COOK COMPOSITES AND POLYMERS CO.
SAUKVILLE, WISCONSIN

1991 ANNUAL REPORT

Prepared for:

COOK COMPOSITES AND POLYMERS CO.
Saukville, Wisconsin

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1.0 INTRODUCTION

As required by the current program at the Cook Composites and Polymers Co., Saukville Plant, quarterly groundwater monitoring for January, 1991 (Winter quarter), April 1991 (Spring quarter), July, 1991 (Summer quarter) and October, 1991 (Fall quarter) was conducted. The October, 1991 sampling period represents the annual sampling event. The collection of field data and groundwater sampling was conducted by Sigma Environmental Services, Inc. (formerly CBC Environmental Services), Oak Creek, Wisconsin, and the water quality analyses were conducted by Enseco/ERCO Laboratory, Cambridge, Massachusetts. Both water quality and field observation tests have been submitted to U.S. Environmental Protection Agency (USEPA), Region V, Wisconsin Department of Natural Resources (WDNR) and Cook Composites and Polymers Co. (CCP) on a quarterly basis. The intent of this annual report is to summarize the data collected during 1991 and to make pertinent evaluations and recommendations.

2.0 GROUNDWATER MONITORING

2.1 Water Levels

Table 1 lists the wells and laboratory analysis methods in the current groundwater monitoring program at the CCP's Saukville facility. Locations for the sampled wells are presented on Figures 1 and 2. Water level observations were recorded for each monitoring well in the current sampling program. These water level readings were used to construct quarterly potentiometric surface maps for both the glacial and dolomite aquifers. These maps are included in Appendix A. During the sampling periods (quarters), several wells were dry or water levels could not be obtained due to mechanical difficulties. These wells are noted on Table 1. CCP also maintains a daily record of running times for various pumping wells and this information is presented in Table 2.

The potentiometric surface maps for both the glacial and dolomite aquifers were contoured using a statistical kriging method. Because groundwater elevations at this site can reasonably be assumed to follow a linear pattern, these maps represent the groundwater (potentiometric) surface of the aquifers underlying the site. Only those wells associated with a particular aquifer are included in the database for groundwater elevation contouring. Figures 1 and 2 show the location of the wells used and the particular aquifer which they monitor. A 24 x 36 inch version of Figure 2 is included as Appendix F and may be referenced when viewing the potentiometric maps located in Appendix A.

Examination of the groundwater maps for the glacial aquifer shows the groundwater surface generally slopes downward to the east toward the Milwaukee River at a near gradient of 4% across the site. Deflections in the contours represent the induced changes in the glacial aquifer due to the pumping of the Ranney-type Collectors. As indicated in Table 2 pumping of the Ranney-type Collectors (RC1, RC2 and RC3) has not been continuous. This is attributed to fluctuating water levels in the glacial aquifer. The

TABLE 1

Groundwater Monitoring Wells, Sampling Frequency and Laboratory Analyses Method Number

Quarterly Monitoring

	Laboratory Analysis Method Number			
Glacial Wells	Winter	Spring	Summer	Fall
6A	624	624	624	624
14B	624	624	624	624
20	624	624	624	624
27	602	602	602	624
37	602	602	602	624
41	602	602	602	624
42	602	602	602	624
43	Dry	602	602	Dry
44	Dry	Dry	Dry	Dry
45	Dry	Dry	Dry	Dry
46	624	624	624	624
47	602	602	602	624
48	602	602	602	624
Ranney Collectors				
RC1	602	602	602	624
RC2	602	602	602	624
RC3	602	602	602	624
Shallow Dolomite Wells				
3A	624	624	624	624
7	624	624	624	624
21A	602	602	602	624
23	624	624	624	624
24A	602	602	602	624
28	602	602	602	624
29	624	624	624	624
38	602	602	602	624
40	624	624	624	624
Deep Dolomite Wells				
MW1	624	624	624	624
MW2	624	624	624	624
MW3	624	624	624	N/O
30	624	624	624	624
PW8	624	624	624	624

TABLE 1 (continued)

Groundwater Monitoring Wells, Sampling Frequency and Laboratory Analyses Method Number

Annual Monitoring

	Laboratory Analysis Method Number			
Glacial Wells	Winter	Spring	Summer	Fall
1A	NA	NA	NA	624
3B	NA	NA	NA	624
4A	NA	NA	NA	Dry
8	NA	NA	NA	Dry
16A	NA	NA	NA	Dry
18A	NA	NA	NA	624
19A	NA	NA	NA	624
Shallow Dolomite Wells				
22	NA	NA	NA	624
25	NA	NA	NA	624
39	NA	NA	NA	624
Deep Dolomite Wells				
MW4	NA	NA	NA	624

NA = Not analyzed (annual sampling conducted only)
Dry = Well did not contain water
N/O = Non-Operational

NOTE: The following wells were dry during the sampling quarter listed:

Quarter	Dry Wells
Winter, 1991	43, 44, and 45
Spring, 1991	44 and 45
Summer, 1991	44 and 45
Fall, 1991	4A, 8, 16A, 43, 44, and 45

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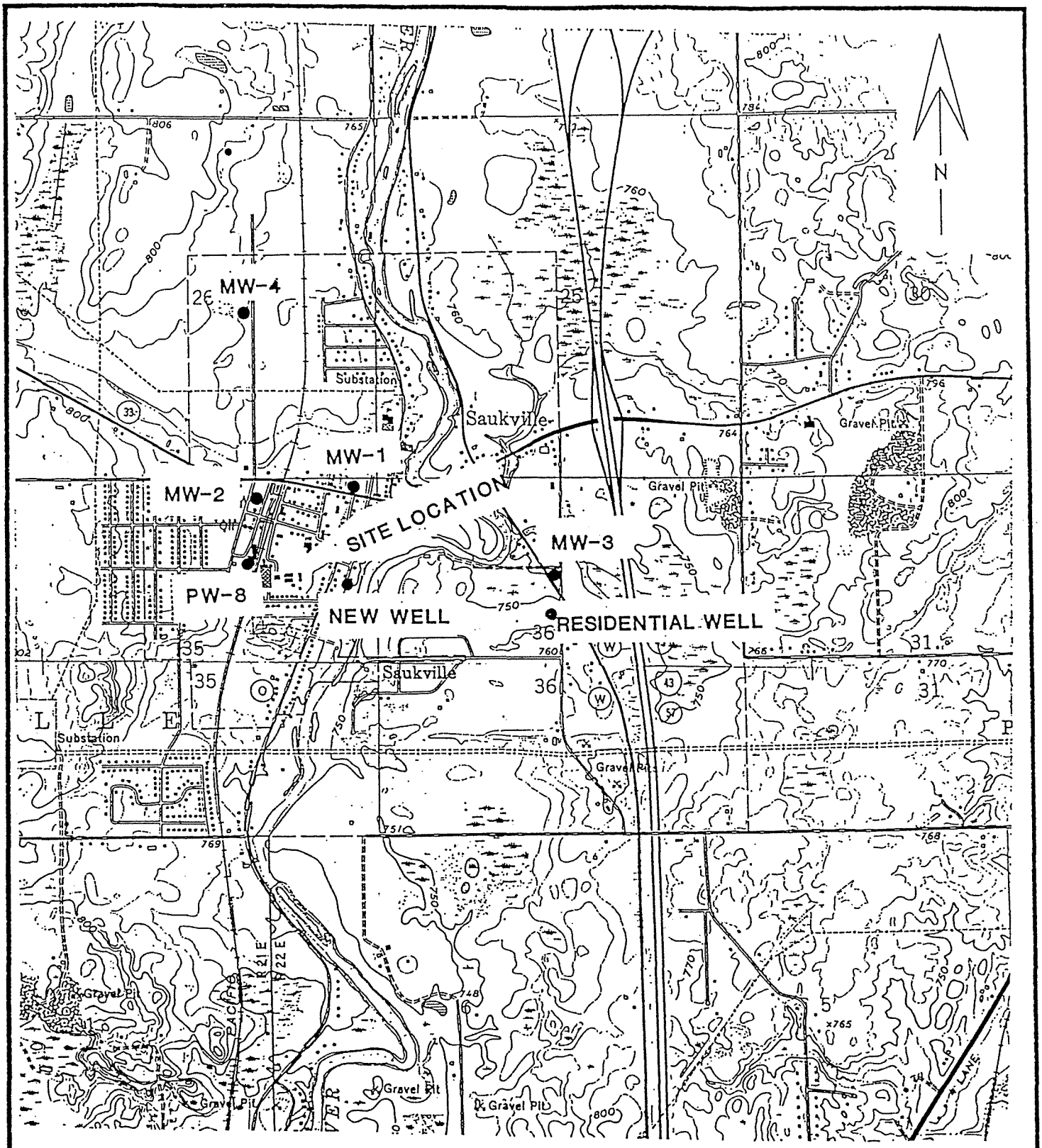
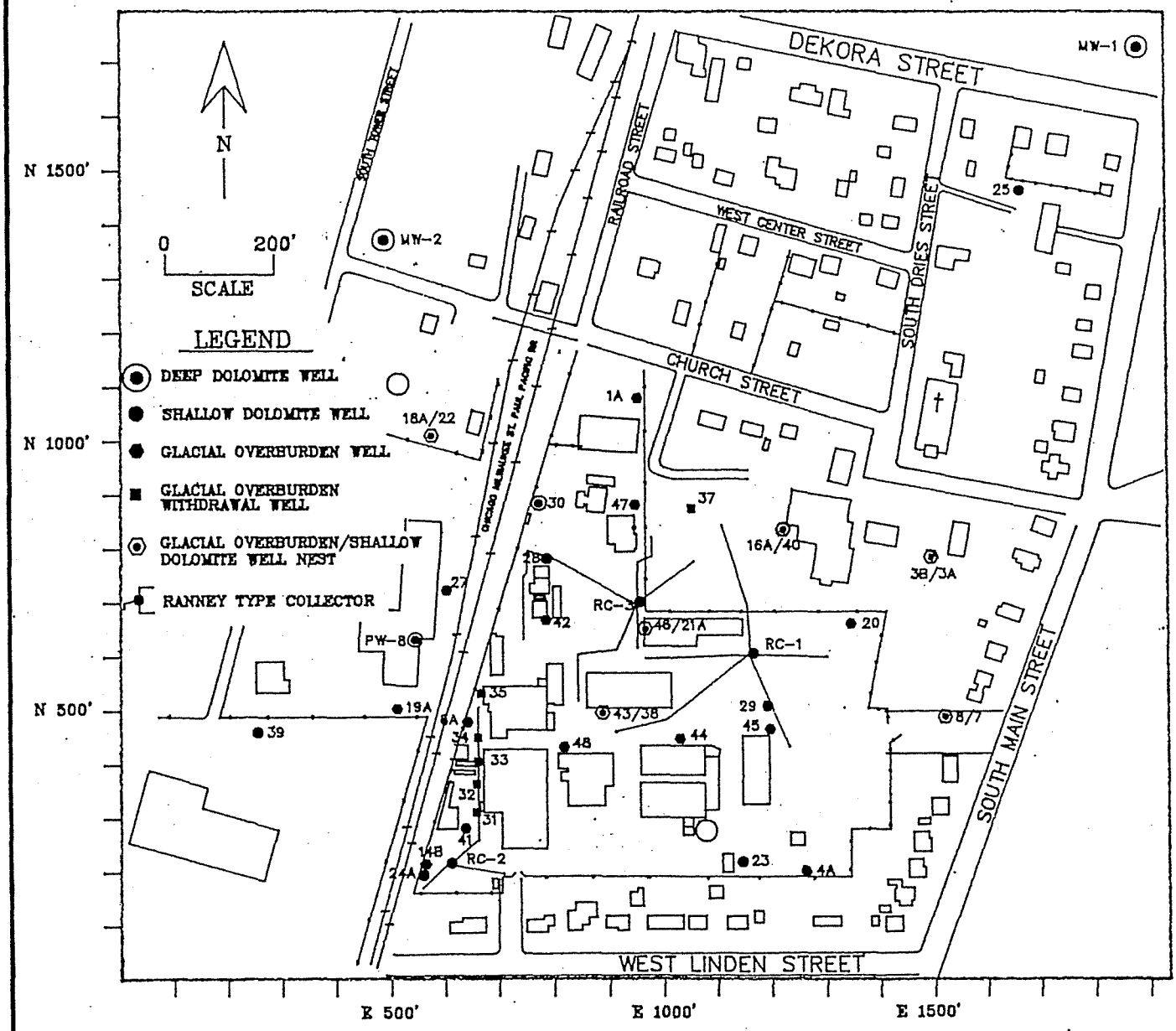


FROM USGS 7.5' TOPOGRAPHIC QUADRANGLE: PORT WASHINGTON WEST, WISCONSIN

JOB #:0001-003	FIGURE 1	HATCHER-SAYRE, INC.
DATE: 1/28/91	LOCATION OF MUNICIPAL WELLS AND OUTLYING MONITORING WELLS	
SCALE: 1:24000	FREEMAN CHEMICAL CORPORATION	
DRAWN BY: RDM	SAUKVILLE, WISCONSIN	



JOB #: 0001-003	FIGURE 2 MONITORING WELL LOCATION PLAN FREEMAN CHEMICAL CORP. SAUKVILLE, WISCONSIN	HATCHER-SAYRE, INC.
DATE: 1/28/91		
SCALE: 1":300'		
DRAWN BY: RDM		

TABLE 2
Summary of Well Running Times

Below is a summary for the well operation (running times) of the various dolomite wells, glacial wells and Ranney Collectors for calendar year 1991. This information has been compiled by Cook Composite and Polymers Co. in conjunction with its daily monitoring of the systems.

Well I.D.	Total Running Time	Weekly Average	Daily Average	Last Date Operations	Comments
W21[1]	2809 hr 36 min	57 hr 20 min	8 hr 10 min	12/11/91	Consistent til June, variable since
W24[1]	2425 hr	49 hr 29 min	7 hr 3 min	12/11/91	Variable, limited during Summer
W28[1]	1489 hr 42 min	30 hr 24 min	4 hr 20 min	12/11/91	Consistent, peaks in March and June
W29[1]	4245 hr 48 min	86 hr 39 min	12 hr 21 min	12/11/91	Pumped in Winter and Fall, Limited in Summer
RC1[2]	376 hr 54 min	7 hr 42 min	1 hr 6 min	12/11/91	Peaked in March and June, minimal otherwise
RC2[2]	1377 hr 36 min	28 hr 7 min	4 hr	12/11/91	Peaked in March and June
RC3[2]	1029 hr 42 min	21 hr 1 min	3 hr	12/10/91	Variable, Peaks in March and June
W31[2]	54 min	1 min	0.2 min	12/11/91	Limited pumping
W32[2]	104 hr 30 min	2 hr 8 min	18 min	12/11/91	No pumping til November

TABLE 2 (continued)
Summary of Well Running Times

Well I.D.	Total Running Time	Weekly Average	Daily Average	Last Date Operations	Comments
W33[2]	83 hr 18 min	1 hr 42 min	15 min	12/11/91	Consistent
W34[2]	6132 hr	125 hr 9 min	17 hr 50 min	12/11/91	Consistent
W35[2]	20 hr 6 min	25 min	4 min	12/11/91	Little Pumping
W37[2]	1 hr 36 min	2 min	0.3 min	07/21/91	Virtually no pumping

[1] Combined average discharge rate for pumping dolomite wells 21A, 24A, 28, and 29 = 10 gpm for a annual discharge of approximately 4,954,300 gallons.

[2] Combined average discharge rate for Ranney-type Collectors RC1, RC2 and RC3, and glacial overburden pumping wells 31, 32, 33, 34, 35, and 37 = 4.4 gpm for an annual discharge of approximately 2,157,085 gallons.

NOTE:

- The wells are listed as dolomite (21, 24, 28, 29) and Ranney Collectors (RC1, RC2, and RC2) and associated glacial wells (W31, W32, W33, W34, W35, and W37).
- The total running time represents the period of January 1, 1991 through December 10, 1991. Running times are recorded daily and reported appropriately.
- The weekly average accounts for the 49-week period beginning January 1, 1991.
- The daily average represents the 344 days elapsed during 1991 through December 10, 1991.
- The last date of operation represents the last known date a respective well timer registered running time for the particular well with a cut off date the morning of December 11, 1991.

It is important to note that the above averages are under ideal notions that there is running time each day and/or week. However, certain facts indicate that this is not always the case. For instance, a few wells only pumped a limited time (i.e. W31 and W32). Also, W34 was not in operation for a month due to a malfunction. Basically, all other wells have run at least limited periods in each of the 1991 calendar months.

variability in the glacial water levels is at least partially attributable to variations in precipitation and water available for recharge to the glacial aquifer. Precipitation data for the Saukville plant are given in Table 3. The potentiometric surface maps for the glacial aquifer show similar patters to those presented in the 1990 Annual Report.

The groundwater maps for the dolomite aquifer indicate the general groundwater gradient also slopes downward to the east, with contour deflections in the vicinity of pumping Well 30 due to drawdown of the groundwater surface of the dolomite aquifer. Well 30 has an average discharge rate of about 360 gpm. Also minor localized deflections in the groundwater elevation contours appear around the shallow dolomite wells 21, 24, 28, and 29. However, because these wells are not pumped at as great a discharge rate (combined rate of 10 gpm) or as continuously, their effects on the potentiometric surface are less dramatic than that of well 30. The potentiometric surface maps for the dolomite aquifer are generally similar to those presented in the 1990 Annual Report.

2.2 Water Quality Data

The water quality data generated for the past year are included in Appendix B. These tables list the sample analyses results for the quarterly sampling events by well number. These data have been summarized in Tables 4 through 11. Additionally, the data for total VOC concentrations for both the glacial and dolomite wells are presented in Appendix C for the four sampling quarters of 1991. These maps depict the isoconcentration contours for the glacial and dolomite aquifers. It is important to note that VOC maps for the glacial aquifer do not include data for the Ranney-type collectors. Results reported for these three systems actually represent results for composite samples of groundwater collected from the various Ranney collection lines, each of which discharges to a control sump in each system. Consequently, the geographic distribution of water quality data cannot be accurately represented on the maps for these three collectors. When reviewing

TABLE 3

Precipitation Data for the Saukville Plant
Cook Composites and Polymers Co.

	Monthly Precipitation (in)[1]				
MONTH	1987	1988	1989	1990	1991
January	0.97	2.01	0.67	1.84	0.11
February	0	0.87	1.01	0.6	0.2
March	2.74	0.82	2.71	2.47	1.85
April	4.2	3.43	0.9	1.36	1.15
May	4.01	0.44	3.49	4.01	3.32
June	1.2	0.89	1.88	3.79	4.04
July	7.63	1.28	4.01	1.38	2.37
August	6.55	1.88	5.15	2.21	2
September	2.89	5.48	1.44	2.46	1.82
October	1.69	1.68	1.74	2.74	2.88
November	2.51	4.4	0.49	2.52	2.62
December	4.00	2.08	0.2	1.07	0.77[3]
TOTALS	38.39	25.26	23.69	26.45	23.13

YEAR	TOTAL PRECIPITATION (in.)
1983[2]	37.47
1984[2]	39.60
1985[2]	37.29
1986[2]	42.17

[1] Recorded on daily basis from the best estimates, weather reports and the in-plant rain gauge, as noted by Saukville Plant employees.

[2] Data Source: National Climatic Data Center for the Milwaukee area.

[3] Recorded from December 1 through December 12, 1991.

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the data for the past year and assessing the effectiveness of remediation, it is important to review the trend analyses for individual wells (Appendix D). This has been taken into account in the subsequent sections.

2.2.1 Glacial Wells and Ranney-Type Collectors

Tables 4 and 5 list the VOCs detected and the total VOC concentrations respectively for each glacial well and sampling quarter for 1991. All the annually sampled glacial wells (1A, 3B, 4A, 8, 16A, 18A, 19A) which contained water (4A, 8 and 16A were dry) showed no detection of the parameters analyzed except 19A. Quarterly sampled wells 14B and 46 indicate seasonal variation in total VOC concentrations with a general reduction in VOC concentrations for the year. Significant VOC concentrations were detected in wells 6A, 37, 41, 42, 43, and 47. We have considered for the purpose of this report, that values greater than 1 mg/l are "significant". The VOCs detected and the total VOC concentrations for the Ranney-type Collectors (RC-1, RC-2, and RC-3) are listed in Tables 6 and 7, respectively. Although seasonal fluctuations in total VOC concentrations exist, review of the water quality data for these three collectors indicate a general reduction in VOCs in RC-1 and RC-3. Ranney-Type Collector RC-2 shows a relatively constant average VOC concentration since remediation began in Spring, 1987.

The annually sampled glacial wells: 1A, 3B, 4A, 8, 16A and 18A have exhibited non-detectable or minor (less than 20 μg/l) concentrations since remediation began during the Spring of 1987 at the Saukville Plant. Wells 14B and 19A indicate overall continually decreasing concentrations. Wells 1A, 3B, 4A, 8, 16A, 18A, 14B, 20, and 27 are located around the perimeter of the Plant area and based upon the chemical analyses to date, indicate the limits of the contaminant plume in the glacial aquifer. The wells which lie within the area outlined by the above referenced wells

TABLE 4 - VOCs DETECTED IN GLACIAL OVERBURDEN WELLS

WELL ID	WINTER	SPRING	SUMMER	FALL
1A	*	*	*	ND
3B	*	*	*	ND
4A	*	*	*	DRY
6A	CARBON DISULF. T,E,X	T,E,X	T,E,X	T,E,X
8	*	*	*	DRY
14B	ND	PCE	ND	ND
16A	*	*	*	DRY
18A	*	*	*	ND
19A	*	*	*	1,2-DCE, TCE
20	ND	B,E,X	ND(#)	ND
27	B	B	ND	1,2-DCE, TCE
37	B,T,E,X	T,E,X	B,T,E,X	T,E,X
41	B,T,E,X	B,E,X	B,E,X	E,X
42	B,T,E,X	B,T,E,X	B,T,E,X	B,T,E,X
43	DRY	B,T,E,X	B,T,E,X	DRY
44	DRY	DRY	DRY	DRY
45	DRY	DRY	DRY	DRY
46	ND (#)	ND	T,X (#)	ND
47	T,E,X	T,E,X	T,E,X	CHLOROMETHANE T,E,X
48	ND	ND	E,X	1,2-DCA

B = BENZENE TCE = TRICHLOROETHENE PCE = TETRACHLOROETHENE
T = TOLUENE DCE = DICHLOROETHENE ND = NONE DETECTED
E = ETHYLBENZENE DCA = DICHLOROETHANE * = SAMPLED ANNUALLY
X = XYLENES(TOTAL) (#) = LAB CONTAMINATION ASSOCIATED WITH SAMPLE
CARBON DISULF. = CARBON DISULFIDE

TABLE 5 - TOTAL VOC CONCENTRATIONS IN THE GLACIAL OVERBURDEN WELLS (MICROGRAMS/LITER)

WELL ID	WINTER	SPRING	SUMMER	FALL
1A	*	*	*	ND
3B	*	*	*	ND
4A	*	*	*	DRY
6A	235,400	175,000	172,000	200,000
8	*	*	*	DRY
14B	ND	7.8	ND	ND
16A	*	*	*	DRY
18A	*	*	*	ND
19A	*	*	*	505
20	ND	41.4	(#) ND	ND
27	17	6.7	ND	240
37	155,400	159,000	155,100	166,000
41	632.9	1005.5	1075	596
42	6,000	10,500	13,600	7,380
43	DRY	88,400	152,000	DRY
44	DRY	DRY	DRY	DRY
45	DRY	DRY	DRY	DRY
46	(#) ND	ND	(#) 38.6	ND
47	1,304,000	575,000	305,000	1,040,000
48	ND	ND	12.3	11

ND = NONE DETECTED
* = SAMPLED ANNUALLY
(#) = LAB CONTAMINATION ASSOCIATED WITH SAMPLE (NOT INCLUDED)

TABLE 6 - VOCs DETECTED IN RANNEY-TYPE COLLECTORS

RANNEY COLLECTOR	WINTER	SPRING	SUMMER	FALL
RC-1	B,T,E,X	T,E,X	T,E,X	T,E,X (#)
RC-2	B,T,E,X	B,T,E,X	B,T,E,X	T,E,X
RC-3	T,E,X	T,E,X	B,T,E,X	T,E,X

B = BENZENE T = TOLUENE E = ETHYLBENZENE X = XYLENES(TOTAL)
(#) = LAB CONTAMINATION ASSOCIATED WITH SAMPLE

TABLE 7 - TOTAL VOC CONCENTRATIONS IN THE RANNEY-TYPE COLLECTORS (MICROGRAMS/LITER)

RANNEY COLLECTOR	WINTER	SPRING	SUMMER	FALL
RC-1	1,015	42,600	591	(#) 21,000
RC-2	75,210	1,274	59,400	21,300
RC-3	31,100	54,500	39,600	21,400

(#) = LAB CONTAMINATION ASSOCIATED WITH SAMPLE (NOT INCLUDED)

fluctuate in contaminant concentration levels as the glacial aquifer varies in recharge. This flushing action explains the variable quarterly concentration levels of the parameters analyzed in these glacial wells and the Ranney-type Collectors (RC1, RC2, and RC3).

2.2.2 Dolomite Wells

Tables 8 and 9 list the VOCs detected and the total VOC concentrations respectively for each shallow dolomite well and sampling quarter for 1991. The annually sampled shallow dolomite wells 22, 25 and 39 showed no detection of VOCs. No VOCs were detected in the quarterly sampled wells 3A, 7 and 23 for the year. Although seasonal fluctuations in concentration levels exist, general overall reduction of VOCs was indicated for wells 3A, 21A, 24A and 29.

The VOCs detected and the total VOC concentrations for the deep dolomite wells are listed in Tables 10 and 11, respectively. Review of the water quality data indicates no VOCs detected in the Municipal Wells MW1, MW2, MW3, and MW4 or PW8. There were seasonal fluctuations in well 30 for the year, but a general overall reduction in VOC concentrations based upon the trend analysis shown in Appendix D for this well.

The annually sampled dolomite wells 22, 25, 39, and MW4 have exhibited non-detectable or minor (less than 10 μg/l) concentrations since remediation began. Wells MW1, MW2, and MW3 have shown no detectable contamination and wells 3A, 7, 23, 24A, 28, 30, 40 and PW8 have shown decreasing and/or maximum concentration levels less than 400 μg/l, since remediation began at the Saukville plant. The success of the areal reduction of groundwater contamination at the plant is believed to be related to the influence pumping well 30 has had and continues to have upon the dolomite aquifer.

TABLE 8 - VOCs DETECTED IN SHALLOW DOLOMITE WELLS

WELL ID	WINTER	SPRING	SUMMER	FALL
3A	ND	ND	ND	ND
7	ND	ND	ND	ND
21A	B,T,X	B,T,E,X	B,T,E,X	B,T,E,X
22	*	*	*	ND
23	ND (#)	ND	ND	ND
24A	B	B	ND	VINYL CHLORIDE 1,2-DCE
25	*	*	*	ND
28	B,T,E,X	B,T,E,X	B,T,E,X	B,T,E,X (#)
29	B,E,X	B,E,X	B,T,E,X	B,E,X
38	B,T,E,X	B,T,E,X	B,T,E,X	B,T,E,X
39	*	*	*	ND
40	ND	ND	B (#)	B

B = BENZENE E = ETHYLBENZENE ND = NONE DETECTED
T = TOLUENE X = XYLENES(TOTAL) * = SAMPLED ANNUALLY
DCE = DICHLOROETHENE (#) = LAB CONTAMINATION ASSOCIATED WITH SAMPLE

TABLE 9 - TOTAL VOC CONCENTRATIONS IN THE SHALLOW DOLOMITE WELLS (MICROGRAMS/LITER)

WELL ID	WINTER	SPRING	SUMMER	FALL
3A	ND	ND	ND	ND
7	ND	ND	ND	ND
21A	26,500	23,800	27,100	26,910
22	*	*	*	ND
23	(#) ND	ND	ND	ND
24A	14	7.0	ND	42
25	*	*	*	ND
28	69	2,460	129.7	(#) 103.2
29	6,200	6,500	6,020	4,700
38	6,981	4,451	5,588	12,780
39	*	*	*	ND
40	ND	ND	(#) 11	6.4

ND = NONE DETECTED
* = SAMPLED ANNUALLY
(#) = LAB CONTAMINATION ASSOCIATED WITH SAMPLE (NOT INCLUDED)

TABLE 10 - VOCs DETECTED IN DEEP DOLOMITE WELLS

WELL ID	WINTER	SPRING	SUMMER	FALL
MW-1	ND	ND	ND (#)	ND
MW-2	ND	ND	ND (#)	ND
MW-3	ND	ND	ND	N/O
MW-4	*	*	*	ND
30	CARBON DISULF B,X	B,X	B,X (#)	B,X
PW-8	ND	ND	ND	ND

B = BENZENE
T = TOLUENE
E = ETHYLBENZENE
X = XYLENES(TOTAL)
CARBON DISULF = CARBON DISULFIDE

ND = NONE DETECTED
* = SAMPLED ANNUALLY
(#) = LAB CONTAMINATION ASSOCIATED WITH SAMPLE
N/O = NON OPERATIONAL

TABLE 11 - TOTAL VOC CONCENTRATIONS IN THE DEEP DOLOMITE WELLS (MICROGRAMS/LITER)

WELL ID	WINTER	SPRING	SUMMER	FALL
MW-1	ND	ND	(#) ND	ND
MW-2	ND	ND	(#) ND	ND
MW-3	ND	ND	ND	N/O
MW-4	*	*	*	ND
30	41	20.3	(#) 13.3	14
PW-8	ND	ND	ND	ND

ND = NONE DETECTED
* = SAMPLED ANNUALLY
N/O = NON OPERATIONAL
(#) = LAB CONTAMINATION ASSOCIATED WITH SAMPLE (NOT INCLUDED)

2.2.3 Publicly Owned Treatment Works (POTW)

The yearly data for the Publicly Owned Treatment Works (POTW) sampling is listed in Table 12. The POTW influent, effluent and sludge were analyzed for Method 624 VOCs and total phenolics. Phenolics were detected in the POTW influent and sludge samples. A total phenolics concentration of 0.012 mg/l was detected in the spring effluent sample.

2.2.4 Isoconcentration Maps

The Revised Project Plans, Tasks 3A, 3B, and 3C for the Freeman Chemical Corporation, Saukville, Wisconsin document, submitted by Hatcher-Sayre, Inc., April 6, 1989, states that the annual report will include isoconcentration contour maps and trend analyses for total VOCs and for the following individual parameters:

Methylene chloride	Benzene
Acetone	4-methyl-2-pentanone
Trans-1,2-dichloroethene	Toluene
2-butanone	Ethylbenzene
	Total Xylenes

These isoconcentration maps are included in Appendices C and E with the following exceptions.

Both methylene chloride and acetone are attributable to laboratory and/or field contamination, as these compounds were detected in method or field blanks prepared by the laboratory or sampled by the field personnel. The compound 4-methyl-2-pentanone and 2-butanone was not detected in any of the samples collected and analyzed during the 1991 sampling quarters. The parameter 1,2-dichloroethene was detected in three samples collected during 1991 at three well locations. Because isoconcentration and trend analyses for the concentration of the individual BTEX parameters

TABLE 12
RESULTS OF CHEMICAL ANALYSES CONDUCTED ON THE
POTW INFLUENT, EFFLUENT AND SLUDGE SAMPLES

	VOCs DETECTED			
SAMPLE ID	WINTER	SPRING	SUMMER	FALL
INFLUENT POTW	1,1,1-TCA	T,E,X (#)	ACETONE T,X (#)	ACETONE
EFFLUENT POTW	ACETONE 1,1,1-TCA	X	ND (#)	ND
SLUDGE POTW	T	T (#)	ACETONE 2-BUTANONE T (#)	CARBON DIS 2-BUTANONE (#)

TOTAL VOC CONCENTRATIONS (mg/l)

	WINTER	SPRING	SUMMER	FALL
INFLUENT POTW	0.21	(#) 0.845	(#) 5.81	0.17
EFFLUENT POTW	0.125	0.036	(#) ND	ND
SLUDGE POTW	0.0051	(#) 0.21	(#) 0.294	(#) 0.108

PHENOLICS, TOTAL (mg/l)

	WINTER	SPRING	SUMMER	FALL
INFLUENT POTW	0.032	0.021	0.056	0.033
EFFLUENT POTW	ND	0.012	ND	ND
SLUDGE POTW	ND	0.9	0.29	** 25

B = BENZENE
T = TOLUENE
E = ETHYLBENZENE
X = XYLENES(TOTAL)
DIS = DISULFIDE
TCA = TRICHLOROETHANE
ND = NONE DETECTED
(#) = LAB CONTAMINATION ASSOCIATED WITH SAMPLE (NOT INCLUDED IN TOTAL)
** = UNITS IN mg/kg

essentially mirror the total VOC isoconcentration maps and trend analyses graphs (given in Appendices C and D, respectively), individual maps and graphs are not presented for these parameters.

Additionally, trichloroethene, 1,2-dichloroethane, vinyl chloride and carbon disulfide were detected in a limited number of samples and wells. The isoconcentration maps for these and for 1,2-dichloroethene (total) are given in Appendix E. As seen on the isoconcentration maps, the detection of these non-BTEX compounds were generally in the wells that are located on or near the western portion of the site boundary.

3.0 **SUMMARY**

Compared to 1990, groundwater levels (elevations) in 1991 were generally unchanged in the glacial and dolomite aquifers except for minor seasonal variations. This variation appeared to be directly related to the local precipitation, and increased withdrawal rates of the glacial and dolomite pumping wells.

Groundwater appears to flow in an easterly direction toward the Milwaukee River. Local glacial groundwater flow is influenced by the Ranney-type Collectors, glacial pumping wells and an apparent sinkhole which underlies the eastern portion of the site. The local dolomite groundwater flow is primarily affected by well 30 which provides cooling water to the plant. This well is pumped constantly at a rate of about 360 gpm.

Both the glacial and dolomite remedial measures appear to be operating as planned, albeit very gradually. Over the past 2 to 3 years, a noticeable reduction in the areal extent of contamination can be observed. Essentially all of the outer boundary wells which originally indicated contamination have shown marked decreases in contaminant concentrations.

Contamination still exists in the glacial aquifer in the vicinity of each Ranney Collector as well as the extreme northern portion of the site (well 47) which extends east to pumping well 37. As indicated in Table 13, all of these areas as well as most of the other wells indicating contamination are comprised of the BTEX (Method 602) parameters. The wells in which contaminants other than BTEX parameters were found are the wells near the western portion of the site (i.e., 6A, 19A, 24A, 27, 46, 47 and 48). The degree of known on-site contamination, therefore, can effectively be measured by evaluating the BTEX parameters.

The non-BTEX compounds detected during quarterly sampling/analyses are listed in Table 14. This list excludes methylene chloride since this compound is attributable to either laboratory or field contamination.

TABLE 13 - TOTAL VOCs (624) VS BTEX COMPONENTS (602)
FOR WELLS ANALYZED BY METHOD 624
(MICROGRAMS/LITER)

WELL ID	WINTER		SPRING		SUMMER		FALL	
	TOTAL VOCs (624)	BTEX (602)	TOTAL VOCs (624)	BTEX (602)	TOTAL VOCs (624)	BTEX (602)	TOTAL VOCs (624)	BTEX (602)
GLACIAL WELLS								
1A	--	--	--	--	--	--	ND	ND
3B	--	--	--	--	--	--	ND	ND
6A	235,400	226,000	175,000	175,000	172,000	172,000	200,000	200,000
14B	ND	ND	7.8	ND	ND	ND	ND	ND
18A	--	--	--	--	--	--	ND	ND
19A	--	--	--	--	--	--	505	ND
20	ND	ND	41.4	41.4	ND	ND	ND	ND
27	--	--	--	--	--	--	240	240
37	--	--	--	--	--	--	166,000	166,000
41	--	--	--	--	--	--	596	596
42	--	--	--	--	--	--	7,380	7,380
46	ND	ND	ND	ND	38.6	38.6	ND	ND
47	--	--	--	--	--	--	1,040,000	972,000
48	--	--	--	--	--	--	11	ND
SHALLOW DOLOMITE WELLS								
3A	ND	ND	ND	ND	ND	ND	ND	ND
7	ND	ND	ND	ND	ND	ND	ND	ND
21A	--	--	--	--	--	--	26,910	26,910
22	--	--	--	--	--	--	ND	ND
23	ND	ND	ND	ND	ND	ND	ND	ND
24A	--	--	--	--	--	--	42	ND
25	--	--	--	--	--	--	ND	ND
28	--	--	--	--	--	--	103.2	103.2
29	6,200	6,200	6,500	6,500	6,020	6,020	4,700	4,700
38	--	--	--	--	--	--	12,780	12,780
39	--	--	--	--	--	--	ND	ND
40	ND	ND	ND	ND	11	11	6.4	6.4
DEEP DOLOMITE WELLS								
MW-1	ND	ND	ND	ND	ND	ND	ND	ND
MW-2	ND	ND	ND	ND	ND	ND	ND	ND
MW-3	ND	ND	ND	ND	ND	ND	N/O	N/O
MW-4	--	--	--	--	--	--	ND	ND
30	41	21	20.3	20.3	13.3	13.3	14	14
PW-8	ND	ND	ND	ND	ND	ND	ND	ND

ND = NONE DETECTED
-- = NOT ANALYZED FOR METHOD 624
N/O= NON-OPERATIONAL

TABLE 14
NON-BTEX COMPOUNDS DETECTED DURING 1991 SAMPLING QUARTERS
GLACIAL AND DOLOMITE WELLS

COMPOUND	FREQUENCY OF DETECTION	WELL ID/ # OF DETECTS	QUARTER/ CONC. (ug/l)
VINYL CHLORIDE	1 / 73	24A / 1	FALL / 20
CHLOROMETHANE	1 / 73	47 / 1	FALL / 68000
1,2-DICHLOROETHENE (TOTAL)	3 / 73	19A / 1	FALL / 78
		27 / 1	FALL / 40
		24A / 1	FALL / 22
CARBON DISULFIDE	2 / 73	6A / 1	WINTER / 9400
		30 / 1	WINTER / 20
TRICHLOROETHENE	2 / 73	19A / 1	FALL / 430
		27 / 1	FALL / 200
TETRACHLOROETHENE	1 / 73	14B / 1	SPRING / 7.8
1,2-DICHLOROETHANE	1 / 73	48 / 1	FALL / 11

GLACIAL WELLS : 6A, 19A, 27, 46, 47, 48
SHALLOW DOLOMITE WELL : 24A
DEEP DOLOMITE WELL : 30

FREQUENCY OF DETECTION IS BASED UPON THE NUMBER OF SAMPLES IN WHICH 624 ANALYSES WERE CONDUCTED (I.E. 73).

The glacial wells 6A, 14B, 19A, 27, 47, and 48 located in the western portion of the site, were the only glacial wells in which non-BTEX compounds were detected. These compounds include: carbon disulfide, 1,2-dichloroethene (total), chloromethane, trichloroethene tetrachloroethene and 1,2-dichloroethane. As discussed earlier, the glacial aquifer water table gradient slopes downward to the east, thus contamination introduced into the glacial aquifer from (an) unknown source(s) west of the site could migrate to the east and be intercepted by these wells.

The dolomite wells 24A and 30, located near the southern and western boundaries of the site, were the only dolomite wells in which non-BTEX parameters were detected. These parameters were 1,2-dichloroethene (total), vinyl chloride and carbon disulfide. As noted earlier, the dolomite aquifer potentiometric surface gradient generally slopes downward to the east, and due to the drawdown of the dolomite aquifer within the radius of influence of pumping well 30, groundwater from areas to the west and south of the site could intersect the wells near the western and southern site boundaries.

Additionally, as the compounds listed in Table 14 were not associated with products utilized by CCP, Saukville Plant, an off-site source for these compounds would explain their detection in the wells located near the site boundary.

It is important to note that precipitation over the past four years (1988-1991) appears to be 13 to 16 inches below normal (assuming annual average of about 39 inches). This explains why a number of the glacial wells have been dry subsequent to installation, as well design was based upon normal precipitation conditions. During periods of normal precipitation, increased groundwater pumping and more effective remediation would be expected to occur.

4.0 **RECOMMENDATIONS**

As the data indicate, the systems are operating to control the migration of the site contaminants and slowly remove them from the soil and groundwater. It is evident that this remedial action, while effective, will take considerable time. In fact, just reviewing the annual data does not show any obvious trends; it is only by reviewing the past 2 to 3 years of data that trends become observable. As a result of the considerable data base which as been generated to date and due to the anticipated long-term remediation and lack of observable trends over the short-term, we recommend that the quarterly sampling currently scheduled, be reduced to semi-annual sampling. Since changes are only observable after 1 or 2 years, this schedule allows for the more effective use of collected data. The data could still be utilized to show trends, isoconcentrations and effectiveness of the remediation systems without reducing the quality of the program.

Furthermore, since the on-site contamination is directly measurable by EPA Method 602 as shown by the last two to three years of data, it is recommended that Method 602 be utilized to analyze all wells except MW1, MW2, MW3, MW4, RC1, RC2, RC3, PW8, 22, 27, 19A, 24A, 23, 28, and 30. Since the above wells are subject to contamination from off-site and the Ranney collectors are discharged to the Saukville POTW, these systems would continue to have VOCs analyzed by EPA Method 624 at the current program frequency. This change in methodology would not affect the quality of the data.

0001-3.rpt/sdb

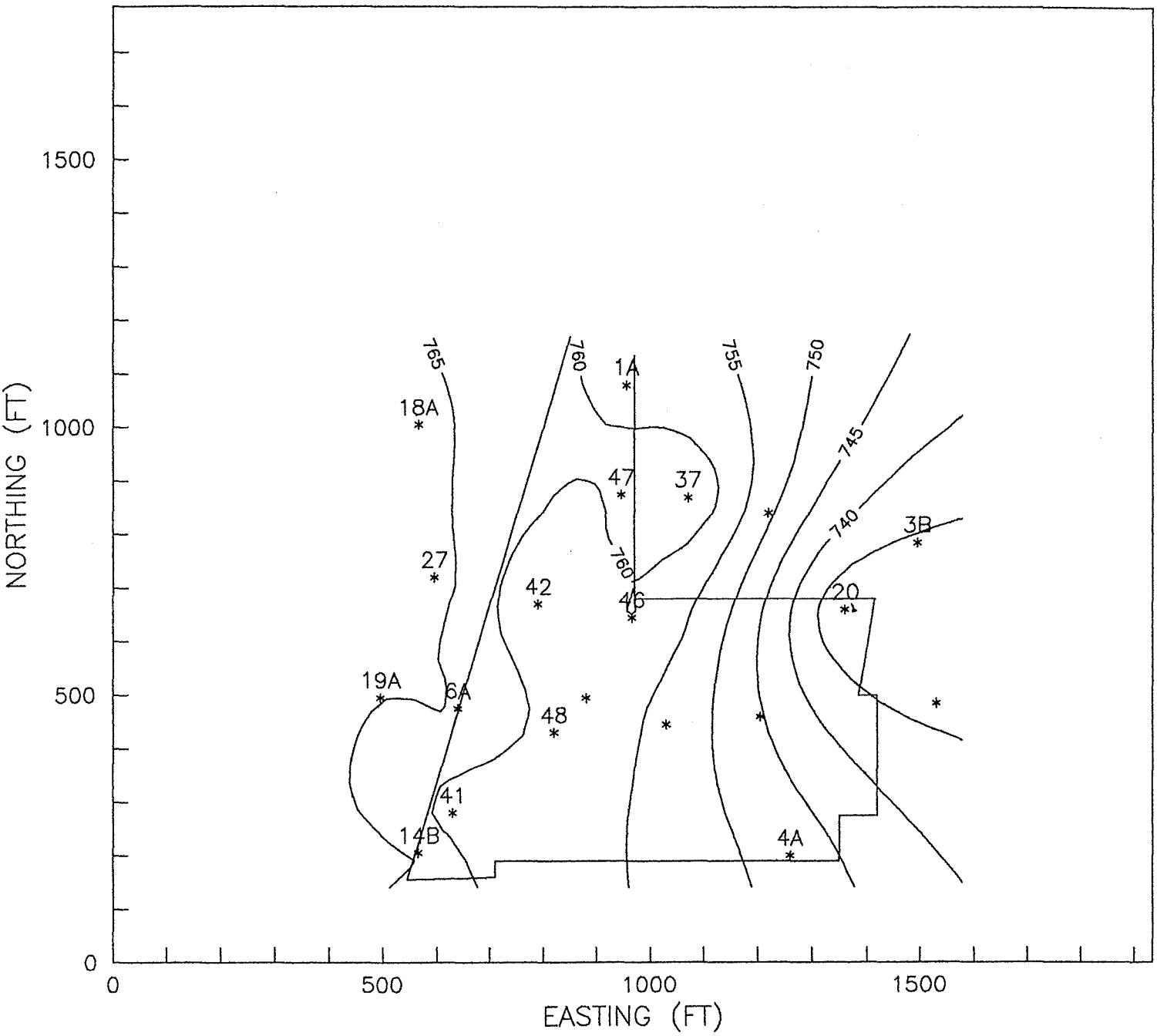
APPENDIX A

Potentiometric Surface Maps for the Glacial and Dolomite Aquifers

Glacial Aquifer - Winter, 1991
Glacial Aquifer - Spring, 1991
Glacial Aquifer - Summer, 1991
Glacial Aquifer - Fall, 1991
Dolomite Aquifer - Winter, 1991
Dolomite Aquifer - Spring, 1991
Dolomite Aquifer - Summer, 1991
Dolomite Aquifer - Fall, 1991

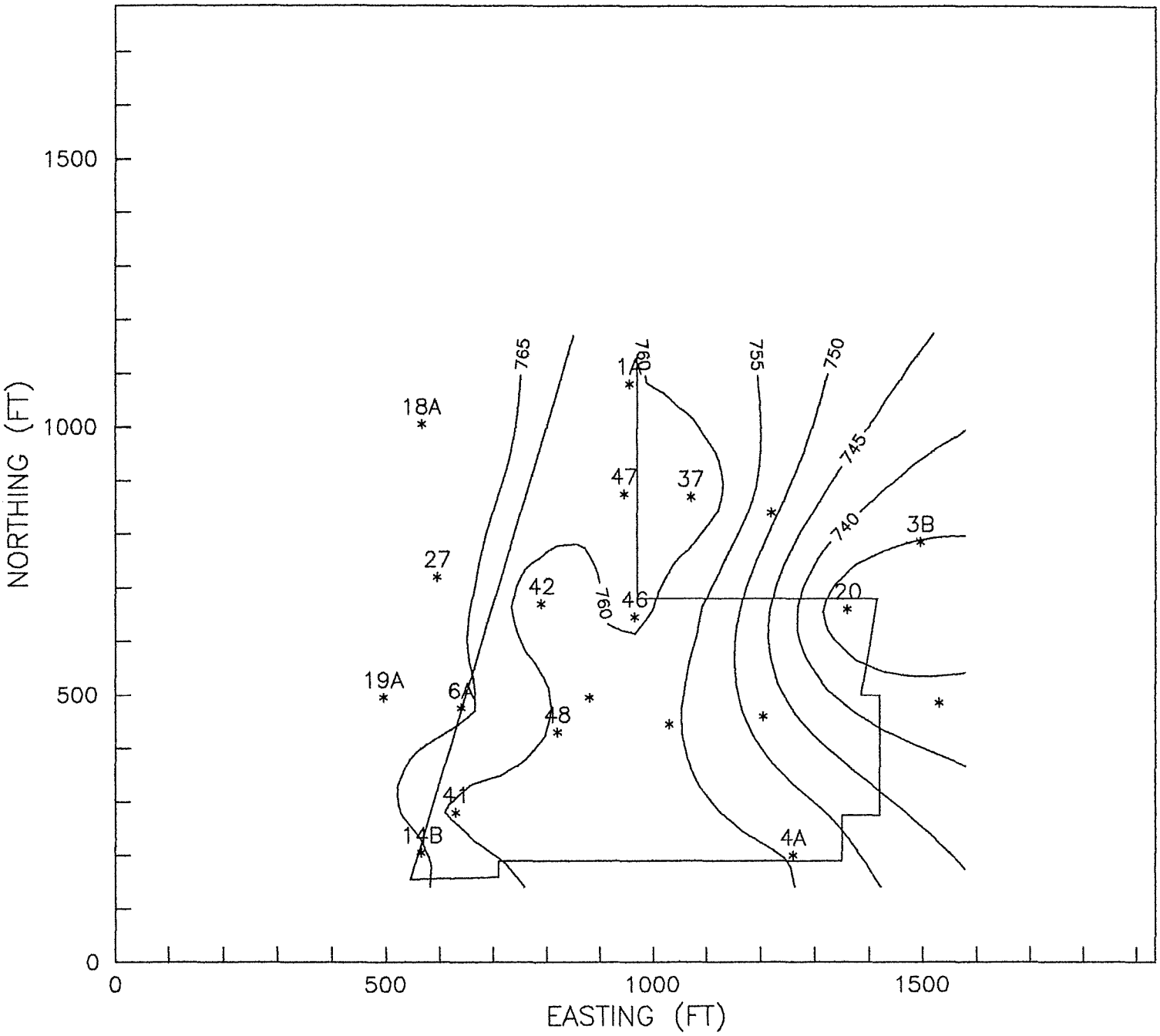
GLACIAL AQUIFER — WINTER 1991

POTENTIOMETRIC SURFACE (ELEVATION IN FTAMSL)



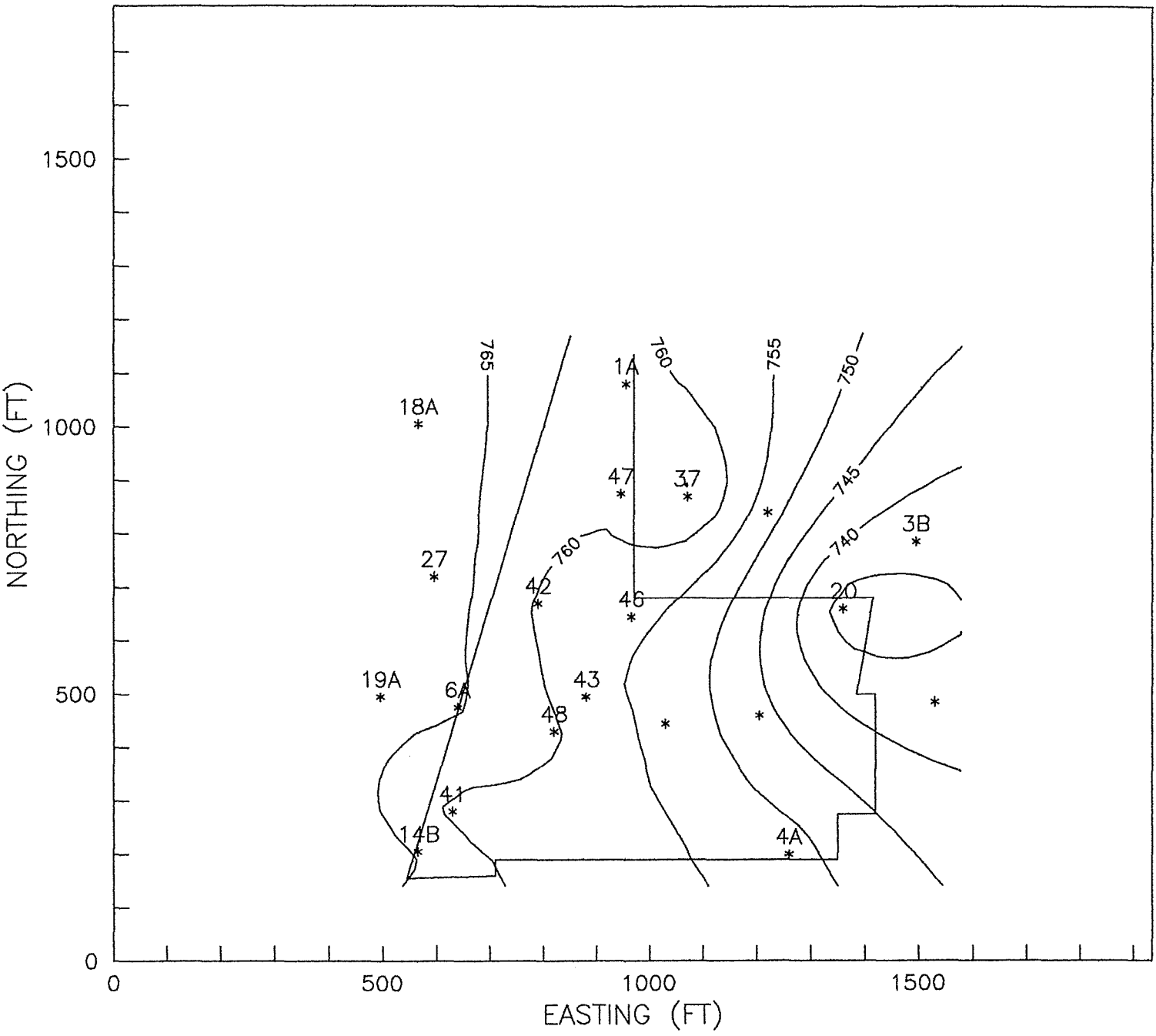
GLACIAL AQUIFER — SPRING 1991

POTENTIOMETRIC SURFACE (ELEVATION IN FTAMSL)



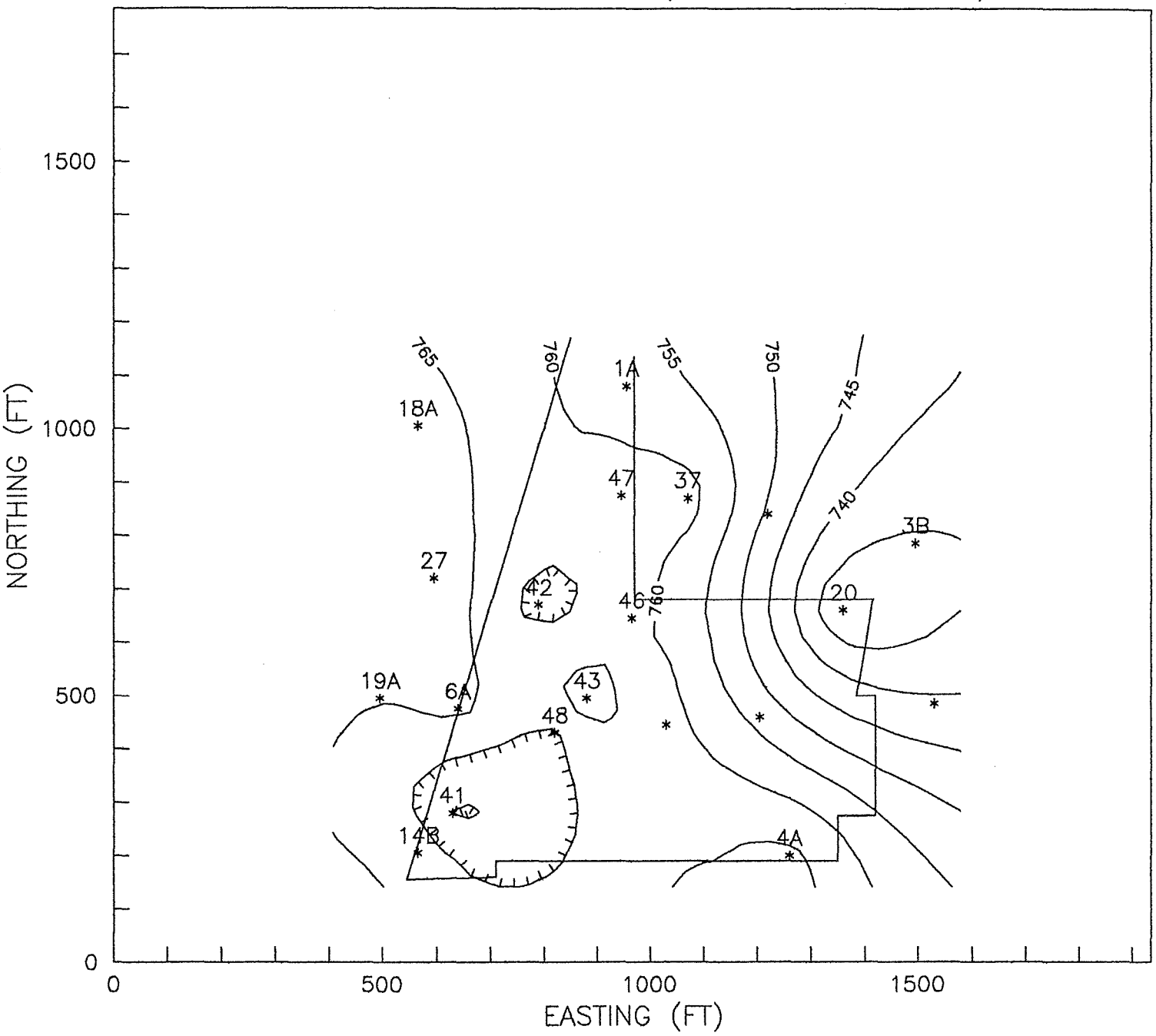
GLACIAL AQUIFER – SUMMER 1991

POTENTIOMETRIC SURFACE (ELEVATION IN FTAMSL)



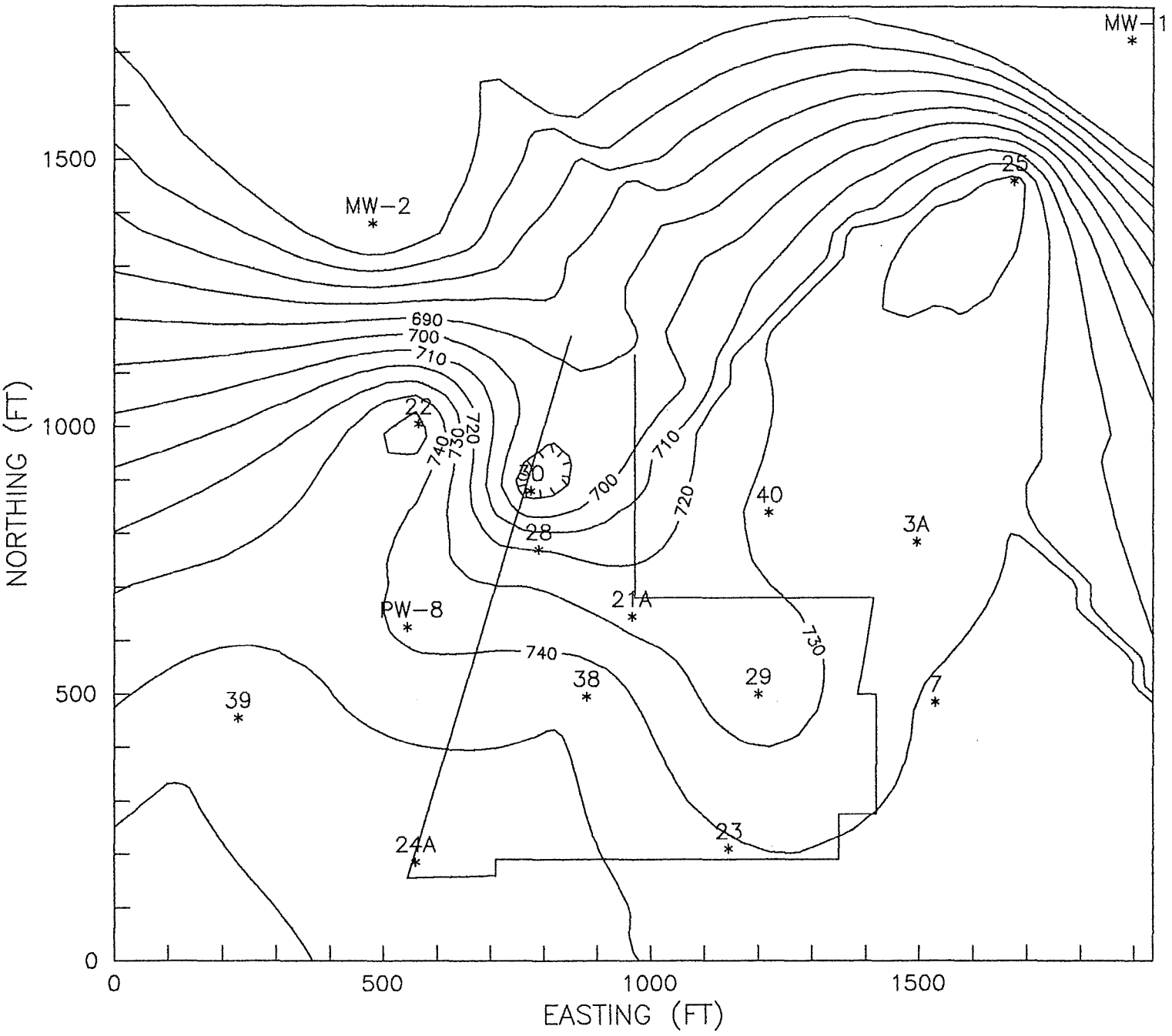
GLACIAL AQUIFER – FALL 1991

POTENTIOMETRIC SURFACE (ELEVATION IN FTAMSL)



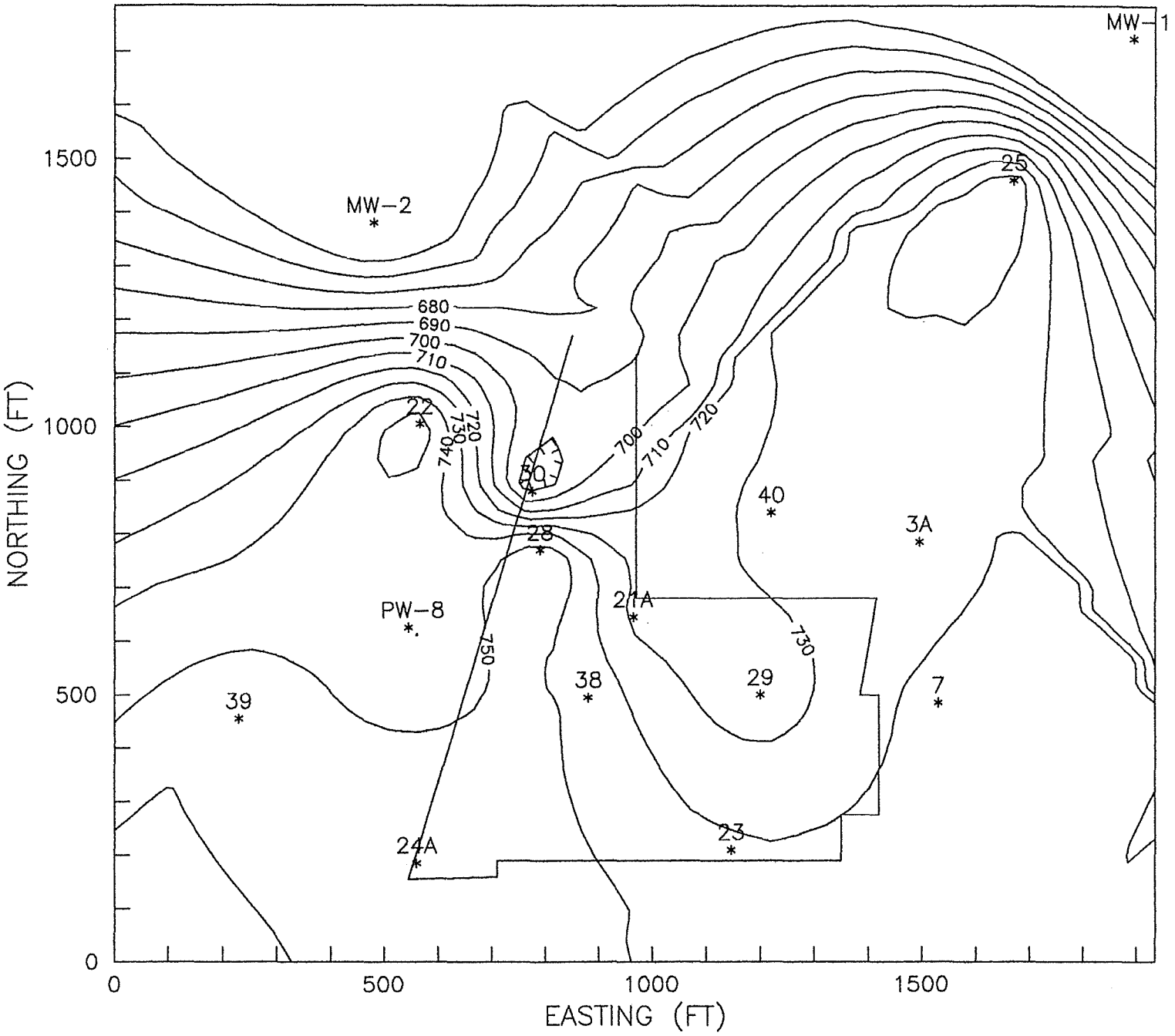
DOLOMITE AQUIFER – WINTER 1991

POTENTIOMETRIC SURFACE (ELEVATION IN FTAMSL)

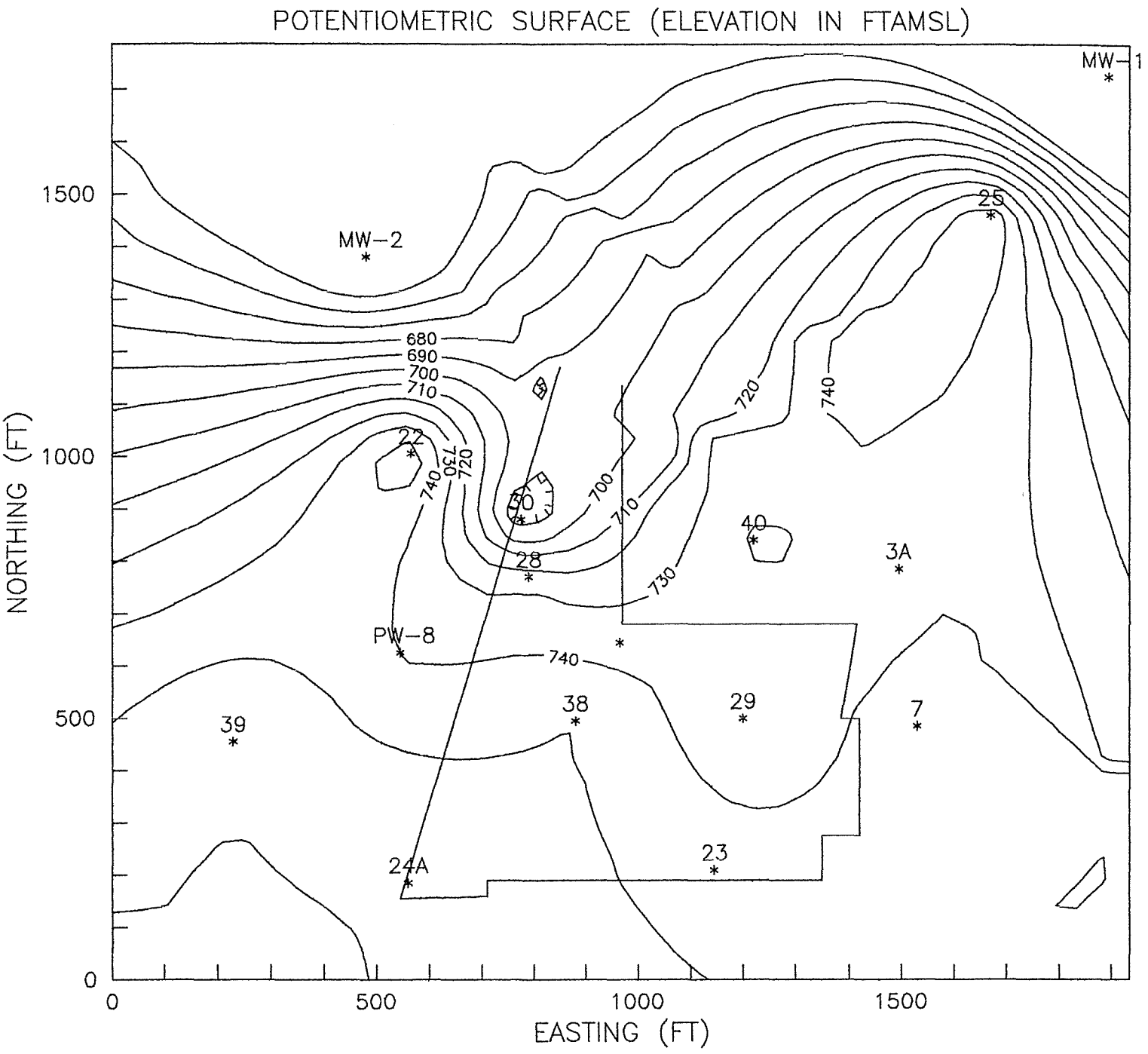


DOLOMITE AQUIFER – SPRING 1991

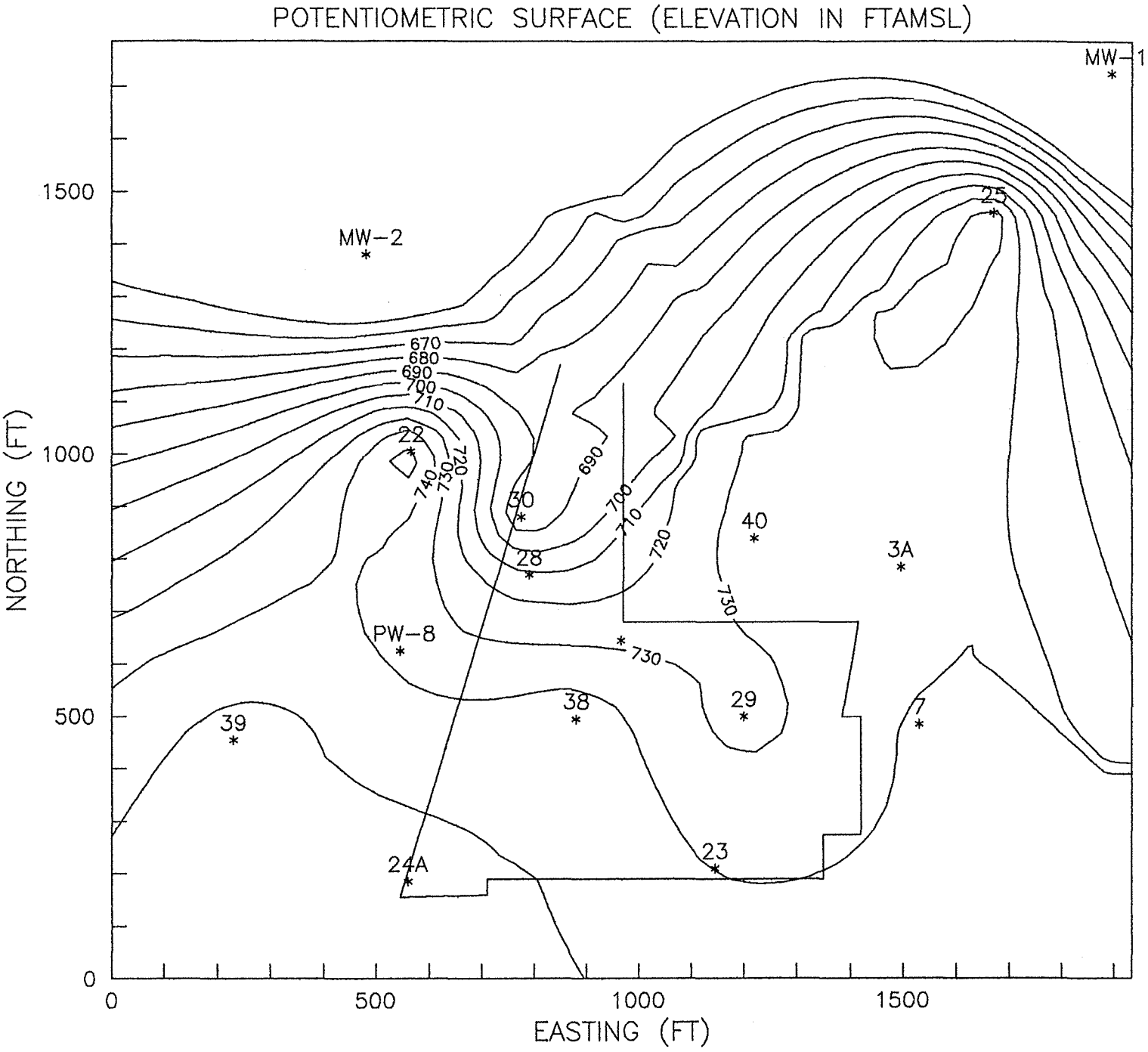
POTENTIOMETRIC SURFACE (ELEVATION IN FTAMSL)



DOLOMITE AQUIFER – SUMMER 1991



DOLOMITE AQUIFER – FALL 1991



APPENDIX B

Summary Tables of Quarterly Sampling Results for the Glacial and Dolomite Wells

Glacial Wells: 1A, 3B, 4A, 6A, 8, 14B, 16A, 18A, 19A, 20, 27, 37, 41, 42, 43, 44, 45, 46, 47, and 48

Ranney-type Collectors: RC-1, RC-2, and RC-3

Shallow Dolomite Wells: 3A, 7, 21A, 22, 23, 24A, 25, 28, 29, 38, 39, and 40

Deep Dolomite Wells: MW-1, MW-2, MW-3, MW-4, 30 and PW-8

POTW Samples: Influent, Effluent, and Stabilized Sludge

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 1A

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	ANNUAL	ANNUAL	ANNUAL	
CHLOROMETHANE				<10
BROMOMETHANE				<10
VINYL CHLORIDE				<10
CHLOROETHANE				<10
METHYLENE CHLORIDE				<5.
ACETONE				<10
CARBON DISULFIDE				<5.
1,1-DICHLOROETHENE				<5.
1,1-DICHLOROETHANE				<5.
1,2-DICHLOROETHENE(TOTAL)				<5.
CHLOROFORM				<5.
1,2-DICHLOROETHANE				<5.
2-BUTANONE				<10
1,1,1-TRICHLOROETHANE				<5.
CARBON TETRACHLORIDE				<5.
VINYL ACETATE				<10
BROMODICHLOROMETHANE				<5.
1,2-DICHLOROPROPANE				<5.
CIS-1,3-DICHLOROPROPENE				<5.
TRICHLOROETHENE				<5.
DIBROMOCHLOROMETHANE				<5.
1,1,2-TRICHLOROETHANE				<5.
BENZENE				<5.
TRANS-1,3-DICHLOROPROPENE				<5.
BROMOFORM				<5.
4-METHYL-2-PENTANONE				<10
2-HEXANONE				<10
1,1,2,2-TETRACHLOROETHANE				<5.
TETRACHLOROETHENE				<5.
TOLUENE				<5.
CHLOROBENZENE				<5.
ETHYLBENZENE				<5.
STYRENE				<5.
XYLENE(TOTAL)				<5.
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 3B

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	ANNUAL	ANNUAL	ANNUAL	
CHLOROMETHANE				<10
BROMOMETHANE				<10
VINYL CHLORIDE				<10
CHLOROETHANE				<10
METHYLENE CHLORIDE				<5.
ACETONE				<10
CARBON DISULFIDE				<5.
1,1-DICHLOROETHENE				<5.
1,1-DICHLOROETHANE				<5.
1,2-DICHLOROETHENE(TOTAL)				<5.
CHLOROFORM				<5.
1,2-DICHLOROETHANE				<5.
2-BUTANONE				<10
1,1,1-TRICHLOROETHANE				<5.
CARBON TETRACHLORIDE				<5.
VINYL ACETATE				<10
BROMODICHLOROMETHANE				<5.
1,2-DICHLOROPROPANE				<5.
CIS-1,3-DICHLOROPROPENE				<5.
TRICHLOROETHENE				<5.
DIBROMOCHLOROMETHANE				<5.
1,1,2-TRICHLOROETHANE				<5.
BENZENE				<5.
TRANS-1,3-DICHLOROPROPENE				<5.
BROMOFORM				<5.
4-METHYL-2-PENTANONE				<10
2-HEXANONE				<10
1,1,2,2-TETRACHLOROETHANE				<5.
TETRACHLOROETHENE				<5.
TOLUENE				<5.
CHLOROBENZENE				<5.
ETHYLBENZENE				<5.
STYRENE				<5.
XYLENE(TOTAL)				<5.
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 4A

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	ANNUAL	ANNUAL	ANNUAL	DRY
CHLOROMETHANE				
BROMOMETHANE				
VINYL CHLORIDE				
CHLOROETHANE				
METHYLENE CHLORIDE				
ACETONE				
CARBON DISULFIDE				
1,1-DICHLOROETHENE				
1,1-DICHLOROETHANE				
1,2-DICHLOROETHENE(TOTAL)				
CHLOROFORM				
1,2-DICHLOROETHANE				
2-BUTANONE				
1,1,1-TRICHLOROETHANE				
CARBON TETRACHLORIDE				
VINYL ACETATE				
BROMODICHLOROMETHANE				
1,2-DICHLOROPROPANE				
CIS-1,3-DICHLOROPROPENE				
TRICHLOROETHENE				
DIBROMOCHLOROMETHANE				
1,1,2-TRICHLOROETHANE				
BENZENE				
TRANS-1,3-DICHLOROPROPENE				
BROMOFORM				
4-METHYL-2-PENTANONE				
2-HEXANONE				
1,1,2,2-TETRACHLOROETHANE				
TETRACHLOROETHENE				
TOLUENE				
CHLOROBENZENE				
ETHYLBENZENE				
STYRENE				
XYLENE(TOTAL)				
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 6A

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624				
CHLOROMETHANE	<10,000	<5,000	<5,000	<5,000
BROMOMETHANE	<10,000	<5,000	<5,000	<5,000
VINYL CHLORIDE	<10,000	<5,000	<5,000	<5,000
CHLOROETHANE	<10,000	<5,000	<5,000	<5,000
METHYLENE CHLORIDE	<5,000	<2,500	<2,500	<2,500
ACETONE	<10,000	<5,000	<5,000	<5,000
CARBON DISULFIDE	9,400	<2,500	<2,500	<2,500
1,1-DICHLOROETHENE	<5,000	<2,500	<2,500	<2,500
1,1-DICHLOROETHANE	<5,000	<2,500	<2,500	<2,500
1,2-DICHLOROETHENE(TOTAL)	<5,000	<2,500	<2,500	<2,500
CHLOROFORM	<5,000	<2,500	<2,500	<2,500
1,2-DICHLOROETHANE	<5,000	<2,500	<2,500	<2,500
2-BUTANONE	<10,000	<5,000	<5,000	<5,000
1,1,1-TRICHLOROETHANE	<5,000	<2,500	<2,500	<2,500
CARBON TETRACHLORIDE	<5,000	<2,500	<2,500	<2,500
VINYL ACETATE	<10,000	<5,000	<5,000	<5,000
BROMODICHLOROMETHANE	<5,000	<2,500	<2,500	<2,500
1,2-DICHLOROPROPANE	<5,000	<2,500	<2,500	<2,500
CIS-1,3-DICHLOROPROPENE	<5,000	<2,500	<2,500	<2,500
TRICHLOROETHENE	<5,000	<2,500	<2,500	<2,500
DIBROMOCHLOROMETHANE	<5,000	<2,500	<2,500	<2,500
1,1,2-TRICHLOROETHANE	<5,000	<2,500	<2,500	<2,500
BENZENE	<5,000	<2,500	<2,500	<2,500
TRANS-1,3-DICHLOROPROPENE	<5,000	<2,500	<2,500	<2,500
BROMOFORM	<5,000	<2,500	<2,500	<2,500
4-METHYL-2-PENTANONE	<10,000	<5,000	<5,000	<5,000
2-HEXANONE	<10,000	<5,000	<5,000	<5,000
1,1,2,2-TETRACHLOROETHANE	<5,000	<2,500	<2,500	<2,500
TETRACHLOROETHENE	<5,000	<2,500	<2,500	<2,500
TOLUENE	80,000	63,000	61,000	64,000
CHLOROBENZENE	<5,000	<2,500	<2,500	<2,500
ETHYLBENZENE	26,000	21,000	21,000	26,000
STYRENE	<5,000	<2,500	<2,500	<2,500
XYLENE(TOTAL)	120,000	91,000	90,000	110,000
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 8

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	ANNUAL	ANNUAL	ANNUAL	DRY
CHLOROMETHANE				
BROMOMETHANE				
VINYL CHLORIDE				
CHLOROETHANE				
METHYLENE CHLORIDE				
ACETONE				
CARBON DISULFIDE				
1,1-DICHLOROETHENE				
1,1-DICHLOROETHANE				
1,2-DICHLOROETHENE(TOTAL)				
CHLOROFORM				
1,2-DICHLOROETHANE				
2-BUTANONE				
1,1,1-TRICHLOROETHANE				
CARBON TETRACHLORIDE				
VINYL ACETATE				
BROMODICHLOROMETHANE				
1,2-DICHLOROPROPANE				
CIS-1,3-DICHLOROPROPENE				
TRICHLOROETHENE				
DIBROMOCHLOROMETHANE				
1,1,2-TRICHLOROETHANE				
BENZENE				
TRANS-1,3-DICHLOROPROPENE				
BROMOFORM				
4-METHYL-2-PENTANONE				
2-HEXANONE				
1,1,2,2-TETRACHLOROETHANE				
TETRACHLOROETHENE				
TOLUENE				
CHLOROBENZENE				
ETHYLBENZENE				
STYRENE				
XYLENE(TOTAL)				
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 14B

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624				
CHLOROMETHANE	<10	<10	<10	<10
BROMOMETHANE	<10	<10	<10	<10
VINYL CHLORIDE	<10	<10	<10	<10
CHLOROETHANE	<10	<10	<10	<10
METHYLENE CHLORIDE	<5.	<5.	<5.	<5
ACETONE	<10	<10	<10	<10
CARBON DISULFIDE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHENE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROETHENE(TOTAL)	<5.	<5.	<5.	<5.
CHLOROFORM	<5.	<5.	<5.	<5.
1,2-DICHLOROETHANE	<5.	<5.	<5.	<5.
2-BUTANONE	<10	<10	<10	<10
1,1,1-TRICHLOROETHANE	<5.	<5.	<5.	<5.
CARBON TETRACHLORIDE	<5.	<5.	<5.	<5.
VINYL ACETATE	<10	<10	<10	<10
BROMODICHLOROMETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROPROPANE	<5.	<5.	<5.	<5.
CIS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
TRICHLOROETHENE	<5.	<5.	<5.	<5.
DIBROMOCHLOROMETHANE	<5.	<5.	<5.	<5.
1,1,2-TRICHLOROETHANE	<5.	<5.	<5.	<5.
BENZENE	<5.	<5.	<5.	<5.
TRANS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
BROMOFORM	<5.	<5.	<5.	<5.
4-METHYL-2-PENTANONE	<10	<10	<10	<10
2-HEXANONE	<10	<10	<10	<10
1,1,2,2-TETRACHLOROETHANE	<5.	<5.	<5.	<5.
TETRACHLOROETHENE	<5.	7.8	<5.	<5.
TOLUENE	<5.	<5.	<5.	<5.
CHLOROBENZENE	<5.	<5.	<5.	<5.
ETHYLBENZENE	<5.	<5.	<5.	<5.
STYRENE	<5.	<5.	<5.	<5.
XYLENE(TOTAL)	<5.	<5.	<5.	<5.
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 16A

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	ANNUAL	ANNUAL	ANNUAL	DRY
CHLOROMETHANE				
BROMOMETHANE				
VINYL CHLORIDE				
CHLOROETHANE				
METHYLENE CHLORIDE				
ACETONE				
CARBON DISULFIDE				
1,1-DICHLOROETHENE				
1,1-DICHLOROETHANE				
1,2-DICHLOROETHENE(TOTAL)				
CHLOROFORM				
1,2-DICHLOROETHANE				
2-BUTANONE				
1,1,1-TRICHLOROETHANE				
CARBON TETRACHLORIDE				
VINYL ACETATE				
BROMODICHLOROMETHANE				
1,2-DICHLOROPROPANE				
CIS-1,3-DICHLOROPROPENE				
TRICHLOROETHENE				
DIBROMOCHLOROMETHANE				
1,1,2-TRICHLOROETHANE				
BENZENE				
TRANS-1,3-DICHLOROPROPENE				
BROMOFORM				
4-METHYL-2-PENTANONE				
2-HEXANONE				
1,1,2,2-TETRACHLOROETHANE				
TETRACHLOROETHENE				
TOLUENE				
CHLOROBENZENE				
ETHYLBENZENE				
STYRENE				
XYLENE(TOTAL)				
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 18A

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	ANNUAL	ANNUAL	ANNUAL	
CHLOROMETHANE				<10
BROMOMETHANE				<10
VINYL CHLORIDE				<10
CHLOROETHANE				<10
METHYLENE CHLORIDE				<5.
ACETONE				<10
CARBON DISULFIDE				<5.
1,1-DICHLOROETHENE				<5.
1,1-DICHLOROETHANE				<5.
1,2-DICHLOROETHENE(TOTAL)				<5.
CHLOROFORM				<5.
1,2-DICHLOROETHANE				<5.
2-BUTANONE				<10
1,1,1-TRICHLOROETHANE				<5.
CARBON TETRACHLORIDE				<5.
VINYL ACETATE				<10
BROMODICHLOROMETHANE				<5.
1,2-DICHLOROPROPANE				<5.
CIS-1,3-DICHLOROPROPENE				<5.
TRICHLOROETHENE				<5.
DIBROMOCHLOROMETHANE				<5.
1,1,2-TRICHLOROETHANE				<5.
BENZENE				<5.
TRANS-1,3-DICHLOROPROPENE				<5.
BROMOFORM				<5.
4-METHYL-2-PENTANONE				<10
2-HEXANONE				<10
1,1,2,2-TETRACHLOROETHANE				<5.
TETRACHLOROETHENE				<5.
TOLUENE				<5.
CHLOROBENZENE				<5.
ETHYLBENZENE				<5.
STYRENE				<5.
XYLENE(TOTAL)				<5.
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 19A

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	ANNUAL	ANNUAL	ANNUAL	
CHLOROMETHANE				<33
BROMOMETHANE				<33
VINYL CHLORIDE				<33
CHLOROETHANE				<33
METHYLENE CHLORIDE				<17
ACETONE				<33
CARBON DISULFIDE				<17
1,1-DICHLOROETHENE				<17
1,1-DICHLOROETHANE				<17
1,2-DICHLOROETHENE(TOTAL)				75
CHLOROFORM				<17
1,2-DICHLOROETHANE				<17
2-BUTANONE				<33
1,1,1-TRICHLOROETHANE				<17
CARBON TETRACHLORIDE				<17
VINYL ACETATE				<33
BROMODICHLOROMETHANE				<17
1,2-DICHLOROPROPANE				<17
CIS-1,3-DICHLOROPROPENE				<17
TRICHLOROETHENE				430
DIBROMOCHLOROMETHANE				<17
1,1,2-TRICHLOROETHANE				<17
BENZENE				<17
TRANS-1,3-DICHLOROPROPENE				<17
BROMOFORM				<17
4-METHYL-2-PENTANONE				<33
2-HEXANONE				<33
1,1,2,2-TETRACHLOROETHANE				<17
TETRACHLOROETHENE				<17
TOLUENE				<17
CHLOROBENZENE				<17
ETHYLBENZENE				<17
STYRENE				<17
XYLENE(TOTAL)				<17
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 20

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624				
CHLOROMETHANE	<5.	<10	<10	<10
BROMOMETHANE	<5.	<10	<10	<10
VINYL CHLORIDE	<5.	<10	<10	<10
CHLOROETHANE	<5.	<10	<10	<10
METHYLENE CHLORIDE	<5.	<5.	* 7.3	<5.
ACETONE	<10	<10	<10	<10
CARBON DISULFIDE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHENE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROETHENE(TOTAL)	<5.	<5.	<5.	<5.
CHLOROFORM	<5.	<5.	<5.	<5.
1,2-DICHLOROETHANE	<5.	<5.	<5.	<5.
2-BUTANONE	<10	<10	<10	<10
1,1,1-TRICHLOROETHANE	<5.	<5.	<5.	<5.
CARBON TETRACHLORIDE	<5.	<5.	<5.	<5.
VINYL ACETATE	<10	<10	<10	<10
BROMODICHLOROMETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROPROPANE	<5.	<5.	<5.	<5.
CIS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
TRICHLOROETHENE	<5.	<5.	<5.	<5.
DIBROMOCHLOROMETHANE	<5.	<5.	<5.	<5.
1,1,2-TRICHLOROETHANE	<5.	<5.	<5.	<5.
BENZENE	<5.	8.4	<5.	<5.
TRANS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
BROMOFORM	<5.	<5.	<5.	<5.
4-METHYL-2-PENTANONE	<10	<10	<10	<10
2-HEXANONE	<10	<10	<10	<10
1,1,2,2-TETRACHLOROETHANE	<5.	<5.	<5.	<5.
TETRACHLOROETHENE	<5.	<5.	<5.	<5.
TOLUENE	<5.	<5.	<5.	<5.
CHLOROBENZENE	<5.	<5.	<5.	<5.
ETHYLBENZENE	<5.	10	<5.	<5.
STYRENE	<5.	<5.	<5.	<5.
XYLENE(TOTAL)	<5.	23	<5.	<5.
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

* = LABORATORY CONTAMINATION

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 27

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	NA	NA	NA	
CHLOROMETHANE				<12
BROMOMETHANE				<12
VINYL CHLORIDE				<12
CHLOROETHANE				<12
METHYLENE CHLORIDE				<6.2
ACETONE				<12
CARBON DISULFIDE				<6.2
1,1-DICHLOROETHENE				<6.2
1,1-DICHLOROETHANE				<6.2
1,2-DICHLOROETHENE(TOTAL)				40
CHLOROFORM				<6.2
1,2-DICHLOROETHANE				<6.2
2-BUTANONE				<12
1,1,1-TRICHLOROETHANE				<6.2
CARBON TETRACHLORIDE				<6.2
VINYL ACETATE				<12
BROMODICHLOROMETHANE				<6.2
1,2-DICHLOROPROPANE				<6.2
CIS-1,3-DICHLOROPROPENE				<6.2
TRICHLOROETHENE				200
DIBROMOCHLOROMETHANE				<6.2
1,1,2-TRICHLOROETHANE				<6.2
BENZENE				<6.2
TRANS-1,3-DICHLOROPROPENE				<6.2
BROMOFORM				<6.2
4-METHYL-2-PENTANONE				<12
2-HEXANONE				<12
1,1,2,2-TETRACHLOROETHANE				<6.2
TETRACHLOROETHENE				<6.2
TOLUENE				<6.2
CHLOROBENZENE				<6.2
ETHYLBENZENE				<6.2
STYRENE				<6.2
XYLENE(TOTAL)				<6.2
METHOD 602				NA
BENZENE	17	6.7	<1.	
TOLUENE	<1.	<1.	<1.	
ETHYLBENZENE	<1.	<1.	<1.	
CHLOROBENZENE	<1.	<1.	<1.	
XYLENE(TOTAL)	<1.	<1.	<1.	
1,4-DICHLOROBENZENE	<1.	<1.	<1.	
1,3-DICHLOROBENZENE	<1.	<1.	<1.	
1,2-DICHLOROBENZENE	<1.	<1.	<1.	

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 37

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	NA	NA	NA	
CHLOROMETHANE				<10,000
BROMOMETHANE				<10,000
VINYL CHLORIDE				<10,000
CHLOROETHANE				<10,000
METHYLENE CHLORIDE				<5,000
ACETONE				<10,000
CARBON DISULFIDE				<5,000
1,1-DICHLOROETHENE				<5,000
1,1-DICHLOROETHANE				<5,000
1,2-DICHLOROETHENE(TOTAL)				<5,000
CHLOROFORM				<5,000
1,2-DICHLOROETHANE				<5,000
2-BUTANONE				<10,000
1,1,1-TRICHLOROETHANE				<5,000
CARBON TETRACHLORIDE				<5,000
VINYL ACETATE				<10,000
BROMODICHLOROMETHANE				<5,000
1,2-DICHLOROPROPANE				<5,000
CIS-1,3-DICHLOROPROPENE				<5,000
TRICHLOROETHENE				<5,000
DIBROMOCHLOROMETHANE				<5,000
1,1,2-TRICHLOROETHANE				<5,000
BENZENE				<5,000
TRANS-1,3-DICHLOROPROPENE				<5,000
BROMOFORM				<5,000
4-METHYL-2-PENTANONE				<10,000
2-HEXANONE				<10,000
1,1,2,2-TETRACHLOROETHANE				<5,000
TETRACHLOROETHENE				<5,000
TOLUENE				51,000
CHLOROBENZENE				<5,000
ETHYLBENZENE				17,000
STYRENE				<5,000
XYLENE(TOTAL)				98,000
METHOD 602				NA
BENZENE	1,400	<1,000	6,100	
TOLUENE	50,000	54,000	58,000	
ETHYLBENZENE	15,000	16,000	14,000	
CHLOROBENZENE	<1,000	<1,000	<1,000	
XYLENE(TOTAL)	89,000	89,000	77,000	
1,4-DICHLOROBENZENE	<1,000	<1,000	<1,000	
1,3-DICHLOROBENZENE	<1,000	<1,000	<1,000	
1,2-DICHLOROBENZENE	<1,000	<1,000	<1,000	

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 41

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	NA	NA	NA	
CHLOROMETHANE				<50
BROMOMETHANE				<50
VINYL CHLORIDE				<50
CHLOROETHANE				<50
METHYLENE CHLORIDE				<25
ACETONE				<50
CARBON DISULFIDE				<25
1,1-DICHLOROETHENE				<25
1,1-DICHLOROETHANE				<25
1,2-DICHLOROETHENE(TOTAL)				<25
CHLOROFORM				<25
1,2-DICHLOROETHANE				<25
2-BUTANONE				<50
1,1,1-TRICHLOROETHANE				<25
CARBON TETRACHLORIDE				<25
VINYL ACETATE				<50
BROMODICHLOROMETHANE				<25
1,2-DICHLOROPROPANE				<25
CIS-1,3-DICHLOROPROPENE				<25
TRICHLOROETHENE				<25
DIBROMOCHLOROMETHANE				<25
1,1,2-TRICHLOROETHANE				<25
BENZENE				<25
TRANS-1,3-DICHLOROPROPENE				<25
BROMOFORM				<25
4-METHYL-2-PENTANONE				<50
2-HEXANONE				<50
1,1,2,2-TETRACHLOROETHANE				<25
TETRACHLOROETHENE				<25
TOLUENE				<25
CHLOROBENZENE				<25
ETHYLBENZENE				76
STYRENE				<25
XYLENE(TOTAL)				520
METHOD 602				NA
BENZENE	4.5	5.5	15	
TOLUENE	8.4	<5.	<5.	
ETHYLBENZENE	200	340	410	
CHLOROBENZENE	<1.	<5.	<5.	
XYLENE(TOTAL)	420	660	650	
1,4-DICHLOROBENZENE	<1.	<5.	<5.	
1,3-DICHLOROBENZENE	<1.	<5.	<5.	
1,2-DICHLOROBENZENE	<1.	<5.	<5.	

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 42

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	NA	NA	NA	
CHLOROMETHANE				<250
BROMOMETHANE				<250
VINYL CHLORIDE				<250
CHLOROETHANE				<250
METHYLENE CHLORIDE				<120
ACETONE				<250
CARBON DISULFIDE				<120
1,1-DICHLOROETHENE				<120
1,1-DICHLOROETHANE				<120
1,2-DICHLOROETHENE(TOTAL)				<120
CHLOROFORM				<120
1,2-DICHLOROETHANE				<120
2-BUTANONE				<250
1,1,1-TRICHLOROETHANE				<120
CARBON TETRACHLORIDE				<120
VINYL ACETATE				<250
BROMODICHLOROMETHANE				<120
1,2-DICHLOROPROPANE				<120
CIS-1,3-DICHLOROPROPENE				<120
TRICHLOROETHENE				<120
DIBROMOCHLOROMETHANE				<120
1,1,2-TRICHLOROETHANE				<120
BENZENE				1,500
TRANS-1,3-DICHLOROPROPENE				<120
BROMOFORM				<120
4-METHYL-2-PENTANONE				<250
2-HEXANONE				<250
1,1,2,2-TETRACHLOROETHANE				<120
TETRACHLOROETHENE				<120
TOLUENE				1,400
CHLOROBENZENE				<120
ETHYLBENZENE				880
STYRENE				<120
XYLENE(TOTAL)				3,600
METHOD 602				NA
BENZENE	1,000	1,000	1,500	
TOLUENE	1,200	2,800	3,400	
ETHYLBENZENE	600	1,400	2,000	
CHLOROBENZENE	<1.	<50	<50	
XYLENE(TOTAL)	3,200	5,300	6,700	
1,4-DICHLOROBENZENE	<1.	<50	<50	
1,3-DICHLOROBENZENE	<1.	<50	<50	
1,2-DICHLOROBENZENE	<1.	<50	<50	

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 43

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	NA	NA	NA	DRY
CHLOROMETHANE				
BROMOMETHANE				
VINYL CHLORIDE				
CHLOROETHANE				
METHYLENE CHLORIDE				
ACETONE				
CARBON DISULFIDE				
1,1-DICHLOROETHENE				
1,1-DICHLOROETHANE				
1,2-DICHLOROETHENE(TOTAL)				
CHLOROFORM				
1,2-DICHLOROETHANE				
2-BUTANONE				
1,1,1-TRICHLOROETHANE				
CARBON TETRACHLORIDE				
VINYL ACETATE				
BROMODICHLOROMETHANE				
1,2-DICHLOROPROPANE				
CIS-1,3-DICHLOROPROPENE				
TRICHLOROETHENE				
DIBROMOCHLOROMETHANE				
1,1,2-TRICHLOROETHANE				
BENZENE				
TRANS-1,3-DICHLOROPROPENE				
BROMOFORM				
4-METHYL-2-PENTANONE				
2-HEXANONE				
1,1,2,2-TETRACHLOROETHANE				
TETRACHLOROETHENE				
TOLUENE				
CHLOROBENZENE				
ETHYLBENZENE				
STYRENE				
XYLENE(TOTAL)				
METHOD 602	DRY			NA
BENZENE		3,700	8,000	
TOLUENE		6,700	14,000	
ETHYLBENZENE		15,000	40,000	
CHLOROBENZENE		<250	<500	
XYLENE(TOTAL)		63,000	90,000	
1,4-DICHLOROBENZENE		<250	<500	
1,3-DICHLOROBENZENE		<250	<500	
1,2-DICHLOROBENZENE		<250	<500	

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 44

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	DRY	DRY	DRY	DRY
CHLOROMETHANE				
BROMOMETHANE				
VINYL CHLORIDE				
CHLOROETHANE				
METHYLENE CHLORIDE				
ACETONE				
CARBON DISULFIDE				
1,1-DICHLOROETHENE				
1,1-DICHLOROETHANE				
1,2-DICHLOROETHENE(TOTAL)				
CHLOROFORM				
1,2-DICHLOROETHANE				
2-BUTANONE				
1,1,1-TRICHLOROETHANE				
CARBON TETRACHLORIDE				
VINYL ACETATE				
BROMODICHLOROMETHANE				
1,2-DICHLOROPROPANE				
CIS-1,3-DICHLOROPROPENE				
TRICHLOROETHENE				
DIBROMOCHLOROMETHANE				
1,1,2-TRICHLOROETHANE				
BENZENE				
TRANS-1,3-DICHLOROPROPENE				
BROMOFORM				
4-METHYL-2-PENTANONE				
2-HEXANONE				
1,1,2,2-TETRACHLOROETHANE				
TETRACHLOROETHENE				
TOLUENE				
CHLOROBENZENE				
ETHYLBENZENE				
STYRENE				
XYLENE(TOTAL)				
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				
XYLENE(TOTAL)				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 45

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	DRY	DRY	DRY	DRY
CHLOROMETHANE				
BROMOMETHANE				
VINYL CHLORIDE				
CHLOROETHANE				
METHYLENE CHLORIDE				
ACETONE				
CARBON DISULFIDE				
1,1-DICHLOROETHENE				
1,1-DICHLOROETHANE				
1,2-DICHLOROETHENE(TOTAL)				
CHLOROFORM				
1,2-DICHLOROETHANE				
2-BUTANONE				
1,1,1-TRICHLOROETHANE				
CARBON TETRACHLORIDE				
VINYL ACETATE				
BROMODICHLOROMETHANE				
1,2-DICHLOROPROPANE				
CIS-1,3-DICHLOROPROPENE				
TRICHLOROETHENE				
DIBROMOCHLOROMETHANE				
1,1,2-TRICHLOROETHANE				
BENZENE				
TRANS-1,3-DICHLOROPROPENE				
BROMOFORM				
4-METHYL-2-PENTANONE				
2-HEXANONE				
1,1,2,2-TETRACHLOROETHANE				
TETRACHLOROETHENE				
TOLUENE				
CHLOROBENZENE				
ETHYLBENZENE				
STYRENE				
XYLENE(TOTAL)				
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 46

COMPOUND	CONCENTRATIONS (micrograms/L) WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624				
CHLOROMETHANE	<10	<10	<10	<10
BROMOMETHANE	<10	<10	<10	<10
VINYL CHLORIDE	<10	<10	<10	<10
CHLOROETHANE	<10	<10	<10	<10
METHYLENE CHLORIDE	<5.	<5.	<5.	<5.
ACETONE	* 22	<10	* 11	<10
CARBON DISULFIDE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHENE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROETHENE(TOTAL)	<5.	<5.	<5.	<5.
CHLOROFORM	<5.	<5.	<5.	<5.
1,2-DICHLOROETHANE	<5.	<5.	<5.	<5.
2-BUTANONE	<10	<10	<10	<10
1,1,1-TRICHLOROETHANE	<5.	<5.	<5.	<5.
CARBON TETRACHLORIDE	<5.	<5.	<5.	<5.
VINYL ACETATE	<10	<10	<10	<10
BROMODICHLOROMETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROPROPANE	<5.	<5.	<5.	<5.
CIS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
TRICHLOROETHENE	<5.	<5.	<5.	<5.
DIBROMOCHLOROMETHANE	<5.	<5.	<5.	<5.
1,1,2-TRICHLOROETHANE	<5.	<5.	<5.	<5.
BENZENE	<5.	<5.	<5.	<5.
TRANS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
BROMOFORM	<5.	<5.	<5.	<5.
4-METHYL-2-PENTANONE	<10	<10	<10	<10
2-HEXANONE	<10	<10	<10	<10
1,1,2,2-TETRACHLOROETHANE	<5.	<5.	<5.	<5.
TETRACHLOROETHENE	<5.	<5.	<5.	<5.
TOLUENE	<5.	<5.	6.6	<5.
CHLOROBENZENE	<5.	<5.	<5.	<5.
ETHYLBENZENE	<5.	<5.	<5.	<5.
STYRENE	<5.	<5.	<5.	<5.
XYLENE(TOTAL)	<5.	<5.	32	<5.
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				
XYLENE(TOTAL)				

* = LABORATORY CONTAMINATION

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 47

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	NA	NA	NA	
CHLOROMETHANE				68,000
BROMOMETHANE				<67,000
VINYL CHLORIDE				<67,000
CHLOROETHANE				<67,000
METHYLENE CHLORIDE				<33,000
ACETONE				<67,000
CARBON DISULFIDE				<33,000
1,1-DICHLOROETHENE				<33,000
1,1-DICHLOROETHANE				<33,000
1,2-DICHLOROETHENE(TOTAL)				<33,000
CHLOROFORM				<33,000
1,2-DICHLOROETHANE				<33,000
2-BUTANONE				<67,000
1,1,1-TRICHLOROETHANE				<33,000
CARBON TETRACHLORIDE				<33,000
VINYL ACETATE				<67,000
BROMODICHLOROMETHANE				<33,000
1,2-DICHLOROPROPANE				<33,000
CIS-1,3-DICHLOROPROPENE				<33,000
TRICHLOROETHENE				<33,000
DIBROMOCHLOROMETHANE				<33,000
1,1,2-TRICHLOROETHANE				<33,000
BENZENE				<33,000
TRANS-1,3-DICHLOROPROPENE				<33,000
BROMOFORM				<33,000
4-METHYL-2-PENTANONE				<67,000
2-HEXANONE				<67,000
1,1,2,2-TETRACHLOROETHANE				<33,000
TETRACHLOROETHENE				<33,000
TOLUENE				42,000
CHLOROBENZENE				<33,000
ETHYLBENZENE				110,000
STYRENE				<33,000
XYLENE(TOTAL)				820,000
METHOD 602				NA
BENZENE	<10	<5,000	<2,500	
TOLUENE	44,000	28,000	22,000	
ETHYLBENZENE	160,000	67,000	43,000	
CHLOROBENZENE	<10	<5,000	<1000	
XYLENE(TOTAL)	1,100,000	480,000	240,000	
1,4-DICHLOROBENZENE	<10	<5,000	<1000	
1,3-DICHLOROBENZENE	<10	<5,000	<1000	
1,2-DICHLOROBENZENE	<10	<5,000	<1000	

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 48

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	NA	NA	NA	
CHLOROMETHANE				<10
BROMOMETHANE				<10
VINYL CHLORIDE				<10
CHLOROETHANE				<10
METHYLENE CHLORIDE				<5.
ACETONE				<10
CARBON DISULFIDE				<5.
1,1-DICHLOROETHENE				<5.
1,1-DICHLOROETHANE				<5.
1,2-DICHLOROETHENE(TOTAL)				<5.
CHLOROFORM				<5.
1,2-DICHLOROETHANE				11
2-BUTANONE				<10
1,1,1-TRICHLOROETHANE				<5.
CARBON TETRACHLORIDE				<5.
VINYL ACETATE				<10
BROMODICHLOROMETHANE				<5.
1,2-DICHLOROPROPANE				<5.
CIS-1,3-DICHLOROPROPENE				<5.
TRICHLOROETHENE				<5.
DIBROMOCHLOROMETHANE				<5.
1,1,2-TRICHLOROETHANE				<5.
BENZENE				<5.
TRANS-1,3-DICHLOROPROPENE				<5.
BROMOFORM				<5.
4-METHYL-2-PENTANONE				<10
2-HEXANONE				<10
1,1,2,2-TETRACHLOROETHANE				<5.
TETRACHLOROETHENE				<5.
TOLUENE				<5.
CHLOROBENZENE				<5.
ETHYLBENZENE				<5.
STYRENE				<5.
XYLENE(TOTAL)				<5.
METHOD 602				NA
BENZENE	<1.	<1.	<1.	
TOLUENE	<1.	<1.	<1.	
ETHYLBENZENE	<1.	<1.	1.3	
CHLOROBENZENE	<1.	<1.	<1.	
XYLENE(TOTAL)	<1.	<1.	11	
1,4-DICHLOROBENZENE	<1.	<1.	<1.	
1,3-DICHLOROBENZENE	<1.	<1.	<1.	
1,2-DICHLOROBENZENE	<1.	<1.	<1.	

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - RC-1

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	NA	NA	NA	
CHLOROMETHANE				<620
BROMOMETHANE				<620
VINYL CHLORIDE				<620
CHLOROETHANE				<620
METHYLENE CHLORIDE				<310
ACETONE				* 950
CARBON DISULFIDE				<310
1,1-DICHLOROETHENE				<310
1,1-DICHLOROETHANE				<310
1,2-DICHLOROETHENE(TOTAL)				<310
CHLOROFORM				<310
1,2-DICHLOROETHANE				<310
2-BUTANONE				<620
1,1,1-TRICHLOROETHANE				<310
CARBON TETRACHLORIDE				<310
VINYL ACETATE				<620
BROMODICHLOROMETHANE				<310
1,2-DICHLOROPROPANE				<310
CIS-1,3-DICHLOROPROPENE				<310
TRICHLOROETHENE				<310
DIBROMOCHLOROMETHANE				<310
1,1,2-TRICHLOROETHANE				<310
BENZENE				<310
TRANS-1,3-DICHLOROPROPENE				<310
BROMOFORM				<310
4-METHYL-2-PENTANONE				<620
2-HEXANONE				<620
1,1,2,2-TETRACHLOROETHANE				<310
TETRACHLOROETHENE				<310
TOLUENE				4,400
CHLOROBENZENE				<310
ETHYLBENZENE				2,600
STYRENE				<310
XYLENE(TOTAL)				14,000
METHOD 602				NA
BENZENE	27	<250	<5.	
TOLUENE	170	9,800	67	
ETHYLBENZENE	98	3,800	64	
CHLOROBENZENE	<5.	<250	<5.	
XYLENE(TOTAL)	720	29,000	460	
1,4-DICHLOROBENZENE	<5.	<250	<5.	
1,3-DICHLOROBENZENE	<5.	<250	<5.	
1,2-DICHLOROBENZENE	<5.	<250	<5.	

* = LABORATORY CONTAMINATION

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - RC-2

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	NA	NA	NA	
CHLOROMETHANE				<620
BROMOMETHANE				<620
VINYL CHLORIDE				<620
CHLOROETHANE				<620
METHYLENE CHLORIDE				<310
ACETONE				<620
CARBON DISULFIDE				<310
1,1-DICHLOROETHENE				<310
1,1-DICHLOROETHANE				<310
1,2-DICHLOROETHENE(TOTAL)				<310
CHLOROFORM				<310
1,2-DICHLOROETHANE				<310
2-BUTANONE				<620
1,1,1-TRICHLOROETHANE				<310
CARBON TETRACHLORIDE				<310
VINYL ACETATE				<620
BROMODICHLOROMETHANE				<310
1,2-DICHLOROPROPANE				<310
CIS-1,3-DICHLOROPROPENE				<310
TRICHLOROETHENE				<310
DIBROMOCHLOROMETHANE				<310
1,1,2-TRICHLOROETHANE				<310
BENZENE				<310
TRANS-1,3-DICHLOROPROPENE				<310
BROMOFORM				<310
4-METHYL-2-PENTANONE				<620
2-HEXANONE				<620
1,1,2,2-TETRACHLOROETHANE				<310
TETRACHLOROETHENE				<310
TOLUENE				4,700
CHLOROBENZENE				<310
ETHYLBENZENE				2,600
STYRENE				<310
XYLENE(TOTAL)				14,000
METHOD 602				NA
BENZENE	310	14	400	
TOLUENE	21,000	160	13,000	
ETHYLBENZENE	7,900	130	6,000	
CHLOROBENZENE	<25	<10	<250	
XYLENE(TOTAL)	46,000	970	40,000	
1,4-DICHLOROBENZENE	<25	<10	<250	
1,3-DICHLOROBENZENE	<25	<10	<250	
1,2-DICHLOROBENZENE	<25	<10	<250	

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - RC-3

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	NA	NA	NA	
CHLOROMETHANE				<830
BROMOMETHANE				<830
VINYL CHLORIDE				<830
CHLOROETHANE				<830
METHYLENE CHLORIDE				<420
ACETONE				<830
CARBON DISULFIDE				<420
1,1-DICHLOROETHENE				<420
1,1-DICHLOROETHANE				<420
1,2-DICHLOROETHENE(TOTAL)				<420
CHLOROFORM				<420
1,2-DICHLOROETHANE				<420
2-BUTANONE				<830
1,1,1-TRICHLOROETHANE				<420
CARBON TETRACHLORIDE				<420
VINYL ACETATE				<830
BROMODICHLOROMETHANE				<420
1,2-DICHLOROPROPANE				<420
CIS-1,3-DICHLOROPROPENE				<420
TRICHLOROETHENE				<420
DIBROMOCHLOROMETHANE				<420
1,1,2-TRICHLOROETHANE				<420
BENZENE				<420
TRANS-1,3-DICHLOROPROPENE				<420
BROMOFORM				<420
4-METHYL-2-PENTANONE				<830
2-HEXANONE				<830
1,1,2,2-TETRACHLOROETHANE				<420
TETRACHLOROETHENE				<420
TOLUENE				4,800
CHLOROBENZENE				<420
ETHYLBENZENE				2,600
STYRENE				<420
XYLENE(TOTAL)				14,000
METHOD 602				
BENZENE	<500	<250	300	
TOLUENE	2,900	12,000	5,500	
ETHYLBENZENE	3,200	4,500	3,800	
CHLOROBENZENE	<500	<250	<250	
XYLENE(TOTAL)	25,000	38,000	30,000	
1,4-DICHLOROBENZENE	<500	<250	<250	
1,3-DICHLOROBENZENE	<500	<250	<250	
1,2-DICHLOROBENZENE	<500	<250	<250	

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 3A

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624				
CHLOROMETHANE	<10	<10	<10	<10
BROMOMETHANE	<10	<10	<10	<10
VINYL CHLORIDE	<10	<10	<10	<10
CHLOROETHANE	<10	<10	<10	<10
METHYLENE CHLORIDE	<5.	<5.	<5.	<5.
ACETONE	<10	<10	<10	<10
CARBON DISULFIDE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHENE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROETHENE(TOTAL)	<5.	<5.	<5.	<5.
CHLOROFORM	<5.	<5.	<5.	<5.
1,2-DICHLOROETHANE	<5.	<5.	<5.	<5.
2-BUTANONE	<10	<10	<10	<10
1,1,1-TRICHLOROETHANE	<5.	<5.	<5.	<5.
CARBON TETRACHLORIDE	<5.	<5.	<5.	<5.
VINYL ACETATE	<10	<10	<10	<10
BROMODICHLOROMETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROPROPANE	<5.	<5.	<5.	<5.
CIS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
TRICHLOROETHENE	<5.	<5.	<5.	<5.
DIBROMOCHLOROMETHANE	<5.	<5.	<5.	<5.
1,1,2-TRICHLOROETHANE	<5.	<5.	<5.	<5.
BENZENE	<5.	<5.	<5.	<5.
TRANS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
BROMOFORM	<5.	<5.	<5.	<5.
4-METHYL-2-PENTANONE	<10	<10	<10	<10
2-HEXANONE	<10	<10	<10	<10
1,1,2,2-TETRACHLOROETHANE	<5.	<5.	<5.	<5.
TETRACHLOROETHENE	<5.	<5.	<5.	<5.
TOLUENE	<5.	<5.	<5.	<5.
CHLOROBENZENE	<5.	<5.	<5.	<5.
ETHYLBENZENE	<5.	<5.	<5.	<5.
STYRENE	<5.	<5.	<5.	<5.
XYLENE(TOTAL)	<5.	<5.	<5.	<5.
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 7

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624				
CHLOROMETHANE	<10	<10	<10	<10
BROMOMETHANE	<10	<10	<10	<10
VINYL CHLORIDE	<10	<10	<10	<10
CHLOROETHANE	<10	<10	<10	<10
METHYLENE CHLORIDE	<5.	<5.	<5.	<5.
ACETONE	<10	<10	<10	<10
CARBON DISULFIDE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHENE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROETHENE(TOTAL)	<5.	<5.	<5.	<5.
CHLOROFORM	<5.	<5.	<5.	<5.
1,2-DICHLOROETHANE	<5.	<5.	<5.	<5.
2-BUTANONE	<10	<10	<10	<10
1,1,1-TRICHLOROETHANE	<5.	<5.	<5.	<5.
CARBON TETRACHLORIDE	<5.	<5.	<5.	<5.
VINYL ACETATE	<10	<10	<10	<10
BROMODICHLOROMETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROPROPANE	<5.	<5.	<5.	<5.
CIS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
TRICHLOROETHENE	<5.	<5.	<5.	<5.
DIBROMOCHLOROMETHANE	<5.	<5.	<5.	<5.
1,1,2-TRICHLOROETHANE	<5.	<5.	<5.	<5.
BENZENE	<5.	<5.	<5.	<5.
TRANS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
BROMOFORM	<5.	<5.	<5.	<5.
4-METHYL-2-PENTANONE	<10	<10	<10	<10
2-HEXANONE	<10	<10	<10	<10
1,1,2,2-TETRACHLOROETHANE	<5.	<5.	<5.	<5.
TETRACHLOROETHENE	<5.	<5.	<5.	<5.
TOLUENE	<5.	<5.	<5.	<5.
CHLOROBENZENE	<5.	<5.	<5.	<5.
ETHYLBENZENE	<5.	<5.	<5.	<5.
STYRENE	<5.	<5.	<5.	<5.
XYLENE(TOTAL)	<5.	<5.	<5.	<5.
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 21A

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	NA	NA	NA	
CHLOROMETHANE				<620
BROMOMETHANE				<620
VINYL CHLORIDE				<620
CHLOROETHANE				<620
METHYLENE CHLORIDE				<310
ACETONE				<620
CARBON DISULFIDE				<310
1,1-DICHLOROETHENE				<310
1,1-DICHLOROETHANE				<310
1,2-DICHLOROETHENE(TOTAL)				<310
CHLOROFORM				<310
1,2-DICHLOROETHANE				<310
2-BUTANONE				<620
1,1,1-TRICHLOROETHANE				<310
CARBON TETRACHLORIDE				<310
VINYL ACETATE				<620
BROMODICHLOROMETHANE				<310
1,2-DICHLOROPROPANE				<310
CIS-1,3-DICHLOROPROPENE				<310
TRICHLOROETHENE				<310
DIBROMOCHLOROMETHANE				<310
1,1,2-TRICHLOROETHANE				<310
BENZENE				910
TRANS-1,3-DICHLOROPROPENE				<310
BROMOFORM				<310
4-METHYL-2-PENTANONE				<620
2-HEXANONE				<620
1,1,2,2-TETRACHLOROETHANE				<310
TETRACHLOROETHENE				<310
TOLUENE				6,100
CHLOROBENZENE				<310
ETHYLBENZENE				5,900
STYRENE				<310
XYLENE(TOTAL)				14,000
METHOD 602				
BENZENE	1,300	900	1,100	
TOLUENE	9,200	6,000	7,600	
ETHYLBENZENE	<100	5,900	5,400	
CHLOROBENZENE	<100	<100	<100	
XYLENE(TOTAL)	16,000	11,000	13,000	
1,4-DICHLOROBENZENE	<100	<100	<100	
1,3-DICHLOROBENZENE	<100	<100	<100	
1,2-DICHLOROBENZENE	<100	<100	<100	

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 22

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	ANNUAL	ANNUAL	ANNUAL	
CHLOROMETHANE				<10
BROMOMETHANE				<10
VINYL CHLORIDE				<10
CHLOROETHANE				<10
METHYLENE CHLORIDE				<5.
ACETONE				<10
CARBON DISULFIDE				<5.
1,1-DICHLOROETHENE				<5.
1,1-DICHLOROETHANE				<5.
1,2-DICHLOROETHENE(TOTAL)				<5.
CHLOROFORM				<5.
1,2-DICHLOROETHANE				<5.
2-BUTANONE				<10
1,1,1-TRICHLOROETHANE				<5.
CARBON TETRACHLORIDE				<5.
VINYL ACETATE				<10
BROMODICHLOROMETHANE				<5.
1,2-DICHLOROPROPANE				<5.
CIS-1,3-DICHLOROPROPENE				<5.
TRICHLOROETHENE				<5.
DIBROMOCHLOROMETHANE				<5.
1,1,2-TRICHLOROETHANE				<5.
BENZENE				<5.
TRANS-1,3-DICHLOROPROPENE				<5.
BROMOFORM				<5.
4-METHYL-2-PENTANONE				<10
2-HEXANONE				<10
1,1,2,2-TETRACHLOROETHANE				<5.
TETRACHLOROETHENE				<5.
TOLUENE				<5.
CHLOROBENZENE				<5.
ETHYLBENZENE				<5.
STYRENE				<5.
XYLENE(TOTAL)				<5.
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 23

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624				
CHLOROMETHANE	<10	<10	<10	<10
BROMOMETHANE	<10	<10	<10	<10
VINYL CHLORIDE	<10	<10	<10	<10
CHLOROETHANE	<10	<10	<10	<10
METHYLENE CHLORIDE	* 7.7	<5.	<5.	<5.
ACETONE	<10	<10	<10	<10
CARBON DISULFIDE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHENE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROETHENE(TOTAL)	<5.	<5.	<5.	<5.
CHLOROFORM	<5.	<5.	<5.	<5.
1,2-DICHLOROETHANE	<5.	<5.	<5.	<5.
2-BUTANONE	<10	<10	<10	<10
1,1,1-TRICHLOROETHANE	<5.	<5.	<5.	<5.
CARBON TETRACHLORIDE	<5.	<5.	<5.	<5.
VINYL ACETATE	<10	<10	<10	<10
BROMODICHLOROMETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROPROPANE	<5.	<5.	<5.	<5.
CIS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
TRICHLOROETHENE	<5.	<5.	<5.	<5.
DIBROMOCHLOROMETHANE	<5.	<5.	<5.	<5.
1,1,2-TRICHLOROETHANE	<5.	<5.	<5.	<5.
BENZENE	<5.	<5.	<5.	<5.
TRANS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
BROMOFORM	<5.	<5.	<5.	<5.
4-METHYL-2-PENTANONE	<10	<10	<10	<10
2-HEXANONE	<10	<10	<10	<10
1,1,2,2-TETRACHLOROETHANE	<5.	<5.	<5.	<5.
TETRACHLOROETHENE	<5.	<5.	<5.	<5.
TOLUENE	<5.	<5.	<5.	<5.
CHLOROBENZENE	<5.	<5.	<5.	<5.
ETHYLBENZENE	<5.	<5.	<5.	<5.
STYRENE	<5.	<5.	<5.	<5.
XYLENE(TOTAL)	<5.	<5.	<5.	<5.
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

* = LABORATORY CONTAMINATION

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 24A

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	NA	NA	NA	
CHLOROMETHANE				<10
BROMOMETHANE				<10
VINYL CHLORIDE				20
CHLOROETHANE				<10
METHYLENE CHLORIDE				<5.
ACETONE				<10
CARBON DISULFIDE				<5.
1,1-DICHLOROETHENE				<5.
1,1-DICHLOROETHANE				<5.
1,2-DICHLOROETHENE(TOTAL)				22
CHLOROFORM				<5.
1,2-DICHLOROETHANE				<5.
2-BUTANONE				<10
1,1,1-TRICHLOROETHANE				<5.
CARBON TETRACHLORIDE				<5.
VINYL ACETATE				<10
BROMODICHLOROMETHANE				<5.
1,2-DICHLOROPROPANE				<5.
CIS-1,3-DICHLOROPROPENE				<5.
TRICHLOROETHENE				<5.
DIBROMOCHLOROMETHANE				<5.
1,1,2-TRICHLOROETHANE				<5.
BENZENE				<5.
TRANS-1,3-DICHLOROPROPENE				<5.
BROMOFORM				<5.
4-METHYL-2-PENTANONE				<10
2-HEXANONE				<10
1,1,2,2-TETRACHLOROETHANE				<5.
TETRACHLOROETHENE				<5.
TOLUENE				<5.
CHLOROBENZENE				<5.
ETHYLBENZENE				<5.
STYRENE				<5.
XYLENE(TOTAL)				<5.
METHOD 602				NA
BENZENE	14	7.0	<1.	
TOLUENE	<1.	<1.	<1.	
ETHYLBENZENE	<1.	<1.	<1.	
CHLOROBENZENE	<1.	<1.	<1.	
XYLENE(TOTAL)	<1.	<1.	<1.	
1,4-DICHLOROBENZENE	<1.	<1.	<1.	
1,3-DICHLOROBENZENE	<1.	<1.	<1.	
1,2-DICHLOROBENZENE	<1.	<1.	<1.	

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 25

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	ANNUAL	ANNUAL	ANNUAL	
CHLOROMETHANE				<10
BROMOMETHANE				<10
VINYL CHLORIDE				<10
CHLOROETHANE				<10
METHYLENE CHLORIDE				<5.
ACETONE				<10
CARBON DISULFIDE				<5.
1,1-DICHLOROETHENE				<5.
1,1-DICHLOROETHANE				<5.
1,2-DICHLOROETHENE(TOTAL)				<5.
CHLOROFORM				<5.
1,2-DICHLOROETHANE				<5.
2-BUTANONE				<10
1,1,1-TRICHLOROETHANE				<5.
CARBON TETRACHLORIDE				<5.
VINYL ACETATE				<10
BROMODICHLOROMETHANE				<5.
1,2-DICHLOROPROPANE				<5.
CIS-1,3-DICHLOROPROPENE				<5.
TRICHLOROETHENE				<5.
DIBROMOCHLOROMETHANE				<5.
1,1,2-TRICHLOROETHANE				<5.
BENZENE				<5.
TRANS-1,3-DICHLOROPROPENE				<5.
BROMOFORM				<5.
4-METHYL-2-PENTANONE				<10
2-HEXANONE				<10
1,1,2,2-TETRACHLOROETHANE				<5.
TETRACHLOROETHENE				<5.
TOLUENE				<5.
CHLOROBENZENE				<5.
ETHYLBENZENE				<5.
STYRENE				<5.
XYLENE(TOTAL)				<5.
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 28

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	NA	NA	NA	
CHLOROMETHANE				<10
BROMOMETHANE				<10
VINYL CHLORIDE				<10
CHLOROETHANE				<10
METHYLENE CHLORIDE				<5.
ACETONE				* 36
CARBON DISULFIDE				<5.
1,1-DICHLOROETHENE				<5.
1,1-DICHLOROETHANE				<5.
1,2-DICHLOROETHENE(TOTAL)				<5.
CHLOROFORM				<5.
1,2-DICHLOROETHANE				<5.
2-BUTANONE				<10
1,1,1-TRICHLOROETHANE				<5.
CARBON TETRACHLORIDE				<5.
VINYL ACETATE				<10
BROMODICHLOROMETHANE				<5.
1,2-DICHLOROPROPANE				<5.
CIS-1,3-DICHLOROPROPENE				<5.
TRICHLOROETHENE				<5.
DIBROMOCHLOROMETHANE				<5.
1,1,2-TRICHLOROETHANE				<5.
BENZENE				17
TRANS-1,3-DICHLOROPROPENE				<5.
BROMOFORM				<5.
4-METHYL-2-PENTANONE				<10
2-HEXANONE				<10
1,1,2,2-TETRACHLOROETHANE				<5.
TETRACHLOROETHENE				<5.
TOLUENE				7.2
CHLOROBENZENE				<5.
ETHYLBENZENE				12
STYRENE				<5.
XYLENE(TOTAL)				67
METHOD 602				NA
BENZENE	16	310	27	
TOLUENE	11	390	8.7	
ETHYLBENZENE	2.0	660	15	
CHLOROBENZENE	<1.	<1.	<1.	
XYLENE(TOTAL)	40	1,100	79	
1,4-DICHLOROBENZENE	<1.	<1.	<1.	
1,3-DICHLOROBENZENE	<1.	<1.	<1.	
1,2-DICHLOROBENZENE	<1.	<1.	<1.	

* = LABORATORY CONTAMINATION

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 29

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624				
CHLOROMETHANE	<100	<170	<250	<200
BROMOMETHANE	<100	<170	<250	<200
VINYL CHLORIDE	<100	<170	<250	<200
CHLOROETHANE	<100	<170	<250	<200
METHYLENE CHLORIDE	<50	<84	<120	<100
ACETONE	<100	<170	<250	<200
CARBON DISULFIDE	<50	<84	<120	<100
1,1-DICHLOROETHENE	<50	<84	<120	<100
1,1-DICHLOROETHANE	<50	<84	<120	<100
1,2-DICHLOROETHENE(TOTAL)	<50	<84	<120	<100
CHLOROFORM	<50	<84	<120	<100
1,2-DICHLOROETHANE	<50	<84	<120	<100
2-BUTANONE	<100	<170	<250	<200
1,1,1-TRICHLOROETHANE	<50	<84	<120	<100
CARBON TETRACHLORIDE	<50	<84	<120	<100
VINYL ACETATE	<100	<170	<250	<200
BROMODICHLOROMETHANE	<50	<84	<120	<100
1,2-DICHLOROPROPANE	<50	<84	<120	<100
CIS-1,3-DICHLOROPROPENE	<50	<84	<120	<100
TRICHLOROETHENE	<50	<84	<120	<100
DIBROMOCHLOROMETHANE	<50	<84	<120	<100
1,1,2-TRICHLOROETHANE	<50	<84	<120	<100
BENZENE	1,600	1,800	1,500	1,300
TRANS-1,3-DICHLOROPROPENE	<50	<84	<120	<100
BROMOFORM	<50	<84	<120	<100
4-METHYL-2-PENTANONE	<100	<170	<250	<200
2-HEXANONE	<100	<170	<250	<200
1,1,2,2-TETRACHLOROETHANE	<50	<84	<120	<100
TETRACHLOROETHENE	<50	<84	<120	<100
TOLUENE	<50	<84	220	<100
CHLOROBENZENE	<50	<84	<120	<100
ETHYLBENZENE	1,900	1,900	1,700	1,400
STYRENE	<50	<84	<120	<100
XYLENE(TOTAL)	2,700	2,800	2,600	2,000
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 38

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	NA	NA	NA	
CHLOROMETHANE				<330
BROMOMETHANE				<330
VINYL CHLORIDE				<330
CHLOROETHANE				<330
METHYLENE CHLORIDE				<170
ACETONE				<330
CARBON DISULFIDE				<170
1,1-DICHLOROETHENE				<170
1,1-DICHLOROETHANE				<170
1,2-DICHLOROETHENE(TOTAL)				<170
CHLOROFORM				<170
1,2-DICHLOROETHANE				<170
2-BUTANONE				<330
1,1,1-TRICHLOROETHANE				<170
CARBON TETRACHLORIDE				<170
VINYL ACETATE				<330
BROMODICHLOROMETHANE				<170
1,2-DICHLOROPROPANE				<170
CIS-1,3-DICHLOROPROPENE				<170
TRICHLOROETHENE				<170
DIBROMOCHLOROMETHANE				<170
1,1,2-TRICHLOROETHANE				<170
BENZENE				2,400
TRANS-1,3-DICHLOROPROPENE				<170
BROMOFORM				<170
4-METHYL-2-PENTANONE				<330
2-HEXANONE				<330
1,1,2,2-TETRACHLOROETHANE				<170
TETRACHLOROETHENE				<170
TOLUENE				180
CHLOROBENZENE				<170
ETHYLBENZENE				3,100
STYRENE				<170
XYLENE(TOTAL)				7,100
METHOD 602				
BENZENE	1,800	1,300	1,800	
TOLUENE	81	31	88	
ETHYLBENZENE	1,500	820	1,100	
CHLOROBENZENE	<1.	<20	<20	
XYLENE(TOTAL)	3,600	2,300	2,600	
1,4-DICHLOROBENZENE	<1.	<20	<20	
1,3-DICHLOROBENZENE	<1.	<20	<20	
1,2-DICHLOROBENZENE	<1.	<20	<20	

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 39

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	ANNUAL	ANNUAL	ANNUAL	
CHLOROMETHANE				<10
BROMOMETHANE				<10
VINYL CHLORIDE				<10
CHLOROETHANE				<10
METHYLENE CHLORIDE				<5.
ACETONE				<10
CARBON DISULFIDE				<5.
1,1-DICHLOROETHENE				<5.
1,1-DICHLOROETHANE				<5.
1,2-DICHLOROETHENE(TOTAL)				<5.
CHLOROFORM				<5.
1,2-DICHLOROETHANE				<5.
2-BUTANONE				<10
1,1,1-TRICHLOROETHANE				<5.
CARBON TETRACHLORIDE				<5.
VINYL ACETATE				<10
BROMODICHLOROMETHANE				<5.
1,2-DICHLOROPROPANE				<5.
CIS-1,3-DICHLOROPROPENE				<5.
TRICHLOROETHENE				<5.
DIBROMOCHLOROMETHANE				<5.
1,1,2-TRICHLOROETHANE				<5.
BENZENE				<5.
TRANS-1,3-DICHLOROPROPENE				<5.
BROMOFORM				<5.
4-METHYL-2-PENTANONE				<10
2-HEXANONE				<10
1,1,2,2-TETRACHLOROETHANE				<5.
TETRACHLOROETHENE				<5.
TOLUENE				<5.
CHLOROBENZENE				<5.
ETHYLBENZENE				<5.
STYRENE				<5.
XYLENE(TOTAL)				<5.
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 40

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624				
CHLOROMETHANE	<10	<10	<10	<10
BROMOMETHANE	<10	<10	<10	<10
VINYL CHLORIDE	<10	<10	<10	<10
CHLOROETHANE	<10	<10	<10	<10
METHYLENE CHLORIDE	<5.	<5.	* 5.9	<5.
ACETONE	<10	<10	<10	<10
CARBON DISULFIDE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHENE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROETHENE(TOTAL)	<5.	<5.	<5.	<5.
CHLOROFORM	<5.	<5.	<5.	<5.
1,2-DICHLOROETHANE	<5.	<5.	<5.	<5.
2-BUTANONE	<10	<10	<10	<10
1,1,1-TRICHLOROETHANE	<5.	<5.	<5.	<5.
CARBON TETRACHLORIDE	<5.	<5.	<5.	<5.
VINYL ACETATE	<10	<10	<10	<10
BROMODICHLOROMETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROPROPANE	<5.	<5.	<5.	<5.
CIS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
TRICHLOROETHENE	<5.	<5.	<5.	<5.
DIBROMOCHLOROMETHANE	<5.	<5.	<5.	<5.
1,1,2-TRICHLOROETHANE	<5.	<5.	<5.	<5.
BENZENE	<5.	<5.	11	6.4
TRANS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
BROMOFORM	<5.	<5.	<5.	<5.
4-METHYL-2-PENTANONE	<10	<10	<10	<10
2-HEXANONE	<10	<10	<10	<10
1,1,2,2-TETRACHLOROETHANE	<5.	<5.	<5.	<5.
TETRACHLOROETHENE	<5.	<5.	<5.	<5.
TOLUENE	<5.	<5.	<5.	<5.
CHLOROBENZENE	<5.	<5.	<5.	<5.
ETHYLBENZENE	<5.	<5.	<5.	<5.
STYRENE	<5.	<5.	<5.	<5.
XYLENE(TOTAL)	<5.	<5.	<5.	<5.
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

* = LABORATORY CONTAMINATION

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - MW-1

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624				
CHLOROMETHANE	<10	<10	<10	<10
BROMOMETHANE	<10	<10	<10	<10
VINYL CHLORIDE	<10	<10	<10	<10
CHLOROETHANE	<10	<10	<10	<10
METHYLENE CHLORIDE	<5.	<5.	* 11	<5.
ACETONE	<10	<10	<10	<10
CARBON DISULFIDE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHENE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROETHENE(TOTAL)	<5.	<5.	<5.	<5.
CHLOROFORM	<5.	<5.	<5.	<5.
1,2-DICHLOROETHANE	<5.	<5.	<5.	<5.
2-BUTANONE	<10	<10	<10	<10
1,1,1-TRICHLOROETHANE	<5.	<5.	<5.	<5.
CARBON TETRACHLORIDE	<5.	<5.	<5.	<5.
VINYL ACETATE	<10	<10	<10	<10
BROMODICHLOROMETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROPROPANE	<5.	<5.	<5.	<5.
CIS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
TRICHLOROETHENE	<5.	<5.	<5.	<5.
DIBROMOCHLOROMETHANE	<5.	<5.	<5.	<5.
1,1,2-TRICHLOROETHANE	<5.	<5.	<5.	<5.
BENZENE	<5.	<5.	<5.	<5.
TRANS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
BROMOFORM	<5.	<5.	<5.	<5.
4-METHYL-2-PENTANONE	<10	<10	<10	<10
2-HEXANONE	<10	<10	<10	<10
1,1,2,2-TETRACHLOROETHANE	<5.	<5.	<5.	<5.
TETRACHLOROETHENE	<5.	<5.	<5.	<5.
TOLUENE	<5.	<5.	<5.	<5.
CHLOROBENZENE	<5.	<5.	<5.	<5.
ETHYLBENZENE	<5.	<5.	<5.	<5.
STYRENE	<5.	<5.	<5.	<5.
XYLENE(TOTAL)	<5.	<5.	<5.	<5.
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

* = LABORATORY CONTAMINATION

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - MW-2

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624				
CHLOROMETHANE	<10	<10	<10	<10
BROMOMETHANE	<10	<10	<10	<10
VINYL CHLORIDE	<10	<10	<10	<10
CHLOROETHANE	<10	<10	<10	<10
METHYLENE CHLORIDE	<5.	<5.	* 12	<5.
ACETONE	<10	<10	<10	<10
CARBON DISULFIDE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHENE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROETHENE(TOTAL)	<5.	<5.	<5.	<5.
CHLOROFORM	<5.	<5.	<5.	<5.
1,2-DICHLOROETHANE	<5.	<5.	<5.	<5.
2-BUTANONE	<10	<10	<10	<10
1,1,1-TRICHLOROETHANE	<5.	<5.	<5.	<5.
CARBON TETRACHLORIDE	<5.	<5.	<5.	<5.
VINYL ACETATE	<10	<10	<10	<10
BROMODICHLOROMETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROPROPANE	<5.	<5.	<5.	<5.
CIS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
TRICHLOROETHENE	<5.	<5.	<5.	<5.
DIBROMOCHLOROMETHANE	<5.	<5.	<5.	<5.
1,1,2-TRICHLOROETHANE	<5.	<5.	<5.	<5.
BENZENE	<5.	<5.	<5.	<5.
TRANS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
BROMOFORM	<5.	<5.	<5.	<5.
4-METHYL-2-PENTANONE	<10	<10	<10	<10
2-HEXANONE	<10	<10	<10	<10
1,1,2,2-TETRACHLOROETHANE	<5.	<5.	<5.	<5.
TETRACHLOROETHENE	<5.	<5.	<5.	<5.
TOLUENE	<5.	<5.	<5.	<5.
CHLOROBENZENE	<5.	<5.	<5.	<5.
ETHYLBENZENE	<5.	<5.	<5.	<5.
STYRENE	<5.	<5.	<5.	<5.
XYLENE(TOTAL)	<5.	<5.	<5.	<5.
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

* = LABORATORY CONTAMINATION

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - MW-3

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624				NON-
CHLOROMETHANE	<10	<10	<10	OPERATIONAL
BROMOMETHANE	<10	<10	<10	
VINYL CHLORIDE	<10	<10	<10	
CHLOROETHANE	<10	<10	<10	
METHYLENE CHLORIDE	<5.	<5.	<5.	
ACETONE	<10	<10	<10	
CARBON DISULFIDE	<5.	<5.	<5.	
1,1-DICHLOROETHENE	<5.	<5.	<5.	
1,1-DICHLOROETHANE	<5.	<5.	<5.	
1,2-DICHLOROETHENE(TOTAL)	<5.	<5.	<5.	
CHLOROFORM	<5.	<5.	<5.	
1,2-DICHLOROETHANE	<5.	<5.	<5.	
2-BUTANONE	<10	<10	<10	
1,1,1-TRICHLOROETHANE	<5.	<5.	<5.	
CARBON TETRACHLORIDE	<5.	<5.	<5.	
VINYL ACETATE	<10	<10	<10	
BROMODICHLOROMETHANE	<5.	<5.	<5.	
1,2-DICHLOROPROPANE	<5.	<5.	<5.	
CIS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	
TRICHLOROETHENE	<5.	<5.	<5.	
DIBROMOCHLOROMETHANE	<5.	<5.	<5.	
1,1,2-TRICHLOROETHANE	<5.	<5.	<5.	
BENZENE	<5.	<5.	<5.	
TRANS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	
BROMOFORM	<5.	<5.	<5.	
4-METHYL-2-PENTANONE	<10	<10	<10	
2-HEXANONE	<10	<10	<10	
1,1,2,2-TETRACHLOROETHANE	<5.	<5.	<5.	
TETRACHLOROETHENE	<5.	<5.	<5.	
TOLUENE	<5.	<5.	<5.	
CHLOROBENZENE	<5.	<5.	<5.	
ETHYLBENZENE	<5.	<5.	<5.	
STYRENE	<5.	<5.	<5.	
XYLENE(TOTAL)	<5.	<5.	<5.	
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - MW-4

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624	ANNUAL	ANNUAL	ANNUAL	
CHLOROMETHANE				<10
BROMOMETHANE				<10
VINYL CHLORIDE				<10
CHLOROETHANE				<10
METHYLENE CHLORIDE				<5.
ACETONE				<10
CARBON DISULFIDE				<5.
1,1-DICHLOROETHENE				<5.
1,1-DICHLOROETHANE				<5.
1,2-DICHLOROETHENE(TOTAL)				<5.
CHLOROFORM				<5.
1,2-DICHLOROETHANE				<5.
2-BUTANONE				<10
1,1,1-TRICHLOROETHANE				<5.
CARBON TETRACHLORIDE				<5.
VINYL ACETATE				<10
BROMODICHLOROMETHANE				<5.
1,2-DICHLOROPROPANE				<5.
CIS-1,3-DICHLOROPROPENE				<5.
TRICHLOROETHENE				<5.
DIBROMOCHLOROMETHANE				<5.
1,1,2-TRICHLOROETHANE				<5.
BENZENE				<5.
TRANS-1,3-DICHLOROPROPENE				<5.
BROMOFORM				<5.
4-METHYL-2-PENTANONE				<10
2-HEXANONE				<10
1,1,2,2-TETRACHLOROETHANE				<5.
TETRACHLOROETHENE				<5.
TOLUENE				<5.
CHLOROBENZENE				<5.
ETHYLBENZENE				<5.
STYRENE				<5.
XYLENE(TOTAL)				<5.
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - 30

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624				
CHLOROMETHANE	<10	<10	<10	<10
BROMOMETHANE	<10	<10	<10	<10
VINYL CHLORIDE	<10	<10	<10	<10
CHLOROETHANE	<10	<10	<10	<10
METHYLENE CHLORIDE	<5.	<5.	* 9.0	<5.
ACETONE	<10	<10	<10	<10
CARBON DISULFIDE	20	<5.	<5.	<5.
1,1-DICHLOROETHENE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROETHENE(TOTAL)	<5.	<5.	<5.	<5.
CHLOROFORM	<5.	<5.	<5.	<5.
1,2-DICHLOROETHANE	<5.	<5.	<5.	<5.
2-BUTANONE	<10	<10	<10	<10
1,1,1-TRICHLOROETHANE	<5.	<5.	<5.	<5.
CARBON TETRACHLORIDE	<5.	<5.	<5.	<5.
VINYL ACETATE	<10	<10	<10	<10
BROMODICHLOROMETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROPROPANE	<5.	<5.	<5.	<5.
CIS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
TRICHLOROETHENE	<5.	<5.	<5.	<5.
DIBROMOCHLOROMETHANE	<5.	<5.	<5.	<5.
1,1,2-TRICHLOROETHANE	<5.	<5.	<5.	<5.
BENZENE	10	9.3	7.1	6.5
TRANS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
BROMOFORM	<5.	<5.	<5.	<5.
4-METHYL-2-PENTANONE	<10	<10	<10	<10
2-HEXANONE	<10	<10	<10	<10
1,1,2,2-TETRACHLOROETHANE	<5.	<5.	<5.	<5.
TETRACHLOROETHENE	<5.	<5.	<5.	<5.
TOLUENE	<5.	<5.	<5.	<5.
CHLOROBENZENE	<5.	<5.	<5.	<5.
ETHYLBENZENE	<5.	<5.	<5.	<5.
STYRENE	<5.	<5.	<5.	<5.
XYLENE(TOTAL)	11	11	6.2	7.5
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

* = LABORATORY CONTAMINATION

YEARLY SUMMARY OF QUARTERLY SAMPLING
WELL I.D. - PW-8

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624				
CHLOROMETHANE	<10	<10	<10	<10
BROMOMETHANE	<10	<10	<10	<10
VINYL CHLORIDE	<10	<10	<10	<10
CHLOROETHANE	<10	<10	<10	<10
METHYLENE CHLORIDE	<5.	<5.	<5.	<5.
ACETONE	<10	<10	<10	<10
CARBON DISULFIDE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHENE	<5.	<5.	<5.	<5.
1,1-DICHLOROETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROETHENE(TOTAL)	<5.	<5.	<5.	<5.
CHLOROFORM	<5.	<5.	<5.	<5.
1,2-DICHLOROETHANE	<5.	<5.	<5.	<5.
2-BUTANONE	<10	<10	<10	<10
1,1,1-TRICHLOROETHANE	<5.	<5.	<5.	<5.
CARBON TETRACHLORIDE	<5.	<5.	<5.	<5.
VINYL ACETATE	<10	<10	<10	<10
BROMODICHLOROMETHANE	<5.	<5.	<5.	<5.
1,2-DICHLOROPROPANE	<5.	<5.	<5.	<5.
CIS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
TRICHLOROETHENE	<5.	<5.	<5.	<5.
DIBROMOCHLOROMETHANE	<5.	<5.	<5.	<5.
1,1,2-TRICHLOROETHANE	<5.	<5.	<5.	<5.
BENZENE	<5.	<5.	<5.	<5.
TRANS-1,3-DICHLOROPROPENE	<5.	<5.	<5.	<5.
BROMOFORM	<5.	<5.	<5.	<5.
4-METHYL-2-PENTANONE	<10	<10	<10	<10
2-HEXANONE	<10	<10	<10	<10
1,1,2,2-TETRACHLOROETHANE	<5.	<5.	<5.	<5.
TETRACHLOROETHENE	<5.	<5.	<5.	<5.
TOLUENE	<5.	<5.	<5.	<5.
CHLOROBENZENE	<5.	<5.	<5.	<5.
ETHYLBENZENE	<5.	<5.	<5.	<5.
STYRENE	<5.	<5.	<5.	<5.
XYLENE(TOTAL)	<5.	<5.	<5.	<5.
METHOD 602	NA	NA	NA	NA
BENZENE				
TOLUENE				
ETHYLBENZENE				
CHLOROBENZENE				
XYLENE(TOTAL)				
1,4-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,2-DICHLOROBENZENE				

YEARLY SUMMARY OF QUARTERLY SAMPLING
SAMPLE I.D. - POTW INFLUENT

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624				
CHLOROMETHANE	<20	<25	<330	<10
BROMOMETHANE	<20	<25	<330	<10
VINYL CHLORIDE	<20	<25	<330	<10
CHLOROETHANE	<20	<25	<330	<10
METHYLENE CHLORIDE	<10	<12	* 300	<5.
ACETONE	<20	* 54	4,900	170
CARBON DISULFIDE	<10	<12	<170	<5.
1,1-DICHLOROETHENE	<10	<12	<170	<5.
1,1-DICHLOROETHANE	<10	<12	<170	<5.
1,2-DICHLOROETHENE(TOTAL)	<10	<12	<170	<5.
CHLOROFORM	<10	<12	<170	<5.
1,2-DICHLOROETHANE	<10	<12	<170	<5.
2-BUTANONE	<20	<25	<330	<10
1,1,1-TRICHLOROETHANE	210	<12	<170	<5.
CARBON TETRACHLORIDE	<10	<12	<170	<5.
VINYL ACETATE	<20	<25	<330	<10
BROMODICHLOROMETHANE	<10	<12	<170	<5.
1,2-DICHLOROPROPANE	<10	<12	<170	<5.
CIS-1,3-DICHLOROPROPENE	<10	<12	<170	<5.
TRICHLOROETHENE	<10	<12	<170	<5.
DIBROMOCHLOROMETHANE	<10	<12	<170	<5.
1,1,2-TRICHLOROETHANE	<10	<12	<170	<5.
BENZENE	<10	<12	<170	<5.
TRANS-1,3-DICHLOROPROPENE	<10	<12	<170	<5.
BROMOFORM	<10	<12	<170	<5.
4-METHYL-2-PENTANONE	<20	<25	<330	<10
2-HEXANONE	<20	<25	<330	<10
1,1,2,2-TETRACHLOROETHANE	<10	<12	<170	<5.
TETRACHLOROETHENE	<10	<12	<170	<5.
TOLUENE	<10	260	310	<5.
CHLOROBENZENE	<10	<12	<170	<5.
ETHYLBENZENE	<10	75	<170	<5.
STYRENE	<10	<12	<170	<5.
XYLENE(TOTAL)	<10	510	600	<5.
METHOD 420.1				
PHENOLICS, TOTAL	32	21	56	33

* = LABORATORY CONTAMINATION

YEARLY SUMMARY OF QUARTERLY SAMPLING
SAMPLE I.D. - POTW STABILIZED SLUDGE

	CONCENTRATIONS (micrograms/L)			
COMPOUND	WINTER 91	SPRING 91	SUMMER 91	FALL 91
METHOD 624				
CHLOROMETHANE	<10	<50	<17	<10
BROMOMETHANE	<10	<50	<17	<10
VINYL CHLORIDE	<10	<50	<17	<10
CHLOROETHANE	<10	<50	<17	<10
METHYLENE CHLORIDE	<5.	<25	* 15	* 1,300
ACETONE	<10	* 89	250	23
CARBON DISULFIDE	<5.	<25	<8.3	<5.
1,1-DICHLOROETHENE	<5.	<25	<8.3	<5.
1,1-DICHLOROETHANE	<5.	<25	<8.3	<5.
1,2-DICHLOROETHENE(TOTAL)	<5.	<25	<8.3	<5.
CHLOROFORM	<5.	<25	<8.3	<5.
1,2-DICHLOROETHANE	<5.	<25	<8.3	<5.
2-BUTANONE	<10	<50	33	85
1,1,1-TRICHLOROETHANE	<5.	<25	<8.3	<5.
CARBON TETRACHLORIDE	<5.	<25	<8.3	<5.
VINYL ACETATE	<10	<50	<17	<10
BROMODICHLOROMETHANE	<5.	<25	<8.3	<5.
1,2-DICHLOROPROPANE	<5.	<25	<8.3	<5.
CIS-1,3-DICHLOROPROPENE	<5.	<25	<8.3	<5.
TRICHLOROETHENE	<5.	<25	<8.3	<5.
DIBROMOCHLOROMETHANE	<5.	<25	<8.3	<5.
1,1,2-TRICHLOROETHANE	<5.	<25	<8.3	<5.
BENZENE	<5.	<25	<8.3	<5.
TRANS-1,3-DICHLOROPROPENE	<5.	<25	<8.3	<5.
BROMOFORM	<5.	<25	<8.3	<5.
4-METHYL-2-PENTANONE	<10	<50	<17	<10
2-HEXANONE	<10	<50	<17	<10
1,1,2,2-TETRACHLOROETHANE	<5.	<25	<8.3	<5.
TETRACHLOROETHENE	<5.	<25	<8.3	<5.
TOLUENE	5.1	210	11	<5.
CHLOROBENZENE	<5.	<25	<8.3	<5.
ETHYLBENZENE	<5.	<25	<8.3	<5.
STYRENE	<5.	<25	<8.3	<5.
XYLENE(TOTAL)	<5.	<25	<8.3	<5.
METHOD 420.1				
PHENOLICS, TOTAL	<10	900	290	** 25

* = LABORATORY CONTAMINATION ** = UNITS IN MILLIGRAMS/KILOGRAM

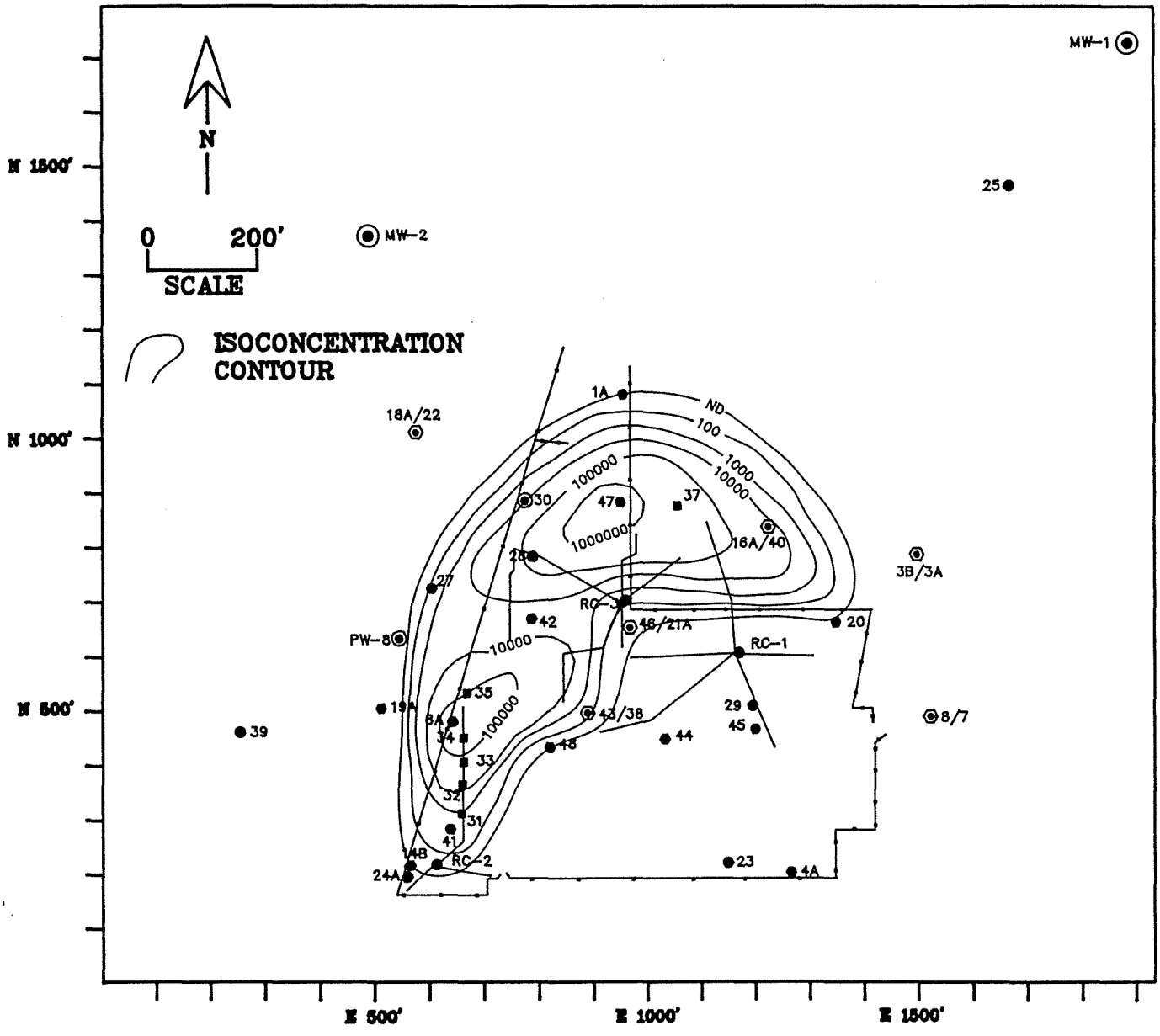
APPENDIX C

Total VOC Isoconcentration Maps for the Glacial and Dolomite Aquifers

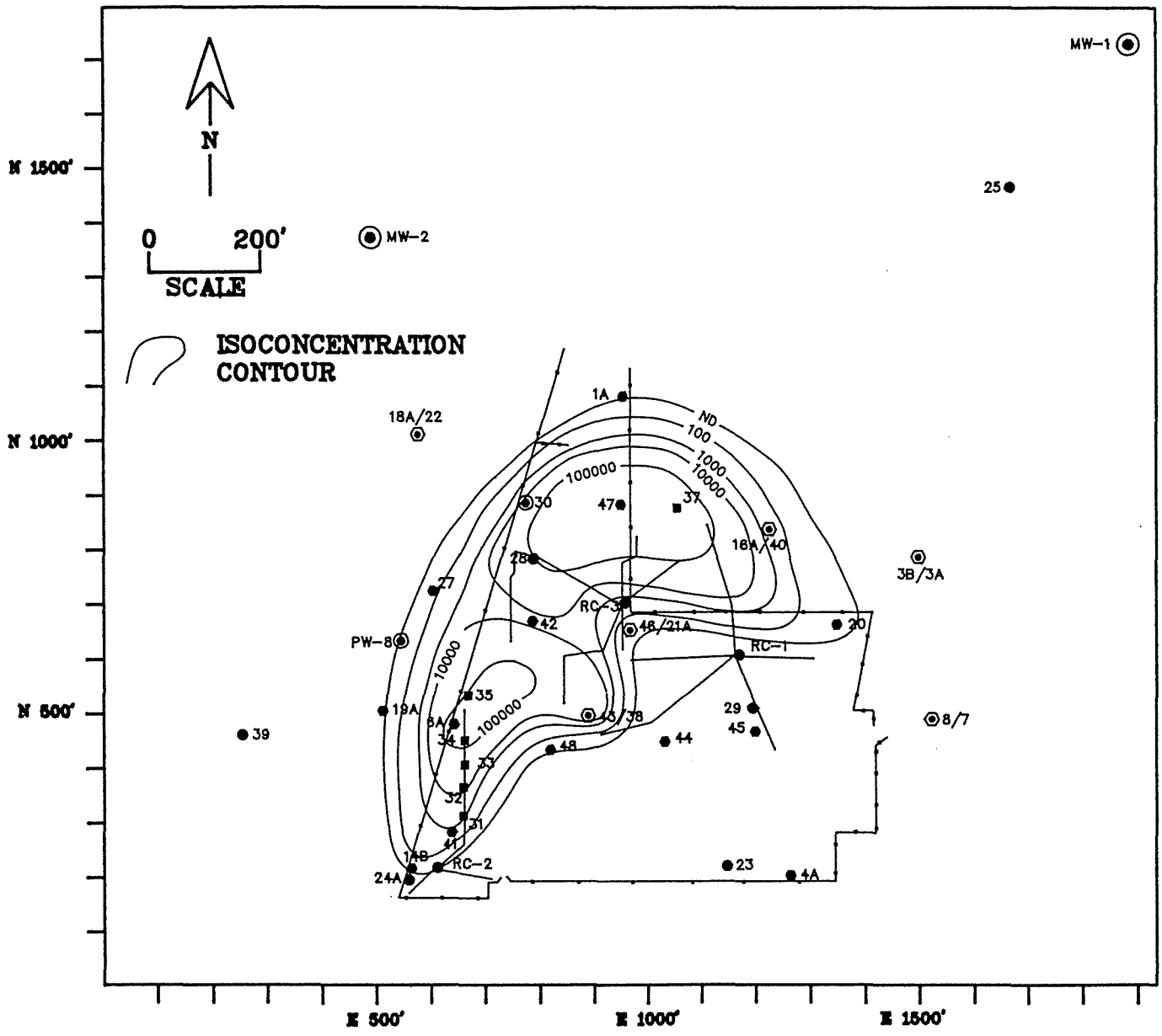
Glacial Aquifer - Winter, 1991
Glacial Aquifer - Spring, 1991
Glacial Aquifer - Summer, 1991
Glacial Aquifer - Fall, 1991

Dolomite Aquifer - Winter, 1991
Dolomite Aquifer - Spring, 1991
Dolomite Aquifer - Summer, 1991
Dolomite Aquifer - Fall, 1991

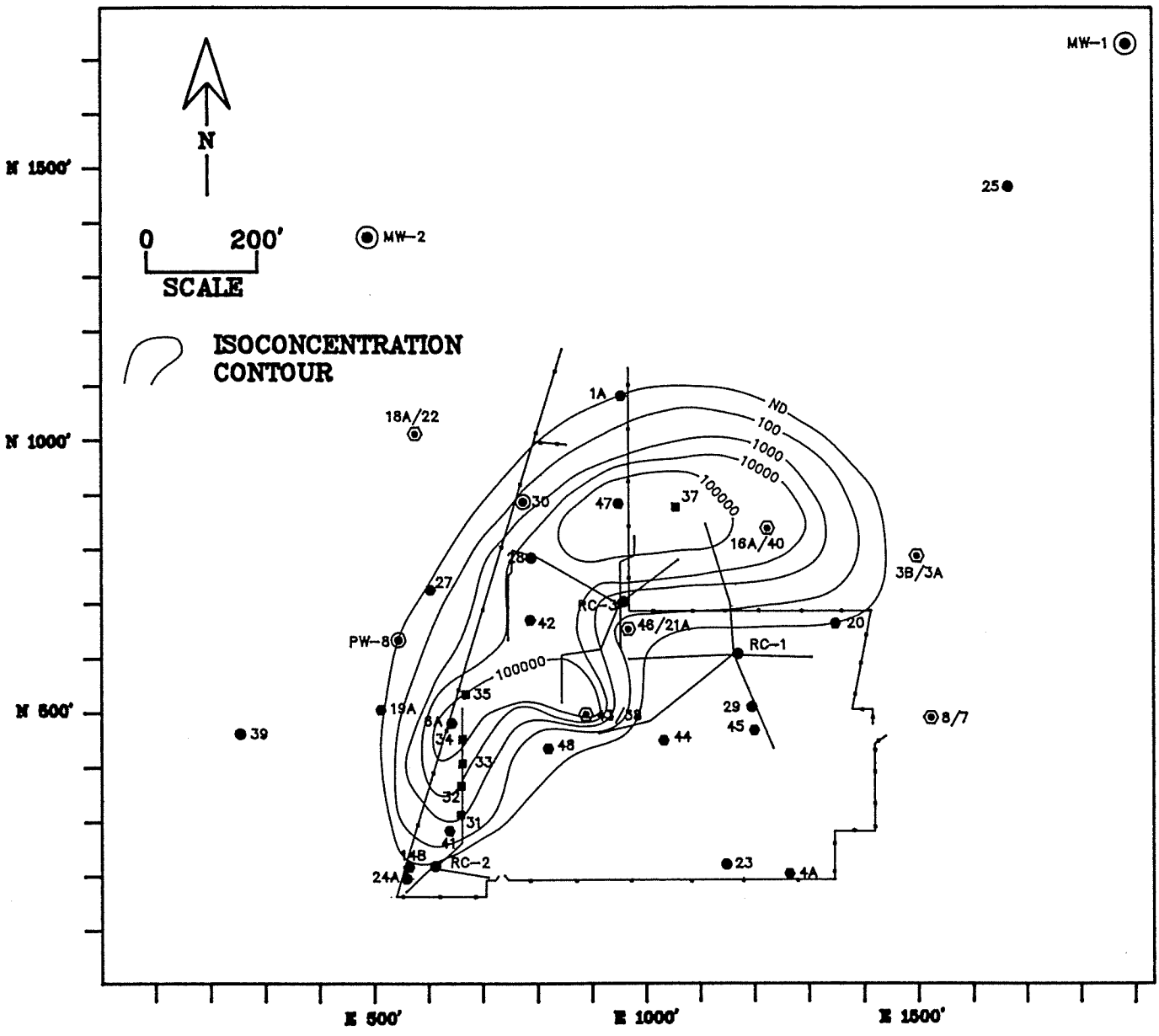
GLACIAL AQUIFER – WINTER 1991
TOTAL VOC CONCENTRATIONS (MICROGRAMS/LITER)



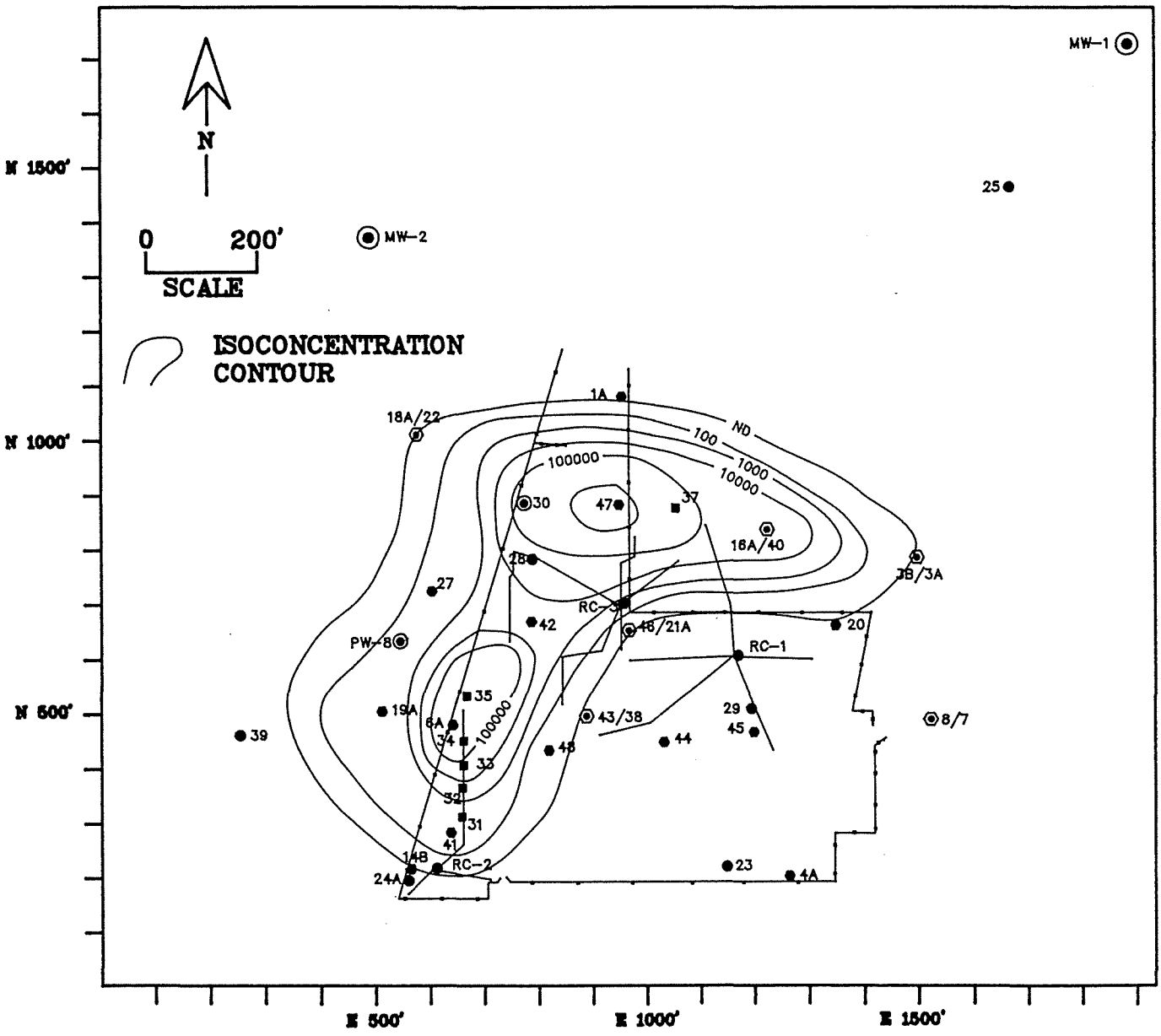
GLACIAL AQUIFER – SPRING 1991
TOTAL VOC CONCENTRATIONS (MICROGRAMS/LITER)



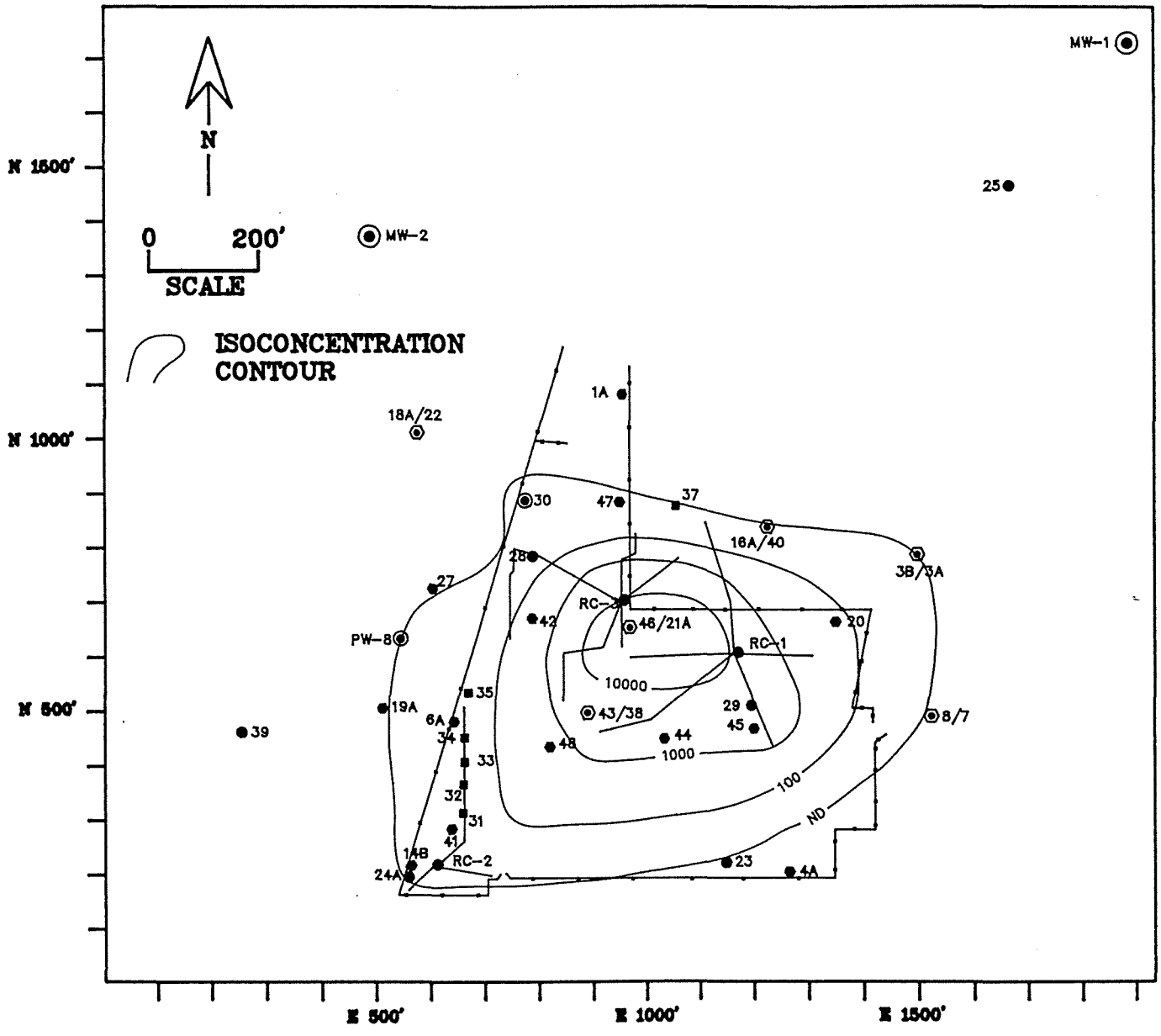
GLACIAL AQUIFER – SUMMER 1991
TOTAL VOC CONCENTRATIONS (MICROGRAMS/LITER)



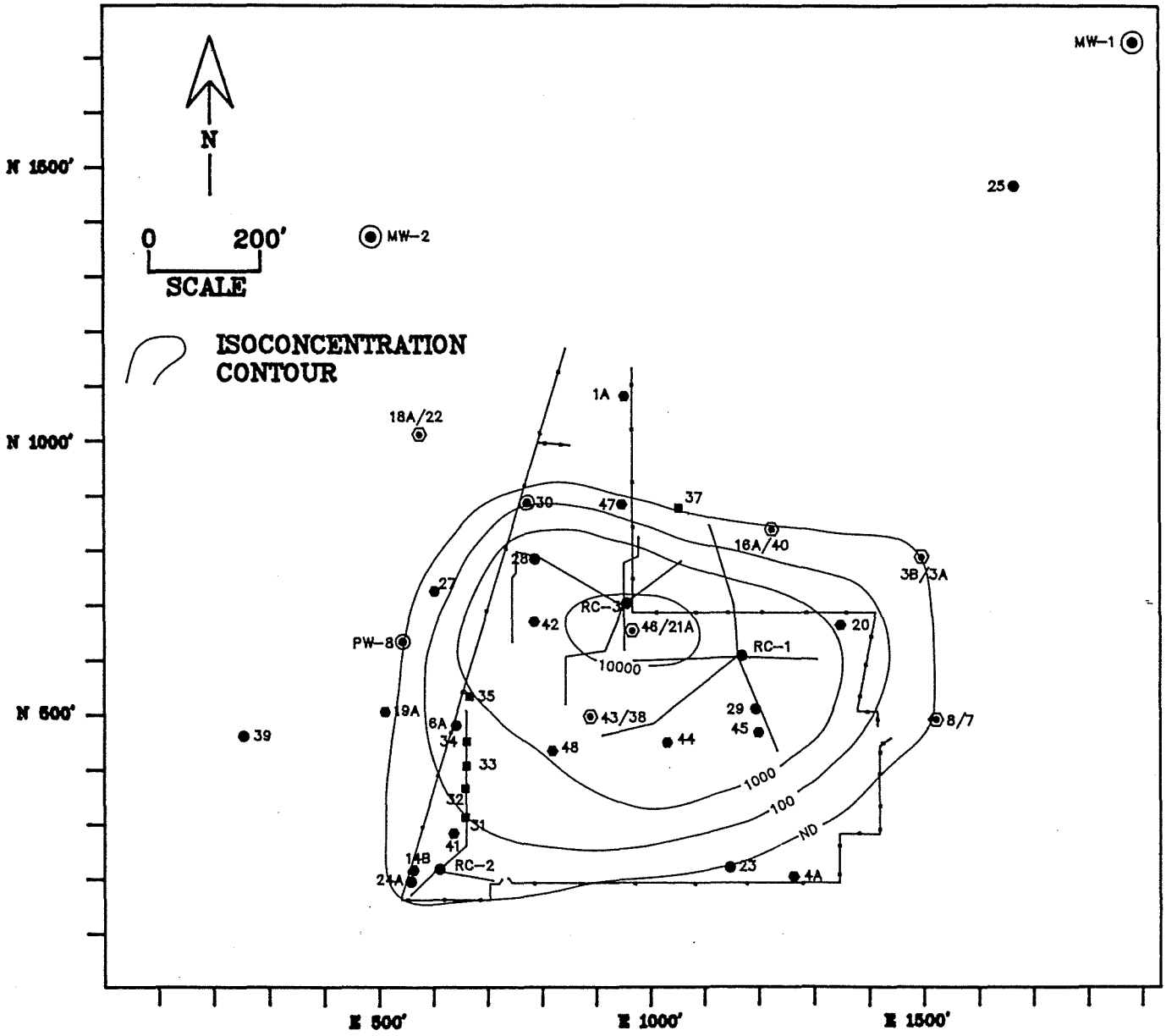
GLACIAL AQUIFER – FALL 1991
TOTAL VOC CONCENTRATIONS (MICROGRAMS/LITER)



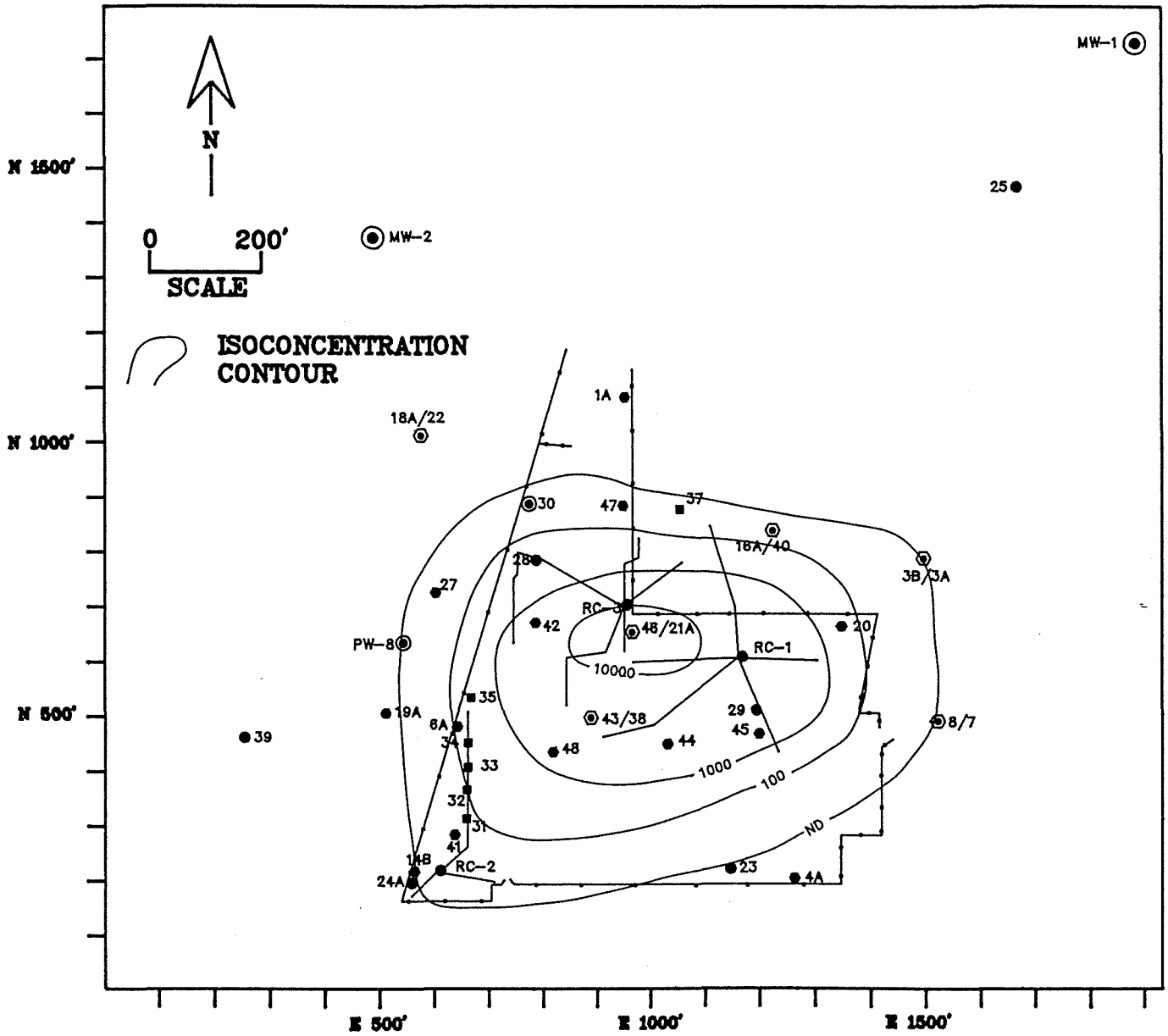
DOLOMITE AQUIFER – WINTER 1991
TOTAL VOC CONCENTRATIONS (MICROGRAMS/LITER)



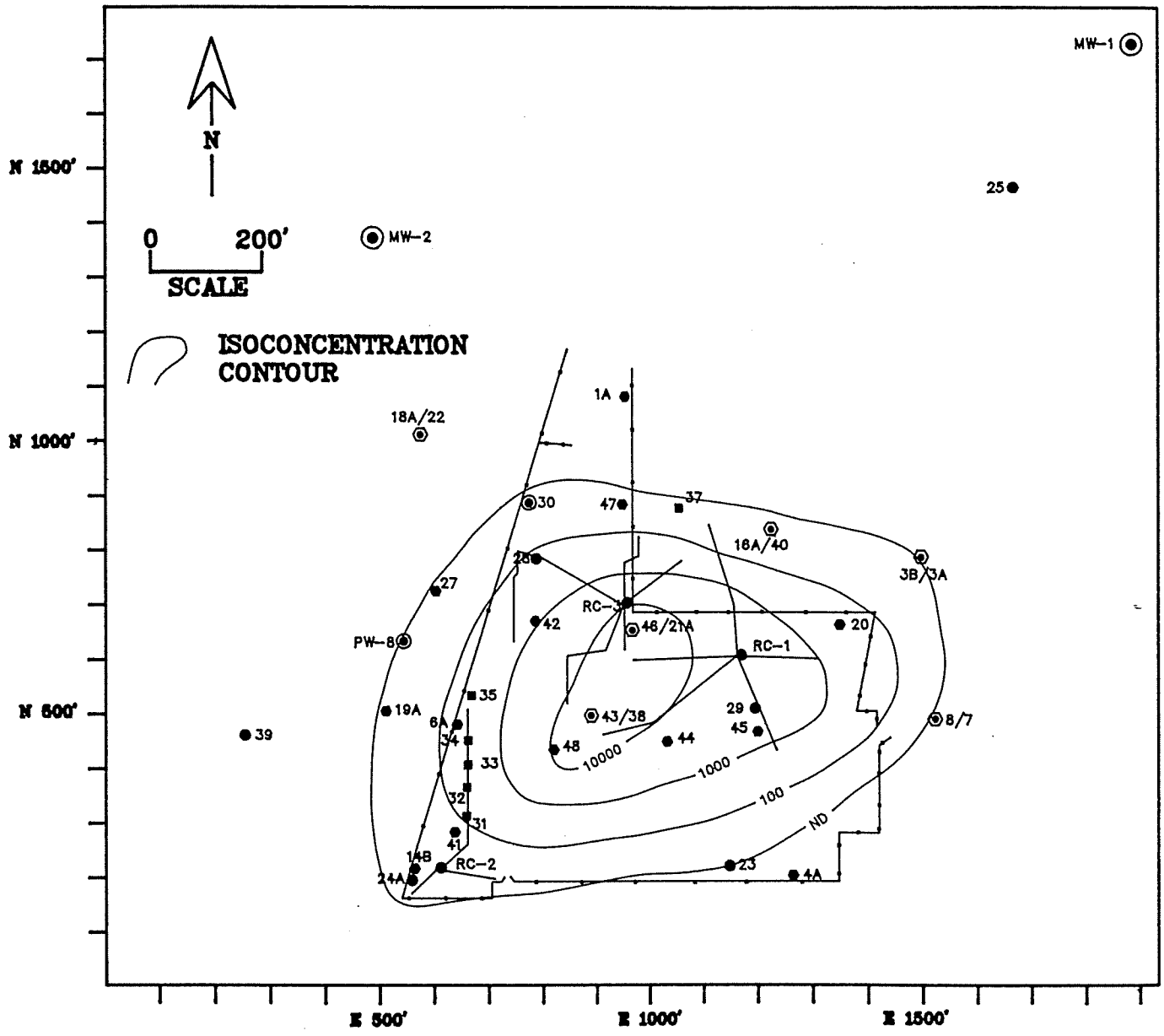
DOLOMITE AQUIFER – SPRING 1991
TOTAL VOC CONCENTRATIONS (MICROGRAMS/LITER)



DOLOMITE AQUIFER – SUMMER 1991
TOTAL VOC CONCENTRATIONS (MICROGRAMS/LITER)



DOLOMITE AQUIFER – FALL 1991
TOTAL VOC CONCENTRATIONS (MICROGRAMS/LITER)



APPENDIX D

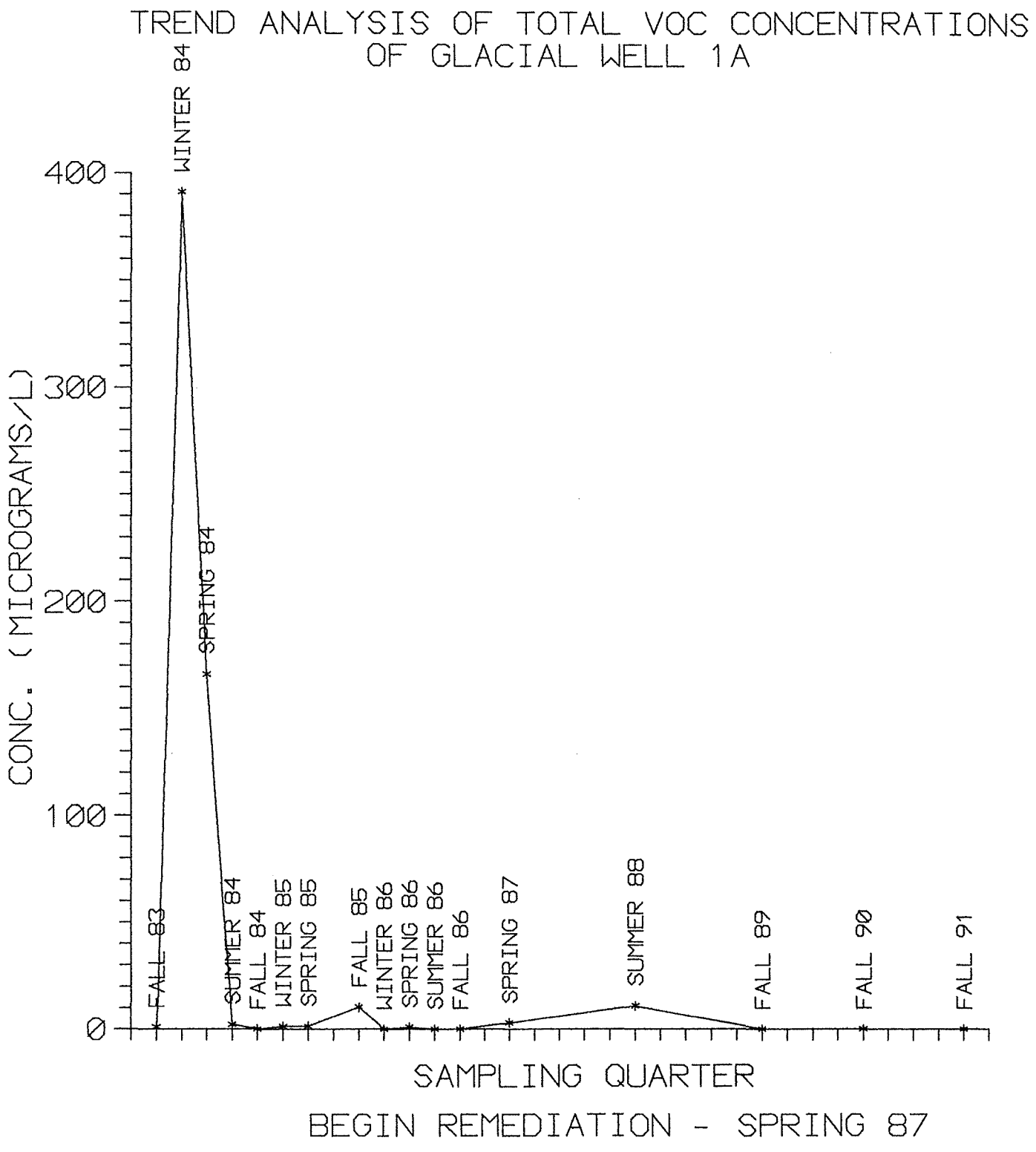
Total VOC Concentrations Trend Analysis Graphs for the Glacial and Dolomite Wells

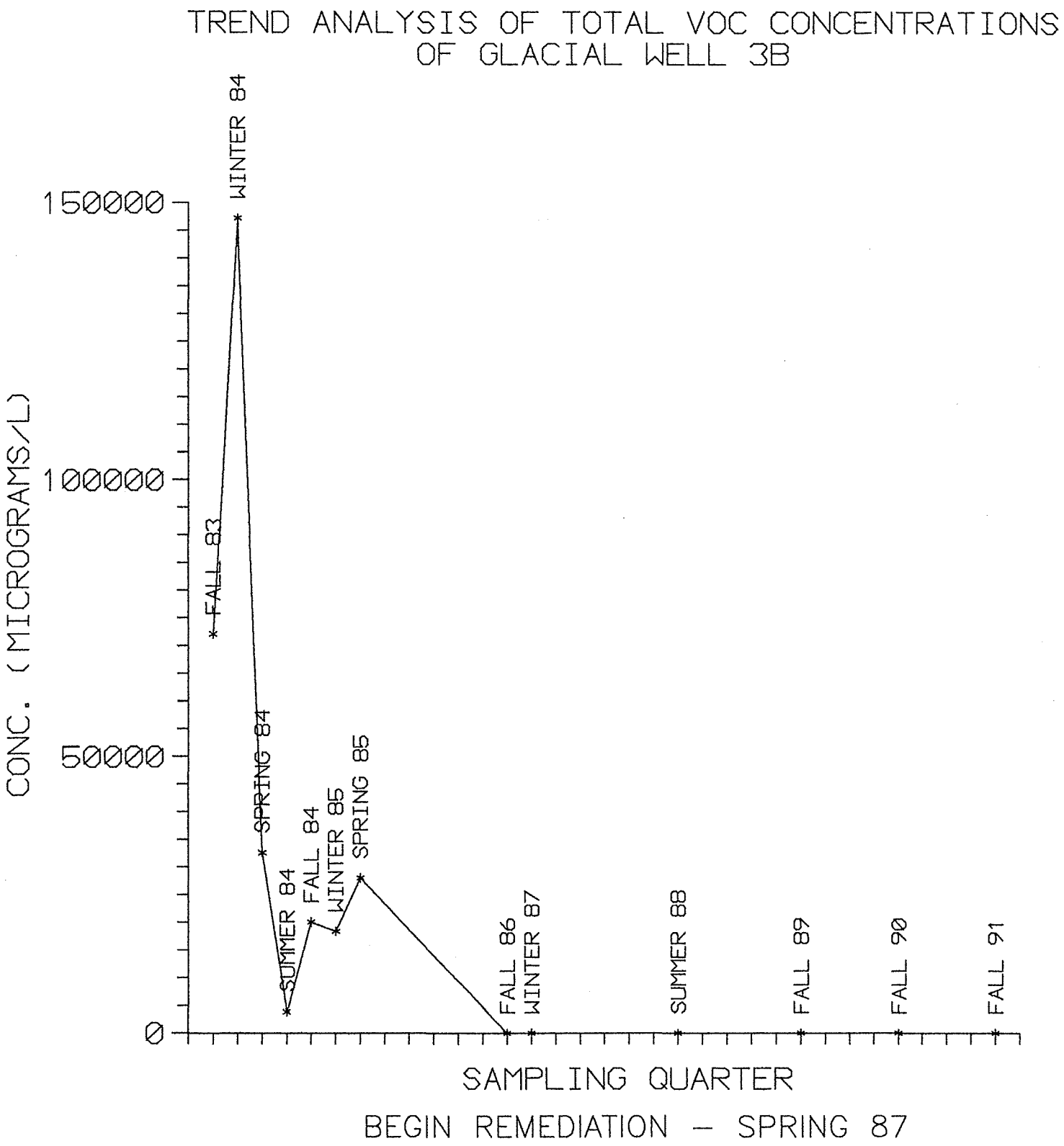
Glacial Wells: 1A, 3B, 4A, 6A, 8, 14B, 16A, 18A, 19A, 20, 27, 37, 41, 42, 43, 44, 45, 46, 47, and 48

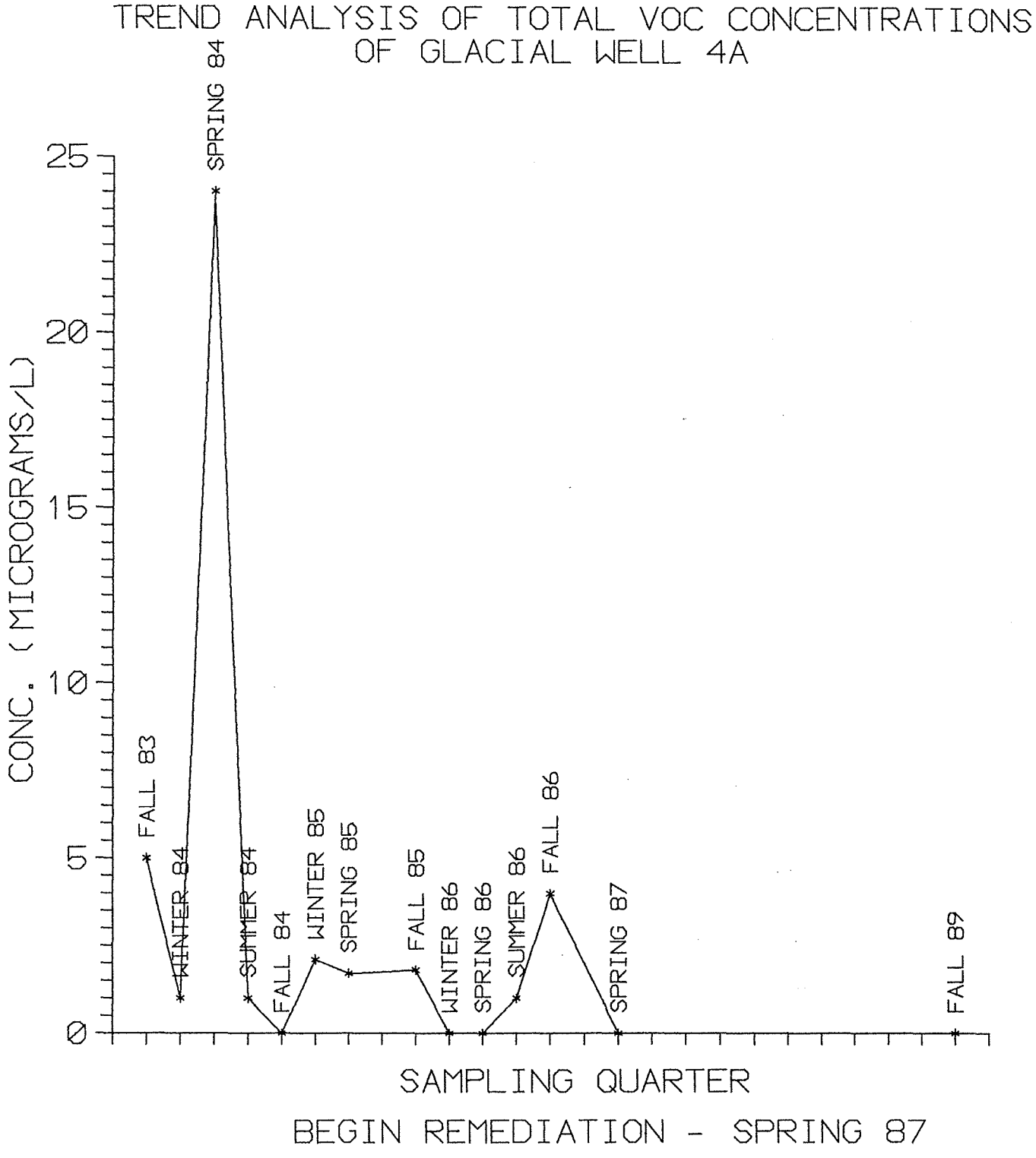
Ranney-type Collectors: RC-1, RC-2, and RC-3

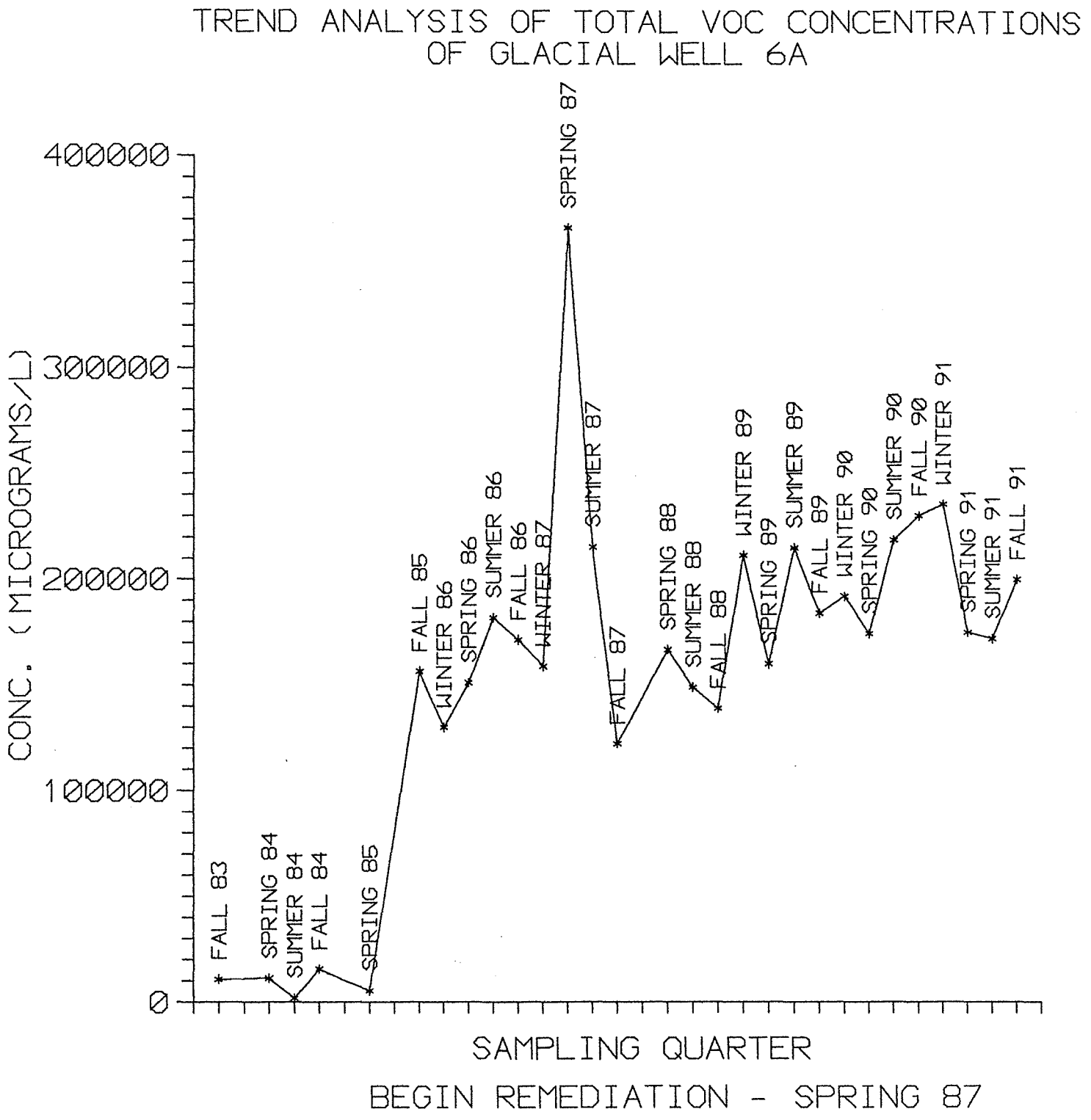
Shallow Dolomite Wells: 3A, 7, 21A, 22, 23, 24A, 25, 28, 29, 38, 39, and 40

Deep Dolomite Wells: MW-1, MW-2, MW-3, MW-4, 30, and PW-8

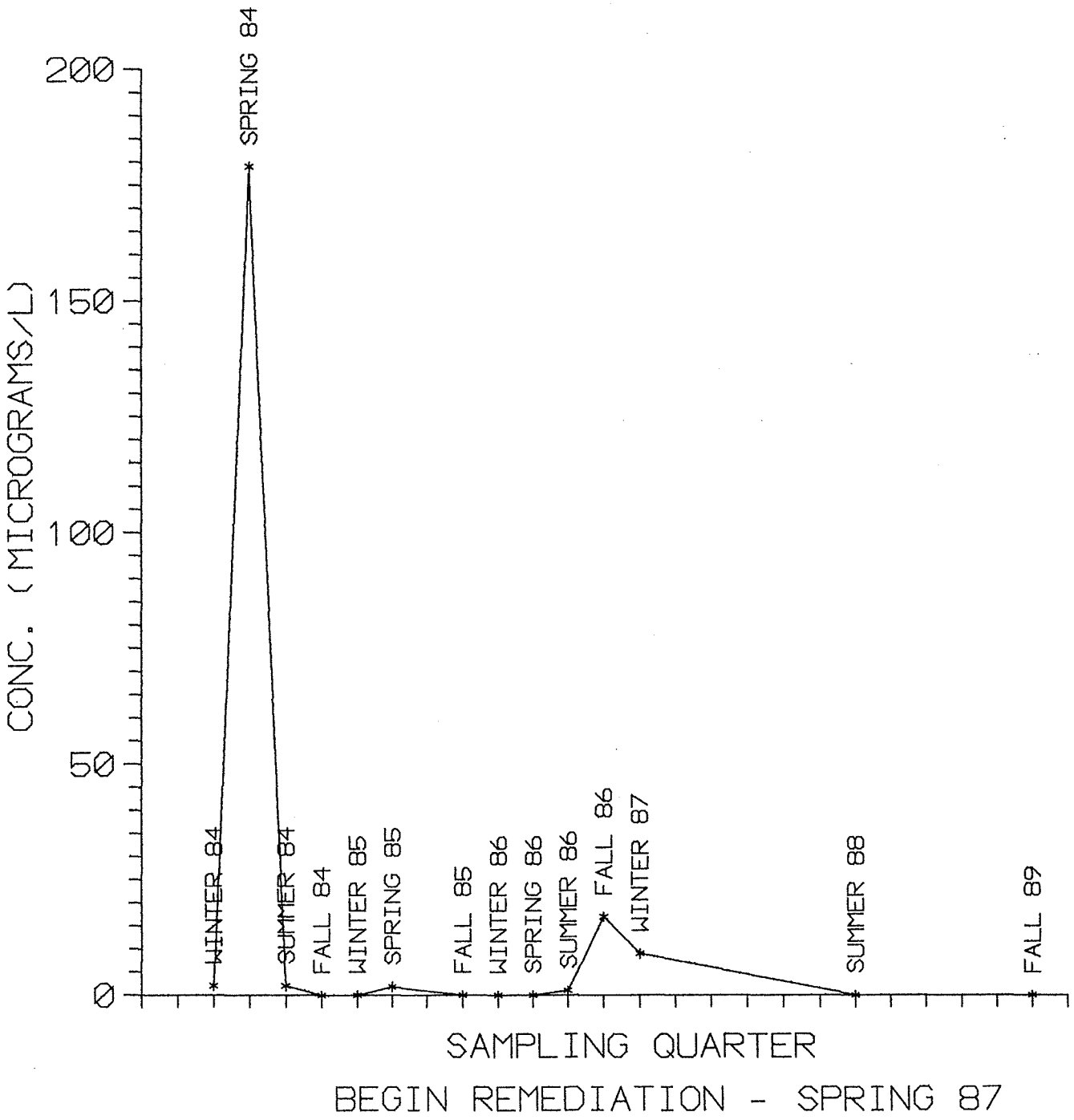

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS
OF GLACIAL WELL 1A
CONC. (MICROGRAMS/L)
400
300
200
100
0
WINTER 84
SPRING 84
FALL 83
SUMMER 84
FALL 84
WINTER 85
SPRING 85
FALL 85
WINTER 86
SPRING 86
SUMMER 86
FALL 86
SPRING 87
SUMMER 88
FALL 89
FALL 90
FALL 91
SAMPLING QUARTER
BEGIN REMEDIATION - SPRING 87


TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS
OF GLACIAL WELL 3B
CONC. (MICROGRAMS/L)
150000
100000
50000
0
FALL 83
WINTER 84
SPRING 84
SUMMER 84
FALL 84
WINTER 85
SPRING 85
FALL 86
WINTER 87
SUMMER 88
FALL 89
FALL 90
FALL 91
SAMPLING QUARTER
BEGIN REMEDIATION – SPRING 87


TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS
OF GLACIAL WELL 4A
CONC. (MICROGRAMS/L)
0
5
10
15
20
25
FALL 83
WINTER 84
SPRING 84
SUMMER 84
FALL 84
WINTER 85
SPRING 85
FALL 85
WINTER 86
SPRING 86
SUMMER 86
FALL 86
SPRING 87
FALL 89
SAMPLING QUARTER
BEGIN REMEDIATION - SPRING 87

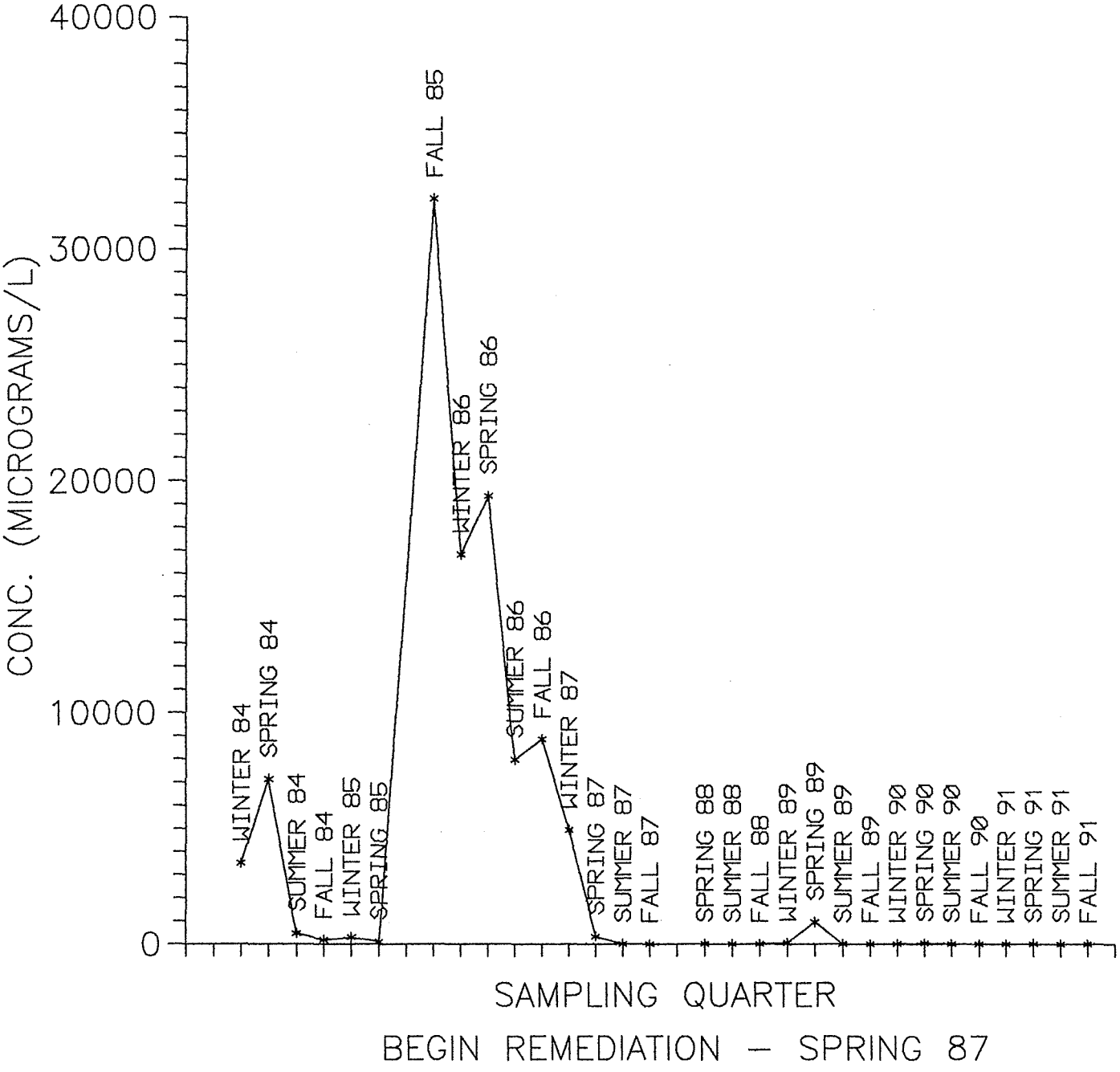

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS
OF GLACIAL WELL 6A
CONC. (MICROGRAMS/L)
400000
300000
200000
100000
0
FALL 83
SPRING 84
SUMMER 84
FALL 84
SPRING 85
FALL 85
WINTER 86
SPRING 86
SUMMER 86
FALL 86
WINTER 87
SPRING 87
SUMMER 87
FALL 87
SPRING 88
SUMMER 88
FALL 88
WINTER 89
SPRING 89
SUMMER 89
FALL 89
WINTER 90
SPRING 90
SUMMER 90
FALL 90
WINTER 91
SPRING 91
SUMMER 91
FALL 91
SAMPLING QUARTER
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF GLACIAL WELL 8

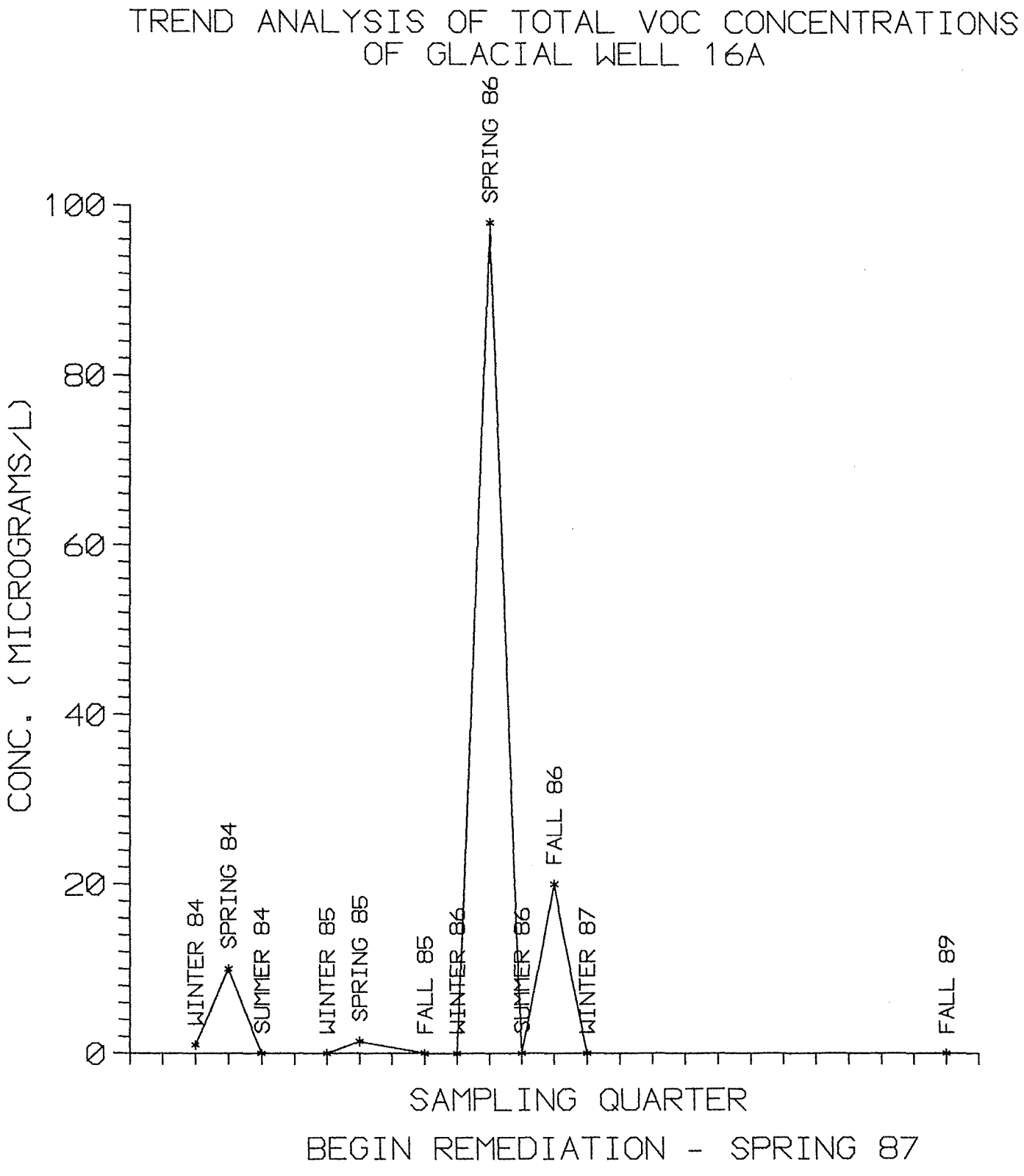


BEGIN REMEDIATION - SPRING 87

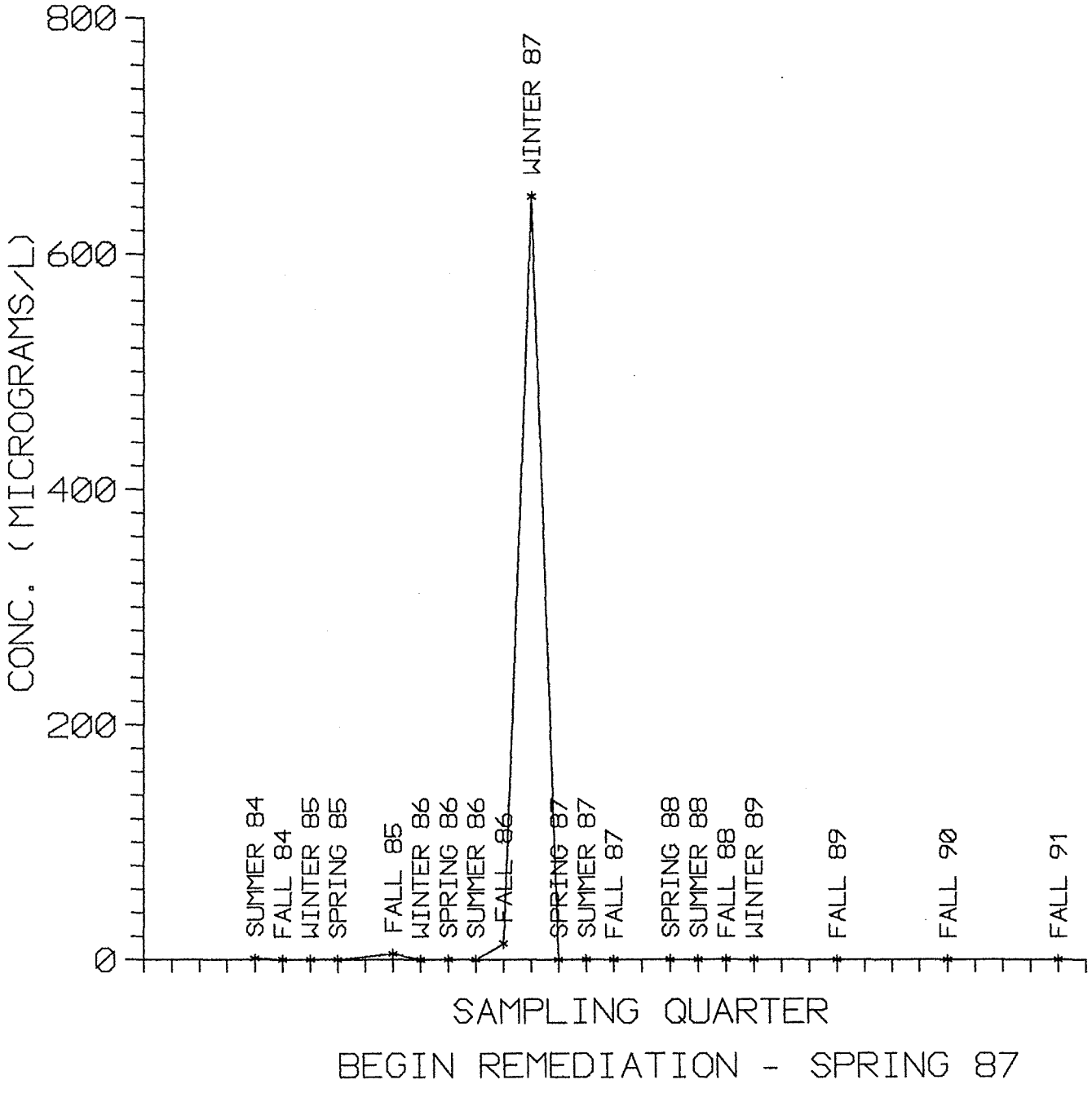
TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF GLACIAL WELL 14B



BEGIN REMEDIATION – SPRING 87

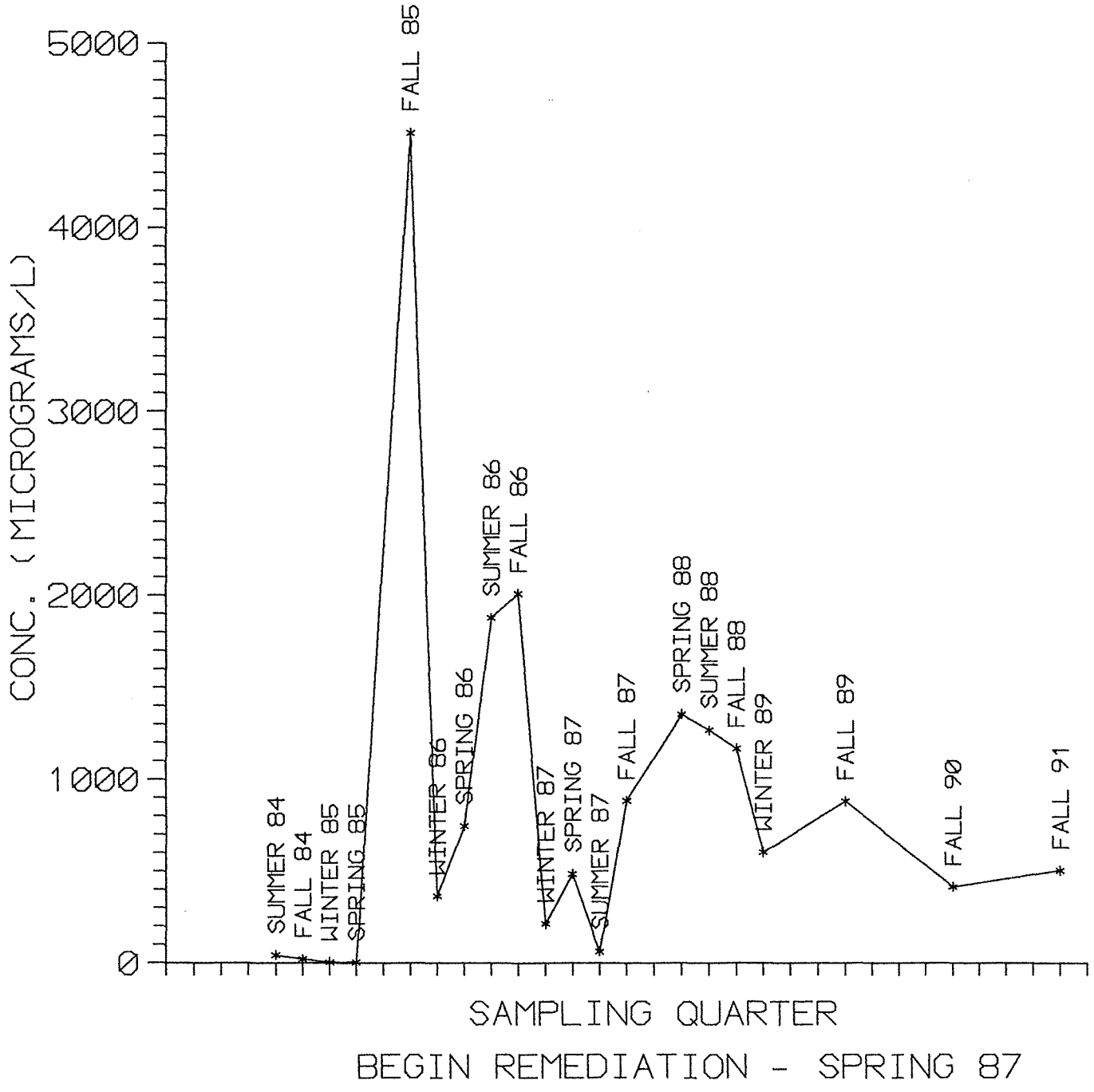

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS
OF GLACIAL WELL 16A
CONC. (MICROGRAMS/L)
0
20
40
60
80
100
WINTER 84
SPRING 84
SUMMER 84
WINTER 85
SPRING 85
FALL 85
WINTER 86
SPRING 86
SUMMER 86
FALL 86
WINTER 87
FALL 89
SAMPLING QUARTER
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF GLACIAL WELL 18A



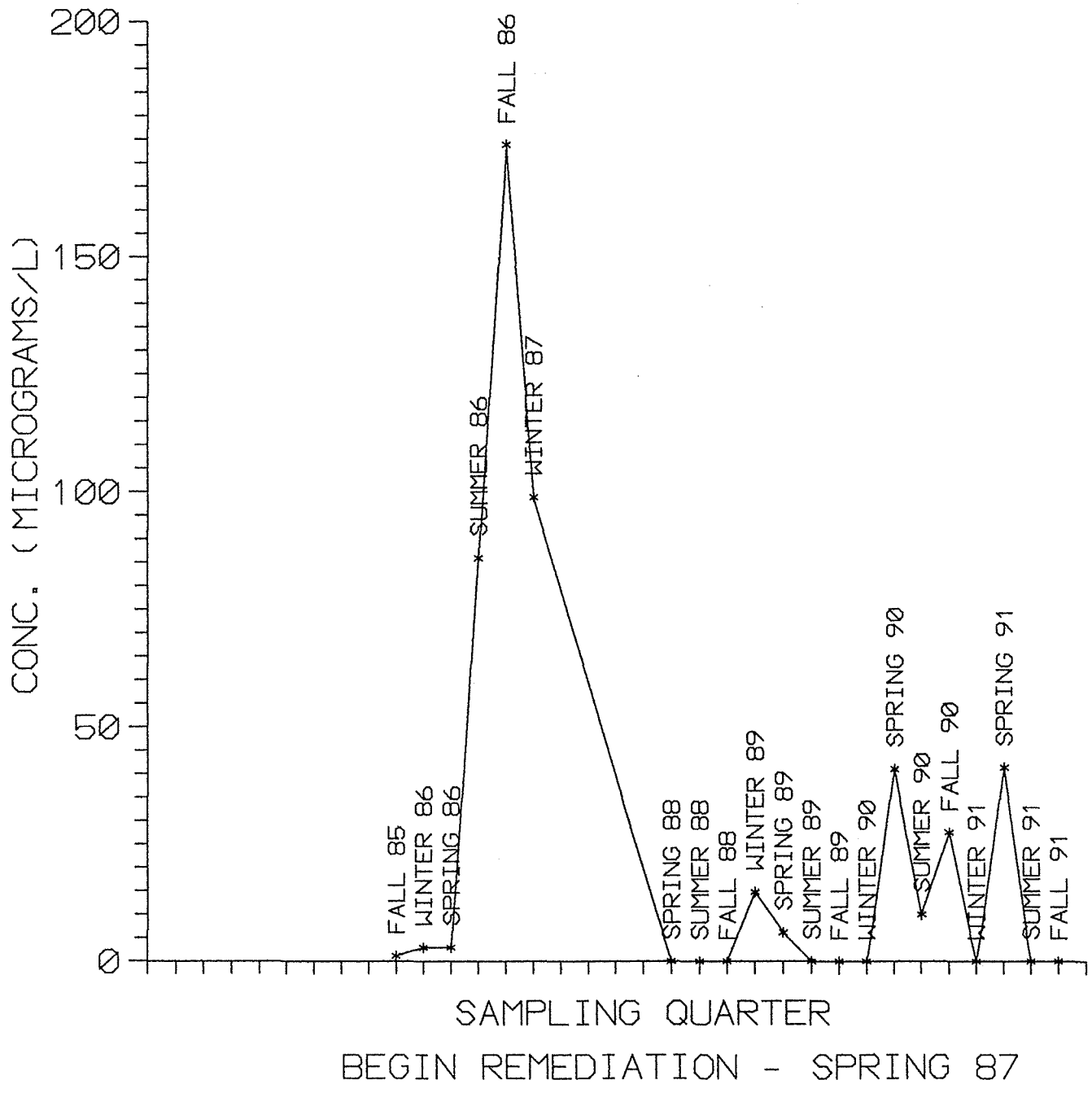
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF GLACIAL WELL 19A

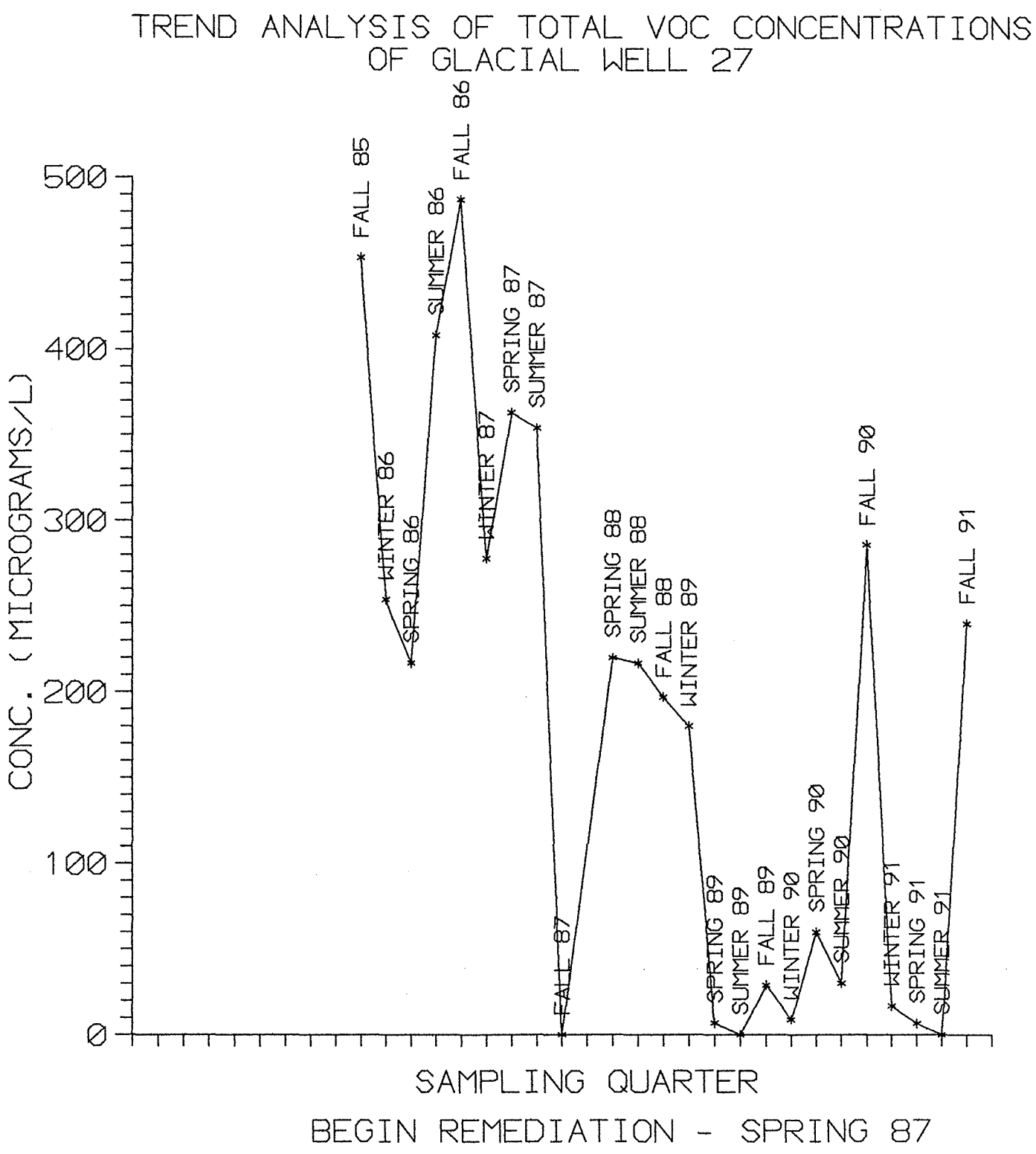


BEGIN REMEDIATION - SPRING 87

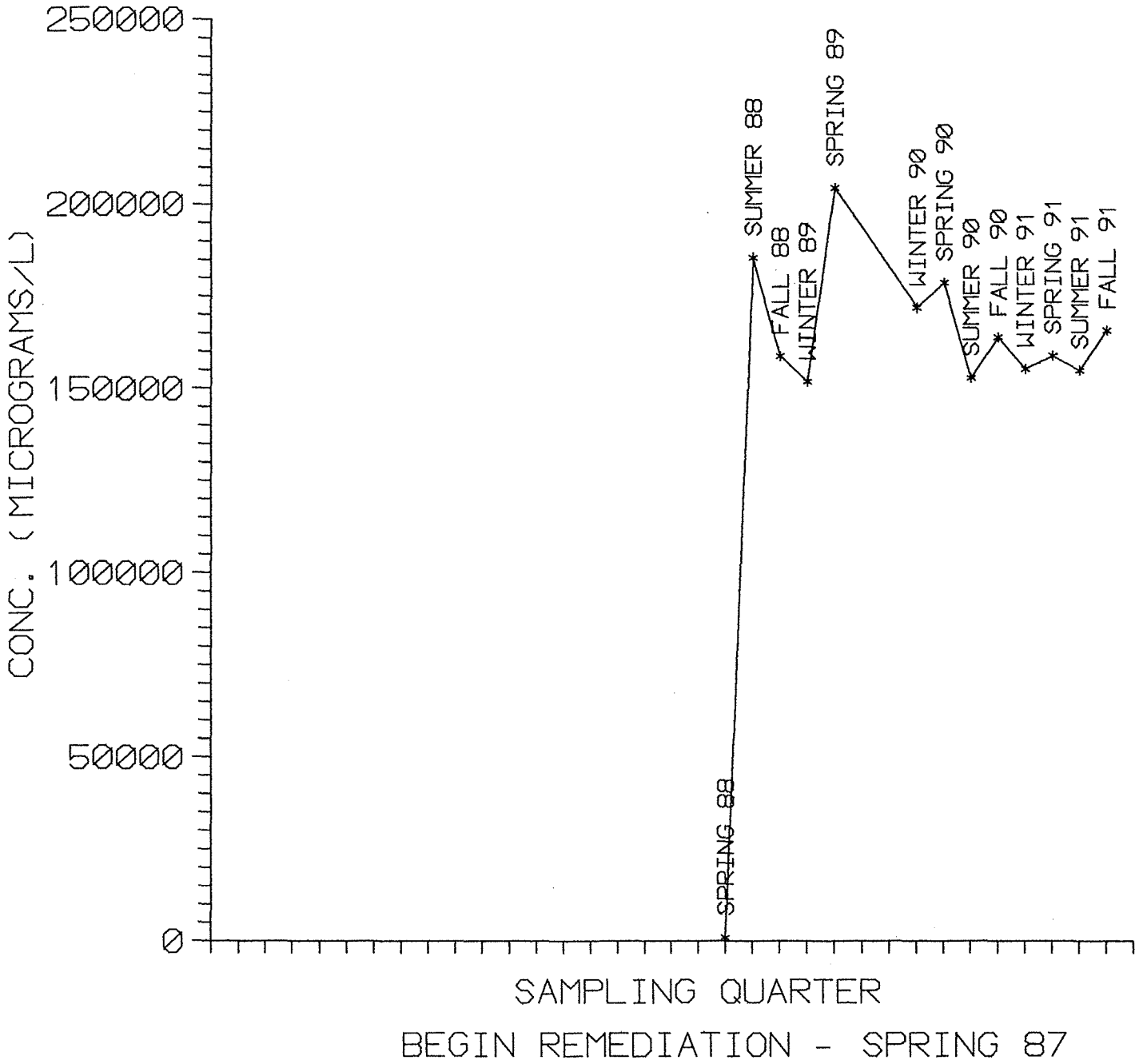
TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF GLACIAL WELL 20



BEGIN REMEDIATION - SPRING 87

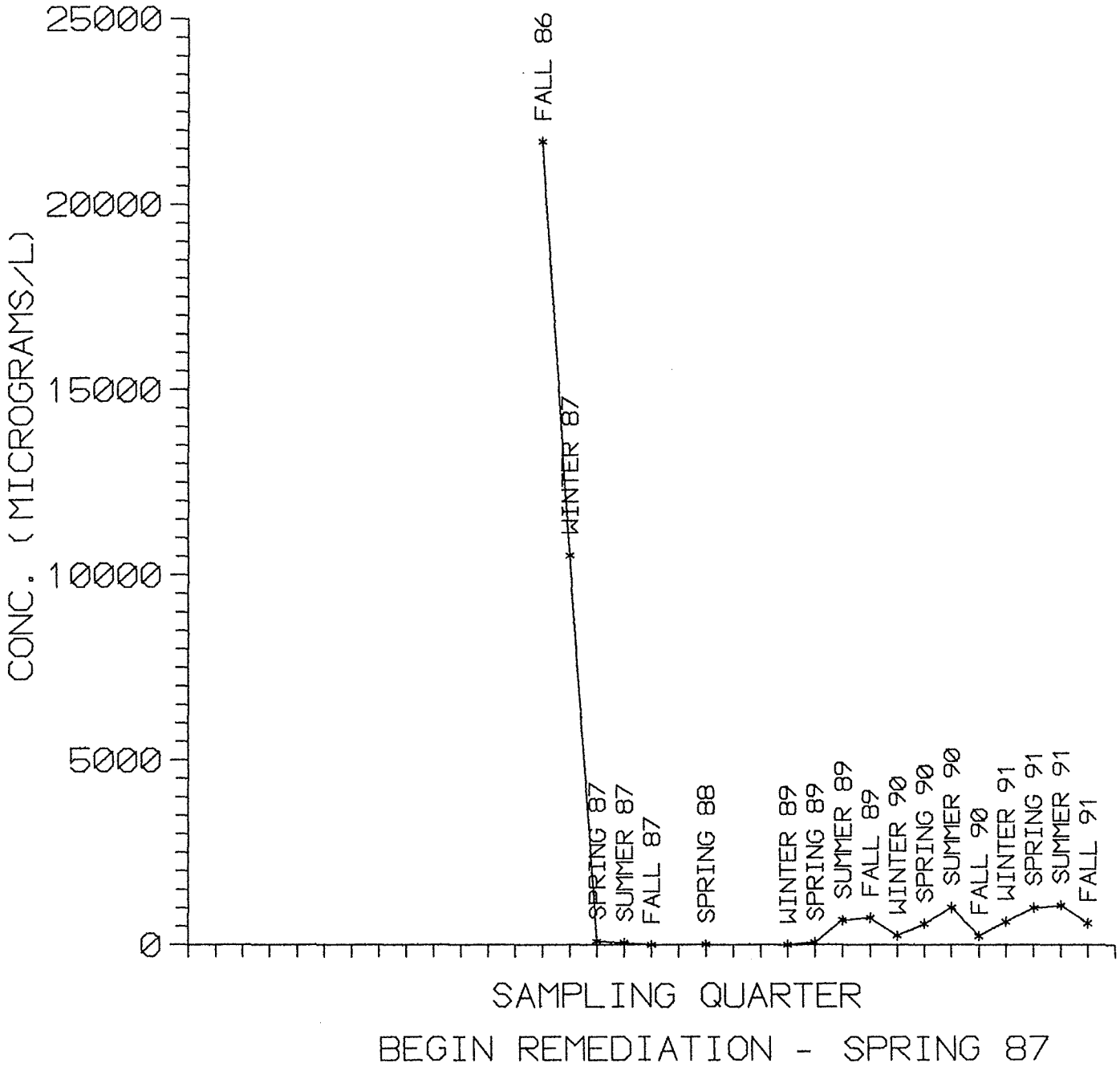

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS
OF GLACIAL WELL 27
CONC. (MICROGRAMS/L)
0
100
200
300
400
500
FALL 85
WINTER 86
SPRING 86
SUMMER 86
FALL 86
WINTER 87
SPRING 87
SUMMER 87
FALL 87
SPRING 88
SUMMER 88
FALL 88
WINTER 89
SPRING 89
SUMMER 89
FALL 89
WINTER 90
SPRING 90
SUMMER 90
FALL 90
WINTER 91
SPRING 91
SUMMER 91
FALL 91
SAMPLING QUARTER
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF GLACIAL WELL 37



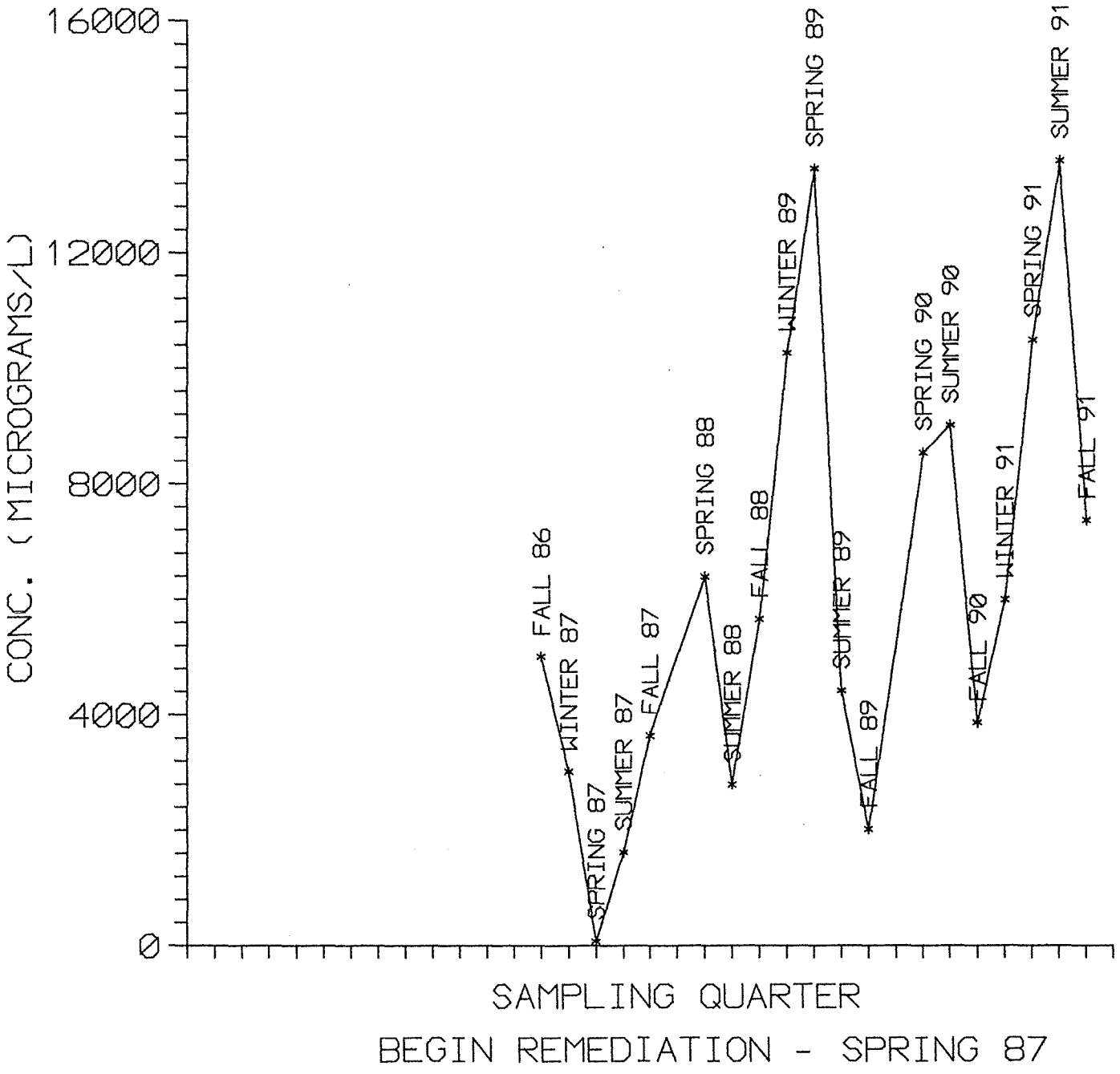
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF GLACIAL WELL 41



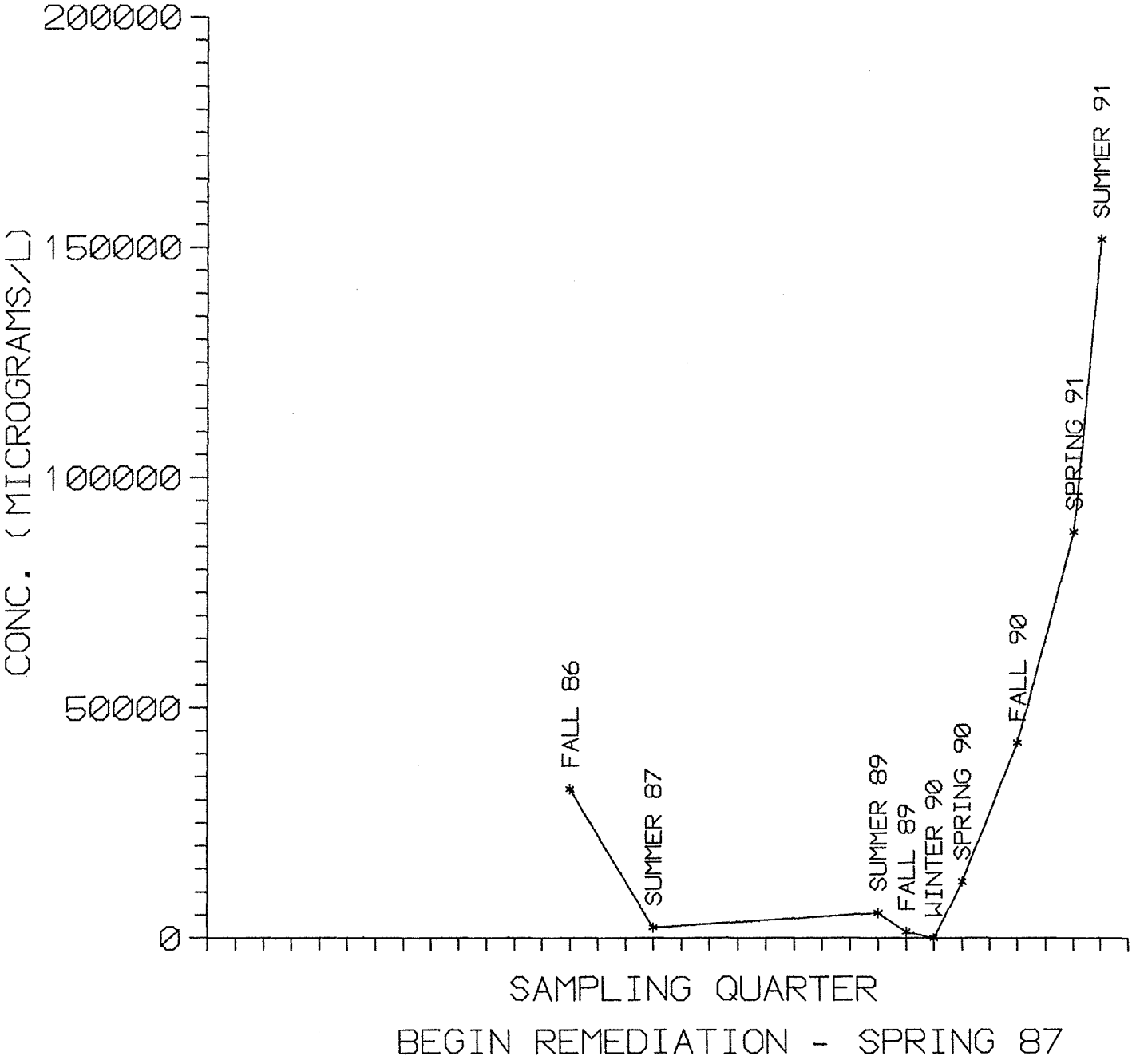
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF GLACIAL WELL 42



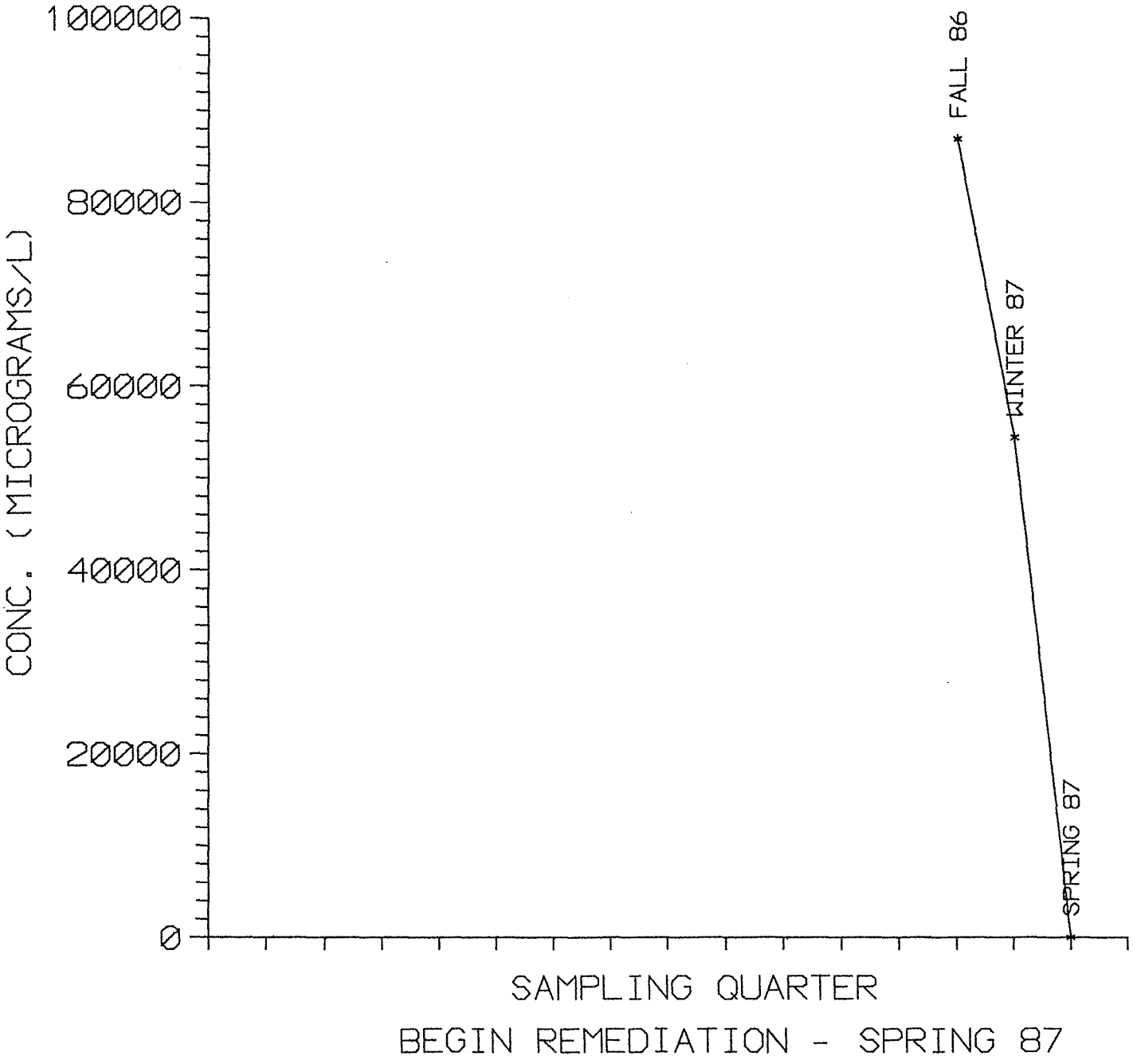
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF GLACIAL WELL 43

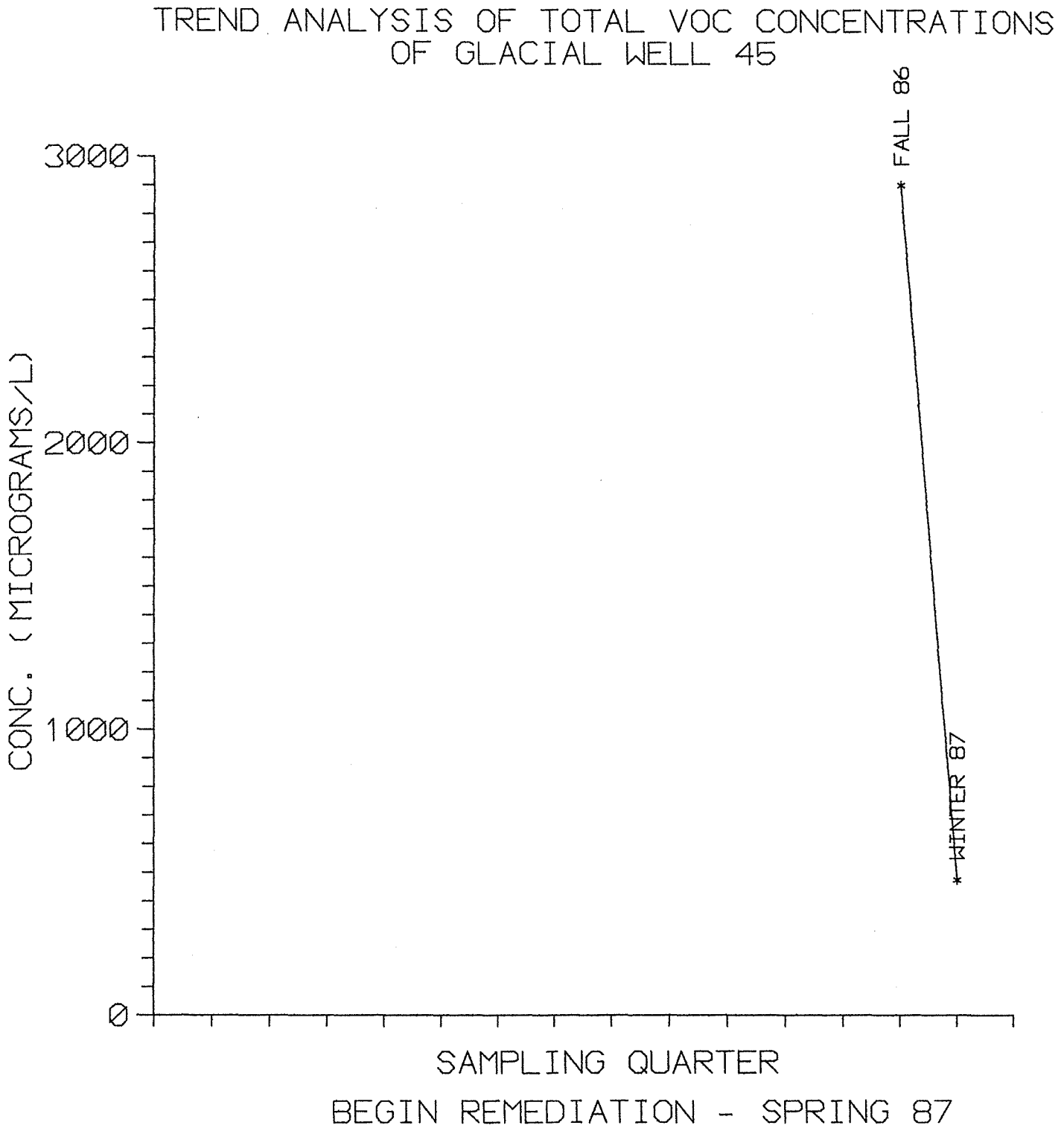


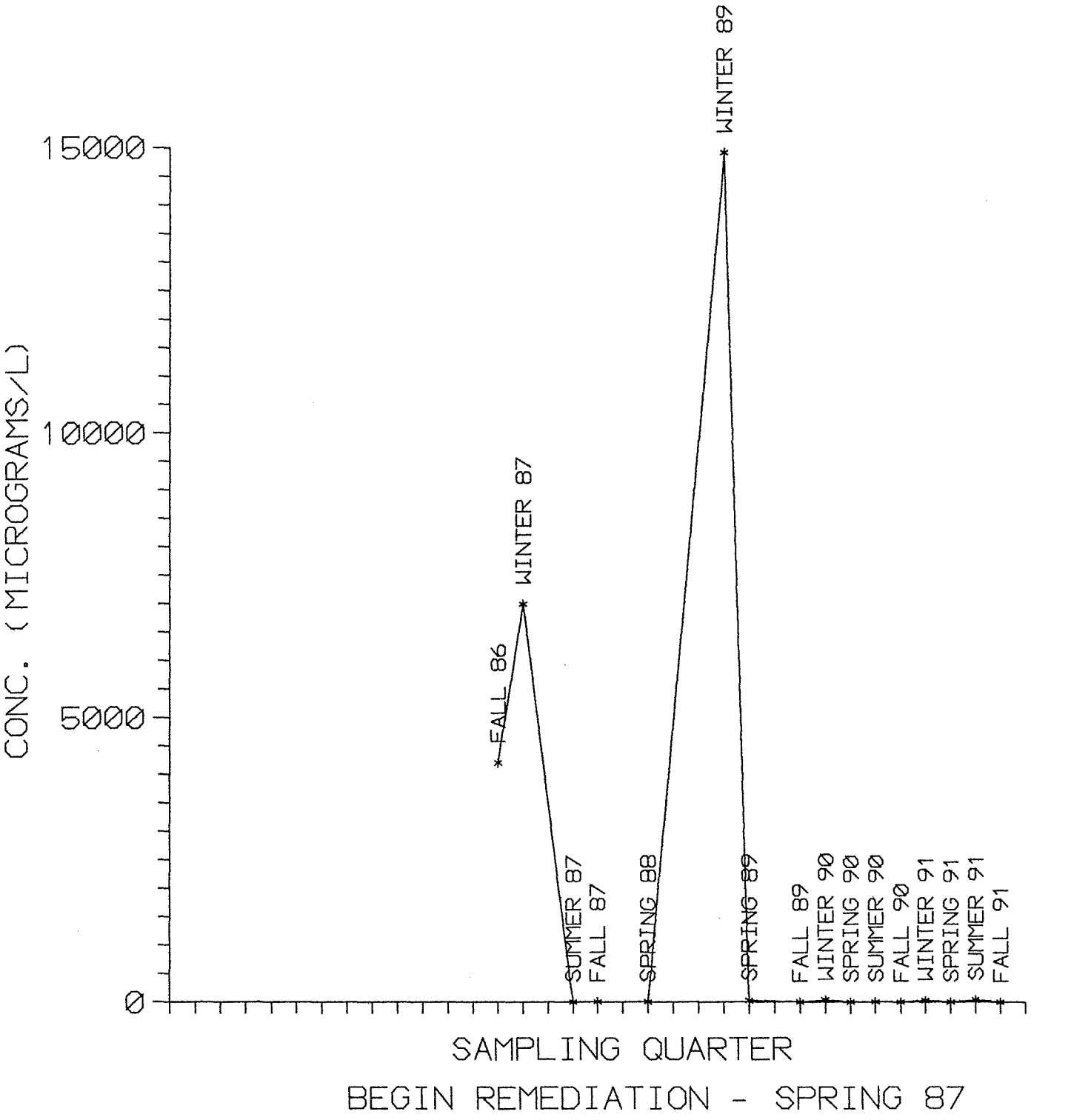
BEGIN REMEDIATION - SPRING 87

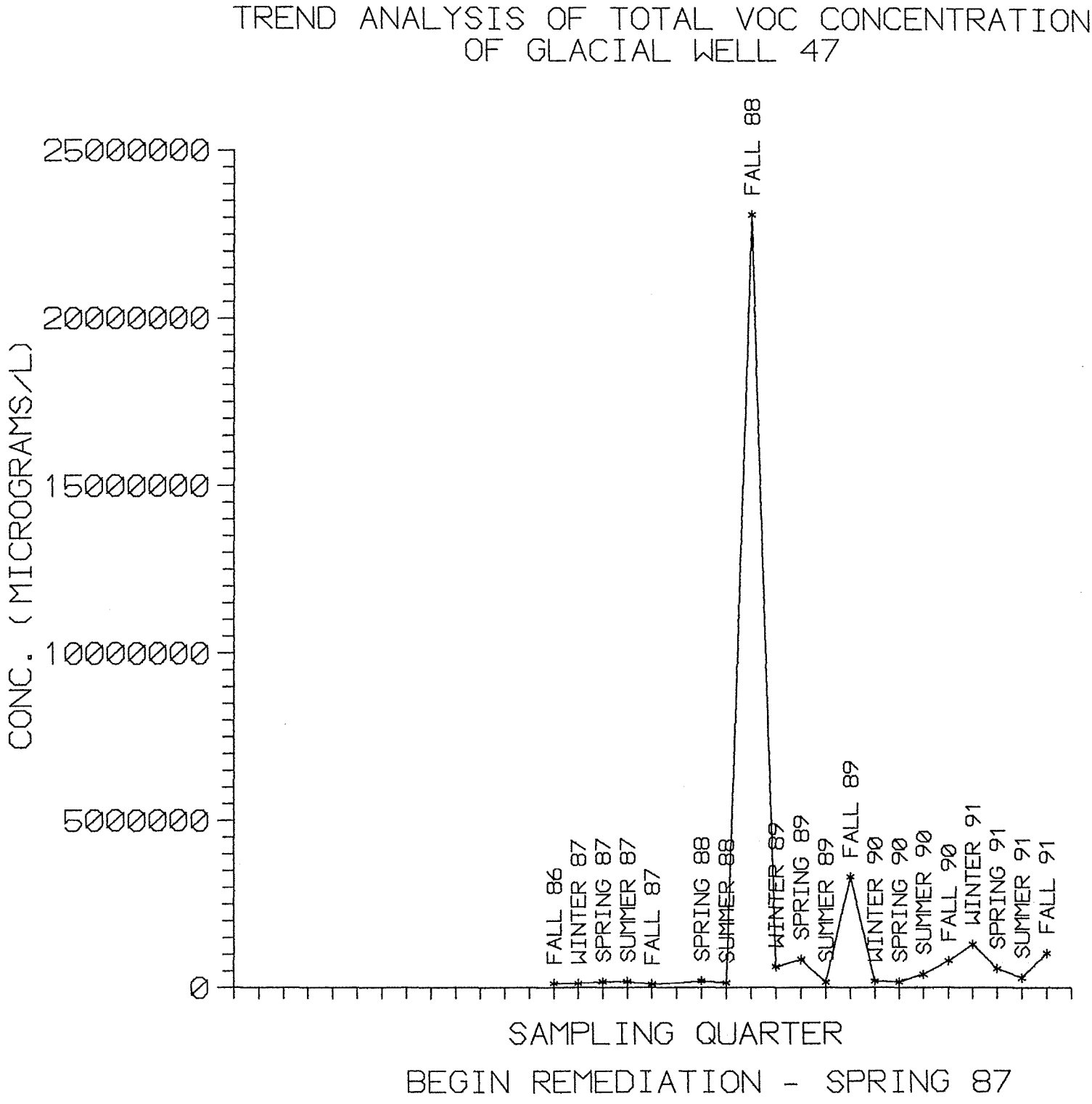
TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF GLACIAL WELL 44



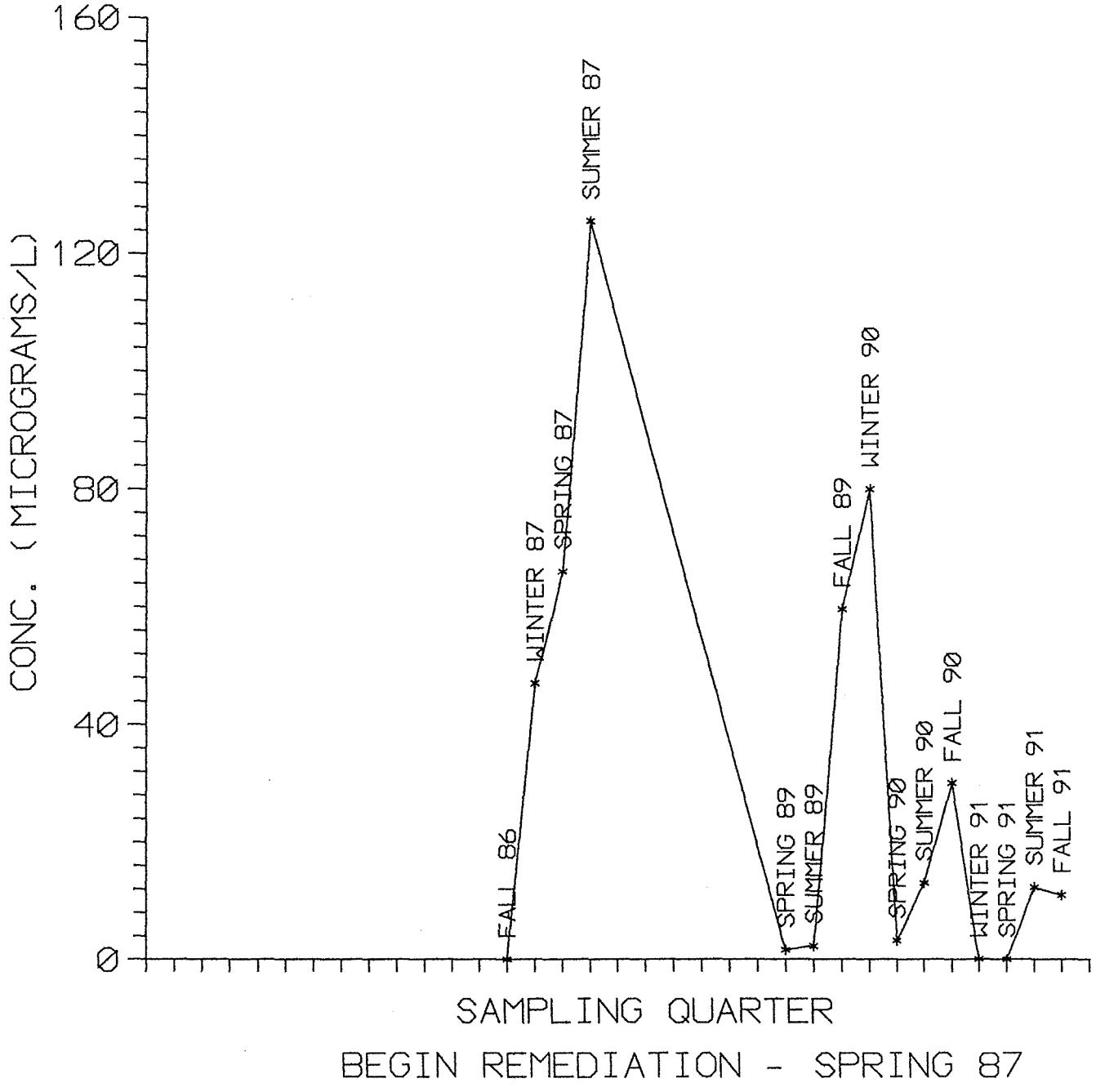
BEGIN REMEDIATION - SPRING 87


TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS
OF GLACIAL WELL 45
CONC. (MICROGRAMS/L)
3000
2000
1000
0
FALL 86
WINTER 87
SAMPLING QUARTER
BEGIN REMEDIATION - SPRING 87


TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS
OF GLACIAL WELL 46
CONC. (MICROGRAMS/L)
15000
10000
5000
0
FALL 86
WINTER 87
SUMMER 87
FALL 87
SPRING 88
WINTER 89
SPRING 89
FALL 89
WINTER 90
SPRING 90
SUMMER 90
FALL 90
WINTER 91
SPRING 91
SUMMER 91
FALL 91
SAMPLING QUARTER
BEGIN REMEDIATION - SPRING 87

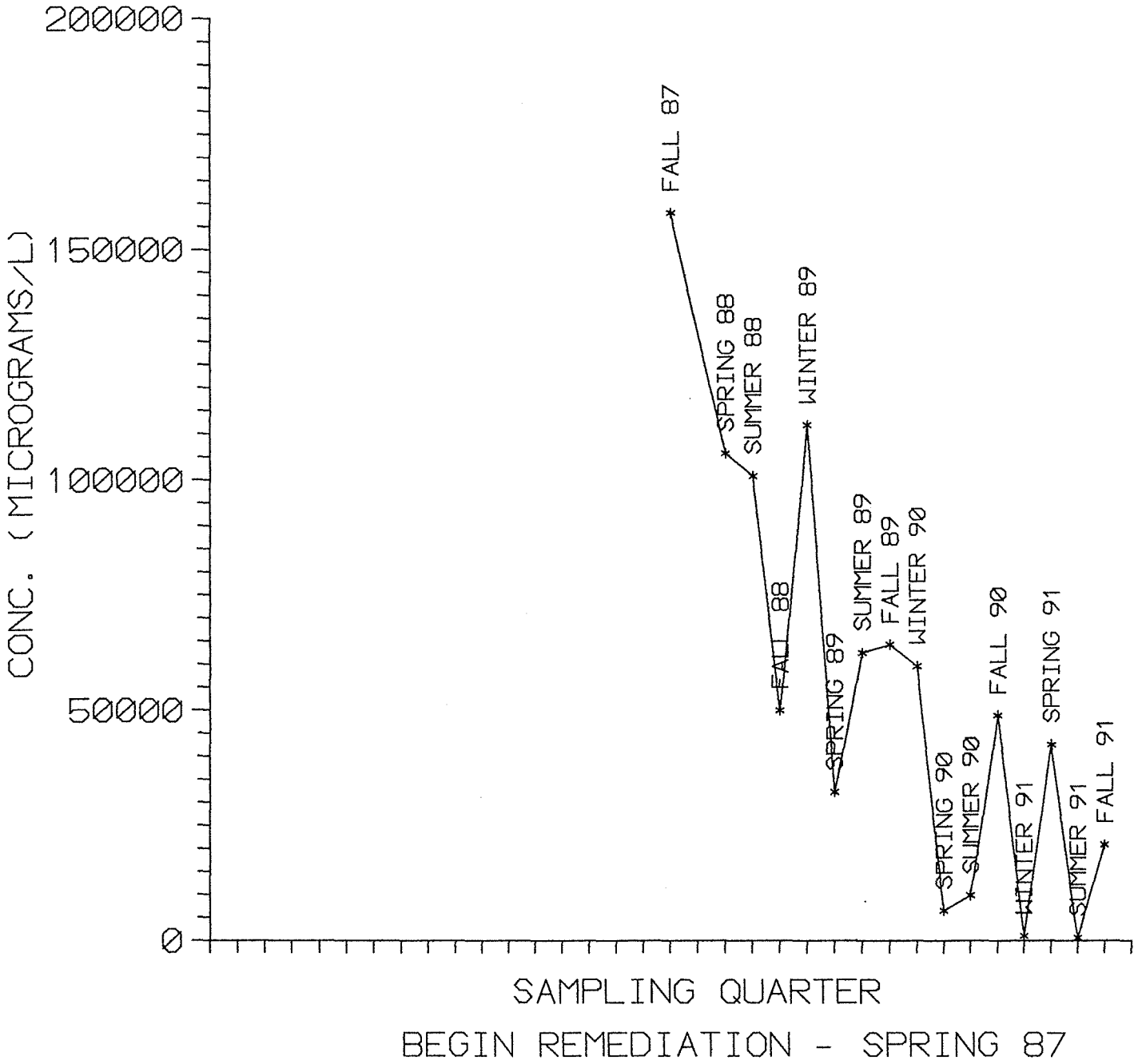

TREND ANALYSIS OF TOTAL VOC CONCENTRATION
OF GLACIAL WELL 47
CONC. (MICROGRAMS/L)
25000000
20000000
15000000
10000000
5000000
0
FALL 88
FALL 86
WINTER 87
SPRING 87
SUMMER 87
FALL 87
SPRING 88
SUMMER 88
WINTER 89
SPRING 89
SUMMER 89
FALL 89
WINTER 90
SPRING 90
SUMMER 90
FALL 90
WINTER 91
SPRING 91
SUMMER 91
FALL 91
SAMPLING QUARTER
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF GLACIAL WELL 48

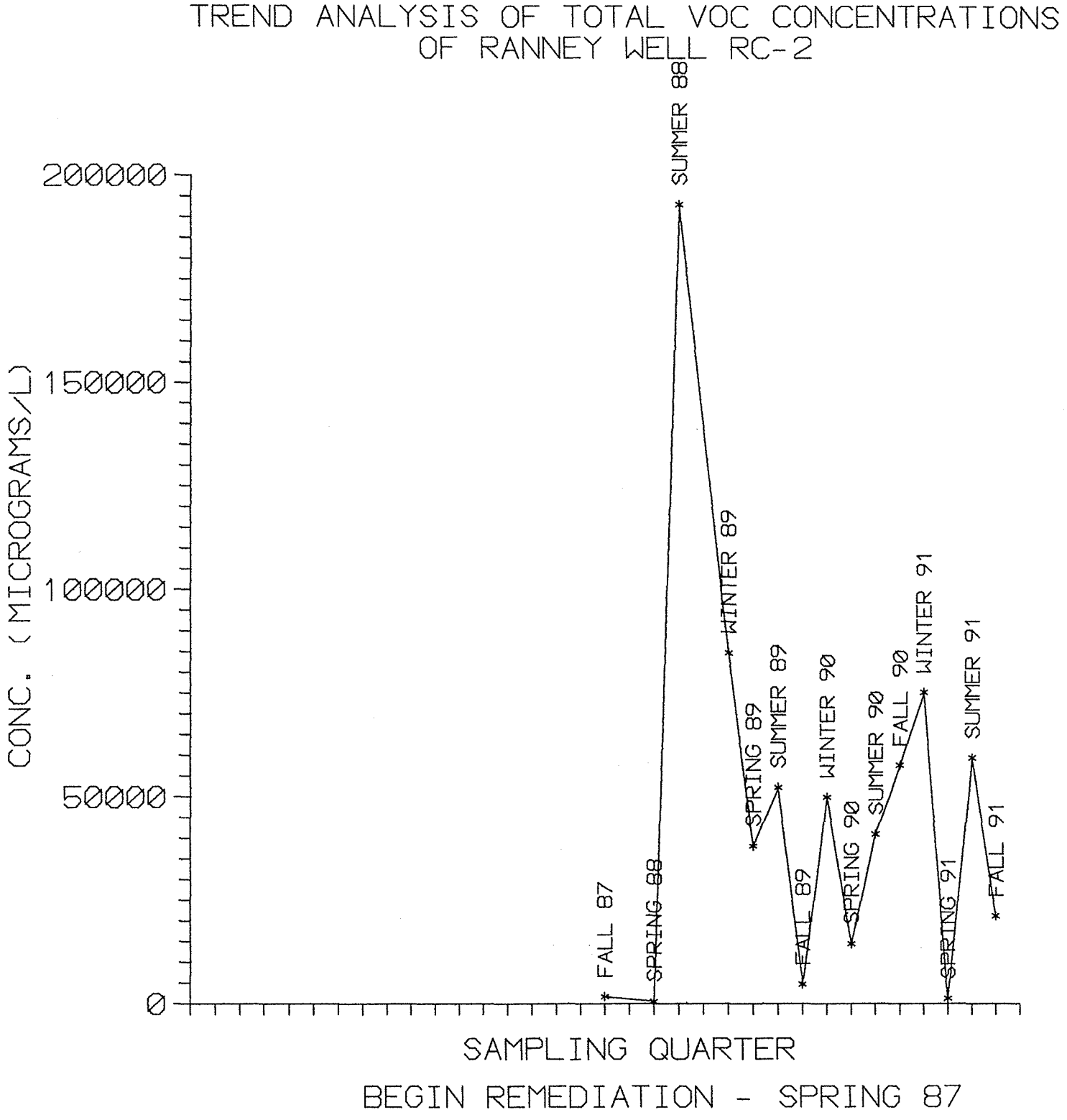


BEGIN REMEDIATION - SPRING 87

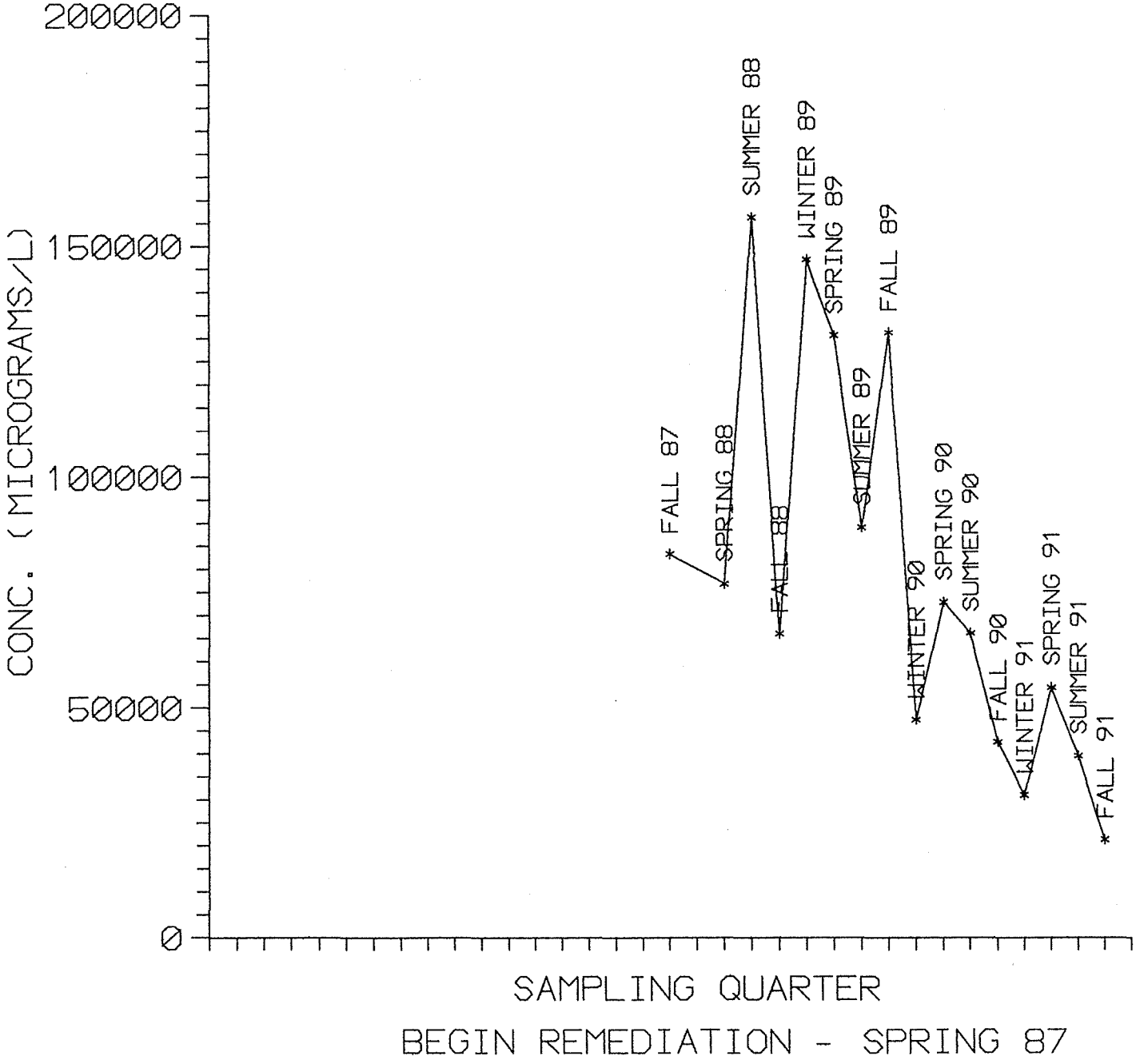
TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF RANNEY WELL RC-1



BEGIN REMEDIATION - SPRING 87

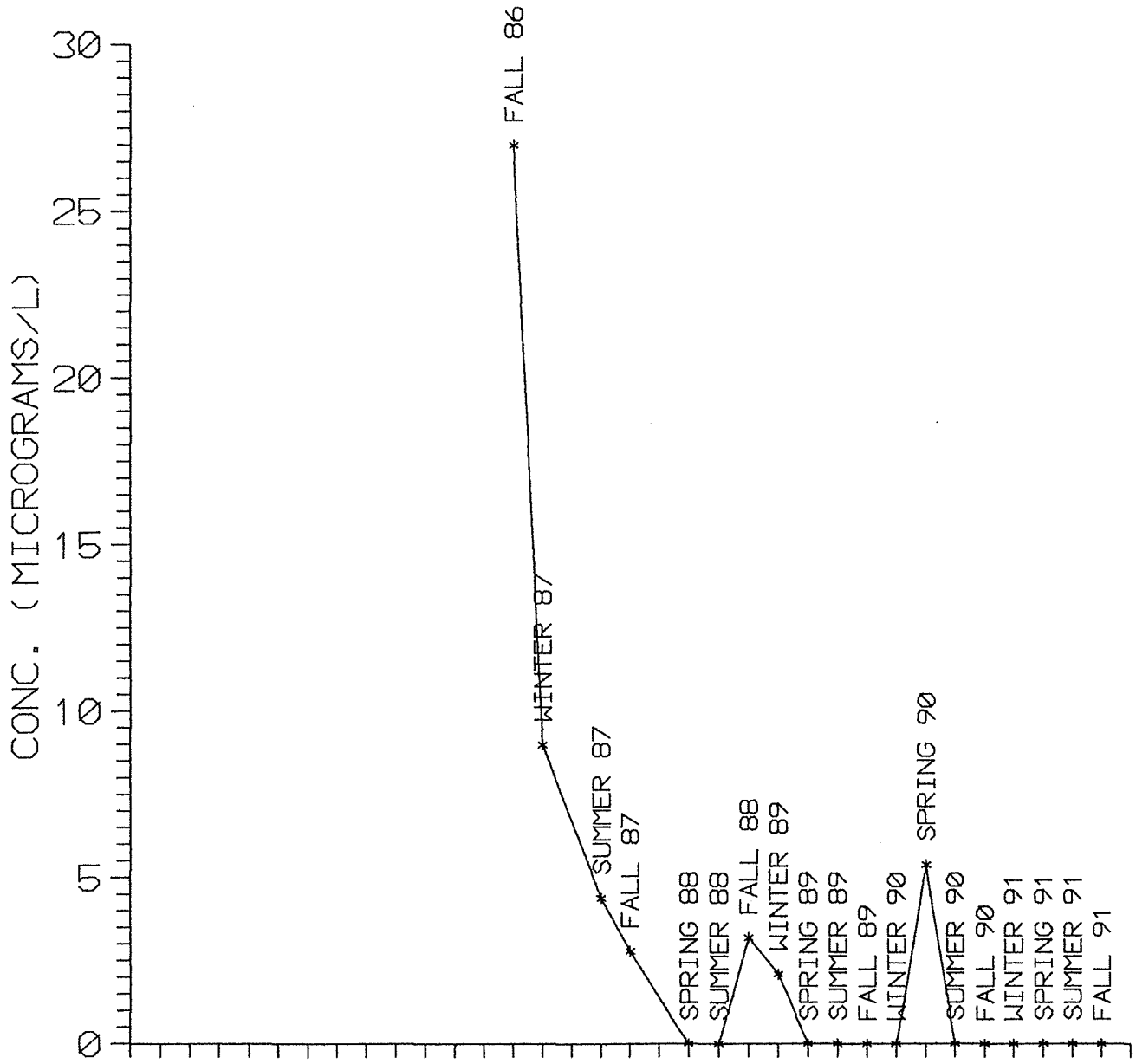

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS
OF RANNEY WELL RC-2
CONC. (MICROGRAMS/L)
200000
150000
100000
50000
0
FALL 87
SPRING 88
SUMMER 88
WINTER 89
SPRING 89
SUMMER 89
FALL 89
WINTER 90
SPRING 90
SUMMER 90
FALL 90
WINTER 91
SPRING 91
SUMMER 91
FALL 91
SAMPLING QUARTER
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF RANNEY WELL RC-3



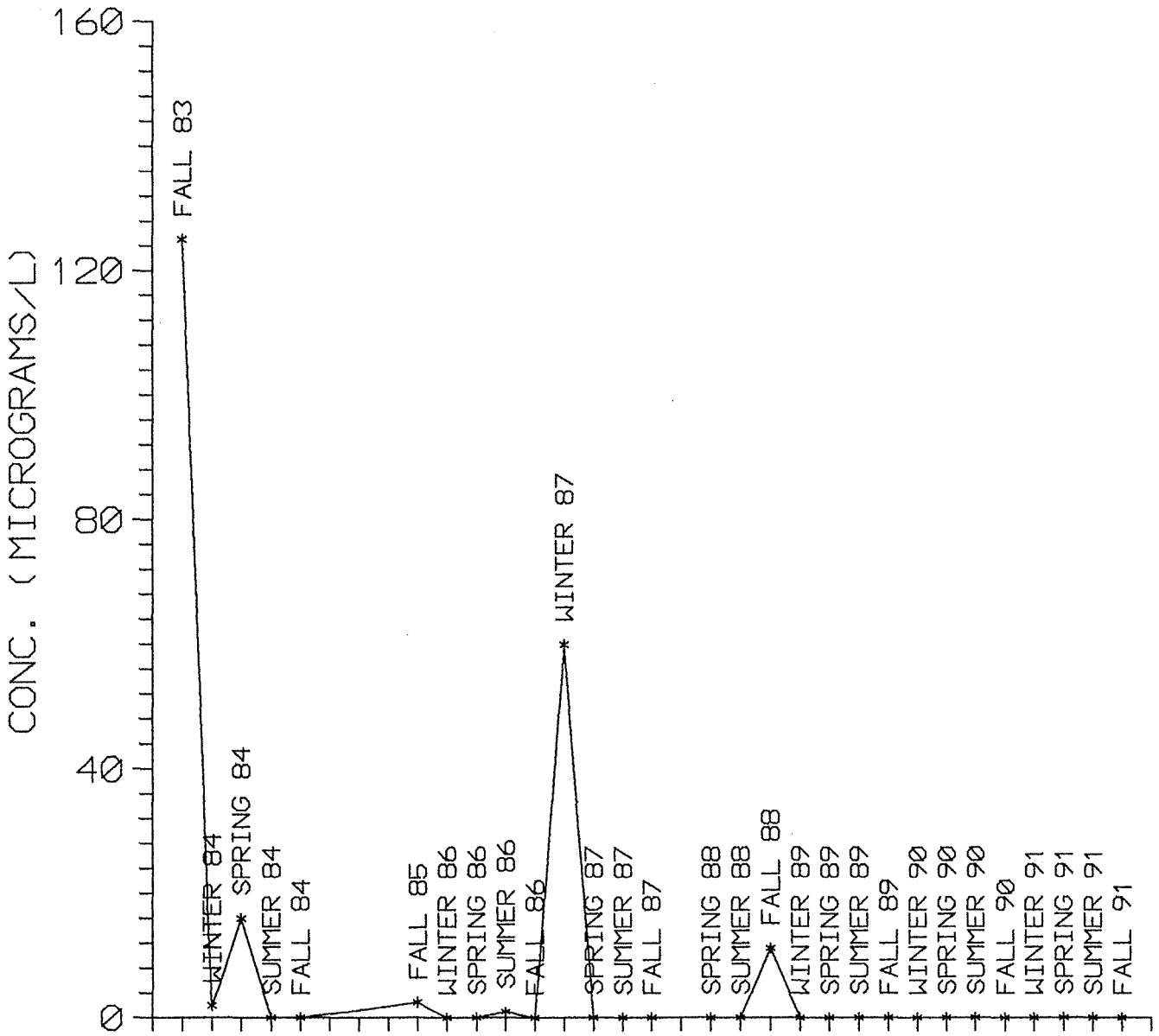
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF SHALLOW DOLOMITE WELL 3A



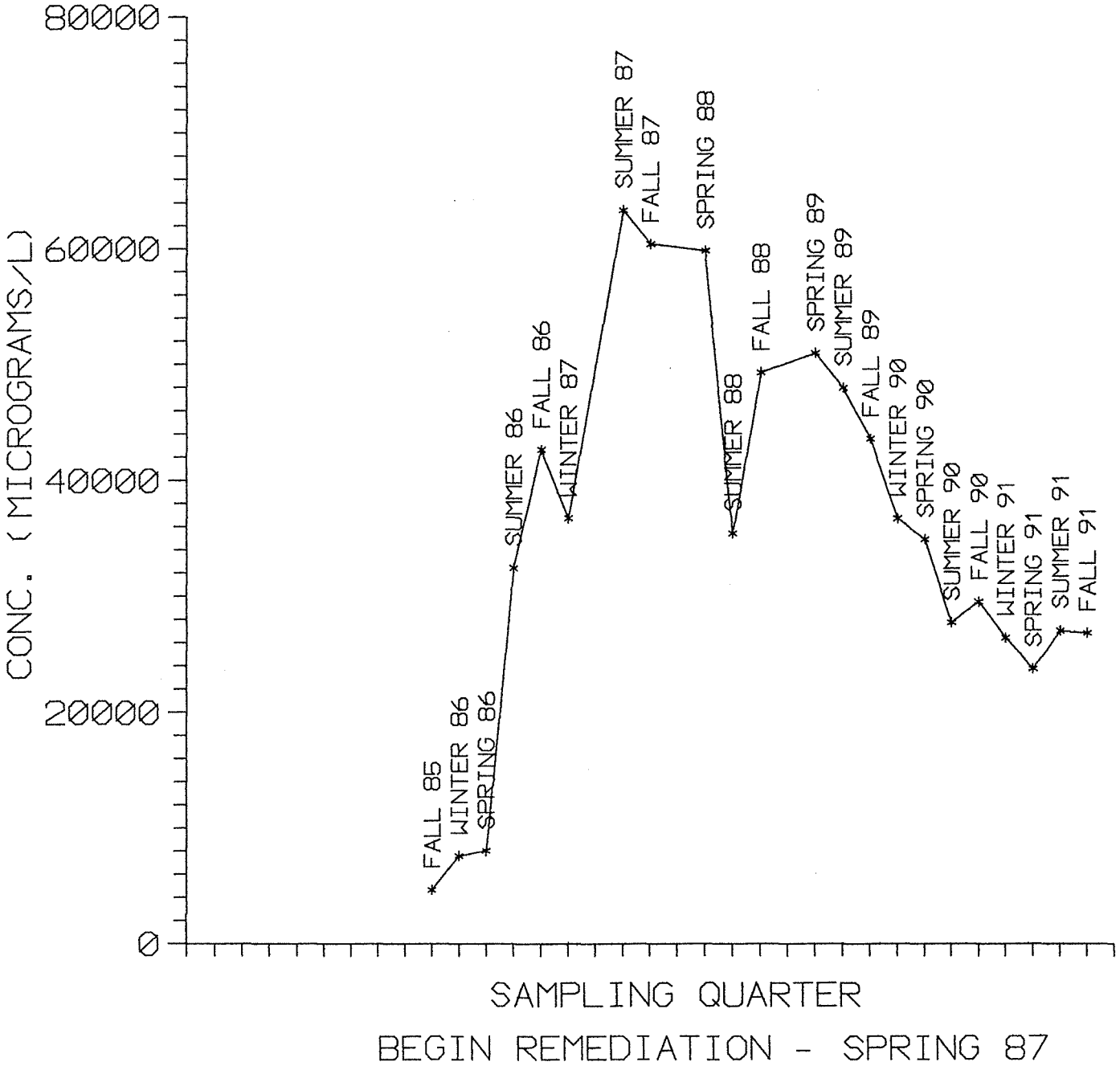
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF SHALLOW DOLOMITE WELL 7



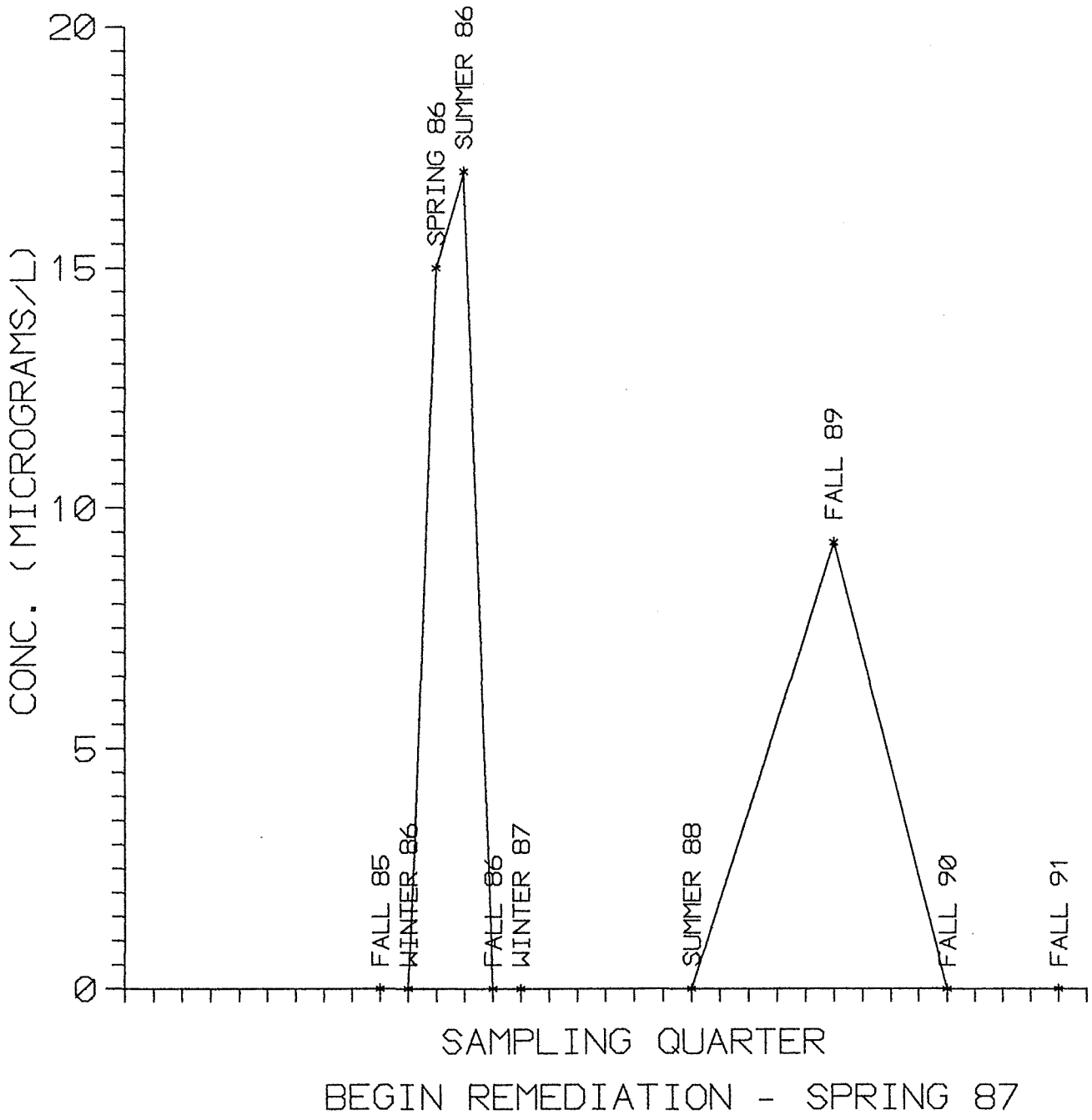
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF SHALLOW DOLOMITE WELL 21A



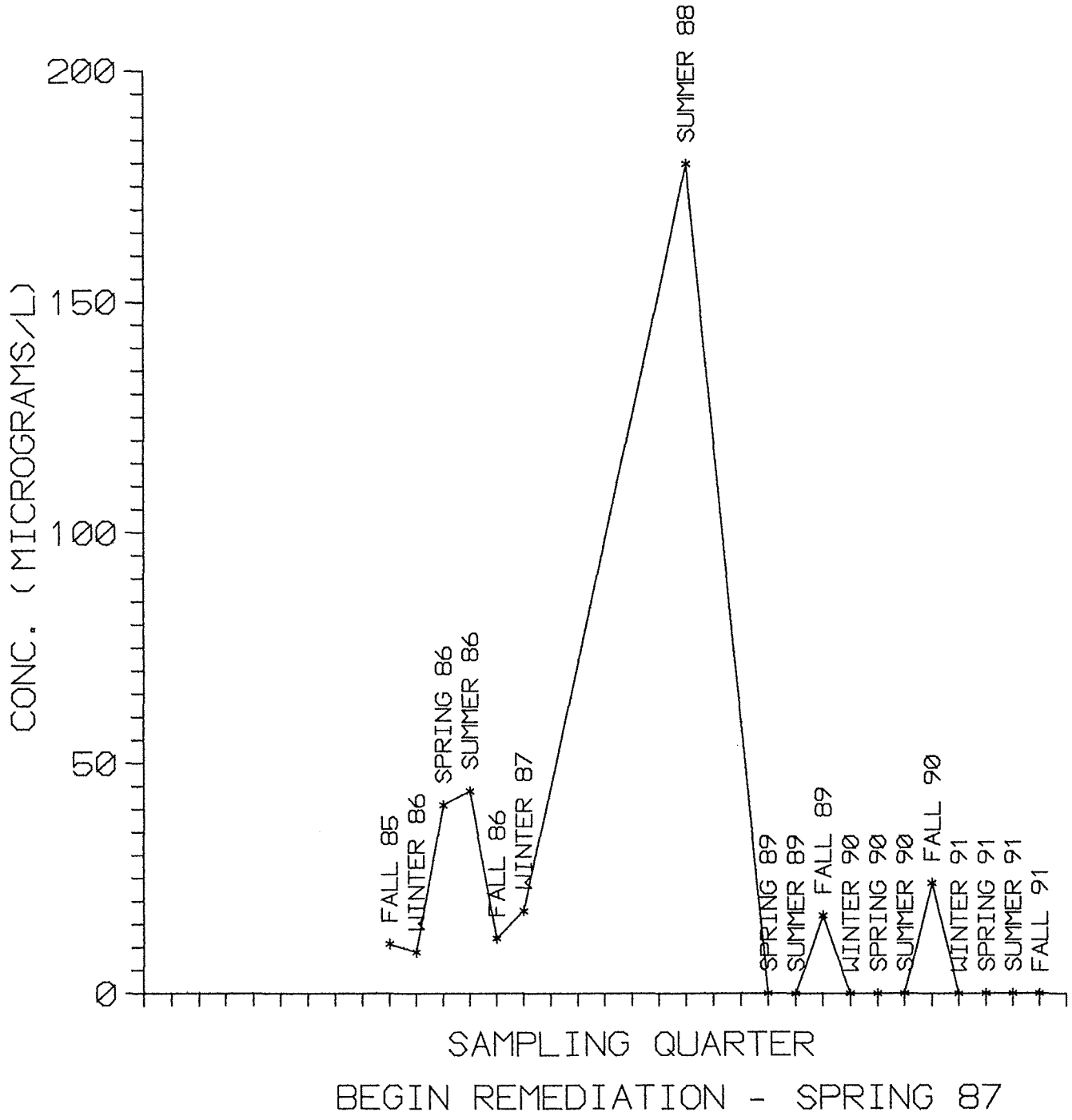
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF SHALLOW DOLOMITE WELL 22



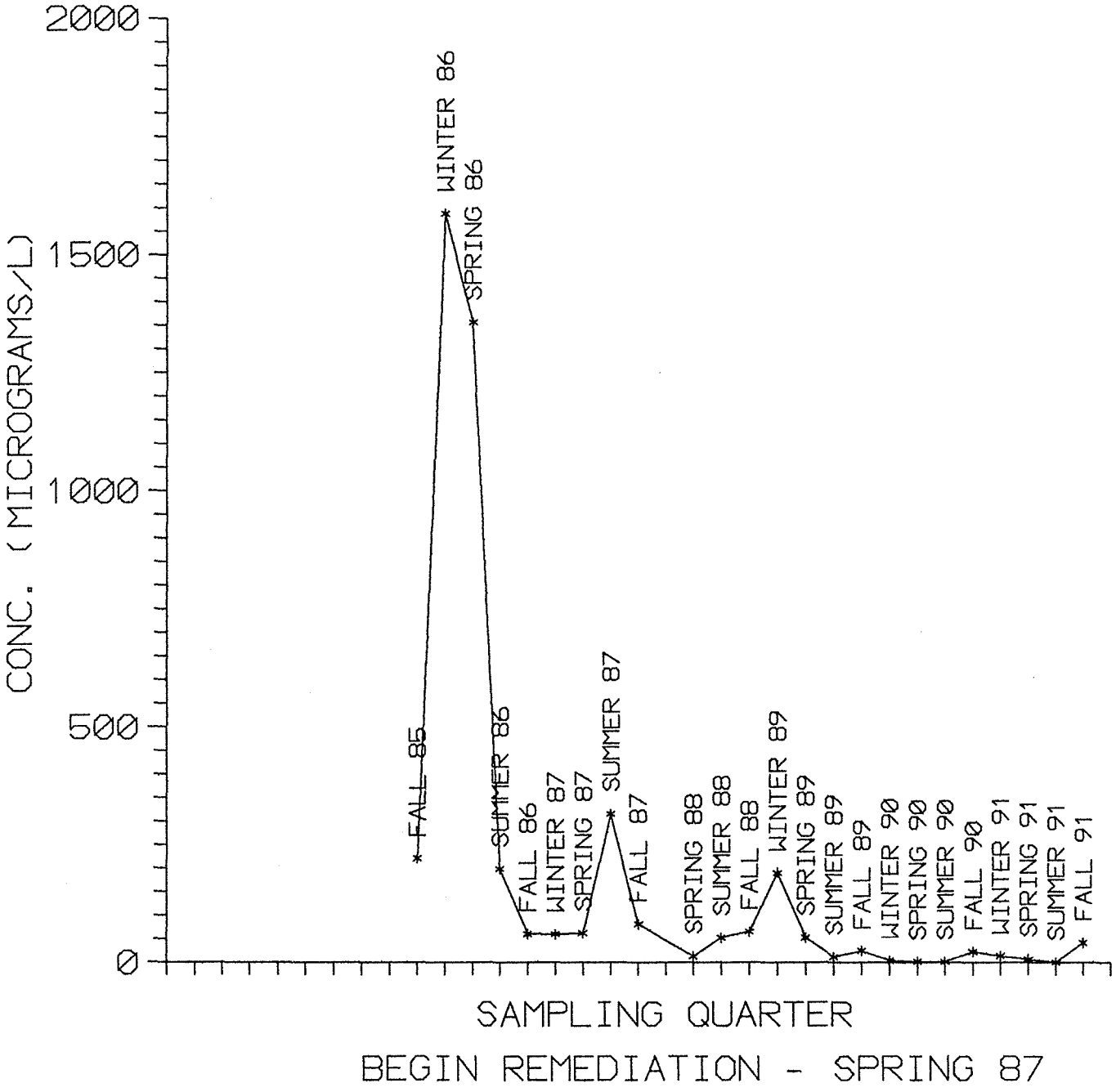
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF SHALLOW DOLOMITE WELL 23



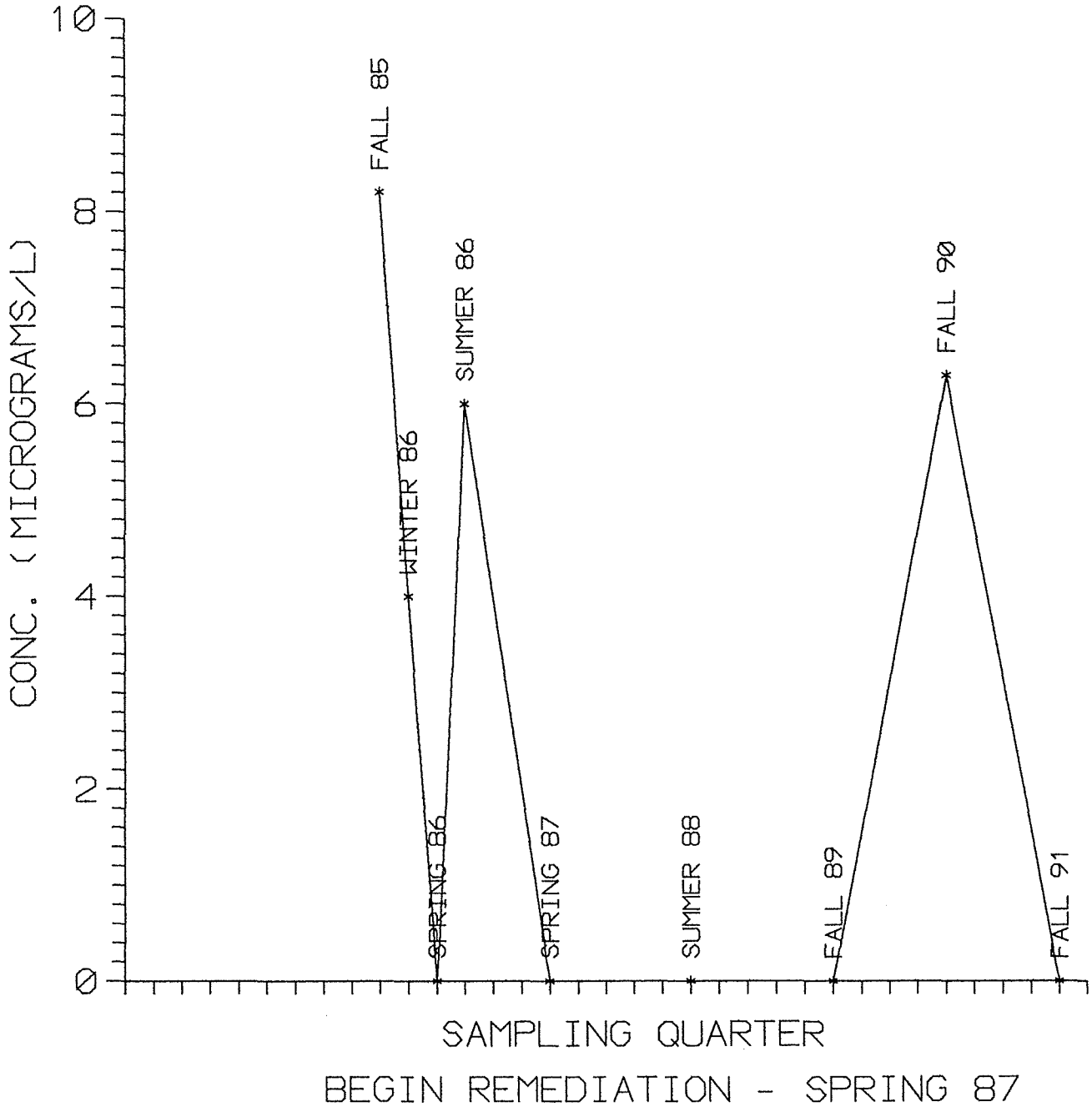
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF SHALLOW DOLOMITE WELL 24A



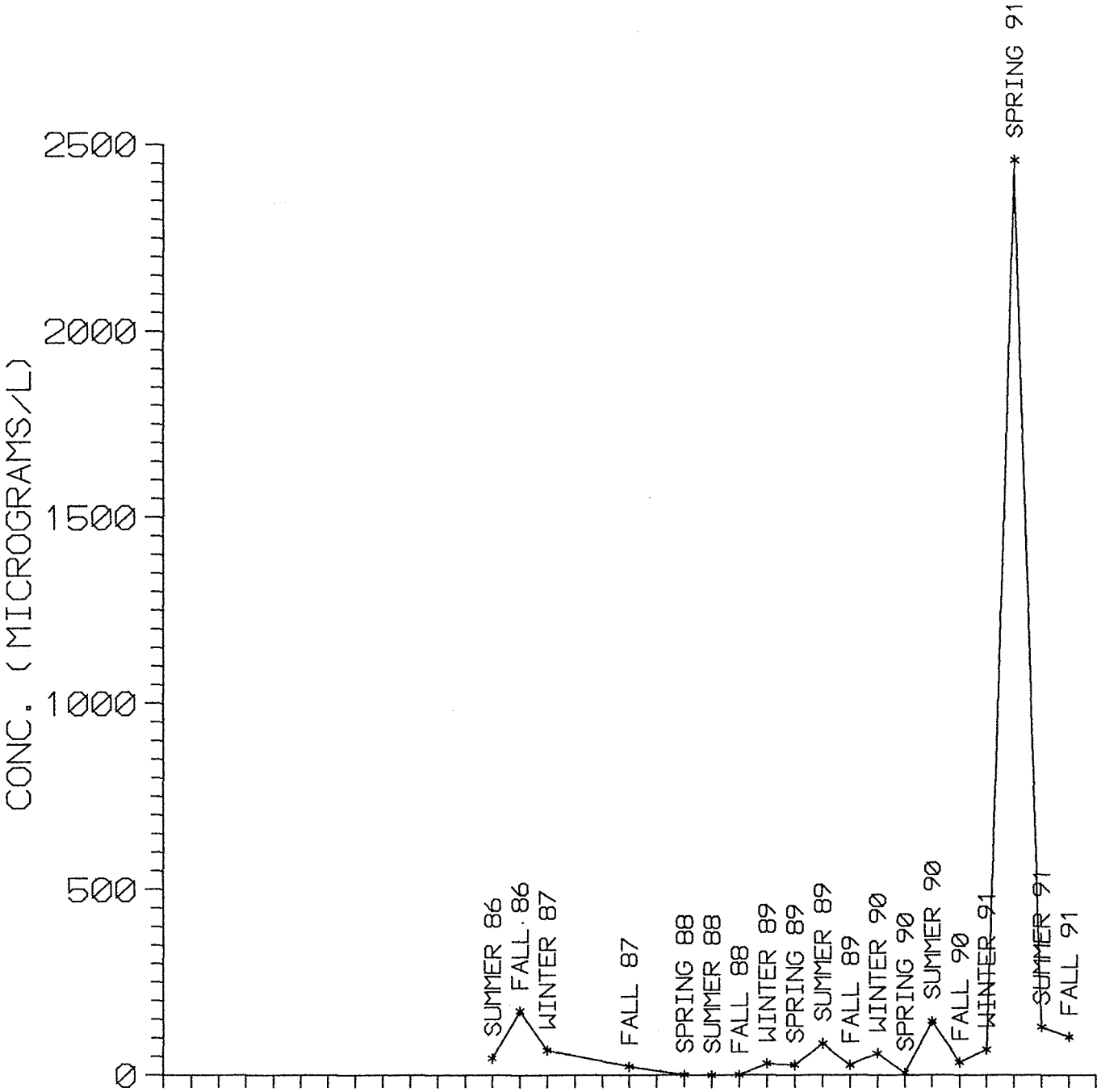
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF SHALLOW DOLOMITE WELL 25



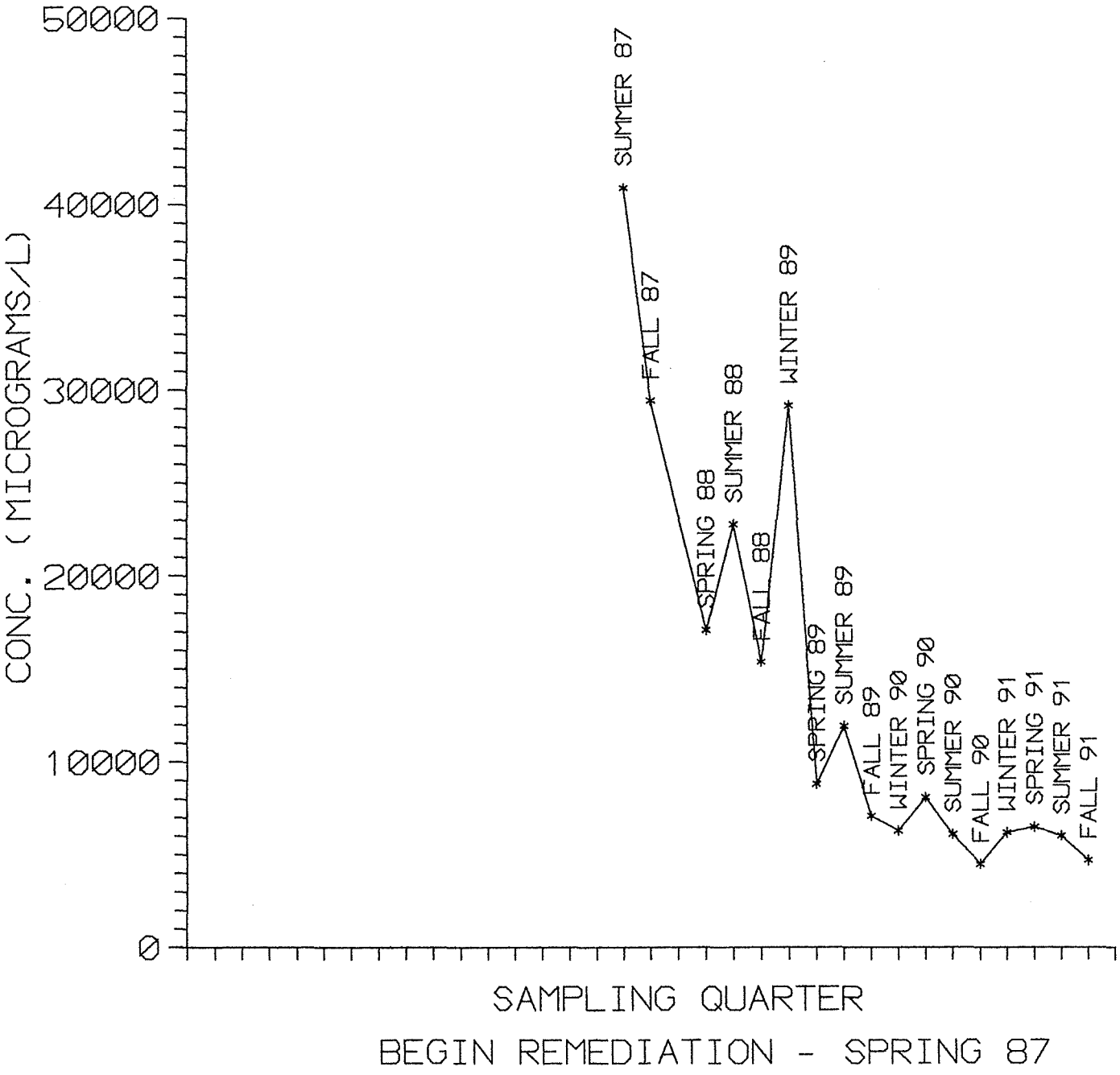
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF SHALLOW DOLOMITE WELL 28



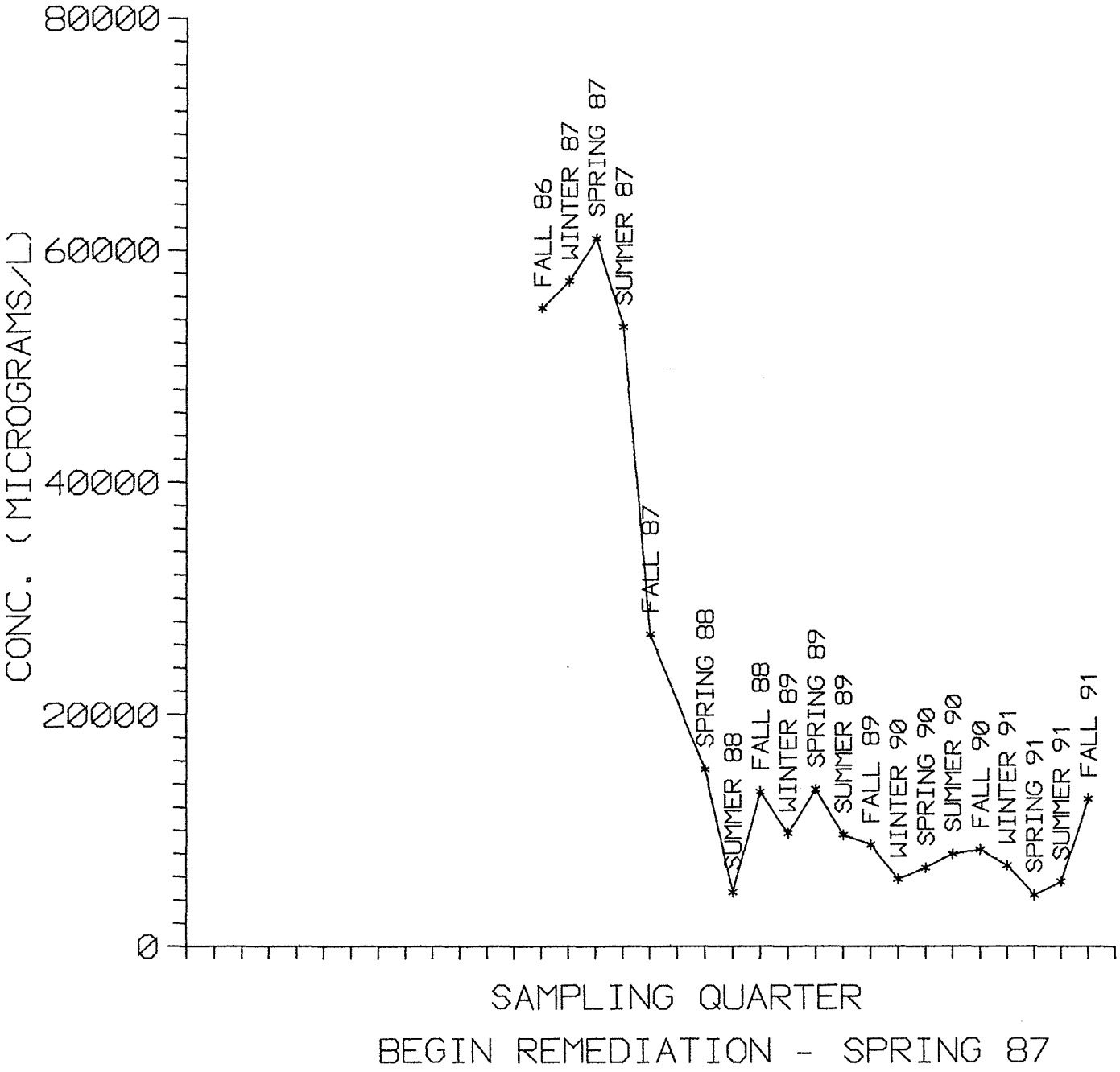
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF SHALLOW DOLOMITE WELL 29



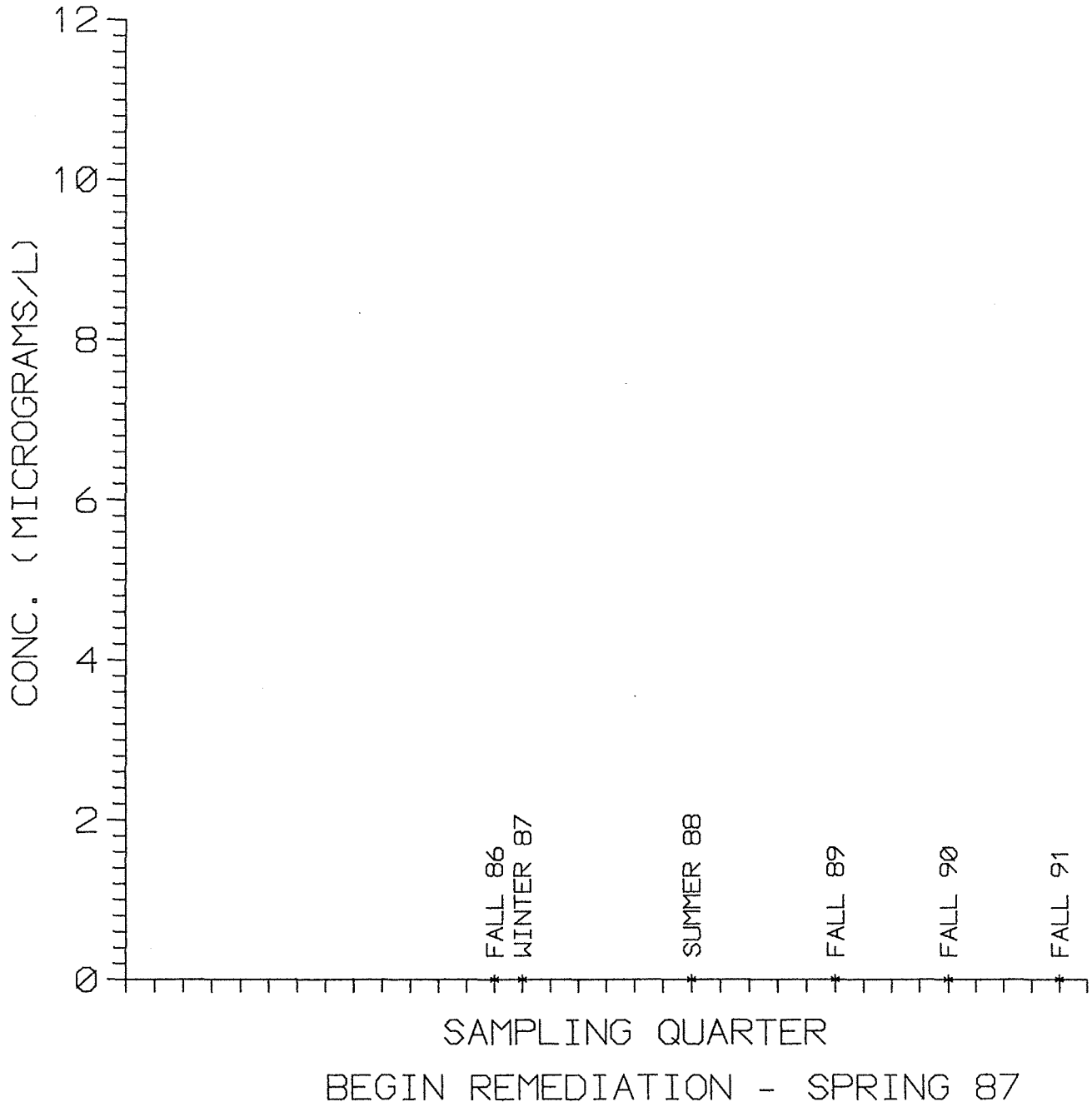
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF SHALLOW DOLOMITE WELL 38



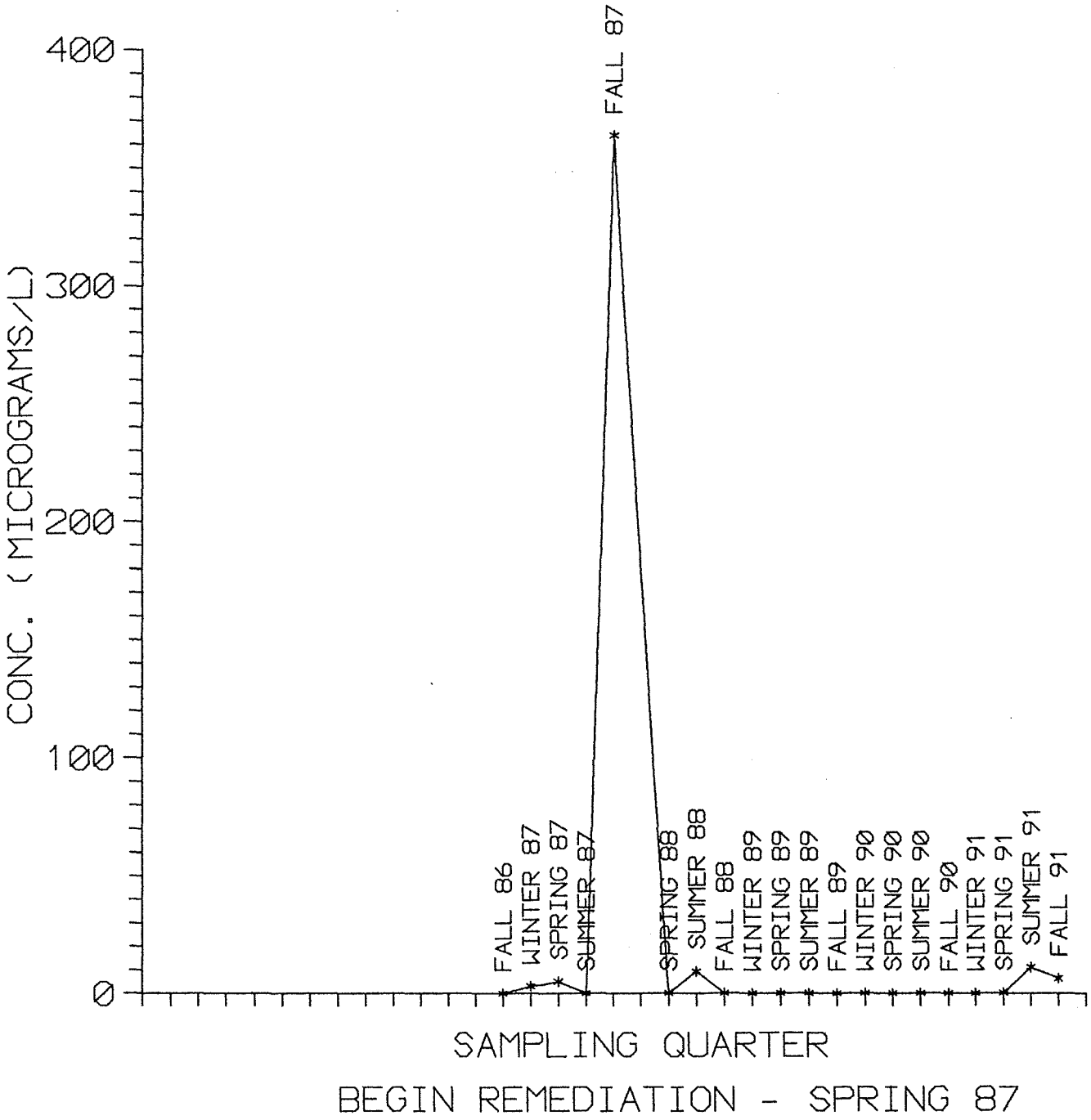
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF SHALLOW DOLOMITE WELL 39



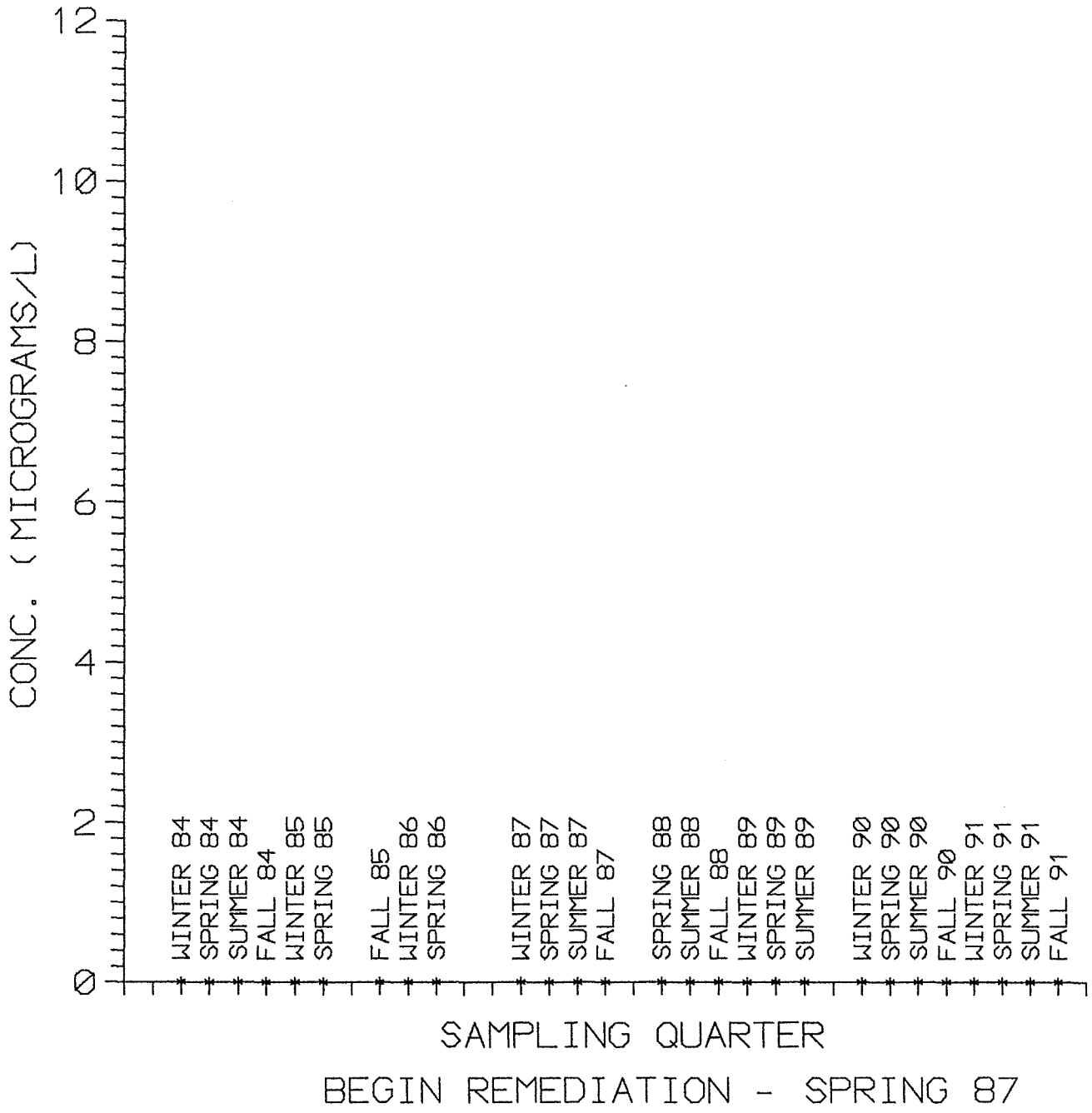
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF SHALLOW DOLOMITE WELL 40

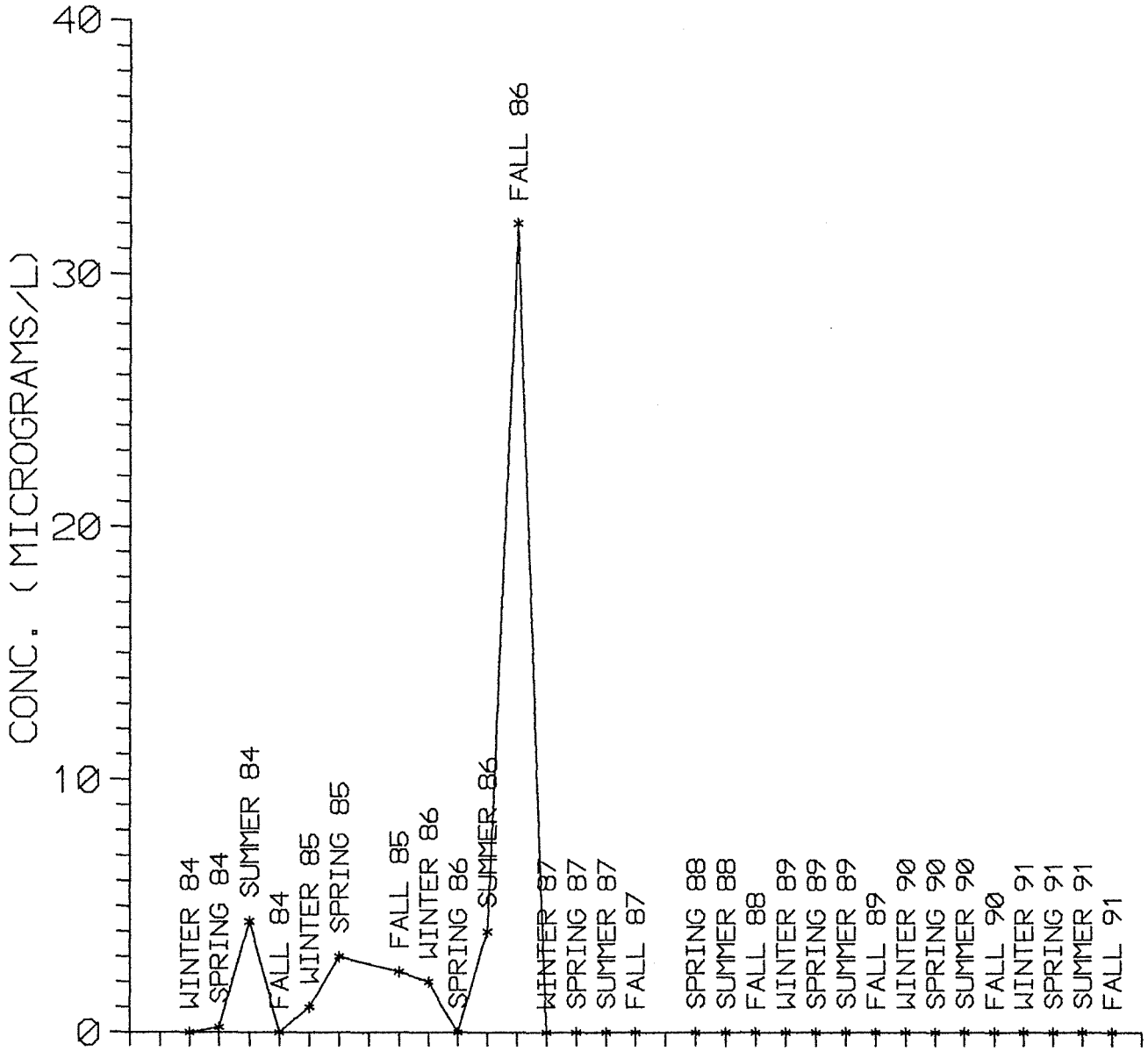


BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF DEEP DOLOMITE WELL MW-1

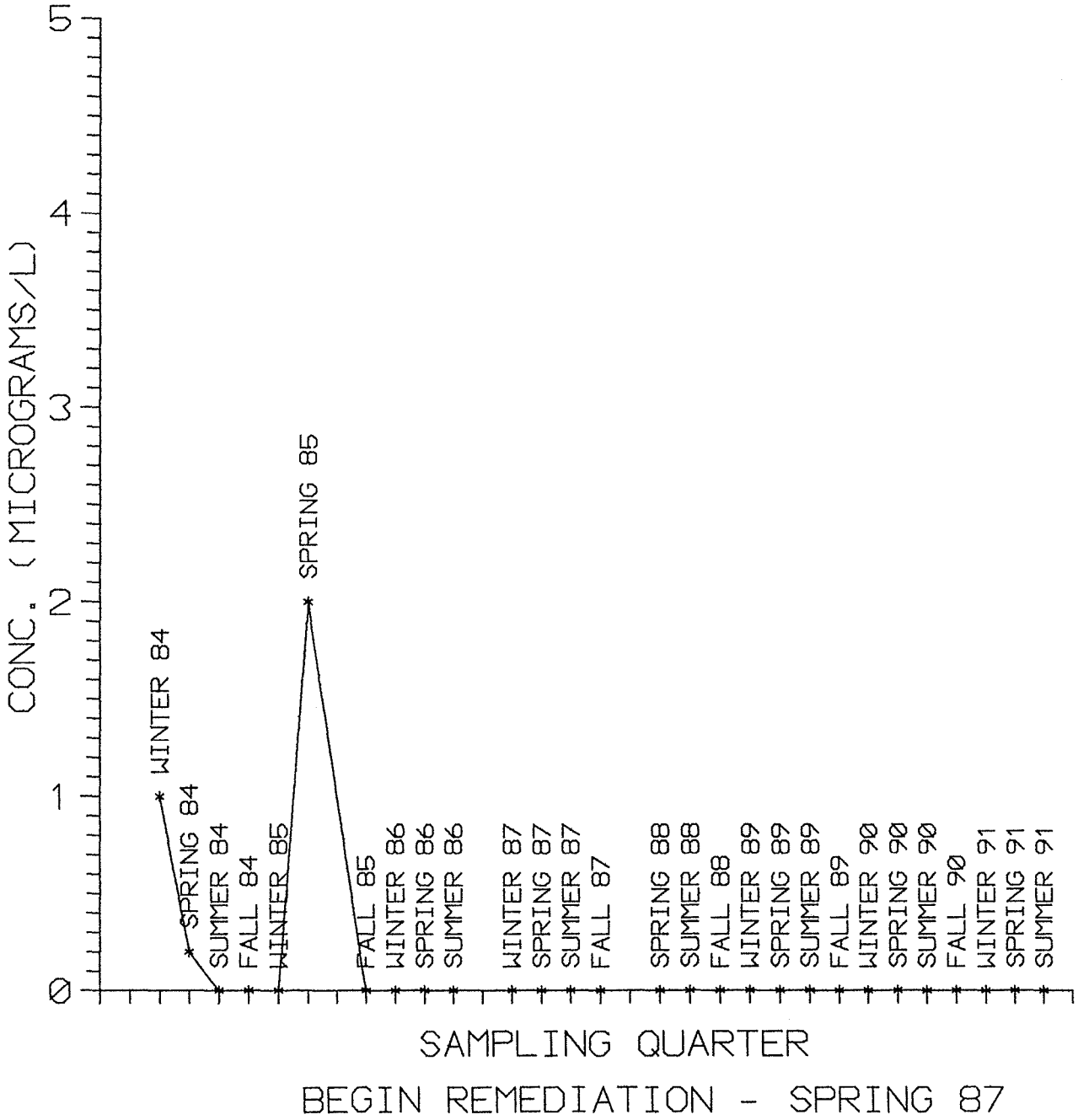


TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF DEEP DOLOMITE WELL MW-2



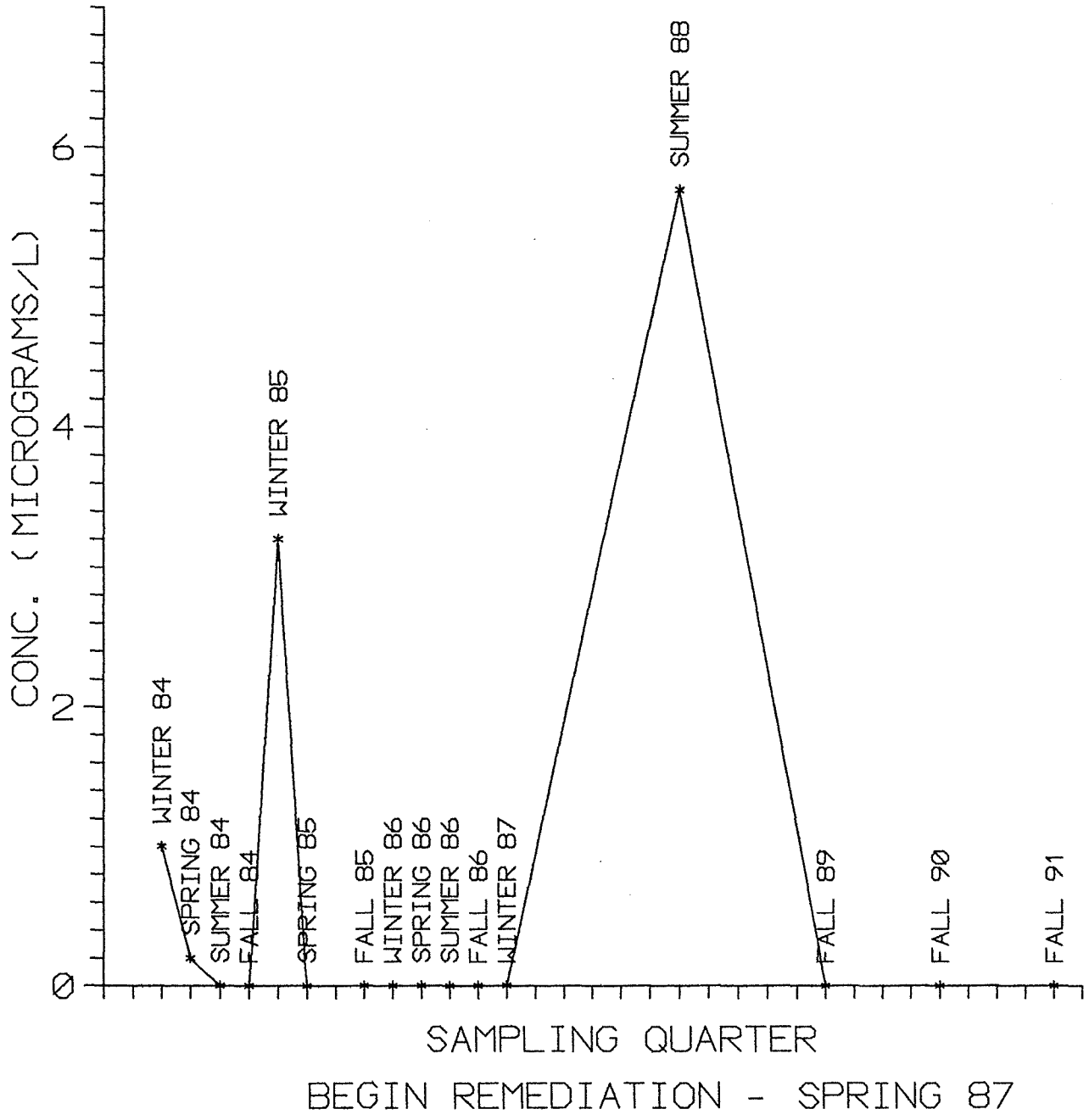
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF DEEP DOLOMITE WELL MW-3



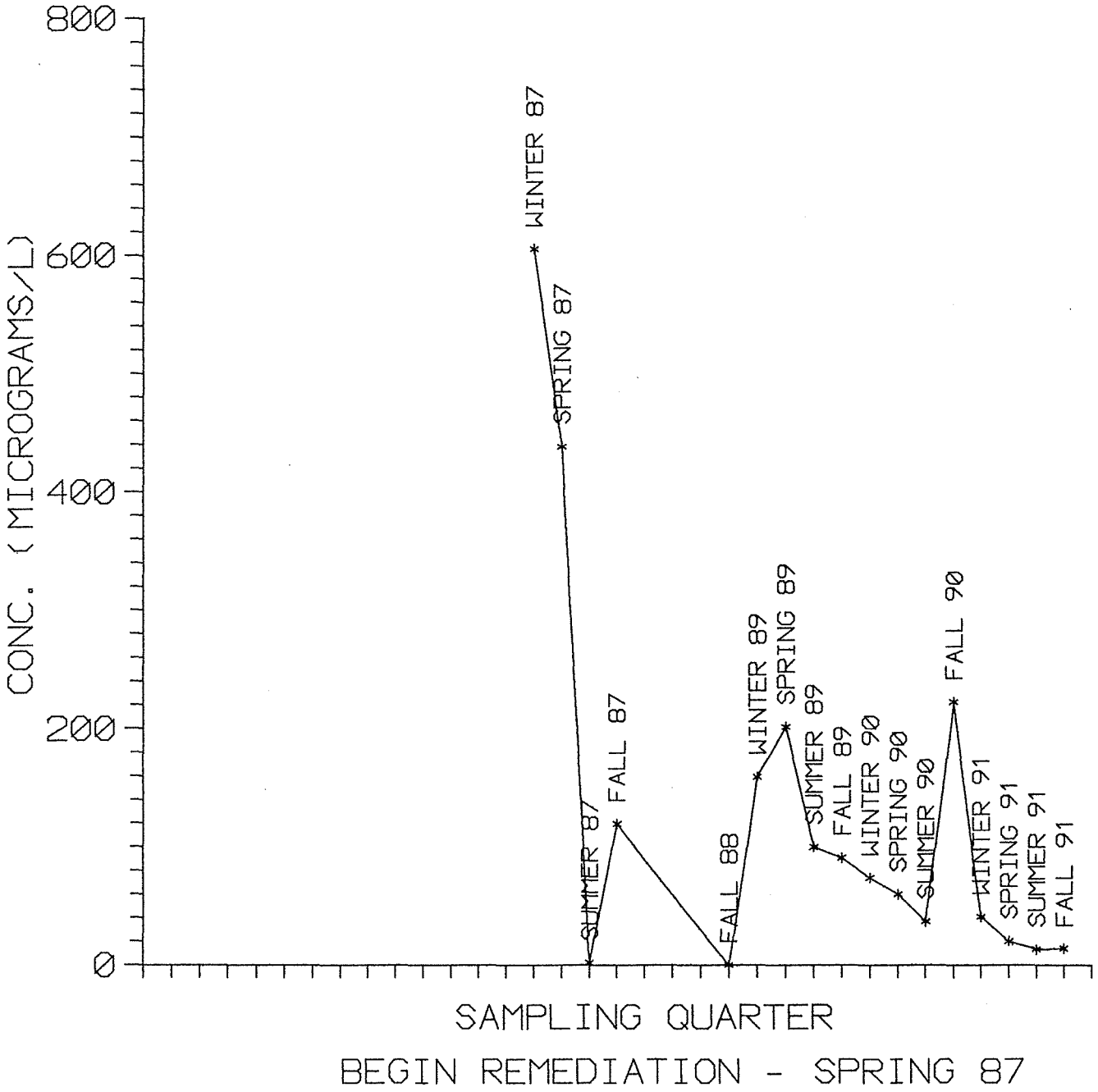
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF DEEP DOLOMITE WELL MW-4



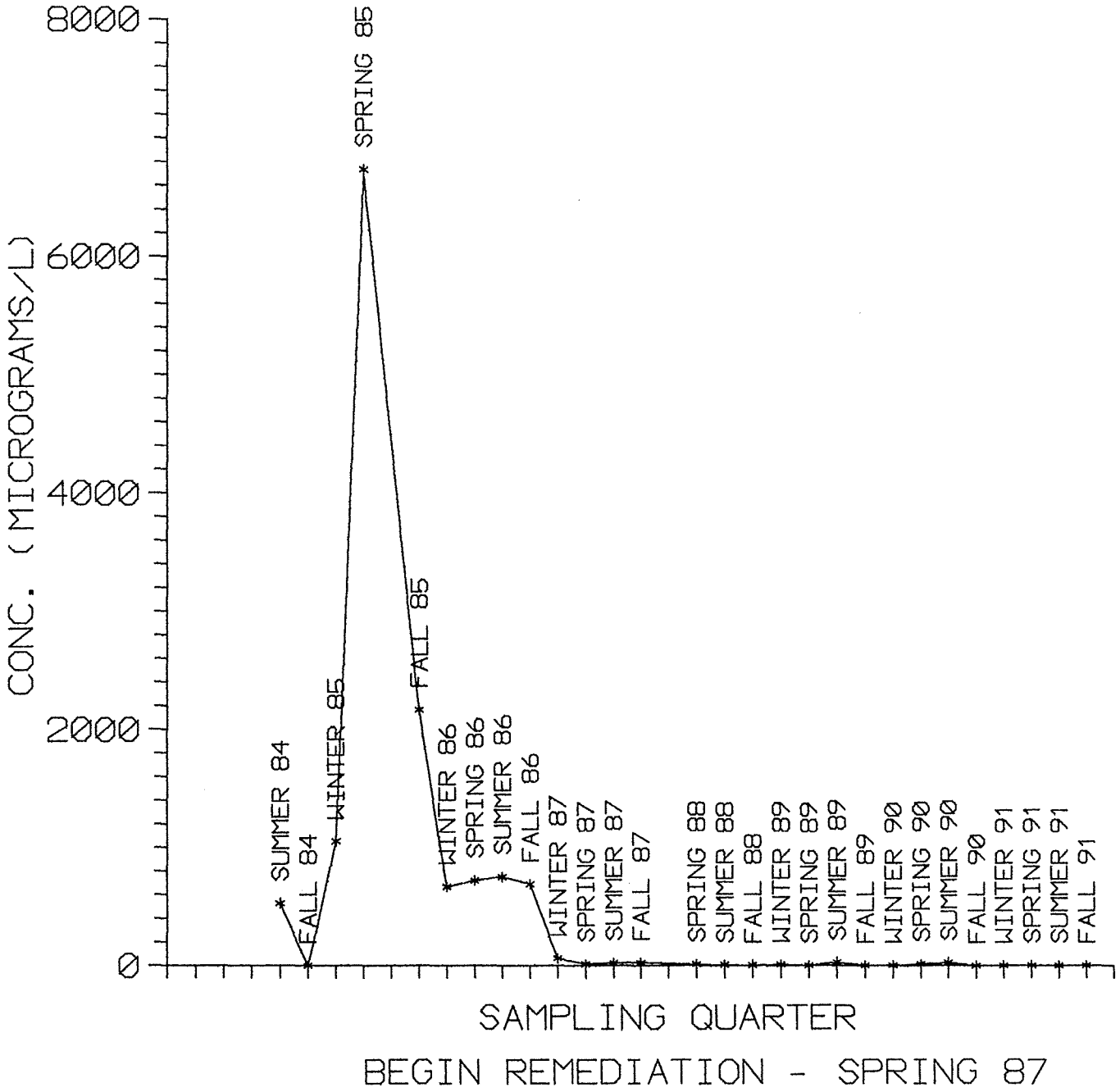
BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF DEEP DOLOMITE WELL 30



BEGIN REMEDIATION - SPRING 87

TREND ANALYSIS OF TOTAL VOC CONCENTRATIONS OF DEEP DOLOMITE WELL PW-8



BEGIN REMEDIATION - SPRING 87

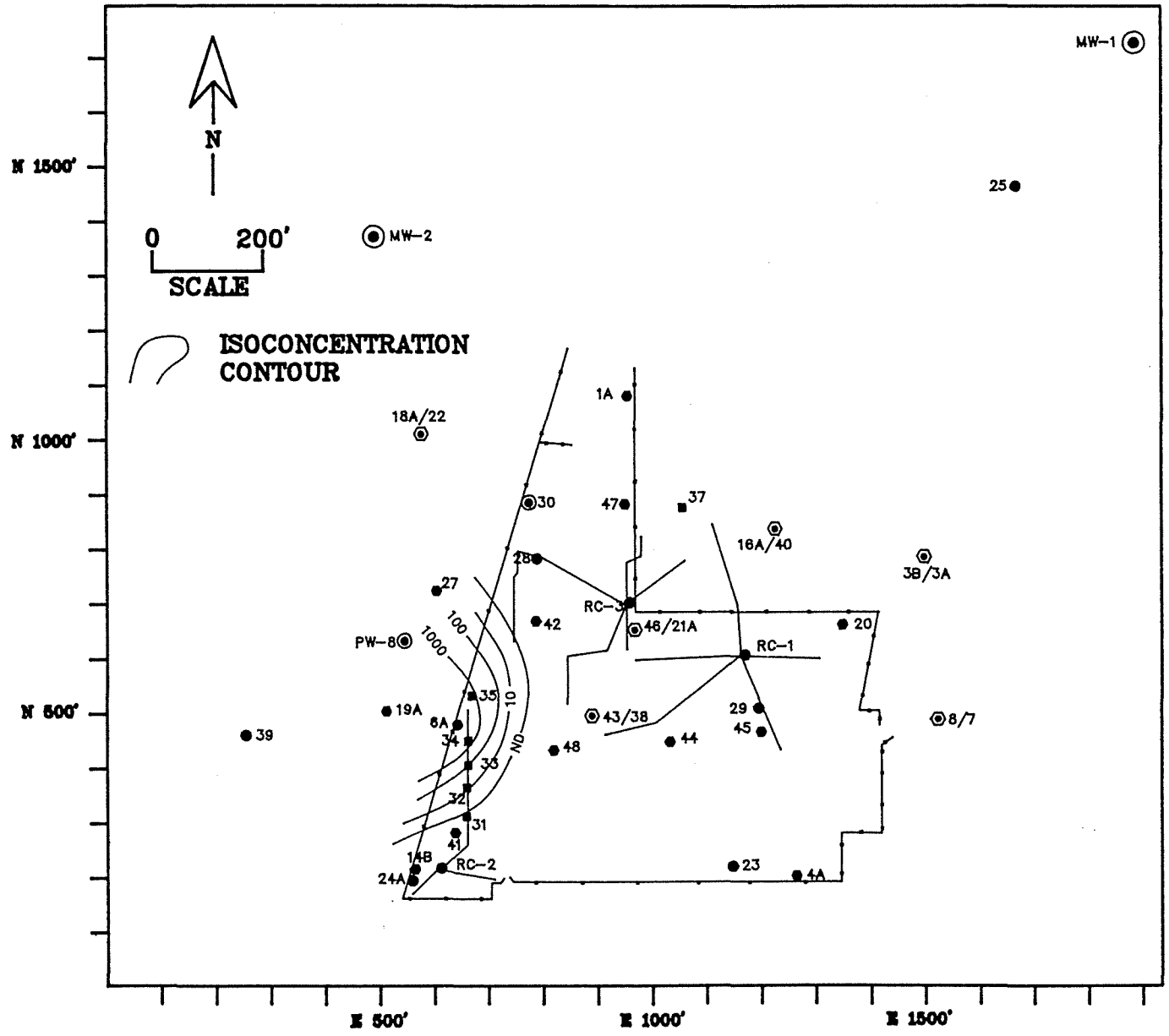
APPENDIX E

Isoconcentration Maps for Non-BTEX Compounds Detected in the Glacial and Dolomite Aquifers

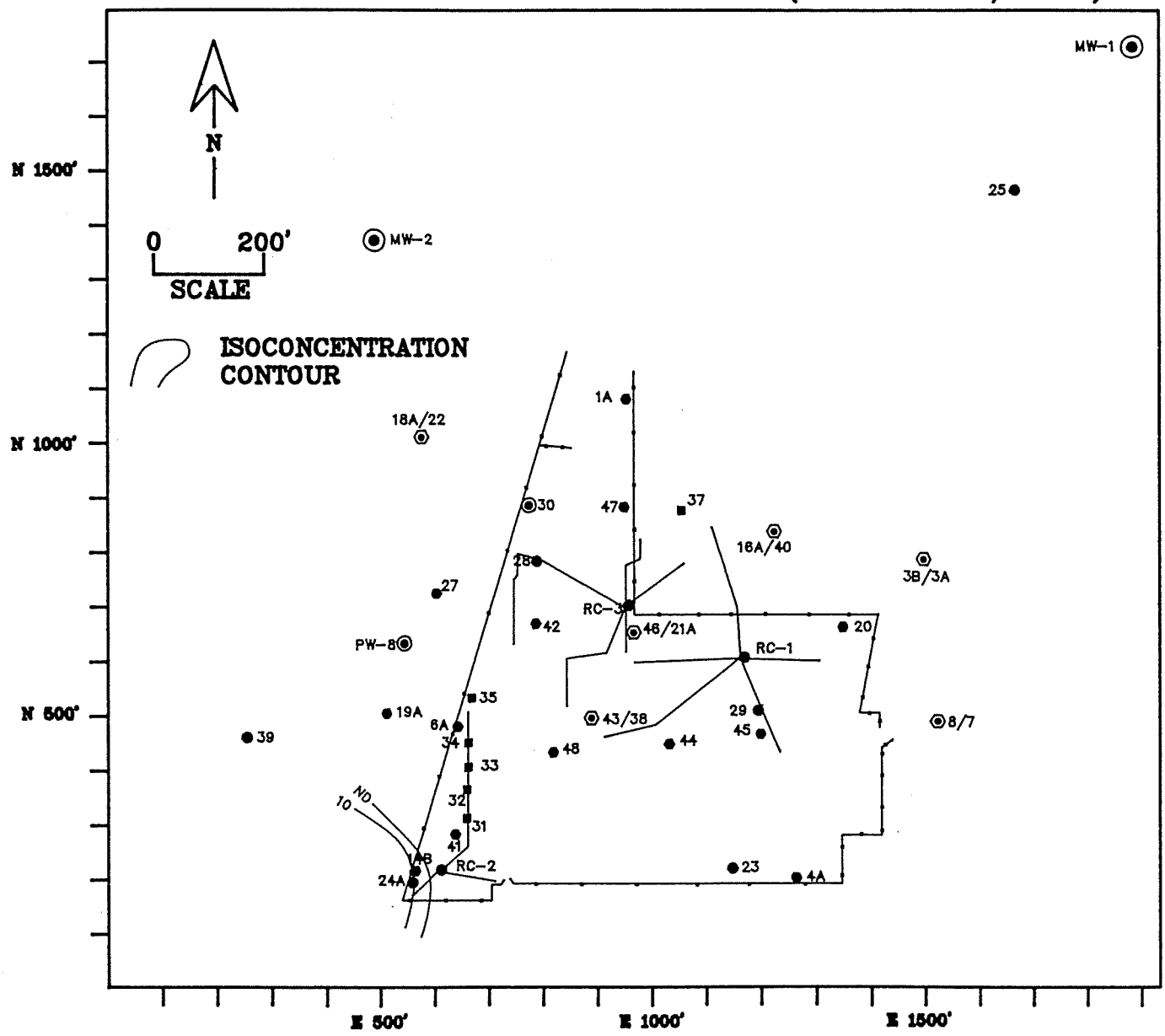
Glacial Aquifer - Winter, 1991 - Carbon Disulfide
Glacial Aquifer - Spring, 1991 - Tetrachloroethene
Glacial Aquifer - Fall, 1991 - Chloromethane

Glacial Aquifer - Fall, 1991 - 1,2-Dichloroethene (total)
Glacial Aquifer - Fall, 1991 - 1,2-Dichloroethane
Glacial Aquifer - Fall, 1991 - Trichloroethene
Dolomite Aquifer - Winter, 1991 - Carbon Disulfide
Dolomite Aquifer - Fall, 1991 - 1,2-Dichloroethene (total)
Dolomite Aquifer - Fall, 1991 - Vinyl Chloride

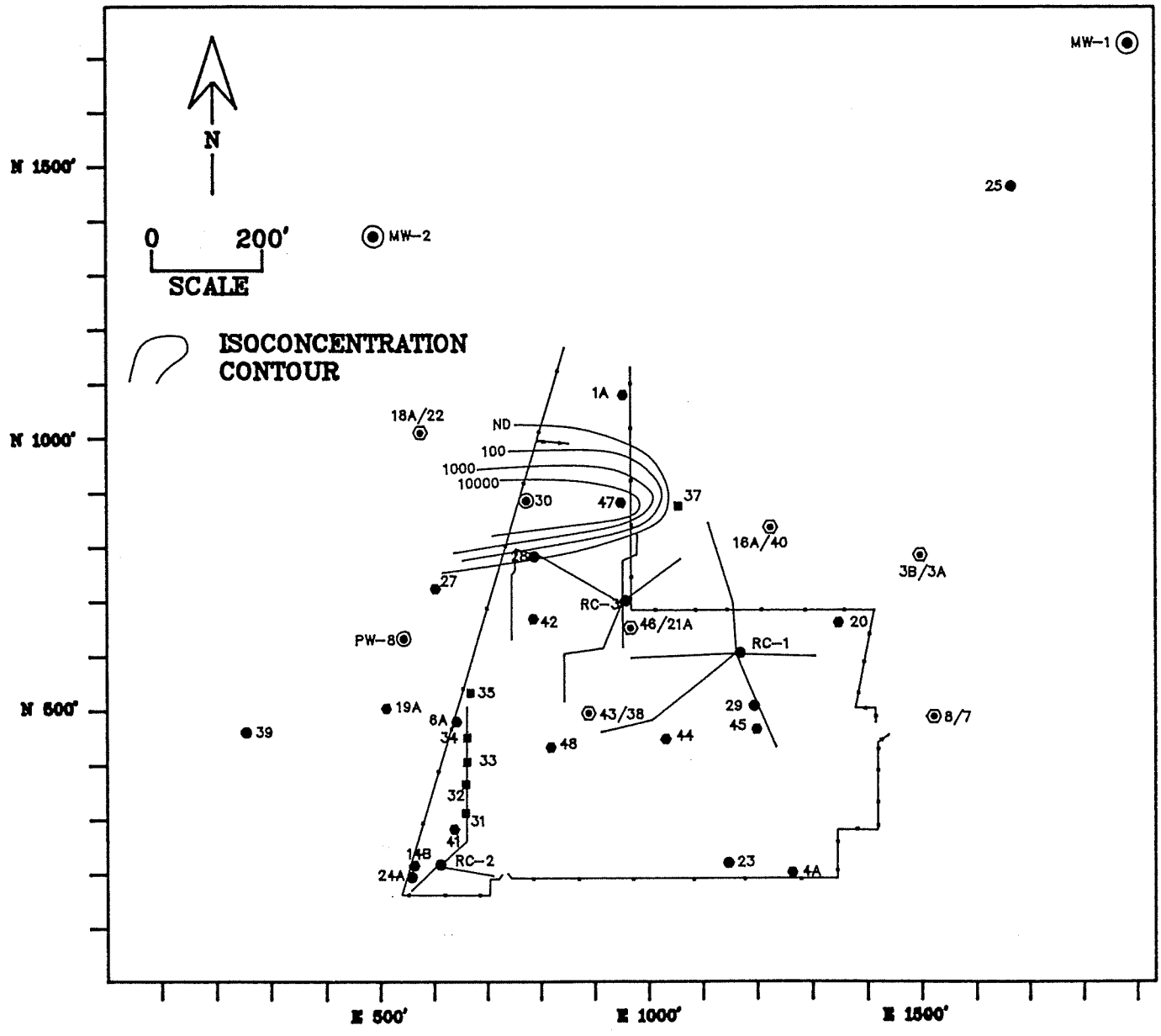
GLACIAL AQUIFER – WINTER 1991
CARBON DISULFIDE CONCENTRATIONS (MICROGRAMS/LITER)



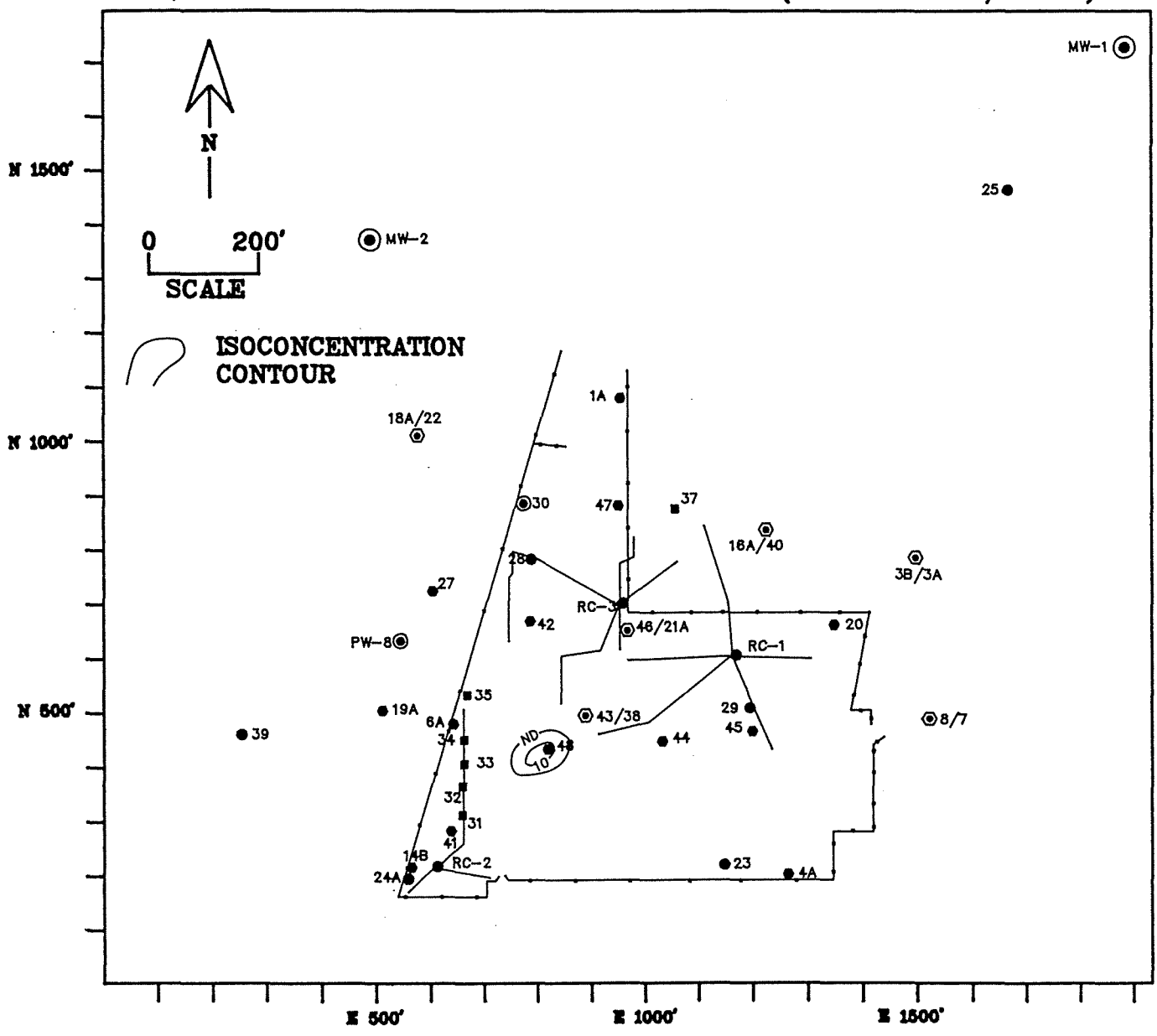
GLACIAL AQUIFER – SPRING 1991
TETRACHLOROETHENE CONCENTRATIONS (MICROGRAMS/LITER)



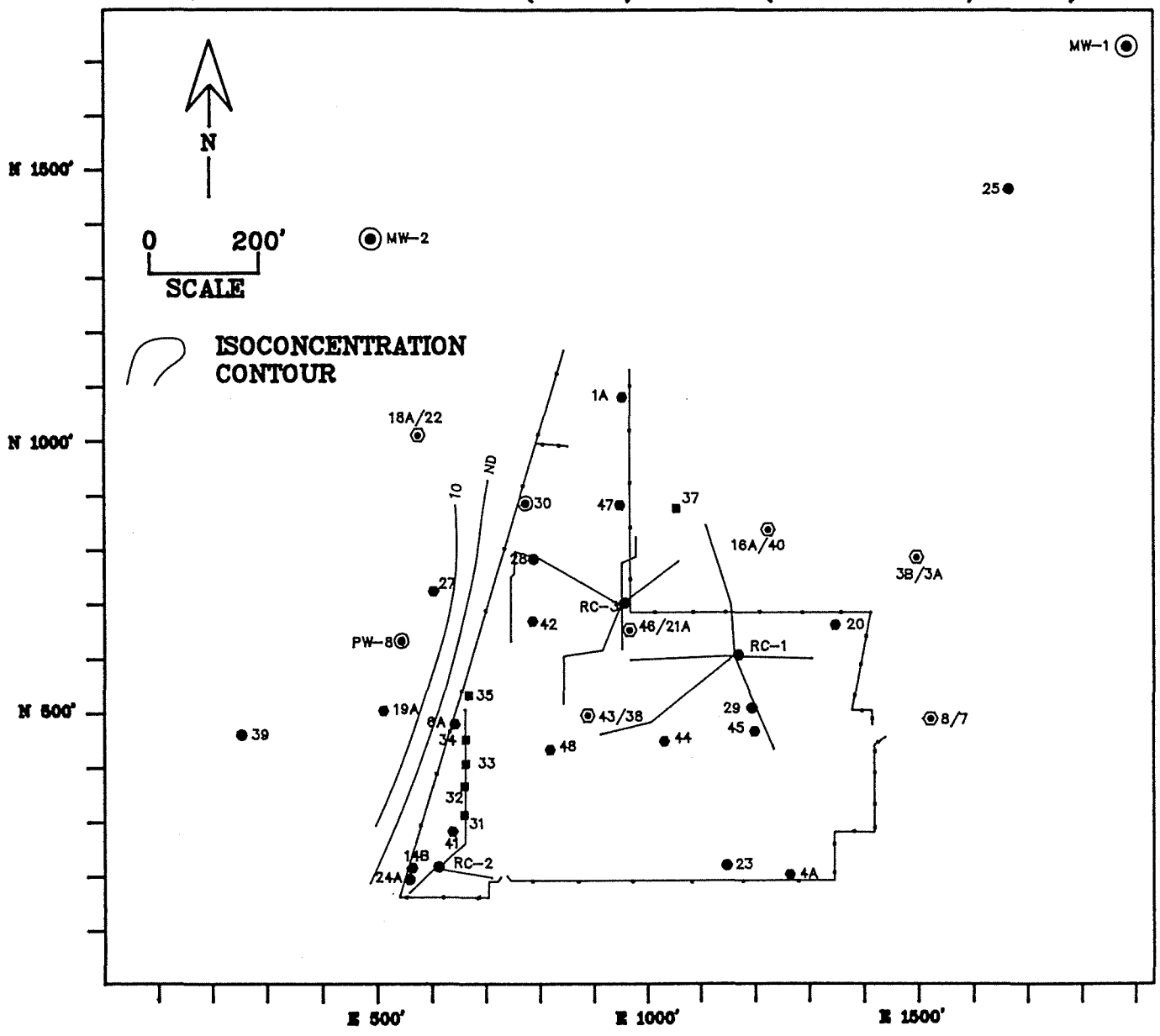
GLACIAL AQUIFER – FALL 1991
CHLOROMETHANE CONCENTRATIONS (MICROGRAMS/LITER)



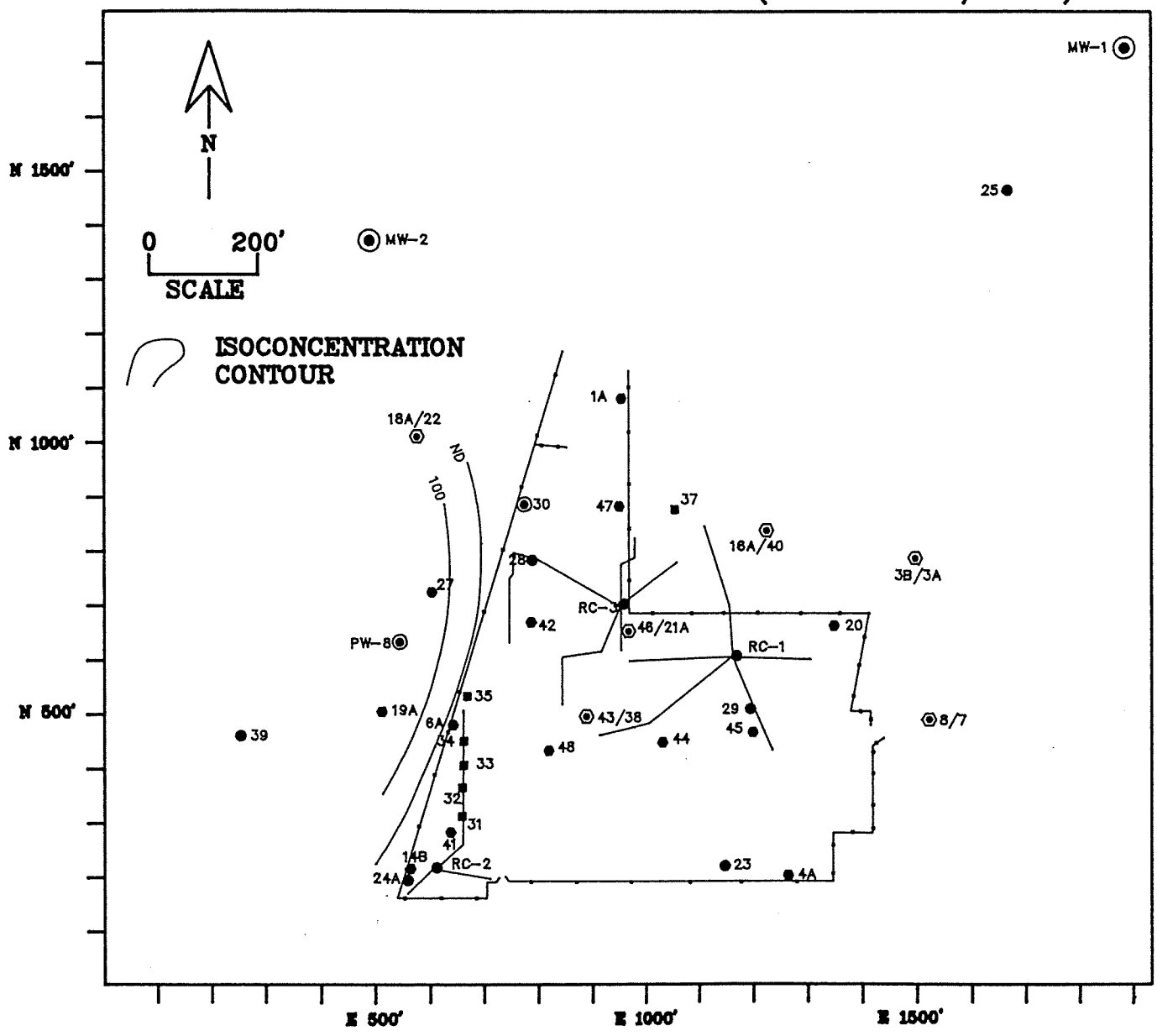
GLACIAL AQUIFER – FALL 1991
1,2–DICHLOROETHANE CONCENTRATIONS (MICROGRAMS/LITER)



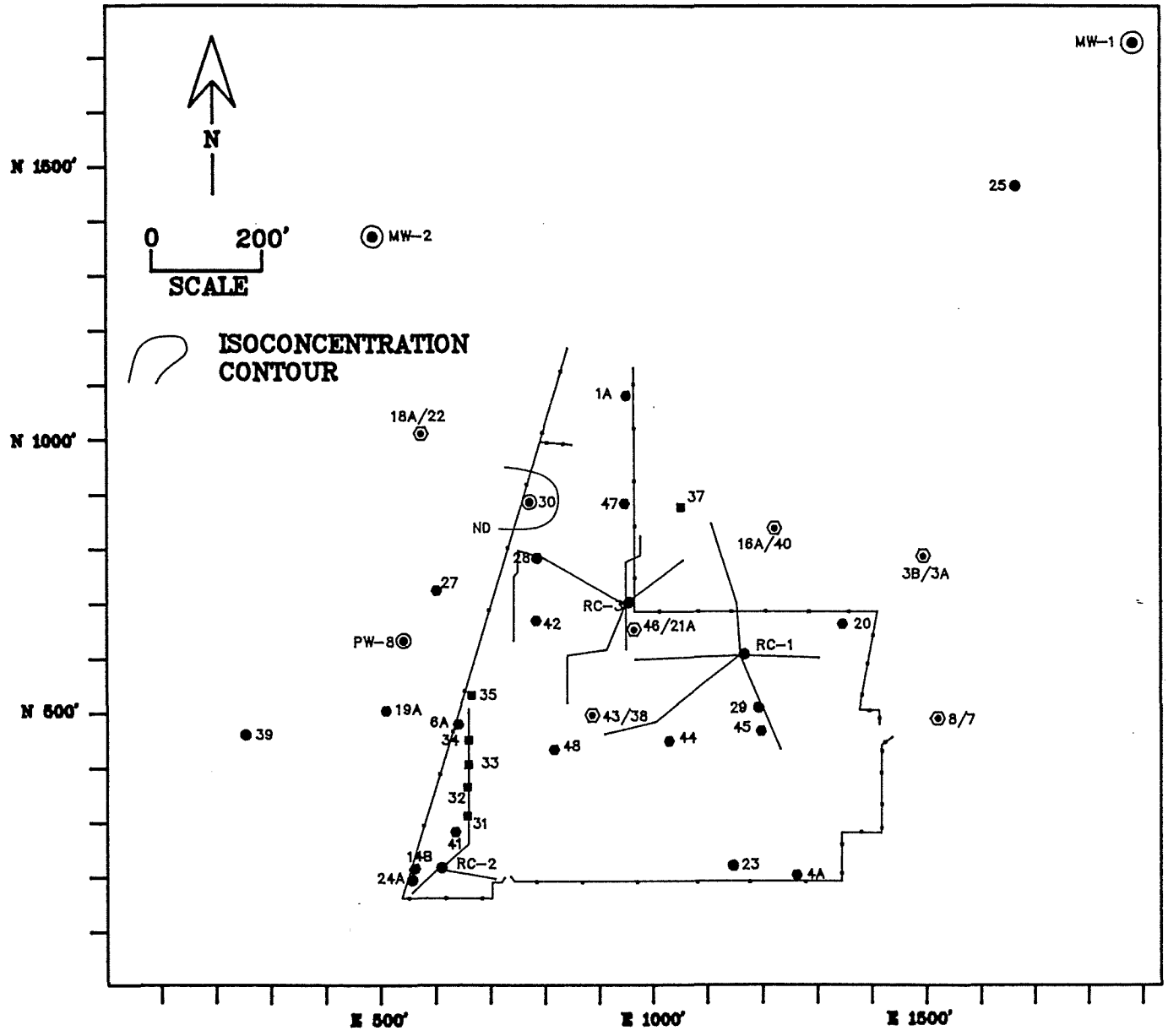
GLACIAL AQUIFER – FALL 1991
1,2–DICHLOROETHENE (TOTAL) CONC. (MICROGRAMS/LITER)



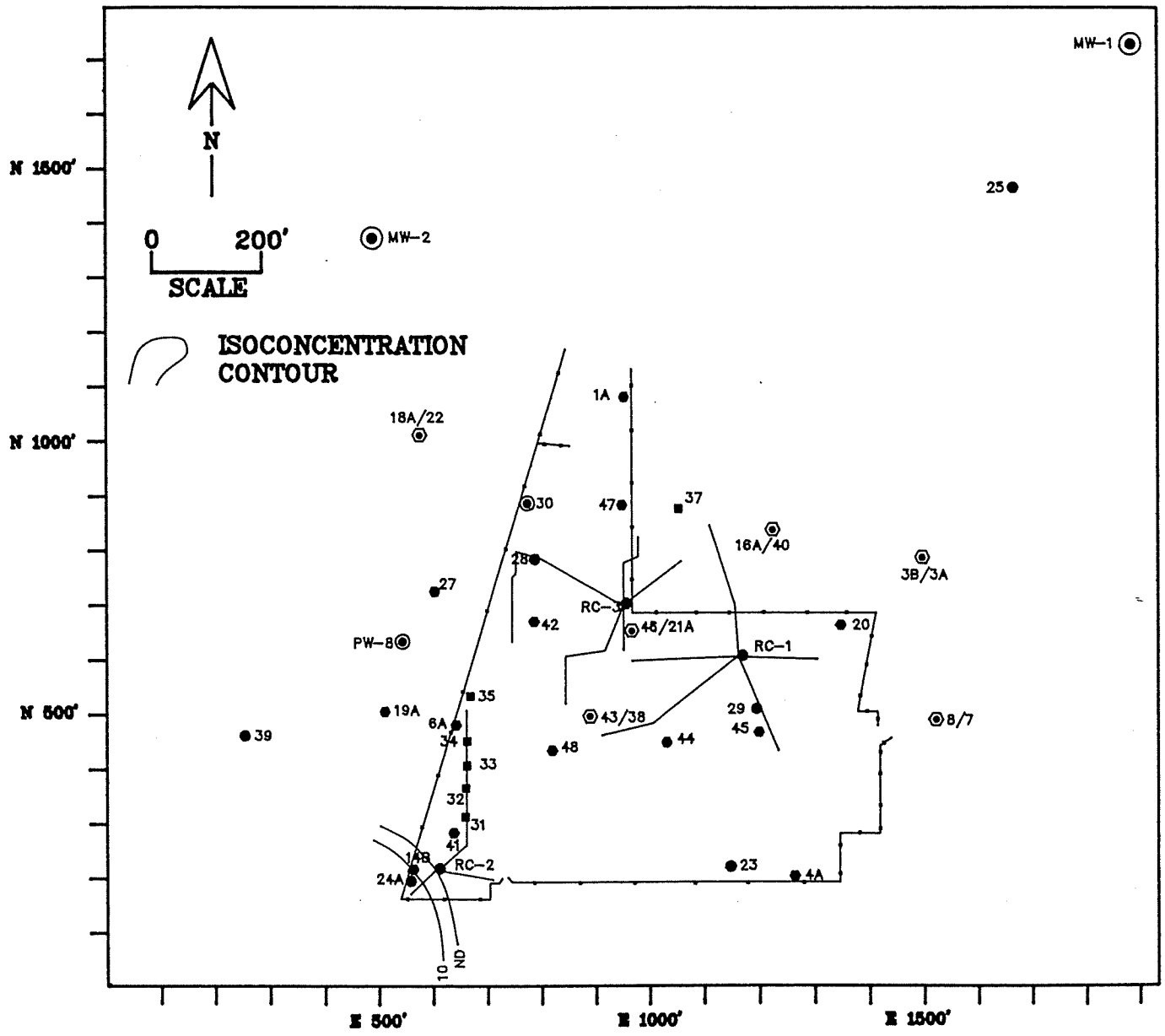
GLACIAL AQUIFER – FALL 1991
TRICHLOROETHENE CONCENTRATIONS (MICROGRAMS/LITER)



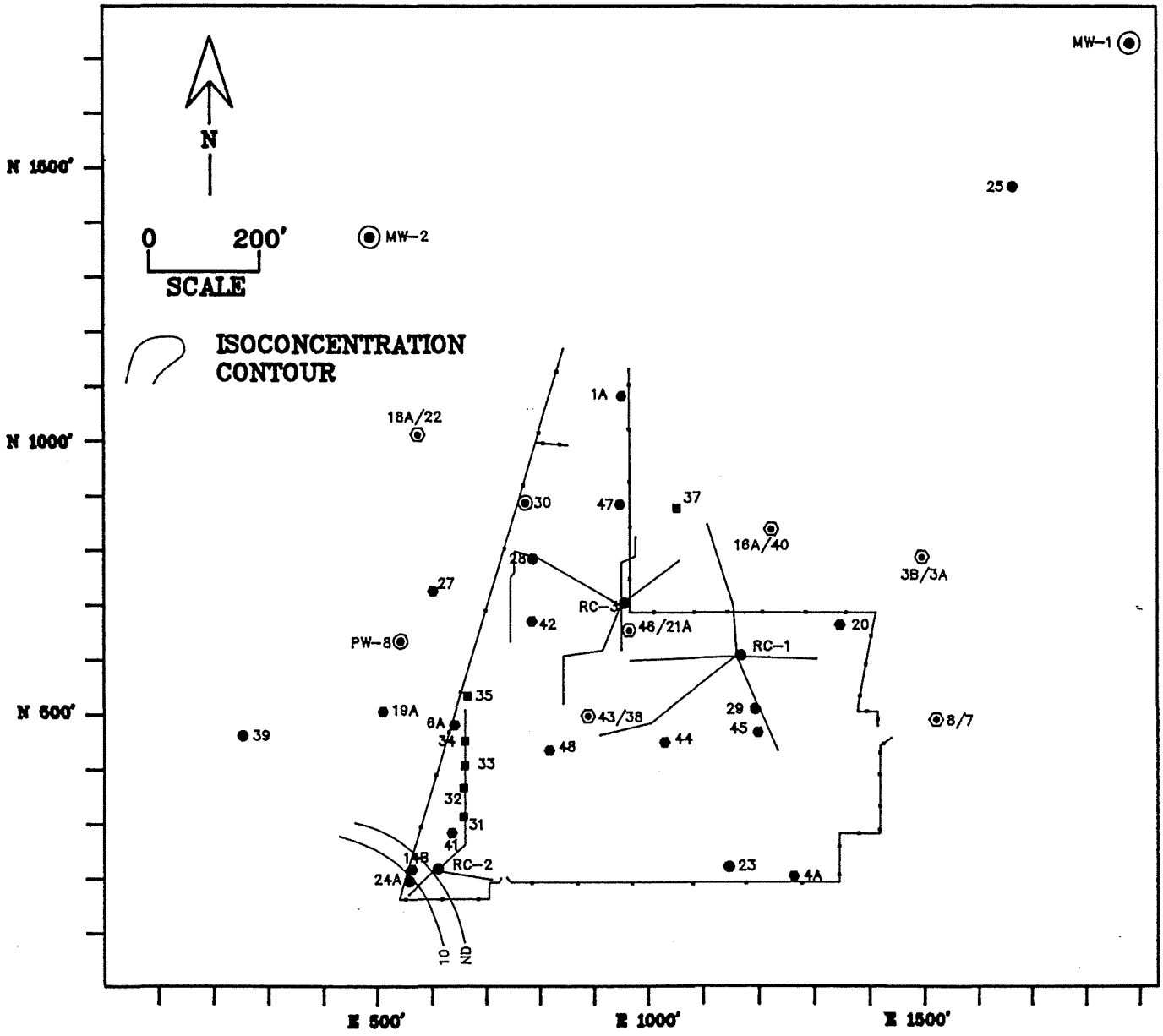
DOLOMITE AQUIFER – WINTER 1991
CARBON DISULFIDE CONCENTRATIONS (MICROGRAMS/LITER)



DOLOMITE AQUIFER – FALL 1991
1,2–DICHLOROETHENE (TOTAL) CONCENTRATIONS (MICROGRAMS/LITER)



DOLOMITE AQUIFER – FALL 1991
VINYL CHLORIDE CONCENTRATIONS (MICROGRAMS/LITER)



APPENDIX F

Monitoring Well Location Map (24 x 36 inch)