

cc JA, LH, + RYoung
Return original to
John Swanson, DEC
7-28-88 ASE

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RECEIVED

02-8710-102-PA
REV. NO. 0

PRELIMINARY ASSESSMENT
TAYLOR INSTRUMENT/DIVISION OF SYBRON

PREPARED UNDER

TECHNICAL DIRECTIVE DOCUMENT NO. 02-8710-102
CONTRACT NO. 68-01-7346

FOR THE

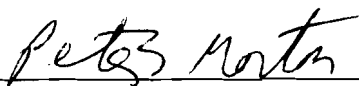
ENVIRONMENTAL SERVICES DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

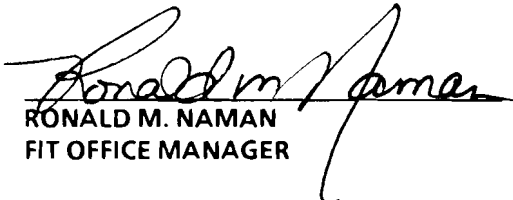
MARCH 11, 1988

NUS CORPORATION
SUPERFUND DIVISION

SUBMITTED BY:

REVIEWED/APPROVED BY:


PETER S. MORTON
PROJECT MANAGER


RONALD M. NAMAN
FACILITY OFFICE MANAGER

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

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY 0002211415

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) 02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Taylor Instrument Company/Division of Sybron 95 Ames Street
03 CITY 04 STATE 05 ZIP CODE 06 COUNTY 07 COUNTY CODE 08 CONG DIST.
Rochester NY 14611 Monroe 055 30
09 COORDINATES
LATITUDE LONGITUDE
4 30 0 9' 0 5". N 0 7 70 3 8' 4 3". W

10 DIRECTIONS TO SITE (Starting from nearest public road)

From downtown Rochester, take 490 West to Ames St. exit, left on Ames, to site on right

III. RESPONSIBLE PARTIES

01 OWNER (if known) 02 STREET (Business, mailing, residential)
Taylor Instrument Co. 95 Ames Street
03 CITY 04 STATE 05 ZIP CODE 06 TELEPHONE NUMBER
Rochester NY 14611 (716) 235-6160
07 OPERATOR (if known and different from owner) 08 STREET (Business, mailing, residential)
Taylor Instrument Co. 95 Ames Street
09 CITY Rochester

☒ A. PRIVATE ☐ B. FEDERAL: (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E.
☐ F. OTHER: (Specify) ☐ G. UNKNOWN

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

☐ A. RCRA 3001 DATE RECEIVED: / / ☒ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: 1 / 11 / 82
☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION BY (Check all that apply)
☐ YES DATE: / / ☐ A. EPA ☐ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR
☒ NO ☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: (Specify)
CONTRACTOR NAME(S):

02 SITE STATUS (Check one) 03 YEARS OF OPERATION
☐ A. ACTIVE ☒ B. INACTIVE ☐ C. UNKNOWN Approx. 1940 / 1965
BEGINNING ENDING
☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Elemental mercury was discovered in on-site soils collected in October, 1981.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

There is no potential hazard to the environment. Remedial work has been completed at the site with NYSDCE approval and monitoring of the site continues.

IV. PRIORITY ASSESSMENT

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

☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☐ C. LOW (Inspection on time available basis) ☒ D. NONE

(No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT 02 OF (Agency/Organization) 03 TELEPHONE NUMBER
Diana Messina U.S. EPA (201) 321-6776

04 PERSON RESPONSIBLE FOR ASSESSMENT 05 AGENCY 06 ORGANIZATION 07 TELEPHONE NUMBER 08 DATE
Peter Morton U.S. EPA NUS Corp. (201) 225-6160 01 / 08 / 88

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY D002211415

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply) 02 WASTE QUANTITY AT SITE 03 WASTE CHARACTERISTICS (Check all that apply)

- A. SOLID	E. SLURRY	(Measures of waste quantities must be independent)	☒ A. TOXIC	☒ E. SOLUBLE	- I. HIGHLY VOLATILE
- B. POWDER, FINES	☒ F. LIQUID		- B. CORROSIVE	- F. INFECTIOUS	- J. EXPLOSIVE
- C. SLUDGE	- G. GAS		- C. RADIOACTIVE	- G. FLAMMABLE	- K. REACTIVE
- D. OTHER: _____	(Specify)		☒ D. PERSISTENT	- H. IGNITABLE	- L. INCOMPATIBLE
		TONS _____			
		CUBIC YARDS _____			
		NO. OF DRUMS <u>1</u>			

III. WASTE TYPE

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

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

CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	Mercury	7439-97-6	found in on-site soils	52,000	ppm

V. FEEDSTOCKS (See Appendix for CAS Numbers)

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

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

Environmental Protection Agency Notification of Hazardous Waste Site Form 103(c).
Lozier Architects/Engineers, Engineering and Analytical Report on Mercury Contamination, Taylor Instrument Company, January, 1982.

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY 0002211415

02-8710-102-PA
Rev. No. 0

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY 0002211415

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 J. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION

02 OBSERVED (DATE:) POTENTIAL ALLEGED

There is no potential for contamination of flora. Mercury strongly absorbs to soils, preventing what little plant life is present from taking it up.

01 K. DAMAGE TO FAUNA

04 NARRATIVE DESCRIPTION (Include name(s) of species)

02 OBSERVED (DATE:) POTENTIAL ALLEGED

There is no potential for damage to fauna. The site is in urban Rochester. The contaminated area has been capped.

01 L. CONTAMINATION OF FOOD CHAIN

04 NARRATIVE DESCRIPTION

02 OBSERVED (DATE:) POTENTIAL ALLEGED

There is no potential for contamination of food chain.

01 X M. UNSTABLE CONTAINMENT OF WASTES
(Spills/runoff/standing liquids/leaking drums)

03 POPULATION POTENTIALLY AFFECTED:

02 X OBSERVED (DATE: October 1981) POTENTIAL ALLEGED

04 NARRATIVE DESCRIPTION

The mercury detected in on-site soils was uncontained. However, the site has since been remediated, the contaminated area is now capped, and regular monitoring takes place.

01 N. DAMAGE TO OFFSITE PROPERTY

04 NARRATIVE DESCRIPTION

02 OBSERVED (DATE:) POTENTIAL ALLEGED

No damage to off-site property was noted during site reconnaissance on 11/19/87.

01 X O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs
04 NARRATIVE DESCRIPTION

02 OBSERVED (DATE:) X POTENTIAL ALLEGED

Mercury from on-site soils may potentially contaminate the Rochester sewer system.

01 P. ILLEGAL/UNAUTHORIZED DUMPING

04 NARRATIVE DESCRIPTION

02 OBSERVED (DATE:) POTENTIAL ALLEGED

The site is completely fenced. No potential for illegal dumping exists.

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

None

III. TOTAL POPULATION POTENTIALLY AFFECTED: 0

IV. COMMENTS

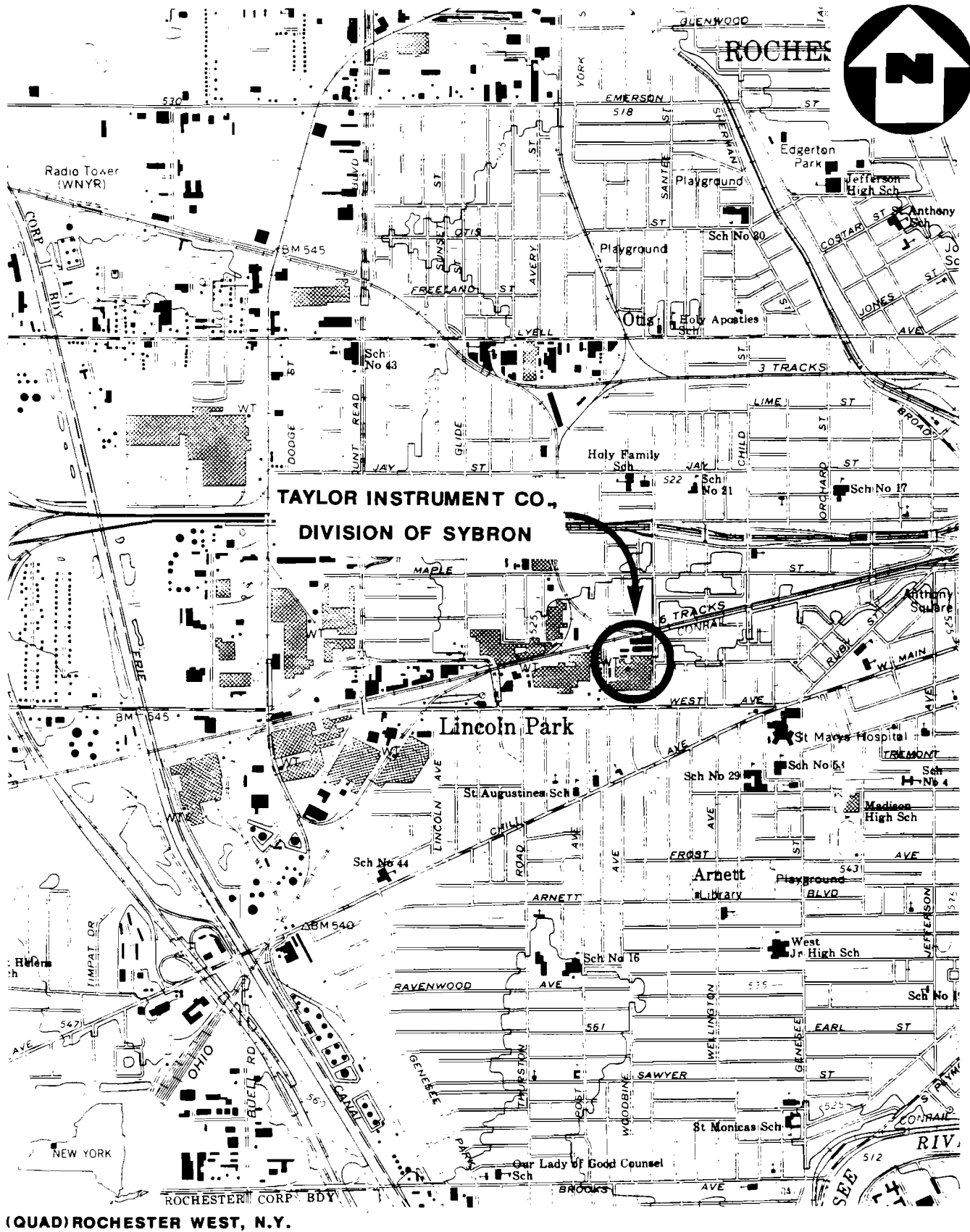
Remediation has been completed at the site, the contaminated soils have been capped, and regular monitoring occurs. The site does not pose a potential threat to the environment.

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

FIT 2 off-site reconnaissance conducted on 11/8/87.
Telecon Note: Conversation between Louise Hartshorn of Monroe County Environmental Management Council and Peter Morton of NUS Corp. dated 11/17/87.

APPENDIX A
MAPS AND PHOTOGRAPHS

APPENDIX A
MAPS AND PHOTOGRAPHS

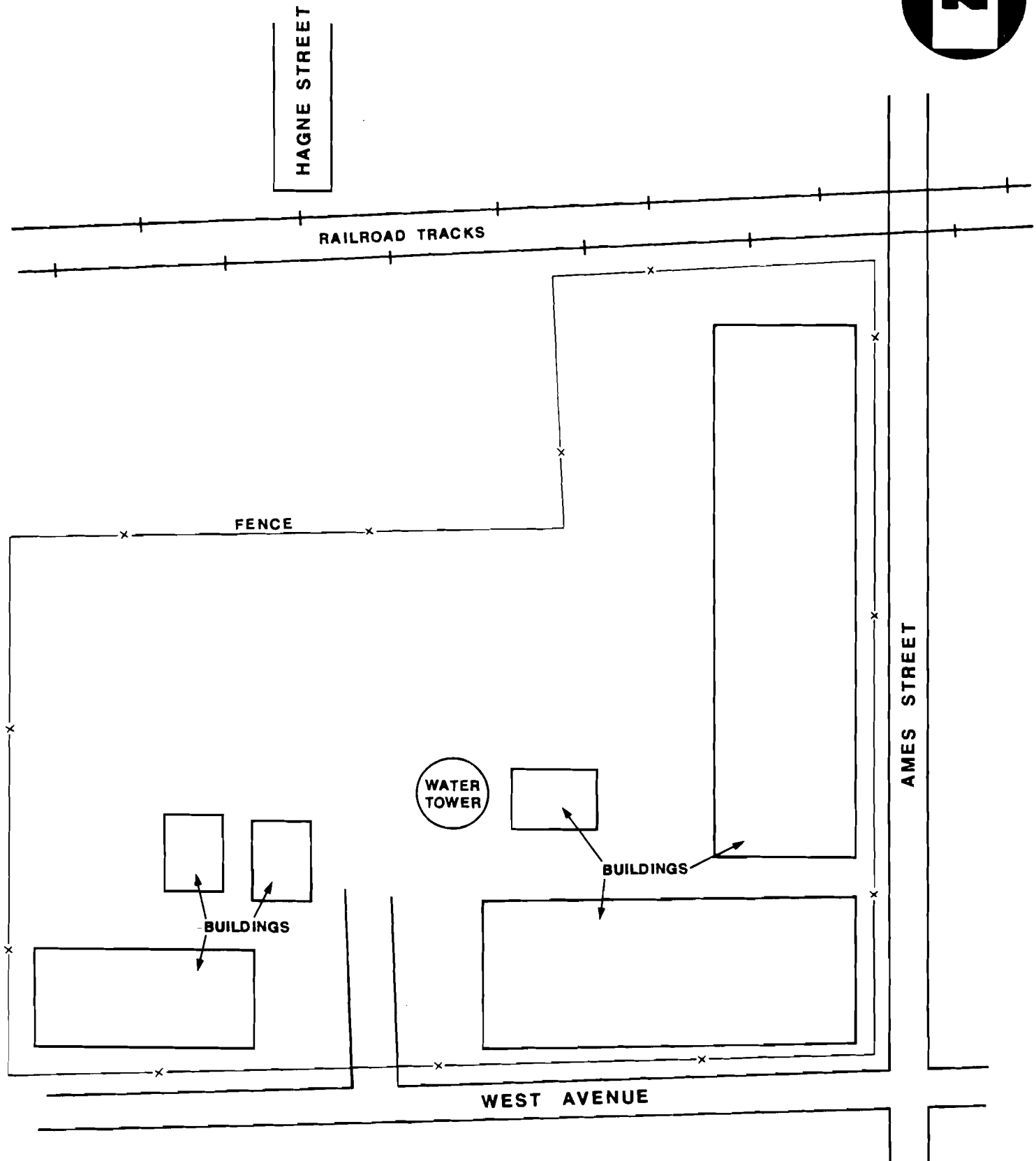


SITE LOCATION MAP
TAYLOR INSTRUMENT CO., DIVISION OF SYBRON,
ROCHESTER, N.Y.

SCALE: 1" = 2000'

FIGURE 1





SITE MAP

**TAYLOR INSTRUMENT CO., DIVISION OF SYBRON,
ROCHESTER, N.Y.**

(NOT TO SCALE)

FIGURE 2



TAYLOR INSTRUMENT/DIVISION OF SYBRON
ROCHESTER, NEW YORK
TDD NO. 02-8710-102
NOVEMBER 18, 1987

PHOTOGRAPH LOG

TAYLOR INSTRUMENTAL/DIVISION OF SYBRON
ROCHESTER, NEW YORK
TDD NO. 02-8710-102
NOVEMBER 18, 1987

ALL PHOTOGRAPHS TAKEN BY PETER MORTON

<u>Photo Number</u>	<u>Description</u>	<u>Time</u>
1P-16	View of facility looking southeast from Hague Street.	1415
1P-20	View of facility looking south along Ames Street.	1425
1P-24	View of facility looking north from West Street.	1438
1P-22	View of one of the facility gates, looking north from West St.	1431

TAYLOR INSTRUMENTAL/DIVISION OF SYBRON



1P-16

November 18, 1967

1415

View of facility looking southeast from Hague Street.



1P-20

November 18, 1967

1425

View of facility looking south along Ames Street.

TAYLOR INSTRUMENTAL/DIVISION OF SYBRON



1P-24

November 18, 1987

1438

View of facility looking north from West Street.



1P-22

November 18, 1987

1431

View of one of the facility gate, looking north from West Street.

APPENDIX B
BACKGROUND INFORMATION

0007-F
02-8710-102

OSRIRF 10/12/87
Page 1 of 5

PRELIMINARY ASSESSMENT
OFF SITE RECONNAISSANCE
INFORMATION REPORTING FORM

Date: Nov. 18, 1987

Site Name: Taylor Instrument/sybron TDD: 02-8710-102

Site Address: 95 Ames St.
Street, Box, etc.

Rochester
Town

Monroe
County

New York
State

NUS Personnel:	Name	Discipline
	<u>Peter Morton</u>	<u>Geologist</u>
	<u>Thomas Varner</u>	<u>Chem. Eng.</u>

Weather Conditions (clear, cloudy, rain, snow, etc.):

Overcast

Estimated wind direction and wind speed: north, 10 mph

Estimated temperature: 50°F

Signature: Tom Varner Date: 11/18/87

Countersigned: [Signature] Date: 11/19/87

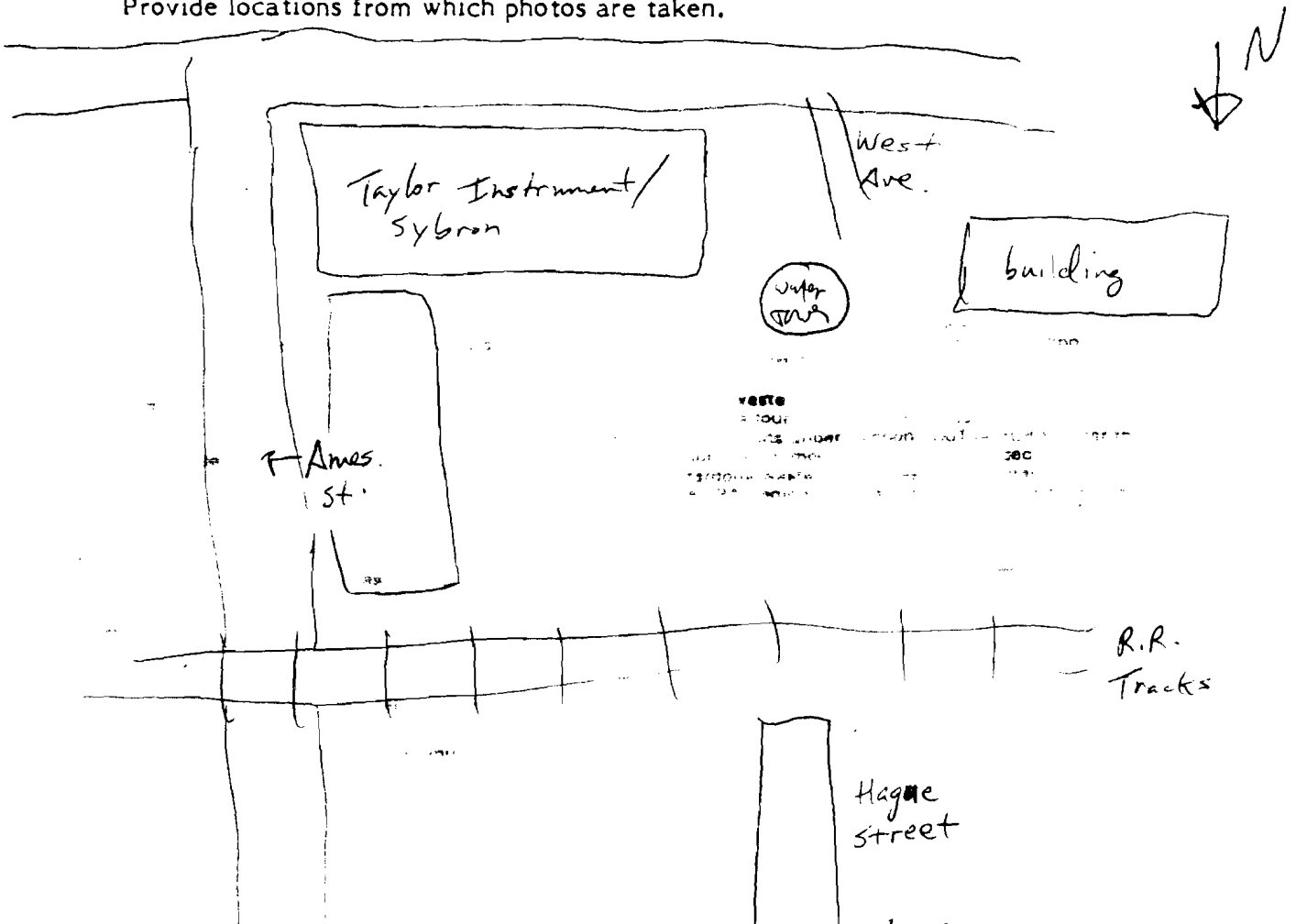
PRELIMINARY ASSESSMENT
INFORMATION REPORTING FORM

Date: Nov. 18, 1987

Site Name: Taylor Instrument/Sybron TDD: 02-8710-102

Site Sketch:

Indicate relative landmark locations (streets, buildings, streams, etc.).
Provide locations from which photos are taken.



Signature: Tom Vanner

Date: 11/18/87

Countersigned: AShorter

Date: 11/15/87

PRELIMINARY ASSESSMENT
INFORMATION REPORTING FORM

Date: Nov. 18, 1987

Site Name: Taylor Instrument/Sybron TDD: 02-8710-102

Notes (Periodically indicate time of entries in military time):

Site is fenced
Signs on building read "Combustion
Engineering" large complex
many buildings, large water tower
present

Signature: Tom Varner
Countersignature: [Signature]

Date: 11/18/87
Date: 11/15/87

INFORMATION REPORTING FORM

Date: Nov. 18, 1987

Site Name: Taylor Instrument / Sybron RDD: 02-8710-102

Notes (Cont'd):

[illegible]

Attach additional sheets if necessary. Provide site name, TDD number, signature, and countersignature on each.

Signature: Tom Varney

Date: 11/18/87

Countersignature: Pratt

Date: 11/19/57

PRELIMINARY ASSESSMENT
INFORMATION REPORTING FORM

Date: Nov. 18, 1987

Site Name: Taylor Instrument / Sybron TDD: 02-8716-102

Photolog:

Frame/Photo Number	Date	Time	Photographer	Description
<u>1P-16</u>	<u>11/18/87</u>	<u>2:1415</u> ^{TAY 11/18/87}	<u>P. Morton</u>	<u>Facing rear of</u>
<u>1P-17</u>	<u>11/18/87</u>	<u>1418</u>	<u>P. Morton</u>	<u>Facility</u>
<u>1P-18</u>	<u>11/18/87</u>	<u>1421</u>	<u>P. Morton</u>	<u>Photograph of nearby</u>
<u>1P-19</u>	<u>11/18/87</u>	<u>1423</u>	<u>P. Morton</u>	<u>building</u>
<u>1P-20</u>	<u>11/18/87</u>	<u>1425</u>	<u>P. Morton</u>	<u>North to south</u>
<u>1P-21</u>	<u>11/18/87</u>	<u>1427</u>	<u>P. Morton</u>	<u>views of</u>
<u>1P-22</u>	<u>11/18/87</u>	<u>1431</u>	<u>P. Morton</u>	<u>Facility</u>
<u>1P-23</u>	<u>11/18/87</u>	<u>1436</u>	<u>P. Morton</u>	<u>View of facility</u>
<u>1P-24</u>	<u>11/18/87</u>	<u>1438</u>	<u>P. Morton</u>	<u>facing north</u>
				<u>View of facility</u>
				<u>facing north</u>

Attach additional sheets if necessary. Provide site name, TDD number, signature, and countersignature on each.

Signature: Tom Vanner

Date: 11/18/87

Countersignature: P. Morton

Date: 11/19/87

NUS CORPORATION AND SUBSIDIARIES		TELECON NOTE
CONTROL NO:	DATE: 11/17/87	TIME: 920
DISTRIBUTION: File		
BETWEEN: Louise Hartshorn	OF: County of Monroe Environmental Mgt. Council	PHONE: (716) 428-5114
AND: Peter Morton		
DISCUSSION: I called Ms. Hartshorn regarding municipal water supply in Rochester. All of the municipal water comes from Lake Ontario, Lake Canaduse, and Lake ^{PA} Hemlock Hemlock Lake (Canaduse + Hemlock are Finger Lakes). There are <u>no</u> private wells within the city of Rochester.		
ACTION ITEMS:		

EPA Notification of Hazardous Waste SiteUnited States
Environmental Protection
Agency
Washington DC 20460

This initial notification information is required by Section 103(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and must be mailed by June 9, 1981.

Please type or print in ink. If you need additional space, use separate sheets of paper. Indicate the letter of the item which applies.

820119

NYS 000001417

A Person Required to Notify:

Enter the name and address of the person or organization required to notify.

Name Taylor Instrument Company, Div. of Sybron Corporation
Street 95 Ames Street
City Rochester State NY Zip Code 14611

B Site Location:

Enter the common name (if known) and actual location of the site.

NYD 0022, 11415
See Attached Report

Name of Site Ames Street Site
Street 95 Ames Street
City Rochester County Monroe State NY Zip Code 14611

C Person to Contact:

Enter the name, title (if applicable), and business telephone number of the person to contact regarding information submitted on this form.

Name (Last, First and Title) Cervelloni, Frank - Manager of Facilities
Phone (716) 235-5000

D Dates of Waste Handling:

Enter the years that you estimate waste treatment, storage, or disposal began and ended at the site.

Approximately
From (Year) 1940 To (Year) 1965

E Waste Type: Choose the option you prefer to complete

Option 1: Select general waste types and source categories. If you do not know the general waste types or sources, you are encouraged to describe the site in item I—Description of Site.

General Type of Waste:
Place an X in the appropriate boxes. The categories listed overlap. Check each applicable category.

- 1. ☐ Organics
- 2. ☐ Inorganics
- 3. ☐ Solvents
- 4. ☐ Pesticides
- 5. ☐ Heavy metals
- 6. ☐ Acids
- 7. ☐ Bases
- 8. ☐ PCBs
- 9. ☐ Mixed Municipal Waste
- 10. ☐ Unknown
- 11. ☒ Other (Specify)
(30) Mercury

Source of Waste:
Place an X in the appropriate boxes.

- 1. ☐ Mining
- 2. ☐ Construction
- 3. ☐ Textiles
- 4. ☐ Fertilizer
- 5. ☐ Paper/Printing
- 6. ☐ Leather Tanning
- 7. ☐ Iron/Steel Foundry
- 8. ☐ Chemical, General
- 9. ☐ Plating/Polishing
- 10. ☐ Military/Ammunition
- 11. ☐ Electrical Conductors
- 12. ☐ Transformers
- 13. ☐ Utility Companies
- 14. ☐ Sanitary/Refuse
- 15. ☐ Photofinish
- 16. ☐ Lab/Hospital
- 17. ☐ Unknown
- 18. ☒ Other (Specify)
(40) Instrumentation Manufacturing

Option 2: This option is available to persons familiar with the Resource Conservation and Recovery Act (RCRA) Section 3001 regulations (40 CFR Part 261).

Specific Type of Waste:
EPA has assigned a four-digit number to each hazardous waste listed in the regulations under Section 3001 of RCRA. Enter the appropriate four-digit number in the boxes provided. A copy of the list of hazardous wastes and codes can be obtained by contacting the EPA Region serving the State in which the site is located.

Notification of Hazardous Waste Site

Side Two

F Waste Quantity

Place an X in the appropriate boxes to indicate the facility types found at the site.

In the "total facility waste amount" space give the estimated combined quantity (volume) of hazardous wastes at the site using cubic feet or gallons.

In the "total facility area" space, give the estimated area size which the facilities occupy using square feet or acres.

Facility Type

1. ☒ Piles
2. ☐ Land Treatment
3. ☐ Landfill
4. ☐ Tanks
5. ☐ Impoundment
6. ☐ Underground Injection
7. ☐ Drums, Above Ground
8. ☐ Drums, Below Ground
9. ☐ Other (Specify) _____

Total Facility Waste Amount

cubic feet

Estimated to be not more
than 55 gallons

Total Facility Area

square feet

acres

G Known, Suspected or Likely Releases to the Environment:

Place an X in the appropriate boxes to indicate any known, suspected, or likely releases of wastes to the environment.

☒ Known ☐ Suspected ☐ Likely ☐ None

Note: Items H and I are optional. Completing these items will assist EPA and State and local governments in locating and assessing hazardous waste sites. Although completing the items is not required, you are encouraged to do so.

H Sketch Map of Site Location: (Optional)

Sketch a map showing streets, highways, routes or other prominent landmarks near the site. Place an X on the map to indicate the site location. Draw an arrow showing the direction north. You may substitute a publishing map showing the site location.

See attached report.

I Description of Site: (Optional)

Describe the history and present conditions of the site. Give directions to the site and describe any nearby wells, springs, lakes, or housing. Include such information as how waste was disposed and where the waste came from. Provide any other information or comments which may help describe the site conditions.

See Attached Report

All facilities, including nearby residential units, in the vicinity of the site are believed to be on the public water supply system, the sources of which are surface waters located many miles from the site. No known wells, springs or lakes are nearby.

J Signature and Title:

The person or authorized representative (such as plant managers, superintendents, trustees or attorneys) of persons required to notify must sign the form and provide a mailing address (if different than address in item A). For other persons providing notification, the signature is optional. Check the boxes which best describe the relationship to the site of the person required to notify. If you are not required to notify check "Other".

Name Frank Cervelloni

Street 95 Ames Street

City Rochester State NY Zip Code 14601

Signature Frank Cervelloni Date 1-11-82
Manager of Facilities

- ☐ Owner, Present
☒ Owner, Past
☐ Transporter
☐ Operator, Present
☐ Operator, Past
☒ Other See Attached Report

ENGINEERING AND ANALYTICAL
REPORT
ON
MERCURY CONTAMINATION

TAYLOR INSTRUMENT COMPANY
DIVISION OF SYBRON CORPORATION
ROCHESTER, NEW YORK 14601

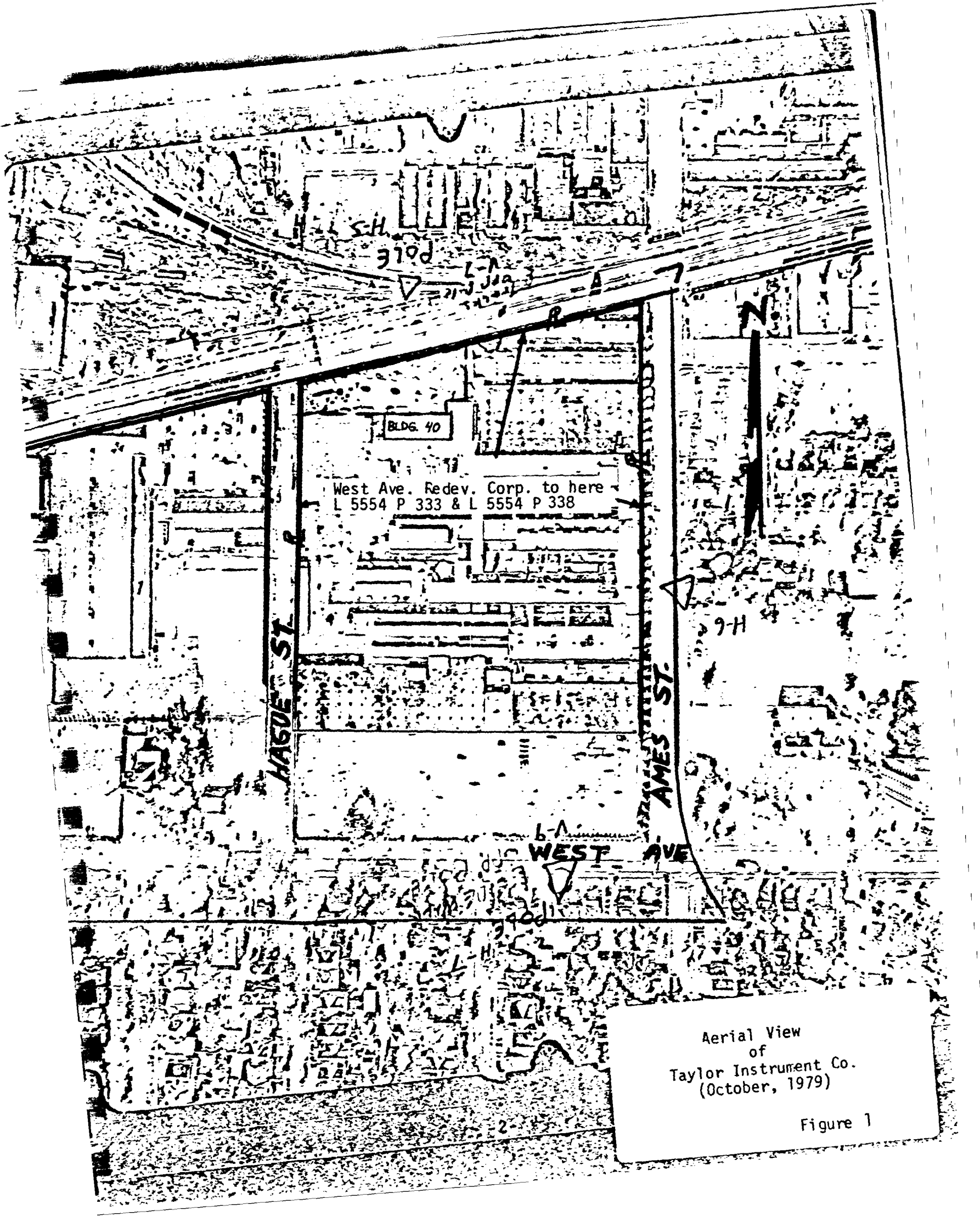
JANUARY, 1982

LOZIER



ARCHITECTS/ENGINEERS

Taylor Instrument, a division of Sybron is located at 95 Ames Street and engages in the manufacturing of various instrumentation items and systems. The Taylor Instrument Company is situated on land recently conveyed by it to, and leased back from the West Avenue Redevelopment Corporation, a subsidiary of the New York State Urban Development Corporation. An open area, outlined roughly in yellow in Figure 1, is to be included in the lease. We are informed that this area has been conveyed by the CSX Corporation (Chessie) to the City of Rochester and is to be conveyed shortly to the West Avenue Redevelopment Corporation. For the purposes of this report all this land, bounded on the east by Ames St., on the west by Hague St., on the south by West Ave., and on the north by property owned by the CSX Corporation (see Figure 1), is referred to as the Taylor Instrument Site. On September 9, 1981, Taylor Instrument (Kevin Hylton) and Lozier, Inc. (Leonard Bower and Thomas Lawson) met at the Taylor facility and discussed the discovery of elemental mercury in the ground on the plant site. This mercury is apparently the outgrowth of a mercury reclamation operation which was used until approximately 1965. The exact circumstances by which the mercury was placed in the soil has not been established, although the site is strewn with broken thermometer glass and miscellaneous instrumentation hardware. This operation was located in the northwest portion of Building 40 at the extreme north end of the Taylor Instrument site. The area of concern, is basically that portion of land shown in Figure 1 which is outlined in yellow. Kevin Hylton indicated that the basis for his belief that there was a mercury



Aerial View
of
Taylor Instrument Co.
(October, 1979)

Figure 1

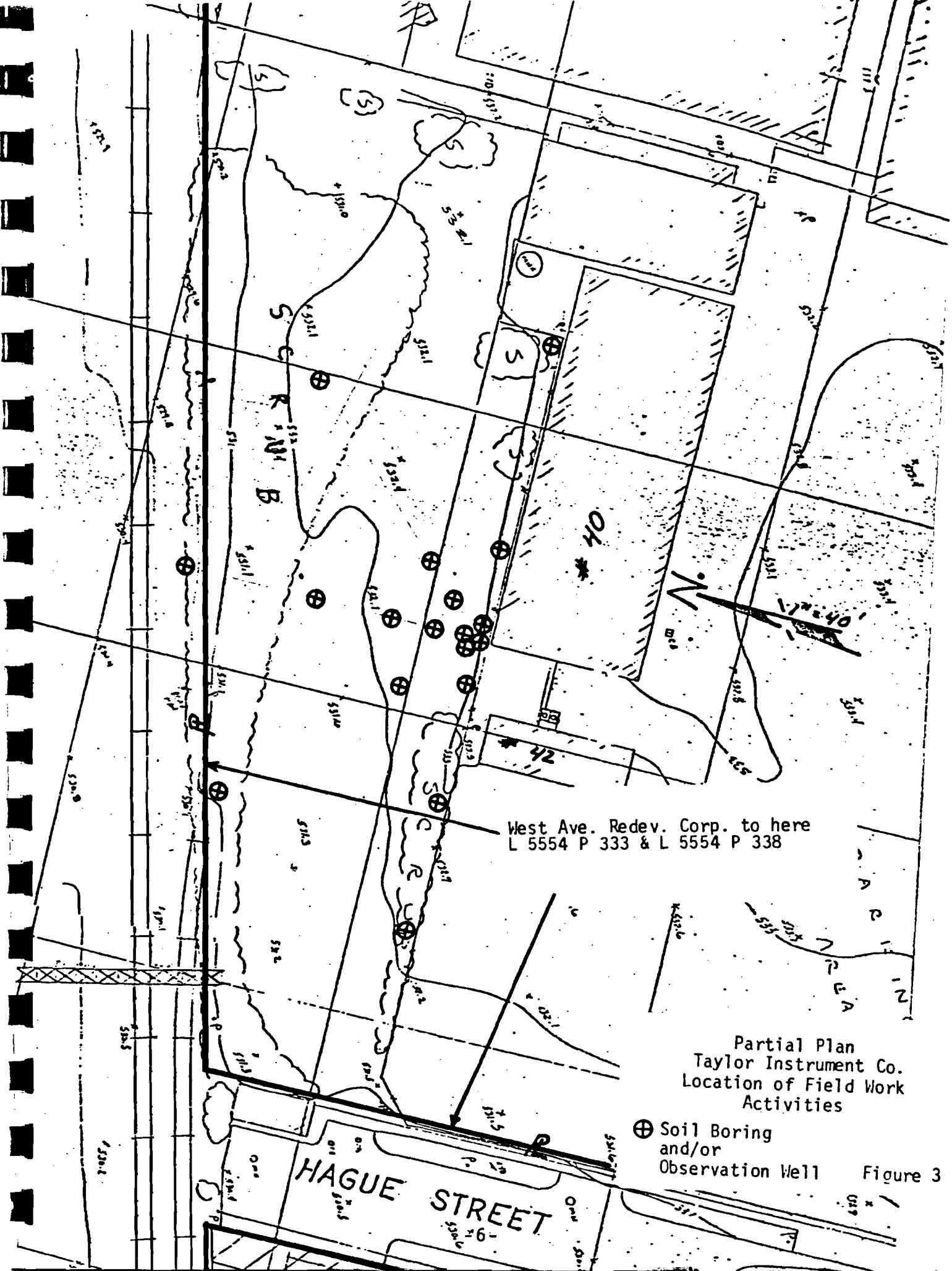
contamination problem was twofold:

1. The discovery of broken thermometer glass shard and instrumentation pieces laying on the ground just outside the northwest corner of Building 40.
2. Grab sample soil testing for elemental mercury performed in the Taylor laboratory, which indicated a potential problem even allowing for a reasonable percentage of laboratory error.

Kevin Hylton then conducted a physical inspection for Thomas Lawson and Leonard Bower of the areas previously mentioned. The surface area just outside the fenceline north of Building 40 indicated broken glass shard in an east/west direction within the confines of the yellowed area previously indicated in Figure 1. Most of the glass shard was noticed at the northwest corner of Building 40.

A few days after this meeting, Kevin Hylton transmitted, by telephone to Thomas Lawson of Lozier, Inc., the actual laboratory test results of the elemental mercury testing performed by Taylor Instrument. On Friday, September 18, 1981, Lozier, Inc. submitted a proposal for engineering and analytical service to Taylor Instrument Company. On September 29, 1981, Thomas Lawson was notified by Kevin Hylton that Lozier, Inc. and its subsidiary, Lozier/Camo Laboratories had been selected by Taylor Instrument Co. to do the work as outlined in the proposal.

Empire Soils was contracted by Lozier, Inc. to do the field work at the Taylor Instrument site. This field work consisted of boring seventeen (17) holes. Soil samples were withdrawn from sixteen (16) of these holes along the guidelines of the initial proposal and four (4) groundwater observation wells were installed, three (3) of which were in holes from which soil samples were withdrawn. A more representative illustration of the expanse of the field investigations at the subject site can be found on Figures 2 & 3. The actual contract with Empire Soils, Inc. was signed on October 13, 1981 and the initial projection for the start of field work was Thursday, October 15, 1981. Available on-site power difficulties and some equipment difficulties impeded the actual start of the field work, and consequently no significant work began at the Taylor Instrument site until Monday, October 19, 1981. All positions at which Empire Soils conducted drilling work were staked by Lozier, Inc. personnel in the field on October 12, 1981. These positions were laid out logarithmically per the guidelines of the initial proposal and ground elevations were shot at each position where Empire Soils was to perform drilling work. All drilling, soil sample withdrawal and groundwater well installation work was finished by Empire Soils late in the afternoon on Tuesday, October 20, 1981. The drilling logs from the field work performed by Empire Soils can be found in Appendix A. All the soil samples withdrawn from the four (4) different elevations in each of the boring holes were split in the field at the time of withdrawal. Every split soil sample received by Taylor Instrument and Lozier/Camo consisted of

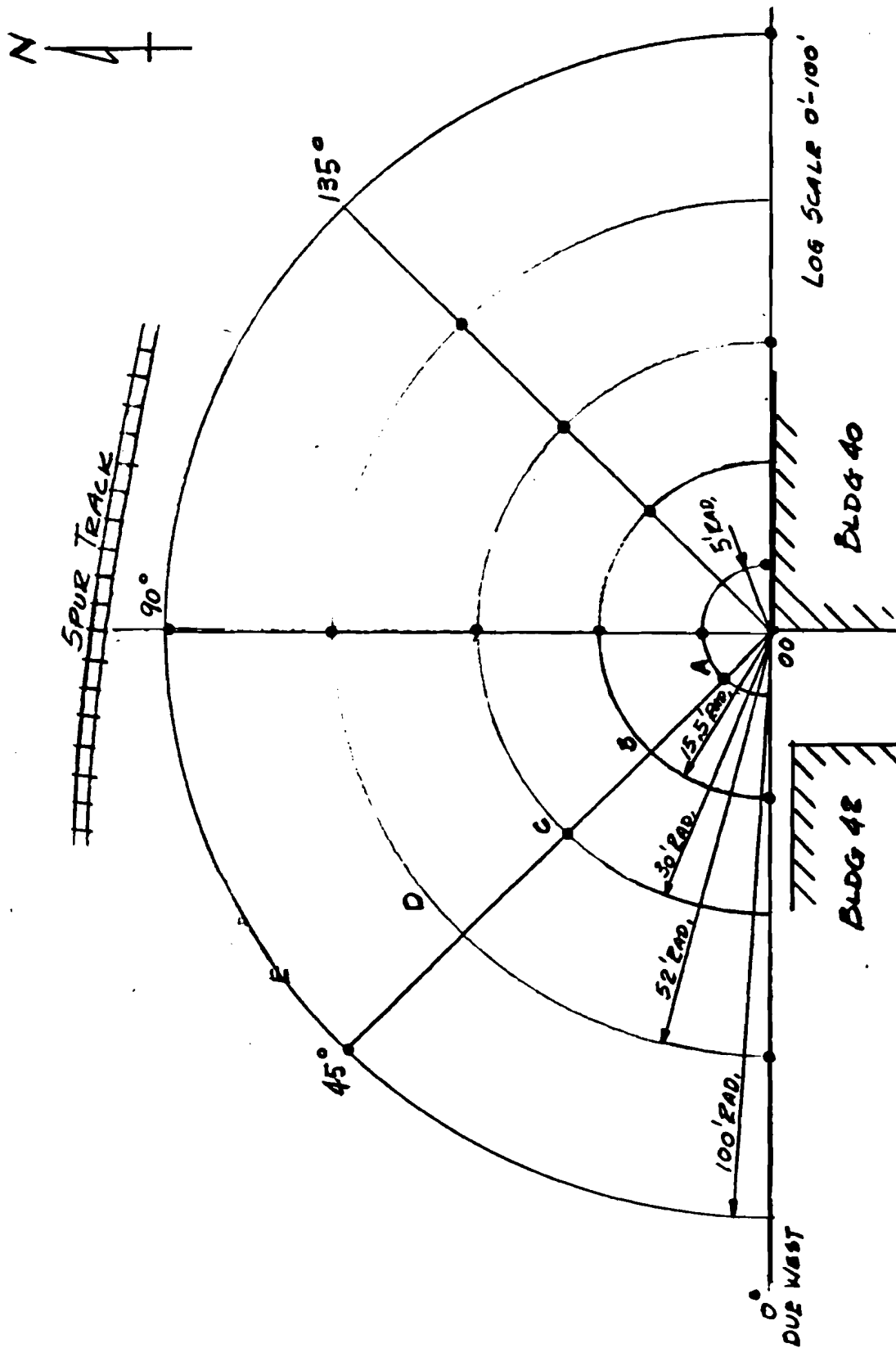


West Ave. Redev. Corp. to here
L 5554 P 333 & L 5554 P 338

Partial Plan
Taylor Instrument Co.
Location of Field Work
Activities

⊕ Soil Boring
and/or
Observation Well

Figure 3



TAYLOR INSTRUMENT CO.
SAMPLING GRID PATTERN
FIGURE #2



Analytical Report
Taylor Instrument Company - Confidential
CAMO Job No. 81-11-9357

The initial data from the investigation was reviewed by Camo as well as each step in the procedure. The review indicated that the vacuum pump employed in the filtration step was not reaching proper pressure as per method specifications. The pump was unable to be repaired satisfactorily for the re-running of all three (3) samples. It was then decided by Camo that due to the turnaround requirements, data samples at positions E-180° and 0-0° (both of which tested positive during initial testing) would be sent to an approved laboratory that Camo had dealt with in the past to re-run the EP Toxicity test. The data presented for 0-0° and E-180° in Table 6 for EP Toxicity was provided by New York Testing Laboratories, Inc., Westbury, Long Island, New York. The sub-contracted lab was not provided with any other information other than the sample identification (0-0°, E-180°) and our analysis request.

All other analysis provided in this report, or prior report, were performed at CAMO Laboratories, Hyde Park, New York.

RESULTS AND DISCUSSION

The data is presented in Table 6. The composited soil samples from positions 0-0° and E-180° have mercury concentrations that exceed the allowable concentration for a non-hazardous material, therefore, the soils are toxic with respect to mercury content and are hazardous materials. The composited soil sample from position D-0° was found to have no detectable mercury content after performing the EP Toxicity extraction and analysis. Therefore, the soil from position D-0° is a non-hazardous material. The groundwater data from these three sites is also presented in Table 6. The position D-0° groundwater data matches the EP Toxicity extraction data. Sites 0-0° and E-180° indicate the groundwater sample mercury content is much lower than the EP Toxicity data, as expected. The EP Toxicity extraction procedure subjects the sample to an acidic aqueous environment for a 24 hour period in an attempt to leach out the heavy metal contaminant.

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Table 6

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EP Toxicity Data for Sites 00, DO, and E-180
and Corresponding Groundwater Data

Mercury Concentrations - Ug/L

<u>Site</u>	<u>EP Toxicity (soil)</u>	<u>Groundwater</u>	<u>RCRA threshold level for non-haz. waste</u>
DO	<0.2	<0.2	200
00	476	8.6	200
E-180	238	19.5	200

approximately 100 grams. The Lozier/Camo soil samples were sent to the Camo Laboratory in Hyde Park, New York for a total mercury analysis. The four (4) groundwater observation wells were pumped dry with a peristaltic pump by Lozier/Camo personnel on October 23, 1981, October 26, 1981, and October 28, 1981. On November 2, 1981, two 1000 ml water samples were withdrawn by Lozier/Camo personnel from each of the four (4) groundwater observation wells. These water samples were also sent to the Camo laboratories in Hyde Park for total mercury analysis. The results of these tests can be found in Appendix B. The groundwater depths were also recorded on November 2, 1981. At position D-0° the depth was 5'-8 1/2", at 0-0° it was 4'-7 1/2", at C-135° it was 3'-11" and at E-180° the water was at 3'-11".

Once the results of these tests was known, it was mutually decided between Kevin Hylton, of Taylor Instrument Company and Thomas Lawson of Lozier, Inc. to perform the three originally proposed EP Toxicity tests in three (3) locations. Position D-0°, E-180° and 0-0° were selected for two different reasons. In an attempt to establish some correlation between the two different sets of tests, it was decided that the EP Toxicity tests should be run in the same positions where groundwater samples were withdrawn. Tests performed at these three (3) locations were basically representative of the data available to date. At that time it was still felt that 0-0° was the center of the contamination, E-180° was a position of high mercury concentration, and D-0° appeared to be one of the positions of lesser mercury contamination. Also, at

D-0°, the groundwater sample indicated mercury contamination less than the State groundwater limit (.002 mg/l), whereas at position 0-0° and E-180° the water samples indicated mercury contamination in excess of the State groundwater limits. Results of the EP Toxicity tests can also be found in Appendix B.

Based on all the preceeding information which has been presented in this report, the following statements basically summarize the status of the project and all related data to date. These statements are not in any particular order of significance.

1. Any pieces of rock and glass that were in some of the soil samples from the sixteen (16) drilling locations were withdrawn and consequently not tested, i.e., they were taken out prior to the mercury testing by the Lozier/Camo Laboratory. This was done since Lozier/Camo wished to test a true soil sample, and the feeling was that those hard items present were heterogeneous in nature. Those soil samples which contained pieces of glass are noted in Appendix A.
2. Generally speaking, mercury concentrations in the soil are higher toward Building 40 and within the first three feet of overburden. Based on an analysis of the driller's log the majority of the area appears to have been filled with an ash/cinder mixture to varying depths. The present data also indicates higher mercury concentrations in those portions of the site where glass shard deposits were noted.
3. There is a general decrease in mercury concentrations laterally outward from the presently presumed center (0-0°) of the contamination and vertically downward within the soil profile, except as noted in number 4 below.
4. Field operations within the project area have revealed other areas of broken glassware on the ground and thus possibly high mercury concentrations. This relationship is based on the findings to date at positions 0-0° and E-180° where areas

of high glass concentration have also been high in elemental mercury.

5. The breadth and depth of the mercury contamination problem at the Taylor Instrument site has not yet been analytically defined. However, information to date indicates that:
 - a. There is mercury contamination in both the soil and water, and
 - b. The EP Toxicity test results indicate that at least some of the in place soil and mercury material can be considered a hazardous waste, if it is ever removed from the site.
6. Tests for pH were run at the Lozier/Camo Laboratory on four (4) separate soil samples. These test results indicated a pH ranging from 6.8 to 7.2.
7. Analytical data does not indicate mercury in the groundwater in excess of the State groundwater limits any great distance from the two presently known high mercury concentration positions, i.e., water samples withdrawn from positions C-135° and D-0° were not in excess of the State standard.
8. It appears that the worst concentrations of mercury in the soil are above the groundwater table. However, conclusive information on the seasonal fluctuations in the groundwater table is not available, and this could have an impact on any mercury migration.
9. Groundwater data is still insufficient to conclusively determine the flow direction, depth and condition of the groundwater. In addition, there is no firm data indicating

whether or not the groundwater is part of a moving aquifer or is perched groundwater.

10. It is probable, in the opinion of the testing laboratory, that the mercury present on the site consists of three forms:

- A. metallic mercury
- B. inorganic divalent mercury
- C. methyl or phenyl mercury