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REMEDIAL INVESTIGATION REPORT

VOLUME I - Report, Figures, Tables, Plans

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Cheektowaga, New York

Site Code: 915156

Project Site numbers will be proceeded by the following:

Municipal Brownfields - B
Superfund - HW
Spills - SP
ERP - E
VCP - V
BCP - C

915156

REMEDIAL INVESTIGATION REPORT

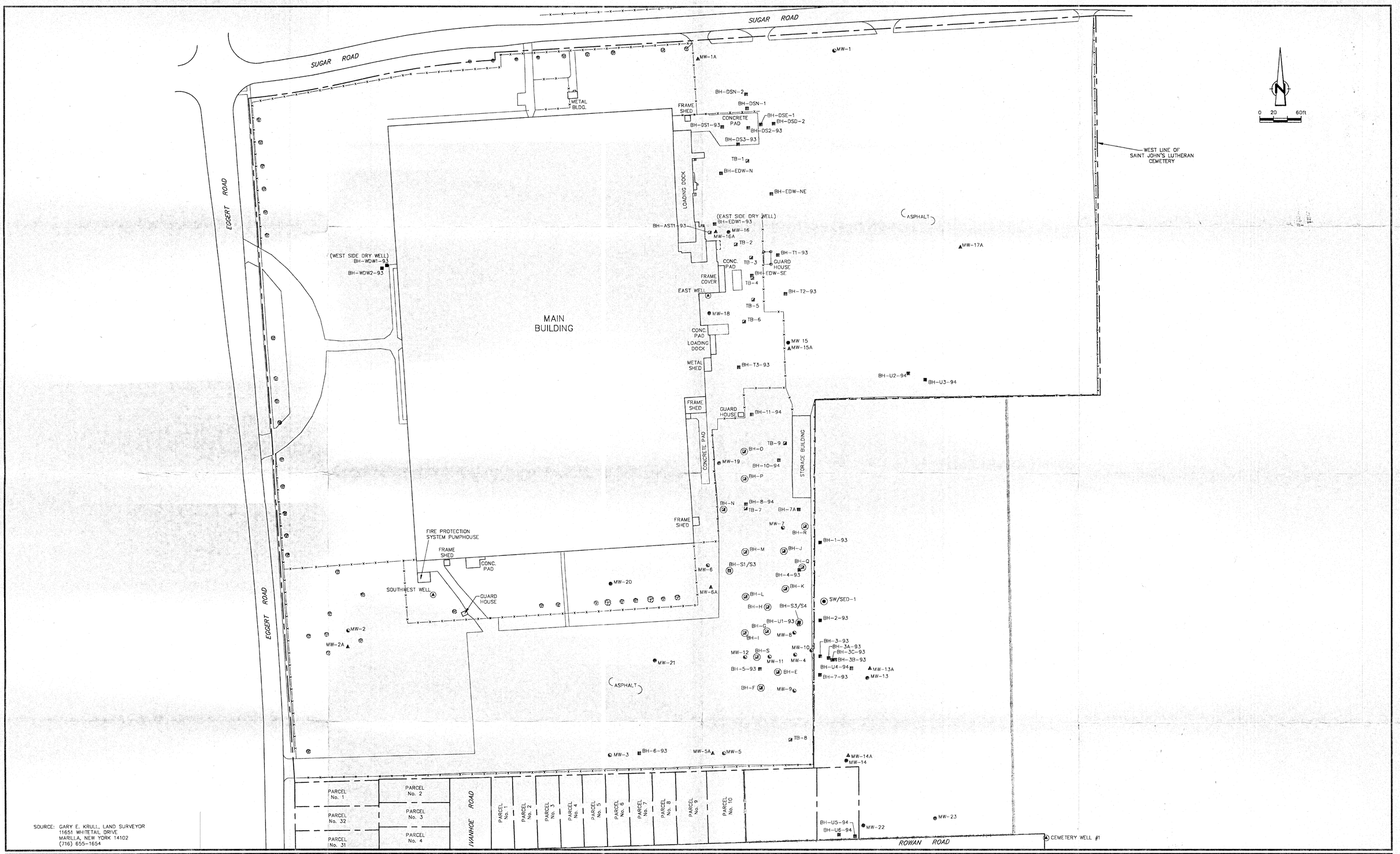
VOLUME I - Report, Figures, Tables, Plans

Leica Inc.
Cheektowaga, New York
Site Code: 915156

PRINTED ON

OCT 3 1994

Revised Feb 16, 1995



SOURCE: GARY E. KRULL, LAND SURVEYOR
11651 WHITETAIL DRIVE
MARILLA, NEW YORK 14102
(716) 655-1654

LEGEND

- EXISTING FENCE LINE
- PROPERTY LINE/SITE BOUNDARY
- OFFSITE PARCEL BOUNDARY
- BH-10 BOREHOLE
- MW-6A BEDROCK MONITORING WELL (1993/94)
- MW-1 OVERBURDEN MONITORING WELL (PREVIOUSLY INSTALLED)
- MW-19 OVERBURDEN MONITORING WELL (1993/94)
- TB-1 RECRA BOREHOLE (PREVIOUSLY INSTALLED)
- BH-E SI BOREHOLE (PREVIOUSLY INSTALLED)
- SW/SED-1 SURFACE WATER/SEDIMENT SAMPLE LOCATION
- BH-S1 BOREHOLE
- SOUTHWEST WELL NON-POTABLE WATER SUPPLY WELL

Nº	Revision	Date	Initial
1	REVISE WELL LABELS	JAN 23/95	KPL

Approved

LEICA, INC.
Cheektowaga, New York

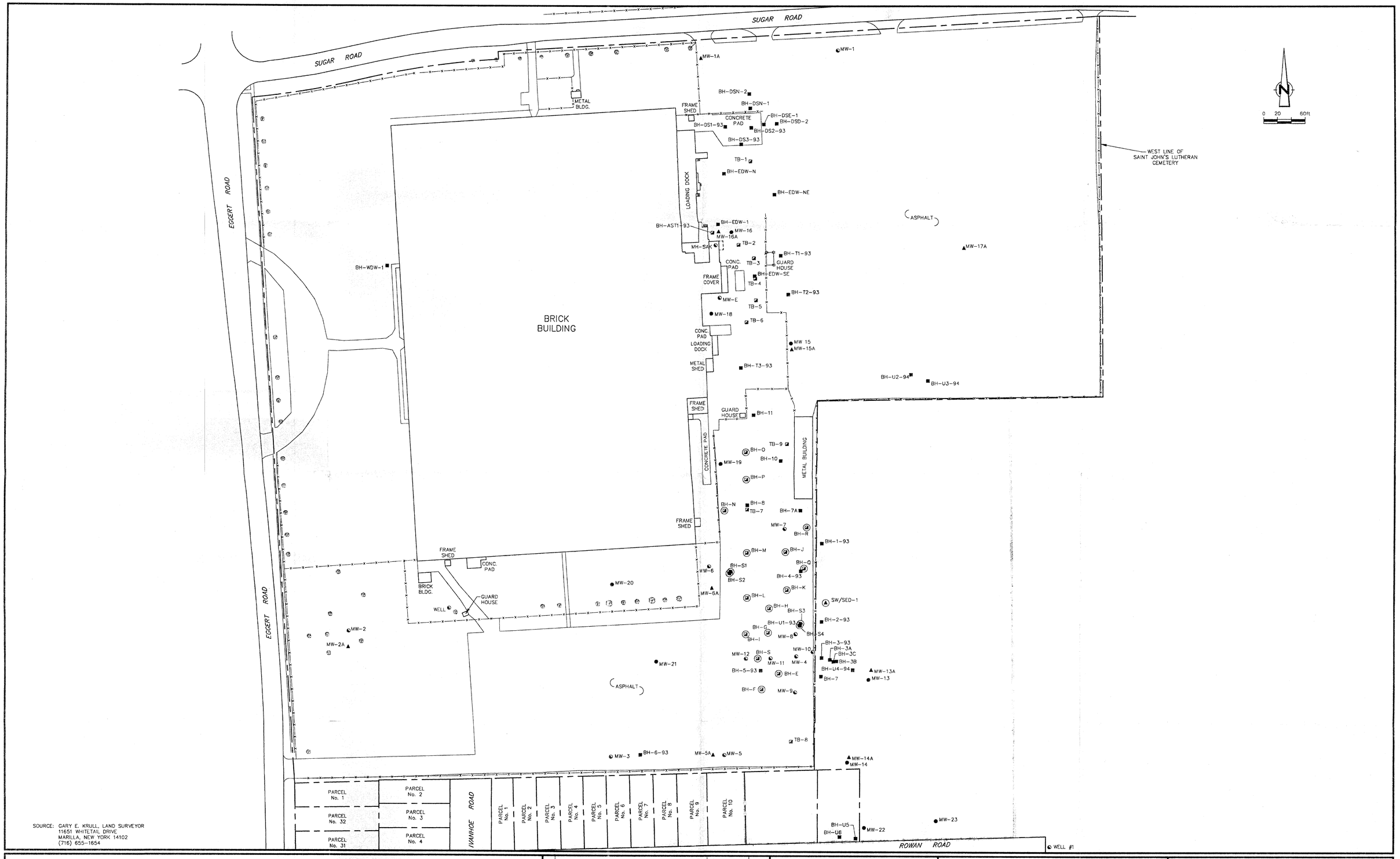
REMEDIAL INVESTIGATION/FEASIBILITY STUDY

SITE PLAN AND LAYOUT

CRA
CONESTOGA-ROVERS & ASSOCIATES

Drawn by: JTM	Scale: 1"=60'	Date: SEPTEMBER 1994	File Nº: P-39	Rev.Nº: 1
Designed by: KPL				
Checked by: KPL	Field book:	Project Nº: 3967	Drawing Nº: PLAN 2	

JAN 31/95(NF)



SOURCE: GARY E. KRULL, LAND SURVEYOR
11651 WHITETAIL DRIVE
MARILLA, NEW YORK 14102
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LEGEND

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Cheektowaga, New York

REMEDIAL INVESTIGATION/FEASIBILITY STUDY

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OCT 03/94(NF)

Sugar Road (Asphalt Pavement)

South Line of Lands Conveyed to the Erie County Department of Public Works by Liber 8478 Page 449 Map no. SK 204-71R Parcil no. 1B

N03°26'16"W 11.08'

R = 1308.24' L = 165.06'

R=1159.21' L=197.33'

N86°33'44"E 868.90'

South Bounds of Sugar Road as 49.5' Wide

Ex. 1" Pipe 6" Down Fence Cor. 3.0' South 2.8' West

Set L Cut in Walk

Brick Building

Asphalt

Loading Dock

Frame Shed

Conc. Pad

Guard House

Conc. Pit

Frame Cover

Metal Shed

Metal Building

Elec. Trans.

Water Meter

Hyd. 1

Hyd. 2

Hyd. 3

Hyd. 4

Hyd. 5

Hyd. #8

Hyd. #9

Hyd. A

Hyd. B

Hyd. C

Hyd. D

Hyd. E

Brk. Bldg.

Phone Cable Box

Phone Cable Marker

Fiber Optic Cable

Flag Pole

Sewer Vent

8' Dia. Planter

8' Wide Planter

12' Planter

16' Planter

Set Rebar Fence Cor. 0.7' North 0.4' West

Set Rebar Fence Cor. 0.9' North 3.1' West

Set Rebar Fence Cor. 5.2' North 1.0' West

West Line of Saint John's Lutheran Cemetery

Fence Corner 0.9' North 3.1' West

Chain Link Fence

Eggert Road (Conc. Curb, Asphalt Pavement, Width Varies)

Warner-Lambert Technologies, Inc. To Reichert-Jung Inc. Liber 9689 Page 226

23.94± Acres

Set Rebars On Corners

Lands Remaining in Parcel 3 by Liber 9689 Page 226 Containing 0.0094± Acres

Northeast Cor. Lot 44

Lands Conveyed to Iroquois Gas Corp. 9/3/48

N88°51'00"E 37.25'

S88°20'37"W 1023.48'

S88°20'37"W 1023.48'

S88°43'25"E 1535.48'R&M

N03°43'25"W 996.16'

S88°20'37"W 523.24'R&M

S88°20'37"W 103.01'M 103.04'R

S89°19'33"W 527.73'

S88°18'30"W 445'R&M

S00°09'05"E 1.51'

S00°11'20"W 534.89'M 535.11'R

S89°35'16"E 549.98'R&M

S89°35'16"E 409.90'R&M

East Line Lot 44

West Line Lot 35

City of Buffalo

Town of Cheektowaga

Eggert Road (60' Wide)

Ivanhoe Road (60' Wide)

Marne Road (60' Wide)

Rowan Road (60' Wide)

Preston Road (60' Wide)

Carroll Drive (60' Wide)

Parcel No. 1 | Parcel No. 2 | Parcel No. 3 | Parcel No. 4 | Parcel No. 5 | Parcel No. 6 | Parcel No. 7 | Parcel No. 8 | Parcel No. 9 | Parcel No. 10

Parcel No. 11 | Parcel No. 12 | Parcel No. 13 | Parcel No. 14 | Parcel No. 15 | Parcel No. 16 | Parcel No. 17 | Parcel No. 18 | Parcel No. 19 | Parcel No. 20 | Parcel No. 21 | Parcel No. 22 | Parcel No. 23 | Parcel No. 24 | Parcel No. 25 | Parcel No. 26 | Parcel No. 27 | Parcel No. 28 | Parcel No. 29 | Parcel No. 30 | Parcel No. 31 | Parcel No. 32

Parcel No. 1.1 | Parcel No. 19.1

Parcel No. 1 | Parcel No. 2 | Parcel No. 3 | Parcel No. 4 | Parcel No. 5 | Parcel No. 6 | Parcel No. 7 | Parcel No. 8 | Parcel No. 9 | Parcel No. 10 | Parcel No. 11 | Parcel No. 12 | Parcel No. 13 | Parcel No. 14 | Parcel No. 15 | Parcel No. 16 | Parcel No. 17 | Parcel No. 18 | Parcel No. 19 | Parcel No. 20 | Parcel No. 21

North Line of G.F. Umhauer Liber 2127 Page 484

See Erie County Tax Map #090.68 for Parcels in Blocks 2,3,4 & 5

A TOPOGRAPHICAL SURVEY OF PART OF LOT 35, TOWNSHIP 11, RANGE 7 HOLLAND LAND COMPANY SURVEY TOWN OF CHEEKTOWAGA ERIE COUNTY, NEW YORK STATE AUGUST 1, 1994 SCALE: 1"=50'

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)

1 inch = 50 ft.

Job no. 94-100

Gary E. Krull
Land Surveyor
N.Y.S. Lic. No. 049838
11651 Whitetail Drive
Marilla, New York 14102 (716) 655-1654

LEICA INC. RI/FS PLAN 1

REMEDIAL INVESTIGATION REPORT

VOLUME I - Report, Figures, Tables, Plans

Leica Inc.
Cheektowaga, New York
Site Code: 915156

OCTOBER 1994
REF. NO. 3967 (7)
This report is printed on recycled paper.

CONESTOGA-ROVERS & ASSOCIATES

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1.0 INTRODUCTION

A Remedial Investigation (RI) and a Feasibility Study (FS) are underway at the former Leica Inc. facility (Site), located in Cheektowaga, New York. The RI was conducted pursuant to the terms and conditions of the Administrative Order on Consent (Order) (Index Number B9-0396-92-01) between the New York State Department of Environmental Conservation (NYSDEC) and Leica Inc. (Leica).

The primary objective of the RI is to characterize the nature and extent of residual contamination at the Site and the associated risks posed by such residual contamination.

Previous investigations identified the southeast portion of the Site as the primary area of chemical contamination. Therefore, the RI focused on the southeast portion of the Site, including an off-Site wooded area immediately adjacent to it.

Other areas identified during previous investigations or during RI field activities as areas which might be contaminated were also thoroughly investigated. These areas included the underground storage tank (UST) area where Number 6 fuel oil is stored, and a former drum storage pad where drummed wastes were temporarily stored prior to being disposed off-Site, and the dry sump for the flammable storage area floor drains. All three areas are located to the east of the Main Building.

An RI/FS Work Plan was developed in accordance with the United States Environmental Protection Agency (USEPA) interim final guidance document entitled, "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA", dated October 1988, as well as in accordance with NYSDEC regulations and applicable guidance, including the "Technical and Administrative Guidance Memoranda" (TAGMs), prepared by the NYSDEC Division of Hazardous Waste Remediation. The RI/FS Work Plan was approved by the NYSDEC and the Order was signed on October 24, 1993.

Additions to the proposed RI (Task 4) were described in letters dated November 22, 1993 and March 25, 1994 to the NYSDEC. Both proposed addendums were accepted by the NYSDEC and were implemented as part of the RI.

The following tasks constituted the RI:

i) Task 1: Preparation of Detailed Project Specific Plans;
ii) Task 2: Description of Current Conditions and Site Background;
iii) Task 3: Procurement of Contractors;
iv) Task 4: Site Investigation;
v) Task 5: Sample Analyses;
vi) Task 6: Data Evaluation;
vii) Task 7: Risk Assessment;
viii) Task 8: Identification of Preliminary Remedial Action Objectives; and
ix) Task 10: Remedial Investigation Report.

Task 9 is the Preliminary Evaluation of Treatability Studies which are to be included as part of a separate report to be submitted with the FS.

The RI was performed consistent with the provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA), and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP, 40 CFR Part 300).

This report presents a synopsis of the activities performed during the RI, the information collected through the performance of these activities, and a detailed assessment of Site conditions. The RI report is structured as follows:

i) Section 1: Introduction;
ii) Section 2: Site Background and Setting;

iii) Section 3: Regional Setting;
iv) Section 4: Description of RI Activities;
v) Section 5: Site Conditions;
vi) Section 6: Nature and Extent of Contamination;
vii) Section 7: Contaminant Fate and Transport;
viii) Section 8: Baseline Risk Assessment;
ix) Section 9: Ecological Evaluation; and
x) Section 10: Conclusions.

All available verifiable and pertinent data both from the RI and previous investigations at the Site have been incorporated into this report.

2.0 SITE BACKGROUND AND SETTING

The Site background has been prepared using information presented in previous reports and supplemental information gathered from inquiries made to various agencies, review of Leica records, and discussions with Leica personnel.

2.1 SITE LOCATION

The Site is located at the intersection of Eggert Road and Sugar Road in the Town of Cheektowaga, New York. The west boundary of the Site abuts the eastern boundary of the City of Buffalo, New York. The location of the Site is shown on Figure 2.1.

2.2 SITE DESCRIPTION AND HISTORY

The Site is approximately 24 acres in size situated on a generally flat plain. An adjoining off-Site parcel of land approximately six acres in size owned by the St. Johns Cemetery Association was also investigated during the RI. This off-Site parcel was planned as an extension of Preston Road from Rowan Road to Sugar Road. Storm and sanitary sewer lines and a gravel subbase were installed but the road was never completed.

The manufacturing facility was built on the Site in 1938 by the Spencer Lens Company for the manufacture of scientific instruments and high quality optical devices. Spencer Lens operated at the Site from 1938 to 1945. American Optical Corporation owned and operated the Site from 1945 to 1986, manufacturing the same type of products. From 1986 to 1990, Cambridge Instruments Inc. owned and occupied the Site for the manufacture of similar optical products. In 1990, Cambridge Instruments Inc. merged with Leica Inc. and operated under the Leica name at this Site until 1993. In July 1993, Leica Inc. ceased manufacturing operations at the Site. In October 1993 the facility and most of the land was sold to Samson Distribution

Corporation/Calypso Development Corporation (Samson) for use as a distribution warehouse. Leica retained title to a 100 x 390 foot area in the southeast corner of the Site. Portions of the Main Building are also being subleased by Samson to other businesses.

2.2.1 Site Layout

As shown on the Site layout (Figure 2.2), there are three permanent buildings on-Site, including the brick multi-story Main Building of approximately 360,000 square feet, a single story metal storage building of approximately 3,100 square feet, and a one story brick fire protection system pump house of 325 square feet. The Main Building was constructed in segments from 1938 to 1967. The metal storage building and pump house date back to the early 1940s. The remainder of the Site is either paved for parking use or landscaped. The buildings are all constructed with concrete slab on grade foundations. The boiler room of the Main Building is of concrete subgrade construction with connecting subsurface piping to the adjacent underground storage tank pumping system.

The Main Building varies in height from one to four stories. The upper floors were predominantly used for office and storage space. The first floor was primarily manufacturing and shipping/receiving, with lenswork and machining located in the southern end, metal work located in the northern end, and shipping/receiving in the center part of the building. Offices were located along the west side of the building. The boiler room and a refuse incinerator are located on the east side of the building.

The boiler room contains three dual-fuel boilers used to supply steam and heat for the facility. These boilers currently operate with natural gas as a primary fuel and use #6 fuel oil as an alternate fuel. From 1972 to 1990, #6 fuel oil was the primary fuel. From sometime in the early 1960s to 1972, #5 fuel oil was burned. From 1938 to the early 1960s, the facility was heated with coal. Until about 1956 the ash resulting from the use of coal as a boiler fuel was landfilled on Site in a low area in the southeast corner of the Site. After 1956, the ash was disposed by the Town of Cheektowaga. This

area was covered with soil and was subsequently paved over for use as an employee parking area in the late 1950s. Figure 2.3 is an aerial photograph (taken circa 1950) which shows a large pile of coal ash staged near this low area. This photograph also shows a fence along the east property line, indicating intrusion into the off-Site area could not have occurred. Ball fields are shown immediately south of the Main Building.

The refuse incinerator is located outside the Main Building immediately north of the boiler room. The incinerator was built in 1971 for disposal of burnable refuse from the facility and was fired by natural gas. Ash from the incinerator was hauled away by the Town of Cheektowaga. Both the boilers and the incinerator discharged to the atmosphere through a common smokestack. An Air Discharge Permit was issued for this stack as Permit No. 143-000-075. The three boilers were designated emission point numbers 00001A, 00001B, and 00001C and the incinerator was emission point 00001D. The incinerator was operated by Leica until July 1993, when Leica moved from the facility.

The metal storage building is built of sheet metal and steel frame construction on a concrete slab. It has historically been used for storage of miscellaneous records, furniture and equipment, and maintenance vehicles and tools.

The brick fire protection system pump house was built to house the pressurization pump for the Main Building sprinkler and fire water systems. In addition to the diesel powered water pump, this building contains the associated water piping system and a 110-gallon aboveground diesel fuel tank.

The buildings and asphalt parking areas occupy approximately 65 percent of the Plant Site. The off-Site parcel is approximately 50 percent wooded with mature growth trees, with the rest of the off-Site parcel being shrub/open meadow vegetation. Soil from grave sites at the adjacent cemeteries is currently being placed in two small areas of this off-Site parcel. Figure 2.4 shows the existing surface characteristics of the Site and the off-Site parcel.

2.2.2 Historic Operations

Prior to 1993, the owners and operators of the facility had all been involved in the manufacture of scientific instruments and optical devices. This involved two primary production processes: a metals operation and a lens production operation. In the metals operation, metal parts were machined and/or manufactured, cleaned, coated, and assembled. The production of optical lenses involved the shaping, grinding, polishing, and coating of glass lenses for use in ophthalmic instruments, microscopes, refractometers, and other optical instruments. Figure 2.5 identifies the location of the major production areas within the Main Building.

Numerous chemicals were stored and used at the facility for use in or as part of the manufacturing processes. These materials have included paints, solvents (such as acetone, xylene, methanol, methylene chloride, 2-butanone, and chloromethane), degreasers (such as trichloroethene [TCE] and 1,1,1-trichloroethane [1,1,1-TCA]), hydraulic oils, fuel oils, cutting oils, refraction oils, cyanide, acid based plating baths, and metals (cadmium, chromium, nickel, zinc, and copper). Figure 2.6 shows the locations of historical storage and use of these chemicals by Leica and Leica's predecessors.

Associated with the paint storage room and the flammable storage room shown on Figure 2.6 are subsurface dry wells which acted as receivers for the floor drains installed in these rooms. The "East side dry well" is located east of the Main Building, outside of the flammable storage room. This east side dry well is a six foot deep, four foot by four foot unlined hole which was backfilled with crushed stone and covered with asphalt. The "West side dry well" was located west of the Main Building, outside the paint storage room. This dry well is approximately two feet square and four feet deep and of similar construction to the east side dry well.

There are two industrial water supply wells located at the Site. Both wells were installed in 1980 to an approximate depth of 180 feet

BGS as open hole 8-inch diameter bedrock wells in an attempt to reduce the consumption of and cost related to the use of municipal water. The "East Well", located east of the Main Building (see Figure 2.2), was intended as a water supply well for production and sanitary uses. The "Southwest Well", located near the southwest corner of the Main Building, was intended to provide water for the Main Building fire protection system. Use of water from these wells was suspended shortly after installation because of a high sulfide content and corrosion problems experienced with rubber seals on the plumbing due to use of the water.

Cemetery Well #1, located southeast of the Site, east of Carol Road, as shown on Figure 2.2, is a bedrock well installed at the Temple Shaarey Zedek Cemetery to provide water for watering the cemetery lawns. A separate municipal supply serves the cemetery maintenance building off Carol Road. Construction details of this well are not known.

2.3 STORAGE TANKS

Six storage tanks are or were present on-Site as follows:

i) one 110-gallon steel aboveground diesel fuel tank located inside the fire protection system pump house to fuel the diesel pump motor;

ii) one 100-gallon steel aboveground diesel fuel tank formerly located south of the boiler room. This tank was used to fuel a diesel generator. The tank was closed and removed in July 1993;

iii) two aboveground steel solvent storage tanks, one 750-gallon and one 250-gallon, for storage of TCE and 1,1,1-TCA. These tanks were formerly located on the concrete dock area north of the boiler room. The two tanks were removed from service in 1987 and removed from the Site in July 1991.

iv) one 10,000-gallon steel underground tank for storage of #6 fuel oil. This tank, located northeast of the boiler room, is still in service and contains approximately 2,000 gallons of #6 fuel oil; and

v) one 20,000-gallon steel underground tank for storage of #6 fuel oil. This tank, located east of the boiler room, is still in service and contains approximately 11,000 gallons of #6 fuel oil.

The two USTs are registered with the NYSDEC under Permit Number 221775, under the name of Reichart-Jung.

Figure 2.6 shows the location of these tanks at the Site.

2.4 SPILLS, RELEASES, AND ON-SITE DISPOSAL

NYSDEC records contain no reports of spills or releases at the Site. Leica personnel report a 6,000 gallon #6 fuel oil spill onto the ground in 1970 or 1971 due to a problem while filling a tank. This spill was cleaned up by the fuel delivery company using absorbents, shovels, and pumps.

According to Leica personnel, the only known on-Site disposal was the placement of coal ash in a low area in the southeast portion of the Site. The presence of volatile organic compounds (VOCs) in the southeast portion of the Site coincides with this filled area.

2.5 CURRENT PLANT PROCESSES

Leica ceased operations at the Site in July 1993. The Main Building is presently owned and occupied by Samson as a distribution warehouse. Portions of the building are being sub-leased to other businesses.

2.6 PREVIOUS INVESTIGATIONS

Recra Environmental Incorporated (Recra) of Amherst, New York, was retained by Leica in July 1990 to conduct a Real Property Environmental Appraisal (Audit) of the Site. The Audit consisted of a Site walk-through to identify potential areas of concern, an agency record search to identify historical incidents or problems, and interviews with current and past employees and facility owners. No analytical samples were collected during the Audit.

The recommendations resulting from the Audit led to a Phase II investigation of the Site in November 1990. The Phase II investigation consisted of the collection of samples from transformer, plating, and machining areas; subsurface sampling of the former drum storage area and the underground storage tank area; a geophysical survey of select areas of the Site; subsurface sampling of an anomalous area encountered during the geophysical survey in the southeast part of the Site; and installation of four overburden monitoring wells (MW-1, MW-2, MW-3, and MW-4), and collection of groundwater samples. The location of all wells and boreholes discussed in this section are shown on Figure 2.2.

The Phase II investigation revealed the presence of VOCs in the shallow fill soils and in the groundwater from the deeper sandy soils. The soil VOCs were primarily ethylbenzene, xylene, methylene chloride, 1,2-dichloroethene (1,2-DCE), vinyl chloride, and acetone. Total petroleum hydrocarbons (TPH) were detected in the subsurface soil samples from the UST area at concentrations of 42 milligrams/kilogram (mg/kg) to 7,370 mg/kg and in the southeast part of the Site at 178 mg/kg to 60,900 mg/kg. The groundwater VOCs detected were 1,2-DCE, TCE, and vinyl chloride at levels up to 101,000 micrograms/liter (µg/L) total VOCs at MW-4 in the southeast part of the Site. Appendix A presents the Historical Analytical Database.

In May 1991, Conestoga-Rovers & Associates (CRA) was retained to verify the sample results obtained by Recra in the Phase II

investigation. MW-4 was resampled for VOCs and the results were consistent with the previous Recra results. In July 1991, three additional monitoring wells (MW-5, MW-6, and MW-7) were installed into the overburden south, west, and north of MW-4 to determine the extent of contamination in the southeast corner of the Site. Monitoring wells MW-1, MW-4, and MW-5 were sampled in July 1991 for VOCs. MW-2, MW-6, and MW-7 were found to be dry. MW-4 again showed VOC presence. VOCs were all below method detection limits at MW-1 and MW-5.

Leica informed the NYSDEC of the residual contamination found at the Site. In December 1991, Leica met with the NYSDEC to present the findings of the historical investigations and propose a Supplemental Site Investigation (SSI) program to further delineate the nature and extent of contaminants at the Site.

The SSI was approved by the NYSDEC and was implemented in January 1992 as outlined in the document "Site Investigation Work Plan", October 1991 by CRA. Eighteen shallow soil borings were completed to investigate petroleum hydrocarbon presence in the shallow fill zone underlying the parking area in the southeast portion of the Site. Four of these shallow boreholes were deepened and converted to overburden monitoring wells and one deep soil boring and one additional monitoring well were installed. The five new wells (MW-8 through MW-12) and MW-2, MW-3, MW-4, MW-5, MW-6, and MW-7 were sampled in January 1992. VOCs were detected in the overburden groundwater in MW-4, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, and MW-12, with total VOC concentrations ranging from 90 µg/L (MW-9) to 771,000 µg/L (MW-11). No VOCs were detected in MW-2, MW-3, or MW-5. Phenolic compounds were detected in MW-11 at a concentration of 1,600 µg/L.

Nine shallow soil samples from the 18 boreholes were tested for petroleum hydrocarbons. Results indicate the presence of TPH ranging from 140 to 14,000 mg/kg. Two samples were collected for analysis of VOCs, semi-volatile organic compounds (SVOCs), and metals. Analytical results show VOCs, SVOCs, and three metals to be present in excess of recommended soil cleanup objectives presented in the NYSDEC TAGM 4046,

"Determination of Soil Cleanup Objectives and Cleanup Levels", dated January 24, 1994 (TAGM 4046). A summary of all analysis performed during these investigations is presented in Appendix A, Historical Analytical Database.

Based upon the findings from the Site investigation program, the NYSDEC listed the Site on the New York Registry of Inactive Hazardous Waste Sites as a Class 2 site (Site Number 915156). That listing and classification prompted this RI.

3.0 REGIONAL SETTING

3.1 DEMOGRAPHICS

The Site is located along the western border of the Town of Cheektowaga in Erie County, New York. The Site abuts the eastern border of the City of Buffalo. The 1990 census lists the populations of the Town of Cheektowaga and the City of Buffalo as 99,314 and 328,123, respectively. Erie County has a population of 968,532. The surrounding area is mixed residential area and cemetery areas. The land immediately north of the Site is owned by the Saint Stanislaus Cemetery and is currently used as a cemetery. The land to the east of the Site is owned by the Saint Johns Cemetery Association and, except for a six acre parcel adjacent to the southeast corner of the Site, is currently used as a cemetery. The six acre parcel was at one time planned as an extension of Preston Road from Rowan Road north to Sugar Road. This parcel is approximately 50 percent mature trees with the remainder being shrub/open meadow vegetation. Portions of this six acre parcel are being filled with soil from graves at the cemeteries. This filled area is slated for future burial. The area to the south of the Site is residential, with one and two story frame houses abutting the south property line of the Site. The area to the west is a 15 acre cleared vacant area also owned by the St. Johns Cemetery Association.

Figure 3.1 depicts ownership and use of the adjacent properties.

3.2 PHYSIOGRAPHY

The Cheektowaga/Buffalo area lies within the Lake Erie Plain. The Lake Erie Plain is bordered to the north by the Onondaga Escarpment, with an approximate elevation of 650 feet above mean sea level (AMSL). The Lake Erie Plain is smooth or gently rolling and rises in elevation to approximately 900 feet at its southern border at the Portage

Escarpment. The Lake Erie Plain was formed by glacial lakes ancestral to Lake Erie. Surrounding local topography is shown on Plan 1.

3.3 CLIMATE

The climate of the Cheektowaga/Buffalo area is classified as humid continental, consisting of cool-wet winters and hot-wet summers. A summary of climatological data for the period 1963 through 1993, including the mean monthly temperature and precipitation data recorded at the Buffalo Meteorological Station, located at the Buffalo International Airport, approximately four miles east of the Site, are presented in Table 3.1. The mean annual temperature is 47.4°F. The coldest average temperature occurs in February (24.7°F) and the warmest in July (70.5°F). The prevailing wind direction is southwest. Average annual precipitation is 36.2 inches. Average annual snowfall is 91.0 inches.

3.4 REGIONAL GEOLOGY

3.4.1 Overburden

Surficial geology of the Lake Erie Plain and much of Erie County, New York, exhibits the effects of Pleistocene glaciation from the Wisconsin Stage. The most prominent features are a series of east to west trending end moraines and southwest to northeast oriented strand lines (beach ridges) of the late Wisconsin age Lakes Warren and Whittlesey.

Bedrock outcrops of the Middle Devonian age Onondaga Formation occur along the north edge of the Lake Erie Plain. The south border of the Lake Erie Plain is defined by the Upper Devonian age Canadaway Formation members which form the Portage Escarpment.

The End Moraine deposits consist of both ablation and lodgment till deposited by the ice sheet. The till matrix varies from silty clay

to sandy silt and is moderately to abundantly stony. The thickness is variable. In many areas along the west and north parts of the Lake Erie Plain, the tills are overlain by a layer of bottom deposits from the proglacial lakes. These bottom deposits are typically red, varved clays, and silts with occasional sand and rounded gravel.

3.4.2 Bedrock Geology

The bedrock geology of the Lake Erie Plain consists of Upper (Late) Silurian and Lower to Middle Devonian age strata deposited within the Appalachian Foreland Basin. These strata tend to dip southward at approximately 40 feet per mile and strike approximately east-west. The Upper Silurian Dolostones and Lower and Middle Devonian limestones outcrop along the Onondaga Escarpment approximately two miles north of the Site. A schematic stratigraphic section of the bedrock of the Northern Lake Erie Plain is presented on Figure 3.2.

The oldest exposed geologic formation on the Lake Erie Plain is the Upper Silurian Bertie Formation which outcrops at the base of the Onondaga Escarpment. The Bertie consists of three members which are, in ascending order, the Basal Falkirk Dolostone, the Scajaquada Shale, and the Williamsville Dolomite. The Falkirk Member is a massive, dark gray dolomitic limestone with occasional fossils. The Scajaquada Shale is a dark gray shale and marly limestone. The Williamsville Member is a gray, laminated, fine grained dolostone with occasional fossils. The overall thickness of the Bertie averages 30 to 45 feet. The lower contact of the Bertie with the Camillus Shale is non-conforming. The upper contact with the Akron Formation is gradational.

The Akron Formation is also Upper Silurian in age. It is a fine grained, massive, gray-buff mottled dolostone with abundant weathered calcareous corals. The Akron dolostone in the Buffalo area is six to eight feet thick. The upper contact with the overlying lower Devonian Bois Blanc Formation is marked by an erosional unconformity which delineates the separation between rocks of Silurian and Devonian age.

The Bois Blanc Formation is the only Lower Devonian age formation present in the Buffalo area. The Bois Blanc ranges in thickness from a few inches to four feet, but is discontinuous and is absent in many places. The lower part of the Bois Blanc is a sandy, dark gray, calcareous quartz arenite which grades upward into a dark gray, fine grained limestone. Brachiopods, corals, and conodonts are common. The upper contact with the overlying Middle Devonian Onondaga Formation is also marked by a sharp unconformity.

The Onondaga Limestone Formation overlies the Bois Blanc or, where the Bois Blanc is absent, the Akron Dolostone. The Onondaga consists of four members which are, in ascending order, the Edgecliff, Clarence, Moorehouse, and Seneca Members. The basal Edgecliff Member is a relatively thin, light gray, coarse, coraliferous, crinoidal, crystalline limestone approximately five to eight feet thick. Occasional small patch reefs or bioherms are noted to occur within this member. These reefs are composed of solitary or colonial rugose corals and tabulate corals in a matrix of coarse crinoidal debris. This member and the Clarence Member outcrop along the Onondaga Escarpment approximately two miles north of the Site.

The overlying Clarence Member is a fine grained gray limestone containing abundant (40 to 70 percent) dark gray chert nodules. This member is only sparsely fossiliferous. The Clarence is 40 to 45 feet thick in the Buffalo area.

The Moorehouse Member, lying above the Clarence Member, is a fine to medium grained, light to medium gray, massive limestone containing some light to dark gray and buff colored chert and disseminated bituminous matter. This member is fossiliferous, with an abundance of brachiopods and corals. The overall thickness of this member in the Buffalo area is 55 feet.

Above the Moorehouse Member is the Tioga Bentonite, a four to ten inch thick, soft, white, clay bed of volcanic origin. Many geologists

include this bed as the base of the overlying Seneca Member. The Seneca Member is lithologically and paleontologically similar to the underlying Moorehouse Member and is primarily recognized by its position above the Tioga Bentonite. The Seneca Member is reported to be approximately 40 feet thick in the Buffalo area. The contact with the overlying black calcareous shales of the Marcellus Formation of the Hamilton Group is gradational and contains abundant pyrite nodules.

3.4.3 Regional Structural Geology

The bedrock of the Lake Erie Basin is sedimentary, having been deposited in successive layers over millions of years. These layered deposits exhibit minor folding and jointing as the result of Pleistocene and Neocene tectonics. No major local fracture patterns or faulting are known to exist in the Buffalo area, however, LaSala (1968) identified two main vertical fracture sets trending northeast and northwest through the region. These joints are regularly spaced up to roughly 30 feet apart and may extend from 50 to several hundred feet in length at the surface. The frequency of these joints diminishes with depth. The bedrock dips southward throughout the region at approximately 40 feet per mile.

3.5 REGIONAL HYDROGEOLOGY

This section outlines the general waterbearing characteristics of the stratigraphic sequences discussed in the regional geology section of this report. As will be discussed in the following section, groundwater is not extensively utilized in the Buffalo area due to the availability of surface water supplies and the extensively developed municipal water supply system in the City of Buffalo and the surrounding suburban communities. Reliance on groundwater aquifers increases in the more rural areas in eastern and southern Erie County. In southern Erie County, glacial outwash deposits of sand and gravel are present, creating productive overburden aquifers.

3.5.1 Regional Overburden Groundwater Occurrence

The overburden of the Lake Erie Basin is primarily glacial in origin, consisting of till, lake sediment deposits, or sand and gravel deposits. Till is the most widespread of the unconsolidated deposits in the Lake Erie Basin, however, tills generally yield only small quantities of water. Lake sediment deposits typically consist of horizontally bedded clay, silt, and sand. Lake sediments typically form a thin mantle over till and/or bedrock in the Lake Erie Basin lowlands. Thicknesses and the proportions of sand, silt, and clay are variable. Lake sediments are typically non-waterbearing and are not used as a source of water. Glacial sand and gravel deposits are typically ice-contact or outwash deposits occurring primarily in valleys of upland areas in the southern and eastern Lake Erie Basin. These sand and gravel deposits can provide a significant volume of potable groundwater and are extensively used by several outlying municipalities.

3.5.2 Regional Bedrock Groundwater Occurrence

The primary bedrock aquifer underlying the Lake Erie Plain is within the limestone/dolostone formations overlying the Camillus Shale. These formations include the Onondaga, Bois Blanc, Akron, and Bertie Formations and are herein collectively referred to as the Limestone Unit. Most of the groundwater flow within the Limestone Unit is along bedding planes and open vertical joints. Because of the relatively high solubility of the limestone, solution widening of bedding joints, vertical joints, and the formation of solution cavities within the bedrock increase the permeability of the bedrock, and therefore increases groundwater yields. Yields from wells completed in the Limestone Unit have been reported to range up to 300 gallons per minute (gpm) (LaSala 1968).

Underlying the Limestone Unit is the Camillus Shale. While shales are typically of low permeability and do not contain large volumes of groundwater, the Camillus contains a large amount of

interbedded limestone, dolostone, and gypsum. The presence of gypsum, which is much more soluble than the carbonate rocks or shale, provides a means for the storage and flow of groundwater. Large volumes of groundwater have been reported to occur in two (now abandoned) gypsum mines in Clarence, New York and from wells completed into the Camillus in the Town of Tonawanda and City of Buffalo.

3.6 GROUNDWATER USAGE

The City of Buffalo and most of the surrounding suburbs have an extensive municipal water supply system. The Buffalo Water Authority provides potable water to City residents and businesses. In Cheektowaga, the Erie County Water Authority operates the water supply system. The source of the water provided by both authorities is from intakes in Lake Erie at the headwaters of the Niagara River. The nearest known residences to the Leica facility that are reliant on well water are in the Rein Road area, east of the Buffalo Airport, approximately five miles east of the Site. Additionally, several industries in the Buffalo area use groundwater for industrial purposes.

There are two bedrock wells for water supply on the former Leica Site, neither of which is in use. One of the nearby cemeteries has a water supply well which is used to provide groundwater for watering the lawns.

Reliance on groundwater for drinking and residential use increases in the more rural communities east and south of the City of Buffalo.

3.7 SURFACE WATER USAGE

The only open water area within two miles of the Site is Scajaquada Creek, approximately one mile south of the Site. Scajaquada Creek, in this area, is identified as a Class C surface water body. A Class C

water body is defined as follows: "The best usage of Class C waters is fishing. These waters shall be suitable for fish propagation and survival. The water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes".

Scajaquada Creek is the receiver of treated effluent from the Municipal Sewage Treatment Plant on Central Boulevard, about 1.5 miles southeast of the Site. Scajaquada Creek also serves as a primary drainage channel for much of north Cheektowaga, receiving stormwater runoff from numerous drainage swales and culverts.

The Site is not located within the floodplain of any surface water body.

4.0 DESCRIPTION OF RI ACTIVITIES

In order to complete the tasks required for the RI, several different data gathering activities were performed. These investigative activities, intended to supplement existing information regarding conditions at the Site, were conducted between November 1993 and August 1994. Table 4.1 presents a chronology of the investigative activities performed and their completion dates.

The following subsections present brief descriptions of each of the investigative activities. Unless otherwise noted, the protocols implemented were those contained in the approved Work Plan including the Health and Safety Plan (HASP), the Quality Assurance Project Plan (QAPP), and the Standard Operating Procedures-Field Activities (SOPs).

Detailed discussions of the data collected during each investigative activity are presented in Sections 5.0 and 6.0.

4.1 HYDROGEOLOGIC INVESTIGATION

4.1.1 Monitoring Well Installations

During the RI, ten overburden and nine bedrock monitoring wells were installed on-Site or on the adjacent off-Site parcel.

The overburden wells were designated MW-13, MW-14, MW-15, MW-16, MW-18, MW-19, MW-20, MW-21, MW-22, and MW-23. Wells MW-13 to MW-16 were installed prior to Round I groundwater sampling and wells MW-18 to MW-23 were installed prior to Round III groundwater sampling. All overburden monitoring wells were installed into the silty sand zone above the bedrock.

The bedrock wells were designated MW-1A, MW-2A, MW-5A, MW-6A, MW-13A, MW-14A, MW-15A, MW-16A, and MW-17A,

and were installed into the Onondaga Limestone Unit underlying the Site. Wells MW-2A, MW-5A, MW-6A, MW-13A, MW-14A, and MW-15A were installed prior to Round I groundwater sampling and wells MW-1A, MW-16A, and MW-17A were installed prior to Round III groundwater sampling. Stratigraphic and Instrumentation Logs for all Site monitoring wells are contained in Appendix B.

All new monitoring wells were developed prior to sampling. Well development records are contained in Appendix C. All wells were surveyed by a licensed land surveyor following their completion, and have been accurately plotted and presented on Plan 2 (attached). The top of casing and ground elevation were also surveyed and are presented in Table 4.2, with the monitoring well completion details.

4.1.2 Hydraulic Conductivity Testing

Rising head tests were conducted in ten of the 23 overburden wells and in eight of the nine bedrock wells to estimate the hydraulic conductivities of the overburden and bedrock hydrogeologic units. Water level changes were recorded manually using an electronic water level measurement tape.

The rising head test data calculations, using methods by Bower and Rice or Cooper et al, indicate the overburden sandy zone soils have a hydraulic conductivity range of 1.08E-05 cm/sec at MW-22 to 1.05E-02 cm/sec at MW-2. The bedrock exhibits a range of hydraulic conductivities of 9.33E-05 cm/sec at MW-5A to 1.80E-02 cm/sec at MW-14A. The hydraulic conductivity calculations are presented in Appendix D. Table 4.3 summarizes the results for each tested well.

4.1.3 Water Level Monitoring

Water level monitoring was performed on several occasions over a two year period from July 1992 to August 1994, including five

events during the RI. Each water level monitoring event consisted of the measurement of water levels in all available wells on the same day. Each event took place under static conditions before any well pumping or purging took place. Table 4.4 presents the overburden groundwater level database. Table 4.5 presents the bedrock groundwater level database.

4.2 SOIL SAMPLING

4.2.1 Analytical Sampling

During the RI, soil samples were collected from 52 boreholes installed on-Site and in the off-Site area (19 of these boreholes were converted to groundwater monitoring wells). From 33 of the 52 installations, 21 shallow (fill zone) soil samples and 17 deep (sandy zone) soil samples were collected for chemical analysis, as summarized in Table 4.6.

Shallow boreholes were advanced to the top of the lake sediment layer with continuous split-spoon sampling. Deep boreholes were advanced to the top of bedrock, also with continuous sampling. Soil samples for chemical analysis were collected and handled in accordance with the protocols contained in the Work Plan. Based on field observations and/or headspace and photoionization readings of the soil cores, soil samples were analyzed for the Site-Specific Parameter List (SSPL) consisting of VOCs, metals, and TPH if "clean", or VOCs, metals, TPH, and SVOCs, if "dirty". The soils encountered at each borehole and monitoring well location were recorded in the field notes. Details of the soils encountered are contained in borehole stratigraphic and instrumentation logs which are presented in Appendix B.

The data from analyses of the soil samples were used to define the limits of soil contamination at the Site as discussed in Section 6.1 of this report. Soil analytical data were also used in the preparation of the Baseline Risk Assessment (Section 8), and the Air Pathways Analysis presented in Appendix J.

4.2.2 Geotechnical Sample Collection

One Shelby tube sample was collected from the lake sediment layer at MW-13 for grain size distribution analyses, Atterberg limits, permeability, and specific gravity. Two attempts to obtain a Shelby tube sample of the sandy zone soils were unsuccessful.

Additionally, three bulk samples of the lake sediments, four bulk samples of the sand layer, and one bulk sample of the till were collected for grain size distribution analysis.

A summary of the geotechnical samples collected and the analyses performed is presented in Table 4.7. A summary of the geotechnical results is presented in Table 4.8 The geotechnical data will be used in considering remedial actions for the Site. Complete geotechnical data is presented in Appendix E. All boreholes were surveyed by the licensed land surveyor and are accurately plotted on Plan 2.

4.3 SEDIMENT AND SURFACE WATER SAMPLING

One sediment sample (SED-1) and one surface water sample (SW-1) were collected from the off-Site area as shown on Figure 2.2, prior to clearing activities to remove shrub/scrub vegetation from this area at the request of the cemetery association. These samples were collected from low areas east of the eastern property line. The sediment sample (actually a surface soil sample) was collected from the upper one-inch of soil using stainless steel tools. The surface water sample was collected by submerging the precleaned sample containers into the only standing water which was present at the time of sample collection. Both samples were analyzed for TCL VOCs, TCL BNAs, Target Analyte List (TAL) metals, and TPH.

4.4 GROUNDWATER SAMPLING

Groundwater samples were collected and analyzed on the following three occasions during the RI:

i) from 16 overburden and six bedrock monitoring wells and the east well during Round I;

ii) from eight overburden and six bedrock monitoring wells during Round II; and

iii) from six overburden and three bedrock monitoring wells during Round III.

Well development, purging, and sampling were conducted in accordance with the protocols contained in the Work Plan. At MW-8 and MW-11, the presence of a light non-aqueous phase liquid (LNAPL) layer resulted in a change in the purging method, where the LNAPL layer was pumped off before the aqueous phase liquid (APL) layer was pumped. No pH or conductance readings were taken during purging to avoid instrument contamination. At the East well, no purging took place prior to sampling due to the large water volumes involved (more than 400 gallons per volume). Grab samples were collected from the top of the water column and from the bottom of the well for chemical analysis.

The NYSDEC collected split samples from selected wells during each of the three sample rounds.

In accordance with well purging protocols, measurements of pH, specific conductance, and temperature were made after each well volume was removed. These measurements have been tabulated in Appendix F. Table 4.9 summarizes the groundwater samples collected and the analyses performed for all three sampling rounds.

Non-aqueous phase liquids (NAPL) are liquids which are immiscible (do not readily mix) with water and tend to form a distinct

separate layer or phase. Some NAPLs float on water (e.g, oil) and are termed a lighter NAPL or LNAPL. Other compounds (e.g, tetrachloroethene) are heavier than water and tend to sink through the water column. These are referred to as dense NAPL or DNAPL. The water column, when NAPLs are present, is typically referred to as an aqueous phase liquid (APL). Compounds present in the NAPL can solubilize into the APL phase in groundwater.

4.4.1 Round I

Round I groundwater samples were collected from the following wells:

- Overburden: MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, and MW-16.

- Bedrock: MW-2A, MW-5A, MW-6A, MW-13A, MW-14A, MW-15A, and the east well.

Samples collected from the existing overburden wells (MW-1 through MW-12) were analyzed for Target Compound List (TCL) VOCs and TPH. Samples from the wells installed during the RI (MW-13 through MW-16 and the bedrock wells) and the east well were analyzed for TCL VOCs, TCL BNAs (base/neutral and acid extractables), TAL metals, and TPH. MW-15 samples were analyzed only for TCL VOCs and TPH due to a field error. In addition, an LNAPL sample was collected from MW-11 for analysis of TCL VOCs, additional volume was collected from MW-10 for a petroleum products scan, and a distinctly whiter zone at the base of the APL layer at MW-8 was sampled for analysis of TCL VOCs for comparison to VOC results from the overlying clearer APL layer.

4.4.2 Round II

Round II groundwater samples were collected from the following wells, as proposed in the March 3, 1994 Bi-Monthly Report and approved by the NYSDEC on March 17, 1994.

- Overburden: MW-1, MW-2, MW-3, MW-5, MW-13, MW-14, MW-15, and MW-16.

- Bedrock: MW-2A, MW-5A, MW-6A, MW-13A, MW-14A, and MW-15A.

All samples were analyzed for a revised set of the SSPL groundwater parameters (TCL VOCs only) as requested in the March 11, 1994 letter and approved by NYSDEC on March 17, 1994.

4.4.3 Round III

Based on results of the Round I and Round II groundwater analyses and the soil sample analyses, seven additional boreholes, six overburden, and three bedrock monitoring wells were installed at the Site following discussions with the NYSDEC. The Round III groundwater samples were collected from these supplemental wells as shown below.

- Overburden: MW-18, MW-19, MW-20, MW-21, MW-22, and MW-23.
- Bedrock: MW-1A, MW-16A, and MW-17A.

All samples were analyzed for the revised set of SSPL groundwater parameters.

4.5 TOPOGRAPHIC AND PROPERTY SURVEY

A topographical and property boundary survey were completed for the Site by a licensed land surveyor. The survey included the topography of the Site and the off-Site areas to the east and the south as well as the property boundaries of the Site and the adjacent off-Site areas. The survey also included the location of all existing sample points, well and borehole installations, catchbasins, and manholes. The topographic map is included with the RI report as Plan 1. Sample, well, and borehole locations are shown on Plan 2.

4.6 BASELINE RISK ASSESSMENT

A Baseline Risk Assessment (BRA) was conducted for certain media at the Site to characterize potential current and future health risks associated with exposure to Site related residual contaminants. The media evaluated included surface soils, subsurface soils, and bedrock groundwater. The BRA is included as Section 8.0 of this report. Supporting calculations and toxicity summaries are contained in Appendices G and H, respectively.

4.7 BIOTA SURVEY

A biota survey was conducted for the off-Site area east of the Site by Fine Line Technical Services (Fine Line) in accordance with Step 1 of the NYSDEC guidance document entitled, "Fish and Wildlife Impact Analysis for Inactive Hazardous Waste Sites", dated June 18, 1991. The biota survey is discussed in Section 9.0 and is contained in Appendix I of this report.

4.8 AIR PATHWAYS ANALYSIS

An Air Pathways Analysis (APA) was performed to evaluate potential air emission impacts resulting from the Site. The APA was conducted in accordance with the NYSDEC Division of Air document, "Air Pathways Analysis Requirements in the Remedial Investigation" dated April 2, 1991, and "Air Guide 1". The APA is further discussed in Section 6.4 and the report and calculations are presented in Appendix J of this report.

4.9 UNDERGROUND UTILITIES STUDY

An investigation of the underground utilities on the Site was conducted during the RI. This investigation consisted of research of existing information to determine which utilities are present at the Site and the routing of these utilities. A field survey was conducted to confirm this information.

Additionally, six boreholes were installed into the bedding of or adjacent to the sewers which exit the Site into the off-Site area to the east. Soils from four of the six boreholes were screened using a photoionization detector (PID). No PID readings were taken at BH-U2-94 and BH-U3-94 because of equipment failure due to snowy weather. The stratigraphic and instrumentation logs contained in Appendix B detail the stratigraphy encountered, the observations made of the soil conditions, and the HNU readings obtained.

The manhole survey data sheets recording the results of the manhole/catchbasin survey are contained in Appendix K.

4.10 RI MATERIAL HANDLING

The wastes generated as a result of the RI were disposed as follows.

4.10.1 Drill Cuttings

All drill cuttings were placed in 55-gallon steel drums, covered, labeled, and stored on Site. Application has been made with Chemical Waste Management (CWM) to accept the drummed soils for disposal. Disposal is to be handled by their Technical Services Group.

4.10.2 Groundwater

All groundwater removed from wells during the RI and all wash waters resulting from decontamination of equipment were stored on-Site in a tanker trailer. Application has been made to CWM to disposal of these wastes.

4.10.3 Light Non-Aqueous Phase Liquids

Approximately seven gallons of LNAPL was placed into two 5-gallon pails for temporary storage. These pails were placed in a 55-gallon drum lined with speedi-dry. Application has been made to CWM to accept these wastes.

4.11 SAMPLE ANALYSIS AND VALIDATION

All water, soil, and sediment samples collected for chemical analysis during the RI were submitted to H2M Labs in Melville, New York. H2M was approved by the NYSDEC as the analytical contract laboratory prior to the commencement of the RI.

All data presented in this report have been validated using USEPA guidelines consistent with methods described in the QAPP.

5.0 SITE CONDITIONS

5.1 GENERAL

The RI activities were focused on the eastern and southern areas of the Leica property and an adjacent six acre off-Site parcel located immediately east of the southern area of the Site. Historical sampling has shown these areas to be contaminated or to have had operations which are probable contaminant sources. Figure 5.1 depicts the eastern area and the southern area of the Site and shows the monitoring well and soil boring locations installed at the Site.

The majority of the study area is covered by asphalt pavement, concrete, or buildings (65 percent) with the remainder being grassed lawns. The off-Site parcel is completely vegetated, with mature trees on the north and south ends and meadow vegetation in the center. This central area was cleared (at the request of the Cemetery Association) with a brush-hog in November 1993. Soil from graves at the adjoining cemeteries is being placed in the northeast and southeast parts of the off-Site area.

The ground surface across the Site varies by approximately 13 feet, from a high of 665 feet AMSL along the north side of the Site along Sugar Road to a low of 652 feet AMSL at the south end of the off-Site parcel, along Rowan Road. Plan 1 shows ground surface contours and features of the Site and the surrounding areas.

5.2 SITE GEOLOGY

The following sections present Site geology as interpreted from data collected during all subsurface drilling investigations at the Site. Stratigraphic logs for all wells and boreholes installed at the Site are presented in Appendix B. A stratigraphic summary table is presented in Table 5.1.

The stratigraphic sequence encountered at the Site is:

i) fill material overlying;
ii) native lake sediments, primarily silts and clays, overlying;
iii) saturated silty-sand zone soils, primarily sands and silts, overlying;
iv) till, primarily compacted sand and gravel, overlying;
v) bedrock (Onondaga Formation limestone).

Figure 5.2 presents a typical stratigraphic column representing the geologic units encountered at the Site.

5.2.1 Overburden Geology

The overburden at the Site consists of a thin layer of fill material (0.5 to 6.2 feet thick) overlying native soils. The total overburden thickness ranges from 8.1 feet at MW-2A to 16.0 feet at MW-23 (MW-23 is located in one of the off-Site areas being filled and is raised approximately 3.5 feet above the surrounding grade). The overburden is generally thickest along the east side and southeast corner of the Main Building (13 to 15.5 feet) which appears to correspond with the higher ground elevations observed in these areas. Table 5.1 presents a summary of Site stratigraphy. Isopach maps of the fill materials, lake sediment layer, and sandy zone soils are presented on Figures 5.3, 5.4, and 5.5, respectively.

5.2.1.1 Fill

The fill encountered at the Site consists of disturbed native soils; imported topsoil in the grassed areas; sand, gravel and asphalt underlying the parking lot areas; and assorted fill, including brick, glass, slag, ash, coal, clinkers, metal, gravel, wood and other materials in the area southeast of the Main Building. This area was a low area which was filled with coal ash, as shown in the aerial photograph presented as Figure 2.3. The paved area immediately east of the southeast corner of the Main Building, along the east property line shared with the off-Site parcel, is elevated from one to three feet above the grade of the off-Site parcel, indicating the extent of filling in this area. However, no fill was placed off the Leica property as

evidenced by a fence which was in place along the east property line when filling was taking place as shown on Figure 2.3.

The fill layer ranges in thickness from 0.5 feet to 6.2 feet as shown on Figure 5.3. The fill layer is thickest in the areas east and southeast of the southeast corner of the Main Building, where it is in excess of three feet deep. The fill thins toward the south and west. In the eastern parking lot area, the fill is generally less than one foot, with native soil occurring below a thin topsoil or asphalt layer. The moisture content of the fill zone varied from dry to wet across the Site, with the areas of thickest fill generally being wetter. The water in the fill is a perched water table resting on the underlying lake sediment layer.

5.2.1.2 Native Soil

The native soils at the Site consist of a lake sediment layer overlying a gray silty-sand layer overlying a thin till overlying bedrock. The thickness of the native soil ranges from 5.4 feet at BH-10-94, west of the storage building, to 12.9 feet at MW-17A, located in the east parking lot. The overall thickness of the native soils averages 9.7 feet, and is thickest in the east parking area and the west part of the south parking area. The native soils are thinnest in the southeast portion of the Site; correlating to the thickest fill areas.

The lake sediment layer is the result of deposition of fine grained soils by proglacial lakes which preceded present-day Lake Erie. The lake sediment layer at the Site is a varved, red-brown clay, and silt with minor amounts of sand and fine gravel. One Shelby tube sample and three bulk soil samples were collected from the lake sediment layer. Results of grain size distribution analyses shows clay and silt comprise from 78.6 to 97.4 percent of this unit. One permeability test of an undisturbed sample collected using the Shelby tube indicates a permeability on the order of $1x10^{-8}$ cm/sec, with a porosity of 0.37 and a moisture content of 19.5 percent. Based on the type and consistency of grain size of this layer across the Site, this layer would act as an aquitard unless disturbed or breached. The results

of geotechnical testing are summarized in Table 4.8 and are contained in Appendix E.

The lake sediment layer ranges in thickness from 2.4 feet at BH-10-94 to 9.4 feet at MW-21, and averages 5.6 feet thick. This layer was present in all borings completed at the Site. The lake sediments were described as being dry to moist. Figure 5.4 shows the thicknesses of the lake sediment layer across the Site.

Beneath the lake sediments is a saturated silty-sand layer (sandy zone), which is primarily sand and silt with minor amounts of clay and gravel as shown on the geotechnical sample summary presented in Table 4.8. This sandy zone ranges in thickness from 1.9 feet (MW-21 and BH-8-94) to 9.7 feet (MW-17A) and averages 4.1 feet thick. Included with this sandy zone is a thin densely compacted till layer which lies directly above the bedrock. Where noted to be present, this till layer ranged in thickness from 0.3 to 3.0 feet, with an average thickness of 1.1 feet. The till layer was notably drier than the overlying silty sands. Figure 5.5 shows the sandy zone thickness across the Site. The sandy zone is the only overburden water-producing interval. The 22 overburden wells at the Site were installed to monitor this zone.

5.2.2 Bedrock Geology

The bedrock encountered beneath the Site is the Onondaga Formation. The uppermost member encountered is the Moorehouse Member, a fine to medium grained, light to medium gray, massive limestone with nodular chert, tabular and rugose corals, and brachiopod fossils.

This member is noted to be up to 55 feet thick in the Buffalo Area. The actual thickness under the Site is unknown as the bedrock wells penetrate a maximum of 32 feet of bedrock.

Bedrock cores indicate the presence of an abundantly coraliferous zone, possibly a patch reef, which runs north-south through monitoring wells MW-13A and MW-14A. The adjacent bedrock wells MW-5A and MW-6A show significantly fewer and thinner coral zones, as do MW-15A and MW-17A. Figure 5.2 shows a generalized stratigraphic column for the Site.

5.2.2.1 Bedrock Surface Contours

Figure 5.6 presents the contours of the bedrock surface at the Site. In general, the bedrock surface is highest toward the northwest corner of the Site and drops toward the southeast. A total relief of 10.1 feet was observed across the Site, with highest elevations observed at wells MW-1, MW-1A, MW-2, and MW-2A, and the lowest elevations occurring at the south end of the off-Site parcel (MW-14/14A, MW-22, and MW-23). The relief is fairly constant across the Site with an average slope of approximately 0.9 percent, which is consistent with the regional dip of the bedrock.

5.2.2.2 Stratigraphic Profile

The profile of the overburden and bedrock at the Site is shown on Figures 5.8 through 5.12, which are cross-section diagrams along the alignments shown on Figure 5.7.

Cross-sections A-A' and B-B' show north-south stratigraphic trends through the eastern area and the southeast part of the southern area. Cross-sections C-C' and D-D' show west to east profiles across the southern area. Cross-section E-E' shows a west to east profile across the eastern area of the Site.

Figures 5.8 and 5.9 show a general north to south dip of the overburden horizons and the bedrock surface, with localized thinning and thickening of the overburden layers. A distinctly thicker area of fill is apparent between BH-11-94 and MW-12. The raised area near MW-18 is

attributable to the elevated ground surface adjacent to the UST area. A low point in the bedrock surface is noticeable at the MW-16/16A location. Cross-section B-B', also a north to south profile slightly east of the A-A' cross-section confirms the general southward dip of the subsurface layers. Again a thickening of the fill layer is apparent between BH-11-94 and MW-9A. This corresponds with the area of ash placement and increased chemistry levels noted in the soils and the overburden groundwater in the southeast part of the Site. The bedrock surface at MW-14/14A appears as a low point, although several other localized dips in the bedrock surface are noticeable across the Site. The thin fill zone between MW-1 and MW-15 shows that no apparent filling occurred under the eastern area parking lot.

The west-east cross-sections across the southern area of the Site (C-C' and D-D') show a general eastward dip of the bedrock surface. The overburden layers exhibit this same dip across the western part of the southern area, but flatten out on the east side of the Off-Site Parcel. The thicker fill zone in the vicinity of MW-4, MW-11, and MW-12 can be seen on the D-D' cross-section, as can localized dips in the bedrock surface at these same locations.

The E-E' cross-section showing the west to east profile across the eastern area indicates the overburden layers and bedrock surface to be flat, with a very thin fill layer at each of the two locations profiled. This is consistent with the known history of this area, which has always been used for vehicle parking at the Site.

5.3 SITE HYDROGEOLOGY

Two hydrostratigraphic units have been identified beneath the Site. These units are identified as:

i) the Overburden Silty-Sand Unit; and
ii) the Onondaga Limestone Bedrock Unit.

A perched water table also exists within limited areas of the fill zone at the Site as evidenced by the moisture content of the fill zone material encountered during subsurface investigations in the southeast portion of the Site. This perched water zone appears to coincide with the areas having the greatest amount of fill and is discontinuous at the Site. It is highly probable that the perched water zone tends to dry out during dry periods as the groundwater levels in the deeper sandy zone were observed to drop significantly as discussed below.

5.3.1 Overburden

The silty sand zone at the Site is monitored by the 22 overburden wells across the east and south sides of the Site and in the off-Site parcel. Over a period of three years, the groundwater table in this sandy zone has been monitored by periodic measurements of water levels at the Site. Review of these levels shows that seasonal fluctuations of the water table on the order of four to six feet occurs, with a significant drop in water levels and/or drying up of some on-Site overburden wells observed during drier periods.

Hydraulic conductivity testing of the silty-sand zone was performed at ten overburden wells using a rising head test, whereby a volume of water was removed from the well and the time required for the return to a prior static water level was monitored. Wells MW-4, MW-11, MW-6, MW-8, and MW-16 were not tested due to elevated chemistry levels. Wells MW-18, MW-20, MW-21, MW-9, and MW-10 were not tested due to low water levels in the wells. Plotting of the recovery test data yields an estimated hydraulic conductivity for the well. The estimated hydraulic conductivities for the wells installed into the sandy zone at the Site ranged from 1.08E-05 cm/sec at MW-22 to 1.05E-02 cm/sec at MW-2. The complete set of hydraulic conductivities are presented in Table 4.3. The calculations of hydraulic conductivity were completed using methods by Bower and Rice or Cooper et al.. These calculations are contained in Appendix D of this report.

Five rounds of overburden groundwater levels were measured during the RI. The measurements show that the groundwater flow in the southeast part of the Site generally follows the top of bedrock flowing onto the southern area of the Site from the south, west, and northwest directions toward a low point in the MW-4, MW-8, MW-11 area. The August 30, 1994 data shows a groundwater low point occurring further to the southeast at the MW-14 well. Across the east side of the Site the overburden groundwater flow is northeast to southwest, flowing into the southern area of the Site. This also follows the top of the bedrock surface. Figures 5.13, 5.14, 5.15, 5.16, and 5.17 show the overburden groundwater elevation contours for the five sets of data collected. All five sets of data are consistent. Figure 5.6 shows the bedrock surface contours.

In the southeastern part of the Site, a low point in the overburden groundwater elevations occurs in the vicinity of MW-4, MW-8, and MW-11. Groundwater flow in the southern area of the Site is generally toward this low point from the south, west, and north. It appears that the groundwater then flows off-Site toward the south-southeast. Later water level rounds, which include MW-22 near the Preston/Rowan Road intersection suggest a closure of the low point somewhere between MW-14 and MW-22.

In the eastern area of the Site, the overburden groundwater flow is linear in a north-northeast to south-southwest direction, which is perpendicular to the bedrock dip. The MW-1 well appears as a high point for all five sets of data. The groundwater flow off the eastern area of the Site appears to continue southward into the southern area of the Site.

5.3.2 Bedrock

The upper 20 to 33 feet of the Onondaga Limestone at the Site was investigated during the RI through the installation of nine bedrock monitoring wells. Groundwater flow within the Onondaga occurs primarily along bedding plane fractures and vertical joints. Weathered horizontal fractures and partings in the rock cores were frequently observed. LaSala

(1968) reports two regionally occurring sets of regularly spaced vertical joints, one which trends northeast, the other northwest. These vertical joints and secondary porosity features (i.e., fossil presence, vugs, voids) increase the movement of groundwater through the bedrock.

Rising head tests were performed on eight of the nine bedrock wells. The data derived using the methods by Bower and Rice or Cooper et al, indicates a range of hydraulic conductivities of 9.33E-05 cm/sec at MW-5A to 1.80E-02 cm/sec at MW-14A. The hydraulic conductivity calculations are presented in Appendix D. Table 4.3 summarizes the results for each tested well. Water yields in the bedrock were variable across the Site during well development, purging, and sampling. The MW-5A well was slow to yield water, going dry between volumes with slow recovery. The MW-6A well, only 300 feet away, yielded a good supply of water with minimal drawdown during development and purging. Groundwater pumping rates of 0.5 to 3 gpm were attained during development and purging.

The rock cores from MW-13A and MW-14A showed thick zones of Rugose and Fan Coral from 20 to 30 feet below ground surface (BGS) and 30 feet to 35 feet BGS, respectively, indicating a possible reef structure in this area. Coral was present in other wells on-Site, but was observed to occur only in thin zones or as solitary fossils. The coral zones at MW-13A and MW-14A exhibited a slight to moderate fuel oil odor and yellow core staining. No other well at the Site exhibited a similar fuel oil presence. Hydrocarbon production has been noted to occur in Onondaga Formation reef structures in southern Erie County and in Chautauqua and Cattaraugus Counties, further south (Calla, 1984, and VanTyne and Foster, 1990).

5.3.3 Bedrock Groundwater Flow

Five sets of bedrock groundwater level measurements were obtained during the RI. The two groundwater level rounds from March 1994 show flow direction in the southeast part of the Site only as no bedrock wells had been installed in the eastern area of the Site at the time

these water levels were taken. The April, June, and August levels show the bedrock groundwater flow beneath the entire Site. The flow across the eastern area of the Site appears to be from a high point at MW-17A westward toward MW-16A. Groundwater in the southeast part of the Site appears to flow from the southwest and the northeast toward a low area running northwest to southeast from the MW-6A well through the MW-14A well. In each of the five sets of water level measurements taken, MW-14A shows the lowest water level elevation. Bedrock groundwater flow patterns are very consistent over the period of time for which measurements are available and appears to correlate well with the top of bedrock contours shown on Figure 5.6.

Figures 5.18 to 5.22 show the bedrock groundwater contours for the five sets of data collected during the RI.

5.4 UTILITY INVESTIGATION

The underground utilities present at the Site were investigated during the RI to determine whether any of the utilities may have been a source of contaminants at the Site or may be contributing to the spread of Site contaminants.

Existing records and drawings were reviewed to determine the location and routing of underground utilities at the Site. These utilities are shown on Figure 5.23.

A series of boreholes were installed into the bedding adjacent to several sewer lines which exit the Site through the southeast part of the Site or through the off-Site parcel. These borings, designated as BH-U1-93 through BH-U6-94 were installed at the locations shown on Figure 5.23. Each boring was visually screened in the field and with a PID. The PID did not operate while installing BH-U2-94 and BH-U3-94 due to severe weather conditions (very cold [20°F] with heavy wet snow), however, no signs of contamination were encountered. BH-U1-93 was installed adjacent to an 8-inch sanitary sewer, constructed of plastic, which cuts across

the southeast portion of the Site. PID readings of up to 71 parts per million (ppm) were measured. An iridescent sheen and odors were observed in the wet zones of this borehole. Native soil material (lake sediment) was encountered at 5.9 feet BGS. This information confirms the findings of four borings installed during the Site investigation in 1992 along this sewer alignment, where an oily sheen and petroleum odor were noted. Borehole BH-U4-94, adjacent to the manhole (San-F) into which this sanitary sewer empties, showed only a moderate petroleum odor at 2 feet BGS. No PID readings above background were recorded. Native soil material (lake sediment) was encountered at 3.0 feet BGS. The contamination of the bedding around this sewer is very likely due to the presence of contaminants in the surrounding fill material on Site and not due to leakage from the sewer. The welded plastic construction of this sewer makes infiltration of contaminants into this sewer unlikely. Boreholes BH-U5-94 and BH-U6-94, installed adjacent to the sanitary and storm sewers at the south end of the off-Site parcel, both appeared clean, with no signs of contamination present in the soils from these boreholes and no PID readings above background noted.

A field survey was conducted to inspect each manhole and catchbasin on the Site. During the inspection, each manhole was opened and any incoming or outgoing lines were noted. The general condition of the structure and pipe and manhole invert depths were noted. The sewer structures on-Site were generally in good condition. The sanitary sewer manholes in the off-Site area are only in fair to poor condition with deteriorating sides and sediment accumulations observed. Several manholes in the off-Site area are flooded and a flow restriction appears to occur in the line connecting manholes San-F and San-G.

The sewer bedding at the locations investigated appears to be uncontaminated except along the 8-inch sewer which traverses the southeast part of the Site. The contaminants in the bedding along this line are likely the result of its installation through the ash-filled area, and are not due to discharges through the on-Site sewers. Copies of the manhole inspection log sheets are contained in Appendix K.

6.0 NATURE AND EXTENT OF CONTAMINATION

The analytical results of the various environmental media at the Site have been used to define the nature and extent of contamination. The following sections present detailed discussions of each of the media investigated.

6.1 SOIL

Soil analytical results are available from boreholes installed in areas which were identified in previous investigations or during the RI as possible sources of contamination, and in areas found to be contaminated, to delineate these areas. From the eastern area, boreholes were installed and samples collected in and adjacent to the former drum storage pad, near the location of the former aboveground storage tanks and the east side dry well, and near the underground fuel oil storage area. From the southern area, boreholes were installed in the southeast part of the Site, and in the off-Site parcel. Boreholes were installed to collect samples of the shallow fill zone and/or the deeper silty-sand zone soils.

The areas investigated are shown on Figure 6.1 and are discussed separately in the following subsections.

The organic chemical data have been compared to the "Recommended Soil Cleanup Objectives" presented in Appendix A of the NYSDEC Memorandum HWR-94-4046, "Revised Technical and Guidance Memorandum-Determination of Soil Cleanup Objectives and Cleanup Levels", dated January 24, 1994 (TAGM 4046).

The discussions for metals detected in soils in this section use a three step comparison for evaluating those metals which are potentially of concern at the Site. First, the concentration of each metal detected is compared to the recommended soil cleanup objectives for metals in Appendix A of TAGM 4046. Where TAGM 4046 specifies "Site Background" as an appropriate objective, the upper value of the New York State or Eastern

US soils (NY soil) in Table 6.3 is used as a background value. When a detected metal exceeds both TAGM 4046 recommended soil cleanup objectives and NY soil background levels, that concentration will be compared to the published background concentration ranges for US soils presented in Table 6.3. Those metals which exceed the US soil background levels (or the NY soil background level, whichever is greater) and which were historically used on-Site are considered as a potential contaminant of concern. The soil cleanup objectives for the Site will be the upper value of the published US soil concentration range shown in Table 6.3.

Those metals which have been historically used on-Site in metal plating are cadmium, chromium, copper, nickel, and zinc.

6.1.1 Former Drum Storage Area

This area, located at the northeast corner of the Main Building, consists of a 40 foot by 70 foot concrete pad surrounded by asphalt parking areas. This area was used to stage drums of various chemicals and waste materials prior to off-Site disposal. During the RI, seven boreholes (BH-DS1-93, BH-DS2-93, BH-DS3-93, BH-DS-N1, BH-DS-N2, BH-DS-E1, and BH-DS-E2) were installed to the top of the lake sediment layer for the collection of soil samples for analysis. One borehole (TB-1) was installed just south of the storage pad during the 1990 Site Assessment to collect one shallow and one deep soil sample for analysis. All of these samples were analyzed for VOCs and TPH. Metals were analyzed at BH-DS1-93, BH-DS2-93, BH-DS3-93, and the TB-1 location only.

Organic Chemical Compounds

The organic chemicals detected in the soil samples collected from this area and their reported concentrations are presented in Table 6.1.

In the shallow soils, the BH-DS-E2 location showed no organic chemical presence. Low levels of total VOCs were detected at

boreholes BH-DS1-93 (119 micrograms/kilogram [µg/kg] total VOCs), BH-DS-N1 (10 µg/kg total VOCs), BH-DS-N2 (5 µg/kg total VOCs), BH-DS-E1 (2 µg/kg total VOCs), and at TB-1 (65 µg/kg total VOCs). At the BH-DS2-93 location, total VOCs were 16,700 µg/kg, with 1,1,1-TCA detected at a concentration of 16,000 µg/kg, and xylenes at 560 µg/kg. The deep soil sample from location TB-1 showed only trace organic chemical presence.

A comparison of this data to TAGM 4046 shows the soil cleanup objective for 1,1,1-TCA (800 µg/kg) is exceeded at the BH-DS2-93 location.

Total Petroleum Hydrocarbons

TPHs were analyzed for the seven shallow samples and the TB-1 samples collected from this area. TPH results are summarized in Table 6.2. The TPH concentrations reported ranged from ND(37) to 4,170 mg/kg. Associated benzene, toluene, ethylbenzene, and xylene concentrations do not exceed the TAGM 4046 soil cleanup objectives.

Metals

Table 6.2 presents the concentrations of metals detected in the soil samples collected and analyzed from the drum storage pad area. These concentrations have been compared to TAGM 4046 and NY soil background ranges. The metals which exceed TAGM 4046 and NY soil background levels are calcium, copper, magnesium, nickel, and zinc. Copper and zinc are within US soil background ranges. Calcium and magnesium are naturally occurring soil elements. There are no published US soil background concentrations for these metals. Nickel exceeded the US soil range (150 mg/kg) at the BH-DS1-93 location (208 mg/kg).

Summary of Soil Conditions-Former Drum Storage Area

Soil cleanup objectives and/or published NY soil or US soil background ranges are exceeded only for 1,1,1-TCA at BH-DS2-93 and nickel at BH-DS1-93.

The former drum storage pad area is no longer used for the storage or handling of drummed wastes and chemicals, eliminating the source of the detected residual contaminants in this area. Furthermore, the horizontal and vertical extent of contaminants around BH-DS2-93 is limited, as exhibited by the low concentration of 1,1,1-TCA detected in the adjacent boreholes (BH-DS-E1, BH-DS-E2, BH-DS-N1, BH-DS-N2, BH-DS3-93, and TB-1 and the deeper soil sample from TB-1), the closest of which are only 20 to 30 feet away. Nickel concentrations in the boreholes closest to BH-DS1-93 (BH-DS2-93 and BH-DS3-93) were both within the published US soil ranges. Additionally, the concrete surface and surrounding asphalt covering act to limit contact with the soil and reduce the infiltration of surface water.

6.1.2 East Side Dry Well Area/Former Aboveground Storage Tank Area/Underground Fuel Oil Storage Tank Area

Multiple potential contaminant sources are present within close proximity of each other in this area, located east of the Main Building. A stone-filled pit (dry well) functioned as the drainage sump for the trench and floor drains in the former flammable liquids storage room. Outside this room, two aboveground solvent storage tanks (TCE and 1,1,1-TCA) were formerly located on an elevated concrete loading dock. To the southeast, two USTs were used to store #5 and #6 fuel oil and one AST stored diesel fuel. Each of these potential sources was investigated as described in the following subsections. Table 6.4 presents a summary of organic compounds detected in the above area samples. Table 6.5 summarizes the TPH and metals concentrations detected.

6.1.2.1 Former Aboveground Storage Tank Area (AST)

This area was investigated through the collection of one shallow soil sample and one duplicate soil sample from beneath the pavement at the foot of the elevated concrete loading dock area. Analysis of this sample (BH-AST1-93) showed 1,2-DCE (570D and 660JD mg/kg) and TCE

(360JD and 850JD mg/kg) concentrations which exceed the TAGM 4046 soil cleanup objectives (300 and 700 µg/kg, respectively).

TPHs were detected in the samples at levels of 358J and 522J mg/kg. The associated benzene, toluene, ethylbenzene, and xylene levels do not exceed TAGM 4046 soil cleanup objectives for these compounds.

Analysis for metals from the AST area sample, and the associated duplicate sample, show that calcium, copper, magnesium, mercury, nickel, and zinc exceeded the TAGM 4046 and NY soil background concentration ranges. The detected concentrations of mercury, nickel, and zinc are within the US soil background concentration ranges. Calcium and magnesium are naturally occurring soil elements. Copper was detected at 545J mg/kg, which exceeds the US soil background concentration range in one of the two soil samples from this area. The associated duplicate sample result showed copper to be present at 42.3J mg/kg. Both results were estimated due to the lack of repeatability of the duplicate sample result with the investigative sample result. Metals and TPH results are listed in Table 6.5.

6.1.2.2 East Side Dry Well Area

The east side dry well, located approximately 25 feet east of the AST area, was the receiver for floor and trench drains from the former flammable storage room. This dry well consists of a 4 foot by 4 foot hole about six feet deep which was backfilled with stones, covered with soil, and paved over. One deep soil borehole was installed to investigate this area. One soil sample was collected from BH-EDW1-93 for analysis of VOCs, TPH, SVOCs and metals from the deeper sandy zone soils at this location. Analytical results show 1,1,1-TCA (21,000D µg/kg), TCE (1,700JD µg/kg), toluene (1,800JD µg/kg), ethylbenzene (17,000D µg/kg), and xylene (92,000D µg/kg) to exceed soil cleanup objectives in the deeper sandy zone. Additionally, 1,1-dichloroethene (1,1-DCA) was detected at an estimated level in the sample before dilution, but was not detected at a level of 2,900 µg/kg after dilution. No SVOCs were detected. Metals results show calcium, , magnesium, and zinc to be present in excess of TAGM 4046 and NY soil background levels.

Zinc is present within the US soil background concentration range. Calcium and magnesium are naturally occurring soil elements.

Three additional boreholes (BH-EDW-N, BH-EDW-NE, and BH-EDW-SE) were installed approximately 70 to 90 feet north, northeast, and southeast of the east dry well to screen the deeper soils for contaminants. No soil samples were analyzed from these locations, and no PID readings were obtained because of severe weather (20° with heavy snow) at the time of installation, however the soils were visually examined in the field and no signs of contamination were observed. The MW-16 and MW-16A monitoring wells were installed about 25 feet southeast of the dry well borehole (BH-EDW1-93) to monitor groundwater conditions in this area. The impacts to Site groundwater quality are discussed in Section 6.2.

6.1.2.3 Underground Fuel Oil Storage Tank Area

Two USTs for the storage of heavy fuel oils (#5 and #6) are present in the area east of the Main Building. One AST for storage of diesel fuel was also located in this area. Five boreholes (designated TB-2 through TB-6) were installed in 1990 to evaluate soil conditions surrounding the USTs. Soil samples were collected from the upper and lower zones from each borehole for analyses of TPH and benzene, toluene, xylenes, and ethylbenzene.

Soil samples for analysis of VOCs and TPH were collected from three additional shallow boreholes (to the top of the lake sediments) during the RI. These boreholes (BH-T1-93, BH-T2-93, and BH-T3-93) radiate outward from the 1990 boreholes with the highest TPH (TB-3 and TB-4).

Organic chemical results show low levels of total VOCs in the shallow soil at BH-T2-93 (77 µg/kg total VOCs) and BH-T3-93 (80 µg/kg total VOCs), and in the 1990 borehole TB-2 (180 µg/kg total VOCs) and TB-6 (150 µg/kg total VOCs). Borehole BH-T1-93 showed 1,1,1-TCA (1,200JD µg/kg) and xylenes (7,000D µg/kg) exceeding the soil cleanup objectives (800 µg/kg

and 1,200 µg/kg, respectively). Benzene at TB-2 (80 µg/kg) was detected at a concentration above the soil cleanup objective (60 µg/kg).

The deeper soil zone at this location was investigated during the 1990 Site Assessment and at MW-18 during the RI. Borehole TB-2 showed benzene (140 µg/kg) and toluene (1,500 µg/kg) at or exceeding the soil cleanup objectives (60 µg/kg and 1,500 µg/kg, respectively). Borehole TB-2 is located near the east dry well area where elevated organic chemical presence was detected.

TPHs were detected in all Site assessment and RI soil samples from this area except BH-T3-93. TPH was not tested at MW-18. TPH concentrations detected ranged from 54.4 mg/kg at BH-T2-93 to 7,370 mg/kg at TB-3. TPH levels are higher to the north and east of the USTs, and lower to the south.

6.1.2.4 Summary of Soil Conditions - East Side Dry Well Area, Aboveground Storage Tank Area, Underground Fuel Oil Storage Tank Area

The UST area exhibits TPH presence in the shallow soils along the north and east side. Also, benzene and toluene exceed soil cleanup objectives at the TB-2 location north of the tank area. The shallow soil in the areas south and southeast of the tanks is not contaminated, as evidenced by the low concentrations (e.g., less than 130 ppb) in the TB-5, TB-6, BH-T2-93, BH-T3-93, and MW-18 samples.

Soil samples collected from the area north of the tanks, including the TB-2 location, the east dry well area, and the AST area show 1,2-DCE, TCE, 1,1,1-TCA, xylene, and benzene exceeding soil cleanup objectives in the deep sandy zone.

The source of the shallow soil contamination is attributable to the historic storage and handling of solvents in the vicinity of

the AST area. The TPH concentrations are the result of vehicle traffic and the storage and handling of fuel oils in this area of the Site.

Calcium, copper, and magnesium were detected in the soils in this area at concentrations above the US soil background concentration range. Calcium and magnesium are naturally occurring soil elements which can be naturally present at the concentrations detected on-Site as a result of the composition of the underlying bedrock, which at the Site is sedimentary limestone and dolomitic bedrock.

An elevated concentration of copper was detected in one of two duplicate analyses from the AST area. The associated duplicate sample showed a poor correlation (42.3J mg/kg and 545J mg/kg), resulting in justification of the results as estimated during the data validation. An arithmetic average of these two results show an average concentration which is less than the soil cleanup objective for copper.

The source of the contaminants in the sandy zone soil in this area is attributable to the east side dry well and its historic purpose of receiving drainage from floor and trench drains in the flammable storage room. All chemicals detected were either used on-Site or are a component or breakdown product of a chemical that was used on-Site.

The horizontal extent of contamination in the shallow soils in this area extends from the building on the west to beyond the BH-T1-93 borehole to the east. It extends halfway to the drum storage pad and into the UST area. The extent of chemical contamination in the deeper sandy zone soils is primarily limited to the area around the east side dry well as analysis of samples from the TB-1, TB-3, and MW-18 locations (all within 130 feet of BH-EDW1-93) show low or non-detect levels of contaminants (e.g., less than 35 µg/kg total VOCs). This correlates to the extent of overburden groundwater contamination in this area as discussed in Section 6.2.1.1. It is not known if contaminants have migrated beneath the Main Building in this area. A separate investigation will be conducted to assess this. The chemicals have migrated vertically into the shallow bedrock beneath this area. Bedrock

groundwater chemistry is discussed in Section 6.2.2. The extent of vertical migration is not known.

The levels of chemicals present in the soils of the east side dry well area could impact human health or the environment. The presence of an asphalt cover over most of the eastern part of the Site limits stormwater infiltration and prevents incidental contact with soils in this area. Because exposure to soils in this area could occur, the soils were evaluated in the BRA.

6.1.3 Southern Area

The southern area includes the entire southern portion of the Site and the area between the Main Building and the storage building. Historical research has shown that a portion of this area was filled with coal ash prior to 1956. This filled area lies in the southeast part of the southern area and is shown in the aerial photograph on Figure 2.3 and as outlined on Figure 6.1.

In the southern area, three wells and three boreholes were installed in 1990 as part of the Site Assessment. Soil samples from the TB-7, TB-9, and MW-4 locations showed the presence of VOCs, SVOCs, metals, and TPH in this area.

To determine the nature and extent of contamination in the southeastern part of the southern area, eight monitoring wells and 18 shallow boreholes were installed in 1991 and 1992 (in addition to the three existing monitoring wells and three boreholes installed during the Site Assessment). Nine soil samples were submitted from seven shallow boreholes for TPH analysis. Two shallow soil samples were also analyzed for VOCs, SVOCs, and metals (BH-G and BH-Q). Four deep sandy zone soil samples were also submitted for analysis of VOC and TPH.

The results of analysis of the soil samples confirmed organic chemical presence in both the shallow and deep soils in the southeast

part of the Site. These installations also defined the extent of elevated chemical presence as being limited to the ash-filled area. Analysis of overburden groundwater samples from the southeast part of the Site indicated contaminants were present at the eastern property line and may have migrated off the Site into the adjacent off-Site parcel.

During the RI, this off-Site parcel was investigated for the presence of contamination. Additional soil samples were collected from various areas in the southern part of the Site, including BH-6-93 and MW-5A, adjacent to the residences on the south property line of the Site, at the MW-20 and MW-21 locations, and at the northern end of the area between the main and storage buildings.

Organic Chemical Compounds - Southern Area

In the shallow soil in the southern part of the Site, 14 volatile organic chemicals were detected at the concentrations shown in Table 6.6. Soil cleanup objectives were exceeded for six of these compounds: vinyl chloride at MW-4 (840J µg/kg); acetone at MW-4 (1800JB µg/kg); toluene at MW-4 (5100 µg/kg); 1,2-DCE at MW-4 (460J µg/kg), BH-G (9100J µg/kg), and at BH-Q (1400J µg/kg); TCE at BH-G (320,000 µg/kg); and xylenes at BH-G (29,000J mg/kg), and BH-Q (24,000 µg/kg).

Analysis of two shallow soil samples collected during the RI at MW-5A and BH-6-93, near the residences, showed low concentrations of acetone (73J µg/kg) and 2-butanone (2J µg/kg) at BH-6-93, and acetone at MW-5A (14J µg/kg).

Seventeen SVOCs were detected in shallow soil samples from the southern area. The compounds detected and their reported concentrations are shown in Table 6.6. At the BH-G location, 2-methylphenol (570 µg/kg) exceeded the soil cleanup objective (100 µg/kg).

In the deeper sandy zone soil samples submitted for analyses, 12 VOC compounds were detected at the concentrations shown in Table 6.8. Of these 12 compounds, three exceeded soil cleanup objectives.

TCE was detected in the sandy zone soil in the vicinity of MW-8, MW-11, and MW-12 at concentrations of 410 µg/kg (at MW-8) to 18,000 µg/kg (at MW-12). Higher levels of TCE were detected in soil from BH-S (deep) (2,000,000 µg/kg) and MW-11 (12.0 to 12.6 feet) (570,000 µg/kg), where NAPL was present in the soil. Additionally, high levels of total 1,2-DCE (up to 37,000J µg/kg) and total xylenes (up to 64,000J µg/kg) were detected in this area. Away from the MW-4 area, the chemistry levels decline rapidly, reaching non-detect levels within the distance of 150 feet. The locations where levels of elevated soil chemistry were detected are all under asphalt pavement (except at MW-6/6A), and coincide with the ash-filled low area in the southeast corner of the Site. The area along the south property line is not filled and exhibits low levels (e.g, less than 75 µg/kg total VOCs) of Site related contaminants in MW-5A and BH-6-93 soil samples. The historical photo on Figure 2.3 shows ball fields in the area of the Site closest to the residential area.

TPH and Metals Presence

In shallow zone soils, concentrations of calcium, cadmium, chromium, magnesium, nickel, and zinc exceeded TAGM 4046 and NY soil background levels. The detected concentrations of chromium and nickel fall within the published US soil concentration range. Calcium and magnesium are naturally occurring soil elements. Cadmium was above the US soil background concentration range (up to 1.1 mg/kg) at MW-4 (2.5 mg/kg), MW-5A (1.5 mg/kg), and BH-6-93 (1.9 mg/kg). Zinc was above the US soil background concentration range (up to 300 mg/kg) at MW-4 (445 mg/kg).

TPH was present at levels ranging from not detected (MW-5A and BH-6-93) to 60,900 mg/kg (MW-4) as shown in Table 6.7. All locations from which shallow soil samples were collected are located under asphalt pavement. Results of Petroleum Product Scans (New York State Department of Health [NYSDOH] Method 310.13) from the area exhibiting elevated TPH shows the presence of fuel oil at 180J to 55,000 mg/kg. This data is presented in the Analytical Database in Appendix A in Table A.2.

In the sandy zone soils from the southern area of the Site, metals were analyzed on samples collected at BH-5-93, BH-6-93, and MW-5A. The analytical results show calcium and magnesium at concentrations in excess of soil cleanup objectives, as shown in Table 6.9. Calcium and magnesium are naturally occurring soil elements.

Summary of Soil Conditions - Southern Area

Figure 2.3, a historical photograph circa 1950, shows the low area being filled. It also shows established ball fields to the south of the building adjacent to where the residences along the south property line are today, and a fence along the east property line, indicating encroachment onto the Off-Site Parcel did not occur and no wastes were deposited off the property.

Shallow Soil

The shallow soils from the southeast part of the area, which correlates well with the area of ash placement (as shown on Figures 2.3 and 6.1), show concentrations of organic compounds, cadmium and zinc, in excess of soil cleanup objectives. This area runs west to east from a point somewhere between MW-21 and MW-6A to the eastern property line. The north to south extent is from the TB-7/BH-8-94 area, where TPH was detected, to MW-9. The area of contamination corresponds with the areas in which the ash was placed in the southeast corner. The areal extent of higher chemical concentrations in the soil does not extend beyond the fill areas. The primary contaminants are 1,2-DCE, TCE, and xylenes. TCE and xylene were used on-Site in degreasing and painting operations. The 1,2-DCE is a degradation by-product of TCE. These compounds are present in concentrations high enough to present a potential for adverse impact to the environment. The overall potential for human exposure is limited due to the presence of an asphalt or vegetative cover over the areas of highest chemistry, which would eliminate incidental contact with contaminated soils. The soils of this area have been evaluated in the BRA because a potential exposure pathway could exist if the asphalt cover were disturbed (by excavation or other invasive activities).

Sandy Zone

The deeper sandy zone soils in the southeast part of the southern area contain elevated organic contaminants in the part of the Site underlying the ash-filled area. TCE, 1,2-DCE, and xylenes exceed soil cleanup objectives. The extent of soil contamination in this deeper sandy zone is limited to the area between MW-6/6A to MW-10 and from a point between MW-21 and MW-12 northward to MW-7. The areas of elevated chemistry are well defined and chemistry levels rapidly decline outside this area.

Along the south edge of the southern area, closest to the adjoining residences, no organic compounds were detected in the BH-6-93 (8.0 to 11.0 foot) sample. The MW-5A (8.0 to 11.8 foot) sample showed acetone (5J µg/kg) and carbon disulfide (1J mg/kg) to be present, but both at estimated concentrations below the detection limit. The low MW-21 soil chemistry (120 µg/kg) and the non-detect results at the MW-20 location show these locations are outside the westward limit of contamination. Northward, the contamination in the deep soils is present to the BH-8-94, BH-10-94, and MW-19 area. To the east, the extent of elevated soil chemistry ends at the property line. The off-Site shallow and deep subsurface soil samples contain no organic contaminants in excess of soil cleanup objectives.

Additionally, although not investigated through collection and analysis of soil samples, the Lake sediments directly underlying contaminated fill areas or above contaminated sandy zone soils could also be assumed to be contaminated.

The levels of contamination present in the MW-4 area are high enough to present a potential threat to the environment or for unacceptable human exposure. However, no known route of exposure exists, mitigating any potential health impacts. However, the potential for health effects from exposure to the shallow and deep soils was evaluated as part of the BRA for the Site.

The extent of soil contamination in the deep sandy zone must also be considered in combination with the overburden groundwater at

the Site. The extent of overburden groundwater contamination extends beyond the area described above toward the southeast, as discussed in Section 6.2.

6.1.4 Eastern Off-Site Parcel

The area referred to as the Eastern Off-Site Parcel is a six acre property owned by the St. Johns Cemetery Association. This area is located immediately east of the southern part of the Site and was at one time intended as a northward extension of Preston Road from Rowan Road to Sugar Road. A gravel road base and sanitary and storm sewers were installed, however, the roadway was never completed.

This area was investigated during the RI because data from an earlier program (1992 Site Investigation) indicated contaminants were present at the eastern property line. Seven shallow boreholes, four overburden wells, and two bedrock wells were installed on the Off-Site Parcel. Three boreholes were also installed adjacent to the off-Site sewers. One surface soil and one surface water sample were also collected for chemical analysis. Six shallow soil samples and four deep soil samples were collected from the borehole and well installations for analyses.

6.1.4.1 Organic Compound Presence

In the shallow soils, 12 VOCs and two SVOCs were detected at the reported concentrations shown in Table 6.10. None of these compounds were detected at concentrations exceeding soil cleanup objectives.

In the deep soil zone underlying the Off-Site Parcel, six organic compounds were detected at low levels (e.g., less than 10 µg/kg total VOCs), all of which were estimated due to being below the method detection limits and all of which are below soil cleanup objectives. These compounds and their reported concentrations are presented in Table 6.12.

6.1.4.2 Metals and TPH Presence

In the shallow soil, cadmium, calcium, magnesium, mercury, nickel, and zinc were detected at concentrations exceeding TAGM 4046 and NY soil background levels. The levels of mercury, nickel, and zinc are within published US soil background concentration ranges. Calcium and magnesium are naturally occurring soil elements. Cadmium was detected at concentrations above the highest US soil background concentration range (1.1 mg/kg) at BH-2-93 (2.0 mg/kg), MW-13 (2.0 mg/kg), and MW-14 (2.9 mg/kg).

In the deeper sandy soil zone, calcium, magnesium, and zinc were detected at levels exceeding TAGM 4046 and NY soil background concentrations. The calcium and magnesium are naturally occurring soil elements. The detected concentrations of zinc are within the US soil background concentration ranges.

6.1.4.3 Summary of Soil Conditions - Off-Site Parcel

The shallow and deep sandy zone soils on the Off-Site Parcel exhibit only very low levels of organic and inorganic residual contamination, well below the TAGM 4046 soil cleanup objectives.

The largest number of detected compounds and the highest reported concentration of these compounds from the off-Site area (545 µg/kg total VOCs) were from the shallow sample collected at BH-3-93. This location is closest to the on-Site area near MW-4/MW-8/MW-12, which exhibits elevated contaminant levels. The extent of contamination at BH-3-93 is limited, as exhibited by the sample collected at BH-3C-93 (83 µg/kg total VOCs) located 17 feet east of BH-3-93. Additionally, BH-2-93 (40 feet north of BH-3-93) showed only low levels of contaminants (13 µg/kg total VOCs), and screening of the BH-7-93 sample showed no visible contamination and no PID readings above background were recorded.

The shallow soil sample collected from BH-1-93, located south of the storage building, also exhibited low levels of residual contamination (215 µg/kg total volatile organics) and metals. The adjacent surface soil sample (Sed-1) confirmed the presence of contaminants at this location. The source of this residual contamination is not known, but is suspected to be migration from on-Site contaminated areas. It is hypothesized that runoff from the ash filled area prior to paving, or water movement through the fill zone, carried residual contaminants to the BH-1-93 and Sed-1 area. The presence of a fence along the east property line, as shown on Figure 2.3, indicates off-Site placement of fill material was unlikely.

6.1.4.4 West Side Dry Well Area

The west side dry well, located west of the Main Building, north of the building entrance, was the receiver for floor drains for the former paint storage room in the northwest part of the Main Building. This dry well was constructed by digging a 2 ft. x 2 ft. x 4 ft. deep hole, filling it with stones and covering it with topsoil.

One borehole (BH-WDW2-93) was completed to 4.0 feet BGS in native lake sediment soils approximately one foot west of the dry well location. Soils removed were screened using a PID. No visible or other signs of contaminants were observed (e.g., discoloration). A PID reading of up to 1.0 ppm was observed at the 1.0 to 1.5 foot interval; no other PID readings were recorded above background levels. A second borehole (BH-WDW1-93) was completed directly above the dry well to 0.9 feet BGS, where fine to large gravel was encountered. A soil sample was collected from finer material directly above and mixed in with the stones from BH-WDW1-93 for TCL VOCs, TAL metals, and TPH. No VOCs were detected in the sample. Beryllium, calcium, copper, magnesium, and zinc exceeded TAGM 4046 and NY soil background concentration ranges. The beryllium, copper, and zinc were detected within the range of US soil background concentration ranges. Calcium and magnesium are naturally occurring soil elements. No TPH was detected at this location. Analytical results for this sample are contained in the Appendix A analytical database.

6.2 GROUNDWATER

Samples of overburden and bedrock groundwater were collected from existing wells and from wells installed during the RI. Three rounds of groundwater samples were collected from various wells as described in Section 4.4. During the sampling conducted as part of the RI, the NYSDEC also collected split samples from select wells during each of the three sample rounds.

The data from the analyses of the above samples and historical groundwater data have been used to characterize the nature and extent of groundwater contamination at the Site. A complete groundwater analytical database has been compiled and is presented in Appendix A.

As discussed in Section 6.1, there are two source areas at the Site; one in the vicinity of the east side dry well (eastern area) and one in the southeast portion of the Site (southern area). The presence of source areas has impacted both overburden and bedrock groundwater quality in the immediate vicinity of each source area. The following subsections present detailed discussions of the presence of chemicals in both the Site overburden and bedrock groundwater.

6.2.1 Overburden Groundwater

6.2.1.1 Eastern Area

Overburden monitoring wells MW-1, MW-15, MW-16, and MW-18 are located within the eastern area of the Site. Each of these wells were sampled at least once during the three groundwater sampling rounds. The analytical results show that the overburden groundwater in the vicinity of the east side dry well has been impacted by the presence of chemicals in the overlying soils of the source area. Elevated chemical presence was observed

in the immediate vicinity of monitoring well MW-16. A discussion of the chemicals observed is presented below.

Organic Chemical Compounds

The majority of chemicals detected in the overburden groundwater in the eastern area of the Site were organic chemicals, primarily VOCs. A summary of detected volatile and SVOCs is presented in Table 6.14. Also presented in Table 6.14 are the New York State Standards, Criteria and Guidelines (NYS SCGs) for Class GA groundwaters for the detected compounds.

The chemicals present in the overburden groundwater in the eastern area of the Site fall into three main chemical groups:

i) chlorinated ethenes;
ii) chlorinated ethanes; and
iii) benzene, toluene, ethylbenzene, and xylenes (BTEX).

As shown in Table 6.14, the analytical results for monitoring well MW-16 indicated that the primary VOCs detected above the NYS SCGs were chlorinated ethene compounds. These include: 1,1-DCE (240JD µg/L to 630JD µg/L), total 1,2-DCE (3,900D µg/L to 8,200D µg/L), TCE (2,100D µg/L to 6,800D µg/L), and vinyl chloride (75J µg/L to not detected at 500 µg/L). The most frequently detected compounds and those consistently at the highest concentrations were total 1,2-DCE and TCE.

Other VOCs detected in the overburden groundwater at MW-16 include: 1,1,1-TCA (77J µg/L to 87J µg/L), 1,1-DCA (3,000D µg/L to 6,500 µg/L), toluene (160JD µg/L to 1,100JD µg/L), ethylbenzene (620D µg/L to 5,200 µg/L), total xylene (1,300D µg/L to 5,200 µg/L), and methylene chloride (9J µg/L).

The BTEX compounds are grouped together as they are commonly associated with petroleum products.

The plumes of each of the three chemical groups within the overburden groundwater beneath the eastern area of the Site are presented on Figures 6.4, 6.5, and 6.6, respectively. As shown on these figures, the chemical plumes in the eastern area are located in the immediate vicinity of MW-16 as indicated by the low chemical concentrations (e.g., below NYS SCGs) in adjacent monitoring wells MW-1, MW-15, and MW-18, which are located within 300 feet of MW-16.

Semi-volatile compounds were not detected in the eastern area of the Site above NYS SCGs as indicated by the analytical results for MW-15, MW-16, and MW-18. The only SVOC detected above NYS SCGs was naphthalene in MW-16 at 42 µg/L (NYS SCG of 10 µg/L). Four other SVOCs were detected at low levels in MW-16; however, NYS SCGs do not exist for these compounds. These compounds were: 2-methylphenol (4J µg/L), 4-methylphenol (5J µg/L), 2,4-methylphenol (26 µg/L), and 4-chloro-3-methylphenol (19J µg/L). The concentrations for 2-methylphenol, 4-methylphenol and 4-chloro-3-methylphenol are estimated and below method detection levels.

Metals and Inorganics

Metals detected within the overburden groundwater in the eastern area of the Site are shown in Table 6.15. The NYS SCGs for these compounds are also provided in Table 6.15. The presence of metals in the eastern area of the Site was determined from the analytical results for MW-16.

The metals detected above NYS SCGs were:

Parameter	*Concentration (µg/L)*	*NYS SCG (µg/L)*
Chromium	83	50
Iron	21,600	300
Magnesium	55,70	35,000
Manganese	599	300
Sodium	361,000	20,000

The reported concentrations of elevated iron, magnesium, manganese, and sodium are attributable to the overburden groundwater formation and not Site activities as these are naturally occurring elements in soils and bedrock. The source of chromium could be attributed to plating operations conducted at the Site.

Other metals detected for which NYS SCGs do not exist include:

Parameter	*Concentration (µg/L)*
Aluminum	9,250
Calcium	168,000
Cobalt	10
Nickel	175
Potassium	6,850
Vanadium	12

The metals detected in the overburden groundwater beneath the eastern area of the Site are consistent with the concentrations observed in other overburden areas of the Site as indicated by the analytical results for MW-13 and MW-14 presented in Table 6.15.

TPHs were also analyzed for at MW-16 and MW-1 within the eastern area of the Site. As shown in Table 6.15, TPHs were not detected above 2.5 mg/L.

6.2.1.2 Southern Area

Overburden groundwater in the southeast corner of the southern area of the Site has been impacted by the presence of chemicals in the overlying soils of the source area identified in Section 6.1.3. Elevated chemical presence was observed in the vicinity of monitoring wells MW-4, MW-6, MW-7, MW-8, MW-10, MW-11, and MW-12. The elevated chemical presence in the overburden groundwater in this area is also attributable to the

presence of LNAPLs observed in MW-8 and MW-11. A discussion of the chemicals observed is presented below.

Organic Chemical Compounds

As with the eastern area of the Site, the primary compounds detected in the overburden groundwater beneath the southeastern part of the southern area are VOCs. A summary of detected volatile and SVOCs is presented in Table 6.14. Also presented in Table 6.14 are the NYS SCGs for the detected compounds.

As shown in Table 6.14, the primary VOCs detected above NYS SCGs were chlorinated ethene compounds consisting of 1,1-DCE, total 1,2-DCE, TCE, tetrachloroethene, and vinyl chloride. The most frequently detected compounds and those consistently at the highest concentrations were total 1,2-DCE and TCE. Also detected above NYS SCGs at several wells were all the BTEX compounds. The only other VOC detected above NYS SCGs was methylene chloride at MW-11 (120J µg/L). Unlike the eastern area, chlorinated ethanes were not detected in the overburden groundwater beneath the southern area of the Site.

The plumes for each of the chlorinated ethene compounds and BTEX compounds are presented on Figures 6.4 and 6.6, respectively.

The chlorinated ethene plume is centered around monitoring wells MW-4, MW-8, MW-10, MW-11, and MW-12 as shown on Figure 6.4. The total chlorinated ethene concentrations in these wells range between 51,160 µg/L in MW-10 to 768,000 µg/L in MW-11. The chlorinated ethene plume extends in a southeasterly direction from the southeast corner of the Main Building toward monitoring well MW-22. The eastern edge of the plume is defined by monitoring wells MW-23 and MW-13 where chlorinated ethenes were not detected above NYS SCGs. The western edge of the plume is defined by monitoring wells MW-5, MW-21, MW-3, and MW-20 where the total chlorinated ethene concentrations ranged from not detected to a maximum of 6 µg/L. The northern edge of the plume extends slightly

north of MW-19 and is defined by MW-15 and MW-18 where chlorinated ethenes were not detected above NYS SCGs.

As discussed previously, LNAPL was observed in MW-8 and MW-11. A sample of the LNAPL present in MW-11 was collected and analyzed for VOCs. The LNAPL in MW-11 is an oily matrix containing vinyl chloride (1,400,000 µg/L), total 1,2-DCE (22,000,000 µg/L), TCE (330,000,000 µg/L), tetrachloroethene (160,000J µg/L), ethylbenzene (920,000J µg/L), and total xylene (6,600,000 µg/L). Given the high concentrations of chlorinated ethenes in the LNAPL in MW-11, the elevated chlorinated ethene concentrations in the center of the plume are attributable to the presence of LNAPL.

The highest chlorinated ethene concentrations are limited to the center of the plume in the immediate vicinity of LNAPL presence and the source area. Outside of this area the chlorinated ethene concentrations reduce significantly over a short distance. This is indicated by the concentration reduction of several orders of magnitude observed between monitoring wells MW-4 (318,066 µg/L) and MW-9 (205 µg/L). Monitoring well MW-9 is located approximately 50 feet south of MW-4.

As shown on Figure 6.6, the BTEX plume in the southeastern area of the Site is also located in the vicinity of monitoring wells MW-4, MW-7, MW-8, MW-10, MW-11, and MW-12. The total BTEX plume corresponds to the center of the total chlorinated ethene plume in the southeastern area. The BTEX concentrations observed in these wells ranged between 84 µg/L in MW-4 to 21,138 µg/L in MW-8. The boundary of the BTEX plume is defined on the south, east, north, and west by monitoring wells MW-9 (4 µg/L), MW-13 (not detected), MW-19 (1 µg/L), and MW-6 (7 µg/L).

Results of a petroleum products analyses on groundwater from MW-10 showed the presence of fuel oils and lubricating oils in this area. The elevated BTEX compounds may be the results of fuel oil compounds which could have been disposed in the ash-filled area. Additionally, ethylbenzene (920,000J µg/L) and total xylenes (6,600,000 µg/L) were found to

be primary constituents of the LNAPL present at MW-11. The elevated BTEX compounds present in this area may also be related to LNAPL presence.

SVOCs were analyzed for during the RI at MW-13 and MW-14 within the southeastern part of the Site. SVOCs were not detected in these wells during the RI. SVOCs were also historically analyzed in monitoring well MW-11 (see Appendix A). Only five SVOCs were detected. These compounds were naphthalene (24J µg/L), 2,4-dimethylphenol (38J µg/L), 2-methylphenol (65 µg/L), 4-methylphenol (550 µg/L), and phenol (980 µg/L). The concentrations of naphthalene and 2,4-dimethylphenol are estimated and below the method detection limits.

Metals and Inorganics

Metals were analyzed at MW-13 and MW-14 within the southeastern area of the Site during the RI. Metals detected within the overburden groundwater in the southeastern area of the Site are shown in Table 6.15. The NYS SCGs for these compounds are also provided in Table 6.15.

The metals detected above NYS SCGs were as follows:

Parameter	*Concentration Range (µg/L)*	*NYS SCG (µg/L)*
Chromium	53 to 92	50
Iron	12,700 to 60,900J	300
Lead	ND(10.4) to 112J	25
Magnesium	81,900 to 290,000	35,000
Manganese	254 to 1,850	300
Sodium	16,200 to 78,800	20,000

The reported concentrations of iron, magnesium, manganese, and sodium are attributable to the overburden groundwater formation at the Site as the metals are naturally occurring elements in soils and bedrock. The source of chromium could be attributed to plating operations conducted at the Site. The source of the lead is unknown.

Other metals detected for which NYS SCGs do not exist include the following:

Parameter	*Concentration Range (µg/L)*
Aluminum	6,970 to 39,800J
Calcium	186,000 to 584,000
Cobalt	8 to 24
Nickel	70 to 138
Potassium	3,970 to 13,800
Vanadium	9.0B to 62

Metals were also historically analyzed at monitoring well MW-11. The results for this well are presented in Appendix A and indicate that the metal concentrations detected at MW-11 are the same order of magnitude as those detected at MW-13 and MW-14.

The metals detected in the overburden groundwater beneath the southeastern area of the plant are consistent with the concentrations observed in other areas of the Site as indicated by the analytical results for MW-16 (see Table 6.15).

TPHs were analyzed for at all wells within the southeastern area of the Site. As shown in Table 6.15, TPHs were detected only at MW-8 (67.4 mg/L), MW-10 (3.2 mg/L), MW-11 (192 mg/L), and MW-13 (3.5 mg/L).

6.2.1.3 Summary

The overburden groundwater analyses conducted during the RI in combination with historical data have identified two distinct areas of the Site where overburden groundwater has been impacted. The overburden groundwater in the eastern area of the Site has been impacted by chlorinated ethenes and to a lesser extent by chlorinated ethanes and BTEX compounds. The overburden groundwater in the southeastern part of the southern area of the Site has also been impacted by chlorinated ethenes and to

a lesser extent by BTEX compounds. As shown on Figures 6.4, 6,5, and 6.6, the plumes in these areas have had a minimal impact on off-Site overburden groundwater quality.

Metals have been detected in the overburden groundwater at the Site. These metals have been detected and consistently measured at the same concentrations across the Site. This indicates that specific source areas contributing to metal concentrations in the overburden groundwater at the Site do not exist. This is further supported by the fact that the VOC plumes at the Site (which are more mobile than metals) are limited to the vicinity of known source areas. Therefore, migration of metals in the groundwater from source areas is unlikely.

6.2.2 Bedrock Groundwater

6.2.2.1 Eastern Area

Bedrock groundwater in the vicinity of the eastern dry well has been impacted by the presence of chemicals in the overlying overburden groundwater flow regime. Elevated chemical presence was observed in the immediate vicinity of monitoring well MW-16A. A discussion of the chemicals observed is presented below.

Organic Chemical Compounds

Organic chemicals, primarily VOCs, were detected in the bedrock groundwater in the eastern area of the Site. A summary of detected VOCs and SVOCs is presented in Table 6.16. Also presented in Table 6.16 are the NYS SCGs for the compounds detected in the bedrock groundwater.

As shown in Table 6.16, the analytical results for monitoring well MW-16A indicate that the VOCs detected above NYS SCGs were primarily chlorinated ethene compounds. These include 1,1-DCE (1,200JD µg/L), total 1,2-DCE (34,000D µg/L), TCE (88,000D µg/L), tetrachloroethene (33 µg/L), and vinyl chloride (4,700JD µg/L).

Other VOCs detected above NYS SCGs in the bedrock groundwater at MW-16A include chlorinated ethane compounds (total concentration 114,573 µg/L), BTEX compounds (total concentration 20,718 µg/L), methylene chloride (18 µg/L), and chloroform (8J µg/L). Detected VOCs for which NYS SCGs do not exist include carbon disulfide (75 µg/L) and 4-methyl-2-pentanone (91 µg/L). It should be noted that although chloroform, carbon disulfide, and 4-methyl-2-pentanone were detected in low concentrations in soil samples from the Site, these compounds were not detected in the overburden groundwater. Therefore, their source in the bedrock groundwater is unknown.

As with the overburden groundwater in the eastern area of the Site, there are three main groups of chemicals present in the bedrock groundwater: chlorinated ethenes, chlorinated ethanes, and BTEX compounds. The plumes of each of these chemical groups are presented on Figures 6.7, 6.8, and 6.9, respectively. As shown on these figures, the chemical plumes in the bedrock groundwater beneath the eastern area of the Site are primarily in the immediate area of MW-16A. This is consistent with the overburden groundwater plumes in the eastern area of the Site.

Chlorinated ethenes were also detected in monitoring wells MW-15A and MW-17A and in the East well (top) and East well (bottom) sample. Chlorinated ethanes were also detected in MW-15A and the East well (bottom) samples. The bedrock well groundwater level measurements for April, June, and August 1994 show that MW-15A and the East well are located downgradient or on the same groundwater gradient as MW-16A and the chlorinated compounds at MW-15A and the East well appear related to the eastern source area. MW-17A is located upgradient of the eastern source area, and the source of the chlorinated ethenes in this well are unknown.

SVOCs were only analyzed for at monitoring well MW-15A and the east well in the eastern area. As shown in Table 6.16, SVOCs were not detected in the bedrock groundwater at the east well and MW-15A. The east well is a 180 foot deep bedrock well which does not

discretely monitor the upper bedrock zone, but is open throughout the entire bedrock interval.

Metals and Inorganics

Metals detected within the bedrock groundwater in the eastern area of the Site are shown in Table 6.17. The NYS SCGs for these compounds are also provided in Table 6.17. Metals in the bedrock groundwater beneath the eastern area of the Site were analyzed for at the east well and MW-15A.

The metals detected above NYS SCGs include:

Parameter	*Concentration Range (µg/L)*	*NYS SCG (µg/L)*
Iron	2,610 to 5,620	300
Magnesium	32,300 to 60,800	35,000
Sodium	133,000 to 154,000	20,000

The elevated concentrations of these metals are attributable to the bedrock groundwater formation and not Site activities, as these metals are naturally occurring elements in soil and bedrock. This is further supported by the fact that the metals detected in the bedrock groundwater beneath the eastern area of the Site are consistent with the concentrations observed in other areas of the Site, as indicated by the analytical results for MW-2A, MW-5A, MW-6A, MW-13A, and MW-14A presented in Table 6.17.

Other metals detected in the bedrock groundwater for which NYS SCGs do not exist include:

Parameter	*Concentration Range (µg/L)*
Aluminum	ND (49.7) to 450
Calcium	80,500 to 135,000
Potassium	1,630 to 3,130

TPHs were also analyzed for at MW-2A, MW-5A, MW-6A, MW-13A, MW-14A, and MW-15A. As shown in Table 6.17, TPHs were not detected in the bedrock groundwater in any of these wells.

6.2.2.2 Southeast Area

Bedrock groundwater samples were collected from monitoring wells MW-2A, MW-5A, MW-6A, MW-13A, and MW-14A in the southern portion of the Site. Bedrock groundwater in the southeast corner of the Site has been impacted by the presence of chemicals in the overlying overburden groundwater flow regime. Elevated chemical presence was observed in the vicinity of monitoring wells MW-6A, MW-13A, and MW-14A. The MW-2A and MW-5A wells exhibited low concentrations of chemicals, indicating the extent of contamination is localized and corresponds to the area of overlying overburden contamination. A discussion of the chemicals observed is presented below.

Organic Chemical Compounds

As with the eastern area of the Site, the primary compounds detected in the bedrock groundwater beneath the southeastern area of the Site are VOCs. A summary of detected VOCs and SVOCs is presented in Table 6.16. Also presented in Table 6.16 are the NYS SCGs for the detected compounds.

As shown in Table 6.16, the primary VOCs detected above NYS SCGs were chlorinated ethene compounds. The most frequently detected compounds in the southeastern area were total 1,2-DCE and vinyl

chloride. Also detected above NYS SCGs were chlorinated ethanes (up to 18 µg/L at MW-6A) and BTEX compounds.

The chlorinated ethene and BTEX compound plumes are consistent with and located directly below the plumes detected in the overburden groundwater beneath the southeastern area of the Site. The chlorinated ethanes detected in the bedrock groundwater at MW-6A were not detected in the overburden groundwater at MW-6.

The plumes for each of the chlorinated ethenes, chlorinated ethanes and BTEX compounds are presented on Figures 6.7, 6.8, and 6.9, respectively.

As shown on Figure 6.7, the chlorinated ethene plume extends in a southeasterly direction from MW-6A near the southeast corner of the plant building towards MW-13A and MW-14A. The highest chlorinated ethene concentrations were observed at MW-6A and ranged between 88,300 µg/L to 500,230 µg/L. At MW-6A, total 1,2-DCE was detected at concentrations of up to 390,000D µg/L and vinyl chloride was detected at concentrations of up to 110,000D µg/L. The chlorinated ethene concentrations at MW-13A and MW-14A are several orders of magnitude lower than those observed at MW-6A. The concentrations at MW-13A and MW-14A ranged between 20 µg/L and 89 µg/L.

As shown on Figure 6.8, the chlorinated ethanes observed at MW-6A are an isolated occurrence in the southeastern area. The chlorinated ethanes detected were 1,1,1-TCA (18J µg/L) and 1,1-dichloroethane (6J µg/L to 14J µg/L). These concentrations are estimated and below method detection levels.

The BTEX plume shown on Figure 6.9 is also an isolated occurrence. BTEX compounds were detected above NYS SCGs only at MW-6A. The maximum concentration of a BTEX compound detected at MW-6A was total xylenes at a concentration of 7,000JD µg/L.

SVOCs were not detected above NYS SCGs within the bedrock groundwater beneath the southeast area of the Site. Three SVOCs were detected at MW-6A for which NYS SCGs do not exist. These compounds were 2-methylphenol (20 µg/L), 4-methylphenol (62 µg/L), and 2,4-dimethylphenol (11 µg/L).

Metals and Inorganics

Metals detected within bedrock groundwater beneath the southeastern area of the Site are shown in Table 6.17. The NYS SCGs for these compounds are also provided in Table 6.17. Metals in the bedrock groundwater beneath the southeastern area of the Site were analyzed for at MW-5A, MW-6A, MW-13A, and MW-14A.

The metals detected above NYS SCGs in these wells were as follows:

Parameter	*Concentration Range (µg/L)*	*NYS SCG (µg/L)*
Iron	3,750 to 13,800	300
Magnesium	68,100 to 147,000	35,000
Sodium	10,400 to 99,200	20,000

The reported concentrations of iron, magnesium, and sodium are attributable to the bedrock groundwater formation and not Site activities, as these metals are naturally occurring elements in soil and bedrock. This is supported by the fact that the metals detected in the bedrock groundwater beneath the southeastern area of the Site are consistent with the concentrations observed in other areas of the Site, as indicated by the analytical results for MW-2A and MW-15A presented in Table 6.17.

Other metals detected for which NYS SCGs do not exist include the following:

Parameter	*Concentration Range (µg/L)*
Aluminum	231 to 8,810
Calcium	134,000 to 436,000
Cobalt	ND3.2 to 4
Nickel	6.0 to 18
Potassium	2,150 to 10,500
Vanadium	ND2.0 to 7.0

TPHs were analyzed for at MW-2A, MW-5A, MW-6A, MW-13A, and MW-14A. As shown in Table 6.17, TPHs were not detected at these wells above 2.5 mg/L.

6.2.2.3 Summary

The bedrock groundwater analyses conducted during the RI have identified two distinct areas of the Site where bedrock groundwater has been impacted. These areas corresponded spatially and chemically with the chemical plumes observed in the overburden groundwater.

The bedrock groundwater in the eastern area of the Site has been impacted primarily by chlorinated ethenes and chlorinated ethanes and to a lesser extent, BTEX compounds. The bedrock groundwater in the southeastern area of the Site has been impacted primarily by chlorinated ethenes and to a lesser extent, chlorinated ethanes and BTEX compounds.

As shown on Figures 6.7, 6.8, and 6.9, the southwestern plume has had a minor impact on off-Site bedrock groundwater quality as low levels of VOCs were detected in MW-14A.

Metals have been detected in the bedrock groundwater at the Site. These metals have been detected and consistently observed to be within the same order of magnitude as metal concentrations across the Site, both upgradient and downgradient. The metals detected which exceed NYS SCGs are also naturally present within bedrock groundwater formations.

6.3 SURFACE WATER AND SEDIMENT

On-Site surface water is controlled through the use of grading and catchbasins, which minimize the amount of surface water runoff from the Site to off-Site areas. Further, the majority of the Site (65 percent or 15 acres) is covered by pavement, concrete, or buildings, which prevents contact of runoff with contaminated soil. On the off-Site area, low areas exhibit seasonal standing water. Heavy rains produce surface water flow across this parcel in a north to south direction. The majority of runoff channels into two stormwater receivers located just inside the fence north of Rowan Road at Preston Road. These receivers tie into the Town of Cheektowaga stormwater sewer system.

In November 1993, one sediment sample and one surface water sample were collected from the off-Site area at the location identified as Sed-1 and SW-1 on Plan 2. These samples were analyzed for VOCs, SVOCs, metals, and TPH. The off-Site areas which have seasonal standing water do not sustain benthic or aquatic organisms. Thus, the levels of chemistry in the SED-1 sample were compared to soil cleanup objectives in TAGM 4046, which are human health based, rather than to sediment criteria in the NYSDEC Division of Fish and Wildlife document, "Technical Guidance for Screening Contaminated Sediments", November 22, 1993. The NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values, October 1993, will be used to evaluate the extent of contaminants in the surface water sample.

Organic Chemical Compounds

Acetone at 5J µg/kg and bis(2-ethylhexyl)phthalate at 1J µg/kg were detected in the surface water sample from the off-Site area. Both compounds were estimated at below method detection limits. The acetone has no guidance value or standard for surface water. The

bis(2-ethylhexyl)phthalate level barely exceeds the Class C surface water SCG of 0.6 µg/L.

TCE was detected in the Sed-1 surface soil sample at 8J µg/kg, which is below the method detection level and the soil cleanup objective.

Six SVOCs were detected in the sample from Sed-1 in excess of soil cleanup objectives. These compounds are benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, and chrysene. Fourteen additional SVOCs were detected in the surface soil sample. None of these 14 compounds were detected above the soil cleanup objective, and the total concentration of all SVOCs detected was 136,270 µg/kg, which is less than the soil cleanup objective of total SVOCs (less than 500,000 µg/kg).

Bis(2-ethylhexyl)phthalate and benzo(k)fluoranthene were also detected, but the results were qualified as not detected because of associated laboratory blank detection. A complete list of the compounds detected and their reported concentrations appears on Table 6.18.

Metals and TPH

In the surface water sample, aluminum, cadmium, copper, iron, lead, and zinc exceeded surface water quality standards from TOGS 1.1.1. The surface water quality standards for cadmium, chromium, copper, lead, nickel, and zinc were calculated based on the hardness of the water using the formulas in TOGS 1.1.1. These calculations are shown in Table 6.19. TPH was not detected in the surface water.

The concentrations of the metals and TPH reported for the surface water and surface soil samples are shown in Table 6.20.

In the surficial soil sample, arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, and zinc were detected at concentrations above TAGM 4046 and NY soil background concentration

ranges. The barium, chromium, copper, mercury, and nickel are within published US soil background concentration ranges. The remaining four metals exceed the maximum published US soil background concentrations. These metals and their detected concentrations are:

Metals	*Concentration Detected (mg/kg)*	*Soil Cleanup Objective (mg/kg)*
Arsenic	109	7.5
Cadmium	9.8	1.0
Lead	1830	500
Zinc	1500	300

The cadmium and zinc may be attributable to use of these compounds in plating operations on Site. There is no known Site-related source for lead or arsenic as these metals were not used in historic operations at the Site.

Summary of Off-Site Surficial Conditions

Because only trace concentrations of VOCs (at levels below the appropriate standards) were detected in samples collected from off-Site surficial soils or seasonally present surface water, these compounds are not a contaminant of concern in these media.

Six SVOCs were detected in the surficial soil sample at levels exceeding soil cleanup objectives. Fourteen additional SVOCs were also detected at levels below the TAGM 4046 soil cleanup objectives. All the SVOCs are polynuclear aromatic hydrocarbons (PAHs) frequently found in association with coal and coal residues, such as the coal ash which was placed nearby. Only bis(2-ethylhexyl)phthalate was detected in the surface water sample, at an estimated concentration of 1J µg/kg, which is slightly above the Class C surface water quality standard of 0.6 µg/kg, which is an aquatic-based standard, not human-health based standard.

Four metals were detected in the off-Site surface soil samples at levels exceeding US soil background concentration ranges .

Cadmium and zinc may be attributable to on-Site plating operations. There is no known Site-related source for arsenic and lead, however these metals historically were widely used in paints, pigments, agricultural chemicals (pesticides and herbicides), glass products, and many other materials.

The elevated surface soil, PAH, and metals levels appear to be isolated as the levels of these compounds detected in BH-1-93 (85 feet north) and BH-2-93 (25 feet south) are lower than at SED-1.

6.4 AIR PATHWAYS ANALYSIS

An Air Pathways Analysis (APA) was performed and a detailed report prepared for sample locations from the potential air emission source area, which includes the BH-1-93, BH-2-93, BH-3-93, BH-3C-93, and MW-13 area of the Off-Site Parcel. Areas of elevated chemistry which are beneath the existing asphalt surface were not used as potential source areas because this type of cover prevents or greatly reduces the emission of volatile contaminants.

6.4.1 Potential Source Area

The potential source area is an area of approximately 225 feet by 75 feet surrounding the off-Site area borehole and monitoring well locations listed above.

6.4.2 Methodology

As agreed to by Greg Sutton (NYSDEC), the APA was performed using the following Site-related compounds: TCE, 1,2-DCE, ethylbenzene, xylenes, vinyl chloride, toluene, and 1,1,1-TCA.

The APA was performed using the methodologies contained in:

i) USEPA Air/Superfund National Technical Guidance Study Series, "Guideline for Predictive Baseline Emissions Estimation Procedures for Superfund Sites", Interim-Final, USEPA Report No. EPA 450/1-92-002, dated January 1992; and

ii) Draft NYSDEC Air Guide 1, "Guidelines for the Control of Toxic Ambient Air Contaminants", dated 1991.

6.4.3 Results

The results of the APA are summarized in Table 6.21. The complete document, including the basis, calculations, and results is contained in Appendix J. The estimated maximum annual and short-term impact concentrations of the Site related compounds were compared to the NYSDEC AGC and SGC for each compound. The estimated maximum annual and short-term impact concentrations are at least one order of magnitude lower than their respective AGC and SGC standards as summarized in Table 6.2.1.

7.0 CONTAMINANT FATE AND TRANSPORT

7.1 INTRODUCTION

The following section presents a qualitative discussion of the potential pathways of contaminant migration from the Site and the general behavior of the contaminant types. The assessment is based on the data collected during the RI and previous investigations.

7.2 POTENTIAL CONTAMINANT MIGRATION PATHWAYS

Site related contaminants have been detected in the surface soil, shallow soil, sandy zone soil, overburden groundwater, bedrock groundwater, and seasonally present surface water. Therefore, the potential migration pathways which exist at the Site include:

i) atmospheric dispersion of surficial soils;
ii) surface water transport;
iii) overburden groundwater flow;
iv) bedrock groundwater flow; and
v) utility bedding.

Each of these potential migration pathways is discussed on the following pages.

Atmospheric dispersion of chemicals from the Site is restricted to chemicals present in or which migrate to the surface soils. The chemicals may be released to the atmosphere through volatilization and/or by atmospheric entrainment of chemicals absorbed onto particulate matter. Once released, the chemicals may be transported by the wind.

The majority of the Site surface is covered by pavement, buildings, or grass, which minimizes the dispersion of chemicals by volatilization or entrainment. In areas of worn or broken pavement, the soil

tends to be compacted rather than loose. The surface of the off-Site area is largely covered by established vegetation or by vegetative debris (fallen leaves, etc.). Areas of exposed soil are along a limited part of the former roadway road base and are gravelly and compacted.

The data from the air pathway analysis shows the estimated air emissions of Site contaminants is one or more orders of magnitude below the guidance criteria and, therefore, air is not a significant pathway for exposure to VOCs from the Site.

Additionally, the compounds which were present in the surface soil from the off-Site area were SVOCs and metals, which are not highly volatile. Therefore, the primary route of transport of these compounds in surface soils would be by airborne dispersion of soil particles or by surface water transport.

7.2.1 Surface Water Runoff

Surface water runoff or overland flow may carry particulate or dissolved contaminants from the surface soil. Surface water drainage on the Site is largely across paved areas and is controlled from exiting the Site via overland flow through the use of grading and catchbasins to conduct the flow to the Town of Cheektowaga storm sewer system. In a limited area along the east side of the southern area of the Site, surface water runoff can exit the Site onto the off-Site parcel. This occurs in the vicinity of BH-2-93. Overland flow of stormwater across the off-Site parcel is controlled by grading and topography which directs flow toward two stormwater receivers at the south end of the off-site area which are tied into the Town storm sewers.

The Cheektowaga storm sewer system transports the runoff from the Site to the City of Buffalo storm sewer system along Genesee Street. This sewer outfalls into the underground portion of Scajaquada Creek approximately two miles southwest of the Site. Scajaquada Creek in the area south of the Site is classified as a Class C water body, and receives heavy

stormwater discharges from most of northern Cheektowaga, and the northern part of the Town of Clarence and Lancaster.

No sampling of storm event runoff or stormwater was conducted during the RI and there are no permanent surface water bodies on or adjacent to the Site. The one surface water sample collected was from seasonally ponded water in a low area on the off-Site parcel. This pool of water was the only water present on the off-Site parcel at the time of sample collection. Because of the low levels of chemicals (primarily metals) detected in the surface water sample, the effective use of control structures to collect overland stormwater flow from both the on-Site and off-Site areas, and the dilution of the residual chemicals that would occur by the mixture of a low concentration of these chemicals with a relatively large volume of stormwater, this mechanism of transport is not a significant pathway for the migration of contaminants from the Site.

7.2.2 Overburden Groundwater Flow

Site related contaminants are present in the overburden groundwater on the east side of the Main Building and in the southeastern corner of the Site. Contaminated groundwater has not migrated off-Site from the eastern area. It has migrated, to a limited extent, onto the adjacent off-Site parcel from the southeastern area. The limits of off-Site migration of Site-related contaminants in the overburden have been defined through the installation of monitoring wells MW-13, MW-14, MW-22 and MW-23.

A potential migration pathway to the off-Site area exists for shallow perched water through the bedding of the sewer line which cuts diagonally across the southeastern part of the Site. Contaminants have been detected in the bedding of this utility seven feet inside the eastern property line. It is possible that contaminants around the sewer line are the result of the adjacent fill being contaminated, and that the chemicals do not extend off the Site. The plastic construction of this sewer makes infiltration of contaminants into the sewer unlikely. However, utility bedding typically provides a preferential migration pathway as it is a disturbed native soil or

engineered bedding material of higher permeability and the backfill material is often looser than the surrounding soil.

The potential migration pathway of groundwater in the deeper soil is laterally through the silty sand layer. Vertical migration of contaminants from the overburden into the bedrock has occurred. This is most likely to occur where bedrock groundwater elevations are lower than those of the overlying overburden groundwater elevations. There is a 0.5 foot to 11.3 foot difference in groundwater levels between the overburden and bedrock groundwater. Vertical migration occurs through water movement through pore spaces between soil grains. Groundwater movement in bedrock is discussed in Section 6.

The overburden groundwater is not currently used as a source of drinking water near the Site and it is highly unlikely it would be as only minimal water is available at a low yield. No known seeps or discharges of overburden groundwater occur at or near the Site. Therefore no pathway exists for exposure to overburden groundwater and exposure to overburden groundwater would not occur.

7.2.3 Bedrock Groundwater

Site-related contaminants have been released into the bedrock groundwater below the Site in two distinct areas: the eastern portion of the Site with a source area in the vicinity of MW-16A; and in the southeastern portion of the Site from the MW-6A area off-Site to the MW-14A and MW-13A area. The source of the southeastern area contaminants coincides with the ash-filled area in this part of the Site and the high contaminant levels detected in the MW-4, MW-6, MW-7, MW-8, MW-11, and MW-12 area. The areal limits of chloroethenes in the bedrock groundwater in the southwestern part of the Site have not been fully defined in a southeastward direction. However, the highest bedrock groundwater chemistry is confined to the on-Site areas with only low level concentrations (<100 µg/L) detected in the off-Site area. The limits of bedrock groundwater contamination in the eastern part of the Site have been adequately defined to

the north and to the east, and likely continue at very low concentrations into the southern part of the Site. The western limit extends beneath the Main Building, but is not expected to extend far because of the opposing gradient of the bedrock groundwater from the southwest corner of the Site.

The potential migration pathways of groundwater in the bedrock are laterally through horizontal and/or bedding plane fractures in the water-producing intervals and vertically along vertical fractures and joints.

The shallow bedrock groundwater is not presently used as a drinking water supply, however, it has been historically pumped for industrial purposes. The fluctuating water table in the bedrock would make shallow bedrock groundwater production unreliable and the generally low yields of most wells preclude heavy use. However, because there are no restrictions to the use of bedrock groundwater as a drinking water source in the area of the Site, a potential complete exposure pathway exists and bedrock groundwater will therefore be evaluated in the Risk Assessment.

B. RA.

8.0 BASELINE RISK ASSESSMENT

8.1 GENERAL

8.1.1 Overview

The BRA, as presented herein, has been conducted pursuant to the terms and conditions of the Order.

The BRA is intended to characterize potential current and future threats to human health attributable to human exposure to Site-related chemical residuals in soil, surface water and/or groundwater, as appropriate. Information developed during the BRA will be utilized in the development, evaluation and selection of appropriate remedial action alternatives including the "no-action" alternative.

Specific USEPA guidance utilized in the development of the BRA includes:

i) Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part A) (RAGS), EPA/540/1-89/002, December 1989;

ii) Supplemental Guidance, Standard Default Exposure Factors (Supplemental Guidance), OSWER Directive 9285.6-03, March 25, 1991;

iii) EPA Superfund Exposure Assessment Manual (SEAM), EPA/540/1-88/001, OSWER Directive 9285.5-1, April 1988;

iv) EPA Exposure Factors Handbook (EFH), EPA/600/8-89/043, March 1990;

v) EPA Dermal Exposure Assessment: Principles and Applications, EPA/600/8-91/11B, January 1992; and

vi) additional guidance, criteria and reference documents as applicable and as referenced herein.

An ecological evaluation was not warranted at this Site because of the lack of any wildlife habitat on the Site. The Site is occupied by the plant buildings, adjacent paved parking lots, and a lawn area across the west side (front) of the plant building. The eastern off-Site parcel, a small wooded area at the southwest corner of the Site which is part of the adjacent cemetery property, is too small to represent a significant area of wildlife habitat. This area is scheduled for clearing and filling, in preparation for future use as burial plots. However, a biotic survey was conducted covering this area (see Appendix I).

8.1.2 Site Background

Site background and characterization are presented in detail in Section 2.0.

The Site occupies an area of 24 acres and contains three plant buildings; the main building (360,000 ft.^{2}), a metal storage building (3,100 ft.^{2}), a pump house, and an adjoining off-Site parcel of land of approximately six acres owned by St. John's Cemetery was also included in the investigation. The Site and buildings have housed primarily one-type of business, the production of optical devices and scientific instruments, and the area of the Site is comparatively small. Examination of groundwater and surface soil data indicate similar chemical residuals occur over the Site area affected. Therefore, the BRA addresses a single set of chemicals of concern. Because of different exposures expected in different areas around the plant, three separate sectors or units were identified to evaluate soil exposure: Sector A, the undeveloped cemetery property; Sector B, the grassed area in front of and along the sides of the plant; and Sector C, the primarily paved areas to the south and east of the plant. Groundwater will be evaluated on a total Site basis and on the basis of the downgradient perimeter wells.

8.1.3 Scope of the Baseline Risk Assessment

The BRA has been prepared in accordance with the NCP and applicable USEPA guidance.

The BRA utilizes data developed during the RI to estimate potential health risks and hazards related to human exposure to residual chemicals identified as related to the activities at the Site. If applicable, an attempt will be made to differentiate Site-specific chemicals from chemicals which are possibly or more likely from sources other than the Site.

Reported chemical concentrations in the environmental media will change over time due to various transport and degradation processes (i.e., migration, dilution, sorption, dispersion, volatilization, biodegradation, chemical degradation, and photodegradation). These processes and the resultant decrease or increase in concentrations were not considered in conducting the BRA. In addition, various exposure scenarios have been constructed in accordance with applicable guidance. This guidance is admittedly conservative and, as such, will exaggerate stated exposures. Inclusion of the various degradation processes and more realistic exposure scenario assumptions could significantly affect results of the BRA.

The BRA incorporates the following major segments:

i) Identification of Chemicals of Concern (COC) - the presence, distribution, concentration and toxicity of chemicals detected and identified as Site related were evaluated to identify those chemicals which are most likely to pose the majority of the potential health risks;

ii) Exposure Assessment - potential exposure pathways were assessed to determine how and in what media the COCs could reach potential public receptors, the exposure point concentrations, estimated daily intakes for receptors, and the uncertainties related to exposure assessment;

iii) Toxicity Assessment - potential hazards associated with the COCs were identified; and

iv) Risk Characterization - estimates of potential carcinogenic and non-carcinogenic risks were then calculated for each potential exposure pathway on the exposure and toxicity assessments.

Data collection and evaluation are part of the RI process. The BRA process utilizes the information obtained during the RI to generate the exposure assessment. The exposure quantification and toxicity information are then utilized to calculate the theoretical potential for adverse human health effects.

The process applies several theoretical assumptions to determine a numerical expression of the risk to human health. The potentials for both carcinogenic effects and non-carcinogenic effects are evaluated. The health risk assessment characterizes potential carcinogenic effects in terms of probabilities that an individual will develop cancer over a lifetime of exposure to Site-related contaminants. The potential for non-carcinogenic effects is evaluated by comparing an estimated dose level from potential exposures at the Site to a reference dose which is defined as the dose level at which a receptor can be exposed through their entire lifetime without experiencing appreciable adverse health effects.

Agency guidelines require that the estimates of potential carcinogenic risk and non-carcinogenic hazard be based on the reasonable maximum exposure (RME) which could result from the presence of reported residues of Site-related contaminants.

8.2 IDENTIFICATION OF CHEMICALS OF POTENTIAL CONCERN (COCs)

8.2.1 General Site-Specific Data

The Site history and characteristics as presented in other sections of the report and the validated analytical results from environmental sampling were utilized to identify Site related COCs. The Site-specific and area information is summarized in Sections 2.0 and 3.0 of this RI report.

The primary Site-related facts applied to this evaluation are summarized as follows:

i) The Site consists of approximately 24 acres of which approximately half is covered by manufacturing and administration buildings and related parking areas. The remaining area is largely landscaped grassy areas. See Figure 2.2. An undeveloped area consisting of six acres of the adjacent cemetery property was also evaluated.

ii) The Site property is bounded on the south and west and northwest by areas zoned for residential use. A single unit housing area is adjacent to the Site boundary to the south. Eggert Road is adjacent to the Site on the west side and Sugar Road runs along the north side of the Site property. A cemetery occupies the area across Sugar Road from the Site and is adjacent to the plant along the east boundary. The area to the west of Eggert Road is occupied by several individual homes to the south and a housing development to the north. The area to the west, directly across Eggert Road from the Site, is vacant.

iii) The Site is located within Town of Cheektowaga in Erie County and on the boundary with the City of Buffalo.

iv) The Site is comparatively flat and drains via storm sewers which ultimately discharge to the storm sewer located along the east side of the Site. A minor amount of surface water may drain off the east and

south edge of the Site. Generally, surface water is discharged to on-Site storm sewers.

v) There are no surface water bodies on or near the Site.

vi) The geology of the area consists of a comparatively shallow overburden and fill over bedrock. See Sections 3.4.1 and 3.4.2.

vii) The native overburden at the Site is essentially an aquitard and contains minimal groundwater in discontinuous layers of sand and clay. The movement of this overburden groundwater is generally from the northeast to the southwest except for an area near the south boundary where flow appears to reverse at certain times of the year. See Section 3.5.1.

viii) The upper 25 feet (±) of bedrock was evaluated during the RI. This bedrock interval contains distinct zones of variable waterbearing capacity. See Section 3.5.2.

ix) Groundwater movement in the bedrock aquifer is in a north/northwest to south/southeast direction.

x) Although the bedrock could be an adequate and appropriate source of potable water, there are no known wells in the vicinity of the Site. The nearby residences and industries are generally supplied by the existing municipal water supply system.

8.2.2 Environmental Data

Information on Site characteristics and data from analysis of groundwater, surface water, soil and sediments reported for the RI and analytical reports were examined to evaluate the chemicals present, their distribution and concentrations at the Site. Data used to identify the COCs are summarized in Sections 5.0 and 6.0 and are discussed in Section 7.0 of this report.

All validated data for soil, sediment, surface water, and groundwater collected during implementation of the RI were evaluated in the identification of the COCs. The reported data for individual samples of groundwater and soil are summarized in Tables 8.1 and 8.2, respectively. Sample locations utilized as background and as test samples in the evaluations are identified in Tables 8.3 through 8.8.

8.2.3 Procedure for the Identification of COCs

The identification of COCs may use several objective approaches which numerically evaluate the concentrations, frequency of occurrence, and toxicity of the reported chemicals and, by applying selected criteria, identify the primary chemicals in a specific media. In some sites several chemicals are obviously the main contaminants and present the primary potential for risks to health and the environment. A more subjective approach is appropriate under these conditions. At the Leica Site, the later condition appears applicable and chemicals were evaluated using a subjective evaluation to define the chemicals which are most likely to be Site related and impact human health and the environment.

The data for each medium were evaluated to determine which chemicals were present at concentrations which appeared to be significantly above background concentrations, and were present at a frequency and concentration which would indicate they were Site-related chemicals. This subjective evaluation and professional judgment identified the VOCs and the metals cadmium, chromium, nickel, and zinc as the Site-related chemicals which would present the majority of the potential risk to human health on the basis of their concentration, prevalence, and potential toxicity.

A quantitative or objective approach for COC selection was also applied. However, because of the statistically small number of data points available for some media, the objective procedure applied only two criteria for the selection of chemicals to be included as COCs, namely,

frequency of detection and comparison to background levels. If the chemical was reported in 5 percent of the total samples analyzed and at a concentration above background values, it was included in the quantitative risk assessment if toxicity factors were published for the particular chemical. In those cases where there were fewer than 20 samples analyzed in any media or sector, any chemical reported as present above background concentration in at least one sample was included for potential risk and hazard calculations. All chemicals with published toxicity factors which were determined to be present above background and in at least 5 percent of the total samples were evaluated in the quantitative health risk assessment. These chemicals are identified in Table 8.9.

The Draft Cleanup Policy and Guidelines, Volume I, October 1991, and the TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels, January 24, 1994 were used to evaluate the reported soil concentrations (see Section 6.1), but were not specifically used in the selection of COCs.

Each medium was evaluated separately and COCs for each medium were identified. These COCs were then examined to determine if a single set of Site-related COCs could be identified. This evaluation indicated that the groundwater and soil contained different sets of COCs.

8.2.4 Identification of Background Sample Locations

8.2.4.1 Soil Background

Soil sample location BH-WDW1-93, in the lawn west of the plant building, was determined to be at the greatest distance from known areas of contamination and least apt to be impacted by the Site, and was designated a background location for soil samples. Therefore, the sample from this location was believed to represent natural soil and/or areas not contaminated by Site activities.

Because there was only one sample from this background location, background soil data from published literature was also used to evaluate soil sample data (see Section 6.1). The data for this background soil sample is summarized in Table 8.2.

8.2.4.2 Sediment Background

No sediment sampling locations considered unaffected by Site activities and representing background conditions were identified at the Site.

8.2.4.3 Surface Water Background

No surface water sampling locations were identified as background conditions for surface water.

8.2.4.4 Groundwater Background

Groundwater monitoring wells MW-1, MW-1A, and MW-17A were identified as upgradient of potential impact from Site activities and are considered to represent background groundwater monitoring well locations. The data for the background wells are summarized in Table 8.8.

8.2.5 COCs in Soils

The data for soils are presented in Table 8.2 and summarized in Tables 8.3, 8.4, and 8.5. Preliminary evaluation of the analytical data for soil samples shows VOCs in soil samples were the most prevalent contaminants and reported at significantly elevated concentrations. PAHs, phenol, methylphenols, and phthalates were the most frequently reported SVOCs and acid extractables in soil. Although these compounds

were frequently present in only a single sample in a sector and possibly at background concentrations, the statistically small number of sample and background locations did not allow exclusion on the basis of background or the 5 percent criteria. Therefore, they were included for quantitative evaluation and risk characterization. Pesticides and PCBs were not considered COCs at this Site. The inorganic chemicals were reported in all soil samples but several were at expected soil background concentrations. As noted above, cadmium, chromium, nickel, and zinc were the only metals believed to be related to Site activities, but because of the lack of adequate sample numbers in separate sectors and Site-specific background data, all metals for which toxicity factors were available were evaluated.

In summary, the subjective evaluation identified VOCs, cadmium, chromium, nickel, and zinc as Site-related COCs in affected soils and groundwater. Chemicals identified for evaluation in the quantitative procedure to objectively evaluate chemicals in soil on the basis of background and frequency (present in more than 5 percent of the samples analyzed) are identified in Table 8.9.

8.2.6 COCs in Sediments

Data for only one sample identified as sediment was reported. The sample was collected in an area of ponded water which was observed in Sector A during only one sampling event. The area was observed to be dry during other on-Site activities. Thus, this is not a significant sediment sample since it is believed to be from a wet area which does not remain wet for long periods of time. The data for this sediment sample was included as a soil sample and evaluated with surface soil in Sector A.

8.2.7 COCs in Surface Water

Only a single surface water sample was collected and no COCs were selected. Surface water is not a medium of concern at the Site and no further BRA evaluation will be made of the data from this single sample.

Section 6.3 discusses the surface water and sediment sample in relation to regulatory or guidance levels.

8.2.8 COCs in Groundwater

The data for groundwater are presented in Table 8.1 and summarized in Tables 8.6, 8.7 and 8.8. Comparison of VOC concentrations in samples from on-Site and downgradient monitoring wells with VOC concentrations in upgradient groundwater shows that VOCs were the primary Site-related chemicals detected. Several VOCs were reported in the background wells. Only carbon disulfide background concentrations exceeded concentrations reported in on-Site wells.

Only a few SVOCs and acid extractables were reported at low concentrations in only one to three samples and, therefore, BNAs were not considered primary COCs. However, because SVOCs and acid extractables were analyzed in only ten groundwater samples (a statistically small population), none of these chemicals could be eliminated as being in less than 5 percent of the samples and all the detected chemicals which exceeded background and for which toxicity factors were published were evaluated as COCs in groundwater.

On the basis of the examination of reported concentrations of metals in samples from the plating room sewer, cadmium, chromium, nickel, and zinc appear to be the primary metals related to Site operations. However, due to the low number of groundwater samples from background wells which were analyzed for metals, there was no basis for selection of Site-related chemicals. Thus, data on all metals with published toxicity factors were included in the quantitative risk assessment.

8.2.9 Summary of Identification of COCs

The evaluation of the data base and comparison with background concentrations identified VOCs as COCs in groundwater. The

statistically small data set did not allow selection of SVOCs, acid extractables, or metals in groundwater as Site-related COCs and all chemicals in these groups that had published toxicity factors were evaluated in the quantitative risk assessment. The same situation also applied to the selection of COCs for soil. The identified chemicals which were evaluated in the quantitative risk assessment are listed in Table 8.9. The identified list of chemicals does not include all the chemicals reported in each media but the COCs are believed to account for the vast majority (>95 percent) of the potential adverse effects on human health and the environment from any probable exposure.

8.3 EXPOSURE ASSESSMENT

8.3.1 Characterization of Exposure Setting

8.3.1.1 Physical Setting

The physical setting of the Site is presented in Sections 2.0 and 3.0 of this report.

The evaluation of soil will encompass all areas of the Site and the adjacent undeveloped land which is part of the cemetery property. Because the nature of different Site areas determines the populations exposed and the soil of concern (surface and subsurface), the Site was divided into three sectors, namely Sector A, the undeveloped cemetery property; Sector B, the grassed area in front of and along the sides of the plant; and Sector C, the primarily paved areas to the south and east of the plant.

For health risk evaluations, the single sample identified as sediment was evaluated as a soil sample in Sector A.

Groundwater was evaluated on the basis of potential use as potable water. The overburden and the bedrock groundwater were evaluated as separate units. The total data set for the bedrock, excluding background wells was used to calculate the exposure point concentrations. In

addition, the perimeter downgradient wells were evaluated as a separate series of wells to characterize the potential risk from use of groundwater at the Site boundary as potable water.

8.3.1.2 Potentially Exposed Populations

Because the Site is presently an industrial site within an area zoned industrial, there is no reason to believe this land use will change. The Site is presently surrounded by a secure chain link fence. The potential populations which would enter the Site (Sectors B and C) would be company employees and visitors, contract workers (construction, maintenance, etc.), or trespassers. The undeveloped cemetery property (Sector A) is open to the east allowing access to passersby or residents of homes adjacent to this area. Cemetery workers would also be expected to enter Sector A for maintenance and development activities.

Populations which could be exposed to contaminated soils in Sectors B and C would be on-Site workers, visitors, or trespassers. Sector B, the grass/landscaped area near the plant, has only one surface soil sample. This sample was considered unaffected by plant activities and identified as a background sample. Since Sector B is covered by grass or other landscape planting, contact with surface soil would be very limited. Since the area is apparently unaffected by Site-related chemicals and contact is very limited, this area will not be evaluated further.

Sector C is essentially a paved parking and operations area. Therefore, there is no direct contact with surface soil by the visitors, trespassers, or the employees during their regular activities. Only in case of construction activities involving excavation will soil beneath the pavement be exposed for worker contact. Therefore, workers involved in construction activities may be exposed to chemicals in the subsurface soils.

Surface soil in Sector A may be a source of exposure to cemetery workers or to residents that may enter the area from the adjacent

residential area. Because of the close proximity of this area to the residential lots, even small children could enter the area to play.

Although there are no active wells in the Site area, the bedrock could be a potential source of potable groundwater and could supply adequate water for residential or business use. All residential water in the area is presently obtained from a municipal water system.

Because there are no wetlands, seeps, streams or ponds on Site or in the general area, exposure to contaminated sediment and surface water are not evaluated as exposure possibilities.

In summary, the potential populations exposed to soil in Sectors B and C are on-Site employees (plant employees or contract workers) visitors and trespassers that might gain entrance to the fenced Site area. Regular employees, trespassers and visitors would only have potential exposure to the landscaped lawn area, paved parking, or walkway areas, and not have any potential exposure to contaminated soil. Workers involved in construction excavations could have potential exposure to chemicals in subsurface soil in all Sectors. In Sector A, the exposed populations are residents from the neighboring homes and cemetery workers. Residents that could possibly use the bedrock as a potable water source could be exposed to COCs in bedrock groundwater.

8.3.2 Identification of Exposure Pathways

Because land use in the Site area is not expected to change, the exposure pathways under present and future conditions will be the same.

Plant employees and contract workers brought on Site could be potentially exposed to chemicals in surface soil. In operations that require excavation, these same workers could be exposed to chemicals in subsurface soil. Since the surface soils in the contaminated areas of the Site (Sector C), are below pavement, contact with surface soil is unlikely. Contact with subsurface soils is possible when areas are excavated. There is no

indication that plant workers would be exposed outside the fenced Site area. The exposures to chemicals in soil can be by dermal contact, inadvertent ingestion, and by inhalation of dust and vapors.

Trespassers and visitors may be exposed to chemicals in surface soil. This exposure could occur within the fenced Site area. As with workers, the potential route of exposure can be by dermal contact, inadvertent ingestion, and inhalation of dust or vapors. Since the areas in the fenced area are primarily landscaped lawn or paved, there is minimal potential for exposure to contaminated soil by visitors or trespassers.

Because the overburden does not contain usable quantities of water, there is no potential exposure to this water. Potential migration and potential exposures will be discussed qualitatively in the risk characterization of the Site.

Exposure to the bedrock groundwater would be from use as potable water and includes ingestion, dermal contact, and inhalation of vapors.

The potential exposures under present and future land use are summarized as follows:

Media	*Exposure Pathway*	*Receptor Population*
Plant Site (Sector C)		
Subsurface soil	Dermal Contact Incidental Ingestion Inhalation	On-Site Workers or Contractors

Cemetery Property (Sector A)

Surface and Subsurface Soil	Dermal Contact Incidental Ingestion Inhalation	Workers Trespassers (residents from adjacent homes)

Bedrock

Groundwater	Ingestion Dermal Contact Inhalation	Residential Use of Private Well (home owners)

8.3.3 Quantification of Exposure

To quantify exposures to or intake of COCs the following general equation is applied:

$$\text{Intake} = \frac{CM \times ER \times ET \times EF \times ED \times CF}{AT \times BW} \times PTF$$

where:

Intake	=	Average daily intake of chemical (mg/kg/day)
CM	=	Concentration in specific media (mg/kg or mg/L)
ER	=	Exposure rate (mg/day) This factor involves several factors depending on the media and route of exposure.
ET	=	Exposure time (hours/day)
EF	=	Exposure frequency (days/year)
ED	=	Exposure duration (years exposed)
CF	=	Conversion Factors as needed
PTF	=	Percentage Time Factor (adjustment for time receptor is exposed to contaminated media)
BW	=	Body weight of receptor (kg)
AT	=	Averaging time to develop average daily intake (25,550 days per lifetime or 365 days per year)

The individual factors will be discussed further as necessary for the various exposures which can be reasonably expected at the Site.

8.3.3.1 Exposure Point Concentrations

Tables 8.3 to 8.8 present the arithmetic mean of the concentrations in all samples, and the 95th percentile of the mean for each chemical in each medium, in the areas evaluated. These means were utilized as the exposure point concentrations (CM, or concentrations in specific media) to calculate estimates of potential health risks and hazards. Both detected values and non-detects were recorded for a detected chemical in each medium. Where a chemical was detected in a medium, a value of half the detection limit was assigned to samples showing non-detect and these values were included in the calculations of the mean values. In the event the inclusion of non-detects resulted in means which exceeded the maximum concentration, these unreasonably high non-detects were not utilized to determine the means for the risk assessment. If the mean exceeded the maximum value for any reason, the mean was replaced by the maximum value reported as the exposure point concentration. In the event duplicate samples were analyzed, the duplicates were averaged and the average included in the calculations as a single sample.

8.3.3.1.1 Soil Exposure Point Concentrations

Soil samples evaluated in the exposure scenarios were from all sampling locations reported in each sector. In Sector A, the calculated means for all samples analyzed were used to represent the exposure point concentrations for exposure to chemicals in surface soil. In Sector C, the calculated means for all samples analyzed were used to represent the exposure point concentrations for exposure to chemicals in excavated soils.

8.3.3.1.2 Bedrock Groundwater Exposure Point Concentrations

To calculate the exposure point concentrations bedrock groundwater, all on-Site bedrock groundwater data were included except MW-1A and MW-17A, the upgradient wells.

In addition, to evaluate potential off-Site impact of bedrock groundwater, the means were calculated for the downgradient perimeter bedrock wells, MW-2A and MW-5A. These means were used to assess estimated health risks from potential off-Site wells which could be installed into the bedrock in the immediate area. This potential has a low probability because the area is serviced by a municipal water system.

8.3.3.2 Exposure Scenarios

To quantify exposure using the general equation, potential exposure scenarios were developed using guidance for exposure assumptions presented in USEPA documents referenced in Section 8.1.

In some instances where the USEPA documents did not present necessary assumptions and where specific appropriate exposure information were not available, professional judgment was applied to develop conservative assumptions which are protective of human health.

8.3.3.2.1 Surface Soil

Exposure to chemicals in surface soil is via inadvertent ingestion of soil, generally due to hand-to-mouth contact, dermal contact with chemicals from soiled skin, and inhalation of chemicals on airborne dust or chemical vapors from volatilized chemicals. Exposure rate is therefore a combination of the amount ingested per day plus the amount absorbed through the skin, plus the amount inhaled as dust or as vapors. At the low levels of environmental contamination evaluated, ingestion and dermal contact represent the major exposure to soil. Inhalation exposure will

not be quantified in the soil exposure scenarios. Inhalation exposure was evaluated in the Air Pathway Analysis as discussed in Section 6.4. This analysis showed estimated air emission rates were well below the NYS AGC for each compound evaluated.

Sector A

In Sector A there were two potentially exposed populations, cemetery workers and local residents.

a) Cemetery Workers

Cemetery workers would be exposed during cleanup and maintenance activities, or in case the area is cleared and developed as additional cemetery plots.

Applying the following scenario assumptions in the exposure formula will provide a conservative estimate of the chemical intake for cemetery worker exposures:

i) exposure point concentrations are the mean (Mean) and the 95th percentile of the mean (RME);

ii) ingestion rate is 50 mg of soil/day for both Mean and RME;

iii) surface area exposed to soiling is 5,300 cm^2;

iv) conversion factor is 0.000001 kg/mg;

v) the worker is exposed 1 work day per week (RME) or 1 day per month (Mean) for 5 months (May through September) or 20 days per year (RME) or 5 days per year (Mean). This is a conservative assumption and would cover work applied to future development of the area;

vi) the worker is assumed to spend 10 years (Mean) or 25 years (RME) at the same job for his work life;

vii) the average worker weighs 70 kg;

viii) averaging time:
Carcinogen - 25,550 days
Non-carcinogen - 365 days;

ix) 0.2 mg (Mean) or 1.0 mg (RME) of soil adheres to each cm^2 of skin;

x) a matrix factor of 0.15 represents the fact that only 15 percent of the chemical in the soil matrix on the skin actually contacts the skin and is available for absorption;

xi) the chemical-specific absorption factor represents the rate of absorption of the chemical through the skin; and

(Note: If the absorption factor is based on absorption data from tests on contaminated soil, the matrix factor does not apply);

xii) the PTF or part of exposure time the individual is exposed to the contaminated soil is 1 since the contamination generally extends over most of the Sector.

The detailed calculations of the intake of chemicals in soil by workers in Sector A is presented in the spreadsheets, Tables 1 through 4 in Appendix G.

b) Local Residents

Local residents, especially children, could play in the area and be potentially exposed to Site-related chemicals through contact with contaminated surface soil.

Applying the following scenario assumptions in the exposure formula will provide a conservative estimate of the chemical intake for local residents that may enter Sector A:

i) exposure point concentrations are the mean (Mean) and the 95th percentile of the mean (RME);

ii) ingestion rate is:
Young child - 200 mg soil/day for both Mean and RME;
Older child - 100 mg soil/day for both Mean and RME;

iii) surface area exposed to soiling is:
Child - 1,325 cm^2;
Older child - 5,300 cm^2;

iv) conversion factor is 0.000001 kg/mg;

v) the receptor resident is exposed 2 days per week (RME) or 1 day per week (Mean) for 6 months (May through October) or 48 days per year (RME) or 24 days per year (Mean) as a child. A conservative assumption is made that younger children and older children (including teenagers) would play in this area at the same frequency. Adults would not be expected to recreate or trespass regularly in this area. Adult exposures in this area are evaluated as cemetery worker exposures.

vi) although the very young child (2 and 3 years old) is unlikely to play in this undeveloped area, the young child is assumed to play in the undeveloped cemetery property during years age 2, 3, 4, 5, and 6 (RME) or years age 4, 5, and 6 (Mean). The older child is assumed to play in the area each year from age 7 through 18 (12 years for RME and Mean).

vii) the average weight is:
Child - 16 kg
Older child - 45 kg;

viii) averaging time:
Carcinogen - 25,550 days
Non-carcinogen - 365 days;

ix) 0.2 mg (Mean) or 1.0 mg (RME) of soil adheres to each cm^2 of skin;

x) a matrix factor of 0.15 represents the fact that only 15 percent of the chemical in the soil matrix on the skin actually contacts the skin and is available for absorption;

xi) the chemical-specific absorption factor represents the rate of absorption of the chemical through the skin. This factor is chemical specific; and

(Note: If the absorption factor is based on absorption data from tests on chemically contaminated soil, the absorption factor is applied and the matrix factor does not apply.)

xii) the PTF or part of exposure time the individual is exposed to the contaminated soil is 1 since the contamination generally extends over most of the Sector.

The detailed calculations of the intake of residents that may enter Sector A is presented in the spreadsheets, Tables 5 through 12 in Appendix G.

Sector C

In Sector C, there was only one potentially exposed population, construction workers. Because the area is essentially all paved, exposure to contaminated subsurface soil would only occur during periods of excavation.

Construction workers would be exposed during the limited time that excavated dirt is exposed. Two construction campaigns per year are assumed, one involving a 1-month excavation period and another involving a 3-month excavation period. The worker is assumed to be exposed daily during the 5 day work week for the entire excavation period.

Applying the following scenario assumptions in the exposure formula will provide a conservative estimate of the chemical intake for construction worker exposures:

i) exposure point concentrations are the mean (Mean) and the 95th percentile of the mean (RME);

ii) ingestion rate is 50 mg of soil/day for both Mean and RME;

iii) surface area exposed to soiling is 5,300 cm^2;

iv) conversion factor is 0.000001 kg/mg;

v) the worker is exposed 5 work days per week for 3 months (RME) or 5 days per week for 1 month (Mean) 80 days per year (RME) or 20 days per year (Mean) for 1 year. This is a conservative assumption since the excavation portion of the construction jobs would generally cover a comparatively short part of the total construction period;

vi) the worker is assumed to be exposed during a single year during one construction campaign;

vii) the average worker's weight is 70 kg;

viii) averaging time:
Carcinogen - 25,550 days
Non-carcinogen - 365 days;

ix) 0.2 mg (Mean) or 1.0 mg (RME) of soil adheres to each cm^2 of skin;

x) a matrix factor of 0.15 represents the fact that only 15 percent of the chemical in the soil matrix on the skin actually contacts the skin and is available for absorption;

xi) the chemical-specific absorption factor represents the rate of absorption of the chemical through the skin; and

(Note: If the absorption factor is based on absorption data from tests on contaminated soil, the matrix factor does not apply);

xii) the PTF or part of exposure time the individual is exposed to the contaminated soil is 1 since the contamination generally extends over most of the Sector.

The detailed calculation of the intake of chemicals in soil by a construction worker in Sector C is presented in the spreadsheets, Tables 13 through 16 in Appendix G.

8.3.3.2.2 Groundwater

Presently, there are no groundwater users on Site or in the general area of the Site. However, the bedrock groundwater is adequate to develop residential or commercial wells. The development of potable water supply wells is not likely in this area because of the availability of municipal water service, but a hypothetical scenario for the use of groundwater is provided to evaluate groundwater quality at the Site. Two evaluations are presented covering the evaluation of the total groundwater under the Site and the evaluation of the groundwater at the downgradient perimeter of the Site.

a) Ingestion of Drinking Water - On-Site Wells

The scenario for the hypothetical future consumption of bedrock groundwater from an on-Site well for residential drinking water includes the following assumptions:

i) exposure point concentrations are the average (Mean) and the 95th percentile of the mean (RME) concentrations for samples reported from all bedrock wells on Site;

ii) ingestion rates are:
Young child - 1 L/day (Mean and RME)
Adults - 2 L/day (Mean and RME);

iii) the exposure frequency is 350 days per year for both child and adult, this allows for 15 days spent away from home;

iv) the exposure duration is 5 years for child (Mean and RME) and 5 and 25 years for adults (Mean and RME). The duration's for child and adult are additive to account for 10 and 30-year residency at a single dwelling;

v) the average weight is:
Child - 16 kg
Adult - 70 kg; and

vi) averaging time:
Carcinogen - 25,550 days:
Non-carcinogen - 365 days.

The detailed calculation of the intake of chemicals in groundwater by residents drinking water from an on-Site well is presented in the spreadsheets, Tables 17 through 24 in Appendix G.

b) Ingestion of Drinking Water - Perimeter Wells

The scenario for the hypothetical future consumption of bedrock groundwater from a well immediately downgradient of the Site for a residential drinking water includes the following assumptions:

i) exposure point concentrations are the average (Mean) and the 95th percentile of the mean (RME) concentrations for samples reported from bedrock wells MW-2A and MW-5A, the perimeter wells at the downgradient perimeter of the Site;

ii) ingestion rates are:
Young child - 1 L/day (Mean and RME)
Adults - 2 L/day (Mean and RME);

iii) the exposure frequency is 350 days per year for both child and adult, this allows for 15 days spent away from home;

iv) the exposure duration is 5 years for child (Mean and RME) and 5 and 25 years for adults (Mean and RME). The duration's for child and adult are additive to account for 10 and 30-year residency at a single dwelling;

v) the average weight is:
Child - 16 kg
Adult - 70 kg; and

vi) averaging time:
Carcinogen - 25,550 days
Non-carcinogen - 365 days.

The detailed calculation of the intake of chemicals in groundwater by residents drinking water from perimeter wells immediately downgradient of the Site is presented in the spreadsheets, Tables 25 through 32 in Appendix G.

Showering/Bathing On-Site and Off-Site Wells

Because of the uncertainty related to existing models used for estimating exposures related to showering or bathing, the exposure and resulting risk from bathing will be assumed to be 1.5 times the exposure and resulting risk from ingestion by drinking the water. This is consistent with the conclusions published by Wan K. Jo, et al., (1990) where they state: ***"The inhalation in the shower stall for the most volatile compounds is equivalent to approximately 1.5 times that incurred through ingestion of 2 L of the same water"***. This is believed to be a conservative approach, especially in the case

of the low volatile organics and non-volatile inorganic chemicals where exposure is predominantly by the dermal route.

8.4 TOXICITY ASSESSMENT

Table 8.10 summarizes important physicochemical constants used in evaluating environmental fate of the chemicals and the toxicity potency factors (CSF and RfD values) used to estimate the incremental carcinogenic risk and potential non-carcinogenic hazard.

Brief monographs are presented in Appendix H which summarize the toxicity of Site-related chemicals. Toxicity summaries for only those chemicals which are considered Site-related COCs and present significant potential risk or hazard are covered in Appendix H.

8.5 RISK AND HAZARD CHARACTERIZATION

Appendix G presents the scenarios and spreadsheets for the calculation of estimated health risks and hazards.

The estimated carcinogenic risk is calculated using the following formula:

$$\text{Risk} = \text{Intake} \times \text{CSF}$$

where:

Risk = Estimated upper bound risk of additional cancer in a population exposed to the estimated dose for a lifetime. For example, a risk of 1.0E-06 refers to a risk of one additional cancer for a population of 1,000,000 people exposed.

Intake = Chemical exposure calculated by applying the scenarios noted above and expressed as mg/kg/day. This exposure is the daily exposure for the exposure duration averaged over the individuals expected lifetime of 70 years.

CSF = Cancer Slope Factor which is a factor expressing the potential for carcinogenic response based on a theoretical model. This factor is expressed as 1/(mg/kg/day).

The USEPA cancer classification and the CSF for each chemical evaluated are presented in Table 8.10.

The individual risks from several chemicals for the same exposure scenario are considered additive. This is a conservative assumption suggested by USEPA guidance. The estimated risks from more than one exposure scenario which can reasonably be assumed to happen to a single individual person are also considered additive.

Table 8.11 summarizes the potential carcinogenic risks for receptors exposed to chemicals in soils and bedrock groundwater on or near the Site.

The hazard of non-carcinogenic adverse effects from exposure to a chemical is expressed as the Hazard Quotient (HQ) and is calculated as follows:

$$\text{Hazard Quotient} = \frac{\text{Intake}}{\text{RfD}}$$

where:

Hazard Quotient = The relationship between the calculated dose of a chemical and a reference dose which is not expected to cause adverse effects from a lifetime exposure. A HQ below 1.0 is considered protective of health and of no concern.

Intake = Chemical exposure calculated by applying the scenarios noted above and expressed as mg/kg/day. This intake is the average intake for the expected period of exposure which may or may not be a lifetime.

RfD = Reference Dose which is a daily dose based on experimental study or human experience and is believed to not cause an adverse effect from even a lifetime exposure.

The RfD values for the chemicals evaluated are presented in Table 8.10.

The Hazard Index (HI) for an exposure situation is the sum of the HQs for the individual chemical exposures presented by the several exposure scenarios which can reasonably occur to the same individual. An HI below 1.0 is considered health protective for a lifetime exposure and is therefore not an exposure of concern.

Table 8.12 summarizes the potential non-carcinogenic hazards for receptors exposed to chemicals in soils and groundwater on or near the Site.

8.5.1 Surface Soil - Sector A

a) Cemetery Worker

The estimated additional cancer risks and non-cancer hazard from oral and dermal exposure of cemetery workers to surface soil in Sector A are summarized in Tables 8.11 and 8.12, respectively. The detailed calculations are presented in Appendix G, Tables 1 through 4.

Applying the conservative assumptions set forth in the scenarios, the estimated potential additional risk of cancer in the cemetery

workers exposed, 1.1E-07 (mean) or 6.0E-06 (RME), is below or slightly above 1.0E-06, the low end of the acceptable range of 1.0E-06 to 1.0E-04 established by USEPA. Eighty percent (80 percent) of the estimated risk is related to BNAs, primarily PAHs, reported only once. Most of the BNAs were reported in the single "sediment" sample which was included as a surface soil sample in the Sector A evaluation. Most of the remaining risk is related to the metals, arsenic and beryllium, both reported at mean concentrations near or slightly above background concentrations expected in soil.

Applying the conservative assumptions set forth in the scenarios, the estimated potential non-carcinogenic hazards for the cemetery worker exposed, 5.7E-03 (mean) or 3.6E-02 (RME), are two orders of magnitude below 1.0, the acceptable level established by USEPA which is not expected to cause adverse heatlh effects even after a lifetime exposure.

b) Cemetery Trespasser - Children Playing

Applying the conservative assumptions set forth in the scenarios, the estimated potential additional risk of cancer in the children exposed, 5.6E-06 (mean) or 4.22E`05 (RME), is within the acceptable range of 1.0E-06 to 1.0E-04 established by USEPA. As with the cemetery workers, 80 percent of the estimated risk is related to BNAs, primarily PAHs, reported only once. Most of the BNAs were reported in the single "sediment" sample which was included as a surface soil sample in Sector A evaluation. Most of the remaining risk is related to the metals, arsenic and beryllium, both reported at mean concentrations near or slightly above background concentrations expected in soil.

Applying the conservative assumptions set forth in the scenarios, the estimated potential non-carcinogenic hazards for the children exposed, 1.7E-01 (mean) or 6.5E-01 (RME), are below 1.0, the acceptable level established by USEPA which is not expected to cause adverse health effects even after a lifetime exposure.

8.5.2 Soil - Sector C

a) Construction Worker

The estimated additional cancer risks and non-cancer hazard from oral and dermal exposure of construction workers to surface soil in Sector C are summarized in Tables 8.11 and 8.12, respectively. The detailed calculations are presented in Appendix G, Tables 13 through 16.

Applying the conservative assumptions set forth in the scenarios, the estimated additional risk of cancer in the construction workers exposed, 1.33E-08 (mean) or 3.08E-08 (RME), is below 1.0E-06, the low end of the acceptable range of 1.0E-06 to 1.0E-04 established by USEPA.

Applying the conservative assumptions set forth in the scenarios, the estimated non-carcinogenic hazard for the construction workers exposed, 5.74E-03 (mean) or 3.61E-02 (RME), is two orders of magnitude below 1.0, the acceptable level established by USEPA which is not expected to cause adverse health effects even after a lifetime exposure.

8.5.3 Groundwater

a) Ingestion - On-Site Groundwater

The estimated additional cancer risks and non-cancer hazard from oral exposure of residents to bedrock groundwater from on-Site wells are summarized in Tables 8.11 and 8.12, respectively. The detailed calculations are presented in Appendix G, Tables 17 through 24.

This scenario is hypothetical since no residential well is expected to be developed on-Site. Applying the conservative assumptions set forth in the scenarios, the estimated potential additional risk of cancer in the residents from the ingestion of drinking water from bedrock wells is well above 1.0E-04, the high end of the acceptable range of 1.0E-06 to 1.0E-04 established by USEPA. Ninety-nine percent (99.4 percent) of the estimated

risk is related to the concentrations of vinyl chloride. Most of the remaining risk is related to other VOCs, 1,1-DCE and tetrachloroethene, in particular.

b) Ingestion - Off-Site Groundwater - Perimeter Wells

The estimated additional cancer risks and non-cancer hazard from oral exposure of residents to bedrock groundwater in off-Site (downgradient perimeter) wells are summarized in Tables 8.11 and 8.12, respectively. The detailed calculations are presented in Appendix G, Tables 25 through 32.

This scenario is also hypothetical since no residential well is expected to be developed off-Site in the immediate area of the Site. Applying the conservative assumptions set forth in the scenarios, the estimated additional risk of cancer in the residents from the ingestion of drinking water from bedrock wells, 9.5E-04 (mean) or 7.7E-03 (RME), is well above 1.0E-04, the high end of the acceptable range of 1.0E-06 to 1.0E-04 established by USEPA. Essentially, 100 percent of the estimated cancer risk is related to the concentrations of arsenic at 3.6 µg/L, which is well below the Class GA Groundwater Quality Standard for arsenic, which is 25 µg/L.

Applying the conservative assumptions set forth in the scenarios, the estimated non-carcinogenic hazard for the residents drinking on-Site bedrock groundwater, 1.9E+03 (mean) or 7.5E+04 (RME) is orders of magnitude above 1.0, the acceptable level established by USEPA which is not expected to cause adverse health effects even after a lifetime exposure. Thirty-six percent (36 percent) of the hazard is caused by the concentration of barium. Barium, arsenic and nickel account for 99.5 percent of the total non-carcinogenic hazard. As stated above, this exposure is hypothetical since no residential wells are expected to be developed off-Site in the immediate area of the Site.

8.6 IDENTIFICATION OF UNCERTAINTIES

The uncertainties related to the potential populations and receptors, and the potential exposure pathways, the assumptions used and their scientific basis or lack of basis are summarized in the sub-sections which follow.

8.6.1 General Issues

It is important to remember that the exposure scenarios based on USEPA guidance utilize 90th or 95th percentile confidence limits to make assumptions to define exposure parameters. Where USEPA Guidance Values are not available, professional judgment is used to determine what are believed to be equally conservative assumptions. These highly conservative assumptions, in the final calculations, are multiplied to obtain the final risk and hazard values. Therefore, calculated chronic daily intakes are likely one or more orders of magnitude above any actual exposures that would be reasonably expected to occur.

Similarly, the CSFs for carcinogens are modeled from available exposure/response data in a conservative manner. The risk estimate calculated by multiplying the CSF times a specific dose yields a cancer risk estimate which is an upper bound limit. In simple terms, this means that the actual risk will not be greater than the estimate, will probably be lower, and may be zero.

Because uncertainties of unknown magnitude in both the CSF and the estimated chronic daily intake are multiplied to generate the estimated cancer risk, the resulting risk value is almost certainly several orders of magnitude higher than the actual risk to exposed populations which is presented by any measured chemical exposure.

For these reasons, the estimated cancer risks based on USEPA guidance as presented in this document should not be construed as actual risks to a population. The function of these risk estimates is to assist in

evaluating which chemicals may be responsible for the major risk, if any, associated with the Site; which media and exposure pathways present the greatest potential problems; what remediation, if any, is needed; and how effective any selected remediation will be in decreasing the estimated risk.

The risk assessment has a high degree of uncertainty and its primary value for the decision makers is for comparison to show where a potential problem may be and what would be most effective in remediating the problem. The result of the risk assessment should not be applied as an indication of actual risk or hazard for public health effects. It is very important to understand this, and for this reason, it is critical to keep the individual elements of the risk assessment as reasonable and realistic as possible.

8.6.2 Use of Maximum Concentration Values and Non-Detect Values

To undertake the BRA, the maximum concentrations were frequently used as exposure point concentrations to estimate human exposures. Although the use of maximum values is generally recognized as an appropriate screening approach, it should also be recognized that this procedure may incorporate an unknown magnitude of uncertainty into the actual exposure.

This may also be the case for the use of one half of the detection limits as the non-detect values when a chemical has been reported as not detected in the majority of the samples collected and analyzed. Since some of the non-detects may be zero, assuming that a concentration equal to one half of the detection limit is present instead of zero may significantly over estimate the actual chemical concentrations at the Site. This is particularly true if interfering chemicals affect the analyses and the detection limit is elevated. In such instances, a value of half the detection limit may actually exceed the highest detected values. Only in cases where most samples show positive detections of a chemical is the use of one-half of the

detection limit for non-detected values likely to under-estimate the actual values for that chemical.

8.6.3 Additivity

In the hazard and risk evaluations, the risks or hazards presented by several chemicals reported for the same exposure have been added to provide a sum of estimated total risk or hazard for that particular exposure. This is a conservative assumption and is scientifically accurate only in those instances where the health effects of individual chemicals are directed at the same effect and same target organ. In these instances, the effects may be additive, synergistic or antagonistic. Since a large number of chemicals have no similarity as to their non-carcinogenic action or the target of their action, this approach is not supported scientifically and the hazards are over-estimated.

If chemicals are synergistic, simply adding the risk or hazard scores could under-estimate the potential effect; while in some cases, chemicals are antagonistic or protective against the effects of other chemicals, in which case simply adding scores would over-estimate the potential effect.

8.6.4 Sampling and Analysis Uncertainties

Environmental sampling and analysis can contain significant errors and artifacts. At this Site, the data are believed to adequately and accurately represent the existing conditions. However, when maximum values are used, any erroneously high values used to determine the exposure may result in overstatment of risks and hazards.

Sampling error also arises when sampling is not random over the entire Site. Since sampling and analysis is also providing data to design remedial clean-up procedures, there is a strong tendency to sample areas known or suspected to be contaminated. This tends to overstate the general contamination over the whole Site and bias the BRA results.

8.6.5 Steady State Assumptions

When the long-term health effects are evaluated, it is assumed that the chemical concentrations are constant for the exposure period being evaluated. This is not accurate since the reported chemical concentrations are changing due to various degradation processes (i.e. dilution by uncontaminated water, sorption, dispersion of contaminated groundwater, volatilization, biodegradation, chemical degradation and photo degradation). The use of steady-state conditions will therefore also over-estimate the exposure. For example, a chemical having a half-life of 1 year in soil would retain less than 1 percent of the original concentration after 7 years and the exposure is overestimated more than several orders of magnitude by assuming no degradation over a 70-year lifetime.

8.6.6 Other Potential Exposures Not Evaluated

The exposures to vapors and dust at the Site, dermal contact with groundwater from household uses other than bathing (i.e., laundry, washing dishes), and other possible exposures to surface soil were not evaluated. Although other potential exposures could occur, the magnitudes of these exposures are expected to be much lower than the exposures evaluated, and would not qualitatively affect the total health impact from the Site.

8.6.7 Conclusions to be Drawn from Uncertainties

When the results of the risk and hazard calculations indicate that there are no unacceptable health risks or hazards presented by the exposures evaluated, the uncertainties described herein (based on USEPA guidance) provide an additional confidence factor that the evaluation over-estimates any actual risk and assures that no unacceptable health risks and hazards are presented by the chemicals reported at the Site.

When the results of the risk and hazard calculations indicate unacceptable levels, the results may indicate the actual toxicological hazards present or may be the result of an overly conservative process.

8.7 DISCUSSION AND SUMMARY

The BRA has been conducted to determine the present and future potential impact on public health due to soil and groundwater contamination from Site activities. The BRA has assumed that present land use and environmental conditions are unchanged in the future and has specifically not considered any affects which will follow implementation of any interim remedial action (IRAs) or final remedial action. In this way the BRA has maintained the most conservative approach.

Estimated potential cancer risks and hazard indices were calculated, as appropriate, for all scenarios evaluated. Exposures to soil presented minimal risk and hazard to the exposed receptors. Potential health risks from exposure to soil were below or within the acceptable range as prescribed by USEPA.

The use of groundwater from the bedrock below the Site for household use (drinking and bathing) resulted in estimated risks and hazards in excess of the acceptable range. Since this is a hypothetical use of this groundwater, this exceedance of acceptable risk and hazard levels is of consequence only for remedial planning. It is of interest to note that vinyl chloride presents the great preponderance of potential carcinogenic risk from consumption of water while 1,2-DCE is the primary source of potential non-carcinogenic hazard.

In contrast to the estimated cancer risk and health hazard from water in on-Site wells, which is primarily from the volatile organics, the estimated carcinogenic risk and non-carcinogenic hazard from use of off-Site bedrock groundwater is from inorganics. Arsenic presents essentially

100 percent of the carcinogenic risk while barium, arsenic and nickel account for 99.5 percent of the non-carcinogenic hazard. It should be noted that the RME concentration for arsenic is 3.7 µg/L while the maximum contaminant level (MCL) for arsenic is 50 µg/L. The RME concentration of barium is 331 µg/L while the MCL for barium is 2,000 µg/L. The RME for nickel is 97.7 µg/L while the MCL for nickel is 100 µg/L.

Therefore, although the inorganic constituents result in exceedances of the acceptable risk and hazard limits, the concentrations of the primary inorganic contaminants are all below their MCLs. Although the on-Site bedrock groundwater is contaminated, the movement off-Site is limited and the present downgradient perimeter conditions do not exceed the MCL levels for the inorganic chemicals which are the primary contaminants in bedrock groundwater from the perimeter wells. Concentrations of metals reported in downgradient wells may be in part or totally a result of normal background conditions.

Although the overburden is not a productive unit, and therefore not a potential source of potable water, it is important to note that, as for the bedrock groundwater, there is limited downgradient and off-Site movement of the Site-impacted groundwater in the overburden. This apparently results from the seasonal fluctuations of the gradient of the overburden groundwater in the southern and southeastern portion of the Site.

In conclusion, the soil which has been impacted by Site activities does not present a potential unacceptable cancer risk or non-carcinogenic hazard to construction workers, cemetery workers or neighboring children that may trespass (play) on the undeveloped cemetery property adjacent to the Plant site. Groundwater in the bedrock is unacceptable for household use because of the presence of elevated concentrations of VOCs. The water from downgradient perimeter wells in the bedrock aquifer exceeds the cancer risk and non-carcinogenic hazard acceptable limits, but the inorganics causing these exceedances are below their respective MCLs. Neither the overburden or bedrock groundwater is expected

to be used for household water because the area surrounding the Site is supplied by a municipal water supply.

The overburden is not a suitable source for household or industrial water because of the very limited quantities of water present. The overburden groundwater appears to be migrating off-Site at a very limited rate, if at all.

9.0 ECOLOGICAL EVALUATION

In "Risk Assessment Guidance for Superfund, Volume II, Environmental Evaluation Manual," it is stated, "Not all sites will require environmental evaluations. Indeed, many are in industrial areas with little if any wildlife." This is true of the Leica Site in general, and in particular it applies to the area within the perimeter fence. Therefore, this area was not evaluated for potential ecological impacts.

The only potential for ecological exposure is represented by the off-Site area, the undeveloped Cemetery property adjacent to the southeast corner of the Site. This area is small (six acres) and is surrounded by developed cemetery area, residential lots, and the Site. However, this area was included in a Phase I Fish and Wildlife Impact Assessment which was conducted by Fine Line Technical Services. This report is included as Appendix I.

The report summarized the Site-related effects as follows:

> "No obviously contaminated areas were observed on the Site or in the area within the Site vicinity. No stressed vegetation, wildlife mortality, or other abnormal changes in biota were observed. No records of wildlife mortality associated with the Site area were found during review of file information by NYSDEC Region 9 staff." (Page 12, Appendix I).

The report also concluded that the value of resources to wildlife and humans had not been adversely impacted by the presence of the Site or Site activities.

10.0 CONCLUSIONS

The primary objective of the RI was to characterize the nature and extent of residual contaminants present at the Site, and associated risks posed by such residual contamination which may be present as a result of historical Site operation. Based upon the results of the RI, including the BRA, the APA, and the Phase I Ecological Assessment, the following conclusions regarding the objectives are drawn:

i) The air emission of each of the seven compounds evaluated at the Site during the APA is at least one order of magnitude below the associated NYS AGC value for those compounds. Therefore, air is not a media of concern for exposure to Site-related chemicals;

ii) The presence of chemicals in Site surface water (seasonal standing water on the off-Site parcel) is well defined. The concentrations detected are very low and the number of compounds limited. The surface water data was compared to the water quality criteria for protection of fish (for Class C waters). Only one SVOC and six metals exceeded these criteria, and by less than one order of magnitude. The surface water on the Off-Site Parcel is present only during the wetter seasons and tends to be ponded in lower areas mainly in the central part of this parcel. Additionally, overland flow of stormwater from the off-Site area and from on-Site areas (which are asphalt covered) is controlled by the municipal storm sewer system. Therefore, the potential for exposure to Site-related contaminants for these media are very low and surface water and stormwater runoff are not a media of concern for exposure to Site-related chemicals;

iii) The nature and extent of chemicals in soils for both on-Site areas and the off-Site parcel is well defined, however, it is not known whether contaminants have migrated beneath the Main Building from the MW-16/east side dry well area. Several Site-related chemicals exceed NYSDEC soil cleanup objectives, primarily TCE, 1,2-DCE, 1,1,1-TCA, and xylenes. Several metals also are present at levels at or above typical soil ranges. The areal extent of elevated chemical presence in

soil in excess of the TAGM 4046 Recommended Cleanup Objectives is limited to the soils underlying the two known contaminant source areas and has not migrated from the Leica property. The areas of elevated chemical presence in soil are almost entirely contained beneath existing asphalt pavement and only under very specific conditions (e.g., ground intrusive activities) is there a potential for exposure to Site-related chemicals in soil. The BRA showed the estimated additional cancer risk to cemetery workers from the off-Site area soils is 1.08E-07 to 6.01E-06 which is below or slightly above the low end of the USEPA acceptable range of 1.0E-06 to 1.0E-04. For trespassers to the off-Site area, the estimated additional cancer risk is 5.64E-06 to 4.22E-05, which is within the acceptable range of 1.0E-06 to 1.0E-04. The non-carcinogenic HI ranged from 3.64E-03 to 3.82E-02 for cemetery workers and 1.72E-01 to 6.45E-01 for trespassers are both one to three orders of magnitude below the designated level of concern (1.0). The additional cancer risk to a construction worker from the on-Site soils ranges from 1.33E-08 to 3.08E-08, which is below the low end of the acceptable range established by the USEPA (1.0E-06 to 1.0E-04). The non-carcinogenic HI ranges from 3.61E-02 to 5.74E-03, which is two to three orders of magnitude below the designated level of concern (1.0). Therefore, exposure to Site soils presents minimal risk and hazard to exposed receptors. However, because of the lack of engineering controls to prevent the future migration of Site-related contaminants away from the source areas, the soils at the Site are still a media of concern and will be addressed through remedial efforts to further contain and control the contaminants in order to achieve the remedial action objectives for this medium;

iv) Overburden groundwater at the Site contains VOCs, primarily TCE, 1,2-DCE, vinyl chloride, and BTEX compounds which exceed the NYSDEC ambient water quality standards. Due to the nature of this waterbearing overburden stratum, which is a silty sand layer of limited thickness and is generally of low water yield, the extent of areal distribution of Site-related chemicals in the overburden groundwater is well defined. The elevated chemical presence in overburden groundwater is generally limited to the area below and immediately

downgradient of the known source areas. It is not known whether contaminants in the overburden groundwater have migrated beneath the Main Building from the MW-16 area. Contaminants in the overburden have also migrated vertically into the bedrock groundwater regime. Because the overburden groundwater is not a potential source of potable water and no seeps or discharges above ground are known to occur, no pathway of exposure exists. Therefore, overburden groundwater was not evaluated in the BRA. However, due to the chemistry levels encountered and the lack of engineering controls to prevent the spread of these contaminants by overburden groundwater flow, the overburden groundwater at the Site is still a medium of concern and will be addressed through remedial efforts to further contain and control the contaminants present in this medium in order to achieve the remedial action objectives for this medium; and

v) The bedrock groundwater at the Site also contains VOCs in excess of NYSDEC ambient water quality standards. These VOCs are the same as those found in the overburden groundwater, and include TCE, 1,2-DCE, 1,1,1-TCA, vinyl chloride, and BTEX compounds. Except for the area westward of MW-16A, the horizontal extent of bedrock groundwater contamination is adequately defined, with the highest concentrations occurring directly beneath the two known contaminant source area. It is not known whether contaminants in the bedrock groundwater have migrated beneath the Main Building from the MW-16A areas. Only very low concentrations of a limited number of compounds have migrated off the Site in a down-gradient direction. The bedrock groundwater in the immediate vicinity of the Site is not currently used as a potable water source or for industrial applications, however, no restriction to these uses exist. Therefore, the BRA evaluated the use of this media as a potable water source for both on-Site and off-Site bedrock groundwater.

For the on-Site bedrock groundwater, the results show the estimated additional cancer risk over a lifetime from its hypothetical use as potable water to range from 4.72E-01 to 2.39E+00, and the hypothetical risk from drinking and showering or bathing with this water ranges

from 7.08E-01 to 3.58E+00. Both of these ranges exceed the acceptable range established by the USEPA of 1.0E-06 to 1.0E-04 and are due mainly to the VOC presence in this water. The non-carcinogenic HI ranges from 7.23E+03 to 2.18E+05, which is also above the designated level of concern of 1.0.

For the hypothetical use of off-Site bedrock groundwater as a potable water source (based on the chemistry levels from the bedrock perimeter wells MW-2A and MW-5A) the estimated additional cancer risk over a lifetime is 6.35E-04 to 5.10E-03.

The hypothetical use of this water for drinking or bathing or showering results in an estimated additional cancer risk of 9.53E-04 to 7.65E-03. Both of these ranges are up to one order of magnitude above the upper end of the acceptable range of 1.0E-06 to 1.0E-04 established by the USEPA and are due mainly to the presence of arsenic in the groundwater, which was detected at concentrations below the MCL and has no known on-Site source.

The non-carcinogenic HI for the off-Site bedrock groundwater ranges from 1.90E+03 to 1.12E+05, which is well above the designated level of concern of 1.0, and is also the result of the inorganics present, namely arsenic, barium, and nickel in the groundwater. Only nickel may potentially be attributed to Site-related activities.

The on-Site bedrock groundwater has been identified as a media of concern and will be appropriately addressed through remedial efforts to achieve the remedial action objectives for this medium.

Although the horizontal extent of bedrock groundwater chemistry is adequately defined, the vertical extent is not known. This should be determined by the installation of the following bedrock wells during a supplemental investigation:

a) one deeper bedrock well adjacent to MW-16A,
b) one deeper bedrock well adjacent to MW-6A, and

c) one deeper well in the expected downgradient direction of each of the above installations.

Contaminant presence beneath the Main Building in the area westward of MW-16/MW-16A will also be evaluated through a supplemental investigation.

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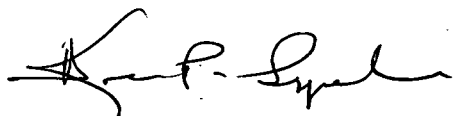
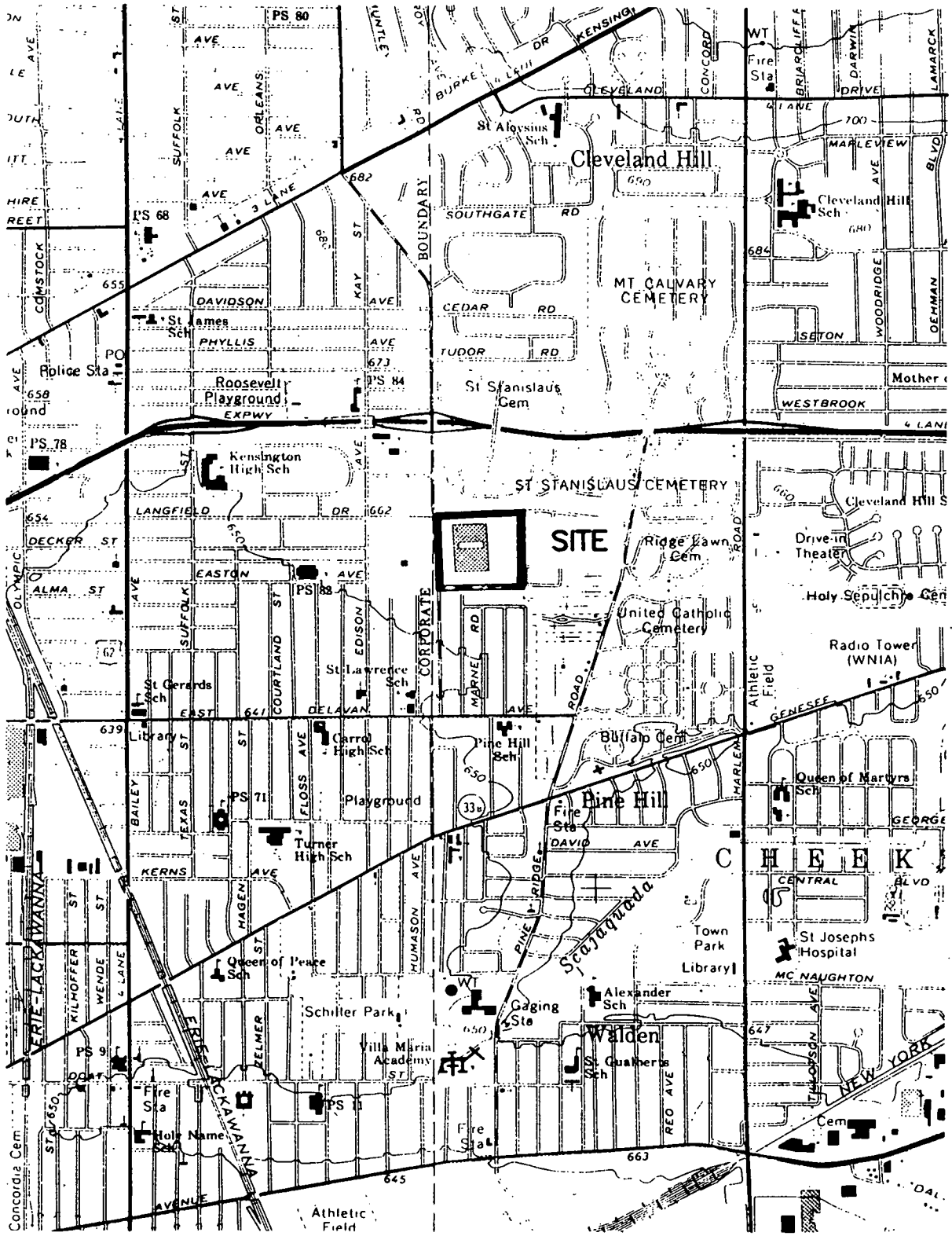
All of Which is Respectfully Submitted,

James K. Kay, P. Eng.



Kevin P. Lynch

FIGURES



N

USGS BUFFALO NE 7.5' QUADRANGLE

figure 2.1

SITE LOCATION MAP

LEICA, INC.

Cheektowaga, New York

CRA

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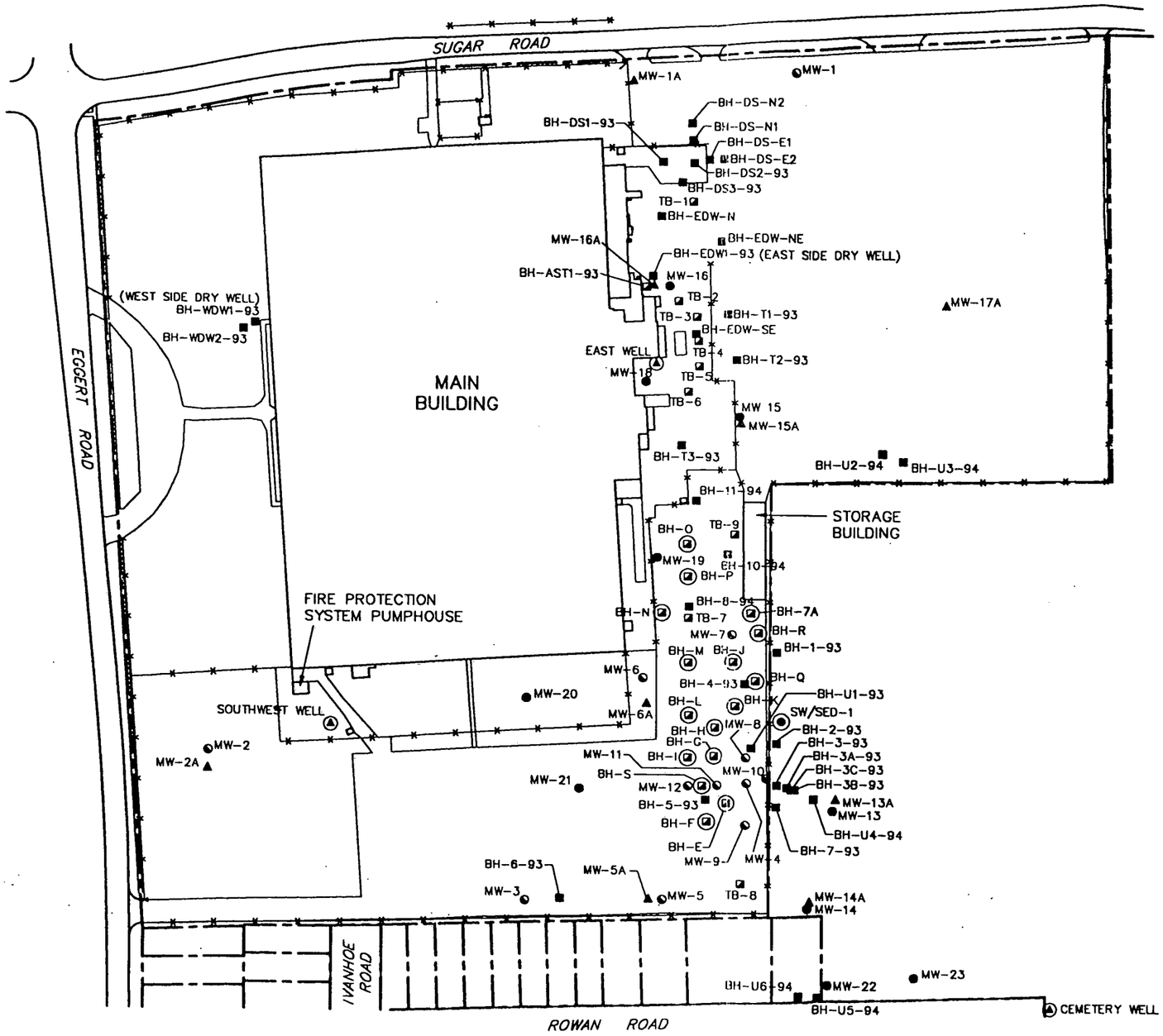

LEGEND

- EXISTING FENCE LINE
- PROPERTY LINE
- BH-10-94 ■ BOREHOLE LOCATION
- MW-1 ◔ OVERBURDEN MONITORING WELL (PREVIOUSLY INSTALLED)
- MW-19 ● OVERBURDEN MONITORING WELL (1993/94)
- MW-6A ▲ BEDROCK MONITORING WELL (1993/94)
- TB-9 ◪ RECRA BOREHOLE (PREVIOUSLY INSTALLED)
- BH-F ⊛ SI BOREHOLE (PREVIOUSLY INSTALLED)
- SW/SED-1 ◉ SURFACE WATER/SEDIMENT SAMPLE LOCATION
- SOUTHWEST WELL ⓐ NON-POTABLE WATER SUPPLY WELL

SOURCE: GARY E. KRULL, LAND SURVEYOR
11651 WHITETAIL DRIVE
MARILLA, NEW YORK 14102
(716) 655-1654

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figure 2.2
SITE LAYOUT
LEICA, INC.
Cheektowaga, New York

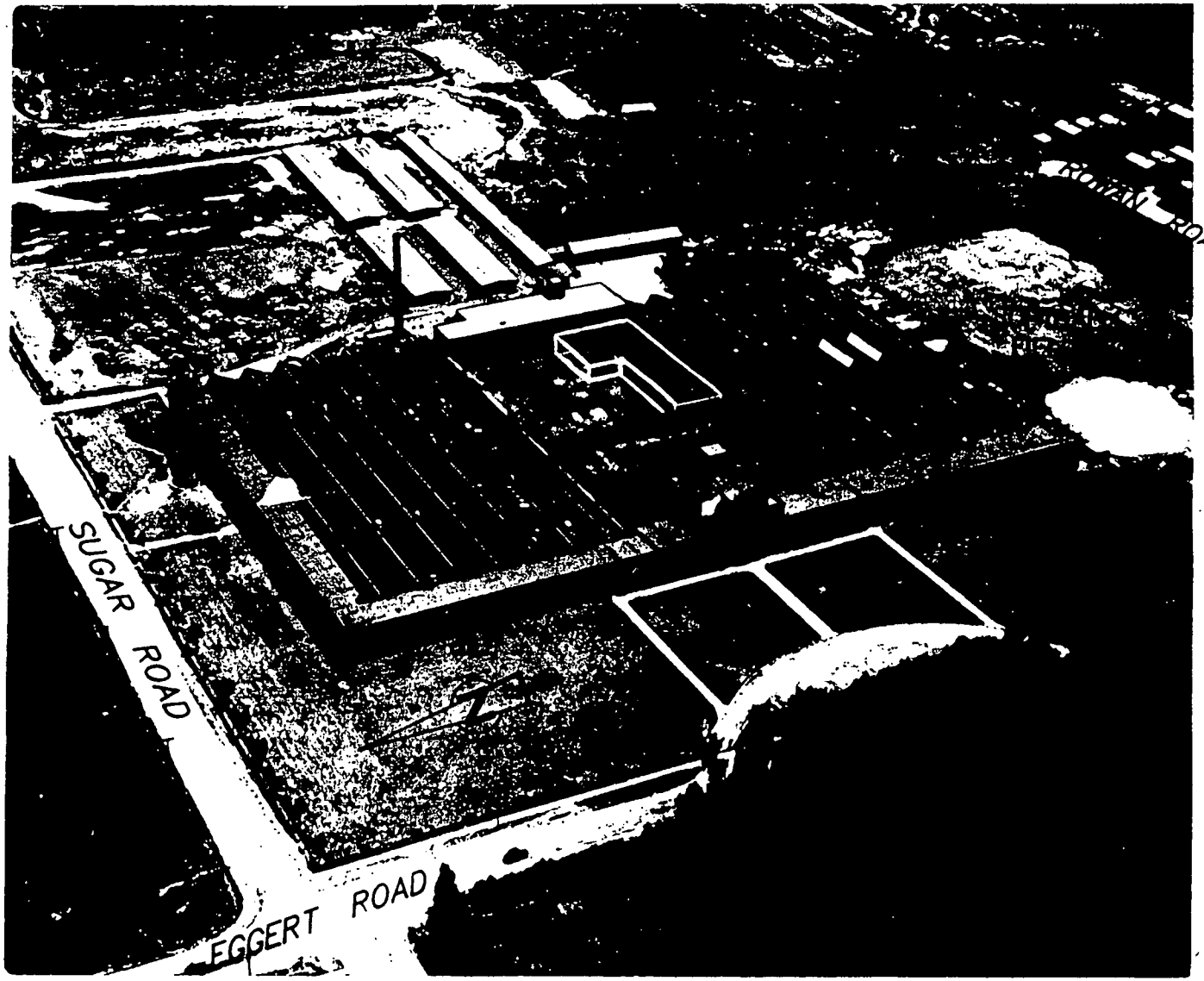

PHOTO CIRCA 1950

figure 2.3
AIR PHOTO
LEICA, INC.
Cheektowaga, New York

CRA

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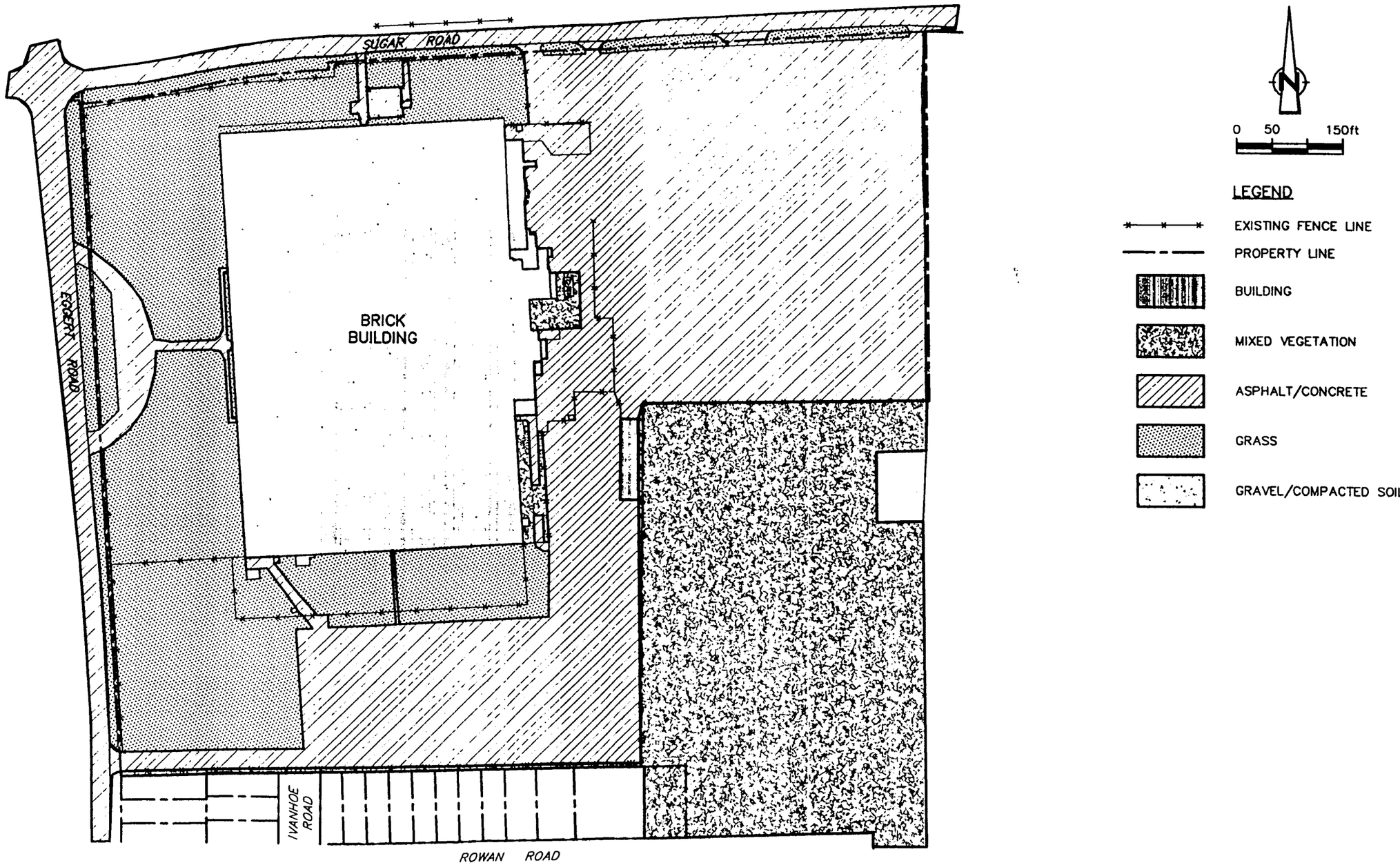

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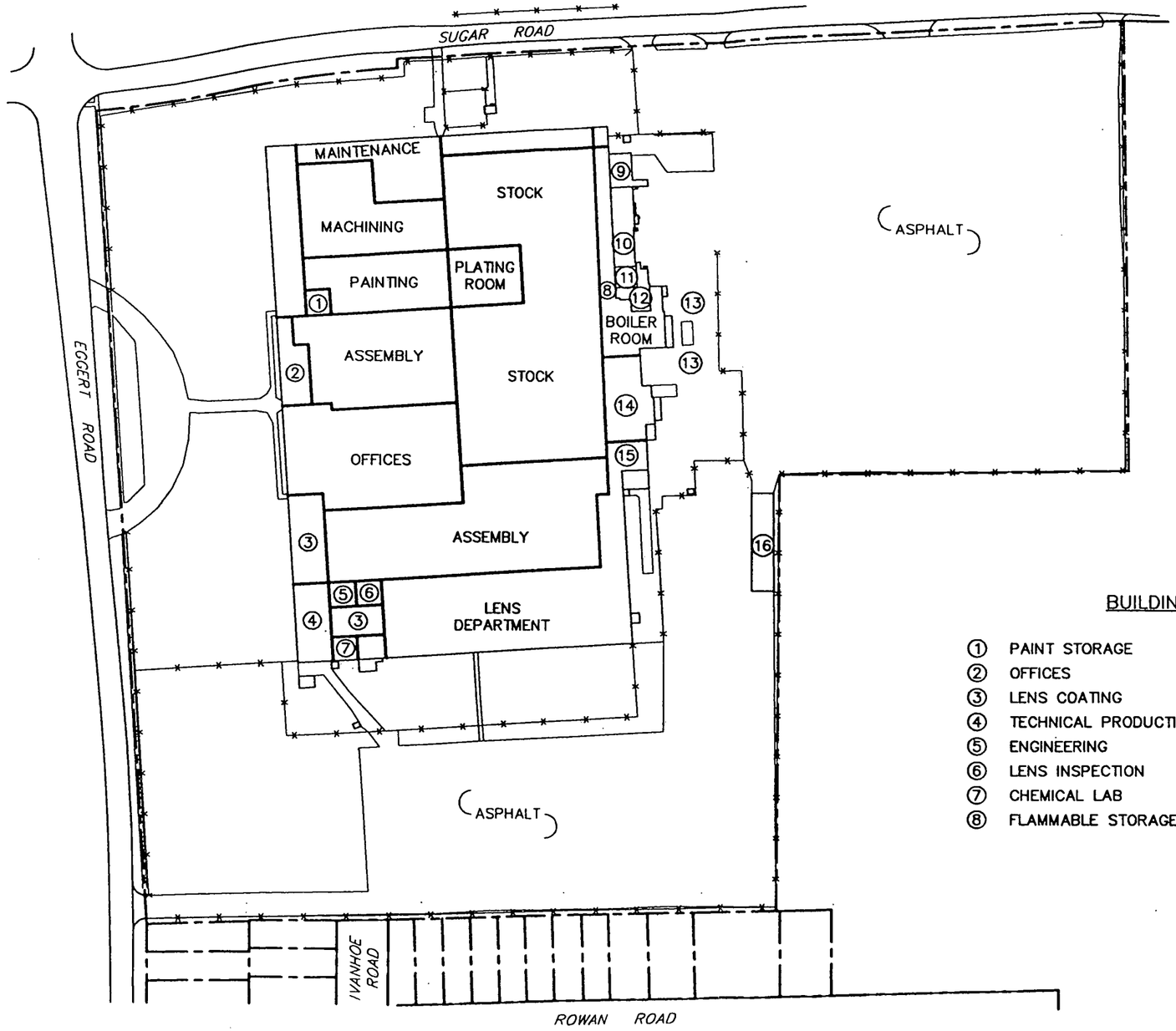
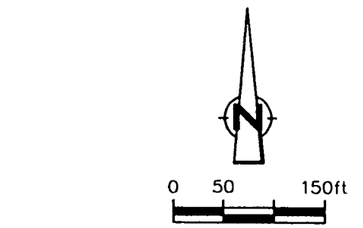
figure 2.4
SURFACE CHARACTERISTICS
LEICA, INC.
Cheektowaga, New York





BUILDING KEY

①	PAINT STORAGE	⑨	SCRAP ROOM
②	OFFICES	⑩	SHIPPING
③	LENS COATING	⑪	FORMER ABOVE GROUND STORAGE AREA
④	TECHNICAL PRODUCTION	⑫	INCINERATOR
⑤	ENGINEERING	⑬	UNDERGROUND STORAGE TANK
⑥	LENS INSPECTION	⑭	RECEIVING
⑦	CHEMICAL LAB	⑮	INSPECTION
⑧	FLAMMABLE STORAGE ROOM	⑯	STORAGE

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figure 2.5
MAJOR PRODUCTION AREAS
LEICA, INC.
Cheektowaga, New York

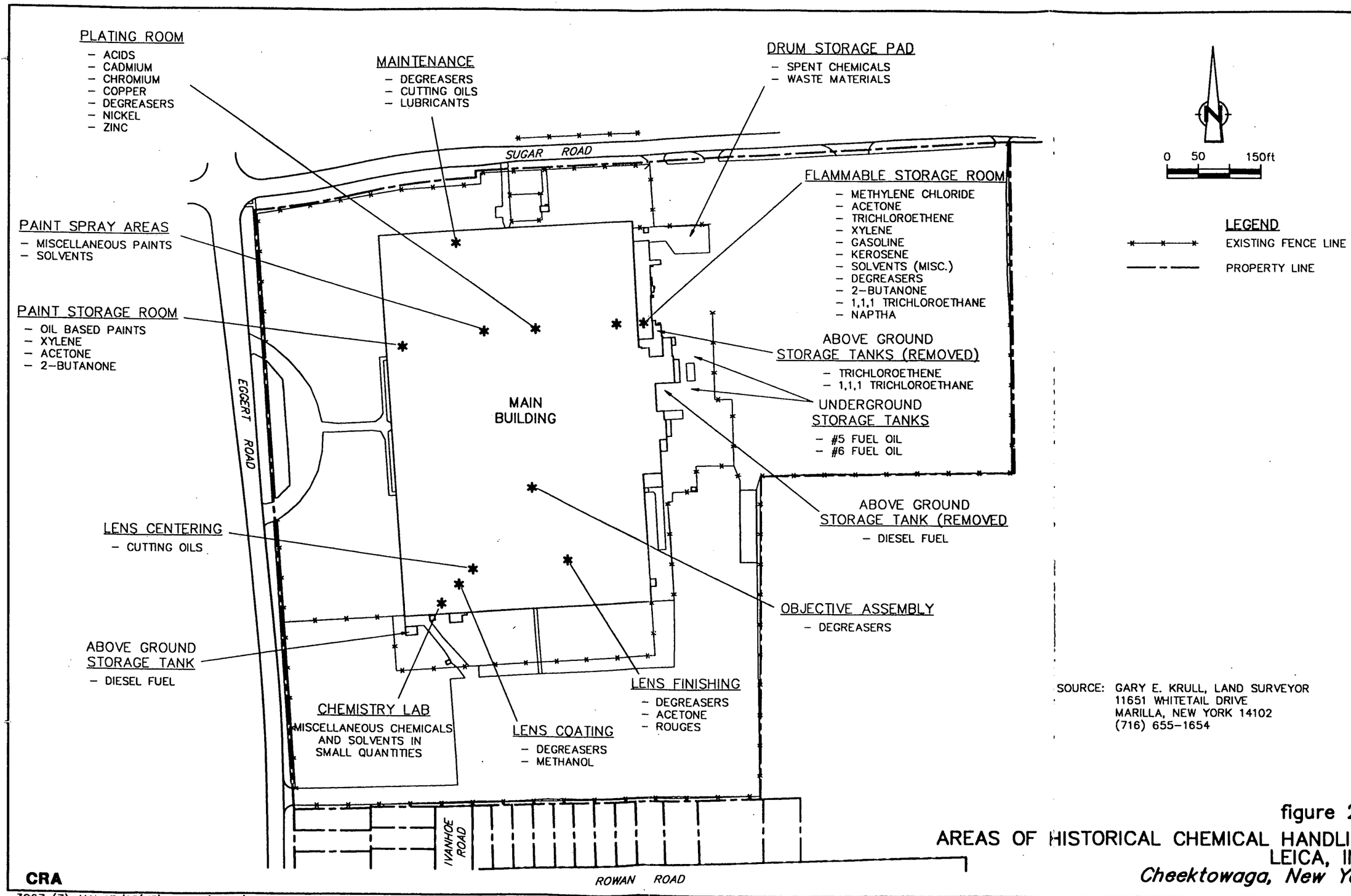

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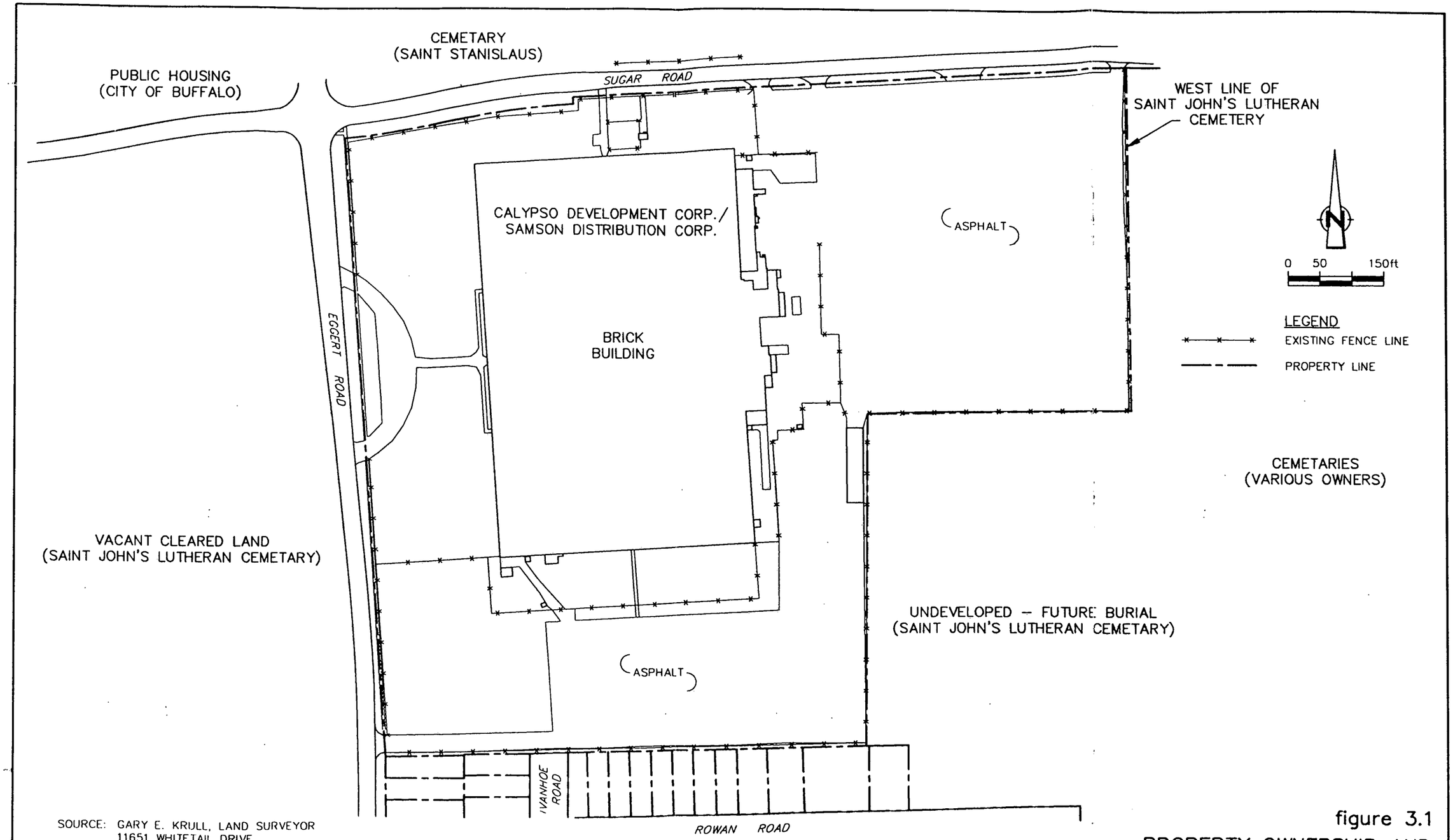
figure 2.6
AREAS OF HISTORICAL CHEMICAL HANDLING
LEICA, INC.
Cheektowaga, New York

CRA

3967 (7) JAN 17/95(NF) REV.1 (P–24)



SOURCE: GARY E. KRULL, LAND SURVEYOR
11651 WHITETAIL DRIVE
MARILLA, NEW YORK 14102
(716) 655-1654

figure 3.1
PROPERTY OWNERSHIP AND
SURROUNDING LAND USE
LEICA, INC.
Cheektowaga, New York

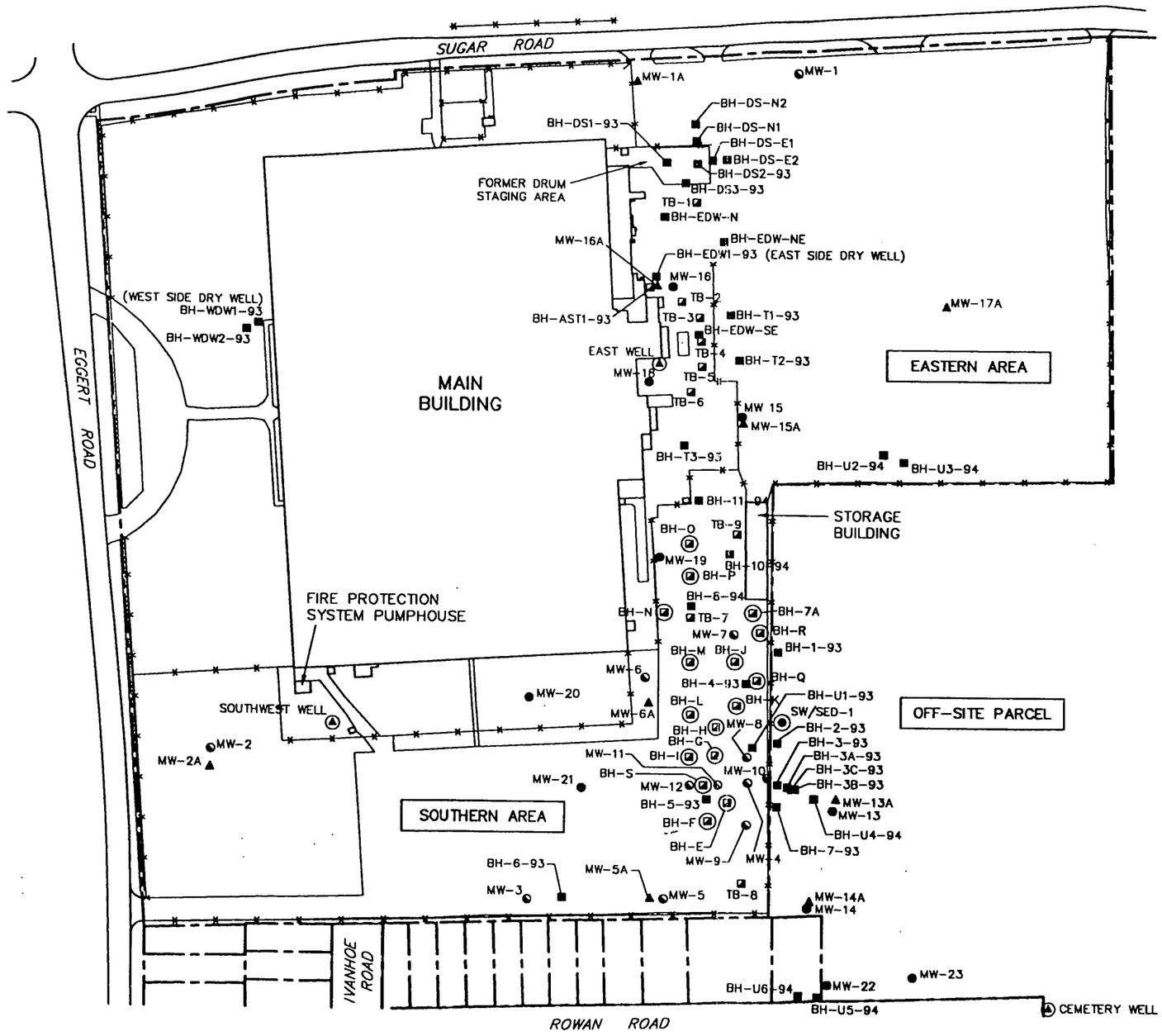
CRA

3967 (7) SEP 17/94(NF) REV.0 (P--25)

SYSTEM	SERIES	GROUP	FORMATION	MEMBERS	THICKNESS (FEET)	DESCRIPTION
DEVONIAN	UPPER ?	GENESEE			10–20	BLACK TO GRAY SHALES.
	MIDDLE	HAMILTON	MOSCOW	–	30	GRAY SHALE, KNOBBY.
				KASHONG	6	BLACK SHALE, THIN BEDDED.
			LUDLOWVILLE	TICHENOR	8–10	LIGHT GRAY LIMESTONE, CRINOIDAL.
				WANAKAH	35	BLUE–GRAY SHALE, CALCAREOUS, CONCRETIONARY, ABUNDANT TABULATE CORALS.
				LEDYARD	25–30	GRAY–BLACK SHALE, THIN BEDDED OR KNOBBY, FOSSILIFEROUS PYRITE CONCRETIONS.
				CENTERFIELD	6–8	GRAY LIMESTONE, MEDIUM TO COARSE GRAINED, THICK BEDDED, FOSSILIFEROUS.
			SKANEATELES	LEVANNA	50	BLUE–BLACK TO GRAY SHALE, MEDIUM TO COARSE GRAINED, THIN TO MEDIUM BEDDED.
				STAFFORD	3–4	BLACK LIMESTONE, FINE GRAINED, THIN BEDDED.
			MARCELLUS	OATKA CREEK	50	BLACK AND BLUE–BLACK SHALE, FISSILE, BITUMINOUS, THIN BEDDED, PYRITE NODULES AND BRACHIOPODS COMMON.
			ONONDAGA	SENECA	30–40	DARK GRAY LIMESTONE, MASSIVE BEDDED, DARKER AND MORE ARGILLACEOUS AT THE TOP.
				TIOGA	<1	WHITE BENTONITE, SOFT, VOLCANIC IN ORIGIN.
				MOORE–HOUSE	55	GRAY LIMESTONE, MEDIUM GRAINED, MASSIVE BEDDED, LIGHT AND DARK CHERT NODULES, ABUNDANT BRACHIOPODS AND CORALS.
				CLARENCE	40–45	GRAY LIMESTONE, FINE GRAINED, ABUNDANT DARK GRAY CHERT NODULES, OCCASIONAL FOSSILS.
				EDGECLIFF	3–6	LIGHT GRAY CORALLINE LIMESTONE, COARSE GRAINED, IRREGULAR LIGHT GRAY CHERT, BIOHERMS AND REEFS NOTED TO OCCUR.
		UNCONFORMITY				
	LOWER		BOIS BLANC	–	0–4	LIGHT GRAY QUARTZ SANDSTONE GRADING UPWARD INTO A DARK GRAY LIMESTONE, FINE GRAINED, ABUNDANT BRACHIOPODS AND CORALS – DISCONTINUOUS.
		UNCONFORMITY				
SILURIAN	CAYUGAN		AKRON	–	6–8	GRAY–BUFF MOTTLED DOLOSTONE, FINE GRAINED, SOLUTION OF CALCAREOUS CORALS RESULTS IN CAVITIES.
		SALINA	BERTIE	WILLIAMSVILLE	5–8	DARK GRAY DOLOSTONE, FINE GRAINED, LAMINATED.
				SCAJAQUADA	4–10	DARK GRAY SHALE AND LIMESTONE, MARLEY.
				FALKIRK	18–25	DARK GRAY DOLOMITIC LIMESTONE, MASSIVE BEDDED, RESISTANT TO WEATHERING.
			CAMILLUS	–	80–100	GREEN TO MAROON MUDSTONE AND SHALE, OCCASIONAL DOLOMITE OR ANHYDRITE ZONES.
			SYRACUSE	–	100	GRAY SHALE, BUFF DOLOSTONE, ANHYDRITE, SOME HALITE LAYERS, THIN TO MASSIVE BEDDED.
			VERNON	–	200	RED, GREEN, AND BUFF DOLOSTONE WITH ANHYDRITE; RED–GREEN SILTSTONE AND SHALE AT TOP; BRACHIOPODS, MOLLUSKS, OTHER FOSSILS COMMON.
	NIAGARAN	LOCKPORT	OAK ORCHARD	–	>150	DARK GRAY TO BROWN, THIN BEDDED TO MASSIVE DOLOMITE AND LIMESTONE, FOSSILIFEROUS, LOCAL BIOHERMS.
			ERAMOSA	–		
			GOAT ISLAND	–		
			GASPORT	–		
			PECEW	–		

REFERENCES: A.M. LASALA, JR. (1968)
L.V. RICKARD (1975)
E.J. BUEHLER AND I.H. TESMER (1963)

figure 3.2
REGIONAL BEDROCK STRATIGRAPHIC SEQUENCE
LEICA, INC.
Cheektowaga, New York



SOURCE: GARY E. KRULL, LAND SURVEYOR
11651 WHITETAIL DRIVE
MARILLA, NEW YORK 14102
(716) 655-1654

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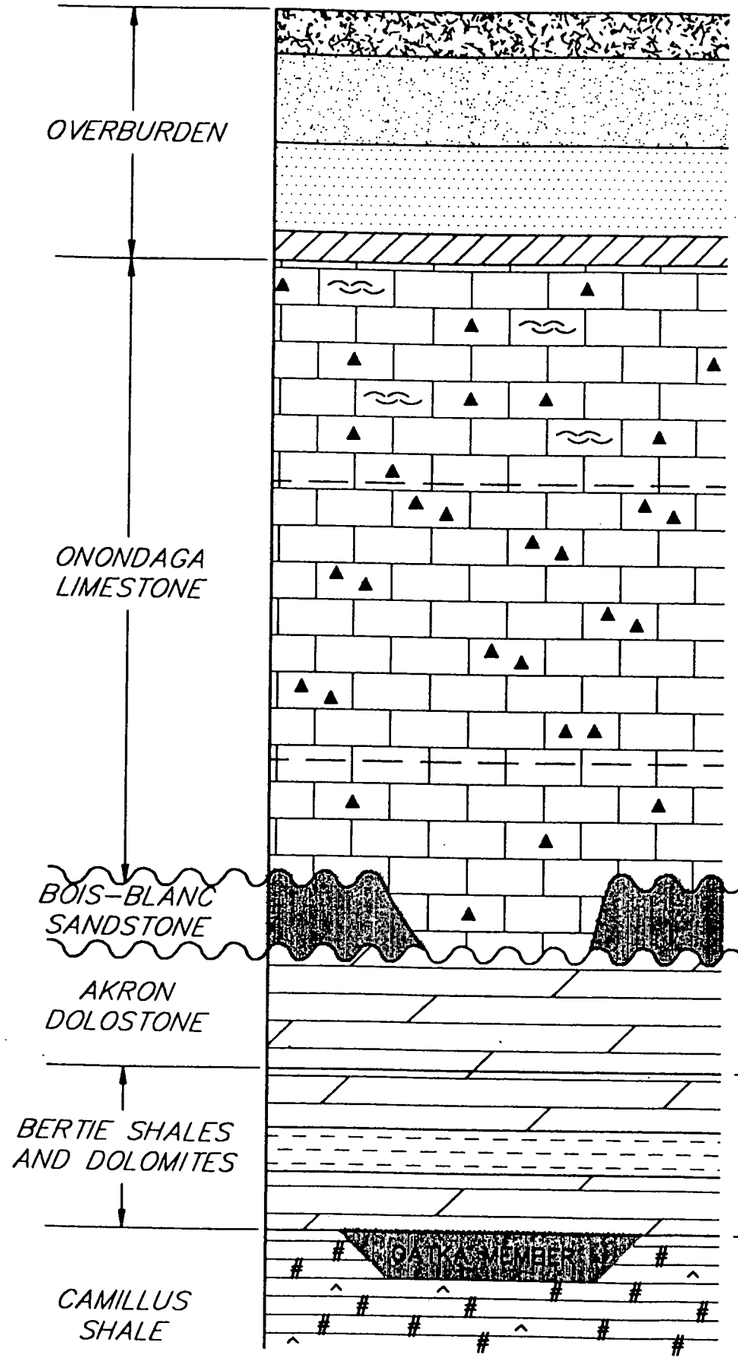
3967 (7) JAN 17/95(NF) REV.1 (P-26)

figure 5.1

MONITORING WELL AND SAMPLE LOCATIONS
LEICA, INC.
Cheektowaga, New York



	RANGE OF THICKNESS (ft)		
FILL	0.5–6.2		
LAKE SEDIMENTS	2.4–9.4	8.1–16.0'	
SANDY SOILS	1.9–9.7		
TILL	0.3–3.0		
MOOREHOUSE MEMBER	55	98–105'	
CLARENCE MEMBER	40–45		
EDGECLIFF MEMBER	3–6		
	0–4		DEVONIAN
EROSIONAL UNCONFORMITY			SILURIAN
	6–8		
WILLIAMSVILLE MEMBER	5–8	30–45'	
SCAJAQUADA MEMBER	4–10		
FALKIRK MEMBER	18–25		
	20		
		~ 400'	

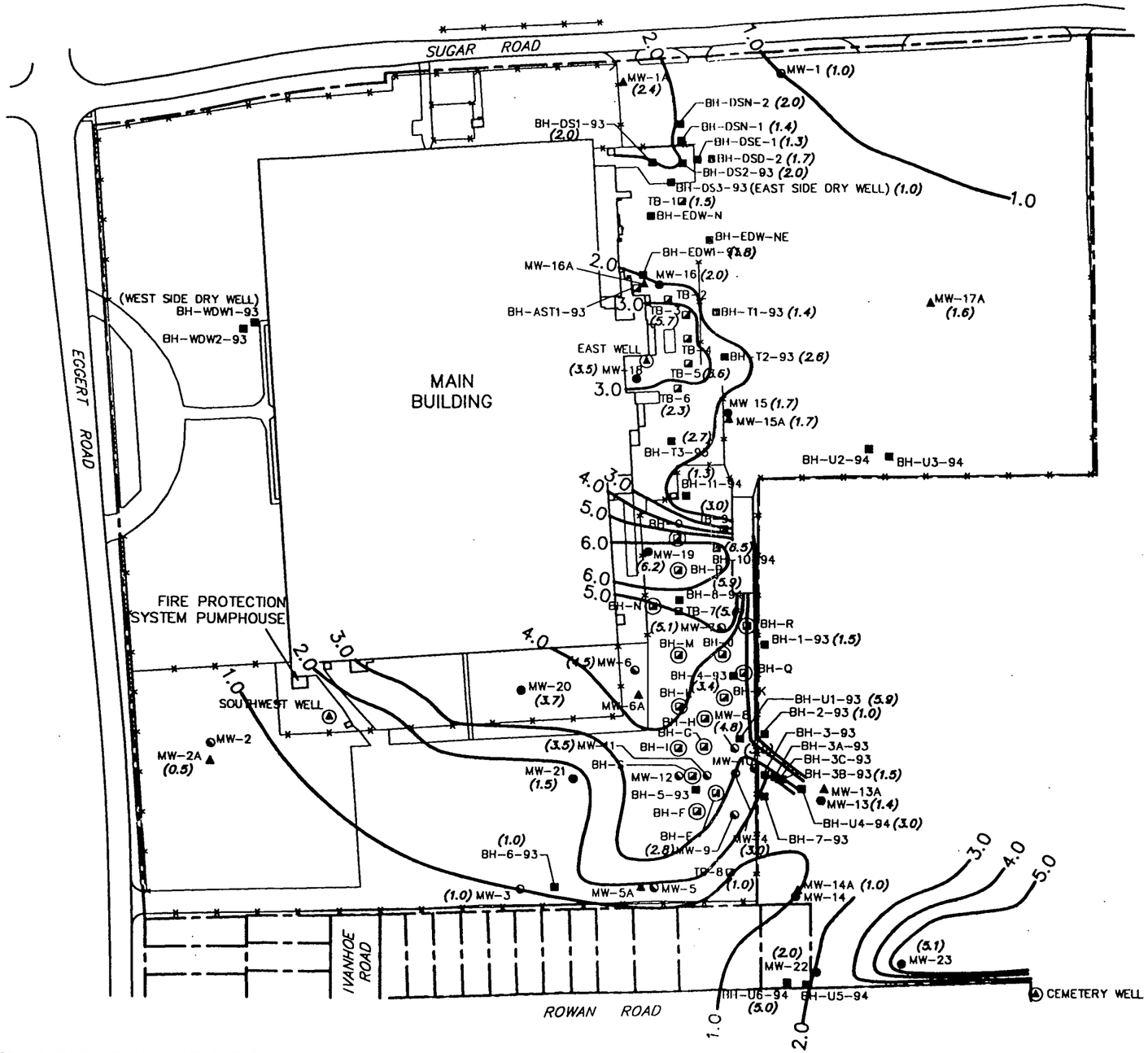
LEGEND

- SANDSTONE
- DOLOSTONE
- LIMESTONE
- SHALE
- ▲ CHERT
- ≈ FOSSILS
- # HALITE
- ^ GYPSUM

figure 5.2
SITE STRATIGRAPHIC COLUMN
LEICA, INC.
Cheektowaga, New York

CRA

3967 (7) SEP 20/94(NF) REV.0 (X-02).



LEGEND

- EXISTING FENCE LINE
- PROPERTY LINE
- BH-10-94 ■ BOREHOLE LOCATION
- MW-1 ◔ OVERBURDEN MONITORING WELL (PREVIOUSLY INSTALLED)
- MW-19 ● OVERBURDEN MONITORING WELL (1993/94)
- MW-6A ▲ BEDROCK MONITORING WELL (1993/94)
- TB-9 ◪ RECRA BOREHOLE (PREVIOUSLY INSTALLED)
- BH-F ⊘ SI BOREHOLE (PREVIOUSLY INSTALLED)
- CEMETERY WELL #1 ⊘ NON-POTABLE WATER SUPPLY WELL
- ISOPACH CONTOUR
- 1.0 FILL THICKNESS (feet)

SOURCE: GARY E. KRULL, LAND SURVEYOR
11651 WHITETAIL DRIVE
MARILLA, NEW YORK 14102
(716) 655-1654

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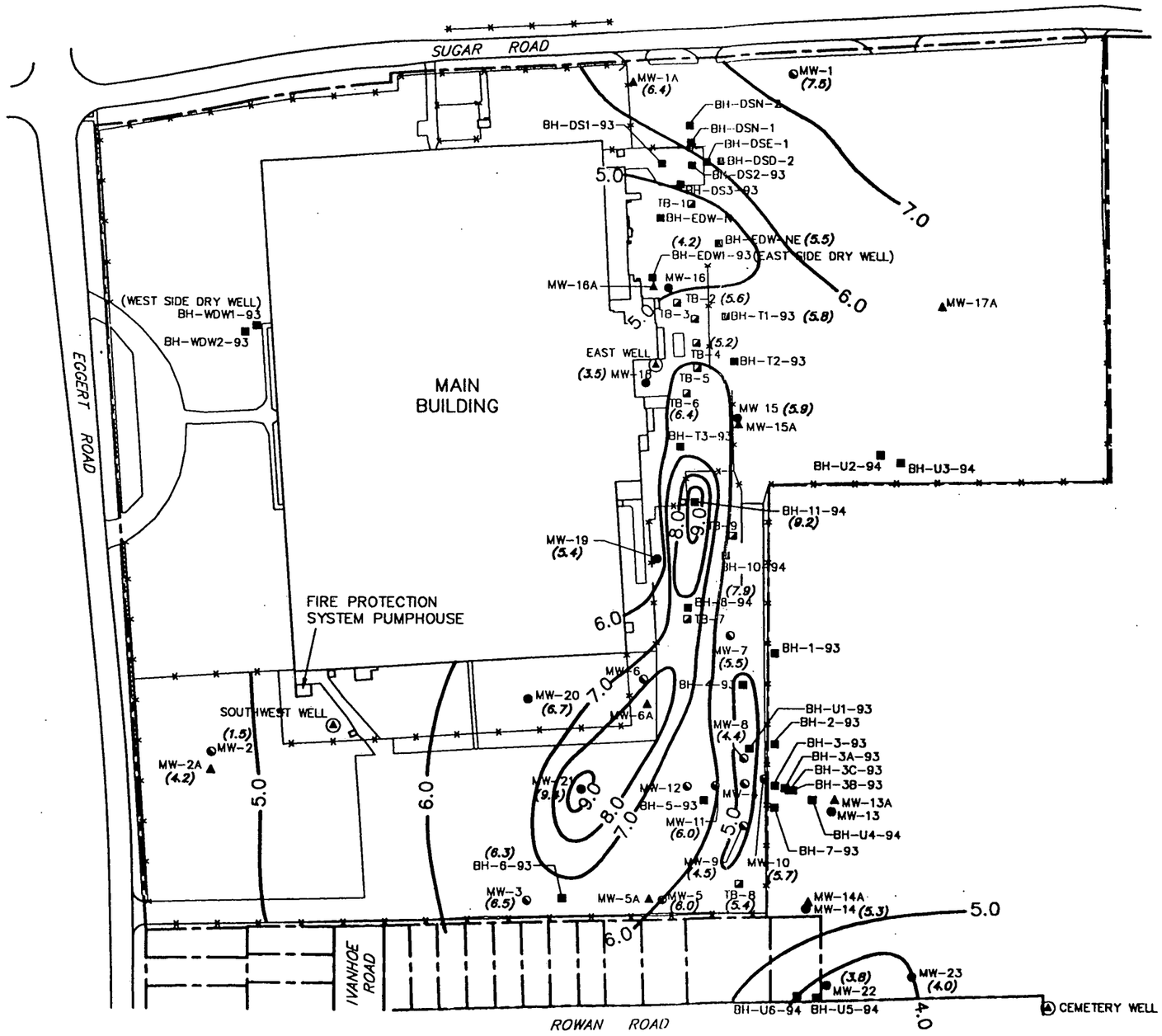
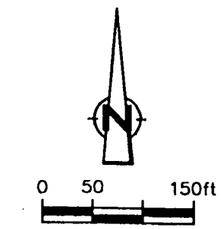
3967 (7) JAN 17/95(NF) REV.1 (P-27)

figure 5.3
ISOPACH OF FILL
LEICA, INC.
Cheektowaga, New York





LEGEND

	EXISTING FENCE LINE
	PROPERTY LINE
BH-10-94 ■	BOREHOLE LOCATION
MW-1 ◔	OVERBURDEN MONITORING WELL (PREVIOUSLY INSTALLED)
MW-19 ●	OVERBURDEN MONITORING WELL (1993/94)
MW-6A ▲	BEDROCK MONITORING WELL (1993/94)
TB-9 ◪	RECRA BOREHOLE (PREVIOUSLY INSTALLED)
CEMETERY WELL #1 Ⓐ	NON-POTABLE WATER SUPPLY WELL
	ISOPACH CONTOUR
6.0	LAKE SEDIMENT THICKNESS (feet)

SOURCE: GARY E. KRULL, LAND SURVEYOR
11651 WHITETAIL DRIVE
MARILLA, NEW YORK 14102
(716) 655-1654

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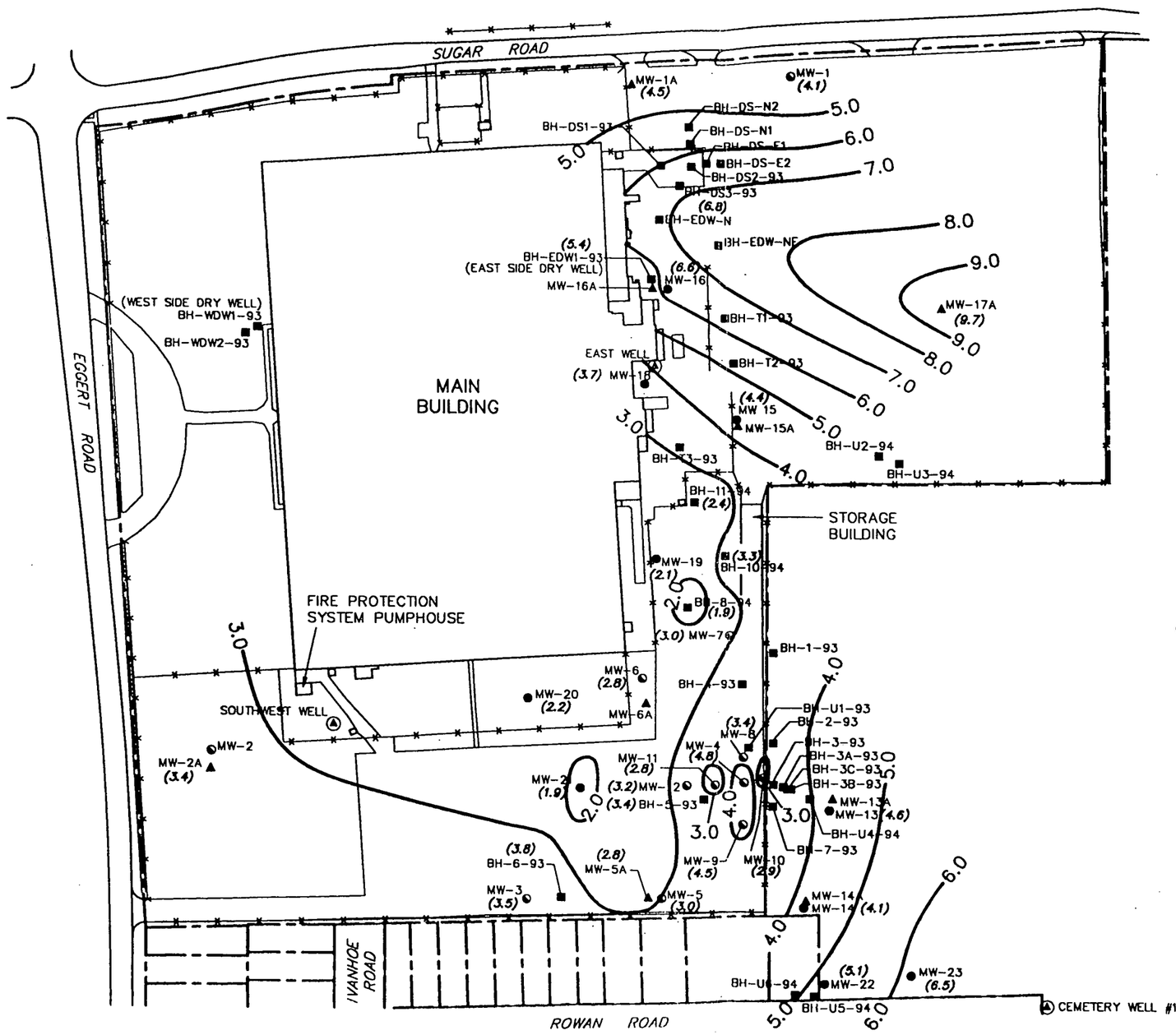
3967 (7) JAN 17/95(NF) REV.1 (P-28)

figure 5.4
LAKE SEDIMENT ISOPACH
LEICA, INC.
Cheektowaga, New York



LEGEND

- EXISTING FENCE LINE
- PROPERTY LINE
- BH-10-94 ■ BOREHOLE LOCATION
- MW-1 ◔ OVERBURDEN MONITORING WELL (PREVIOUSLY INSTALLED)
- MW-19 ● OVERBURDEN MONITORING WELL (1993/94)
- MW-6A ▲ BEDROCK MONITORING WELL (1993/94)
- CEMETERY WELL #1 Ⓐ NON-POTABLE WATER SUPPLY WELL
- ISOPACH CONTOUR
- 1.0 SAND THICKNESS (ft)

SOURCE: GARY E. KRULL, LAND SURVEYOR
11651 WHITETAIL DRIVE
MARILLA, NEW YORK 14102
(716) 655-1654

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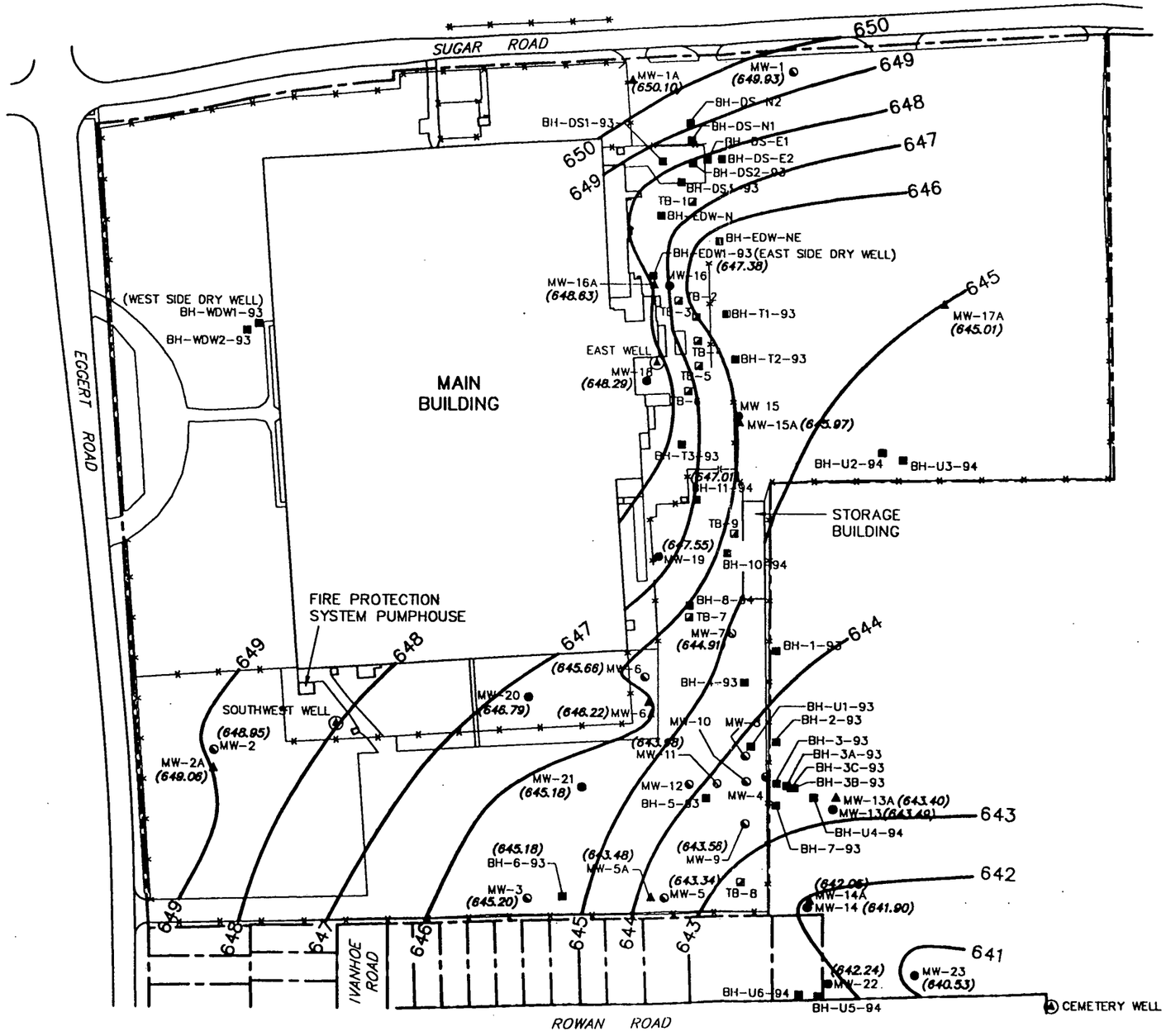
3967 (7) JAN 17/95(NF) REV.1 (P-29)

figure 5.5
SANDY ZONE ISOPACH
LEICA, INC.
Cheektowaga, New York



LEGEND

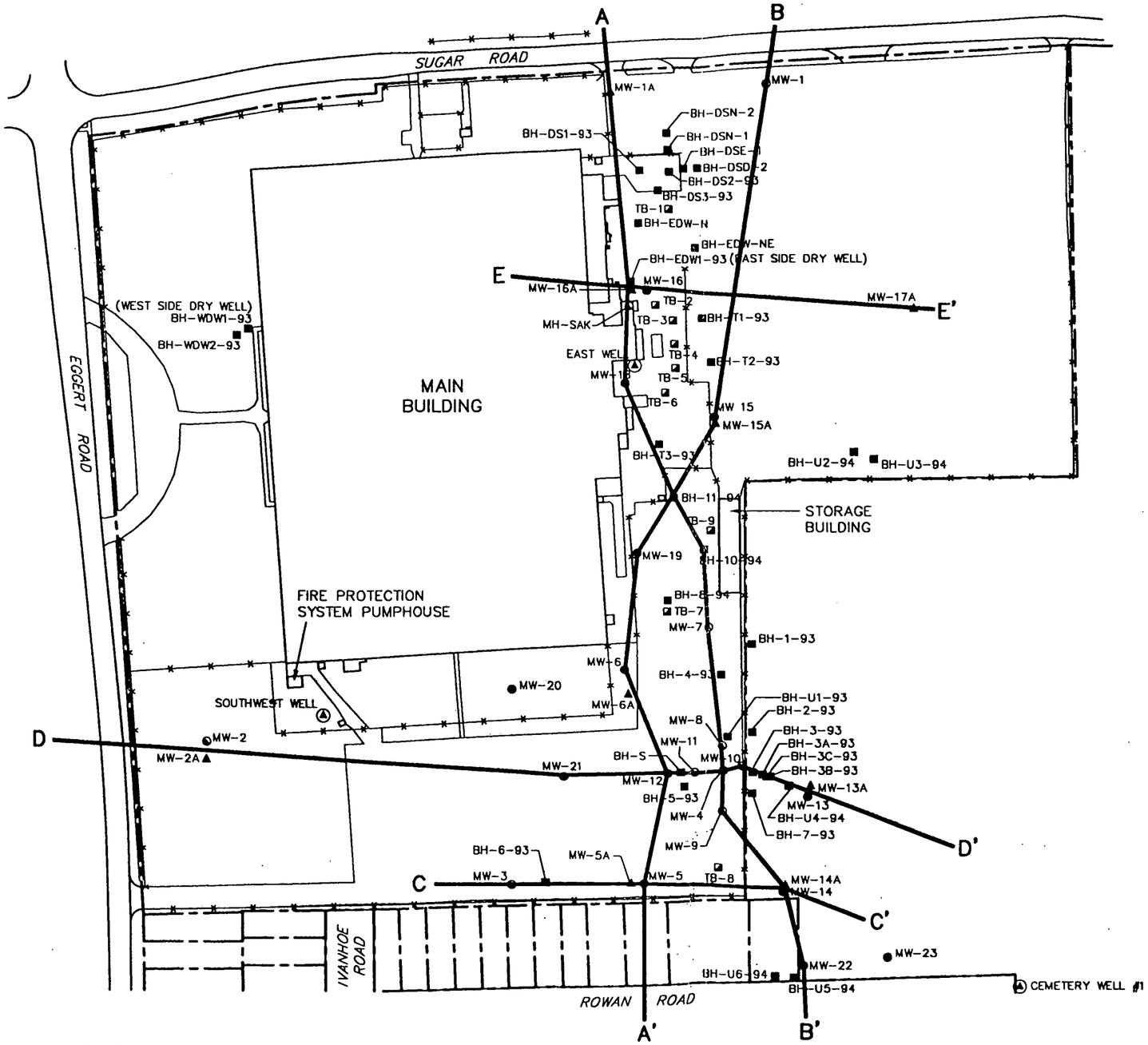
- EXISTING FENCE LINE
- PROPERTY LINE
- BH-10-94 ■ BOREHOLE LOCATION
- MW-1 ◐ OVERBURDEN MONITORING WELL (PREVIOUSLY INSTALLED)
- MW-19 ● OVERBURDEN MONITORING WELL (1993/94)
- MW-6A ▲ BEDROCK MONITORING WELL (1993/94)
- TB-9 ◪ RECRA BOREHOLE (PREVIOUSLY INSTALLED)
- CEMETERY WELL #1 Ⓐ NON-POTABLE WATER SUPPLY WELL
- BEDROCK CONTOUR
- (645.01) BEDROCK ELEVATION (ft AMSL)

SOURCE: GARY E. KRULL, LAND SURVEYOR
11651 WHITETAIL DRIVE
MARILLA, NEW YORK 14102
(716) 655-1654

CRA

3967 (7) JAN 17/95(NF) REV.1 (P-30)

figure 5.6
BEDROCK SURFACE CONTOURS
LEICA, INC.
Cheektowaga, New York



LEGEND

- EXISTING FENCE LINE
- PROPERTY LINE
- BH-10-94 ■ BOREHOLE LOCATION
- MW-1 ◔ OVERBURDEN MONITORING WELL (PREVIOUSLY INSTALLED)
- MW-19 ● OVERBURDEN MONITORING WELL (1993/94)
- MW-6A ▲ BEDROCK MONITORING WELL (1993/94)
- TB-9 ◪ RECRA BOREHOLE (PREVIOUSLY INSTALLED)
- CEMETERY WELL #1 Ⓐ NON-POTABLE WATER SUPPLY WELL

SOURCE: GARY E. KRULL, LAND SURVEYOR
11651 WHITETAIL DRIVE
MARILLA, NEW YORK 14102
(716) 655-1654

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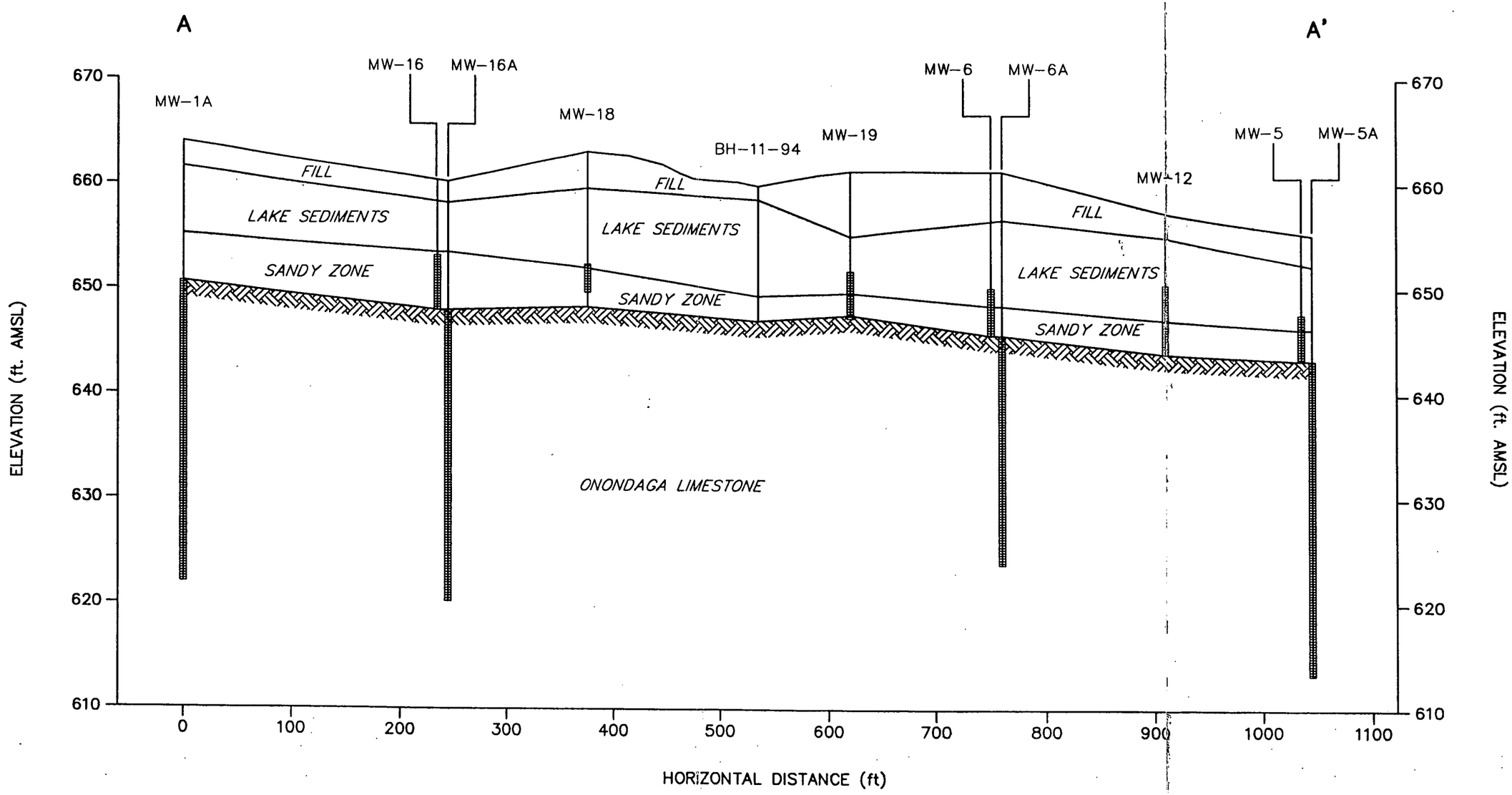
3967 (7) JAN 17/95(NF) REV.1 (P-31)

figure 5.7
CROSS SECTION ALIGNMENTS
LEICA, INC.
Cheektowaga, New York



LEGEND

MONITORED INTERVAL

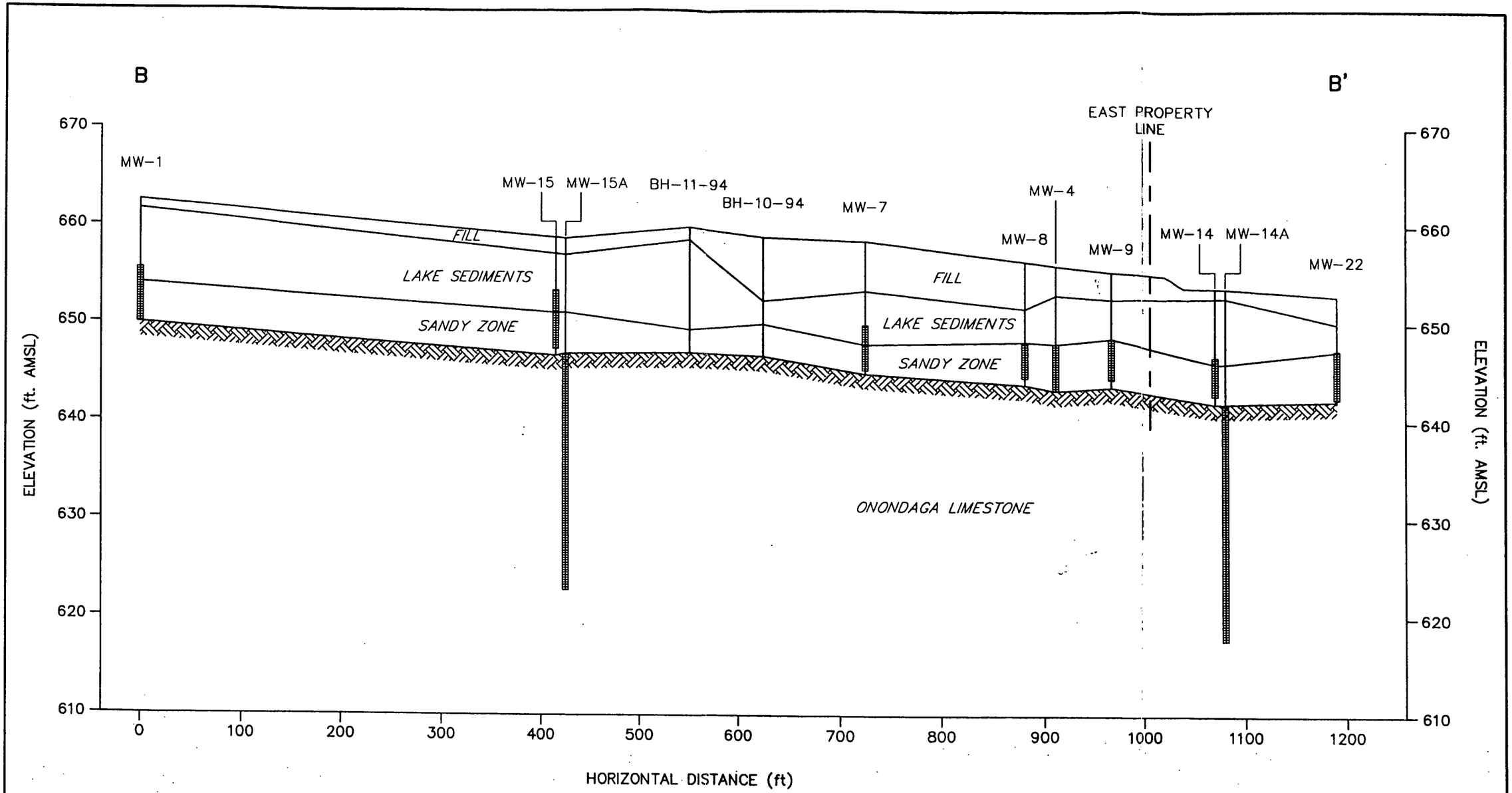
CROSS SECTION A–A'

SCALE: HORIZ: 1"=100'
VERT: 1"=10'

figure 5.8
STRATIGRAPHIC CROSS SECTION A–A'
LEICA, INC.
Cheektowaga, New York

CRA

3967 (7) SEP 20/94(NF) REV.0 (X-03)



CROSS SECTION B–B'

SCALE: HORIZ: 1"=100'
VERT: 1"=10'

figure 5.9
STRATIGRAPHIC CROSS SECTION B–B'
LEICA, INC.
Cheektowaga, New York

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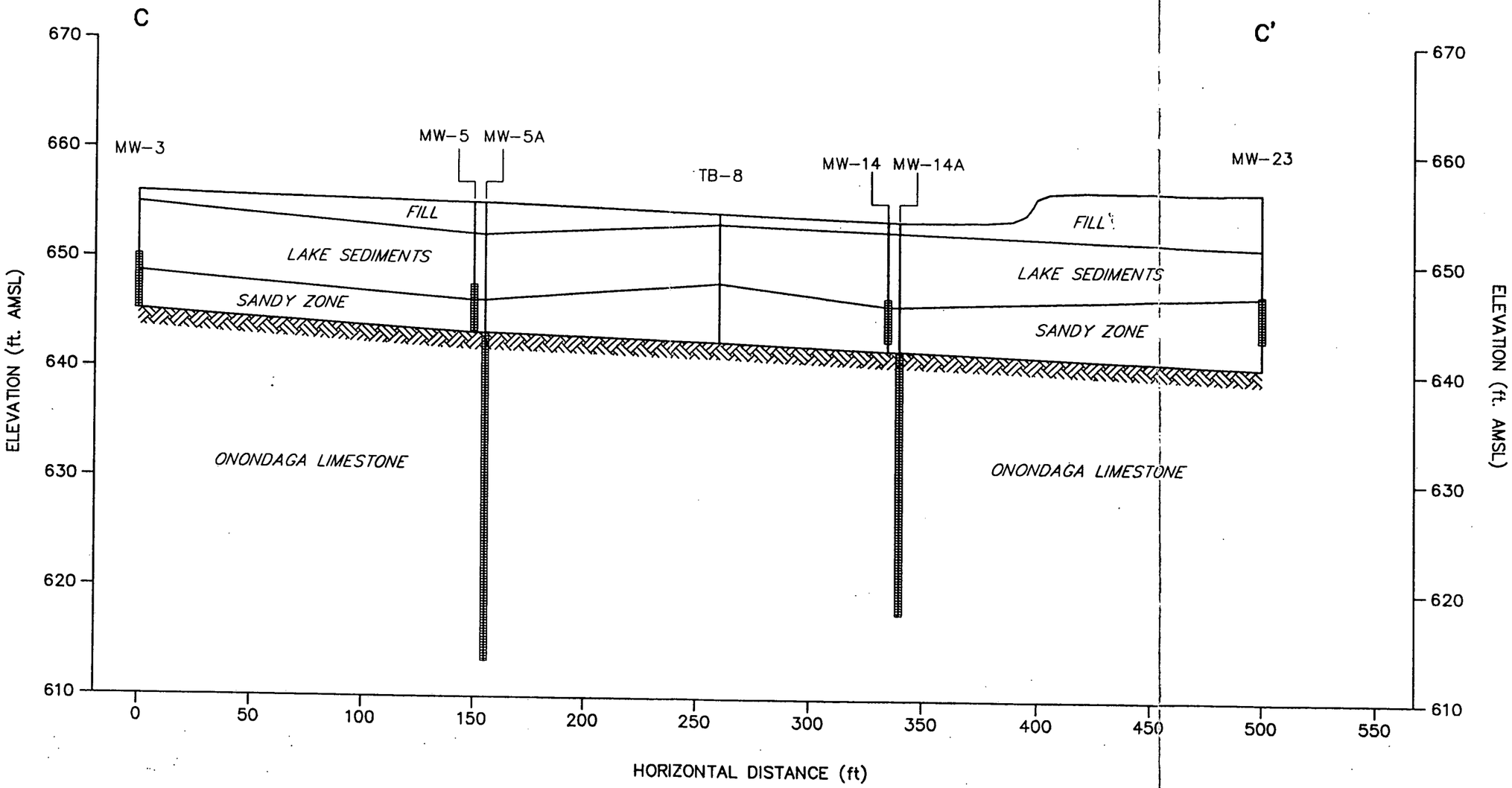
3967 (7) SEP 20/94(NF) REV.0 (X-04)



LEGEND

MONITORED INTERVAL

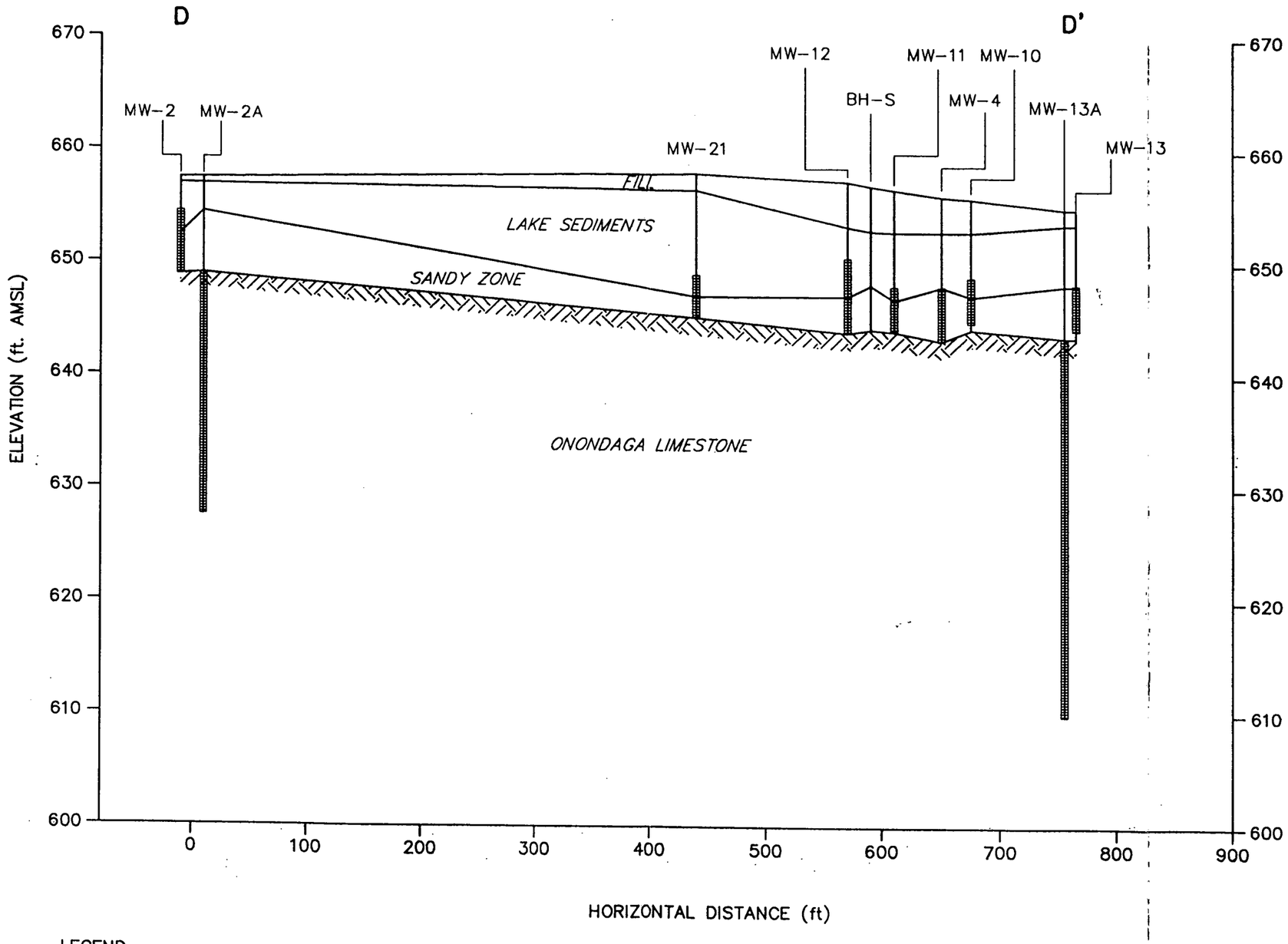
CROSS SECTION C–C'

SCALE: HORIZ: 1"=50'
VERT: 1"=10'

figure 5.10
STRATIGRAPHIC CROSS SECTION C–C'
LEICA, INC.
Cheektowaga, New York

CRA

3967 (7) SEP 20/94(NF) REV.0 (X-05)



LEGEND

MONITORED INTERVAL

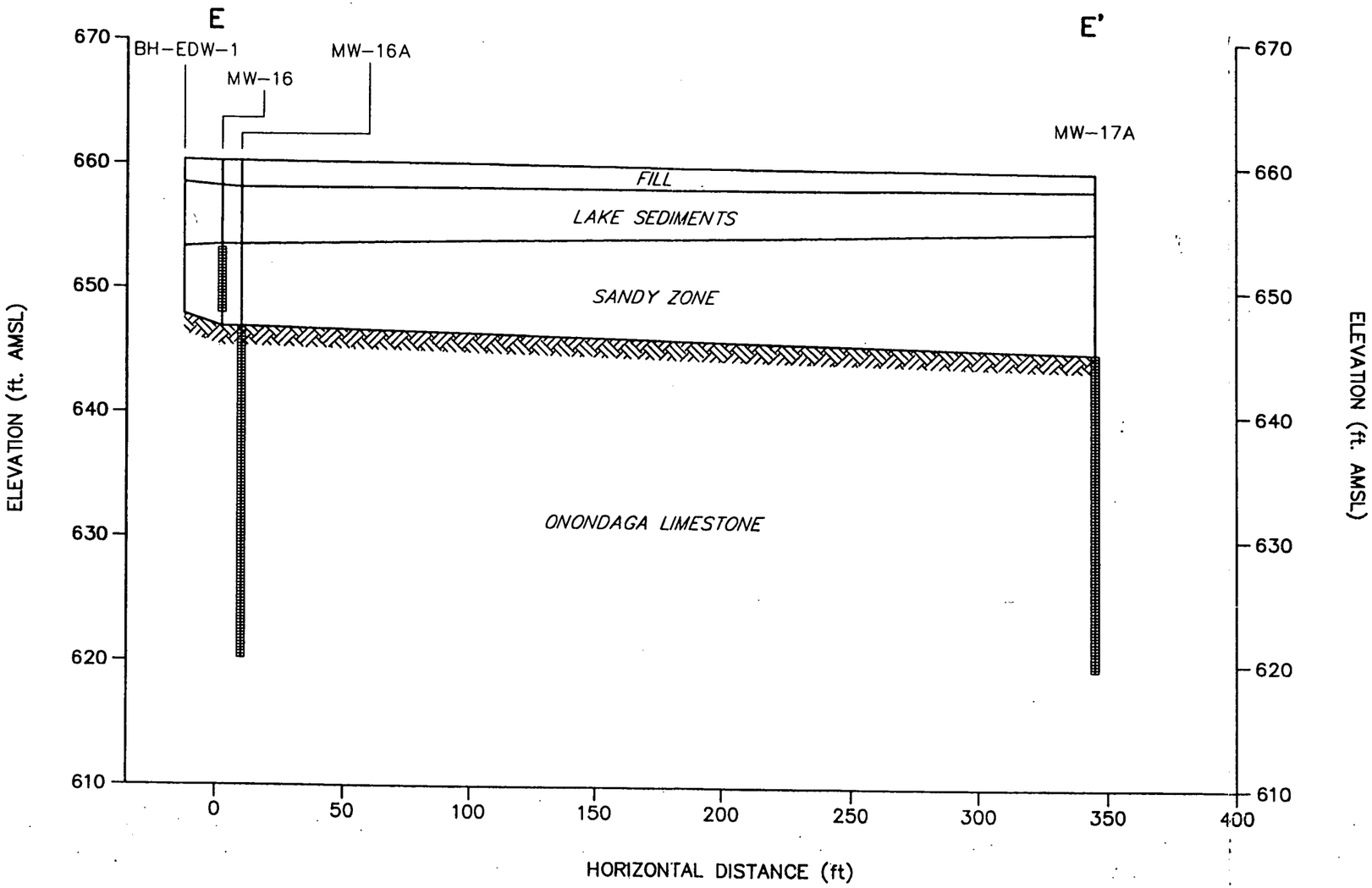
CROSS SECTION D–D'

SCALE: HORIZ: 1"=100'
VERT: 1"=10'

figure 5.11
STRATIGRAPHIC CROSS SECTION D–D'
LEICA, INC.
Cheektowaga, New York

CRA

3967 (7) SEP 20/94(NF) REV.0 (X-06)



LEGEND

MONITORED INTERVAL

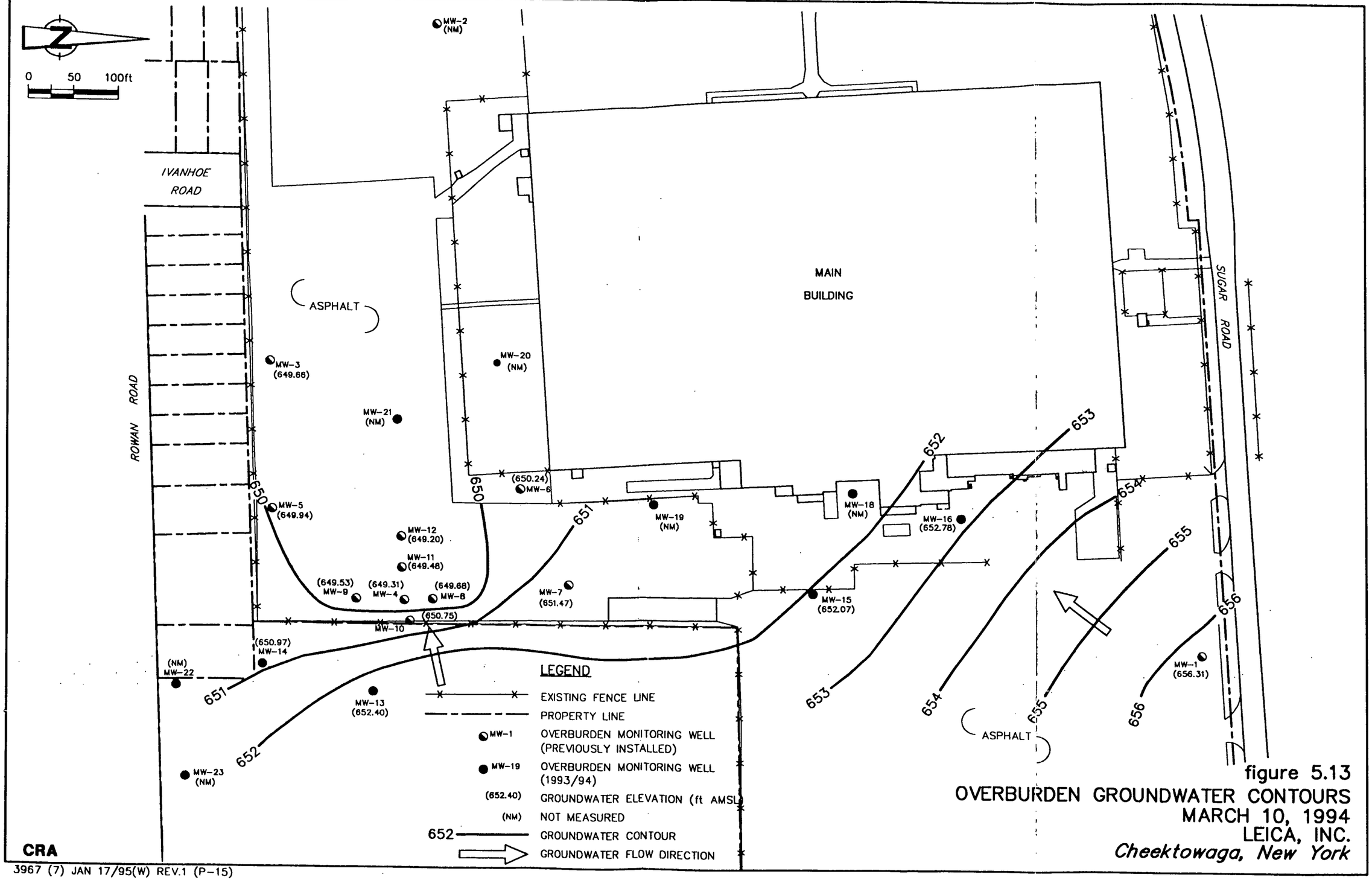
CROSS SECTION E-E'

SCALE: HORIZ: 1"=50'
VERT: 1"=10'

figure 5.12
STRATIGRAPHIC CROSS SECTION E-E'
LEICA, INC.
Cheektowaga, New York

CRA

3967 (7) SEP 20/94(NF) REV.0 (X-07)



CRA

3967 (7) JAN 17/95(W) REV.1 (P-15)

figure 5.13
OVERBURDEN GROUNDWATER CONTOURS
MARCH 10, 1994
LEICA, INC.
Cheektowaga, New York

0 50 100ft

IVANHOE ROAD

ROWAN ROAD

SUGAR ROAD

MAIN BUILDING

ASPHALT

ASPHALT

MW-2 (649.93)

MW-3 (650.53)

MW-5 (650.83)

MW-6 (650.86)

MW-7 (651.97)

MW-8 (647.74)

MW-9 (650.11)

MW-10 (651.31)

MW-11 (648.65)

MW-12 (649.63)

MW-13 (652.73)

MW-14 (651.35)

MW-15 (655.00)

MW-16 (653.55)

MW-18 (NM)

MW-19 (NM)

MW-20 (NM)

MW-21 (NM)

MW-22 (NM)

MW-23 (NM)

MW-1 (656.85)

650 651 652 653 654 655 656

649 648

LEGEND

EXISTING FENCE LINE

PROPERTY LINE

MW-1 OVERBURDEN MONITORING WELL (PREVIOUSLY INSTALLED)

MW-19 OVERBURDEN MONITORING WELL (1993/94)

(652.40) GROUNDWATER ELEVATION (ft AMSL)

(NM) NOT MEASURED

652 GROUNDWATER CONTOUR

GROUNDWATER FLOW DIRECTION

CRA

3967 (7) JAN 17/95(W) REV.1 (P-16)

figure 5.14

OVERBURDEN GROUNDWATER CONTOURS
MARCH 21, 1994
LEICA, INC.
Cheektowaga, New York

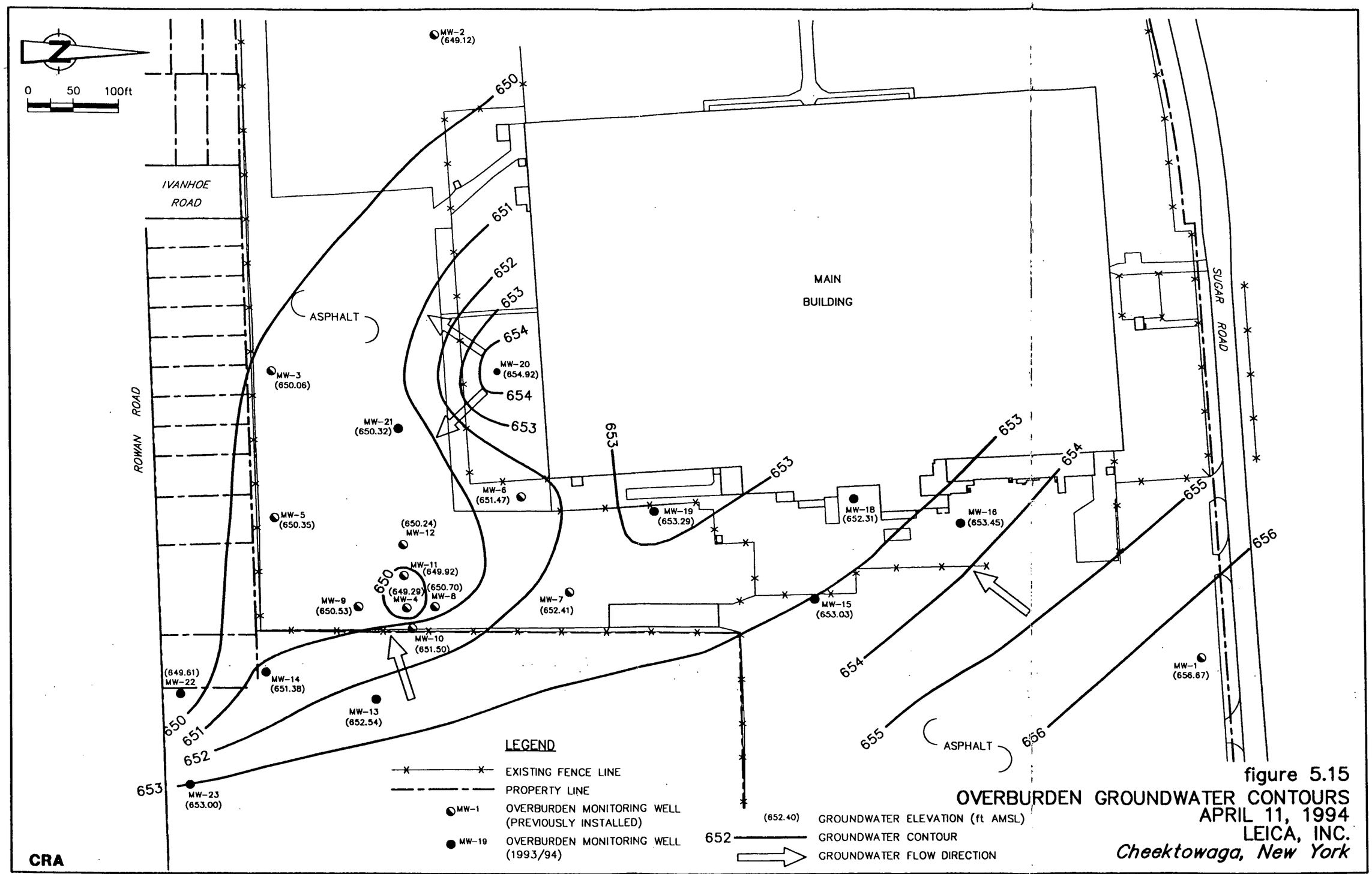
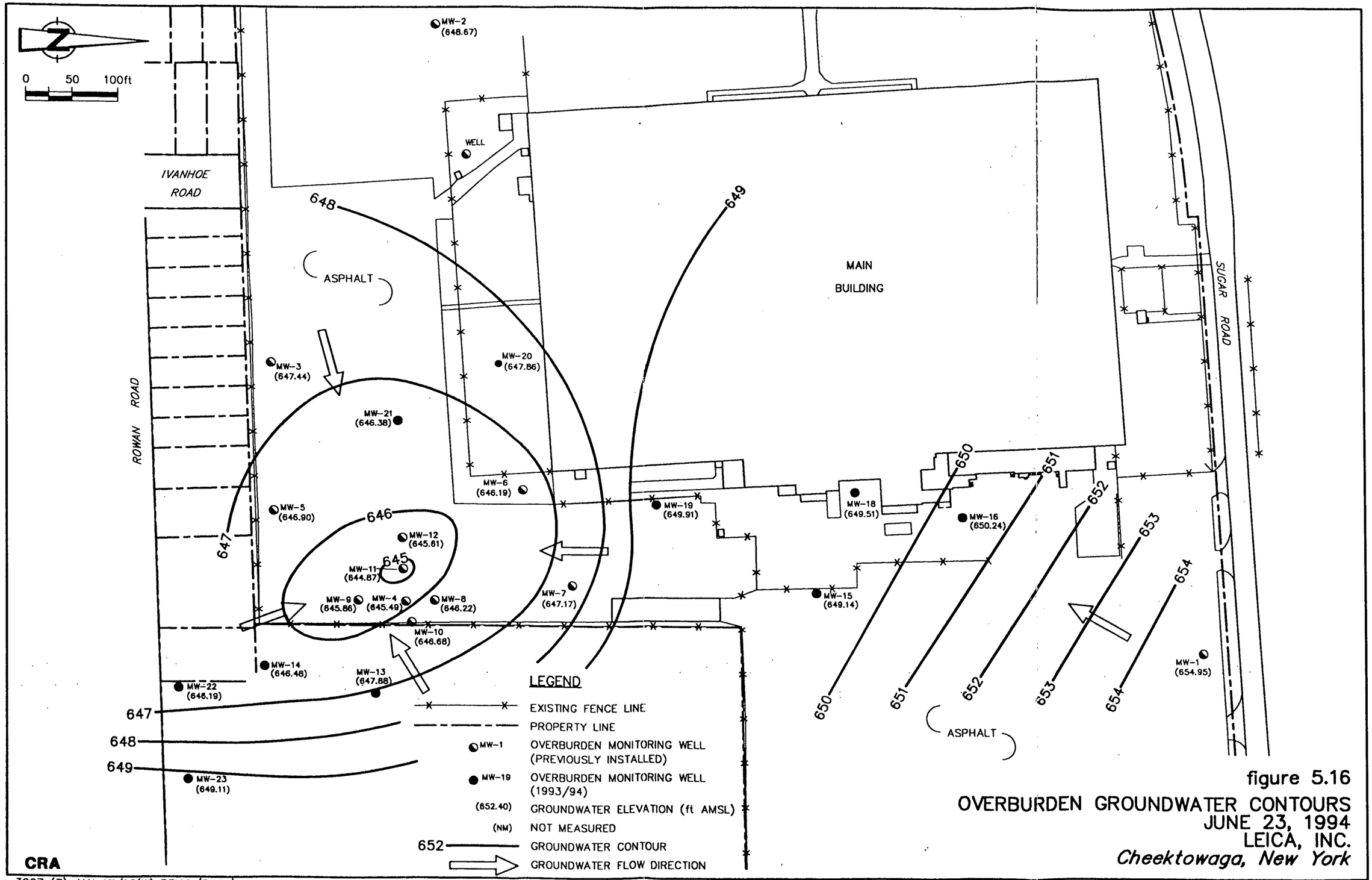


figure 5.15
OVERBURDEN GROUNDWATER CONTOURS
APRIL 11, 1994
LEICA, INC.
Cheektowaga, New York

CRA

3967 (7) JAN 17/95(W) REV.1 (P-17)

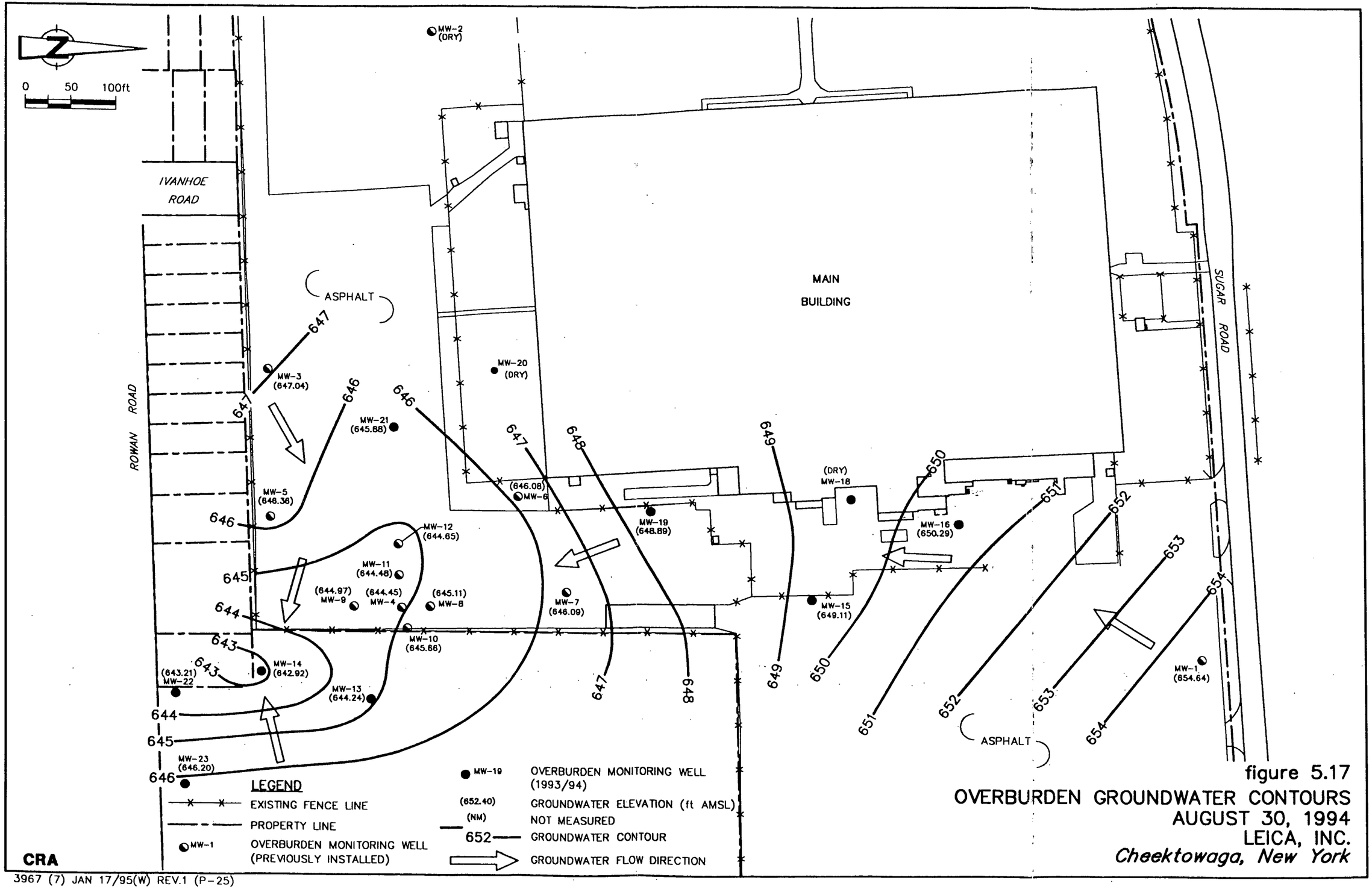


CRA

figure 5.16

OVERBURDEN GROUNDWATER CONTOURS
JUNE 23, 1994
LEICA, INC.
Cheektowaga, New York

3967 (7) JAN 17/95(W) REV.1 (P-18)



CRA

3967 (7) JAN 17/95(W) REV.1 (P-25)

figure 5.17
OVERBURDEN GROUNDWATER CONTOURS
AUGUST 30, 1994
LEICA, INC.
Cheektowaga, New York

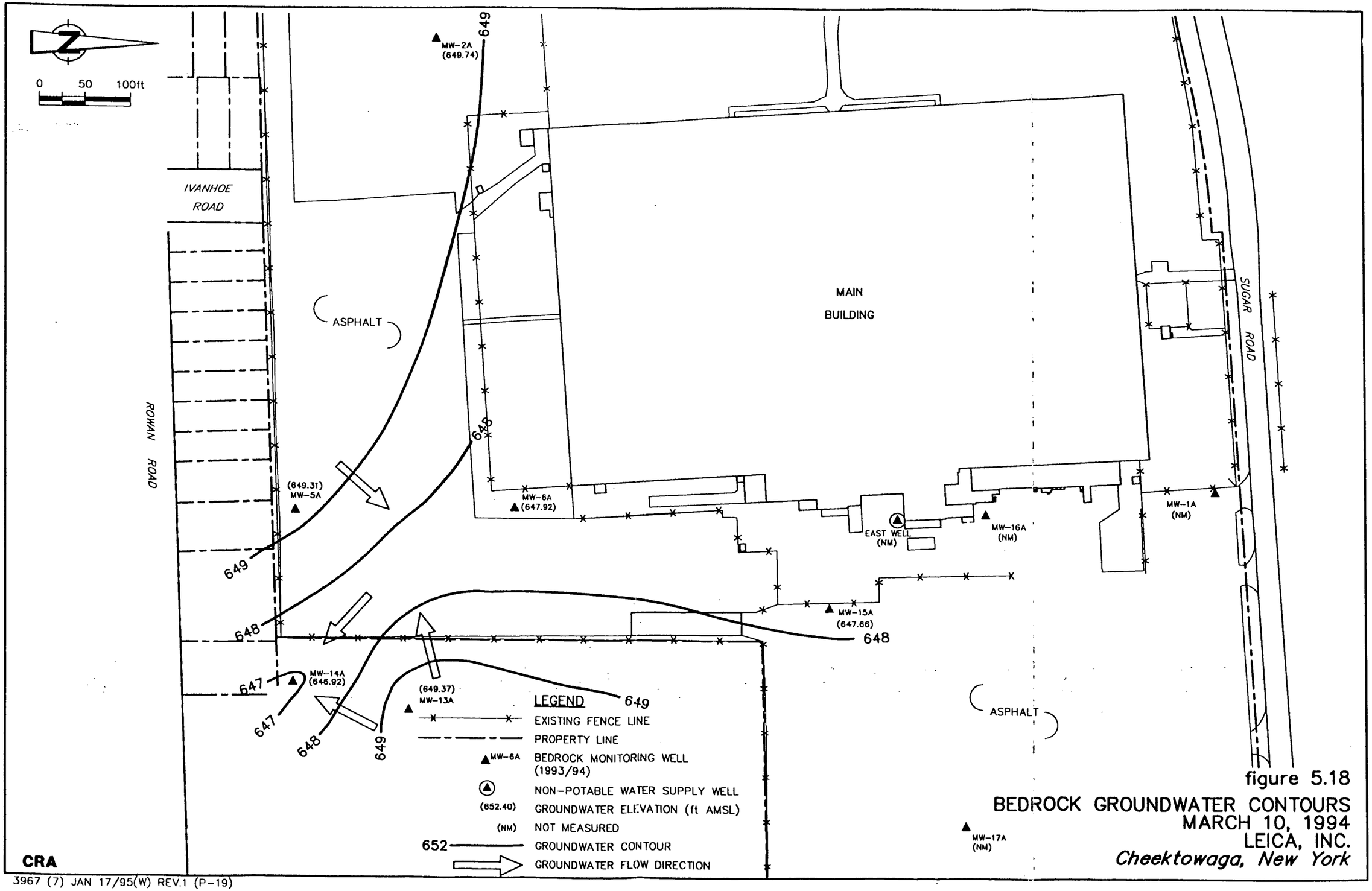


figure 5.18

BEDROCK GROUNDWATER CONTOURS
MARCH 10, 1994
LEICA, INC.
Cheektowaga, New York

CRA

3967 (7) JAN 17/95(W) REV.1 (P-19)

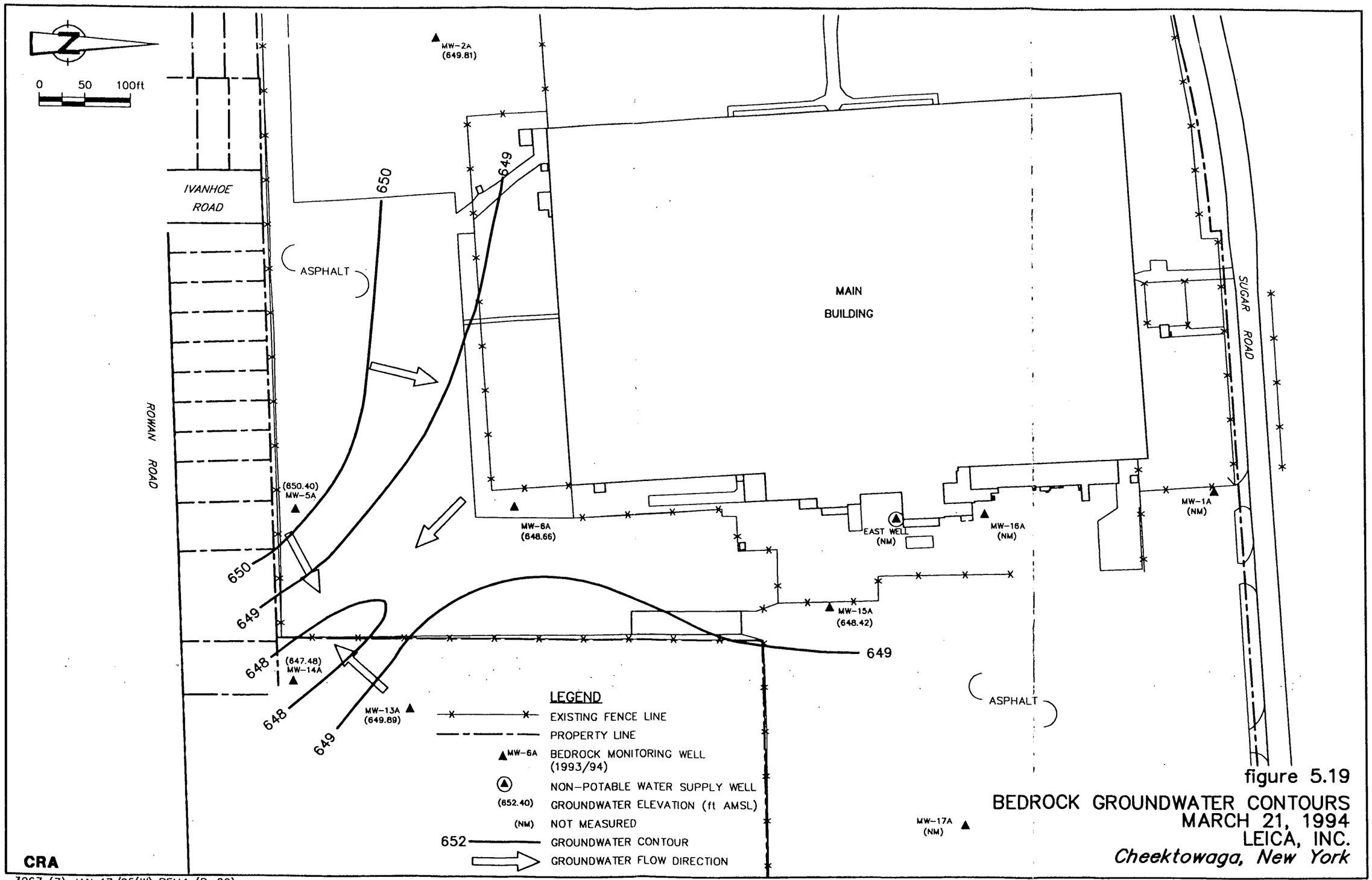


figure 5.19

BEDROCK GROUNDWATER CONTOURS
MARCH 21, 1994
LEICA, INC.
Cheektowaga, New York

CRA

3967 (7) JAN 17/95(W) REV.1 (P-20)

N

0 50 100ft

IVANHOE ROAD

ROWAN ROAD

SUGAR ROAD

MW-2A (649.70)

MAIN BUILDING

ASPHALT

MW-6A (649.30)

MW-5A (649.96)

MW-14A (648.36)

MW-13A (650.13)

EAST WELL (NM)

MW-16A (652.65)

MW-15A (649.18)

MW-1A (650.08)

MW-17A (656.64)

649 650 651 652 653 654 655 656

LEGEND

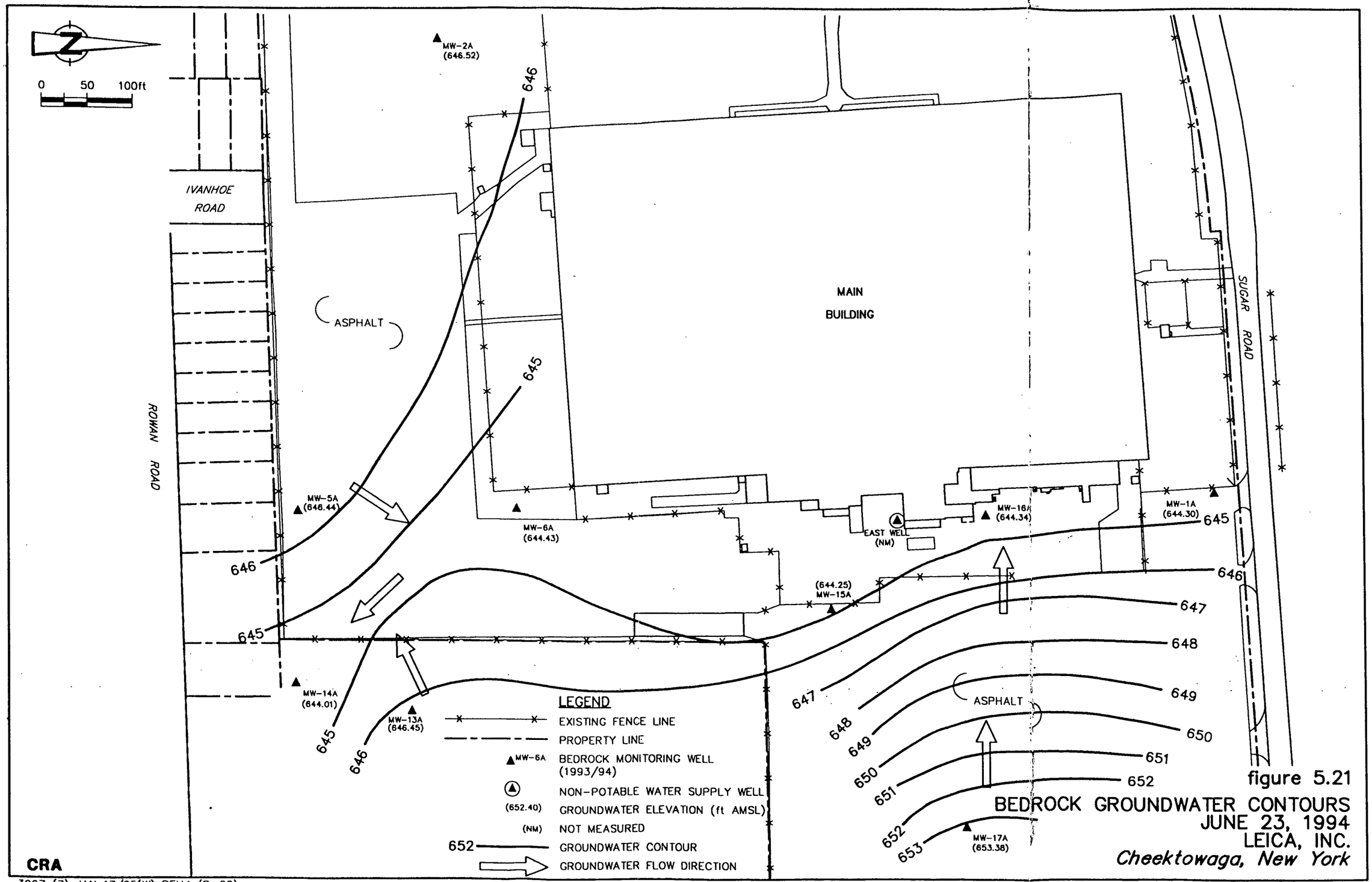
- EXISTING FENCE LINE
- PROPERTY LINE
- ▲MW-6A BEDROCK MONITORING WELL (1993/94)
- NON-POTABLE WATER SUPPLY WELL
- (652.40) GROUNDWATER ELEVATION (ft AMSL)
- (NM) NOT MEASURED
- 652 GROUNDWATER CONTOUR
- GROUNDWATER FLOW DIRECTION

CRA

3967 (7) JAN 17/95(W) REV.1 (P-21)

figure 5.20

BEDROCK GROUNDWATER CONTOURS
APRIL 11, 1994
LEICA, INC.
Cheektowaga, New York



CRA

3967 (7) JAN 17/95(W) REV.1 (P-22)

figure 5.21

BEDROCK GROUNDWATER CONTOURS
JUNE 23, 1994
LEICA, INC.
Cheektowaga, New York

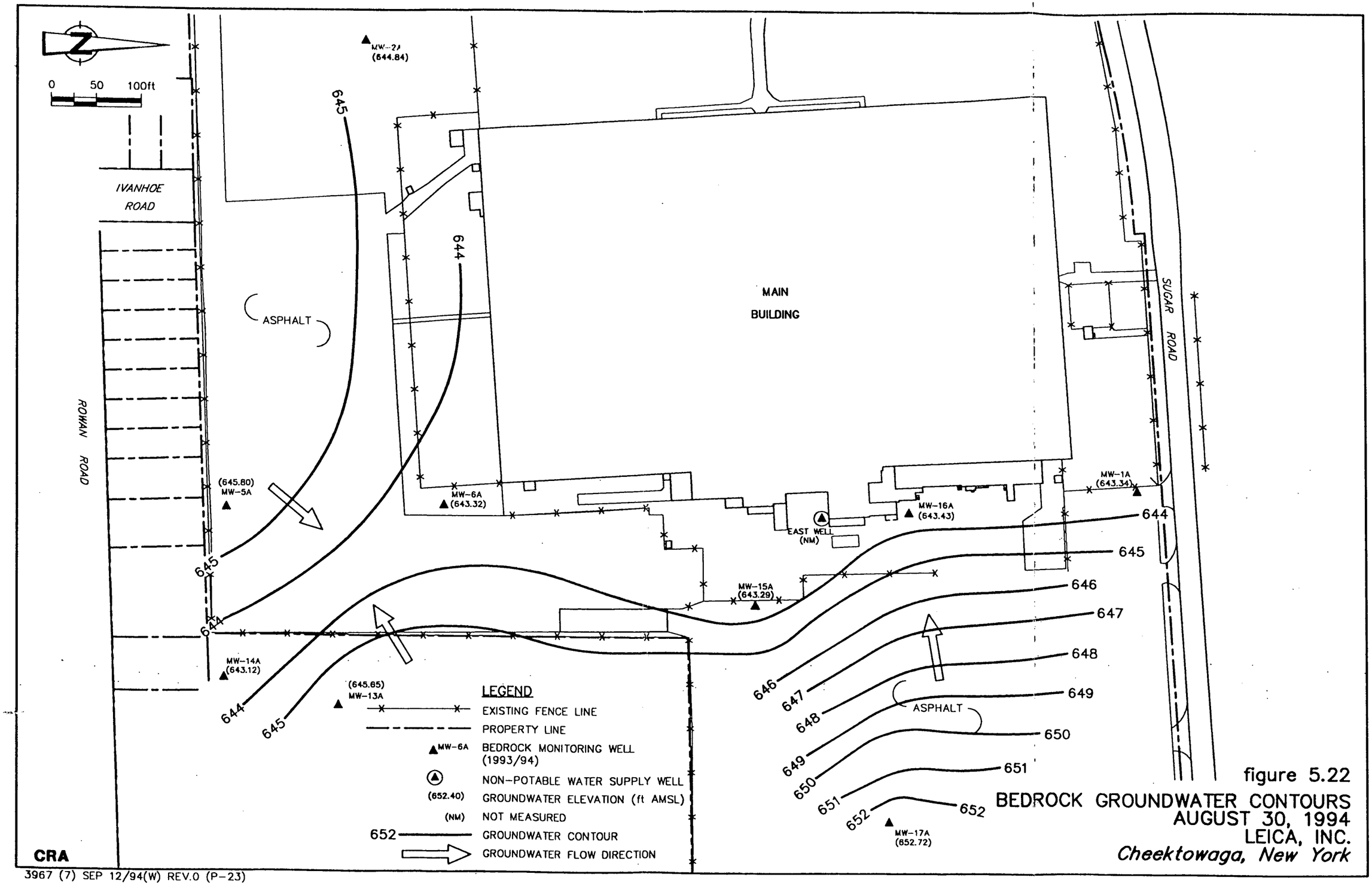
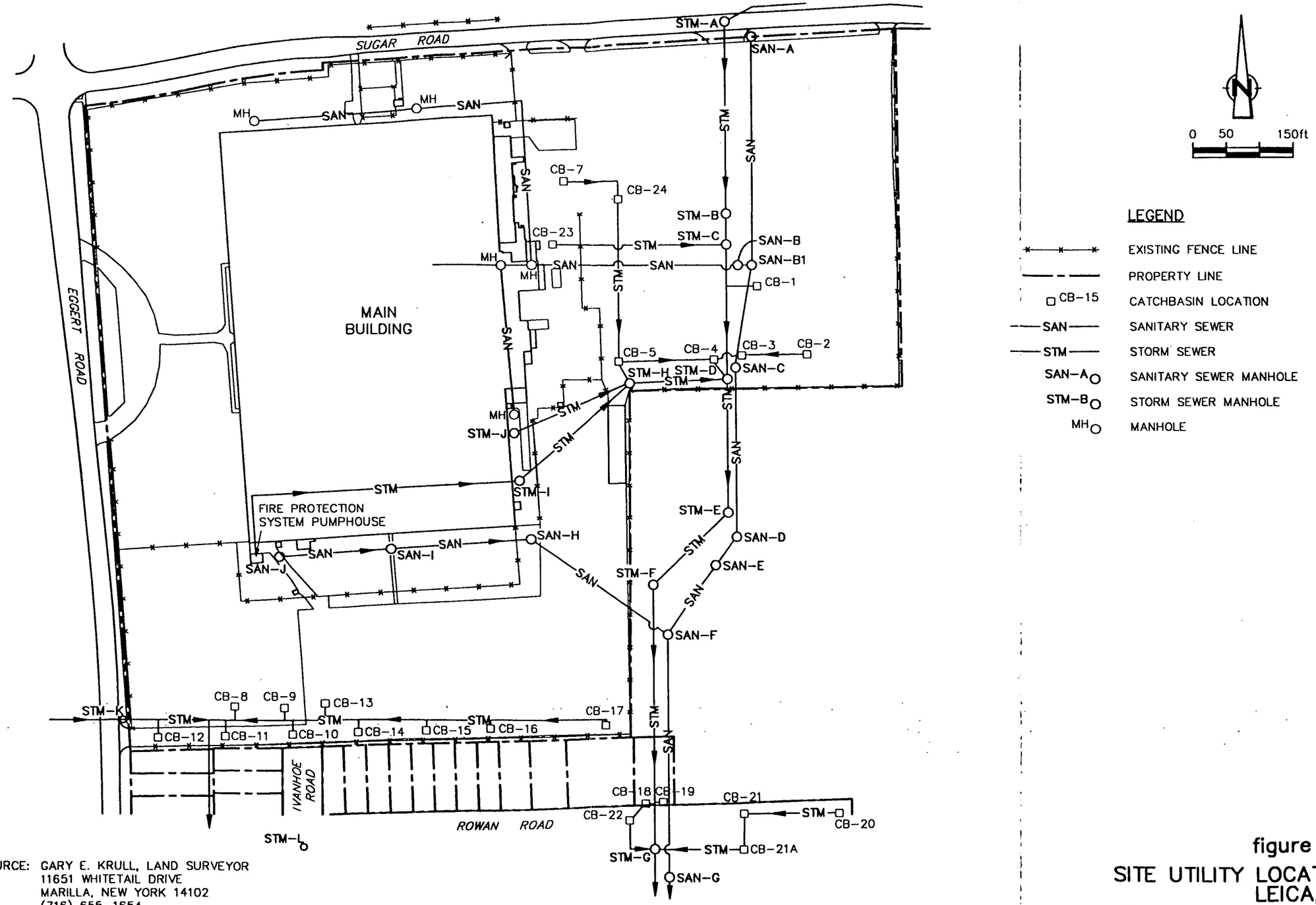


figure 5.22

BEDROCK GROUNDWATER CONTOURS
AUGUST 30, 1994
LEICA, INC.
Cheektowaga, New York

3967 (7) SEP 12/94(W) REV.0 (P-23)

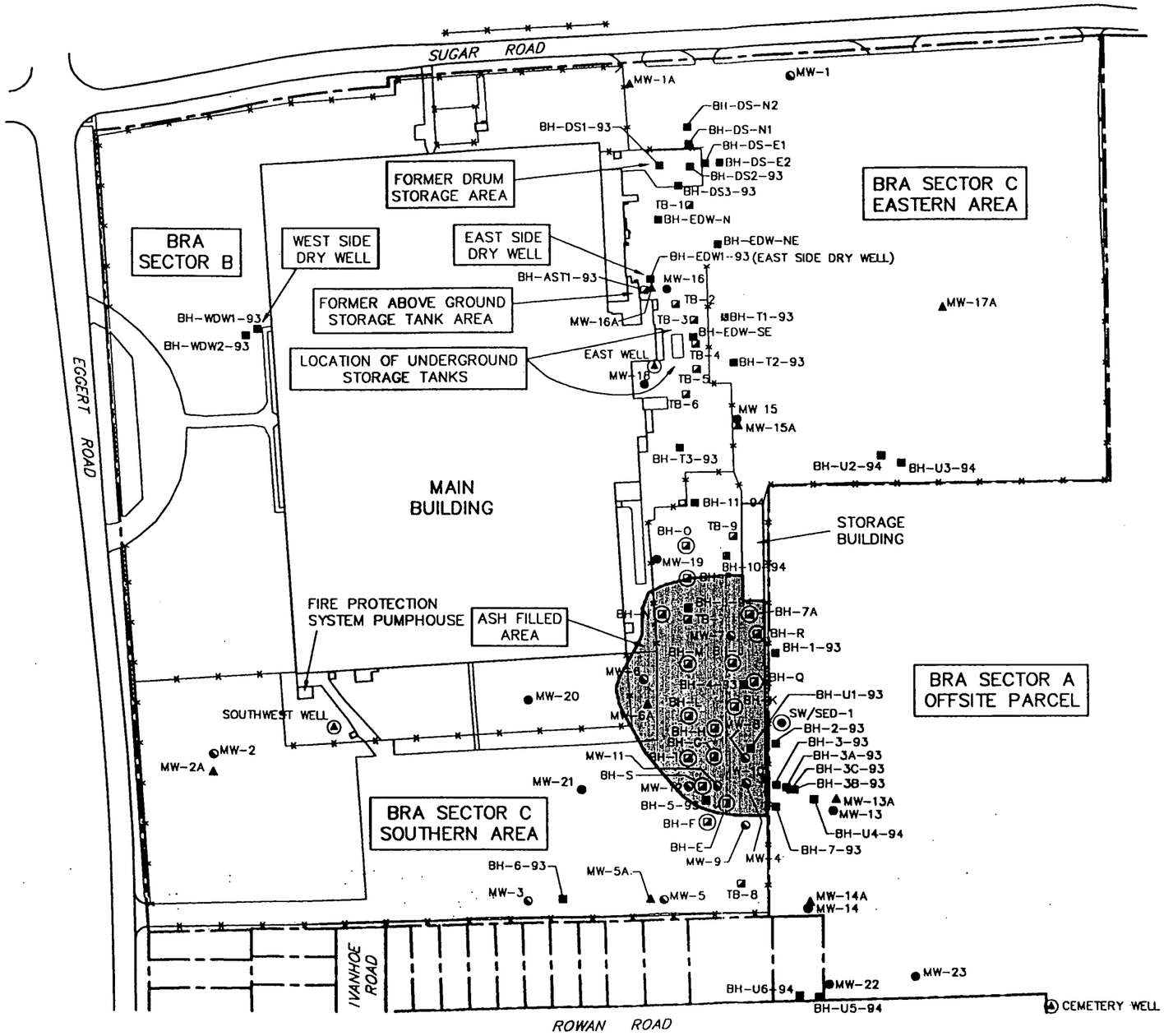


SOURCE: GARY E. KRULL, LAND SURVEYOR
11651 WHITETAIL DRIVE
MARILLA, NEW YORK 14102
(716) 655-1654

CRA

3967 (7) JAN 17/95(NF) REV.1 (P-35)

figure 5.23
SITE UTILITY LOCATIONS
LEICA, INC.
Cheektowaga, New York



LEGEND

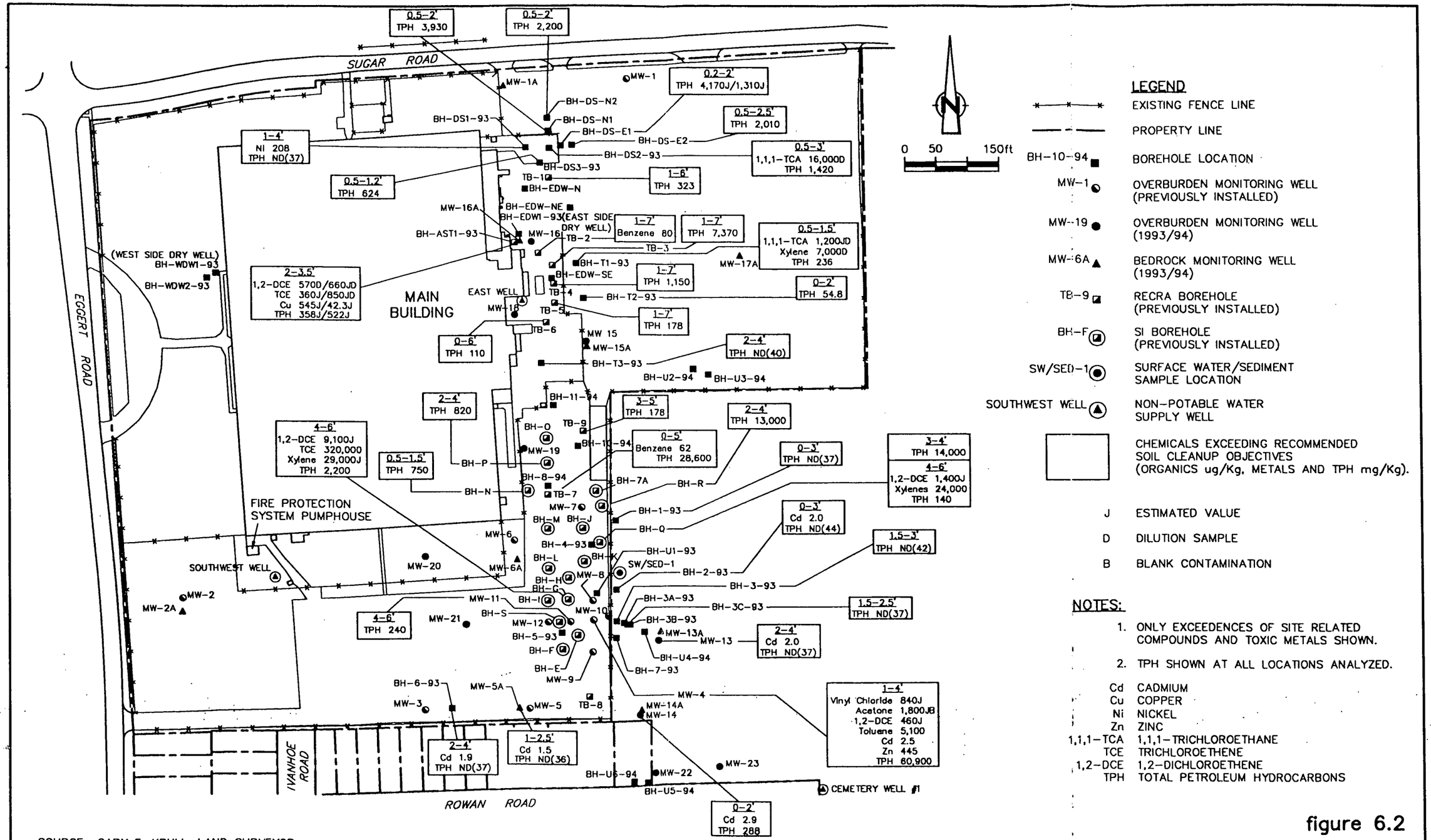
- EXISTING FENCE LINE
- PROPERTY LINE
- BH-10-94 ■ BOREHOLE LOCATION
- MW-1 ◔ OVERBURDEN MONITORING WELL (PREVIOUSLY INSTALLED)
- MW-19 ● OVERBURDEN MONITORING WELL (1993/94)
- MW-6A ▲ BEDROCK MONITORING WELL (1993/94)
- TB-9 ◪ RECRA BOREHOLE (PREVIOUSLY INSTALLED)
- BH-F ◎ SI BOREHOLE (PREVIOUSLY INSTALLED)
- SW/SED-1 ◉ SURFACE WATER/SEDIMENT SAMPLE LOCATION
- SOUTHWEST WELL ▲ NON-POTABLE WATER SUPPLY WELL
- BRA BASELINE RISK ASSESSMENT

SOURCE: GARY E. KRULL, LAND SURVEYOR
11651 WHITETAIL DRIVE
MARILLA, NEW YORK 14102
(716) 655-1654

CRA

3967 (7) JAN 17/95(NF) REV.1 (P-32)

figure 6.1
SITE AREAS IDENTIFIED
LEICA, INC.
Cheektowaga, New York



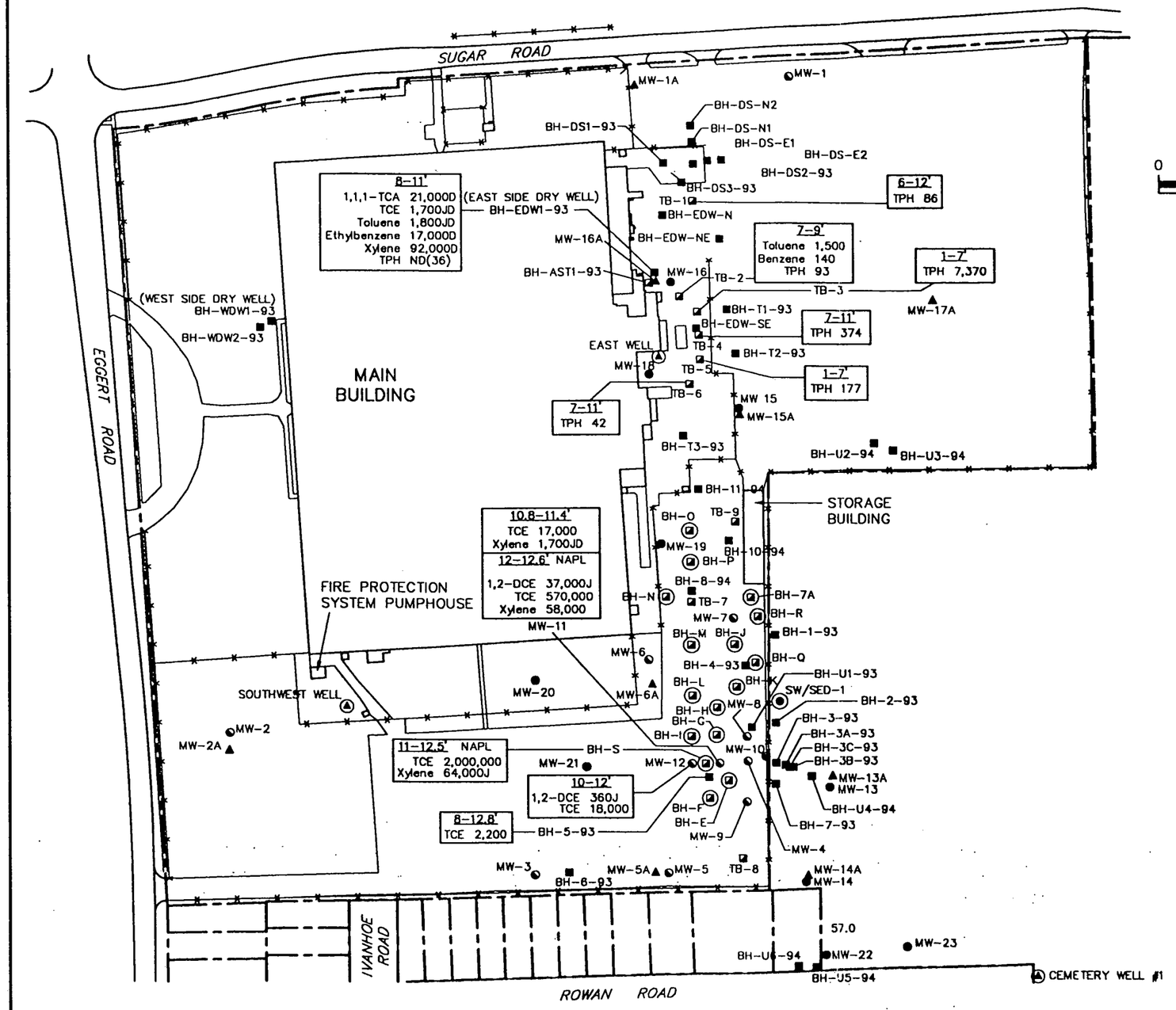
SOURCE: GARY E. KRULL, LAND SURVEYOR
11651 WHITETAIL DRIVE
MARILLA, NEW YORK 14102
(716) 655–1654

CRA

3967 (7) JAN 17/95(NF) REV.1 (P–33)

figure 6.2

SHALLOW SOIL CHEMISTRY
LEICA, INC.
Cheektowaga, New York



LEGEND

- EXISTING FENCE LINE
- PROPERTY LINE
- BH-10-94 — BOREHOLE LOCATION
- MW-1 — OVERBURDEN MONITORING WELL (PREVIOUSLY INSTALLED)
- MW-19 — OVERBURDEN MONITORING WELL (1993/94)
- MW-6A — BEDROCK MONITORING WELL (1993/94)
- TB-9 — RECRA BOREHOLE (PREVIOUSLY INSTALLED)
- BH-F — SI BOREHOLE (PREVIOUSLY INSTALLED)
- SW/SED-1 — SURFACE WATER/SEDIMENT SAMPLE LOCATION
- SOUTHWEST WELL — NON-POTABLE WATER SUPPLY WELL
- CHEMICALS EXCEEDING RECOMMENDED SOIL CLEANUP OBJECTIVES (ORGANICS ug/Kg, METALS AND TPH mg/Kg).

NOTES:

1. ONLY EXCEEDENCES OF SITE RELATED COMPOUNDS AND TOXIC METALS SHOWN.
2. TPH SHOWN AT ALL LOCATIONS ANALYZED.

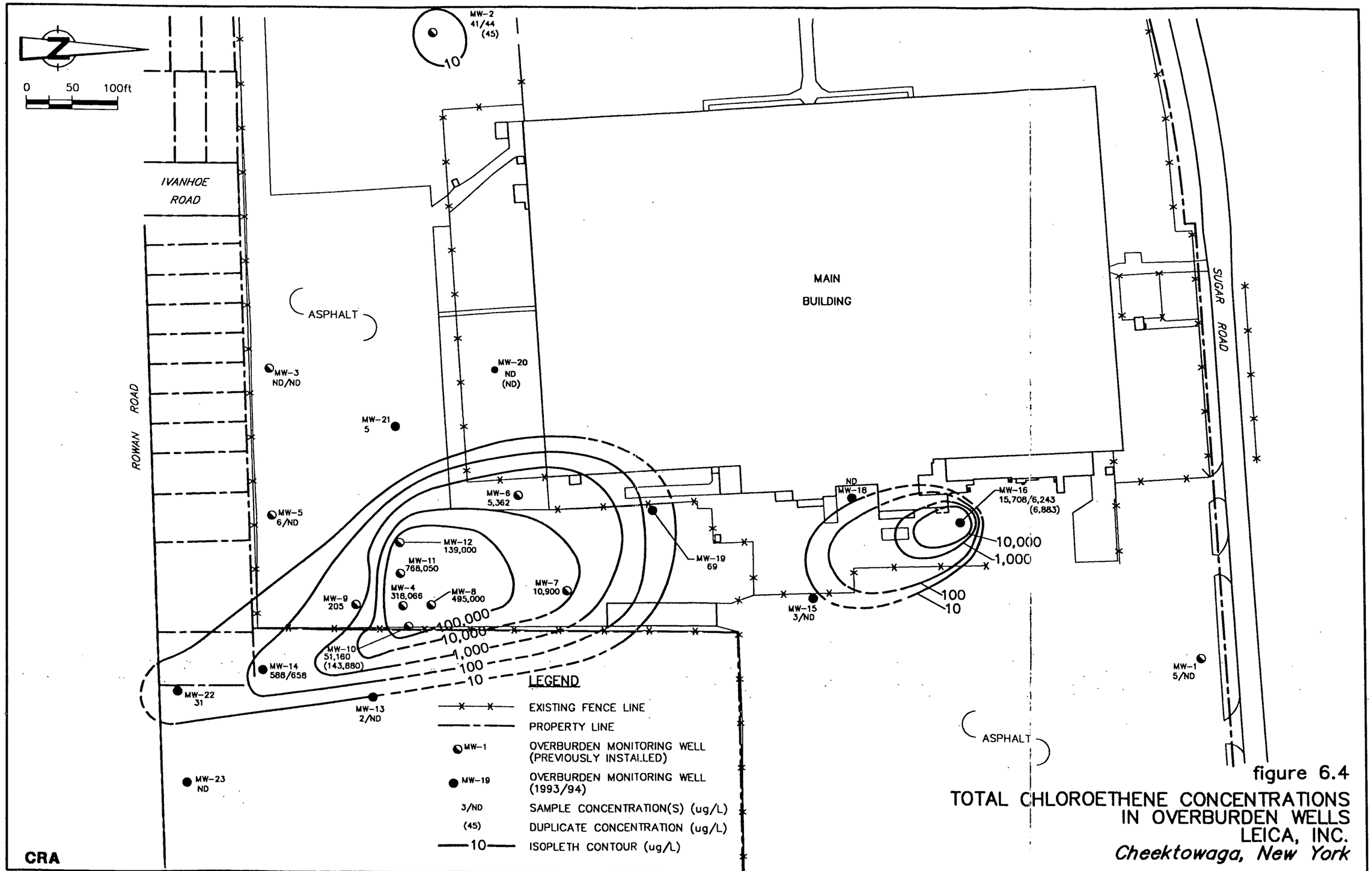
1,1,1-TCA	1,1,1-TRICHLOROETHANE
TCE	TRICHLOROETHENE
1,2-DCE	1,2-DICHLOROETHENE
TPH	TOTAL PETROLEUM HYDROCARBON

SOURCE: GARY E. KRULL, LAND SURVEYOR
11651 WHITETAIL DRIVE
MARILLA, NEW YORK 14102
(716) 655-1654

CRA

3967 (7) JAN 17/95(NF) REV.1 (P-34)

figure 6.3
DEEP SOIL CHEMISTRY
LEICA, INC.
Cheektowaga, New York

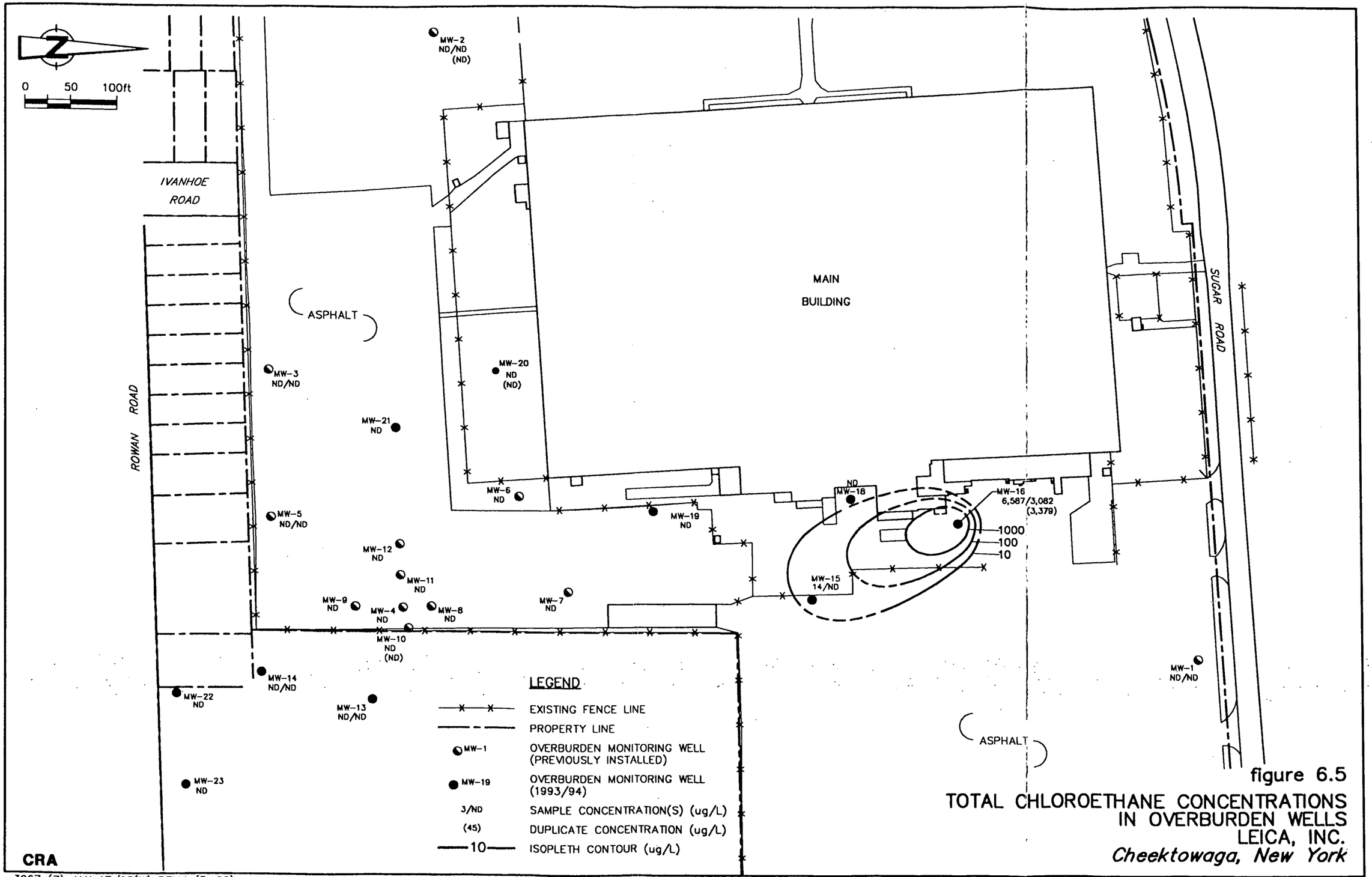


CRA

3967 (7) JAN 17/95(W) REV.1 (P-07)

figure 6.4

TOTAL CHLOROETHENE CONCENTRATIONS IN OVERBURDEN WELLS
LEICA, INC.
Cheektowaga, New York

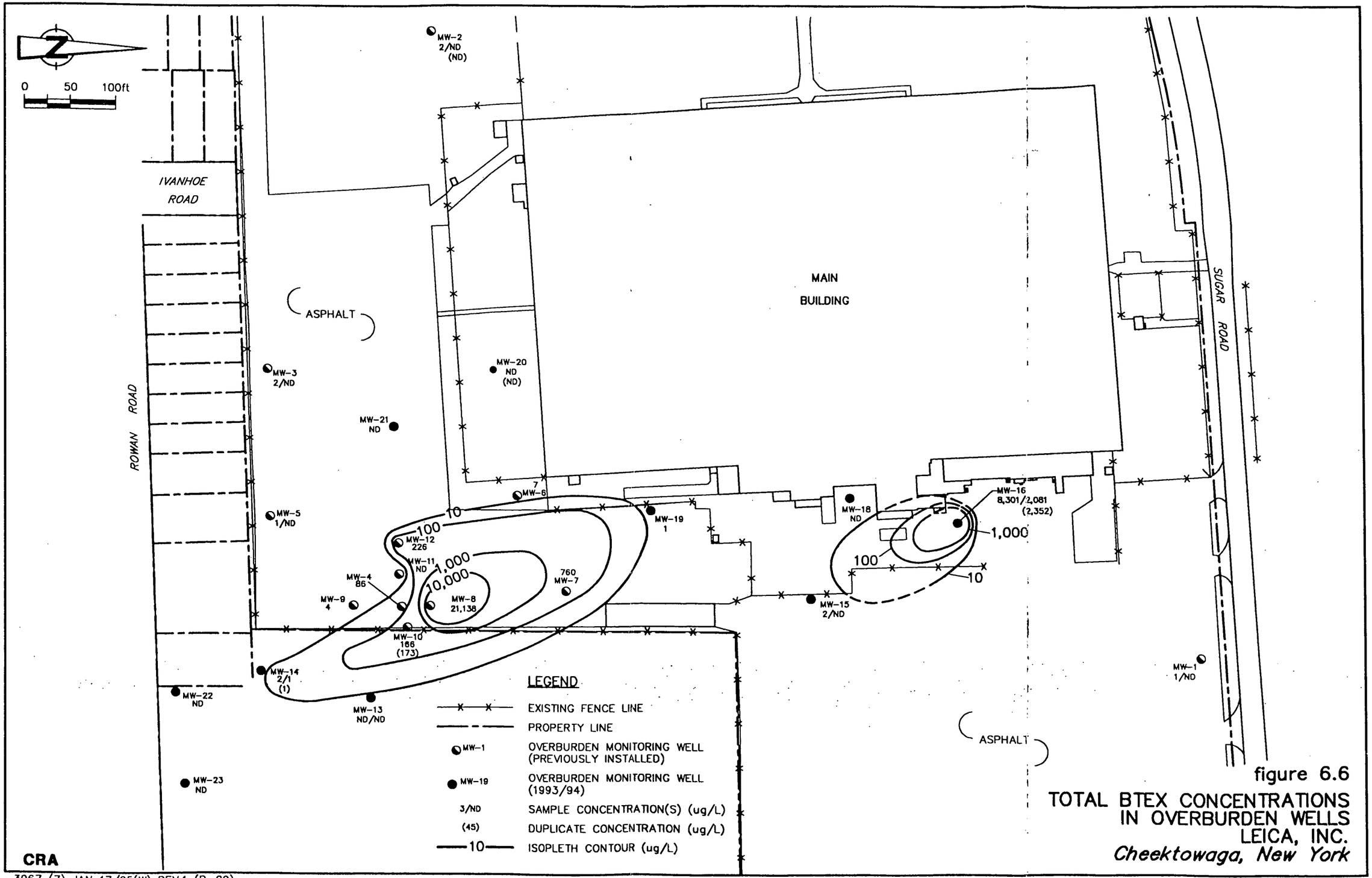


CRA

3967 (7) JAN 17/95(W) REV.1 (P-08)

figure 6.5

TOTAL CHLOROETHANE CONCENTRATIONS
IN OVERBURDEN WELLS
LEICA, INC.
Cheektowaga, New York



CRA

3967 (7) JAN 17/95(W) REV.1 (P-09)

figure 6.6

TOTAL BTEX CONCENTRATIONS IN OVERBURDEN WELLS
LEICA, INC.
Cheektowaga, New York

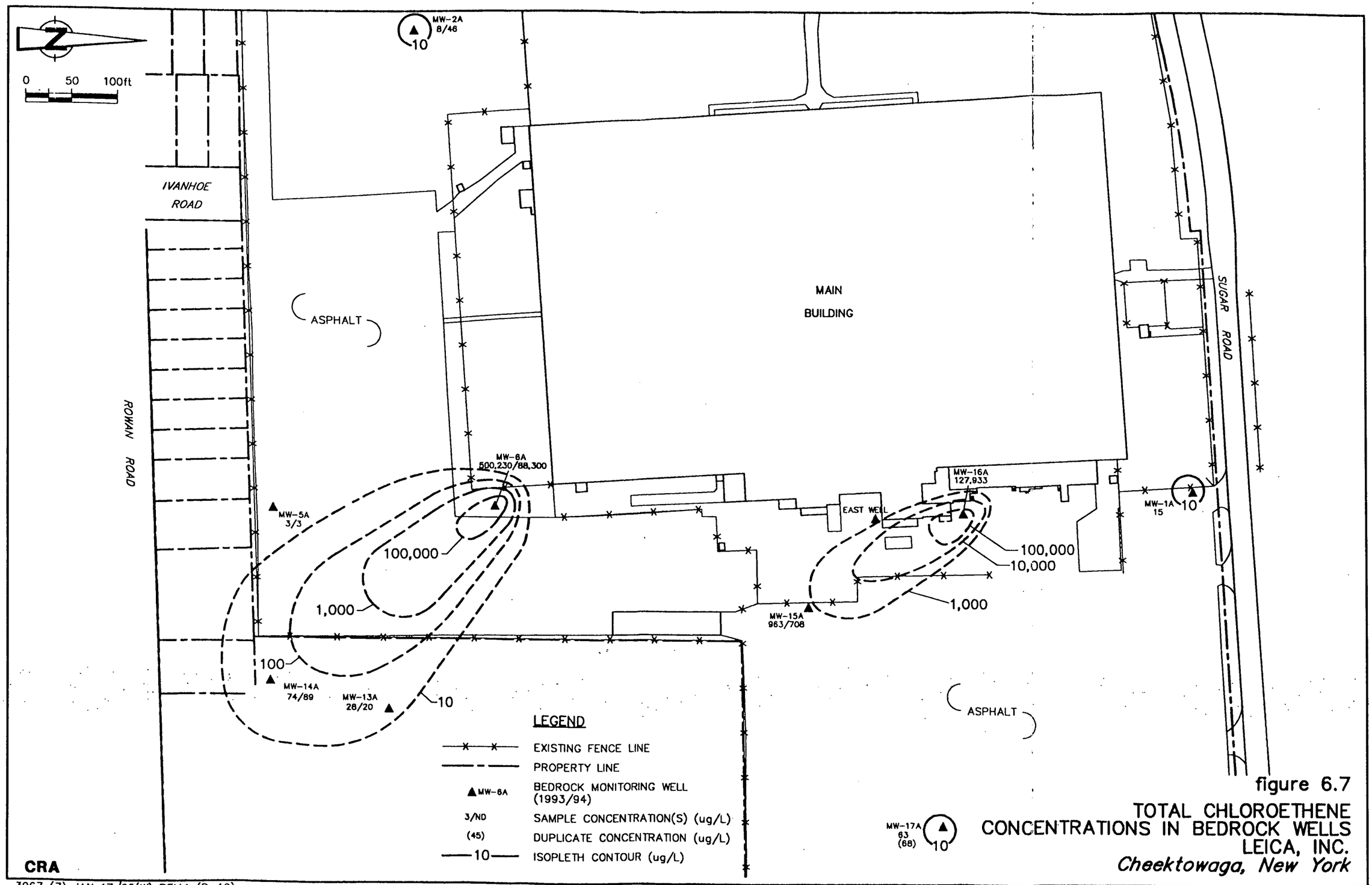


figure 6.7

TOTAL CHLOROETHENE CONCENTRATIONS IN BEDROCK WELLS
LEICA, INC.
Cheektowaga, New York

CRA

3967 (7) JAN 17/95(W) REV.1 (P-10)

0 50 100ft

IVANHOE ROAD

ROWAN ROAD

SUGAR ROAD

MW-2A
ND/ND

MW-6A
6/32

10

MW-5A
ND/ND

MW-14A
ND/ND

MW-13A
ND/ND

ASPHALT

MAIN
BUILDING

MW-15A
19/33

MW-16A
114,573

100,000

10,000

1,000

100

10

EAST WELL

MW-1A
ND

ASPHALT

MW-17A
ND
(ND)

LEGEND

- EXISTING FENCE LINE
- PROPERTY LINE
- ▲MW-6A — BEDROCK MONITORING WELL (1993/94)
- 3/ND — SAMPLE CONCENTRATION(S) (ug/L)
- (45) — DUPLICATE CONCENTRATION (ug/L)
- —10— ISOPLETH CONTOUR (ug/L)

CRA

3967 (7) JAN 17/95(W) REV.1 (P-11)

figure 6.8

TOTAL CHLOROETHANE CONCENTRATIONS
IN BEDROCK WELLS
LEICA, INC.
Cheektowaga, New York

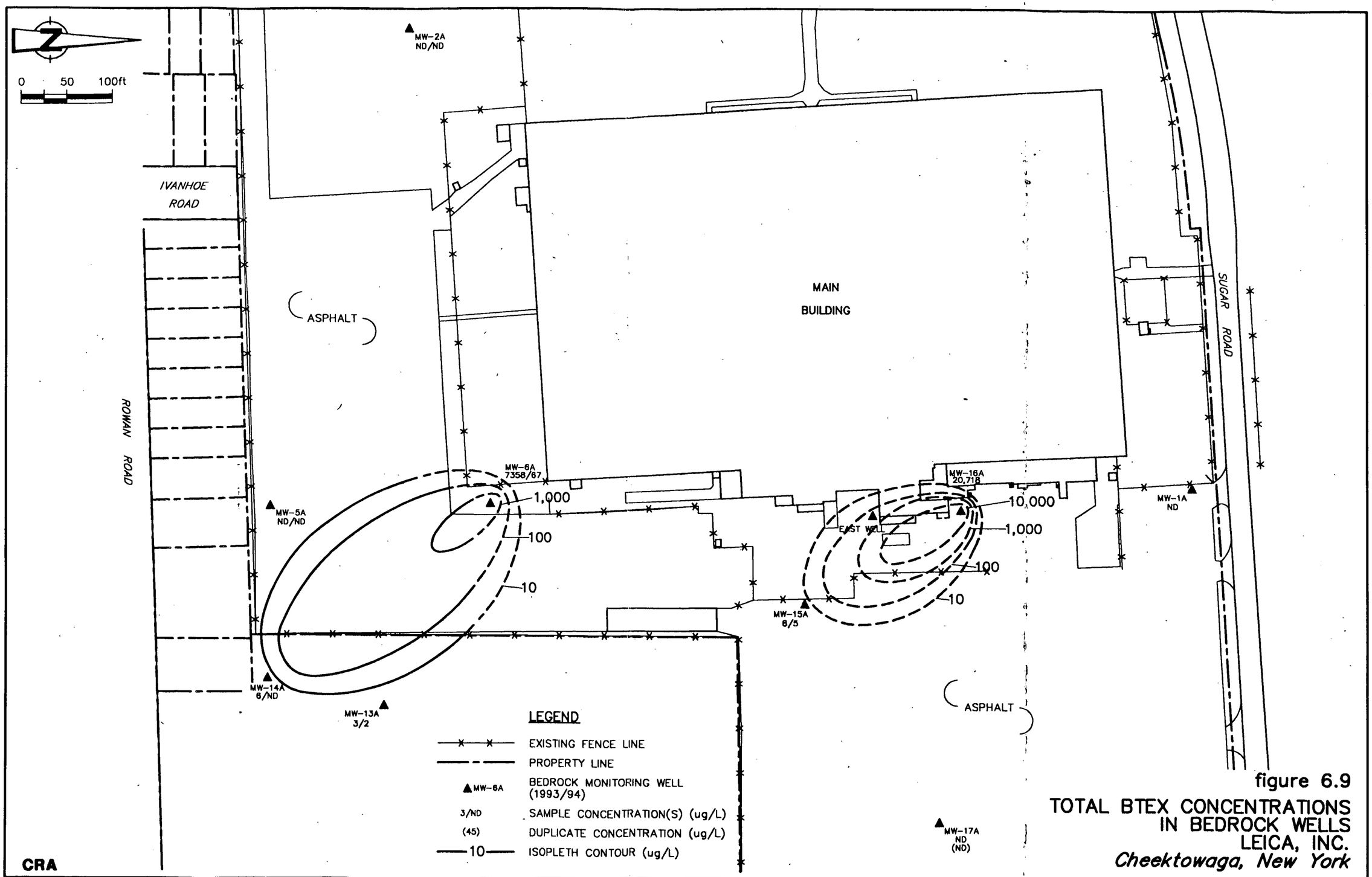


figure 6.9

TOTAL BTEX CONCENTRATIONS IN BEDROCK WELLS
LEICA, INC.
Cheektowaga, New York

CRA

3967 (7) JAN 17/95(W) REV.1 (P-12)

TABLES

TABLE 3.1

MEAN MONTHLY AND ANNUAL TOTAL
TEMPERATURE, PRECIPITATION AND SNOWFALL
1963 - 1993
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA, INC.
CHEEKTOWAGA, NEW YORK

(Precipitation in Inches)

Year	*Jan.*	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Total Annual*
1963	1.51	1.03	2.19	2.77	2.22	0.61	6.43	8.04	1.20	0.30	5.07	1.83	33.20
1964	2.12	1.09	3.72	3.36	2.91	1.55	2.57	5.02	0.77	1.89	2.09	2.58	29.67
1965	3.27	2.99	1.97	1.99	1.21	1.50	3.69	4.12	2.37	5.07	4.69	2.60	35.47
1966	3.74	2.11	2.78	2.06	1.36	1.97	4.92	3.60	2.65	0.93	4.50	2.25	32.87
1967	1.18	1.39	1.20	2.60	3.69	2.50	1.57	4.04	6.36	4.78	3.13	2.16	34.60
1968	2.18	0.81	2.67	1.78	3.30	4.45	1.19	5.33	5.63	3.03	4.47	3.42	38.26
1969	3.85	0.97	1.62	4.16	3.75	3.51	3.83	2.48	2.04	2.77	4.09	3.09	36.16
1970	2.06	1.74	1.72	2.54	2.87	2.55	4.02	2.01	4.55	4.20	3.20	3.25	34.71
1971	1.46	3.03	2.07	1.48	1.56	4.25	4.50	4.43	1.88	1.57	3.07	3.61	32.91
1972	2.17	3.44	3.99	2.99	3.64	6.06	0.99	4.19	3.06	2.96	4.28	3.86	41.63
1973	2.03	1.98	3.27	3.56	2.99	1.68	3.68	2.98	1.44	4.27	4.07	4.89	36.84
1974	2.44	2.19	3.19	3.15	3.36	3.86	1.80	3.64	2.42	1.75	5.38	3.13	36.31
1975	2.11	2.93	2.92	1.86	3.31	3.65	2.34	8.49	2.44	1.13	2.77	4.58	38.53
1976	3.19	3.43	5.59	4.01	4.70	3.36	5.65	1.65	5.39	3.61	2.11	3.83	46.52
1977	3.38	1.59	2.42	3.60	1.39	2.79	3.64	10.67	8.99	2.61	4.45	8.02	53.55
1978	6.29	1.36	1.72	1.84	3.95	2.42	1.48	3.51	4.40	3.72	1.55	3.50	35.74
1979	5.43	2.03	2.48	3.16	1.63	2.18	3.51	6.26	5.61	3.88	4.14	3.43	43.74
1980	1.97	1.08	4.05	2.43	1.60	5.82	3.55	3.58	4.53	4.69	2.36	2.65	38.31
1981	1.11	3.50	1.70	3.09	2.56	3.68	5.05	3.13	4.24	3.31	2.22	2.87	36.46
1982	6.88	1.28	2.64	2.33	3.66	3.14	1.50	4.62	3.37	2.06	6.31	3.32	41.11
1983	1.44	1.30	3.20	2.55	3.28	2.99	2.01	3.51	2.11	4.62	5.19	7.30	39.50
1984	1.54	3.59	1.77	2.53	4.67	6.86	1.37	4.16	3.73	0.87	2.66	3.67	37.42
1985	4.27	3.34	4.42	1.33	3.46	3.21	1.81	4.63	1.20	3.73	9.75	4.85	46.00
1986	2.31	2.60	1.95	3.33	4.42	4.15	2.82	2.73	3.88	4.34	3.11	4.02	39.66
1987	2.90	0.85	3.66	3.40	1.35	8.36	3.09	3.38	5.32	2.62	4.44	2.78	42.15
1988	1.58	4.07	2.99	2.96	2.74	1.56	6.35	2.69	2.07	6.08	3.37	2.15	38.61
1989	1.77	2.54	3.15	1.88	7.22	7.83	0.93	1.84	3.85	2.98	4.83	2.34	41.16
1990	2.69	5.90	1.50	5.22	6.08	3.55	3.14	3.25	3.65	4.59	2.61	8.71	50.89
1991	2.07	2.06	5.97	5.83	3.10	0.86	3.34	2.84	3.19	3.11	4.02	3.81	40.20
1992	2.01	2.45	2.93	4.68	3.48	2.21	8.93	3.79	5.56	2.80	4.92	3.80	47.56
1993	4.35	1.92	3.02	2.55	1.79	4.99	1.78	3.86	5.53	3.69	3.58	3.60	40.66
Mean	3.06	2.69	2.79	2.75	2.95	2.92	2.96	3.23	3.13	3.09	3.34	3.32	36.23

TABLE 3.1

MEAN MONTHLY AND ANNUAL TOTAL
TEMPERATURE, PRECIPITATION AND SNOWFALL
1963 - 1993
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA, INC.
CHEEKTOWAGA, NEW YORK

(Average Temperature (Degree F)

Year	*Jan.*	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Avg. Annual*
1963	18.9	18.8	35.4	44.2	52.9	66.7	70.2	64.3	57.1	57.1	43.6	23.4	46.1
1964	29.3	23.5	34.0	46.9	59.2	65.7	73.1	64.9	60.9	48.1	42.1	29.5	48.1
1965	23.6	25.8	30.0	41.2	59.6	64.3	67.6	67.8	63.5	47.8	40.0	34.3	47.1
1966	20.4	24.9	34.7	43.3	52.2	67.4	71.4	68.5	58.7	48.8	41.5	28.6	46.7
1967	29.8	20.6	30.9	46.1	50.1	72.5	71.2	68.1	60.7	51.9	36.3	33.0	47.6
1968	19.9	20.7	35.7	49.2	53.4	64.8	71.2	69.4	66.1	53.5	40.7	26.8	47.6
1969	25.0	24.6	30.9	46.8	54.4	64.4	70.5	71.2	62.2	51.0	39.1	24.8	47.1
1970	17.6	24.8	30.1	46.9	57.3	66.0	71.0	70.2	64.0	54.5	41.6	27.4	47.6
1971	20.9	27.0	29.8	41.8	54.5	67.6	68.7	67.8	65.4	58.7	39.1	33.5	47.9
1972	25.5	22.0	30.1	41.1	59.1	62.6	71.0	67.7	62.8	46.2	36.0	30.8	46.3
1973	27.6	22.9	42.4	46.9	54.5	68.2	72.3	71.8	61.7	54.3	40.8	29.0	49.4
1974	27.1	22.3	33.0	46.2	53.1	65.6	69.9	69.9	59.6	49.2	40.2	31.7	47.3
1975	30.1	29.1	30.8	39.3	62.1	68.0	72.3	69.7	58.3	53.1	46.9	28.3	49.0
1976	19.7	31.8	37.2	46.5	53.4	68.4	67.8	67.5	60.1	46.3	34.1	22.0	46.3
1977	13.8	24.6	39.8	47.0	60.3	64.4	72.0	68.1	62.6	49.6	43.3	27.9	47.8
1978	20.4	15.5	28.2	42.5	57.4	65.1	70.4	70.3	60.8	49.5	40.4	30.4	45.9
1979	20.5	14.9	38.2	44.3	56.9	66.5	71.3	67.5	61.9	50.7	43.5	33.4	47.5
1980	25.8	21.2	31.8	46.1	58.1	61.9	71.7	72.6	62.4	48.7	39.4	25.3	47.1
1981	19.3	32.9	33.9	47.2	56.4	66.2	71.8	70.0	60.9	48.2	40.4	29.0	48.0
1982	17.2	23.2	32.5	41.6	61.0	62.2	71.8	65.0	61.6	52.6	43.0	37.5	47.5
1983	27.0	29.6	36.7	43.6	53.9	67.6	74.2	71.2	63.7	51.7	40.8	22.7	48.6
1984	20.4	33.8	27.1	47.7	52.9	67.8	70.3	70.3	58.5	53.2	39.0	35.6	48.1
1985	21.1	24.8	35.6	49.5	59.5	62.7	69.7	69.2	64.2	52.5	42.0	25.6	48.0
1986	25.5	24.5	36.2	47.8	59.7	64.1	71.1	67.9	61.8	50.9	37.7	32.4	48.3
1987	26.1	25.0	37.7	50.0	60.5	68.9	74.2	68.9	63.4	47.9	42.5	34.3	50.0
1988	26.6	24.3	35.2	46.1	59.7	64.0	74.8	72.4	62.1	46.9	43.0	30.0	48.8
1989	31.3	22.7	33.0	41.9	55.1	65.9	71.5	68.5	60.8	51.5	37.9	17.4	46.5
1990	33.4	29.3	36.9	48.5	54.9	66.7	71.4	70.4	61.7	52.5	43.4	34.4	50.3
1991	26.0	30.6	37.8	50.5	64.3	69.1	71.9	71.0	62.0	53.1	39.3	31.3	50.6
1992	27.1	27.7	31.6	43.8	57.3	63.4	66.8	66.3	61.6	47.9	40.2	31.9	47.1
1993	29.5	20.7	30.7	47.3	57.0	66.0	73.4	72.0	59.4	49.2	39.6	29.6	47.9
Mean	25.0	24.7	32.6	43.8	55.1	64.8	70.5	69.0	62.4	51.5	40.0	29.5	47.4

TABLE 3.1

MEAN MONTHLY AND ANNUAL TOTAL TEMPERATURE, PRECIPITATION AND SNOWFALL
1963 - 1993
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA, INC.
CHEEKTOWAGA, NEW YORK

(Snowfall - Inches)

Season	*July*	*Aug.*	*Sep.*	*Oct.*	*Nov.*	*Dec.*	*Jan.*	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*Total*
1963-64	0.0	0.0	0.0	0.0	3.1	24.0	13.7	14.6	12.8	3.3	0.0	0.0	71.5
1964-65	0.0	0.0	0.0	T	5.4	15.2	19.2	9.4	17.5	4.2	0.0	0.0	70.9
1965-66	0.0	0.0	0.0	1.2	12.2	7.0	48.0	15.2	11.4	3.2	0.1	0.0	98.3
1966-67	0.0	0.0	0.0	0.0	10.0	12.1	11.6	19.8	10.8	0.6	1.2	0.0	66.1
1967-68	0.0	0.0	0.0	T	19.7	10.4	19.1	11.7	10.6	0.1	0.0	0.0	71.6
1968-69	0.0	0.0	0.0	T	11.6	11.7	31.2	12.8	8.0	3.1	0.0	0.0	78.4
1969-70	0.0	0.0	0.0	1.0	22.1	23.4	38.0	21.9	12.6	1.5	T	0.0	120.5
1970-71	0.0	0.0	0.0	0.0	2.6	32.3	17.2	19.4	22.6	2.9	0.0	0.0	97.0
1971-72	0.0	0.0	0.0	0.0	18.7	12.9	27.6	31.4	14.1	5.2	0.0	0.0	109.9
1972-73	0.0	0.0	0.0	3.1	18.9	19.8	9.9	16.1	8.5	2.4	0.1	0.0	78.8
1973-74	0.0	0.0	0.0	0.0	3.0	23.1	19.7	22.8	12.9	7.1	0.1	0.0	88.7
1974-75	0.0	0.0	0.0	T	22.1	23.6	11.0	16.3	7.6	15.0	0.0	0.0	95.6
1975-76	0.0	0.0	0.0	T	5.5	27.3	21.6	8.3	17.3	2.5	T	0.0	82.5
1976-77	0.0	0.0	0.0	0.2	31.3	60.7	68.3	22.7	13.5	2.2	0.5	0.0	199.4
1977-78	0.0	0.0	0.0	T	15.0	53.4	56.5	21.7	5.8	1.8	0.1	0.0	154.3
1978-79	0.0	0.0	0.0	T	3.0	10.1	42.6	28.3	4.6	8.7	0.0	0.0	97.3
1979-80	0.0	0.0	0.0	T	12.6	19.7	10.2	11.7	13.9	0.3	T	T	68.4
1980-81	0.0	0.0	0.0	T	6.7	21.6	14.4	5.0	13.2	T	0.0	0.0	60.9
1981-82	0.0	0.0	0.0	T	1.8	24.8	53.2	12.7	9.0	10.9	0.0	0.0	112.4
1982-83	0.0	0.0	0.0	0.0	15.8	12.9	9.0	5.5	6.9	2.3	T	0.0	52.4
1983-84	0.0	0.0	0.0	T	17.7	52.0	13.4	32.5	16.0	0.9	T	0.0	132.5
1984-85	0.0	0.0	0.0	0.0	1.4	11.2	65.9	20.9	6.3	1.5	0.0	0.0	107.2
1985-86	0.0	0.0	0.0	0.0	5.2	68.4	17.3	17.3	4.8	1.7	T	0.0	114.7
1986-87	0.0	0.0	0.0	0.0	13.7	4.8	28.5	7.7	10.8	2.0	0.0	0.0	67.5
1987-88	0.0	0.0	0.0	T	0.9	9.8	6.9	31.9	6.1	0.8	0.0	0.0	56.4
1988-89	0.0	0.0	0.0	0.5	0.6	10.8	5.4	29.6	10.1	2.5	7.9	0.0	67.4
1989-90	0.0	0.0	0.0	T	7.8	34.8	11.8	28.0	1.4	9.9	T	0.0	93.7
1990-91	0.0	0.0	0.0	T	0.7	15.4	16.6	16.1	8.5	0.2	T	0.0	57.5
1991-92	0.0	T	0.0	0.2	18.0	21.4	18.4	7.0	22.8	5.0	0.0	0.0	92.8
1992-93	0.0	0.0	0.0	0.6	13.7	16.5	13.1	19.5	29.3	0.5	T	0.0	93.2
1993-94	T	0.0	T	2.9	4.8	27.9	35.4	21.6	NA	NA	NA	NA	NA
Mean	T	T	T	0.3	11.5	22.7	23.9	18.3	11.7*	3.1*	0.3*	T*	91.0*

TABLE 3.1

MEAN MONTHLY AND ANNUAL TOTAL
TEMPERATURE, PRECIPITATION AND SNOWFALL
1963 - 1993
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA, INC.
CHEEKTOWAGA, NEW YORK

Notes:
T Trace Amount.
* Through 1992-1993 only.

Source:
National Weather Services Office, Greater Buffalo International Airport, Cheektowaga, New York

TABLE 4.1

COMPLETION SUMMARY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA, INC.
CHEEKTOWAGA, NEW YORK

Activity	*Completion Date*
Work Plan Approval/Consent Order Signed	10/24/93
Surface Water Sample/Sediment Sample	11/10/93
Underground Storage Tank Area Investigation	12/16/93
Off-Site Access Approved	11/03/93
Monitoring Well Installation	
•RI Wells	12/17/93
•Supplemental Wells	04/08/94
Borehole Installation/Soil Sampling	
•RI Boreholes	04/08/94
•Supplemental Boreholes	04/08/94
Underground Utility Investigation	
• Boreholes	04/13/94
• Research	08/01/94
Field Permeability Testing	
•RI Wells	03/25/94
•Supplemental Wells	08/01/94
Groundwater Samples:	
Round I -	
• Field Work	01/14/94
• Analysis	02/24/94
• Validation	04/20/94
Round II -	
• Field Work	03/25/94
• Analysis	04/22/94
• Validation	05/12/94
Round III -	
•Field Work	04/18/94
•Analysis	05/18/94
•Validation	06/06/94

TABLE 4.1

COMPLETION SUMMARY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA, INC.
CHEEKTOWAGA, NEW YORK

Activity	*Completion Date*
Air Pathway Analysis	08/15/94
Land Use Map	08/15/94
Soil Samples	
RI Boreholes -	
• Analysis	12/24/93
• Validation	04/29/94
Supplemental Boreholes -	
•Analysis	05/18/94
•Validation	06/24/94
Risk Assessment	
• Habitat Assessment	08/15/94
• Public Health Assessment	08/30/94

TABLE 4.2

MONITORING WELL COMPLETION DETAILS
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Well Number	*Date Completed*	*Ground Elevation (Ft. AMSL)*	*Top of Casing Elevation (Ft. AMSL)*	*Monitored/Screened Interval*		*Sandpack Interval*		*Monitored/ Screened Unit*
				Depth (Ft. BGS)	*Elevation (Ft. AMSL)*	*Depth (Ft. BGS)*	*Elevation (Ft. AMSL)*	
Overburden								
MW-1	11/23/90	662.53	662.38	7.6 - 12.6	654.93 - 649.93	7.0 - 12.6	655.53 - 649.93	Sandy Zone
MW-2	11/23/90	657.45	657.01	3.5 - 8.5	653.95 - 648.95	3.0 - 8.5	654.45 - 648.95	Sandy Zone
MW-3	11/22/90	656.20	655.94	6.0 - 11.0	650.20 - 645.20	6.0 - 11.0	650.20 - 645.20	Sandy Zone
MW-4	11/20/90	656.00	655.57	8.0 - 12.8	648.00 - 643.20	8.0 - 12.8	648.00 - 643.20	Sandy Zone
MW-5	07/01/91	655.24	654.80	9.4 - 11.5	645.84 - 643.74	7.5 - 11.9	647.74 - 643.34	Sandy Zone
MW-6	07/01/91	661.16	660.84	13.0 - 15.1	648.16 - 646.06	11.0 - 15.5	650.16 - 645.66	Sandy Zone
MW-7	07/02/92	658.51	658.21	10.7 - 12.8	647.81 - 645.71	8.6 - 13.2	649.91 - 645.31	Sandy Zone
MW-8	01/22/92	656.43	656.11	9.9 - 11.9	646.53 - 644.53	8.2 - 12.0	648.23 - 644.52	Sandy Zone
MW-9	01/22/92	655.36	654.99	9.0 - 11.0	646.36 - 644.36	6.8 - 11.0	648.56 - 644.36	Sandy Zone
MW-10	01/22/92	655.82	655.48	8.6 - 10.6	647.22 - 645.22	7.0 - 11.0	648.82 - 644.82	Sandy Zone
MW-11	01/23/92	656.58	656.08	10.5 - 12.5	646.08 - 644.08	8.6 - 12.6	647.98 - 643.98	Sandy Zone
MW-12	01/29/92	657.30	656.93	8.2 - 13.2	649.10 - 644.10	6.8 - 13.4	650.50 - 643.90	Sandy Zone
MW-13	12/08/93	654.89	654.66	8.5 - 10.5	646.39 - 644.39	6.5 - 10.7	648.39 - 644.19	Sandy Zone
MW-14	12/06/93	653.70	653.38	9.0 - 11.0	644.70 - 642.70	7.0 - 11.0	646.70 - 642.70	Sandy Zone
MW-15	12/14/93	658.74	658.35	6.3 - 11.3	652.44 - 647.44	5.3 - 11.3	653.44 - 647.44	Sandy Zone
MW-16	12/15/93	660.20	659.89	10.0 - 12.0	650.20 - 648.20	7.0 - 12.2	653.20 - 648.00	Sandy Zone
MW-18	03/30/94	663.09	662.51	11.4 - 13.4	651.69 - 649.69	10.7 - 13.4	652.39 - 649.69	Sandy Zone
MW-19	04/07/94	661.25	660.84	11.9 - 13.9	649.35 - 647.35	9.5 - 14.0	651.75 - 647.25	Sandy Zone
MW-20	04/05/94	659.39	659.12	10.2 - 12.2	649.19 - 647.19	8.5 - 12.2	650.89 - 647.19	Sandy Zone
MW-21	04/04/94	657.98	657.72	10.7 - 12.7	647.28 - 645.28	9.0 - 12.7	648.98 - 645.28	Sandy Zone
MW-22	03/29/94	652.94	652.51	8.5 - 10.5	644.44 - 642.44	5.5 - 10.5	647.44 - 642.44	Sandy Zone
MW-23	03/30/94	656.53	656.18	11.5 - 13.5	645.03 - 643.03	9.3 - 13.5	647.23 - 643.03	Sandy Zone

TABLE 4.2

MONITORING WELL COMPLETION DETAILS
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Well Number	*Date Completed*	*Ground Elevation (Ft. AMSL)*	*Top of Casing Elevation (Ft. AMSL)*	*Monitored/Screened Interval*		*Sandpack Interval*		*Monitored/ Screened Unit*
				Depth (Ft. BGS)	*Elevation (Ft. AMSL)*	*Depth (Ft. BGS)*	*Elevation (Ft. AMSL)*	
Bedrock								
MW-1A	04/08/94	664.01	663.48	14.3 - 39.4	649.71 - 624.61	NA		Onondaga
MW-2A	11/30/93	657.16	657.02	8.4 - 29.9	648.76 - 627.26	NA		Onondaga
MW-5A	12/13/93	655.28	654.84	12.6 - 42.0	642.68 - 613.28	NA		Onondaga
MW-6A	12/17/93	659.82	659.38	14.9 - 36.0	644.92 - 623.82	NA		Onondaga
MW-13A	12/09/93	655.40	655.13	12.9 - 45.0	642.50 - 610.40	NA		Onondaga
MW-14A	12/07/93	653.95	653.70	12.9 - 35.0	641.05 - 618.95	NA		Onondaga
MW-15A	12/16/93	658.77	658.51	14.4 - 36.0	644.37 - 622.77	NA		Onondaga
MW-16A	04/07/94	660.33	659.95	12.5 - 40.0	647.83 - 620.33	NA		Onondaga
MW-17A	04/08/94	659.51	659.18	15.5 - 40.0	643.91 - 619.51	NA		Onondaga
East Well	1980	663.10	NM	12.0-180±	651.10-483.10±	NA		Bedrock
Southwest Well	1980	658±	NM	10.0-180±	648.00-478.00±	NA		Bedrock
Cemetery Well	Unknown	654.60	NM	Unknown		NA		Bedrock

Key:

AMSL	Above Mean Sea Level.
BGS	Below Ground Surface.
NA	Not Applicable.
NM	Not Measured.

TABLE 4.3

SINGLE WELL RESPONSE TEST RESULTS
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Well Designation	*Static Water Elevation (ft AMSL)*	*Test Type*	*Analysis Method*	*Transmissivity (ft^2/sec)*	*Saturated Thickness (ft) (3)*	*Hydraulic Conductivity (ft/sec)*	*Hydraulic Conductivity (cm/sec) (4)*	*Generalized Lithological Description of Screened Material*
MW-1	654.64	Rising Head	Bower & Rice (1)	--	4.10	4.56E-06	1.39E-04	Silty clay till, silty sand, trace gravel
MW-2	650.45	Rising Head	Bower & Rice	--	1.94	2.73E-04	8.32E-03	Silty sand, gravel
	650.43	Rising Head	Bower & Rice	--	1.92	3.45E-04	1.05E-02	Silty sand, gravel
MW-3	650.09	Rising Head	Cooper et al (2)	2.74E-05	3.50	7.83E-06	2.39E-04	Silty clay till, silty sand, trace gravel
MW-5	650.52	Rising Head	Bower & Rice	--	3.00	3.55E-07	1.08E-05	Silty clay, sand, trace gravel
MW-13	652.27	Rising Head	Cooper et al	6.30E-06	4.60	1.37E-06	4.18E-05	Silt, sand, trace gravel
MW-14	651.50	Rising Head	Cooper et al	3.63 E-06	4.10	8.85E-07	2.70E-05	Sand, trace gravel, trace clay (dense)
MW-15	653.03	Rising Head	Cooper et al	2.41E-05	4.40	5.48E-06	1.67E-04	Silt, sand, some clay, trace gravel
MW-19	648.89	Rising Head	Bower & Rice	--	1.75	1.02E-04	3.11E-03	Silt, sand, some clay, trace gravel
	648.84	Rising Head	Bower & Rice	--	1.70	2.64E-05	8.05E-04	Silt, sand, some clay, trace gravel
MW-22	643.21	Rising Head	Bower & Rice	--	1.40	2.55E-06	7.77E-05	Sand, little silt, trace gravel
MW-23	646.20	Rising Head	Bower & Rice	--	6.02	2.26E-05	6.89E-04	Silt, sand, little clay, trace gravel
MW-1A	643.34	Rising Head	Bower & Rice	--	28.16	1.80E-04	5.49E-03	Limestone, trace vertical fractures
	643.34	Rising Head	Bower & Rice	--	28.16	8.49E-05	2.59E-03	Limestone, trace vertical fractures
MW-2A	650.34	Rising Head	Cooper et al	9.41E-04	35.0	2.69E-05	8.20E-04	Limestone, trace fractures
	650.34	Rising Head	Cooper et al	5.40E-03	35.0	1.54E-04	4.69E-03	Limestone, trace fractures
	650.34	Rising Head	Cooper et al	3.91E-03	35.0	1.12E-04	3.41E-03	Limestone, trace fractures
MW-5A	650.05	Rising Head	Cooper et al	1.07E-04	35.0	3.06E-06	9.33E-05	Limestone, trace vertical fractures
MW-6A	643.32	Rising Head	Bower & Rice	--	32.6	7.23E-05	2.20E-03	Limestone, weathered fractures

TABLE 4.3

SINGLE WELL RESPONSE TEST RESULTS
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Well Designation	*Static Water Elevation (ft AMSL)*	*Test Type*	*Analysis Method*	*Transmissivity (ft^2/sec)*	*Saturated Thickness (ft) (3)*	*Hydraulic Conductivity (ft/sec)*	*Hydraulic Conductivity (cm/sec) (4)*	*Generalized Lithological Description of Screened Material*
MW-13A	649.06	Rising Head	Cooper et al	1.21E-04	35.0	3.46E-06	1.05E-04	Limestone, weathered fractures
MW-14A	648.69	Rising Head	Cooper et al	1.75E-02	35.0	5.00E-04	1.52E-02	Limestone, weathered fractures
	648.69	Rising Head	Cooper et al	2.07E-02	35.0	5.91E-04	1.80E-02	Limestone, weathered fractures
MW-15A	649.31	Rising Head	Cooper et al	3.77E-03	35.0	1.08E-04	3.28E-03	Limestone, weathered fractures
	649.30	Rising Head	Insufficient Data to Perform Analysis					
	649.31	Rising Head	Insufficient Data to Perform Analysis					
MW-17A	652.72	Rising Head	Insufficient Data to Perform Analysis					
	652.72	Rising Head	Insufficient Data to Perform Analysis					

Notes:

(1) Bower & Rice solution generally used for unconfined aquifer situations, where the screen straddles the water table - solution yields hydraulic conductivity value.
(2) Cooper et al. solution generally used for confined aquifer situations - solution yields transmissivity value.
(3) The saturated thickness of the bedrock aquifer was assumed to be 35 feet, based on depth of penetration of the deepest well. The actual saturated thickness is likely greater than 35 feet.
(4) Hydraulic Conductivity for Cooper et al. solutions calculated as transmissivity divided by the saturated thickness of aquifer.

TABLE 4.4

OVERBURDEN GROUNDWATER ELEVATIONS
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Well Number	*Ground Elevation*	*Riser Elevation*	*03/10/94 Groundwater Elevation (Ft. AMSL)*	*03/21/94 Groundwater Elevation (Ft. AMSL)*	*04/11/94 Groundwater Elevation (Ft. AMSL)*	*06/23/94 Groundwater Elevation (Ft. AMSL)*	*08/30/94 Groundwater Elevation (Ft. AMSL)*
MW-1	662.53	662.38	656.31	656.85	656.67	654.95	654.64
MW-2	657.45	657.01	NM	649.93	649.12	648.67	Dry
MW-3	656.20	655.94	649.66	650.53	650.06	647.44	647.04
MW-4	656.00	655.57	648.94	647.16	649.92	645.49	644.45
MW-5	655.24	654.80	649.94	650.63	650.35	646.90	646.36
MW-6	661.16	660.84	650.24	650.86	651.47	646.19	646.08
MW-7	658.51	658.21	651.47	651.97	652.41	647.14	646.09
MW-8	656.43	656.11	649.68	647.74	650.70	646.22	645.11
MW-9	655.36	654.99	649.53	650.11	650.53	645.86	644.97
MW-10	655.82	655.48	650.75	651.31	651.50	646.68	645.66
MW-11	656.58	656.08	647.48	648.65	649.29	644.87	644.48
MW-12	657.30	656.93	649.20	649.63	650.24	645.61	644.65
MW-13	654.89	654.66	652.40	652.73	652.54	647.88	644.24
MW-14	653.70	653.38	650.97	651.35	651.38	646.48	642.92
MW-15	658.74	658.35	652.07	655.00	653.03	649.14	649.11
MW-16	660.20	659.89	652.78	653.55	653.45	650.24	650.29
MW-18	663.09	662.51	NM	NM	652.31	Dry	Dry
MW-19	661.25	660.84	NM	NM	653.29	649.91	648.89
MW-20	659.39	659.12	NM	NM	654.92	647.86	Dry
MW-21	657.98	657.72	NM	NM	650.32	646.38	645.88
MW-22	652.94	652.51	NM	NM	649.61	646.19	643.21
MW-23	656.53	656.18	NM	NM	653.00	649.11	646.20

Key:
AMSL Above Mean Sea Level.
NM Not Measured.

TABLE 4.5

BEDROCK GROUNDWATER ELEVATIONS
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Well Number	*Ground Elevation*	*Riser Elevation*	*03/10/94 Groundwater Elevation (Ft. AMSL)*	*03/21/94 Groundwater Elevation (Ft. AMSL)*	*04/11/94 Groundwater Elevation (Ft. AMSL)*	*06/23/94 Groundwater Elevation (Ft. AMSL)*	*08/30/94 Groundwater Elevation (Ft. AMSL)*
MW-1A	664.01	663.48	NM	NM	650.08	644.30	643.34
MW-2A	657.16	657.02	649.74	649.81	649.70	646.52	644.84
MW-5A	655.28	654.84	649.39	650.40	649.96	646.44	645.80
MW-6A	659.82	659.38	647.92	648.66	649.30	644.43	643.32
MW-13A	655.40	655.13	649.37	649.89	650.13	646.45	645.65
MW-14A	653.95	653.70	646.92	647.45	648.36	644.01	643.12
MW-15A	658.77	658.51	647.66	648.42	649.18	644.25	643.29
MW-16A	660.33	659.95	NM	NM	652.65	644.34	643.43
MW-17A	659.51	659.18	NM	NM	656.64	653.38	652.72

Key:
AMSL Above Mean Sea Level.
NM Not Measured.

TABLE 4.6

SOIL SAMPLE COLLECTION AND ANALYSIS SUMMARY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Number	*Sample Location*	*Sample Date*	*Sample Depth (Ft. BGS)*	*Parameters*	*Comments*
SED-1-1193	SED-1	11/10/93	0.0 - 0.1	VOCs, BNAs, Metals, TPH	
MW-5A	MW-5A	12/01/93	1.0 - 4.5	VOCs, Metals, TPH	
MW-5A	MW-5A	12/01/93	8.0 - 11.8	VOCs, Metals, TPH	
BH-6-93	BH-6-93	12/01/93	1.0 - 4.0	VOCs, Metals, TPH	
BH-6-93	BH-6-93	12/01/93	8.0 - 11.0	VOCs, Metals, TPH	
BH-5-93	BH-5-93	12/01/93	8.0 - 12.8	VOCs, BNAs, Metals, TPH TOC, 310.13, TCLP	
BH-4-93	BH-4-93	12/03/93	0.5 - 4.0	310.13, TCLP	
BH-1-93	BH-1-93	12/03/93	0.0 - 3.0	VOCs, BNAs, Metals, TPH	MS/MSD
MW-14	MW-14	12/06/93	0.0 - 2.0	VOCs, Metals, TPH	
MW-14	MW-14	12/06/93	10.0 - 11.0	VOCs, BNAs, Metals, TPH	
MW-13	MW-13	12/08/93	2.0 - 4.0	VOCs, Metals, TPH	
MW-13	MW-13	12/08/93	8.0 - 11.0	VOCs, Metals, TPH	Duplicate as BH-D1-93
BH-2-93	BH-2-93	12/08/93	0.0 - 3.0	VOCs, Metals, TPH	
BH-3-93	BH-3-93	12/08/93	1.5 - 3.0	VOCs, BNAs, Metals, TPH, TOC, 310.13, TCLP	
BH-3C-93	BH-3C-93	12/13/93	1.5 - 2.5	VOCs, Metals, TPH	
BH-DS1-93	BH-DS1-93	12/13/93	1.0 - 4.0	VOCs, Metals, TPH	
BH-DS2-93	BH-DS2-93	12/13/93	0.5 - 3.0	VOCs, Metals, TPH	
BH-DS3-93	BH-DS3-93	12/13/93	0.5 - 1.2	VOCs, Metals, TPH	MS/MSD
BH-EDW1-93	BH-EDW1-93	12/14/93	8.0 - 11.0	VOCs, BNAs, Metals, TPH, TCLP	
BH-T1-93	BH-T1-93	12/14/93	0.5 - 1.5	VOCs, TPH	
BH-T2-93	BH-T2-93	12/14/93	0.0 - 2.0	VOCs, TPH	
BH-T3-93	BH-T3-93	12/14/93	2.0 - 4.0	VOCs, TPH	
BH-AST1-93	BH-AST1-93	12/15/93	2.0 - 3.5	VOCs, Metals, TPH	Duplicate as BH-D2-93
BH-WDW1-93	BH-WDW1-93	12/15/93	0.7 - 0.9	VOCs, Metals, TPH	

TABLE 4.6

SOIL SAMPLE COLLECTION AND ANALYSIS SUMMARY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Number	*Sample Location*	*Sample Date*	*Sample Depth (Ft. BGS)*	*Parameters*	*Comments*
MW-22	MW-22	03/29/94	8.5 - 9.5	VOCs	
MW-18	MW-18	03/30/94	13.5 - 14.5	VOCs	
MW-23	MW-23	03/30/94	12.5 - 13.5	VOCs	
MW-1A	MW-1A	03/31/94	11.5 - 12.5	VOCs	
MW-21	MW-21	04/04/94	11.0 - 12.0	VOCs	
MW-20	MW-20	04/05/94	11.0 - 12.0	VOCs	
BH-DS-N1	BH-DS-N1	04/07/94	0.5 - 2.0	VOCs, TPH	MS/MSD
BH-DS-N2	BH-DS-N2	04/07/94	0.5 - 2.0	VOCs, TPH	
BH-DS-E1	BH-DS-E1	04/07/94	0.2 - 2.0	VOCs, TPH	Duplicate as BH-DS-NW
BH-DS-E2	BH-DS-E2	04/07/94	0.5 - 2.5	VOCs, TPH	
BH-8-94	BH-8-94	04/07/94	13.0 - 14.1	VOCs, TPH	
MW-19-94	MW-19	04/07/94	12.5 - 13.7	VOCs, TPH	
BH-10-94	BH-10-94	04/08/94	10.5 - 12.5	VOCs, TPH	Duplicate as BH-14A-94
BH-11-94	BH-11-94	04/08/94	10.0 - 12.0	VOCs, TPH	
-	BH-3B-93	12/13/93	0.0 - 2.0	PID Screen	Adjacent hole sampled
-	BH-3A-93	12/13/93	0.0 - 3.0	PID Screen	Adjacent hole sampled
-	BH-EDW-N	01/17/94	6.0 - 10.0	-	PID Fault - Field Observation Only
-	BH-EDW-NE	01/17/94	6.0 - 10.0	-	PID Fault - Field Observation Only
-	BH-EDW-SE	01/17/94	6.0 - 12.0	-	PID Fault - Field Observation Only
-	BH-U1-94	12/03/93	0.0 - 6.5	PID Screen	BH-S4-92 Adjacent
-	BH-U2-94	01/17/94	4.0 - 6.0	-	PID Fault - Field Observation Only
-	BH-U3-94	01/17/94	6.0 - 10.0	-	PID Fault - Field Observation Only
-	BH-U4-94	04/13/94	0.0 - 4.5	PID Screen	PID Fault - Field Observation Only

TABLE 4.6

SOIL SAMPLE COLLECTION AND ANALYSIS SUMMARY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Number	*Sample Location*	*Sample Date*	*Sample Depth (Ft. BGS)*	*Parameters*	*Comments*
-	BH-U5-94	04/13/94	0.0 - 5.5	PID Screen	
-	BH-U6-94	04/13/94	0.0 - 4.0	PID Screen	
-	BH-7-93	12/13/93	0.0 - 2.5	PID Screen	
-	MW-15	12/14/93	0.0 - 12.0	Not Sampled	
-	MW-16	12/15/93	0.0 - 13.3	Not Sampled	BH-EDW1 Adjacent

Note:
Soil VOCs were collected from one split spoon driven over a 2-foot interval of the noted sample interval.
Soil VOCs were not composited.

Key:

310.13	New York State Department of Health (NYSDOH) petroleum products scan.
BNA	Base/Neutral Acid Extractables (Target Compound List Semi-Volatile Compounds).
Metals	Metals (Target Analyte List).
PID	Photoionization Detector.
TCLP	Toxicity Characteristic Leaching Procedure analysis of VOCs, BNAs, and metals.
TOC	Total Organic Carbon.
TPH	Total Petroleum Hydrocarbon.
VOCs	Volatile Organic Compounds (Target Compound List).

TABLE 4.7

GEOTECHNICAL SAMPLE COLLECTION AND ANALYSIS SUMMARY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location	*Sample Depth (Ft. BGS)*	*Stratigraphic Unit Sampled*	*Sample Type*	*Analyses Performed*
MW-13	3.0 - 5.0	Lake Sediments	Shelby Tube	Grain Size Distribution Atterberg Limits Permeability Calculated Porosity
MW-1A	5.0 - 7.0	Lake Sediments	Bulk	Grain Size Distribution
MW-1A	9.0 - 11.0	Sand Zone	Bulk	Grain Size Distribution
MW-1A	13.0 - 13.6	Till	Bulk	Grain Size Distribution
MW-17A	9.0 - 13.0	Sand Zone	Bulk	Grain Size Distribution
MW-21	3.0 - 6.0	Lake Sediments	Bulk	Grain Size Distribution
MW-21	10.0 - 12.0	Sand Zone	Bulk	Grain Size Distribution
MW-22	2.0 - 4.0	Lake Sediments	Bulk	Grain Size Distribution
MW-22	7.0 - 9.0	Sand Zone	Bulk	Grain Size Distribution

Key:
BGS Below Ground Surface.

TABLE 4.8

GEOTECHNICAL SAMPLE RESULTS
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location	*Sample Depth (Ft. BGS)*	*Grain Size Distribution (percent)*				*In-Place Permeability (cm/sec)*	*Porosity*	*Moisture Content (percent)*
		Gravel	*Sand*	*Silt*	*Clay*			
Lake Sediments								
MW-13*	3-5	0.4	21.0	45.5	33.1	1.81×10^{-8}	0.37	19.5
MW-21	3-6	2.4	10.2	32.4	55.0			
MW-22	2-4	5.9	13.5	34.7	45.9			
MW-1A	5-7	0.0	2.6	24.4	73.0			
	Average:	**2.175**	**11.825**	**34.25**	**51.75**			
Sandy Zone								
MW-1A	9-11	8.1	31.4	40.2	20.3			
MW-17A	9-13	0.8	46.3	49.3	3.6			
MW-21	10-12	1.4	27.9	46.9	23.8			
MW-22	7-9	3.9	43.4	43.6	9.1			
	Average:	**3.55**	**37.25**	**45.0**	**14.2**			
Till								
MW-1A	12.5 - 13.5	17.4	30.7	34.2	17.7			

Notes:

* MW-13, 3-5 feet was collected as an undisturbed soil sample using a thin wall sampler. All other samples are of bulk soils from split spoon sampling.

BGC Below Ground Surface.

TABLE 4.9

GROUNDWATER SAMPLE COLLECTION AND ANALYSIS SUMMARY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Number	*Sample Location*	*Sample Date*	*Parameters*	*Comments*
ROUND I				
Overburden				
MW-1-194-I	MW-1	01/07/94	VOCs, TPH	
MW-2-194-I	MW-2	01/05/94	VOCs, TPH	
MW-3-194-I	MW-3	01/05/94	VOCs, TPH	
MW-4-194-I	MW-4	01/10/94	VOCs, TPH	
MW-5-194-I	MW-5	01/05/94	VOCs, TPH	
MW-6-194-I	MW-6	01/05/94	VOCs, TPH	
MW-7-194-I	MW-7	01/07/94	VOCs, TPH	
MW-8-194-I	MW-8	01/11/94	VOCs, TPH	
MW-8 APL	MW-8	01/11/94	VOCs	White APL sample
MW-9-194-I	MW-9	01/07/94	VOCs, TPH	
MW-10-194-I	MW-10	01/11/94	VOCs, TPH, 310.13	Duplicate as MW-19C-194-I
MW-11-194-I	MW-11	01/10/94	VOCs, TPH	
MW-11 NAPL	MW-11	01/10/94	VOCs	LNAPL Sample
MW-12-194-I	MW-12	01/10/94	VOCs, TPH	
MW-13-194-I	MW-13	01/06/94	VOCs, BNAs, Metals, TPH	
MW-14-194-I	MW-14	01/06/94	VOCs, BNAs, Metals, TPH	Duplicate as MW-18C-194-I
MW-15-194-I	MW-15	01/06/94	VOCs, TPH	
MW-16-194-I	MW-16	01/07/94	VOCs, BNAs, Metals, TPH	MS/MSD
Bedrock				
MW-2A-194-I	MW-2A	01/13/94	VOCs, BNAs, Metals, TPH	
MW-5A-194-I	MW-5A	01/13/94	VOCs, BNAs, Metals, TPH	
MW-6A-194-I	MW-6A	01/12/94	VOCs, BNAs, Metals, TPH	
MW-13A-194-I	MW-13A	01/13/94	VOCs, BNAs, Metals, TPH	
MW-14A-194-I	MW-14A	01/13/94	VOCs, BNAs, Metals, TPH	
MW-15A-194-I	MW-15A	01/14/94	VOCs, BNAs, Metals, TPH	
East Well - Top	East Well	01/14/94	VOCs, BNAs, Metals, TPH	
East Well - Deep	East Well	01/14/94	VOCs, BNAs, TPH	

TABLE 4.9

GROUNDWATER SAMPLE COLLECTION AND ANALYSIS SUMMARY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Number	*Sample Location*	*Sample Date*	*Parameters*	*Comments*
ROUND II				
Overburden				
MW-1-394-II	MW-1	03/24/94	VOCs	
MW-2-394-II	MW-2	03/22/94	VOCs	Duplicate as MW-18C-394-II
MW-3-394-II	MW-3	03/22/94	VOCs	
MW-5-394-II	MW-5	03/22/94	VOCs	
MW-13-394-II	MW-13	03/23/94	VOCs	
MW-14-394-II	MW-14	03/23/94	VOCs	
MW-15-394-II	MW-15	03/24/94	VOCs	MS/MSD
MW-16-394-II	MW-16	03/24/94	VOCs	Duplicate as MW-19C-394-II
Bedrock				
MW-2A-394-II	MW-2A	03/22/94	VOCs	
MW-5A-394-II	MW-5A	03/24/94	VOCs	
MW-6A-394-II	MW-6A	03/24/94	VOCs	
MW-13A-394-II	MW-13A	03/23/94	VOCs	
MW-14A-394-II	MW-14A	03/23/94	VOCs	
MW-15A-394-II	MW-15A	03/24/94	VOCs	
ROUND III				
Overburden				
MW-18-494-III	MW-18	04/15/94	VOCs	MS/MSD
MW-19-494-III	MW-19	04/14/94	VOCs	
MW-20-494-III	MW-20	04/14/94	VOCs	Duplicate as MW-25C-494-II
MW-21-494-III	MW-21	04/14/94	VOCs	
MW-22-494-III	MW-22	04/14/94	VOCs	
MW-23-494-III	MW-23	04/14/94	VOCs	
Bedrock				
MW-1A-494-III	MW-1A	04/15/94	VOCs	
MW-16A-494-III	MW-16A	04/18/94	VOCs	
MW-17A-494-III	MW-17A	04/15/94	VOCs	Duplicate as MW-26C-494-III

Key:

310.13	New York State Department of Health (NYSDOH) petroleum products scan.
APL	Aqueous Phase Liquid.
BNA	Base/Neutral Acid Extractables (Target Compound List Semi-Volatile Compounds).
Metals	Metals (Target Analyte List).
LNAPL	Light Non-Aqueous Phase Liquid.
PID	Photoionization Detector.
TCLP	Toxicity Characteristic Leaching Procedure analysis of VOCs, BNAs, and metals.
TOC	Total Organic Carbon.
TPH	Total Petroleum Hydrocarbon.
VOCs	Volatile Organic Compounds (Target Compound List).

TABLE 5.1

OVERBURDEN STRATIGRAPHIC SUMMARY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Well/Borehole	Ground Elevation (Ft. AMSL)	Fill		Lake Sediments		Sand		Bedrock Top of Onondaga (Ft. BGS)
		Depth (Ft. BGS)	Thickness (Ft.)	Depth (Ft. BGS)	Thickness (Ft.)	Depth (Ft. BGS)	Thickness (Ft.)	
MW-1	662.53	0.0 - 1.0	1.0	1.0 - 8.5	7.5	8.5 - 12.6	4.1	12.6
MW-1A	664.01	0.0 - 2.4	2.4	2.4 - 8.8	6.4	8.8 - 13.3	4.5	13.3
MW-2	657.45	0.0 - 0.5	0.5	0.5 - 2.0	1.5	2.0 - 8.5	6.5	8.5
MW-2A	657.16	0.0 - 0.5	0.5	0.5 - 4.7	4.2	4.7 - 8.1	3.4	8.1
MW-3	656.20	0.0 - 1.0	1.0	1.0 - 7.5	6.5	7.5 - 11.0	3.5	11.0
MW-4	656.00	0.0 - 3.0	3.0	3.0 - 8.0	5.0	8.0 - 12.8	4.8	12.8
MW-5	655.24	0.0 - 2.9	2.9	2.9 - 8.9	6.0	8.9 - 11.9	3.0	11.9
MW-5A	655.28	0.0 - 4.4	4.4	4.4 - 9.0	4.6	9.0 - 11.8	2.8	11.8
MW-6	661.16	0.0 - 4.5	4.5	4.5 - 12.7	8.2	12.7 - 15.5	2.8	15.5
MW-6A	659.82	-	-	-	-	-	-	13.6
MW-7	658.51	0.0 - 5.1	5.1	5.1 - 10.6	5.5	10.6 - 13.6	3.0	13.6
MW-8	656.43	0.0 - 4.8	4.8	4.8 - 9.2	4.4	9.2 - 12.6	3.4	12.6
MW-9	655.36	0.0 - 2.8	2.8	2.8 - 7.3	4.5	7.3 - 11.8	4.5	11.8
MW-10	655.82	0.0 - 3.0	3.0	3.0 - 8.7	5.7	8.7 - 11.6	2.9	11.6
MW-11	656.58	0.0 - 3.8	3.8	3.8 - 9.8	6.0	9.8 - 12.6	2.8	12.6
MW-12	657.30	-	-	4.0 - 10.2	-	10.2 - 13.4	3.2	13.4
MW-13	654.89	0.0 - 1.4	1.4	1.4 - 6.8	5.4	6.8 - 11.4	4.6	11.4
MW-13A	655.40	-	-	-	-	-	-	12.0
MW-14	653.70	0.0 - 1.0	1.0	1.0 - 7.7	6.7	7.7 - 11.8	4.1	11.8
MW-14A	653.95	-	-	-	-	-	-	11.9
MW-15	658.74	0.0 - 1.7	1.7	1.7 - 7.6	5.9	7.6 - 12.0	4.4	12.0

TABLE 5.1

OVERBURDEN STRATIGRAPHIC SUMMARY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Well/Borehole	Ground Elevation (Ft. AMSL)	Fill		Lake Sediments		Sand		Bedrock Top of Onondaga (Ft. BGS)
		Depth (Ft. BGS)	Thickness (Ft.)	Depth (Ft. BGS)	Thickness (Ft.)	Depth (Ft. BGS)	Thickness (Ft.)	
MW-15A	658.77	-	-	-	-	-	-	12.8
MW-16	660.20	0.0 - 2.0	2.0	2.0 - 6.7	4.7	6.7 - 13.3	6.6	13.3
MW-16A	660.33	-	-	-	-	-	-	11.7
MW-17A	659.51	0.0 - 1.6	1.6	1.6 -4.8	3.2	4.8 - 14.5	9.7	14.5
MW-18	663.09	0.0 - 3.5	3.5	3.5 - 11.1	7.6	11.1 - 14.8	3.7	14.8
MW-19	661.25	0.0 - 6.2	6.2	6.2 - 11.6	5.4	11.6 - 13.7	2.1	13.7
MW-20	659.39	0.0 - 3.7	3.7	3.7 - 10.4	6.7	10.4 - 12.6	2.2	12.6
MW-21	657.98	0.0 - 1.5	1.5	1.5 - 10.9	9.4	10.9 - 12.8	1.9	12.8
MW-22	652.94	0.0 -2.0	2.0	2.0 - 5.6	3.6	5.6 - 10.7	5.1	10.7
MW-23	656.53	0.0 - 5.1	5.1	5.1 - 9.5	4.4	9.5 - 16.0	6.5	16.0
TB-1	660.02	0.0 - 1.5	1.5	1.5 - 7.0	5.5	7.0 - 13.8	6.8	13.8
TB-2	659.70	0.0 - 1.0	1.0	1.0 - 6.6	5.6	6.6 - 13.0	-	-
TB-3	660.39	0.0 - 5.7	5.7	5.7 - 9.5	3.8	9.5 - 12.9	-	-
TB-4	660.51	0.0 - 3.0	3.0	3.0 - 8.2	5.2	8.2 - 13.0	-	-
TB-5	660.32	0.0 - 3.6	3.6	3.6 - 8.2	4.6	8.2 - 13.0	-	-
TB-6	660.18	0.0 - 2.3	2.3	2.3 - 8.7	6.4	8.7 - 12.6	-	-
TB-7	660.10	0.0 - 5.0	5.0	5.0 - 9.0	-	-	-	-
TB-8	654.38	0.0 - 1.0	1.0	1.0 - 6.4	5.4	6.4 - 11.0	-	-
TB-9	658.91	0.0 - 3.0	3.0	3.0 - 5.0	-	-	-	-

TABLE 5.1

OVERBURDEN STRATIGRAPHIC SUMMARY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Well/Borehole	Ground Elevation (Ft. AMSL)	Fill		Lake Sediments		Sand		Bedrock Top of Onondaga (Ft. BGS)
		Depth (Ft. BGS)	Thickness (Ft.)	Depth (Ft. BGS)	Thickness (Ft.)	Depth (Ft. BGS)	Thickness (Ft.)	
BH-E	656.01	0.0 - 4.0	4.0	4.0 - 6.0	-	-	-	-
BH-F	656.04	0.0 - 2.7	2.7	2.7 - 4.0	-	-	-	-
BH-G	657.25	0.0 - 4.3	4.3	4.3 - 6.0	-	-	-	-
BH-H	657.77	0.0 - 3.1	3.1	3.1 - 8.0	-	-	-	-
BH-I	657.87	0.0 - 3.9	3.9	3.9 - 4.0	-	-	-	-
BH-J	658.15	0.0 - 4.9	4.9	4.9 - 6.0	-	-	-	-
BH-K	657.42	0.0 - 3.4	3.4	3.4 - 6.0	-	-	-	-
BH-L	658.76	0.0 - 4.3	4.3	4.3 - 6.0	-	-	-	-
BH-M	659.87	0.0 - 4.3	4.3	4.3 - 7.0	-	-	-	-
BH-N	661.35	0.0 - 2.8	2.8	2.8 - 4.0	-	-	-	-
BH-O	660.16	0.0 - 2.0	2.0	2.0 - 4.0	-	-	-	-
BH-P	660.13	0.0 - 3.5	3.5	3.5 - 6.0	-	-	-	-
BH-Q	657.04	0.0 - 3.7	3.7	3.7 - 6.0	-	-	-	-
BH-R	657.67	0.0 - 4.0	4.0	4.0 - 6.0	-	-	-	-
BH-S	656.88	0.0 - 4.0	4.0	4.0 - 8.8	4.8	8.8 - 12.7	3.9	12.7
BH-EDW1-93	660.28	0.0 - 1.8	1.8	1.8 - 7.0	5.2	7.0 - 12.4	5.4	12.9
BH-EDW-N	660.77	-	-	-	-	8.5 - 10.0	-	-
BH-EDW-NE	659.40	-	-	-	-	6.1 - 10.0	-	-
BH-EDW-SE	660.70	-	-	-	-	8.5 - 12.0	-	-

TABLE 5.1

OVERBURDEN STRATIGRAPHIC SUMMARY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Well/Borehole	Ground Elevation (Ft. AMSL)	Fill		Lake Sediments		Sand		Bedrock Top of Onondaga (Ft. BGS)
		Depth (Ft. BGS)	Thickness (Ft.)	Depth (Ft. BGS)	Thickness (Ft.)	Depth (Ft. BGS)	Thickness (Ft.)	
BH-1-93	655.21	0.0 - 1.5	1.5	1.5 - 3.5	-	-	-	-
BH-2-93	654.67	0.0 - 1.0	1.0	1.0 - 3.0	-	-	-	-
BH-3-93	653.97	0.0 - 1.5	1.5	1.5 - 3.0	-	-	-	-
BH-4-93	657.24	0.0 - 3.4	3.4	3.4 - 4.5	-	-	-	-
BH-5-93	656.52	-	-	-	-	9.4 - 12.8	3.4	12.9
BH-6-93	656.28	0.0 - 1.0	1.0	1.0 - 7.3	6.3	7.3 - 11.1	3.8	11.1
BH-7A	658.41	0.0 - 4.5	4.5	4.5 - 9.0	4.5	9.0 - 14.9	5.9	14.9
BH-7-93	653.29	0.0 - 1.8	1.8	1.8 - 2.5	-	-	-	-
BH-8-94	660.06	0.0 - 5.9	5.9	5.9 - 12.2	6.3	12.2 - 14.1	1.9	14.1
BH-10-94	658.87	0.0 - 6.5	6.5	6.5 - 8.9	2.4	8.9 - 12.2	3.3	12.2
BH-11-94	659.91	0.0 - 1.3	1.3	1.3 - 10.5	9.2	10.5 - 12.9	2.4	12.9
BH-U1-93	656.34	0.0 - 5.9	5.9	5.9 - 6.5	-	-	-	-
BH-U2-94	657.79	-	-	5.0 - 6.0	-	-	-	-
BH-U3-94	658.27	-	-	-	-	7.6 - 10.0	-	-
BH-U4-94	653.88	0.0 - 3.0	3.0	3.0 - 6.0	-	-	-	-
BH-U5-94	653.29	0.0 - 5.0	5.0	5.0 - 5.5	-	-	-	-
BH-U6-94	652.52	0.0 - 3.5	3.5	3.5 - 4.0	-	-	-	-

TABLE 5.1

OVERBURDEN STRATIGRAPHIC SUMMARY
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Well/Borehole	Ground Elevation (Ft. AMSL)	Fill		Lake Sediments		Sand		Bedrock Top of Onondaga (Ft. BGS)
		Depth (Ft. BGS)	Thickness (Ft.)	Depth (Ft. BGS)	Thickness (Ft.)	Depth (Ft. BGS)	Thickness (Ft.)	
BH-T1-93	659.24	0.0 - 1.4	1.4	1.4 - 4.0	-	-	-	-
BH-T2-93	659.26	0.0 - 2.6	2.6	2.6 - 4.0	-	-	-	-
BH-T3-93	659.77	0.0 - 2.7	2.7	2.7 - 6.0	-	-	-	-
BH-DS1-93	661.40	0.0 - 2.0	2.0	2.0 - 4.0	-	-	-	-
BH-DS2-93	661.05	0.0 - 2.0	2.0	2.0 - 4.0	-	-	-	-
BH-DS3-93	660.65	0.0 - 1.0	1.0	1.0 - 2.0	-	-	-	-
BH-DS-E1	660.49	0.0 - 1.3	1.3	1.3 - 2.2	-	-	-	-
BH-DS-E2	660.41	0.0 - 1.7	1.7	1.7 - 2.5	-	-	-	-
BH-DS-N1	661.33	0.0 -1.4	1.4	1.4 - 2.0	-	-	-	-
BH-DS-N2	661.97	0.0 - 2.0	2.0	2.0 - 2.5	-	-	-	-
BH-ASTI-93	660.29	0.0 - 2.0	2.0	2.0 - 4.0	-	-	-	-
BH-WDW1-93	-	0.0 - 0.7	0.7	0.7 - 4.0	-	-	-	-

Notes:
BGS Below Ground Surface.
AMSL Above Mean Sea Level.

TABLE 6.1

ORGANIC COMPOUNDS DETECTED - SOIL
FORMER DRUM STORAGE AREA
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Number: / *Depth (Ft. BGS):*	*Soil Cleanup Objective (1)*	*TB-1* *0.0 - 6.0*	*TB-1* *6.0-12.0*	*BH-DS1-93* *1.0-4.0*	*BH-DS2-93* *0.5-3.0*	*BH-DS3-93* *0.5-1.2*
Volatile Organics (µg/kg)						
Acetone	200	7J	10J	12J	29J	ND(11)
Benzene	60	ND(6)	ND(5)	ND(12)	ND(11)J	1J
2-Butanone	300	ND(11)	ND(11)	ND(12)J	15J	ND(11)J
Carbon Disulfide	2,700	ND(6)	ND(5)	ND(12)	18J	ND(11)J
1,1-Dichlorothane	200	6	9	19	ND(1,400)D	7J
1,1-Dichloroethene	400	1J	ND(5)	4J	ND(1,400)D	ND(11)
1,2-Dichloroethene (total)	300	ND(6)	ND(5)	ND(12)	ND(11)J	ND(11)
Ethylbenzene	5,500	ND(6)	ND(5)	7J	48J	37J
2-Hexanone	-	ND(11)	ND(11)	ND(12)	ND(11)J	4J
Methylene Chloride	100	1J	2J	3J	ND(11)J	93
4-Methyl-2-Pentanone	1,000	ND(11)	ND(11)	ND(12)	ND(11)J	11J
Tetrachloroethene	1,400	ND(6)	ND(5)	ND(12)	ND(11)J	8J
Toluene	1,500	9	2J	ND(12)	23J	25J
1,1,1-Trichloroethane	800	38	8	25	16,000D	180J
Trichloroethene	700	3J	2J	47	4J	ND(11)J
Xylenes (total)	1,200	ND(6)	2J	2J	560JD	240J

Notes:

(1) NYSDEC TAGM 4046, January 24, 1994.
- Not Available.
2J/2J Duplicate sample results.
BGS Below Ground Surface
D Result obtained after matrix dilution.
J The associated value is estimated.
ND(x) Not-detected at or above the associated value.
Concentration exceeds soil cleanup objective.

TABLE 6.1

ORGANIC COMPOUNDS DETECTED - SOIL
FORMER DRUM STORAGE AREA
REMEDIAL INVESTIGATION
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Number:		*BH-DS-E1*	*BH-DS-E2*	*BH-DS-N1*	*BH-DS-N2*
Depth (Ft. BGS):		*0.2-2.0*	*0.5-2.5*	*0.5-2.0*	*0.5-2.0*
	Soil Cleanup Objective (1)				
Volatile Organics (µg/kg)					
Acetone	200	ND(12)/ND(14)	ND(11)	ND(12)	ND(12)
Benzene	60	ND(12)/ND(12)	ND(11)	ND(12)	ND(12)
2-Butanone	300	2J/2J	ND(11)	ND(12)	4J
Carbon Disulfide	2,700	ND(12)J/ND(12)J	ND(11)J	ND(12)J	ND(12)J
1,1-Dichlorothane	200	ND(12)/ND(12)	ND(11)	ND(12)	ND(12)
1,1-Dichloroethene	400	ND(12)/ND(12)	ND(11)	ND(12)	ND(12)
1,2-Dichloroethene (total)	300	ND(12)/ND(12)	ND(11)	4J	1J
Ethylbenzene	5,500	ND(12)/ND(12)	ND(11)	ND(12)	ND(12)
2-Hexanone	-	ND(12)/ND(12)	ND(11)	ND(12)	ND(12)
Methylene Chloride	100	ND(12)/ND(12)	ND(11)	ND(12)	ND(12)
4-Methyl-2-Pentanone	1,000	ND(12)/ND(12)	ND(11)	ND(12)	ND(12)
Tetrachloroethene	1,400	ND(12)/ND(12)	ND(11)	ND(12)	ND(12)
Toluene	1,500	ND(12)/ND(12)	ND(11)	ND(12)	ND(12)
1,1,1-Trichloroethane	800	ND(12)/ND(12)	ND(11)	ND(12)	ND(12)
Trichloroethene	700	ND(12)/ND(12)	ND(11)	6J	ND(12)
Xylenes (total)	1,200	ND(12)/ND(12)	ND(11)	ND(12)	ND(12)

Notes:

(1)	NYSDEC TAGM 4046, January 24, 1994.
-	Not Available.
2J/2J	Duplicate sample results.
BGS	Below Ground Surface
D	Result obtained after matrix dilution.
J	The associated value is estimated.
ND(x)	Not-detected at or above the associated value.
▒▒	Concentration exceeds soil cleanup objective.

TABLE 6.2

TOTAL PETROLEUM HYDROCARBONS AND METALS DETECTED - SOIL
FORMER DRUM STORAGE AREA
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location:		*TB-1*	*TB-1*	*BH-DS1-93*	*BH-DS2-93*	*BH-DS3-93*
Sample Depth (Ft. BGS):	*Soil Cleanup Objective (1)*	*0.0 - 6.0*	*6.0 - 12.0*	*1.0 - 4.0*	*0.5 - 3.0*	*0.5 - 1.2*
Metals (mg/kg)						
Aluminum	100,000	NA	NA	13,900	11,700	17,800
Arsenic	7.5 (3)	NA	NA	1.8B	4.9	2.6
Barium	3,000	NA	NA	151	113	296
Beryllium	5	NA	NA	0.85	0.63	1.3
Cadmium	1.1	ND(0.59)	0.89	ND(0.79)	ND(0.77)	ND(0.73)
Calcium	35,000 (2)	NA	NA	120,000	76,700	26,000J
Chromium	1500	NA	8.5	17.7	19.4	20.6
Cobalt	60 (2)	NA	NA	7.8	8.4	11.7
Copper	300	NA	NA	25.2	21.1	53.4J
Iron	550,000 (2)	NA	NA	17,300	19,400	27,200
Lead	500 (3)	NA	NA	12.3	13.2	64.9J
Magnesium	5,000 (2)	NA	NA	19,500	19,100	6,770
Manganese	5,000 (2)	NA	NA	703	509	1,200J
Mercury	1.5	NA	NA	ND(0.050)	ND(0.050)	0.07
Nickel	150	12	7.8	208	41.6	22.8
Potassium	43,000 (2)	NA	NA	2,250	1,540	1,620
Selenium	4	NA	NA	ND(0.38)J	ND(0.37)	0.99J
Sodium	50,000 (2)	NA	NA	ND(254)	ND(221)	1,010
Vanadium	300 (2)	NA	NA	20.6	21.3	28.6
Zinc	300	24	61	74.9	77.7	115J
Total Petroleum Hydrocarbon (mg/kg)	-	323	86	ND(37.4)	1,420	624

TABLE 6.2

TOTAL PETROLEUM HYDROCARBONS AND METALS DETECTED - SOIL
FORMER DRUM STORAGE AREA
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location:		*BH-DS-E1*	*BH-DS-E2*	*BH-DS-N1*	*BH-DS-N2*
Sample Depth (Ft. BGS):	*Soil Cleanup Objective (1)*	*0.2 - 2.0*	*0.5 - 2.5*	*0.5 - 2.0*	*0.5 - 2.0*
Metals (mg/kg)					
Aluminum	100,000	NA	NA	NA	NA
Arsenic	7.5 (3)	NA	NA	NA	NA
Barium	3,000	NA	NA	NA	NA
Beryllium	5	NA	NA	NA	NA
Cadmium	1.1	NA	NA	NA	NA
Calcium	35,000 (2)	NA	NA	NA	NA
Chromium	1500	NA	NA	NA	NA
Cobalt	60 (2)	NA	NA	NA	NA
Copper	300	NA	NA	NA	NA
Iron	550,000 (2)	NA	NA	NA	NA
Lead	500 (3)	NA	NA	NA	NA
Magnesium	5,000 (2)	NA	NA	NA	NA
Manganese	5,000 (2)	NA	NA	NA	NA
Mercury	1.5	NA	NA	NA	NA
Nickel	150	NA	NA	NA	NA
Potassium	43,000 (2)	NA	NA	NA	NA
Selenium	4	NA	NA	NA	NA
Sodium	50,000 (2)	NA	NA	NA	NA
Vanadium	300 (2)	NA	NA	NA	NA
Zinc	300	NA	NA	NA	NA
Total Petroleum Hydrocarbon (mg/kg)	-	4170J/1310J	2010	3930	2200

Notes:

(1)	Published Background Concentration for US Soil (maximum of range).
(2)	Published Background Concentration for NY Soil (maximum of range).
(3)	NYSDEC TAGM 4046, January 24, 1994.
-	Not Available.
100/100	Results of duplicate analyses.
D	Result obtained after matrix dilution.
J	Value is estimated.
NA	Not Analyzed.
ND (x)	Not detected at or above the associated value.
SB	Site Background.
	Concentration exceeds cleanup objectives.

TABLE 6.3

BACKGROUND METAL CONCENTRATIONS IN SOILS
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Chemical Parameter	*Units*	*Published Concentrations (1) (2)*		*NYSDEC (3) (4) Published Concentrations*	
		Range	*Mean*	*Range*	*Mean*
Silver	mg/kg	NR	NR	NR	NR
Aluminum	mg/kg	4,500-100,000	NR	1,000-25,000	33,000*
Arsenic	mg/kg	<1.0-93.2	7	3-12	5
Barium	mg/kg	>0-3,000	560	15-600	290
Beryllium	mg/kg	<1-5	1.6	0-1.75	0.6
Calcium	mg/kg	NR	NR	130-35,000	1651
Cadmium	mg/kg	0.4-1.1	0.5	0.01-0.88	0.21
Cobalt	mg/kg	3-50	10.5	2.5-60	5.9
Chromium	mg/kg	7-1500	50	1.5-40	33
Copper	mg/kg	3-300	26	5-38	13
Iron	mg/kg	0.5-5%	NR	2,000-550,000	14000
Mercury	mg/kg	0.02-1.5	0.17	0.042-0.066	0.081*
Potassium	mg/kg	NR	NR	8,500-43,000	12000
Magnesium	mg/kg	NR	NR	100-5,000	2300
Manganese	mg/kg	20-3,000	490	50-5,000	285
Sodium	mg/kg	NR	NR	<500-50,000	2500
Nickel	mg/kg	<5-150	18.5	0.5-25	19.5
Lead	mg/kg	<10-70	26	4-61	17
Antimony	mg/kg	0.25-0.6	NR	NR	NR
Selenium	mg/kg	<0.1-4.0	0.31	<1-3.9	0.3
Thallium	mg/kg	0.02-2.8	NR	NR	NR
Vanadium	mg/kg	0.7-98	NR	1-300	43
Zinc	mg/kg	13-300	73.5	9-50	40

Notes:

(1) Data are reported in "Trace Elements in Soils and Plants", Kabata Pendias, Alina and Itenryk Pendias, CRC Press, Inc., Boca Raton, Florida, 1985.

(2) Data are reported for various types of surface soils in the United States.

(3) Data reported in "Background Concentrations of 20 Elements in Soils with Special Regard to New York State", E. Carol McGovern, NYSDEC.

(4) Data reported for uncontaminated soils in New York State or eastern United States.

* Mean reported is outside the range reported.

NA Not Analyzed.

ND(x) Not detected at or above the level specified.

NR Not Reported.

TABLE 6.4

ORGANIC COMPOUNDS DETECTED - SOIL
FORMER ABOVEGROUND STORAGE TANK AREA, EAST SIDE DRY WELL AREA
AND UNDERGROUND STORAGE TANK AREA
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA, INC.
CHEEKTOWAGA, NEW YORK

Sample Location:		*BH-AST1-93*	*BH-EDW1-93*	*BH-T1-93*	*BH-T2-93*
Sample Depth (Ft. BGS):		*2.0 - 3.5*	*8.0 - 11.0*	*0.5 - 1.5*	*0.0 - 2.0 Ft.*
	Soil Cleanup Objective (1)				
Volatile Organics (µg/kg)					
Methylene chloride	200	1J/2J	ND(2,900)	ND(12)	ND(11)
Acetone	200	8J/8J	ND(2,900)	ND(12)J	13J
Carbon disulfide	2,700	ND(12)J/ND(12)J	ND(2,900)	ND(12)J	ND(11)J
1,1-Dichloroethane	400	ND(12)J/7J	ND(2,900)	120	ND(11)
1,1-Dichloroethene	200	83J/180J	ND(2,900)	6J	ND(11)
1,2-Dichloroethene (total)	300	**570D/660JD**	ND(2,900)	ND(12)	ND(11)
2-Butanone	300	ND(12)J/ND(12)J	ND(2,900)	ND(12)J	ND(11)J
1,1,1-Trichloroethane	800	22J/71J	**21,000D**	**1,200JD**	54
Trichloroethene	700	**360JD/850JD**	**1,700JD**	ND(1,500)D	2J
Tetrachloroethene	1,400	3J/5J	ND(2,900)	ND(12)	ND(11)
Toluene	1,500	4J/7J	**1,800JD**	160JD	8J
Ethylbenzene	5,500	ND(12)/ND(12)	**17,000D**	1,100JD	8J
Xylenes (total)	1,200	3J/ND(12)	**92,000D**	**7,000D**	41
Benzene	60	ND(12)/ND(12)	ND(2,900)	ND(12)	ND(11)

TABLE 6.4

ORGANIC COMPOUNDS DETECTED - SOIL
FORMER ABOVEGROUND STORAGE TANK AREA, EAST SIDE DRY WELL AREA
AND UNDERGROUND STORAGE TANK AREA
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA, INC.
CHEEKTOWAGA, NEW YORK

Sample Location:		*BH-T3-93*	*MW-18*	*TB-2*	*TB-2*	*TB-3*	*TB-3*
Sample Depth (Ft. BGS):		*2.0 - 4.0*	*13.5 - 14.5*	*1 - 7*	*7 - 9*	*1 - 7*	*7 - 11*
	Soil Cleanup Objective (1)						
Volatile Organics (ug/kg)							
Methylene chloride	200	ND(13)	ND(12)	NA	NA	NA	NA
Acetone	200	58J	ND(12)	NA	NA	NA	NA
Carbon disulfide	2,700	5J	ND(12)	NA	NA	NA	NA
1,1-Dichloroethane	400	ND(13)	ND(12)	NA	NA	NA	NA
1,1-Dichloroethene	200	ND(13)	ND(12)	NA	NA	NA	NA
1,2-Dichloroethene (total)	300	ND(13)	ND(12)	NA	NA	NA	NA
2-Butanone	300	15J	ND(12)	NA	NA	NA	NA
1,1,1-Trichloroethane	800	2J	ND(12)	NA	NA	NA	NA
Trichloroethene	700	ND(13)	ND(12)	NA	NA	NA	NA
Tetrachloroethene	1,400	ND(13)	ND(12)	NA	NA	NA	NA
Toluene	1,500	ND(13)	ND(12)	ND(10)	**1,500**	ND(10)	ND(10)
Ethylbenzene	5,500	ND(13)	ND(12)	ND(10)	210	ND(10)	ND(10)
Xylenes (total)	1,200	ND(13)	ND(12)	100	400	ND(30)	ND(30)
Benzene	60	ND(13)	ND(12)	**80**	**140**	ND(20)	ND(20)

METALS AND TPH RESULTS - SOIL
FORMER ABOVEGROUND STORAGE TANK AREA, EAST SIDE DRY WELL AREA
UNDERGROUND STORAGE TANK AREA
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location:		*BH-AST1-93*	*BH-EDW1-93*	*BH-T1-93*	*BH-T2-93*	*BH-T3-93*
Sample Depth (Ft. BGS):	*Soil Cleanup Objective (1)*	*2.0 - 3.5*	*8.0 - 11.0*	*0.5 - 1.5*	*0.5 - 1.5*	*0.0 - 2.0*
Metals (mg/kg)						
Aluminum	100,000	12,900/13,300	1,600	NA	NA	NA
Barium	3,000	120/157	15.9	NA	NA	NA
Beryllium	5	0.72/0.81	ND(0.21)	NA	NA	NA
Calcium	35,000 (2)	51,900/88,400	52,000	NA	NA	NA
Cadmium	1.1	ND(0.77)/ND(0.78)	ND(0.76)	NA	NA	NA
Cobalt	60 (2)	9.5/8.0	ND(1.6)	NA	NA	NA
Chromium	1,500	19.2/19.6	ND(2.0)	NA	NA	NA
Copper	300	545J/42.3J	5.3	NA	NA	NA
Iron	550,000 (2)	19,300/22,800	4,150	NA	NA	NA
Potassium	43,000 (2)	2,100/2,340	398	NA	NA	NA
Magnesium	5,000 (2)	19,800/19,900	22,100	NA	NA	NA
Manganese	5,000 (2)	685/704	213	NA	NA	NA
Sodium	50,000 (2)	420/417	ND(192)	NA	NA	NA
Nickel	150	27.9/28.8	ND(4.5)	NA	NA	NA
Vanadium	300 (2)	23.7/27.9	5.6	NA	NA	NA
Zinc	300	152J/96.1J	56.2	NA	NA	NA
Arsenic	7.5 (3)	3.5J/5.7J	0.98	NA	NA	NA
Lead	500 (3)	41.2J/84.7J	6.9	NA	NA	NA
Mercury	1.5	0.24J/0.10J	ND(0.050)	NA	NA	NA
TPH (mg/kg)	-	358J/522J	ND(35.8)	236	54.8	ND(40.0)

METALS AND TPH RESULTS - SOIL
FORMER ABOVEGROUND STORAGE TANK AREA, EAST SIDE DRY WELL AREA
UNDERGROUND STORAGE TANK AREA
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location:		*TB-2*	*TB-2*	*TB-3*	*TB-3*	*TB-4*
Sample Depth (Ft. BGS):		*1 - 7*	*7 - 9*	*1 - 7*	*7 - 11*	*1 - 7*
	Recommended Soil Cleanup Objective (1)					
Metals (mg/kg)						
Aluminum	100,000	NA	NA	NA	NA	NA
Barium	3,000	NA	NA	NA	NA	NA
Beryllium	5	NA	NA	NA	NA	NA
Calcium	35,000 (2)	NA	NA	NA	NA	NA
Cadmium	1.1	NA	NA	NA	NA	NA
Cobalt	60 (2)	NA	NA	NA	NA	NA
Chromium	1,500	NA	NA	NA	NA	NA
Copper	300	NA	NA	NA	NA	NA
Iron	550,000 (2)	NA	NA	NA	NA	NA
Potassium	43,000 (2)	NA	NA	NA	NA	NA
Magnesium	5,000 (2)	NA	NA	NA	NA	NA
Manganese	5,000 (2)	NA	NA	NA	NA	NA
Sodium	50,000 (2)	NA	NA	NA	NA	NA
Nickel	150	NA	NA	NA	NA	NA
Vanadium	300 (2)	NA	NA	NA	NA	NA
Zinc	300	NA	NA	NA	NA	NA
Arsenic	7.5 (3)	NA	NA	NA	NA	NA
Lead	500 (3)	NA	NA	NA	NA	NA
Mercury	1.5	NA	NA	NA	NA	NA
TPH (mg/kg)	-	122	93	7,370	130	1,150

METALS AND TPH RESULTS - SOIL
FORMER ABOVEGROUND STORAGE TANK AREA, EAST SIDE DRY WELL AREA
UNDERGROUND STORAGE TANK AREA
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location:		*TB-4*	*TB-5*	*TB-5*	*TB-6*	*TB-6*
Sample Depth (Ft. BGS):		*7 - 11*	*1 - 7*	*7 - 9*	*1 - 7*	*7 - 11*
	Recommended Soil Cleanup Objective (1)					
Metals (mg/kg)						
Aluminum	100,000	NA	NA	NA	NA	NA
Barium	3,000	NA	NA	NA	NA	NA
Beryllium	5	NA	NA	NA	NA	NA
Calcium	35,000 (2)	NA	NA	NA	NA	NA
Cadmium	1.1	NA	NA	NA	NA	NA
Cobalt	60 (2)	NA	NA	NA	NA	NA
Chromium	1,500	NA	NA	NA	NA	NA
Copper	300	NA	NA	NA	NA	NA
Iron	550,000 (2)	NA	NA	NA	NA	NA
Potassium	43,000 (2)	NA	NA	NA	NA	NA
Magnesium	5,000 (2)	NA	NA	NA	NA	NA
Manganese	5,000 (2)	NA	NA	NA	NA	NA
Sodium	50,000 (2)	NA	NA	NA	NA	NA
Nickel	150	NA	NA	NA	NA	NA
Vanadium	300 (2)	NA	NA	NA	NA	NA
Zinc	300	NA	NA	NA	NA	NA
Arsenic	7.5 (3)	NA	NA	NA	NA	NA
Lead	500 (3)	NA	NA	NA	NA	NA
Mercury	1.5	NA	NA	NA	NA	NA
TPH (mg/kg)	-	374	178	177	110	42

Notes:

(1) Published Background Concentration for US Soil (maximum of range).
(2) Published Background Concentration for NY Soil (maximum of range).
(3) NYSDEC TAGM 4046, January 24, 1994.
BGS Below Ground Surface.
J The associated value is estimated.
NA Not Analyzed.
ND(x) Not detected at or above the associated value.
- Not Available.
Concentration exceeds cleanup objective.

TABLE 6.3

ORGANIC COMPOUNDS DETECTED
SOUTHERN AREA - SHALLOW SOIL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Site Location:		*BH-G*	*BH-Q*	*MW-4*	*MW-5A*	*BH-6-93*	*TB-7*	*TB-9*	*MW-11/BH-D*
Sample Depth (Ft. BGS):	*Soil Cleanup Objective (1)*	*4.0 - 6.0*	*4.5 - 6.0*	*1.0 - 4.0*	*1.0 - 2.5*	*2.0 - 4.0*	*0.0 - 5.0*	*3.0 - 5.0*	*4.0 - 6.0*
Volatile Organic Compounds (µg/kg)									
Vinyl chloride	200	ND(6,200)	ND(1,600)	840J	ND(11)	ND(12)	41J	25	ND(3,100)
Methylene chloride	100	ND(31,000)	ND(1,600)	ND (2)	ND(11)	ND(12)	4J	8	ND(3,100)
Acetone	200	ND(31,000)	ND(1,600)	1,800JB	14J	73J	100JB	92	ND(3,100)
1,2-Dichloroethene (total)	300	9,100J	1,400J	460J	ND(11)	ND(12)	33	78	1,200J
2-Butanone	300	ND(31,000)	ND(1,600)	ND	ND(11)	2J	ND(10)	ND(13)	ND(3,100)
Trichloroethene	700	320,000	ND(1,600)	ND	ND(11)	ND(12)	ND(10)	ND(13)	37,000
4-Methyl-2-pentanone	1,000	ND(31,000)	ND(1,600)	ND	ND(11)	ND(12)	100	ND(13)	ND(3,100)
Benzene	60	ND(31,000)	ND(1,600)	ND	ND(11)	ND(12)	62	ND(13)	ND(3,100)
2-Hexanone	NA	ND(31,000)	ND(1,600)	ND	ND(11)	ND(12)	570	ND(13)	ND(3,100)
1,1,2,2-Tetrachloroethane	600	ND(31,000)	ND(1,600)	ND	ND(11)	ND(12)	100	ND(13)	ND(3,100)
Toluene	1,500	ND(31,000)	500J	5,100	ND(11)	ND(12)	ND(10)	ND(13)	ND(3,100)
Chlorobenzene	1,700	ND(31,000)	ND(1,600)	ND	ND(11)	ND(12)	530	ND(13)	ND(3,100)
Ethylbenzene	5,500	ND(31,000)	1,200J	ND	ND(11)	ND(12)	450	ND(13)	ND(3,100)
Xylenes (total)	1,200	29,000J	24,000	ND	ND(11)	ND(12)	510	ND(13)	4,400

TABLE 6.6

ORGANIC COMPOUNDS DETECTED
SOUTHERN AREA - SHALLOW SOIL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Site Location:		*BH-G*	*BH-Q*	*MW-4*	*MW-5A*	*BH-6-93*	*TB-7*	*TB-9*
Sample Depth (Ft. BGS):		*4.0 - 6.0*	*4.5 - 6.0*	*1.0 - 4.0*	*1.0 - 2.5*	*2.0 - 4.0*	*0.0 - 5.0*	*3.0 - 5.0*
	Soil Cleanup Objective (1)							
Semi-Volatile Organics (µg/kg)								
Benzo(a)pyrene	61 or MDL	ND(330)	ND(330)	ND (2)	NA	NA	17	ND (2)
Benzo(a)anthracene	224 or MDL	220J	ND(330)	ND	NA	NA	22	78J
Benzo(b)fluoranthene	1,100	140J	ND(330)	ND	NA	NA	27	NA
Benzo(k)fluoranthene	1,100	37J	ND(330)	ND	NA	NA	ND (2)	NA
Benzo(g,h,i)perylene	50,000	130J	ND(330)	ND	NA	NA	NA	NA
Chrysene	400	130J	ND(330)	1.7	NA	NA	18	NA
Di-n-butylphthalate	8,100	1,700	ND(330)	ND	NA	NA	NA	NA
Fluoranthene	50,000	410	ND(330)	2.8	NA	NA	43	140J
Indeno(1,2,3-cd)pyrene	3,200	140J	ND(330)	ND	NA	NA	NA	NA
2-Methylnapthalene	36,400	120J	ND(330)	ND	NA	NA	NA	NA
Napthalene	13,000	290J	ND(330)	ND	NA	NA	NA	NA
Phenanthrene	50,000	190J	ND(330)	ND	NA	NA	50	130J
Pyrene	50,000	210J	ND(330)	ND	NA	NA	43	120J
2,4-Dimethylphenol	-	750	ND(330)	2.7	NA	NA	NA	NA
2-Methylphenol	100 or MDL	570	ND(330)	1.3	NA	NA	NA	NA
4-Methylphenol	900	380	ND(330)	ND	NA	NA	NA	NA
Phenol	300 or MDL	270J	ND(330)	ND	NA	NA	NA	NA

Notes:

(1) NYSDEC TAGM 4046, January 24, 1994.
(2) Detection level used is not known.
- Not Available.
B Compound also detected in associated method blank.
BGS Below Ground Surface.
J The associated value is estimated.
MDL Method Detection Limit.
NA Not Analyzed.
ND Not Detected.
ND(x) Not detected at or above the associated value.
Concentration exceeds cleanup objective.

TABLE 6.7

METALS AND TPH RESULTS
SOUTHERN AREA - SHALLOW SOIL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location:		*BH-G*	*BH-Q*	*MW-4*	*MW-5A*	*BH-6-93*	*TB-7*	*TB-9*
Sample Depth (Ft. BGS):	*Soil Cleanup Objective (1)*	*4.0 - 6.0*	*4.5 - 6.0*	*1.0 - 4.0*	*1.0 - 4.5*	*1.0 - 4.0*	*0.0 - 5.0*	*3.0 - 5.0*
Metals (mg/kg)								
Aluminum	100,000	9,400	8,600	NA	9,540	15,500	NA	NA
Barium	3,000	100	76	NA	40.4	110	NA	NA
Beryllium	5	0.6	0.4	NA	ND(0.46)	ND(0.70)	NA	NA
Calcium	35,000 (2)	61,000	63,000	NA	12,500	56,000	NA	NA
Cadmium	1.1	ND(0.5)	ND(0.5)	2.5	1.5	1.9	NA	0.77
Cobalt	60 (2)	6.2	7.5	NA	7.3	10.3	NA	NA
Chromium	1,500	14	16	41.0	12.4	22.2	NA	26
Copper	300	16	16	NA	29.6	20.7	NA	NA
Iron	550,000 (2)	18,000	16,000	NA	20,000	25,300	NA	NA
Potassium	43,000 (2)	1,800	1,600	NA	911	1,180	NA	NA
Magnesium	5,000 (2)	16,000	16,000	NA	3,750	28,300	NA	NA
Manganese	5,000 (2)	470	420	NA	716	317	NA	NA
Sodium	50,000 (2)	380	410	NA	ND(196)	ND(197)	NA	NA
Nickel	150	14	17	54.0	25.1	ND(6.5)	NA	21.0
Vanadium	300 (2)	20	20	NA	20.4	31.6	NA	NA
Zinc	300	58	96	445	76.7	70.4	NA	167
Arsenic	7.5 (3)	1.4	1.4	NA	5.9	4.6	NA	NA
Lead	500 (3)	11	9	NA	9.6	14.3	NA	NA
Thallium	1.5	ND(0.5)	0.3J	NA	0.39	ND(0.3)	NA	NA
TPH (mg/kg)		2,200	140	60,900	ND(35.7)	ND(36.8)	28,600	178

TABLE 6.7

METALS AND TPH RESULTS
SOUTHERN AREA - SHALLOW SOIL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location:		*MW-10/BH-C*	*BH-N*	*BH-P*	*BH-Q*	*BH-R*	*MW-11/BH-D*
Sample Depth (Ft. BGS):		*3.8 - 4.1*	*0.5 - 1.5*	*2.0 - 4.0*	*3.0 - 4.0*	*2.0 - 4.0*	*4.0 - 6.0*
	Soil Cleanup Objective (1)						
TPH (mg/kg)	-	2,000/3,200	750	820	14,000	13,000	240

Notes:
(1) Published US Soil Concentration (maximum of range).
(2) NYSDEC Published Concentration (maximum of range).
(3) From NYSDEC TAGM 4046, January 24, 1994.
- Not Available.
BGS Below Ground Surface.
NA Not Analyzed.
ND(x) Compound not detected at or above the associated value.
SB Site Background.
TPH Total Petroleum Hydrocarbon.
Concentration exceeds soil cleanup objective.

TABLE 6.8

ORGANIC COMPOUNDS DETECTED
SOUTHERN AREA - DEEP SOIL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location:		*BH-5-93*	*BH-6-93*	*BH-8-94*	*BH-10-94*	*BH-11-94*	*BH-S Deep*
Sample Depth (Ft. BGS):		*8.0 - 12.8*	*8.0 - 11.0*	*10.8 - 11.4*	*12.0 - 12.6*	*10.0 - 12.0*	*11.0 - 12.5*
	Soil Cleanup Objective (1)						*(NAPL in Soil)*
Volatile Organics (µg/kg)							
Vinyl chloride	200	ND(11)	ND(12)	5J	ND(11)/ND(11)	3J	ND(120,000)
Carbon disulfide	2,700	3J	ND(12)	1J	ND(11)/ND(11)	ND(12)	ND(120,000)
Acetone	200	ND(11)	ND(12)	ND(13)	ND(11)/6J	ND(12)	ND(120,000)
1,2-Dichloroethene (total)	300	140	ND(12)	32	1J/ND(11)	3J	ND(120,000)
2-Butanone	300	ND(11)	ND(12)	1J	ND(11)/ND(11)	ND(12)	ND(120,000)
Trichloroethene	700	2,200	ND(12)	ND(13)	ND(11)/ND(11)	ND(12)	2,000,000
Benzene	60	ND(11)	ND(12)	20	2J/ND(11)	ND(12)	ND(120,000)
Tetrachloroethene	1,400	ND(11)	ND(12)	ND(13)	ND(11)/ND(11)	ND(12)	ND(120,000)
Toluene	1,500	ND(11)	ND(12)	ND(13)	ND(11)/ND(11)	ND(12)	ND(120,000)
Chlorobenzene	1,700	ND(11)	ND(12)	ND(13)	23/17	ND(12)	ND(120,000)
Ethylbenzene	5,500	35	ND(12)	ND(13)	ND(11)/ND(11)	ND(12)	ND(120,000)
Xylene (total)	1,200	6J	ND(12)	1J	2J/1J	ND(12)	64,000J

TABLE 6.8

ORGANIC COMPOUNDS DETECTED
SOUTHERN AREA - DEEP SOIL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location: / *Sample Depth (Ft. BGS):*	*Soil Cleanup Objective (1)*	*MW-5A* *8.0 - 11.8*	*MW-8* *11.5 - 12.0*	*MW-11* *10.8 - 11.4*	*MW-11* *12.0 - 12.6* *(NAPL in Soil)*	*MW-12* *10.0 - 12.0*
Volatile Organics (µg/kg)						
Vinyl chloride	200	ND(12)	ND(33)	ND(1,200)	ND(42,000)	ND(1,200)
Carbon disulfide	2,700	1J	ND(33)	ND(1,200)	ND(42,000)	ND(1,200)
Acetone	200	5J	90B	ND(1,200)	ND(42,000)	ND(1,200)
1,2-Dichloroethene (total)	300	ND(12)	180	ND(1,200)	37,000J	360J
2-Butanone	300	ND(12)	ND(33)	ND(1,200)	ND(42,000)	ND(1,200)
Trichloroethene	700	ND(12)	410	17,000	570,000	18,000
Benzene	60	ND(12)	ND(33)	ND(1,200)	ND(42,000)	ND(1,200)
Tetrachloroethene	1,400	ND(12)	10J	ND(1,200)	ND(42,000)	ND(1,200)
Toluene	1,500	ND(12)	10J	ND(1,200)	ND(42,000)	ND(1,200)
Chlorobenzene	1,700	ND(12)	ND(33)	ND(1,200)	ND(42,000)	ND(1,200)
Ethylbenzene	5,500	ND(12)	ND(33)	ND(1,200)	ND(42,000)	ND(1,200)
Xylene (total)	1,200	ND(12)	880	1,600	58,000	ND(1,200)

TABLE 6.8

ORGANIC COMPOUNDS DETECTED
SOUTHERN AREA - DEEP SOIL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location:		*MW-19*	*MW-20*	*MW-21*
Sample Depth (Ft. BGS):		*12.5 - 13.7*	*11.0 - 12.0*	*11.0 - 12.0*
	Soil Cleanup Objective (1)			
Volatile Organics (µg/kg)				
Vinyl chloride	200	ND(11)	ND(11)	ND(11)
Carbon disulfide	2,700	ND(11)	ND(11)	ND(11)
Acetone	200	ND(11)	ND(11)	ND(11)
1,2-Dichloroethene (total)	300	8J	ND(11)	ND(11)
2-Butanone	300	ND(11)	ND(11)	ND(11)
Trichloroethene	700	ND(11)	ND(11)	ND(11)
Benzene	60	ND(11)	ND(11)	ND(11)
Tetrachloroethene	1,400	ND(11)	ND(11)	ND(11)
Toluene	1,500	ND(11)	ND(11)	120
Chlorobenzene	1,700	ND(11)	ND(11)	ND(11)
Ethylbenzene	5,500	ND(11)	ND(11)	ND(11)
Xylene (total)	1,200	ND(11)	ND(11)	ND(11)

Notes:
(1) From NYSDEC TAGM 4046, January 24, 1994.
23/17 Duplicate sample results.
B Compound also detected in associated method blank.
BGS Below Ground Surface.
J Associated value is estimated.
ND(x) Not detected at or above the associated value.
Concentration exceeds Cleanup Objective.

xxxx()

TABLE 6.9
METALS AND TPH RESULTS
SOUTHERN AREA - DEEP SOIL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location:		*BH-5-93*	*BH-6-93*	*BH-8-94*	*BH-10-94*	*BH-11-94*	*BH-S Deep*	*MW-5A*
Sample Depth (Ft. BGS):		*8.0 - 12.8*	*8.0 - 11.0*	*10.8 - 11.4*	*12.0 - 12.6*	*10.0 - 12.0*	*11.0 - 12.5 (NAPL in Soil)*	*8.0 - 11.8*
	Soil Cleanup Objective (1)							
Metals								
Aluminum	100,000	4,310	3,810	NA	NA	NA	NA	5,800
Barium	3,000	39.5	35.0	NA	NA	NA	NA	43.3
Calcium	35,000 (2)	71,000	81,800	NA	NA	NA	NA	74,100
Cobalt	60 (2)	3.9	3.1	NA	NA	NA	NA	4.8
Chromium	1,500	9.7	6.7	NA	NA	NA	NA	9.6
Copper	300	9.4	8.4	NA	NA	NA	NA	10.9
Iron	550,000 (2)	9,430	8,250	NA	NA	NA	NA	11,200
Potassium	43,000 (2)	1,180	1,040	NA	NA	NA	NA	1,530
Magnesium	5,000 (2)	28,300	37,500	NA	NA	NA	NA	29,700
Manganese	5,000 (2)	317	273	NA	NA	NA	NA	346
Vanadium	300 (2)	71.1	10.4	NA	NA	NA	NA	13.6
Zinc	300	52.8	44.9	NA	NA	NA	NA	51.3
Arsenic	7.5 (3)	1.3	2.0	NA	NA	NA	NA	1.5
Lead	500 (3)	6.8	12.4	NA	NA	NA	NA	6.8
TPH (mg/kg)	-	ND(36.1)	ND(36.7)	ND(38.7)	ND(35.2)	ND(35.7)	1,600	ND(36.4)

TABLE 6.9
METALS AND TPH RESULTS
SOUTHERN AREA - DEEP SOIL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location:		*MW-8*	*MW-11*	*MW-11*	*MW-12*	*MW-19*	*MW-20*	*MW-21*
Sample Depth (Ft. BGS):		*11.5 - 12.0*	*10.8 - 11.4*	*12.0 - 12.6 (NAPL in Soil)*	*10.0 - 12.0*	*12.5 - 13.7*	*11.0 - 12.0*	*11.0 - 12.0*
	Soil Cleanup Objective (1)							
Metals								
Aluminum	100,000	NA	NA	NA	NA	NA	NA	NA
Barium	3,000	NA	NA	NA	NA	NA	NA	NA
Calcium	35,000 (2)	NA	NA	NA	NA	NA	NA	NA
Cobalt	60 (2)	NA	NA	NA	NA	NA	NA	NA
Chromium	1,500	NA	NA	NA	NA	NA	NA	NA
Copper	300	NA	NA	NA	NA	NA	NA	NA
Iron	550,000 (2)	NA	NA	NA	NA	NA	NA	NA
Potassium	43,000 (2)	NA	NA	NA	NA	NA	NA	NA
Magnesium	5,000 (2)	NA	NA	NA	NA	NA	NA	NA
Manganese	5,000 (2)	NA	NA	NA	NA	NA	NA	NA
Vanadium	300 (2)	NA	NA	NA	NA	NA	NA	NA
Zinc	300	NA	NA	NA	NA	NA	NA	NA
Arsenic	7.5 (3)	NA	NA	NA	NA	NA	NA	NA
Lead	500 (3)	NA	NA	NA	NA	NA	NA	NA
TPH (mg/kg)	-	9,000	83	NA	3,300	ND(35.9)	NA	NA

Notes:
(1) Published Background Concentration for US Soil (maximum of range).
(2) Published Background Concentration for NY Soil (maximum of range).
(3) NYSDEC TAGM 4046, January 24, 1994.
NA Not Analyzed.
ND(x) Not detected at or above the associated value.
TPH Total Petroleum Hydrocarbons.
Concentration exceeds cleanup objective.

TABLE 6.10

ORGANIC COMPOUNDS DETECTED
OFF-SITE PARCEL - SHALLOW SOIL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location:		*BH-1-93*	*BH-2-93*	*BH-3-93*	*BH-3C-93*	*MW-13*	*MW-14*
Sample Depth (Ft. BGS):		*0.0 - 3.0*	*0.0 - 3.0*	*1.5 - 3.0*	*1.5 - 2.5*	*2.0 - 4.0*	*0.0 - 2.0*
	Soil Cleanup Objective (1)						
Volatile Organics (µg/kg)							
Bromomethane	-	ND(12)	ND(14)	ND(13)	3J	ND(12)	ND(12)
Vinyl chloride	200	ND(12)	ND(14)	42	ND(12)	ND(12)	ND(12)
Acetone	200	10J	2J	49J	45J	3J	ND(12)
Carbon disulfide	2,700	ND(12)	ND(14)	2J	ND(12)	ND(12)	ND(12)
1,2-Dichloroethane	300	55J	6J	160D	19	ND(12)	ND(12)
2-Butanone	300	ND(12)	ND(14)	9J	ND(12)	ND(12)	ND(12)
1,1,1-Trichloroethane	800	ND(12)	ND(14)	ND(13)	8J	ND(12)	ND(12)
Trichloroethene	700	150J	5J	ND(13)	8J	ND(12)	ND(12)
2-Hexanone	-	ND(12)	ND(14)	6J	ND(12)	ND(12)	ND(12)
Toluene	1,500	ND(12)	ND(14)	39	ND(12)	ND(12)	ND(12)
Ethylbenzene	5,500	ND(12)	ND(14)	42	ND(12)	ND(12)	ND(12)
Xylene (total)	1,200	ND(12)	ND(14)	190D	ND(12)	ND(12)	ND(12)
Semi-Volatile Organics (µg/kg)							
Fluoranthene	50,000	100J	NA	130J	NA	NA	NA
Pyrene	50,000	66J	NA	150J	NA	NA	NA

Notes:

(1) NYSDEC TAGM 4046, January 24, 1994.
- Not Available.
BGS Below Ground Surface.
D Result obtained after matrix dilution.
J The associated value is estimated.
NA Not Analyzed.
ND(x) Not detected at the stated detection limit.

TABLE 6.11

METALS AND TPH RESULTS
OFF-SITE PARCEL - SHALLOW SOIL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location:		*BH-1-93*	*BH-2-93*	*BH-3-93*	*BH-3C-93*	*MW-13*	*MW-14*
Sample Depth (Ft. BGS):		*0.0 - 3.0*	*0.0 - 3.0*	*1.5 - 3.0*	*1.5 - 2.5*	*2.0 - 4.0*	*0.0 - 2.0*
	Soil Cleanup Objective (1)						
Metals (mg/kg)							
Aluminum	100,000	12,800	18,100	29,600	17,000	13,200	15,200
Barium	3,000	92.4	137	235	233	185	167
Beryllium	5	ND(0.47)	ND(0.85)	ND(1.0)	0.88	ND(0.48)	0.68
Calcium	35,000 (2)	57,400	11,900	3,730	3,360	91,200	29,500
Cadmium	1.1	ND(1.4)	2.0	ND(1.3)	ND(0.78)	2.0	2.9
Cobalt	60 (2)	12.5	12.5	8.3	13.1	10.7	10.9
Chromium	1,500	18.8	26.6	30.0	23.1	19.5	35.4
Copper	300	24.4	26.1	9.7	21.3	24.5	33.1
Iron	550,000 (2)	19,600	32,000	20,000	31,900	23,900	26,900
Potassium	43,000 (2)	2,140	2,720	2,620	1,980	2,190	2,940
Magnesium	5,000 (2)	19,400	8,730	5,690	5,650	19,300	12,500
Manganese	5,000 (2)	475	408	182	999	655	624
Sodium	50,000 (2)	362J	ND(219)	347	ND(159)	ND(130)	ND(113)
Nickel	150	21.8	29.6	31.0	33.0	24.5	31.0
Vanadium	300 (2)	25.0	41.3	27.3	31.7	25.6	33.1
Zinc	300	74.6J	89.6	159	102	69.2	193
Arsenic	7.5 (3)	8.0	8.3	0.88	6.1	1.8	4.6
Lead	500 (3)	60.0J	20.3	13.9	16.3	13.1	346
Mercury	1.5	ND(0.05)	ND(0.11)	ND(0.17)	ND(0.06)	ND(0.06)	0.37
Thallium	2.8	ND(0.31)	0.62	ND(0.77)	ND(0.31)	ND(0.31)	0.35

TABLE 6.11

METALS AND TPH RESULTS
OFF-SITE PARCEL - SHALLOW SOIL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location:		*BH-1-93*	*BH-2-93*	*BH-3-93*	*BH-3C-93*	*MW-13*	*MW-14*
Sample Depth (Ft. BGS):		*0.0 - 3.0*	*0.0 - 3.0*	*1.5 - 3.0*	*1.5 - 2.5*	*2.0 - 4.0*	*0.0 - 2.0*
	Soil Cleanup Objective (1)						
TPH (mg/kg)	-	ND(36.8)	ND(44.3)	ND(41.7)	ND(37.0)	ND(36.9)	288
Total Organic Carbon (mg/kg)	-	NA	NA	15,900	NA	NA	NA

Notes:
(1) Published Background Concentration for US Soil (maximum of range).
(2) Published Background Concentration for NY soil (maximum of range).
(3) NYSDEC TAGM 4046, January 24, 1994.
- Not Available.
NA Not Analyzed.
ND(x) Not detected at or above the associated value.
TPH Total Petroleum Hydrocarbon.
Concentration exceeds cleanup objctives.

TABLE 6.12

ORGANIC COMPOUNDS DETECTED
OFF-SITE PARCEL - DEEP SOIL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location:		*MW-13*	*MW-14*	*MW-22*	*MW-23*
Sample Depth (Ft. BGS):		*8.0 - 11.0*	*10.0 - 11.0*	*8.5 - 9.5*	*12.5 - 13.5*
	Soil Cleanup Objective (1)				
Volatile Organics					
Bromomethane	-	ND(11)/2J	ND(12)	ND(11)	ND(11)
Methylene chloride	100	ND(11)/ND(11)	ND(12)	2J	2J
Acetone	200	7J/5J	4J	ND(11)	ND(11)
Carbon disulfide	2,700	1J/1J	ND(12)	ND(11)	ND(11)
Trichloroethene	700	ND(11)/ND(11)	5J	ND(11)	ND(11)
Toluene	1,500	ND(11)/ND(11)	1J	ND(11)	ND(11)

Notes:

(1)	From NYSDEC TAGM 4046, January 24, 1994.
-	Not Available.
BGS	Below Ground Surface.
J	The associated value is estimated.
ND(11)/ND(11)	Duplicate sample results.
ND(x)	Not detected at or above the associated value.

TABLE 6.13

METALS AND TPH RESULTS
OFF-SITE PARCEL - DEEP SOIL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Sample Location:		*MW-13*	*MW-14*	*MW-22*	*MW-23*
Sample Depth (Ft. BGS):		*8.0 - 11.0*	*10.0 - 11.0*	*8.5 - 9.5*	*12.5 - 13.5*
	Soil Cleanup Objective (1)				
Metals (mg/kg)					
Aluminum	100,000	3,350/2,580	4,100	NA	NA
Barium	3,000	30.9/26.3	37.9	NA	NA
Calcium	35,000 (2)	66,200/64,500	61,100	NA	NA
Cobalt	60 (2)	2.8/2.5	3.4	NA	NA
Chromium	1,500	6.9/7.5	7.4	NA	NA
Copper	300	6.8/6.2	10.0	NA	NA
Iron	550,000 (2)	7,580/8,500	9,240	NA	NA
Potassium	43,000 (2)	924J/666J	1,010	NA	NA
Magnesium	5,000 (2)	27,700/25,800	25,300	NA	NA
Manganese	5,000 (2)	257/229	285	NA	NA
Vanadium	300 (2)	10.6/10.9	10.4	NA	NA
Zinc	300	51.2/45.6	57.0	NA	NA
Arsenic	7.5 (3)	1.2J/2.8J	1.7	NA	NA
Lead	500 (3)	6.8/5.3	6.3	NA	NA
TPH (mg/kg)	-	ND(34.9)/ND(34.6)	ND(37.7)	NA	NA

Notes:
(1) Published Background Concentration for US Soil (maximum of range).
(2) Published Background Concentration for NY Soil (maximum of range).
(3) NYSDEC TAGM 4046, January 24, 1994.
- Not Available.
6.9/7.5 Results of duplicate analyses.
J Value is estimated.
NA Not Analyzed.
ND(x) Not detected at or above the associated value.
TPH Total Petroleum Hydrocarbon.
Concentration exceeds cleanup objective.

TABLE 6.14

DETECTED VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
IN OVERBURDEN GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

		MW-1		*MW-2*		
		1/7/94	*3/24/94*	*1/5/94*	*3/22/94*	*3/22/94*
	NYS SCG					*Dup*
Volatiles (µg/L)						
1,1,1-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,1,2-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,1-Dichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,1-Dichloroethene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,2-Dichloroethene (total)	5 (S)	2J	ND (10)	2J	4J	4J
2-Butanone	50 (G)	ND (10)	ND (10)J	ND (10)J	ND (10)	ND (10)
4-Methyl-2-pentanone	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acetone	50 (G)	ND (10)	ND (10)J	ND (10)J	ND (10)	ND (10)
Benzene	0.7 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Bromomethane	5 (S)	ND (10)	ND (10)J	ND (10)	ND (10)	ND (10)
Carbon disulfide	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chlorobenzene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chloroethane	5 (S)	ND (10)	ND (10)J	ND (10)	ND (10)J	ND (10)J
Chloroform	7 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chloromethane	-	ND (10)	ND (10)J	ND (10)	ND (10)J	ND (10)J
Ethylbenzene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Methylene chloride	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)J	ND (10)J
Tetrachloroethene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Toluene	5 (S)	1J	ND (10)	ND (10)	ND (10)	ND (10)
Trichloroethene	5 (S)	3J	ND (10)	**39**	**40**	**41**
Vinyl chloride	2 (S)	ND (10)	ND (10)J	ND (10)	ND (10)J	ND (10)J
Xylene (total)	5 (S)	ND (10)	ND (10)	2J	ND (10)	ND (10)
Semi-Volatiles (µg/L)						
1,2-Dichlorobenzene	4.7 (S)	NA	NA	NA	NA	NA
2-Methylphenol	-	NA	NA	NA	NA	NA
4-Methylphenol	-	NA	NA	NA	NA	NA
2,4-Dimethylphenol	-	NA	NA	NA	NA	NA
Naphthalene	10 (G)	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	-	NA	NA	NA	NA	NA
4-Nitroaniline	5 (S)	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	50 (S)	NA	NA	NA	NA	NA

TABLE 6.14

DETECTED VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
IN OVERBURDEN GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

		MW-3		MW-4	MW-5		MW-6
		1/5/94	3/22/94	1/10/94	1/5/94	3/22/94	1/5/94
	NYS SCG						
Volatiles (ug/L)							
1,1,1-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,1,2-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,1-Dichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,1-Dichloroethene	5 (S)	ND (10)	ND (10)	66	ND (10)	ND (10)	22
1,2-Dichloroethene (total)	5 (S)	ND (10)	ND (10)	180,000D	6J	ND (10)	4,000D
2-Butanone	50 (G)	ND (10)J	ND (10)	ND (10)	ND (10)J	ND (10)	ND (10)
4-Methyl-2-pentanone	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)J
Acetone	50 (G)	ND (10)J	ND (10)	13	13J	ND (10)	ND (10)
Benzene	0.7 (S)	ND (10)	ND (10)	2J	ND (10)	ND (10)	4J
Bromomethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Carbon disulfide	-	ND (10)	ND (10)	3J	ND (10)	ND (10)	ND (10)
Chlorobenzene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chloroethane	5 (S)	ND (10)	ND (10)J	ND (10)	ND (10)	ND (10)J	ND (10)
Chloroform	7 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chloromethane	-	ND (10)	ND (10)J	ND (10)	ND (10)	ND (10)J	ND (10)
Ethylbenzene	5 (S)	ND (10)	ND (10)	13	ND (10)	ND (10)	ND (10)
Methylene chloride	5 (S)	ND (10)	ND (10)J	ND (10)	ND (10)	ND (10)J	ND (10)
Tetrachloroethene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Toluene	5 (S)	ND (10)	ND (10)	ND (22)	ND (10)	ND (10)	3J
Trichloroethene	5 (S)	ND (10)	ND (10)	110,000D	ND (10)	ND (10)	890D
Vinyl chloride	2 (S)	ND (10)	ND (10)J	28,000D	ND (10)	ND (10)J	450JD
Xylene (total)	5 (S)	2J	ND (10)	69	1J	ND (10)	ND (10)
Semi-Volatiles (ug/L)							
1,2-Dichlorobenzene	4.7 (S)	NA	NA	NA	NA	NA	NA
2-Methylphenol	-	NA	NA	NA	NA	NA	NA
4-Methylphenol	-	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	-	NA	NA	NA	NA	NA	NA
Naphthalene	10 (G)	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	-	NA	NA	NA	NA	NA	NA
4-Nitroaniline	5 (S)	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	50 (S)	NA	NA	NA	NA	NA	NA

TABLE 6.14

DETECTED VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
IN OVERBURDEN GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

		MW-7	*MW-8*		*MW-9*
		1/7/94	*1/11/94*	*1/11/94 (APL)*	*1/7/94*
	NYS SCG				
Volatiles (µg/L)					
1,1,1-Trichloroethane	5 (S)	ND (1,000)	ND (10)J	ND (10)J	ND (10)
1,1,2-Trichloroethane	5 (S)	ND (1,000)	ND (10)J	ND (10)J	ND (10)
1,1-Dichloroethane	5 (S)	ND (1,000)	R	ND (10)J	ND (10)
1,1-Dichloroethene	5 (S)	ND (1,000)	ND (50,000)D	ND (50,000)D	ND (10)
1,2-Dichloroethene (total)	5 (S)	6,800	370,000D	390,000D	63
2-Butanone	50 (G)	ND (1,000)	R	ND (10)J	ND (10)
4-Methyl-2-pentanone	-	ND (1,000)	R	R	ND (10)
Acetone	50 (G)	ND (1,000)	ND (50,000)DJ	ND (50,000)DJ	ND (10)
Benzene	0.7 (S)	190J	8J	7J	ND (10)
Bromomethane	5 (S)	ND (1,000)	R	ND (10)J	ND (10)
Carbon disulfide	-	ND (1,000)	R	ND (10)J	ND (10)
Chlorobenzene	5 (S)	ND (1,000)	R	R	ND (10)
Chloroethane	5 (S)	ND (1,000)	R	ND (10)J	ND (10)
Chloroform	7 (S)	ND (1,000)	R	ND (10)J	ND (10)
Chloromethane	-	ND (1,000)	R	ND (10)J	ND (10)
Ethylbenzene	5 (S)	120J	130J	84J	ND (10)
Methylene chloride	5 (S)	ND (1,000)	R	ND (10)J	ND (10)
Tetrachloroethene	5 (S)	ND (1,000)	R	23J	ND (10)
Toluene	5 (S)	210J	ND (50,000)D	ND (50,000)D	1J
Trichloroethene	5 (S)	ND (1,000)	71,000D	36,000DJ	2J
Vinyl chloride	2 (S)	4,400D	54,000DJ	54,000DJ	140
Xylene (total)	5 (S)	240J	21,000JD	ND (50,000)D	3J
Semi-Volatiles (µg/L)					
1,2-Dichlorobenzene	4.7 (S)	NA	NA	NA	NA
2-Methylphenol	-	NA	NA	NA	NA
4-Methylphenol	-	NA	NA	NA	NA
2,4-Dimethylphenol	-	NA	NA	NA	NA
Naphthalene	10 (G)	NA	NA	NA	NA
4-Chloro-3-methylphenol	-	NA	NA	NA	NA
4-Nitroaniline	5 (S)	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	50 (S)	NA	NA	NA	NA

TABLE 6.14

DETECTED VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
IN OVERBURDEN GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

		MW-10		MW-11	MW-11-NAPL	MW-12
		1/11/94	1/11/94	1/10/94	1/10/94	1/10/94
	NYS SCG		Dup			
Volatiles (µg/L)						
1,1,1-Trichloroethane	5 (S)	ND (10)J	ND (10)J	R	ND (1,000,000)	ND (10)J
1,1,2-Trichloroethane	5 (S)	ND (10)J	ND (10)J	R	ND (1,000,000)	ND (10)J
1,1-Dichloroethane	5 (S)	ND (10)J	ND (10)J	R	ND (1,000,000)	ND (10)J
1,1-Dichloroethene	5 (S)	16J	18J	ND (50,000)D	ND (1,000,000)	ND (10)J
1,2-Dichloroethene (total)	5 (S)	51,000DJ	98,000DJ	470,000D	22,000,000	53,000D
2-Butanone	50 (G)	ND (10)J	ND (10)J	R	ND (1,000,000)	ND (10)J
4-Methyl-2-pentanone	-	ND (10)J	ND (10)J	R	ND (1,000,000)	ND (10)J
Acetone	50 (G)	18U	ND (10)J	ND (50,000)DJ	ND (1,000,000)	ND (10)J
Benzene	0.7 (S)	ND (10)J	ND (10)J	R	ND (1,000,000)	ND (10)J
Bromomethane	5 (S)	ND (10)J	ND (10)J	R	ND (1,000,000)	ND (10)J
Carbon disulfide	-	ND (10)J	ND (10)J	R	ND (1,000,000)	ND (10)J
Chlorobenzene	5 (S)	ND (10)J	ND (10)J	R	ND (1,000,000)	ND (10)J
Chloroethane	5 (S)	ND (10)J	ND (10)J	R	ND (1,000,000)	ND (10)J
Chloroform	7 (S)	ND (10)J	ND (10)J	R	ND (1,000,000)	ND (10)J
Chloromethane	-	ND (10)J	ND (10)J	R	ND (1,000,000)	ND (10)J
Ethylbenzene	5 (S)	17J	19J	ND (50,000)D	920,000J	17J
Methylene chloride	5 (S)	ND (10)J	ND (10)J	120J	ND (1,000,000)	ND (10)J
Tetrachloroethene	5 (S)	ND (10)J	ND (10)J	50J	160,000J	ND (10)J
Toluene	5 (S)	49J	54J	ND (50,000)D	ND (1,000,000)	69J
Trichloroethene	5 (S)	ND (50,000)DJ	38,000JD	250,000D	330,000,000D	86,000D
Vinyl chloride	2 (S)	ND (50,000)DJ	15,700JD	48,000JD	1,400,000	ND (10)J
Xylene (total)	5 (S)	100J	100J	ND (50,000)D	6,600,000	140J
Semi-Volatiles (µg/L)						
1,2-Dichlorobenzene	4.7 (S)	NA	NA	NA	NA	NA
2-Methylphenol	-	NA	NA	NA	NA	NA
4-Methylphenol	-	NA	NA	NA	NA	NA
2,4-Dimethylphenol	-	NA	NA	NA	NA	NA
Naphthalene	10 (G)	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	-	NA	NA	NA	NA	NA
4-Nitroaniline	5 (S)	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	50 (S)	NA	NA	NA	NA	NA

TABLE 6.14

DETECTED VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
IN OVERBURDEN GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

		MW-13		
		1/6/94	*1/6/94*	*3/23/94*
	NYS SCG		*DEC Split*	
Volatiles (ug/L)				
1,1,1-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)
1,1,2-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)
1,1-Dichloroethane	5 (S)	ND (10)	ND (10)	ND (10)
1,1-Dichloroethene	5 (S)	ND (10)	ND (10)	ND (10)
1,2-Dichloroethene (total)	5 (S)	2J	ND (10)	ND (10)
2-Butanone	50 (G)	ND (10)	ND (10)	ND (10)J
4-Methyl-2-pentanone	-	ND (10)J	ND (10)	ND (10)
Acetone	50 (G)	ND (14)	ND (10)	ND (10)J
Benzene	0.7 (S)	ND (10)	ND (10)	ND (10)
Bromomethane	5 (S)	ND (10)	ND (10)	ND (10)J
Carbon disulfide	-	ND (10)	ND (10)	ND (10)
Chlorobenzene	5 (S)	ND (10)	ND (10)	ND (10)
Chloroethane	5 (S)	ND (10)	ND (10)	ND (10)J
Chloroform	7 (S)	ND (10)	ND (10)	ND (10)
Chloromethane	-	ND (10)	ND (10)	ND (10)J
Ethylbenzene	5 (S)	ND (10)	ND (10)	ND (10)
Methylene chloride	5 (S)	ND (10)	ND (10)	ND (10)
Tetrachloroethene	5 (S)	ND (10)	ND (10)	ND (10)
Toluene	5 (S)	ND (10)	ND (10)	ND (10)
Trichloroethene	5 (S)	ND (10)	ND (10)	ND (10)
Vinyl chloride	2 (S)	ND (10)	2J	ND (10)J
Xylene (total)	5 (S)	ND (10)	ND (10)	ND (10)
Semi-Volatiles (ug/L)				
1,2-Dichlorobenzene	4.7 (S)	ND (10)	NA	NA
2-Methylphenol	-	ND (10)	NA	NA
4-Methylphenol	-	ND (10)	NA	NA
2,4-Dimethylphenol	-	ND (10)	NA	NA
Naphthalene	10 (G)	ND (10)	NA	NA
4-Chloro-3-methylphenol	-	ND (10)	NA	NA
4-Nitroaniline	5 (S)	ND (25)J	NA	NA
bis(2-Ethylhexyl)phthalate	50 (S)	ND (10)	NA	NA

TABLE 6.14

**DETECTED VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
IN OVERBURDEN GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK**

		MW-14				
	NYS SCG	*1/6/94*	*1/6/94 Dup*	*1/6/94 DEC Split*	*1/6/94 DEC Split*	*3/23/94*
Volatiles (µg/L)						
1,1,1-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (100)	ND (10)
1,1,2-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (100)	ND (10)
1,1-Dichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (100)	ND (10)
1,1-Dichloroethene	5 (S)	ND (10)	ND (10)	1J	ND (100)	2J
1,2-Dichloroethene (total)	5 (S)	580D	650D	950 E	900D	690D
2-Butanone	50 (G)	ND (10)J	ND (10)J	ND (10)	ND (100)	7JD
4-Methyl-2-pentanone	-	ND (10)	ND (10)	ND (10)	ND (100)	ND (10)
Acetone	50 (G)	ND (10)	ND (10)	ND (10)	ND (100)	3J
Benzene	0.7 (S)	2J	1J	1J	ND (100)	1J
Bromomethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (100)	16JD
Carbon disulfide	-	ND (10)	ND (10)	ND (10)	ND (100)	ND (10)
Chlorobenzene	5 (S)	ND (10)	ND (10)	ND (10)	ND (100)	ND (10)
Chloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (100)	ND (10)J
Chloroform	7 (S)	ND (10)	ND (10)	ND (10)	ND (100)	ND (10)
Chloromethane	-	ND (10)	ND (10)	ND (10)	ND (100)	25JD
Ethylbenzene	5 (S)	ND (10)	ND (10)	ND (10)	ND (100)	ND (10)
Methylene chloride	5 (S)	ND (10)	ND (10)	ND (10)	ND (100)	ND (10)
Tetrachloroethene	5 (S)	ND (10)	ND (10)	ND (10)	ND (100)	ND (10)
Toluene	5 (S)	ND (10)	ND (10)	ND (10)	ND (100)	ND (10)
Trichloroethene	5 (S)	ND (10)	ND (10)	ND (10)	ND (100)	ND (10)
Vinyl chloride	2 (S)	8J	8J	13	ND (100)	11J
Xylene (total)	5 (S)	ND (10)	ND (10)	ND (10)	ND (100)	ND (10)
Semi-Volatiles (µg/L)						
1,2-Dichlorobenzene	4.7 (S)	ND (10)	ND (10)	NA	NA	NA
2-Methylphenol	-	ND (10)	ND (10)	NA	NA	NA
4-Methylphenol	-	ND (10)	ND (10)	NA	NA	NA
2,4-Dimethylphenol	-	ND (10)	ND (10)	NA	NA	NA
Naphthalene	10 (G)	ND (10)	ND (10)	NA	NA	NA
4-Chloro-3-methylphenol	-	ND (10)	ND (10)	NA	NA	NA
4-Nitroaniline	5 (S)	ND (25)J	ND (25)J	NA	NA	NA
bis(2-Ethylhexyl)phthalate	50 (S)	ND (10)	ND (10)	NA	NA	NA

TABLE 6.14

DETECTED VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
IN OVERBURDEN GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

		MW-15		*MW-16*		
		1/6/94	*3/24/94*	*1/7/94*	*3/24/94*	*03/24/94*
	NYS SCG					*Dup*
Volatiles (µg/L)						
1,1,1-Trichloroethane	5 (S)	ND (10)	ND (10)	67J	77J	79J
1,1,2-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,1-Dichloroethane	5 (S)	14	ND (10)	6,500D	3,000D	3,300D
1,1-Dichloroethene	5 (S)	ND (10)	ND (10)	630JD	240JD	280JD
1,2-Dichloroethene (total)	5 (S)	3J	ND (10)	6,200D	3,900D	4,200D
2-Butanone	50 (G)	ND (10)	ND (10)J	ND (10)	ND (10)J	ND (10)J
4-Methyl-2-pentanone	-	ND (10)J	ND (10)	ND (10)J	ND (10)	ND (10)
Acetone	50 (G)	74	4J	ND (10)	ND (10)J	ND (10)J
Benzene	0.7 (S)	ND (10)	ND (10)	1J	1J	2J
Bromomethane	5 (S)	ND (10)	ND (10)J	ND (10)	ND (10)J	ND (10)J
Carbon disulfide	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chlorobenzene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chloroethane	5 (S)	ND (10)	ND (10)J	ND (10)	5J	ND (10)J
Chloroform	7 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chloromethane	-	ND (10)	ND (10)J	ND (10)	ND (10)J	ND (10)J
Ethylbenzene	5 (S)	ND (10)	ND (10)	2,000D	620D	670D
Methylene chloride	5 (S)	ND (10)	ND (10)	ND (10)	9J	9J
Tetrachloroethene	5 (S)	ND (10)	ND (10)	3J	3J	3J
Toluene	5 (S)	1J	ND (10)	1,100JD	160JD	180JD
Trichloroethene	5 (S)	ND (10)	ND (10)	6,800D	2,100D	2,400D
Vinyl chloride	2 (S)	ND (10)	ND (10)J	75J	ND (500)D	ND (500)D
Xylene (total)	5 (S)	1J	ND (10)	5,200D	1,300D	1,500D
Semi-Volatiles (µg/L)						
1,2-Dichlorobenzene	4.7 (S)	NA	NA	ND (10)	NA	NA
2-Methylphenol	-	NA	NA	4J	NA	NA
4-Methylphenol	-	NA	NA	5J	NA	NA
2,4-Dimethylphenol	-	NA	NA	26	NA	NA
Naphthalene	10 (G)	NA	NA	42	NA	NA
4-Chloro-3-methylphenol	-	NA	NA	19J	NA	NA
4-Nitroaniline	5 (S)	NA	NA	ND (25)J	NA	NA
bis(2-Ethylhexyl)phthalate	50 (S)	NA	NA	ND (10)	NA	NA

TABLE 6.14

**DETECTED VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
IN OVERBURDEN GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK**

		MW-18		*MW-19*	*MW-20*		
		4/15/94	*4/15/94*	*4/14/94*	*4/14/94*	*4/14/94*	*4/14/94*
	NYS SCG		*DEC Split*			*Dup*	*DEC Split*
Volatiles (ug/L)							
1,1,1-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,1,2-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,1-Dichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,1-Dichloroethene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,2-Dichloroethene (total)	5 (S)	ND (10)	ND (10)	52	ND (10)	ND (10)	ND (10)
2-Butanone	50 (G)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Methyl-2-pentanone	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acetone	50 (G)	ND (10)	ND (10)	ND (10)J	ND (10)J	ND (10)	ND (10)
Benzene	0.7 (S)	ND (10)	ND (10)	1J	ND (10)	ND (10)	ND (10)
Bromomethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Carbon disulfide	-	ND (10)	ND (10)	ND (10)J	ND (10)J	ND (10)	ND (10)
Chlorobenzene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chloroform	7 (S)	1J	2J	ND (10)	ND (10)	ND (10)	ND (10)
Chloromethane	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Ethylbenzene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Methylene chloride	5 (S)	ND (10)	ND (10)	ND (10)J	ND (10)J	ND (10)	ND (10)
Tetrachloroethene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Toluene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Trichloroethene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Vinyl chloride	2 (S)	ND (10)	ND (10)	17	ND (10)	ND (10)	ND (10)
Xylene (total)	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Semi-Volatiles (ug/L)							
1,2-Dichlorobenzene	4.7 (S)	NA	NA	NA	NA	NA	NA
2-Methylphenol	-	NA	NA	NA	NA	NA	NA
4-Methylphenol	-	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	-	NA	NA	NA	NA	NA	NA
Naphthalene	10 (G)	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	-	NA	NA	NA	NA	NA	NA
4-Nitroaniline	5 (S)	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	50 (S)	NA	NA	NA	NA	NA	NA

TABLE 6.14

DETECTED VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
IN OVERBURDEN GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

		MW-21		MW-22		MW-23	
		04/14/94	4/14/94	04/14/94	4/14/94	4/14/94	4/14/94
	NYS SCG		DEC Split		DEC Split		DEC Split
Volatiles (ug/L)							
1,1,1-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,1,2-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,1-Dichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,1-Dichloroethene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,2-Dichloroethene (total)	5 (S)	ND (10)	ND (10)	15	ND (10)	ND (10)	ND (10)
2-Butanone	50 (G)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Methyl-2-pentanone	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acetone	50 (G)	ND (10)J	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Benzene	0.7 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Bromomethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Carbon disulfide	-	ND (10)J	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chlorobenzene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chloroform	7 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chloromethane	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Ethylbenzene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Methylene chloride	5 (S)	ND (10)J	ND (10)	1J	ND (10)	ND (10)	ND (10)
Tetrachloroethene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Toluene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Trichloroethene	5 (S)	ND (10)	ND (10)	16	ND (10)	ND (10)	ND (10)
Vinyl chloride	2 (S)	5J	6J	ND (10)	ND (10)	ND (10)	ND (10)
Xylene (total)	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Semi-Volatiles (ug/L)							
1,2-Dichlorobenzene	4.7 (S)	NA	NA	NA	NA	NA	NA
2-Methylphenol	-	NA	NA	NA	NA	NA	NA
4-Methylphenol	-	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	-	NA	NA	NA	NA	NA	NA
Naphthalene	10 (G)	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	-	NA	NA	NA	NA	NA	NA
4-Nitroaniline	5 (S)	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	50 (S)	NA	NA	NA	NA	NA	NA

Notes:

(G) Guidance value
(S) Standard value
- Not Available
APL Aqueous Phase Liquid.
D Value obtained after matrix dilution.
Dup Field Duplicate
J Associated value is estimated
NA Not analyzed
NAPL Non-Aqueous Phase Liquid
ND Not detected at or above the associated value.
R Rejected value
Concentration exceeds NYS SCG (Ambient Water Quality Standards and Guidance Values, October 1993).

TABLE 6.15

**DETECTED METALS AND PETROLEUM HYDROCARBONS
IN OVERBURDEN GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK**

		MW-1		*MW-2*			*MW-3*		*MW-4*
	NYS SCG	*1/7/94*	*3/24/94*	*1/5/94*	*3/22/94*	*3/22/94 Dup*	*1/5/94*	*3/22/94*	*1/10/94*
Metals (µg/L)									
Aluminum	-	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	25 (S)	NA	NA	NA	NA	NA	NA	NA	NA
Barium	1,000 (S)	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	-	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	50 (S)	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	-	NA	NA	NA	NA	NA	NA	NA	NA
Copper	200 (S)	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300 (S)	NA	NA	NA	NA	NA	NA	NA	NA
Lead	25 (S)	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	35,000 (G)	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	300 (S)	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	-	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	-	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	20,000 (S)	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	-	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	300 (S)	NA	NA	NA	NA	NA	NA	NA	NA
Petroleum Hydrocarbons (µg/L)									
Total Petroleum Hydrocarbons (mg/L)	-	ND (2.5)	NA	ND (2.5)	NA	NA	ND (2.5)	NA	ND (2.5)
Gasoline	-	NA	NA	NA	NA	NA	NA	NA	NA
Kerosene	-	NA	NA	NA	NA	NA	NA	NA	NA
Fuel oil	-	NA	NA	NA	NA	NA	NA	NA	NA
Lubricating oil	-	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 6.15

DETECTED METALS AND PETROLEUM HYDROCARBONS
IN OVERBURDEN GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

		MW-5		MW-6	MW-7	MW-8		MW-9
		1/5/94	3/22/94	1/5/94	1/7/94	1/11/94	1/11/94 (APL)	1/7/94
	NYS SCG							
Metals (µg/L)								
Aluminum	-	NA	NA	NA	NA	NA	NA	NA
Arsenic	25 (S)	NA	NA	NA	NA	NA	NA	NA
Barium	1,000 (S)	NA	NA	NA	NA	NA	NA	NA
Calcium	-	NA	NA	NA	NA	NA	NA	NA
Chromium	50 (S)	NA	NA	NA	NA	NA	NA	NA
Cobalt	-	NA	NA	NA	NA	NA	NA	NA
Copper	200 (S)	NA	NA	NA	NA	NA	NA	NA
Iron	300 (S)	NA	NA	NA	NA	NA	NA	NA
Lead	25 (S)	NA	NA	NA	NA	NA	NA	NA
Magnesium	35,000 (G)	NA	NA	NA	NA	NA	NA	NA
Manganese	300 (S)	NA	NA	NA	NA	NA	NA	NA
Nickel	-	NA	NA	NA	NA	NA	NA	NA
Potassium	-	NA	NA	NA	NA	NA	NA	NA
Sodium	20,000 (S)	NA	NA	NA	NA	NA	NA	NA
Vanadium	-	NA	NA	NA	NA	NA	NA	NA
Zinc	300 (S)	NA	NA	NA	NA	NA	NA	NA
Petroleum Hydrocarbons (µg/L)								
Total Petroleum Hydrocarbons (mg/L)	-	ND (2.5)	NA	ND (2.5)	ND (2.5)	67.4	NA	ND (2.5)
Gasoline	-	NA	NA	NA	NA	NA	NA	NA
Kerosene	-	NA	NA	NA	NA	NA	NA	NA
Fuel oil	-	NA	NA	NA	NA	NA	NA	NA
Lubricating oil	-	NA	NA	NA	NA	NA	NA	NA

TABLE 6.15

DETECTED METALS AND PETROLEUM HYDROCARBONS
IN OVERBURDEN GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

		MW-10		MW-11	MW-11-NAPL	MW-12
		1/11/94	1/11/94	1/10/94	1/10/94	1/10/94
	NYS SCG		Dup			
Metals (µg/L)						
Aluminum	-	NA	NA	NA	NA	NA
Arsenic	25 (S)	NA	NA	NA	NA	NA
Barium	1,000 (S)	NA	NA	NA	NA	NA
Calcium	-	NA	NA	NA	NA	NA
Chromium	50 (S)	NA	NA	NA	NA	NA
Cobalt	-	NA	NA	NA	NA	NA
Copper	200 (S)	NA	NA	NA	NA	NA
Iron	300 (S)	NA	NA	NA	NA	NA
Lead	25 (S)	NA	NA	NA	NA	NA
Magnesium	35,000 (G)	NA	NA	NA	NA	NA
Manganese	300 (S)	NA	NA	NA	NA	NA
Nickel	-	NA	NA	NA	NA	NA
Potassium	-	NA	NA	NA	NA	NA
Sodium	20,000 (S)	NA	NA	NA	NA	NA
Vanadium	-	NA	NA	NA	NA	NA
Zinc	300 (S)	NA	NA	NA	NA	NA
Petroleum Hydrocarbons (µg/L)						
Total Petroleum Hydrocarbons (mg/L)	-	3.2	ND (2.5)J	192.0	NA	ND (2.5)J
Gasoline	-	Not Present	NA	NA	NA	NA
Kerosene	-	100U	NA	NA	NA	NA
Fuel oil	-	590	NA	NA	NA	NA
Lubricating oil	-	Present	NA	NA	NA	NA

TABLE 6.15

DETECTED METALS AND PETROLEUM HYDROCARBONS IN OVERBURDEN GROUNDWATER REMEDIAL INVESTIGATION/FEASIBILITY STUDY LEICA INC. CHEEKTOWAGA, NEW YORK

		MW-13			MW-14				
	NYS SCG	1/6/94	1/6/94 DEC Split	3/23/94	1/6/94	1/6/94 Dup	1/6/94 DEC Split	1/6/94 DEC Split	3/23/94
Metals (ug/L)									
Aluminum	-	6,970	NA	NA	27,200J	39,800J	NA	NA	NA
Arsenic	25 (S)	2	NA	NA	9	14	NA	NA	NA
Barium	1,000 (S)	245	NA	NA	251	352	NA	NA	NA
Calcium	-	186,000	NA	NA	466,000	584,000	NA	NA	NA
Chromium	50 (S)	53	NA	NA	73	92	NA	NA	NA
Cobalt	-	8	NA	NA	16	24	NA	NA	NA
Copper	200 (S)	22	NA	NA	75	88	NA	NA	NA
Iron	300 (S)	12,700	NA	NA	41,600J	60,900J	NA	NA	NA
Lead	25 (S)	ND (10.4)	NA	NA	63.6J	112J	NA	NA	NA
Magnesium	35,000 (G)	81,900	NA	NA	251,000	290,000	NA	NA	NA
Manganese	300 (S)	254	NA	NA	1,390	1,850	NA	NA	NA
Nickel	-	70.0	NA	NA	128	138	NA	NA	NA
Potassium	-	3,970	NA	NA	10,900	13,800	NA	NA	NA
Sodium	20,000 (S)	16,200	NA	NA	76,600	77,100	NA	NA	NA
Vanadium	-	9.0B	NA	NA	38.3B	62	NA	NA	NA
Zinc	300 (S)	35.7J	NA	NA	207J	257J	NA	NA	NA
Petroleum Hydrocarbons (ug/L)									
Total Petroleum Hydrocarbons (mg/L)	-	3.5	NA	NA	ND (2.5)	ND (2.5)	NA	NA	NA
Gasoline	-	NA	NA	NA	NA	NA	NA	NA	NA
Kerosene	-	NA	NA	NA	NA	NA	NA	NA	NA
Fuel oil	-	NA	NA	NA	NA	NA	NA	NA	NA
Lubricating oil	-	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 6.15

**DETECTED METALS AND PETROLEUM HYDROCARBONS
IN OVERBURDEN GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK**

		MW-15		*MW-16*		
		1/6/94	*3/24/94*	*1/7/94*	*3/24/94*	*03/24/94*
	NYS SCG					*Dup*
Metals (ug/L)						
Aluminum	-	NA	NA	9,250	NA	NA
Arsenic	25 (S)	NA	NA	6	NA	NA
Barium	1,000 (S)	NA	NA	266	NA	NA
Calcium	-	NA	NA	168,000	NA	NA
Chromium	50 (S)	NA	NA	83	NA	NA
Cobalt	-	NA	NA	10	NA	NA
Copper	200 (S)	NA	NA	53.0	NA	NA
Iron	300 (S)	NA	NA	21,600	NA	NA
Lead	25 (S)	NA	NA	18	NA	NA
Magnesium	35,000 (G)	NA	NA	55,700	NA	NA
Manganese	300 (S)	NA	NA	599	NA	NA
Nickel	-	NA	NA	175	NA	NA
Potassium	-	NA	NA	6,850	NA	NA
Sodium	20,000 (S)	NA	NA	361,000	NA	NA
Vanadium	-	NA	NA	12	NA	NA
Zinc	300 (S)	NA	NA	132J	NA	NA
Petroleum Hydrocarbons (ug/L)						
Total Petroleum Hydrocarbons (mg/L)	-	ND (2.5)	NA	ND (2.5)	NA	NA
Gasoline	-	NA	NA	NA	NA	NA
Kerosene	-	NA	NA	NA	NA	NA
Fuel oil	-	NA	NA	NA	NA	NA
Lubricating oil	-	NA	NA	NA	NA	NA

TABLE 6.15

DETECTED METALS AND PETROLEUM HYDROCARBONS
IN OVERBURDEN GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

		MW-18		MW-19	MW-20		
		4/15/94	4/15/94	4/14/94	4/14/94	4/14/94	4/14/94
	NYS SCG		DEC Split			Dup	DEC Split
Metals (µg/L)							
Aluminum	-	NA	NA	NA	NA	NA	NA
Arsenic	25 (S)	NA	NA	NA	NA	NA	NA
Barium	1,000 (S)	NA	NA	NA	NA	NA	NA
Calcium	-	NA	NA	NA	NA	NA	NA
Chromium	50 (S)	NA	NA	NA	NA	NA	NA
Cobalt	-	NA	NA	NA	NA	NA	NA
Copper	200 (S)	NA	NA	NA	NA	NA	NA
Iron	300 (S)	NA	NA	NA	NA	NA	NA
Lead	25 (S)	NA	NA	NA	NA	NA	NA
Magnesium	35,000 (G)	NA	NA	NA	NA	NA	NA
Manganese	300 (S)	NA	NA	NA	NA	NA	NA
Nickel	-	NA	NA	NA	NA	NA	NA
Potassium	-	NA	NA	NA	NA	NA	NA
Sodium	20,000 (S)	NA	NA	NA	NA	NA	NA
Vanadium	-	NA	NA	NA	NA	NA	NA
Zinc	300 (S)	NA	NA	NA	NA	NA	NA
Petroleum Hydrocarbons (µg/L)							
Total Petroleum Hydrocarbons (mg/L)	-	NA	NA	NA	NA	NA	NA
Gasoline	-	NA	NA	NA	NA	NA	NA
Kerosene	-	NA	NA	NA	NA	NA	NA
Fuel oil	-	NA	NA	NA	NA	NA	NA
Lubricating oil	-	NA	NA	NA	NA	NA	NA

TABLE 6.15

DETECTED METALS AND PETROLEUM HYDROCARBONS
IN OVERBURDEN GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

		MW-21		MW-22		MW-23	
		04/14/94	4/14/94	04/14/94	4/14/94	4/14/94	4/14/94
	NYS SCG		DEC Split		DEC Split		DEC Split
Metals (ug/L)							
Aluminum	-	NA	NA	NA	NA	NA	NA
Arsenic	25 (S)	NA	NA	NA	NA	NA	NA
Barium	1,000 (S)	NA	NA	NA	NA	NA	NA
Calcium	-	NA	NA	NA	NA	NA	NA
Chromium	50 (S)	NA	NA	NA	NA	NA	NA
Cobalt	-	NA	NA	NA	NA	NA	NA
Copper	200 (S)	NA	NA	NA	NA	NA	NA
Iron	300 (S)	NA	NA	NA	NA	NA	NA
Lead	25 (S)	NA	NA	NA	NA	NA	NA
Magnesium	35,000 (G)	NA	NA	NA	NA	NA	NA
Manganese	300 (S)	NA	NA	NA	NA	NA	NA
Nickel	-	NA	NA	NA	NA	NA	NA
Potassium	-	NA	NA	NA	NA	NA	NA
Sodium	20,000 (S)	NA	NA	NA	NA	NA	NA
Vanadium	-	NA	NA	NA	NA	NA	NA
Zinc	300 (S)	NA	NA	NA	NA	NA	NA
Petroleum Hydrocarbons (ug/L)							
Total Petroleum Hydrocarbons (mg/L)	-	NA	NA	NA	NA	NA	NA
Gasoline	-	NA	NA	NA	NA	NA	NA
Kerosene	-	NA	NA	NA	NA	NA	NA
Fuel oil	-	NA	NA	NA	NA	NA	NA
Lubricating oil	-	NA	NA	NA	NA	NA	NA

Notes:

(G) Guidance value
(S) Standard value
- Not Available
APL Aqueous Phase Liquid.
B Compound also detected in associated laboratory method blank.
D Result obtained after matrix dilution.
Dup Field Duplicate
J Associated value is estimated
NA Not Analyzed.
NAPL Non-Aqueous Phase Liquid.
ND Not-detected at or above the associated value.
R Rejected value
Concentration exceeds NYS SCG (Ambient Water Quality) Standard Guidance Values, October 1993).

TABLE 6.16

DETECTED VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS IN BEDROCK GROUNDWATER REMEDIAL INVESTIGATION/FEASIBILITY STUDY LEICA INC. CHEEKTOWAGA, NEW YORK

		MW-1A	*MW-2A*		*MW-5A*	
		4/15/94	*1/13/94*	*3/22/94*	*1/13/94*	*3/24/94*
	NYS SCG					
Volatiles (µg/L)						
1,1,1-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,1,2-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,1-Dichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,1-Dichloroethene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
1,2-Dichloroethene (total)	5 (S)	14	ND (10)	4J	ND (10)	3J
2-Butanone	50 (G)	ND (10)	ND (10)J	ND (10)	ND (10)J	ND (10)J
4-Methyl-2-pentanone	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acetone	50 (G)	ND (10)	ND (10)J	ND (10)	3J	ND (10)J
Benzene	0.7 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Bromomethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)J
Carbon disulfide	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chlorobenzene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chloroethane	5 (S)	ND (10)	ND (10)J	ND (10)J	ND (10)J	ND (10)J
Chloroform	7 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chloromethane	-	ND (10)	ND (10)J	ND (10)J	ND (10)J	ND (10)J
Ethylbenzene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Methylene chloride	5 (S)	ND (10)	ND (10)	ND (10)J	ND (10)	ND (10)
Tetrachloroethene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Toluene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Trichloroethene	5 (S)	1J	8J	42	ND (10)	ND (10)
Vinyl chloride	5 (S)	ND (10)	ND (10)J	ND (10)J	ND (10)J	ND (10)J
Xylene (total)	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Semi-Volatiles (µg/L)						
1,2-Dichlorobenzene	4.7 (S)	NA	ND (10)	NA	ND (10)	NA
2-Methylphenol	-	NA	ND (10)	NA	ND (10)	NA
4-Methylphenol	-	NA	ND (10)	NA	ND (10)	NA
2,4-Dimethylphenol	-	NA	ND (10)	NA	ND (10)	NA
Naphthalene	10 (G)	NA	ND (10)	NA	ND (10)	NA
4-Chloro-3-methylphenol	-	NA	ND (10)	NA	ND (10)	NA
4-Nitroaniline	5 (S)	NA	ND (25)J	NA	ND (25)J	NA
bis(2-Ethylhexyl)phthalate	50 (S)	NA	40	NA	3J	NA

TABLE 6.16

DETECTED VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
IN BEDROCK GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

		MW-6A		MW-13A		
		1/12/94	03/24/94	1/13/94	1/13/94	3/23/94
	NYS SCG				DEC Split	
Volatiles (µg/L)						
1,1,1-Trichloroethane	5 (S)	ND (10)J	18J	ND (10)	ND (10)	ND (10)
1,1,2-Trichloroethane	5 (S)	ND (10)J	ND (10)	ND (10)	ND (10)	ND (10)
1,1-Dichloroethane	5 (S)	6J	14J	ND (10)	ND (10)	ND (10)
1,1-Dichloroethene	5 (S)	140J	140J	ND (10)	ND (10)	ND (10)
1,2-Dichloroethene (total)	5 (S)	390,000D	69,000D	25	28	19
2-Butanone	50 (G)	ND (10)J	ND (10)J	ND (10)	ND (10)	ND (10)J
4-Methyl-2-pentanone	-	7J	12J	ND (10)	ND (10)	ND (10)
Acetone	50 (G)	16J	15J	ND (10)	ND (10)	ND (10)J
Benzene	0.7 (S)	38J	67J	ND (10)	ND (10)	ND (10)
Bromomethane	5 (S)	ND (10)J	ND (10)J	ND (10)	ND (10)	ND (10)J
Carbon disulfide	-	ND (10)J	3J	ND (10)	ND (10)	ND (10)
Chlorobenzene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chloroethane	5 (S)	ND (10)J	ND (10)J	ND (10)	ND (10)	ND (10)J
Chloroform	7 (S)	ND (10)J	ND (10)	ND (10)	ND (10)	ND (10)
Chloromethane	-	ND (10)J	ND (10)J	ND (10)J	ND (10)	ND (10)J
Ethylbenzene	5 (S)	140J	ND (5,000)D	ND (10)	ND (10)	ND (10)
Methylene chloride	5 (S)	ND (10)J	2J	ND (10)	ND (10)	ND (10)
Tetrachloroethene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Toluene	5 (S)	190J	ND (5,000)D	ND (10)	ND (10)	ND (10)
Trichloroethene	5 (S)	90J	160J	3J	ND (10)	ND (10)
Vinyl chloride	5 (S)	110,000D	19,000D	ND (10)	2J	1J
Xylene (total)	5 (S)	7,000JD	ND (5,000)D	3J	2J	2J
Semi-Volatiles (µg/L)						
1,2-Dichlorobenzene	4.7 (S)	4J	NA	ND (10)	NA	NA
2-Methylphenol	-	20	NA	ND (10)	NA	NA
4-Methylphenol	-	62	NA	ND (10)	NA	NA
2,4-Dimethylphenol	-	11	NA	ND (10)	NA	NA
Naphthalene	10 (G)	3J	NA	ND (10)	NA	NA
4-Chloro-3-methylphenol	-	ND (10)	NA	ND (10)	NA	NA
4-Nitroaniline	5 (S)	ND (25)J	NA	ND (25)J	NA	NA
bis(2-Ethylhexyl)phthalate	50 (S)	2J	NA	1J	NA	NA

TABLE 6.16

**DETECTED VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS
IN BEDROCK GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK**

		MW-14A			*MW-15A*		*MW-16A*
		1/13/94	*1/13/94*	*3/23/94*	*1/14/94*	*3/24/94*	*04/18/94*
	NYS SCG		*DEC Split*				
Volatiles (ug/L)							
1,1,1-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	8J	110,000D
1,1,2-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	13
1,1-Dichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	19	25	4,400JD
1,1-Dichloroethene	5 (S)	ND (10)	ND (10)	ND (10)	5J	4J	1,200JD
1,2-Dichloroethene (total)	5 (S)	46	57	64	650D	490D	34,000D
2-Butanone	50 (G)	ND (10)J	ND (10)	ND (10)J	ND (10)J	ND (10)J	43
4-Methyl-2-pentanone	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	91
Acetone	50 (G)	ND (10)J	ND (10)	ND (10)J	4J	ND (10)J	ND (10000)D
Benzene	0.7 (S)	ND (10)	ND (10)	ND (10)	1J	ND (10)	18
Bromomethane	5 (S)	ND (10)	ND (10)	ND (10)J	ND (10)	5JD	ND (10)
Carbon disulfide	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	7J
Chlorobenzene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	2J
Chloroethane	5 (S)	ND (10)J	ND (10)	ND (10)J	ND (10)J	ND (10)J	160
Chloroform	7 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	8J
Chloromethane	-	ND (10)J	ND (10)	ND (10)J	ND (10)J	8JD	ND (10)
Ethylbenzene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	2J	3,000JD
Methylene chloride	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	1J	18
Tetrachloroethene	5 (S)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	33
Toluene	5 (S)	3J	ND (10)	ND (10)	3J	1J	2,700JD
Trichloroethene	5 (S)	ND (10)	ND (10)	ND (10)	8J	14	88,000D
Vinyl chloride	5 (S)	28J	28	25J	300D	200D	4,700JD
Xylene (total)	5 (S)	3J	0.8J	ND (10)	4J	2J	15,000D
Semi-Volatiles (ug/L)							
1,2-Dichlorobenzene	4.7 (S)	ND (10)	NA	NA	ND (10)	NA	NA
2-Methylphenol	-	ND (10)	NA	NA	ND (10)	NA	NA
4-Methylphenol	-	ND (10)	NA	NA	ND (10)	NA	NA
2,4-Dimethylphenol	-	ND (10)	NA	NA	ND (10)	NA	NA
Naphthalene	10 (G)	ND (10)	NA	NA	ND (10)	NA	NA
4-Chloro-3-methylphenol	-	ND (10)	NA	NA	ND (10)	NA	NA
4-Nitroaniline	5 (S)	ND (25)J	NA	NA	ND (25)J	NA	NA
bis(2-Ethylhexyl)phthalate	50 (S)	2J	NA	NA	ND (10)	NA	NA

TABLE 6.16

DETECTED VOLATILE AND SEMI-VOLATILE ORGANIC COMPOUNDS IN BEDROCK GROUNDWATER REMEDIAL INVESTIGATION/FEASIBILITY STUDY LEICA INC. CHEEKTOWAGA, NEW YORK

		MW-17A		*East Well (Top)*	*East Well (Bottom)*
		4/15/94	*4/15/94*	*1/14/94*	*1/14/94*
	NYS SCG		*Dup*		
Volatiles (µg/L)					
1,1,1-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	13
1,1,2-Trichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND(10)
1,1-Dichloroethane	5 (S)	ND (10)	ND (10)	ND (10)	49
1,1-Dichloroethene	5 (S)	ND (10)	ND (10)	ND (10)	7J
1,2-Dichloroethene (total)	5 (S)	31	33	6J	640D
2-Butanone	50 (G)	ND (10)	ND (10)	ND (10)	ND(10)
4-Methyl-2-pentanone	-	ND (10)	ND (10)	ND (10)	ND(10)
Acetone	50 (G)	ND (10)	ND (10)	ND (10)	ND(10)
Benzene	0.7 (S)	ND (10)	ND (10)	ND (10)	ND(10)
Bromomethane	5 (S)	ND (10)	ND (10)	ND (10)	ND(10)
Carbon disulfide	-	9J	9J	ND (10)	ND(10)
Chlorobenzene	5 (S)	ND (10)	ND (10)	ND (10)	ND(10)
Chloroethane	5 (S)	ND (10)	ND (10)	ND (10)	ND(10)
Chloroform	7 (S)	ND (10)	ND (10)	ND (10)	ND(10)
Chloromethane	-	ND (10)	ND (10)	ND (10)J	ND(10)
Ethylbenzene	5 (S)	ND (10)	ND (10)	ND (10)	1J
Methylene chloride	5 (S)	ND (10)	1J	ND (10)	ND(10)
Tetrachloroethene	5 (S)	ND (10)	ND (10)	ND (10)	ND(10)
Toluene	5 (S)	ND (10)	ND (10)	ND (10)	2J
Trichloroethene	5 (S)	32	35	3J	360D
Vinyl chloride	5 (S)	ND (10)	ND (10)	ND (10)	17.0D
Xylene (total)	5 (S)	ND (10)	ND (10)	ND (10)	3J
Semi-Volatiles (µg/L)					
1,2-Dichlorobenzene	4.7 (S)	NA	NA	ND (10)	ND (10)
2-Methylphenol	-	NA	NA	ND (10)	ND (10)
4-Methylphenol	-	NA	NA	ND (10)	ND (10)
2,4-Dimethylphenol	-	NA	NA	ND (10)	ND (10)
Naphthalene	10 (G)	NA	NA	ND (10)	ND (10)
4-Chloro-3-methylphenol	-	NA	NA	ND (10)	ND (10)
4-Nitroaniline	5 (S)	NA	NA	ND(25)J	ND(25)J
bis(2-Ethylhexyl)phthalate	50 (S)	NA	NA	ND (10)	ND (10)

TABLE 6.17

DETECTED METALS AND PETROLEUM HYDROCARBONS IN BEDROCK GROUNDWATER REMEDIAL INVESTIGATION/FEASIBILITY STUDY LEICA INC. CHEEKTOWAGA, NEW YORK

		MW-1A	*MW-2A*		*MW-5A*	
		4/15/94	*1/13/94*	*3/22/94*	*1/13/94*	*3/24/94*
	NYS SCG					
Metals (ug/L)						
Aluminum	-	NA	732	NA	8,810	NA
Arsenic	25 (S)	NA	3.6J	NA	4	NA
Barium	1,000 (S)	NA	59	NA	296	NA
Calcium	-	NA	105,000	NA	179,000	NA
Chromium	50 (S)	NA	9	NA	14	NA
Cobalt	-	NA	32	NA	4	NA
Copper	200 (S)	NA	ND (8.5)	NA	ND (12.3)	NA
Iron	300 (S)	NA	8,330	NA	13,800	NA
Lead	25 (S)	NA	ND (2.7)	NA	13	NA
Magnesium	35,000 (G)	NA	36,400	NA	147,000	NA
Manganese	300 (S)	NA	93	NA	414	NA
Nickel	-	NA	7	NA	7	NA
Potassium	-	NA	3,740	NA	10,500	NA
Sodium	20,000 (S)	NA	11,600	NA	52,700	NA
Vanadium	-	NA	ND (2.0)	NA	7	NA
Zinc	300 (S)	NA	ND (22.3)	NA	66.8J	NA
Petroleum Hydrocarbons (ug/L)						
Total Petroleum Hydrocarbons (mg/L	-	NA	ND (2.5)	NA	ND (2.5)	NA
Gasoline	-	NA	NA	NA	NA	NA
Kerosene	-	NA	NA	NA	NA	NA
Fuel oil	-	NA	NA	NA	NA	NA
Lubricating oil	-	NA	NA	NA	NA	NA

TABLE 6.17

DETECTED METALS AND PETROLEUM HYDROCARBONS
IN BEDROCK GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

		MW-6A		*MW-13A*		
		1/12/94	*03/24/94*	*1/13/94*	*1/13/94*	*3/23/94*
	NYS SCG				*DEC Split*	
Metals (ug/L)						
Aluminum	-	231	NA	480	NA	NA
Arsenic	25 (S)	2.0J	NA	2.0	NA	NA
Barium	1,000 (S)	458	NA	230	NA	NA
Calcium	-	134,000	NA	436,000	NA	NA
Chromium	50 (S)	10	NA	ND (6.4)	NA	NA
Cobalt	-	3	NA	ND (3.2)	NA	NA
Copper	200 (S)	25	NA	ND (9.3)	NA	NA
Iron	300 (S)	3,750	NA	4,670	NA	NA
Lead	25 (S)	ND (5.2)	NA	ND (2.9)	NA	NA
Magnesium	35,000 (G)	93,000	NA	68,100	NA	NA
Manganese	300 (S)	80	NA	173	NA	NA
Nickel	-	18	NA	6	NA	NA
Potassium	-	6,360	NA	2,150	NA	NA
Sodium	20,000 (S)	99,200	NA	10,400	NA	NA
Vanadium	-	ND (2.0)	NA	ND (2.0)	NA	NA
Zinc	300 (S)	596J	NA	ND (15.7)	NA	NA
Petroleum Hydrocarbons (ug/L)						
Total Petroleum Hydrocarbons (mg/L	-	ND (2.5)	NA	ND (2.5)	NA	NA
Gasoline	-	NA	NA	NA	NA	NA
Kerosene	-	NA	NA	NA	NA	NA
Fuel oil	-	NA	NA	NA	NA	NA
Lubricating oil	-	NA	NA	NA	NA	NA

TABLE 6.17

DETECTED METALS AND PETROLEUM HYDROCARBONS IN BEDROCK GROUNDWATER REMEDIAL INVESTIGATION/FEASIBILITY STUDY LEICA INC. CHEEKTOWAGA, NEW YORK

		MW-14A			*MW-15A*	
		1/13/94	*1/13/94*	*3/23/94*	*1/14/94*	*3/24/94*
	NYS SCG		*DEC Split*			
Metals (µg/L)						
Aluminum	-	636	NA	NA	450	NA
Arsenic	25 (S)	3	NA	NA	5	NA
Barium	1,000 (S)	214	NA	NA	139	NA
Calcium	-	165,000	NA	NA	135,000	NA
Chromium	50 (S)	11	NA	NA	ND (6.4)	NA
Cobalt	-	ND (3.2)	NA	NA	ND (3.2)	NA
Copper	200 (S)	14	NA	NA	17	NA
Iron	300 (S)	5,210	NA	NA	2,610	NA
Lead	25 (S)	ND (3.0)	NA	NA	ND (2.1)	NA
Magnesium	35,000 (G)	75,900	NA	NA	60,800	NA
Manganese	300 (S)	102	NA	NA	66.0	NA
Nickel	-	6.0	NA	NA	ND (4.8)	NA
Potassium	-	3,450	NA	NA	3,130	NA
Sodium	20,000 (S)	20,400	NA	NA	154,000	NA
Vanadium	-	ND (2.0)	NA	NA	ND (2.0)	NA
Zinc	300 (S)	24.6J	NA	NA	ND (20.4)	NA
Petroleum Hydrocarbons (µg/L)						
Total Petroleum Hydrocarbons (mg/L	-	ND (2.5)	NA	NA	ND (2.5)	NA
Gasoline	-	NA	NA	NA	NA	NA
Kerosene	-	NA	NA	NA	NA	NA
Fuel oil	-	NA	NA	NA	NA	NA
Lubricating oil	-	NA	NA	NA	NA	NA

TABLE 6.17

DETECTED METALS AND PETROLEUM HYDROCARBONS
IN BEDROCK GROUNDWATER
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

		MW-16A	*MW-17A*		*East Well (Top)*
		04/18/94	*4/15/94*	*4/15/94*	*1/14/94*
	NYS SCG			*Dup*	
Metals (ug/L)					
Aluminum	-	NA	NA	NA	ND (49.7)
Arsenic	25 (S)	NA	NA	NA	4.8J
Barium	1,000 (S)	NA	NA	NA	95
Calcium	-	NA	NA	NA	80,500
Chromium	50 (S)	NA	NA	NA	ND (6.4)
Cobalt	-	NA	NA	NA	ND (3.2)
Copper	200 (S)	NA	NA	NA	ND (3.6)
Iron	300 (S)	NA	NA	NA	5,620
Lead	25 (S)	NA	NA	NA	ND (2.6)
Magnesium	35,000 (G)	NA	NA	NA	32,300
Manganese	300 (S)	NA	NA	NA	145
Nickel	-	NA	NA	NA	ND (4.8)
Potassium	-	NA	NA	NA	1,630
Sodium	20,000 (S)	NA	NA	NA	133,000
Vanadium	-	NA	NA	NA	ND (2.0)
Zinc	300 (S)	NA	NA	NA	91.1J
Petroleum Hydrocarbons (ug/L)					
Total Petroleum Hydrocarbons (mg/L	-	NA	NA	NA	ND (2.5)
Gasoline	-	NA	NA	NA	NA
Kerosene	-	NA	NA	NA	NA
Fuel oil	-	NA	NA	NA	NA
Lubricating oil	-	NA	NA	NA	NA

Notes:

(G)	Guidance value
(S)	Standard value
-	Not Available
D	Result obtained after matrix dilution
Dup	Field Duplicate
J	Associated value is estimated
NA	Not analyzed
ND	Not-detected at or above the associated value
R	Rejected value
	Concentration exceeds NYS SCG (Ambient Water Quality and Guidance Values, October 1993).

TABLE 6.18

ORGANIC COMPOUNDS DETECTED
OFF-SITE AREA SURFACE SAMPLES
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

Compound	*Class C Surface Water Quality Standard (µg/kg) (1)*	*Soil Cleanup Objective (µg/kg) (2)*	*SW-1*	*SED-1*
Volatile Organics (µg/kg)				
Acetone	NS/G	200	5J	ND(31)
Trichloroethene	11(G) (3)	700	ND(10)	8J
Semi-Volatiles (µg/kg)				
Naphthalene	NS/G	13,000	ND(10)	2,700
2-Methylnapthalene	NS/G	36,400	ND(10)	3,500
Acenaphthylene	NS/G	41,000	ND(10)	330J
Acenaphthene	NS/G	50,000	ND(10)	560J
Dibenzofuran	NS/G	6,200	ND(10)	1,200
Fluorene	NS/G	50,000	ND(10)	660J
Phenanthrene	NS/G	50,000	ND(10)	13,000D
Anthracene	NS/G	50,000	ND(10)	1,500
Carbazole	NS/G	NA	ND(10)	5,200J
Di-n-butylphthalate	NS/G	8,100	ND(10)	320J
Fluoranthene	NS/G	50,000	ND(10)	25,000D
Pyrene	NS/G	50,000	ND(10)	18,000D
Butylbenzylphthalate	NS/G	50,000	ND(10)	600J
Benzo(a)anthracene	NS/G	224	ND(10)	**8,400JD**
Chrysene	NS/G	400	ND(10)	**8,100**
bis(2-Ethylhexyl)phthalate	0.6 (S) (4)	50,000	**1J**	ND(7,700)U
Benzo(b)fluoranthene	NS/G	1,100	ND(10)	**24,000D**
Benzo(a)pyrene	0.0012 (G)	61	ND(10)	**12,000D**
Ideno(1,2,3-cd)pyrene	NS/G	3,200	ND(10)	**4,700**
Dibenz(a,h)anthracene	NS/G	4	ND(10)	**2,100**
Benzo(g,h,i)perylene	NS/G	50,000	ND(10)	4,400

Notes:

(1) From TOGS 1.1.1, October 22, 1993, Ambient Water Quality Standards and Guidance Values.
(2) From TAGM 4046, January 24, 1994, Determination of Soil Cleanup Objectives and Cleanup Levels.
(3) Guidance value.
(4) Standard.
D Result obtained after matrix dilution.
J Associated value is estimated.
ND(x) Not detected at or above the associated value.
NS/G No standard or guidance value.
U Data is unusable.
Concentration exceeds associated quality standard or cleanup objective.

TABLE 6.19

SURFACE WATER HARDNESS AND CALCULATION OF SURFACE WATER QUALITY STANDARDS REMEDIAL INVESTIGATION/FEASIBILITY STUDY LEICA INC. CHEEKTOWAGA, NEW YORK

Estimate of Surface Water Hardness

Hardness $CaCO_3$ Equivalent (mg/L) = Cation (mg/L) x Factor

(Ref: Limnological Analyses 2nd Ed., Wetzel and Likens, 1991. page 118)

Cation	*Concentration (mg/L)*		*Conductivity Factor*		*$CaCO_3$ Equivalent (mg/L)*
Ca	70.7	x	2.497	=	176.538
Mg	8.0	x	4.116	=	32.928
Fe	0.899	x	1.792	=	1.611
Mn	0.344	x	1.822	=	0.627
Al	0.611	x	5.564	=	3.400
Zn	0.208	x	1.531	=	0.318

Total Hardness as $CaCO_3$ Equivalent = 215.422 mg/L

Calculation of Surface Water Quality Standards Per TOGS 1.1.1

(Ref. NYSDEC Division of Water TOGS 1.1.1, October 22, 1993)

Cd = exp (0.7852 [ln (mg/L Hardness)] - 3.490)
= exp (0.7852 [5.37] -3.490)
= exp (0.729)
2.1 µg/L

Cu = exp (0.8545 [ln (mg/L-Hardness)] - 1.465)
= exp (0.8545 [5.37] - 1.465)
= exp (3.12)
22.6 µg/L

Pb = exp (1.266 [ln (mg/L Hardness)] - 4.661)
= exp (1.266 [5.37] - 4.661)
= exp (2.14)
8.5 µg/L

Zn = exp (0.85 [ln (mg/L Hardness)] + 0.50)
= exp (0.85 [5.37] + 0.50)
= exp (5.06)
158 µg/L

TABLE 6.20

METALS AND TOTAL PETROLEUM HYDROCARBONS
OFF-SITE SURFACE SAMPLES
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
LEICA INC.
CHEEKTOWAGA, NEW YORK

	Class C Surface Water Standard (µg/L) (1)	*Soil Cleanup Objective (9) (mg/kg)*	*SW-1 11/10/93 (µg/L)*	*SED-1 11/10/93 (mg/kg)*
Metals				
Aluminum	100 (S)	100,000	611	11,000
Arsenic	190 (S)	7.5	18.5	109
Barium	NS/G (2)	3,000	233	832
Beryllium	11 (S)	5	ND(0.30)	1.0
Cadmium	2.1 (3) (S)	1.1	6.8	9.8
Calcium	NS/G	35,000 (10)	70,700	14,700
Chromium	(4) (S)	1,500	ND(8.3)	99
Cobalt	5 (S)	60 (10)	ND(2.6)	14.7
Copper	22.6 (5) (S)	300	27	280
Iron	300	550,000 (10)	899	26,700
Lead	8.5 (S)	500 (11)	56.2J	1,830
Magnesium	NS/G	5,000 (10)	7,970	3,160
Manganese	NS/G	5,000 (10)	344	838
Mercury	0.2G	1.5	ND(0.10)	1.1
Nickel	(7) (S)	150	ND(20.5)	102
Potassium	NS/G	43,000 (10)	3,190	1,850
Selenium	1 (S)	4.0	ND(1.0)J	2.0
Sodium	NS/G	50,000 (10)	31,100	241
Vanadium	14 (S)	300 (10)	ND(2.0)	65.7
Zinc	158 (8) (S)	300	208	1,500
TPH (mg/L or mg/kg)	-	-	ND(2.5)	ND(94)

Notes:

(1) The noted concentrations are obtained from "Water Quality Standards and Guidance Values", Division of Water, New York State Department of Environmental Conservation, Albany, New York, October 1993, which may be applicable or appropriate and relevant to the Site.
(2) NS/G - No standard or guidance values have been established.
(3) Value is equal to exp(0.7852[ln (mg/L hardness)] - 3.490).
(4) Value is equal to exp(0.819[ln (mg/L hardness)] +1.561).
(5) Value is equal to exp(0.8545[ln (mg/L hardness)] - 1.465).
(6) Value is equal to exp(1.266[ln (mg/L hardness)] - 4.661).
(7) Value is equal to exp(0.76[ln (mg/L hardness)] + 1.06).
(8) Value is equal to exp(0.85[ln (mg/L hardness)] + 0.50).
(9) Published Concentration value for US Soil (maximum of range) (See Table 6.3).
(10) Published Concentration Value for NY Soil (maximum range) (see Table 6.3).
(11) From TAGM 4046 (January 24, 1994) Determination of Soil Cleanup Objectives and Cleanup Levels.
(G) Guidance Value.
(S) Standard.
- Not Available.
J Associated value is estimated.
ND(x) Not detected at mthod detection level shown.
ND(x)U Detected, but justified as unusable due to associated laboratory blank contamination.
Result exceeds associated standard or cleanup objective.

TABLE 6.21

ESTIMATED AMBIENT AIR CONCENTRATIONS
PRELIMINARY AIR PATHWAY ANALYSIS
LEICA INC., CHEEKTOWAGA, NEW YORK

Component	*Emission Rate Ei* $(g/s)^{(1)}$	*Maximum Actual Impact Ca* $(\mu g/m^3)$ (1)	*Maximum Potential Impact Cp* $(\mu g/m^3)$ (1)	*Maximum Short Term Impact Cst* $(\mu g/m^3)$ (1)	*NYSDEC Guidance Concentrations (2)* AGC $(\mu g/m^3)$	SGC $(\mu g/m^3)$
Total 1,2-Dichloroethene	2.22E-06	8.88E-04	8.92E-04	8.92E-02	0.039	190,000
Ethylbenzene	1.40E-07	5.62E-05	5.63E-05	5.63E-03	1,000	100,000
Toluene	2.64E-06	1.06E-03	1.07E-03	1.07E-01	2,000	89,000
Trichloroethene	1.15E-06	4.62E-04	4.63E-04	4.63E-02	0.45	33,000
Vinyl chloride	3.32E-06	1.33E-03	1.34E-03	1.34E-01	0.02	1,300
Xylenes	8.46E-07	3.39E-04	3.41E-04	3.41E-02	300	100,000
1,1,1-Trichloroethane	3.41E-07	1.37E-04	1.37E-04	1.37E-02	1,000	450,000

Notes:
(1) Calculated.
(2) Annual and Short-Term Guidance Concentrations from NYSDEC Divison of Air Resources "Air Guide 1".

TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-4 5/91 (1020)	MW-4 5/91 (1535)	MW-1 7/91	MW-4 7/91	MW-4 DUPLICATE 7/91	MW-5 7/91	MW-4 1/92
VOCs (mg/L)							
Acetone	ND 13	ND 13	ND 0.05	ND 25	ND 17	ND 0.05	ND 8.3
Benzene	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
Bromodichloromethane	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
Bromoform	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
Bromomethane	ND 2.6	ND 2.6	ND 0.01	ND 5	ND 3.4	ND 0.01	ND 8.3
2-Butanone	ND 13	ND 13	ND 0.05	ND 25	ND 17	ND 0.05	ND 8.3
Carbon Disulfide	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
Carbon Tetrachloride	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
Chlorobenzene	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
Chloroethane	ND 2.6	ND 2.6	ND 0.01	ND 5	ND 3.4	ND 0.01	ND 8.3
Chloroform	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
Chloromethane	ND 2.6	ND 2.6	ND 0.01	ND 5	ND 3.4	ND 0.01	ND 8.3
Dibromochloromethane	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
1,1-Dichloroethane	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
1,2-Dichloroethane	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
1,1-Dichloroethene	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
1,2-Dichloroethene (Total)	42	52	ND 0.005	49	47	ND 0.005	64
1,2-Dichloropropane	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
cis-1,3-Dichloropropene	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
trans-1,3-Dichloropropene	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
Ethylbenzene	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
2-Hexanone	ND 13	ND 13	ND 0.05	ND 25	ND 17	ND 0.05	ND 8.3
Methylene Chloride	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
4-Methyl-2-Pentanone	ND 13	ND 13	ND 0.05	ND 25	ND 17	ND 0.05	ND 8.3
Styrene	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
1,1,2,2-Tetrachloroethane	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
Tetrachloroethene	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
Toluene	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
1,1,1-Trichloroethane	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
1,1,2-Trichloroethane	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3
Trichloroethene	22	40	ND 0.005	22	16	ND 0.005	23
Vinyl Acetate	ND 13	ND 13	ND 0.05	ND 2.5	ND 1.7	ND 0.05	ND 8.3
Vinyl Chloride	18	16	ND 0.01	11	7.1	ND 0.01	15
Xylenes (Total)	ND 1.3	ND 1.3	ND 0.005	ND 2.5	ND 1.7	ND 0.005	ND 8.3

NA = Not Analyzed
ND = Not Detected
R = Rejected Value
J = Associated value is estimated
D = Value quantitated from a dilution
U=Non-detect at the associated value
B=Compound also detected in the method blank associated with this sample

TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-4 5/91 (1020)	MW-4 5/91 (1535)	MW-1 7/91	MW-4 7/91	MW-4 DUPLICATE 7/91	MW-5 7/91	MW-4 1/92
SVOCs (mg/L)							
Acenaphthene	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA
Benzo (a) anthracene	NA	NA	NA	NA	NA	NA	NA
Benzo (b) fluoranthene	NA	NA	NA	NA	NA	NA	NA
Benzo (k) fluoranthene	NA	NA	NA	NA	NA	NA	NA
Benzo (g,h,i) perylene	NA	NA	NA	NA	NA	NA	NA
Benzo (a) pyrene	NA	NA	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroethoxy) methane	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroethyl) ether	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroisopropyl) ether	NA	NA	NA	NA	NA	NA	NA
Bis (2-ethylhexyl) phthalate	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NA	NA	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA
1-Chloropropane	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA
Dibenzo (a,h) anthracene	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA

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SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-4 5/91 (1020)	MW-4 5/91 (1535)	MW-1 7/91	MW-4 7/91	MW-4 DUPLICATE 7/91	MW-5 7/91	MW-4 1/92
SVOCs (mg/L)							
Fluorene	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NA	NA	NA	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	NA	NA	NA	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA
Acid Extractables (mg/L)							
Benzoic acid	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	NA	NA	NA	NA	NA	NA	NA
Phenol	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA

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TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-4 5/91 (1020)	MW-4 5/91 (1535)	MW-1 7/91	MW-4 7/91	MW-4 DUPLICATE 7/91	MW-5 7/91	MW-4 1/92
Pesticides and PCBs (mg/L)							
alpha-BHC	NA	NA	NA	NA	NA	NA	NA
beta-BHC	NA	NA	NA	NA	NA	NA	NA
delta-BHC	NA	NA	NA	NA	NA	NA	NA
Lindane	NA	NA	NA	NA	NA	NA	NA
Heptachlor	NA	NA	NA	NA	NA	NA	NA
Aldrin	NA	NA	NA	NA	NA	NA	NA
Heptachlor epoxide	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	NA	NA	NA	NA	NA	NA	NA
Dieldrin	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA	NA
Endrin	NA	NA	NA	NA	NA	NA	NA
Endosulfan II	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA	NA
Endosulfan sulfate	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA	NA	NA	NA
Endrin ketone	NA	NA	NA	NA	NA	NA	NA
alpha-Chlordane	NA	NA	NA	NA	NA	NA	NA
gamma-Chlordane	NA	NA	NA	NA	NA	NA	NA
Toxaphene	NA	NA	NA	NA	NA	NA	NA
Aroclor-1016	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	NA	NA	NA	NA	NA	NA	NA
Metals (mg/L)							
Aluminum	NA	NA	NA	NA	NA	NA	NA
Antimony	NA	NA	NA	NA	NA	NA	NA
Arsenic	NA	NA	NA	NA	NA	NA	NA
Barium	NA	NA	NA	NA	NA	NA	NA
Beryllium	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA

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TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-4 5/91 (1020)	MW-4 5/91 (1535)	MW-1 7/91	MW-4 7/91	MW-4 DUPLICATE 7/91	MW-5 7/91	MW-4 1/92
Metals (mg/L)							
Calcium	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA
Cobalt	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA
Cyanide (total)	NA	NA	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA
Magnesium	NA	NA	NA	NA	NA	NA	NA
Manganese	NA	NA	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA
Potassium	NA	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA
Sodium	NA	NA	NA	NA	NA	NA	NA
Thallium	NA	NA	NA	NA	NA	NA	NA
Vanadium	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (mg/L)	NA	NA	NA	NA	NA	NA	NA
Petroleum Products (mg/L)							
Gasoline	NA	NA	NA	NA	NA	NA	NA
Kerosene	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	NA	NA	NA	NA	NA	NA	NA
Lubricating Oil	NA	NA	NA	NA	NA	NA	NA

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TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-6 1/92	MW-7 1/92	MW-8 1/92	MW-8 DUPLICATE 1/92	MW-9 1/92	MW-10 1/92
VOCs (mg/L)						
Acetone	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
Benzene	ND 0.67	0.11J	ND 25	ND 25	ND 0.077	ND 6.2
Bromodichloromethane	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
Bromoform	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
Bromomethane	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
2-Butanone	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
Carbon Disulfide	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
Carbon Tetrachloride	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
Chlorobenzene	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
Chloroethane	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
Chloroform	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
Chloromethane	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
Dibromochloromethane	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
1,1-Dichloroethane	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
1,2-Dichloroethane	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
1,1-Dichloroethene	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
1,2-Dichloroethene (Total)	5.8	5.5	300	430	0.6	74
1,2-Dichloropropane	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
cis-1,3-Dichloropropene	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
trans-1,3-Dichloropropene	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
Ethylbenzene	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
2-Hexanone	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
Methylene Chloride	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
4-Methyl-2-Pentanone	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
Styrene	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
1,1,2,2-Tetrachloroethane	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
Tetrachloroethene	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
Toluene	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
1,1,1-Trichloroethane	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
1,1,2-Trichloroethane	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
Trichloroethene	4.4	ND 0.33	110	150	0.16	93
Vinyl Acetate	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2
Vinyl Chloride	1.1	2.1	31	46	0.099	9.7
Xylenes (Total)	ND 0.67	ND 0.33	ND 25	ND 25	ND 0.077	ND 6.2

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TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-6 1/92	MW-7 1/92	MW-8 1/92	MW-8 DUPLICATE 1/92	MW-9 1/92	MW-10 1/92
SVOCs (mg/L)						
Acenaphthene	NA	NA	NA	NA	NA	NA
Acenaphthylene	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA
Benzo (a) anthracene	NA	NA	NA	NA	NA	NA
Benzo (b) fluoranthene	NA	NA	NA	NA	NA	NA
Benzo (k) fluoranthene	NA	NA	NA	NA	NA	NA
Benzo (g,h,i) perylene	NA	NA	NA	NA	NA	NA
Benzo (a) pyrene	NA	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA	NA
Bis (2-chloroethoxy) methane	NA	NA	NA	NA	NA	NA
Bis (2-chloroethyl) ether	NA	NA	NA	NA	NA	NA
Bis (2-chloroisopropyl) ether	NA	NA	NA	NA	NA	NA
Bis (2-ethylhexyl) phthalate	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NA	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA	NA
1-Chloropropane	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA
Dibenzo (a,h) anthracene	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA

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CHEEKTOWAGA, NEW YORK

PARAMETER	MW-6 1/92	MW-7 1/92	MW-8 1/92	MW-8 DUPLICATE 1/92	MW-9 1/92	MW-10 1/92
SVOCs (mg/L)						
Fluorene	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	NA
Hexachloroethane	NA	NA	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	NA	NA	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA
Nitrobenzene	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA
Acid Extractables (mg/L)						
Benzoic acid	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA
Pentachlorophenol	NA	NA	NA	NA	NA	NA
Phenol	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA

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CHEEKTOWAGA, NEW YORK

PARAMETER	MW-6 1/92	MW-7 1/92	MW-8 1/92	MW-8 DUPLICATE 1/92	MW-9 1/92	MW-10 1/92
Pesticides and PCBs (mg/L)						
alpha-BHC	NA	NA	NA	NA	NA	NA
beta-BHC	NA	NA	NA	NA	NA	NA
delta-BHC	NA	NA	NA	NA	NA	NA
Lindane	NA	NA	NA	NA	NA	NA
Heptachlor	NA	NA	NA	NA	NA	NA
Aldrin	NA	NA	NA	NA	NA	NA
Heptachlor epoxide	NA	NA	NA	NA	NA	NA
Endosulfan I	NA	NA	NA	NA	NA	NA
Dieldrin	NA	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA
Endrin	NA	NA	NA	NA	NA	NA
Endosulfan II	NA	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA
Endosulfan sulfate	NA	NA	NA	NA	NA	NA
4,4'-DDT	NA	NA	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA	NA	NA
Endrin ketone	NA	NA	NA	NA	NA	NA
alpha-Chlordane	NA	NA	NA	NA	NA	NA
gamma-Chlordane	NA	NA	NA	NA	NA	NA
Toxaphene	NA	NA	NA	NA	NA	NA
Aroclor-1016	NA	NA	NA	NA	NA	NA
Aroclor-1221	NA	NA	NA	NA	NA	NA
Aroclor-1232	NA	NA	NA	NA	NA	NA
Aroclor-1242	NA	NA	NA	NA	NA	NA
Aroclor-1248	NA	NA	NA	NA	NA	NA
Aroclor-1254	NA	NA	NA	NA	NA	NA
Aroclor-1260	NA	NA	NA	NA	NA	NA
Metals (mg/L)						
Aluminum	NA	NA	NA	NA	NA	NA
Antimony	NA	NA	NA	NA	NA	NA
Arsenic	NA	NA	NA	NA	NA	NA
Barium	NA	NA	NA	NA	NA	NA
Beryllium	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA

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LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-6 1/92	MW-7 1/92	MW-8 1/92	MW-8 DUPLICATE 1/92	MW-9 1/92	MW-10 1/92
Metals (mg/L)						
Calcium	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA
Cobalt	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA
Cyanide (total)	NA	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA
Magnesium	NA	NA	NA	NA	NA	NA
Manganese	NA	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA
Potassium	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA
Sodium	NA	NA	NA	NA	NA	NA
Thallium	NA	NA	NA	NA	NA	NA
Vanadium	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (mg/L)	NA	1.2	NA	NA	NA	2.2
Petroleum Products (mg/L)						
Gasoline	NA	NA	NA	NA	NA	NA
Kerosene	NA	NA	NA	NA	NA	NA
Fuel Oil	NA	NA	NA	NA	NA	NA
Lubricating Oil	NA	NA	NA	NA	NA	NA

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LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-11 1/92	MW-12 1/92	MW-1 1/7/94	MW-2 1/5/94	MW-3 1/5/94	MW-4 1/10/94	MW-5 1/5/94
VOCs (mg/L)							
Acetone	ND 25	ND 5	ND 0.01	ND 0.01J	ND 0.01J	0.013	0.013J
Benzene	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	0.002J	ND 0.01
Bromodichloromethane	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bromoform	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bromomethane	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
2-Butanone	ND 25	ND 5	ND 0.01	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J
Carbon Disulfide	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	0.003J	ND 0.01
Carbon Tetrachloride	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chlorobenzene	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chloroethane	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chloroform	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chloromethane	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Dibromochloromethane	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1-Dichloroethane	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,2-Dichloroethane	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1-Dichloroethene	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	0.066	ND 0.01
1,2-Dichloroethene (Total)	370	5.2	0.002J	0.002J	ND 0.01	180D	0.006J
,2-Dichloropropane	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
cis-1,3-Dichloropropene	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
trans-1,3-Dichloropropene	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Ethylbenzene	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	0.013	ND 0.01
2-Hexanone	ND 25	ND 5	ND 0.01	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J
Methylene Chloride	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
4-Methyl-2-Pentanone	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Styrene	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1,2,2-Tetrachloroethane	ND 25	ND 5	ND 0.01	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J
Tetrachloroethene	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Toluene	ND 25	ND 5	0.001J	ND 0.01	ND 0.01	ND 0.022	ND 0.01
1,1,1-Trichloroethane	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1,2-Trichloroethane	ND 25	ND 5	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Trichloroethene	350	54	0.003J	0.039	ND 0.01	110D	ND 0.01
Vinyl Acetate	ND 25	ND 5	NA	NA	NA	NA	NA
Vinyl Chloride	51	ND 1	ND 0.01	ND 0.01	ND 0.01	28D	ND 0.01
Xylenes (Total)	ND 25	ND 5	ND 0.01	0.002J	0.002J	0.069	0.001J

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LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-11 1/92	MW-12 1/92	MW-1 1/7/94	MW-2 1/5/94	MW-3 1/5/94	MW-4 1/10/94	MW-5 1/5/94
SVOCs (mg/L)							
Acenaphthene	ND 0.05	NA	NA	NA	NA	NA	NA
Acenaphthylene	ND 0.05	NA	NA	NA	NA	NA	NA
Anthracene	ND 0.05	NA	NA	NA	NA	NA	NA
Benzo (a) anthracene	ND 0.05	NA	NA	NA	NA	NA	NA
Benzo (b) fluoranthene	ND 0.05	NA	NA	NA	NA	NA	NA
Benzo (k) fluoranthene	ND 0.05	NA	NA	NA	NA	NA	NA
Benzo (g,h,i) perylene	ND 0.05	NA	NA	NA	NA	NA	NA
Benzo (a) pyrene	ND 0.05	NA	NA	NA	NA	NA	NA
Benzyl alcohol	ND 0.05	NA	NA	NA	NA	NA	NA
Bis (2-chloroethoxy) methane	ND 0.05	NA	NA	NA	NA	NA	NA
Bis (2-chloroethyl) ether	ND 0.05	NA	NA	NA	NA	NA	NA
Bis (2-chloroisopropyl) ether	ND 0.05	NA	NA	NA	NA	NA	NA
Bis (2-ethylhexyl) phthalate	ND 0.05	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	ND 0.05	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	ND 0.05	NA	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	ND 0.05	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	ND 0.05	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	ND 0.05	NA	NA	NA	NA	NA	NA
1-Chloropropane	NA	NA	NA	NA	NA	NA	NA
Chrysene	ND 0.05	NA	NA	NA	NA	NA	NA
Dibenzo (a,h) anthracene	ND 0.05	NA	NA	NA	NA	NA	NA
Dibenzofuran	ND 0.05	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	ND 0.05	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	ND 0.05	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	ND 0.05	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	ND 0.05	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	ND 0.1	NA	NA	NA	NA	NA	NA
Diethyl phthalate	ND 0.05	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	ND 0.05	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	ND 0.05	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	ND 0.05	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	ND 0.05	NA	NA	NA	NA	NA	NA
Fluoranthene	ND 0.05	NA	NA	NA	NA	NA	NA

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CHEEKTOWAGA, NEW YORK

PARAMETER	MW-11 1/92	MW-12 1/92	MW-1 1/7/94	MW-2 1/5/94	MW-3 1/5/94	MW-4 1/10/94	MW-5 1/5/94
SVOCs (mg/L)							
Fluorene	ND 0.05	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	ND 0.05	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	ND 0.05	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	ND 0.05	NA	NA	NA	NA	NA	NA
Hexachloroethane	ND 0.05	NA	NA	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	ND 0.05	NA	NA	NA	NA	NA	NA
Isophorone	ND 0.05	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	ND 0.05	NA	NA	NA	NA	NA	NA
Naphthalene	0.024J	NA	NA	NA	NA	NA	NA
Nitrobenzene	ND 0.05	NA	NA	NA	NA	NA	NA
2-Nitroaniline	ND 0.25	NA	NA	NA	NA	NA	NA
3-Nitroaniline	ND 0.25	NA	NA	NA	NA	NA	NA
4-Nitroaniline	ND 0.25	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	ND 0.05	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	ND 0.05	NA	NA	NA	NA	NA	NA
Phenanthrene	ND 0.05	NA	NA	NA	NA	NA	NA
Pyrene	ND 0.05	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	ND 0.05	NA	NA	NA	NA	NA	NA
Acid Extractables (mg/L)							
Benzoic acid	ND 0.25	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	ND 0.05	NA	NA	NA	NA	NA	NA
2-Chlorophenol	ND 0.05	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	ND 0.05	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	0.038J	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	ND 0.25	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	ND 0.25	NA	NA	NA	NA	NA	NA
2-Methylphenol	0.065	NA	NA	NA	NA	NA	NA
4-Methylphenol	0.55	NA	NA	NA	NA	NA	NA
2-Nitrophenol	ND 0.05	NA	NA	NA	NA	NA	NA
4-Nitrophenol	ND 0.25	NA	NA	NA	NA	NA	NA
Pentachlorophenol	ND 0.25	NA	NA	NA	NA	NA	NA
Phenol	0.98	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	ND 0.05	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	ND 0.05	NA	NA	NA	NA	NA	NA

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PARAMETER	MW-11 1/92	MW-12 1/92	MW-1 1/7/94	MW-2 1/5/94	MW-3 1/5/94	MW-4 1/10/94	MW-5 1/5/94
Pesticides and PCBs (mg/L)							
alpha-BHC	ND 0.00005	NA	NA	NA	NA	NA	NA
beta-BHC	ND 0.00005	NA	NA	NA	NA	NA	NA
delta-BHC	ND 0.00005	NA	NA	NA	NA	NA	NA
Lindane	ND 0.00005	NA	NA	NA	NA	NA	NA
Heptachlor	ND 0.00005	NA	NA	NA	NA	NA	NA
Aldrin	ND 0.00005	NA	NA	NA	NA	NA	NA
Heptachlor epoxide	ND 0.00005	NA	NA	NA	NA	NA	NA
Endosulfan I	ND 0.00005	NA	NA	NA	NA	NA	NA
Dieldrin	ND 0.0001	NA	NA	NA	NA	NA	NA
4,4'-DDE	ND 0.0001	NA	NA	NA	NA	NA	NA
Endrin	ND 0.0001	NA	NA	NA	NA	NA	NA
Endosulfan II	ND 0.0001	NA	NA	NA	NA	NA	NA
4,4'-DDE	ND 0.0001	NA	NA	NA	NA	NA	NA
Endosulfan sulfate	ND 0.0001	NA	NA	NA	NA	NA	NA
4,4'-DDT	ND 0.0001	NA	NA	NA	NA	NA	NA
Methoxychlor	ND 0.0005	NA	NA	NA	NA	NA	NA
Endrin ketone	ND 0.0001	NA	NA	NA	NA	NA	NA
alpha-Chlordane	ND 0.0001	NA	NA	NA	NA	NA	NA
gamma-Chlordane	ND 0.0001	NA	NA	NA	NA	NA	NA
Toxaphene	ND 0.005	NA	NA	NA	NA	NA	NA
Aroclor-1016	ND 0.0001	NA	NA	NA	NA	NA	NA
Aroclor-1221	ND 0.0001	NA	NA	NA	NA	NA	NA
Aroclor-1232	ND 0.0001	NA	NA	NA	NA	NA	NA
Aroclor-1242	ND 0.0001	NA	NA	NA	NA	NA	NA
Aroclor-1248	ND 0.0001	NA	NA	NA	NA	NA	NA
Aroclor-1254	ND 0.0001	NA	NA	NA	NA	NA	NA
Aroclor-1260	ND 0.0001	NA	NA	NA	NA	NA	NA
Metals (mg/L)							
Aluminum	5	NA	NA	NA	NA	NA	NA
Antimony	ND 0.06	NA	NA	NA	NA	NA	NA
Arsenic	0.007	NA	NA	NA	NA	NA	NA
Barium	0.27	NA	NA	NA	NA	NA	NA
Beryllium	ND 0.005	NA	NA	NA	NA	NA	NA
Cadmium	ND 0.005	NA	NA	NA	NA	NA	NA

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PARAMETER	MW-11 1/92	MW-12 1/92	MW-1 1/7/94	MW-2 1/5/94	MW-3 1/5/94	MW-4 1/10/94	MW-5 1/5/94
Metals (mg/L)							
Calcium	380	NA	NA	NA	NA	NA	NA
Chromium	0.03	NA	NA	NA	NA	NA	NA
Cobalt	ND 0.05	NA	NA	NA	NA	NA	NA
Copper	0.022	NA	NA	NA	NA	NA	NA
Cyanide (total)	ND 0.005	NA	NA	NA	NA	NA	NA
Iron	10	NA	NA	NA	NA	NA	NA
Lead	0.006	NA	NA	NA	NA	NA	NA
Magnesium	310	NA	NA	NA	NA	NA	NA
Manganese	0.45	NA	NA	NA	NA	NA	NA
Mercury	ND 0.0002	NA	NA	NA	NA	NA	NA
Nickel	ND 0.04	NA	NA	NA	NA	NA	NA
Potassium	11	NA	NA	NA	NA	NA	NA
Selenium	ND 0.005	NA	NA	NA	NA	NA	NA
Silver	ND 0.01	NA	NA	NA	NA	NA	NA
Sodium	490	NA	NA	NA	NA	NA	NA
Thallium	ND 0.01	NA	NA	NA	NA	NA	NA
Vanadium	ND 0.05	NA	NA	NA	NA	NA	NA
Zinc	0.32	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (mg/L)	8	NA	ND 2.5	ND 2.5	ND 2.5	ND 2.5	ND 2.5
Petroleum Products (mg/L)							
Gasoline	NA	NA	NA	NA	NA	NA	NA
Kerosene	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	NA	NA	NA	NA	NA	NA	NA
Lubricating Oil	NA	NA	NA	NA	NA	NA	NA

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TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-6 1/5/94	MW-7 1/7/94	MW-8 1/11/94	MW-8 WHITE APL 1/11/94	MW-9 1/7/94	MW-10 1/11/94
VOCs (mg/L)						
Acetone	ND 0.01	ND 1	ND 50DJ	ND 50DJ	ND 0.01	0.018U
Benzene	0.004J	0.19J	0.008J	0.007J	ND 0.01	ND 0.01J
Bromodichloromethane	ND 0.01	ND 1	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J
Bromoform	ND 0.01	ND 1	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J
Bromomethane	ND 0.01	ND 1	R	ND 0.01J	ND 0.01	ND 0.01J
2-Butanone	ND 0.01	ND 1	R	ND 0.01J	ND 0.01	ND 0.01J
Carbon Disulfide	ND 0.01	ND 1	R	ND 0.01J	ND 0.01	ND 0.01J
Carbon Tetrachloride	ND 0.01	ND 1	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J
Chlorobenzene	ND 0.01	ND 1	R	R	ND 0.01	ND 0.01J
Chloroethane	ND 0.01	ND 1	R	ND 0.01J	ND 0.01	ND 0.01J
Chloroform	ND 0.01	ND 1	R	ND 0.01J	ND 0.01	ND 0.01J
Chloromethane	ND 0.01	ND 1	R	ND 0.01J	ND 0.01	ND 0.01J
Dibromochloromethane	ND 0.01	ND 1	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J
1,1-Dichloroethane	ND 0.01	ND 1	R	ND 0.01J	ND 0.01	ND 0.01J
1,2-Dichloroethane	ND 0.01	ND 1	R	ND 0.01J	ND 0.01	ND 0.01J
1,1-Dichloroethene	0.022	ND 1	ND 50D	ND 50D	ND 0.01	0.16J
1,2-Dichloroethene (Total)	4D	6.5	370D	390D	0.063	51DJ
1,2-Dichloropropane	ND 0.01	ND 1	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J
cis-1,3-Dichloropropene	ND 0.01	ND 1	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J
trans-1,3-Dichloropropene	ND 0.01	ND 1	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J
Ethylbenzene	ND 0.01	0.12J	0.13J	0.084J	ND 0.01	0.017J
2-Hexanone	ND 0.01	ND 1	R	R	ND 0.01	ND 0.01J
Methylene Chloride	ND 0.01	ND 1	R	ND 0.01J	ND 0.01	ND 0.01J
4-Methyl-2-Pentanone	ND 0.01J	ND 1	R	R	ND 0.01	ND 0.01J
Styrene	ND 0.01	ND 1	R	R	ND 0.01	ND 0.01J
1,1,2,2-Tetrachloroethane	ND 0.01J	ND 1	R	R	ND 0.01	ND 0.01J
Tetrachloroethene	ND 0.01	ND 1	R	0.023 J	ND 0.01	ND 0.01J
Toluene	0.003J	0.21J	ND 50D	ND 50D	0.001J	0.049J
1,1,1-Trichloroethane	ND 0.01	ND 1	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J
1,1,2-Trichloroethane	ND 0.01	ND 1	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J
Trichloroethene	0.89D	ND 1	71	36DJ	0.002J	ND 50DJ
Vinyl Acetate	NA	NA	NA	NA	NA	NA
Vinyl Chloride	0.45DJ	4.4D	54DJ	54DJ	0.14	ND 50DJ
Xylenes (Total)	ND 0.01	0.24J	21DJ	ND 50D	0.003J	0.1J

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TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-6 1/5/94	MW-7 1/7/94	MW-8 1/11/94	MW-8 WHITE APL 1/11/94	MW-9 1/7/94	MW-10 1/11/94
SVOCs (mg/L)						
Acenaphthene	NA	NA	NA	NA	NA	NA
Acenaphthylene	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA
Benzo (a) anthracene	NA	NA	NA	NA	NA	NA
Benzo (b) fluoranthene	NA	NA	NA	NA	NA	NA
Benzo (k) fluoranthene	NA	NA	NA	NA	NA	NA
Benzo (g,h,i) perylene	NA	NA	NA	NA	NA	NA
Benzo (a) pyrene	NA	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA	NA
Bis (2-chloroethoxy) methane	NA	NA	NA	NA	NA	NA
Bis (2-chloroethyl) ether	NA	NA	NA	NA	NA	NA
Bis (2-chloroisopropyl) ether	NA	NA	NA	NA	NA	NA
Bis (2-ethylhexyl) phthalate	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NA	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA	NA
1-Chloropropane	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA
Dibenzo (a,h) anthracene	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA

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LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-6 1/5/94	MW-7 1/7/94	MW-8 1/11/94	MW-8 WHITE APL 1/11/94	MW-9 1/7/94	MW-10 1/11/94
SVOCs (mg/L)						
Fluorene	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	NA
Hexachloroethane	NA	NA	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	NA	NA	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA
Nitrobenzene	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA
Acid Extractables (mg/L)						
Benzoic acid	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA
Pentachlorophenol	NA	NA	NA	NA	NA	NA
Phenol	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA

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LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-6 1/5/94	MW-7 1/7/94	MW-8 1/11/94	MW-8 WHITE APL 1/11/94	MW-9 1/7/94	MW-10 1/11/94
Pesticides and PCBs (mg/L)						
alpha-BHC	NA	NA	NA	NA	NA	NA
beta-BHC	NA	NA	NA	NA	NA	NA
delta-BHC	NA	NA	NA	NA	NA	NA
Lindane	NA	NA	NA	NA	NA	NA
Heptachlor	NA	NA	NA	NA	NA	NA
Aldrin	NA	NA	NA	NA	NA	NA
Heptachlor epoxide	NA	NA	NA	NA	NA	NA
Endosulfan I	NA	NA	NA	NA	NA	NA
Dieldrin	NA	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA
Endrin	NA	NA	NA	NA	NA	NA
Endosulfan II	NA	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA
Endosulfan sulfate	NA	NA	NA	NA	NA	NA
4,4'-DDT	NA	NA	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA	NA	NA
Endrin ketone	NA	NA	NA	NA	NA	NA
alpha-Chlordane	NA	NA	NA	NA	NA	NA
gamma-Chlordane	NA	NA	NA	NA	NA	NA
Toxaphene	NA	NA	NA	NA	NA	NA
Aroclor-1016	NA	NA	NA	NA	NA	NA
Aroclor-1221	NA	NA	NA	NA	NA	NA
Aroclor-1232	NA	NA	NA	NA	NA	NA
Aroclor-1242	NA	NA	NA	NA	NA	NA
Aroclor-1248	NA	NA	NA	NA	NA	NA
Aroclor-1254	NA	NA	NA	NA	NA	NA
Aroclor-1260	NA	NA	NA	NA	NA	NA
Metals (mg/L)						
Aluminum	NA	NA	NA	NA	NA	NA
Antimony	NA	NA	NA	NA	NA	NA
Arsenic	NA	NA	NA	NA	NA	NA
Barium	NA	NA	NA	NA	NA	NA
Beryllium	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA

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LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-6 1/5/94	MW-7 1/7/94	MW-8 1/11/94	MW-8 WHITE APL 1/11/94	MW-9 1/7/94	MW-10 1/11/94
Metals (mg/L)						
Calcium	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA
Cobalt	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA
Cyanide (total)	NA	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA
Magnesium	NA	NA	NA	NA	NA	NA
Manganese	NA	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA
Potassium	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA
Sodium	NA	NA	NA	NA	NA	NA
Thallium	NA	NA	NA	NA	NA	NA
Vanadium	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (mg/L)	ND 2.5	ND 2.5	67.4	NA	ND 2.5	3.2
Petroleum Products (mg/L)						
Gasoline	NA	NA	NA	NA	NA	NOT PRESENT
Kerosene	NA	NA	NA	NA	NA	0.1U
Fuel Oil	NA	NA	NA	NA	NA	0.59
Lubricating Oil	NA	NA	NA	NA	NA	PRESENT

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TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-19C DUPLICATE 1/11/94	MW-11 1/10/94	MW-11 NAPL 1/10/94	MW-12 1/10/94	MW-13 1/6/94	MW-14 1/6/94
VOCs (mg/L)						
Acetone	ND 0.01J	ND 50DJ	ND 1000	ND 0.01J	ND 0.014	ND 0.01
Benzene	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	0.002J
Bromodichloromethane	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01
Bromoform	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01
Bromomethane	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01
2-Butanone	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01J
Carbon Disulfide	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01
Carbon Tetrachloride	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01
Chlorobenzene	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01
Chloroethane	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01
Chloroform	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01
Chloromethane	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01
Dibromochloromethane	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01
1,1-Dichloroethane	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01
1,2-Dichloroethane	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01
1,1-Dichloroethene	0.18J	ND 50D	ND 1000	ND 0.01J	ND 0.01	ND 0.01
1,2-Dichloroethene (Total)	90DJ	470D	22000	53D	0.002J	0.58D
1,2-Dichloropropane	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01
cis-1,3-Dichloropropene	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01
trans-1,3-Dichloropropene	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01
Ethylbenzene	0.019J	ND 50D	920J	0.017J	ND 0.01	ND 0.01
2-Hexanone	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01J
Methylene Chloride	ND 0.01J	0.12J	ND 1000	ND 0.01J	ND 0.01	ND 0.01
4-Methyl-2-Pentanone	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01J	ND 0.01
Styrene	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01
1,1,2,2-Tetrachloroethane	ND 0.01J	R	ND 1000J	ND 0.01J	ND 0.01J	ND 0.01J
Tetrachloroethene	ND 0.01J	0.05J	160J	ND 0.01J	ND 0.01	ND 0.01
Toluene	0.054J	ND 50D	ND 1000	0.069J	ND 0.01	ND 0.01
1,1,1-Trichloroethane	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01
1,1,2-Trichloroethane	ND 0.01J	R	ND 1000	ND 0.01J	ND 0.01	ND 0.01
Trichloroethene	38DJ	250D	330000D	86D	ND 0.01	ND 0.01
Vinyl Acetate	NA	NA	NA	NA	NA	NA
Vinyl Chloride	15.7DJ	48DJ	1400	ND 0.01J	ND 0.01	0.008J
Xylenes (Total)	0.1J	ND 50D	6600	0.14J	ND 0.01	ND 0.01

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LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-19C DUPLICATE 1/11/94	MW-11 1/10/94	MW-11 NAPL 1/10/94	MW-12 1/10/94	MW-13 1/6/94	MW-14 1/6/94
SVOCs (mg/L)						
Acenaphthene	NA	NA	NA	NA	ND 0.01	ND 0.01
Acenaphthylene	NA	NA	NA	NA	ND 0.01	ND 0.01
Anthracene	NA	NA	NA	NA	ND 0.01	ND 0.01
Benzo (a) anthracene	NA	NA	NA	NA	ND 0.01	ND 0.01
Benzo (b) fluoranthene	NA	NA	NA	NA	ND 0.01	ND 0.01
Benzo (k) fluoranthene	NA	NA	NA	NA	ND 0.01	ND 0.01
Benzo (g,h,i) perylene	NA	NA	NA	NA	ND 0.01	ND 0.01
Benzo (a) pyrene	NA	NA	NA	NA	ND 0.01	ND 0.01
Benzyl alcohol	NA	NA	NA	NA	ND 0.01	ND 0.01
Bis (2-chloroethoxy) methane	NA	NA	NA	NA	ND 0.01	ND 0.01
Bis (2-chloroethyl) ether	NA	NA	NA	NA	ND 0.01	ND 0.01
Bis (2-chloroisopropyl) ether	NA	NA	NA	NA	ND 0.01	ND 0.01
Bis (2-ethylhexyl) phthalate	NA	NA	NA	NA	ND 0.01	ND 0.01
4-Bromophenyl phenyl ether	NA	NA	NA	NA	ND 0.01	ND 0.01
Butyl benzyl phthalate	NA	NA	NA	NA	ND 0.01	ND 0.01
Carbazole	NA	NA	NA	NA	ND 0.01	ND 0.01
4-Chloroaniline	NA	NA	NA	NA	ND 0.01	ND 0.01
2-Chloronaphthalene	NA	NA	NA	NA	ND 0.01	ND 0.01
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	ND 0.01	ND 0.01
1-Chloropropane	NA	NA	NA	NA	ND 0.01	ND 0.01
Chrysene	NA	NA	NA	NA	ND 0.01	ND 0.01
Dibenzo (a,h) anthracene	NA	NA	NA	NA	ND 0.01	ND 0.01
Dibenzofuran	NA	NA	NA	NA	ND 0.01	ND 0.01
Di-n-butyl phthalate	NA	NA	NA	NA	ND 0.01	ND 0.01
1,2-Dichlorobenzene	NA	NA	NA	NA	ND 0.01	ND 0.01
1,3-Dichlorobenzene	NA	NA	NA	NA	ND 0.01	ND 0.01
1,4-Dichlorobenzene	NA	NA	NA	NA	ND 0.01	ND 0.01
3,3'-Dichlorobenzidine	NA	NA	NA	NA	ND 0.01	ND 0.01
Diethyl phthalate	NA	NA	NA	NA	ND 0.01	ND 0.01
Dimethyl phthalate	NA	NA	NA	NA	ND 0.01	ND 0.01
2,4-Dinitrotoluene	NA	NA	NA	NA	ND 0.01	ND 0.01
2,6-Dinitrotoluene	NA	NA	NA	NA	ND 0.01	ND 0.01
Di-n-octyl phthalate	NA	NA	NA	NA	ND 0.01	ND 0.01
Fluoranthene	NA	NA	NA	NA	ND 0.01	ND 0.01

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PARAMETER	MW-19C DUPLICATE 1/11/94	MW-11 1/10/94	MW-11 NAPL 1/10/94	MW-12 1/10/94	MW-13 1/6/94	MW-14 1/6/94
SVOCs (mg/L)						
Fluorene	NA	NA	NA	NA	ND 0.01	ND 0.01
Hexachlorobenzene	NA	NA	NA	NA	ND 0.01	ND 0.01
Hexachlorobutadiene	NA	NA	NA	NA	ND 0.01	ND 0.01
Hexachlorocyclopentadiene	NA	NA	NA	NA	ND 0.01J	ND 0.01J
Hexachloroethane	NA	NA	NA	NA	ND 0.01	ND 0.01
Indeno (1,2,3-cd) pyrene	NA	NA	NA	NA	ND 0.01	ND 0.01
Isophorone	NA	NA	NA	NA	ND 0.01	ND 0.01
2-Methylnaphthalene	NA	NA	NA	NA	ND 0.01	ND 0.01
Naphthalene	NA	NA	NA	NA	ND 0.01	ND 0.01
Nitrobenzene	NA	NA	NA	NA	ND 0.01	ND 0.01
2-Nitroaniline	NA	NA	NA	NA	ND 0.025	ND 0.025
3-Nitroaniline	NA	NA	NA	NA	ND 0.025J	ND 0.025J
4-Nitroaniline	NA	NA	NA	NA	ND 0.025J	ND 0.025J
N-Nitrosodiphenylamine	NA	NA	NA	NA	ND 0.01J	ND 0.01J
N-Nitroso-di-n-propylamine	NA	NA	NA	NA	ND 0.01	ND 0.01
Phenanthrene	NA	NA	NA	NA	ND 0.01	ND 0.01
Pyrene	NA	NA	NA	NA	ND 0.01	ND 0.01
1,2,4-Trichlorobenzene	NA	NA	NA	NA	ND 0.01	ND 0.01
Acid Extractables (mg/L)						
Benzoic acid	NA	NA	NA	NA	ND 0.01	ND 0.01
4-Chloro-3-methylphenol	NA	NA	NA	NA	ND 0.01	ND 0.01
2-Chlorophenol	NA	NA	NA	NA	ND 0.01	ND 0.01
2,4-Dichlorophenol	NA	NA	NA	NA	ND 0.01	ND 0.01
2,4-Dimethylphenol	NA	NA	NA	NA	ND 0.01	ND 0.01
2,4-Dinitrophenol	NA	NA	NA	NA	ND 0.025J	ND 0.025J
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	ND 0.025	ND 0.025
2-Methylphenol	NA	NA	NA	NA	ND 0.01	ND 0.01
4-Methylphenol	NA	NA	NA	NA	ND 0.01	ND 0.01
2-Nitrophenol	NA	NA	NA	NA	ND 0.01	ND 0.01
4-Nitrophenol	NA	NA	NA	NA	ND 0.025J	ND 0.025J
Pentachlorophenol	NA	NA	NA	NA	ND 0.025	ND 0.025
Phenol	NA	NA	NA	NA	ND 0.01	ND 0.01
2,4,5-Trichlorophenol	NA	NA	NA	NA	ND 0.025	ND 0.025
2,4,6-Trichlorophenol	NA	NA	NA	NA	ND 0.01	ND 0.01

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TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-19C DUPLICATE 1/11/94	MW-11 1/10/94	MW-11 NAPL 1/10/94	MW-12 1/10/94	MW-13 1/6/94	MW-14 1/6/94
Pesticides and PCBs (mg/L)						
alpha-BHC	NA	NA	NA	NA	NA	NA
beta-BHC	NA	NA	NA	NA	NA	NA
delta-BHC	NA	NA	NA	NA	NA	NA
Lindane	NA	NA	NA	NA	NA	NA
Heptachlor	NA	NA	NA	NA	NA	NA
Aldrin	NA	NA	NA	NA	NA	NA
Heptachlor epoxide	NA	NA	NA	NA	NA	NA
Endosulfan I	NA	NA	NA	NA	NA	NA
Dieldrin	NA	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA
Endrin	NA	NA	NA	NA	NA	NA
Endosulfan II	NA	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA
Endosulfan sulfate	NA	NA	NA	NA	NA	NA
4,4'-DDT	NA	NA	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA	NA	NA
Endrin ketone	NA	NA	NA	NA	NA	NA
alpha-Chlordane	NA	NA	NA	NA	NA	NA
gamma-Chlordane	NA	NA	NA	NA	NA	NA
Toxaphene	NA	NA	NA	NA	NA	NA
Aroclor-1016	NA	NA	NA	NA	NA	NA
Aroclor-1221	NA	NA	NA	NA	NA	NA
Aroclor-1232	NA	NA	NA	NA	NA	NA
Aroclor-1242	NA	NA	NA	NA	NA	NA
Aroclor-1248	NA	NA	NA	NA	NA	NA
Aroclor-1254	NA	NA	NA	NA	NA	NA
Aroclor-1260	NA	NA	NA	NA	NA	NA
Metals (mg/L)						
Aluminum	NA	NA	NA	NA	6.97	27.2J
Antimony	NA	NA	NA	NA	ND 0.0079	ND 0.0079
Arsenic	NA	NA	NA	NA	0.002	0.009
Barium	NA	NA	NA	NA	0.245	0.251
Beryllium	NA	NA	NA	NA	ND 0.00077	ND 0.0017
Cadmium	NA	NA	NA	NA	ND 0.0018	ND 0.0022

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SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-19C DUPLICATE 1/11/94	MW-11 1/10/94	MW-11 NAPL 1/10/94	MW-12 1/10/94	MW-13 1/6/94	MW-14 1/6/94
Metals (mg/L)						
Calcium	NA	NA	NA	NA	186	466
Chromium	NA	NA	NA	NA	0.053	0.073
Cobalt	NA	NA	NA	NA	0.008	0.016
Copper	NA	NA	NA	NA	0.022	0.075
Cyanide (total)	NA	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	12.7	41.6J
Lead	NA	NA	NA	NA	ND 0.0104	0.0656J
Magnesium	NA	NA	NA	NA	81.9	251
Manganese	NA	NA	NA	NA	0.254	1.39
Mercury	NA	NA	NA	NA	ND 0.0001	ND 0.0001
Nickel	NA	NA	NA	NA	0.07	0.128
Potassium	NA	NA	NA	NA	3.97	10.9
Selenium	NA	NA	NA	NA	ND 0.0022J	ND 0.0022J
Silver	NA	NA	NA	NA	ND 0.0021	ND 0.0021
Sodium	NA	NA	NA	NA	16.2	78.8
Thallium	NA	NA	NA	NA	ND 0.0012	ND 0.0012
Vanadium	NA	NA	NA	NA	0.009B	0.0383B
Zinc	NA	NA	NA	NA	0.0357J	0.207J
Total Petroleum Hydrocarbons (mg/L)	ND 2.5J	192	NA	ND 2.5J	3.5	ND 2.5
Petroleum Products (mg/L)						
Gasoline	NA	NA	NA	NA	NA	NA
Kerosene	NA	NA	NA	NA	NA	NA
Fuel Oil	NA	NA	NA	NA	NA	NA
Lubricating Oil	NA	NA	NA	NA	NA	NA

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TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-18C DUPLICATE 1/6/94	MW-15 1/6/94	MW-16 1/7/94	EAST WELL 1/14/94	EAST WELL 1/14/94	MW-2A 1/13/94
VOCs (mg/L)						
Acetone	ND 0.01	0.074	ND 0.01	ND 0.01	ND 0.01J	ND 0.01J
Benzene	0.001J	ND 0.01	0.001J	ND 0.01	ND 0.01	ND 0.01
Bromodichloromethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bromoform	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bromomethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
2-Butanone	ND 0.01J	ND 0.01	ND 0.01	ND 0.01	ND 0.01J	ND 0.01J
Carbon Disulfide	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Carbon Tetrachloride	ND 0.01	ND 0.01	ND 0.01	ND 0.01J	ND 0.01	ND 0.01
Chlorobenzene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01J	ND 0.01J
Chloroform	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chloromethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01J	ND 0.01J	ND 0.01J
Dibromochloromethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1-Dichloroethane	ND 0.01	0.014	6.5D	ND 0.01	0.049	ND 0.01
1,2-Dichloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1-Dichloroethene	ND 0.01	ND 0.01	0.63DJ	ND 0.01	0.007J	ND 0.01
1,2-Dichloroethene (Total)	0.65D	0.003J	8.2D	0.006J	0.64D	ND 0.01
1,2-Dichloropropane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
cis-1,3-Dichloropropene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
trans-1,3-Dichloropropene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Ethylbenzene	ND 0.01	ND 0.01	2D	ND 0.01	0.001J	ND 0.01
2-Hexanone	ND 0.01J	ND 0.01	ND 0.01	ND 0.01	ND 0.01J	ND 0.01J
Methylene Chloride	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
4-Methyl-2-Pentanone	ND 0.01	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01	ND 0.01
Styrene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1,2,2-Tetrachloroethane	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J
Tetrachloroethene	ND 0.01	ND 0.01	0.003J	ND 0.01	ND 0.01	ND 0.01
Toluene	ND 0.01	0.001J	1.1DJ	ND 0.01	0.002J	ND 0.01
1,1,1-Trichloroethane	ND 0.01	ND 0.01	0.087J	ND 0.01	0.013	ND 0.01
1,1,2-Trichloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Trichloroethene	ND 0.01	ND 0.01	6.8D	0.003J	0.36D	0.008J
Vinyl Acetate	NA	NA	NA	NA	NA	NA
Vinyl Chloride	0.008J	ND 0.01	0.075J	ND 0.01	0.17D	ND 0.01J
Xylenes (Total)	ND 0.01	0.001J	5.2D	ND 0.01	0.003J	ND 0.01

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TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-18C DUPLICATE 1/6/94	MW-15 1/6/94	MW-16 1/7/94	EAST WELL 1/14/94	EAST WELL 1/14/94	MW-2A 1/13/94
SVOCs (mg/L)						
Acenaphthene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Acenaphthylene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Anthracene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Benzo (a) anthracene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Benzo (b) fluoranthene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Benzo (k) fluoranthene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Benzo (g,h,i) perylene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Benzo (a) pyrene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Benzyl alcohol	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bis (2-chloroethoxy) methane	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bis (2-chloroethyl) ether	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bis (2-chloroisopropyl) ether	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bis (2-ethylhexyl) phthalate	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	0.04
4-Bromophenyl phenyl ether	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Butyl benzyl phthalate	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Carbazole	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
4-Chloroaniline	ND 0.01	NA	ND 0.01	ND 0.01J	ND 0.01J	ND 0.01J
2-Chloronaphthalene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
4-Chlorophenyl phenyl ether	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1-Chloropropane	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chrysene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Dibenzo (a,h) anthracene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Dibenzofuran	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Di-n-butyl phthalate	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,2-Dichlorobenzene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,3-Dichlorobenzene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,4-Dichlorobenzene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
3,3'-Dichlorobenzidine	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Diethyl phthalate	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Dimethyl phthalate	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
2,4-Dinitrotoluene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
2,6-Dinitrotoluene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Di-n-octyl phthalate	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Fluoranthene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01

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TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-18C DUPLICATE 1/6/94	MW-15 1/6/94	MW-16 1/7/94	EAST WELL 1/14/94	EAST WELL 1/14/94	MW-2A 1/13/94
SVOCs (mg/L)						
Fluorene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Hexachlorobenzene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Hexachlorobutadiene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Hexachlorocyclopentadiene	ND 0.01J	NA	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J
Hexachloroethane	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Indeno (1,2,3-cd) pyrene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Isophorone	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
2-Methylnaphthalene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Naphthalene	ND 0.01	NA	0.042	ND 0.01	ND 0.01	ND 0.01
Nitrobenzene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
2-Nitroaniline	ND 0.025	NA	ND 0.025	ND 0.025	ND 0.025	ND 0.025
3-Nitroaniline	ND 0.025J	NA	ND 0.025J	ND 0.025J	ND 0.025J	ND 0.025J
4-Nitroaniline	ND 0.025J	NA	ND 0.025J	ND 0.025J	ND 0.025J	ND 0.025J
N-Nitrosodiphenylamine	ND 0.01J	NA	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J
N-Nitroso-di-n-propylamine	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Phenanthrene	ND 0.01	NA	ND 0.01	ND 0.01J	ND 0.01J	ND 0.01J
Pyrene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,2,4-Trichlorobenzene	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Acid Extractables (mg/L)						
Benzoic acid	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
4-Chloro-3-methylphenol	ND 0.01	NA	0.019J	ND 0.01	ND 0.01	ND 0.01
2-Chlorophenol	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
2,4-Dichlorophenol	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
2,4-Dimethylphenol	ND 0.01	NA	0.026	ND 0.01	ND 0.01	ND 0.01
2,4-Dinitrophenol	ND 0.025J	NA	ND 0.025J	ND 0.025J	ND 0.025J	ND 0.025J
4,6-Dinitro-2-methylphenol	ND 0.025	NA	ND 0.025	ND 0.025	ND 0.025	ND 0.025
2-Methylphenol	ND 0.01	NA	0.004J	ND 0.01	ND 0.01	ND 0.01
4-Methylphenol	ND 0.01	NA	0.005J	ND 0.01	ND 0.01	ND 0.01
2-Nitrophenol	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
4-Nitrophenol	ND 0.025J	NA	ND 0.025J	ND 0.025J	ND 0.025J	ND 0.025J
Pentachlorophenol	ND 0.025	NA	ND 0.025	ND 0.025	ND 0.025	ND 0.025
Phenol	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01
2,4,5-Trichlorophenol	ND 0.025	NA	ND 0.025	ND 0.025	ND 0.025	ND 0.025
2,4,6-Trichlorophenol	ND 0.01	NA	ND 0.01	ND 0.01	ND 0.01	ND 0.01

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TABLE 8.1
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LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-18C DUPLICATE 1/6/94	MW-15 1/6/94	MW-16 1/7/94	EAST WELL 1/14/94	EAST WELL 1/14/94	MW-2A 1/13/94
Pesticides and PCBs (mg/L)						
alpha-BHC	NA	NA	NA	NA	NA	NA
beta-BHC	NA	NA	NA	NA	NA	NA
delta-BHC	NA	NA	NA	NA	NA	NA
Lindane	NA	NA	NA	NA	NA	NA
Heptachlor	NA	NA	NA	NA	NA	NA
Aldrin	NA	NA	NA	NA	NA	NA
Heptachlor epoxide	NA	NA	NA	NA	NA	NA
Endosulfan I	NA	NA	NA	NA	NA	NA
Dieldrin	NA	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA
Endrin	NA	NA	NA	NA	NA	NA
Endosulfan II	NA	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA
Endosulfan sulfate	NA	NA	NA	NA	NA	NA
4,4'-DDT	NA	NA	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA	NA	NA
Endrin ketone	NA	NA	NA	NA	NA	NA
alpha-Chlordane	NA	NA	NA	NA	NA	NA
gamma-Chlordane	NA	NA	NA	NA	NA	NA
Toxaphene	NA	NA	NA	NA	NA	NA
Aroclor-1016	NA	NA	NA	NA	NA	NA
Aroclor-1221	NA	NA	NA	NA	NA	NA
Aroclor-1232	NA	NA	NA	NA	NA	NA
Aroclor-1242	NA	NA	NA	NA	NA	NA
Aroclor-1248	NA	NA	NA	NA	NA	NA
Aroclor-1254	NA	NA	NA	NA	NA	NA
Aroclor-1260	NA	NA	NA	NA	NA	NA
Metals (mg/L)						
Aluminum	39.8J	NA	9.25	ND 0.0497	NA	0.732
Antimony	ND 0.0107	NA	ND 0.0079	ND 0.0079	NA	ND 0.0079
Arsenic	0.014	NA	0.006	0.0048J	NA	0.0036J
Barium	0.352	NA	0.266	0.095	NA	0.059
Beryllium	ND 0.002	NA	ND 0.00077	ND 0.0005	NA	ND 0.0005
Cadmium	ND 0.0033	NA	ND 0.0027	ND 0.0013	NA	ND 0.0013

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LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-18C DUPLICATE 1/6/94	MW-15 1/6/94	MW-16 1/7/94	EAST WELL 1/14/94	EAST WELL 1/14/94	MW-2A 1/13/94
Metals (mg/L)						
Calcium	584	NA	168	80.5	NA	105
Chromium	0.092	NA	0.083	ND 0.0064	NA	0.009
Cobalt	0.024	NA	0.01	ND 0.0032	NA	0.032
Copper	0.088	NA	0.053	ND 0.0036	NA	ND 0.0085
Cyanide (total)	NA	NA	NA	NA	NA	NA
Iron	60.9J	NA	21.6	5.62	NA	8.33
Lead	0.112J	NA	0.018	ND 0.0026	NA	ND 0.0027
Magnesium	290	NA	55.7	32.3	NA	38.4
Manganese	1.85	NA	0.599	0.145	NA	0.093
Mercury	ND 0.0001	NA	ND 0.0001	ND 0.0001	NA	ND 0.0001
Nickel	0.138	NA	0.175	ND 0.0048	NA	0.007
Potassium	13.8	NA	6.85	1.63	NA	3.74
Selenium	ND 0.011J	NA	ND 0.0022J	ND 0.0022J	NA	ND 0.0022J
Silver	ND 0.0021	NA	ND 0.0021	ND 0.0021	NA	ND 0.0021
Sodium	77.1	NA	361	133	NA	11.6
Thallium	ND 0.0012	NA	ND 0.0012	ND 0.0012	NA	ND 0.0012
Vanadium	0.062	NA	0.012	ND 0.002	NA	ND 0.002
Zinc	0.257J	NA	0.132J	0.0911J	NA	ND 0.0223
Total Petroleum Hydrocarbons (mg/L)	ND 2.5	ND 2.5	ND 2.5	ND 2.5	ND 2.5	ND 2.5
Petroleum Products (mg/L)						
Gasoline	NA	NA	NA	NA	NA	NA
Kerosene	NA	NA	NA	NA	NA	NA
Fuel Oil	NA	NA	NA	NA	NA	NA
Lubricating Oil	NA	NA	NA	NA	NA	NA

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SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-5A 1/13/94	MW-6A 1/12/94	MW-13A 1/13/94	MW-14A 1/13/94	MW-15A 1/14/94	MW-1 3/24/94
VOCs (mg/L)						
Acetone	0.003J	0.016J	ND 0.01	ND 0.01J	0.004J	ND 0.01J
Benzene	ND 0.01	0.038J	ND 0.01	ND 0.01	0.001J	ND 0.01
Bromodichloromethane	ND 0.01	ND 0.01J	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bromoform	ND 0.01	ND 0.01J	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bromomethane	ND 0.01	ND 0.01J	ND 0.01	ND 0.01	ND 0.01	ND 0.01J
2-Butanone	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J	ND 0.01J	ND 0.01J
Carbon Disulfide	ND 0.01	ND 0.01J	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Carbon Tetrachloride	ND 0.01	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01	ND 0.01
Chlorobenzene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chloroethane	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J	ND 0.01J	ND 0.01J
Chloroform	ND 0.01	ND 0.01J	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chloromethane	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J
Dibromochloromethane	ND 0.01	ND 0.01J	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1-Dichloroethane	ND 0.01	0.006J	ND 0.01	ND 0.01	0.019	ND 0.01
1,2-Dichloroethane	ND 0.01	ND 0.01J	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1-Dichloroethene	ND 0.01	0.14J	ND 0.01	ND 0.01	0.005J	ND 0.01
1,2-Dichloroethene (Total)	ND 0.01	390D	0.025	0.046	0.65D	ND 0.01
1,2-Dichloropropane	ND 0.01	ND 0.01J	ND 0.01	ND 0.01	ND 0.01	ND 0.01
cis-1,3-Dichloropropene	ND 0.01	ND 0.01J	ND 0.01	ND 0.01	ND 0.01	ND 0.01
trans-1,3-Dichloropropene	ND 0.01	ND 0.01J	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Ethylbenzene	ND 0.01	0.14J	ND 0.01	ND 0.01	ND 0.01	ND 0.01
2-Hexanone	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J	ND 0.01J	ND 0.01J
Methylene Chloride	ND 0.01	ND 0.01J	ND 0.01	ND 0.01	ND 0.01	ND 0.01
4-Methyl-2-Pentanone	ND 0.01	0.007J	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Styrene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1,2,2-Tetrachloroethane	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01
Tetrachloroethene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Toluene	ND 0.01	0.18J	ND 0.01	0.003J	0.003J	ND 0.01
1,1,1-Trichloroethane	ND 0.01	ND 0.01J	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1,2-Trichloroethane	ND 0.01	ND 0.01J	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Trichloroethene	ND 0.01	0.09J	0.003J	ND 0.01	0.008J	ND 0.01
Vinyl Acetate	NA	NA	NA	NA	NA	NA
Vinyl Chloride	ND 0.01J	110D	ND 0.01	0.028J	0.3D	ND 0.01J
Xylenes (Total)	ND 0.01	7DJ	0.003J	0.003J	0.004J	ND 0.01

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TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-5A 1/13/94	MW-6A 1/12/94	MW-13A 1/13/94	MW-14A 1/13/94	MW-15A 1/14/94	MW-1 3/24/94
SVOCs (mg/L)						
Acenaphthene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Acenaphthylene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Anthracene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Benzo (a) anthracene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Benzo (b) fluoranthene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Benzo (k) fluoranthene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Benzo (g,h,i) perylene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Benzo (a) pyrene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Benzyl alcohol	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Bis (2-chloroethoxy) methane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Bis (2-chloroethyl) ether	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Bis (2-chloroisopropyl) ether	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Bis (2-ethylhexyl) phthalate	0.003J	0.002J	0.001J	0.002J	ND 0.01	NA
4-Bromophenyl phenyl ether	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Butyl benzyl phthalate	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Carbazole	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
4-Chloroaniline	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	NA
2-Chloronaphthalene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
4-Chlorophenyl phenyl ether	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
1-Chloropropane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Chrysene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Dibenzo (a,h) anthracene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Dibenzofuran	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Di-n-butyl phthalate	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
1,2-Dichlorobenzene	ND 0.01	0.004J	ND 0.01	ND 0.01	ND 0.01	NA
1,3-Dichlorobenzene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
1,4-Dichlorobenzene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
3,3'-Dichlorobenzidine	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Diethyl phthalate	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Dimethyl phthalate	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
2,4-Dinitrotoluene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
2,6-Dinitrotoluene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Di-n-octyl phthalate	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Fluoranthene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA

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TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-5A 1/13/94	MW-6A 1/12/94	MW-13A 1/13/94	MW-14A 1/13/94	MW-15A 1/14/94	MW-1 3/24/94
SVOCs (mg/L)						
Fluorene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Hexachlorobenzene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Hexachlorobutadiene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Hexachlorocyclopentadiene	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	NA
Hexachloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Indeno (1,2,3-cd) pyrene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Isophorone	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
2-Methylnaphthalene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Naphthalene	ND 0.01	0.003J	ND 0.01	ND 0.01	ND 0.01	NA
Nitrobenzene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
2-Nitroaniline	ND 0.025	ND 0.025	ND 0.025	ND 0.025	ND 0.025	NA
3-Nitroaniline	ND 0.025J	ND 0.025J	ND 0.025J	ND 0.025J	ND 0.025J	NA
4-Nitroaniline	ND 0.025J	ND 0.025J	ND 0.025J	ND 0.025J	ND 0.025J	NA
N-Nitrosodiphenylamine	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	NA
N-Nitroso-di-n-propylamine	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Phenanthrene	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	NA
Pyrene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
1,2,4-Trichlorobenzene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
Acid Extractables (mg/L)						
Benzoic acid	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
4-Chloro-3-methylphenol	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
2-Chlorophenol	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
2,4-Dichlorophenol	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
2,4-Dimethylphenol	ND 0.01	0.011	ND 0.01	ND 0.01	ND 0.01	NA
2,4-Dinitrophenol	ND 0.025J	ND 0.025J	ND 0.025J	ND 0.025J	ND 0.025J	NA
4,6-Dinitro-2-methylphenol	ND 0.025	ND 0.025	ND 0.025	ND 0.025	ND 0.025	NA
2-Methylphenol	ND 0.01	0.02	ND 0.01	ND 0.01	ND 0.01	NA
4-Methylphenol	ND 0.01	0.062	ND 0.01	ND 0.01	ND 0.01	NA
2-Nitrophenol	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
4-Nitrophenol	ND 0.025J	ND 0.025J	ND 0.025J	ND 0.025J	ND 0.025J	NA
Pentachlorophenol	ND 0.025	ND 0.025	ND 0.025	ND 0.025	ND 0.025	NA
Phenol	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA
2,4,5-Trichlorophenol	ND 0.025	ND 0.025	ND 0.025	ND 0.025	ND 0.025	NA
2,4,6-Trichlorophenol	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	NA

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TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-5A 1/13/94	MW-6A 1/12/94	MW-13A 1/13/94	MW-14A 1/13/94	MW-15A 1/14/94	MW-1 3/24/94
Pesticides and PCBs (mg/L)						
alpha-BHC	NA	NA	NA	NA	NA	NA
beta-BHC	NA	NA	NA	NA	NA	NA
delta-BHC	NA	NA	NA	NA	NA	NA
Lindane	NA	NA	NA	NA	NA	NA
Heptachlor	NA	NA	NA	NA	NA	NA
Aldrin	NA	NA	NA	NA	NA	NA
Heptachlor epoxide	NA	NA	NA	NA	NA	NA
Endosulfan I	NA	NA	NA	NA	NA	NA
Dieldrin	NA	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA
Endrin	NA	NA	NA	NA	NA	NA
Endosulfan II	NA	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA
Endosulfan sulfate	NA	NA	NA	NA	NA	NA
4,4'-DDT	NA	NA	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA	NA	NA
Endrin ketone	NA	NA	NA	NA	NA	NA
alpha-Chlordane	NA	NA	NA	NA	NA	NA
gamma-Chlordane	NA	NA	NA	NA	NA	NA
Toxaphene	NA	NA	NA	NA	NA	NA
Aroclor-1016	NA	NA	NA	NA	NA	NA
Aroclor-1221	NA	NA	NA	NA	NA	NA
Aroclor-1232	NA	NA	NA	NA	NA	NA
Aroclor-1242	NA	NA	NA	NA	NA	NA
Aroclor-1248	NA	NA	NA	NA	NA	NA
Aroclor-1254	NA	NA	NA	NA	NA	NA
Aroclor-1260	NA	NA	NA	NA	NA	NA
Metals (mg/L)						
Aluminum	8.81	0.231	0.48	0.636	0.45	NA
Antimony	ND 0.0079	ND 0.0079	ND 0.0079	ND 0.0079	ND 0.0079	NA
Arsenic	0.004	0.002J	0.002	0.003	0.005	NA
Barium	0.296	0.458	0.23	0.214	0.139	NA
Beryllium	ND 0.0005	ND 0.0005	ND 0.0005	ND 0.0005	ND 0.0005	NA
Cadmium	ND 0.0013	ND 0.0019	ND 0.0013	ND 0.0013	ND 0.0013	NA

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SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-5A 1/13/94	MW-6A 1/12/94	MW-13A 1/13/94	MW-14A 1/13/94	MW-15A 1/14/94	MW-1 3/24/94
Metals (mg/L)						
Calcium	179	134	436	165	135	NA
Chromium	0.014	0.01	ND 0.0064	0.011	ND 0.0064	NA
Cobalt	0.004	0.003	ND 0.0032	ND 0.0032	ND 0.0032	NA
Copper	ND 0.0123	0.025	ND 0.0093	0.014	0.017	NA
Cyanide (total)	NA	NA	NA	NA	NA	NA
Iron	13.8	3.75	4.67	5.21	2.61	NA
Lead	0.013	ND 0.0052	ND 0.0029	ND 0.003	ND 0.0021	NA
Magnesium	147	93	68.1	75.9	60.8	NA
Manganese	0.414	0.08	0.173	0.102	0.066	NA
Mercury	ND 0.0001	ND 0.0001	ND 0.0001	ND 0.0001	ND 0.0001	NA
Nickel	0.007	0.018	0.006	0.006	ND 0.0048	NA
Potassium	10.5	6.36	2.15	3.45	3.13	NA
Selenium	ND 0.0022J	ND 0.0022J	ND 0.0022J	ND 0.0022J	ND 0.0022J	NA
Silver	ND 0.0021	ND 0.0021	ND 0.0021	ND 0.0021	ND 0.0021	NA
Sodium	52.7	99.2	10.4	20.4	154	NA
Thallium	ND 0.0012	ND 0.0012	ND 0.0012	ND 0.0012	ND 0.0012	NA
Vanadium	0.007	ND 0.002	ND 0.002	ND 0.002	ND 0.002	NA
Zinc	0.0668J	0.596J	ND 0.0157	0.0246J	ND 0.0204	NA
Total Petroleum Hydrocarbons (mg/L)	ND 2.5	ND 2.5	ND 2.5	ND 2.5	ND 2.5	NA
Petroleum Products (mg/L)						
Gasoline	NA	NA	NA	NA	NA	NA
Kerosene	NA	NA	NA	NA	NA	NA
Fuel Oil	NA	NA	NA	NA	NA	NA
Lubricating Oil	NA	NA	NA	NA	NA	NA

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TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-2 3/22/94	MW-18C DUPLICATE 3/22/92	MW-3 3/22/94	MW-5 3/22/94	MW-13 3/23/94	MW-14 3/23/94	MW-15 3/24/94
VOCs (mg/L)							
Acetone	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01J	0.003J	0.004J
Benzene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	0.001J	ND 0.01
Bromodichloromethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bromoform	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bromomethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01J	0.016DJ	ND 0.01J
2-Butanone	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01J	0.007DJ	ND 0.01J
Carbon Disulfide	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Carbon Tetrachloride	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chlorobenzene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chloroethane	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J
Chloroform	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chloromethane	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	0.025DJ	ND 0.01J
Dibromochloromethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1-Dichloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,2-Dichloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1-Dichloroethene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	0.002J	ND 0.01
1,2-Dichloroethene (Total)	0.004J	0.004J	ND 0.01	ND 0.01	ND 0.01	0.69D	ND 0.01
1,2-Dichloropropane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
cis-1,3-Dichloropropene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
trans-1,3-Dichloropropene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Ethylbenzene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
2-Hexanone	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01J	ND 0.01J	ND 0.01J
Methylene Chloride	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01	ND 0.01
4-Methyl-2-Pentanone	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Styrene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1,2,2-Tetrachloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Tetrachloroethene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Toluene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1,1-Trichloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1,2-Trichloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Trichloroethene	0.04	0.041	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	0.011J	ND 0.01J
Xylenes (Total)	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01

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LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-2 3/22/94	MW-18C DUPLICATE 3/22/92	MW-3 3/22/94	MW-5 3/22/94	MW-13 3/23/94	MW-14 3/23/94	MW-15 3/24/94
SVOCs (mg/L)							
Acenaphthene	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA
Benzo (a) anthracene	NA	NA	NA	NA	NA	NA	NA
Benzo (b) fluoranthene	NA	NA	NA	NA	NA	NA	NA
Benzo (k) fluoranthene	NA	NA	NA	NA	NA	NA	NA
Benzo (g,h,i) perylene	NA	NA	NA	NA	NA	NA	NA
Benzo (a) pyrene	NA	NA	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroethoxy) methane	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroethyl) ether	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroisopropyl) ether	NA	NA	NA	NA	NA	NA	NA
Bis (2-ethylhexyl) phthalate	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NA	NA	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA
1-Chloropropane	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA
Dibenzo (a,h) anthracene	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA

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TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-2 3/22/94	MW-18C DUPLICATE 3/22/92	MW-3 3/22/94	MW-5 3/22/94	MW-13 3/23/94	MW-14 3/23/94	MW-15 3/24/94
SVOCs (mg/L)							
Fluorene	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NA	NA	NA	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	NA	NA	NA	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA
Acid Extractables (mg/L)							
Benzoic acid	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	NA	NA	NA	NA	NA	NA	NA
Phenol	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA

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LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-2 3/22/94	MW-18C DUPLICATE 3/22/92	MW-3 3/22/94	MW-5 3/22/94	MW-13 3/23/94	MW-14 3/23/94	MW-15 3/24/94
Pesticides and PCBs (mg/L)							
alpha-BHC	NA	NA	NA	NA	NA	NA	NA
beta-BHC	NA	NA	NA	NA	NA	NA	NA
delta-BHC	NA	NA	NA	NA	NA	NA	NA
Lindane	NA	NA	NA	NA	NA	NA	NA
Heptachlor	NA	NA	NA	NA	NA	NA	NA
Aldrin	NA	NA	NA	NA	NA	NA	NA
Heptachlor epoxide	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	NA	NA	NA	NA	NA	NA	NA
Dieldrin	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA	NA
Endrin	NA	NA	NA	NA	NA	NA	NA
Endosulfan II	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA	NA
Endosulfan sulfate	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA	NA	NA	NA
Endrin ketone	NA	NA	NA	NA	NA	NA	NA
alpha-Chlordane	NA	NA	NA	NA	NA	NA	NA
gamma-Chlordane	NA	NA	NA	NA	NA	NA	NA
Toxaphene	NA	NA	NA	NA	NA	NA	NA
Aroclor-1016	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	NA	NA	NA	NA	NA	NA	NA
Metals (mg/L)							
Aluminum	NA	NA	NA	NA	NA	NA	NA
Antimony	NA	NA	NA	NA	NA	NA	NA
Arsenic	NA	NA	NA	NA	NA	NA	NA
Barium	NA	NA	NA	NA	NA	NA	NA
Beryllium	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA

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SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-2 3/22/94	MW-18C DUPLICATE 3/22/92	MW-3 3/22/94	MW-5 3/22/94	MW-13 3/23/94	MW-14 3/23/94	MW-15 3/24/94
Metals (mg/L)							
Calcium	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA
Cobalt	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA
Cyanide (total)	NA	NA	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA
Magnesium	NA	NA	NA	NA	NA	NA	NA
Manganese	NA	NA	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA
Potassium	NA	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA
Sodium	NA	NA	NA	NA	NA	NA	NA
Thallium	NA	NA	NA	NA	NA	NA	NA
Vanadium	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (mg/L)	NA	NA	NA	NA	NA	NA	NA
Petroleum Products (mg/L)							
Gasoline	NA	NA	NA	NA	NA	NA	NA
Kerosene	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	NA	NA	NA	NA	NA	NA	NA
Lubricating Oil	NA	NA	NA	NA	NA	NA	NA

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SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-16 3/24/94	MW-19C DUPLICATE 3/24/94	MW-2A 3/22/94	MW-5A 3/24/94	MW-6A 3/24/94	MW-13A 3/23/94	MW-14A 3/23/94
VOCs (mg/L)							
Acetone	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J	0.015J	ND 0.01J	ND 0.01J
Benzene	0.001J	0.002J	ND 0.01	ND 0.01	0.067J	ND 0.01	ND 0.01
Bromodichloromethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bromoform	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bromomethane	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J
2-Butanone	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J
Carbon Disulfide	ND 0.01	ND 0.01	ND 0.01	ND 0.01	0.003J	ND 0.01	ND 0.01
Carbon Tetrachloride	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chlorobenzene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chloroethane	0.005J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J
Chloroform	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chloromethane	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J
Dibromochloromethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1-Dichloroethane	3D	3.3D	ND 0.01	ND 0.01	0.014J	ND 0.01	ND 0.01
1,2-Dichloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1-Dichloroethene	0.24DJ	0.28DJ	ND 0.01	ND 0.01	0.14J	ND 0.01	ND 0.01
1,2-Dichloroethene (Total)	3.9D	4.2D	0.004J	0.003J	69D	0.019	0.064
1,2-Dichloropropane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
cis-1,3-Dichloropropene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
trans-1,3-Dichloropropene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Ethylbenzene	0.62D	0.67D	ND 0.01	ND 0.01	ND 5D	ND 0.01	ND 0.01
2-Hexanone	ND 0.01J	ND 0.01J	ND 0.01	ND 0.01J	ND 0.01J	ND 0.01J	ND 0.01J
Methylene Chloride	0.009J	0.009J	ND 0.01J	ND 0.01	0.002J	ND 0.01	ND 0.01
4-Methyl-2-Pentanone	ND 0.01	ND 0.01	ND 0.01	ND 0.01	0.012J	ND 0.01	ND 0.01
Styrene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1,2,2-Tetrachloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Tetrachloroethene	0.003J	0.003J	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Toluene	0.16DJ	0.18DJ	ND 0.01	ND 0.01	ND 5D	ND 0.01	ND 0.01
1,1,1-Trichloroethane	0.077J	0.079J	ND 0.01	ND 0.01	0.018J	ND 0.01	ND 0.01
1,1,2-Trichloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Trichloroethene	2.1D	2.4D	0.042	ND 0.01	0.16J	ND 0.01	ND 0.01
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	ND 0.5D	ND 0.5D	ND 0.01J	ND 0.01J	19D	0.001J	0.025J
Xylenes (Total)	1.3D	1.5D	ND 0.01	ND 0.01	ND 5D	0.002J	ND 0.01

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LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-16 3/24/94	MW-19C DUPLICATE 3/24/94	MW-2A 3/22/94	MW-5A 3/24/94	MW-6A 3/24/94	MW-13A 3/23/94	MW-14A 3/23/94
SVOCs (mg/L)							
Acenaphthene	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA
Benzo (a) anthracene	NA	NA	NA	NA	NA	NA	NA
Benzo (b) fluoranthene	NA	NA	NA	NA	NA	NA	NA
Benzo (k) fluoranthene	NA	NA	NA	NA	NA	NA	NA
Benzo (g,h,i) perylene	NA	NA	NA	NA	NA	NA	NA
Benzo (a) pyrene	NA	NA	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroethoxy) methane	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroethyl) ether	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroisopropyl) ether	NA	NA	NA	NA	NA	NA	NA
Bis (2-ethylhexyl) phthalate	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NA	NA	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA
1-Chloropropane	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA
Dibenzo (a,h) anthracene	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA

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SVOCs (mg/L)							
Fluorene	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NA	NA	NA	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	NA	NA	NA	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA
Acid Extractables (mg/L)							
Benzoic acid	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	NA	NA	NA	NA	NA	NA	NA
Phenol	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA

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PARAMETER	MW-16 3/24/94	MW-19C DUPLICATE 3/24/94	MW-2A 3/22/94	MW-5A 3/24/94	MW-6A 3/24/94	MW-13A 3/23/94	MW-14A 3/23/94
Pesticides and PCBs (mg/L)							
alpha-BHC	NA	NA	NA	NA	NA	NA	NA
beta-BHC	NA	NA	NA	NA	NA	NA	NA
delta-BHC	NA	NA	NA	NA	NA	NA	NA
Lindane	NA	NA	NA	NA	NA	NA	NA
Heptachlor	NA	NA	NA	NA	NA	NA	NA
Aldrin	NA	NA	NA	NA	NA	NA	NA
Heptachlor epoxide	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	NA	NA	NA	NA	NA	NA	NA
Dieldrin	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA	NA
Endrin	NA	NA	NA	NA	NA	NA	NA
Endosulfan II	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA	NA
Endosulfan sulfate	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA	NA	NA	NA
Endrin ketone	NA	NA	NA	NA	NA	NA	NA
alpha-Chlordane	NA	NA	NA	NA	NA	NA	NA
gamma-Chlordane	NA	NA	NA	NA	NA	NA	NA
Toxaphene	NA	NA	NA	NA	NA	NA	NA
Aroclor-1016	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	NA	NA	NA	NA	NA	NA	NA
Metals (mg/L)							
Aluminum	NA	NA	NA	NA	NA	NA	NA
Antimony	NA	NA	NA	NA	NA	NA	NA
Arsenic	NA	NA	NA	NA	NA	NA	NA
Barium	NA	NA	NA	NA	NA	NA	NA
Beryllium	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA

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LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-16 3/24/94	MW-19C DUPLICATE 3/24/94	MW-2A 3/22/94	MW-5A 3/24/94	MW-6A 3/24/94	MW-13A 3/23/94	MW-14A 3/23/94
Metals (mg/L)							
Calcium	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA
Cobalt	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA
Cyanide (total)	NA	NA	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA
Magnesium	NA	NA	NA	NA	NA	NA	NA
Manganese	NA	NA	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA
Potassium	NA	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA
Sodium	NA	NA	NA	NA	NA	NA	NA
Thallium	NA	NA	NA	NA	NA	NA	NA
Vanadium	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (mg/L)	NA	NA	NA	NA	NA	NA	NA
Petroleum Products (mg/L)							
Gasoline	NA	NA	NA	NA	NA	NA	NA
Kerosene	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	NA	NA	NA	NA	NA	NA	NA
Lubricating Oil	NA	NA	NA	NA	NA	NA	NA

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SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-15A 3/24/94	MW-1A 4/15/94	MW-16A 4/18/94	MW-17A 4/15/94	MW-26C DUPLICATE 4/15/94	MW-18 4/15/94	MW-19 4/14/94
VOCs (mg/L)							
Acetone	ND 0.01J	ND 0.01	ND 10D	ND 0.01	ND 0.01	ND 0.01	ND 0.01J
Benzene	ND 0.01	ND 0.01	0.018	ND 0.01	ND 0.01	ND 0.01	0.001J
Bromodichloromethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bromoform	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bromomethane	0.005DJ	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
2-Butanone	ND 0.01J	ND 0.01	0.043	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Carbon Disulfide	ND 0.01	ND 0.01	0.007J	0.009J	0.009J	ND 0.01	ND 0.01J
Carbon Tetrachloride	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chlorobenzene	ND 0.01	ND 0.01	0.002J	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chloroethane	ND 0.01J	ND 0.01	0.16	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chloroform	ND 0.01	ND 0.01	0.008J	ND 0.01	ND 0.01	0.001J	ND 0.01
Chloromethane	0.008DJ	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Dibromochloromethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1-Dichloroethane	0.025	ND 0.01	4.4DJ	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,2-Dichloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1-Dichloroethene	0.004J	ND 0.01	1.2DJ	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,2-Dichloroethene (Total)	0.49D	0.014	34D	0.031	0.033	ND 0.01	0.052
1,2-Dichloropropane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
cis-1,3-Dichloropropene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
trans-1,3-Dichloropropene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Ethylbenzene	0.002J	ND 0.01	3DJ	ND 0.01	ND 0.01	ND 0.01	ND 0.01
2-Hexanone	ND 0.01J	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Methylene Chloride	0.001J	ND 0.01	0.018	ND 0.01	0.001J	ND 0.01	ND 0.01J
4-Methyl-2-Pentanone	ND 0.01	ND 0.01	0.091	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Styrene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1,2,2-Tetrachloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Tetrachloroethene	ND 0.01	ND 0.01	0.033	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Toluene	0.001J	ND 0.01	2.7DJ	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1,1-Trichloroethane	0.008J	ND 0.01	110D	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1,2-Trichloroethane	ND 0.01	ND 0.01	0.013	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Trichloroethene	0.014	0.001J	88D	0.032	0.035	ND 0.01	ND 0.01
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	0.2D	ND 0.01	4.7DJ	ND 0.01	ND 0.01	ND 0.01	0.017
Xylenes (Total)	0.002J	ND 0.01	15D	ND 0.01	ND 0.01	ND 0.01	ND 0.01

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TABLE 8.1
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LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-15A 3/24/94	MW-1A 4/15/94	MW-16A 4/18/94	MW-17A 4/15/94	MW-26C DUPLICATE 4/15/94	MW-18 4/15/94	MW-19 4/14/94
SVOCs (mg/L)							
Acenaphthene	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA
Benzo (a) anthracene	NA	NA	NA	NA	NA	NA	NA
Benzo (b) fluoranthene	NA	NA	NA	NA	NA	NA	NA
Benzo (k) fluoranthene	NA	NA	NA	NA	NA	NA	NA
Benzo (g,h,i) perylene	NA	NA	NA	NA	NA	NA	NA
Benzo (a) pyrene	NA	NA	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroethoxy) methane	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroethyl) ether	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroisopropyl) ether	NA	NA	NA	NA	NA	NA	NA
Bis (2-ethylhexyl) phthalate	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NA	NA	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA
1-Chloropropane	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA
Dibenzo (a,h) anthracene	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA

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SVOCs (mg/L)							
Fluorene	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NA	NA	NA	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	NA	NA	NA	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA
Acid Extractables (mg/L)							
Benzoic acid	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	NA	NA	NA	NA	NA	NA	NA
Phenol	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA

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Pesticides and PCBs (mg/L)							
alpha-BHC	NA	NA	NA	NA	NA	NA	NA
beta-BHC	NA	NA	NA	NA	NA	NA	NA
delta-BHC	NA	NA	NA	NA	NA	NA	NA
Lindane	NA	NA	NA	NA	NA	NA	NA
Heptachlor	NA	NA	NA	NA	NA	NA	NA
Aldrin	NA	NA	NA	NA	NA	NA	NA
Heptachlor epoxide	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	NA	NA	NA	NA	NA	NA	NA
Dieldrin	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA	NA
Endrin	NA	NA	NA	NA	NA	NA	NA
Endosulfan II	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA	NA	NA
Endosulfan sulfate	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA	NA	NA	NA
Endrin ketone	NA	NA	NA	NA	NA	NA	NA
alpha-Chlordane	NA	NA	NA	NA	NA	NA	NA
gamma-Chlordane	NA	NA	NA	NA	NA	NA	NA
Toxaphene	NA	NA	NA	NA	NA	NA	NA
Aroclor-1016	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	NA	NA	NA	NA	NA	NA	NA
Metals (mg/L)							
Aluminum	NA	NA	NA	NA	NA	NA	NA
Antimony	NA	NA	NA	NA	NA	NA	NA
Arsenic	NA	NA	NA	NA	NA	NA	NA
Barium	NA	NA	NA	NA	NA	NA	NA
Beryllium	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA

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LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-15A 3/24/94	MW-1A 4/15/94	MW-16A 4/18/94	MW-17A 4/15/94	MW-26C DUPLICATE 4/15/94	MW-18 4/15/94	MW-19 4/14/94
Metals (mg/L)							
Calcium	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA
Cobalt	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA
Cyanide (total)	NA	NA	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA
Magnesium	NA	NA	NA	NA	NA	NA	NA
Manganese	NA	NA	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA
Potassium	NA	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA
Sodium	NA	NA	NA	NA	NA	NA	NA
Thallium	NA	NA	NA	NA	NA	NA	NA
Vanadium	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (mg/L)	NA	NA	NA	NA	NA	NA	NA
Petroleum Products (mg/L)							
Gasoline	NA	NA	NA	NA	NA	NA	NA
Kerosene	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	NA	NA	NA	NA	NA	NA	NA
Lubricating Oil	NA	NA	NA	NA	NA	NA	NA

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LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-20 4/14/94	MW-25C DUPLICATE 4/14/94	MW-21 4/14/94	MW-22 4/14/94	MW-23 4/14/94
VOCs (mg/L)					
Acetone	ND 0.01J	ND 0.01	ND 0.01J	ND 0.01	ND 0.01
Benzene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bromodichloromethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bromoform	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Bromomethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
2-Butanone	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Carbon Disulfide	ND 0.01J	ND 0.01	ND 0.01J	ND 0.01	ND 0.01
Carbon Tetrachloride	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chlorobenzene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chloroform	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Chloromethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Dibromochloromethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1-Dichloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,2-Dichloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1-Dichloroethene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,2-Dichloroethene (Total)	ND 0.01	ND 0.01	ND 0.01	0.015	ND 0.01
1,2-Dichloropropane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
cis-1,3-Dichloropropene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
trans-1,3-Dichloropropene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Ethylbenzene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
2-Hexanone	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Methylene Chloride	ND 0.01J	ND 0.01	ND 0.01J	0.001J	ND 0.01
4-Methyl-2-Pentanone	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Styrene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1,2,2-Tetrachloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Tetrachloroethene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Toluene	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1,1-Trichloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
1,1,2-Trichloroethane	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01
Trichloroethene	ND 0.01	ND 0.01	ND 0.01	0.016	ND 0.01
Vinyl Acetate	NA	NA	NA	NA	NA
Vinyl Chloride	ND 0.01	ND 0.01	0.005J	ND 0.01	ND 0.01
Xylenes (Total)	ND 0.01	ND 0.01	ND 0.01	ND 0.01	ND 0.01

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SVOCs (mg/L)					
Acenaphthene	NA	NA	NA	NA	NA
Acenaphthylene	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA
Benzo (a) anthracene	NA	NA	NA	NA	NA
Benzo (b) fluoranthene	NA	NA	NA	NA	NA
Benzo (k) fluoranthene	NA	NA	NA	NA	NA
Benzo (g,h,i) perylene	NA	NA	NA	NA	NA
Benzo (a) pyrene	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA
Bis (2-chloroethoxy) methane	NA	NA	NA	NA	NA
Bis (2-chloroethyl) ether	NA	NA	NA	NA	NA
Bis (2-chloroisopropyl) ether	NA	NA	NA	NA	NA
Bis (2-ethylhexyl) phthalate	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA
1-Chloropropane	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA
Dibenzo (a,h) anthracene	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA
Diethyl phthalate	NA	NA	NA	NA	NA
Dimethyl phthalate	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA

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SVOCs (mg/L)					
Fluorene	NA	NA	NA	NA	NA
Hexachlorobenzene	NA	NA	NA	NA	NA
Hexachlorobutadiene	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA
Hexachloroethane	NA	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	NA	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA
Nitrobenzene	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA
Acid Extractables (mg/L)					
Benzoic acid	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA
Pentachlorophenol	NA	NA	NA	NA	NA
Phenol	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA

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Pesticides and PCBs (mg/L)					
alpha-BHC	NA	NA	NA	NA	NA
beta-BHC	NA	NA	NA	NA	NA
delta-BHC	NA	NA	NA	NA	NA
Lindane	NA	NA	NA	NA	NA
Heptachlor	NA	NA	NA	NA	NA
Aldrin	NA	NA	NA	NA	NA
Heptachlor epoxide	NA	NA	NA	NA	NA
Endosulfan I	NA	NA	NA	NA	NA
Dieldrin	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA
Endrin	NA	NA	NA	NA	NA
Endosulfan II	NA	NA	NA	NA	NA
4,4'-DDE	NA	NA	NA	NA	NA
Endosulfan sulfate	NA	NA	NA	NA	NA
4,4'-DDT	NA	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA	NA
Endrin ketone	NA	NA	NA	NA	NA
alpha-Chlordane	NA	NA	NA	NA	NA
gamma-Chlordane	NA	NA	NA	NA	NA
Toxaphene	NA	NA	NA	NA	NA
Aroclor-1016	NA	NA	NA	NA	NA
Aroclor-1221	NA	NA	NA	NA	NA
Aroclor-1232	NA	NA	NA	NA	NA
Aroclor-1242	NA	NA	NA	NA	NA
Aroclor-1248	NA	NA	NA	NA	NA
Aroclor-1254	NA	NA	NA	NA	NA
Aroclor-1260	NA	NA	NA	NA	NA
Metals (mg/L)					
Aluminum	NA	NA	NA	NA	NA
Antimony	NA	NA	NA	NA	NA
Arsenic	NA	NA	NA	NA	NA
Barium	NA	NA	NA	NA	NA
Beryllium	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA

NA = Not Analyzed
ND = Not Detected
R = Rejected Value
J = Associated value is estimated
D = Value quantitated from a dilution
U=Non-detect at the associated value
B=Compound also detected in the method blank associated with this sample

TABLE 8.1
SUMMARY OF GROUNDWATER DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-20 4/14/94	MW-25C DUPLICATE 4/14/94	MW-21 4/14/94	MW-22 4/14/94	MW-23 4/14/94
Metals (mg/L)					
Calcium	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA
Cobalt	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA
Cyanide (total)	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA
Magnesium	NA	NA	NA	NA	NA
Manganese	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA
Potassium	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA
Sodium	NA	NA	NA	NA	NA
Thallium	NA	NA	NA	NA	NA
Vanadium	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (mg/L)	NA	NA	NA	NA	NA
Petroleum Products (mg/L)					
Gasoline	NA	NA	NA	NA	NA
Kerosene	NA	NA	NA	NA	NA
Fuel Oil	NA	NA	NA	NA	NA
Lubricating Oil	NA	NA	NA	NA	NA

NA = Not Analyzed
ND = Not Detected
R = Rejected Value
J = Associated value is estimated
D = Value quantitated from a dilution
U=Non-detect at the associated value
B=Compound also detected in the method blank associated with this sample

TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	SED11193 11/10/93	BH-G 4.0-6.0' Jan-92	BH-Q 4.5-6.0' Jan-92	BH-C 3.8-4.1' Jan-92	BH-C(DUP) 3.8-4.1' Jan-92	BH-N 0.5-1.5' Jan-92	BH-P 2.0-4.0' Jan-92	BH-Q 3.0-4.0' Jan-92
VOCs (mg/kg)								
Acetone	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
Benzene	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
Bromodichloromethane	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
Bromoform	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
Bromomethane	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
2-Butanone	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
Carbon Disulfide	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
Carbon Tetrachloride	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
Chlorobenzene	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
Chloroethane	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
Chloroform	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
Chloromethane	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
Dibromochloromethane	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
1,1-Dichloroethane	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
1,2-Dichloroethane	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
1,1-Dichloroethene	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
1,2-Dichloroethene (Total)	ND 0.031	9.1J	1.4J	NA	NA	NA	NA	NA
1,2-Dichloropropane	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
Ethylbenzene	ND 0.031	ND 31	1.2J	NA	NA	NA	NA	NA
2-Hexanone	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
Methylene Chloride	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
Styrene	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
Tetrachloroethene	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
Toluene	ND 0.031	ND 31	0.5J	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	ND 0.031	ND 31	ND 1.6	NA	NA	NA	NA	NA
Trichloroethene	0.008J	320	ND 1.6	NA	NA	NA	NA	NA
Vinyl Acetate	NA	ND 31	ND 1.6	NA	NA	NA	NA	NA
Vinyl Chloride	ND 0.031	ND 6.2	ND 1.6	NA	NA	NA	NA	NA
Xylenes (Total)	ND 0.031	29J	24	NA	NA	NA	NA	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	SED11193 11/10/93	BH-G 4.0-6.0' Jan-92	BH-Q 4.5-6.0' Jan-92	BH-C 3.8-4.1' Jan-92	BH-C(DUP) 3.8-4.1' Jan-92	BH-N 0.5-1.5' Jan-92	BH-P 2.0-4.0' Jan-92	BH-Q 3.0-4.0' Jan-92
SVOCs (mg/kg)								
Acenaphthene	0.56J	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Acenaphthylene	0.33J	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Anthracene	1.5	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Benzo (a) anthracene	8.4DJ	0.2J	ND 0.33	NA	NA	NA	NA	NA
Benzo (b) fluoranthene	24D	0.14J	ND 0.33	NA	NA	NA	NA	NA
Benzo (k) fluoranthene	11UD	0.037J	ND 0.33	NA	NA	NA	NA	NA
Benzo (g,h,i) perylene	4.4	0.13J	ND 0.33	NA	NA	NA	NA	NA
Benzo (a) pyrene	12D	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Benzyl alcohol	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Bis (2-chloroethoxy) methane	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Bis (2-chloroethyl) ether	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Bis (2-chloroisopropyl) ether	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Bis (2-ethylhexyl) phthalate	7.7U	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Butyl benzyl phthalate	0.6J	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Carbazole	5.2J	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
2-Chloronaphthalene	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
1-Chloropropane	ND 1.1	NA	NA	NA	NA	NA	NA	NA
Chrysene	8.1	0.13J	ND 0.33	NA	NA	NA	NA	NA
Dibenzo (a,h) anthracene	2.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Dibenzofuran	1.2	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Di-n-butyl phthalate	0.32J	1.7	ND 0.33	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	ND 1.1	ND 0.66	ND 0.66	NA	NA	NA	NA	NA
Diethyl phthalate	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Dimethyl phthalate	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Di-n-octyl phthalate	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Fluoranthene	25D	0.41	ND 0.33	NA	NA	NA	NA	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	SED11193 11/10/93	BH-G 4.0-6.0' Jan-92	BH-Q 4.5-6.0' Jan-92	BH-C 3.8-4.1' Jan-92	BH-C(DUP) 3.8-4.1' Jan-92	BH-N 0.5-1.5' Jan-92	BH-P 2.0-4.0' Jan-92	BH-Q 3.0-4.0' Jan-92
SVOCs (mg/kg)								
Fluorene	0.66J	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Hexachlorobenzene	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Hexachlorobutadiene	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Hexachloroethane	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	4.7	0.14J	ND 0.33	NA	NA	NA	NA	NA
Isophorone	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
2-Methylnaphthalene	3.5	0.12J	ND 0.33	NA	NA	NA	NA	NA
Naphthalene	2.7	0.29J	ND 0.33	NA	NA	NA	NA	NA
Nitrobenzene	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
2-Nitroaniline	ND 2.7	ND 1.6	ND 1.6	NA	NA	NA	NA	NA
3-Nitroaniline	ND 2.7	ND 1.6	ND 1.6	NA	NA	NA	NA	NA
4-Nitroaniline	ND 2.7	ND 1.6	ND 1.6	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	ND 1.1J	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Phenanthrene	13D	0.19J	ND 0.33	NA	NA	NA	NA	NA
Pyrene	18D	0.21J	ND 0.33	NA	NA	NA	NA	NA
2,4-Trichlorobenzene	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
Acid Extractables (mg/kg)								
Benzoic acid	NA	ND 1.6	ND 1.6	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	ND 1.1J	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
2-Chlorophenol	ND 1.1J	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
2,4-Dichlorophenol	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
2,4-Dimethylphenol	ND 1.1	0.75	ND 0.33	NA	NA	NA	NA	NA
2,4-Dinitrophenol	ND 2.7	ND 1.6	ND 1.6	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	ND 2.7	ND 1.6	ND 1.6	NA	NA	NA	NA	NA
2-Methylphenol	ND 1.1	0.57	ND 0.33	NA	NA	NA	NA	NA
4-Methylphenol	ND 1.1	0.38	ND 0.33	NA	NA	NA	NA	NA
2-Nitrophenol	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
4-Nitrophenol	ND 2.7	ND 1.6	ND 1.6	NA	NA	NA	NA	NA
Pentachlorophenol	ND 2.7	ND 1.6	ND 1.6	NA	NA	NA	NA	NA
Phenol	ND 1.1J	0.27J	ND 0.33	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	ND 2.7	ND 0.33	ND 0.33	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	ND 1.1	ND 0.33	ND 0.33	NA	NA	NA	NA	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	SED11193 11/10/93	BH-G 4.0-6.0' Jan-92	BH-Q 4.5-6.0' Jan-92	BH-C 3.8-4.1' Jan-92	BH-C(DUP) 3.8-4.1' Jan-92	BH-N 0.5-1.5' Jan-92	BH-P 2.0-4.0' Jan-92	BH-Q 3.0-4.0' Jan-92
Metals (mg/kg)								
Aluminum	11000	9400	8600	NA	NA	NA	NA	NA
Antimony	18.5UJ	ND 10	ND 10	NA	NA	NA	NA	NA
Arsenic	109	1.4	1.4	NA	NA	NA	NA	NA
Barium	832	100	76	NA	NA	NA	NA	NA
Beryllium	1	0.6	0.4	NA	NA	NA	NA	NA
Cadmium	9.8	ND 0.5	ND 0.5	NA	NA	NA	NA	NA
Calcium	14700	61000	63000	NA	NA	NA	NA	NA
Chromium	99	14	16	NA	NA	NA	NA	NA
Cobalt	14.7	6.2	7.5	NA	NA	NA	NA	NA
Copper	280	16	16	NA	NA	NA	NA	NA
Cyanide (total)	NA	ND 0.1	ND 0.1	NA	NA	NA	NA	NA
Iron	26700	18000	17000	NA	NA	NA	NA	NA
Lead	1830	11	9	NA	NA	NA	NA	NA
Magnesium	3160	16000	16000	NA	NA	NA	NA	NA
Manganese	838	470	420	NA	NA	NA	NA	NA
Mercury	1.1	ND 0.25	ND 0.25	NA	NA	NA	NA	NA
Nickel	102	14	17	NA	NA	NA	NA	NA
Potassium	1850	1800	1600	NA	NA	NA	NA	NA
Selenium	2	ND 0.5	ND 0.5	NA	NA	NA	NA	NA
Silver	ND 0.53	ND 0.5	ND 0.5	NA	NA	NA	NA	NA
Sodium	241	380	410	NA	NA	NA	NA	NA
Thallium	ND 0.39	ND 0.5	0.3J	NA	NA	NA	NA	NA
Vanadium	65.7	20	20	NA	NA	NA	NA	NA
Zinc	1500	58	96	NA	NA	NA	NA	NA
Wet Chemistry (mg/kg)								
Total Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons	ND 94	2200	140	2000	3200	750	820	14000
Petroleum Products (mg/kg)								
Gasoline	NA	NA	NA	NA	NA	NA	NA	NA
Kerosene	NA	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	NA	NA	NA	NA	NA	NA	NA	NA
Lubricating Oil	NA	NA	NA	NA	NA	NA	NA	NA

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ND = Not Detected
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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-R 2.0-4.0' Jan-92	MW-11/BH-D 4.0-6.0' Jan-92	MW-8/BH-A 11.5-12.0' Jan-92	MW-11/BH-D 10.8-11.4' Jan-92	MW-11/BH-D 12-12.6' Jan-92	MW-12 10-12' Jan-92	BH-5 (NAPL) 11-12.5' Jan-92
VOCs (mg/kg)							
Acetone	NA	NA	0.09B	ND 1.2	ND 42	ND 1.2	ND 120
Benzene	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
Bromodichloromethane	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
Bromoform	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
Bromomethane	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
2-Butanone	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
Carbon Disulfide	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
Carbon Tetrachloride	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
Chlorobenzene	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
Chloroethane	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
Chloroform	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
Chloromethane	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
Dibromochloromethane	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
1,1-Dichloroethane	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
1,2-Dichloroethane	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
1,1-Dichloroethene	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
1,2-Dichloroethene (Total)	NA	NA	0.18	ND 1.2	37J	0.26J	ND 120
1,2-Dichloropropane	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
cis-1,3-Dichloropropene	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
trans-1,3-Dichloropropene	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
Ethylbenzene	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
2-Hexanone	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
Methylene Chloride	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
4-Methyl-2-Pentanone	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
Styrene	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
1,1,2,2-Tetrachloroethane	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
Tetrachloroethene	NA	NA	0.01J	ND 1.2	ND 42	ND 1.2	ND 120
Toluene	NA	NA	0.01J	ND 1.2	ND 42	ND 1.2	ND 120
1,1,1-Trichloroethane	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
1,1,2-Trichloroethane	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
Trichloroethene	NA	NA	0.41	17	570	18	2000
Vinyl Acetate	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
Vinyl Chloride	NA	NA	ND 0.033	ND 1.2	ND 42	ND 1.2	ND 120
Xylenes (Total)	NA	NA	0.88	1.6	58	ND 1.2	64J

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-R 2.0-4.0' Jan-92	MW-11/BH-D 4.0-6.0' Jan-92	MW-8/BH-A 11.5-12.0' Jan-92	MW-11/BH-D 10.8-11.4' Jan-92	MW-11/BH-D 12-12.6' Jan-92	MW-12 10-12' Jan-92	BH-5 (NAPL) 11-12.5' Jan-92
SVOCs (mg/kg)							
Acenaphthene	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA
Benzo (a) anthracene	NA	NA	NA	NA	NA	NA	NA
Benzo (b) fluoranthene	NA	NA	NA	NA	NA	NA	NA
Benzo (k) fluoranthene	NA	NA	NA	NA	NA	NA	NA
Benzo (g,h,i) perylene	NA	NA	NA	NA	NA	NA	NA
Benzo (a) pyrene	NA	NA	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroethoxy) methane	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroethyl) ether	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroisopropyl) ether	NA	NA	NA	NA	NA	NA	NA
Bis (2-ethylhexyl) phthalate	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NA	NA	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA
1-Chloropropane	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA
Dibenzo (a,h) anthracene	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA

NA = Not Available
ND = Not Detected
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B = Compound also detected in the method blank associated with this sample

TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-R 2.0-4.0' Jan-92	MW-11/BH-D 4.0-6.0' Jan-92	MW-8/BH-A 11.5-12.0' Jan-92	MW-11/BH-D 10.8-11.4' Jan-92	MW-11/BH-D 12-12.6' Jan-92	MW-12 10-12' Jan-92	BH-5 (NAPL) 11-12.5' Jan-92
SVOCs (mg/kg)							
Fluorene	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NA	NA	NA	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	NA	NA	NA	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA
Acid Extractables (mg/kg)							
Benzoic acid	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	NA	NA	NA	NA	NA	NA	NA
Phenol	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA

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ND = Not Detected
J = Associated value is estimated
D = Value quantitated from a dilution
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B = Compound also detected in the method blank associated with this sample

TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-R 2.0-4.0' Jan-92	MW-11/BH-D 4.0-6.0' Jan-92	MW-8/BH-A 11.5-12.0' Jan-92	MW-11/BH-D 10.8-11.4' Jan-92	MW-11/BH-D 12-12.6' Jan-92	MW-12 10-12' Jan-92	BH-5 (NAPL) 11-12.5' Jan-92
Metals (mg/kg)							
Aluminum	NA	NA	NA	NA	NA	NA	NA
Antimony	NA	NA	NA	NA	NA	NA	NA
Arsenic	NA	NA	NA	NA	NA	NA	NA
Barium	NA	NA	NA	NA	NA	NA	NA
Beryllium	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA
Calcium	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA
Cobalt	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA
Cyanide (total)	NA	NA	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA
Magnesium	NA	NA	NA	NA	NA	NA	NA
Manganese	NA	NA	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA
Potassium	NA	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA
Sodium	NA	NA	NA	NA	NA	NA	NA
Thallium	NA	NA	NA	NA	NA	NA	NA
Vanadium	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA
Wet Chemistry (mg/kg)							
Total Organic Carbon	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons	13000	240	9000	83	NA	3300	1600
Petroleum Products (mg/kg)							
Gasoline	NA	NA	NA	NA	NA	NA	NA
Kerosene	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	NA	NA	NA	NA	NA	NA	NA
Lubricating Oil	NA	NA	NA	NA	NA	NA	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-1-93 0-3' 12/3/93	BH-2-93 0-3' 12/8/93	BH-3-93 1.5-3' 12/8/93	BH-3C-93 1.5-2.5' 12/13/93	BH-4-93 0.5-4' 12/3/93	BH-5-93 8-12.8' 12/1/93
VOCs (mg/kg)						
Acetone	0.01J	0.002J	0.049J	0.045J	NA	ND 0.011J
Benzene	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
Bromodichloromethane	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
Bromoform	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
Bromomethane	ND 0.012	ND 0.014	ND 0.013	0.003J	NA	ND 0.011J
2-Butanone	ND 0.012J	ND 0.014J	0.009J	ND 0.012J	NA	ND 0.011J
Carbon Disulfide	ND 0.012	ND 0.014	0.002J	ND 0.012	NA	0.003J
Carbon Tetrachloride	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
Chlorobenzene	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
Chloroethane	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
Chloroform	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
Chloromethane	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011J
Dibromochloromethane	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
1,1-Dichloroethane	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
1,2-Dichloroethane	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
1,1-Dichloroethene	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
1,2-Dichloroethene (Total)	0.055	0.006J	0.16D	0.019	NA	0.14
1,2-Dichloropropane	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
cis-1,3-Dichloropropene	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
trans-1,3-Dichloropropene	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
Ethylbenzene	ND 0.012	ND 0.014	0.042	ND 0.012	NA	0.035
2-Hexanone	ND 0.012	ND 0.014	0.006J	ND 0.012	NA	ND 0.011J
Methylene Chloride	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
4-Methyl-2-Pentanone	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
Styrene	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
1,1,2,2-Tetrachloroethane	ND 0.012J	ND 0.014J	ND 0.013J	ND 0.012	NA	ND 0.011
Tetrachloroethene	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
Toluene	ND 0.012	ND 0.014	0.039	ND 0.012	NA	ND 0.011
1,1,1-Trichloroethane	ND 0.012	ND 0.014	ND 0.013	0.008J	NA	ND 0.011
1,1,2-Trichloroethane	ND 0.012	ND 0.014	ND 0.013	ND 0.012	NA	ND 0.011
Trichloroethene	0.15J	0.005J	ND 0.013	0.008J	NA	0.22D
Vinyl Acetate	NA	NA	NA	NA	NA	NA
Vinyl Chloride	ND 0.012	ND 0.014	0.042	ND 0.012	NA	ND 0.011
Xylenes (Total)	ND 0.012	ND 0.014	0.19D	ND 0.012	NA	0.006J

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-1-93 0-3' 12/3/93	BH-2-93 0-3' 12/8/93	BH-3-93 1.5-3' 12/8/93	BH-3C-93 1.5-2.5' 12/13/93	BH-4-93 0.5-4' 12/3/93	BH-5-93 8-12.8' 12/1/93
SVOCs (mg/kg)						
Acenaphthene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Acenaphthylene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Anthracene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Benzo (a) anthracene	ND 0.39	NA	ND 0.44	NA	NA	0.055J
Benzo (b) fluoranthene	ND 0.39	NA	ND 0.44J	NA	NA	ND 0.38
Benzo (k) fluoranthene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Benzo (g,h,i) perylene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Benzo (a) pyrene	ND 0.39	NA	ND 0.44	NA	NA	0.061J
Benzyl alcohol	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Bis (2-chloroethoxy) methane	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Bis (2-chloroethyl) ether	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Bis (2-chloroisopropyl) ether	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Bis (2-ethylhexyl) phthalate	ND 0.66	NA	ND 0.44	NA	NA	ND 0.96
4-Bromophenyl phenyl ether	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Butyl benzyl phthalate	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Carbazole	ND 0.39	NA	ND 0.44J	NA	NA	ND 0.38
4-Chloroaniline	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
2-Chloronaphthalene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
4-Chlorophenyl phenyl ether	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
1-Chloropropane	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Chrysene	ND 0.39	NA	ND 0.44	NA	NA	0.073J
Dibenzo (a,h) anthracene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Dibenzofuran	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Di-n-butyl phthalate	ND 0.39	NA	ND 0.44	NA	NA	0.099J
1,2-Dichlorobenzene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
1,3-Dichlorobenzene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
1,4-Dichlorobenzene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
3,3'-Dichlorobenzidine	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Diethyl phthalate	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Dimethyl phthalate	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
2,4-Dinitrotoluene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
2,6-Dinitrotoluene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Di-n-octyl phthalate	ND 0.39J	NA	ND 0.44J	NA	NA	ND 0.38J
Fluoranthene	0.1J	NA	0.13J	NA	NA	0.19J

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-1-93 0-3' 12/3/93	BH-2-93 0-3' 12/8/93	BH-3-93 1.5-3' 12/8/93	BH-3C-93 1.5-2.5' 12/13/93	BH-4-93 0.5-4' 12/3/93	BH-5-93 8-12.8' 12/1/93
SVOCs (mg/kg)						
Fluorene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Hexachlorobenzene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Hexachlorobutadiene	ND 0.39J	NA	ND 0.44	NA	NA	ND 0.38
Hexachlorocyclopentadiene	ND 0.39J	NA	ND 0.44	NA	NA	ND 0.38J
Hexachloroethane	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Indeno (1,2,3-cd) pyrene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Isophorone	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
2-Methylnaphthalene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Naphthalene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Nitrobenzene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
2-Nitroaniline	ND 0.98	NA	ND 1.1	NA	NA	ND 0.96
3-Nitroaniline	ND 0.98	NA	ND 1.1	NA	NA	ND 0.96
4-Nitroaniline	ND 0.98	NA	ND 1.1J	NA	NA	ND 0.96
N-Nitrosodiphenylamine	ND 0.39J	NA	ND 0.44	NA	NA	ND 0.38J
N-Nitroso-di-n-propylamine	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Phenanthrene	ND 0.39	NA	ND 0.44	NA	NA	0.13J
Pyrene	0.066J	NA	0.15J	NA	NA	0.11J
1,2,4-Trichlorobenzene	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
Acid Extractables (mg/kg)						
Benzoic acid	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
2-Chlorophenol	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
2,4-Dichlorophenol	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
2,4-Dimethylphenol	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
2,4-Dinitrophenol	ND 0.98	NA	ND 1.1J	NA	NA	ND 0.96
4,6-Dinitro-2-methylphenol	ND 0.98	NA	ND 1.1	NA	NA	ND 0.96
2-Methylphenol	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
4-Methylphenol	ND 0.39J	NA	ND 0.44	NA	NA	ND 0.38J
2-Nitrophenol	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
4-Nitrophenol	ND 0.98	NA	ND 1.1	NA	NA	ND 0.96
Pentachlorophenol	ND 0.98	NA	ND 1.1	NA	NA	ND 0.96
Phenol	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38
2,4,5-Trichlorophenol	ND 0.98	NA	ND 1.1	NA	NA	ND 0.96
2,4,6-Trichlorophenol	ND 0.39	NA	ND 0.44	NA	NA	ND 0.38

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-1-93 0-3' 12/3/93	BH-2-93 0-3' 12/8/93	BH-3-93 1.5-3' 12/8/93	BH-3C-93 1.5-2.5' 12/13/93	BH-4-93 0.5-4' 12/3/93	BH-5-93 8-12.8' 12/1/93
Metals (mg/kg)						
Aluminum	12800	18100	29600	17000	NA	4310
Antimony	ND 1.9J	ND 2.3	ND 2.2	ND 4.3	NA	ND 1.9
Arsenic	8	8.3	0.88	6.1	NA	1.3
Barium	92.4	137	235	233	NA	39.5
Beryllium	ND 0.47	ND 0.85	ND 1	0.88	NA	ND 0.07
Cadmium	ND 1.4	2	ND 1.3	ND 0.78	NA	ND 0.84
Calcium	57400	11900	3730	3660	NA	71000
Chromium	18.8	26.6	30	23.1	NA	9.7
Cobalt	12.5	12.5	8.3	13.1	NA	3.9
Copper	24.4J	26.1	9.7	21.3	NA	9.4
Cyanide (total)	NA	NA	NA	NA	NA	NA
Iron	19600	32000	20000	31900	NA	9430
Lead	60J	20.3	13.9	16.3	NA	6.8
Magnesium	19400	8730	5690	5650	NA	28300
Manganese	475	408	182	999	NA	317
Mercury	ND 0.05	ND 0.11	ND 0.17	ND 0.06	NA	ND 0.06
Nickel	21.8	29.6	31	33	NA	ND 6.5
Potassium	2140	2720	2620	1980	NA	1180
Selenium	ND 0.24J	ND 0.28J	ND 0.27	ND 0.38	NA	ND 0.23
Silver	ND 0.42J	ND 0.51	ND 0.48	ND 0.73	NA	ND 0.41
Sodium	362J	ND 219	347	ND 159	NA	ND 197
Thallium	ND 0.31	0.62	ND 0.77	ND 0.31	NA	ND 0.3
Vanadium	25	41.3	27.3	31.7	NA	11.1
Zinc	74.6J	89.6	159	102	NA	52.8
Wet Chemistry (mg/kg)						
Total Organic Carbon	NA	NA	15900	NA	NA	9600
Total Petroleum Hydrocarbons	ND 36.8	ND 44.3	ND 41.7	ND 37	NA	ND 36.1
Petroleum Products (mg/kg)						
Gasoline	NA	NA	NOT PRESENT J	NA	NOT PRESENT	NOT PRESENT
Kerosene	NA	NA	ND 33J	NA	ND 1300	ND 33
Fuel Oil	NA	NA	180J	NA	55000	23J
Lubricating Oil	NA	NA	PRESENT	NA	NOT PRESENT	PRESENT

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-6-93 1-4' 12/1/93	BH-6-93 8-11' 12/1/93	BH-AST1-93 2-3.5' 12/15/93	BH-D2-93 2-3.5' (DUP) 12/15/93	BH-DS1-93 1-4' 12/13/93	BH-DS2-93 0.5-3' 12/13/93
VOCs (mg/kg)						
Acetone	0.073J	ND 0.012J	0.008J	0.008J	0.012J	0.029J
Benzene	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
Bromodichloromethane	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
Bromoform	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
Bromomethane	ND 0.012J	ND 0.012J	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
2-Butanone	0.002J	ND 0.012J	ND 0.012J	ND 0.012J	ND 0.012J	0.015J
Carbon Disulfide	ND 0.012	ND 0.012	ND 0.012J	ND 0.012J	ND 0.012	0.018J
Carbon Tetrachloride	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
Chlorobenzene	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
Chloroethane	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
Chloroform	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
Chloromethane	ND 0.012J	ND 0.012J	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
Dibromochloromethane	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
1,1-Dichloroethane	ND 0.012	ND 0.012	0.083J	0.18J	0.019	ND 1.4D
1,2-Dichloroethane	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
1,1-Dichloroethene	ND 0.012	ND 0.012	ND 0.012J	0.007J	0.004J	ND 1.4D
1,2-Dichloroethene (Total)	ND 0.012	ND 0.012	0.57D	0.66DJ	ND 0.012	ND 0.011J
1,2-Dichloropropane	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
cis-1,3-Dichloropropene	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
trans-1,3-Dichloropropene	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
Ethylbenzene	ND 0.012	ND 0.012	ND 0.012	ND 0.012	0.007J	0.048J
2-Hexanone	ND 0.012J	ND 0.012J	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
Methylene Chloride	ND 0.012	ND 0.012	0.001J	0.002J	0.003J	ND 0.011J
4-Methyl-2-Pentanone	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
Styrene	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
1,1,2,2-Tetrachloroethane	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
Tetrachloroethene	ND 0.012	ND 0.012	0.003J	0.005J	ND 0.012	ND 0.011J
Toluene	ND 0.012	ND 0.012	0.004J	0.007J	ND 0.012	0.023J
1,1,1-Trichloroethane	ND 0.012	ND 0.012	0.022J	0.071J	0.025	16D
1,1,2-Trichloroethane	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
Trichloroethene	ND 0.012	ND 0.012	0.36DJ	0.85DJ	0.047	0.004J
Vinyl Acetate	NA	NA	NA	NA	NA	NA
Vinyl Chloride	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.012	ND 0.011J
Xylenes (Total)	ND 0.012	ND 0.012	0.003J	ND 0.012	0.002J	0.56DJ

NA = Not Available
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B = Compound also detected in the method blank associated with this sample.

TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-6-93 1-4' 12/1/93	BH-6-93 8-11' 12/1/93	BH-AST1-93 2-3.5' 12/15/93	BH-D2-93 2-3.5' (DUP) 12/15/93	BH-DS1-93 1-4' 12/13/93	BH-DS2-93 0.5-3' 12/13/93
SVOCs (mg/kg)						
Acenaphthene	NA	NA	NA	NA	NA	NA
Acenaphthylene	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA
Benzo (a) anthracene	NA	NA	NA	NA	NA	NA
Benzo (b) fluoranthene	NA	NA	NA	NA	NA	NA
Benzo (k) fluoranthene	NA	NA	NA	NA	NA	NA
Benzo (g,h,i) perylene	NA	NA	NA	NA	NA	NA
Benzo (a) pyrene	NA	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA	NA
Bis (2-chloroethoxy) methane	NA	NA	NA	NA	NA	NA
Bis (2-chloroethyl) ether	NA	NA	NA	NA	NA	NA
Bis (2-chloroisopropyl) ether	NA	NA	NA	NA	NA	NA
Bis (2-ethylhexyl) phthalate	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NA	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA	NA
1-Chloropropane	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA
Dibenzo (a,h) anthracene	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-6-93 1-4' 12/1/93	BH-6-93 8-11' 12/1/93	BH-AST1-93 2-3.5' 12/15/93	BH-D2-93 2-3.5' (DUP) 12/15/93	BH-DS1-93 1-4' 12/13/93	BH-DS2-93 0.5-3' 12/13/93
SVOCs (mg/kg)						
Fluorene	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	NA
Hexachloroethane	NA	NA	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	NA	NA	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA
Nitrobenzene	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA
Acid Extractables (mg/kg)						
Benzoic acid	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA
Pentachlorophenol	NA	NA	NA	NA	NA	NA
Phenol	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-6-93 1-4' 12/1/93	BH-6-93 8-11' 12/1/93	BH-AST1-93 2-3.5' 12/15/93	BH-D2-93 2-3.5' (DUP) 12/15/93	BH-DS1-93 1-4' 12/13/93	BH-DS2-93 0.5-3' 12/13/93
Metals (mg/kg)						
Aluminum	15500	3810	12900	13300	13900	11700
Antimony	ND 1.9	ND 1.9	ND 4.3	ND 4.3	ND 4.4	ND 4.2
Arsenic	4.6	2	3.5J	5.7J	1.8B	4.9
Barium	110	35	120	157	151	113
Beryllium	ND 0.7	ND 0.07	0.72	0.81	0.85	0.63
Cadmium	1.9	ND 0.7	ND 0.77	ND 0.78	ND 0.79	ND 0.77
Calcium	56000	81800	81900	88400	120000	76700
Chromium	22.2	6.7	19.2	19.6	17.7	19.4
Cobalt	10.3	3.1	9.5	8	7.8	8.4
Copper	20.7	8.4	545J	42.3J	25.2	21.1
Cyanide (total)	NA	NA	NA	NA	NA	NA
Iron	25300	8250	19300	22800	17300	19400
Lead	14.3	12.4	41.2J	84.7J	12.3	13.2
Magnesium	17200	37500	19800	19900	19500	19100
Manganese	456	273	685	704	703	509
Mercury	ND 0.06	ND 0.06	0.24J	0.1J	ND 0.05	ND 0.05
Nickel	25.2	ND 5.3	27.9	28.8	208	41.6
Potassium	2490	1040	2100	2340	2250	1540
Selenium	ND 0.23	ND 0.23	ND 0.37	ND 0.38J	ND 0.38J	ND 0.37
Silver	ND 0.42	ND 0.42	ND 0.72	ND 0.73	ND 0.74	ND 0.72
Sodium	269	ND 148	420	417	ND 254	ND 221
Thallium	ND 0.3	ND 0.3	ND 0.3	ND 0.31	ND 0.31J	ND 0.3
Vanadium	31.6	10.4	23.7	27.9	20.6	21.3
Zinc	70.4	44.9	152J	96.1J	74.9	77.7
Wet Chemistry (mg/kg)						
Total Organic Carbon	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons	ND 36.8	ND 36.7	358J	522J	ND 37.4	1420
Petroleum Products (mg/kg)						
Gasoline	NA	NA	NA	NA	NA	NA
Kerosene	NA	NA	NA	NA	NA	NA
Fuel Oil	NA	NA	NA	NA	NA	NA
Lubricating Oil	NA	NA	NA	NA	NA	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-DS3-93 0.5-1.2' 12/13/93	BH-EDW1-93 8-11' 12/14/93	BH-T1-93 0.5-1.5' 12/14/93	BH-T2-93 0-2' 12/14/93	BH-T3-93 2-4' 12/14/93	BH-WDW1-93 0.7-0.9' 12/15/93
VOCs (mg/kg)						
Acetone	ND 0.001	ND 2.9	ND 0.012J	0.013J	0.058J	ND 0.011J
Benzene	0.001J	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
Bromodichloromethane	ND 0.011J	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
Bromoform	ND 0.011J	ND 2.9	ND 0.012	ND 0.011	ND 0.013J	ND 0.011J
Bromomethane	ND 0.011J	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
2-Butanone	ND 0.011J	ND 2.9	ND 0.012J	ND 0.011J	0.015J	ND 0.011J
Carbon Disulfide	ND 0.011J	ND 2.9	ND 0.012J	ND 0.011J	0.005J	ND 0.011J
Carbon Tetrachloride	ND 0.011J	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
Chlorobenzene	ND 0.011J	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
Chloroethane	ND 0.011J	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
Chloroform	ND 0.011	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
Chloromethane	ND 0.011J	ND 2.9	ND 0.012	ND 0.011	ND 0.013J	ND 0.011J
Dibromochloromethane	ND 0.011J	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
1,1-Dichloroethane	0.007J	ND 2.9	0.006J	ND 0.011	ND 0.013	ND 0.011
1,2-Dichloroethane	ND 0.011	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
1,1-Dichloroethene	ND 0.011	ND 2.9	0.12	ND 0.011	ND 0.013	ND 0.011
1,2-Dichloroethene (Total)	ND 0.011	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
1,2-Dichloropropane	ND 0.011J	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
cis-1,3-Dichloropropene	ND 0.011J	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
trans-1,3-Dichloropropene	ND 0.011J	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
Ethylbenzene	0.037J	17D	1.1DJ	0.008J	ND 0.013	ND 0.011
2-Hexanone	0.004J	ND 2.9	ND 0.012	ND 0.011	ND 0.013J	ND 0.011J
Methylene Chloride	0.093	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
4-Methyl-2-Pentanone	0.011J	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
Styrene	ND 0.011J	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
1,1,2,2-Tetrachloroethane	ND 0.011J	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
Tetrachloroethene	0.008J	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
Toluene	0.025J	1.8DJ	0.16DJ	0.008J	ND 0.013	ND 0.011
1,1,1-Trichloroethane	0.18J	21D	1.2DJ	0.054	0.002J	ND 0.011
1,1,2-Trichloroethane	ND 0.011J	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
Trichloroethene	ND 0.011J	1.7DJ	ND 1.5D	0.002J	ND 0.013	ND 0.011
Vinyl Acetate	NA	NA	NA	NA	NA	NA
Vinyl Chloride	ND 0.011J	ND 2.9	ND 0.012	ND 0.011	ND 0.013	ND 0.011
Xylenes (Total)	0.24J	92D	7D	0.041	ND 0.013	ND 0.011

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-DS3-93 0.5-1.2' 12/13/93	BH-EDW1-93 8-11' 12/14/93	BH-T1-93 0.5-1.5' 12/14/93	BH-T2-93 0-2' 12/14/93	BH-T3-93 2-4' 12/14/93	BH-WDW1-93 0.7-0.9' 12/15/93
SVOCs (mg/kg)						
Acenaphthene	NA	ND 0.38	NA	NA	NA	NA
Acenaphthylene	NA	ND 0.38	NA	NA	NA	NA
Anthracene	NA	ND 0.38	NA	NA	NA	NA
Benzo (a) anthracene	NA	ND 0.38	NA	NA	NA	NA
Benzo (b) fluoranthene	NA	ND 0.38J	NA	NA	NA	NA
Benzo (k) fluoranthene	NA	ND 0.38	NA	NA	NA	NA
Benzo (g,h,i) perylene	NA	ND 0.38	NA	NA	NA	NA
Benzo (a) pyrene	NA	ND 0.38	NA	NA	NA	NA
Benzyl alcohol	NA	ND 0.38	NA	NA	NA	NA
Bis (2-chloroethoxy) methane	NA	ND 0.38	NA	NA	NA	NA
Bis (2-chloroethyl) ether	NA	ND 0.38	NA	NA	NA	NA
Bis (2-chloroisopropyl) ether	NA	ND 0.38	NA	NA	NA	NA
Bis (2-ethylhexyl) phthalate	NA	ND 0.38	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NA	ND 0.38	NA	NA	NA	NA
Butyl benzyl phthalate	NA	ND 0.38	NA	NA	NA	NA
Carbazole	NA	ND 0.38J	NA	NA	NA	NA
4-Chloroaniline	NA	ND 0.38	NA	NA	NA	NA
2-Chloronaphthalene	NA	ND 0.38	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NA	ND 0.38	NA	NA	NA	NA
1-Chloropropane	NA	ND 0.38	NA	NA	NA	NA
Chrysene	NA	ND 0.38	NA	NA	NA	NA
Dibenzo (a,h) anthracene	NA	ND 0.38	NA	NA	NA	NA
Dibenzofuran	NA	ND 0.38	NA	NA	NA	NA
Di-n-butyl phthalate	NA	ND 0.38	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	ND 0.38	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	ND 0.38	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	ND 0.38	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NA	ND 0.38	NA	NA	NA	NA
Diethyl phthalate	NA	ND 0.38	NA	NA	NA	NA
Dimethyl phthalate	NA	ND 0.38	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	ND 0.38	NA	NA	NA	NA
2,6-Dinitrotoluene	NA	ND 0.38	NA	NA	NA	NA
Di-n-octyl phthalate	NA	ND 0.38J	NA	NA	NA	NA
Fluoranthene	NA	ND 0.38	NA	NA	NA	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-DS3-93 0.5-1.2' 12/13/93	BH-EDW1-93 8-11' 12/14/93	BH-T1-93 0.5-1.5' 12/14/93	BH-T2-93 0-2' 12/14/93	BH-T3-93 2-4' 12/14/93	BH-WDW1-93 0.7-0.9' 12/15/93
SVOCs (mg/kg)						
Fluorene	NA	ND 0.38	NA	NA	NA	NA
Hexachlorobenzene	NA	ND 0.38	NA	NA	NA	NA
Hexachlorobutadiene	NA	ND 0.38	NA	NA	NA	NA
Hexachlorocyclopentadiene	NA	ND 0.38	NA	NA	NA	NA
Hexachloroethane	NA	ND 0.38	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	NA	ND 0.38	NA	NA	NA	NA
Isophorone	NA	ND 0.38	NA	NA	NA	NA
2-Methylnaphthalene	NA	ND 0.38	NA	NA	NA	NA
Naphthalene	NA	ND 0.38	NA	NA	NA	NA
Nitrobenzene	NA	ND 0.38	NA	NA	NA	NA
2-Nitroaniline	NA	ND 0.95	NA	NA	NA	NA
3-Nitroaniline	NA	ND 0.95	NA	NA	NA	NA
4-Nitroaniline	NA	ND 0.95J	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	ND 0.38	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NA	ND 0.38	NA	NA	NA	NA
Phenanthrene	NA	ND 0.38	NA	NA	NA	NA
Pyrene	NA	ND 0.38	NA	NA	NA	NA
1,2,4-Trichlorobenzene	NA	ND 0.38	NA	NA	NA	NA
Acid Extractables (mg/kg)						
Benzoic acid	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NA	ND 0.38	NA	NA	NA	NA
2-Chlorophenol	NA	ND 0.38	NA	NA	NA	NA
2,4-Dichlorophenol	NA	ND 0.38	NA	NA	NA	NA
2,4-Dimethylphenol	NA	ND 0.38	NA	NA	NA	NA
2,4-Dinitrophenol	NA	ND 0.95J	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NA	ND 0.95	NA	NA	NA	NA
2-Methylphenol	NA	ND 0.38	NA	NA	NA	NA
4-Methylphenol	NA	ND 0.38	NA	NA	NA	NA
2-Nitrophenol	NA	ND 0.38	NA	NA	NA	NA
4-Nitrophenol	NA	ND 0.95	NA	NA	NA	NA
Pentachlorophenol	NA	ND 0.95	NA	NA	NA	NA
Phenol	NA	ND 0.38	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	ND 0.95	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	ND 0.38	NA	NA	NA	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-DS3-93 0.5-1.2' 12/13/93	BH-EDW1-93 8-11' 12/14/93	BH-T1-93 0.5-1.5' 12/14/93	BH-T2-93 0-2' 12/14/93	BH-T3-93 2-4' 12/14/93	BH-WDW1-93 0.7-0.9' 12/15/93
Metals (mg/kg)						
Aluminum	17800	1600	NA	NA	NA	23500
Antimony	ND 4.1J	ND 4.2	NA	NA	NA	ND 4.2
Arsenic	2.6	0.98	NA	NA	NA	5.6
Barium	296	15.9	NA	NA	NA	357
Beryllium	1.3	ND 0.21	NA	NA	NA	2.6
Cadmium	ND 0.73	ND 0.76	NA	NA	NA	ND 0.75
Calcium	26000J	52000	NA	NA	NA	92900
Chromium	20.6	ND 2	NA	NA	NA	17.5
Cobalt	11.7	ND 1.6	NA	NA	NA	5.5
Copper	53.4J	5.3	NA	NA	NA	71.8
Cyanide (total)	NA	NA	NA	NA	NA	NA
Iron	27200	4150	NA	NA	NA	14200
Lead	64.9J	6.9	NA	NA	NA	54.3
Magnesium	6770	22100	NA	NA	NA	13200
Manganese	1220J	213	NA	NA	NA	2700
Mercury	0.07	ND 0.05	NA	NA	NA	ND 0.05
Nickel	22.8	ND 4.5	NA	NA	NA	22.9
Potassium	1620	398	NA	NA	NA	1790
Selenium	0.99J	ND 0.37J	NA	NA	NA	ND 0.36
Silver	ND 0.69	ND 0.71	NA	NA	NA	ND 0.71
Sodium	1010	ND 192	NA	NA	NA	459
Thallium	ND 0.29J	ND 0.3J	NA	NA	NA	ND 0.3
Vanadium	28.6	5.6	NA	NA	NA	15.4
Zinc	115J	56.2	NA	NA	NA	132
Wet Chemistry (mg/kg)						
Total Organic Carbon	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons	624	ND 35.8	236	54.8	ND 40	ND 35.9
Petroleum Products (mg/kg)						
Gasoline	NA	NA	NA	NA	NA	NA
Kerosene	NA	NA	NA	NA	NA	NA
Fuel Oil	NA	NA	NA	NA	NA	NA
Lubricating Oil	NA	NA	NA	NA	NA	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-13 2-4' 12/8/93	MW-13 8-11' 12/8/93	BH-D1-93 8-11' (DUP) 12/8/93	MW-14 0-2' 12/6/93	MW-14 10-11' 12/6/93	MW-5A-93 1-4.5' 12/1/93
VOCs (mg/kg)						
Acetone	0.003J	0.007J	0.002J	ND 0.012J	0.004J	0.014J
Benzene	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
Bromodichloromethane	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
Bromoform	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
Bromomethane	ND 0.012	ND 0.011	0.002J	ND 0.012	ND 0.012	ND 0.011J
2-Butanone	ND 0.012J	ND 0.011J	ND 0.011J	ND 0.012J	ND 0.012J	ND 0.011J
Carbon Disulfide	ND 0.012	0.001J	0.002J	ND 0.012	ND 0.012	ND 0.011
Carbon Tetrachloride	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
Chlorobenzene	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
Chloroethane	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
Chloroform	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
Chloromethane	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011J
Dibromochloromethane	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
1,1-Dichloroethane	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
1,2-Dichloroethane	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
1,1-Dichloroethene	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
1,2-Dichloroethene (Total)	ND 0.012J	ND 0.011J	ND 0.011J	ND 0.012J	0.15J	ND 0.011
,2-Dichloropropane	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
cis-1,3-Dichloropropene	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
trans-1,3-Dichloropropene	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
Ethylbenzene	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
2-Hexanone	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011J
Methylene Chloride	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
4-Methyl-2-Pentanone	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
Styrene	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
1,1,2,2-Tetrachloroethane	ND 0.012J	ND 0.011J	ND 0.011J	ND 0.012J	ND 0.012J	ND 0.011
Tetrachloroethene	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
Toluene	ND 0.012	ND 0.011	ND 0.011	ND 0.012	0.001J	ND 0.011
1,1,1-Trichloroethane	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
1,1,2-Trichloroethane	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
Trichloroethene	ND 0.012	ND 0.011	ND 0.011	ND 0.012	0.005J	ND 0.011
Vinyl Acetate	NA	NA	NA	NA	NA	NA
Vinyl Chloride	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011
Xylenes (Total)	ND 0.012	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.011

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B = Compound also detected in the method blank associated with this sample

TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-13 2-4' 12/8/93	MW-13 8-11' 12/8/93	BH-D1-93 8-11' (DUP) 12/8/93	MW-14 0-2' 12/6/93	MW-14 10-11' 12/6/93	MW-5A-93 1-4.5' 12/1/93
SVOCs (mg/kg)						
Acenaphthene	NA	NA	NA	NA	ND 0.4	NA
Acenaphthylene	NA	NA	NA	NA	ND 0.4	NA
Anthracene	NA	NA	NA	NA	ND 0.4	NA
Benzo (a) anthracene	NA	NA	NA	NA	ND 0.4	NA
Benzo (b) fluoranthene	NA	NA	NA	NA	ND 0.4J	NA
Benzo (k) fluoranthene	NA	NA	NA	NA	ND 0.4	NA
Benzo (g,h,i) perylene	NA	NA	NA	NA	ND 0.4	NA
Benzo (a) pyrene	NA	NA	NA	NA	ND 0.4	NA
Benzyl alcohol	NA	NA	NA	NA	ND 0.4	NA
Bis (2-chloroethoxy) methane	NA	NA	NA	NA	ND 0.4	NA
Bis (2-chloroethyl) ether	NA	NA	NA	NA	ND 0.4	NA
Bis (2-chloroisopropyl) ether	NA	NA	NA	NA	ND 0.4	NA
Bis (2-ethylhexyl) phthalate	NA	NA	NA	NA	ND 0.53	NA
4-Bromophenyl phenyl ether	NA	NA	NA	NA	ND 0.4	NA
Butyl benzyl phthalate	NA	NA	NA	NA	ND 0.4	NA
Carbazole	NA	NA	NA	NA	ND 0.4J	NA
4-Chloroaniline	NA	NA	NA	NA	ND 0.4	NA
2-Chloronaphthalene	NA	NA	NA	NA	ND 0.4	NA
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	ND 0.4	NA
1-Chloropropane	NA	NA	NA	NA	ND 0.4	NA
Chrysene	NA	NA	NA	NA	ND 0.4	NA
Dibenzo (a,h) anthracene	NA	NA	NA	NA	ND 0.4	NA
Dibenzofuran	NA	NA	NA	NA	ND 0.4	NA
Di-n-butyl phthalate	NA	NA	NA	NA	ND 0.4	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	ND 0.4	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	ND 0.4	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	ND 0.4	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	ND 0.4	NA
Diethyl phthalate	NA	NA	NA	NA	ND 0.4	NA
Dimethyl phthalate	NA	NA	NA	NA	ND 0.4	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	ND 0.4	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	ND 0.4	NA
Di-n-octyl phthalate	NA	NA	NA	NA	ND 0.4J	NA
Fluoranthene	NA	NA	NA	NA	ND 0.4	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-13 2-4' 12/8/93	MW-13 8-11' 12/8/93	BH-D1-93 8-11' (DUP) 12/8/93	MW-14 0-2' 12/6/93	MW-14 10-11' 12/6/93	MW-5A-93 1-4.5' 12/1/93
SVOCs (mg/kg)						
Fluorene	NA	NA	NA	NA	ND 0.4	NA
Hexachlorobenzene	NA	NA	NA	NA	ND 0.4	NA
Hexachlorobutadiene	NA	NA	NA	NA	ND 0.4	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	ND 0.4	NA
Hexachloroethane	NA	NA	NA	NA	ND 0.4	NA
Indeno (1,2,3-cd) pyrene	NA	NA	NA	NA	ND 0.4	NA
Isophorone	NA	NA	NA	NA	ND 0.4	NA
2-Methylnaphthalene	NA	NA	NA	NA	ND 0.4	NA
Naphthalene	NA	NA	NA	NA	ND 0.4	NA
Nitrobenzene	NA	NA	NA	NA	ND 0.4	NA
2-Nitroaniline	NA	NA	NA	NA	ND 1	NA
3-Nitroaniline	NA	NA	NA	NA	ND 1	NA
4-Nitroaniline	NA	NA	NA	NA	ND 1J	NA
N-Nitrosodiphenylamine	NA	NA	NA	NA	ND 0.4	NA
N-Nitroso-di-n-propylamine	NA	NA	NA	NA	ND 0.4	NA
Phenanthrene	NA	NA	NA	NA	ND 0.4	NA
Pyrene	NA	NA	NA	NA	ND 0.4	NA
1,2,4-Trichlorobenzene	NA	NA	NA	NA	ND 0.4	NA
Acid Extractables (mg/kg)						
Benzoic acid	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NA	NA	NA	NA	ND 0.4	NA
2-Chlorophenol	NA	NA	NA	NA	ND 0.4	NA
2,4-Dichlorophenol	NA	NA	NA	NA	ND 0.4	NA
2,4-Dimethylphenol	NA	NA	NA	NA	ND 0.4	NA
2,4-Dinitrophenol	NA	NA	NA	NA	ND 1J	NA
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	ND 1	NA
2-Methylphenol	NA	NA	NA	NA	ND 0.4	NA
4-Methylphenol	NA	NA	NA	NA	ND 0.4	NA
2-Nitrophenol	NA	NA	NA	NA	ND 0.4	NA
4-Nitrophenol	NA	NA	NA	NA	ND 1	NA
Pentachlorophenol	NA	NA	NA	NA	ND 1	NA
Phenol	NA	NA	NA	NA	ND 0.4	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	ND 1	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	ND 0.4	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-13 2-4' 12/8/93	MW-13 8-11' 12/8/93	BH-D1-93 8-11' (DUP) 12/8/93	MW-14 0-2' 12/6/93	MW-14 10-11' 12/6/93	MW-5A-93 1-4.5' 12/1/93
Metals (mg/kg)						
Aluminum	13200	3350	2580	15200	4100	9540
Antimony	ND 1.9	ND 1.8	ND 1.8	ND 2.1	ND 2	ND 1.9
Arsenic	1.8	1.2J	2.8J	4.6	1.7	5.9
Barium	185	30.9	26.3	167	37.9	40.4
Beryllium	ND 0.48	ND 0.07	ND 0.07	0.68	ND 0.07	ND 0.46
Cadmium	2	ND 0.85	ND 0.89	2.9	ND 0.81	1.5
Calcium	91200	66200	64500	29500	61100	12500
Chromium	19.5	6.9	7.5	35.4	7.4	12.4
Cobalt	10.7	2.8	2.5	10.9	3.4	7.3
Copper	24.5	6.8	6.2	33.1	10	29.6
Cyanide (total)	NA	NA	NA	NA	NA	NA
Iron	23900	7580	8500	26900	9240	20000
Lead	13.1	6.8	5.3	346	6.3	9.6
Magnesium	19300	27700	25800	12500	25300	3750
Manganese	655	257	229	624	285	716
Mercury	ND 0.06	ND 0.05	ND 0.05	0.37	ND 0.06	ND 0.05
Nickel	24.5	ND 5.6	ND 4.6	31	ND 6.4	25.1
Potassium	2190	924J	666J	2940	1010	911
Selenium	ND 0.24	ND 0.22	ND 0.22	ND 0.25	ND 0.24	ND 0.23
Silver	ND 0.42	ND 0.4	ND 0.4	ND 0.46	ND 0.43	ND 0.41
Sodium	ND 130	ND 137	ND 128	ND 113	ND 161	ND 196
Thallium	ND 0.31	ND 0.29	ND 0.29	0.35	ND 0.31	0.39
Vanadium	25.6	10.6	10.9	33.1	10.4	20.4
Zinc	69.2	51.2	45.6	193	57	76.7
Wet Chemistry (mg/kg)						
Total Organic Carbon	NA	NA	NA	NA	17300	NA
Total Petroleum Hydrocarbons	ND 36.9	ND 34.9	ND 34.6	288	ND 37.7	ND 35.7
Petroleum Products (mg/kg)						
Gasoline	NA	NA	NA	NA	NOT PRESENT	NA
Kerosene	NA	NA	NA	NA	ND 33	NA
Fuel Oil	NA	NA	NA	NA	ND 33	NA
Lubricating Oil	NA	NA	NA	NA	PRESENT	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-5A-93 8-11.8' 12/1/93	BH-DS-E1 4/7/94	BH-DS-NW1 DUPLICATE 4/7/94	BH-DS-E2 4/7/94	BH-DS-N1 4/4/94	BH-DS-N2 4/7/94	BH-8-94 4/7/94
VOCs (mg/kg)							
Acetone	0.005J	ND 0.012	0.014U	ND 0.011	ND 0.012	ND 0.013	ND 0.013
Benzene	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	0.02
Bromodichloromethane	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
Bromoform	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
Bromomethane	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
2-Butanone	ND 0.012J	0.002J	0.002J	ND 0.011	ND 0.012	0.004J	0.001J
Carbon Disulfide	0.001J	ND 0.012J	ND 0.012J	ND 0.011J	ND 0.012J	ND 0.012J	0.001J
Carbon Tetrachloride	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
Chlorobenzene	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
Chloroethane	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
Chloroform	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
Chloromethane	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
Dibromochloromethane	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
1,1-Dichloroethane	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
1,2-Dichloroethane	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
1,1-Dichloroethene	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
1,2-Dichloroethene (Total)	ND 0.012	ND 0.012	ND 0.012	ND 0.011	0.004J	0.001J	0.032
1,2-Dichloropropane	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
cis-1,3-Dichloropropene	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
trans-1,3-Dichloropropene	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
Ethylbenzene	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
2-Hexanone	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
Methylene Chloride	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
4-Methyl-2-Pentanone	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
Styrene	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
1,1,2,2-Tetrachloroethane	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
Tetrachloroethene	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
Toluene	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
1,1,1-Trichloroethane	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
1,1,2-Trichloroethane	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	ND 0.013
Trichloroethene	ND 0.012	ND 0.012	ND 0.012	ND 0.011	0.006J	ND 0.012	ND 0.013
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	0.005J
Xylenes (Total)	ND 0.012	ND 0.012	ND 0.012	ND 0.011	ND 0.012	ND 0.012	0.001J

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-5A-93 8-11.8' 12/1/93	BH-DS-E1 4/7/94	BH-DS-NW1 DUPLICATE 4/7/94	BH-DS-E2 4/7/94	BH-DS-N1 4/4/94	BH-DS-N2 4/7/94	BH-8-94 4/7/94
SVOCs (mg/kg)							
Acenaphthene	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA
Benzo (a) anthracene	NA	NA	NA	NA	NA	NA	NA
Benzo (b) fluoranthene	NA	NA	NA	NA	NA	NA	NA
Benzo (k) fluoranthene	NA	NA	NA	NA	NA	NA	NA
Benzo (g,h,i) perylene	NA	NA	NA	NA	NA	NA	NA
Benzo (a) pyrene	NA	NA	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroethoxy) methane	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroethyl) ether	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroisopropyl) ether	NA	NA	NA	NA	NA	NA	NA
Bis (2-ethylhexyl) phthalate	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NA	NA	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA
1-Chloropropane	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA
Dibenzo (a,h) anthracene	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-5A-93 8-11.8' 12/1/93	BH-DS-E1 4/7/94	BH-DS-NW1 DUPLICATE 4/7/94	BH-DS-E2 4/7/94	BH-DS-N1 4/4/94	BH-DS-N2 4/7/94	BH-8-94 4/7/94
SVOCs (mg/kg)							
Fluorene	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NA	NA	NA	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	NA	NA	NA	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA
Acid Extractables (mg/kg)							
Benzoic acid	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	NA	NA	NA	NA	NA	NA	NA
Phenol	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-5A-93 8-11.8' 12/1/93	BH-DS-E1 4/7/94	BH-DS-NW1 DUPLICATE 4/7/94	BH-DS-E2 4/7/94	BH-DS-N1 4/4/94	BH-DS-N2 4/7/94	BH-8-94 4/7/94
Metals (mg/kg)							
Aluminum	5800	NA	NA	NA	NA	NA	NA
Antimony	ND 1.9	NA	NA	NA	NA	NA	NA
Arsenic	1.5	NA	NA	NA	NA	NA	NA
Barium	43.3	NA	NA	NA	NA	NA	NA
Beryllium	ND 0.07	NA	NA	NA	NA	NA	NA
Cadmium	ND 0.79	NA	NA	NA	NA	NA	NA
Calcium	74100	NA	NA	NA	NA	NA	NA
Chromium	9.6	NA	NA	NA	NA	NA	NA
Cobalt	4.8	NA	NA	NA	NA	NA	NA
Copper	10.9	NA	NA	NA	NA	NA	NA
Cyanide (total)	NA	NA	NA	NA	NA	NA	NA
Iron	11200	NA	NA	NA	NA	NA	NA
Lead	6.8	NA	NA	NA	NA	NA	NA
Magnesium	29700	NA	NA	NA	NA	NA	NA
Manganese	346	NA	NA	NA	NA	NA	NA
Mercury	ND 0.05	NA	NA	NA	NA	NA	NA
Nickel	ND 9.7	NA	NA	NA	NA	NA	NA
Potassium	1530	NA	NA	NA	NA	NA	NA
Selenium	ND 0.23	NA	NA	NA	NA	NA	NA
Silver	ND 0.84	NA	NA	NA	NA	NA	NA
Sodium	ND 209	NA	NA	NA	NA	NA	NA
Thallium	ND 0.3	NA	NA	NA	NA	NA	NA
Vanadium	13.6	NA	NA	NA	NA	NA	NA
Zinc	51.3	NA	NA	NA	NA	NA	NA
Wet Chemistry (mg/kg)							
Total Organic Carbon	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons	ND 36.4	4170J	1310J	2010	3930	2200	ND 38.7
Petroleum Products (mg/kg)							
Gasoline	NA	NA	NA	NA	NA	NA	NA
Kerosene	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	NA	NA	NA	NA	NA	NA	NA
Lubricating Oil	NA	NA	NA	NA	NA	NA	NA

NA = Not Available
ND = Not Detected
J = Associated value is estimated
D = Value quantitated from a dilution
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B = Compound also detected in the method blank associated with this sample

TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-10-94 4/8/94	BH-14A-94 DUPLICATE 4/8/94	BH-11-94 4/8/94	MW-1A 3/31/94	MW-18 3/29/94	MW-19 3/29/94	MW-20 4/5/94
VOCs (mg/kg)							
Acetone	ND 0.011	0.006J	ND 0.012	ND 0.012J	ND 0.012	ND 0.011J	ND 0.011
Benzene	0.002J	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
Bromodichloromethane	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
Bromoform	ND 0.011	ND 0.011	ND 0.012	ND 0.012J	ND 0.012	ND 0.011J	ND 0.011
Bromomethane	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
2-Butanone	ND 0.011	ND 0.011	ND 0.012	ND 0.012J	ND 0.012J	ND 0.011J	ND 0.011J
Carbon Disulfide	ND 0.011J	ND 0.011	ND 0.012J	ND 0.012J	ND 0.012	ND 0.011J	ND 0.011
Carbon Tetrachloride	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
Chlorobenzene	0.023	0.017	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
Chloroethane	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
Chloroform	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
Chloromethane	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
Dibromochloromethane	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
1,1-Dichloroethane	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
1,2-Dichloroethane	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
1,1-Dichloroethene	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
1,2-Dichloroethene (Total)	0.001J	ND 0.011	0.003J	0.008J	ND 0.012	0.008J	ND 0.011
,2-Dichloropropane	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
cis-1,3-Dichloropropene	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
trans-1,3-Dichloropropene	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
Ethylbenzene	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
2-Hexanone	ND 0.011	ND 0.011	ND 0.012	ND 0.012J	ND 0.012	ND 0.011J	ND 0.011
Methylene Chloride	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
4-Methyl-2-Pentanone	ND 0.011	ND 0.011	ND 0.012	ND 0.012J	ND 0.012	ND 0.011J	ND 0.011
Styrene	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
1,1,2,2-Tetrachloroethane	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
Tetrachloroethene	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
Toluene	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
1,1,1-Trichloroethane	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
1,1,2-Trichloroethane	ND 0.011	ND 0.011	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011
Trichloroethene	ND 0.011	ND 0.011	ND 0.012	0.002J	ND 0.012	ND 0.011J	ND 0.011
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	ND 0.011	ND 0.011	0.003J	ND 0.012J	ND 0.012	ND 0.011J	ND 0.011
Xylenes (Total)	0.002J	0.001J	ND 0.012	ND 0.012	ND 0.012	ND 0.011J	ND 0.011

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B = Compound also detected in the method blank associated with this sample

TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-10-94 4/8/94	BH-14A-94 DUPLICATE 4/8/94	BH-11-94 4/8/94	MW-1A 3/31/94	MW-18 3/29/94	MW-19 3/29/94	MW-20 4/5/94
SVOCs (mg/kg)							
Acenaphthene	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA
Benzo (a) anthracene	NA	NA	NA	NA	NA	NA	NA
Benzo (b) fluoranthene	NA	NA	NA	NA	NA	NA	NA
Benzo (k) fluoranthene	NA	NA	NA	NA	NA	NA	NA
Benzo (g,h,i) perylene	NA	NA	NA	NA	NA	NA	NA
Benzo (a) pyrene	NA	NA	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroethoxy) methane	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroethyl) ether	NA	NA	NA	NA	NA	NA	NA
Bis (2-chloroisopropyl) ether	NA	NA	NA	NA	NA	NA	NA
Bis (2-ethylhexyl) phthalate	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NA	NA	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA
1-Chloropropane	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA
Dibenzo (a,h) anthracene	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-10-94 4/8/94	BH-14A-94 DUPLICATE 4/8/94	BH-11-94 4/8/94	MW-1A 3/31/94	MW-18 3/29/94	MW-19 3/29/94	MW-20 4/5/94
SVOCs (mg/kg)							
Fluorene	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NA	NA	NA	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	NA	NA	NA	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA
Acid Extractables (mg/kg)							
Benzoic acid	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	NA	NA	NA	NA	NA	NA	NA
Phenol	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA

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D = Value quantitated from a dilution
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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	BH-10-94 4/8/94	BH-14A-94 DUPLICATE 4/8/94	BH-11-94 4/8/94	MW-1A 3/31/94	MW-18 3/29/94	MW-19 3/29/94	MW-20 4/5/94
Metals (mg/kg)							
Aluminum	NA	NA	NA	NA	NA	NA	NA
Antimony	NA	NA	NA	NA	NA	NA	NA
Arsenic	NA	NA	NA	NA	NA	NA	NA
Barium	NA	NA	NA	NA	NA	NA	NA
Beryllium	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA
Calcium	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA
Cobalt	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA
Cyanide (total)	NA	NA	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA
Magnesium	NA	NA	NA	NA	NA	NA	NA
Manganese	NA	NA	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA
Potassium	NA	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA
Sodium	NA	NA	NA	NA	NA	NA	NA
Thallium	NA	NA	NA	NA	NA	NA	NA
Vanadium	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA
Wet Chemistry (mg/kg)							
Total Organic Carbon	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons	ND 35.2	ND 35.4	ND 35.7	NA	NA	ND 35.9	NA
Petroleum Products (mg/kg)							
Gasoline	NA	NA	NA	NA	NA	NA	NA
Kerosene	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	NA	NA	NA	NA	NA	NA	NA
Lubricating Oil	NA	NA	NA	NA	NA	NA	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-21 4/4/94	MW-22 3/29/94	MW-23 3/29/94
VOCs (mg/kg)			
Acetone	ND 0.011	ND 0.011	ND 0.011
Benzene	ND 0.011	ND 0.011	ND 0.011
Bromodichloromethane	ND 0.011	ND 0.011	ND 0.011
Bromoform	ND 0.011	ND 0.011	ND 0.011
Bromomethane	ND 0.011	ND 0.011	ND 0.011
2-Butanone	ND 0.011J	ND 0.011J	ND 0.011J
Carbon Disulfide	ND 0.011	ND 0.011	ND 0.011
Carbon Tetrachloride	ND 0.011	ND 0.011	ND 0.011
Chlorobenzene	ND 0.011	ND 0.011	ND 0.011
Chloroethane	ND 0.011	ND 0.011	ND 0.011
Chloroform	ND 0.011	ND 0.011	ND 0.011
Chloromethane	ND 0.011	ND 0.011	ND 0.011
Dibromochloromethane	ND 0.011	ND 0.011	ND 0.011
1,1-Dichloroethane	ND 0.011	ND 0.011	ND 0.011
1,2-Dichloroethane	ND 0.011	ND 0.011	ND 0.011
1,1-Dichloroethene	ND 0.011	ND 0.011	ND 0.011
1,2-Dichloroethene (Total)	ND 0.011	ND 0.011	ND 0.011
,2-Dichloropropane	ND 0.011	ND 0.011	ND 0.011
cis-1,3-Dichloropropene	ND 0.011	ND 0.011	ND 0.011
trans-1,3-Dichloropropene	ND 0.011	ND 0.011	ND 0.011
Ethylbenzene	ND 0.011	ND 0.011	ND 0.011
2-Hexanone	ND 0.011	ND 0.011	ND 0.011
Methylene Chloride	ND 0.011	0.002J	0.002J
4-Methyl-2-Pentanone	ND 0.011	ND 0.011	ND 0.011
Styrene	ND 0.011	ND 0.011	ND 0.011
1,1,2,2-Tetrachloroethane	ND 0.011	ND 0.011	ND 0.011
Tetrachloroethene	ND 0.011	ND 0.011	ND 0.011
Toluene	0.12	ND 0.011	ND 0.011
1,1,1-Trichloroethane	ND 0.011	ND 0.011	ND 0.011
1,1,2-Trichloroethane	ND 0.011	ND 0.011	ND 0.011
Trichloroethene	ND 0.011	ND 0.011	ND 0.011
Vinyl Acetate	NA	NA	NA
Vinyl Chloride	ND 0.011	ND 0.011	ND 0.011
Xylenes (Total)	ND 0.011	ND 0.011	ND 0.011

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-21 4/4/94	MW-22 3/29/94	MW-23 3/29/94
SVOCs (mg/kg)			
Acenaphthene	NA	NA	NA
Acenaphthylene	NA	NA	NA
Anthracene	NA	NA	NA
Benzo (a) anthracene	NA	NA	NA
Benzo (b) fluoranthene	NA	NA	NA
Benzo (k) fluoranthene	NA	NA	NA
Benzo (g,h,i) perylene	NA	NA	NA
Benzo (a) pyrene	NA	NA	NA
Benzyl alcohol	NA	NA	NA
Bis (2-chloroethoxy) methane	NA	NA	NA
Bis (2-chloroethyl) ether	NA	NA	NA
Bis (2-chloroisopropyl) ether	NA	NA	NA
Bis (2-ethylhexyl) phthalate	NA	NA	NA
4-Bromophenyl phenyl ether	NA	NA	NA
Butyl benzyl phthalate	NA	NA	NA
Carbazole	NA	NA	NA
4-Chloroaniline	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA
4-Chlorophenyl phenyl ether	NA	NA	NA
1-Chloropropane	NA	NA	NA
Chrysene	NA	NA	NA
Dibenzo (a,h) anthracene	NA	NA	NA
Dibenzofuran	NA	NA	NA
Di-n-butyl phthalate	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	NA
Diethyl phthalate	NA	NA	NA
Dimethyl phthalate	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA
2,6-Dinitrotoluene	NA	NA	NA
Di-n-octyl phthalate	NA	NA	NA
Fluoranthene	NA	NA	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-21 4/4/94	MW-22 3/29/94	MW-23 3/29/94
SVOCs (mg/kg)			
Fluorene	NA	NA	NA
Hexachlorobenzene	NA	NA	NA
Hexachlorobutadiene	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA
Hexachloroethane	NA	NA	NA
Indeno (1,2,3-cd) pyrene	NA	NA	NA
Isophorone	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA
Naphthalene	NA	NA	NA
Nitrobenzene	NA	NA	NA
2-Nitroaniline	NA	NA	NA
3-Nitroaniline	NA	NA	NA
4-Nitroaniline	NA	NA	NA
N-Nitrosodiphenylamine	NA	NA	NA
N-Nitroso-di-n-propylamine	NA	NA	NA
Phenanthrene	NA	NA	NA
Pyrene	NA	NA	NA
1,2,4-Trichlorobenzene	NA	NA	NA
Acid Extractables (mg/kg)			
Benzoic acid	NA	NA	NA
4-Chloro-3-methylphenol	NA	NA	NA
2-Chlorophenol	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA
2,4-Dimethylphenol	NA	NA	NA
2,4-Dinitrophenol	NA	NA	NA
4,6-Dinitro-2-methylphenol	NA	NA	NA
2-Methylphenol	NA	NA	NA
4-Methylphenol	NA	NA	NA
2-Nitrophenol	NA	NA	NA
4-Nitrophenol	NA	NA	NA
Pentachlorophenol	NA	NA	NA
Phenol	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA

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TABLE 8.2
SUMMARY OF SOIL DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	MW-21 4/4/94	MW-22 3/29/94	MW-23 3/29/94
Metals (mg/kg)			
Aluminum	NA	NA	NA
Antimony	NA	NA	NA
Arsenic	NA	NA	NA
Barium	NA	NA	NA
Beryllium	NA	NA	NA
Cadmium	NA	NA	NA
Calcium	NA	NA	NA
Chromium	NA	NA	NA
Cobalt	NA	NA	NA
Copper	NA	NA	NA
Cyanide (total)	NA	NA	NA
Iron	NA	NA	NA
Lead	NA	NA	NA
Magnesium	NA	NA	NA
Manganese	NA	NA	NA
Mercury	NA	NA	NA
Nickel	NA	NA	NA
Potassium	NA	NA	NA
Selenium	NA	NA	NA
Silver	NA	NA	NA
Sodium	NA	NA	NA
Thallium	NA	NA	NA
Vanadium	NA	NA	NA
Zinc	NA	NA	NA
Wet Chemistry (mg/kg)			
Total Organic Carbon	NA	NA	NA
Total Petroleum Hydrocarbons	NA	NA	NA
Petroleum Products (mg/kg)			
Gasoline	NA	NA	NA
Kerosene	NA	NA	NA
Fuel Oil	NA	NA	NA
Lubricating Oil	NA	NA	NA

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TABLE 8.3
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS
SECTOR A SOIL
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/kg)	95% UCL (mg/kg)	MAXIMUM CONCENTRATION (mg/kg)
VOCs							
Acetone	11	7	1.69E-02	2.228	1.36E-02	2.50E-02	4.90E-02
Benzene	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
Bromodichloromethane	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
Bromoform	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
Bromomethane	11	2	3.41E-03	2.228	6.27E-03	8.56E-03	3.00E-03
2-Butanone	11	1	2.96E-03	2.228	7.09E-03	9.08E-03	9.00E-03
Carbon Disulfide	11	2	3.58E-03	2.228	6.09E-03	8.49E-03	2.00E-03
Carbon Tetrachloride	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
Chlorobenzene	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
Chloroethane	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
Chloroform	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
Chloromethane	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
Dibromochloromethane	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
1,1-Dichloroethane	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
1,2-Dichloroethane	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
1,1-Dichloroethene	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
1,2-Dichloroethene (Total)	11	5	5.90E-02	2.228	3.95E-02	7.91E-02	1.60E-01
1,2-Dichloropropane	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
cis-1,3-Dichloropropene	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
trans-1,3-Dichloropropene	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
Ethylbenzene	11	1	1.10E-02	2.228	1.01E-02	1.75E-02	4.20E-02
2-Hexanone	11	1	2.91E-03	2.228	6.82E-03	8.77E-03	6.00E-03
Methylene Chloride	11	2	3.51E-03	2.228	6.23E-03	8.58E-03	2.00E-03
4-Methyl-2-Pentanone	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
Styrene	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
1,1,2,2-Tetrachloroethane	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
Tetrachloroethene	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
Toluene	11	2	1.04E-02	2.228	9.36E-03	1.63E-02	3.90E-02
1,1,1-Trichloroethane	11	0	2.90E-03	2.228	7.05E-03	9.00E-03	ND
1,1,2-Trichloroethane	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
1,1,2,-Trichlorotrifluoroethane	11	0	2.90E-03	2.228	6.86E-03	8.81E-03	ND
Trichloroethene	11	5	4.34E-02	2.228	1.92E-02	4.83E-02	1.50E-01
Vinyl Chloride	11	1	1.10E-02	2.228	1.01E-02	1.75E-02	4.20E-02
Xylenes (Total)	11	1	5.53E-02	2.228	2.35E-02	6.07E-02	1.90E-01

NA = Not Available
ND = Not Detected

TABLE 8.3
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS
SECTOR A SOIL
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/kg)	95% UCL (mg/kg)	MAXIMUM CONCENTRATION (mg/kg)
SVOCs							
Acenaphthene	4	1	1.78E-01	3.182	2.94E-01	5.77E-01	5.60E-01
Acenaphthylene	4	1	6.34E-02	3.182	2.36E-01	3.37E-01	3.30E-01
Anthracene	4	1	6.48E-01	3.182	5.29E-01	1.56E+00	1.50E+00
Benzo (a) anthracene	4	1	4.10E+00	3.182	2.25E+00	8.77E+00	8.40E+00
Benzo (b) fluoranthene	4	1	1.19E+01	3.182	6.15E+00	2.51E+01	2.40E+01
Benzo (k) fluoranthene	4	1	5.40E+00	3.182	2.90E+00	1.15E+01	1.10E+01
Benzo (g,h,i) perylene	4	1	2.10E+00	3.182	1.25E+00	4.59E+00	4.40E+00
Benzo (a) pyrene	4	1	5.90E+00	3.182	3.15E+00	1.25E+01	1.20E+01
Bis (2-chloroethoxy) methane	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
Bis (2-chloroethyl) ether	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
Bis (2-ethylhexyl) phthalate	4	1	3.71E+00	3.182	2.13E+00	8.04E+00	7.70E+00
4-Bromophenyl phenyl ether	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
Butyl benzyl phthalate	4	1	1.98E-01	3.182	3.04E-01	6.18E-01	6.00E-01
Carbazole	4	1	2.50E+00	3.182	1.45E+00	5.43E+00	5.20E+00
4-Chloroaniline	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
2-Chloronaphthalene	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
4-Chlorophenyl phenyl ether	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
1-Chloropropane	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
Chrysene	4	1	3.95E+00	3.182	2.18E+00	8.46E+00	8.10E+00
Dibenzo (a,h) anthracene	4	1	9.48E-01	3.182	6.79E-01	2.19E+00	2.10E+00
Dibenzofuran	4	1	4.98E-01	3.182	4.54E-01	1.25E+00	1.20E+00
Di-n-butyl phthalate	4	1	5.85E-02	3.182	2.34E-01	3.27E-01	3.20E-01
1,2-Dichlorobenzene	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
1,3-Dichlorobenzene	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
1,4-Dichlorobenzene	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
3,3'-Dichlorobenzidine	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
Diethyl phthalate	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
Dimethyl phthalate	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
2,4-Dinitrotoluene	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
2,6-Dinitrotoluene	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
Di-n-octyl phthalate	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
Fluoranthene	4	3	1.24E+01	3.182	6.36E+00	2.61E+01	2.50E+01
Fluorene	4	1	2.28E-01	3.182	3.19E-01	6.81E-01	6.60E-01
Hexachlorobenzene	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
Hexachlorobutadiene	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND

NA = Not Available
ND = Not Detected

TABLE 8.3
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS
SECTOR A SOIL
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/kg)	95% UCL (mg/kg)	MAXIMUM CONCENTRATION (mg/kg)
SVOCs							
Hexachlorocyclopentadiene	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
Hexachloroethane	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
Indeno (1,2,3-cd) pyrene	4	1	2.25E+00	3.182	1.33E+00	4.90E+00	4.70E+00
Isophorone	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
2-Methylnaphthalene	4	1	1.65E+00	3.182	1.03E+00	3.65E+00	3.50E+00
Naphthalene	4	1	1.25E+00	3.182	8.29E-01	2.81E+00	2.70E+00
Nitrobenzene	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
2-Nitroaniline	4	0	4.19E-01	3.182	7.23E-01	1.39E+00	ND
3-Nitroaniline	4	0	4.19E-01	3.182	7.23E-01	1.39E+00	ND
4-Nitroaniline	4	0	4.19E-01	3.182	7.23E-01	1.39E+00	ND
N-Nitrosodiphenylamine	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
N-Nitroso-di-n-propylamine	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
Phenanthrene	4	1	6.40E+00	3.182	3.40E+00	1.36E+01	1.30E+01
Pyrene	4	3	8.93E+00	3.182	4.60E+00	1.88E+01	1.80E+01
1,2,4-Trichlorobenzene	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
Acid Extractables							
4-Chloro-3-methylphenol	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
2-Chlorophenol	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
2,4-Dichlorophenol	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
2,4-Dimethylphenol	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
2,4-Dinitrophenol	4	0	4.19E-01	3.182	7.23E-01	1.39E+00	ND
4,6-Dinitro-2-methylphenol	4	0	4.19E-01	3.182	7.23E-01	1.39E+00	ND
2-Methylphenol	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
4-Methylphenol	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
2-Nitrophenol	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
4-Nitrophenol	4	0	4.19E-01	3.182	7.23E-01	1.39E+00	ND
Pentachlorophenol	4	0	4.19E-01	3.182	7.23E-01	1.39E+00	ND
Phenol	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND
2,4,5-Trichlorophenol	4	0	4.19E-01	3.182	7.23E-01	1.39E+00	ND
2,4,6-Trichlorophenol	4	0	1.73E-01	3.182	2.91E-01	5.66E-01	ND

NA = Not Available
ND = Not Detected

TABLE 8.3
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS
SECTOR A SOIL
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/kg)	95% UCL (mg/kg)	MAXIMUM CONCENTRATION (mg/kg)
Metals							
Aluminum	9	9	7.91E+03	2.306	1.38E+04	1.99E+04	1.81E+04
Antimony	9	0	2.73E+00	2.306	2.06E+00	4.15E+00	ND
Arsenic	9	9	3.51E+01	2.306	1.58E+01	4.28E+01	1.09E+02
Barium	9	9	2.43E+02	2.306	2.16E+02	4.03E+02	8.32E+02
Beryllium	9	3	3.50E-01	2.306	4.48E-01	7.17E-01	1.00E+00
Cadmium	9	4	3.01E+00	2.306	2.14E+00	4.46E+00	9.80E+00
Calcium	9	9	3.19E+04	2.306	3.76E+04	6.21E+04	9.12E+04
Chromium	9	9	2.76E+01	2.306	2.97E+01	5.09E+01	9.90E+01
Cobalt	9	9	4.27E+00	2.306	9.86E+00	1.31E+01	1.47E+01
Copper	9	9	8.73E+01	2.306	4.84E+01	1.16E+02	2.80E+02
Iron	9	9	8.77E+03	2.306	2.20E+04	2.88E+04	3.19E+04
Lead	9	9	6.00E+02	2.306	2.57E+02	7.18E+02	1.83E+03
Magnesium	9	9	8.90E+03	2.306	1.41E+04	2.09E+04	2.68E+04
Manganese	9	9	2.78E+02	2.306	5.23E+02	7.37E+02	9.99E+02
Mercury	9	2	3.57E-01	2.306	1.94E-01	4.69E-01	1.10E+00
Nickel	9	7	2.91E+01	2.306	3.10E+01	5.33E+01	1.02E+02
Potassium	9	9	7.32E+02	2.306	2.03E+03	2.59E+03	2.94E+03
Selenium	9	1	6.23E-01	2.306	3.40E-01	8.19E-01	2.00E+00
Silver	9	0	5.06E-02	2.306	2.43E-01	2.82E-01	ND
Sodium	9	3	1.26E+02	2.306	1.56E+02	2.53E+02	3.62E+02
Thallium	9	2	1.64E-01	2.306	2.57E-01	3.83E-01	6.20E-01
Vanadium	9	9	1.67E+01	2.306	3.01E+01	4.29E+01	6.57E+01
Zinc	9	9	4.69E+02	2.306	2.55E+02	6.16E+02	1.50E+03
Wet Chemistry							
Total Organic Carbon	2	2	9.90E+02	12.706	1.66E+04	2.55E+04	1.73E+04
TPH	9	1	8.89E+01	2.306	5.22E+01	1.21E+02	2.88E+02
Petroleum Products							
Gasoline	2	0	NA	12.706	NA	NA	NA
Kerosene	2	0	1.65E-01	12.706	8.33E+00	9.81E+00	ND
Fuel Oil	2	1	1.27E+02	12.706	9.01E+01	1.23E+03	1.80E+02
Lubricating Oil	2	0	NA	12.706	NA	NA	NA

NA = Not Available
ND = Not Detected

TABLE 8.4
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS
SECTOR C SOIL
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/kg)	95% UCL (mg/kg)	MAXIMUM CONCENTRATION (mg/kg)
VOCs							
Acetone	31	10	1.15E+01	2.042	3.24E+00	7.45E+00	9.00E-02
Benzene	31	3	1.15E+01	2.042	3.23E+00	7.44E+00	2.00E-02
Bromodichloromethane	31	0	1.15E+01	2.042	3.23E+00	7.44E+00	ND
Bromoform	31	0	1.15E+01	2.042	3.23E+00	7.44E+00	ND
Bromomethane	31	0	1.15E+01	2.042	3.23E+00	7.44E+00	ND
2-Butanone	31	6	1.15E+01	2.042	3.23E+00	7.44E+00	1.50E-02
Carbon Disulfide	31	5	1.15E+01	2.042	3.23E+00	7.44E+00	1.80E-02
Carbon Tetrachloride	31	0	1.15E+01	2.042	3.23E+00	7.44E+00	ND
Chlorobenzene	31	1	1.15E+01	2.042	3.23E+00	7.44E+00	2.00E-02
Chloroethane	31	0	1.15E+01	2.042	3.23E+00	7.44E+00	ND
Chloroform	31	0	1.15E+01	2.042	3.23E+00	7.44E+00	ND
Chloromethane	31	0	1.15E+01	2.042	3.23E+00	7.44E+00	ND
Dibromochloromethane	31	0	1.15E+01	2.042	3.23E+00	7.44E+00	ND
1,1-Dichloroethane	31	4	1.15E+01	2.042	3.26E+00	7.47E+00	1.32E-01
1,2-Dichloroethane	31	0	1.15E+01	2.042	3.23E+00	7.44E+00	ND
1,1-Dichloroethene	31	3	1.15E+01	2.042	3.26E+00	7.47E+00	1.20E-01
1,2-Dichloroethene (Total)	31	14	1.25E+01	2.042	3.58E+00	8.15E+00	3.70E+01
1,2-Dichloropropane	31	0	1.15E+01	2.042	3.23E+00	7.44E+00	ND
cis-1,3-Dichloropropene	31	0	1.15E+01	2.042	3.23E+00	7.44E+00	ND
trans-1,3-Dichloropropene	31	0	1.15E+01	2.042	3.23E+00	7.44E+00	ND
Ethylbenzene	31	8	1.17E+01	2.042	3.78E+00	8.09E+00	1.70E+01
2-Hexanone	31	1	1.15E+01	2.042	3.23E+00	7.44E+00	4.00E-03
Methylene Chloride	31	3	1.15E+01	2.042	3.23E+00	7.45E+00	9.30E-02
4-Methyl-2-Pentanone	31	1	1.15E+01	2.042	3.23E+00	7.44E+00	1.10E-02
Styrene	31	0	1.15E+01	2.042	3.23E+00	7.44E+00	ND
1,1,2,2-Tetrachloroethane	31	0	1.15E+01	2.042	3.23E+00	7.44E+00	ND
Tetrachloroethene	31	3	1.15E+01	2.042	3.23E+00	7.44E+00	1.00E-02
Toluene	31	9	1.15E+01	2.042	3.24E+00	7.45E+00	1.80E+00
1,1,1-Trichloroethane	31	8	1.21E+01	2.042	4.42E+00	8.85E+00	2.10E+01
1,1,2-Trichloroethane	31	0	1.15E+01	2.042	3.23E+00	7.44E+00	ND
Trichloroethene	31	14	3.72E+02	2.042	9.45E+01	2.31E+02	2.00E+03
Vinyl Acetate	7	0	2.20E+01	2.447	1.41E+01	3.44E+01	ND
Vinyl Chloride	31	2	1.15E+01	2.042	3.23E+00	7.44E+00	5.00E-03
Xylenes (Total)	31	16	2.23E+01	2.042	8.97E+00	1.71E+01	9.20E+01

NA = Not Available
ND = Not Detected

TABLE 8.4
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS
SECTOR C SOIL
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/kg)	95% UCL (mg/kg)	MAXIMUM CONCENTRATION (mg/kg)
SVOCs							
Acenaphthene	2	0	0.00E+00	12.706	1.65E-01	1.65E-01	ND
Acenaphthylene	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Anthracene	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Benzo (a) anthracene	4	2	6.66E-02	3.182	1.53E-01	2.59E-01	2.00E-01
Benzo (b) fluoranthene	4	1	2.39E-02	3.182	1.71E-01	2.09E-01	1.40E-01
Benzo (k) fluoranthene	4	1	7.33E-02	3.182	1.46E-01	2.62E-01	3.70E-02
Benzo (g,h,i) perylene	4	1	2.84E-02	3.182	1.69E-01	2.14E-01	1.30E-01
Benzo (a) pyrene	4	1	5.74E-02	3.182	1.45E-01	2.37E-01	6.10E-02
Benzyl alcohol	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Bis (2-chloroethoxy) methane	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Bis (2-chloroethyl) ether	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Bis (2-chloroisopropyl) ether	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Bis (2-ethylhexyl) phthalate	4	0	1.54E-01	3.182	2.50E-01	4.95E-01	ND
4-Bromophenyl phenyl ether	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Butyl benzyl phthalate	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Carbazole	2	0	0.00E+00	12.706	1.90E-01	1.90E-01	ND
4-Chloroaniline	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
2-Chloronaphthalene	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
4-Chlorophenyl phenyl ether	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
1-Chloropropane	2	0	0.00E+00	12.706	1.90E-01	1.90E-01	ND
Chrysene	4	2	5.07E-02	3.182	1.40E-01	2.20E-01	1.30E-01
Dibenzo (a,h) anthracene	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Dibenzofuran	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Di-n-butyl phthalate	4	2	7.75E-01	3.182	5.39E-01	1.77E+00	1.70E+00
1,2-Dichlorobenzene	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
1,3-Dichlorobenzene	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
1,4-Dichlorobenzene	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
3,3'-Dichlorobenzidine	4	0	8.08E-02	3.182	2.60E-01	3.89E-01	ND
Diethyl phthalate	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Dimethyl phthalate	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
2,4-Dinitrotoluene	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
2,6-Dinitrotoluene	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Di-n-octyl phthalate	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Fluoranthene	4	2	1.15E-01	3.182	2.39E-01	4.21E-01	4.10E-01
Fluorene	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND

NA = Not Available
ND = Not Detected

TABLE 8.4
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS
SECTOR C SOIL
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/kg)	95% UCL (mg/kg)	MAXIMUM CONCENTRATION (mg/kg)
SVOCs							
Hexachlorobenzene	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Hexachlorobutadiene	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Hexachlorocyclopentadiene	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Hexachloroethane	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Indeno (1,2,3-cd) pyrene	4	1	2.39E-02	3.182	1.71E-01	2.09E-01	1.40E-01
Isophorone	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
2-Methylnaphthalene	4	1	3.30E-02	3.182	1.66E-01	2.19E-01	1.20E-01
Naphthalene	4	1	5.54E-02	3.182	2.09E-01	2.97E-01	2.90E-01
Nitrobenzene	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
2-Nitroaniline	4	0	1.86E-01	3.182	6.39E-01	9.35E-01	ND
3-Nitroaniline	4	0	1.86E-01	3.182	6.39E-01	9.35E-01	ND
4-Nitroaniline	4	0	1.86E-01	3.182	6.39E-01	9.35E-01	ND
N-Nitrosodiphenylamine	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
N-Nitroso-di-n-propylamine	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Phenanthrene	4	2	2.84E-02	3.182	1.69E-01	2.14E-01	1.90E-01
Pyrene	4	2	4.33E-02	3.182	1.69E-01	2.38E-01	2.10E-01
1,2,4-Trichlorobenzene	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
Acid Extractables							
Benzoic acid	2	0	0.00E+00	12.706	8.00E-01	8.00E-01	ND
4-Chloro-3-methylphenol	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
2-Chlorophenol	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
2,4-Dichlorophenol	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
2,4-Dimethylphenol	4	1	2.84E-01	3.182	3.24E-01	7.76E-01	7.50E-01
2,4-Dinitrophenol	4	0	1.86E-01	3.182	6.39E-01	9.35E-01	ND
4,6-Dinitro-2-methylphenol	4	0	1.86E-01	3.182	6.39E-01	9.35E-01	ND
2-Methylphenol	4	1	1.95E-01	3.182	2.79E-01	5.88E-01	5.70E-01
4-Methylphenol	4	1	9.99E-02	3.182	2.31E-01	3.90E-01	3.80E-01
2-Nitrophenol	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND
4-Nitrophenol	4	0	1.86E-01	3.182	6.39E-01	9.35E-01	ND
Pentachlorophenol	4	0	1.86E-01	3.182	6.39E-01	9.35E-01	ND
Phenol	4	1	4.57E-02	3.182	2.04E-01	2.76E-01	2.70E-01
2,4,5-Trichlorophenol	4	0	1.80E-01	3.182	3.21E-01	6.08E-01	ND
2,4,6-Trichlorophenol	4	0	1.44E-02	3.182	1.78E-01	2.00E-01	ND

NA = Not Available
ND = Not Detected

TABLE 8.4
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS
SECTOR C SOIL
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/kg)	95% UCL (mg/kg)	MAXIMUM CONCENTRATION (mg/kg)
Metals							
Aluminum	12	12	5.03E+03	2.201	9.59E+03	1.28E+04	1.78E+04
Antimony	12	0	1.46E+00	2.201	2.11E+00	3.04E+00	ND
Arsenic	12	12	1.74E+00	2.201	2.75E+00	3.85E+00	5.90E+00
Barium	12	12	7.68E+01	2.201	9.66E+01	1.45E+02	2.96E+02
Beryllium	12	6	3.97E-01	2.201	4.45E-01	6.97E-01	1.30E+00
Cadmium	12	2	5.32E-01	2.201	5.81E-01	9.20E-01	1.90E+00
Calcium	12	12	2.78E+04	2.201	6.49E+04	8.26E+04	1.20E+05
Chromium	12	11	6.39E+00	2.201	1.41E+01	1.81E+01	2.22E+01
Cobalt	12	11	3.11E+00	2.201	6.71E+00	8.69E+00	1.17E+01
Copper	12	12	8.01E+01	2.201	4.25E+01	9.34E+01	2.94E+02
Cyanide (total)	2	0	0.00E+00	12.706	5.00E-02	5.00E-02	ND
Iron	12	12	6.97E+03	2.201	1.65E+04	2.10E+04	2.72E+04
Lead	12	12	2.11E+01	2.201	1.92E+01	3.26E+01	6.49E+01
Magnesium	12	12	9.30E+03	2.201	1.96E+04	2.56E+04	2.97E+04
Manganese	12	12	2.76E+02	2.201	5.28E+02	7.03E+02	1.22E+03
Mercury	12	2	5.17E-02	2.201	5.88E-02	9.16E-02	1.70E-01
Nickel	12	8	5.65E+01	2.201	3.29E+01	6.88E+01	2.08E+02
Potassium	12	12	6.05E+02	2.201	1.55E+03	1.93E+03	2.49E+03
Selenium	12	1	2.43E-01	2.201	2.34E-01	3.89E-01	9.90E-01
Silver	12	0	8.02E-02	2.201	2.95E-01	3.46E-01	ND
Sodium	12	5	2.70E+02	2.201	2.66E+02	4.38E+02	1.01E+03
Thallium	12	2	7.97E-02	2.201	1.91E-01	2.42E-01	3.90E-01
Vanadium	12	12	7.71E+00	2.201	1.91E+01	2.40E+01	3.16E+01
Zinc	12	12	2.54E+01	2.201	7.48E+01	9.09E+01	1.24E+02
Wet Chemistry							
Total Organic Carbon	1	1	9.60E+03	NA	9.60E+03	9.60E+03	9.60E+03
TPH	33	21	3.50E+03	2.042	1.87E+03	3.11E+03	1.40E+04
Petroleum Products							
Gasoline	1	0	NA	NA	NA	NA	NA
Kerosene	2	0	4.48E+02	12.706	3.33E+02	4.36E+03	NA
Fuel Oil	2	2	3.89E+04	12.706	2.75E+04	3.77E+05	5.50E+04
Lubricating Oil	1	0	NA	NA	NA	NA	NA

NA = Not Available
ND = Not Detected

TABLE 8.5
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS
BACKGROUND SOIL
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/kg)	95% UCL (mg/kg)	MAXIMUM CONCENTRATION (mg/kg)
VOCs							
Acetone	1	0	NA	NA	NA	NA	ND
Benzene	1	0	NA	NA	NA	NA	ND
Bromodichloromethane	1	0	NA	NA	NA	NA	ND
Bromoform	1	0	NA	NA	NA	NA	ND
Bromomethane	1	0	NA	NA	NA	NA	ND
2-Butanone	1	0	NA	NA	NA	NA	ND
Carbon Disulfide	1	0	NA	NA	NA	NA	ND
Carbon Tetrachloride	1	0	NA	NA	NA	NA	ND
Chlorobenzene	1	0	NA	NA	NA	NA	ND
Chloroethane	1	0	NA	NA	NA	NA	ND
Chloroform	1	0	NA	NA	NA	NA	ND
Chloromethane	1	0	NA	NA	NA	NA	ND
Dibromochloromethane	1	0	NA	NA	NA	NA	ND
1,1-Dichloroethane	1	0	NA	NA	NA	NA	ND
1,2-Dichloroethane	1	0	NA	NA	NA	NA	ND
1,1-Dichloroethene	1	0	NA	NA	NA	NA	ND
1,2-Dichloroethene (Total)	1	0	NA	NA	NA	NA	ND
1,2-Dichloropropane	1	0	NA	NA	NA	NA	ND
cis-1,3-Dichloropropene	1	0	NA	NA	NA	NA	ND
trans-1,3-Dichloropropene	1	0	NA	NA	NA	NA	ND
Ethylbenzene	1	0	NA	NA	NA	NA	ND
2-Hexanone	1	0	NA	NA	NA	NA	ND
Methylene Chloride	1	0	NA	NA	NA	NA	ND
4-Methyl-2-Pentanone	1	0	NA	NA	NA	NA	ND
Styrene	1	0	NA	NA	NA	NA	ND
1,1,2,2-Tetrachloroethane	1	0	NA	NA	NA	NA	ND
Tetrachloroethene	1	0	NA	NA	NA	NA	ND
Toluene	1	0	NA	NA	NA	NA	ND
1,1,1-Trichloroethane	1	0	NA	NA	NA	NA	ND
1,1,2-Trichloroethane	1	0	NA	NA	NA	NA	ND
Trichloroethene	1	0	NA	NA	NA	NA	ND
Vinyl Acetate	0	0	NA	NA	NA	NA	NA
Vinyl Chloride	1	0	NA	NA	NA	NA	ND
Xylenes (Total)	1	0	NA	NA	NA	NA	ND

NA = Not Available
ND = Not Detected

TABLE 8.5
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS
BACKGROUND SOIL
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/kg)	95% UCL (mg/kg)	MAXIMUM CONCENTRATION (mg/kg)
SVOCs							
Acenaphthene	0	0	NA	NA	NA	NA	NA
Acenaphthylene	0	0	NA	NA	NA	NA	NA
Anthracene	0	0	NA	NA	NA	NA	NA
Benzo (a) anthracene	0	0	NA	NA	NA	NA	NA
Benzo (b) fluoranthene	0	0	NA	NA	NA	NA	NA
Benzo (k) fluoranthene	0	0	NA	NA	NA	NA	NA
Benzo (g,h,i) perylene	0	0	NA	NA	NA	NA	NA
Benzo (a) pyrene	0	0	NA	NA	NA	NA	NA
Benzyl alcohol	0	0	NA	NA	NA	NA	NA
Bis (2-chloroethoxy) methane	0	0	NA	NA	NA	NA	NA
Bis (2-chloroethyl) ether	0	0	NA	NA	NA	NA	NA
Bis (2-chloroisopropyl) ether	0	0	NA	NA	NA	NA	NA
Bis (2-ethylhexyl) phthalate	0	0	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	0	0	NA	NA	NA	NA	NA
Butyl benzyl phthalate	0	0	NA	NA	NA	NA	NA
Carbazole	0	0	NA	NA	NA	NA	NA
4-Chloroaniline	0	0	NA	NA	NA	NA	NA
2-Chloronaphthalene	0	0	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	0	0	NA	NA	NA	NA	NA
1-Chloropropane	0	0	NA	NA	NA	NA	NA
Chrysene	0	0	NA	NA	NA	NA	NA
Dibenzo (a,h) anthracene	0	0	NA	NA	NA	NA	NA
Dibenzofuran	0	0	NA	NA	NA	NA	NA
Di-n-butyl phthalate	0	0	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	0	0	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	0	0	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	0	0	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	0	0	NA	NA	NA	NA	NA
Diethyl phthalate	0	0	NA	NA	NA	NA	NA
Dimethyl phthalate	0	0	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	0	0	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	0	0	NA	NA	NA	NA	NA
Di-n-octyl phthalate	0	0	NA	NA	NA	NA	NA
Fluoranthene	0	0	NA	NA	NA	NA	NA
Fluorene	0	0	NA	NA	NA	NA	NA
Hexachlorobenzene	0	0	NA	NA	NA	NA	NA
Hexachlorobutadiene	0	0	NA	NA	NA	NA	NA

NA = Not Available
ND = Not Detected

TABLE 8.5
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS
BACKGROUND SOIL
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/kg)	95% UCL (mg/kg)	MAXIMUM CONCENTRATION (mg/kg)
SVOCs							
Hexachlorocyclopentadiene	0	0	NA	NA	NA	NA	NA
Hexachloroethane	0	0	NA	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	0	0	NA	NA	NA	NA	NA
Isophorone	0	0	NA	NA	NA	NA	NA
2-Methylnaphthalene	0	0	NA	NA	NA	NA	NA
Naphthalene	0	0	NA	NA	NA	NA	NA
Nitrobenzene	0	0	NA	NA	NA	NA	NA
2-Nitroaniline	0	0	NA	NA	NA	NA	NA
3-Nitroaniline	0	0	NA	NA	NA	NA	NA
4-Nitroaniline	0	0	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	0	0	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	0	0	NA	NA	NA	NA	NA
Phenanthrene	0	0	NA	NA	NA	NA	NA
Pyrene	0	0	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0	0	NA	NA	NA	NA	NA
Acid Extractables							
Benzoic acid	0	0	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	0	0	NA	NA	NA	NA	NA
2-Chlorophenol	0	0	NA	NA	NA	NA	NA
2,4-Dichlorophenol	0	0	NA	NA	NA	NA	NA
2,4-Dimethylphenol	0	0	NA	NA	NA	NA	NA
2,4-Dinitrophenol	0	0	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	0	0	NA	NA	NA	NA	NA
2-Methylphenol	0	0	NA	NA	NA	NA	NA
4-Methylphenol	0	0	NA	NA	NA	NA	NA
2-Nitrophenol	0	0	NA	NA	NA	NA	NA
4-Nitrophenol	0	0	NA	NA	NA	NA	NA
Pentachlorophenol	0	0	NA	NA	NA	NA	NA
Phenol	0	0	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	0	0	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	0	0	NA	NA	NA	NA	NA

NA = Not Available
ND = Not Detected

TABLE 8.5
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS
BACKGROUND SOIL
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/kg)	95% UCL (mg/kg)	MAXIMUM CONCENTRATION (mg/kg)
Metals							
Aluminum	1	1	NA	NA	2.35E+04	2.35E+04	2.35E+04
Antimony	1	0	NA	NA	NA	NA	ND
Arsenic	1	1	NA	NA	5.60E+00	5.60E+00	5.60E+00
Barium	1	1	NA	NA	3.57E+02	3.57E+02	3.57E+02
Beryllium	1	1	NA	NA	2.60E+00	2.60E+00	2.60E+00
Cadmium	1	0	NA	NA	NA	NA	ND
Calcium	1	1	NA	NA	9.29E+04	9.29E+04	9.29E+04
Chromium	1	1	NA	NA	1.75E+01	1.75E+01	1.75E+01
Cobalt	1	1	NA	NA	5.50E+00	5.50E+00	5.50E+00
Copper	1	1	NA	NA	7.18E+01	7.18E+01	7.18E+01
Cyanide (total)	0	0	NA	NA	NA	NA	NA
Iron	1	1	NA	NA	1.42E+04	1.42E+04	1.42E+04
Lead	1	1	NA	NA	5.43E+01	5.43E+01	5.43E+01
Magnesium	1	1	NA	NA	1.32E+04	1.32E+04	1.32E+04
Manganese	1	1	NA	NA	2.70E+03	2.70E+03	2.70E+03
Mercury	1	0	NA	NA	NA	NA	ND
Nickel	1	1	NA	NA	2.29E+01	2.29E+01	2.29E+01
Potassium	1	1	NA	NA	1.79E+03	1.79E+03	1.79E+03
Selenium	1	0	NA	NA	NA	NA	ND
Silver	1	0	NA	NA	NA	NA	ND
Sodium	1	1	NA	NA	4.59E+02	4.59E+02	4.59E+02
Thallium	1	0	NA	NA	NA	NA	ND
Vanadium	1	1	NA	NA	1.54E+01	1.54E+01	1.54E+01
Zinc	1	1	NA	NA	1.32E+02	1.32E+02	1.32E+02
Wet Chemistry							
Total Organic Carbon	0	0	NA	NA	NA	NA	NA
TPH	1	0	NA	NA	NA	NA	ND
Petroleum Products							
Gasoline	0	0	NA	NA	NA	NA	NA
Kerosene	0	0	NA	NA	NA	NA	NA
Fuel Oil	0	0	NA	NA	NA	NA	NA
Lubricating Oil	0	0	NA	NA	NA	NA	NA

NA = Not Available
ND = Not Detected

TABLE 8.6
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS FOR GROUNDWATER
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/L)	95% UCL (mg/L)	MAXIMUM CONCENTRATION (mg/L)
VOCs							
Acetone	53	9	6.86E+01	2.00	1.21E+01	3.09E+01	7.40E-02
Benzene	52	15	6.93E+01	2.00	1.03E+01	2.96E+01	1.90E-01
Bromodichloromethane	52	0	6.93E+01	2.00	1.04E+01	2.96E+01	ND
Bromoform	52	0	6.93E+01	2.00	1.04E+01	2.96E+01	ND
Bromomethane	51	2	6.99E+01	2.00	1.06E+01	3.02E+01	1.60E-02
2-Butanone	51	2	6.99E+01	2.00	1.10E+01	3.06E+01	4.30E-02
Carbon Disulfide	51	3	7.00E+01	2.00	1.06E+01	3.01E+01	7.00E-03
Carbon Tetrachloride	52	0	6.93E+01	2.00	1.04E+01	2.96E+01	ND
Chlorobenzene	50	1	7.06E+01	2.00	1.08E+01	3.07E+01	2.00E-03
Chloroethane	51	2	6.99E+01	2.00	1.06E+01	3.02E+01	1.60E-01
Chloroform	51	2	7.00E+01	2.00	1.06E+01	3.01E+01	8.00E-03
Chloromethane	51	2	6.99E+01	2.00	1.06E+01	3.02E+01	2.50E-02
Dibromochloromethane	52	0	6.93E+01	2.00	1.04E+01	2.96E+01	ND
1,1-Dichloroethane	51	9	6.99E+01	2.00	1.08E+01	3.04E+01	6.50E+00
1,2-Dichloroethane	51	0	7.00E+01	2.00	1.06E+01	3.01E+01	ND
1,1-Dichloroethene	53	12	6.87E+01	2.00	1.16E+01	3.05E+01	1.20E+00
1,2-Dichloroethene (Total)	53	41	3.02E+03	2.00	4.73E+02	1.30E+03	2.20E+04
1,2-Dichloropropane	52	0	6.93E+01	2.00	1.04E+01	2.96E+01	ND
cis-1,3-Dichloropropene	52	0	6.93E+01	2.00	1.04E+01	2.96E+01	ND
trans-1,3-Dichloropropene	52	0	6.93E+01	2.00	1.04E+01	2.96E+01	ND
Ethylbenzene	53	13	1.26E+02	2.00	1.87E+01	5.34E+01	9.20E+02
2-Hexanone	50	0	7.06E+01	2.00	1.12E+01	3.12E+01	ND
Methylene Chloride	52	6	6.93E+01	2.00	1.04E+01	2.96E+01	1.20E-01
4-Methyl-2-Pentanone	50	3	7.06E+01	2.00	1.12E+01	3.12E+01	9.10E-02
Styrene	50	0	7.06E+01	2.00	1.08E+01	3.07E+01	ND
1,1,2,2-Tetrachloroethane	50	0	7.06E+01	2.00	1.08E+01	3.07E+01	ND
Tetrachloroethene	52	6	2.22E+01	2.00	3.82E+00	9.98E+00	1.60E+02
Toluene	53	13	6.86E+01	2.00	1.17E+01	3.06E+01	2.70E+00
1,1,1-Trichloroethane	52	6	7.06E+01	2.00	1.25E+01	3.21E+01	1.10E+02
1,1,2-Trichloroethane	52	1	6.93E+01	2.00	1.04E+01	2.96E+01	1.30E-02
Trichloroethene	53	33	4.53E+04	2.00	6.25E+03	1.87E+04	3.30E+05
Vinyl Acetate	12	0	4.56E+00	2.201	4.11E+00	7.01E+00	ND
Vinyl Chloride	53	30	1.92E+02	2.00	3.59E+01	8.86E+01	1.40E+03
Xylenes (Total)	53	18	9.06E+02	2.00	1.27E+02	3.76E+02	6.60E+03

NA = Not Available
ND = Not Detected

TABLE 8.6
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS FOR GROUNDWATER
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/L)	95% UCL (mg/L)	MAXIMUM CONCENTRATION (mg/L)
SVOCs							
Acenaphthene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Acenaphthylene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Anthracene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Benzo (a) anthracene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Benzo (b) fluoranthene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Benzo (k) fluoranthene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Benzo (g,h,i) perylene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Benzo (a) pyrene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Benzyl alcohol	1	0	NA	NA	NA	NA	ND
Bis (2-chloroethoxy) methane	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Bis (2-chloroethyl) ether	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Bis (2-chloroisopropyl) ether	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Bis (2-ethylhexyl) phthalate	10	3	1.24E-02	2.262	1.00E-02	1.89E-02	4.00E-02
4-Bromophenyl phenyl ether	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Butyl benzyl phthalate	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Carbazole	9	0	8.23E-11	2.306	5.00E-03	5.00E-03	ND
4-Chloroaniline	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
2-Chloronaphthalene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
4-Chlorophenyl phenyl ether	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
1-Chloropropane	9	0	8.23E-11	2.306	5.00E-03	5.00E-03	ND
Chrysene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Dibenzo (a,h) anthracene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Dibenzofuran	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Di-n-butyl phthalate	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
1,2-Dichlorobenzene	10	1	6.37E-03	2.262	6.90E-03	1.15E-02	4.00E-03
1,3-Dichlorobenzene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
1,4-Dichlorobenzene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
3,3'-Dichlorobenzidine	10	0	1.42E-02	2.262	9.50E-03	1.97E-02	ND
Diethyl phthalate	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Dimethyl phthalate	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
2,4-Dinitrotoluene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
2,6-Dinitrotoluene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Di-n-octyl phthalate	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Fluoranthene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Fluorene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Hexachlorobenzene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Hexachlorobutadiene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND

NA = Not Available
ND = Not Detected

TABLE 8.6
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS FOR GROUNDWATER
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/L)	95% UCL (mg/L)	MAXIMUM CONCENTRATION (mg/L)
SVOCs							
Hexachlorocyclopentadiene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Hexachloroethane	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Indeno (1,2,3-cd) pyrene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Isophorone	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
2-Methylnaphthalene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Naphthalene	10	3	1.27E-02	2.262	1.04E-02	1.95E-02	4.20E-02
Nitrobenzene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
2-Nitroaniline	10	0	3.56E-02	2.262	2.38E-02	4.92E-02	ND
3-Nitroaniline	10	0	3.56E-02	2.262	2.38E-02	4.92E-02	ND
4-Nitroaniline	10	0	3.56E-02	2.262	2.38E-02	4.92E-02	ND
N-Nitrosodiphenylamine	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
N-Nitroso-di-n-propylamine	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Phenanthrene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Pyrene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
1,2,4-Trichlorobenzene	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
Acid Extractables							
Benzoic acid	1	0	NA	NA	NA	NA	ND
4-Chloro-3-methylphenol	10	1	7.31E-03	2.262	8.40E-03	1.36E-02	1.90E-02
2-Chlorophenol	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
2,4-Dichlorophenol	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
2,4-Dimethylphenol	10	3	1.16E-02	2.262	1.10E-02	1.93E-02	3.80E-02
2,4-Dinitrophenol	10	0	3.56E-02	2.262	2.38E-02	4.92E-02	ND
4,6-Dinitro-2-methylphenol	10	0	3.56E-02	2.262	2.38E-02	4.92E-02	ND
2-Methylphenol	10	3	1.91E-02	2.262	1.24E-02	2.61E-02	6.50E-02
4-Methylphenol	10	3	1.71E-01	2.262	6.52E-02	1.88E-01	5.50E-01
2-Nitrophenol	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND
4-Nitrophenol	10	0	3.56E-02	2.262	2.38E-02	4.92E-02	ND
Pentachlorophenol	10	0	3.56E-02	2.262	2.38E-02	4.92E-02	ND
Phenol	10	1	3.08E-01	2.262	1.03E-01	3.23E-01	9.80E-01
2,4,5-Trichlorophenol	10	0	3.95E-03	2.262	1.38E-02	1.66E-02	ND
2,4,6-Trichlorophenol	10	0	6.32E-03	2.262	7.00E-03	1.15E-02	ND

NA = Not Available
ND = Not Detected

TABLE 8.6
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS FOR GROUNDWATER
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/L)	95% UCL (mg/L)	MAXIMUM CONCENTRATION (mg/L)
Pesticides and PCBs							
alpha-BHC	1	0	NA	NA	NA	NA	ND
beta-BHC	1	0	NA	NA	NA	NA	ND
delta-BHC	1	0	NA	NA	NA	NA	ND
Lindane	1	0	NA	NA	NA	NA	ND
Heptachlor	1	0	NA	NA	NA	NA	ND
Aldrin	1	0	NA	NA	NA	NA	ND
Heptachlor epoxide	1	0	NA	NA	NA	NA	ND
Endosulfan I	1	0	NA	NA	NA	NA	ND
Dieldrin	1	0	NA	NA	NA	NA	ND
4,4'-DDE	1	0	NA	NA	NA	NA	ND
Endrin	1	0	NA	NA	NA	NA	ND
Endosulfan II	1	0	NA	NA	NA	NA	ND
4,4'-DDE	1	0	NA	NA	NA	NA	ND
Endosulfan sulfate	1	0	NA	NA	NA	NA	ND
4,4'-DDT	1	0	NA	NA	NA	NA	ND
Methoxychlor	1	0	NA	NA	NA	NA	ND
Endrin ketone	1	0	NA	NA	NA	NA	ND
alpha-Chlordane	1	0	NA	NA	NA	NA	ND
gamma-Chlordane	1	0	NA	NA	NA	NA	ND
Toxaphene	1	0	NA	NA	NA	NA	ND
Aroclor-1016	1	0	NA	NA	NA	NA	ND
Aroclor-1221	1	0	NA	NA	NA	NA	ND
Aroclor-1232	1	0	NA	NA	NA	NA	ND
Aroclor-1242	1	0	NA	NA	NA	NA	ND
Aroclor-1248	1	0	NA	NA	NA	NA	ND
Aroclor-1254	1	0	NA	NA	NA	NA	ND
Aroclor-1260	1	0	NA	NA	NA	NA	ND
Metals							
Aluminum	9	8	1.06E+01	2.306	7.22E+00	1.53E+01	3.35E+01
Antimony	9	0	8.66E-03	2.306	6.92E-03	1.36E-02	ND
Arsenic	9	9	2.94E-03	2.306	5.06E-03	7.32E-03	1.15E-02
Barium	9	9	1.22E-01	2.306	2.37E-01	3.31E-01	4.58E-01
Beryllium	9	0	7.43E-04	2.306	6.05E-04	1.18E-03	ND
Cadmium	9	0	6.09E-04	2.306	1.08E-03	1.54E-03	ND
Calcium	9	9	1.46E+02	2.306	2.10E+02	3.23E+02	5.25E+02

NA = Not Available
ND = Not Detected

TABLE 8.6
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS FOR GROUNDWATER
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/L)	95% UCL (mg/L)	MAXIMUM CONCENTRATION (mg/L)
Metals							
Chromium	9	7	3.28E-02	2.306	3.19E-02	5.71E-02	8.30E-02
Cobalt	9	6	1.13E-02	2.306	1.17E-02	2.04E-02	3.20E-02
Copper	9	6	2.59E-02	2.306	2.59E-02	4.58E-02	8.15E-02
Cyanide (total)	1	0	NA	NA	NA	NA	ND
Iron	9	9	1.50E+01	2.306	1.44E+01	2.59E+01	5.13E+01
Lead	9	4	2.82E-02	2.306	1.53E-02	3.70E-02	8.88E-02
Magnesium	9	9	1.02E+02	2.306	1.21E+02	2.00E+02	3.10E+02
Manganese	9	9	4.90E-01	2.306	4.13E-01	7.90E-01	1.62E+00
Mercury	9	0	1.67E-05	2.306	5.56E-05	6.84E-05	ND
Nickel	9	6	6.42E-02	2.306	4.84E-02	9.77E-02	1.75E-01
Potassium	9	9	3.87E+00	2.306	6.61E+00	9.59E+00	1.24E+01
Selenium	9	0	8.19E-04	2.306	1.50E-03	2.13E-03	ND
Silver	9	0	1.32E-03	2.306	1.49E-03	2.50E-03	ND
Sodium	9	9	1.64E+02	2.306	1.55E+02	2.81E+02	4.90E+02
Thallium	9	0	1.47E-03	2.306	1.09E-03	2.22E-03	ND
Vanadium	9	4	1.64E-02	2.306	1.19E-02	2.45E-02	5.02E-02
Zinc	9	7	1.92E-01	2.306	1.66E-01	3.14E-01	5.96E-01
TPH	24	7	1.68E+00	2.069	4.87E-01	1.19E+00	8.00E+00
Petroleum Products							
Gasoline	1	NA	NA	NA	NA	NA	NA
Kerosene	1	1	1.00E-01	NA	1.00E-01	1.00E-01	1.00E-01
Fuel Oil	1	1	5.90E-01	NA	5.90E-01	5.90E-01	5.90E-01
Lubricating Oil	1	NA	NA	NA	NA	NA	NA

NA = Not Available
ND = Not Detected

TABLE 8.7
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS FOR
PERIMETER WELLS
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/L)	95% UCL (mg/L)	MAXIMUM CONCENTRATION (mg/L)
VOCs							
Acetone	4	1	1.00E-03	3.182	4.50E-03	6.09E-03	3.00E-03
Benzene	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
Bromodichloromethane	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
Bromoform	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
Bromomethane	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
2-Butanone	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
Carbon Disulfide	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
Carbon Tetrachloride	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
Chlorobenzene	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
Chloroethane	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
Chloroform	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
Chloromethane	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
Dibromochloromethane	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
1,1-Dichloroethane	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
1,2-Dichloroethane	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
1,1-Dichloroethene	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
1,2-Dichloroethene (Total)	4	2	9.57E-04	3.182	4.25E-03	5.77E-03	4.00E-03
1,2-Dichloropropane	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
cis-1,3-Dichloropropene	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
trans-1,3-Dichloropropene	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
Ethylbenzene	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
2-Hexanone	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
Methylene Chloride	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
4-Methyl-2-Pentanone	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
Styrene	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
1,1,2,2-Tetrachloroethane	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
Tetrachloroethene	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
Toluene	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
1,1,1-Trichloroethane	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
1,1,2-Trichloroethane	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
Trichloroethene	4	2	1.81E-02	3.182	1.50E-02	4.37E-02	4.20E-02
Vinyl Acetate	0	0	NA	NA	NA	NA	NA
Vinyl Chloride	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND
Xylenes (Total)	4	0	0.00E+00	3.182	5.00E-03	5.00E-03	ND

NA = Not Available
ND = Not Detected

TABLE 8.7
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS FOR PERIMETER WELLS
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/L)	95% UCL (mg/L)	MAXIMUM CONCENTRATION (mg/L)
SVOCs							
Acenaphthene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Acenaphthylene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Anthracene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Benzo (a) anthracene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Benzo (b) fluoranthene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Benzo (k) fluoranthene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Benzo (g,h,i) perylene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Benzo (a) pyrene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Bis (2-chloroethoxy) methane	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Bis (2-chloroethyl) ether	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Bis (2-chloroisopropyl) ether	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Bis (2-ethylhexyl) phthalate	2	2	2.62E-02	12.706	2.15E-02	2.57E-01	4.00E-02
4-Bromophenyl phenyl ether	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Butyl benzyl phthalate	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Carbazole	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
4-Chloroaniline	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
2-Chloronaphthalene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
4-Chlorophenyl phenyl ether	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
1-Chloropropane	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Chrysene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Dibenzo (a,h) anthracene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Dibenzofuran	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Di-n-butyl phthalate	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
1,2-Dichlorobenzene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
1,3-Dichlorobenzene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
1,4-Dichlorobenzene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
3,3'-Dichlorobenzidine	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Diethyl phthalate	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Dimethyl phthalate	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
2,4-Dinitrotoluene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
2,6-Dinitrotoluene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Di-n-octyl phthalate	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Fluoranthene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Fluorene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Hexachlorobenzene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Hexachlorobutadiene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Hexachlorocyclopentadiene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Hexachloroethane	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Indeno (1,2,3-cd) pyrene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Isophorone	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND

NA = Not Available
ND = Not Detected

TABLE 8.7
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS FOR PERIMETER WELLS
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/L)	95% UCL (mg/L)	MAXIMUM CONCENTRATION (mg/L)
SVOCs							
2-Methylnaphthalene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Naphthalene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Nitrobenzene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
2-Nitroaniline	2	0	0.00E+00	12.706	1.25E-02	1.25E-02	ND
3-Nitroaniline	2	0	0.00E+00	12.706	1.25E-02	1.25E-02	ND
4-Nitroaniline	2	0	0.00E+00	12.706	1.25E-02	1.25E-02	ND
N-Nitrosodiphenylamine	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
N-Nitroso-di-n-propylamine	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Phenanthrene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Pyrene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
1,2,4-Trichlorobenzene	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Acid Extractables							
4-Chloro-3-methylphenol	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
2-Chlorophenol	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
2,4-Dichlorophenol	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
2,4-Dimethylphenol	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
2,4-Dinitrophenol	2	0	0.00E+00	12.706	1.25E-02	1.25E-02	ND
4,6-Dinitro-2-methylphenol	2	0	0.00E+00	12.706	1.25E-02	1.25E-02	ND
2-Methylphenol	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
4-Methylphenol	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
2-Nitrophenol	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
4-Nitrophenol	2	0	0.00E+00	12.706	1.25E-02	1.25E-02	ND
Pentachlorophenol	2	0	0.00E+00	12.706	1.25E-02	1.25E-02	ND
Phenol	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
2,4,5-Trichlorophenol	2	0	0.00E+00	12.706	1.25E-02	1.25E-02	ND
2,4,6-Trichlorophenol	2	0	0.00E+00	12.706	5.00E-03	5.00E-03	ND
Metals							
Aluminum	2	2	5.71E+00	12.706	4.77E+00	5.61E+01	8.81E+00
Antimony	2	0	0.00E+00	12.706	3.95E-03	3.95E-03	ND
Arsenic	2	2	0.00E+00	12.706	3.60E-03	3.60E-03	3.60E-03
Barium	2	2	1.68E-01	12.706	1.77E-01	1.68E+00	2.96E-01
Beryllium	2	0	0.00E+00	12.706	2.50E-04	2.50E-04	ND
Cadmium	2	0	0.00E+00	12.706	6.50E-04	6.50E-04	ND
Calcium	2	2	5.23E+01	12.706	1.42E+02	6.12E+02	1.79E+02
Chromium	2	2	3.25E-03	12.706	1.12E-02	4.04E-02	1.35E-02
Cobalt	2	2	2.01E-02	12.706	1.80E-02	1.98E-01	3.22E-02

NA = Not Available
ND = Not Detected

TABLE 8.7
SUMMARY OF MEAN, 95% UCL AND MAXIMUM CONCENTRATIONS FOR
PERIMETER WELLS
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/L)	95% UCL (mg/L)	MAXIMUM CONCENTRATION (mg/L)
Copper	2	0	1.34E-03	12.706	5.20E-03	1.73E-02	ND
Metals							
Iron	2	2	3.87E+00	12.706	1.11E+01	4.58E+01	1.38E+01
Lead	2	1	8.52E-03	12.706	7.38E-03	8.39E-02	1.34E-02
Magnesium	2	2	7.68E+01	12.706	9.27E+01	7.83E+02	1.47E+02
Manganese	2	2	2.27E-01	12.706	2.53E-01	2.30E+00	4.14E-01
Mercury	2	0	0.00E+00	12.706	5.00E-05	5.00E-05	ND
Nickel	2	2	2.12E-04	12.706	7.25E-03	9.16E-03	7.40E-03
Potassium	2	2	4.78E+00	12.706	7.12E+00	5.01E+01	1.05E+01
Selenium	2	0	0.00E+00	12.706	1.10E-03	1.10E-03	ND
Silver	2	0	0.00E+00	12.706	1.05E-03	1.05E-03	ND
Sodium	2	2	2.91E+01	12.706	3.22E+01	2.93E+02	5.27E+01
Thallium	2	0	0.00E+00	12.706	6.00E-04	6.00E-04	ND
Vanadium	2	1	4.24E-03	12.706	4.00E-03	4.21E-02	6.70E-03
Zinc	2	1	3.94E-02	12.706	3.90E-02	3.93E-01	6.68E-02
TPH	2	0	0.00E+00	12.706	1.25E-03	1.25E-03	ND

NA = Not Available
ND = Not Detected

TABLE 8.8
SUMMARY OF MEAN AND 95% UCL FOR BACKGROUND GROUNDWATER
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/L)	95% UCL (mg/L)	MAXIMUM CONCENTRATION (mg/L)
VOCs							
Acetone	5	0	8.94E-03	2.776	9.00E-03	2.01E-02	ND
Benzene	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
Bromodichloromethane	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
Bromoform	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
Bromomethane	5	0	0.00E+00	2.776	5.00E-03	5.00E-03	ND
2-Butanone	5	0	8.94E-03	2.776	9.00E-03	2.01E-02	ND
Carbon Disulfide	5	1	2.33E-03	2.776	5.30E-03	8.20E-03	9.00E-03
Carbon Tetrachloride	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
Chlorobenzene	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
Chloroethane	5	0	0.00E+00	2.776	5.00E-03	5.00E-03	ND
Chloroform	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
Chloromethane	5	0	0.00E+00	2.776	5.00E-03	5.00E-03	ND
Dibromochloromethane	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
1,1-Dichloroethane	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
1,2-Dichloroethane	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
1,1-Dichloroethene	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
1,2-Dichloroethene (Total)	5	3	1.26E-02	2.776	1.11E-02	2.68E-02	3.20E-02
1,2-Dichloropropane	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
cis-1,3-Dichloropropene	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
trans-1,3-Dichloropropene	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
Ethylbenzene	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
2-Hexanone	5	0	8.94E-03	2.776	9.00E-03	2.01E-02	ND
Methylene Chloride	5	1	1.86E-03	2.776	3.70E-03	6.01E-03	1.00E-03
4-Methyl-2-Pentanone	5	0	8.94E-03	2.776	9.00E-03	2.01E-02	ND
Styrene	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
1,1,2,2-Tetrachloroethane	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
Tetrachloroethene	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
Toluene	5	1	1.86E-03	2.776	3.70E-03	6.01E-03	1.00E-03
1,1,1-Trichloroethane	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
1,1,2-Trichloroethane	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND
Trichloroethene	5	3	1.38E-02	2.776	9.00E-03	2.61E-02	3.35E-02
Vinyl Acetate	1	0	2.50E-02	NA	2.50E-02	2.50E-02	ND
Vinyl Chloride	5	0	0.00E+00	2.776	5.00E-03	5.00E-03	ND
Xylenes (Total)	5	0	1.12E-03	2.776	4.50E-03	5.89E-03	ND

NA = Not Available
ND = Not Detected

TABLE 8.8
SUMMARY OF MEAN AND 95% UCL FOR BACKGROUND GROUNDWATER
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/L)	95% UCL (mg/L)	MAXIMUM CONCENTRATION (mg/L)
SVOCs							
Acenaphthene	0	0	NA	NA	NA	NA	NA
Acenaphthylene	0	0	NA	NA	NA	NA	NA
Anthracene	0	0	NA	NA	NA	NA	NA
Benzo (a) anthracene	0	0	NA	NA	NA	NA	NA
Benzo (b) fluoranthene	0	0	NA	NA	NA	NA	NA
Benzo (k) fluoranthene	0	0	NA	NA	NA	NA	NA
Benzo (g,h,i) perylene	0	0	NA	NA	NA	NA	NA
Benzo (a) pyrene	0	0	NA	NA	NA	NA	NA
Benzyl alcohol	0	0	NA	NA	NA	NA	NA
Bis (2-chloroethoxy) methane	0	0	NA	NA	NA	NA	NA
Bis (2-chloroethyl) ether	0	0	NA	NA	NA	NA	NA
Bis (2-chloroisopropyl) ether	0	0	NA	NA	NA	NA	NA
Bis (2-ethylhexyl) phthalate	0	0	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	0	0	NA	NA	NA	NA	NA
Butyl benzyl phthalate	0	0	NA	NA	NA	NA	NA
Carbazole	0	0	NA	NA	NA	NA	NA
4-Chloroaniline	0	0	NA	NA	NA	NA	NA
2-Chloronaphthalene	0	0	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	0	0	NA	NA	NA	NA	NA
1-Chloropropane	0	0	NA	NA	NA	NA	NA
Chrysene	0	0	NA	NA	NA	NA	NA
Dibenzo (a,h) anthracene	0	0	NA	NA	NA	NA	NA
Dibenzofuran	0	0	NA	NA	NA	NA	NA
Di-n-butyl phthalate	0	0	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	0	0	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	0	0	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	0	0	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	0	0	NA	NA	NA	NA	NA
Diethyl phthalate	0	0	NA	NA	NA	NA	NA
Dimethyl phthalate	0	0	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	0	0	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	0	0	NA	NA	NA	NA	NA
Di-n-octyl phthalate	0	0	NA	NA	NA	NA	NA
Fluoranthene	0	0	NA	NA	NA	NA	NA
Fluorene	0	0	NA	NA	NA	NA	NA
Hexachlorobenzene	0	0	NA	NA	NA	NA	NA
Hexachlorobutadiene	0	0	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	0	0	NA	NA	NA	NA	NA
Hexachloroethane	0	0	NA	NA	NA	NA	NA

NA = Not Available
ND = Not Detected

TABLE 8.8
SUMMARY OF MEAN AND 95% UCL FOR BACKGROUND GROUNDWATER
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/L)	95% UCL (mg/L)	MAXIMUM CONCENTRATION (mg/L)
SVOCs							
Indeno (1,2,3-cd) pyrene	0	0	NA	NA	NA	NA	NA
Isophorone	0	0	NA	NA	NA	NA	NA
2-Methylnaphthalene	0	0	NA	NA	NA	NA	NA
Naphthalene	0	0	NA	NA	NA	NA	NA
Nitrobenzene	0	0	NA	NA	NA	NA	NA
2-Nitroaniline	0	0	NA	NA	NA	NA	NA
3-Nitroaniline	0	0	NA	NA	NA	NA	NA
4-Nitroaniline	0	0	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	0	0	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	0	0	NA	NA	NA	NA	NA
Phenanthrene	0	0	NA	NA	NA	NA	NA
Pyrene	0	0	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0	0	NA	NA	NA	NA	NA
Acid Extractables							
Benzoic acid	0	0	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	0	0	NA	NA	NA	NA	NA
2-Chlorophenol	0	0	NA	NA	NA	NA	NA
2,4-Dichlorophenol	0	0	NA	NA	NA	NA	NA
2,4-Dimethylphenol	0	0	NA	NA	NA	NA	NA
2,4-Dinitrophenol	0	0	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	0	0	NA	NA	NA	NA	NA
2-Methylphenol	0	0	NA	NA	NA	NA	NA
4-Methylphenol	0	0	NA	NA	NA	NA	NA
2-Nitrophenol	0	0	NA	NA	NA	NA	NA
4-Nitrophenol	0	0	NA	NA	NA	NA	NA
Pentachlorophenol	0	0	NA	NA	NA	NA	NA
Phenol	0	0	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	0	0	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	0	0	NA	NA	NA	NA	NA
Pesticides and PCBs							
alpha-BHC	0	0	NA	NA	NA	NA	NA
beta-BHC	0	0	NA	NA	NA	NA	NA
delta-BHC	0	0	NA	NA	NA	NA	NA
Lindane	0	0	NA	NA	NA	NA	NA
Heptachlor	0	0	NA	NA	NA	NA	NA

NA = Not Available
ND = Not Detected

TABLE 8.8
SUMMARY OF MEAN AND 95% UCL FOR BACKGROUND GROUNDWATER
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/L)	95% UCL (mg/L)	MAXIMUM CONCENTRATION (mg/L)
Pesticides and PCBs							
Aldrin	0	0	NA	NA	NA	NA	NA
Heptachlor epoxide	0	0	NA	NA	NA	NA	NA
Endosulfan I	0	0	NA	NA	NA	NA	NA
Dieldrin	0	0	NA	NA	NA	NA	NA
4,4'-DDE	0	0	NA	NA	NA	NA	NA
Endrin	0	0	NA	NA	NA	NA	NA
Endosulfan II	0	0	NA	NA	NA	NA	NA
4,4'-DDE	0	0	NA	NA	NA	NA	NA
Endosulfan sulfate	0	0	NA	NA	NA	NA	NA
4,4'-DDT	0	0	NA	NA	NA	NA	NA
Methoxychlor	0	0	NA	NA	NA	NA	NA
Endrin ketone	0	0	NA	NA	NA	NA	NA
alpha-Chlordane	0	0	NA	NA	NA	NA	NA
gamma-Chlordane	0	0	NA	NA	NA	NA	NA
Toxaphene	0	0	NA	NA	NA	NA	NA
Aroclor-1016	0	0	NA	NA	NA	NA	NA
Aroclor-1221	0	0	NA	NA	NA	NA	NA
Aroclor-1232	0	0	NA	NA	NA	NA	NA
Aroclor-1242	0	0	NA	NA	NA	NA	NA
Aroclor-1248	0	0	NA	NA	NA	NA	NA
Aroclor-1254	0	0	NA	NA	NA	NA	NA
Aroclor-1260	0	0	NA	NA	NA	NA	NA
Metals							
Aluminum	0	0	NA	NA	NA	NA	NA
Antimony	0	0	NA	NA	NA	NA	NA
Arsenic	0	0	NA	NA	NA	NA	NA
Barium	0	0	NA	NA	NA	NA	NA
Beryllium	0	0	NA	NA	NA	NA	NA
Cadmium	0	0	NA	NA	NA	NA	NA
Calcium	0	0	NA	NA	NA	NA	NA
Chromium	0	0	NA	NA	NA	NA	NA
Cobalt	0	0	NA	NA	NA	NA	NA
Copper	0	0	NA	NA	NA	NA	NA
Cyanide (total)	0	0	NA	NA	NA	NA	NA
Iron	0	0	NA	NA	NA	NA	NA
Lead	0	0	NA	NA	NA	NA	NA
Magnesium	0	0	NA	NA	NA	NA	NA

NA = Not Available
ND = Not Detected

TABLE 8.8
SUMMARY OF MEAN AND 95% UCL FOR BACKGROUND GROUNDWATER
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	TOTAL SAMPLES (n)	POSITIVE DETECTS	STANDARD DEVIATION	t-value (n-1)	MEAN (mg/L)	95% UCL (mg/L)	MAXIMUM CONCENTRATION (mg/L)
Metals							
Manganese	0	0	NA	NA	NA	NA	NA
Mercury	0	0	NA	NA	NA	NA	NA
Nickel	0	0	NA	NA	NA	NA	NA
Potassium	0	0	NA	NA	NA	NA	NA
Selenium	0	0	NA	NA	NA	NA	NA
Silver	0	0	NA	NA	NA	NA	NA
Sodium	0	0	NA	NA	NA	NA	NA
Thallium	0	0	NA	NA	NA	NA	NA
Vanadium	0	0	NA	NA	NA	NA	NA
Zinc	0	0	NA	NA	NA	NA	NA
TPH	1	0	1.25E-03	NA	1.25E-03	1.25E-03	ND
Petroleum Products							
Gasoline	0	0	NA	NA	NA	NA	NA
Kerosene	0	0	NA	NA	NA	NA	NA
Fuel Oil	0	0	NA	NA	NA	NA	NA
Lubricating Oil	0	0	NA	NA	NA	NA	NA

NA = Not Available
ND = Not Detected

TABLE 8.9
SUMMARY OF CHEMICALS OF POTENTIAL CONCERN
LEICA INC.
CHEEKTOWAGA, NEW YORK

	BEDROCK GROUNDWATER		*SOIL*	
PARAMETER	ON-SITE	PERIMETER WELLS	SECTOR A	SECTOR C
VOCs				
Acetone	x	x	x	x
Benzene	x			x
Bromodichloromethane				
Bromoform				
Bromomethane			x	
2-Butanone			x	x
Carbon Disulfide			x	x
Carbon Tetrachloride				
Chlorobenzene				
Chloroethane				
Chloroform				
Chloromethane				
Dibromochloromethane				
1,1-Dichloroethane	x			x
1,2-Dichloroethane				
1,1-Dichloroethene	x			x
1,2-Dichloroethene (Total)	x	x	x	x
1,2-Dichloropropane				
cis-1,3-Dichloropropene				
trans-1,3-Dichloropropene				
Ethylbenzene	x		x	x
2-Hexanone			x	
Methylene Chloride	x		x	x
4-Methyl-2-Pentanone				
Styrene				
1,1,2,2-Tetrachloroethane				
Tetrachloroethene	x			x
Toluene	x		x	x
1,1,1-Trichloroethane	x			x
1,1,2-Trichloroethane				
Trichloroethene	x	x	x	x
Vinyl Acetate				
Vinyl Chloride	x		x	x
Xylenes (Total)	x		x	x

TABLE 8.9
SUMMARY OF CHEMICALS OF POTENTIAL CONCERN
LEICA INC.
CHEEKTOWAGA, NEW YORK

	BEDROCK GROUNDWATER		*SOIL*	
PARAMETER	ON-SITE	PERIMETER WELLS	SECTOR A	SECTOR C
SVOCs				
Acenaphthene			x	
Acenaphthylene			x	
Anthracene			x	
Benzo (a) anthracene			x	x
Benzo (b) fluoranthene			x	x
Benzo (k) fluoranthene			x	x
Benzo (g,h,i) perylene			x	x
Benzo (a) pyrene			x	x
Bis (2-chloroethoxy) methane				
Bis (2-chloroethyl) ether				
Bis (2-chloroisopropyl) ether				
Bis (2-ethylhexyl) phthalate	x	x	x	
4-Bromophenyl phenyl ether				
Butyl benzyl phthalate			x	
Carbazole			x	
4-Chloroaniline				
2-Chloronaphthalene				
4-Chlorophenyl phenyl ether				
1-Chloropropane				
Chrysene			x	x
Dibenzo (a,h) anthracene			x	
Dibenzofuran			x	
Di-n-butyl phthalate			x	x
1,2-Dichlorobenzene	x			
1,3-Dichlorobenzene				
1,4-Dichlorobenzene				
3,3'-Dichlorobenzidine				
Diethyl phthalate				
Dimethyl phthalate				
2,4-Dinitrotoluene				
2,6-Dinitrotoluene				
Di-n-octyl phthalate				
Fluoranthene			x	x
Fluorene			x	
Hexachlorobenzene				
Hexachlorobutadiene				
Hexachlorocyclopentadiene				
Hexachloroethane				
Indeno (1,2,3-cd) pyrene			x	x

TABLE 8.9
SUMMARY OF CHEMICALS OF POTENTIAL CONCERN
LEICA INC.
CHEEKTOWAGA, NEW YORK

	BEDROCK GROUNDWATER		*SOIL*	
PARAMETER	ON-SITE	PERIMETER WELLS	SECTOR A	SECTOR C
SVOCs				
Isophorone				
2-Methylnaphthalene			x	x
Naphthalene	x		x	x
Nitrobenzene				
2-Nitroaniline				
3-Nitroaniline				
4-Nitroaniline				
N-Nitrosodiphenylamine				
N-Nitroso-di-n-propylamine				
Phenanthrene			x	x
Pyrene			x	x
1,2,4-Trichlorobenzene				
Acid Extractables				
4-Chloro-3-methylphenol	x			
2-Chlorophenol				
2,4-Dichlorophenol				
2,4-Dimethylphenol	x			x
2,4-Dinitrophenol				
4,6-Dinitro-2-methylphenol				
2-Methylphenol	x			x
4-Methylphenol	x			x
2-Nitrophenol				
4-Nitrophenol				
Pentachlorophenol				
Phenol	x			x
2,4,5-Trichlorophenol				
2,4,6-Trichlorophenol				
Metals				
Aluminum	x	x	x	x
Antimony				
Arsenic	x	x	x	x
Barium	x	x	x	x
Beryllium			x	x
Cadmium			x	x
Calcium	x	x	x	x

TABLE 8.9
SUMMARY OF CHEMICALS OF POTENTIAL CONCERN
LEICA INC.
CHEEKTOWAGA, NEW YORK

	BEDROCK GROUNDWATER		*SOIL*	
PARAMETER	ON-SITE	PERIMETER WELLS	SECTOR A	SECTOR C
Metals				
Chromium	x	x	x	x
Cobalt	x	x	x	x
Copper	x		x	x
Iron	x	x	x	x
Lead	x	x		x
Magnesium	x	x	x	x
Manganese	x	x	x	x
Mercury			x	x
Nickel	x	x	x	x
Potassium	x	x	x	x
Selenium			x	x
Silver				
Sodium	x	x	x	x
Thallium			x	x
Vanadium	x	x	x	x
Zinc	x	x	x	x

TABLE 8.10
SUMMARY OF PHYSIOCHEMICAL PROPERTIES AND TOXICITY DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	Water Solubility (mg/L)	Vapor Pressure (mm Hg)	Henry's Law Constant (atm-m3/mol)	Koc (ml/g)	Log Kow	RfD Oral (mg/kg-day)	CSF Oral (1/(mg/kg - day))
VOCs							
ACETONE	miscible	231	3.67E-05	0.37	-0.24	0.1	--
BENZENE	1791	95.19	5.43E-03	48.98	2.13	--	0.029
BROMOMETHANE	17500	1633	6.24E-03	83.18	1.19	0.0014	--
2-BUTANONE	23900	90.6	1.05E-05	1.23	0.29	0.6	--
CARBON DISULPHIDE	2100	297	1.40E-03	239.88-354.81	1.70-4.16	0.1	--
1,1-DICHLOROETHANE	5060	227	5.87E-03	30.20	1.79	0.1	--
1,1-DICHLOROETHENE	400	500	1.50E-02	64.57	1.48	0.009	0.6
1,2-DICHLOROETHENE (TOTAL)	--	--	--	--	--	0.009	--
ETHYLBENZENE	152	7	6.44E-03	257.04	3.15	0.1	--
2-HEXANONE	35000	2	1.75E-03	134.90	1.38	--	--
METHYLENE CHLORIDE	13000	434.9	2.68E-03	8.71	1.25	0.06	0.0075
TETRACHLOROETHENE	150.3	18.49	1.49E-02	263.03	3.40	0.01	0.051
TOLUENE	534.8	28.4	5.94E-03	114.82	2.73	0.2	--
1,1,1-TRICHLOROETHANE	1495	123.7	8.00E-03	151.36	2.49	0.09	--
TRICHLOROETHENE	1100	69	1.03E-02	64.57	2.42	--	--
VINYL CHLORIDE	2763	2660	1.07E-02	2.45	1.38	--	1.9
XYLENES (TOTAL)	146-175	6.6-8.7	5.00E-03-7.68E-03	128.82-1584.89	3.12-3.20	2	--
SVOCs							
ACENAPHTHENE	3.47	1.55E-03	2.41E-04	1.78E+01	3.92	0.06	--
ACENAPHTHYLENE	3.93	2.90E-02	1.14E-04	4.79E+03	4.07	--	--
ANTHRACENE	1.29	1.95E-04	6.51E-05	2.57E+04	4.45	0.3	--
BENZO (a) ANTHRACENE	0.01	1.10E-07	6.60E-07	1.38E+06	5.90	--	0.73*
BENZO (b) FLUORANTHENE	0.014	5.00E-07	1.20E-05	5.50E+05	6.57	--	0.73*
BENZO (k) FLUORANTHENE	0.00055	9.59E-11	1.04E-03	4.37E+06	6.85	--	0.073*
BENZO (g,h,i) PERYLENE	0.00026	1.01E-10	1.40E-07	7.76E+06	7.10	--	--
BENZO (a) PYRENE	0.003	5.49E-09	2.40E-06	8.91E+05	5.99	--	7.3
BIS(2-ETHYLHEXYL) PHTHALATE	0.3	6.45E-06	1.10E-05	1.00E+05	5.11	0.02	0.014
BUTYL BENZYL PHTHALATE	2.69	8.60E-06	1.30E-06	--	4.91	0.2	--
CARBAZOLE	--	4.00E+02 (@ 323°C)	--	--	3.29	--	0.02
CHRYSENE	0.006	6.30E-07	7.26E-20	2.45E+05	5.61	--	0.0073*
DIBENZO (a,h) ANTHRACENE	0.005	1.00E-10	7.33E-09	1.66E+06	6.36	--	7.3*
DIBENZOFURAN	10	--	--	1.00E+04	4.17	--	--
DI-n-BUTYL PHTHALATE	400	1.00E-05	6.30E-05	1.38E+03	4.79	0.1	--
1,2-DICHLOROBENZENE	100	1.00E+00	1.20E-03	1.86E+02	3.38	0.09	--
FLUORANTHENE	0.12	1.00E-02	1.69E-02	4.17E+04	5.22	0.04	--
FLUORENE	1.9	7.10E-04	2.10E-04	5.01E+03	4.38	0.04	--
INDENO (1,2,3-cd) PYRENE	0.062	1.00E-10	2.96E-20	3.09E+07	5.97	--	0.73*
2-METHYL NAPHTHALENE	24.6	--	--	8.51E+03	4.11	--	--
NAPHTHALENE	31.7	8.20E-02	4.83E-04	1.29E+03	3.30	--	--
PHENANTHRENE	1.18	2.10E-04	2.56E-05	2.29E+04	4.46	--	--
PYRENE	0.135	6.85E-07	1.09E-05	6.46E+04	4.09	0.03	--

Notes:
-- - Data not available.
NA - Not applicable.
* - CSF derived by comparing relative potency to benzo(a)pyrene.

TABLE 8.10
SUMMARY OF PHYSIOCHEMICAL PROPERTIES AND TOXICITY DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

PARAMETER	Water Solubility (mg/L)	Vapor Pressure (mm Hg)	Henry's Law Constant (atm-m3/mol)	Koc (ml/g)	Log Kow	RfD Oral (mg/kg-day)	CSF Oral (1/(mg/kg - day))
ACID EXTRACTABLES							
4-CHLORO-3-METHYLPHENOL	3850	0.05	1.78E-06	776.25	3.10	--	--
2,4-DIMETHYLPHENOL	6200	0.098	6.30E-07	117.49	2.30	0.02	--
2-METHYLPHENOL	25000	0.31	1.60E-06	21.88	1.95	0.05	--
4-METHYLPHENOL	22600 (@ 40 C)	0.13	9.60E-07	48.98	1.94	0.005	--
PHENOL	87000	0.524	3.97E-07	17.38	1.46	0.6	--
METALS							
ALUMINUM	insoluble		NA	NA	NA	--	--
ARSENIC	--	--	NA	NA	NA	0.0003	1.75
BARIUM	decomposes	10 (1049°C)	NA	NA	NA	0.07	--
BERYLLIUM	insoluble	1 (@ 1520°°C)	NA	NA	NA	0.005	4.3
CADMIUM	5	1 (@ 1000°C)	NA	NA	NA	0.0005	--
CALCIUM	--	-	NA	NA	NA	--	--
CHROMIUM	insoluble	1 (@ 1616°C)	NA	NA	NA	--	--
COBALT	insoluble	--	NA	NA	NA	--	--
COPPER	insoluble	10 (@ 1870°C)	NA	NA	NA	0.037	--
IRON	--	--	NA	NA	NA	--	--
LEAD	insoluble	10 (@ 1162°C)	NA	NA	NA	0.0014	--
MAGNESIUM	--	-	NA	NA	NA	--	--
MANGANESE	decomposes	1 (@ 1292°C)	NA	NA	NA	0.005	--
MERCURY	0.056	0.002	NA	NA	NA	--	--
NICKEL	insoluble	1 (@ 1810°C)	NA	NA	NA	0.02	--
POTASSIUM	--	--	NA	NA	NA	--	--
SELENIUM	38.4g/100cc (@ 14 C)	12.5 (@ 70°C)	NA	NA	NA	0.005	--
SODIUM	--	--	NA	NA	NA	--	--
THALLIUM	insoluble	10 (@ 1000°C)	NA	NA	NA	0.00007	--
VANADIUM	insoluble	--	NA	NA	NA	0.007	--
ZINC	--	--	NA	NA	NA	0.3	--

Notes:

-- - Data not available.
NA - Not applicable.
* - CSF derived by comparing relative potency to benzo(a)pyrene.

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TABLE 8.10
SUMMARY OF PHYSIOCHEMICAL PROPERTIES AND TOXICITY DATA
LEICA INC.
CHEEKTOWAGA, NEW YORK

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TABLE 8.11
SUMMARY OF ESTIMATED ADDITIONAL CANCER RISKS
LEICA INC.
CHEEKTOWAGA, NEW YORK

TOTAL ESTIMATED ADDITIONAL CANCER RISKS :

SCENARIO	MEAN	RME
SECTOR A (SOIL) :		
Cemetery Worker	1.08E-07	6.01E-06
Trespasser - Child	3.86E-06	2.62E-05
Trespasser - Older Child	1.78E-06	1.60E-05
Trespasser - Lifetime	5.64E-06	4.22E-05
SECTOR C (SOIL) :		
Construction Worker	1.33E-08	3.08E-08
BEDROCK GROUNDWATER (ON-SITE) :		
Drinking Water - Child	3.24E-01	7.26E-01
Drinking Water - Older Child/Adult	1.48E-01	1.66E+00
Drinking Water - Lifetime	4.72E-01	2.39E+00
Drinking Water - Bathing/Showering	7.08E-01	3.58E+00
BEDROCK GROUNDWATER (OFF-SITE) :		
Drinking Water - Child	2.83E-05	2.94E-05
Drinking Water - Older Child/Adult	6.07E-04	5.07E-03
Drinking Water - Lifetime	6.35E-04	5.10E-03
Drinking Water - Bathing/Showering	9.53E-04	7.65E-03

TABLE 8.12
SUMMARY OF HAZARD INDICES
LEICA INC.
CHEEKTOWAGA, NEW YORK

HAZARD INDICES :

SCENARIO	MEAN	RME
SECTOR A (SOIL) :		
Cemetery Worker	3.64E-03	3.82E-02
Trespasser - Child	1.46E-01	5.42E-01
Trespasser - Older Child	2.63E-02	1.03E-01
Trespasser - Lifetime	1.72E-01	6.45E-01
SECTOR C (SOIL) :		
Construction Worker	5.74E-03	3.61E-02
BEDROCK GROUNDWATER (ON-SITE) :		
Drinking Water - Child	3.31E+03	4.40E+04
Drinking Water - Older Child/Adult	1.51E+03	1.01E+05
Drinking Water - Lifetime	4.82E+03	1.45E+05
Drinking Water - Bathing/Showering	7.23E+03	2.18E+05
BEDROCK GROUNDWATER (OFF-SITE) :		
Drinking Water - Child	4.38E+00	3.37E+01
Drinking Water - Older Child/Adult	1.90E+03	7.47E+04
Drinking Water - Lifetime	1.90E+03	7.47E+04
Drinking Water - Bathing/Showering	2.86E+03	1.12E+05