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POST-REMEDIATION GROUND WATER REPORT
FORMER ALLIED SPECIALTY CHEMICAL SITE
SITE NO. 9-15-003-B
TONAWANDA, ERIE COUNTY, NEW YORK

VOLUME I OF II
REPORT TEXT

AUGUST, 1991

SUBMITTED TO:

ALLIED-SIGNAL, INC.
PARK AVENUE AND COLUMBIA ROAD
MORRISTOWN, NEW JERSEY 07962

SUBMITTED BY:

ERM-NORTHEAST, INC.
5500 MAIN STREET
WILLIAMSVILLE, NEW YORK 14221

9

CLEANUP PLAN IMPLEMENTATION REPORT
FORMER ALLIED SPECIALTY CHEMICAL SITE
SITE NO. 9-15-003-B
TONAWANDA, ERIE COUNTY, NEW YORK

JULY, 1991

Received this
sheet separately
7/26/91

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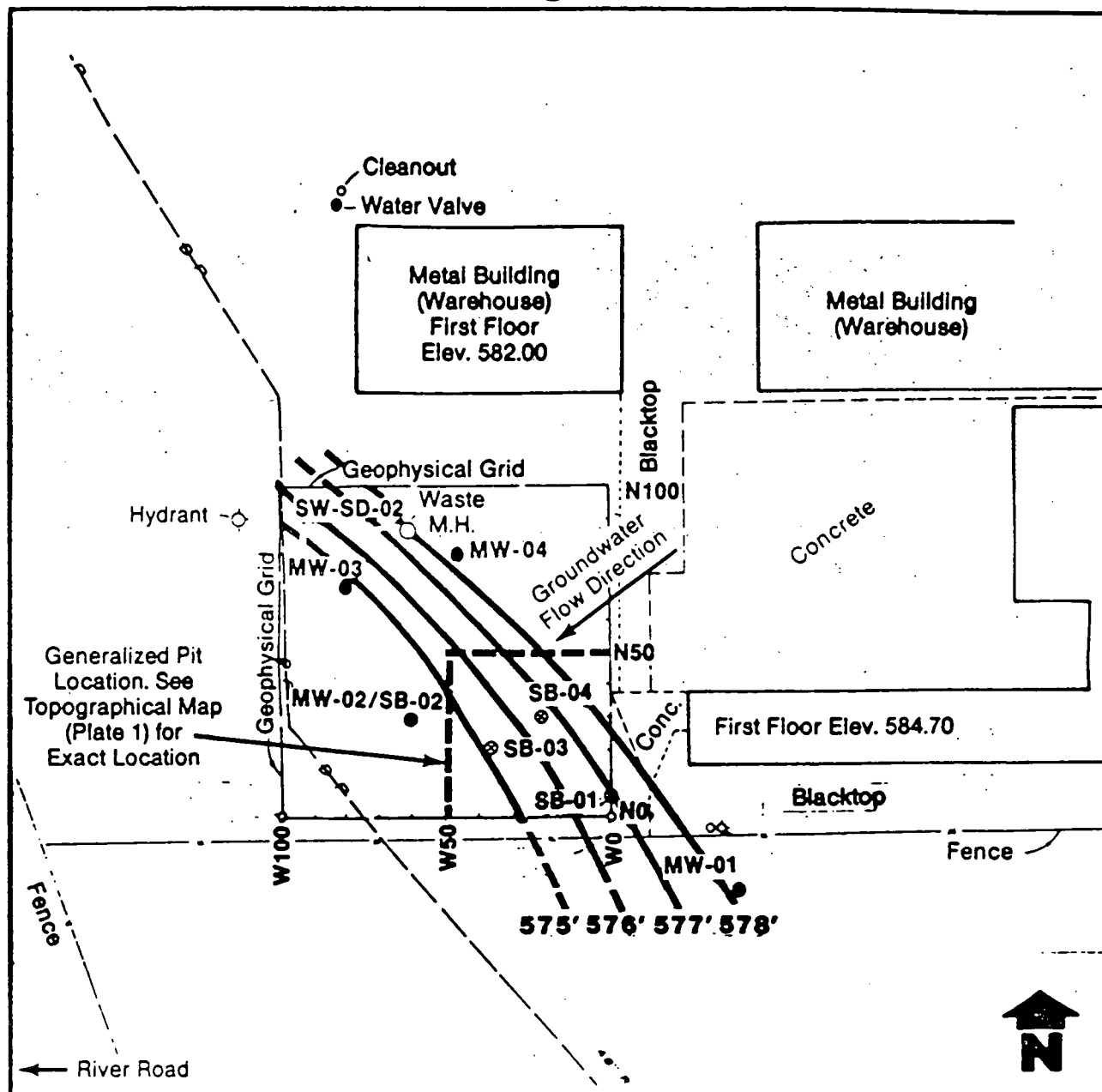
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Source: Krehbiel Associates Drawing #B-1327

Legend

- Monitor Well
- ⊗ Soil Boring
- 575' Groundwater Contour Lines
- - - Approximate Boundary at Pit Location

0 50 100
Scale in Feet
1" = 100'

**FIGURE 4-1 GROUNDWATER FLOW DIRECTION BEFORE SAMPLING
30 NOVEMBER 1988, ALLIED CHEMICAL, TONAWANDA, NEW YORK**

TABLE 3-1
GROUND-WATER SAMPLING RESULTS
6/5/92

WELL	MW-1	MW-5	MW-6	MW-7	MW-8
------	------	------	------	------	------

VOCs (BTEX) (ug/l)

Benzene	140	ND	86	13	ND
Toluene	72	ND	14	4	ND
Ethylbenzene	35	ND	29	1	ND
Total Xylenes	300	ND	110	6	ND

BASE NEUTRAL/ACID EXTRACTABLES (ug/l)

4-Methylphenol	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA
Naphthalene	1100	ND	38	85	ND
2-Methylnaphthalene	300	ND	34	25	ND
Acenaphthylene	NA	ND	4	ND	ND
Dibenzofuran	NA	NA	NA	NA	NA
Fluorene	39	ND	31	7	ND
N-nitrosodiphenylamine	NA	NA	NA	NA	NA
Phenanthrene	34	ND	57	8	ND
bis(2-Ethylhexyl)Phthalate	NA	NA	NA	NA	NA
Acenaphthene	11	ND	6	ND	ND
Anthracene	7	ND	13	ND	ND
Fluoranthene	5	ND	17	3	ND
Pyrene	5	ND	28	3	ND
Total	1501	0	228	131	0

METALS (ug/l)*

Arsenic	4.9	NA	18	66.5	1.7
Cadmium	ND	NA	7.7	ND	4.4
Chromium	169	NA	308	253	11
Hexavalent Chromium	NA	NA	NA	NA	NA
Filtered Hexavalent Chromium**	ND	ND	ND	ND	ND
Copper	19.7	NA	274	457	7.3
Lead	4.5	NA	410	567	13.8
Mercury	ND	NA	3.9	4.7	ND
Zinc	452	NA	535	680	63.9

OTHER INORGANICS*

Total Cyanide (ug/l)	580	600	4800	6800	500
pH	4	5	4.5	3	7
TSS(MG/L)	58	NA	250	1100	820
TDS(MG/L)	152	NA	2940	1650	1130

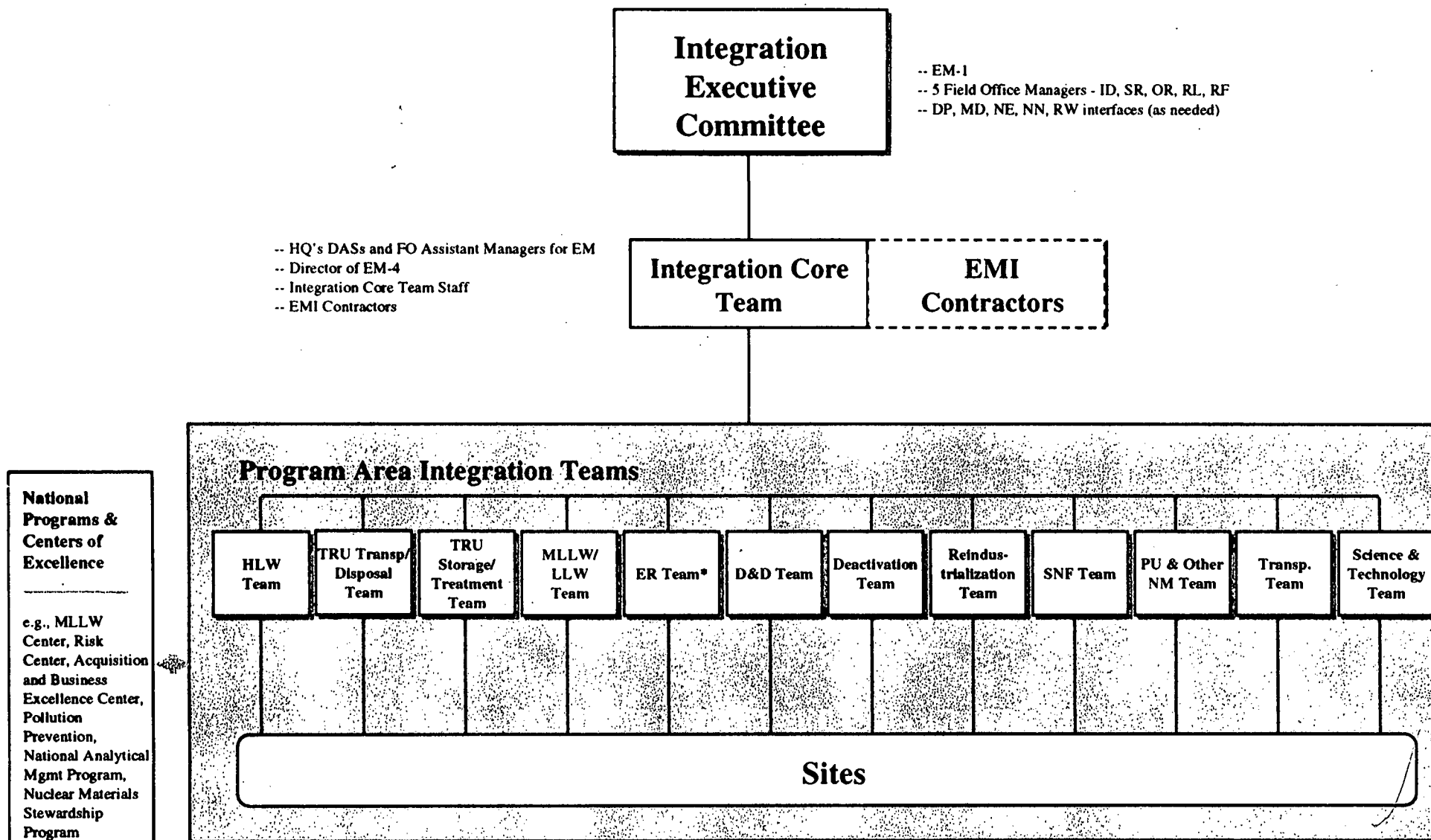
* : NON FILTERED SAMPLES UNLESS NOTED

** : DISSOLVED METALS RUN ON FILTERED SAMPLES

ND : NOT DETECTED

NA : NOT ANALYZED

Figure 2 - Proposed EM Integration Structure



* Including focus on buried waste issues (e.g., complex-wide pre-1970 buried TRU/CERCLA issues)

TABLE 3-3, CONT'D.

GROUND WATER ANALYSIS COMPARISON

PARAMETER	ARAR	MW-3 (1 event)				MW-4 (1 event)			
		HIGH	LOW	MEAN	FILTERED	HIGH	LOW	MEAN	FILTERED
VOCs (BTEX) (µg/L)									
Benzene	ND	ND	ND	ND	N/A	ND	ND	ND	N/A
Toluene	5	ND	ND	ND	N/A	ND	ND	ND	N/A
Ethylbenzene	5	ND	ND	ND	N/A	ND	ND	ND	N/A
Total Xylenes	5	ND	ND	ND	N/A	ND	ND	ND	N/A
BASE NEUTRAL/ACID EXTRACTABLES (µg/L)									
4-Methylphenol	N/A	ND	ND	ND	N/A	ND	ND	ND	N/A
2,4-Dimethylphenol	N/A	ND	ND	ND	N/A	ND	ND	ND	N/A
Naphthalene	10	ND	ND	ND	N/A	ND	ND	ND	N/A
2-Methylnaphthalene	N/A	ND	ND	ND	N/A	ND	ND	ND	N/A
Acenaphthylene	N/A	ND	ND	ND	N/A	ND	ND	ND	N/A
Dibenzofuran	N/A	ND	ND	ND	N/A	ND	ND	ND	N/A
Fluorene	50	ND	ND	ND	N/A	ND	ND	ND	N/A
N-nitrosodiphenylamine	50	3	3	3	N/A	ND	ND	ND	N/A
Phenathrene	50	ND	ND	ND	N/A	ND	ND	ND	N/A
bis(2-Ethylhexyl)Phthaltate	50	ND	ND	ND	N/A	ND	ND	ND	N/A
Acenaphthene	20	ND	ND	ND	N/A	ND	ND	ND	N/A
Anthracene	50	ND	ND	ND	N/A	ND	ND	ND	N/A
Fluoranthene	50	ND	ND	ND	N/A	ND	ND	ND	N/A
Pyrene	50	ND	ND	ND	N/A	ND	ND	ND	N/A
METALS (µg/L)									
Arsenic	25	ND	ND	ND	NA	ND	ND	ND	NA
Cadmium	10	ND	ND	ND	NA	ND	ND	ND	NA
Chromium	50	ND	ND	ND	NA	ND	ND	ND	NA
Hexavalent Chromium	50	NA	NA	N/A	NA	NA	NA	N/A	NA
Copper	200	ND	ND	ND	NA	17	17	17	NA
Lead	25	27.8	27.8	27.8	NA	ND	ND	ND	NA
Mercury	2	ND	ND	ND	NA	ND	ND	ND	NA
Zinc	300	175	175	175	NA	31	31	31	NA
OTHER ORGANICS									
Cyanide(µg/L)	100	730	730	730	NA	1120	1120	1120	NA
pH	6.5 - 8.5	7.7	7.7	7.7	N/A	7.2	7.2	7.2	N/A
TSS (mg/L)	N/A	NA	NA	N/A	N/A	NA	NA	N/A	N/A
TDS (mg/L)	N/A	NA	NA	N/A	N/A	NA	NA	N/A	N/A

NOTES:

N/A: Not applicable.

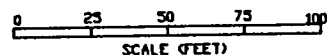
ND: Parameter not detected. For purposes of mean calculation, ND=0.

NA: Sample not analyzed for this parameter.

FIGURE 1
GROUND-WATER CONTOUR MAP
MARCH 5, 1992

LEGEND

- GROUND WATER MONITORING WELL
- 578.0 GROUND WATER ELEVATION (FT)



NOTES :

- 1) THE BASE MAP WAS ADAPTED FROM THE 'TOPOGRAPHICAL MAP OF PART OF LOT 97 OF THE MILE RESERVE' GENERATED BY KREHBIEL ASSOCIATES ON MARCH 31, 1989.

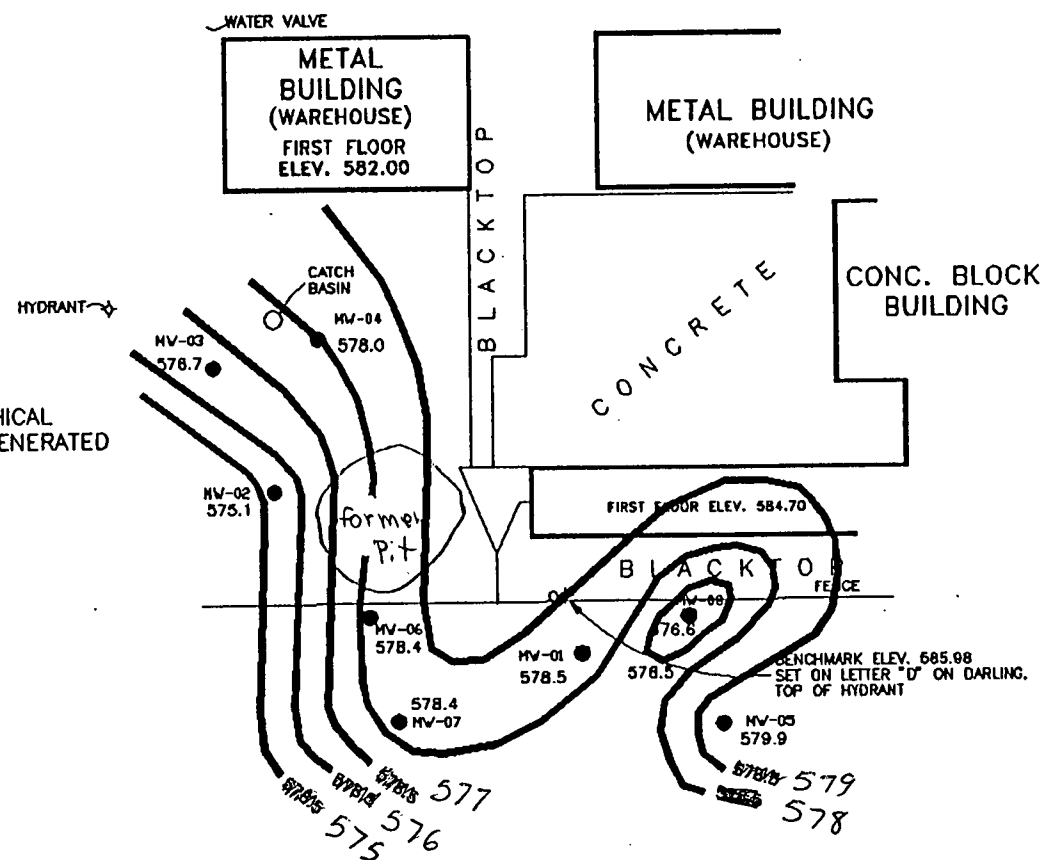
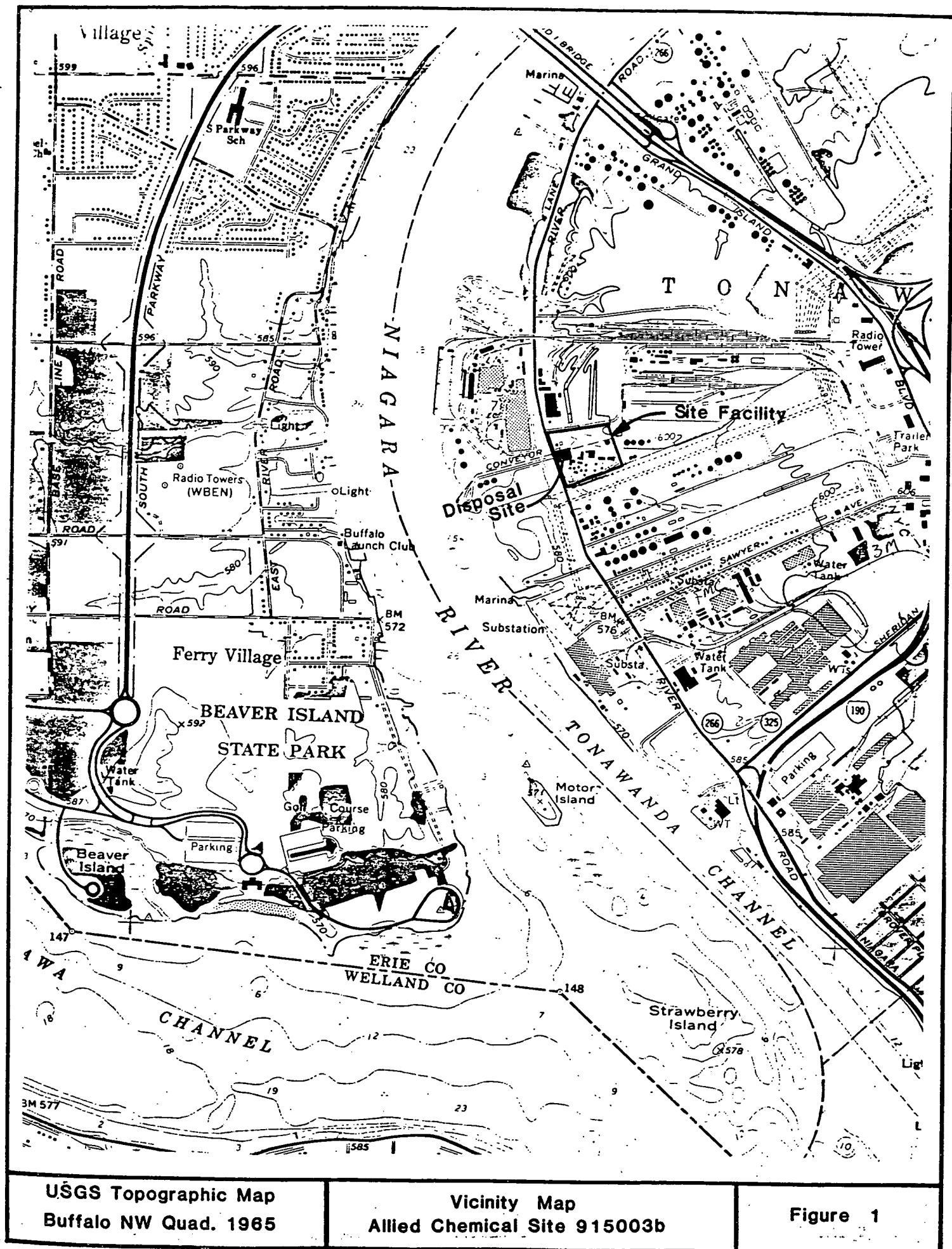
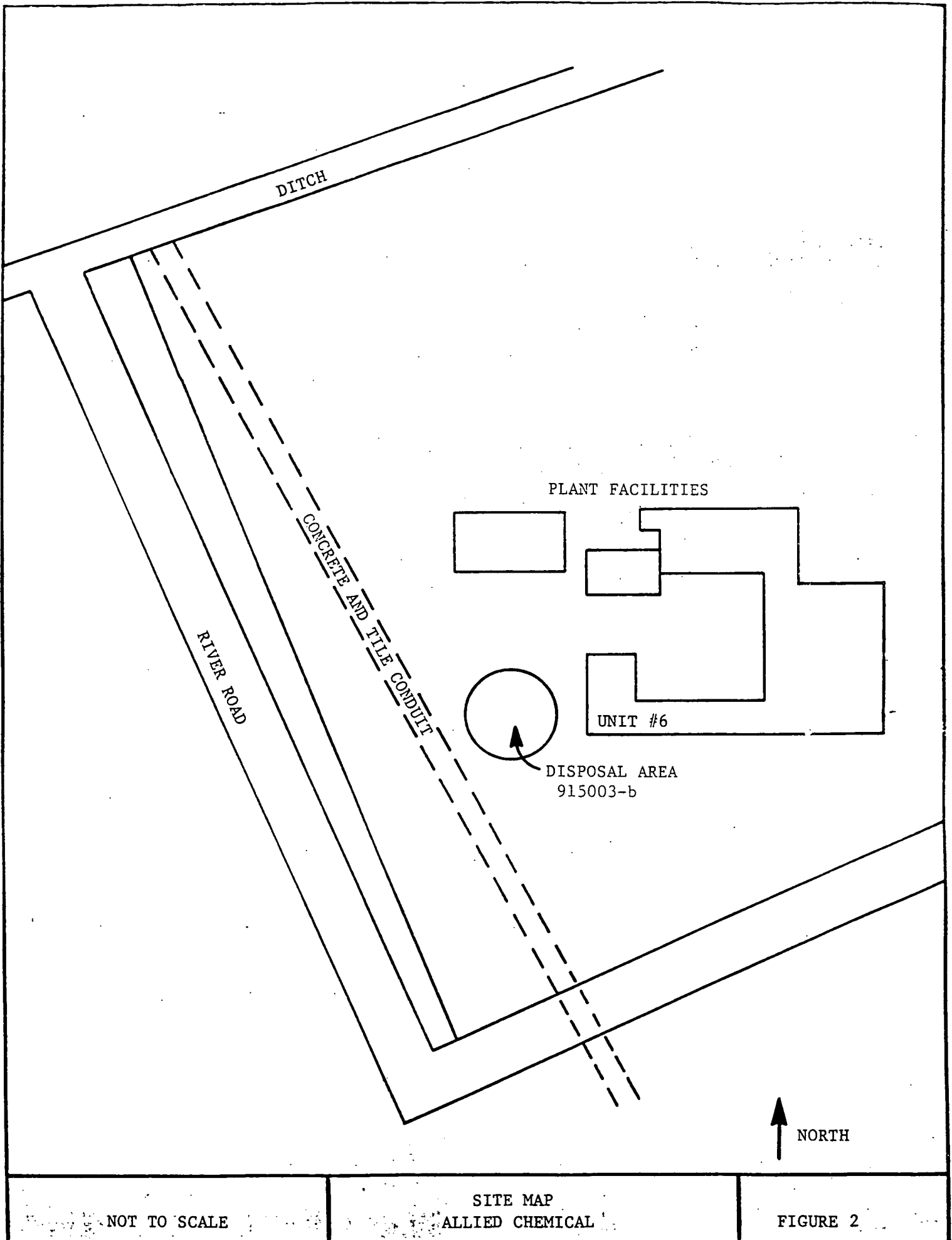


TABLE 3-2
GROUND-WATER SAMPLING RESULTS
PROJECT SUMMARY

[illegible]

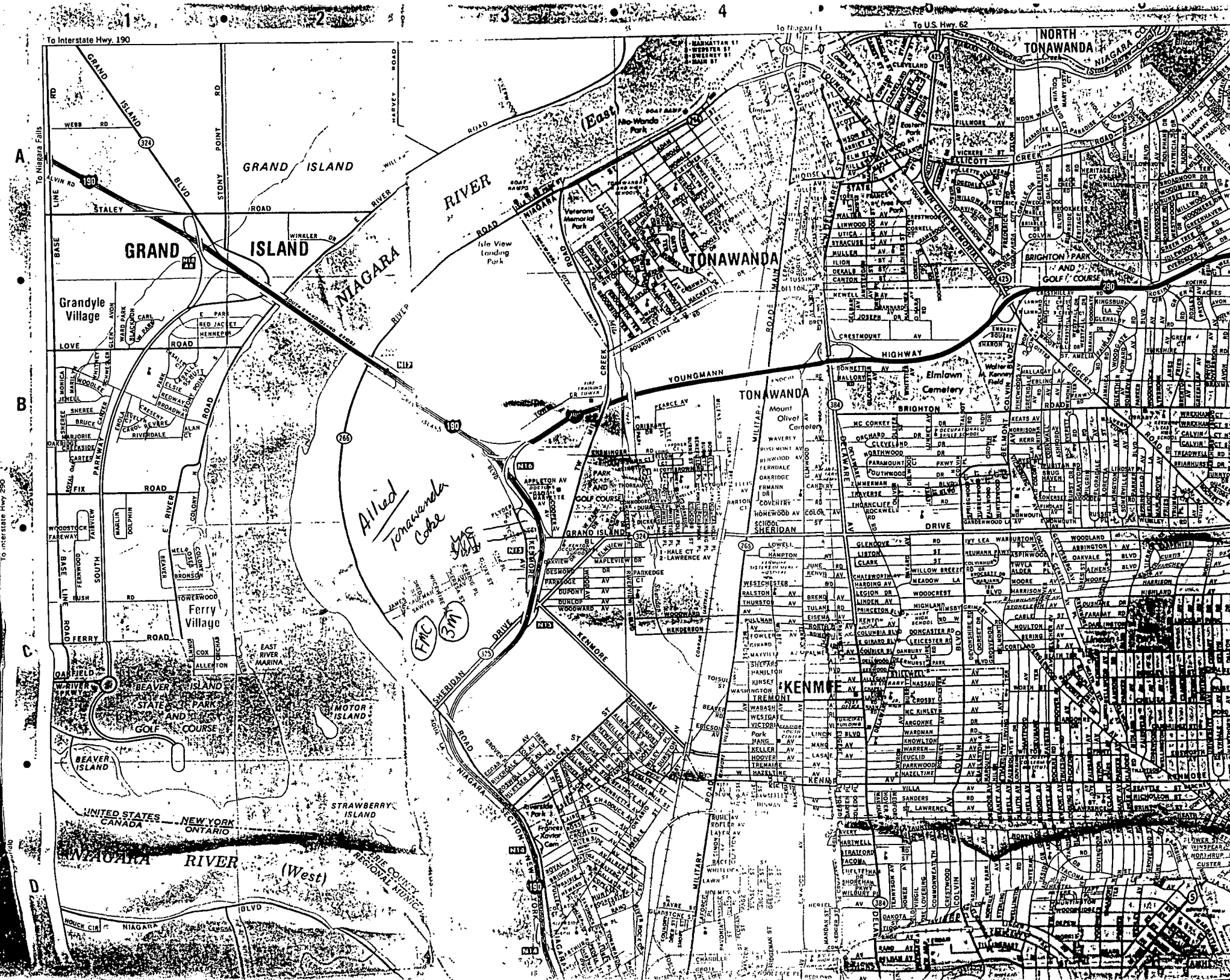




NOT TO SCALE

SITE MAP
ALLIED CHEMICAL

FIGURE 2



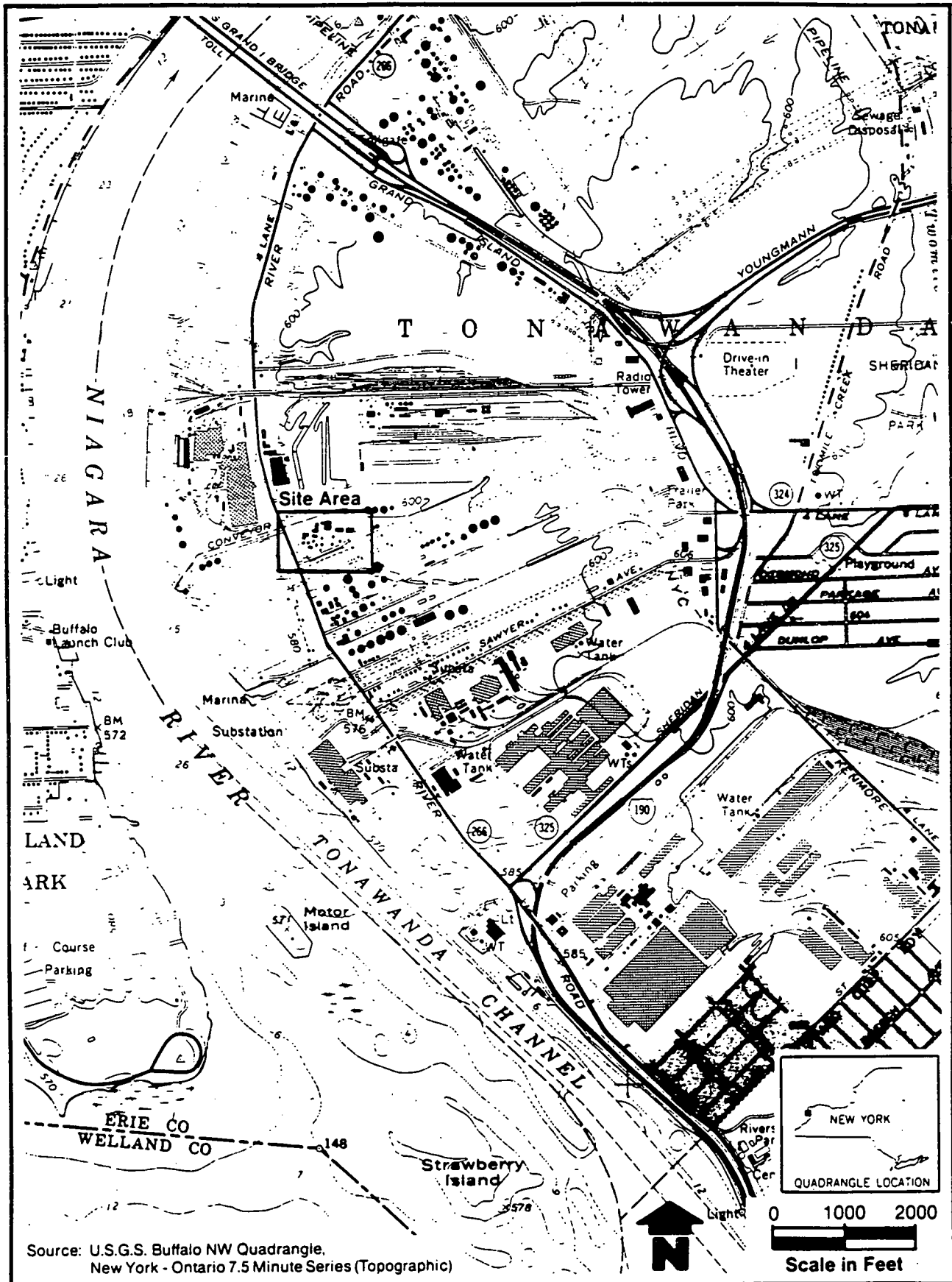


FIGURE 1-1 REGIONAL LOCATION MAP OF ALLIED PLANT TONAWANDA, NEW YORK