24U	77.0	-	110.0	-	
1,1,2-TrichloroethAne	17.694	97.0	1.54U	99.0	-	83.0	-	
2-Chloroethylvinyl Ether	18.697	106.0	2.90U	63.0	-	65.0	-	
Bromoform	20.267	173.0	1.26U	171.0	-	175.0	-	
TetrachloroethEne	22.510	85.0	3.58U	83.0	-	131.0	-	
1,1,2,2-TetrachloroethAne	22.518	164.0	4.60U	129.0	-	131.0	-	
Toluene	23.765	92.0	3.40U	91.0	-	—	-	
Chlorobenzene	24.911	112.0	3.82U	114.0	-	—	-	
Ethylbenzene	26.805	106.0	4.84U	91.0	-	—	-	
M-Xylene	30.887	106.0	7.00U	91.0	-	—	-	
O,P-Xylenes	31.836	106.0	7.00U	91.0	-	—	-	
1,3-Dichlorobenzene	35.484	146.0	5.40U	148.0	-	113.0	-	
1,2-Dichlorobenzene	36.494	146.0	5.40U	148.0	-	113.0	-	
1,4-Dichlorobenzene	37.062	146.0	5.40U	148.0	-	113.0	-	

QUALIFIERS:
"U" - Compound not detected, detection limit reported.
"J" - Reported concentration is less than detection limit.
"B" - Compound found in blank.
"*" - (In Qual/Quant% column) Qualifier ion not found - Compound I.D. may be suspect.

Laboratory Resources INC
A UNITED WATER RESOURCES COMPANY
363 Old Hook Road
Westwood, New Jersey 07675-3235
(201) 666-6644 • FAX: (201) 666-7978

NJ Certification # 02046
NY Certification # 10566

DATE OF REPORT: 12/21/90
DATE COLLECTED: 12/11/90
DATE RECEIVED: 12/11/90
DATE OF ANALYSIS: 12/12/90
WORK ORDER #: 9012194
DILUTION: 1/2

CLIENT: KURT VERSEN
ANALYST: L. SUN

PARAMETER	CLIENT ID.> GRAB #1 SAMPLE ID.> 02	MDL
BROMODICHLOROMETHANE	0.0020	0.0010
BROMOFORM	ND	0.0010
BROMOMETHANE	ND	0.0010
CARBON TETRACHLORIDE	ND	0.0010
CHLOROBENZENE	ND	0.0010
CHLOROETHANE	ND	0.0010
2-CHLOROETHYLVINYL ETHER	ND	0.0010
CHLOROFORM	0.0030	0.0010
CHLOROMETHANE	ND	0.0010
DIBROMOCHLOROMETHANE	ND	0.0010
1,2-DICHLOROBENZENE	ND	0.0010
1,3-DICHLOROBENZENE	ND	0.0010
1,4-DICHLOROBENZENE	ND	0.0010
DICHLORODIFLUOROMETHANE	ND	0.0010
1,1-DICHLOROETHANE	ND	0.0010
1,2-DICHLOROETHANE	ND	0.0010
1,1-DICHLOROETHENE	ND	0.0010
TRANS-1,2-DICHLOROETHENE	ND	0.0010
1,2-DICHLOROPROPANE	ND	0.0010
CIS-1,3-DICHLOROPROPENE	ND	0.0010
TRANS-1,3-DICHLOROPROPENE	ND	0.0010
METHYLENE CHLORIDE	0.0070	0.0010
1,1,2,2-TETRACHLOROETHANE	ND	0.0010
TETRACHLOROETHENE	ND	0.0010
1,1,1-TRICHLOROETHANE	ND	0.0010
1,1,2-TRICHLOROETHANE	ND	0.0010
TRICHLOROETHENE	0.0250	0.0010
TRICHLOROFLUOROMETHANE	ND	0.0010
VINYL CHLORIDE	ND	0.0010

William Jimenez/LSL
ORGANICS MANAGER

MDL=MINIMUM DETECTION LIMIT
ND = NOT DETECTED AT MDL

METHOD 601

All results expressed as mg/L unless otherwise stated
(See reverse for additional information)

Attached Sheet 'F'

Municipalities Served:

1. Alpine
2. Bergenfield
3. Bogota
4. Carlstadt
5. Cliffside Park
6. Closter
7. Cresskill
8. Demarest
9. Dumont
10. E. Rutherford
11. Edgewater
12. Emerson
13. Englewood
14. Englewood Cliffs
* 15. Fair Lawn
16. Fairview
17. Fort Lee
18. Guttenberg
19. Hackensack
20. Harrington Park
21. Hasbrouck Heights
22. Haworth
23. Hillside
24. Leonia
25. Little Ferry
* 26. Lodi
27. Maywood
28. Montvale
29. Moonachie
30. New Milford
31. North Bergen
32. Northvale
33. Norwood
34. Old Tappan
35. Oradell
36. Palisades Park
37. Paramus
38. Ridgefield
39. Ridgefield Park
40. River Edge
41. River Vale
42. Rochelle Park
43. Rockleigh
44. Rutherford
45. Saddle Brook
46. Secaucus
47. S. Hackensack
48. Teaneck
49. Tenafly
50. Teterboro
51. Union City
52. Upper Saddle River
* 53. Wallington
54. Washington Twp.
55. Weehawken
56. West New York
57. Westwood
* 58. Woodcliff Lakes
59. Wood Ridge

* Municipalities Partially Served