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1162

1990 RCRA ANNUAL REPORT VOLUME I
FEBRUARY 25, 1991

02/25/91

DOE-FMPC/USEPA
250
REPORT

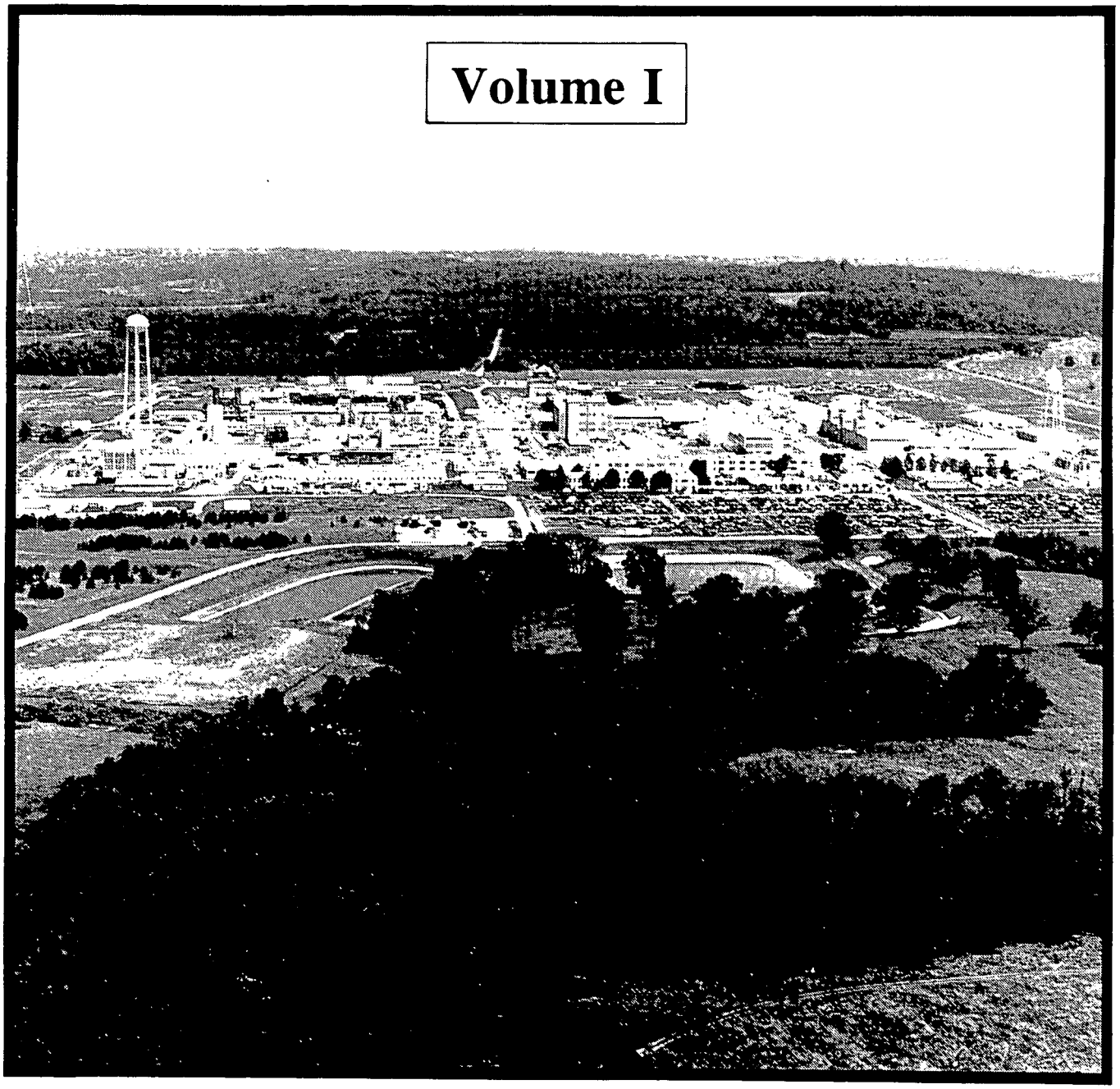
[redacted]

1162

1990 RCRA ANNUAL REPORT
February 25, 1991

FEED MATERIALS PRODUCTION CENTER

Volume I



U.S. Department of Energy
USEPA Identification No. OH6890008976

1

WMCO Graphics #1298

1162

1990 RCRA ANNUAL REPORT

FEED MATERIALS PRODUCTION CENTER
U.S. Department of Energy
USEPA Identification No. OH6890008976

VOLUME I of II

SECTION

1. Generator Annual Report
2. Facility Annual Report
3. Waste Minimization Annual Report
4. Supplementary Annual Report
   Groundwater Monitoring

2

SECTION 1

1990 GENERATOR ANNUAL REPORT

OHIO ENVIRONMENTAL PROTECTION AGENCY

1990 GENERATOR ANNUAL HAZARDOUS WASTE REPORT

1162

For the calendar year ending December 31,1990

The information requested herein is required by Rules 3745-52-41 as applicable of the Ohio Administrative Code.

REFER TO THE SPECIFIC INSTRUCTIONS CONTAINED IN THIS BOOKLET BEFORE COMPLETING THIS FORM.

Please print/type with elite type (12 characters per inch)

LABEL BELOW IS FOR REFERENCE ONLY; SECTIONS I. THROUGH VII. MUST BE COMPLETED.

OH6890008976-EPA ID. SIC CODE-2819
US DOE FEED MATERIALS PROD CENTER
7400 WILLEY RD
FERNALD OH 45030
EAST DAVE (513)738-6170

I. GENERATOR'S EPA I.D. NUMBER

F | O | H | 6 | 8 | 9 | 0 | 0 | 0 | 8 | 9 | 7 | 6 | (2–13) 1 (14–15)

II. NAME OF INSTALLATION

U S D O E F E E D M A T E R I A L S P R O D U C T I O N C E N T E R (30–67)

III. INSTALLATION MAILING ADDRESS

3 | P O B X 3 9 8 7 0 5 (16–45)
Street or P. O. Box

4 | C I N C I N N A T I (16–41)
City or Town

O H (41–42) State

4 5 2 3 9 (47–51) Zip Code

IV. LOCATION OF INSTALLATION

5 | 7 4 0 0 W I L L E Y R O A D (6–45)
Street

3 1 (47–48) County Code

6 | F E R N A L D (6–41)
City or Town

O H (41–42) State

4 5 0 3 0 (47–51) Zip Code

2 8 1 1 9 (52–56) Primary SIC Code

V. INSTALLATION CONTACT

2 | R A S T D A V E (16–45)
Name (last and first)

5 1 3 - 7 3 8 - 6 1 7 0 (46–57)
Phone No. (area code & no.)

VI. TRANSPORTATION SERVICES USED (list the name and EPA identification numbers of all hazardous waste transporters whose services were used during the reporting year.)

ROLLINS CHEMPAK, INC. DED 982565947

TECHNICAL TRANSPORTERS, INC. TXD 987986106

VII. CERTIFICATION

4

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Gerald W. Westerbeck — Print/Type Name
FMPC Site Manager — Title
Signature of Authorized Representative
2/25/91 — Date Signed

EPA 9019

OHIO ENVIRONMENTAL PROTECTION AGENCY 1162

GENERATOR ANNUAL HAZARDOUS WASTE REPORT (cont.)

For the calendar year ending December 31, 1990

FACILITY INFORMATION
(specify facility to which all wastes on this page were sent)

VIII. GENERATOR'S EPA I.D. NO.

OHH6890008976

IX. FACILITY'S EPA I.D.NO.

LADO03952721

X. FACILITY NAME

ROLLINS ENVIRONMENTAL SERVICES LAINC

XI. FACILITY'S ADDRESS

3355 SECRETARY

Street

BATON ROUGE LA 70807

City or Town State Zip Code

XII. WASTE IDENTIFICATION

LINE	A. DESCRIPTION OF WASTE	B. DOT HAZARD CLASS		C. USEPA HAZARDOUS WASTE NUMBER		D. AMOUNT OF WASTE	E. UNIT OF MEASURE
1	WASTE ACETONITRILE GLUTABLE	0	7	D001		100	P
2	LABPACKS IGNITABLE TOXIC	0	7	D001	F003	8	P
	C			U019	U239		
				U225			
3	LABPACKS IGNITABLE EPTOX	1	3	D001	D011	6	P
	X						
4	LABPACKS IGNITABLE TOXIC	0	7	D001	P015	7	P
	C						
5	LABPACKS CORROSIVE	0	2	D002		2	P
6	LABPACKS TOXIC EPTOX	1	5	P106	D007	1	P
7	LABPACKS EPTOX	1	5	D005	D010	5	P

XIII. COMMENTS (enter information by section number)

5

Lines # 1 through 7 are from routine labwork

OHIO ENVIRONMENTAL PROTECTION AGENCY 1162

GENERATOR ANNUAL HAZARDOUS WASTE REPORT (cont.)

For the calendar year ending December 31, 1990

FACILITY INFORMATION
(specify facility to which all wastes on this page were sent)

VIII. GENERATOR'S EPA I.D. NO.

10 H 6 8 9 0 0 0 8 9 7 6

IX. FACILITY'S EPA I.D.NO.

LAD011039512 7

X. FACILITY NAME

ROLLINS ENVIRONMENTAL SERVICES LAINC

XI. FACILITY'S ADDRESS

1335 SCENIC HWY

Street

BATON ROUGE LA 70807

City or Town State Zip Code

XII. WASTE IDENTIFICATION

LINE	A. DESCRIPTION OF WASTE	B. DOT HAZARD CLASS		C. USEPA HAZARDOUS WASTE NUMBER	D. AMOUNT OF WASTE	E. UNIT OF MEASURE
8	LABPACKS TOXIC	1	2	U122 U044 U080	10	P
9	LABPACKS IGNITABLE	1	2	D001	5	P

28 29 30 — 33 34 — 37 38 — 41 42 — 45 46 54 55

XIII. COMMENTS (enter information by section number)

6

Line = 8 and 9 are from routine labwork

SECTION 2

1990 FACILITY ANNUAL REPORT

OHIO ENVIRONMENTAL PROTECTION AGENCY

1162

1990 FACILITY ANNUAL HAZARDOUS WASTE REPORT

For the calendar year ending December 31,1990

The information requested herein is required by Rules 3745-54-75 and 3745-65-75 as applicable of the Ohio Administrative Code

REFER TO THE SPECIFIC INSTRUCTIONS CONTAINED IN THIS BOOKLET BEFORE COMPLETING THIS FORM.

Please print/type with elite type (12 characters per inch)

LABEL BELOW IS FOR REFERENCE ONLY; SECTIONS I. THROUGH VII. MUST BE COMPLETED.

OH6890008976-EPA ID. SIC CODE-2819
USDOE FEED MATERIALS PRODUCTION CENTER
7400 WILLEY ROAD
FERNALD OH 45030
RAST DAVE (513)738-6170

I. FACILITY'S EPA I.D. NUMBER

F OH6890008976 (1–13) 1 (14–15)

II. NAME OF FACILITY

USDOE FEED MATERIALS PRODUCTION CENTER (30–67)

III. FACILITY MAILING ADDRESS

3 PO BOX 3985 (16–45)
Street or P.O. Box

4 CINCINNATI (16–40) OH (41–42) 45239 (47–51)
City or Town State Zip Code

IV. LOCATION OF FACILITY

5 7400 WILLEY ROAD (16–45) 31 (47–48)
Street County Code

6 FERNALD (16–40) OH (41–42) 45030 (47–51) 2819 (53–56)
City or Town State Zip Code Primary SIC Code

V. FACILITY CONTACT

2 RASTDAVID (16–45) 513-738-6170 (46–57)
Name (last and first) Phone No. (area code & no.)

VI. COST ESTIMATES FOR FACILITY

A. Cost Estimate for Facility Closure

$ ___ .00 (16–24)

B. Cost Estimate for Post Closure Monitoring and Maintenance (disposal facilities only)

$ ___ .00 (25–33)

VII. CERTIFICATION

8

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Gerald W. Westerbeck FMPC Site Manager — 2/25/91

Print/Type Name | Title | Signature of Authorized Representative | Date Signed

EPA 9020

OHIO ENVIRONMENTAL PROTECTION AGENCY 1162

FACILITY ANNUAL HAZARDOUS WASTE REPORT (cont.)

For the calendar year ending December 31, 1990

GENERATOR INFORMATION
(specify generator from which all wastes on this page were received)

VIII. FACILITY'S EPA I.D. NO.

G 0 H 6 8 9 0 0 0 8 9 7 6 2

IX. GENERATOR'S EPA I.D.NO. 0 H 6 8 9 0 0 0 8 9 7 6

X. GENERATOR NAME U S D O E F E E D M A T E R I A L S P R O D C E N T E R

XI. GENERATOR'S ADDRESS

7 4 0 0 W I L E Y R O A D
Street

F E R N A L D
City or Town

O H
State

4 5 0 3 0
Zip Code

XII. WASTE IDENTIFICATION

LINE	A. DESCRIPTION OF WASTE	B. HANDLING METHOD (enter code)	C. USEPA HAZARDOUS WASTE NUMBER (see instructions)	D. AMOUNT OF WASTE	E. UNIT OF MEASURE
1	ACETONITRILE LIQUID	S01	D001	64	P
2	BARIUM CHLORIDE CHROMEREDUE	S01	D007	3032 5	P
3	BERRYLLIUM	S01	P015	33	P
4	CONTAMINATED SOIL WATER ROCK AND BRICKS	S01	D008	5265	P
5	CONTAMINATED SOLVENTS	S01	F002	181	P
6	CONTAMINATED SPENT SOLVENTS	S01	F001 F002 D018	2351	P
7	DISCARD PROCESS RESIDUES	S01	F001	845	P
8	DRUM DECONTAMINATION RESIDUES	S01	D006	7932	P

XIII. COMMENTS (enter information by section number)

9

OHIO ENVIRONMENTAL PROTECTION AGENCY

1162

FACILITY ANNUAL HAZARDOUS WASTE REPORT (cont.)

For the calendar year ending December 31, 1990

GENERATOR INFORMATION
(specify generator from which all wastes on this page were received)

VIII. FACILITY'S EPA I.D. NO.

G OHI6689000876 2

IX. GENERATOR'S EPA I.D.NO.

OHI6890008976

X. GENERATOR NAME

USDOE FERNALD MATERIALS PRODUCT

XI. GENERATOR'S ADDRESS

7400 WILEY ROAD
Street

FERNALD
City or Town

OH
State

45030
Zip Code

XII. WASTE IDENTIFICATION

LINE	A. DESCRIPTION OF WASTE	B. HANDLING METHOD (enter code)	C. USEPA HAZARDOUS WASTE NUMBER (see instructions)	D. AMOUNT OF WASTE	E. UNIT OF MEASURE
9	DUST COLLECTOR BAGS	S01	D006	2141	P
10	FURANCE SALT	S01	D005	6953	P
11	FURANCE SALT	S01	D004 D006 D008 D010	93874	P
12	GASOLINE	S01	D001 D018	375	P
13	KEROSENE	S01	D018	2659	P
14	LAB PACKED WASTER AND SAMPLES	S01	D007	92	P
15	LEADED GASOLINE	S01	D001 D008 D018	5230	P
16	LIMESCALE SEDIMIDIL	S01	F001 F005	2373	P

XIII. COMMENTS (enter information by section number)

Item # 11 USEPA HAZARDOUS WASTE NUMBER D010 REFLECTS POSSIBLE SAMPLE MATRIX INTERFERENCE; WILL BE REANALYZED.

10

OHIO ENVIRONMENTAL PROTECTION AGENCY

1162

FACILITY ANNUAL HAZARDOUS WASTE REPORT (cont.)

For the calendar year ending December 31, 1990

GENERATOR INFORMATION
(specify generator from which all wastes on this page were received)

VIII. FACILITY'S EPA I.D. NO.

G | 0 H 6 8 9 0 0 0 8 9 7 6 | 2

IX. GENERATOR'S EPA I.D.NO.

0 H 6 8 9 0 0 0 8 9 7 6

X. GENERATOR NAME

U S D O E F E E D M A T E R I A L S P R O D C E N T E R

XI. GENERATOR'S ADDRESS

7 4 0 0 W I L E Y R O A D

Street

F E R N A L D

City or Town

O H

State

4 5 0 3 0

Zip Code

XII. WASTE IDENTIFICATION

LINE	A. DESCRIPTION OF WASTE	B. HANDLING METHOD (enter codes)	C. USEPA HAZARDOUS WASTE NUMBER (see instructions)	D. AMOUNT OF WASTE	E. UNIT OF MEASURE
17	LIQUID AND SOLID SAMPLES	S01	F002 D004 D005 D006	25	P
		S01	D007 D008 D010 D018		P
18	MERCURY SPILL RESIDUE	S01	U151	14	P
19	METHANOL AND CYCLOHEXANE MIXTURE	S01	D001 F003	1376	P
20	NONREC OVERABLE TRASH	S01	F002 D007 D010	442	P
21	NONREC OVERABLE TRASH	S01	F001 D008	6516	P
22	NONREC OVERABLE TRASH	S01	F001 D029 D039 D040	72	P
23	OIL AND SOLVENTS	S01	F002 D001 D007 D008	1	P
		28 29	30–33 34–37 38–41 42–46	46 54	55

XIII. COMMENTS (enter information by section number)

11

OHIO ENVIRONMENTAL PROTECTION AGENCY

1162

FACILITY ANNUAL HAZARDOUS WASTE REPORT (cont.)

For the calendar year ending December 31, 1990

GENERATOR INFORMATION
(specify generator from which all wastes on this page were received)

VIII. FACILITY'S EPA I.D. NO.

G | OHI6689000897 6 | 2

IX. GENERATOR'S EPA I.D.NO.

OHI6689000976

X. GENERATOR NAME

USDOE FERNALD MATERIALS PROGRAM CENTER

XI. GENERATOR'S ADDRESS

7400 WILEY ROAD

Street

FERNALD

City or Town

OH

State

45030

Zip Code

XII. WASTE IDENTIFICATION

LINE	A. DESCRIPTION OF WASTE	B. HANDLING METHOD (enter code)	C. USEPA HAZARDOUS WASTE NUMBER (enter code)	D. AMOUNT OF WASTE	E. UNIT OF MEASURE
		S01	D010 D018		P
24	OIL CLEANUP MATERIAL	S01	D018	4818	P
25	OILY HILCO FILTER CAKE	S01	D010 D018	15184	P
26	OILY RAGS	S01	F002 D008 D018	408	P
27	OILY RAGS	S01	F001 F002 D008 D018	1414	P
28	OILY RAGS	S01	F002 D018	387	P
29	OILY RAGS CLEANUP MATERIAL	S01	F002 D018	83	P
30	OILY SEMI SOLID	S01	F002	18445	P

XIII. COMMENTS (enter information by section number)

12

OHIO ENVIRONMENTAL PROTECTION AGENCY

1162

FACILITY ANNUAL HAZARDOUS WASTE REPORT (cont.)

For the calendar year ending December 31, 1990

GENERATOR INFORMATION
(specify generator from which all wastes on this page were received)

VIII. FACILITY'S EPA I.D. NO.

G 0 H 6 8 9 0 0 0 8 9 7 6 — 2

IX. GENERATOR'S EPA I.D.NO.

0 H 6 8 9 0 0 0 8 9 7 6

X. GENERATOR NAME

U S D O E FEED MATERIALS PRODUCTION

XI. GENERATOR'S ADDRESS

7400 WILEY ROAD

Street

FERNALD

City or Town

OH

State

45030

Zip Code

XII. WASTE IDENTIFICATION

LINE	A. DESCRIPTION OF WASTE	B. HANDLING METHOD (enter codes)	C. USEPA HAZARDOUS WASTE NUMBER (enter codes)	D. AMOUNT OF WASTE	E. UNIT OF MEASURE
31	OILY SEMI SOLID	S01	F001 D008	3252	P
32	OILY SEMI SOLID	S01	D018	2649	P
33	OIL SOAKED DIRT	S01	F001	1393 4	P
34	PAINT THINNER	S01	F002 D001	2047	P
35	PAINT THINNERS	S01	D001 F002 F003 F005	1369	P
36	PRESSURE TREATED WOOD	S01	D006	530	P
37	RAGS	S01	F002 F003 F005	54	P
38	SAMPLES NON METALLIC	S01	D005	78	P

XIII. COMMENTS (enter information by section number)

13

OHIO ENVIRONMENTAL PROTECTION AGENCY

1162

FACILITY ANNUAL HAZARDOUS WASTE REPORT (cont.)

For the calendar year ending December 31, 1990

GENERATOR INFORMATION
(specify generator from which all wastes on this page were received)

VIII. FACILITY'S EPA I.D. NO.

G | 0 H 6 8 9 0 0 0 8 9 7 6 | 2

IX. GENERATOR'S EPA I.D.NO.

0 H 6 8 9 0 0 0 8 9 7 6

X. GENERATOR NAME

U S D O E F E E D M A T E R I A L S P R O D C E N T E R

XI. GENERATOR'S ADDRESS

7 4 0 0 W I L E Y R O A D

Street

F E R N A L D

City or Town

O H

State

4 5 0 3 0

Zip Code

XII. WASTE IDENTIFICATION

LINE	A. DESCRIPTION OF WASTE	B. HANDLING METHOD (enter code)	C. USEPA HAZARDOUS WASTE NUMBER (see instructions)		D. AMOUNT OF WASTE	E. UNIT OF MEASURE
39	SAND GRIT BLAST PANTS REDUSE	S01	D008		6259 17	P
40	SCRAP SALTS LOW FLOURIDE	S01	D008		249	P
41	SCRAP U308	S01	D005	D010	2352 88	P
42	SOLVENT CONTAMINATED PALLET WOOD	S01	F002		3357	P
43	SOLVENT CONTAMINATED RAGS	S01	F001 D018	F002	112	P
44	SPENT 111-TRICHLOROETHANE	S01	F001 D008	F002 D018	169	P
45	SPENT ACETONE	S01	F003	D001	551	P
46	SPENT ENAMEL	S01	D001		3513	P

XIII. COMMENTS (enter information by section number)

14

OHIO ENVIRONMENTAL PROTECTION AGENCY 1162

FACILITY ANNUAL HAZARDOUS WASTE REPORT (cont.)

For the calendar year ending December 31, 1990

GENERATOR INFORMATION
(specify generator from which all wastes on this page were received)

VIII. FACILITY'S EPA I.D. NO.

G | 0 H 6 8 9 0 0 0 8 9 7 6 | 2

IX. GENERATOR'S EPA I.D.NO. 0 H 6 8 9 0 0 0 8 9 7 6

X. GENERATOR NAME U S D O E F E E D M A T E R I A L S P R O D C E N T E R

XI. GENERATOR'S ADDRESS

7 4 0 0 W I L E Y R O A D
Street

F E R N A L D
City or Town

O H
State

4 5 0 3 0
Zip Code

XII. WASTE IDENTIFICATION

LINE	A. DESCRIPTION OF WASTE	B. HANDLING METHOD (enter codes)	C. USEPA HAZARDOUS WASTE NUMBER (see instructions)	D. AMOUNT OF WASTE	E. UNIT OF MEASURE
47	SPENT METHANOL	S01	F003 D001	252	P
48	SPENT TBP/KEROSENE	S01	D001 D002 D007	3474	P
49	SPENT XYLENE	S01	F003 D001	32	P
50	SPILLED TETRACHLOROETHYLENE	S01	U210	124	P
51	SUMP CAKE W/FREE LIQUIDS	S01	D005 D007	14413	P
52	TANK 5 USTCLEANOUT	S01	F001 F005	4702	P
53	TBP KEROSENE SEMI SOLID	S01	D018	143	P
54	UNFIRED UCTION CHARGES	S01	D001	20	P

XIII. COMMENTS (enter information by section number)

15

OHIO ENVIRONMENTAL PROTECTION AGENCY 1162

FACILITY ANNUAL HAZARDOUS WASTE REPORT (cont.)

For the calendar year ending December 31, 1990

GENERATOR INFORMATION
(specify generator from which all wastes on this page were received)

VIII. FACILITY'S EPA I.D. NO.

G 1 | 0 H 6 8 9 0 0 0 8 9 7 6 2 | 2 13 | 14 15

IX. GENERATOR'S EPA I.D.NO. 0 H 6 8 9 0 0 0 8 9 7 6 (16–27)

X. GENERATOR NAME U S D O E F E E D M A T E R I A L S P R O D C E N T E R (28–38)

XI. GENERATOR'S ADDRESS

7 4 0 0 W I L E Y R O A D (39)
Street

F E R N A L D (39)
City or Town

O H
State

4 5 0 3 0
Zip Code

XII. WASTE IDENTIFICATION

LINE	A. DESCRIPTION OF WASTE	B. HANDLING METHOD (enter codes)	C. USEPA HAZARDOUS WASTE NUMBER (see instructions)	D. AMOUNT OF WASTE	E. UNIT OF MEASURE
55	USED DEVELOPING/FIXER SOLUTION	S 0 1	D 0 1 1	527	P
56	USED OIL	S 0 1	D 0 1 8	15115	P
57	USED OIL	S 0 1	F 0 0 2 D 0 0 5 D 0 0 8 D 0 1 8	413	P
58	USED OIL	S 0 1	F 0 0 2 D 0 1 8	5703	P
59	USED OIL	S 0 1	F 0 0 2	22176	P
60	USED OIL	S 0 1	F 0 0 2 D 0 0 8 D 0 1 8	10915	P
61	USED OIL	S 0 1	F 0 0 2 D 0 0 8	16411	P
62	USED OIL	S 0 1	D 0 0 5 D 0 0 8	2743	P

(28) (29) (30–33) (34–37) (38) (39–41) (42–45) (54) (55)

XIII. COMMENTS (enter information by section number)

16

OHIO ENVIRONMENTAL PROTECTION AGENCY 1162

FACILITY ANNUAL HAZARDOUS WASTE REPORT (cont.)

For the calendar year ending December 31, 1990

GENERATOR INFORMATION
(specify generator from which all wastes on this page were received)

VIII. FACILITY'S EPA I.D. NO.

G 0 H 6 8 9 0 0 0 8 9 7 6 2

IX. GENERATOR'S EPA I.D.NO.

0 H 6 8 9 0 0 0 8 9 7 6

X. GENERATOR NAME

U S D O E FEED MATERIALS PRODUCT CENTER

XI. GENERATOR'S ADDRESS

7400 WILEY ROAD

Street

FERNALD

City or Town

OH

State

45030

Zip Code

XII. WASTE IDENTIFICATION

LINE	A. DESCRIPTION OF WASTE	B. HANDLING METHOD	C. USEPA HAZARDOUS WASTE NUMBER	D. AMOUNT OF WASTE	E. UNIT OF MEASURE
63	USED OIL	S01	F001 F003 D008 D018	1276	P
64	URANIUM CONTAMINATED WATER	S01	D005	3436	P
65	WASTE BENZENE	S01	D001 D018	245	P
66	WASTE ETHYL ETHER	S01	F003 D003	96	P
67	WASTE SOLVENT	S01	F002	5	P
68	WASTE SOLVENT	S01	F001 D007 D008 D018	7663	P
			D019 D021 D029 D039		P
			D040		P

XIII. COMMENTS (enter information by section number)

17

OHIO ENVIRONMENTAL PROTECTION AGENCY 1162

FACILITY ANNUAL HAZARDOUS WASTE REPORT (cont.)

For the calendar year ending December 31, 1990

GENERATOR INFORMATION
(specify generator from which all wastes on this page were received)

VIII. FACILITY'S EPA I.D. NO.

G 0H6890003976 2

IX. GENERATOR'S EPA I.D.NO.

0H6890003976

X. GENERATOR NAME

USDOE FERNALD MATERIALS PRODUCTION CENTER

XI. GENERATOR'S ADDRESS

7400 WILEY ROAD

Street

FERNALD

City or Town

OH

State

45030

Zip Code

XII. WASTE IDENTIFICATION

LINE	A. DESCRIPTION OF WASTE	B. HANDLING METHOD	C. USEPA HAZARDOUS WASTE NUMBER	D. AMOUNT OF WASTE	E. UNIT OF MEASURE
69	WATER AND GASOLINE MIX TURE	S01	D008 D018	2706	P
70	WATER AND GASOLINE MIXTURE	S01	D001 D018	8726	P
71	WATER AND GASOLINE MIXTURE	S01	D001 D008 D018	4420	P
72	TRICHLOROETHANE STILL BOTTOMS	S01	F001 D001	1714 2	P
73	BARIUM CHLORIDE SALT	S01	D005	12354 7	P
74	CONTAMINATED ALUMINUM-SOD DAMPED	S01	D005	2248 9	P
75	TIMPURE THORIUM NITRATE	S01	D007 D008	4914	P
76	INCINERATORS	S01	D008	3047	P

XIII. COMMENTS (enter information by section number)

18

OHIO ENVIRONMENTAL PROTECTION AGENCY 1162

FACILITY ANNUAL HAZARDOUS WASTE REPORT (cont.)

For the calendar year ending December 31, 1990

GENERATOR INFORMATION
(specify generator from which all wastes on this page were received)

VIII. FACILITY'S EPA I.D. NO.

G OHI6689000918972 2

IX. GENERATOR'S EPA I.D.NO.

OH6890008976

X. GENERATOR NAME

USDOE FEED MATERIALS PRODUCTION CENTER

XI. GENERATOR'S ADDRESS

7400 WILEY ROAD
Street

FERNALD OH 45030
City or Town State Zip Code

XII. WASTE IDENTIFICATION

LINE	A. DESCRIPTION OF WASTE	B. HANDLING METHOD (enter code)	C. USEPA HAZARDOUS WASTE NUMBER (see instructions)	D. AMOUNT OF WASTE	E. UNIT OF MEASURE
77	OILY SEMISOLID	S01	D005 D008	91550	P
78	SAMPLES NONMETALLIC MISCELLANEOUS	S01	D005	424	P
79	SCRAP U308	S01	D005	2760 4	P
80	SPENT CHLORINATED SOLVENTS	S01	F001 D001	12514 7	P
81	THORIUM NITRATE SOLUTION	S01	D007 D008	4824	P
82	U308 FORIXIDATION	S01	D007	1095 6	P
83	WET SUMP CAKE	S01	D002 D006 D010	7049 5	P
84	SUMP OR FILTER CAKE	S01	D004 D006 D008	6751 5	P

XIII. COMMENTS (enter information by section number)

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OHIO ENVIRONMENTAL PROTECTION AGENCY 1162

FACILITY ANNUAL HAZARDOUS WASTE REPORT (cont.)

For the calendar year ending December 31, 1990

GENERATOR INFORMATION
(specify generator from which all wastes on this page were received)

VIII. FACILITY'S EPA I.D. NO.

G 0 H 6 8 9 0 0 0 8 9 7 6 2

IX. GENERATOR'S EPA I.D.NO.

0 H 6 8 9 0 0 0 8 9 7 6

X. GENERATOR NAME

U S D O E F F E E D M A T E R I A L S P R O D C E N T E R

XI. GENERATOR'S ADDRESS

7 4 0 0 W I L E Y R O A D

Street

F E R N A L D

City or Town

O H

State

4 5 0 3 0

Zip Code

XII. WASTE IDENTIFICATION

LINE	A. DESCRIPTION OF WASTE	B. HANDLING METHOD (enter code)	C. USEPA HAZARDOUS WASTE NUMBER (see instructions)	D. AMOUNT OF WASTE	E. UNIT OF MEASURE
85	PAINT THINNER	S01	D001	484	P
86	USED OIL	S01	F002 D010 D018	27458	P
3		S01			P
4		S01			P
5		S01			P
6		S01			P
7		S01			P
8		S01			P

XIII. COMMENTS (enter information by section number)

20

SECTION 3

1990 WASTE MINIMIZATION ANNUAL REPORT

OhioEPA
State of Ohio Environmental Protection Agency

FORM WM

INSTRUCTIONS:
Refer to instruction booklet when completing the 1990 Waste Minimization Annual Report (page references given by section)

A: Attach Site Identification Label or Enter: 1162
Site Name: U. S. DOE Feed Materials Prod Center
Location Address 7400 Wiley Road
City, State Fernald, Ohio
County Hamilton Zip Code 45030

B. EPA ID NO.
or same as label ☐ OHI6189001018976

C. Has the site name associated with this EPA ID changed since 1989?
___ YES X NO

SECTION I: Mailing address of site (Instructions on page 3)

A. Is the mailing address the same as the location address? ☒ YES (skip to Sec II) ☐ NO (complete sec I)

B. Number and street name of mailing address

C. City, Town, Village, etc. | D. State | E. Zip Code

SECTION II: Name, title, and telephone number of the person who should be contacted if questions arise regarding this report. (Instructions on page 3)

A. Please print: Last name	First name	M.I.	B. Title	C. Telephone number	Extension
RASTI	DAVID		RICRAI MANAGER	513-738-6312	

SECTION III: Enter the Standard Industrial Classification (SIC) Code. (Instructions on page 3)

A. 0000	B. 2819	C. 0000	D. 0000

E. Please check your reporting status for 1990 (Instructions on page 3)

X Large Quantity Generator X TSD facility ___ Small Quantity Generator ___ Conditionally Exempt SQG

If you checked Small Quantity Generator or Conditionally Exempt SQG then proceed to the section VIII (page 2).
If you checked Large Quantity Generator or TSD facility then proceed to Section IV.

SECTION IV: Waste Minimization during 1990 (Instructions on page 3)

A. Did this site begin or expand a source reduction activity during 1990? X YES ___ NO
B. Did this site begin or expand a recycling activity during 1990? X YES ___ NO
C. Did this site conduct a waste minimization assessment during 1990? ___ YES X NO
If not would you like to be contacted for waste minimization technical assistance? ___ YES X NO

D. What factors have limited this site from initiating new source reduction activities in 1990? (CHECK ALL THAT APPLY)

- ☐ 01 No factors have limited new source reduction activities.
- ☐ 02 Insufficient capital to install new source reduction equipment or implement new reduction practices.
- ☐ 03 Lack of technical information on source reduction techniques, applicable to my specific production processes.
- ☐ 04 Source reduction is not economically feasible: cost savings in waste management or production will not recover the capital investment.
- ☐ 05 Concern that the product quality may decline as a result of source reduction.
- ☐ 06 Technical limitations of the production processes.
- ☐ 07 Permitting burdens.
- ☒ 08 Other (SPECIFY IN COMMENTS) Limited staff

E. What factors have limited this site from initiating new on site or off site recycling activities during 1990? (CHECK ALL THAT APPLY)

- ☐ 01 No factors have limited new recycling activities.
- ☐ 02 Insufficient capital to install new recycling equipment or implement new recycling practices.
- ☐ 03 Lack of technical information on recycling techniques applicable to this site's specific production processes.
- ☐ 04 Recycling is not economically feasible: cost savings in waste management or production will not recover the capital investment.
- ☐ 05 Concern that product quality may decline as a result of recycling.
- ☐ 06 Requirements to manifest wastes inhibit shipments off site for recycling.
- ☐ 07 Financial liability provisions inhibit shipments off site for recycling.
- ☒ 08 Technical limitations of product processes inhibit shipments off site for recycling.
- ☒ 09 Technical limitations of product processes inhibit on site recycling.
- ☒ 10 Permitting burdens inhibit recycling.
- ☐ 11 Lack of permitted off-site recycling facilities.
- ☐ 12 Unable to identify a market for recyclable materials.
- ☐ 13 Other (SPECIFY IN COMMENTS)

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IF YOU ANSWERED "NO" TO *BOTH* A AND B, THEN PROCEED TO SECTION VIII (page 2)

Quantifying Waste Minimization | Place site EPA ID Number Here: OH6890008976

SECTION V: A. Waste Description. (Instructions on page 6)

Laboratory Chemicals - Excess 1162

B. EPA hazardous waste code (Instructions on page 6)	C. Source code (Instructions on page 6)	D. Form code (Instructions on page 6)	E. Origin code (Instructions on page 6)	F. TRI constituent (Instructions on page 6)
D001 D002 D003 D004	A89	B001	System type MN/A	2

G. CAS numbers (Instructions on page 6)

1 7439-92-1 2 108-95-2 3 7631-99-4
4 7439-97-6 5 1048-42-4

SECTION VI.

A. Quantity generated in 1989 (Instructions on page 6)	B. Quantity generated in 1990 (Instructions on page 6)	C. Unit of Measure (Instructions on page 7)	D. Density (Instructions on page 7)
1766	1144	1	10.00 ☐ lbs/gal ☐ sg

E. Was this waste recycled in 1990? (Instructions on page 7)	F. Quantity recycled on-site in 1990 (Instructions on page 7)	G. Quantity recycled off-site in 1990 (Instructions on page 7)
☐ YES (CONTINUE TO BOX P) ☒ NO (SKIP TO SECTION VII)	N/A	N/A

SECTION VII.

A. Activity (Instructions on page 7)	B. Other effects (Instructions on page 7)	C. Quantity recycled in 1990 due to new activities (Instructions on page 7)	D. Activity/Production Index (Instructions on page 7)	E. Source Reduction Quantity (Instructions on page 9)
W25 W11 W22 W12	☐ YES ☒ NO	0	-1	0

SECTION VIII I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. Please print: Last name	First name	M.I.	B. Title
Westerbeck	Gerald	W	FMPC Site Mgr

C. Signature: G Westerbeck

D. Date of signature: 02-25-91 (MO. DAY YR.)

Comments: Section V, Box B (cont.);

D004, D005, D006, D007, D008, D009, D010, D011, F003, U012, U003, U122, U019, U165, U188 U201, U210, U211, U169, U227, U328, U225, U239, U044, U080, P011, P012, P098, P120, P106.

Waste reduction noted from 1989 to 1990 was achieved by the alternate uses of 1020 Lbs of expired lab chemicals which previously would have been shipped off-site for disposal as hazardous waste. Minimization achieved. Used in various labs on-site.

EXAMPLE:
Out dated lab grade
Acetone used as a glassware cleaning solvent.

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Quantifying Waste Minimization | Place site EPA ID Number Here: 0 H 6 8 9 0 0 0 8 9 7 6

SECTION V: A. Waste Description. (Instructions on page 5)

1162

Paint, Paint Shop, Toxicity, Lead.

B. EPA hazardous waste code (Instructions on page 5)	C. Source code (Instructions on page 5)	D. Form code (Instructions on page 5)	E. Origin code (Instructions on page 6)	F. TRI constituent (Instructions on page 6)
D 0 0 8	A 2 1	B 2 0 9	System type M	8

G. CAS numbers (Instructions on page 6) N/A

1 ___ 2 ___ 3 ___

4 ___ 5 ___

SECTION VI.

A. Quantity generated in 1989 (Instructions on page 6)	B. Quantity generated in 1990 (Instructions on page 6)	C. Unit of Measure (Instructions on page 7)	D. Density (Instructions on page 7)
3 8	0	1	☐ lbs/gal ☐ sg

E. Was this waste recycled in 1990? (Instructions on page 7)	F. Quantity recycled on-site in 1990 (Instructions on page 7)	G. Quantity recycled off-site in 1990 (Instructions on page 7)
☐ YES (CONTINUE TO BOX P) ☐ NO (SKIP TO SECTION VII)	N/A	N/A

SECTION VII.

A. Activity (Instructions on page 7)	B. Other effects (Instructions on page 7)	C. Quantity recycled in 1990 due to new activities (Instructions on page 7)	D. Activity/Production Index (Instructions on page 7)	E. Source Reduction Quantity (Instructions on page 9)
W 4 2 / W / W / W	☐ YES ☒ NO	0	0 0 - 0	0 0

SECTION VIII I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. Please print: Last name	First name	M.I.	B. Title
Westerbeck	Gerald	W	FMPC Site Mgr

C. Signature: [signature]

D. Date of signature: 02 25 91 (MO. DAY YR.)

Comments:

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SECTION 4

SUPPLEMENTARY ANNUAL REPORT FOR 1990 GROUNDWATER MONITORING INFORMATION

THE 1990 RCRA ANNUAL GROUNDWATER QUALITY REPORT

February 11, 1991

Prepared by: Westinghouse Materials Company Of Ohio
P.O. Box 398704
Cincinnati, Ohio 45239-8704

Prepared for: U.S. Department of Energy
P.O Box 398705
Cincinnati, Ohio 45239-8705

Under Contract DE-AC05-86OR21600

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1990 RCRA ANNUAL GROUNDWATER QUALITY REPORT

1.0 EXECUTIVE SUMMARY

This RCRA Annual Groundwater Monitoring Report for the Feed Materials Production Center provides an update on assessment activities, and reports the data which was collected in calendar year 1990. The RCRA Groundwater Quality Assessment Program is an ongoing program designed to determine the rate and extent of contamination in the vicinity of Waste Pit No. 4, as required by Code of Federal Regulations Volume 40 Parts 265.93 through 265.94 and the Ohio Administrative Code Parts 3745-65-93 through 3745-65-94. The controlling document for this program is the Groundwater Quality Assessment Program Plan (GQAPP) at Waste Pit #4, Revision 1. The RCRA Assessment Monitoring Program is a component of a comprehensive CERCLA RI/FS Investigation, which is in progress at the FMPC. The controlling document for the RI/FS Investigation is the RI/FS Quality Assurance Program Plan (QAPP).

Groundwater quality in the glacial overburden, beneath the Waste Pit Area differs from observed background groundwater quality in the glacial overburden. This determination is based upon statistical analysis outlined in Statistical Analysis of Ground Water at RCRA Facilities, Interim Final Guidance, April,1989. Elevated levels of specific conductivity, pH, copper, sulfate, nitrate, chloride, fluoride, calcium, nickel, manganese, magnesium, sodium, total organic halides, and total organic carbon were detected in some glacial overburden wells; although no trends were observed. Of the 11 overburden monitoring well locations sampled in the Waste Pit Area, only Monitoring Well 1031 contains Appendix IX organic

constituents. The following organic compounds were detected two or more times during 1990 in Monitoring Well 1031: 1,1-Dichloroethane (1,1-DCA), 1,2-Dichloroethane (1,2-DCA), 1,2-Dichloroethene(Total) (1,2-DCE), Acetone, Methylene Chloride, Toluene, Tetrachloroethene (PCE), and Trichloroethene (TCE).

Water quality in the sand and gravel aquifer beneath the waste pit area has apparently been affected by facility operations. A plume extends east-northeast from the Waste Pit Area. The plume is identified by anomalous measurements of specific conductivity, pH, and the following anions and cations: sulfate, iron, magnesium, calcium, and manganese. Elevated levels of additional inorganic constituents have been detected in the plume, but these detections are inconsistent, and therefore, not used to trace plume movement. Organic constituents have not been confirmed in this plume.

In the water table zone of the sand and gravel aquifer (2000-series wells) the plume extends between 500 and 1500 feet northeast of Monitoring Well 2084 and appears to be limited to the waste pit area. The plume extends farther east between 2000 and 3500 feet away from the Waste Pit Area in deeper portions of the aquifer (3000 series wells).

The rate of migration of constituents within this plume cannot exceed the advective flow rate of the groundwater, which has been estimated to be 569 feet per year in the water table zone and 759 feet per year in the 3000-series zone.

The source of this plume is considered to be located close to Monitoring Well 2084, because ground water samples collected from this well contain the highest measured concentrations of the plume indicator parameters. Monitoring Well 2084 is located Northeast of Waste Pit 4. This location is cross gradient to Waste Pits One (1), Two (2), Four (4) and Five (5), and down gradient from Waste Pit Three (3), and could potentially be impacted by releases from any of these impoundments. It is, therefore, not possible, at this time, to determine which pit(s) is the source.

Organic compounds were detected in only one well within the sand and gravel aquifer. Monitoring Well 2649 was completed in the water table zone of the sand and gravel aquifer, in November of 1990, to determine if organics found in the glacial overburden (Monitoring Well 1031) were present. The first test results from Monitoring Well 2649 (taken in November) indicate that the groundwater in the vicinity of this well contains: 1,1-Dichloroethane, 1,2-Dichloroethene, 1,1,1-Trichloroethane, and Trichloroethene. Confirmatory sampling will be conducted in the first quarter of 1991.

The source of the volatile organic contamination (VOC) appears to be separate from the source of the inorganic constituent plume originating in the vicinity of Monitoring Well 2084. This conclusion is supported by the absence of organic compounds in the inorganic constituent plume, and the fact that the two wells (1031 and 2649) in which the organic compounds were detected are located upgradient and over 1000 feet away from the inorganic constituent plume.

2.0 PROGRAM EVENTS IN 1990

In 1990, 40 of the 43 wells included in the program were sampled quarterly (February, May, August, November) as defined in the Groundwater Quality Assessment Program Plan (GQAPP), Revision 1. A list of the three wells that could not be sampled during all four quarters, and the reason why they were not sampled is outlined in Table 2.1. A complete description of the current sampling program with a historical perspective is provided in the GQAPP.

The well numbering system currently in use identifies the geologic unit and relative depth being monitored by each of the wells. A 1000-series well is completed in the glacial overburden and 2000-, 3000-, and 4000-series wells are completed in different depths in the underlying sand and gravel aquifer. Figure 2.1 presents a generalized description of the relative depth positions of these monitoring wells. Geographic well locations for each network are shown in Figures 2.2, 2.3, and 2.4 and 2.5. A list of the parameters identified in the GQAPP, and a list of all wells used in the program (organized in upgradient and downgradient order) is provided in Table 2.2.

In the course of 1990, additional parameters and wells were added to the program to facilitate program needs. A list of the constituents tested for in each round can be found in Tables 2.3, 2.4, 2.5, and 2.6. The February and May rounds of sampling followed the parameter list identified in the GQAPP. The May round of sampling also included an annual sampling for HSL constituents. The August and

November round exceeded the GQAPP requirements by including constituents not identified in the GQAPP. These additional constituents were added to improve the program. The GQAPP is being revised to reflect the addition of these parameters. The additional wells that were constructed in 1990 for use in the RCRA program are discussed in section 2.3.

2.1 Confirmatory Sampling

As part of the RCRA Assessment Monitoring Program, confirmatory sampling was needed for some organic compounds during 1990. Analytical results are usually not received by the FMPC until several months after the sample is collected. Therefore in most cases, confirmatory sampling is performed during the round of quarterly sampling following the round in which the suspect sample was collected. A list of organic compound detections and available confirmatory results are provided in Table 2.7.

2.2 Purge Water Disposition

A description of the handling of purge water containing RCRA regulated constituents, or suspected of containing such constituents was addressed in a position paper completed in 1990 (DOE-396-91).

Purge water suspected of containing RCRA constituents is containerized. The Toxicity Characteristic Leaching Procedure (TCLP) is used to determine if RCRA

Constituents are present in the water. If RCRA constituents are present, the purge water is disposed of per RCRA regulations. If no RCRA constituents are detected, the purge water is sent through the wastewater processing facility at the FMPC (The General Sump). Based on historical analytical data, purge water from well 1031 may contain RCRA regulated constituents. A satellite accumulation area was established for storage of the purge water from Monitoring Well 1031 pending TCLP analyses. The GQAPP is being revised to reflect the handling of potentially contaminated purge water.

2.3 Monitoring Network Changes

Eight new wells were installed for the RCRA Program in October, 1990 to improve the monitoring system. The GQAPP will be amended to reflect the addition of these wells to the program bringing the total number of Assessment wells to fifty-one (51). Monitoring Well 4011 was installed to provide a 4000-series upgradient well. Monitoring Wells 2643 and 2648 were installed downgradient of Waste Pit 4 in the water table zone of the sand and gravel aquifer. Monitoring Well 2649 was installed downgradient to Monitoring Well 1031 in the water table zone of the sand and gravel aquifer to determine if the constituents found in the glacial overburden are also present in the underlying aquifer. The first round of sampling for four of these wells occurred in November, 1990. No organic constituents were detected in Monitoring Wells 2643, 2648, and 4011. Groundwater from Monitoring Well 2649 contained: 1,1-Dichloroethane, Trichloroethene, 1,1,1-Trichloroethane, and 1,2-Dichloroethene(Total). The remaining four new

Monitoring Wells (1943, 1944, 1846, 1845) have not yet been developed, but should be ready for sampling in the first quarter of 1991.

2.4 Notifications Made To The EPA In 1990

A notification of constituent detections was sent to the OEPA on July 13, 1990 (DOE-1430-90; From: G.W. Westerbeck; To: Thomas A. Winston), per Ohio Administrative Code 3745.65. This notification indicated that volatile organic compounds had been detected in a Waste Pit monitoring well near the Clearwell: a surface water retention pond for the Waste Pit Area.

A proposal for additional assessment activities was submitted to the OEPA on October 1, 1990 (DOE-1983-90; From: G. W. Westerbeck; To: Thomas A. Winston). The proposal addressed the 1031 area by siting a 2000-series well downgradient to Monitoring Well 1031. It also included the installation of seven more monitoring wells in the Waste Pit Area to improve the program. The additional activities that were suggested in the proposal have been completed.

A notification on purge water disposition was sent to the OEPA on December 24, 1990 (DOE-396-91; From G. W. Westerbeck, To: Graham Mitchell).

2.5 Revision Of The GQAPP

Revisions to the GQAPP were initiated in August, 1990. The revisions include an

expanded well monitoring program, an extensive procedure for assessment activities, and a vehicle for implementing future changes to the RCRA Program. The revision to the GQAPP is expected to be submitted by the second quarter of 1991.

2.6 Errata To The 1989 Annual Report, Final Update

The RCRA Groundwater Quality Assessment Program Progress Report For 1989, Final Update was sent to the EPA on October 24, 1990 (DOE-89-91; From: G. W. Westerbeck; To: Thomas A. Winston). This report was developed to complete the reporting requirements for groundwater data in 1989. It was recently discovered that a number of pages in the tables provided in the appendices were missing due to a duplication error. These pages have been provided in Appendix I of this 1990 annual report.

3.0 1990 PROGRAM RESULTS

3.1 Presentation Of Data

Ground water elevation data was collected monthly from all of the monitoring wells at the FMPC. Water level data collected from monitoring wells, included in this RCRA assessment program, are tabulated in Appendix II. Measurements were taken from a reference point at either the top of the well casing or the top of the protective casing. Water level elevations were calculated by subtracting the

measured reference level from the reference point. Water table maps are provided in this report (Figures 3.42 through 3.45).

Analytical results of water samples collected from wells, included in this assessment, are tabulated in Appendix VI. The data is sorted by constituent, well number, and the date that the sample was collected. Analytical results for duplicate samples, trip blanks, field blanks, method blanks, and rinsates are also provided.

Field measurements (pH, specific conductivity, temperature, and dissolved oxygen) are tabulated in Appendix IV. Field measurements were made in the field as the during sampling. Measurements were collected and recorded at the start of purging, the start of sampling, and the end of sampling.

3.2 Assessment of the Groundwater In The Glacial Overburden

3.2.1 Occurrence of Groundwater In The Glacial Overburden.

A thick sequence of silty-clay with interbedded lenses of sand overlies the sand and gravel aquifer throughout most of the FMPC property. This sequence of silty-clay and sand is referred to as the glacial overburden throughout this report. The glacial overburden represents deposits of loess, lacustrine silts and clays, till, and glaciofluvial sands. Each overburden material has distinct hydrologic characteristics that affect the vertical and lateral movement of fluids.

Groundwater within the glacial till exists as discontinuous perched bodies. Groundwater in the underlying sand and gravel is part of a regional aquifer known as the Great Miami Aquifer. Separating the localized discontinuous perched groundwater in the glacial overburden, and the underlying regionally extensive Great Miami Aquifer is approximately 20 to 30 feet of unsaturated material.

Through assessment work conducted in the Waste Pit Area on the glacial overburden (cross sections, fence diagrams etc.) it has been documented that the overburden beneath the Waste Pit Area is very heterogeneous. Of the four glacial overburden materials, the glaciofluvial deposits are considered to be the most permeable units. The limited extent and interconnection of these deposits, illustrated in well logs and through erratic water level data, suggests limited movement of water and contaminants through these units.

The majority of the glaciofluvial material consists of small interbeds of highly sorted sand and gravel. It is believed that these materials were deposited by small meltwater streams that once existed along an ice margin and/or beneath a glacier. These intertill sand layers are highly variable in areal extent, thickness, and volume.

3.2.2 Direction and Speed of Groundwater Flow in the Glacial Overburden.

Water level data and drilling records indicate that groundwater in the glacial overburden appears to be localized with no apparent regional continuity. No flow

systems within this unit have been identified yet by the RI/FS Investigation.

3.2.3 Quality of Groundwater in the Glacial Overburden.

The quality of groundwater in the glacial overburden was determined using a statistical analysis that compared the water quality from background wells to the water quality of wells in the Waste Pit Area. The statistical procedures utilized for the assessment are recommended in the Interim Final Guidance for Statistical Evaluation of Ground Water Data at RCRA Facilities April, 1989, and are the same procedures that were used to assess data for the 1989 RCRA Annual Report.

The 16 constituents present in statistically significant concentrations in 1989, were all detected in statistically significant concentrations in 1990. In addition to these 13 constituents, Total Organic Carbon was determined to be significantly elevated in Monitoring Well 1031 in 1990. Tables 3.1 and 3.2 list parameters detected in statistically significant concentrations in 1989 and 1990, respectively. The statistical procedures used (i.e., Test of Proportions, Students T-Test) and the tables indicating statistical significance are provided in Appendix V for reference. A description of the statistical procedures will be added to the revised GQAPP.

The quality of ground water in the glacial overburden at 11 locations in the Waste Pit Area is statistically different from background ground water quality.

Only 1 of the 11 locations (Monitoring Well 1031) contained organic compounds. In addition to the organic constituents listed as statistically significant in 1989 (1,1-DCA, PCE, and TCE), the following organic compounds were detected in Monitoring Well 1031 at least twice in 1990: 1,2-Dichloroethene (Total), 1,2-Dichloroethane, Acetone, Methylene Chloride, and Toluene. A list of all organics detected in Monitoring Well 1031, in 1990, is provided in Table 3.3.

In addition to the organic compounds detected in Well 1031, detections of man-made volatile and semi-volatile organic compounds, in all monitoring wells, were examined to see if subsequent rounds support the detection. As is indicated in Table 3.4, with the exception of Well 1031, detections of organic compounds were not confirmed by subsequent sampling episodes.

3.2.3.1 Specific Conductivity - Glacial Overburden

The highest value of specific conductivity reported is 6200 uMHOs/cm measured in Monitoring Well 1027 during the February, 1989 round of sampling, but because this value varies greatly from other measurements collected at this location this datum is suspect because of its singular occurrence and extremely high value. The next highest value reported was 4330 uMHOs/cm measured in Monitoring Well 1028 during the August, 1990 round of sampling. Specific conductivity values range as high as 4 to 7 times the background average of approximately 640 uMHOs/cm. Monitoring Wells 1025, 1028, 1030, 1031, and 1081 maintain results above 1200 uMHOs/cm, and represent the highest conductivities in the till.

Specific conductivity concentrations verses time have been plotted to determine if the specific conductivity at any one location is increasing or decreasing. A best fit linear interpretation of the data was also performed to establish trends (see Figures 3.1 through 3.5).

Time verses concentration plots indicate that conductivities are increasing in Monitoring Wells 1028, 1079, and slightly in 1080 and 1082. The highest rate of change, as determined by the slope of the best fit line, occurs in Monitoring Well 1028, which has experienced a change of approximately 70 uMHOs/cm over the two and half year monitoring period.

3.2.3.2 pH - Glacial Overburden

The average background pH value for groundwater in the glacial overburden is 7.20 standard units. Wells in the Waste Pit Area that indicate a more acidic pH are 1025, and 1028. The most acidic pH value was 5.91 standard units measured in Monitoring Well 1028 during the June, 1989 sampling quarter. The only well that exhibits a more basic pH than the average is Monitoring Well 1031, which has an average pH of 9.21 and a high of 9.85 standard units.

Time verses concentration plots were developed to determine pH trends (Figures 3.6 through 3.10). These plots indicate that the pH is changing significantly, compared to background, at Monitoring Wells 1028, 1031, and 1080. Measured pH levels in Monitoring Well 1028 are lower than background levels but have

increased over the two and a half year monitoring period. Measured pH levels in Monitoring Well 1031 are above background levels and have also increased over the monitoring period. Measured pH levels in Monitoring Well 1080 are above background and have decreased over the monitoring period. Measured pH levels in the other wells are near background levels and may be changing slightly, however, no strong trends were observed.

3.2.3.3 TOC and TOX - Glacial Overburden

The TOC and TOX levels for Monitoring Well 1031 represent the organic compounds detected in the groundwater. The levels of Total Organic Carbon (TOC) and Total Organic Halides (TOX) in groundwater sampled at Monitoring Well 1031 are statistically elevated when compared to background levels. The level of TOC is 3 times higher in Monitoring Well 1031 than background, and the level of TOX in Monitoring Well 1031 is 13 times higher than background.

Time verses concentration plots indicate that the TOC level in Monitoring Well 1031 has increased (see Figure 3.11), but no trend has been indicated for TOX levels in Monitoring Well 1031 (see Figure 3.12). TOC levels show an increasing trend in Monitoring Well 1052. The only organic detection in 1990 was acetone during the May round of sampling, however, subsequent rounds indicate less than detectable values for acetone. At this time it is not known what is causing the increase in TOC in Monitoring Well 1052. The TOX levels are increasing in Monitoring Well 1024, but this is mostly due to what seems to be an outlier in

the data for the November, 1990 round of sampling.

3.2.3.4 Sulfate - Glacial Overburden

The average background value for sulfate in the glacial overburden groundwater is 76.53 ppm. The highest measurements for sulfate are one time occurrences that appear to be suspect. The highest measurement of sulfate (855 ppm) was taken in Monitoring Well 1079 in August, 1988, however, all other measurements at Monitoring Well 1079 are approximately 200 ppm, so the August, 1988 result is considered suspect. The second highest sulfate measurement was 677 ppm recorded in Monitoring Well 1025 in August, 1989. This measurement is high, however, compared to other results for Monitoring Well 1025. The third highest sulfate measurement (643 ppm) was taken from Monitoring Well 1028 in June, 1989.

Time verses concentration plots (Figures 3.13 through 3.17) indicate an upward trend in Monitoring Wells 1031, 1080, 1038, and 1052. The concentration of sulfate in all other wells are constant or decreasing.

3.2.3.5 Nitrate - Glacial Overburden

The highest concentration of nitrate (247 ppm) was measured in Monitoring Well 1028 in August, 1990. The average background concentration for nitrate is less than 1.0 ppm. Monitoring Wells 1025, 1028, 1031, and 1081 all have nitrate concentrations that are 10 times larger than the background average.

Time verses concentrations plots indicate trends in nitrate concentrations that can be seen in Figures 3.18 through 3.19. Monitoring Well 1025 has concentrations that increase at a rate greater than 10 ppm per quarter (three months), all other wells of concern indicate decreasing concentrations in the glacial overburden with the exception of Monitoring Well 1028.

3.2.3.6 Chloride - Glacial Overburden

Concentrations range from a low of non-detectable to a high of 1150 ppm in Monitoring Well 1031, measured in August, 1989. The average background value for chloride concentrations is 4.8 ppm. Monitoring wells with measured concentrations over 10 times that of background are; 1025, 1028, 1031, 1074, and 1083.

Time verses concentration plots (Figures 3.20 through 3.24) indicate that the chloride concentrations in Monitoring Well 1028 have increased at a rate greater than 20 ppm per quarter throughout the monitoring period, but only two data points exist to indicate this trend. The concentration of chloride in Monitoring Wells 1083, 1081, and 1082 has increased slightly.

3.2.3.7 Fluoride - Glacial Overburden

Fluoride concentrations in Monitoring Wells 1031 and 1074 are statistically elevated when compared to background concentration levels. The highest

concentration (1.72 ppm) was measured in Monitoring Well 1031 in May, 1990. This value is less than two times the background average of 0.933 ppm. The time verses concentration plot (Figure 3.25) indicates that the average change in the fluoride concentrations have decreased for both the background and compliance wells, but the concentrations for Monitoring Wells 1031 and 1074 are higher than background.

3.2.3.8 Calcium - Glacial Overburden

The average background value is 101.78 ppm. Calcium concentrations range from 47.7 to 718 ppm, with the highest measurement recorded in Monitoring Well 1025 in August, 1990. Monitoring wells with concentrations ranging higher than 3 times the background average are 1025, 1028, 1031, 1038, and 1081. Time verses concentration plots (Figures 3.26 through 3.30) indicate that calcium concentrations have increased in Monitoring Wells 1025, 1030, and 1038 by more than 10 ppm per quarter. Calcium concentrations in Monitoring Wells 1079, 1083, 1080, 1081, and 1082 have increased slightly, but the concentration in Monitoring Well 1024, which is a background well, has also increased.

3.2.3.9 Nickel - Glacial Overburden

Nickel concentrations in Monitoring Wells 1025, 1028, 1031, and 1074 are significant when compared to background concentrations. Nickel concentrations

range from non-detectable to a high of 0.981 ppm measured in Monitoring Well 1028 in June, 1989. A high of 1.61 ppm was recorded for Monitoring Well 1031 in November, 1989. Time verses concentration plots (Figures 3.31 through 3.32) indicate that the nickel concentration in Monitoring Well 1028 has decreased over the monitoring period, and the concentrations for Monitoring Wells 1025, 1031, and 1074 have all increased.

3.2.3.10 Magnesium - Glacial Overburden

The average background concentration for magnesium is believed to be 43.08 ppm. Magnesium concentrations range from 3.7 to a high of 277 ppm. The highest measurement was recorded in Monitoring Well 1025 in August, 1990. Concentrations in Monitoring Well 1025 are 5 times higher than the background concentration. Most other wells range from 20 to 60 ppm higher than the background concentration. Time verses concentration plots (Figures 3.33 through 3.37) indicate that the concentration of magnesium in Monitoring Wells 1025, 1028, 1038, 1083, and 1080 has increased at a rate significantly greater than the background concentration has increased.

3.2.3.11 Manganese - Glacial Overburden

Manganese concentrations range from 0.00665 to 3.51 ppm. The highest measurement was recorded in Monitoring Well 1038 in November, 1990. The highest

concentrations of manganese range from 7 to 20 times higher than the background average of 0.174 ppm. Time verses concentration plots (Figure 3.38) indicates that the concentration of manganese in Monitoring Wells 1025 and 1038 has increased at a rate significantly faster than concentration increases in background wells.

3.2.3.12 Sodium - Glacial Overburden

Sodium concentrations in Monitoring Wells 1025, 1031, 1080, and 1081 are significant when compared to background concentrations. Sodium concentrations range from 7.11 to 533 ppm. The highest measurement was recorded in Monitoring Well 1031 in November, 1989. The highest concentration is 26 times higher than the background average of 20.20 ppm. Time verses concentration plots (Figures 3.39 through 3.40) indicate that only Monitoring Well 1025 has concentrations that have increased over time.

3.2.4 Extent of Contamination by Parameter in the Glacial Overburden.

Concentration contours of water quality in the glacial overburden were not made due to the high variability of the data. It is probable that the overburden wells are screened in a number of localized permeable layers, which have little or no interconnection. Water quality measurements collected from these wells probably represent very localized conditions. This conclusion is supported by the erratic water level measurements collected from these wells, and the variable

nature of the water quality data. As an example, calcium concentrations measured in November, 1990 were mapped (Figure 3.41). Changes in calcium concentrations do not exhibit any trends: several wells located immediately down gradient of the waste pits indicate normal calcium concentrations; whereas, wells further downgradient indicated elevated calcium levels. Wells which indicate statistically significant water quality concentrations (when compared to background levels) may either be in contact with a waste pit, or may be affected by seepage from the surface infiltration.

3.3 Assessment of Groundwater in the Sand and Gravel Aquifer

3.3.1 Occurrence of Groundwater in the Sand and Gravel Aquifer

Groundwater in the underlying sand and gravel is part of a regionally extensive aquifer known as the Great Miami Aquifer. In the vicinity of the Waste Pit Area, the sand and gravel Aquifer is approximately 200 feet thick, and is separated into two units by a 10 to 20 foot thick layer of greenish-black silty-clay. This clay layer underlies about 360 acres of the FMPC and occurs only in the vicinity of the Waste Pit Area and the Production Area. The top of the clay layer lies about 125 feet below the land surface.

Water table elevations within the Sand and Gravel Aquifer in the vicinity of the Waste Pit Area typically have a maximum range of three feet across the area, although the actual values change seasonally. Water table elevation data from

2000-, 3000-, and 4000-series wells indicate that all zones being monitored within the Sand and Gravel Aquifer are essentially interconnected. Water elevation variations at different depth wells at the same location are rarely more than one foot. The gradients dip eastward. Recharge of the area is from flow out of the northwest.

3.3.2 Direction and Speed of Groundwater Flow in the Sand and Gravel Aquifer.

The direction of groundwater flow in the sand and gravel aquifer was determined through monthly water level measurements. Water level contour maps for February, May, August, and November, 1990, are provided in Figures 3.42, 3.43, 3.44, and 3.45). The direction of flow in 1990 trended generally toward the east-northeast beneath the Waste Pit Area, and toward the east beneath the Production Area.

An average hydraulic conductivity (as determined through the RI/FS Investigation) for the upper aquifer (2000- and 3000-series level) is roughly 450 feet/day and 600 feet/day for the lower aquifer.

Darcy's equation was used to relate hydraulic gradient, hydraulic conductivity, and effective porosity to estimate the average linear velocity of groundwater in the upper (2000-series) and lower (4000-series) zones of the sand and gravel aquifer in the Waste Pit Area for data collected in February and August, 1990.

The average linear velocity of groundwater in the upper sand and gravel aquifer

beneath the Waste Pit Area was estimated using the following equation:

$$V_h = (K_h * i) / Ne$$

V_h = the horizontal component of the average linear velocity

K_h = the horizontal component of hydraulic conductivity

i = the hydraulic gradient

Ne = the effective porosity

("Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Interim Final Guidance", United States Environmental Protection Agency, April 1989)

The gradient between Monitoring Well 2004 (east of Paddy's Run Creek) and Monitoring Well 2052 (north of the Production Area) for February, 1990 was 8.665E-04 (2.22 feet drop in head per 2562 feet distance). The gradient between Monitoring Wells 2004 and 2052 in August, 1990 was 6.440E-04 (1.65 feet drop in head per 2562 feet distance).

The effective porosity is roughly 25 percent. Using the 450 ft/day hydraulic conductivity value for the upper zone of the aquifer and the gradient stated above for February, 1990, the estimated horizontal component of the average linear velocity between monitoring wells 2004 and 2052 is 1.56 feet/day or 569 feet/year. For the 4000-series depth it is 2.079 feet per day or 759 feet per year.

In the upper zone of the sand and gravel aquifer during August, 1990, the horizontal component of the average linear velocity has been estimated as 1.16 feet per day or 423.4 feet per year. For the 4000-series depth the linear velocity was estimated to be 1.54 feet per day or 562 feet per year.

3.3.3 Quality of Groundwater in the Sand and Gravel Aquifer.

The assessment of the ground water quality for the 1989 Annual Report produced a list of impacted wells and the significant constituents (Table 3.5). These wells and constituents were analyzed for nature, rate, and extent of contamination.

Statistical analyses were performed on the 1990 data which produce an updated list of constituents of concern. The method used to determine statistical significance and the statistical tables are provided in Appendix V.

The results of this statistical assessment are provided in Table 3.6. No previously unimpacted wells appear to have been impacted in 1990, nor have any additional constituents of concern been identified, however, based on the additional data, several wells indicate the presence of constituents not previously observed in ground water samples from these wells. For example, in 1989 elevated levels of specific conductivity were not observed in well 2010, but were observed in 1990. Comparison of Tables 3.5 and 3.6 indicate that elevated levels of several parameters were more wide spread in 1990 than in 1989.

3.3.3.1 Specific Conductivity - Sand and Gravel Aquifer

Specific conductivity levels in the water table zone of the sand and gravel aquifer were determined to be statistically elevated. Specific conductivity in the sand and gravel aquifer ranges from 131 uMHOs/cm to 2810 uMHOs/cm. The highest measurement was made in Monitoring Well 3010 in May, 1988. The average specific conductivity in the water table zone is 702.81 uMHOs/cm. The average specific conductivity for Monitoring Well 3043 (upgradient) is 519.5 uMHOs/cm, compared to the average of Monitoring Well 3066 (upgradient), which is 1864.80 uMHOs/cm. It can be seen from these averages that the conductivity value measured in Monitoring Well 3066 is significantly different from conductivity values measured in the other upgradient wells.

Time verses concentrations plots were constructed to document the trend in specific conductivity values for each well (see Figures 3.46 through 3.53). From these plots it can be seen that specific conductivity levels in the water table zone (2000 Series Wells) decreased for all wells except 2019, which indicated an increase, and 2010, 2037, and 2055 which appear to have remained constant. Data from the 3000-series monitoring network indicates that specific conductivity values decreased in all wells except 3019, 3037, and upgradient well 3043.

Figure 3.52-A was provided to indicate trends without consideration of the May, 1988 data for Wells 3010 and 3037. These data were excluded from the plots because they were not representative of the other results and were assumed to be

suspect. When the suspect data was removed, the best fit line shows an increase in Monitoring Well 3037, and a slower decrease in Monitoring Well 3010.

It should be noted that Well 4013, screened in the lower aquifer, has conductivity values considerably higher than other lower aquifer wells.

3.3.3.2 pH - Sand and Gravel Aquifer

pH values in the sand and gravel aquifer range from 6.35 to 8.20 standard units. The highest measurement was recorded from Well 3013 in February, 1989. The average background pH for the water table zone (2000-series network) is 7.14 S.U., and the average pH determined from data collected from wells in the 3000-series network is 7.18 S.U. It can be seen from the range of pH and the average background level that the pH in the sand and gravel aquifer remains near neutral, varying by no more than 1 standard unit. Wells with pH values that were determined to be statistically significant when compared to background are all slightly acidic.

The time versus concentration plots for pH levels (Figures 3.54 through 3.61) indicate that pH decreased in all wells except Wells 2066 and 3008, which exhibit an upward trend. All wells with decreasing pH levels seem to have similar rates of change (slopes of the best fit lines are nearly parallel).

3.3.3.3 Sulfate - Sand and Gravel Aquifer

Sulfate concentrations in the sand and gravel aquifer range from non-detectable to 1090 ppm. The highest measurement was made in water collected from Well 2084 during August, 1990. The average background concentration for the water table zone is 37.58 ppm, and the average concentration from data collected in the 3000-series network is 27.70 ppm. Wells showing concentrations 10 times higher than background are; 2010, 2027, 2051, 2084, 3010, 3019, 3037, 3055, and 3084.

Time versus concentration plots of sulfate concentrations in the sand and gravel aquifer (Figures 3.62 through 3.70) indicate that trends in concentrations vary widely between wells. Of the four upgradient wells (2043, 2066, 3043, 3066) the concentration in Well 2043 has increased slightly whereas all other wells have decreased. In the downgradient wells, sulfate concentrations in Well 2084 have increased significantly faster than any other well. Due to the level and rate of increase of sulfate in well 2084 (compared to all other 2000 series wells) , the source of sulfate is probably near or at the location of Well 2084. Other wells that indicate increases in sulfate concentrations are; 2019, 2027, 2010, 3037, 3055, and 4010.

3.3.3.4 Chloride - Sand and Gravel Aquifer

Chloride concentrations in the sand and gravel aquifer range from 2.75 to 826 ppm. The highest recorded result was measured in Well 3066 (an upgradient well)

during May, 1988. This high measurement was consistent with other results for Well 3066. The average concentration of chloride in the water table zone is 56.69 ppm. The average concentration for upgradient well 3043 in the 3000-series monitoring network is 17.02 ppm, whereas upgradient Well 3066 has an average concentration of 599.27 ppm. The concentration in Upgradient Well 3066 is 36 times as high as the average for Well 3043. The extremely high concentrations measured in Well 3066 affected the statistical assessment of data collected from the 3000 series wells. The high concentrations in Well 3066 are confirmed in the specific conductivity readings for the well, which are also high. The downgradient wells that are more than 2 times the average background concentration, not including 3066, are; 2027, 2084, 3010, 3013, 3019, 3037, 3051, 3055, 3084, and 4013.

Time verses concentration plots for chloride (Figures 3.71 through 3.75) show that all of the chloride concentrations have decreased except for Wells 2010, 2055, 3037, and upgradient well 3043. None of the wells displaying increasing concentration trends indicate statistically elevated values or large increases. The two wells determined to have statistically elevated levels of chloride indicated decreasing trends.

3.3.3.5 Nitrate - Sand and Gravel Aquifer

Nitrate concentrations in the sand and gravel aquifer range from non-detectable to 71 ppm. The highest measurement was made in well 2019 in November, 1989.

Background concentrations average less than 1 ppm. Wells that have nitrate concentrations 10 times as high as background are; 2019, 2021, 2084, 3019, and 3084. Times verses concentration plots for nitrate concentrations (Figures 3.76 through 3.80) indicate nitrate concentrations for Wells 2019, 2021, and 3084 have slightly increased (less than 5 ppm per three month period). Nitrate concentrations in Wells 2084, 3010, and 3037 are higher than background concentrations but have decreased over time.

3.3.3.6 Calcium - Sand and Gravel Aquifer

Calcium concentrations range from 17 to 449 ppm. The highest concentration was measured in well 2027 in June, 1989. The average concentration for upgradient wells in the water table zone of the sand and gravel aquifer is 98.44 ppm, and the average for upgradient aquifer wells in the 3000-series is 125.63 ppm. Time verses concentration plots for calcium (Figures 3.81 through 3.89) show that calcium concentrations in Wells 2043, 2084, 2055, 2051, 3043, 3051, and 3055 have increased.

3.3.3.7 Iron - Sand and Gravel Aquifer

Iron concentrations in the sand and gravel aquifer range from non-detectable to 77.80 ppm. The highest measurement was made in well 2027 in November, 1990. The

average concentration in the water table zone of the sand and gravel aquifer is 5.06 ppm, and the average for the data collected from 3000-series wells is 9.39 ppm. Time verses concentration plots (Figures 3.90 through 3.94) indicate that iron concentrations have increased in all wells, including background wells, except for wells 2021 and 2013. Iron concentrations have increased rapidly in well 2027 and upgradient well 2043.

3.3.3.8 Magnesium - Sand and Gravel Aquifer

Magnesium concentrations range from 15 to 101 ppm in the sand and gravel aquifer. The highest measurement was detected in well 2084 in November, 1990. The average background magnesium concentration in the water table zone of the sand and gravel aquifer is 36.24 ppm. The 3000-series zone background average is 36.67 ppm. Time verses concentration plots (Figures 3.95 through 3.100) indicate that concentrations in wells 2084 and 2027 have significantly increased over the monitoring period. Wells 3084 and 3037 were found to have statistically significant concentrations of magnesium, yet their concentrations have decreased over the monitoring period. It is not certain what caused concentrations in the 3000-series wells to decrease while concentrations in the water table zone increased.

3.3.3.9 Manganese - Sand and Gravel Aquifer

Manganese concentrations in the sand and gravel aquifer range from non-detectable

to 4.32 ppm. The highest concentration was measured in well 3010 in November, 1988. The average background concentration for the water table zone is 0.17 ppm, and the average concentration for the 3000-series network is 0.13 ppm. Concentration verses time plots (Figures 3.101 through 3.109) indicate that manganese concentrations increased in Wells 2043, 2084, 2027, 2010, 2037, 2055, 2013, 2051, 3043, 3066, 3008, 3055, 4008, and 4010. Concentrations increased in upgradient as well as downgradient wells, indicating that the increase in manganese may not be due to the Waste Pit Area; although, concentrations in Well 2084 and 2027 increased at a faster rate than upgradient wells.

3.3.3.10 Sodium - Sand and Gravel Aquifer

Sodium concentrations in the sand and gravel aquifer range from 7.22 to 439 ppm. The highest measurement was made in well 3066 in February, 1990. The average background concentration in the water table zone is 42.47 ppm, the average concentration for 3000-series network background Well 3043 is 19.9 ppm, and the average concentration for 3000-series network background Well 3066 is 292.89 ppm. Time verses concentration plots were only completed for Well 2084 and the water table background wells (Figure 3.110) because only Monitoring Well 2084 was determined to have statistically significant levels of sodium. Well 2084 has a higher average sodium concentration than upgradient wells, but its rate of increase is similar if not slightly less than that of the upgradient wells.

3.3.4 Extent of Contamination by Parameter in the Sand and Gravel Aquifer

Isoconcentration contour maps were constructed for parameters whose concentrations were determined to be statistically different from background concentrations. The contour maps were constructed only for those parameters that indicated 3 or more Monitoring Wells with statistically significant concentrations in the same monitoring zone.

Specific conductivity contour maps were made for both the water table zone and the 3000-series network with data collected in May and November, 1990 (Figures 3.111 through 3.112). The water table zone maps clearly define a plume extending from the area around Well 2084 eastward through Well 2027 toward Well 2037. The specific conductivity levels in Well 2037 do not appear elevated; therefore, the specific conductivity plume is estimated to extend approximately 800 feet east-northeast of Well 2084. The extent of migration, roughly normal to the direction of flow, is indeterminate due to fewer data points in this direction.

Specific conductivity contour maps in the 3000-series monitoring network (Figures 3.113 and 3.114) define a slightly larger plume, extending from Well 3084 through Well 3037, and continuing east-northeastward under the northernmost portion of the Production Area. A smaller concentration anomaly around Well 3084 could indicate a second plume of unknown origin. The plume extending from the Waste Pit Area is estimated to be approximately 2000 feet long and 500 to 700 feet wide.

The source of the plume is (i.e. which waste pit, surface infiltration, etc.) has not been positively identified, at this time, but from data available it is probable that Well 2084 is close to the source. The plume seems to be sinking into the aquifer through the 3000-series network as it migrates eastward. This is indicated by Well 3037 (located east of the Waste Pit Area) having the highest middle aquifer conductivities, with Well 2084 (located within the Waste Pit Area) having the highest upper aquifer conductivities. The lower aquifer beneath the blue-clay layer does not show any indication of increased conductivity values with the exception of Monitoring Well 4013. Monitoring Well 4013 is located east of the Production Area, and is anticipated to have been affected by a source other than that of the Waste Pit plume.

Contours maps of pH values in the sand and gravel aquifer were completed using data collected in both May and November, 1990 (Figures 3.115 through 3.118). The pH contour maps indicate the same trend as the specific conductivity contour maps discussed above. Variations in the maps from May to November (between the water table zone (2000-series network) and the deeper (3000-series network) are probably due to the fact that the pH results are close to background, and small variations in data (due to errors or natural causes) can change contours significantly. As illustrated in Figures 3.111 through Figure 3.118, the areal extent of statistically lower than background pH levels is consistent with the areal extent of elevated specific conductivity values.

A contour map of sulfate concentrations in the water table zone of the sand and

gravel aquifer (Figure 3.119) identifies a plume similar in configuration to the plumes illustrated on the specific conductivity and pH maps. Figure 3.119 indicates that a plume containing elevated concentrations of sulfate extends east to east-northeast from Well 2084, where the concentration is 621 ppm, towards Wells 2027 and 2037 where the concentrations are 642 and 125 ppm, respectively. Well 2010 also indicates an elevated sulfate concentration of 105 ppm. The plume extends approximately 1500 feet from Well 2084 into the Production Area. The migration normal to the direction of flow is not as accurately defined due to fewer monitoring wells in this direction.

A similar contour map was developed for the 3000 series well network. This contour map (Figure 3.120) indicates that the extent of the plume is much greater at that depth than in the water table zone. The region affected extends from Well 3084 (375 ppm) east-northeast through Well 3037, and east through Wells 3010, 3055, and 3013. The eastward extent of the plume at this depth is estimated to be approximately 3500 feet, extending through the Production Area. Increased specific conductivity and pH levels do not extend through the Production Area. The extensive area affected by the elevated sulfate concentrations may represent contributions from a source within the Production Area, as well as a source within the Waste Pit Area.

A cross-sectional view was constructed to illustrate the vertical extent of the plume (Figures 3.121-A and 3.121-B). Higher concentrations of parameters such as sulfate and specific conductivity have been detected with increasing depth at

sampling points east of the Waste Pit Area, indicating that the plume migrated deeper into the aquifer as it moved to the east. Sulfate concentrations were chosen for this construction, because they best illustrate the plume's migration pattern. It is thought that a vertical gradient is causing the downward migration of contaminants within the plume.

The contour maps of nitrate concentrations (Figures 3.122 and 3.122) indicate a plume slightly different in configuration from the plume defined by specific conductivity and sulfate. The highest nitrate concentrations were found in wells around Waste Pit 4, suggesting Pit 4 may be the source. Wells downgradient to Monitoring Wells 2084, 2019, and 2021 do not have high nitrate levels. The plume is estimated to be 500 feet long in the direction of groundwater flow and close to 1000 feet wide. The plume dimensions appears to be slightly smaller in the water table zone than in the deeper portions of the aquifer (3000-series network).

The contour map of calcium concentrations in the water table zone of the sand and gravel aquifer (Figure 3.124) identifies the same plume configuration as the specific conductivity and sulfate maps, for the water table zone. The extent of elevated calcium concentrations at the 3000-series level (Figure 3.125) is more extensive than the elevated specific conductivity concentrations, (2500 feet east of well 3084 and about 1500 feet wide). The width of the plume could possibly be smaller than depicted on the contour map.

A contour map of iron concentrations in the water table zone of the sand and gravel aquifer (Figure 3.126) indicates a plume centered around Monitoring Well 2027 extending east-northeast about 500 feet toward Monitoring Well 2037. Iron contours outline the same plume configuration identified by specific conductivity, pH, and sulfate. No monitoring wells at the 3000-series level contain statistically elevated levels of iron.

The contour map of magnesium concentrations identifies the same plume configuration as specific conductivity, sulfate, and calcium in the water table zone of the sand and gravel aquifer (see Figure 3.127). The statistical assessment only identified two wells that have significantly elevated concentrations of magnesium at the 3000-series level, so a contour map at this depth was not generated. The two wells in the 3000-series network are located in the same region as the plume in the water table zone.

Manganese concentration maps were developed for both the water table zone and the 3000-series level of the sand and gravel aquifer. The manganese concentration map in the water table zone (Figure 3.128) identifies the same plume configuration as magnesium and other constituents. The 3000-series depth contour map (Figure 3.129) identifies a plume slightly larger than in the water table zone, extending approximately 1500 feet east from well 2084 toward the Production Area. The map of the 3000-series level identifies a plume configuration similar to the configuration identified by specific conductivity and pH contour maps. A contour map was not developed for the lower aquifer, but a map was produced

with the concentrations of each monitoring well (4001, 4008, 4010, and 4013) (Figure 3.130). The high concentrations in the lower aquifer do not correspond to the plumes identified in the water table zone and 3000-series level.

3.3.5 Rate of Migration in the Sand and Gravel Aquifer

The rate of migration of constituents in the groundwater can not exceed the advective rate of groundwater flow. As a conservative estimate, the advective flow rate will be considered as the rate of migration for constituents in the sand and gravel aquifer. This estimate is conservative because factors such as attenuation and dispersion will slow the migration rate and dilute contaminant concentrations.

The ongoing RI/FS Investigation will include a groundwater flow model that considers attenuation and dispersion. The model will assess the extent of contamination throughout the facility, including the Waste Pit Area.

3.3.5.1 Mathematical Perspective on Rate of Migration

From a purely observational and mathematical perspective, changes in constituent concentrations and physical property levels between selected wells (i.e., time verses concentration plots) were utilized to provide insight into changes in water quality in the waste pit area, until modeling results are available. Estimated average rates of migration in localized areas (i.e., between well pairs

in the same flow path) were based on the observed rates of change of constituent concentrations over the two and a half year monitoring period. Equations for the best fit linear curve (y=mx+b) from the time verses concentration plots were used to determine the rates of migration. The concentration of the constituent of interest from the upgradient well in each pair was substituted into the equation for the best fit line (concentration vs. time) for the downgradient well in the pair. The equation was then solved to determine the time required for the concentration observed in the upgradient well to migrate to the downgradient well. The calculations of rates of migration are provided in Appendix III.

3.3.5.2 Rate of Change of Specific Conductivity in the Sand and Gravel Aquifer

By using data obtained in May 1988, the time required for the 1294.8 uMHO/cm specific conductivity level (in the water table zone of the Sand and Gravel Aquifer (2000-series)) to travel from Monitoring Well 2027 to Monitoring Well 2084 is roughly 4.9 years. The distance between the two wells is 380 feet. The level of specific conductivity in both wells has decreased over the monitoring period. The best fit linear equation for change in specific conductivity levels at Monitoring Well 2027 is:

$$\text{SPECIFIC CONDUCTIVITY} = -15.8091 * \text{TIME} + 1310.58$$

In May, 1988 (Time=1), the average specific conductivity level of groundwater

sampled from Monitoring Well 2027 (from the above equation) was 1294.8 uMHO/cm. This value is based on the average rate of change of specific conductivity. The best fit linear equation for change in specific conductivity levels at Monitoring Well 2084 is:

$$\text{SPECIFIC CONDUCTIVITY} = -22.7364 * \text{TIME} + 1741.33$$

If the specific conductivity calculated (at time =1(quarter of a year)) at Monitoring Well 2027 is inserted into the best fit linear concentration equation for Monitoring Well 2084, and the equation is solved for TIME, the result is how much time it takes for the 1294.8 uMHO/cm specific conductivity level to travel from Monitoring Well 2027 to Monitoring Well 2084.

$$1294.8 = -22.7364 * \text{TIME} + 1741.33$$

$$\text{TIME} = (1294.8 - 1741.33) / -22.7364$$

$$\text{TIME} = 19.64 \text{ quarters or } 4.91 \text{ years}$$

The distance between the two monitoring wells was determined by subtracting the East and North coordinate values for the wells, squaring the values, adding them together, and taking the square root of the sum:

	East	North
Monitoring Well 2027	1379317.37	481969.29
Monitoring Well 2084	-1378940.30	-481922.56
	---	---
	377.07	46.73

Distance = (377.07^2 + 46.73^2)^1/2

Distance = 379.95 feet

Dividing the distance between the two wells (380 feet) by the time (4.91 years) provides a rough estimate of the rate at which the ground water displaying elevated levels of specific conductivity is migrating between the two wells.

380 feet / 4.91 years = 77.4 feet/year

The same method was used to determine the vertical migration of the 1641.33 specific conductivity contour from Monitoring Well 2084 to Monitoring Well 3084. The solution of the method between these two monitoring wells produced a vertical migration rate of 39.53 feet per year. This suggests that the source affecting Monitoring Well 2084 is probably the same source affecting Monitoring Well 3084. The only difference between the two monitoring wells is that Monitoring Well 3084 is located deeper than Monitoring Well 2084. Thus, the specific conductivity changes at Monitoring Well 3084 may be related to water quality changes moving downward from the water table zone.

The rate of migration of elevated specific conductivity values between 3000-series wells was not calculated by the method outlined above because no relationship could be made between downgradient wells. Monitoring Wells 3037 and 3019 indicated increasing specific conductivity levels, but monitoring wells up and downgradient to these two monitoring well locations indicate decreasing levels. Increasing levels of specific conductivity in two monitoring wells indicate that these monitoring wells are being affected, however no other monitoring wells show this trend, therefore no correlation could be made.

3.3.5.3 Rate of Change of Sulfate in the Sand and Gravel Aquifer

The change of sulfate concentrations over time for the water table zone was calculated using the same method stated above between Monitoring Wells 2084 and 2027. Both monitoring wells indicate upward trends in sulfate concentrations, with Monitoring Well 2084 increasing at the fastest rate. The calculation determined that it would take 1.983 years for the 439.9 ppm contour of sulfate to migrate from Monitoring Well 2084 to Monitoring Well 2027. This result suggests that the sulfate concentration contour is moving at a horizontal rate of 191.6 feet per year.

No connection could be made in 3000-series wells to determine the rate of change at that depth. Monitoring Well 3037 is increasing in sulfate concentrations, whereas Monitoring Well 3084 is decreasing in sulfate concentrations.

3.3.5.4 Rate of Change of Chloride in the Sand and Gravel Aquifer

Rates of change of chloride concentrations for the water table zone between Monitoring Wells 2027 and 2084 have been calculated to be 43.34 feet per year. The chloride concentrations in both wells have decreased at similar rates. No relationship has yet been established between water table zone results and results in the 3000-series zone. Monitoring Well 3084 has concentrations higher than one background monitoring well, but the concentrations are lower than upgradient Monitoring Well 3066, and have decreased over time. Monitoring Well 2084 has lower concentrations than the deeper Monitoring Well 3084, and its concentrations have decreased. Monitoring Well 3037 has displayed increased concentrations of chloride over the monitoring period, but the concentrations are lower then upgradient concentrations in Monitoring Well 3066.

3.3.5.5 Rate of Change of Calcium in the Sand and Gravel Aquifer

The relationship between Monitoring Wells 2084 and 2027 could not be used for determining rates of change of calcium concentrations because Monitoring Well 2084 indicates increasing concentrations whereas all of the surrounding monitoring wells indicate decreasing calcium concentrations. A lateral connection could be made between Monitoring Wells 2010 and 2055. The calculation determined that the 188.27 ppm calcium contour would take 11.16 years to reach Monitoring Well 2055 from 2010. This reduces to a rate of 90.84 feet per year for calcium in the water table zone.

The concentrations in the 3000-series zone are decreasing with the exception of Monitoring Wells 3001, 3055, and 3051. The monitoring wells which indicated increasing concentrations of calcium are not related to each other as is evident by the distance between these wells, and the fact that there are monitoring wells between them that indicate decreasing concentrations. Because of the discontinuity described above, no connection could be made in the 3000-series zone.

3.3.5.6 Rate of Change of Iron in the Sand and Gravel Aquifer

The calculated migration rate of iron between Monitoring Wells 2027 and 2037, or Monitoring Wells 2084 and 2027 could not be conducted because of the extreme rate of change of iron concentrations in Monitoring Well 2027. Connections between Monitoring Well 2027 and other monitoring wells would not be accurate because no other well is indicating similar trends. No connection has been established between iron concentrations in the water table and 3000-series zone.

3.3.5.7 Rate of Change of Magnesium in the Sand and Gravel Aquifer

The calculated rate of migration of the 65.72 ppm magnesium concentration level from Monitoring Well 2084 to 2027 is 167.44 feet per year. Both monitoring wells indicate increasing concentrations of magnesium. There appears to be no connection between the water table zone and the 3000-series zone in the region of Monitoring Wells 2084, 3084, 2027, and 3037. This is supported by the fact

that water table aquifer concentrations have increased while 3000-series concentrations have decreased.

The calculated lateral migration of magnesium in the 3000-series zone between Monitoring Wells 3084 and 3037 has been determined to be 135.45 feet per year.

3.3.5.8 Rate of Change of Manganese in the Sand and Gravel Aquifer

Manganese migration between Monitoring Wells 2084 and 2027 has been calculated at 224.7 feet per year in the water table zone of the sand and gravel aquifer. Both monitoring wells used for the calculation indicate increasing concentrations. No connection can be established between the water table and 3000-series zones because concentrations are increasing in the water table and decreasing in the 3000-series zone.

A calculation was performed to determine the rate of migration of manganese between Monitoring Wells 3084 and 3037 in the 3000-series zone. The manganese migration rate between the two monitoring wells was calculated to be 173.17 feet per year.

3.3.5.9 Rate of Change of Nitrate and Sodium in the Sand and Gravel Aquifer

Nitrate migration could not be calculated because there is no connection between downgradient wells. Nitrate calculations are only significant in Monitoring

Wells 2019, 2021, and 2084, none of which are downgradient to each other. Monitoring well results in the 3000-series zone are not consistent enough to make a connection between wells. Sodium has only been determined to be statistically significant in Monitoring Well 2084, so there are no other downgradient wells that can be used for comparison.

4.0 CONCLUSIONS

The 1990 assessment of groundwater quality beneath the Waste Pit Area confirmed that ground water quality has been affected. A ground water plume containing elevated levels of inorganic constituents extends east-northeast from the Waste Pit Area. The source of the contamination was determined to be within the Waste Pit area; however, because of the similarity of materials within the pits, and the location of the most severely impacted well (cross gradient to Pits 4, 5, 1, 2, and down gradient of Pit 3), it is not possible, at this time, to state the exact source of the plume. The plume is defined by general water quality parameters and metals whose concentrations are elevated above background concentrations. No organic compounds have been confirmed in this plume.

Organic compounds have been consistently detected in the glacial overburden in Monitoring Well 1031, which is located over 1000 feet southwest of the plume described above. First time monitoring results in the Sand and Gravel Aquifer immediately downgradient of Monitoring Well 1031 (Monitoring Well 2649) also indicates the presence of organic compounds. The organics in Monitoring Well

2649 will be confirmed in the first quarter of 1991.

It is probable that the organic compounds in Monitoring Well 2649 originate from a source other than that of the inorganic constituents around Monitoring Well 2084. The presence of organic and inorganic constituents in Monitoring Well 2649 appears to form a separate plume that is not connected with the constituent plume moving near Monitoring Well 2084. Groundwater monitored by Monitoring Wells 3001, 2021, 2019, and 3019, which are downgradient to Monitoring Well 2649 but upgradient to Monitoring Well 2084 do not contain organic constituents. The nature and extent of ground water containing organic compounds will be further investigated as part of the ongoing Assessment Monitoring Program in 1991.

Table 2.1

Scheduled Wells Not Sampled For Under RCRA Program

Well Number	Round Not Sampled	Reason
1004	Feb., May, Aug., Nov.	Dry
1072	Feb., May, Aug., Nov.	Dry
3051	Feb. (partial), May, Aug., Nov.	Stuck Purge Pump
1028	May, Aug. (partial)	Dry
1030	May, Aug., Nov.	Dry

Monitoring well 3051 could not be sampled because a purge bump became lodged in the well casing during the February round of sampling. A number of attempts have been made to dislodge the pump, but to date nothing has been successful. Well 3024 could not be sampled during May due to a stuck purge pump, the pump was removed and the well was sampled on June 11.

Table 2.2

Selected Wells and Site Specific Parameters for the RCRA Assessment Program

PARAMETERS	RATIONALE	UPGRADIENT TILL WELLS
Cobalt	A	1024
Beryllium	A	1052
Zinc	A	
Vanadium	A	DOWNGRADIENT TILL WELLS
Nickel	A	
Copper	A	1027
Magnesium	A	1080
Calcium	A	1079
Aluminum	A	1004
Barium	A	1074
Chromium	A	1031
Lead	A	1028
Silver	A	1072
Iron	A	1030
Fluoride	A	1038
Nitrate	A,B	1081
Chloride	A,B	1083
Sulfate	A,B	1082
pH	I	1025
Conductivity	I	
TOC	I	UPGRADIENT SAND & GRAVEL
WELLS		
TOX	I	
Tetrachloroethane	A	2066/3066
Methylene chloride	B	2043/3043
Dichloroethane	B	
Acetone	B	DOWNGRADIENT SAND & GRAVEL
Trichloroethene	C	
Toluene	B	3001/4001
		2084/3084
		2021
		2019/3019
		2027
		2010/3010/4010
		2013/3013/4013
		2051/3051
		2055/3055
		3008/4008
		3024
		2037/3037

A Major constituent of Pit 4
B Constituent found in waste pit area groundwater
C Constituent of Pit 4
I Groundwater Contamination Indicator Parameter Per OAC 3745-65-92(A)(3)

Taken from GQAPP, REV-1, March 1989

Table 2.3

First Quarter 1990 RCRA Analytical Parameters

HSL VOA

Acetone
1,1-Dichloroethane
1,2-Dichloroethane
Methylene chloride
Tetrachloroethene
Toluene
Trichloroethene

GENERAL WATER QUALITY & INDICATOR PARAMETERS

pH
TOC
TOX
Phenols
Specific conductance
Sulfate
Nitrate
Chloride
Fluoride
Dissolved oxygen

METALS (TOTAL & DISSOLVED)

Aluminum
Barium
Beryllium
Calcium
Copper
Iron
Magnesium
Manganese
Sodium
Zinc
Arsenic
Chromium
Cobolt
Lead
Nickel
Silver
Vanadium

Table 2.4

Second Quarter 1990 RCRA Analytical Parameters

INORGANICS ANALYTE	SEMIVOLATILE ORGANICS COMPOUND	SEMIVOLATILE ORGANICS COMPOUND
Aluminum	Phenol	3-Nitroaniline
Antimony	bis(2-Chloroethyl)Ether	Diphenylamine
Arsenic	2-Chlorophenol	2,4-Dinitrophenol
Barium	1,3-Dichlorobenzene	4-Nitrophenol
Beryllium	1,4-Dichlorobenzene	Dibenzofuran
Cadmium	Benzyl Alcohol	2,4-Dinitrotoluene
Calcium	1,2-Dichlorobenzene	Diethylphthalate
Chromium	2-Methylphenol	4-Chlorophenyl phenylether
Cobalt	bis(2-Chloroisopropyl)Ether	Fluorene
Copper	4-Methylphenol	4-Nitroaniline
Iron	N-Nitroso-Di-n-Propylaminm	4,6-Dinitro-2-Methylphenol
Lead	Hexachloroethane	N-Nitrosodiphenylamine (1)
Magnesium	Nitrobenzene	4-Bromophenyl-phenylether
Manganese	Isophorone	Hexachlorobenzene
Mercury	2-Nitrophenol	Pentachlorophenol
Nickel	2,4-Dimethylphenol	Phenanthrene
Potassium	Benzoic Acid	Anthracene
Selenium	bis(2-Chloroethoxy) Methane	Di-n-Butylphthalate
Silver	2,4-Dichlorophenol	Fluoranthene
Sodium	1,2,4-Trichlorobenzene	Pyrene
Thallium	Naphthalene	Butylbenzylphthalate
Vanadium	4-Chloroaniline	3,3-Dichlorobenzidine
Zinc	Hexachlorobutadiene	Benzo(a)Anthraene
Molybdenum	4-Chloro-3-Methylphenol	Chrysene
	2,6-Dinitrotoluene	bis(2-Ethylhexyl)Phthalate
	Hexachlorocyclopentadiene	Pyridine
	2,4,6-Trichlorophenol	Benzo(b)Fluoranthene
	2,4,5-Trichlorophenol	Benzo(k)Fluoranthene
	2-Chloronaphthalene	Benzo(a)Pyrene
	2-Nitroaniline	Indeno(1,2,3-cd)Pyrene
	Dimethyl Phthalate	Dibenz(a,h)Anthracene
	Acenaphthylene	Benzo(g,h,i)Perylene

GENERAL WATER QUALITY
&
INDICATOR PARAMETERS

pH	Nitrate
Specific Conductivity	Phenols
Dissolved Oxygen	Fluoride
TOC	Sulfate
TOX	Chloride

Table 2.4 (continued)

Second Quarter 1990 RCRA Analytical Parameters

PESTICIDE ORGANICS COMPOUND	VOLATILE ORGANICS COMPOUND
alpha-BHC	Chloromethane
beta-BHC	Bromomethane
delta-BHC	Vinyl Chloride
gamma-BHC (Lindane)	Methylene Chloride
Heptachlor	Acetone
Aldrin	Carbon Disulfide
Heptachlor epoxide	1,1-Dichloroethane
Endosulfan I	1,1-Dichloroethene
Dieldrin	1,2-Dichloroethene (total)
4,4'-DDE	Chloroform
Endrin	1,2-Dichloroethane
Endosulfan sulfate	1,1,1-Trichloroethane
4,4'-DDD	Carbon Tetrachloride
Endosulfan II	Vinyl Acetate
44'-DDT	Bromodichloromethane
Chlordane	1,2-Dichloropropane
Endrin aldehyde	cis-1,3-Dichloropropene
Toxaphene	Trichloroethane
Aroclor-1016	Dibromochloromethane
Aroclor-1221	1,1,2-Trichloroethane
Aroclor-1232	Benzene
Aroclor-1242	Trans-1,3-Dichloropropene
Aroclor-1248	Bromoform
Aroclor-1254	4-Methyl-2-Pentanone
Aroclor-1260	2-Hexanone
	Tetrachloroethene
	1,1,2,2-Tetrachloroethane
	Methyl ethyl ketone
	Toluene
	Chlorobenzene
	Ethylbenzene
	Styrene
	Total Xylenes

Table 2.5

Third Quarter 1990 RCRA Analytical Parameters

INORGANICS ANALYTE	VOLATILE ORGANICS COMPOUND
Aluminum	Chloromethane
Antimony	Bromomethane
Arsenic	Vinyl Chloride
Barium	Methylene Chloride
Beryllium	Acetone
Cadmium	Carbon Disulfide
Calcium	1,1-Dichloroethane
Chromium	1,1-Dichloroethene
Cobalt	Chloroform
Copper	1,2-Dichloroethane
Iron	1,1,1-Trichloroethane
Lead	Carbon Tetrachloride
Magnesium	Vinyl Acetate
Manganese	Bromodichloromethane
Mercury	1,2-Dichloropropane
Nickel	cis-1,3-Dichloropropene
Potassium	Trichloroethene
Selenium	Dibromochloromethane
Silver	1,1,2-Trichloroethane
Sodium	Benzene
Thallium	Trans-1,3-Dichloropropene
Vanadium	Bromoform
Zinc	4-Methyl-2-Pentanone
Molybdenum	2-Hexanone
	Tetrachloroethene
	1,1,2,2-Tetrachloroethane
	Methyl ethyl ketone
	Toluene
	Chlorobenzene
	Ethylbenzene
	Styrene
	Total Xylenes

GENERAL WATER QUALITY
&
INDICATOR PARAMETERS

pH	Nitrate
Specific Conductivity	Phenols
Dissolved Oxygen	Fluoride
TOC	Sulfate
TOX	Chloride

Table 2.6

Fourth Quarter 1990 RCRA Analytical Parameters

INORGANICS ANALYTE	VOLATILE ORGANICS COMPOUND
Aluminum	Chloromethane
Antimony	Bromomethane
Arsenic	Vinyl Chloride
Barium	Methylene Chloride
Beryllium	Acetone
Cadmium	Carbon Disulfide
Calcium	1,1-Dichloroethane
Chromium	1,1-Dichloroethene
Cobalt	Chloroform
Copper	1,2-Dichloroethane
Iron	1,1,1-Trichloroethane
Lead	Carbon Tetrachloride
Magnesium	Vinyl Acetate
Manganese	Bromodichloromethane
Mercury	1,2-Dichloropropane
Nickel	cis-1,3-Dichloropropene
Potassium	Trichloroethene
Selenium	Dibromochloromethane
Silver	1,1,2-Trichloroethane
Sodium	Benzene
Thallium	Trans-1,3-Dichloropropene
Vanadium	Bromoform
Zinc	4-Methyl-2-Pentanone
Molybdenum	2-Hexanone
Cyanide	Tetrachloroethene
	1,1,2,2-Tetrachloroethane
	Methyl ethyl ketone
	Toluene
	Chlorobenzene
	Ethyl benzene
	Styrene
	Total Xylenes
	2-Butanone
	Chloroethane
	2-Chloroethyl vinyl ether
	1,2-Dichloroethene
	trans-1,2-Dichloroethene

GENERAL WATER QUALITY & INDICATOR PARAMETERS

pH	Phenols
Specific Conductivity	Fluoride
Dissolved Oxygen	Sulfate
TOC	Chloride
TOX	Ammonia
Alkalinity - as $CaCO_3$	Nitrate-nitrite
Total Dissolved Solids	Phosphorus (total)

Table 2.7
Confirmatory Sampling for RCRA Organic Constituent Detections In 1990 Sampling

First Detect				Subsequent Detects	
Parameter	Well	DSC*	Results	Conformation Testing	Results
1,1,1-Trichloroethane	1031	05-04-90	1.7000	08/28/90	< 5.0000
1,1,1-Trichloroethane	2649	11-30-90	14.8000	N/A	N/A
1,1-Dichloroethane	1031	02-18-90	37.2000	05/04/90	21.4000
"	"	"	"	08/22/90	24.0000
"	"	"	"	11/16/90	20.8000
1,1-Dichloroethane	2021	11-09-90	1.1000	N/A	N/A
1,1-Dichloroethane	2649	11-16-90	7.7000	N/A	N/A
1,1-Dichloroethene	1031	05-04-90	5.6000	08/22/90	< 5.0000
1,2-Dichloroethane	1031	02-18-90	2.6000	05/04/90	1.8000
"	"	"	"	08/22/90	< 5.0000
"	"	"	"	11/16/90	< 5.0000
1,2-Dichloroethene(total)	2649	11-16-90	7.9000	11/16/90	< 5.0000
1,2-Dichloroethene(total)	1031	05-04-90	77.7000	08/22/90	56.0000
2-Nitrophenol	1031	11-16-90	7.2000	N/A	N/A
4-Methyl-2-pentanone	1031	05-04-90	5.9000	08-22-90	< 10.0000
Acetone	1031	02-18-90	78.0000	05/04/90	30.7000
"	"	"	"	08/22/90	< 10.0000
"	"	"	"	11/16/90	< 10.0000
Acetone	1052	05-16-90	16.6000	08/28/90	< 2.0000
Acetone	1081	05-24-90	2.1000	08/21/90	< 2.0000
Benzene	1031	05-04-90	2.6000	08/22/90	< 5.0000
bis(2-Ethylhexyl)phthalate	1079	05-11-91	35.4000	08/27/90	< 4.0000
"	"	"	"	11/14/90	< 4.0000
bis(2-Ethylhexyl)phthalate	4001	05-08-90	10.4000	08/27/90	< 4.0000
Carbon disulfide	3008	05-16-90	27.3000	08/28/90	< 1.0000
Carbon disulfide	3037	05-07-90	101.0000	08/27/90	< 1.0000
Carbon disulfide	3043	08-07-90	2.3000	11/14/90	< 1.0000
Chloroform	1031	05-04-90	1.6000	08/22/90	< 5.0000
Dichlorodifluoromethane	1031	11-16-90	7.4000	N/A	N/A
Methylene chloride	1031	02-18-90	5.0000	05/04/90	5.0000
Pentachlorophenol	1031	11-16-90	5.0000	N/A	N/A
Tetrachloroethene	1031	02-18-90	126.0000	05/04/90	150.0000
"	"	"	"	08/22/90	186.0000
"	"	"	"	11/16/90	195.0000
"	"	"	"	N/A	N/A
Tetrachlorophenol	1031	11-16-90	4.2000	N/A	N/A
Toluene	1031	02-18-90	1.5000	05/04/90	1.1000
"	"	"	"	11/16/90	< 5.0000
Toluene	3001	11-12-90	2.2000	N/A	N/A
trans-1,2-Dichloroethene	1031	11-16-90	9.1000	N/A	N/A
Trichloroethene	1024	02-18-90	2.7000	05/15/90	< 1.0000
Trichloroethene	1031	02-18-90	214.0000	05/04/90	137.0000
Trichloroethene	1031	05-04-90	137.0000	08/22/90	334.0000

* Date Sample Collected

Table 2.7 (continued)
Confirmatory Sampling for RCRA Organic Constituent Detections In 1990 Sampling

First Detect				Subsequent Detects	
Parameter	Well	DSC	Results	Conformation Testing	Results
Trichloroethene	1031	08-22-90	334.0000	11/16/90	292.0000
Trichloroethene	1031	11-16-90	292.0000	N/A	N/A
Trichloroethene	2649	11-16-90	182.0000	N/A	N/A
Vinyl chloride	1031	05-04-90	7.0000	08/22/90	< 5.0000

* Date Sample Collected

Table 3.1

Wells and Site Specific Constituents Found to Have Statistically Significant Concentrations In 1989 In the Glacial Overburden

Well Number	Constituents
1025	Calcium, Chloride, Conductivity, Magnesium, Manganese, Nitrates, pH, Sodium, Sulfate
1028	Calcium, Chloride, Conductivity, Magnesium, Nickel, Nitrates, pH, Sulfate
1030	Calcium, Conductivity, Magnesium, Nitrates
1031	Calcium, Chloride, Conductivity, Fluoride, Nitrates, pH, Sodium, Total Organic Halides, 1-1 Dichloroethane, Copper, Sulfate, Tetrachloroethane, Trichloroethene
1038	Calcium, Chloride, Magnesium, Manganese, pH
1074	Calcium, Chloride, Conductivity, Magnesium, Nickel
1079	Calcium, Magnesium
1080	Calcium, Magnesium, Sodium
1081	Calcium, Chloride, Conductivity, Magnesium, Nitrates, Sulfate
1082	Calcium, Chloride, Conductivity, Magnesium, Sulfate
1083	Calcium, Chloride, Magnesium, Nitrates

Listing of Constituents

1-1 Dichloroethane
Calcium
Chloride
Conductivity
Copper
Fluoride
Magnesium
Manganese
Nickel
Nitrates
pH
Sodium
Sulfate
Tetrachloroethane
Total Organic Halides
Trichloroethene

Table 3.2

Wells and Site Specific Constituents Found to Have Statistically Significant Concentrations in 1990 In the Glacial Overburden

Well Number	Constituent
1025	Calcium, Chloride, Magnesium, Manganese, Nickel, Nitrate, Sodium, Sulfate, Conductivity, pH
1027	Sulfate
1028	Nickel, Conductivity, pH
1031	Calcium, Chloride, Fluoride, Nickel, Nitrate, Sodium, Sulfate, Total Organic Halides, Total Organic Carbon, 1,1-Dichloroethane, Copper, Sulfate, Tetrachloroethane, Trichloroethene, Conductivity, pH
1038	Calcium, Chloride, Magnesium, Sulfate, pH
1074	Calcium, Chloride, Fluoride, Magnesium, Nickel, Conductivity
1079	Calcium, Magnesium, Sulfate
1080	Calcium, Magnesium, Sulfate
1081	Calcium, Chloride, Magnesium, Nitrate, Sulfate, Conductivity
1082	Calcium, Chloride, Magnesium, Sulfate, Conductivity
1083	Calcium, Chloride, Magnesium, Nitrate

Listing of Constituents

1,1-Dichloroethane
Calcium
Chloride
Copper
Fluoride
Magnesium
Manganese
Nickel
Nitrate
Sodium
Sulfate
Tetrachloroethane
Total Organic Halides
Total Organic Carbon
Trichloroethene
Conductivity
pH

Table 3.3
Organic Detections In Well 1031

Parameter	Date Sample Collected	Results	Duplicate	Trip Blank	Units
1,1,1-Trichloroethane	05-04-90	1.7000	N/A	N/A	ug/l
1,1-Dichloroethane	02-18-90	37.2000	N/A	1	ug/l
1,1-Dichloroethane	05-04-90	21.4000	N/A	N/A	ug/l
1,1-Dichloroethane	08-22-90	24.0000	21	1	ug/l
1,1-Dichloroethane	11-16-90	20.8000	N/A	1.	ug/l
1,1-Dichloroethene	05-04-90	5.6000	N/A	N/A	ug/l
1,2-Dichloroethane	02-18-90	2.6000	N/A	1	ug/l
1,2-Dichloroethane	05-04-90	1.8000	N/A	N/A	ug/l
1,2-Dichloroethene(Total)	05-04-90	77.7000	N/A	N/A	ug/l
1,2-Dichloroethene(Total)	08-22-90	56.0000	8.5	1	ug/l
2-Nitrophenol	11-16-90	7.2000	N/A	N/A	ug/l
4-Methyl-2-pentanone	05-04-90	5.9000	N/A	N/A	ug/l
Acetone	02-18-90	78.0000	N/A	2	ug/l
Acetone	05-04-90	30.7000	N/A	N/A	ug/l
Benzene	05-04-90	2.6000	N/A	N/A	ug/l
Chloroform	05-04-90	1.6000	N/A	N/A	ug/l
Dichlorodifluoromethane	11-16-90	7.4000	N/A	N/A	ug/l
Methylene chloride	02-18-90	5.0000	N/A	1	ug/l
Methylene chloride	05-04-90	5.0000	N/A	N/A	ug/l
Pentachlorophenol	11-16-90	5.0000	N/A	N/A	ug/l
Tetrachloroethene	02-18-90	126.0000	N/A	1	ug/l
Tetrachloroethene	05-04-90	150.0000	N/A	N/A	ug/l
Tetrachloroethene	08-22-90	186.0000	183	1	ug/l
Tetrachloroethene	11-16-90	195.0000	N/A	1.	ug/l
Tetrachlorophenol	11-16-90	4.2000	N/A	N/A	ug/l
Toluene	02-18-90	1.5000	N/A	1	ug/l
Toluene	05-04-90	1.1000	N/A	N/A	ug/l
Trichloroethene	02-18-90	214.0000	N/A	1	ug/l
Trichloroethene	05-04-90	137.0000	N/A	N/A	ug/l
Trichloroethene	08-22-90	334.0000	317	1	ug/l
Trichloroethene	11-16-90	292.0000	N/A	1.	ug/l
Vinyl chloride	05-04-90	7.0000	N/A	N/A	ug/l
trans-1,2-Dichloroethene	11-16-90	9.1000	N/A	1.	ug/l

Table 3.4
RCRA Organic Constituent Detections In 1990 Sampling

Parameter	Well	DSC	Results
1,1,1-Trichloroethane	1031	05-04-90	1.7000
1,1,1-Trichloroethane	2649	11-30-90	14.8000
1,1-Dichloroethane	1031	02-18-90	37.2000
1,1-Dichloroethane	1031	05-04-90	21.4000
1,1-Dichloroethane	1031	08-22-90	24.0000
1,1-Dichloroethane	1031	11-16-90	20.8000
1,1-Dichloroethane	2021	11-09-90	1.1000
1,1-Dichloroethane	2649	11-16-90	7.7000
1,1-Dichloroethene	1031	05-04-90	5.6000
1,2-Dichloroethane	1031	02-18-90	2.6000
1,2-Dichloroethane	1031	05-04-90	1.8000
1,2-Dichloroethene	2649	11-16-90	7.9000
1,2-Dichloroethene(total)	1031	05-04-90	77.7000
1,2-Dichloroethene(total)	1031	08-22-90	56.0000
2-Nitrophenol	1031	11-16-90	7.2000
4-Methyl-2-pentanone	1031	05-04-90	5.9000
Acetone	1031	02-18-90	78.0000
Acetone	1031	05-04-90	30.7000
Acetone	1052	05-16-90	16.6000
Acetone	1081	05-24-90	2.1000
Benzene	1031	05-04-90	2.6000
bis(2-Ethylhexy Ephthalate	1079	05-11-90	35.4000
bis(2-Ethylhexyl)phthalate	4001	05-08-90	10.4000
Carbon disulfide	3008	05-16-90	27.3000
Carbon disulfide	3037	05-07-90	101.0000
Carbon disulfide	3043	08-07-90	2.3000
Chloroform	1031	05-04-90	1.6000
Dichlorodifluoromethane	1031	11-16-90	7.4000
Methylene Chloride	1031	02-18-90	5.0000
Methylene chloride	1031	05-04-90	5.0000
Pentachlorophenol	1031	11-16-90	5.0000
Tetrachloroethene	1031	02-18-90	126.0000
Tetrachloroethene	1031	05-04-90	150.0000
Tetrachloroethene	1031	08-22-90	186.0000
Tetrachloroethene	1031	11-16-90	195.0000
Tetrachlorophenol	1031	11-16-90	4.2000
Toluene	1031	02-18-90	1.5000
Toluene	1031	05-04-90	1.1000
Toluene	3001	11-12-90	2.2000
trans-1,2-Dichloroethene	1031	11-16-90	9.1000
Trichloroethene	1024	02-18-90	2.7000
Trichloroethene	1031	02-18-90	214.0000
Trichloroethene	1031	05-04-90	137.0000
Trichloroethene	1031	08-22-90	334.0000
Trichloroethene	1031	11-16-90	292.0000
Trichloroethene	2649	11-16-90	182.0000
Vinyl chloride	1031	05-04-90	7.0000

Table 3.5

Wells and Site Specific Constituents Found to Have Statistically Significant Concentrations In 1989 In the Sand and Gravel Aquifer

Well Number	Constituents
2010	Calcium, Conductivity, Manganese, Sulfate
2013	Sulfate
2019	Calcium, Conductivity, Nitrates, Sulfate
2021	Calcium, Conductivity, Nitrates, Sulfate, Sodium
2027	Calcium, Chloride, Conductivity, Iron, Magnesium, Manganese, Sulfate
2037	Calcium, Iron, Manganese, Sulfate
2051	Calcium, Conductivity, Iron, Magnesium, Manganese, Sulfate
2055	Sulfate
2084	Calcium, Chloride, Conductivity, Iron, Magnesium, Manganese, Nitrates, Sodium, Sulfate
3001	Manganese, Sulfate
3008	Manganese
3010	Calcium, Manganese, Nitrates, Sulfate
3013	Manganese, Sulfate
3019	Calcium, Manganese, Nitrates, pH, Sulfate
3024	Nitrates, Sulfate
3037	Calcium, Manganese, Nitrates, Sulfate
3051	Sulfate
3055	Manganese, Sulfate
3084	Calcium, Magnesium, Manganese, Nitrates, pH, Sulfate
4001	Manganese
4008	Manganese
4013	Calcium, Magnesium, Manganese, Sulfate

Listing of Constituents

Calcium
Conductivity
Chloride
Iron
Manganese
Magnesium
Nitrates
pH
Sulfate
Sodium

Table 3.6

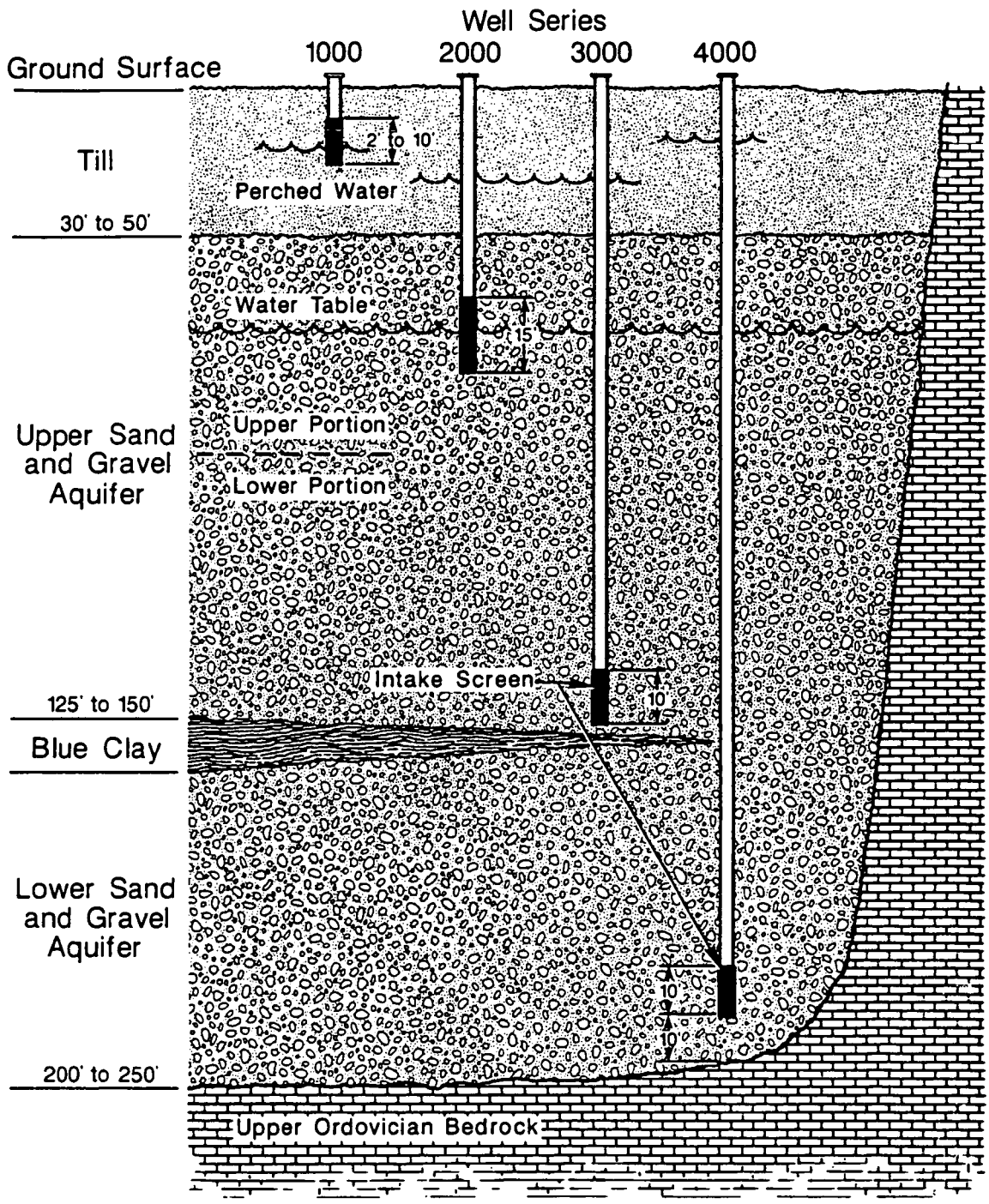
Wells and Site Specific Constituents Found to Have Statistically Significant Concentrations in 1990 In the Sand and Gravel Aquifer

Well Number	Constituent
2010	Calcium, Manganese, Sulfate, Conductivity
2013	Sulfate
2019	Nitrate, Calcium, Conductivity
2021	Calcium, Nitrate, Sulfate, Conductivity
2027	Calcium, Chloride, Iron, Magnesium, Manganese, Sulfate, Conductivity
2037	Calcium, Manganese, Sulfate
2051	Calcium, Manganese, Sulfate
2055	Sulfate
2084	Calcium, Chloride, Magnesium, Manganese, Nitrate, Sodium, Sulfate, Conductivity
3001	Manganese
3008	Manganese, Conductivity
3010	Calcium, Manganese, Sulfate
3013	Sulfate, Manganese
3019	Calcium, Manganese, Nitrate, Sulfate, pH
3024	Sulfate
3037	Calcium, Magnesium, Manganese, Sulfate, pH
3051	Sulfate
3055	Sulfate, pH
3084	Calcium, Magnesium, Manganese, Nitrates, Sulfate, pH
4001	Manganese
4008	Manganese
4013	Calcium, Magnesium, Sulfate

Listing of Constituents

Calcium
Chloride
Iron
Manganese
Magnesium
Nitrates
Sulfate
Sodium
Conductivity
pH

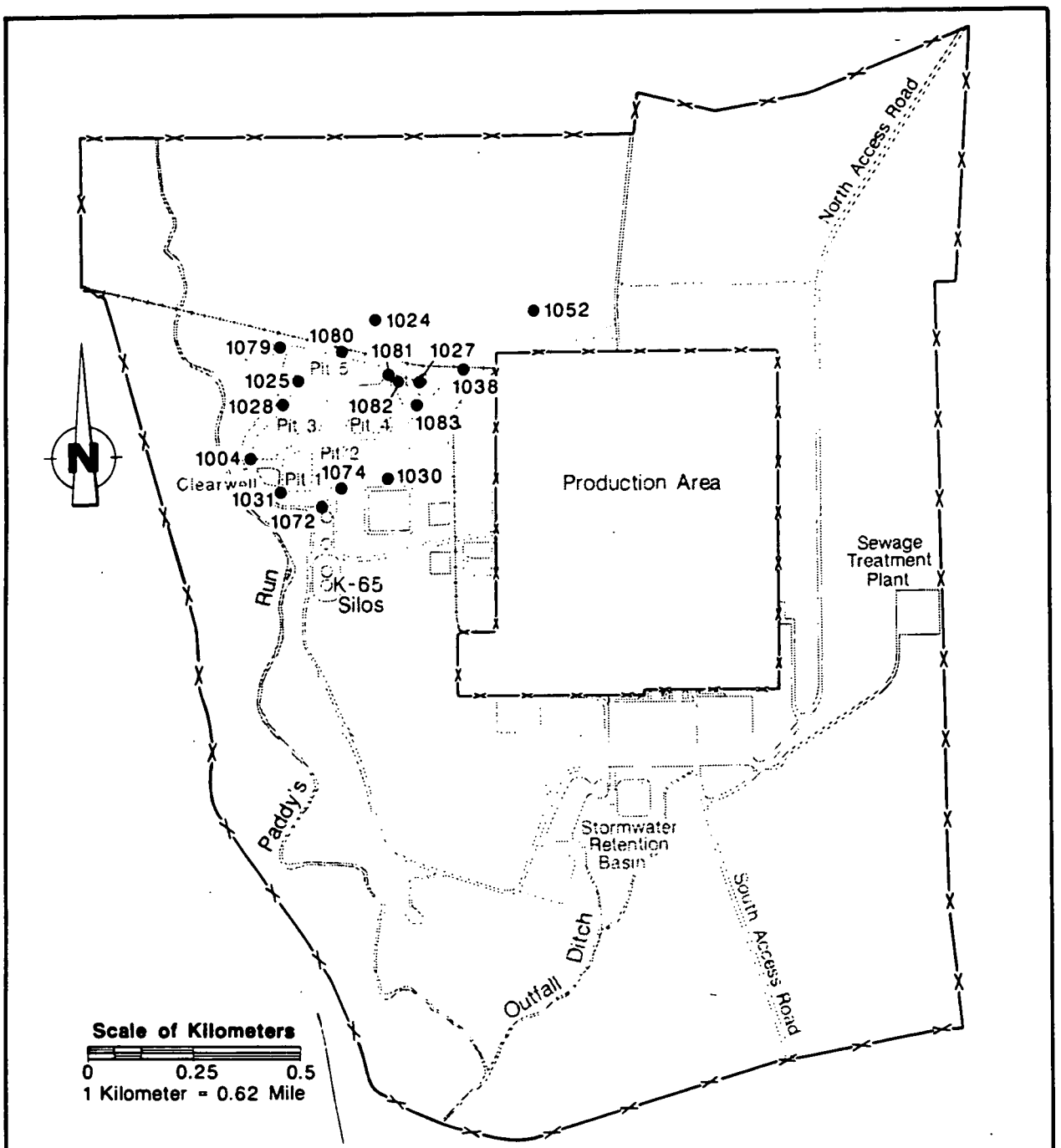
Figure 2.1



Monitoring Well Depths and Screen Locations

0968

Figure 2.2

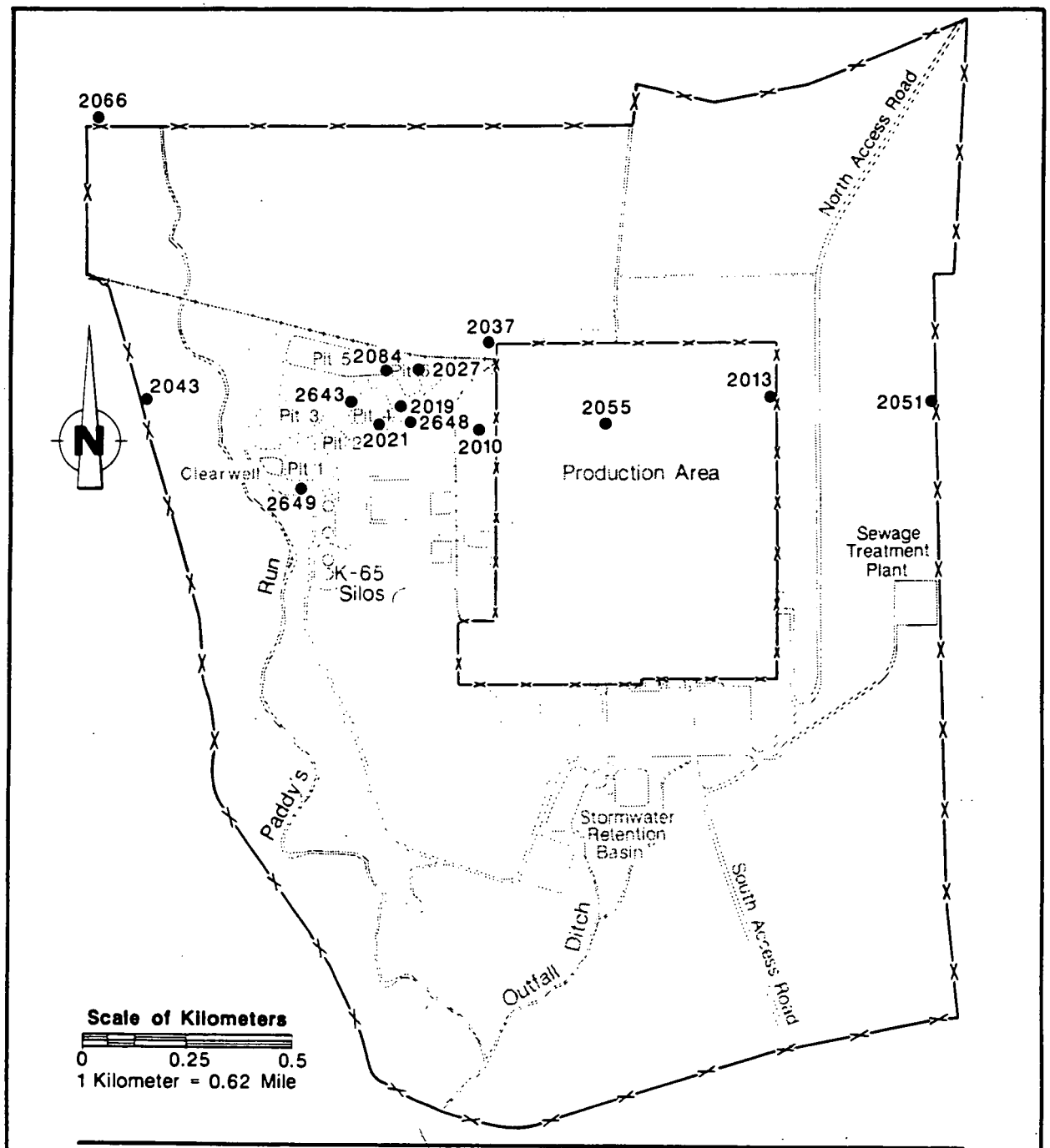


LEGEND

- ● 1000 Series Monitoring Network
- ×—× Plant Perimeter
- ×–×–× Production Area Perimeter

1000-Series Monitoring Well Locations

Figure 2.3

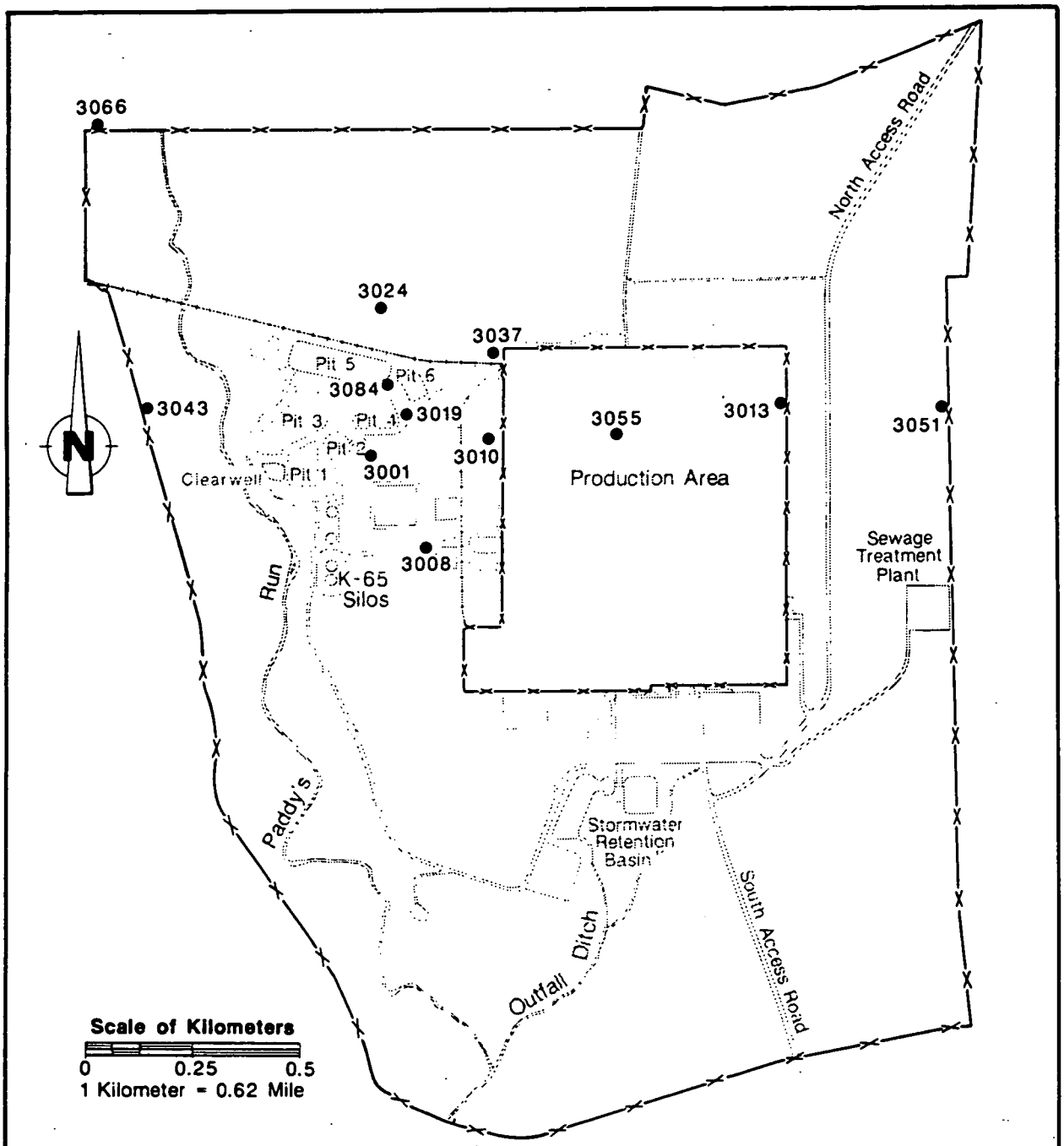


LEGEND

- 2000 Series Monitoring Network
- Plant Perimeter
- Production Area Perimeter

2000-Series Monitoring Well Loctions

Figure 2.4

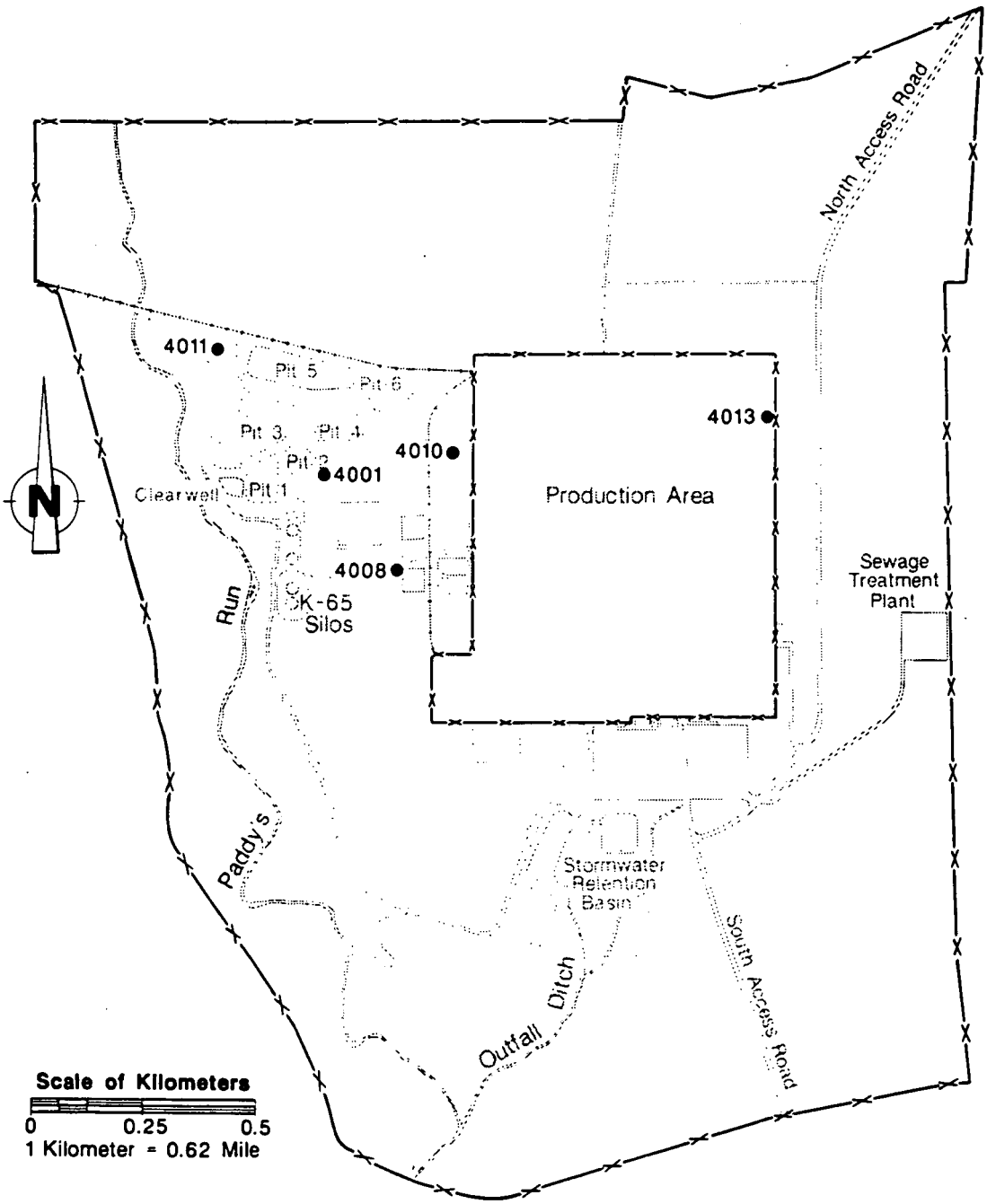


LEGEND

- 3000 Series Monitoring Network
- Plant Perimeter
- Production Area Perimeter

3000-Series Monitoring Well Locations

Figure 2.5



LEGEND

● 4000 Series Monitoring Network

×—× Plant Perimeter

×–×–× Production Area Perimeter

4000-Series Monitoring Well Locations

Figure 3.1

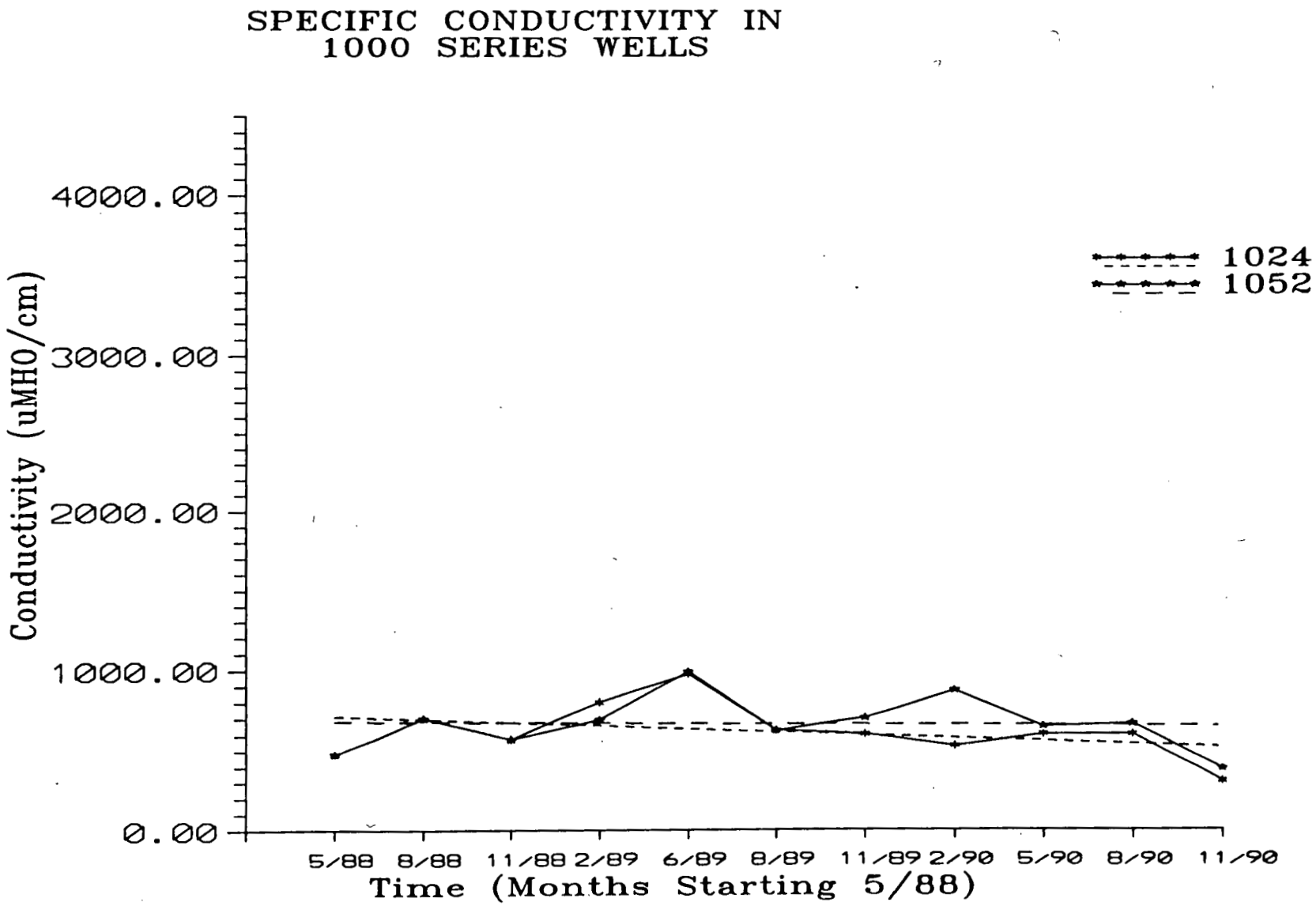

SPECIFIC CONDUCTIVITY IN
1000 SERIES WELLS
Conductivity (uMHO/cm)
4000.00
3000.00
2000.00
1000.00
0.00
1024
1052
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Time (Months Starting 5/88)

Figure 3.2

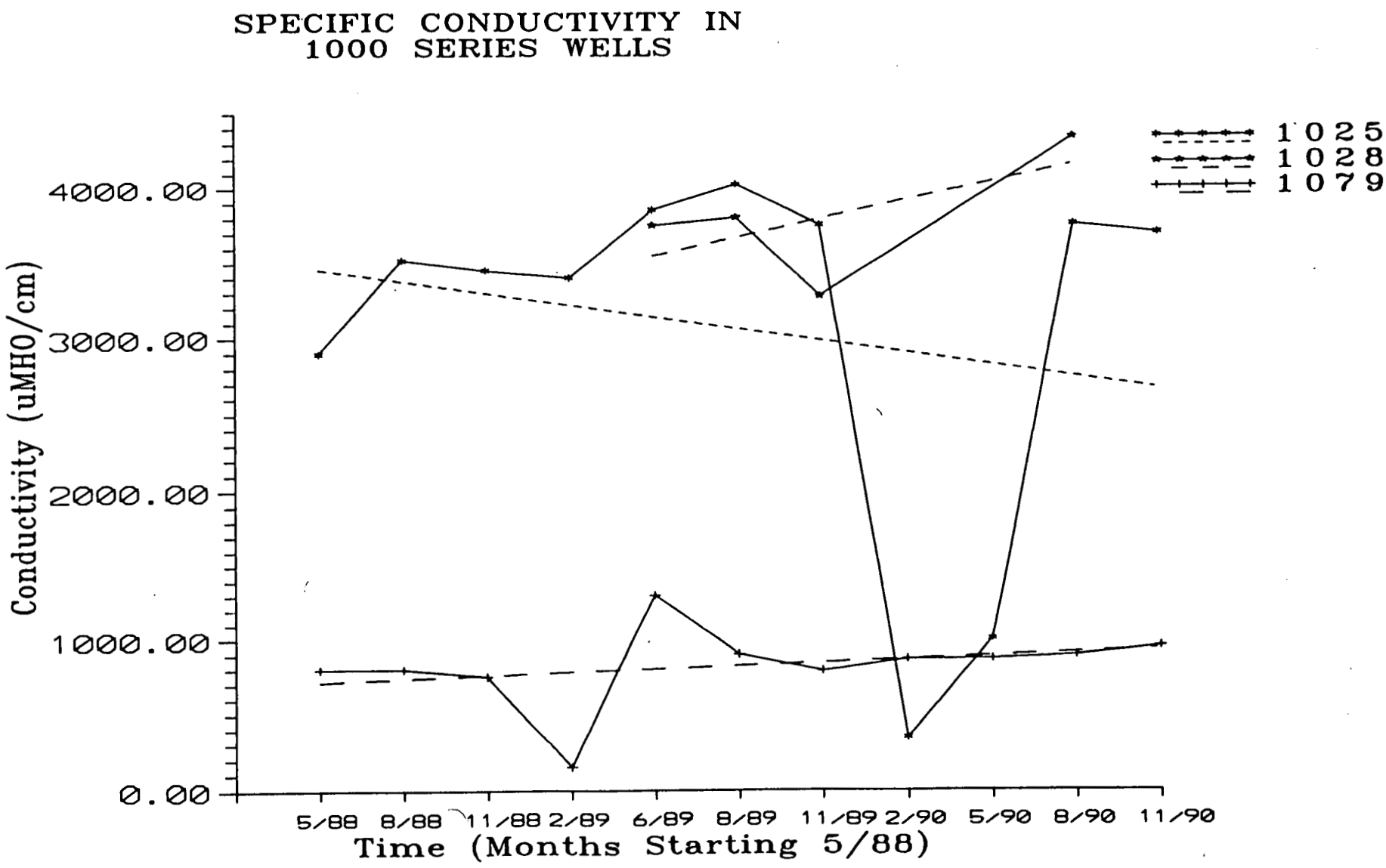

SPECIFIC CONDUCTIVITY IN
1000 SERIES WELLS
Conductivity (uMHO/cm)
4000.00
3000.00
2000.00
1000.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Time (Months Starting 5/88)
1025
1028
1079

Figure 3.3

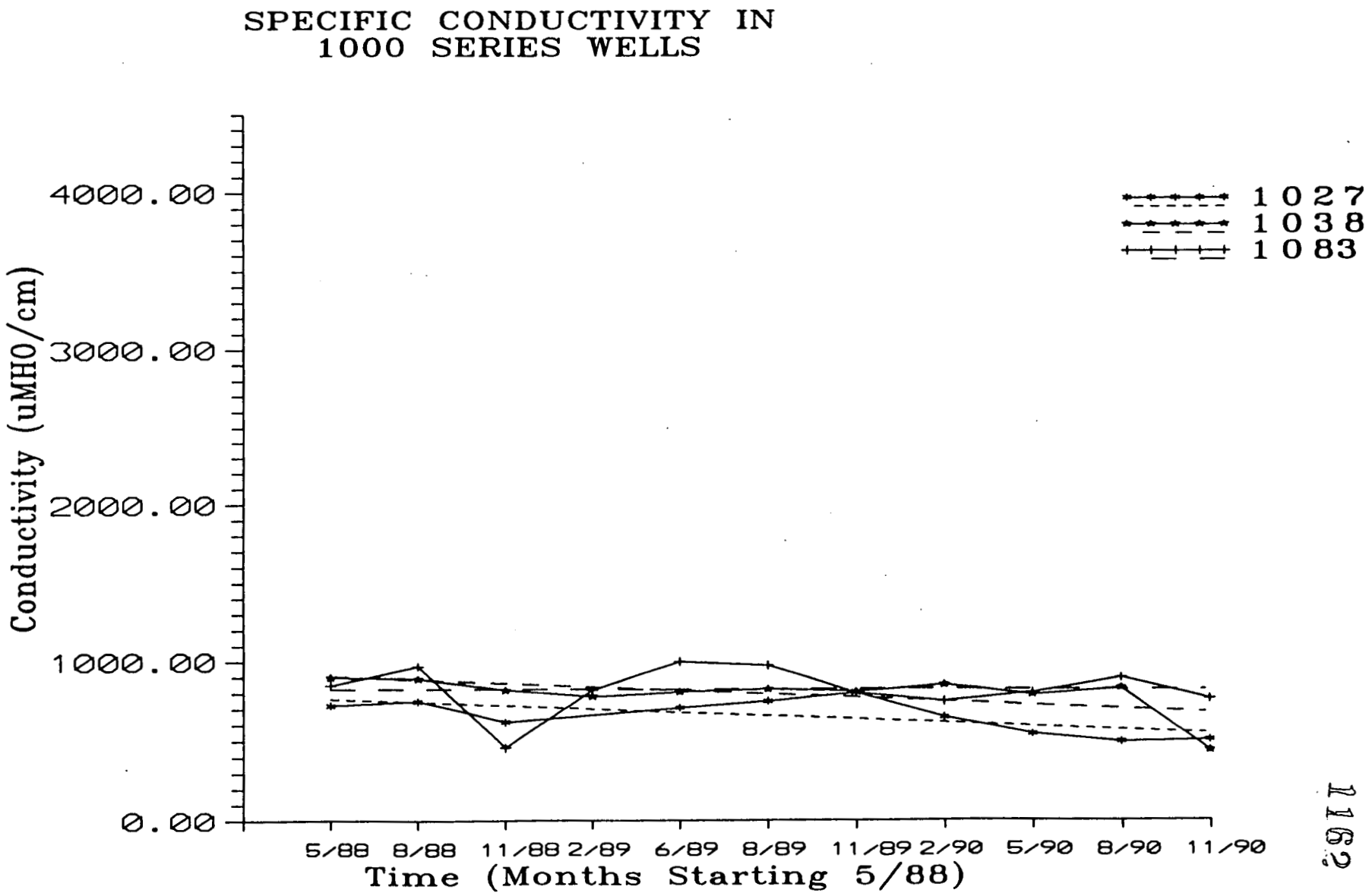

SPECIFIC CONDUCTIVITY IN
1000 SERIES WELLS
Conductivity (uMHO/cm)
4000.00
3000.00
2000.00
1000.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Time (Months Starting 5/88)
1027
1038
1083

Figure 3.4

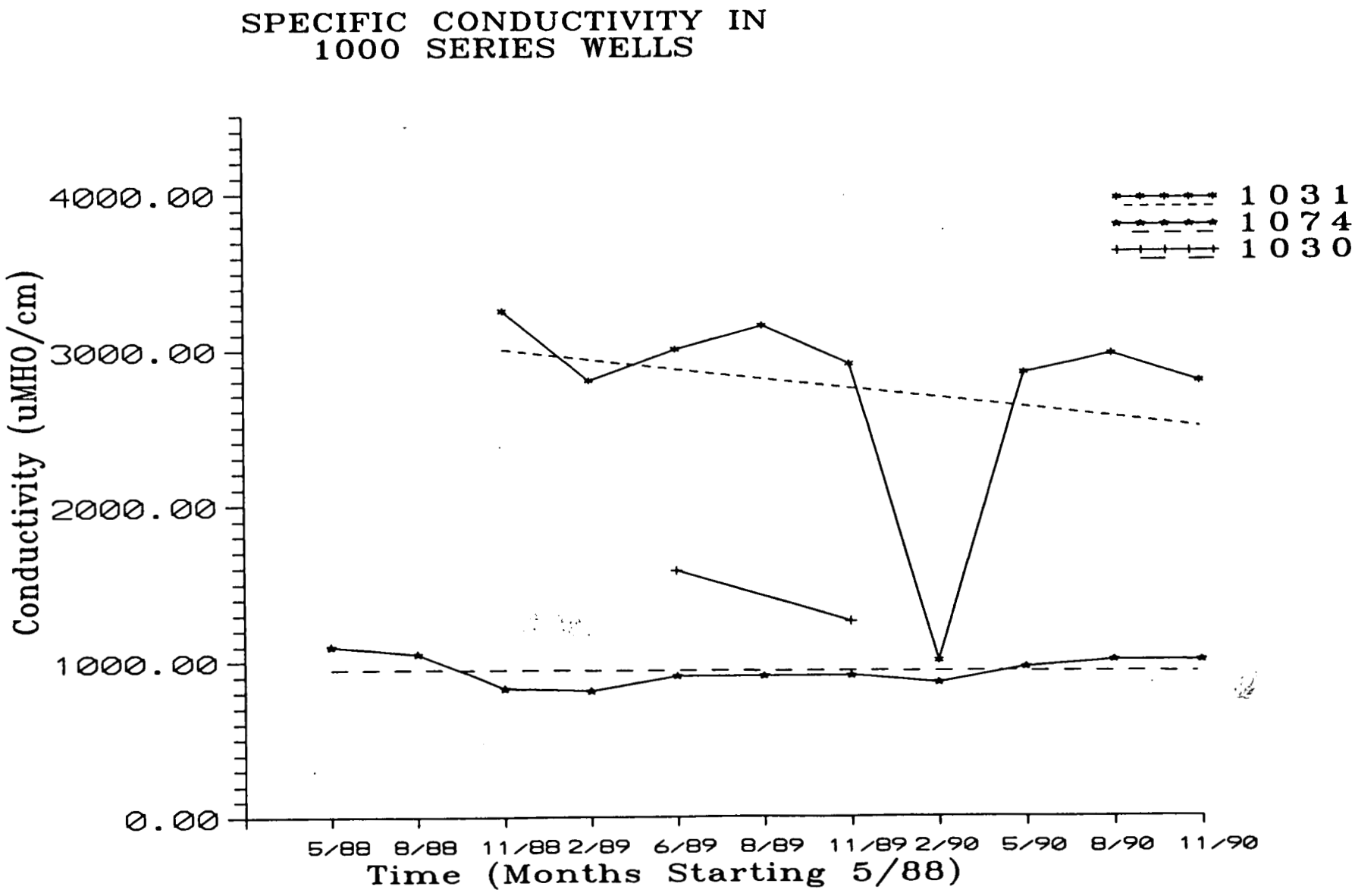

SPECIFIC CONDUCTIVITY IN
1000 SERIES WELLS
Conductivity (uMHO/cm)
4000.00
3000.00
2000.00
1000.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Time (Months Starting 5/88)
1031
1074
1030

Figure 3.5

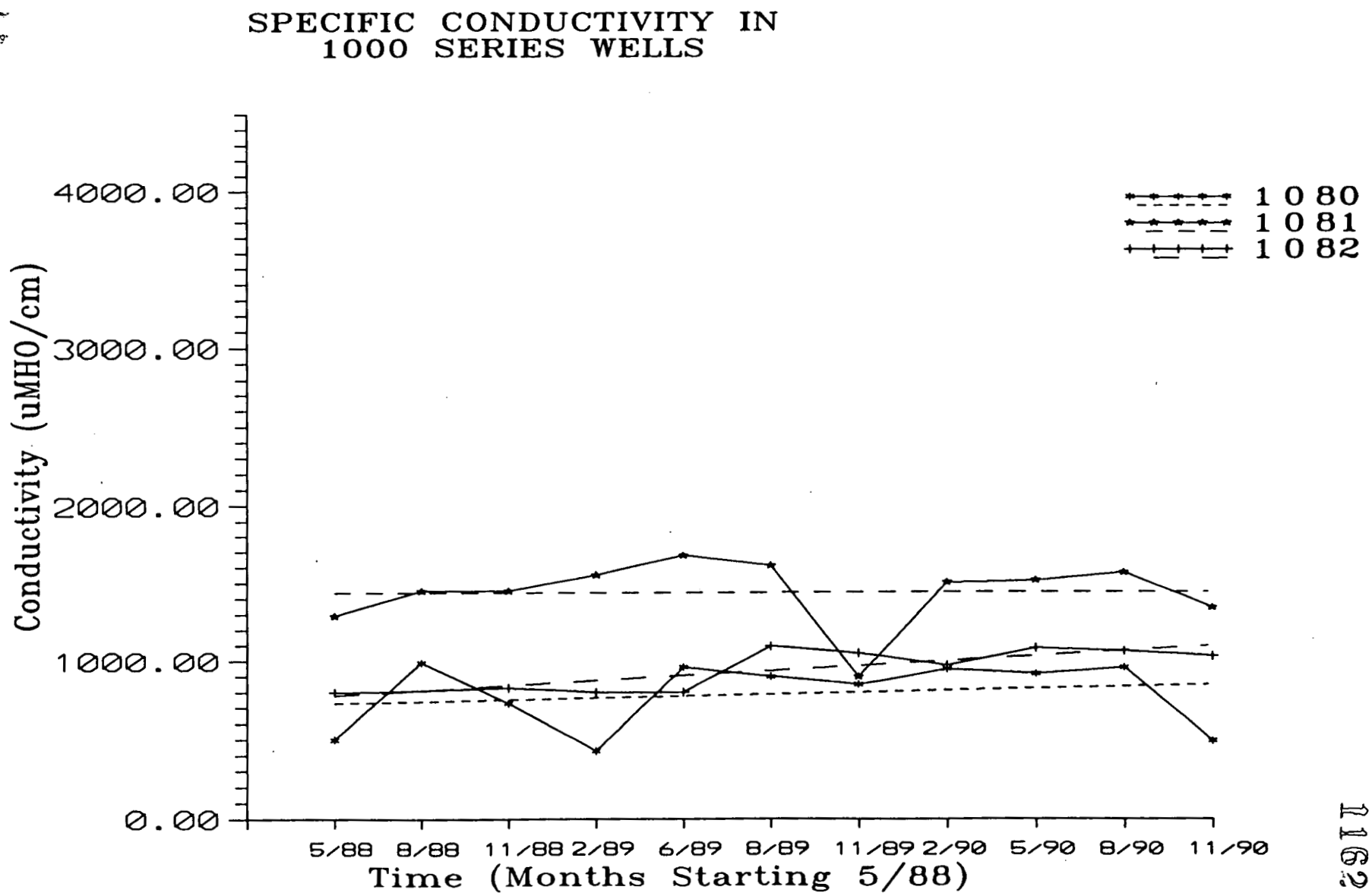

SPECIFIC CONDUCTIVITY IN
1000 SERIES WELLS
Conductivity (uMHO/cm)
4000.00
3000.00
2000.00
1000.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Time (Months Starting 5/88)
1080
1081
1082

Figure 3.6

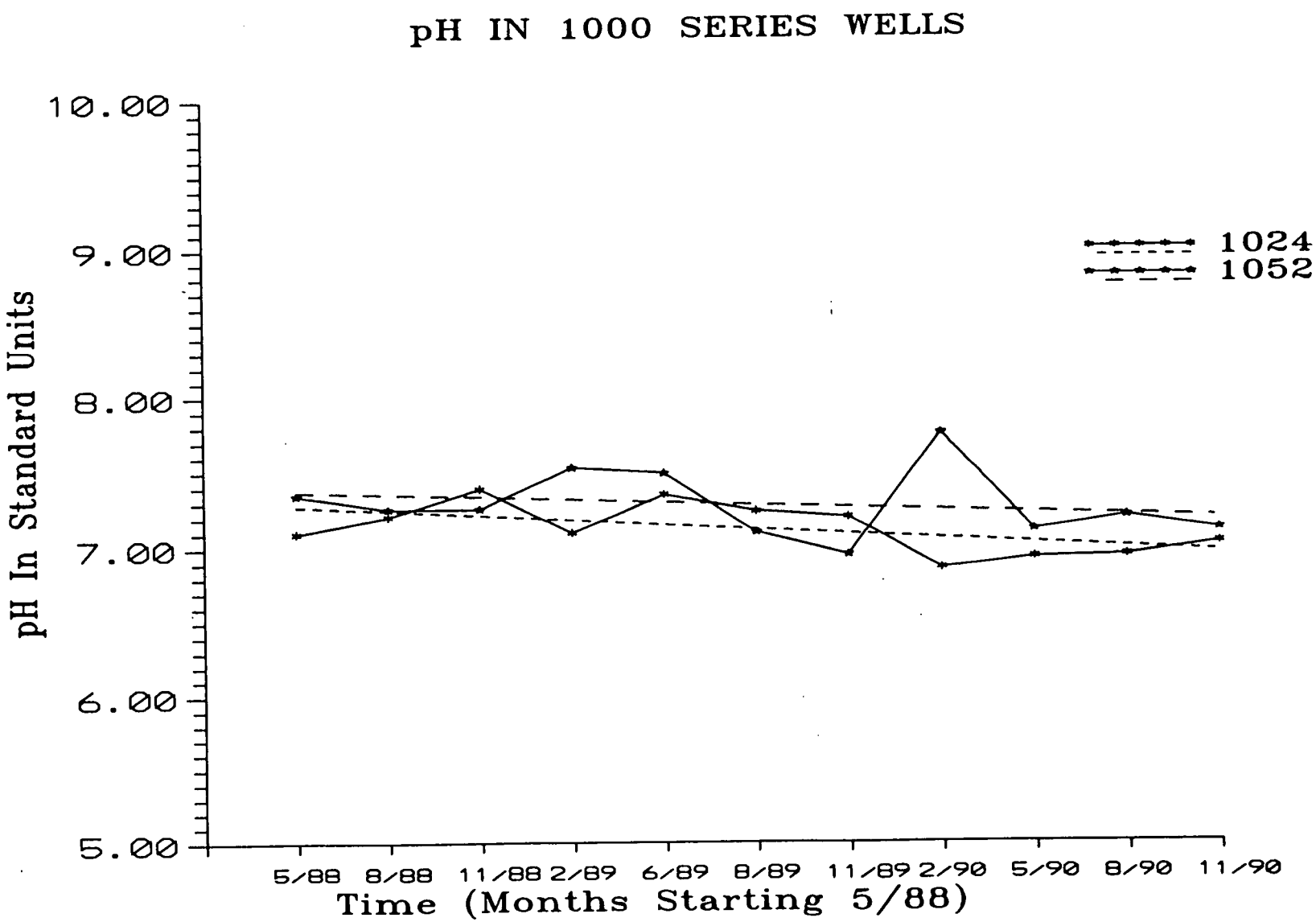

pH IN 1000 SERIES WELLS
10.00
9.00
8.00
7.00
6.00
5.00
pH In Standard Units
1024
1052
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Time (Months Starting 5/88)

Figure 3.7

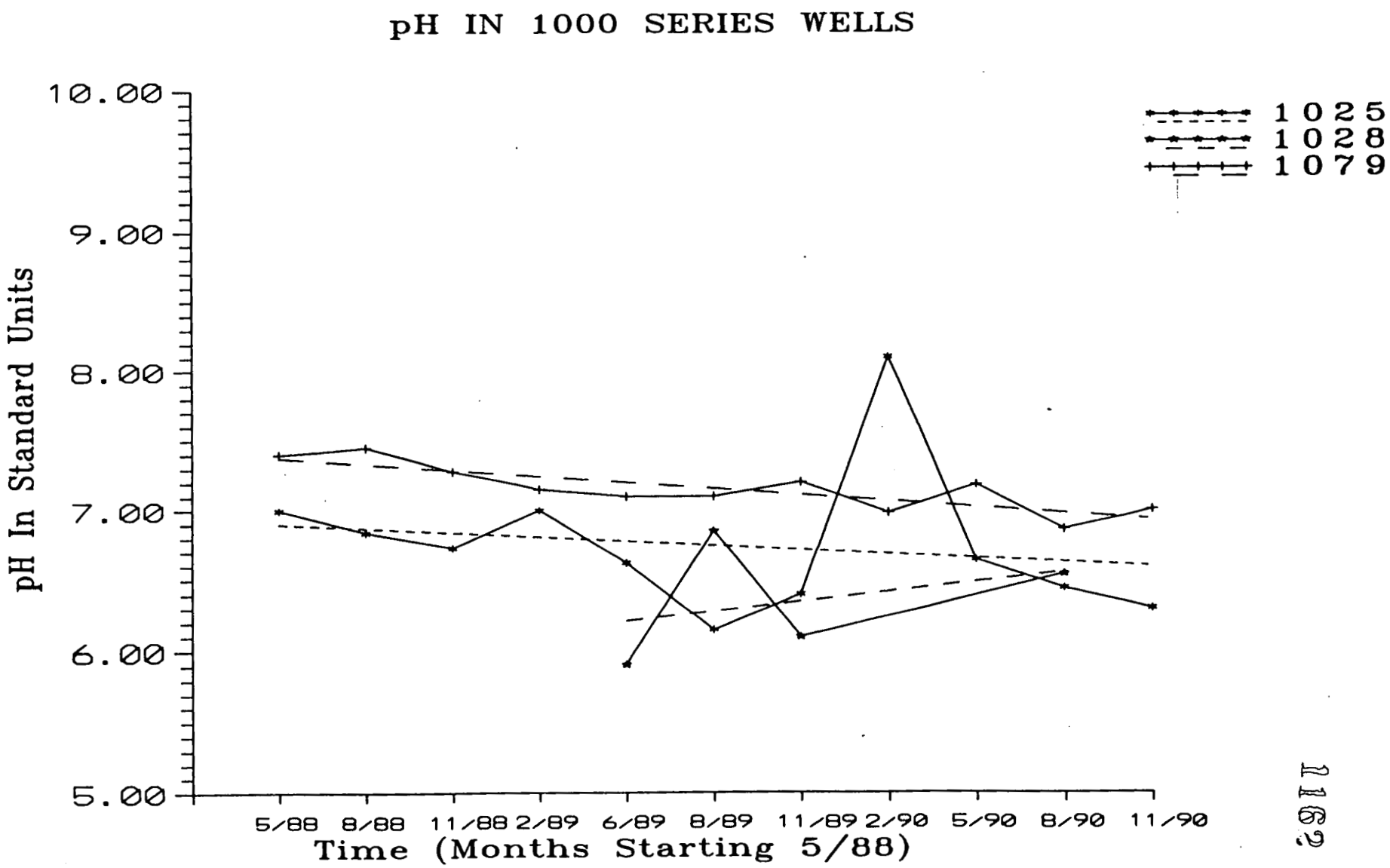

pH IN 1000 SERIES WELLS
1025
1028
1079
pH In Standard Units
10.00
9.00
8.00
7.00
6.00
5.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Time (Months Starting 5/88)

Figure 3.8

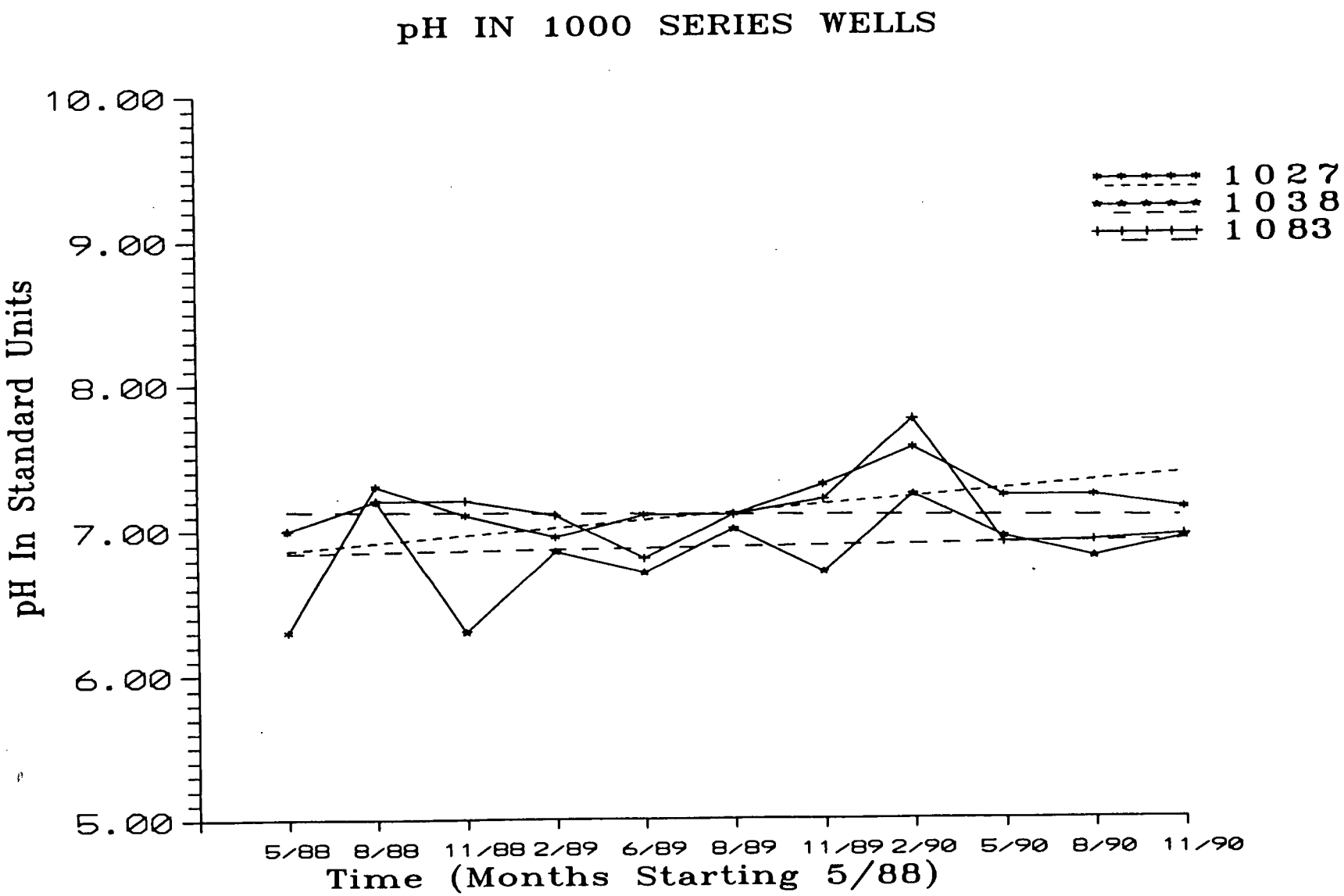

pH IN 1000 SERIES WELLS
1027
1038
1083
10.00
9.00
8.00
7.00
6.00
5.00
pH In Standard Units
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Time (Months Starting 5/88)

Figure 3.9

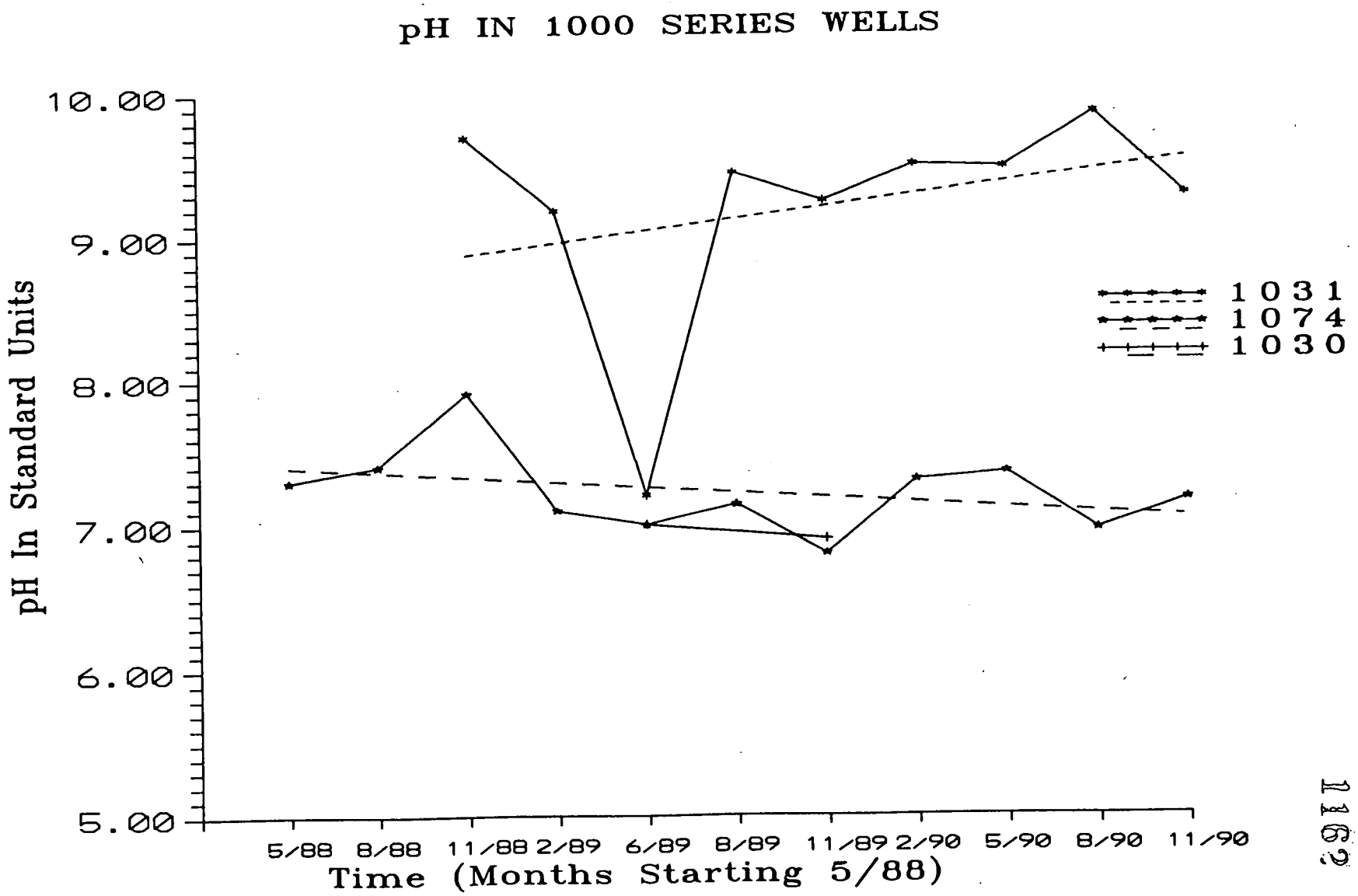

pH IN 1000 SERIES WELLS
pH In Standard Units
10.00
9.00
8.00
7.00
6.00
5.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Time (Months Starting 5/88)
1031
1074
1030

Figure 3.10

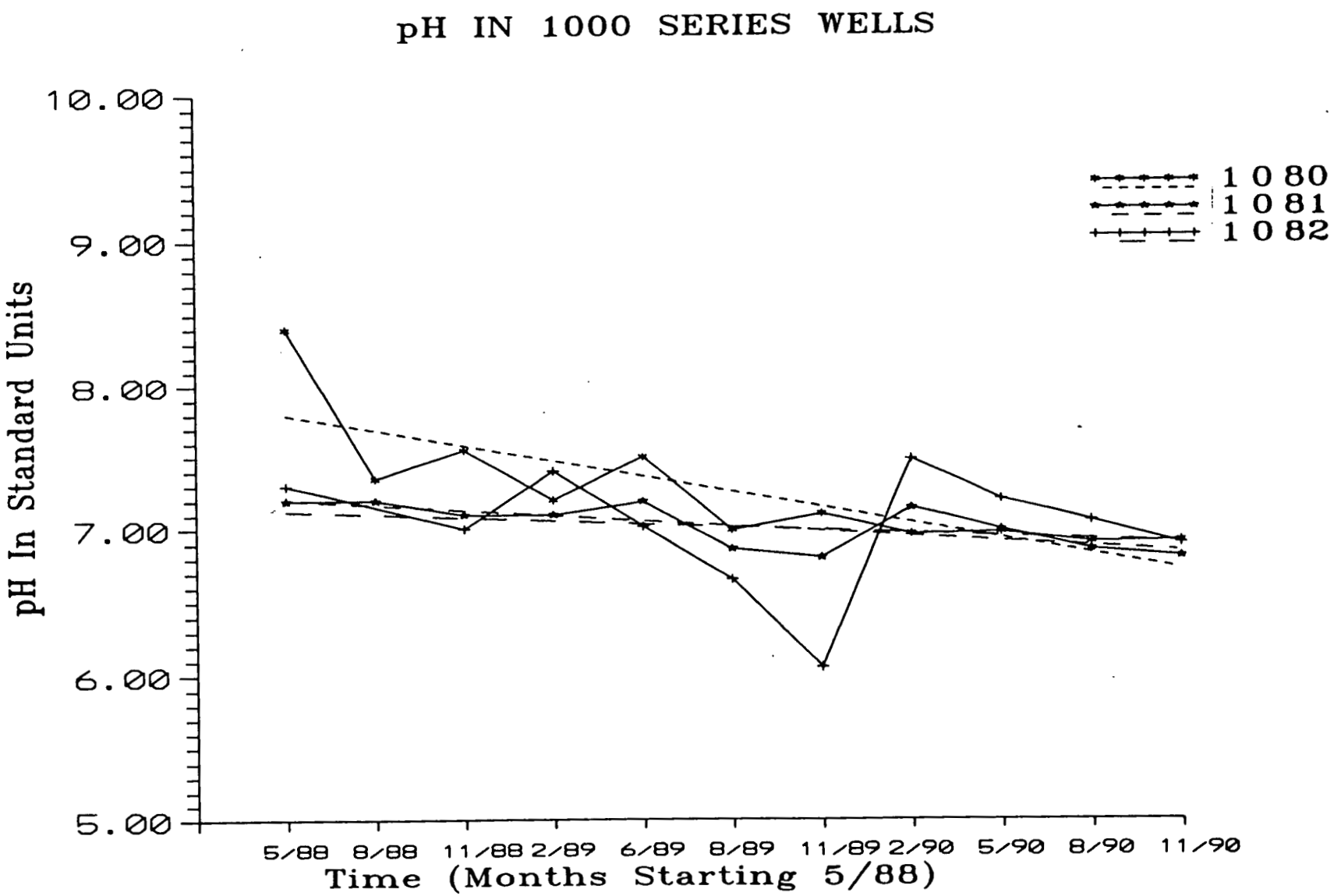

pH IN 1000 SERIES WELLS
10.00
9.00
8.00
7.00
6.00
5.00
pH In Standard Units
1080
1081
1082
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Time (Months Starting 5/88)

Figure 3.11

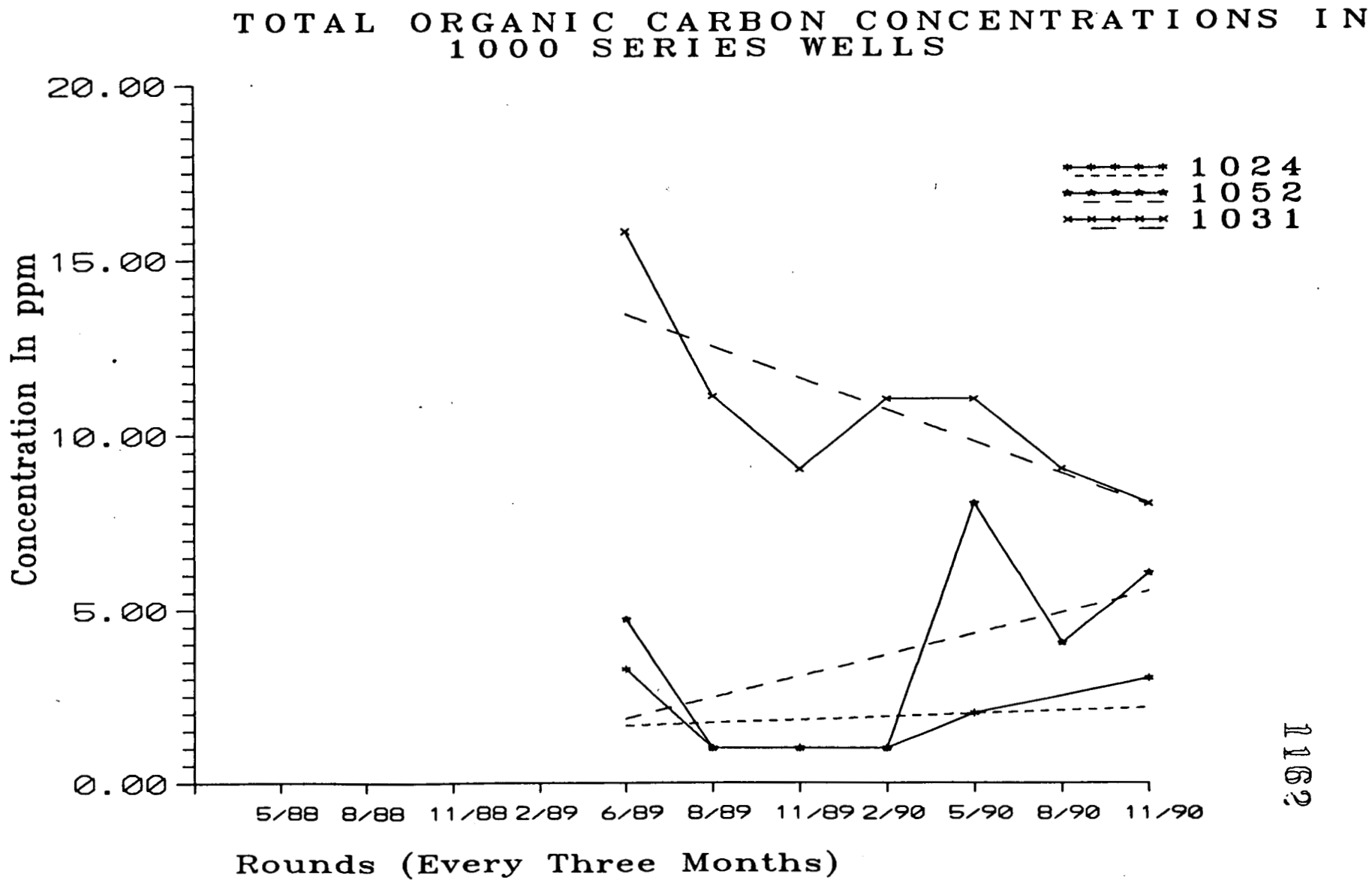

TOTAL ORGANIC CARBON CONCENTRATIONS IN 1000 SERIES WELLS
1024
1052
1031
Concentration In ppm
20.00
15.00
10.00
5.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.12

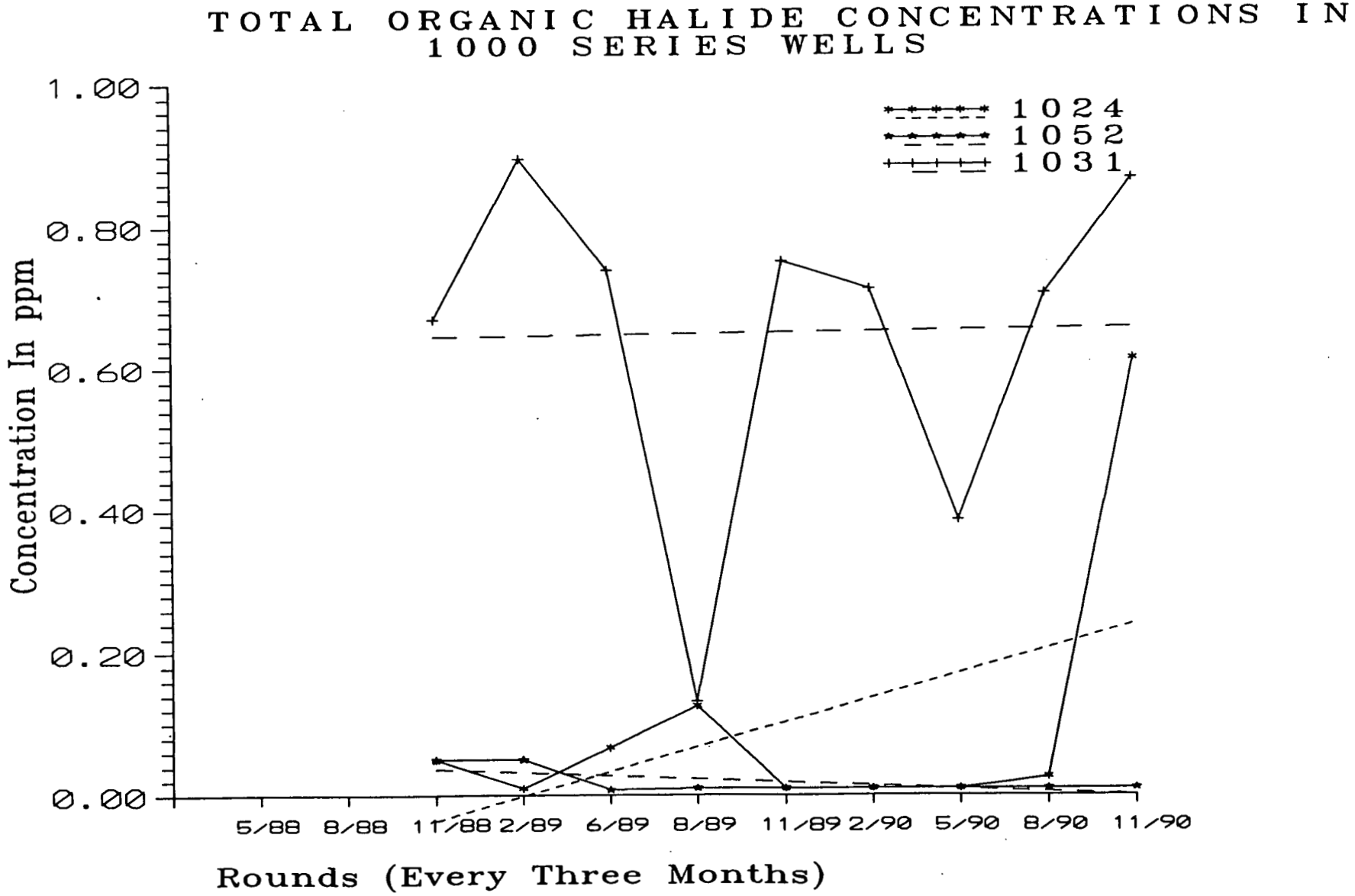

TOTAL ORGANIC HALIDE CONCENTRATIONS IN 1000 SERIES WELLS
1024
1052
1031
Concentration In ppm
1.00
0.80
0.60
0.40
0.20
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.13

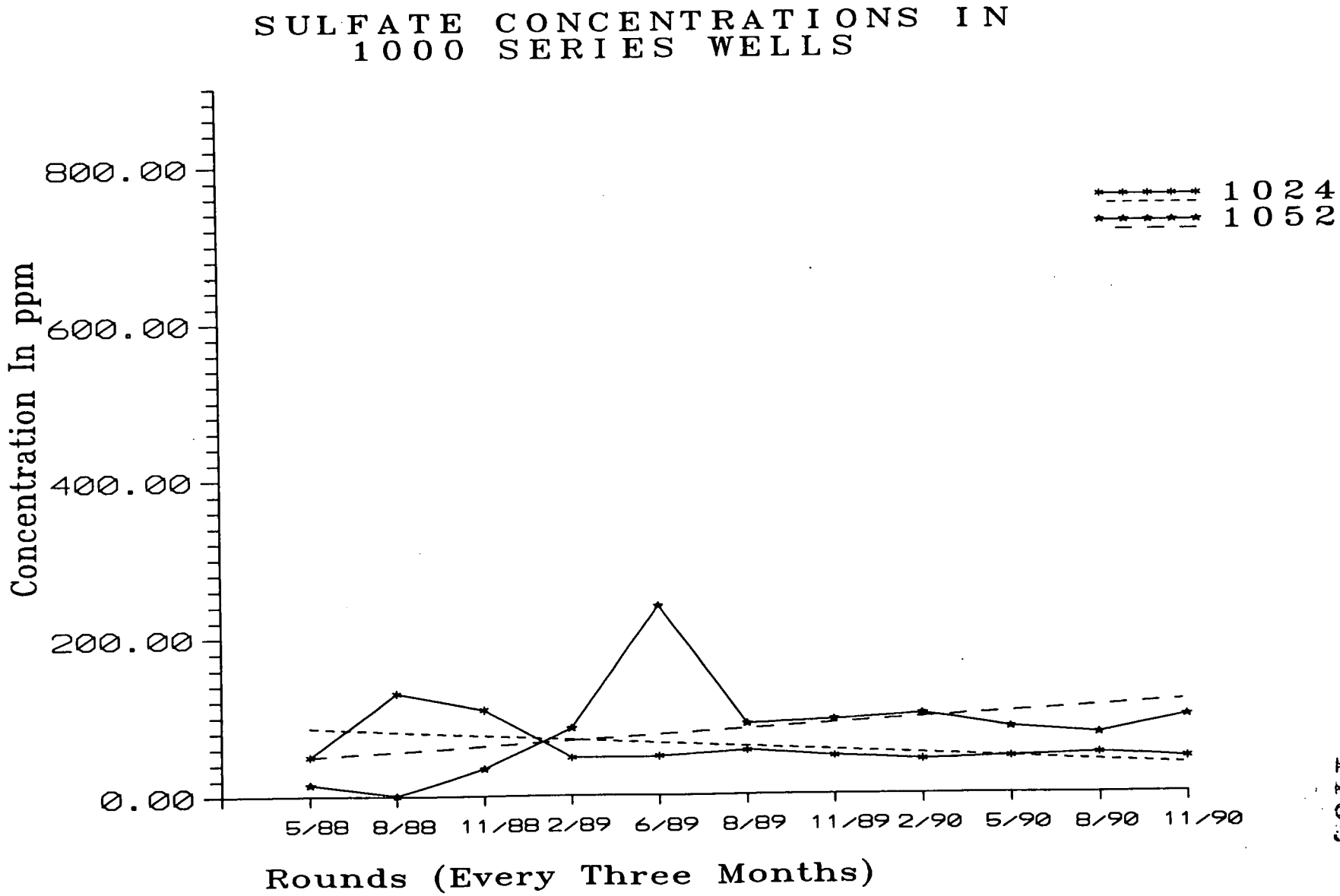

SULFATE CONCENTRATIONS IN
1000 SERIES WELLS
1024
1052
Concentration In ppm
800.00
600.00
400.00
200.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.14

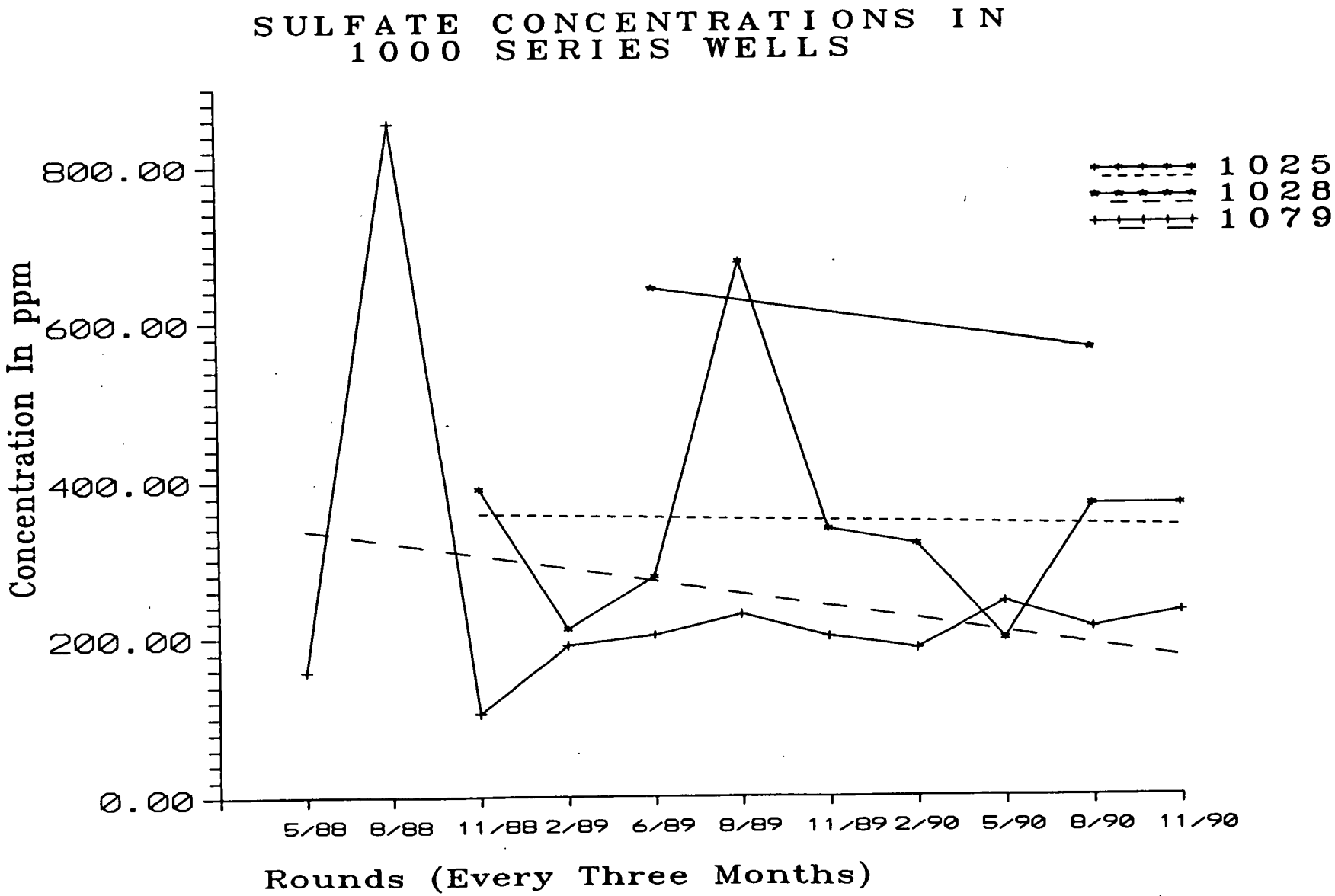

SULFATE CONCENTRATIONS IN
1000 SERIES WELLS
1025
1028
1079
Concentration In ppm
800.00
600.00
400.00
200.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.15

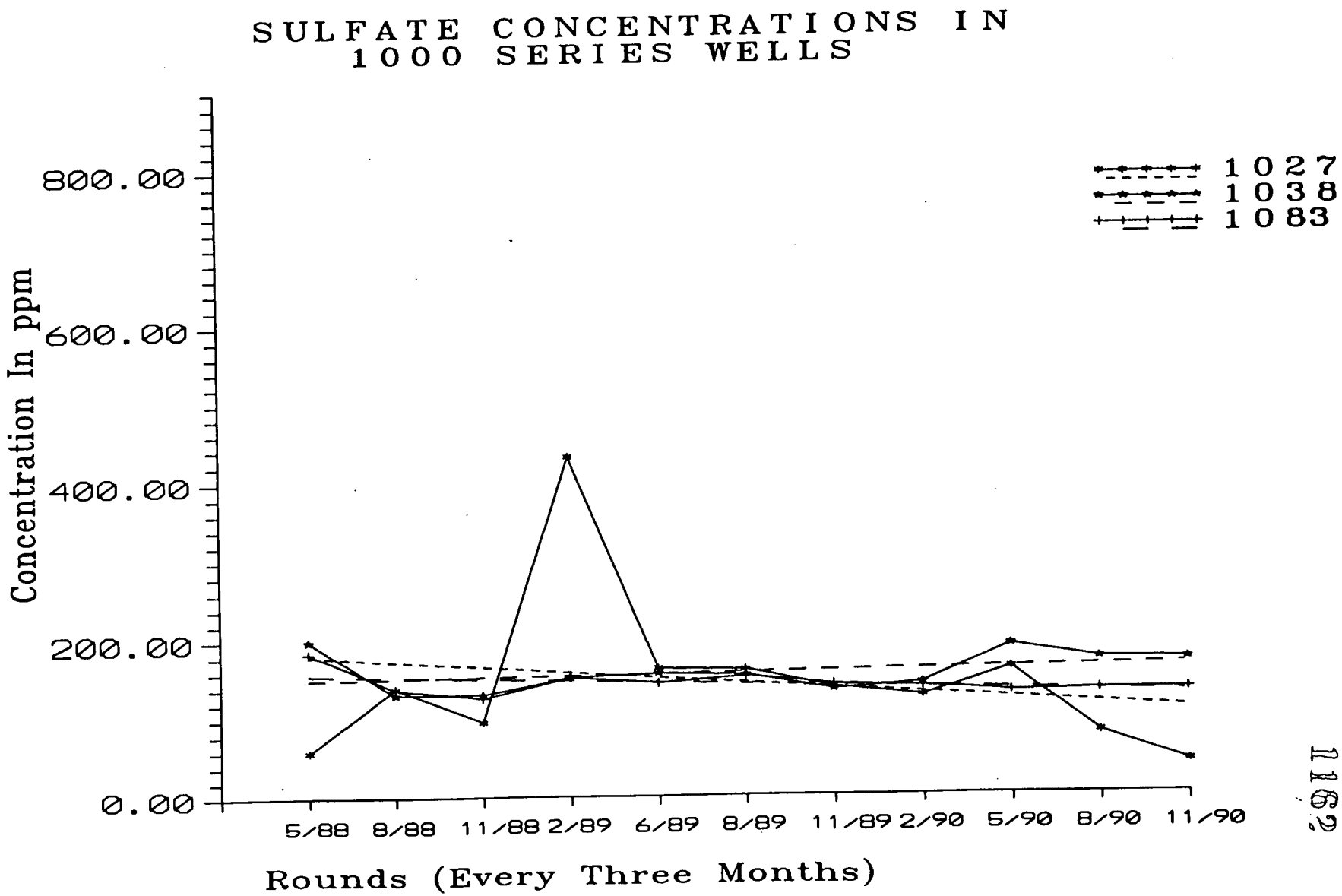

SULFATE CONCENTRATIONS IN
1000 SERIES WELLS
1027
1038
1083
Concentration In ppm
800.00
600.00
400.00
200.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.16

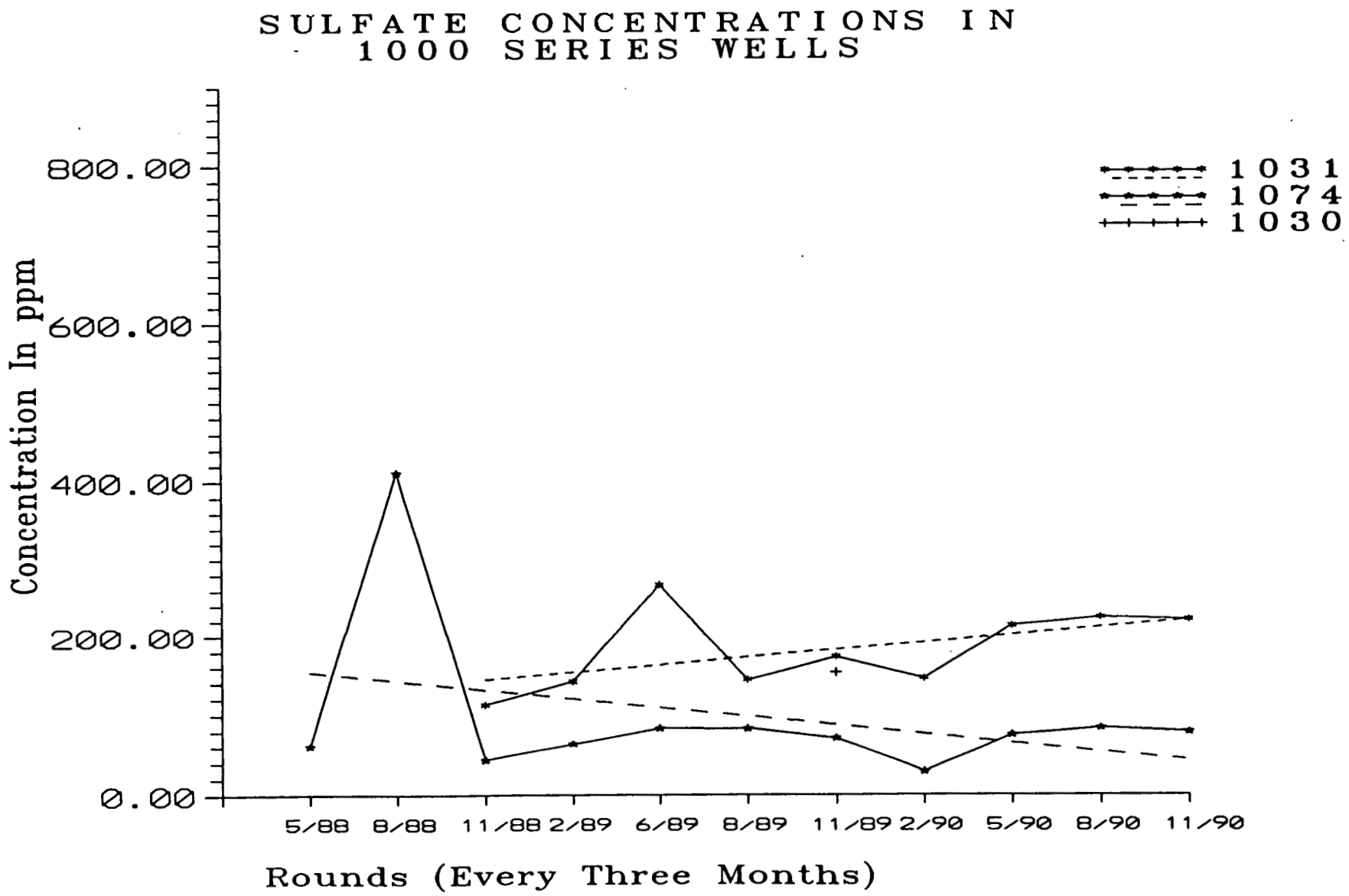

SULFATE CONCENTRATIONS IN
1000 SERIES WELLS
1031
1074
1030
Concentration In ppm
800.00
600.00
400.00
200.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.17

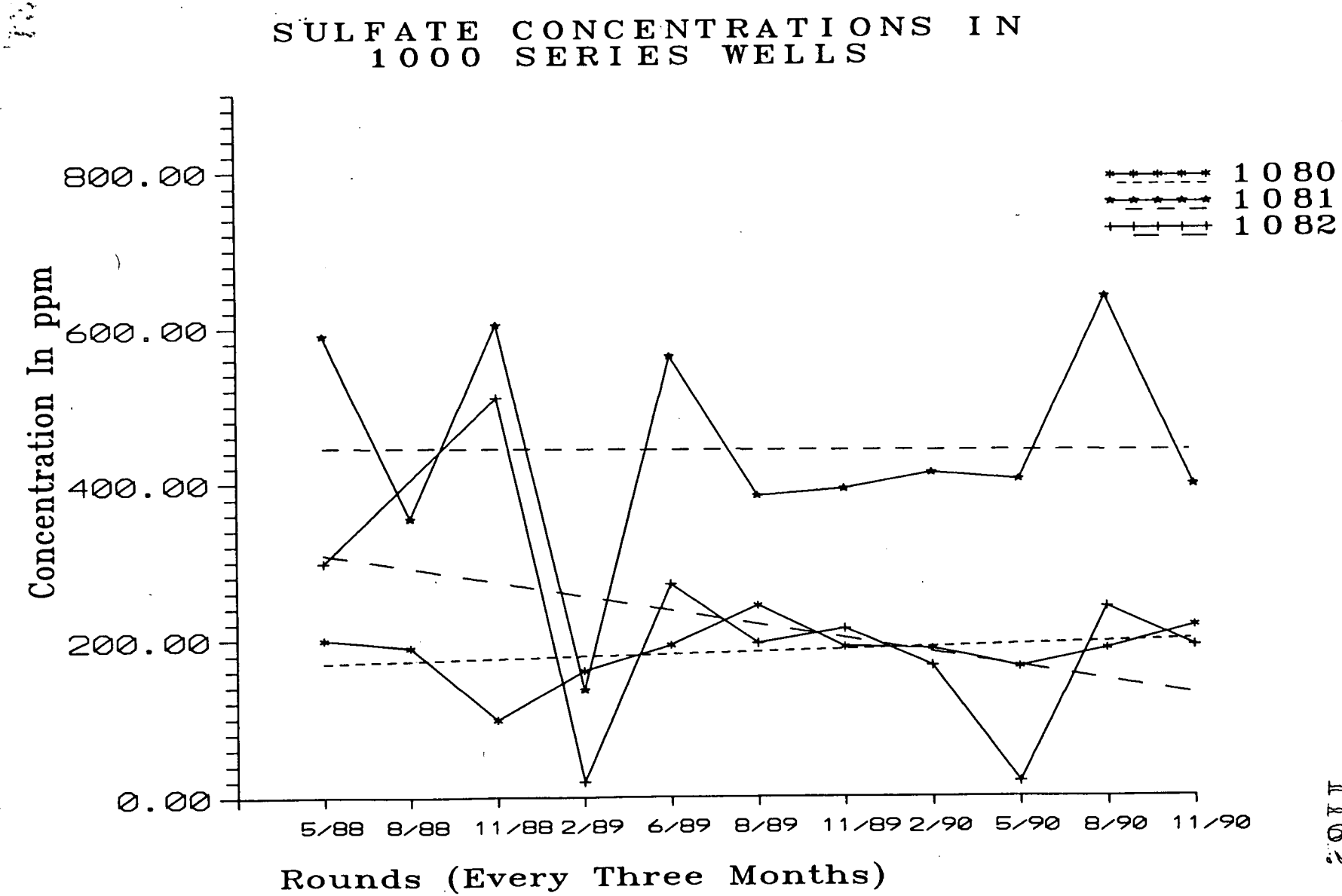

SULFATE CONCENTRATIONS IN
1000 SERIES WELLS
1080
1081
1082
Concentration In ppm
800.00
600.00
400.00
200.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.18

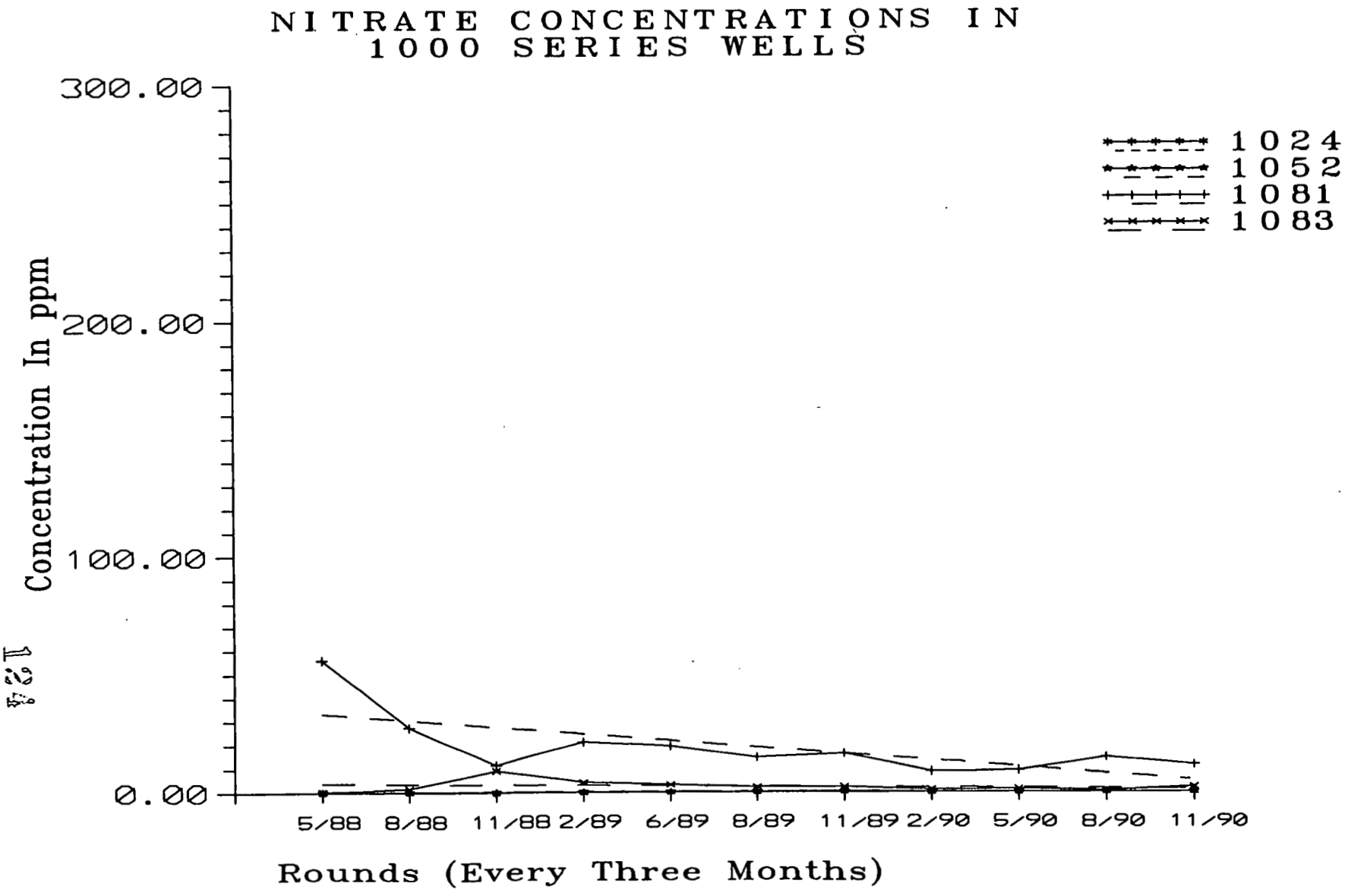

NITRATE CONCENTRATIONS IN
1000 SERIES WELLS
300.00
200.00
100.00
0.00
Concentration In ppm
1024
1052
1081
1083
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.19

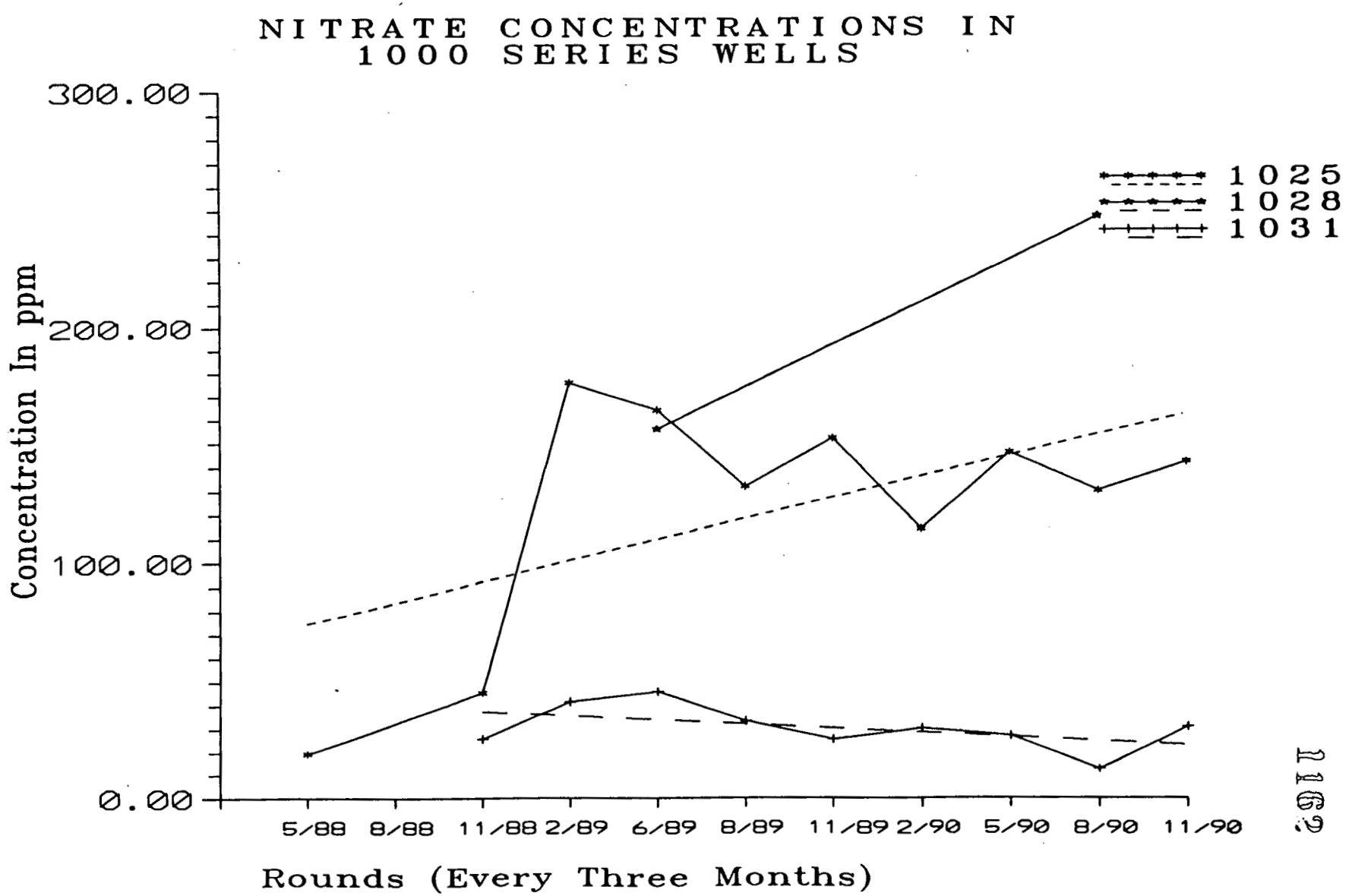

NITRATE CONCENTRATIONS IN
1000 SERIES WELLS
300.00
200.00
100.00
0.00
Concentration In ppm
1025
1028
1031
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.20

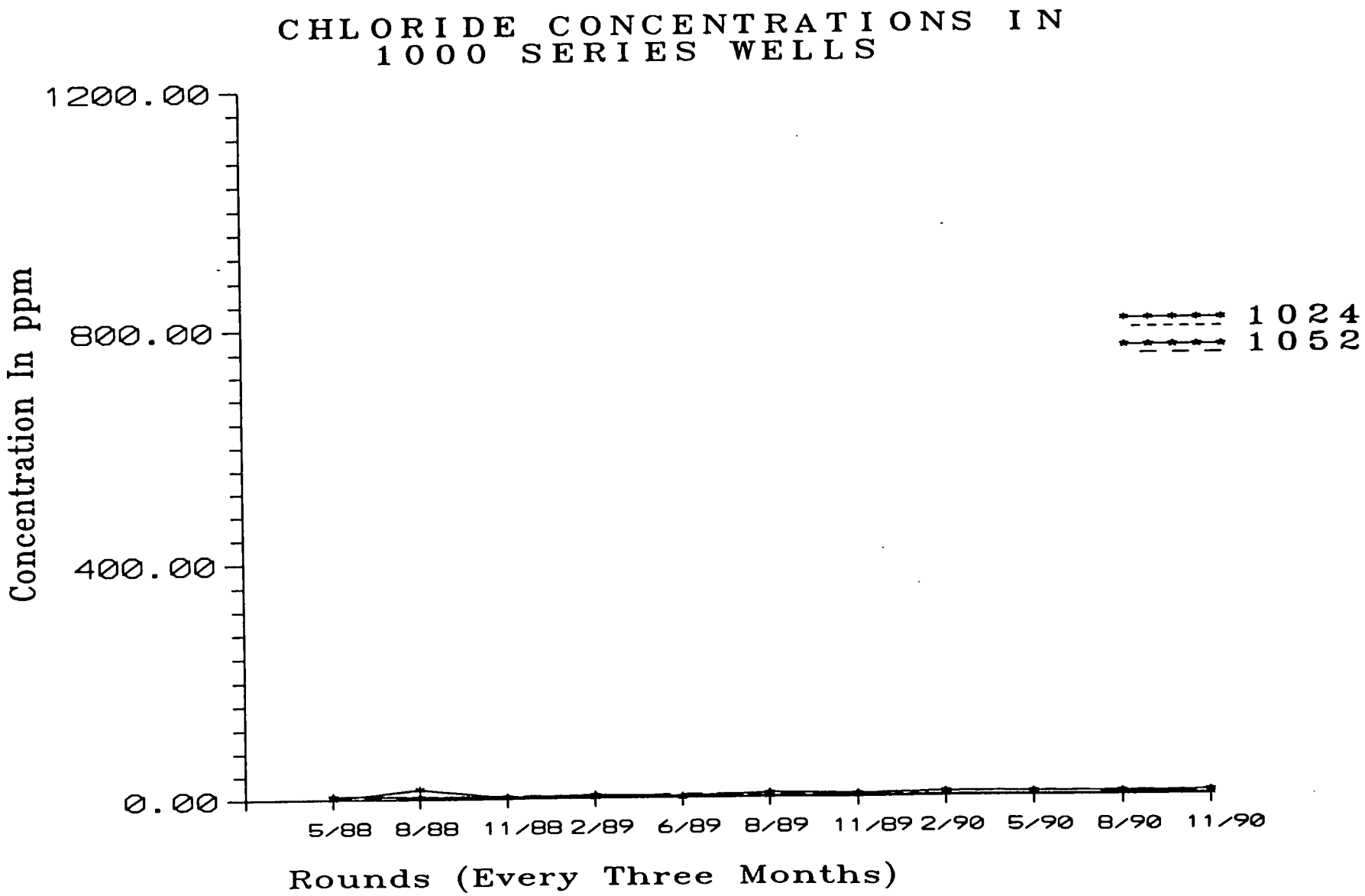

CHLORIDE CONCENTRATIONS IN
1000 SERIES WELLS
1200.00
800.00
400.00
0.00
Concentration In ppm
1024
1052
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.21

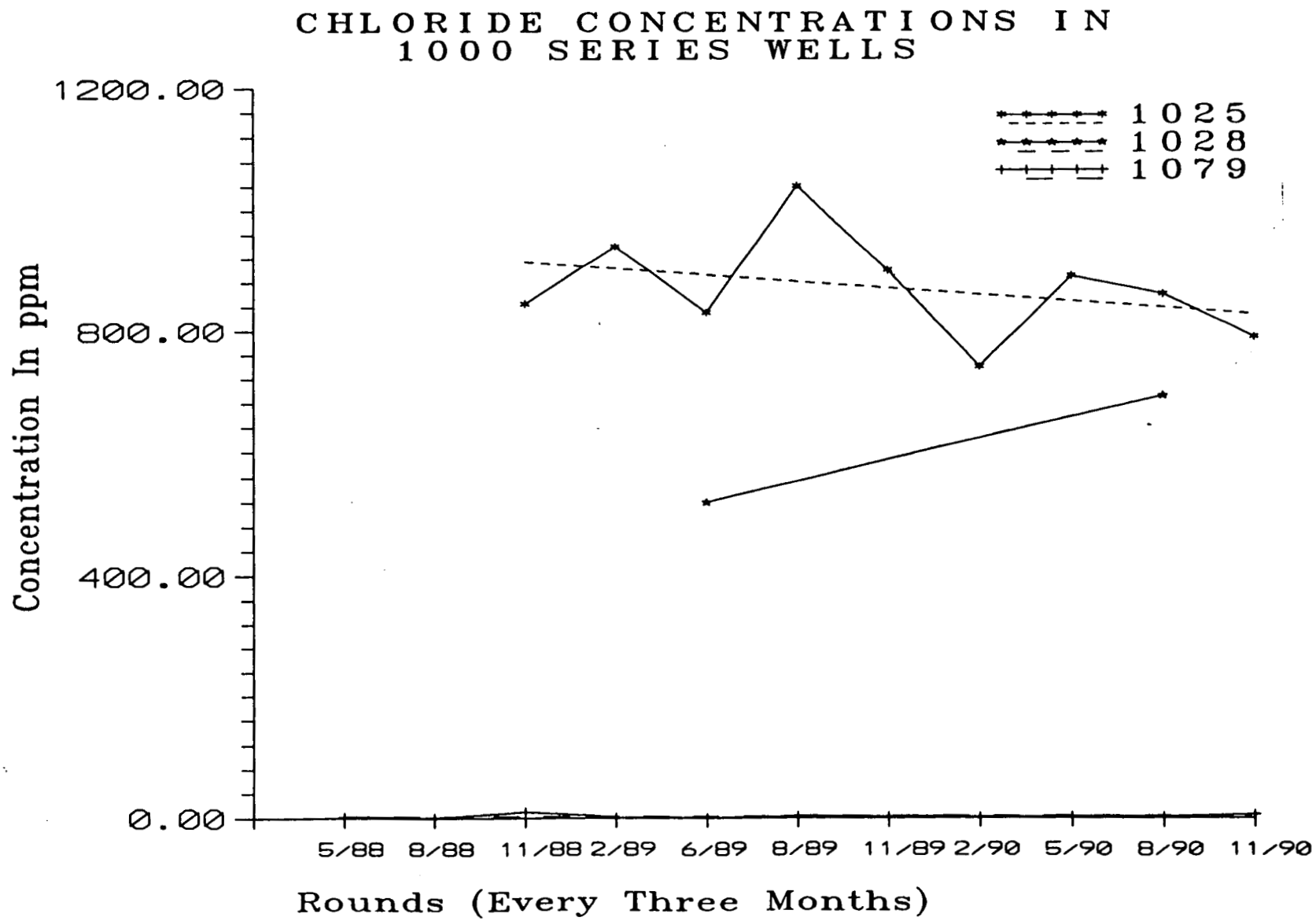

CHLORIDE CONCENTRATIONS IN
1000 SERIES WELLS
1025
1028
1079
1200.00
800.00
400.00
0.00
Concentration In ppm
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.22

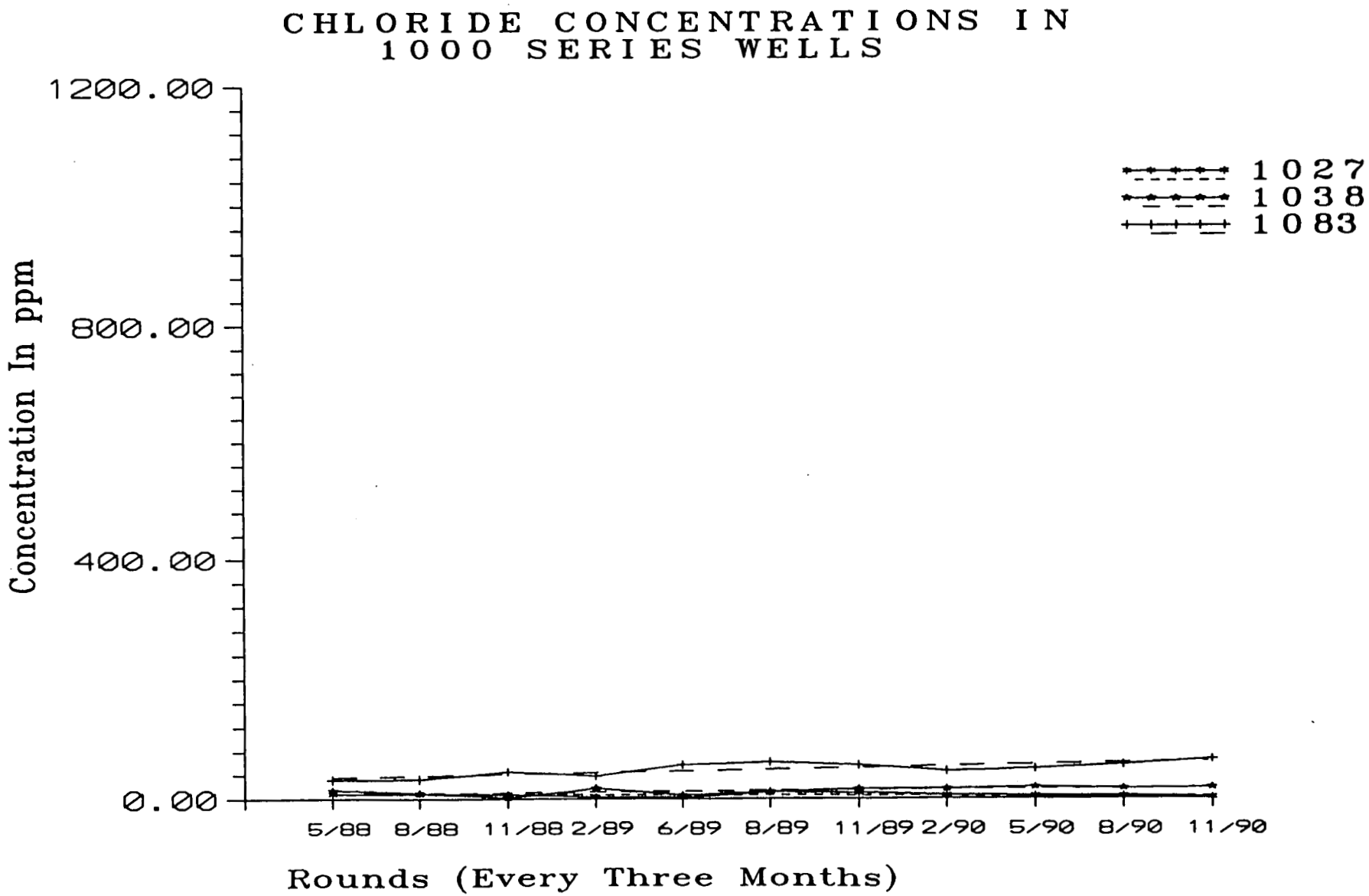

CHLORIDE CONCENTRATIONS IN
1000 SERIES WELLS
1200.00
800.00
400.00
0.00
Concentration In ppm
1027
1038
1083
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.23

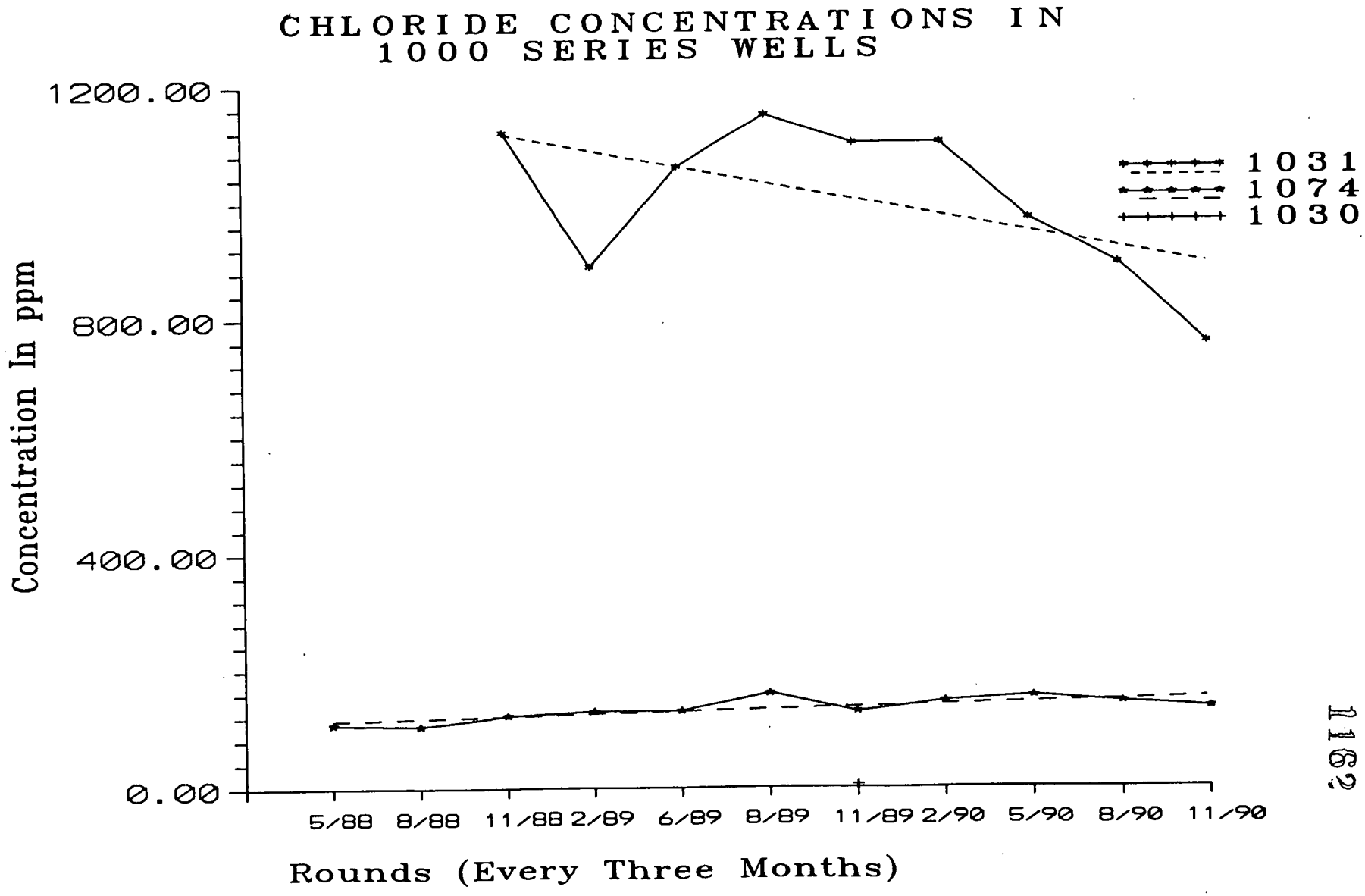

CHLORIDE CONCENTRATIONS IN
1000 SERIES WELLS
1200.00
800.00
400.00
0.00
Concentration In ppm
1031
1074
1030
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.24

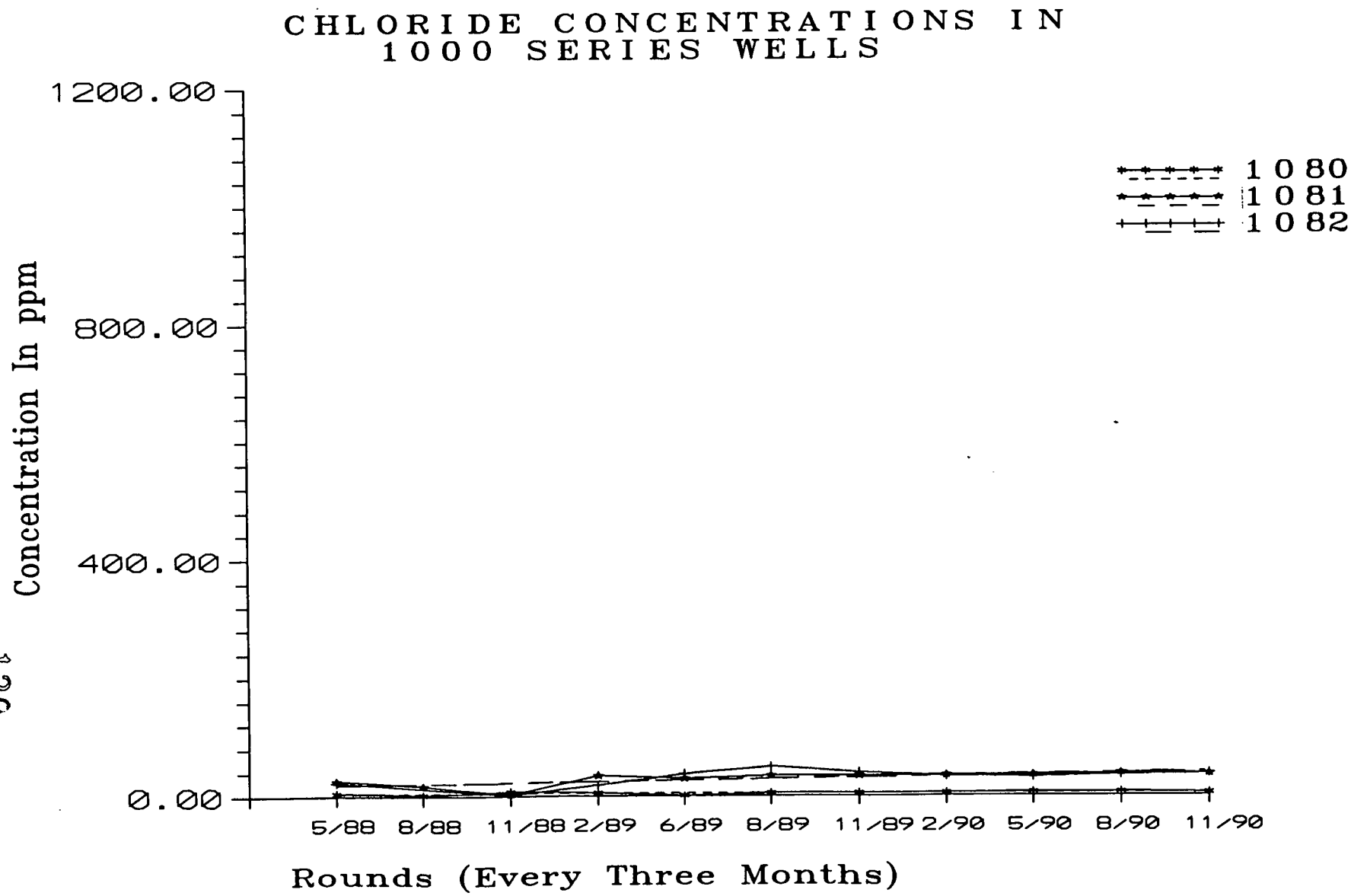

CHLORIDE CONCENTRATIONS IN
1000 SERIES WELLS
1200.00
800.00
400.00
0.00
Concentration In ppm
1080
1081
1082
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.25

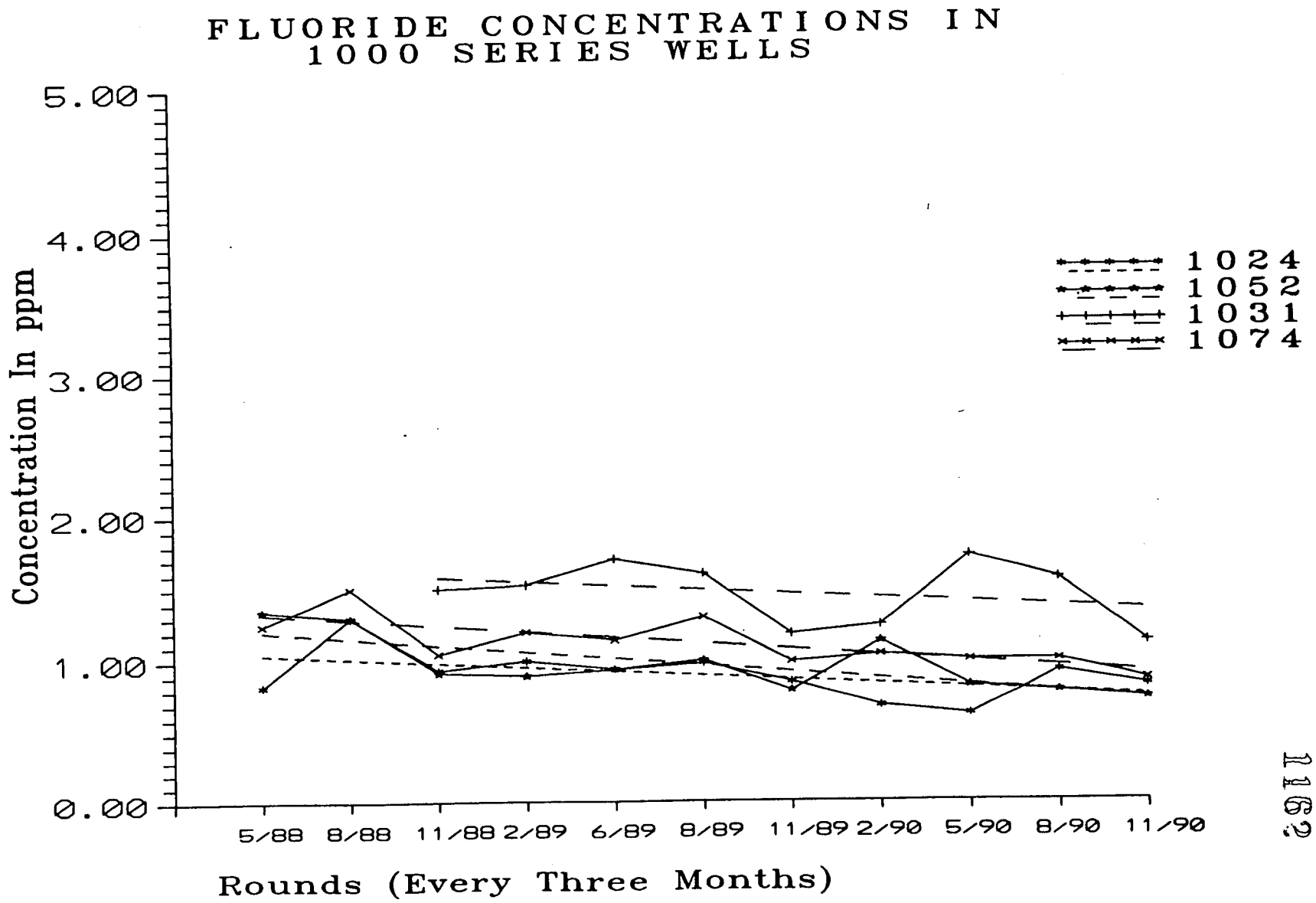

FLUORIDE CONCENTRATIONS IN
1000 SERIES WELLS
Concentration In ppm
5.00
4.00
3.00
2.00
1.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)
1024
1052
1031
1074

Figure 3.26

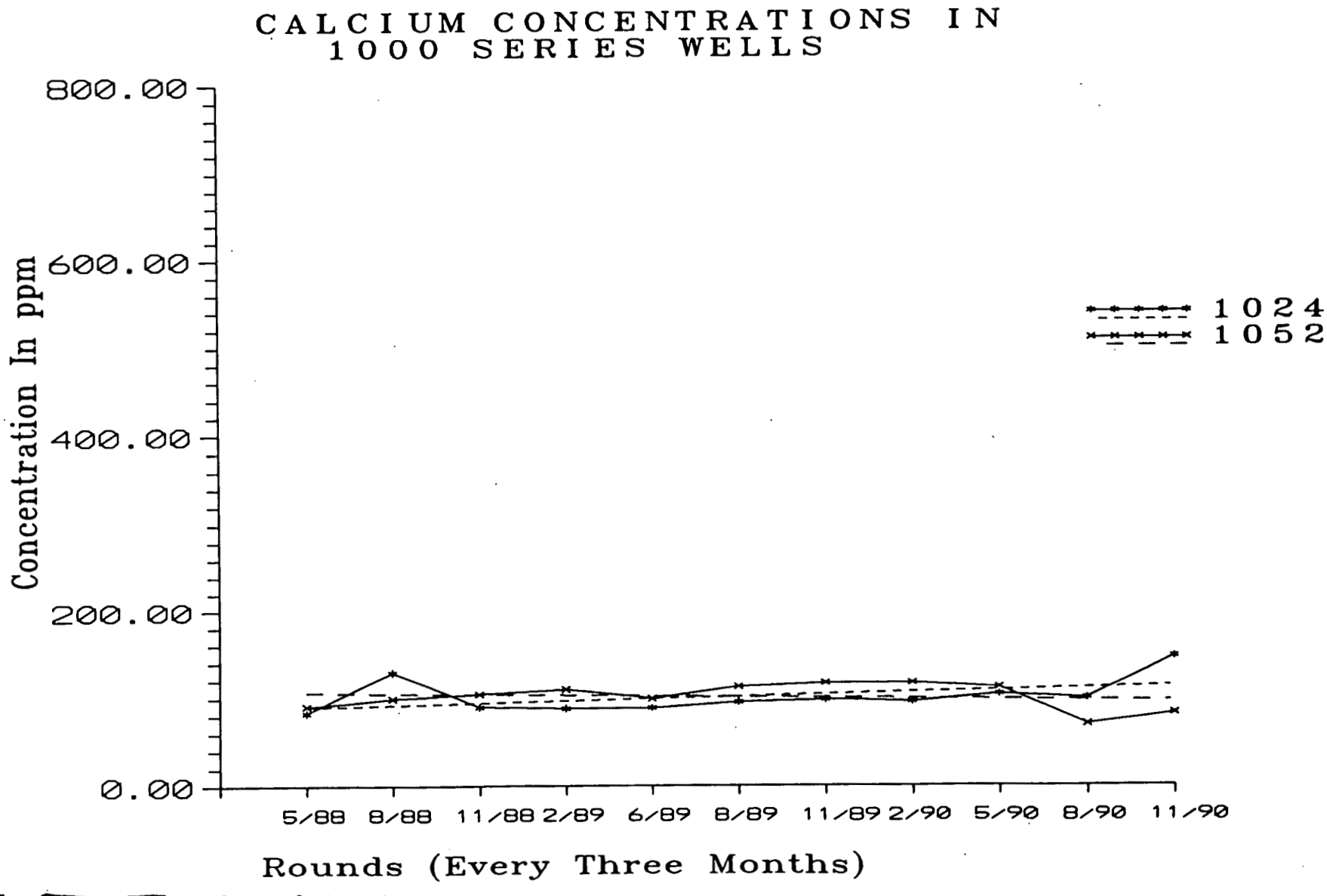

CALCIUM CONCENTRATIONS IN
1000 SERIES WELLS
800.00
600.00
400.00
200.00
0.00
Concentration In ppm
1024
1052
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.27

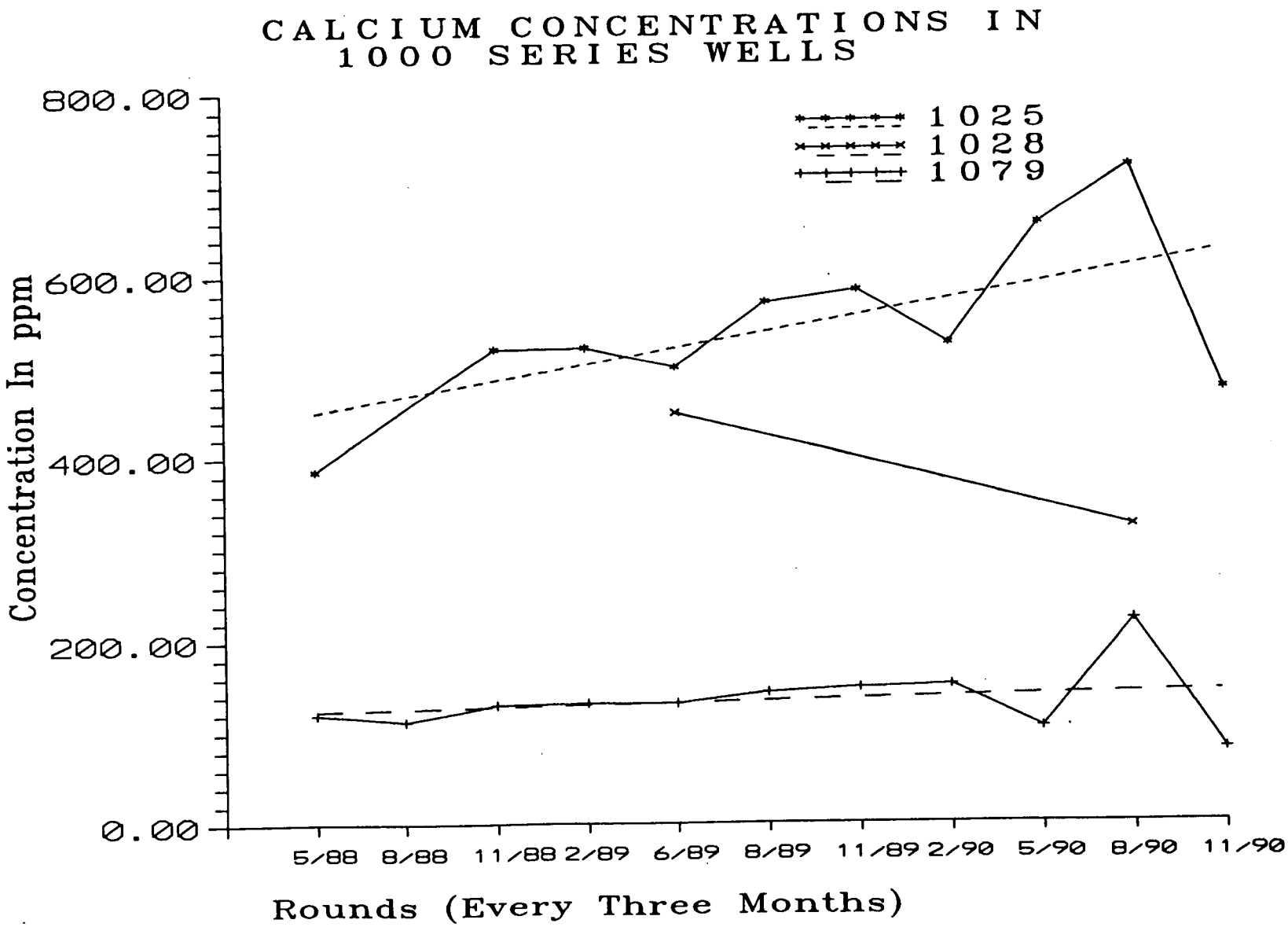

CALCIUM CONCENTRATIONS IN
1000 SERIES WELLS
1025
1028
1079
Concentration In ppm
800.00
600.00
400.00
200.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.28

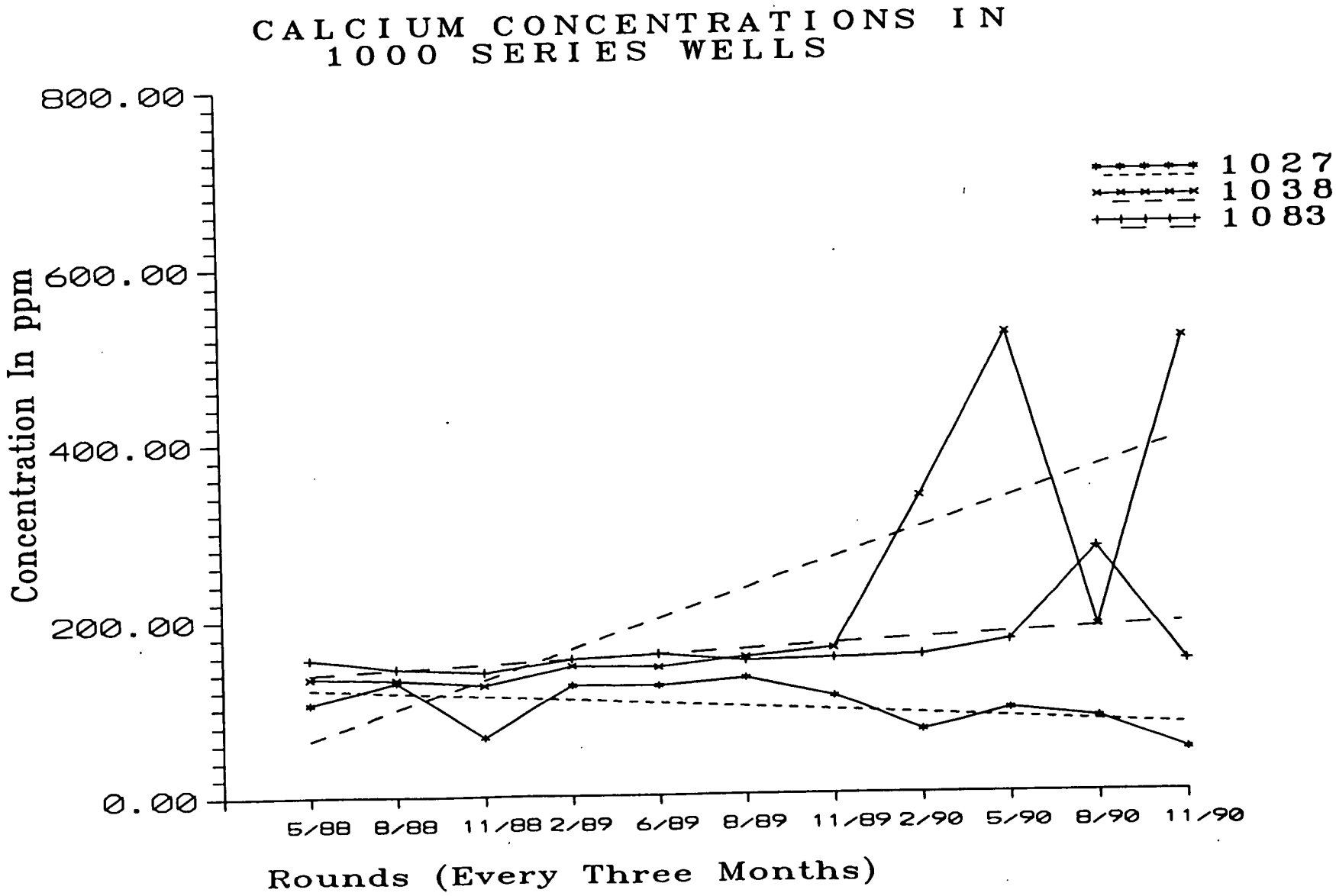

CALCIUM CONCENTRATIONS IN
1000 SERIES WELLS
1027
1038
1083
800.00
600.00
400.00
200.00
0.00
Concentration In ppm
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.29

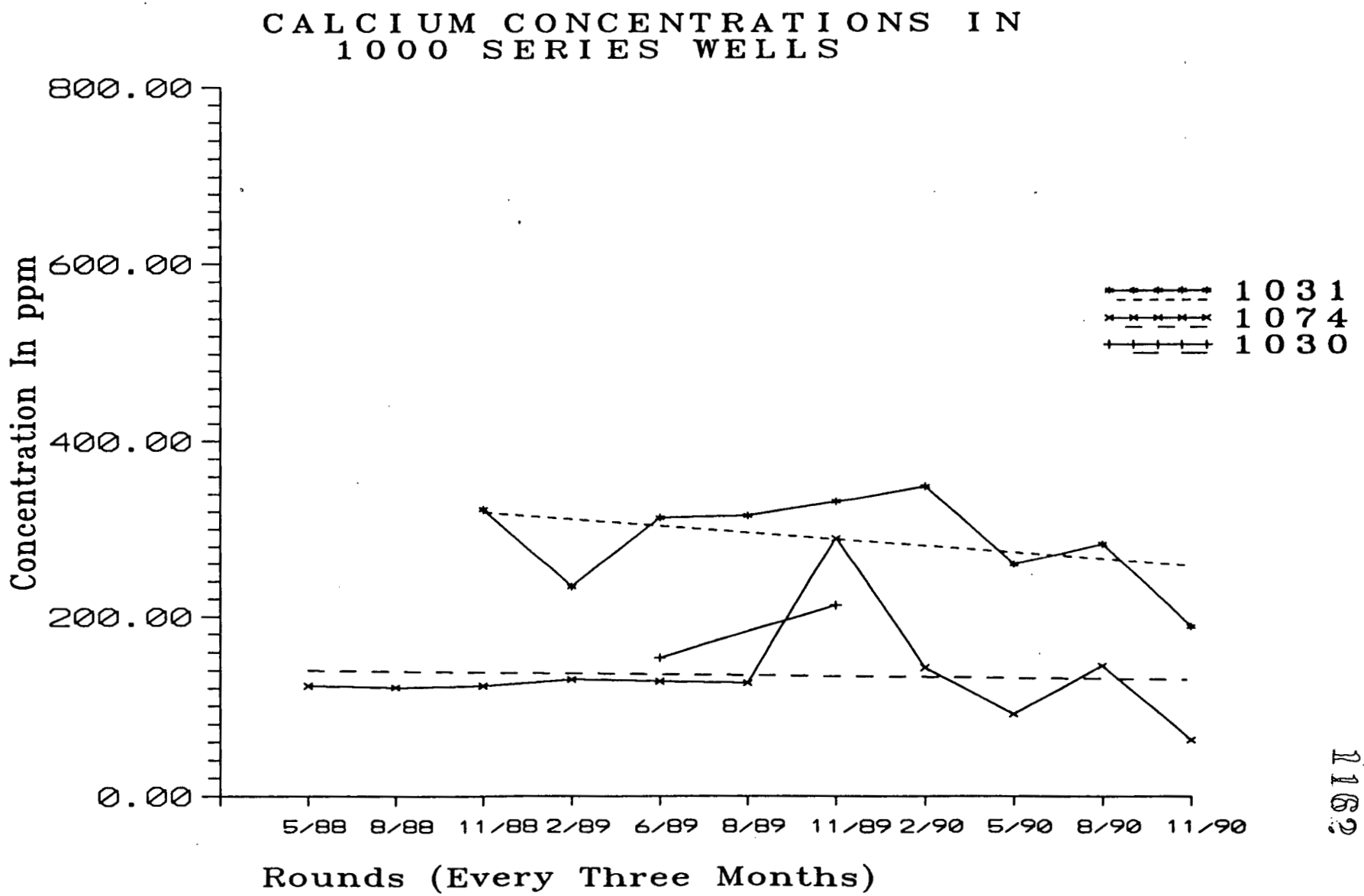

CALCIUM CONCENTRATIONS IN
1000 SERIES WELLS
800.00
600.00
400.00
200.00
0.00
Concentration In ppm
1031
1074
1030
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.30

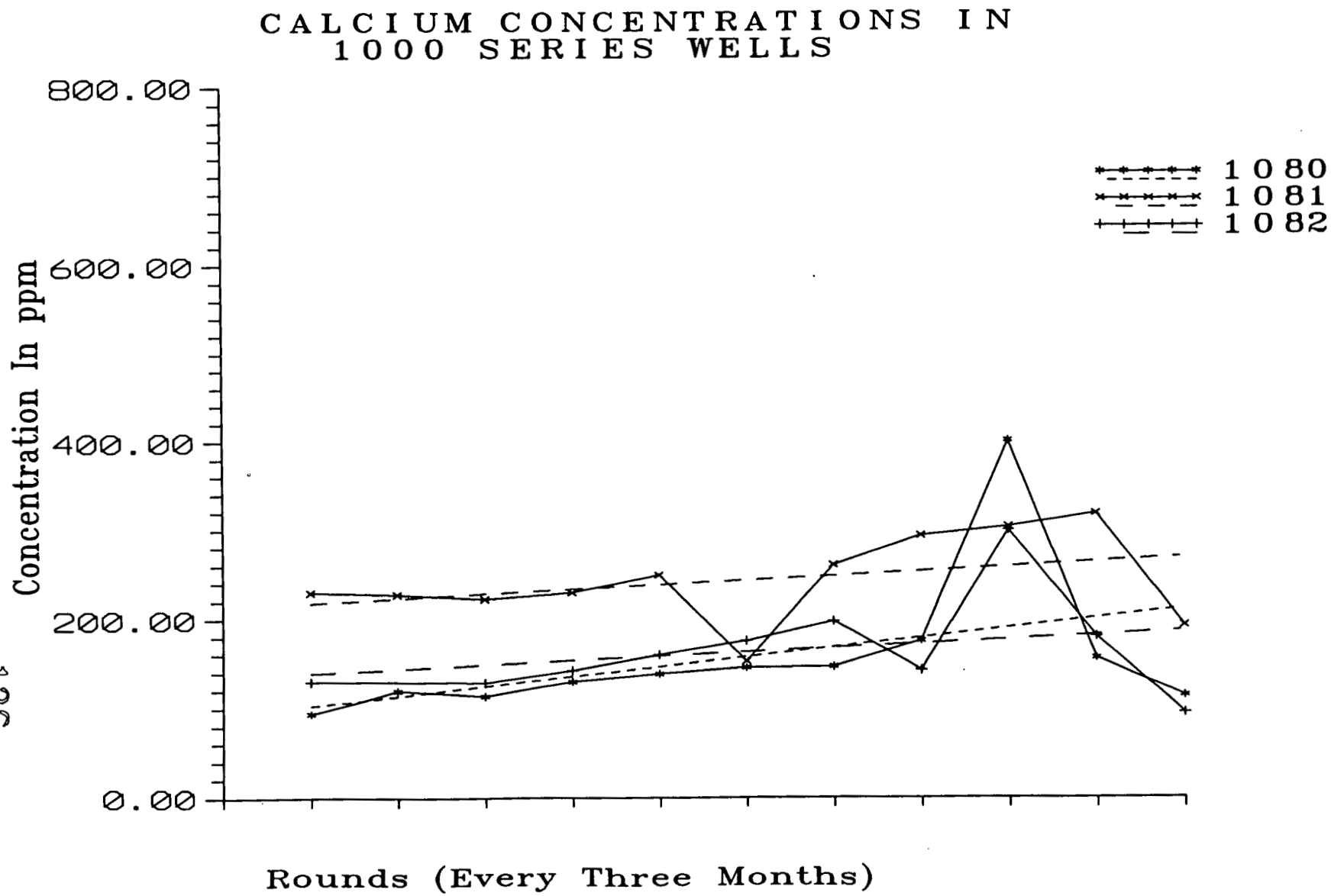

CALCIUM CONCENTRATIONS IN
1000 SERIES WELLS
800.00
600.00
400.00
200.00
0.00
Concentration In ppm
1080
1081
1082
Rounds (Every Three Months)

Figure 3.31

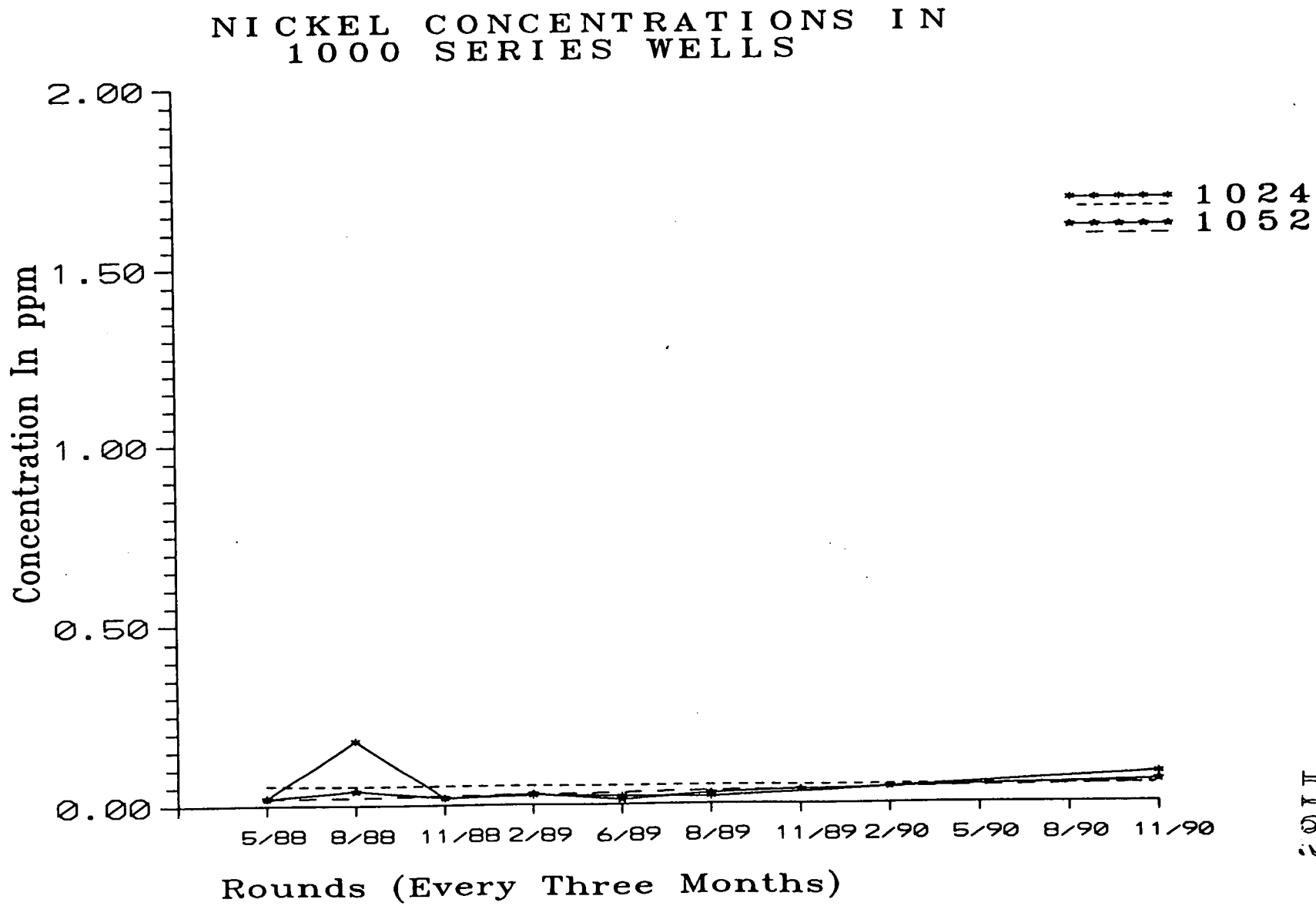

NICKEL CONCENTRATIONS IN
1000 SERIES WELLS
2.00
1.50
1.00
0.50
0.00
Concentration In ppm
1024
1052
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.32

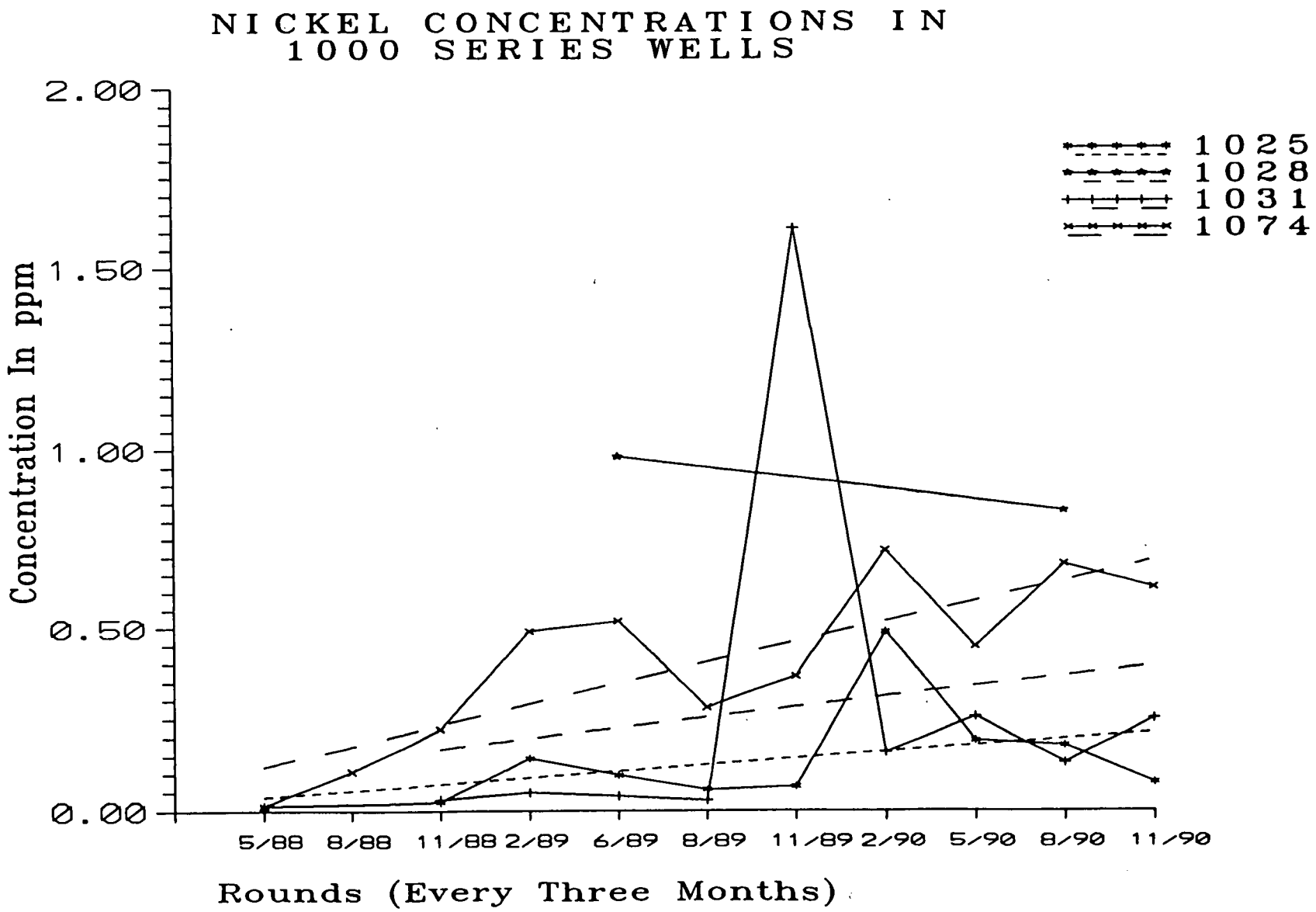

NICKEL CONCENTRATIONS IN
1000 SERIES WELLS
2.00
1.50
1.00
0.50
0.00
Concentration In ppm
1025
1028
1031
1074
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.33

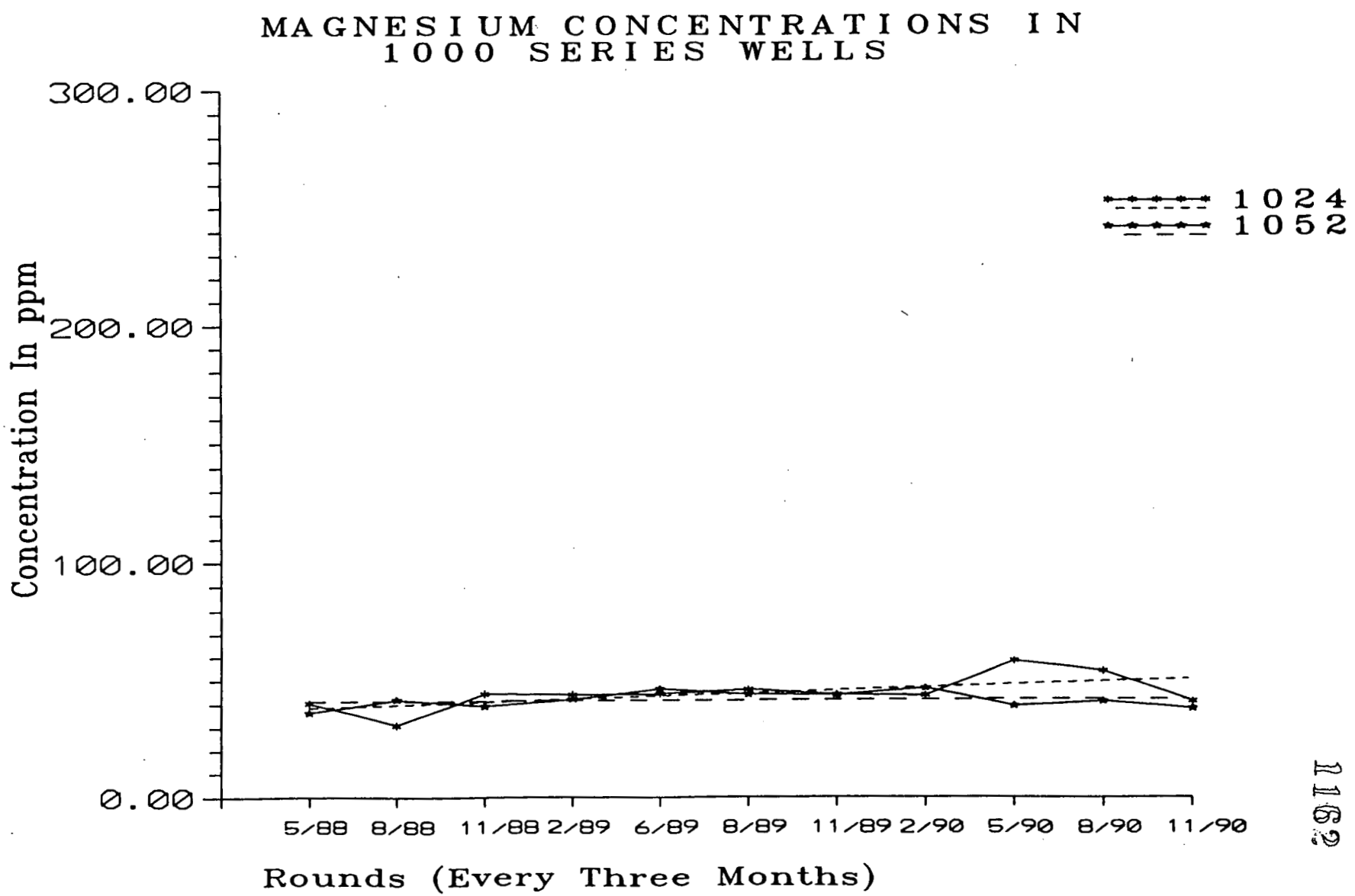

MAGNESIUM CONCENTRATIONS IN
1000 SERIES WELLS
300.00
200.00
100.00
0.00
Concentration In ppm
1024
1052
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.34

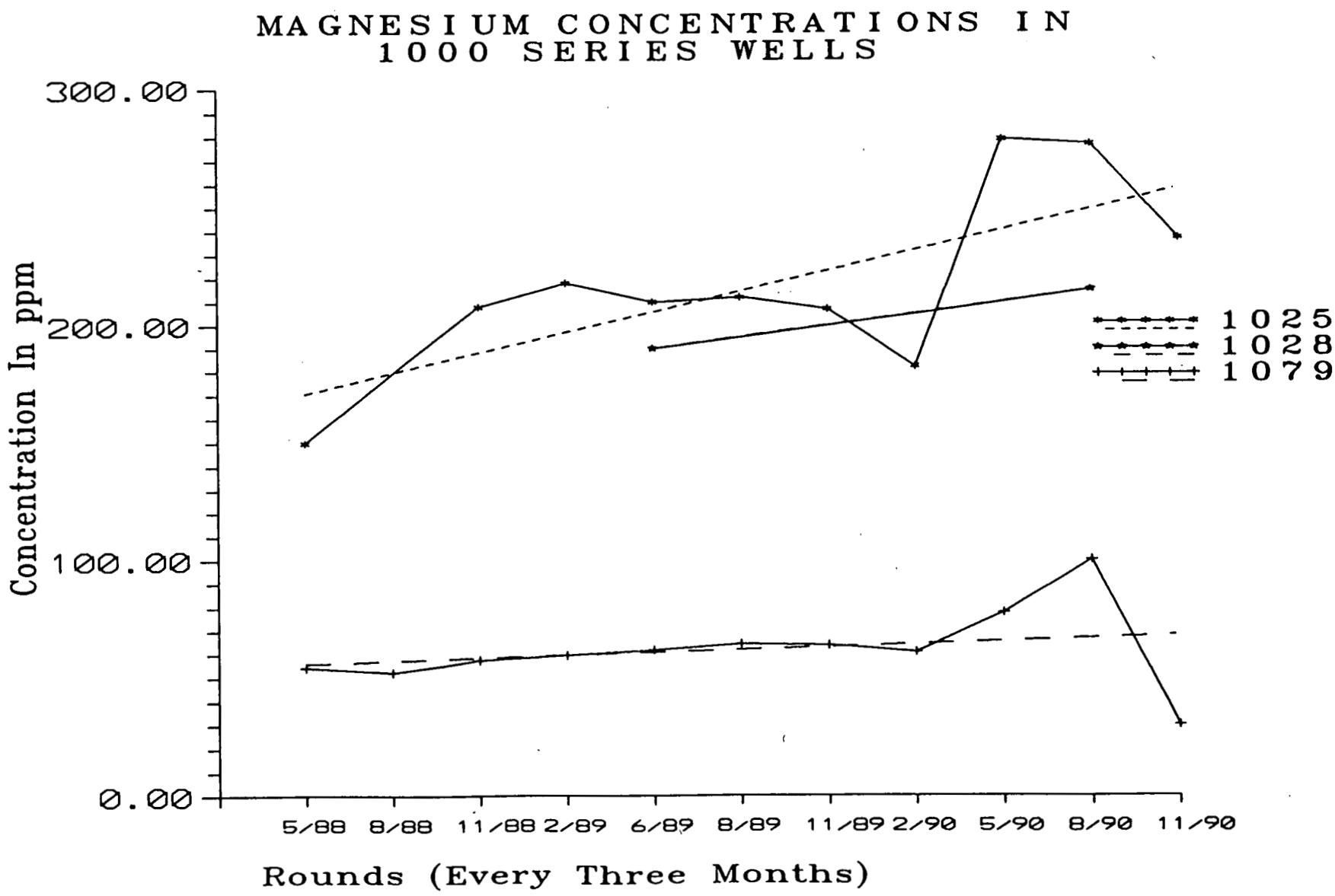

MAGNESIUM CONCENTRATIONS IN
1000 SERIES WELLS
300.00
200.00
100.00
0.00
Concentration In ppm
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)
1025
1028
1079

Figure 3.35

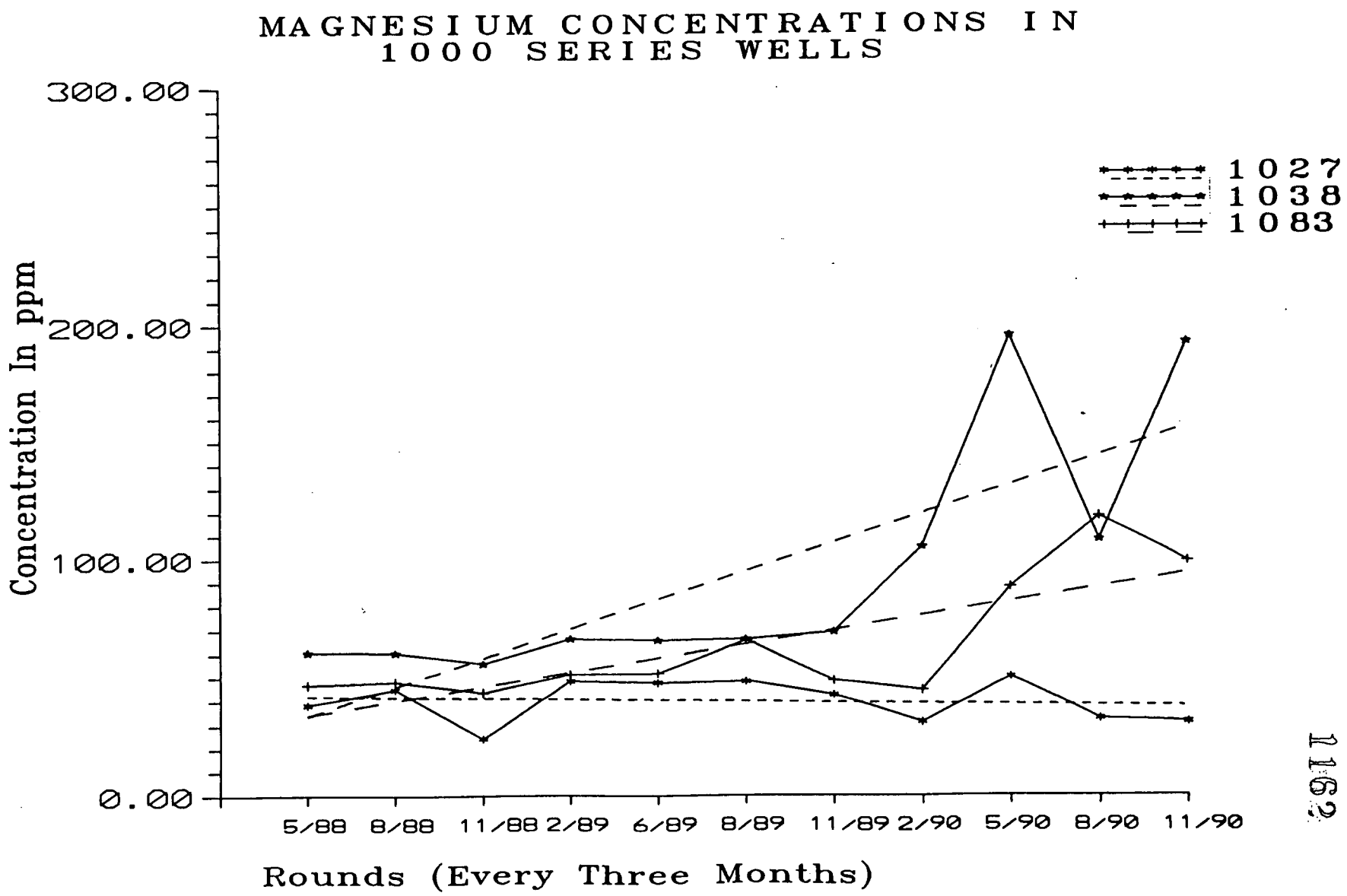

MAGNESIUM CONCENTRATIONS IN
1000 SERIES WELLS
1027
1038
1083
Concentration In ppm
300.00
200.00
100.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.36

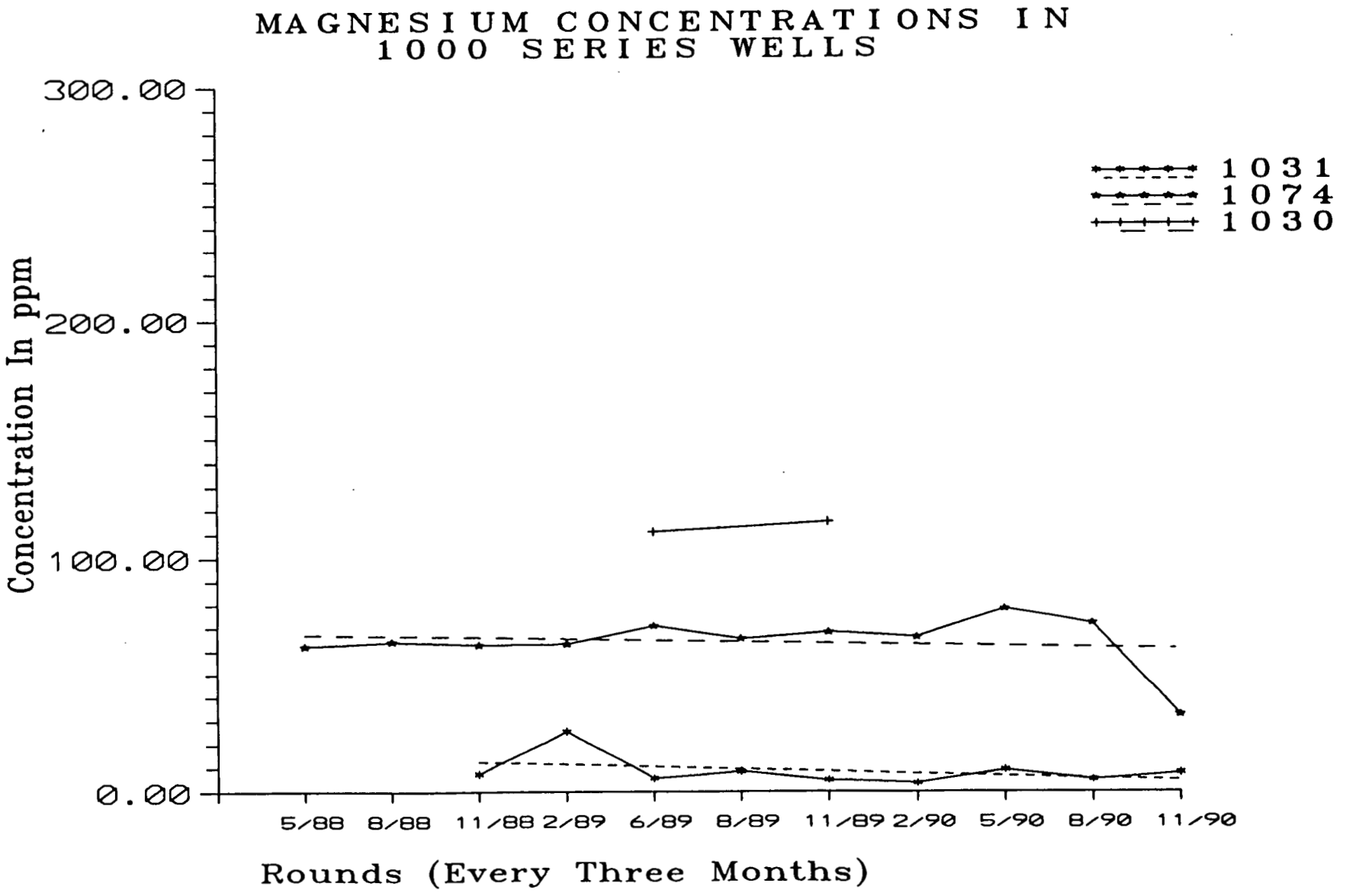

MAGNESIUM CONCENTRATIONS IN
1000 SERIES WELLS
300.00
200.00
100.00
0.00
Concentration In ppm
1031
1074
1030
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.37

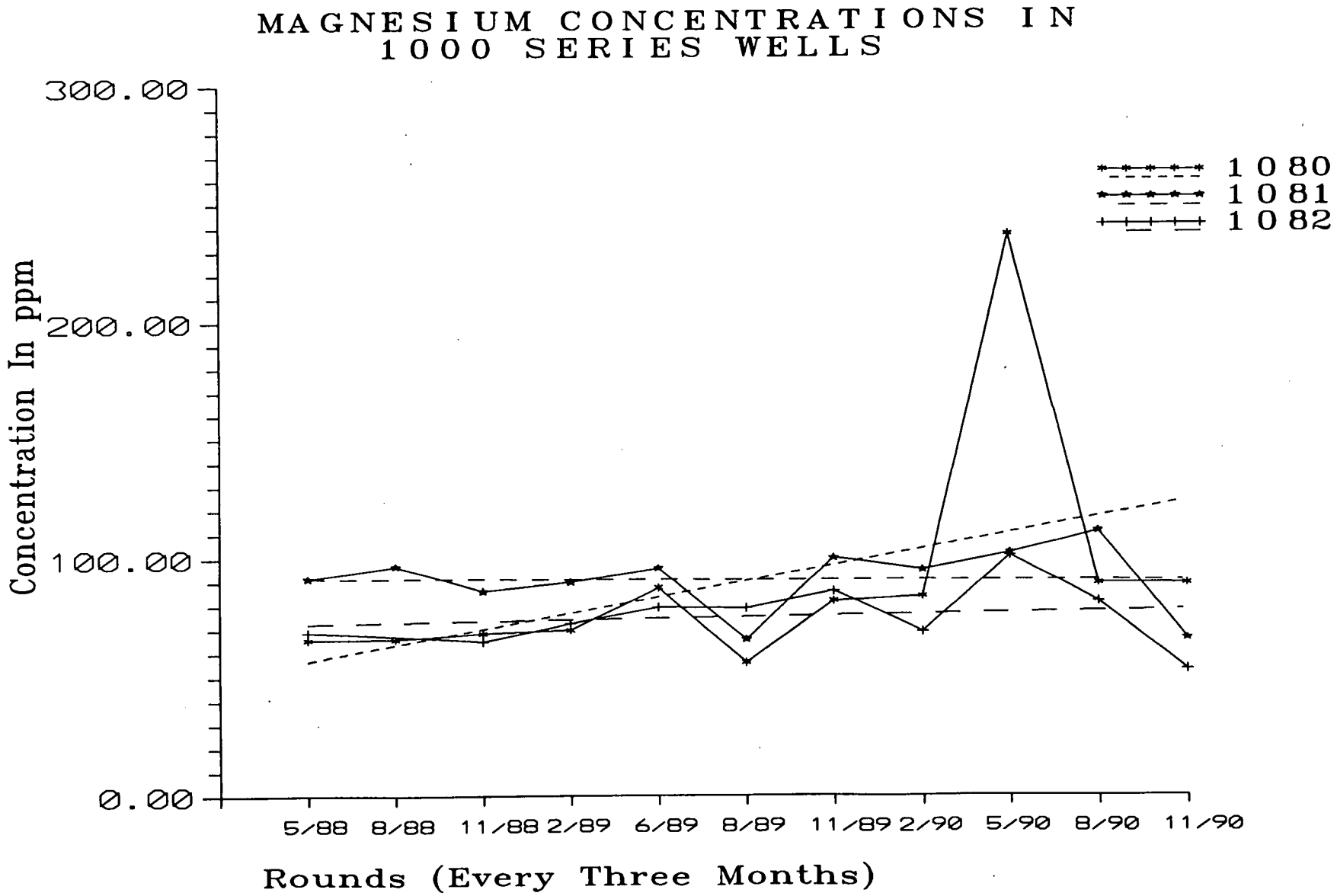

MAGNESIUM CONCENTRATIONS IN
1000 SERIES WELLS
Concentration In ppm
300.00
200.00
100.00
0.00
1080
1081
1082
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.38

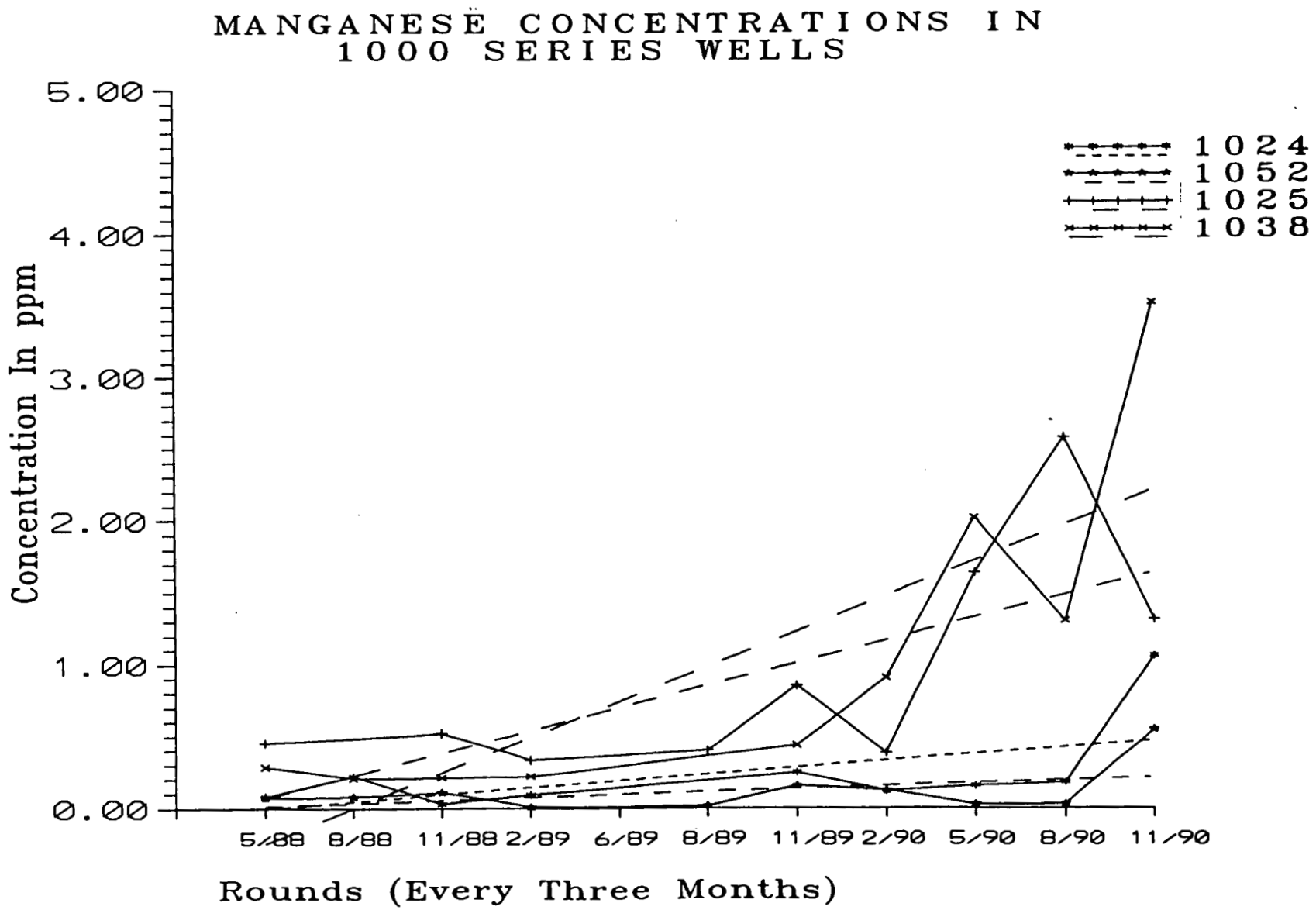

MANGANESE CONCENTRATIONS IN
1000 SERIES WELLS
1024
1052
1025
1038
Concentration In ppm
5.00
4.00
3.00
2.00
1.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.39

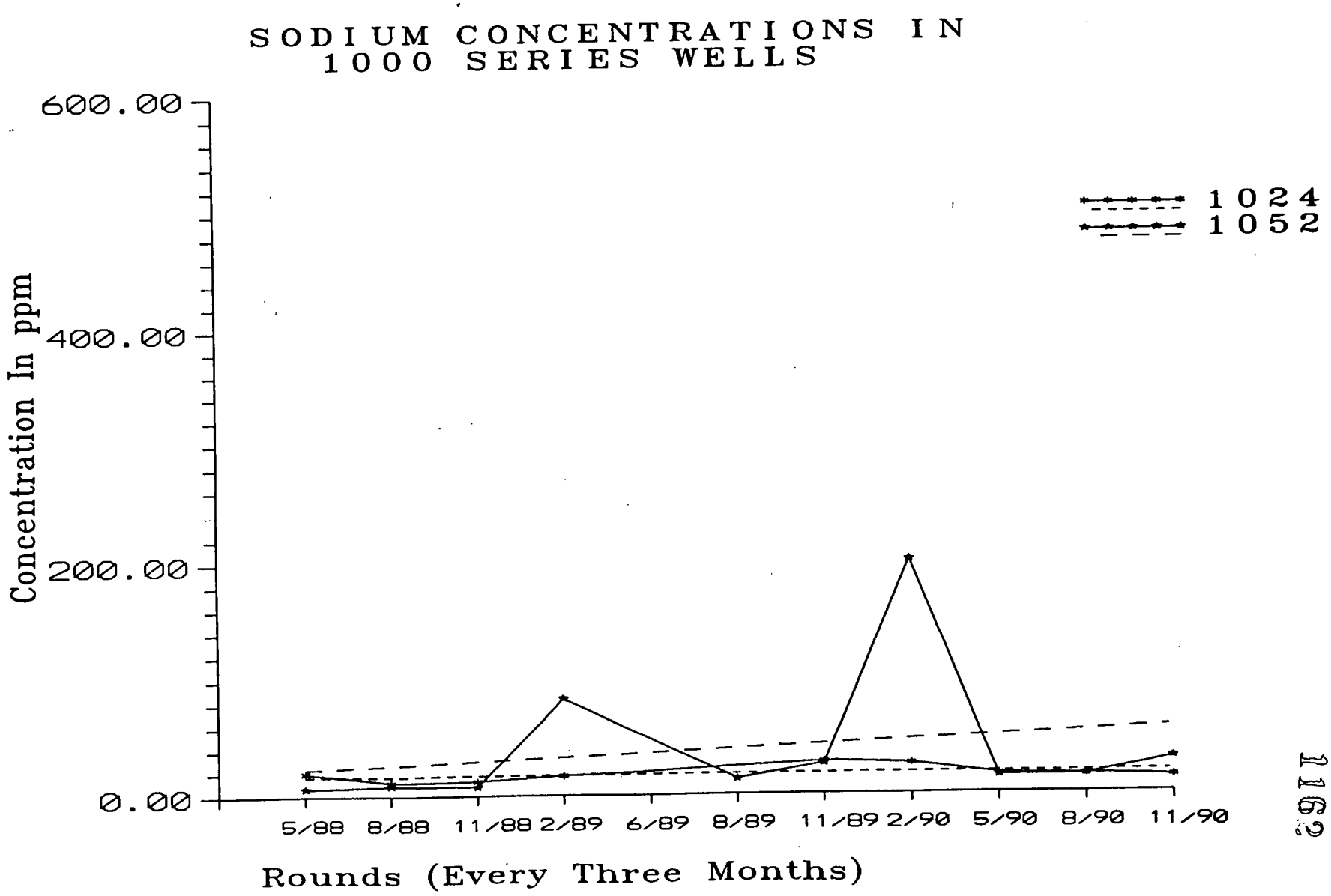

SODIUM CONCENTRATIONS IN
1000 SERIES WELLS
1024
1052
Concentration In ppm
600.00
400.00
200.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.40

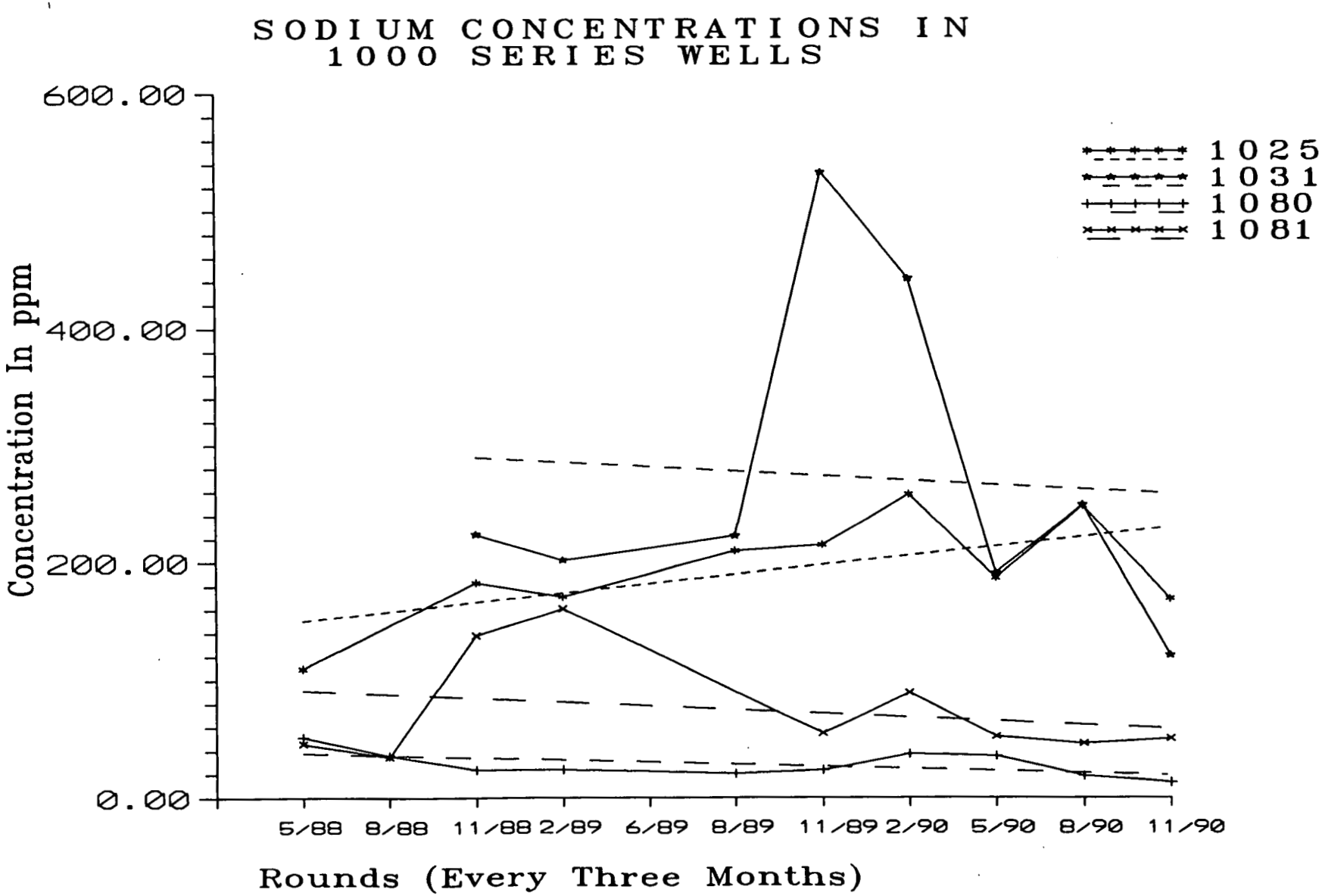

SODIUM CONCENTRATIONS IN
1000 SERIES WELLS
600.00
400.00
200.00
0.00
Concentration In ppm
1025
1031
1080
1081
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.41

Calcium Concentrations For 1000 Series Wells As Of November, 1990

CONCENTRATIONS IN PARTS PER MILLION

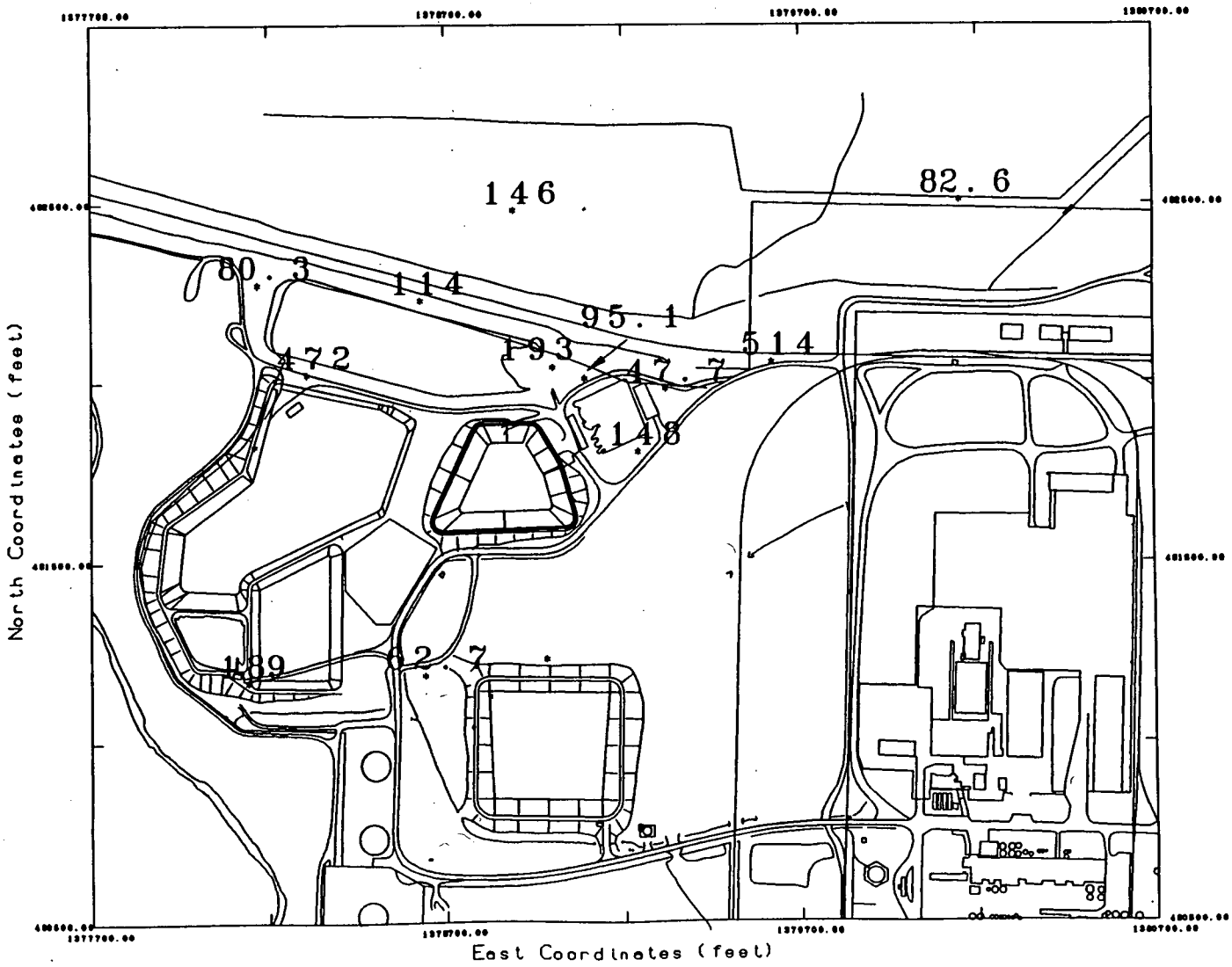
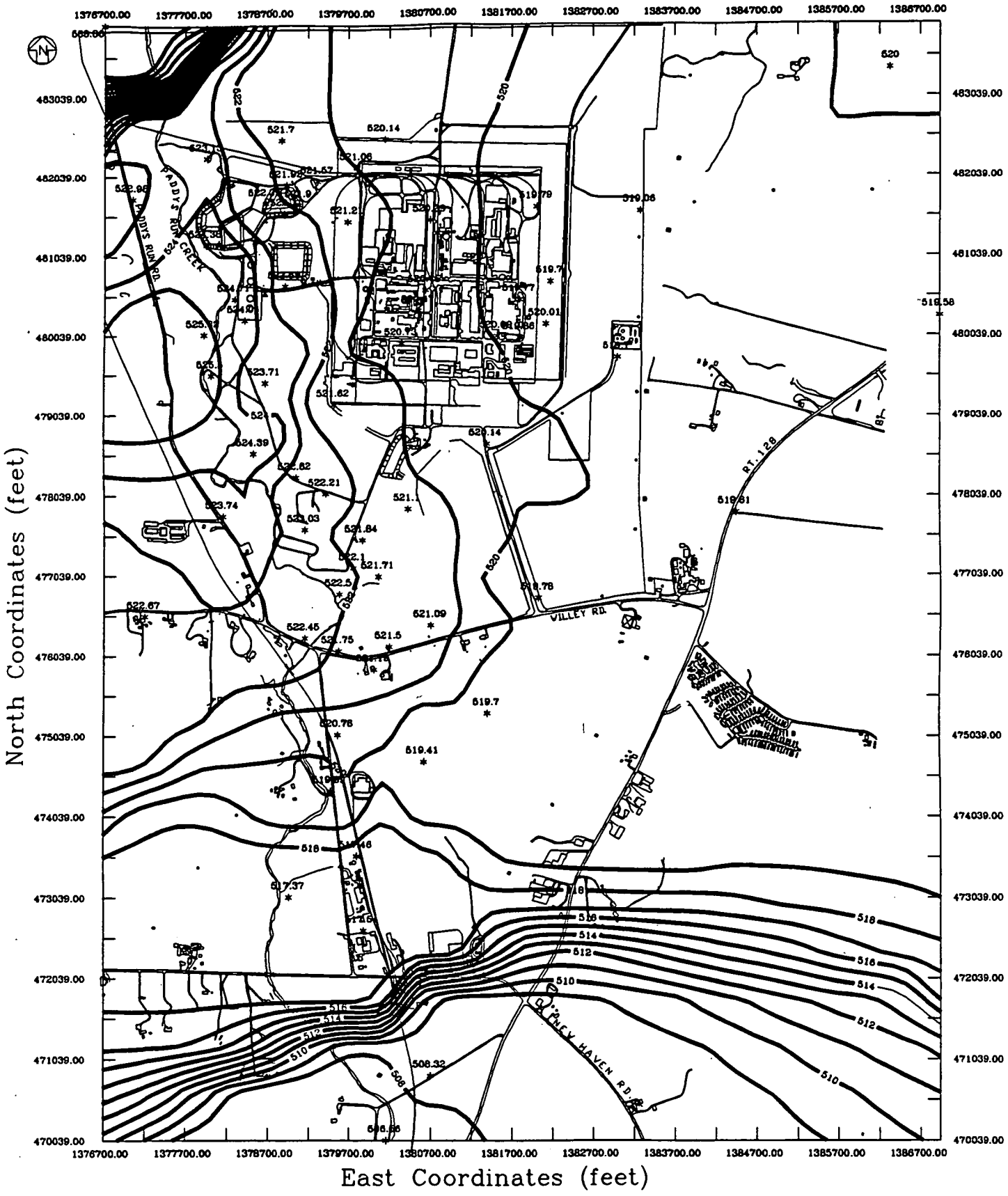


Figure 3.42

Water Level Map For 2000 Series Wells As Of February, 1990

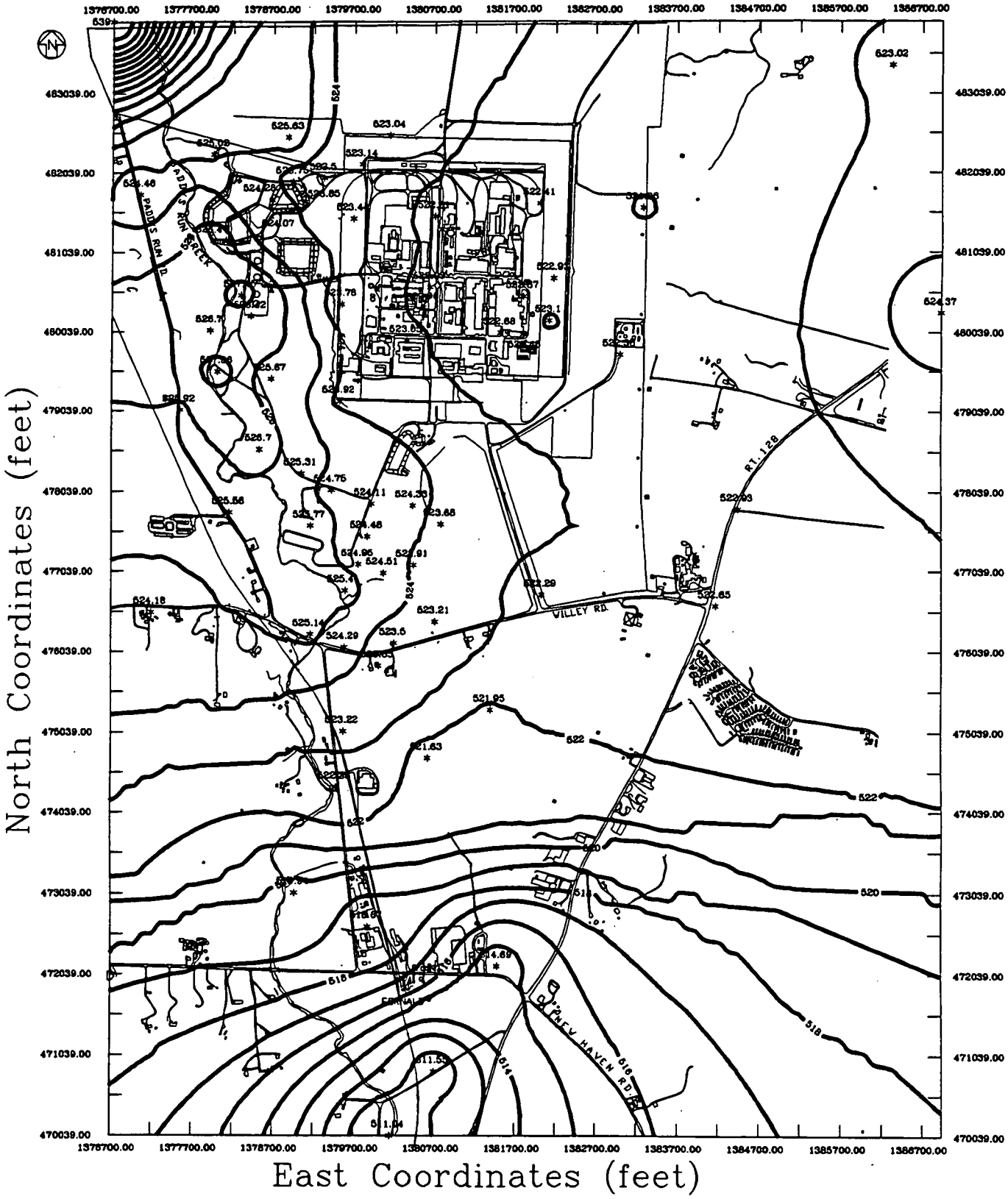


Contour Lines Every Foot In Feet AMSL

0 600 1200 1800 2400

Figure 3.43

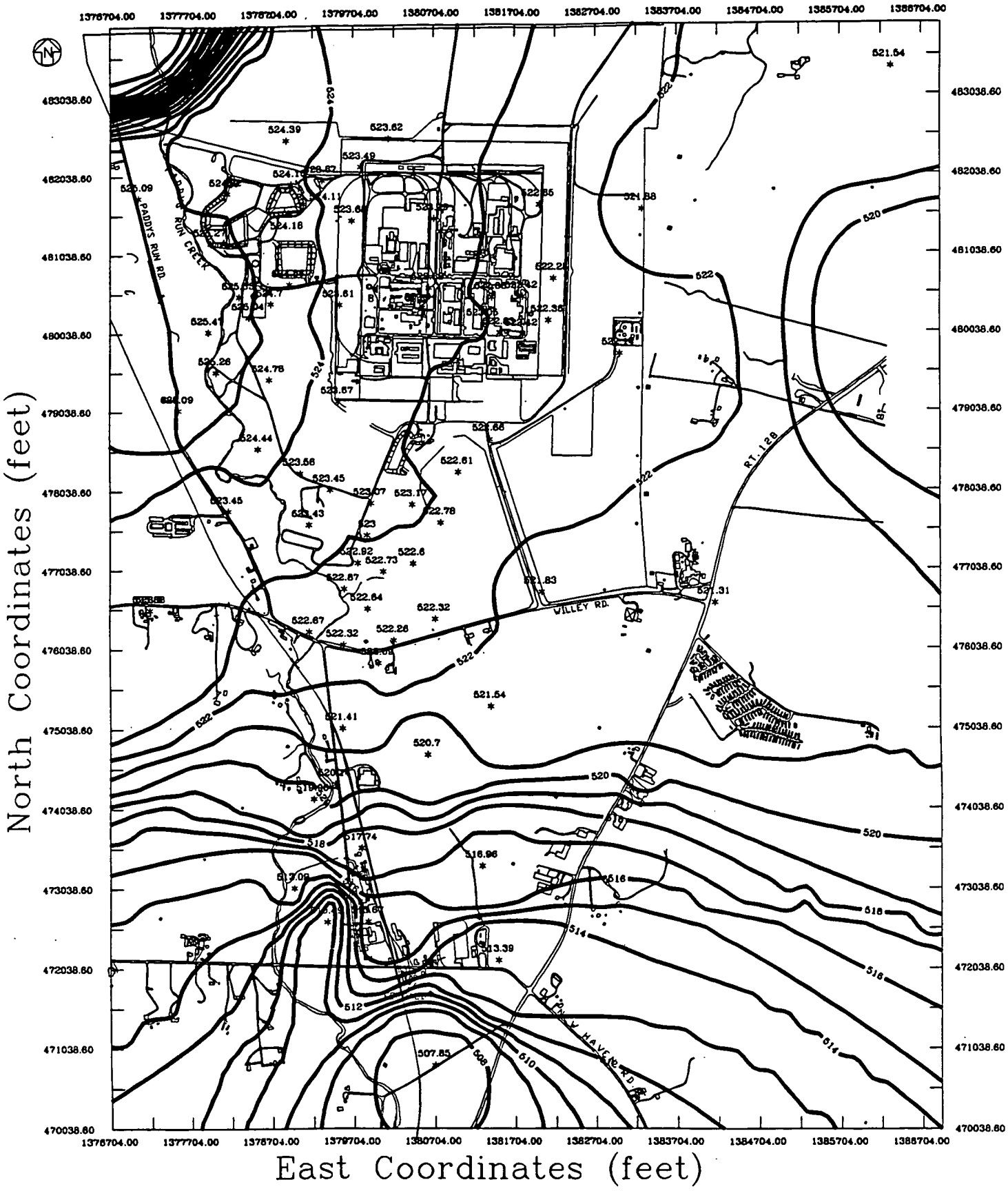
Water Level Map In 2000 Series Wells For May, 1990



Contour Lines Every Foot In Feet AMSL

Figure 3.44

Water Level Map For 2000 Series Wells As Of August, 1990

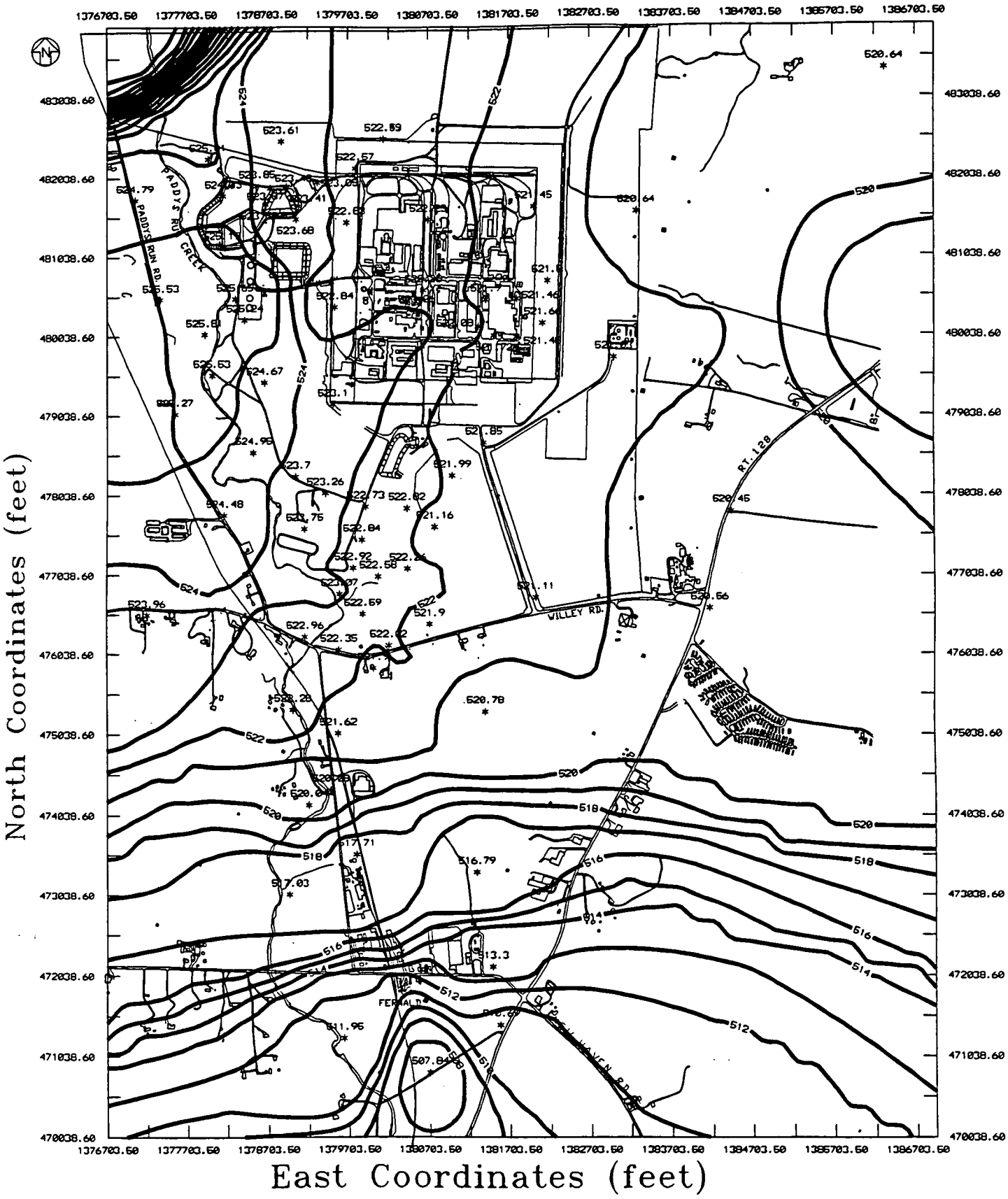


Contour Lines Every Foot In Feet AMSL

0 600 1200 1800 2400

Figure 3.45

Water Level Map For 2000 Series Wells As Of November, 1990



Contour Lines Every Foot In Feet AMSL

0 600 1200 1800 2400

Figure 3.46

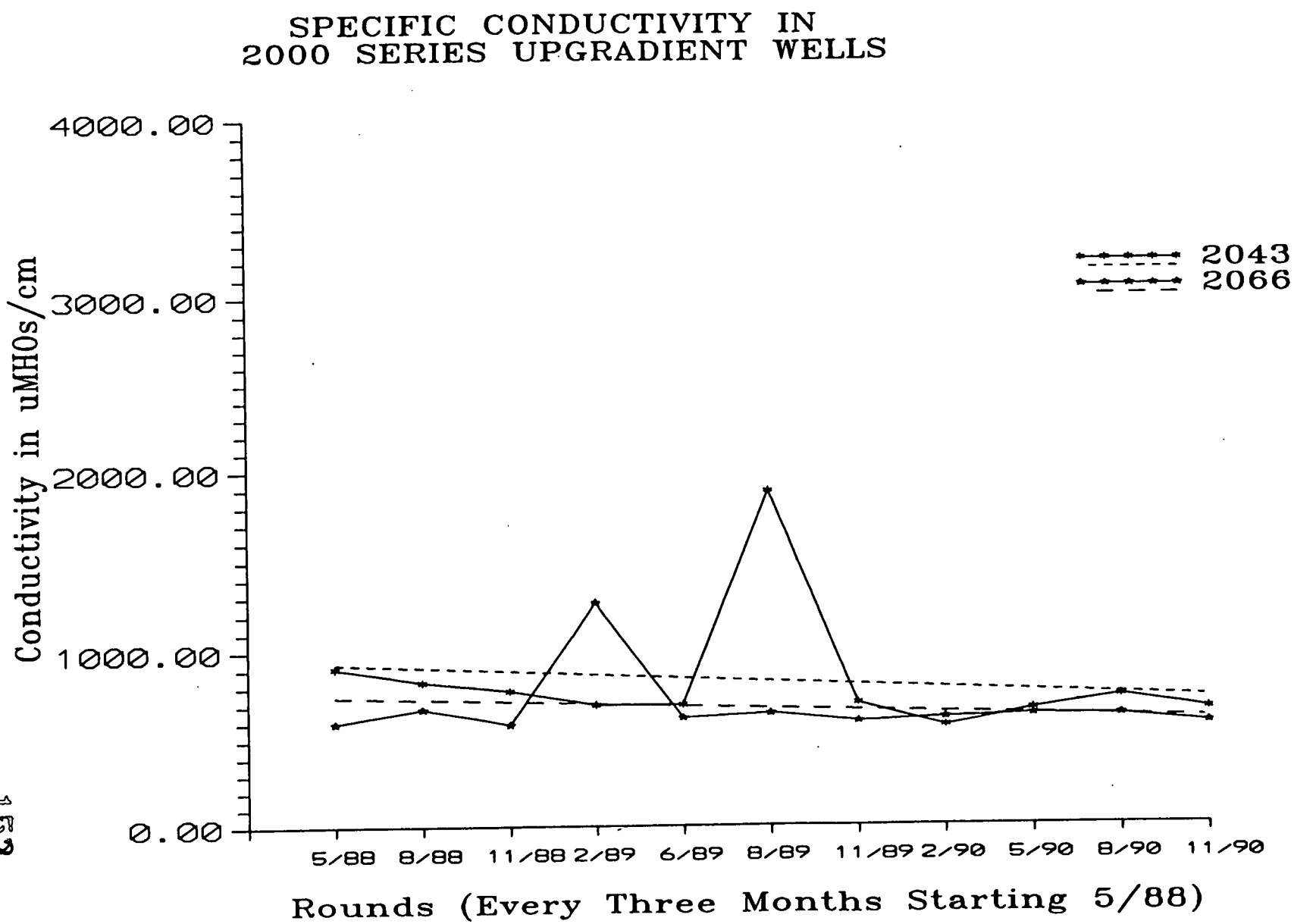

SPECIFIC CONDUCTIVITY IN
2000 SERIES UPGRADIENT WELLS
Conductivity in uMHOs/cm
4000.00
3000.00
2000.00
1000.00
0.00
2043
2066
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.47

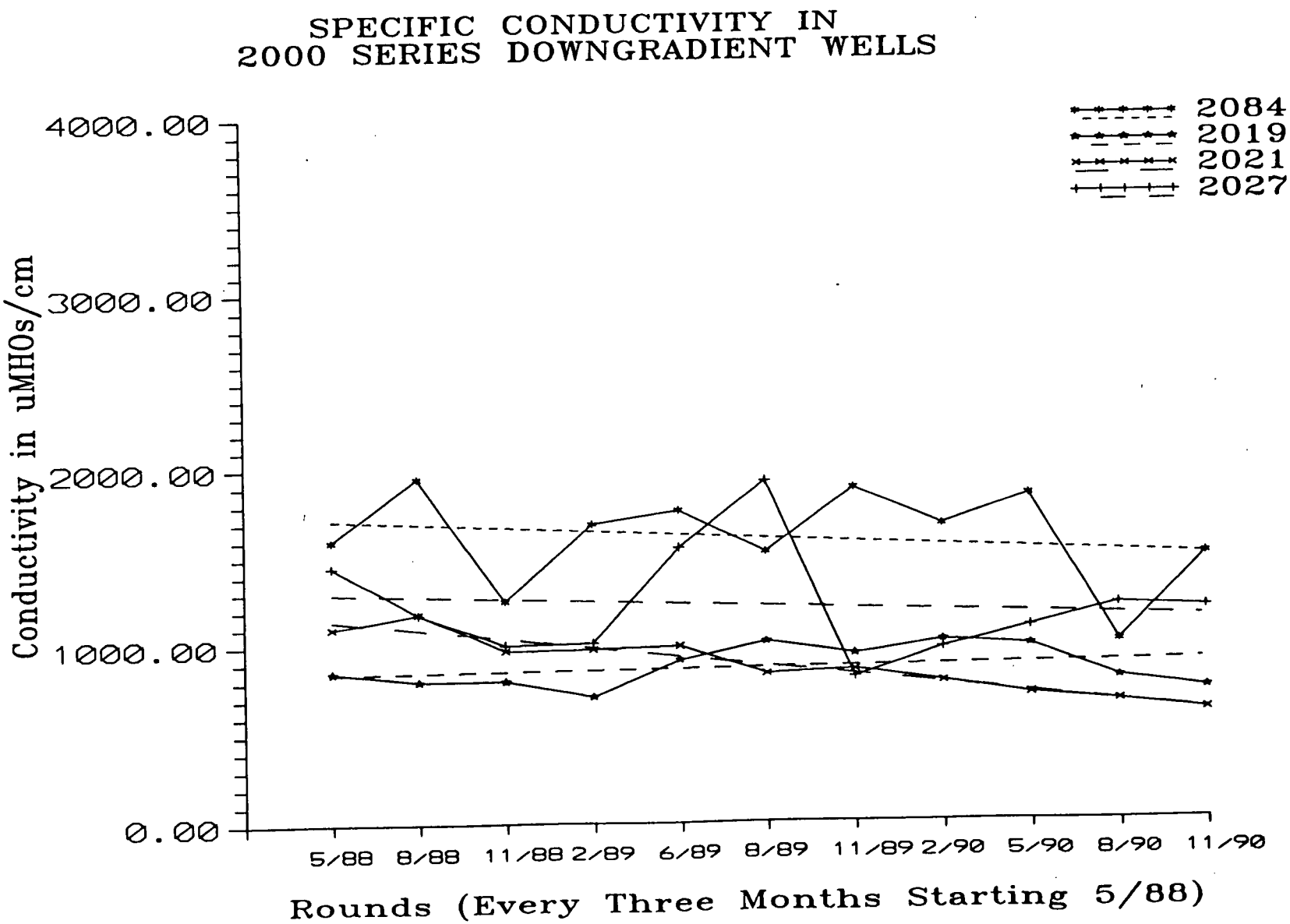

SPECIFIC CONDUCTIVITY IN
2000 SERIES DOWNGRADIENT WELLS
2084
2019
2021
2027
Conductivity in uMHOs/cm
4000.00
3000.00
2000.00
1000.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.48

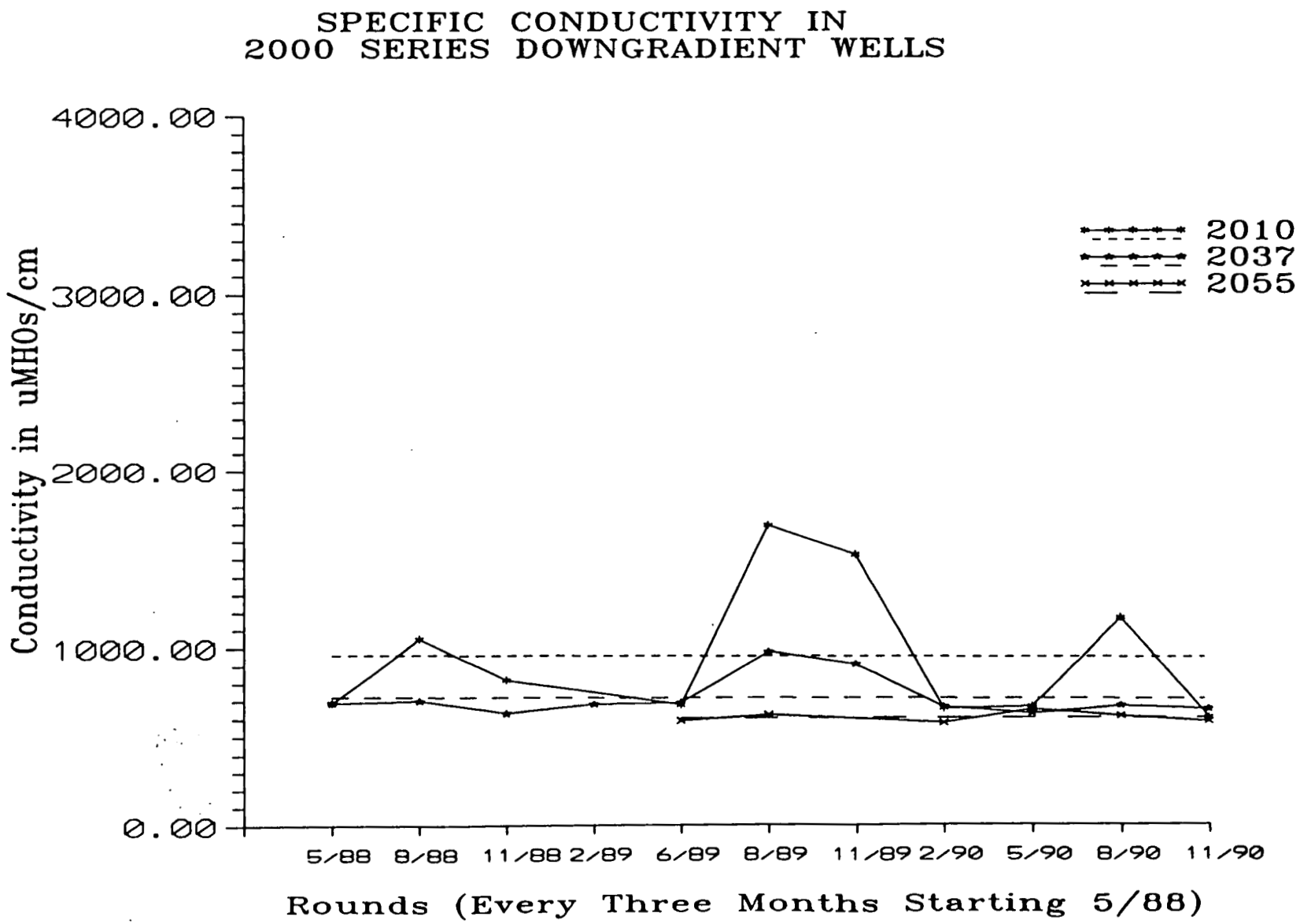

SPECIFIC CONDUCTIVITY IN
2000 SERIES DOWNGRADIENT WELLS
Conductivity in uMHOs/cm
4000.00
3000.00
2000.00
1000.00
0.00
2010
2037
2055
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.49

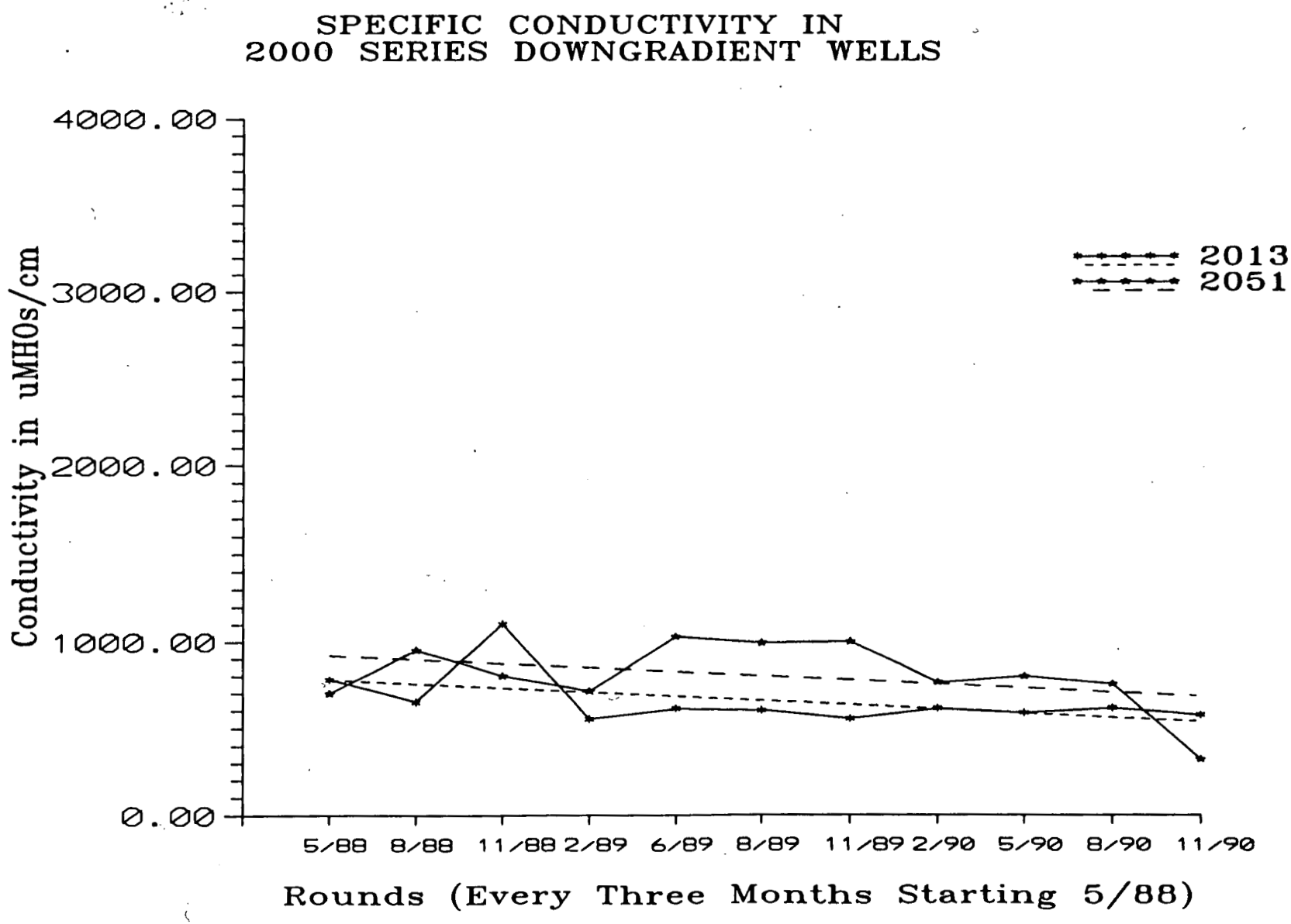

SPECIFIC CONDUCTIVITY IN
2000 SERIES DOWNGRADIENT WELLS
Conductivity in uMHOs/cm
4000.00
3000.00
2000.00
1000.00
0.00
2013
2051
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.50

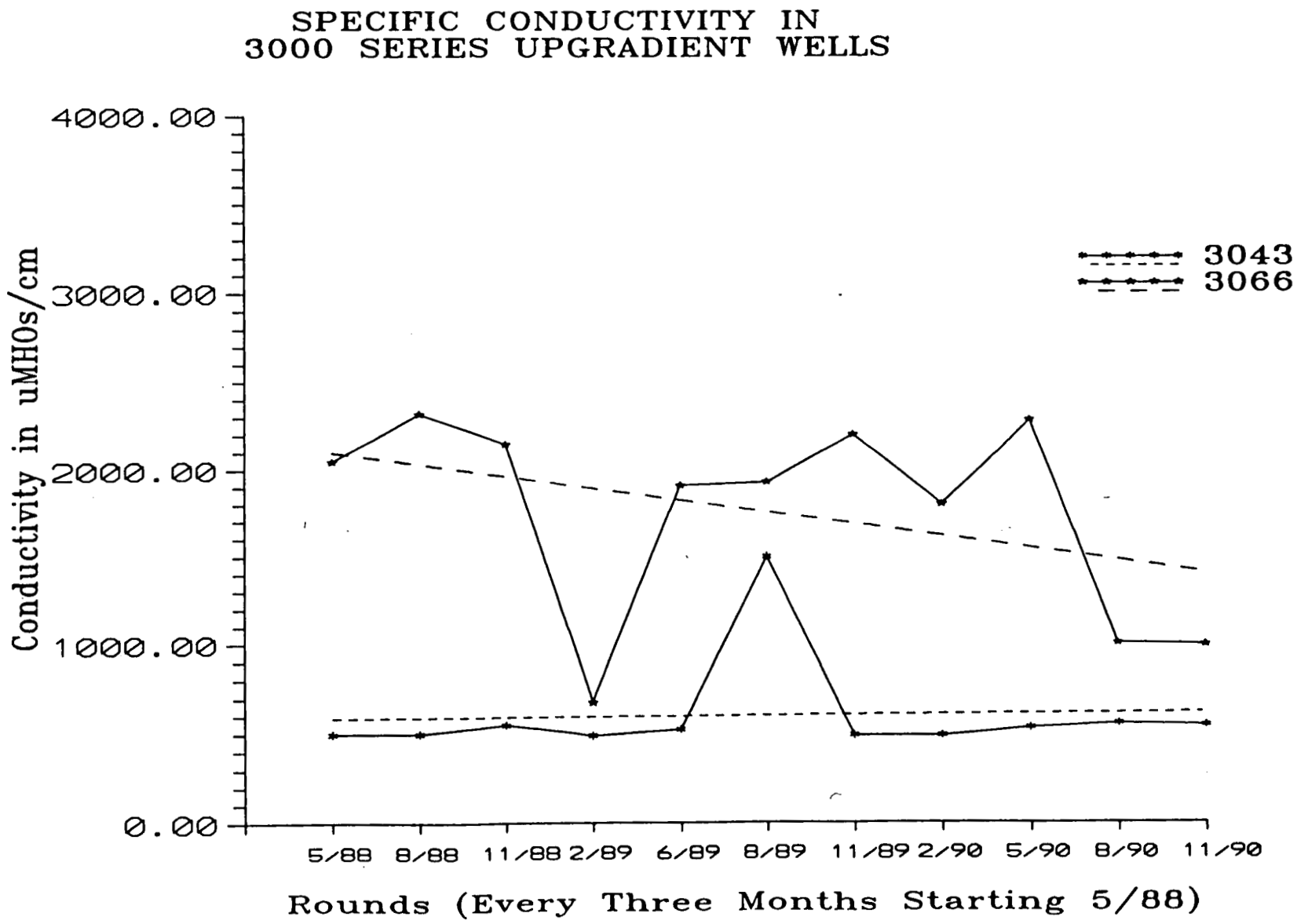

SPECIFIC CONDUCTIVITY IN
3000 SERIES UPGRADIENT WELLS
4000.00
3000.00
2000.00
1000.00
0.00
Conductivity in uMHOs/cm
3043
3066
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.51

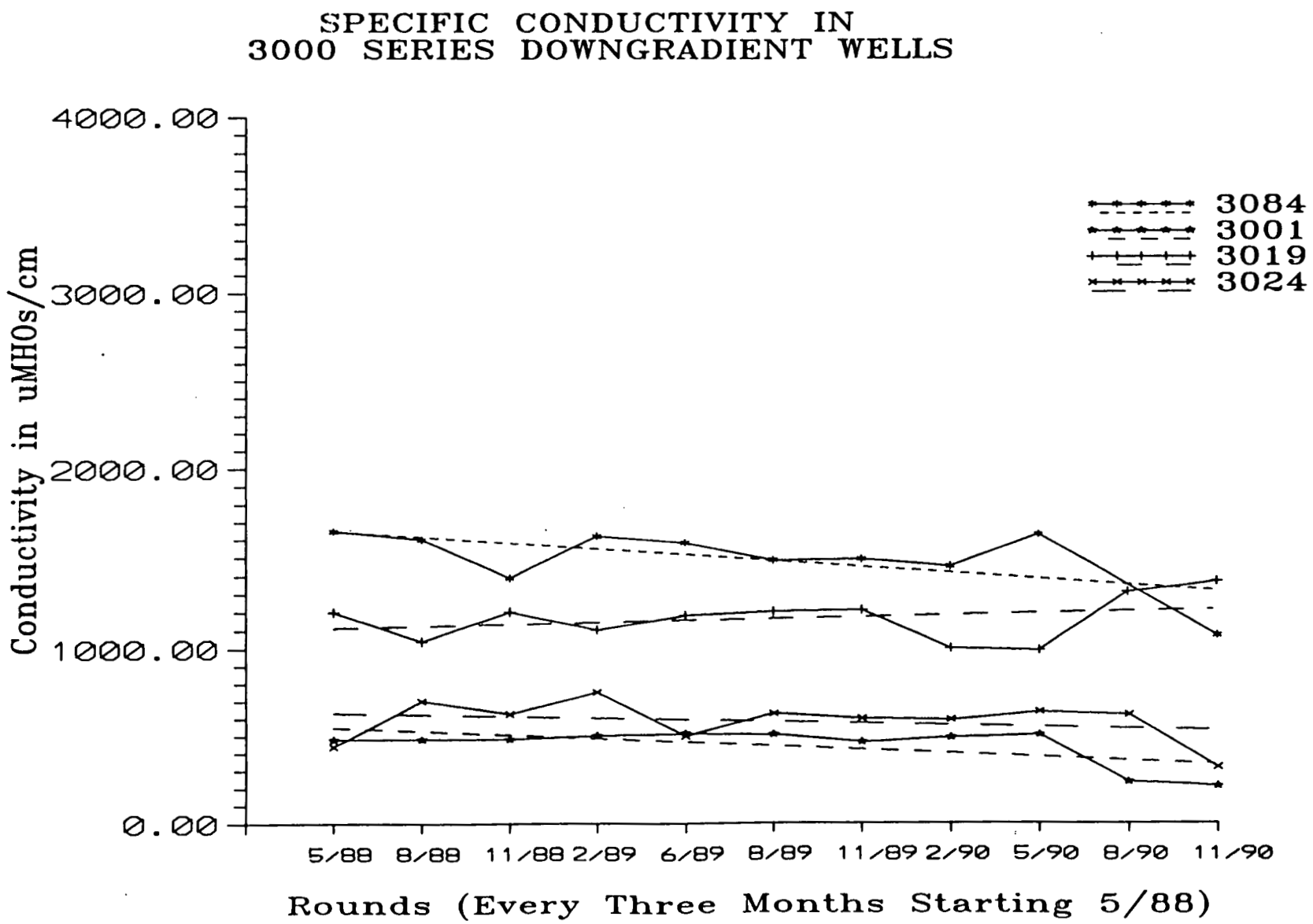

SPECIFIC CONDUCTIVITY IN
3000 SERIES DOWNGRADIENT WELLS
Conductivity in uMHOs/cm
4000.00
3000.00
2000.00
1000.00
0.00
3084
3001
3019
3024
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.52A

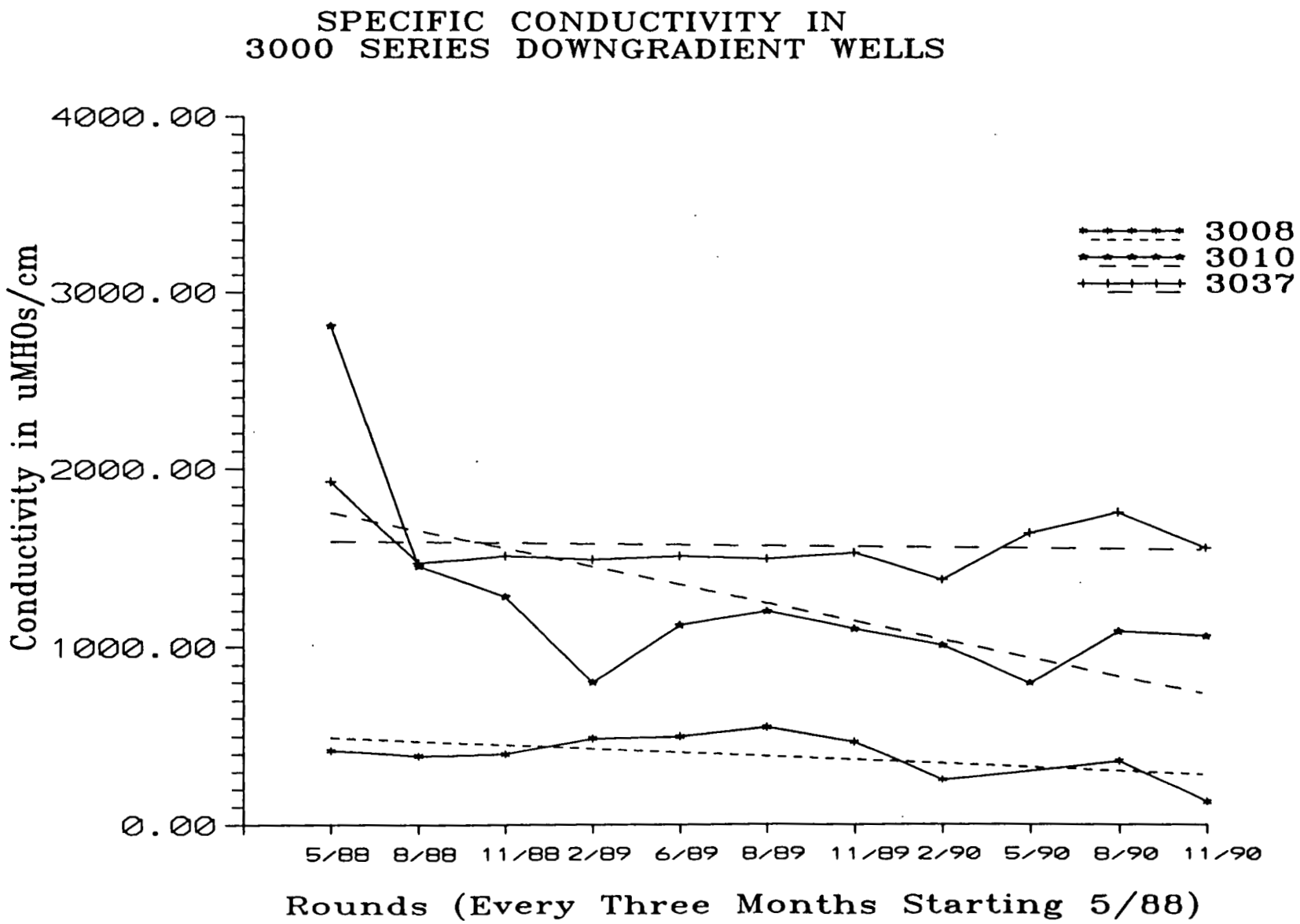

SPECIFIC CONDUCTIVITY IN
3000 SERIES DOWNGRADIENT WELLS
Conductivity in uMHOs/cm
4000.00
3000.00
2000.00
1000.00
0.00
3008
3010
3037
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.52B

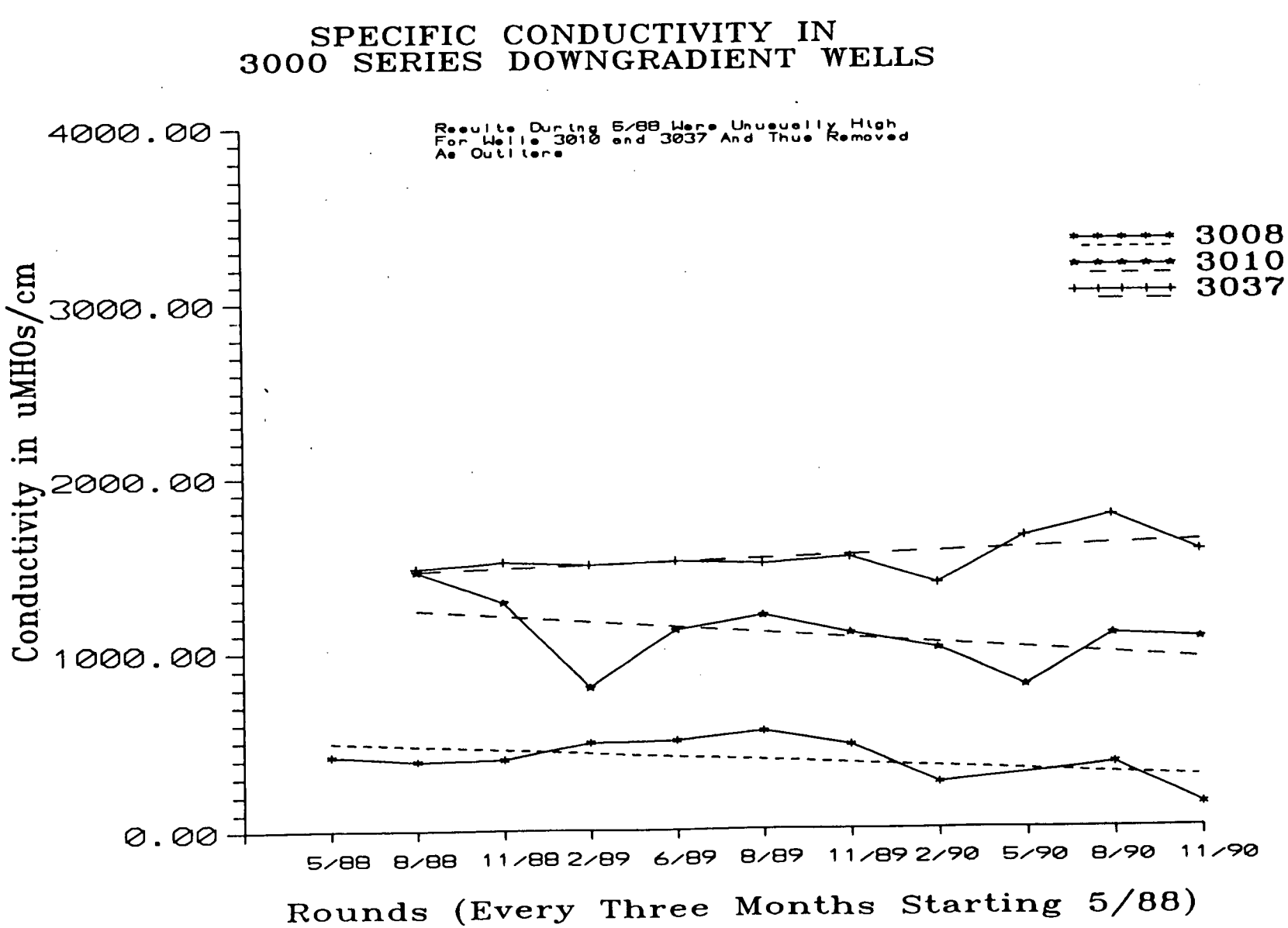

SPECIFIC CONDUCTIVITY IN
3000 SERIES DOWNGRADIENT WELLS
Results During 5/88 Were Unusually High
For Wells 3010 and 3037 And Thus Removed
As Outliers
3008
3010
3037
Conductivity in uMHOs/cm
4000.00
3000.00
2000.00
1000.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.53

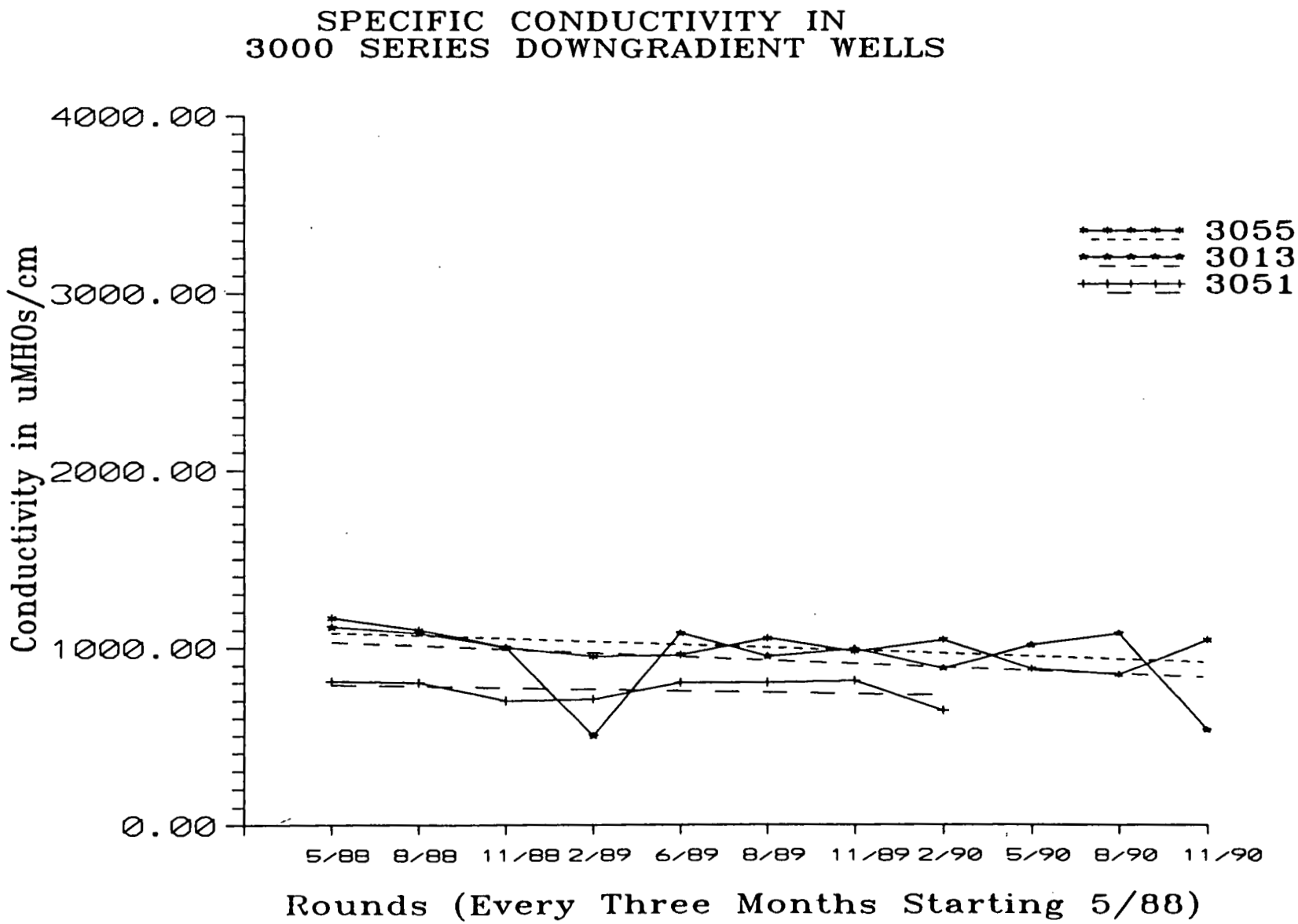

SPECIFIC CONDUCTIVITY IN
3000 SERIES DOWNGRADIENT WELLS
Conductivity in uMHOs/cm
4000.00
3000.00
2000.00
1000.00
0.00
3055
3013
3051
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.54

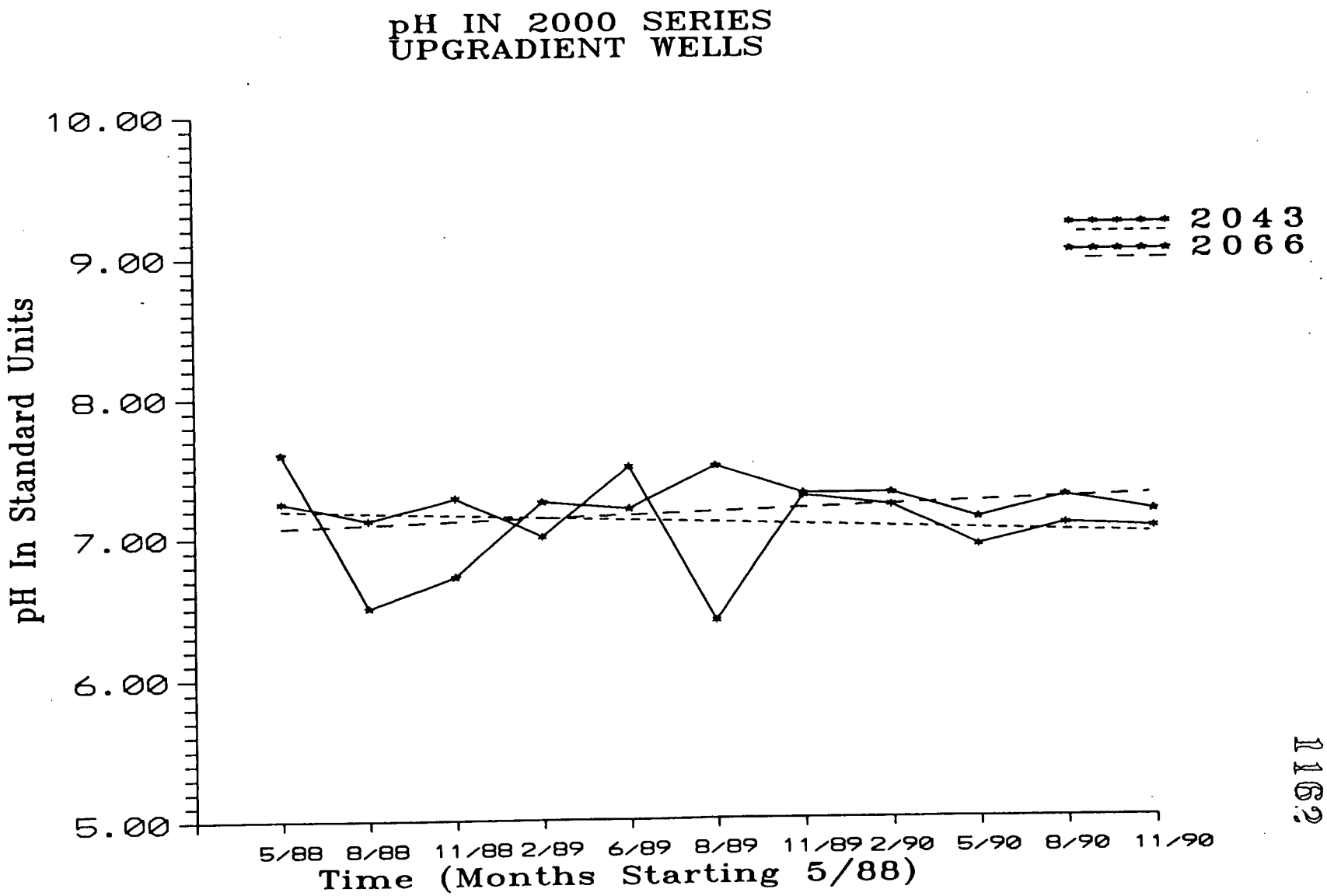

pH IN 2000 SERIES
UPGRADIENT WELLS
pH In Standard Units
10.00
9.00
8.00
7.00
6.00
5.00
2043
2066
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Time (Months Starting 5/88)

Figure 3.55

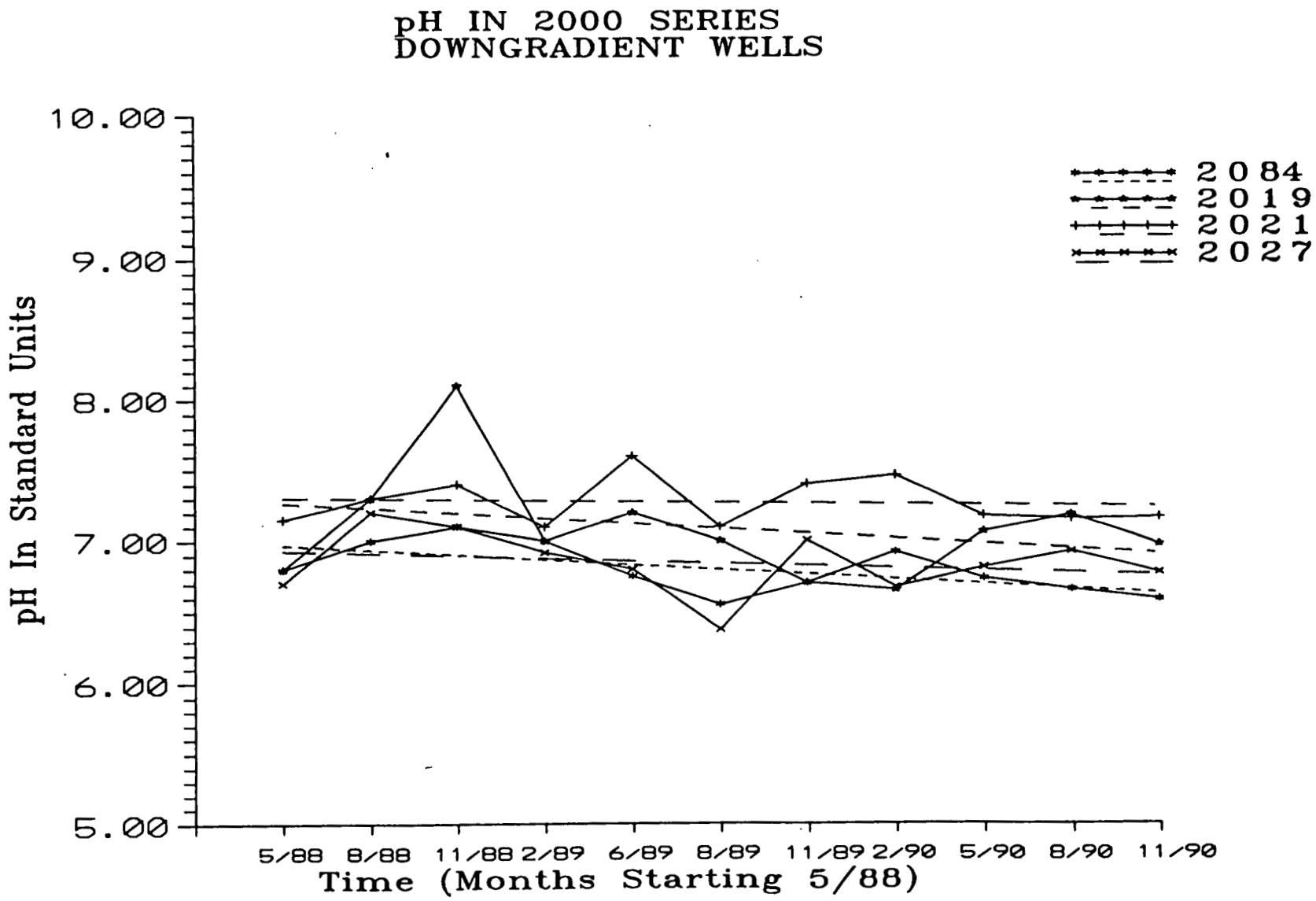

pH IN 2000 SERIES
DOWNGRADIENT WELLS
10.00
9.00
8.00
7.00
6.00
5.00
pH In Standard Units
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Time (Months Starting 5/88)
2084
2019
2021
2027

Figure 3.56

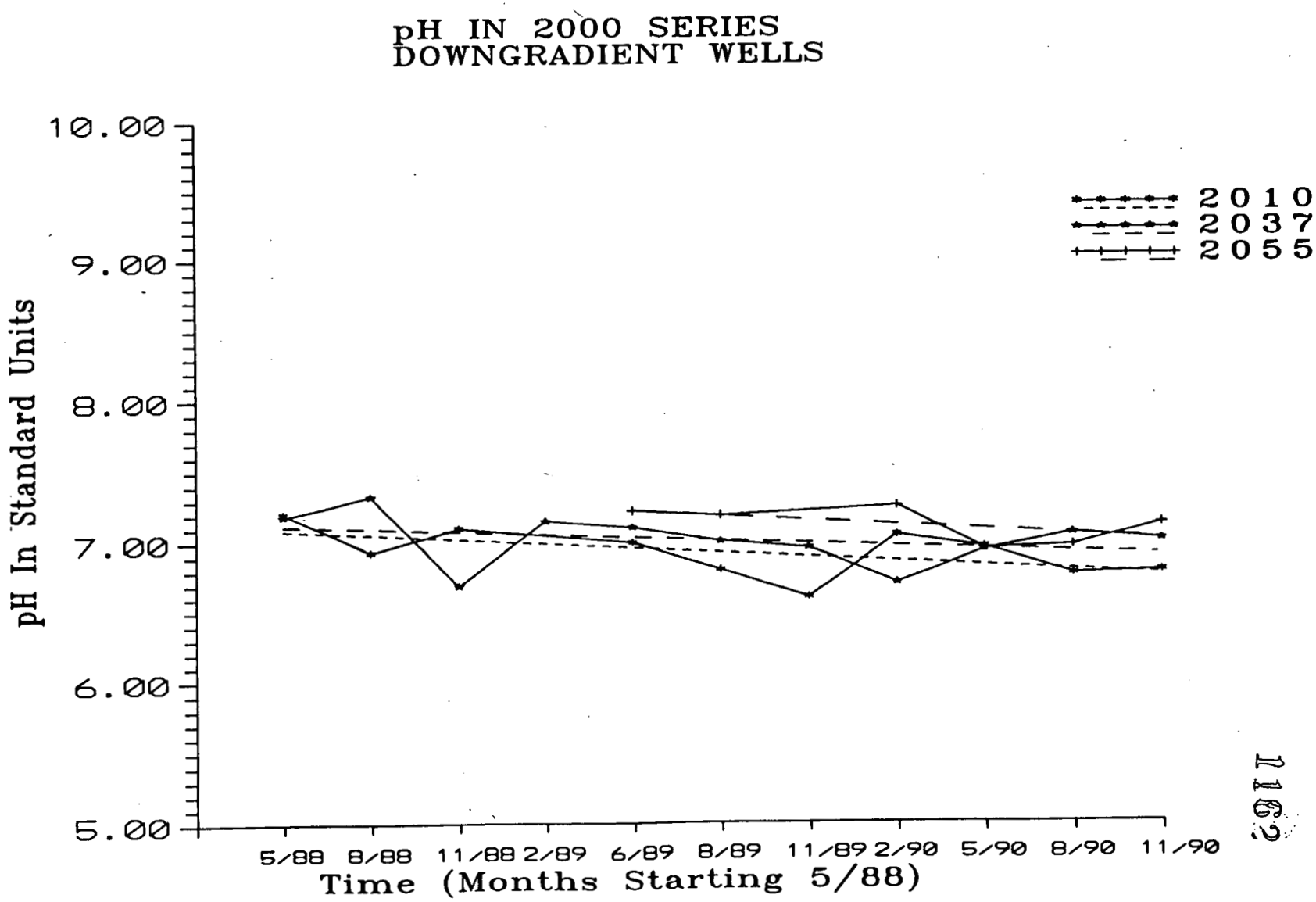

pH IN 2000 SERIES
DOWNGRADIENT WELLS
2010
2037
2055
pH In Standard Units
10.00
9.00
8.00
7.00
6.00
5.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Time (Months Starting 5/88)

Figure 3.57

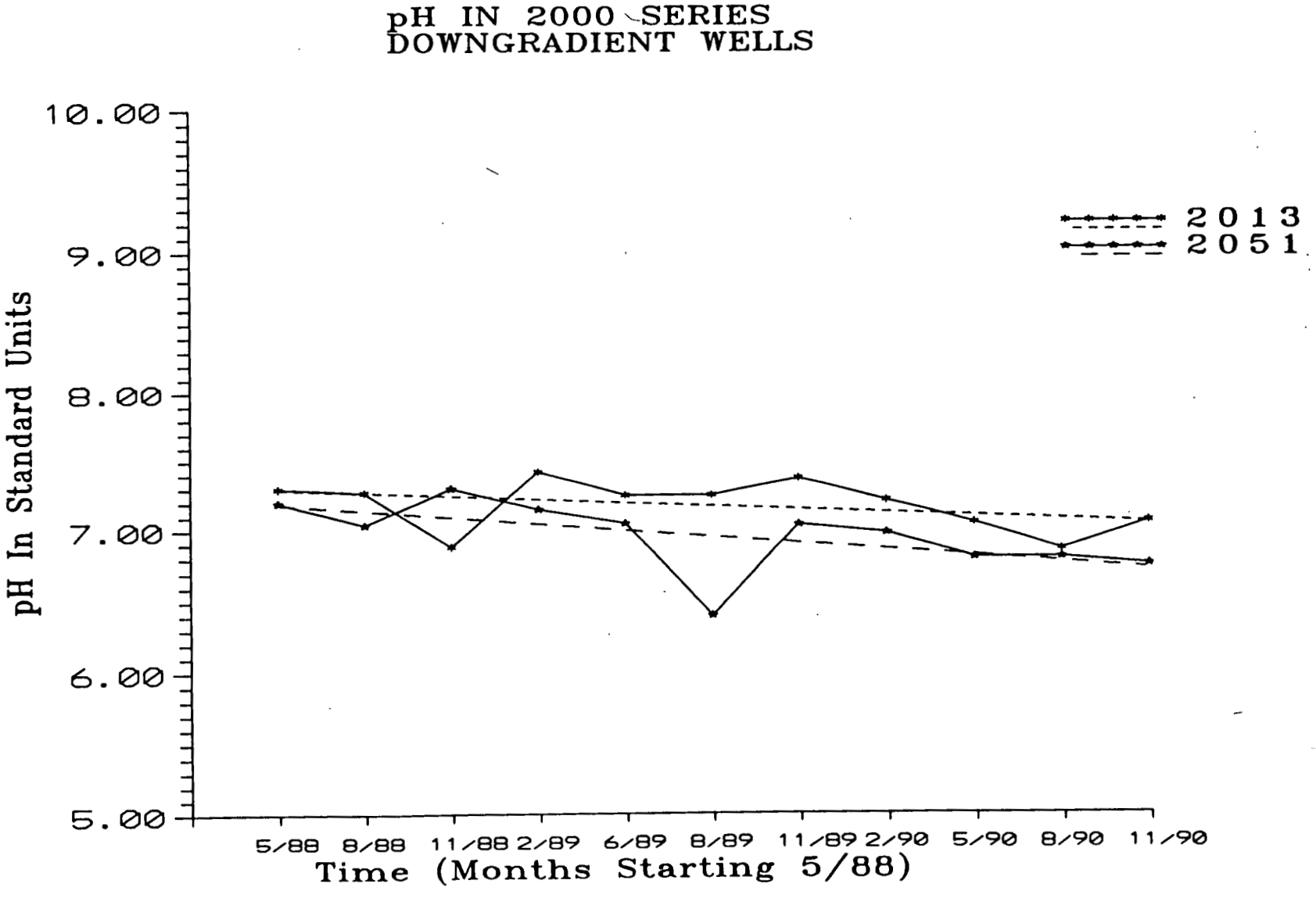

pH IN 2000 SERIES
DOWNGRADIENT WELLS
2013
2051
pH In Standard Units
10.00
9.00
8.00
7.00
6.00
5.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Time (Months Starting 5/88)

Figure 3.58

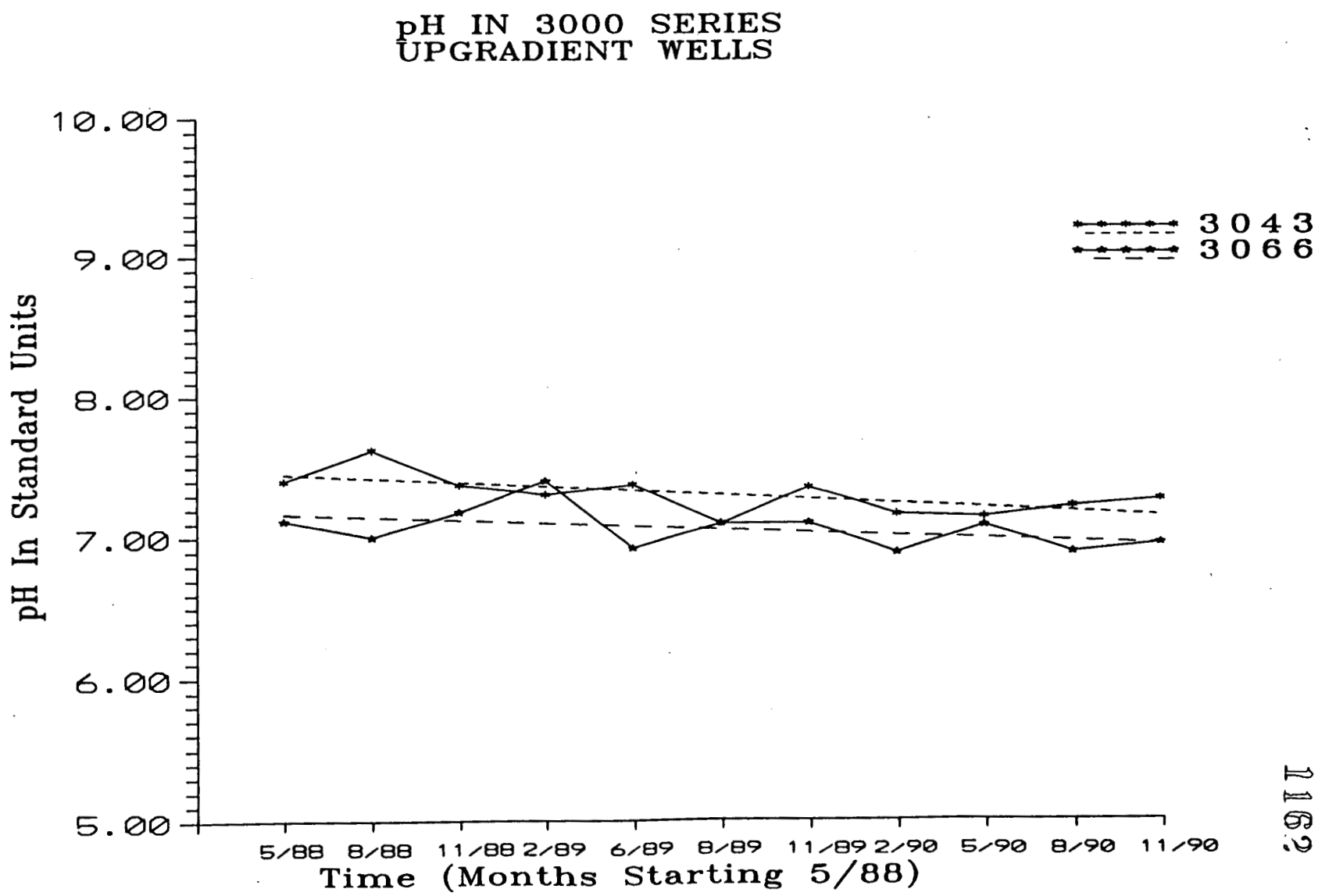

pH IN 3000 SERIES
UPGRADIENT WELLS
3043
3066
pH In Standard Units
10.00
9.00
8.00
7.00
6.00
5.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Time (Months Starting 5/88)

Figure 3.59

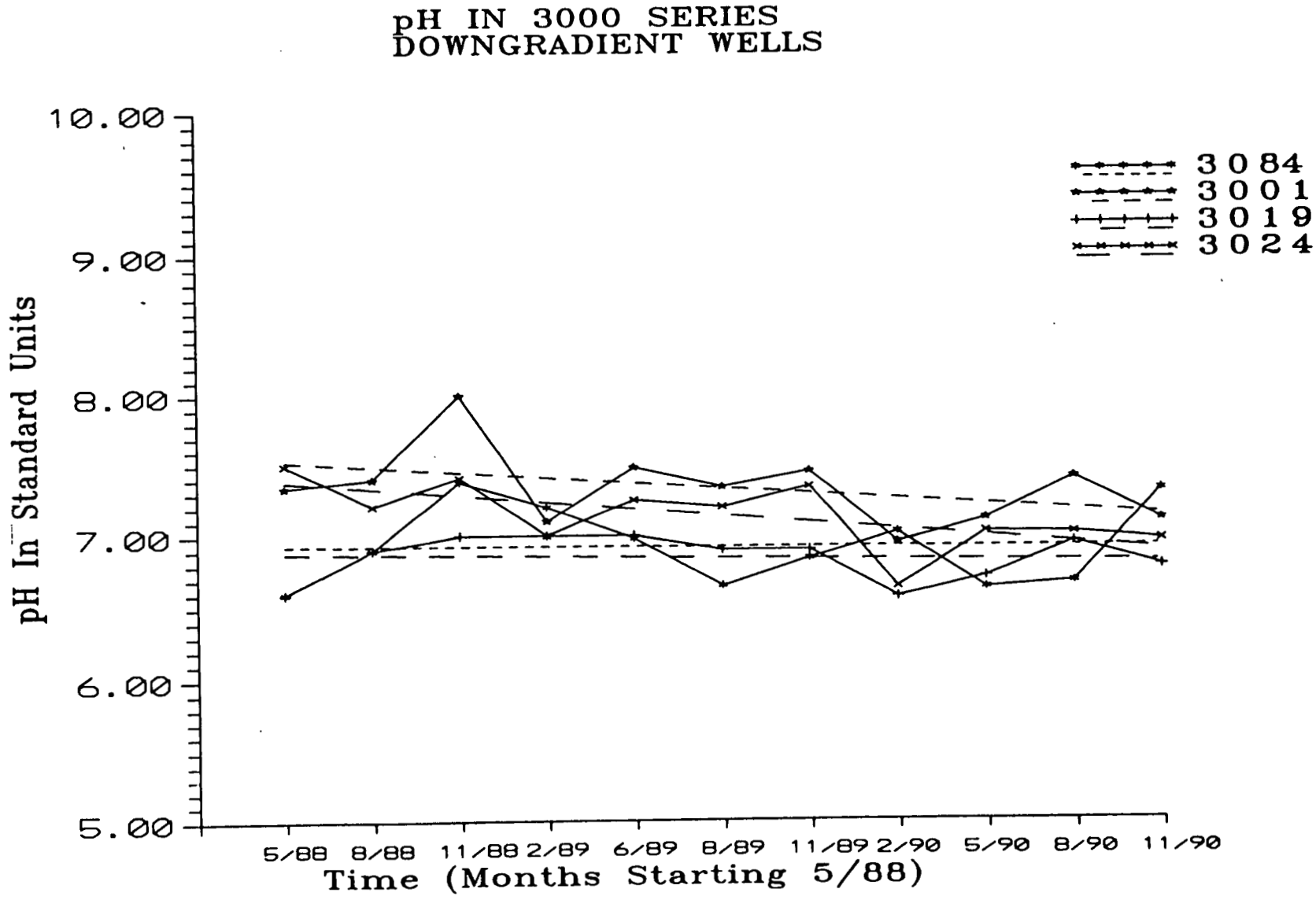

pH IN 3000 SERIES
DOWNGRADIENT WELLS
3084
3001
3019
3024
10.00
9.00
8.00
7.00
6.00
5.00
pH In Standard Units
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Time (Months Starting 5/88)

Figure 3.60

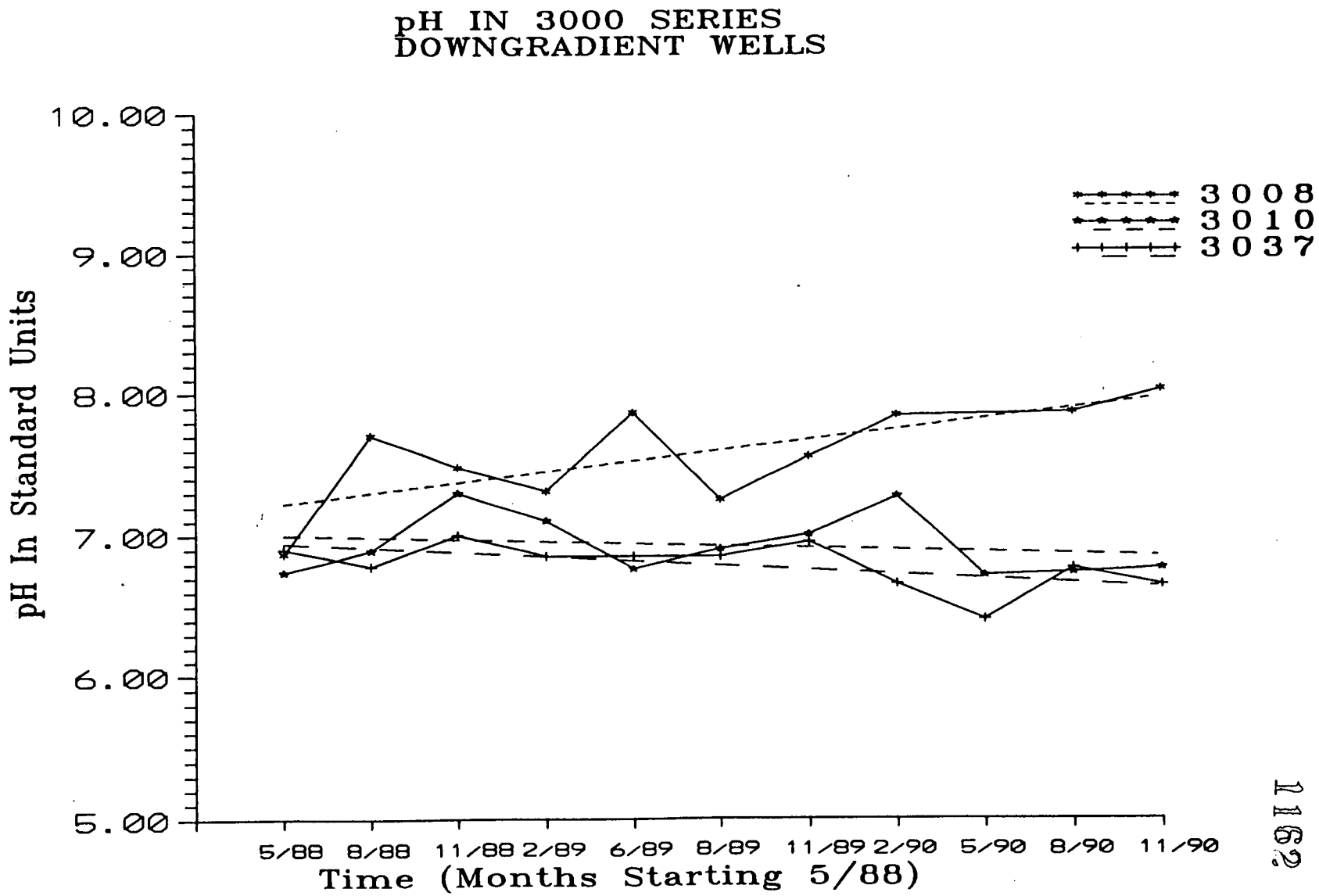

pH IN 3000 SERIES
DOWNGRADIENT WELLS
3008
3010
3037
pH In Standard Units
10.00
9.00
8.00
7.00
6.00
5.00
5/88 8/88 11/88 2/89 6/89 8/89 11/89 2/90 5/90 8/90 11/90
Time (Months Starting 5/88)

Figure 3.61

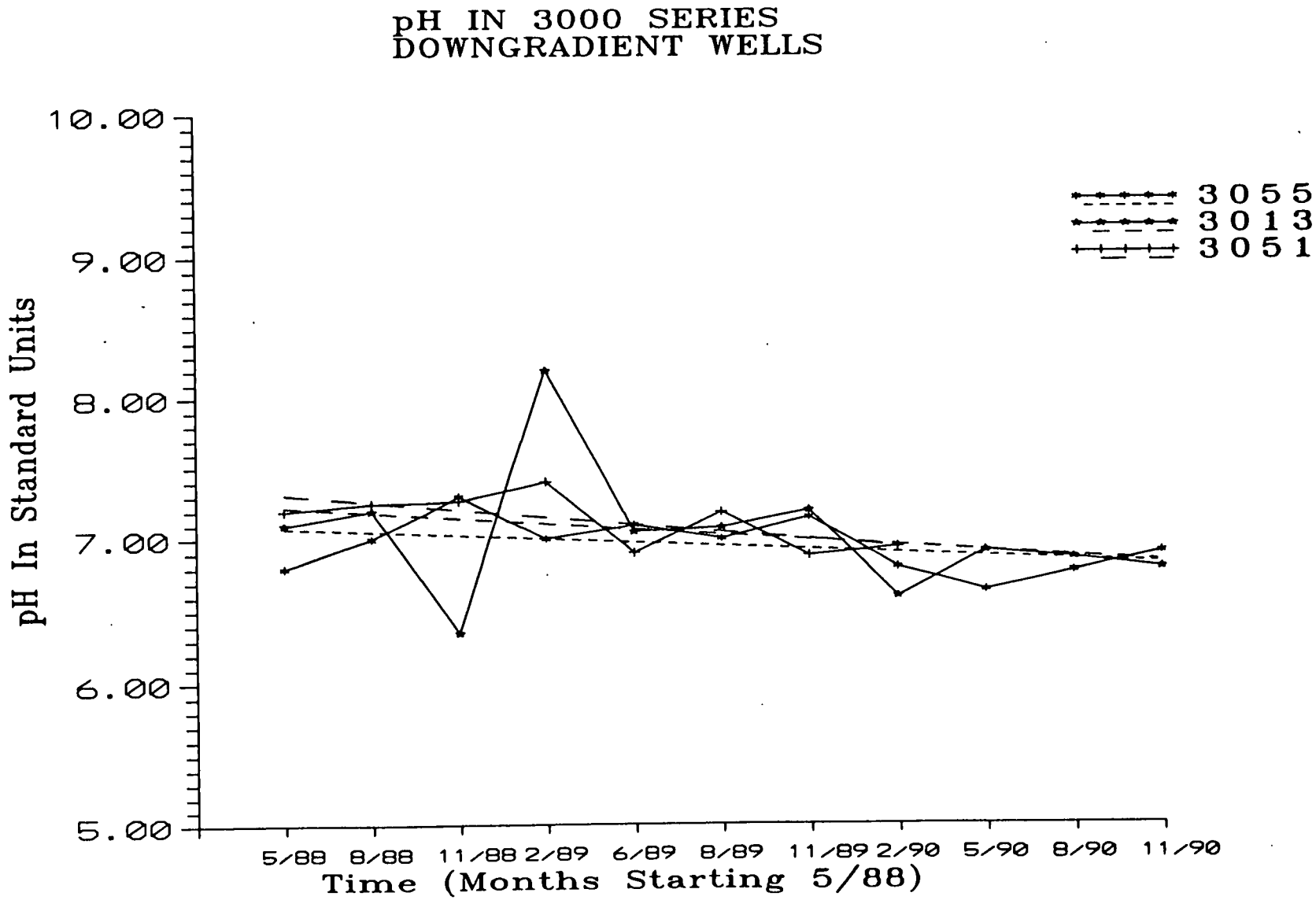

pH IN 3000 SERIES
DOWNGRADIENT WELLS
3055
3013
3051
pH In Standard Units
10.00
9.00
8.00
7.00
6.00
5.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Time (Months Starting 5/88)

Figure 3.62

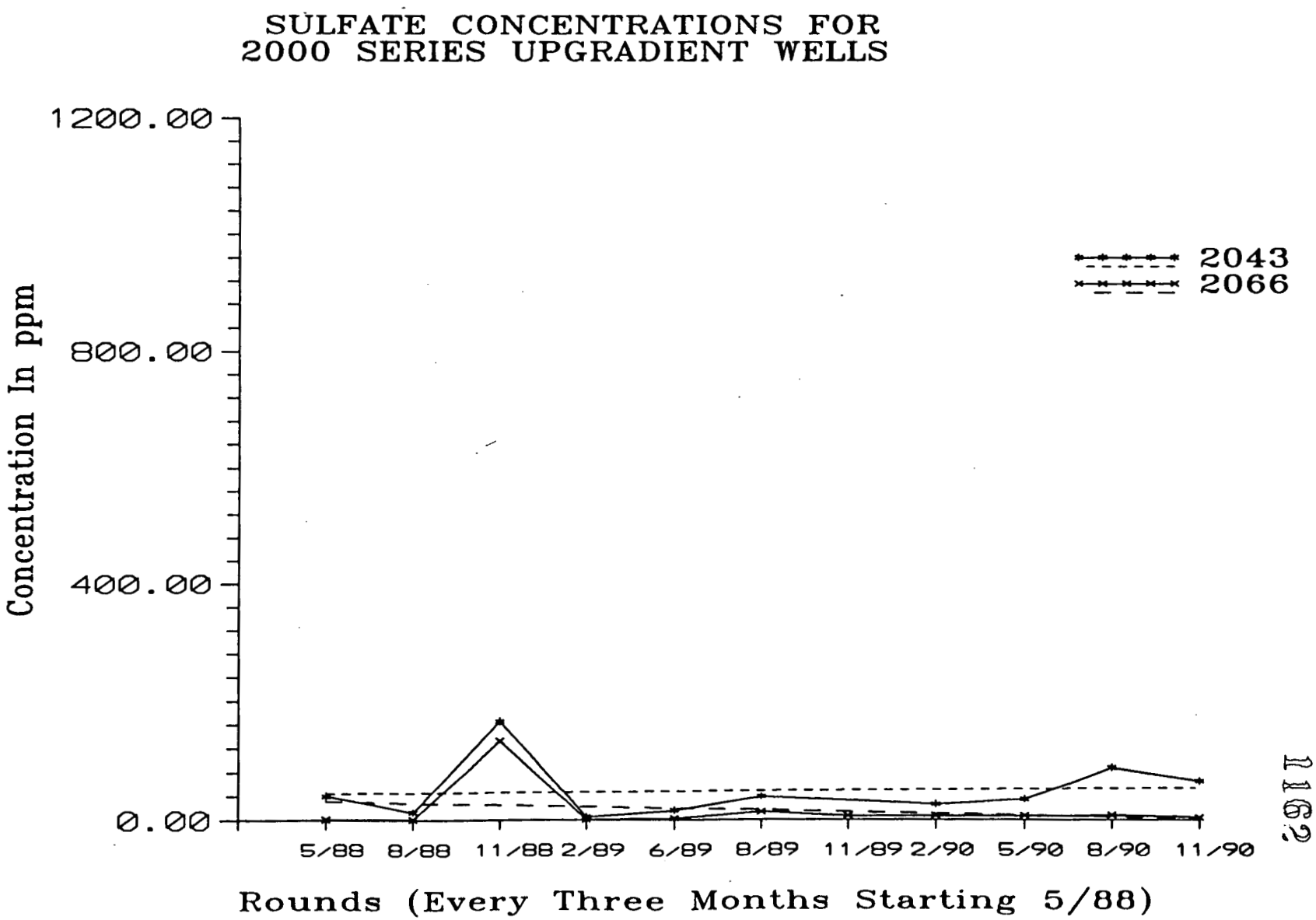

SULFATE CONCENTRATIONS FOR
2000 SERIES UPGRADIENT WELLS
1200.00
800.00
400.00
0.00
Concentration In ppm
2043
2066
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.63

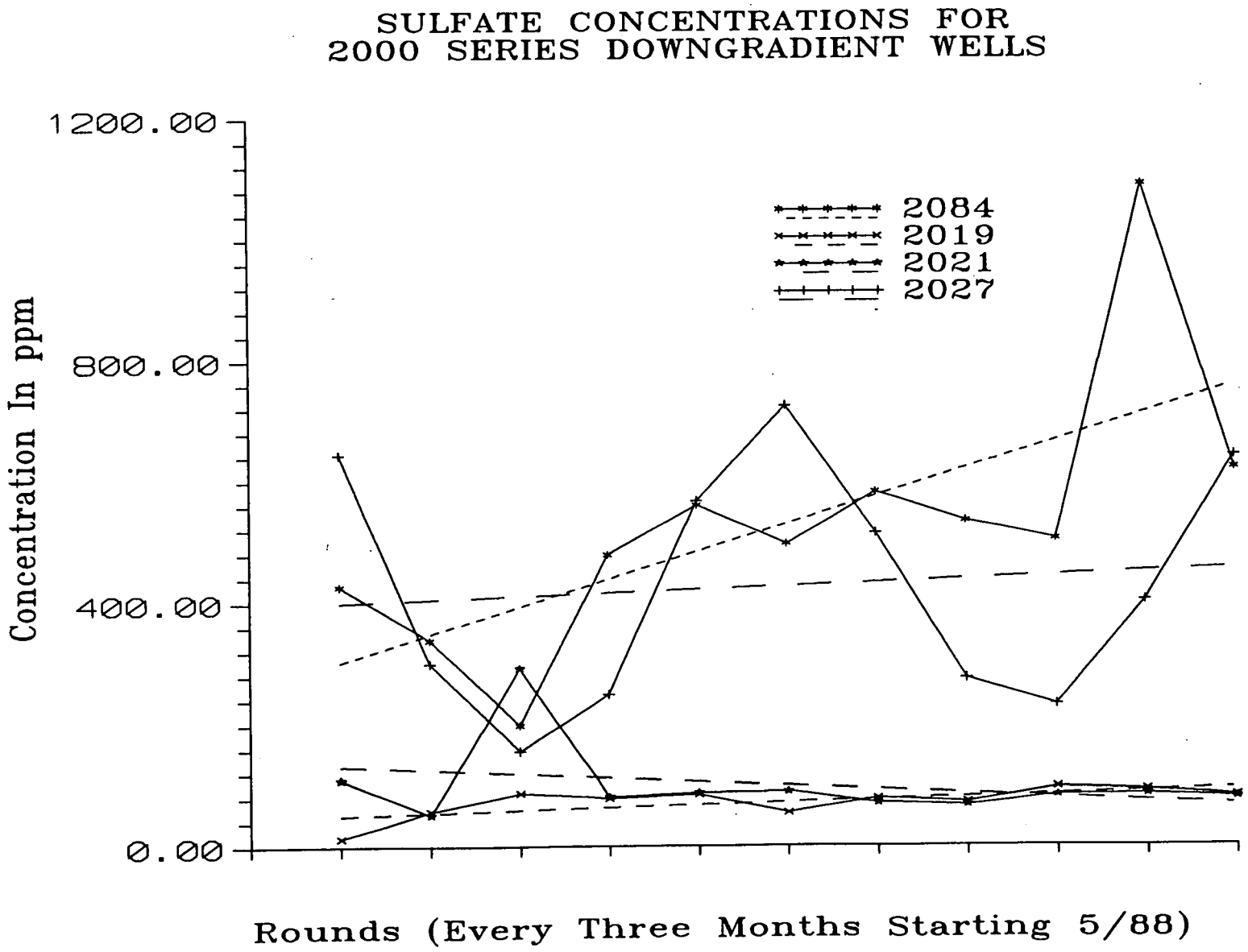

SULFATE CONCENTRATIONS FOR
2000 SERIES DOWNGRADIENT WELLS
1200.00
800.00
400.00
0.00
Concentration In ppm
2084
2019
2021
2027
Rounds (Every Three Months Starting 5/88)

Figure 3.64

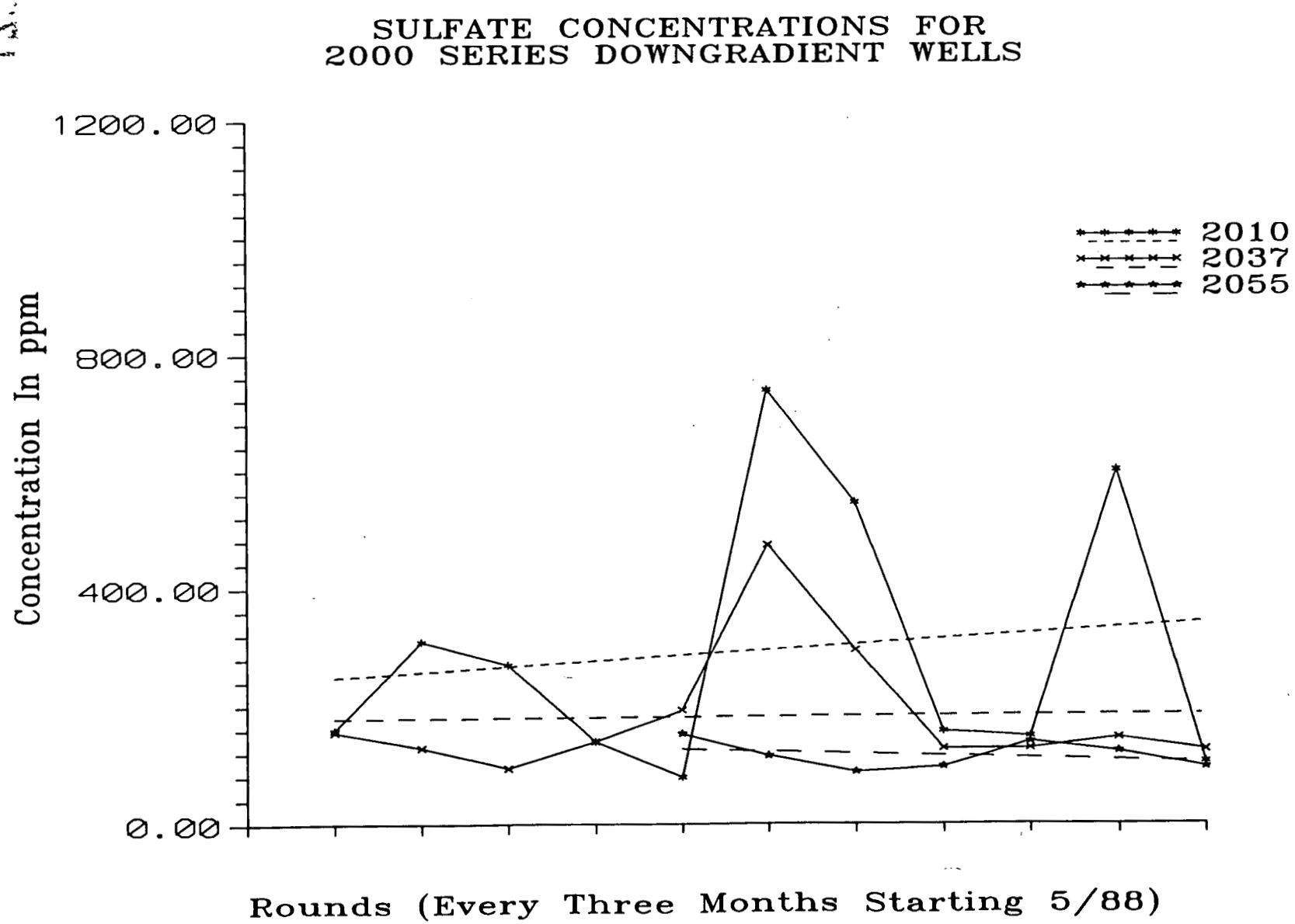

SULFATE CONCENTRATIONS FOR
2000 SERIES DOWNGRADIENT WELLS
1200.00
800.00
400.00
0.00
Concentration In ppm
2010
2037
2055
Rounds (Every Three Months Starting 5/88)

Figure 3.65

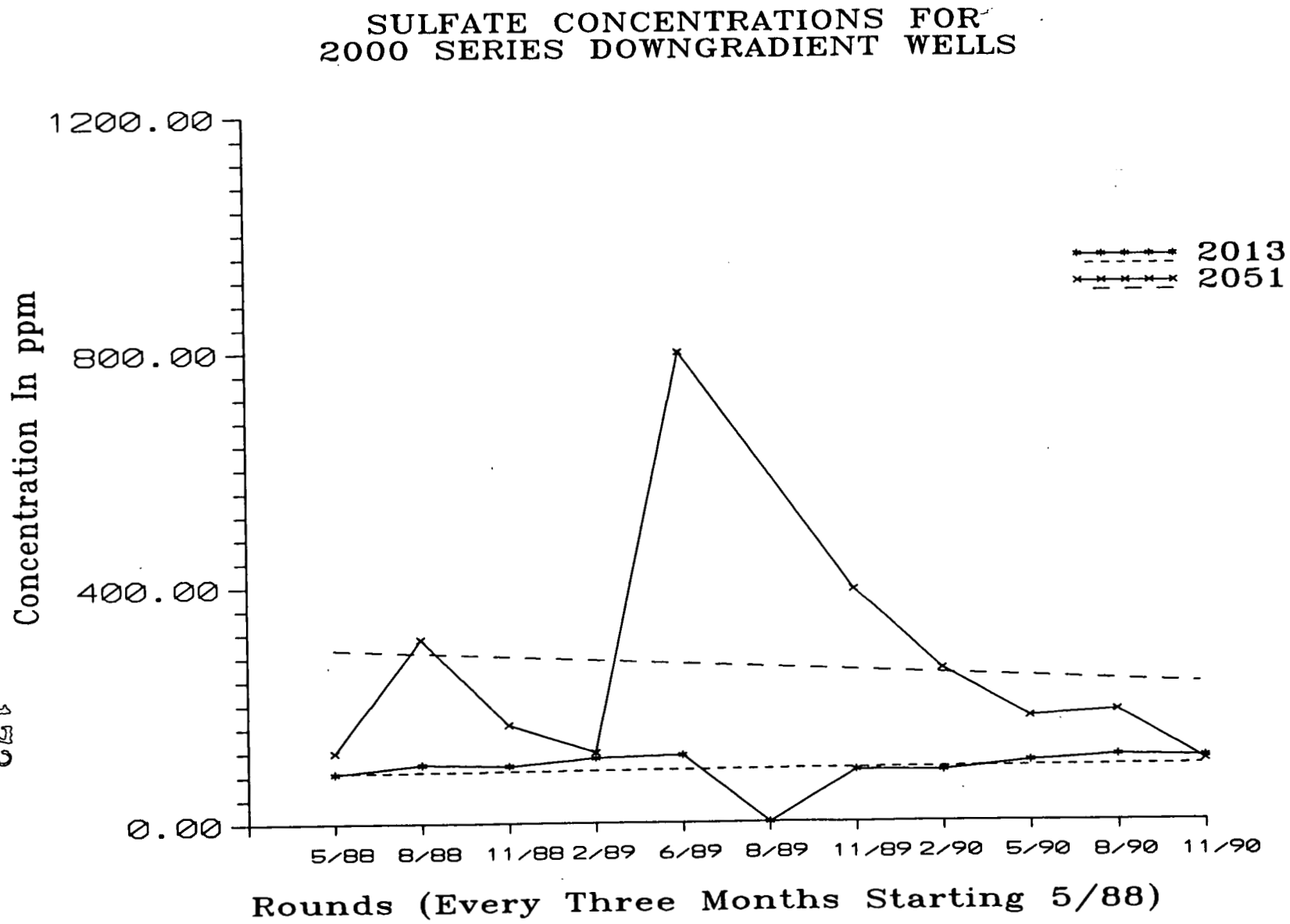

SULFATE CONCENTRATIONS FOR
2000 SERIES DOWNGRADIENT WELLS
1200.00
800.00
400.00
0.00
Concentration In ppm
2013
2051
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.66

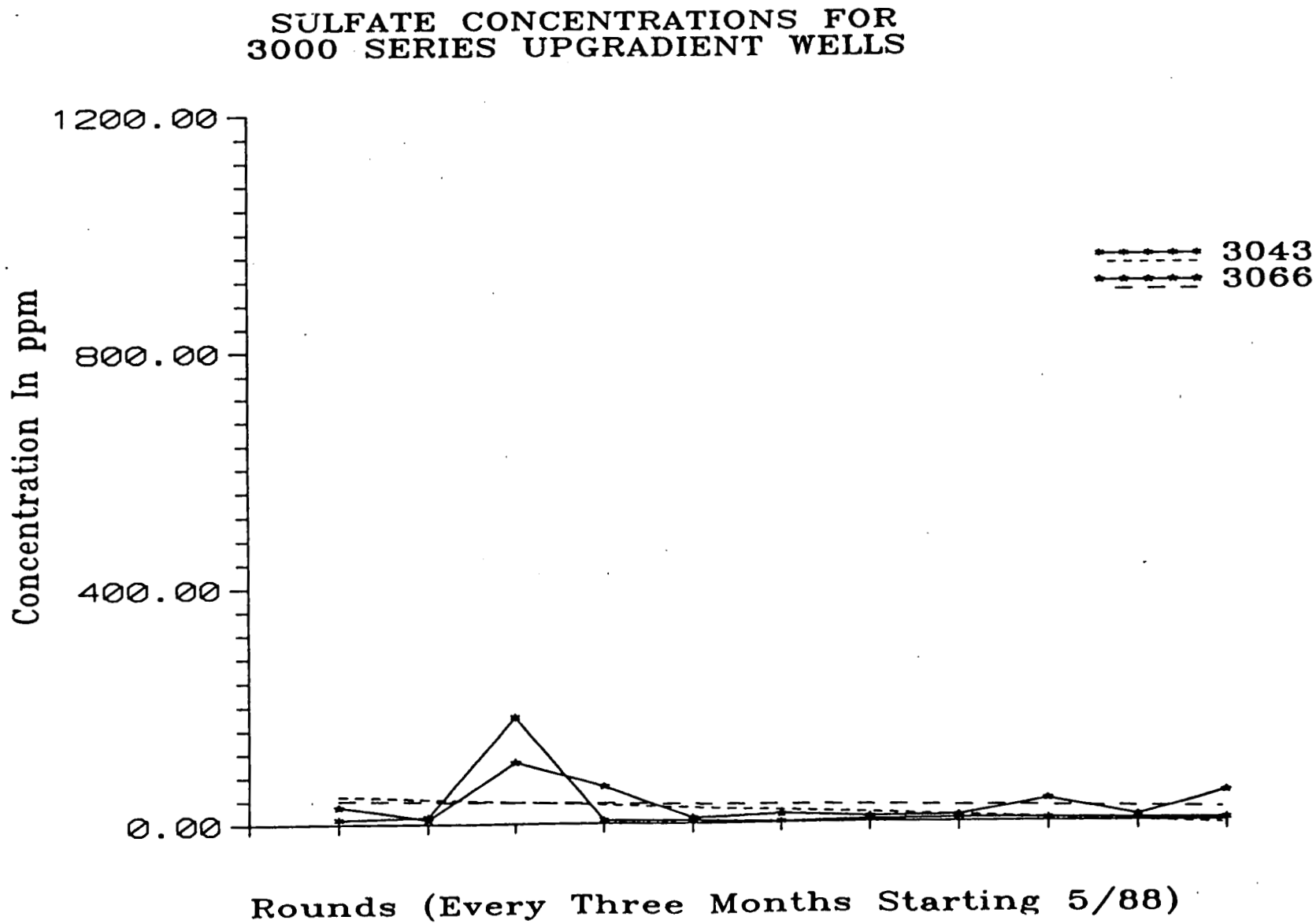

SULFATE CONCENTRATIONS FOR
3000 SERIES UPGRADIENT WELLS
1200.00
800.00
400.00
0.00
Concentration In ppm
3043
3066
Rounds (Every Three Months Starting 5/88)

Figure 3.67

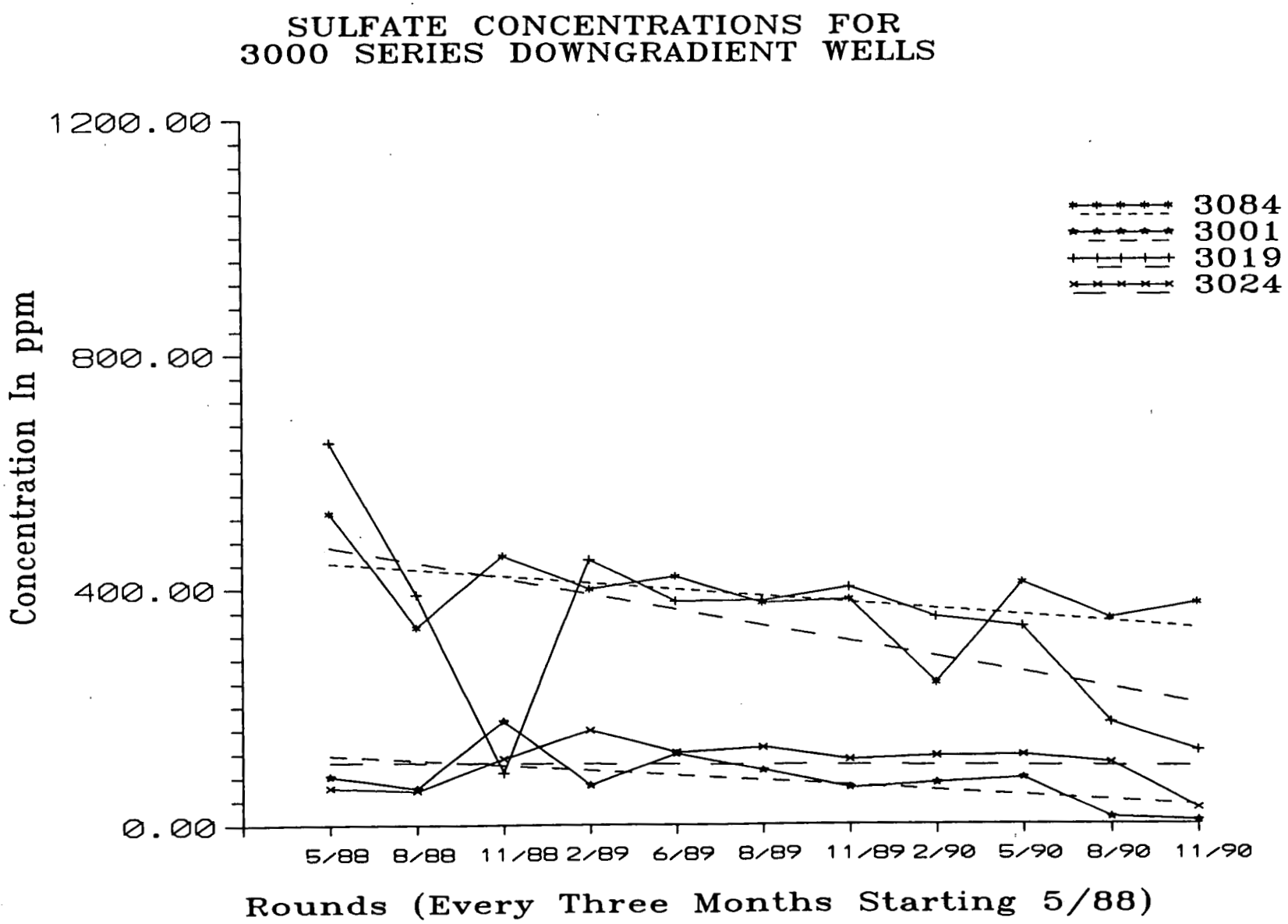

SULFATE CONCENTRATIONS FOR
3000 SERIES DOWNGRADIENT WELLS
1200.00
800.00
400.00
0.00
Concentration In ppm
3084
3001
3019
3024
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.68

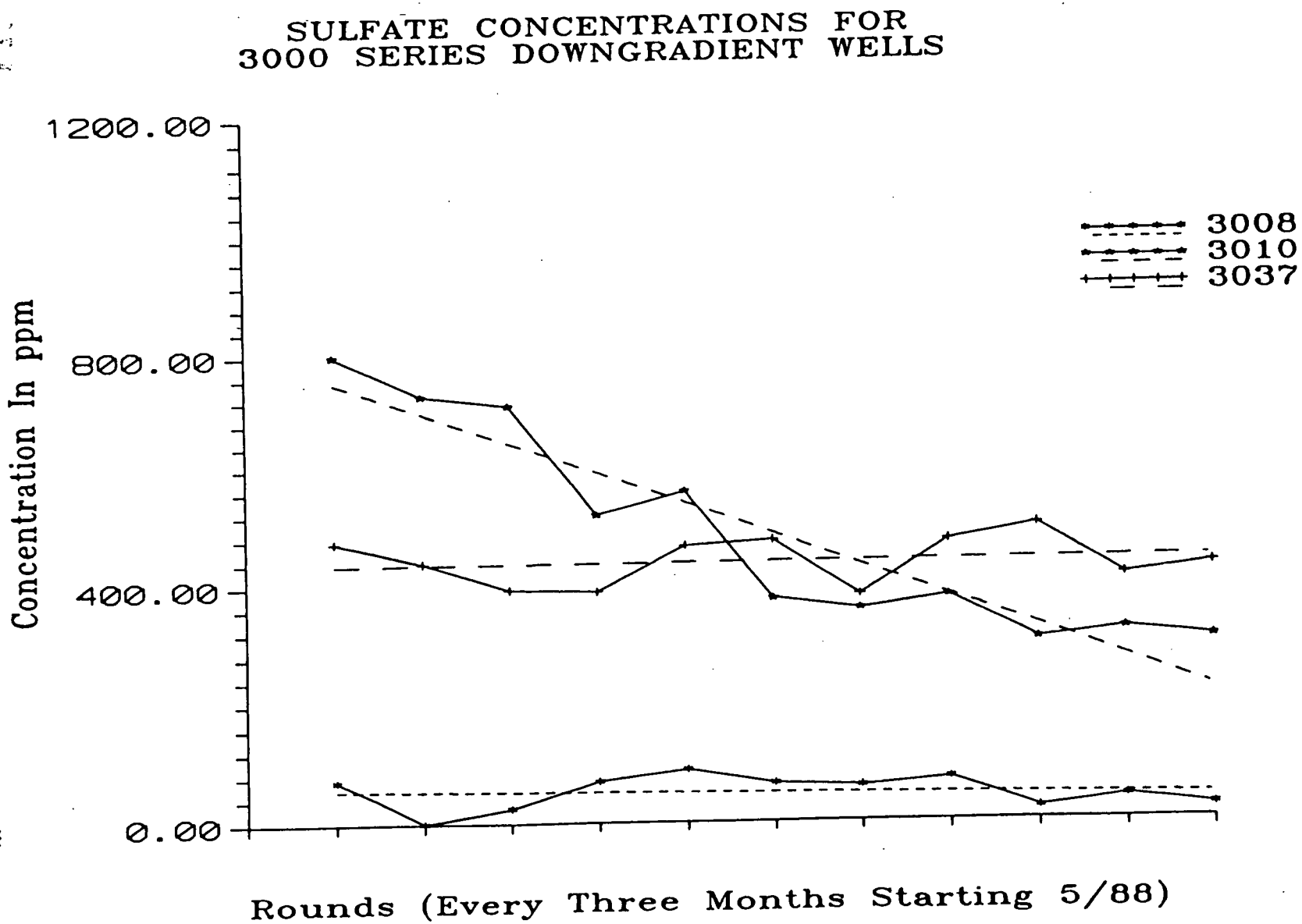

SULFATE CONCENTRATIONS FOR
3000 SERIES DOWNGRADIENT WELLS
1200.00
800.00
400.00
0.00
Concentration In ppm
3008
3010
3037
Rounds (Every Three Months Starting 5/88)

Figure 3.69

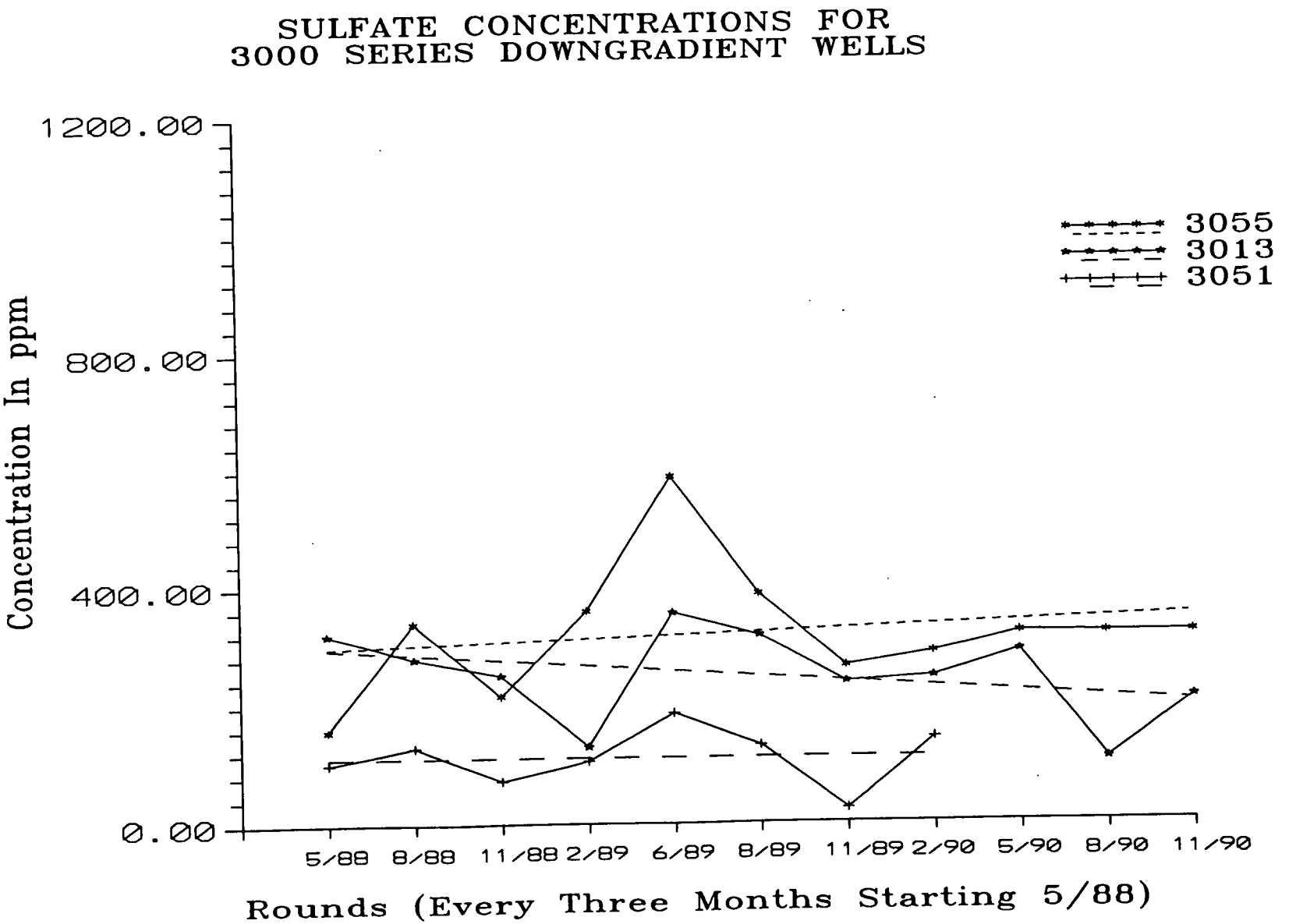

SULFATE CONCENTRATIONS FOR
3000 SERIES DOWNGRADIENT WELLS
1200.00
800.00
400.00
0.00
Concentration In ppm
3055
3013
3051
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.70

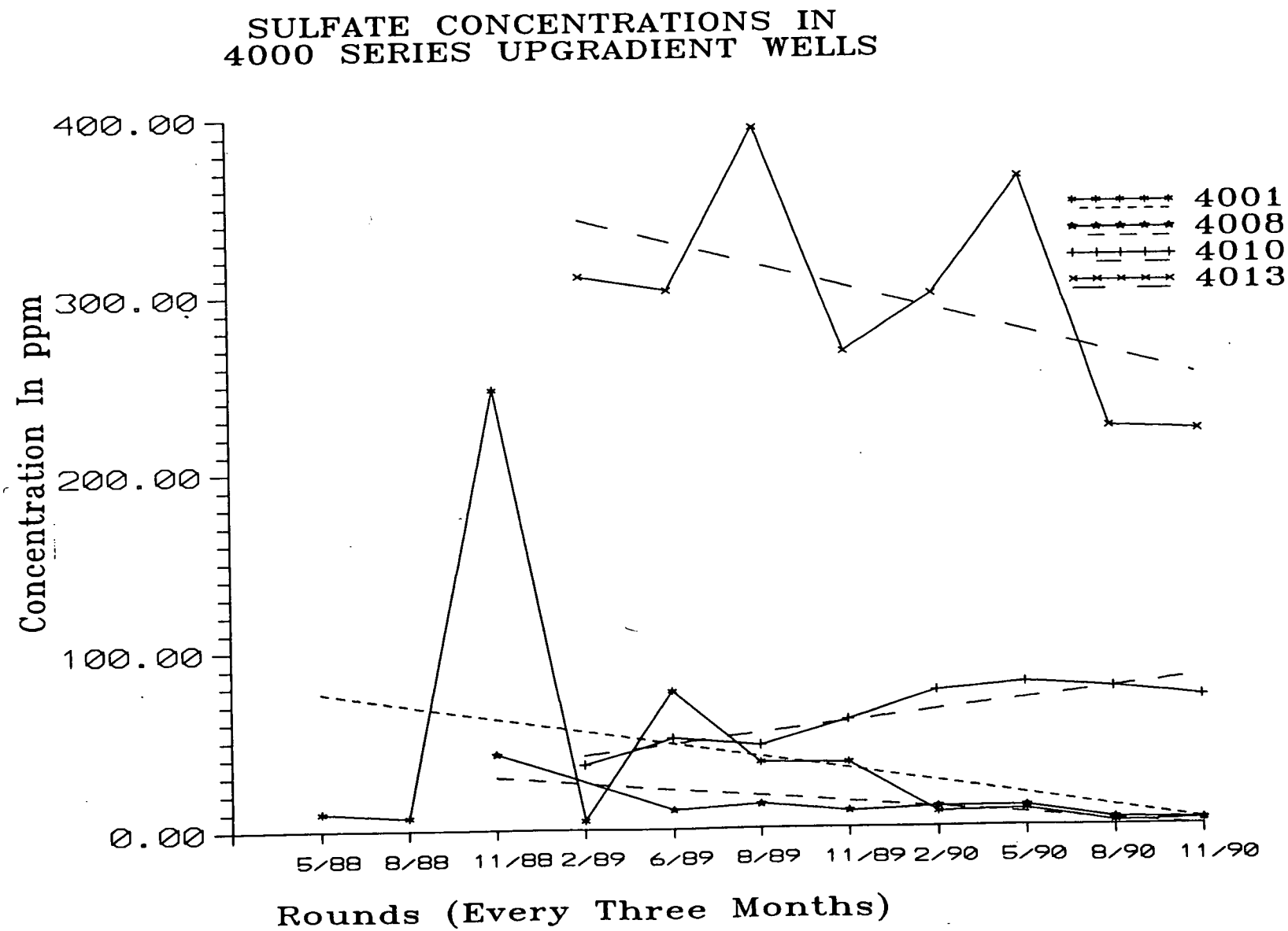

SULFATE CONCENTRATIONS IN
4000 SERIES UPGRADIENT WELLS
400.00
300.00
200.00
100.00
0.00
Concentration In ppm
4001
4008
4010
4013
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.71

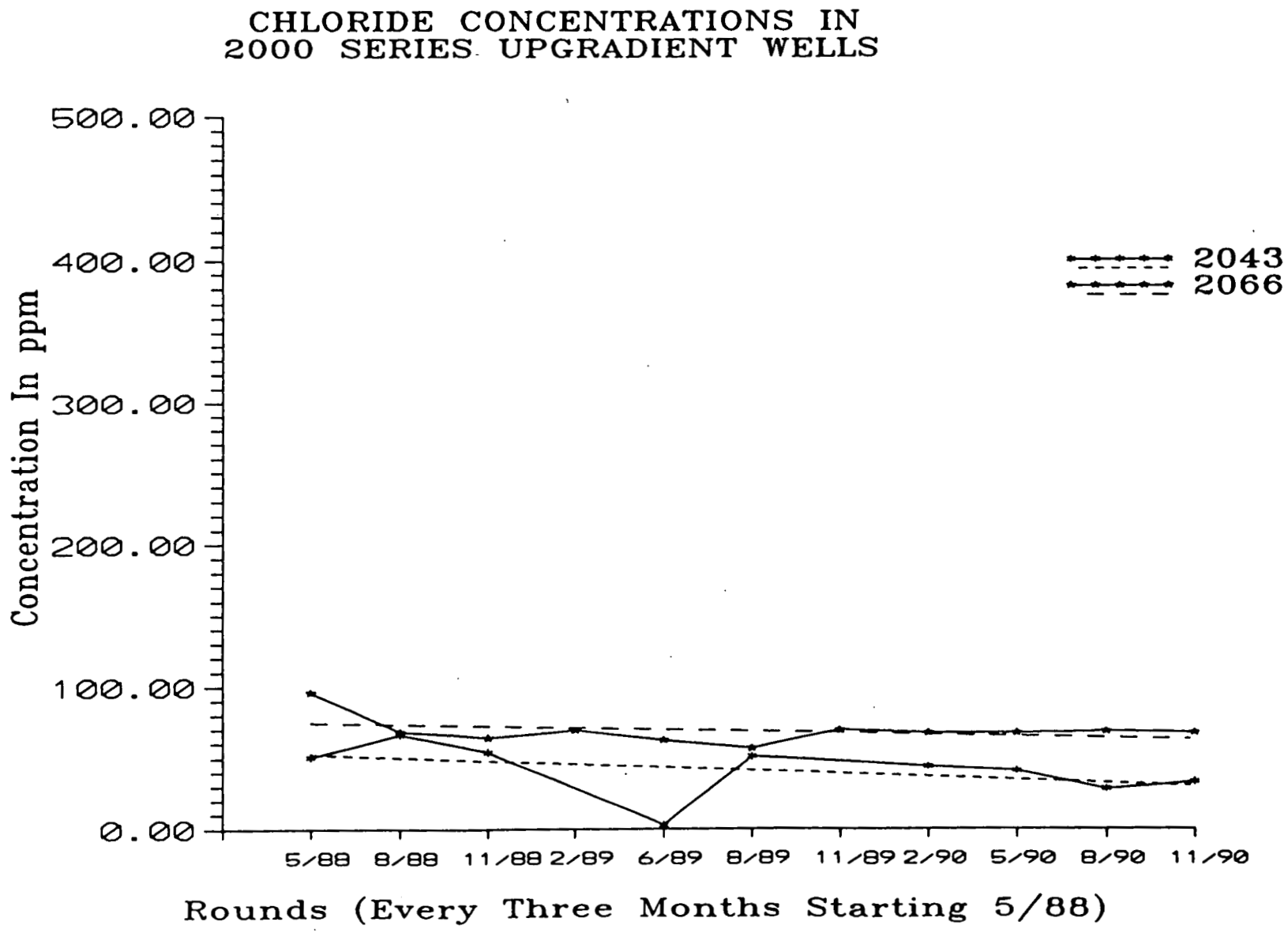

CHLORIDE CONCENTRATIONS IN
2000 SERIES UPGRADIENT WELLS
Concentration In ppm
500.00
400.00
300.00
200.00
100.00
0.00
2043
2066
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.72

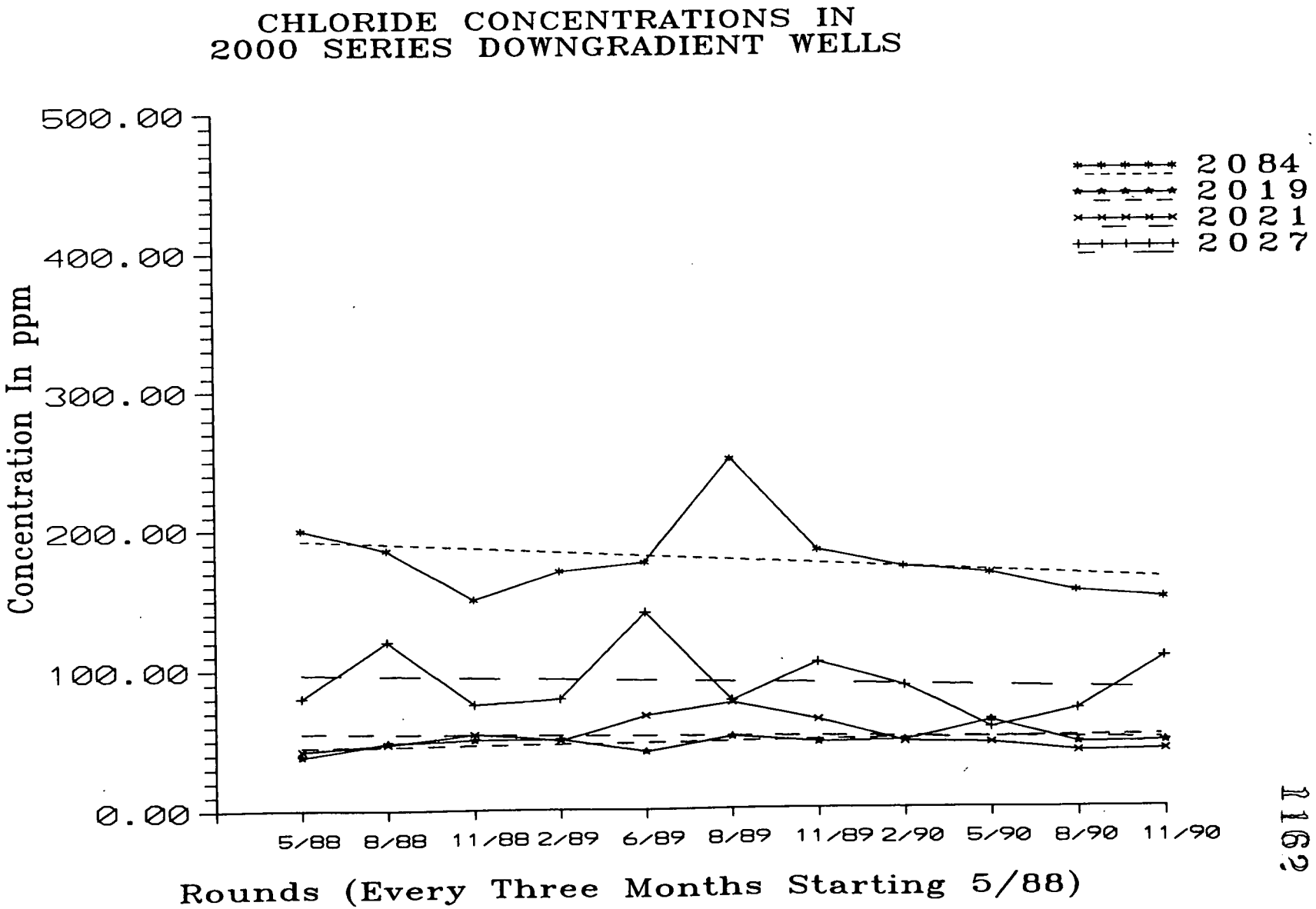

CHLORIDE CONCENTRATIONS IN
2000 SERIES DOWNGRADIENT WELLS
Concentration In ppm
500.00
400.00
300.00
200.00
100.00
0.00
2084
2019
2021
2027
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.73

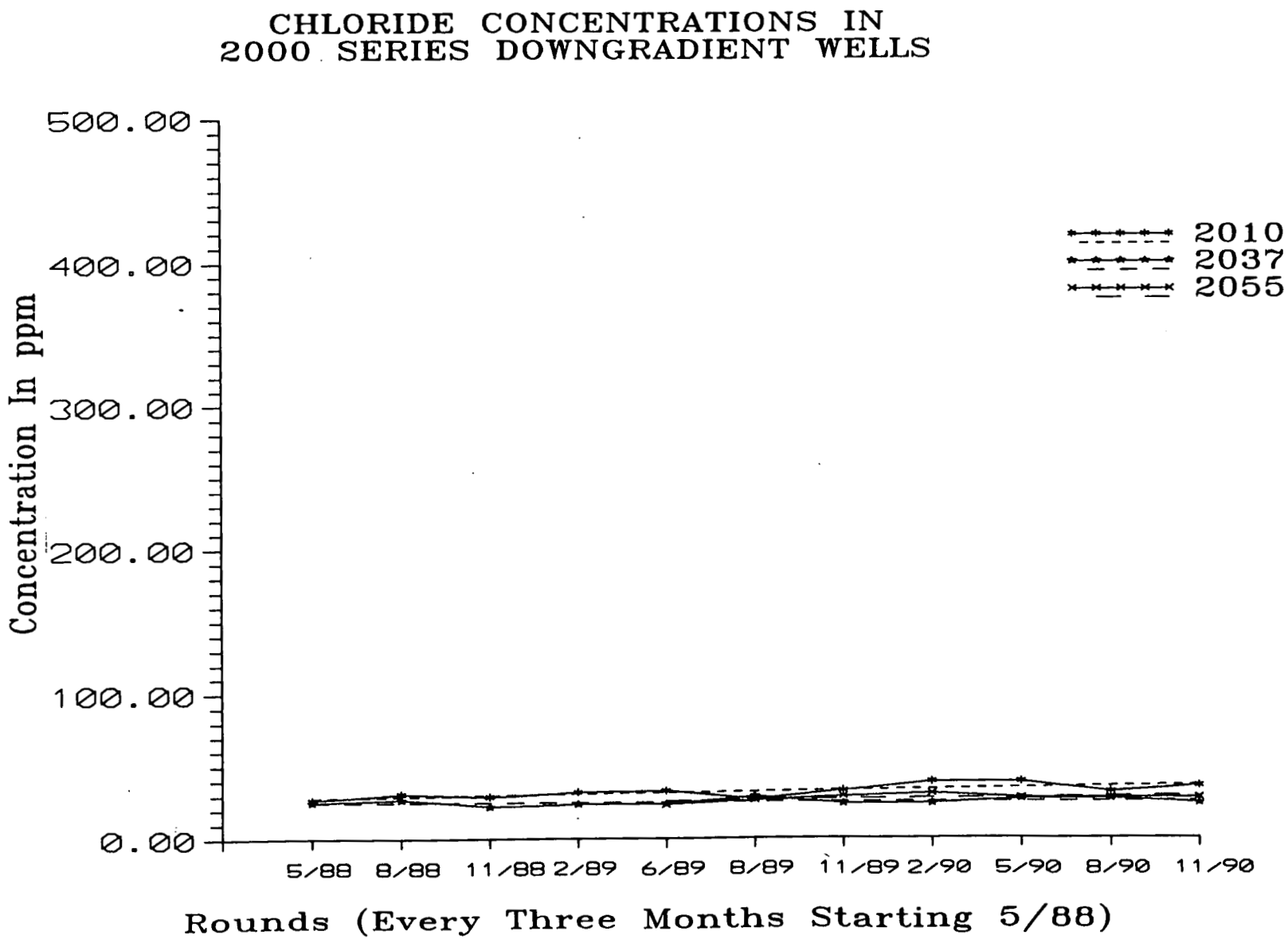

CHLORIDE CONCENTRATIONS IN
2000 SERIES DOWNGRADIENT WELLS
Concentration In ppm
500.00
400.00
300.00
200.00
100.00
0.00
2010
2037
2055
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.74

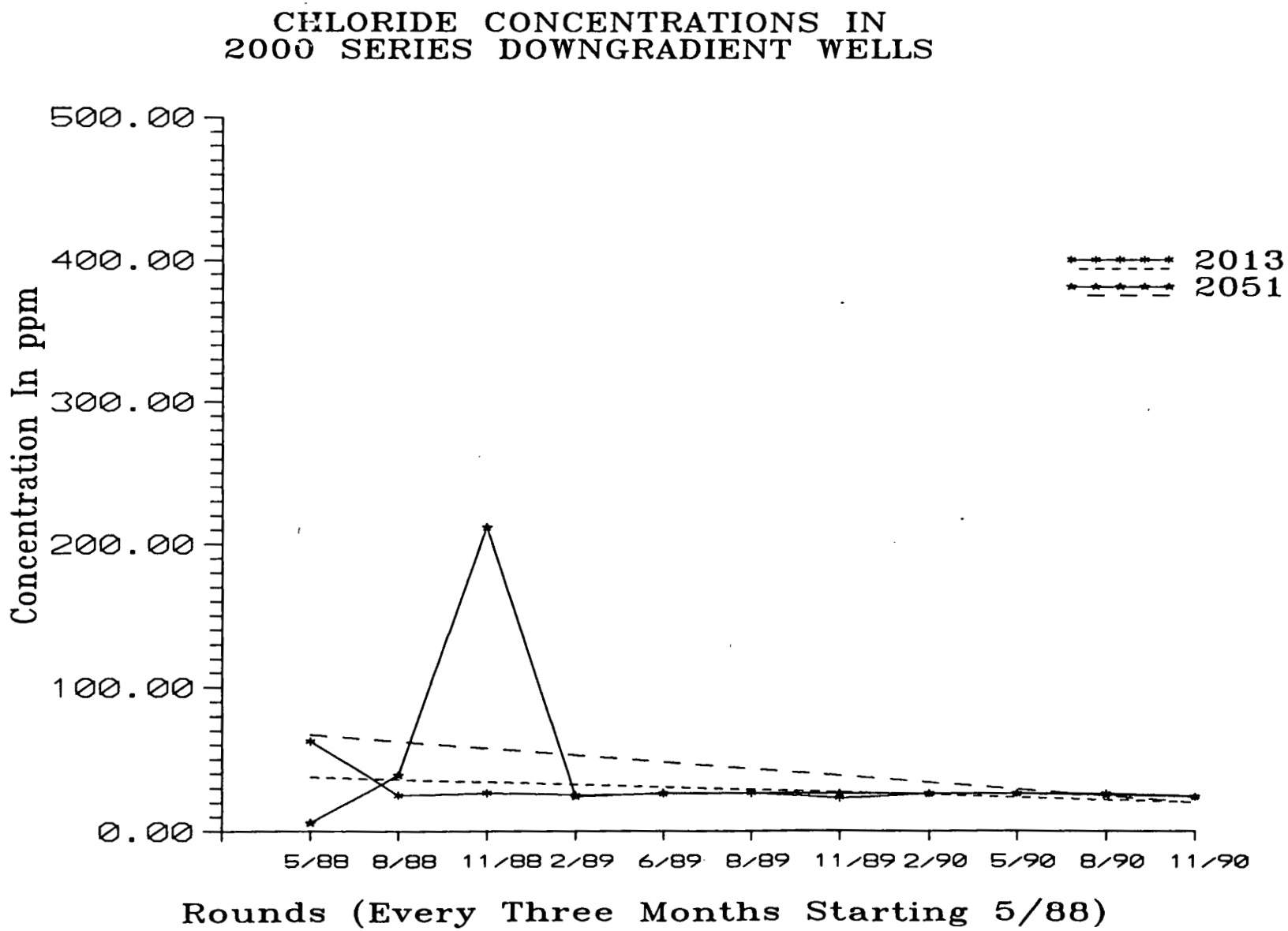

CHLORIDE CONCENTRATIONS IN
2000 SERIES DOWNGRADIENT WELLS
500.00
400.00
300.00
200.00
100.00
0.00
Concentration In ppm
2013
2051
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.75

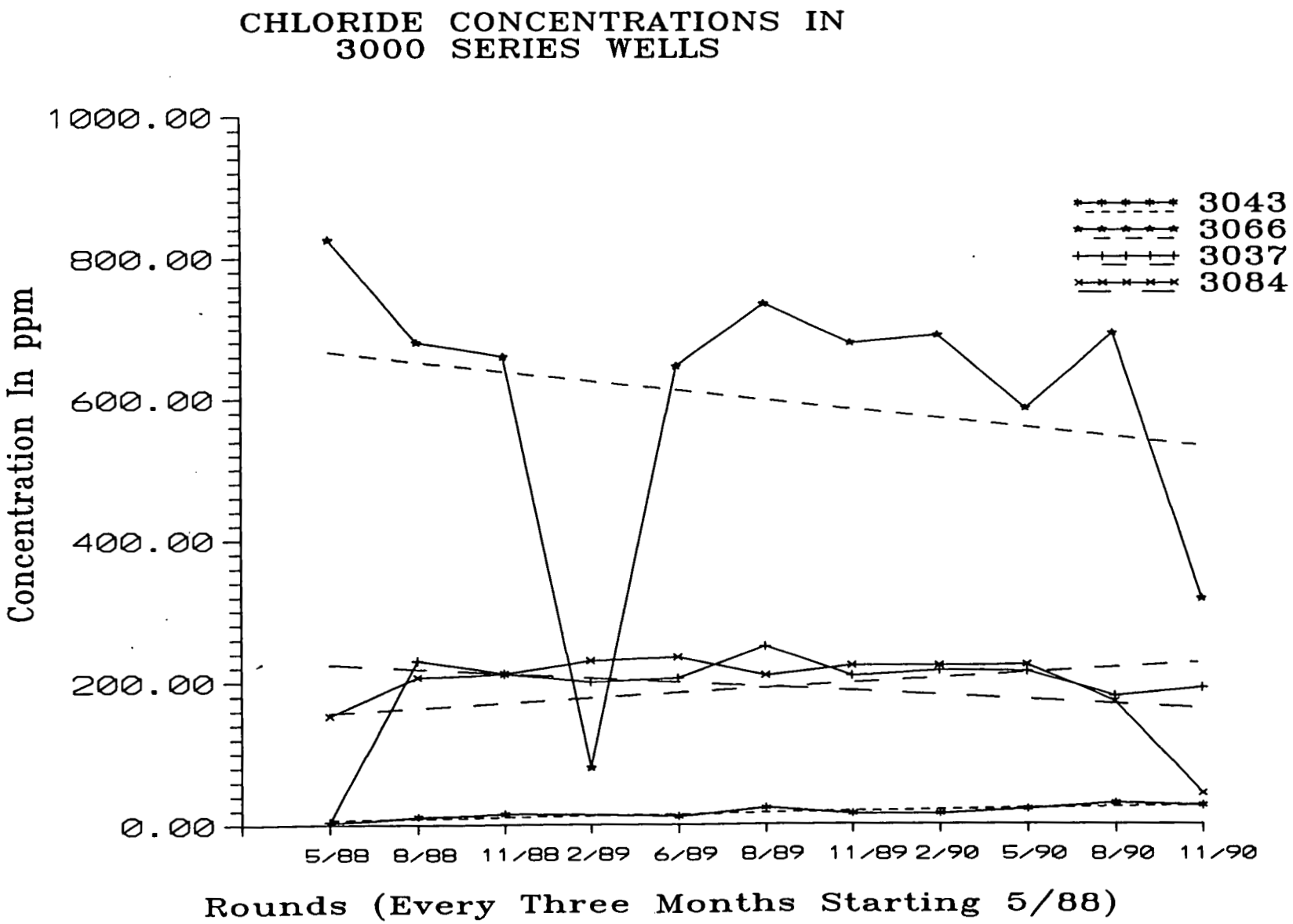

CHLORIDE CONCENTRATIONS IN
3000 SERIES WELLS
1000.00
800.00
600.00
400.00
200.00
0.00
Concentration In ppm
3043
3066
3037
3084
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.76

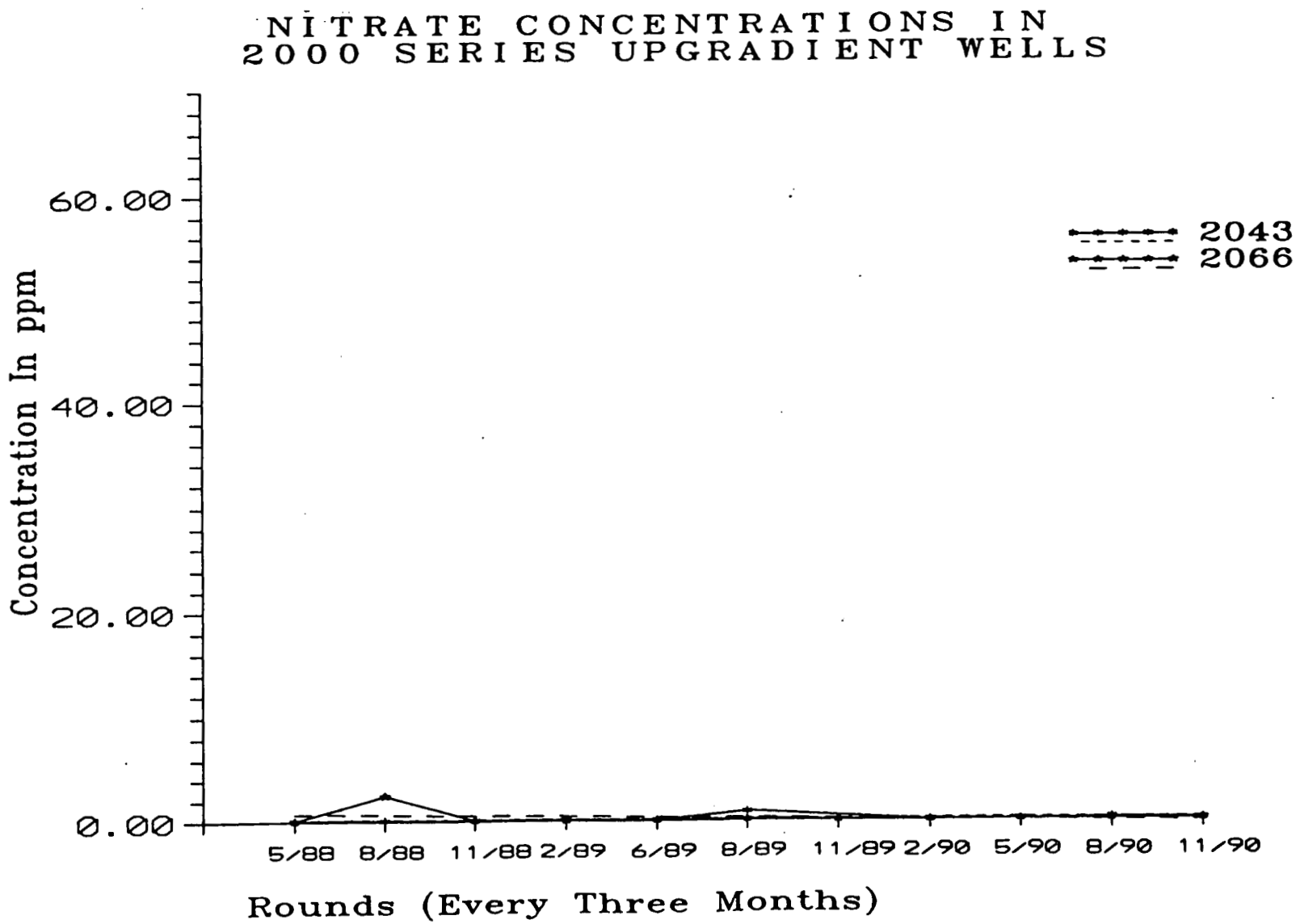

NITRATE CONCENTRATIONS IN
2000 SERIES UPGRADIENT WELLS
Concentration In ppm
60.00
40.00
20.00
0.00
2043
2066
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.77

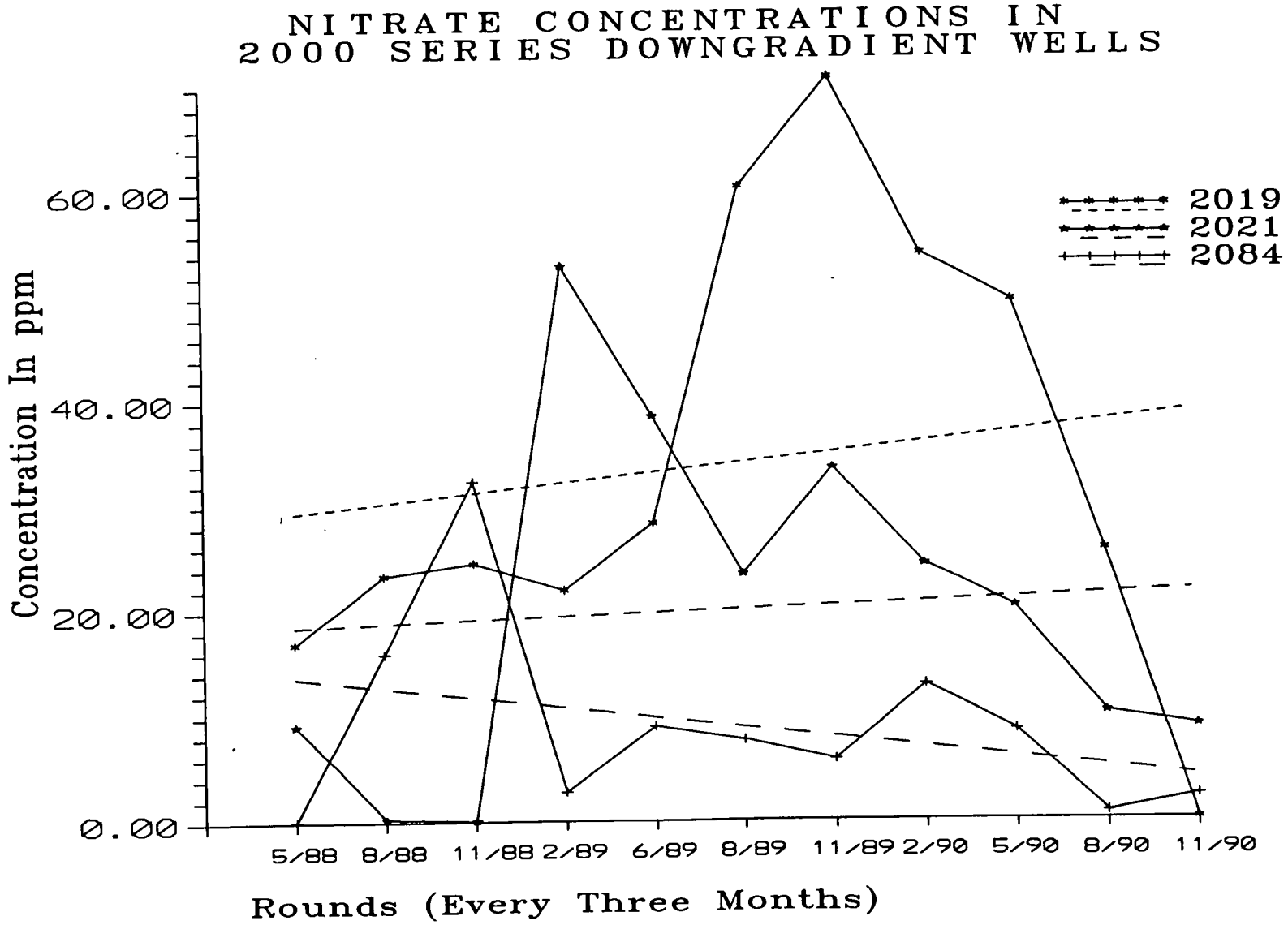

NITRATE CONCENTRATIONS IN
2000 SERIES DOWNGRADIENT WELLS
Concentration In ppm
60.00
40.00
20.00
0.00
2019
2021
2084
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.78

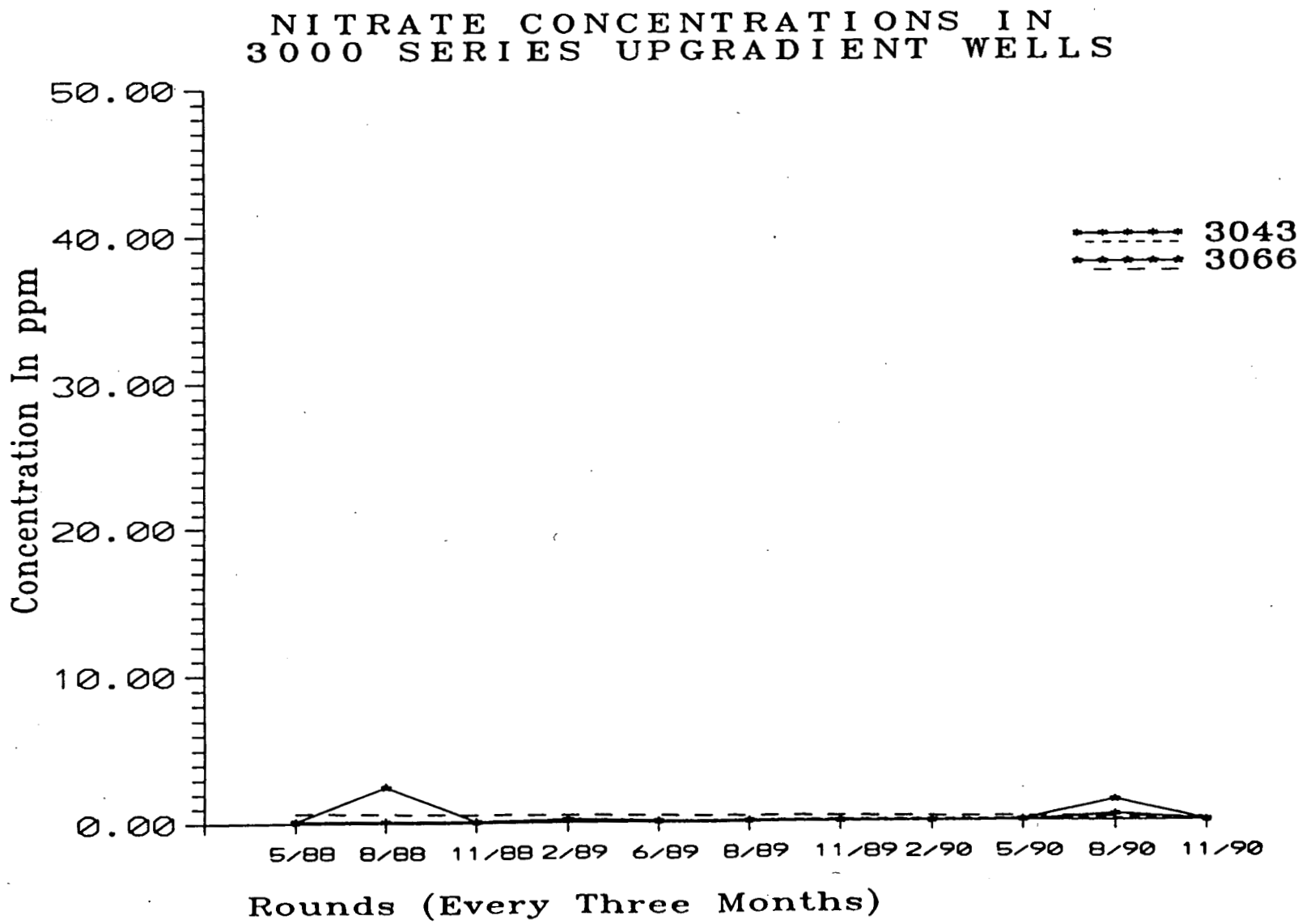

NITRATE CONCENTRATIONS IN
3000 SERIES UPGRADIENT WELLS
Concentration In ppm
50.00
40.00
30.00
20.00
10.00
0.00
3043
3066
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.79

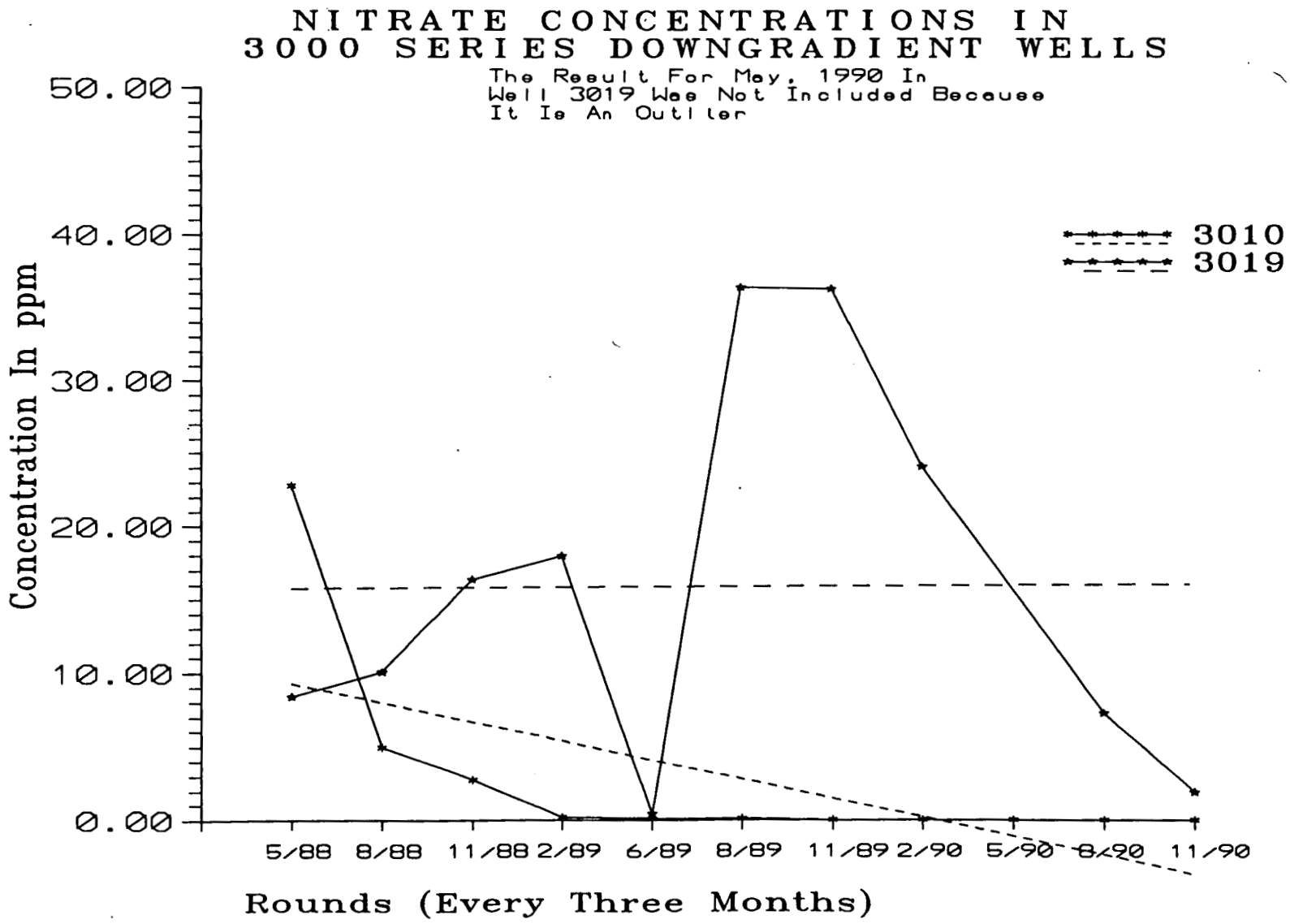

NITRATE CONCENTRATIONS IN
3000 SERIES DOWNGRADIENT WELLS
The Result For May, 1990 In
Well 3019 Was Not Included Because
It Is An Outlier
3010
3019
Concentration In ppm
50.00
40.00
30.00
20.00
10.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.80

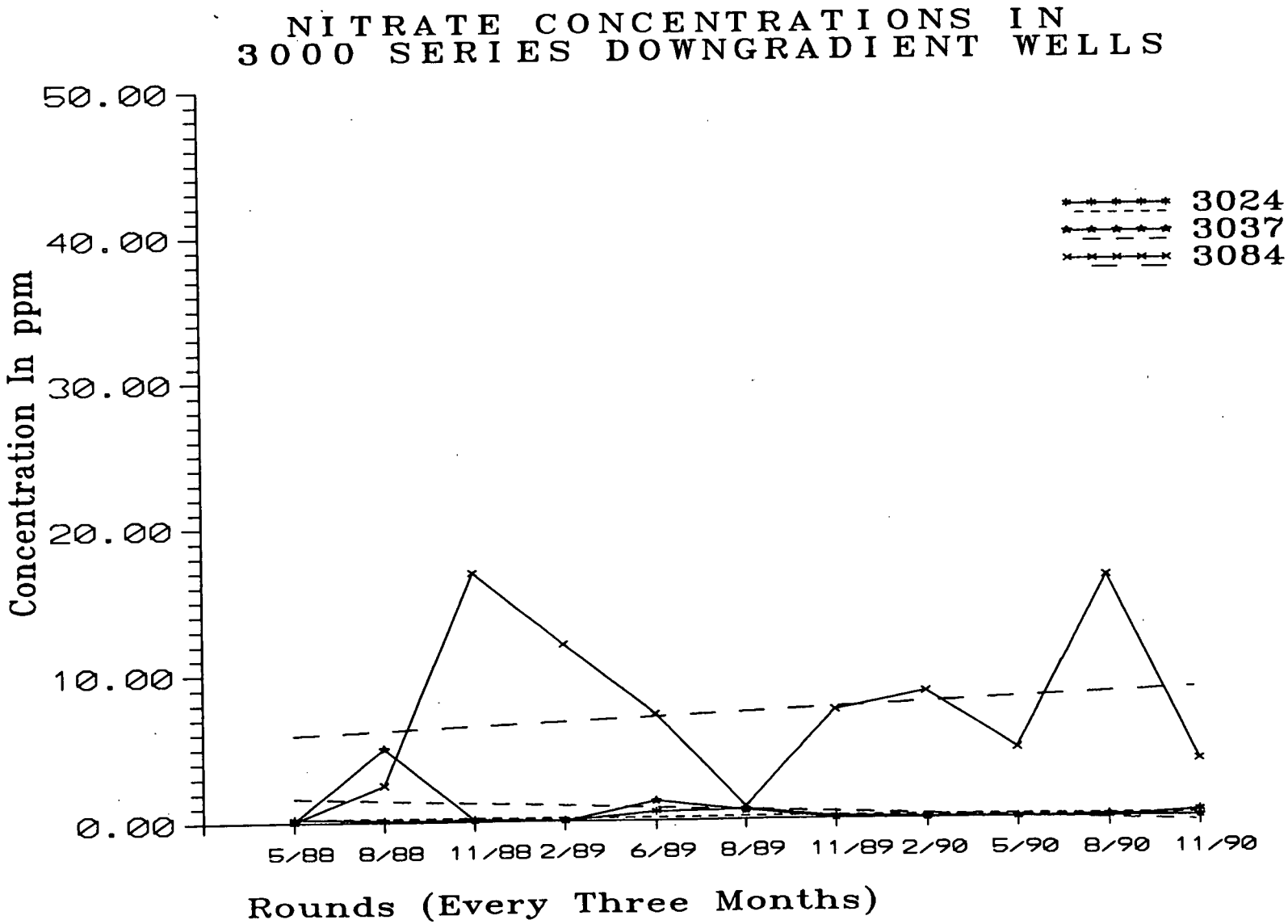

NITRATE CONCENTRATIONS IN
3000 SERIES DOWNGRADIENT WELLS
3024
3037
3084
Concentration In ppm
50.00
40.00
30.00
20.00
10.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.81

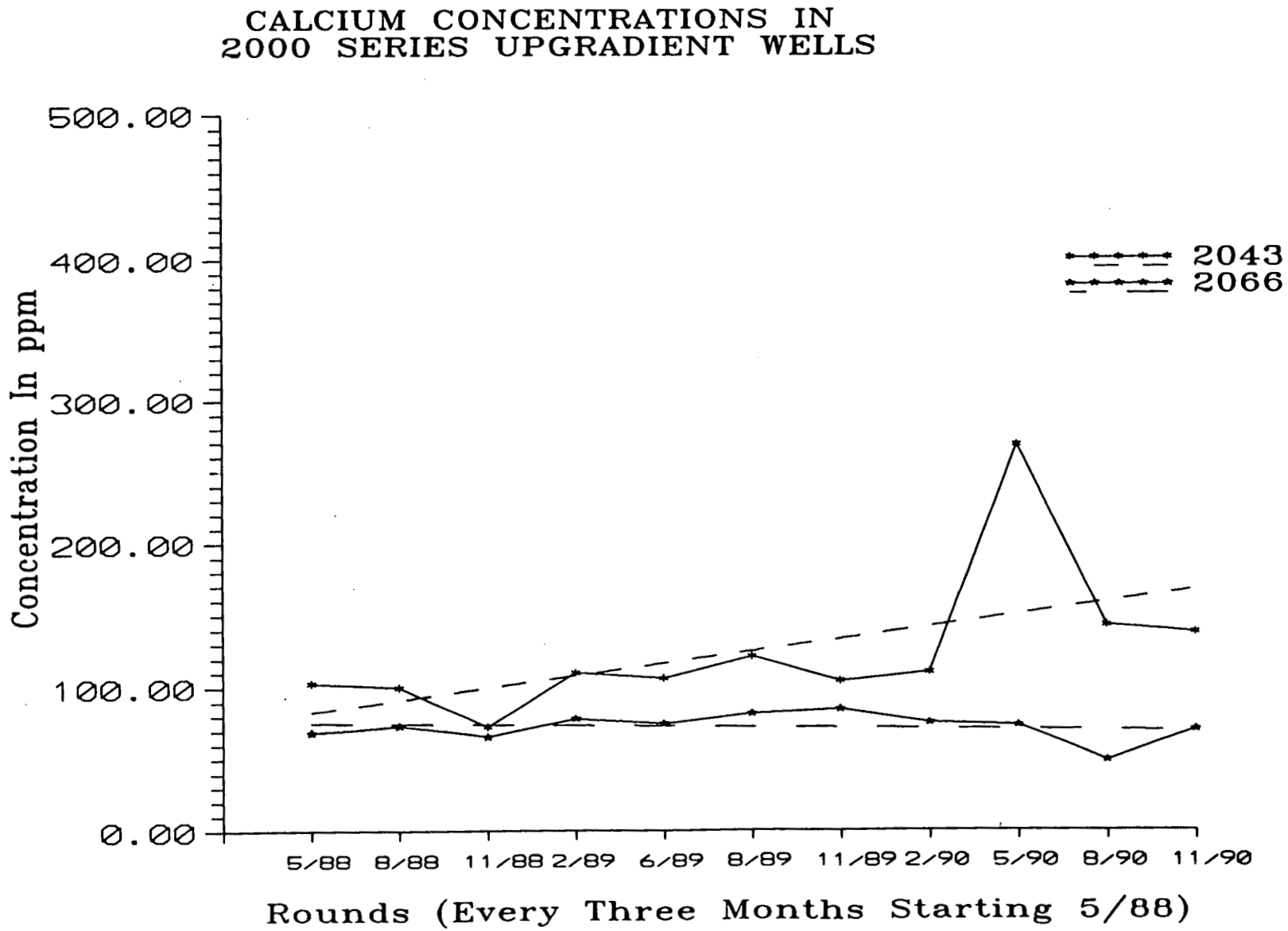

CALCIUM CONCENTRATIONS IN
2000 SERIES UPGRADIENT WELLS
Concentration In ppm
500.00
400.00
300.00
200.00
100.00
0.00
2043
2066
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.82

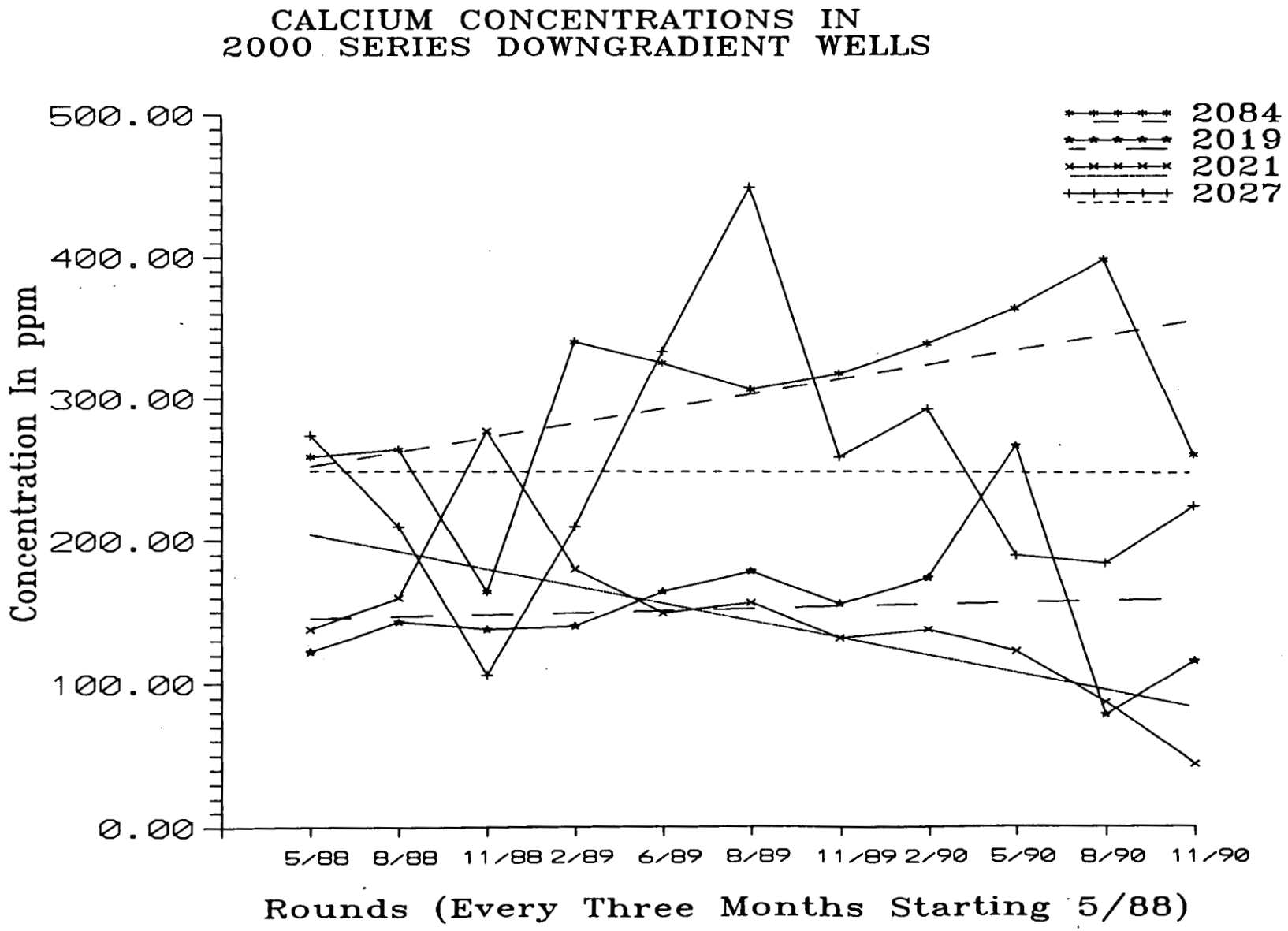

CALCIUM CONCENTRATIONS IN
2000 SERIES DOWNGRADIENT WELLS
2084
2019
2021
2027
Concentration In ppm
500.00
400.00
300.00
200.00
100.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.83

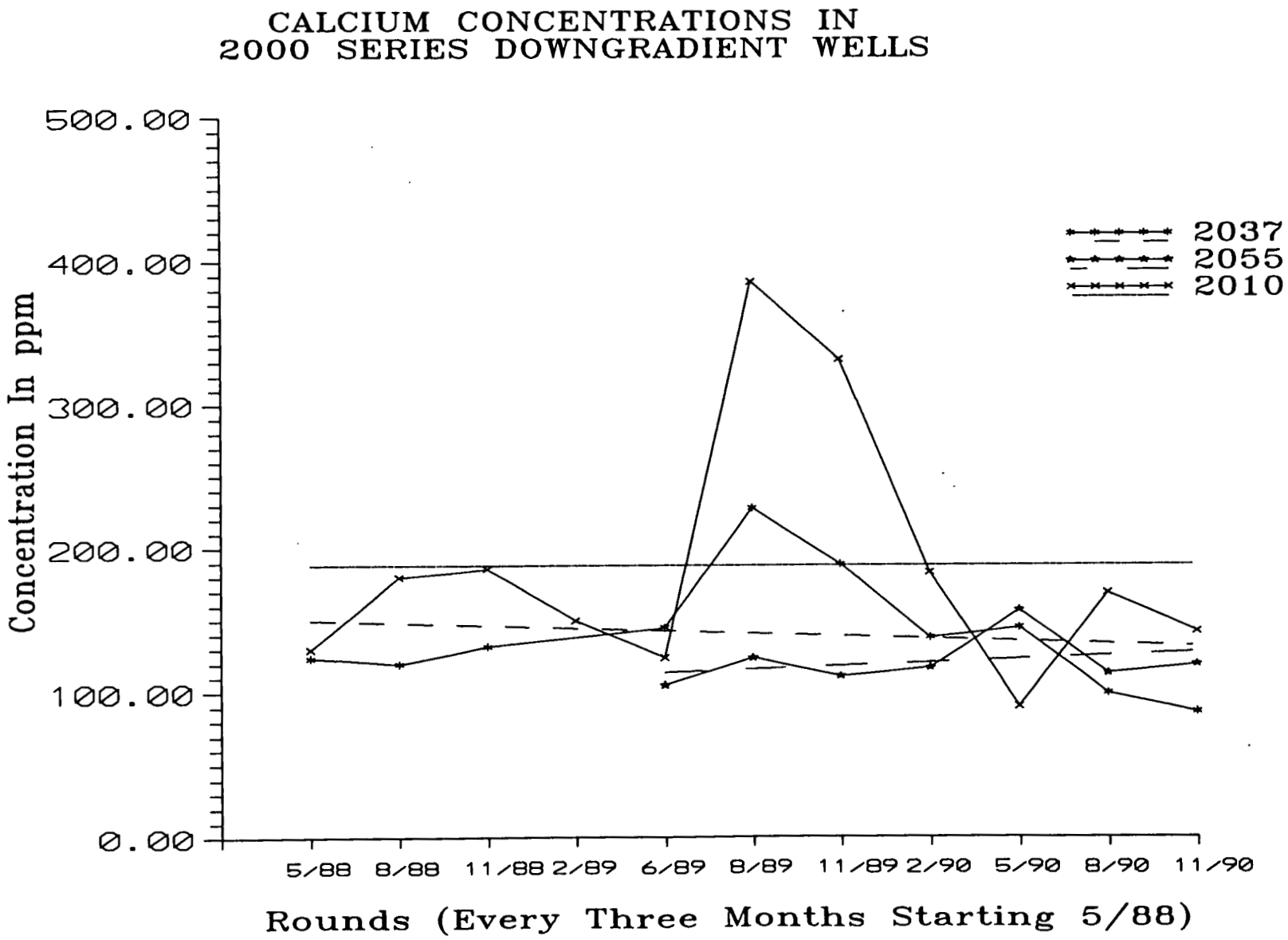

CALCIUM CONCENTRATIONS IN
2000 SERIES DOWNGRADIENT WELLS
Concentration In ppm
500.00
400.00
300.00
200.00
100.00
0.00
2037
2055
2010
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.84

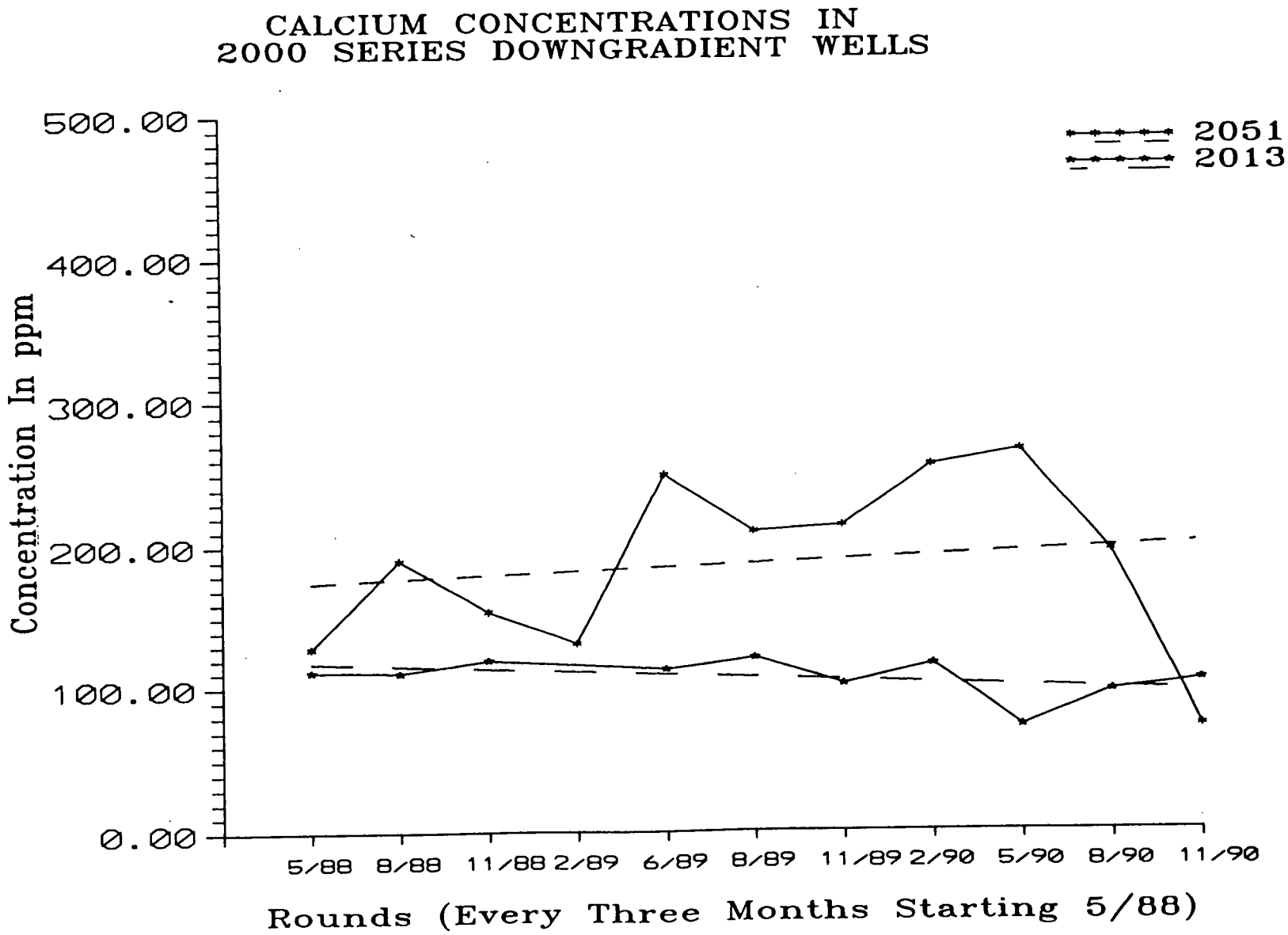

CALCIUM CONCENTRATIONS IN
2000 SERIES DOWNGRADIENT WELLS
2051
2013
Concentration In ppm
500.00
400.00
300.00
200.00
100.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.85

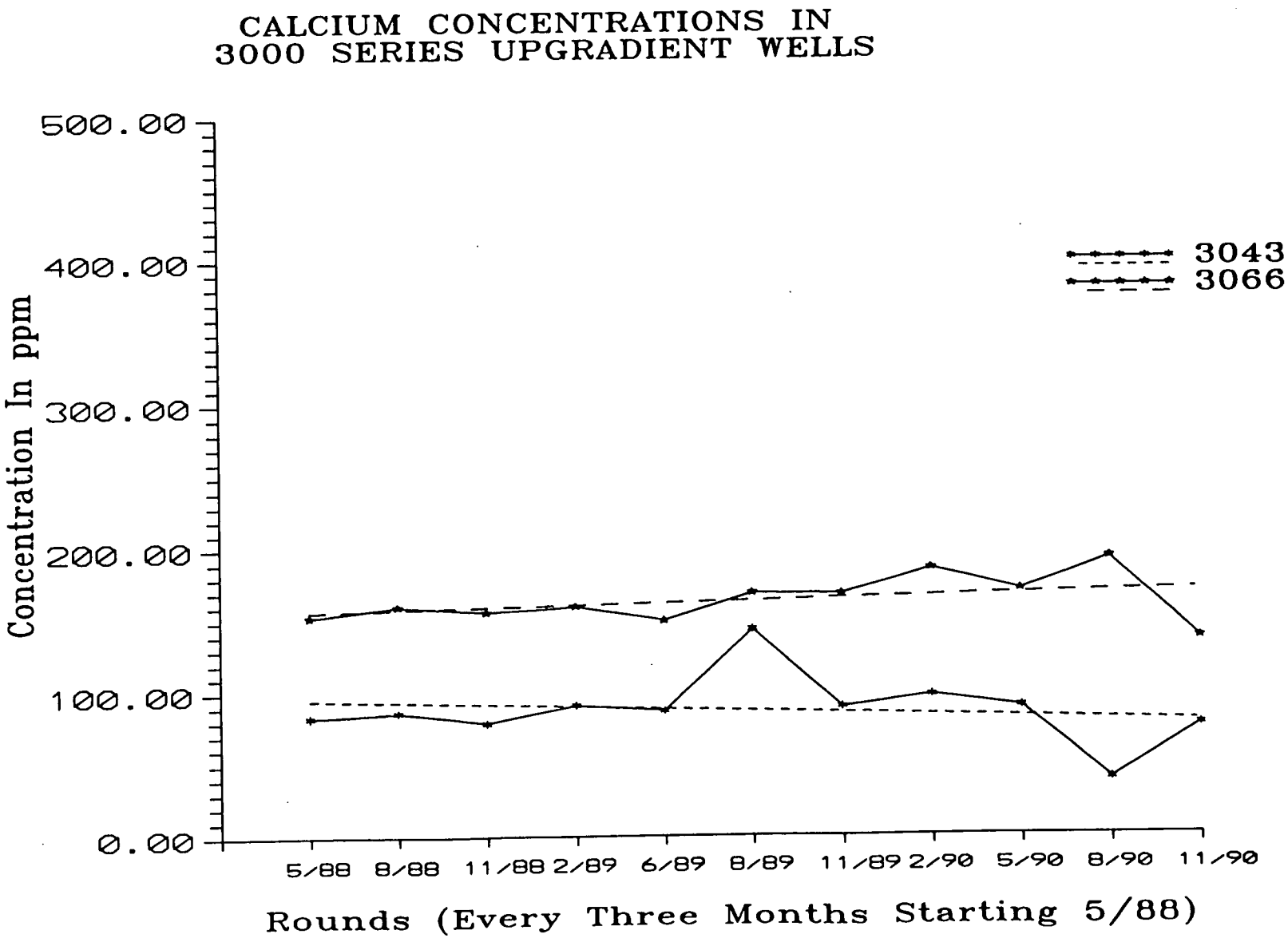

CALCIUM CONCENTRATIONS IN
3000 SERIES UPGRADIENT WELLS
500.00
400.00
300.00
200.00
100.00
0.00
Concentration In ppm
3043
3066
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.86

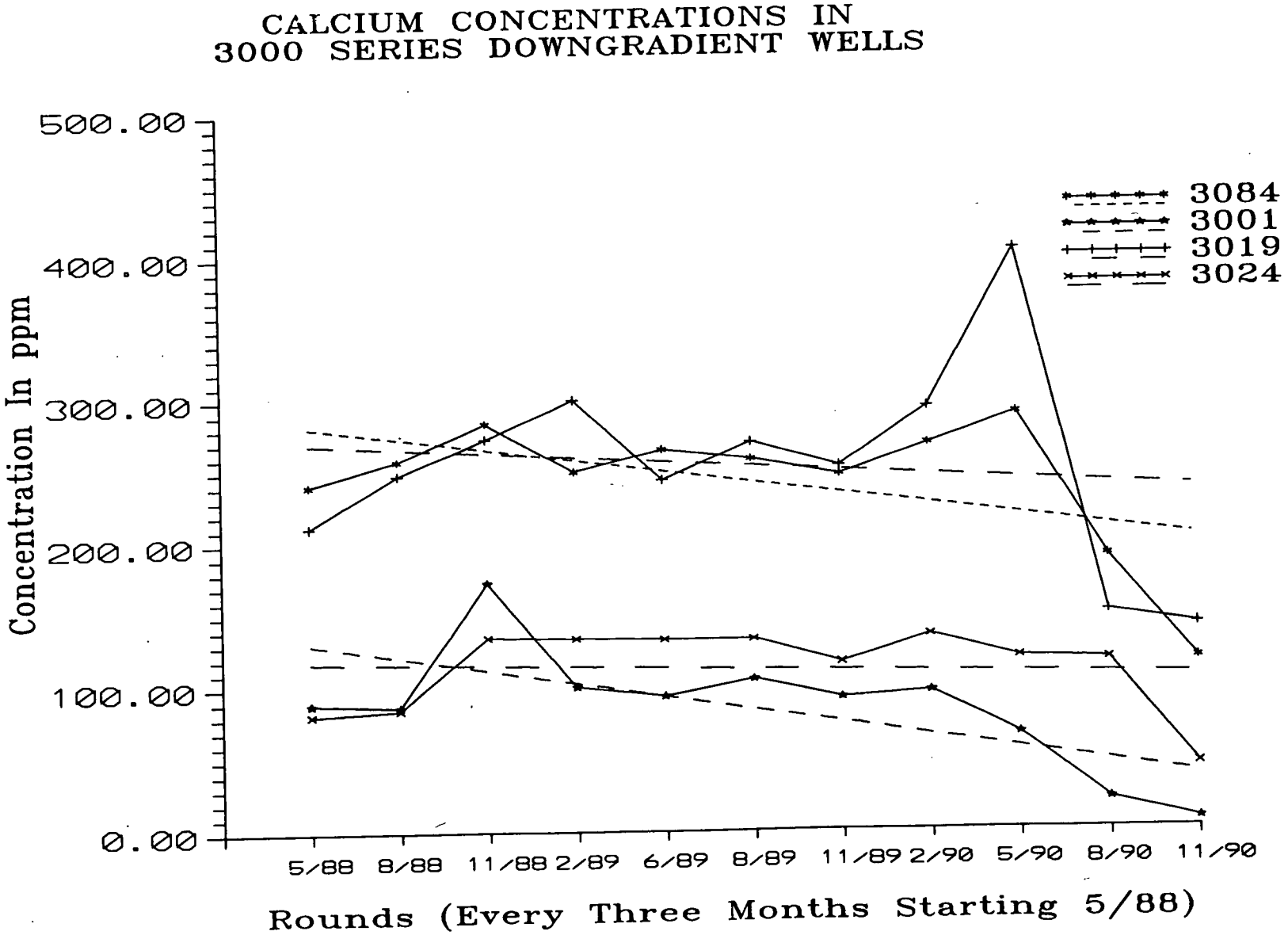

CALCIUM CONCENTRATIONS IN
3000 SERIES DOWNGRADIENT WELLS
Concentration In ppm
500.00
400.00
300.00
200.00
100.00
0.00
3084
3001
3019
3024
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.87

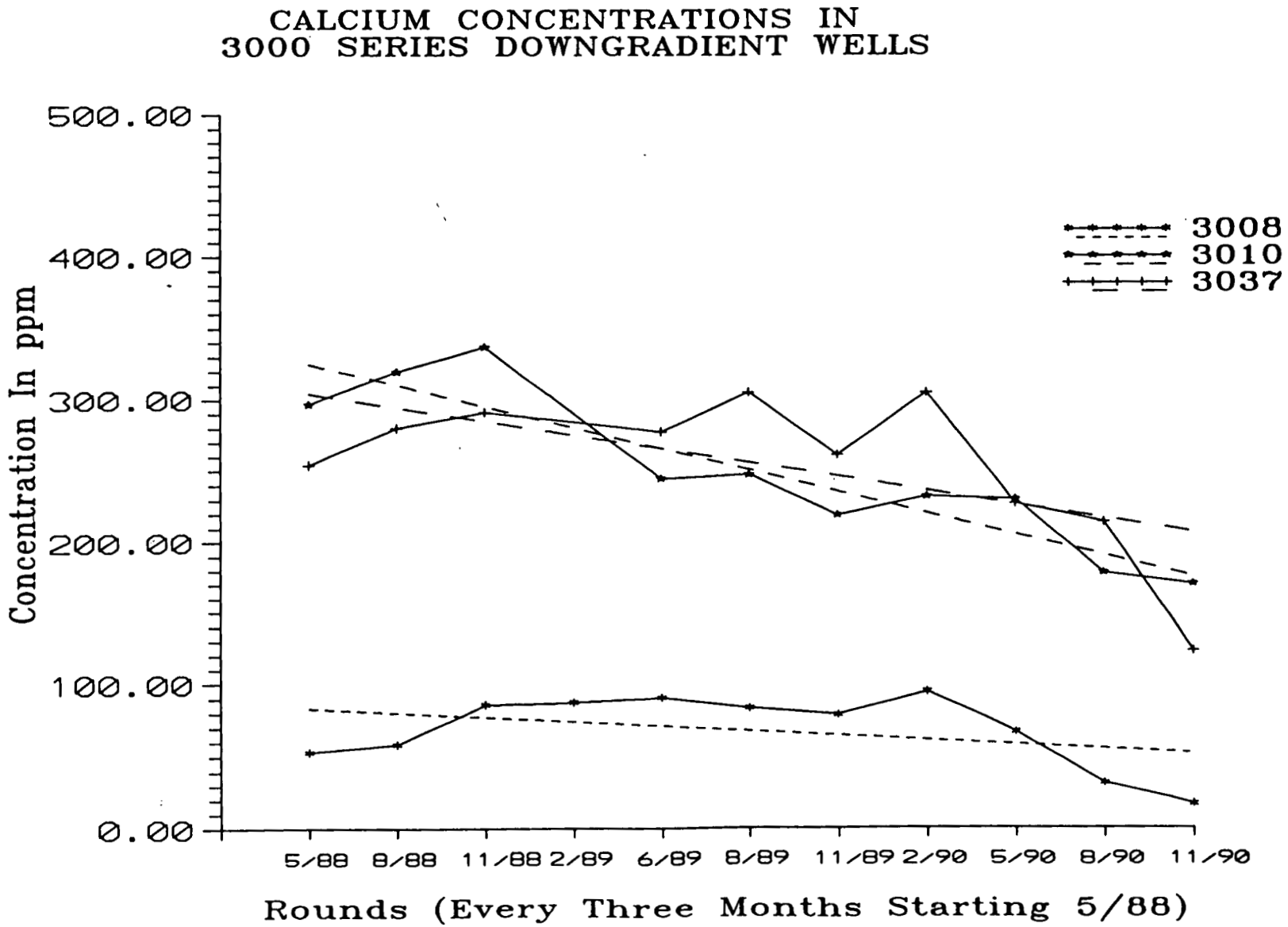

CALCIUM CONCENTRATIONS IN
3000 SERIES DOWNGRADIENT WELLS
Concentration In ppm
500.00
400.00
300.00
200.00
100.00
0.00
3008
3010
3037
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.88

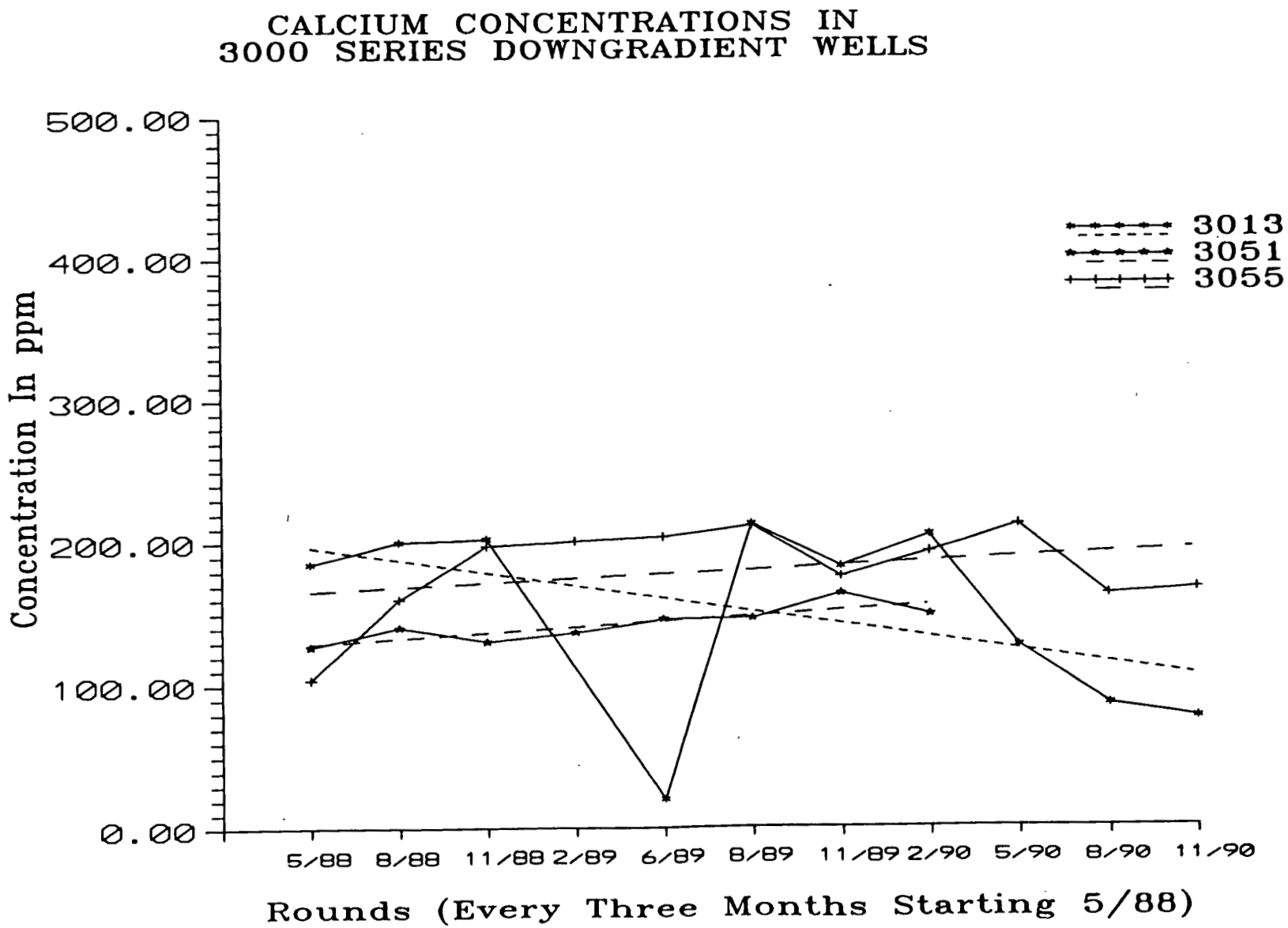

CALCIUM CONCENTRATIONS IN
3000 SERIES DOWNGRADIENT WELLS
Concentration In ppm
500.00
400.00
300.00
200.00
100.00
0.00
3013
3051
3055
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.89

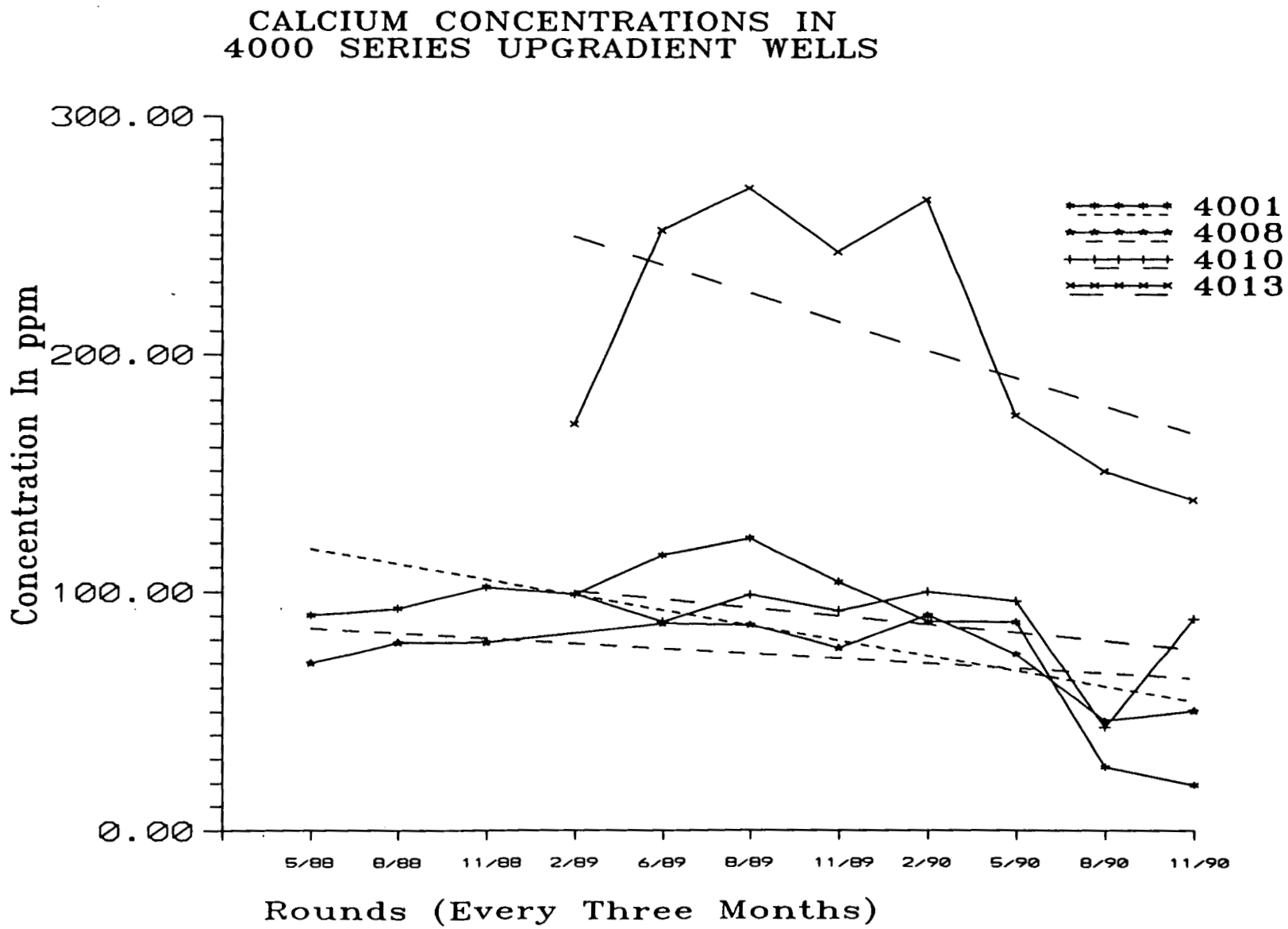

CALCIUM CONCENTRATIONS IN
4000 SERIES UPGRADIENT WELLS
300.00
200.00
100.00
0.00
Concentration In ppm
4001
4008
4010
4013
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.90

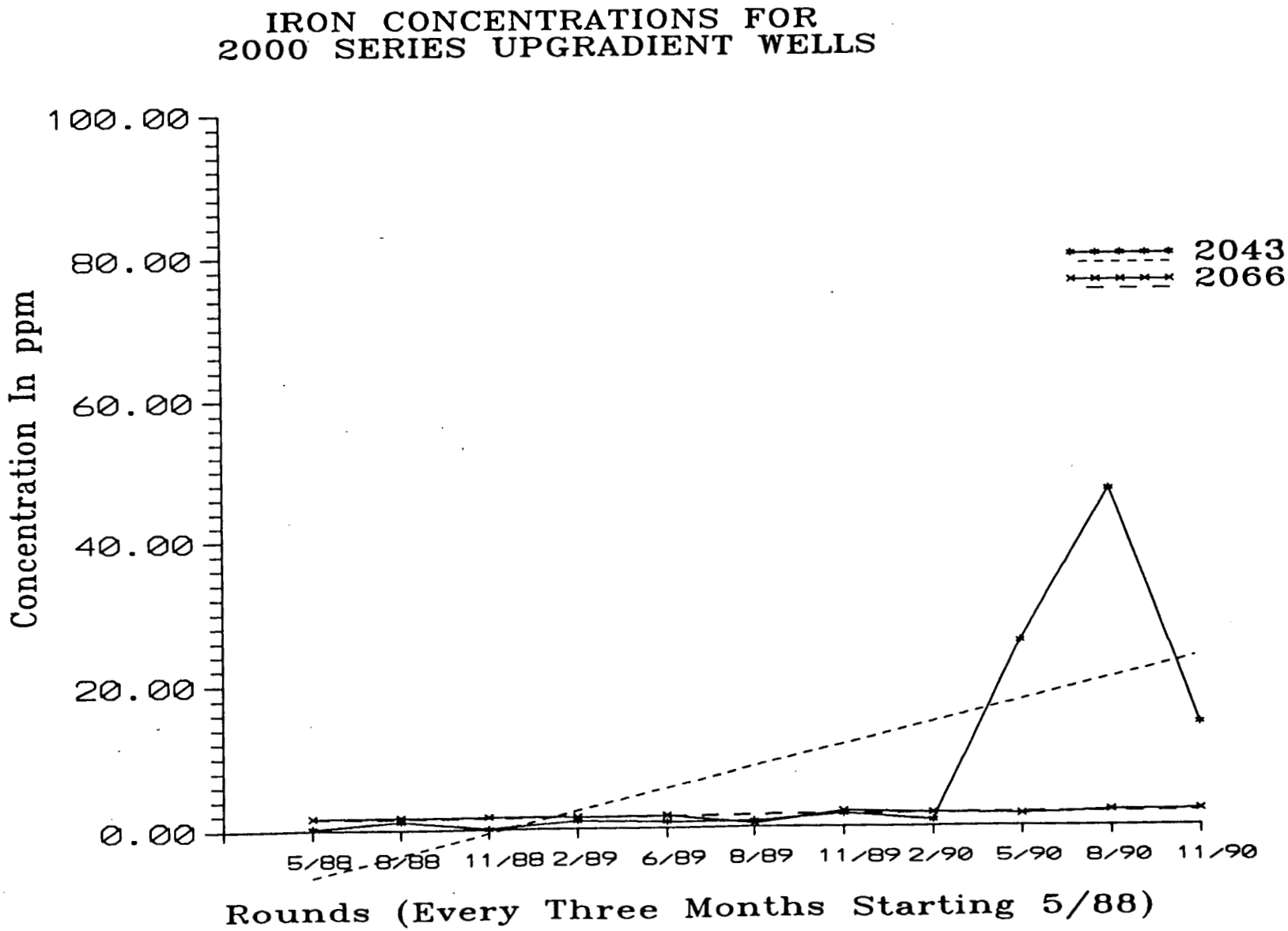

IRON CONCENTRATIONS FOR
2000 SERIES UPGRADIENT WELLS
100.00
80.00
60.00
40.00
20.00
0.00
Concentration In ppm
2043
2066
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.91

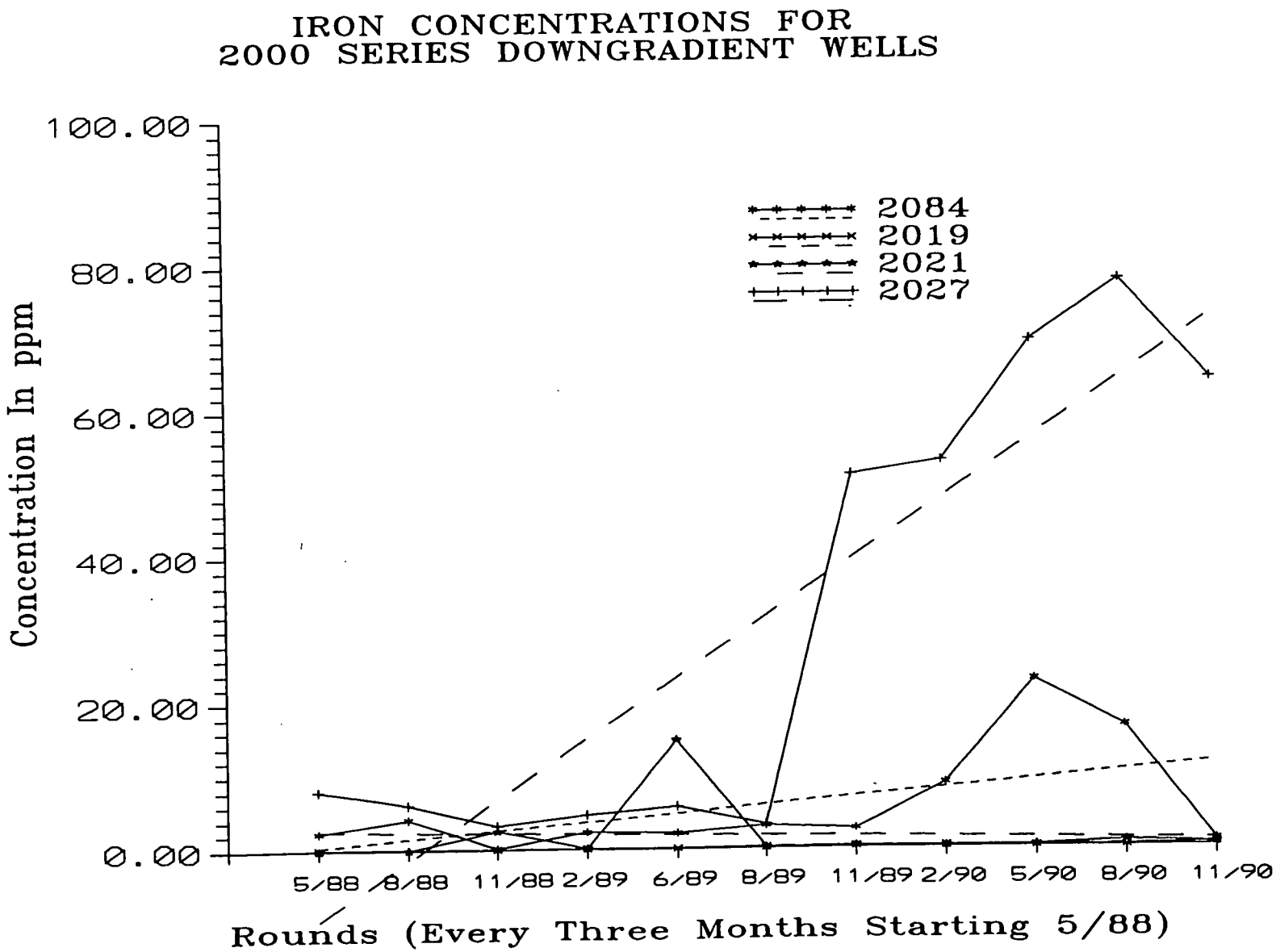

IRON CONCENTRATIONS FOR
2000 SERIES DOWNGRADIENT WELLS
2084
2019
2021
2027
100.00
80.00
60.00
40.00
20.00
0.00
Concentration In ppm
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.92

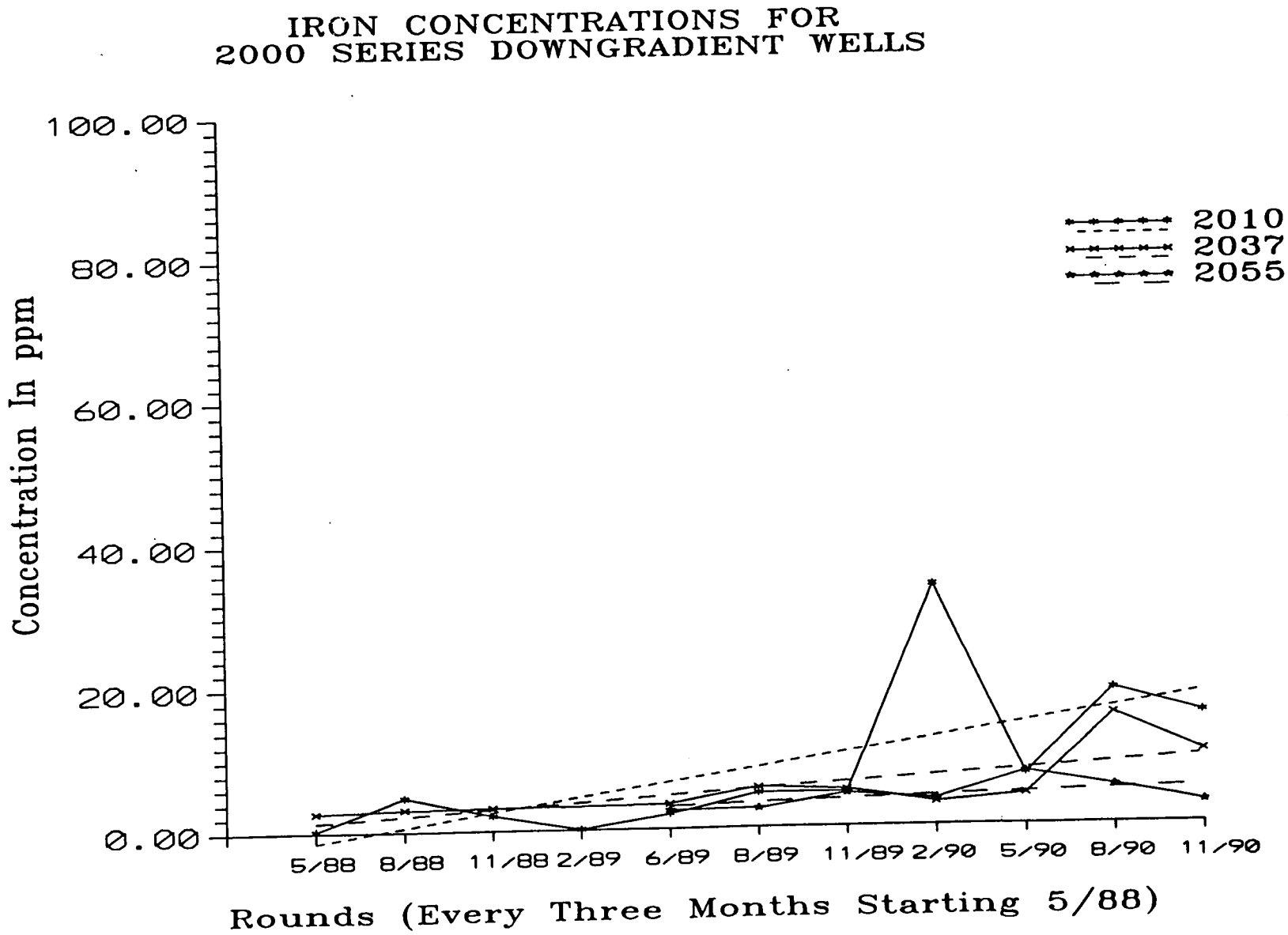

IRON CONCENTRATIONS FOR
2000 SERIES DOWNGRADIENT WELLS
Concentration In ppm
100.00
80.00
60.00
40.00
20.00
0.00
2010
2037
2055
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.93

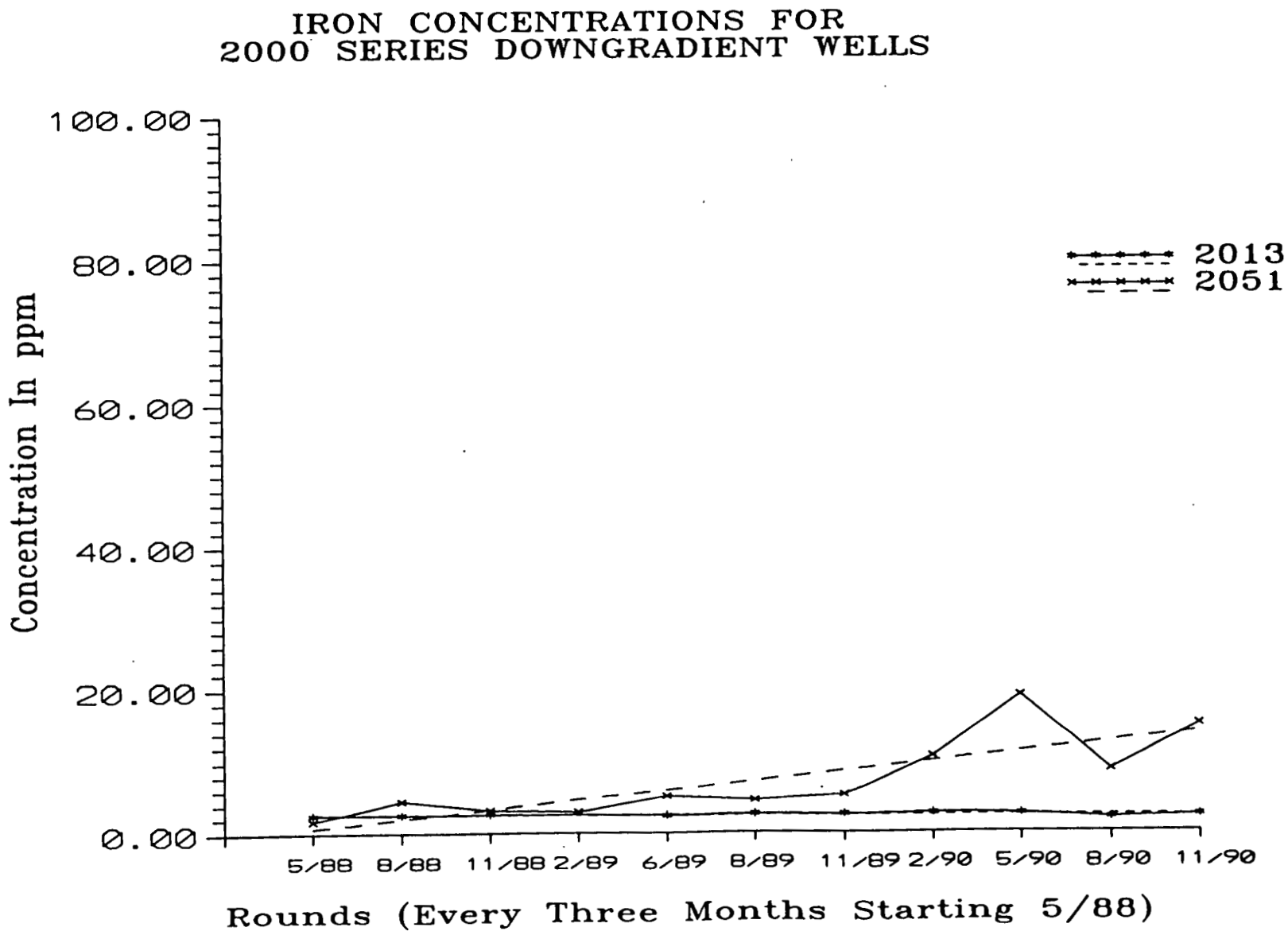

IRON CONCENTRATIONS FOR
2000 SERIES DOWNGRADIENT WELLS
100.00
80.00
60.00
40.00
20.00
0.00
Concentration In ppm
2013
2051
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.94

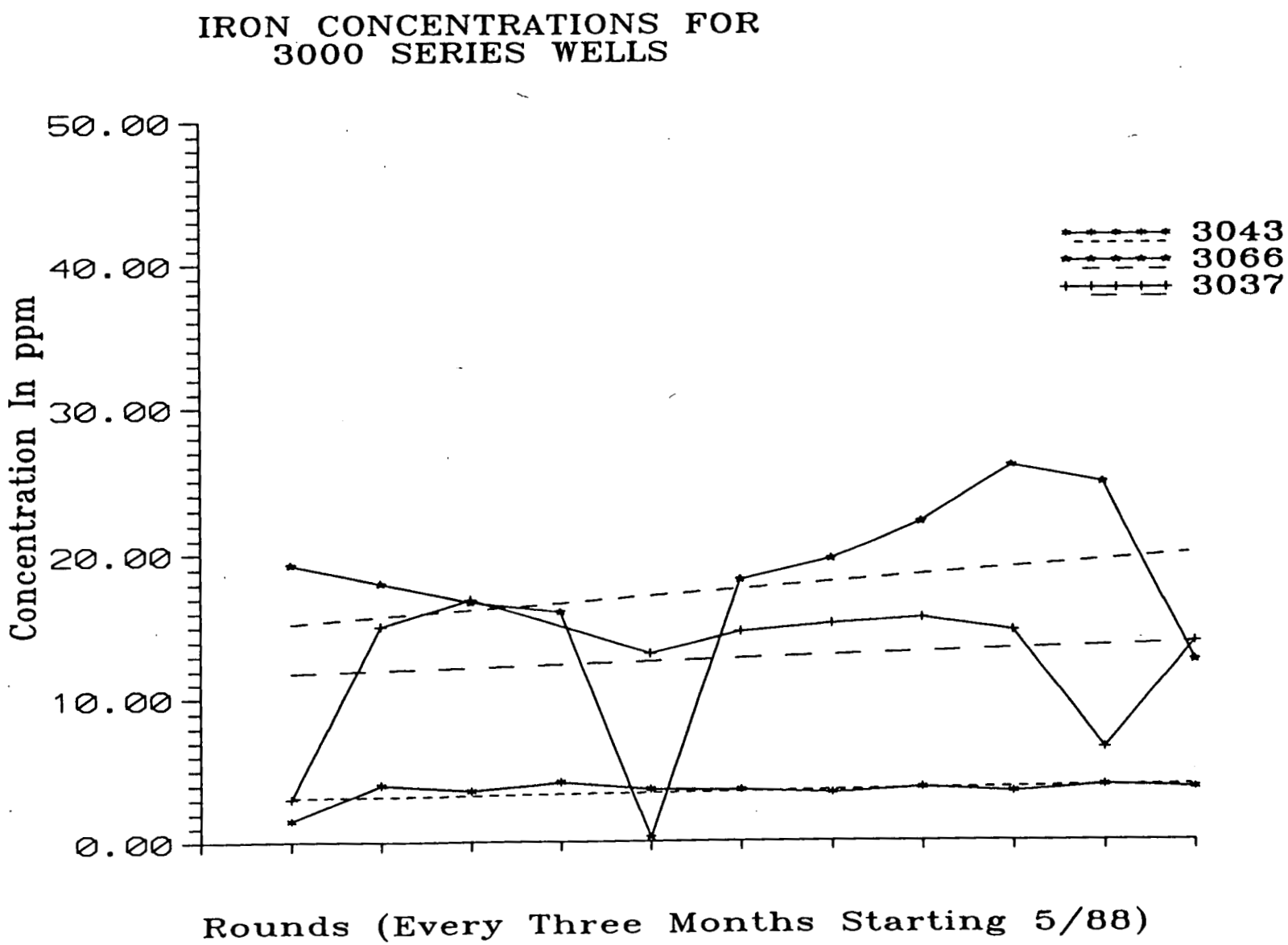

IRON CONCENTRATIONS FOR
3000 SERIES WELLS
50.00
40.00
30.00
20.00
10.00
0.00
Concentration In ppm
3043
3066
3037
Rounds (Every Three Months Starting 5/88)

Figure 3.95

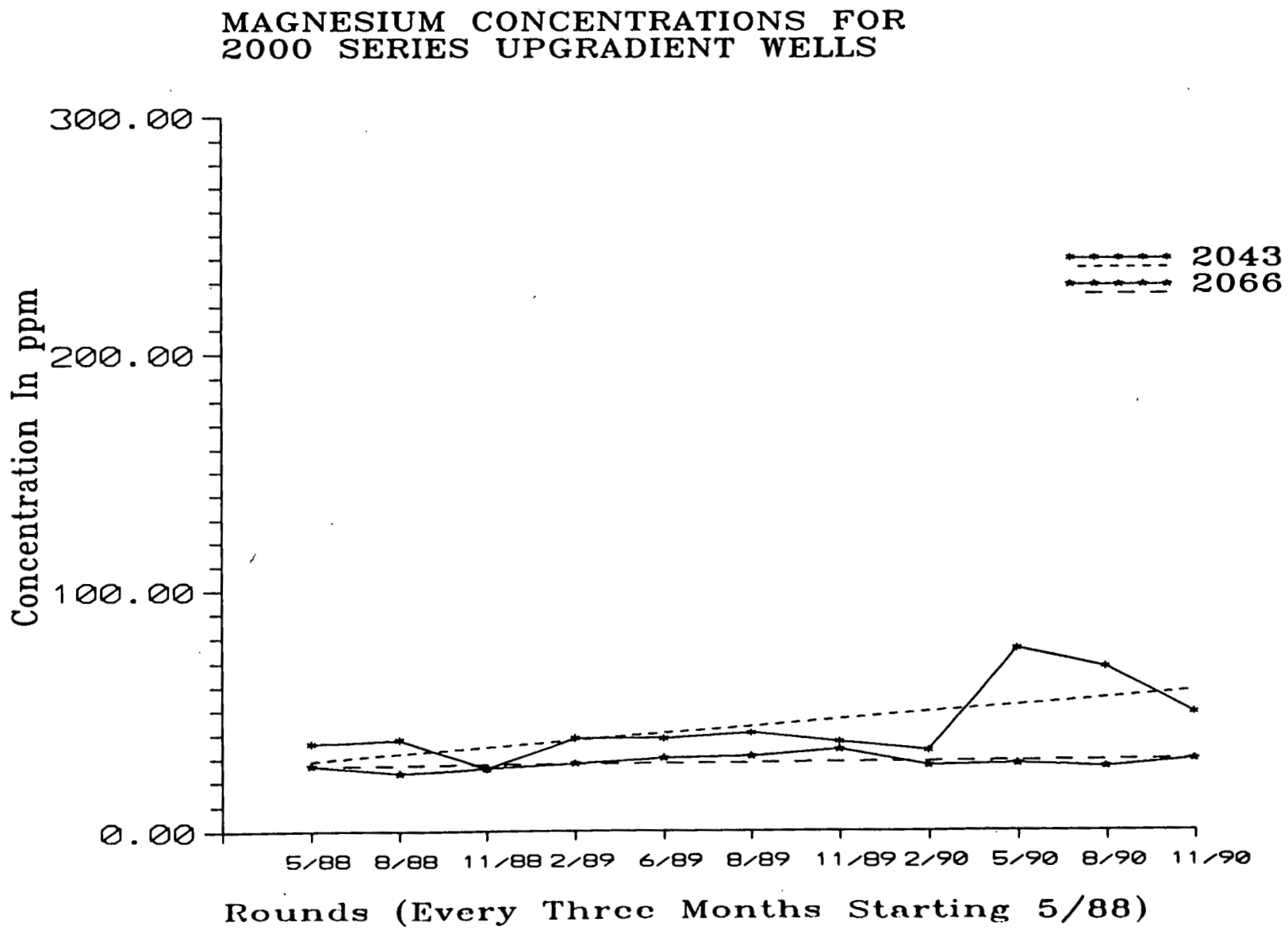

MAGNESIUM CONCENTRATIONS FOR
2000 SERIES UPGRADIENT WELLS
Concentration In ppm
300.00
200.00
100.00
0.00
2043
2066
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.96

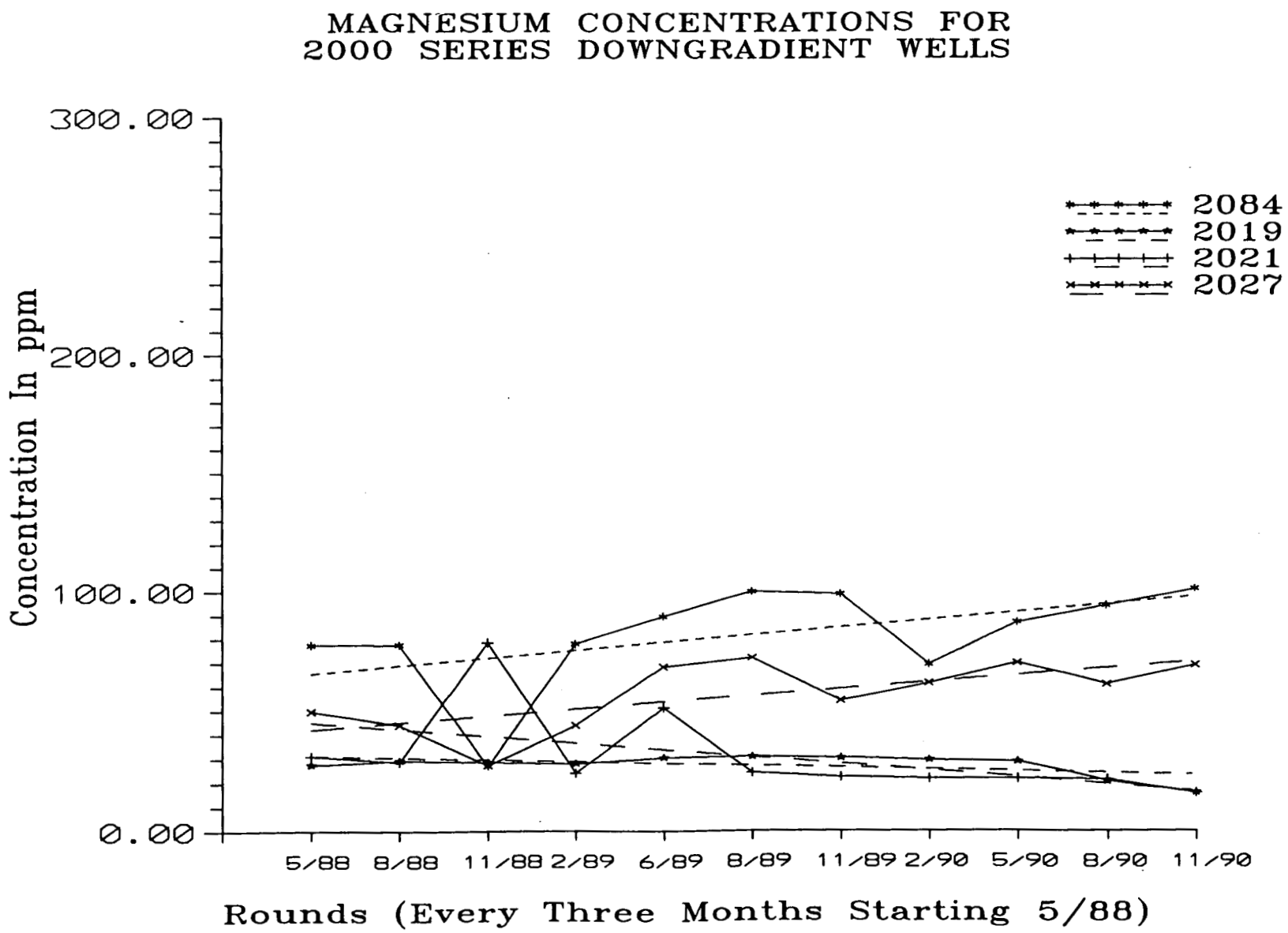

MAGNESIUM CONCENTRATIONS FOR
2000 SERIES DOWNGRADIENT WELLS
300.00
200.00
100.00
0.00
Concentration In ppm
2084
2019
2021
2027
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.97

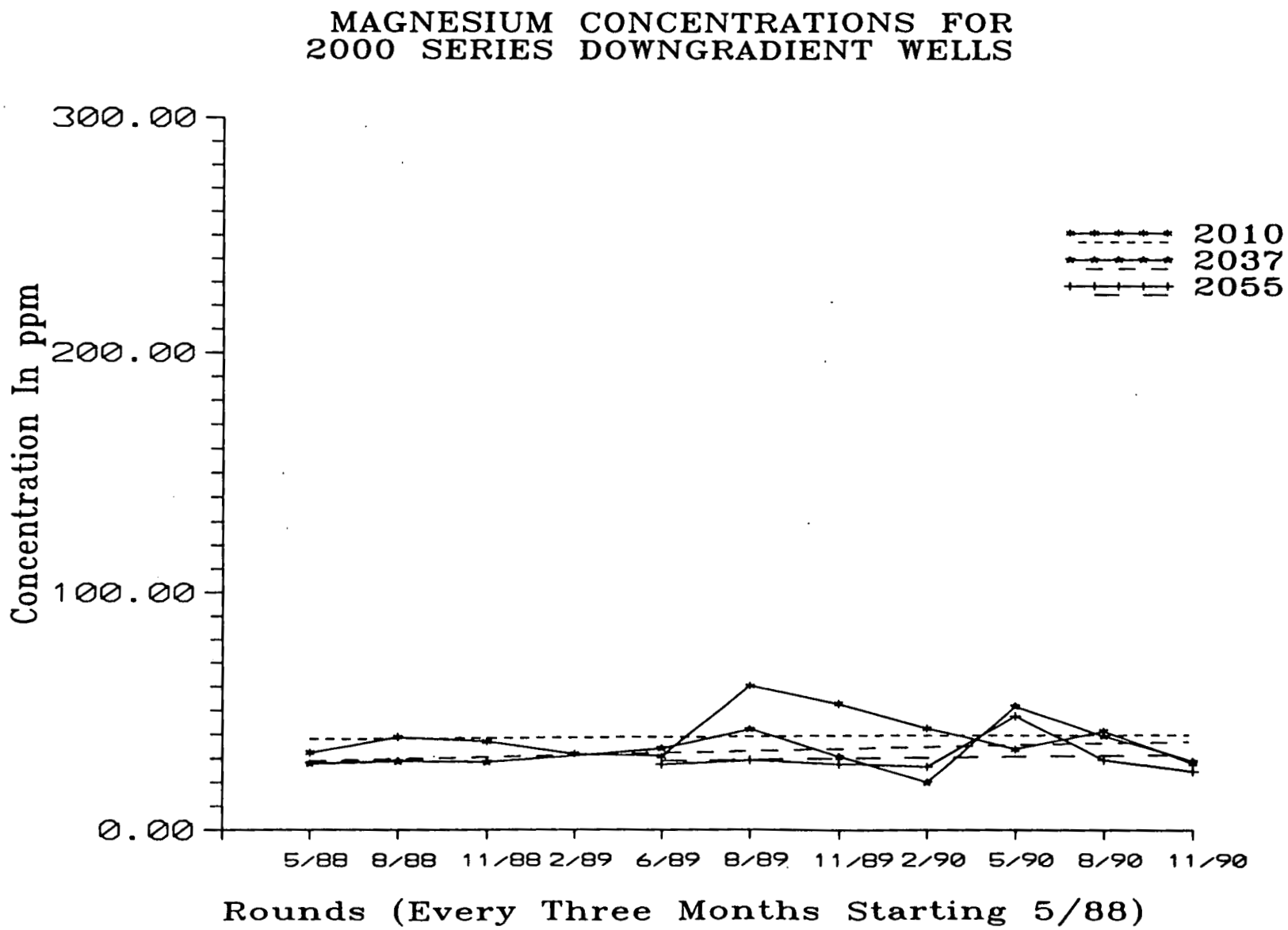

MAGNESIUM CONCENTRATIONS FOR
2000 SERIES DOWNGRADIENT WELLS
300.00
200.00
100.00
0.00
Concentration In ppm
2010
2037
2055
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.98

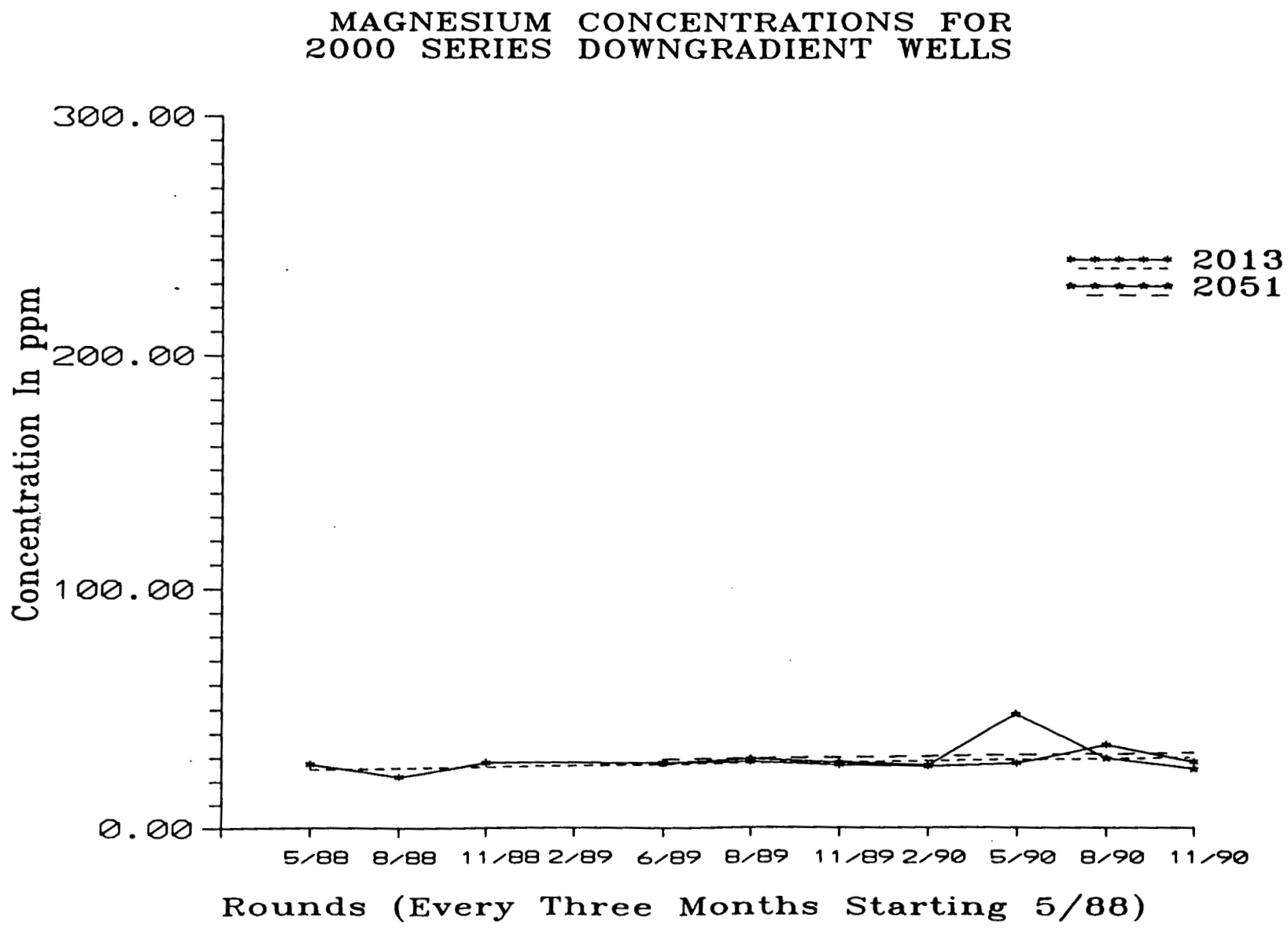

MAGNESIUM CONCENTRATIONS FOR
2000 SERIES DOWNGRADIENT WELLS
2013
2051
Concentration In ppm
300.00
200.00
100.00
0.00
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.99

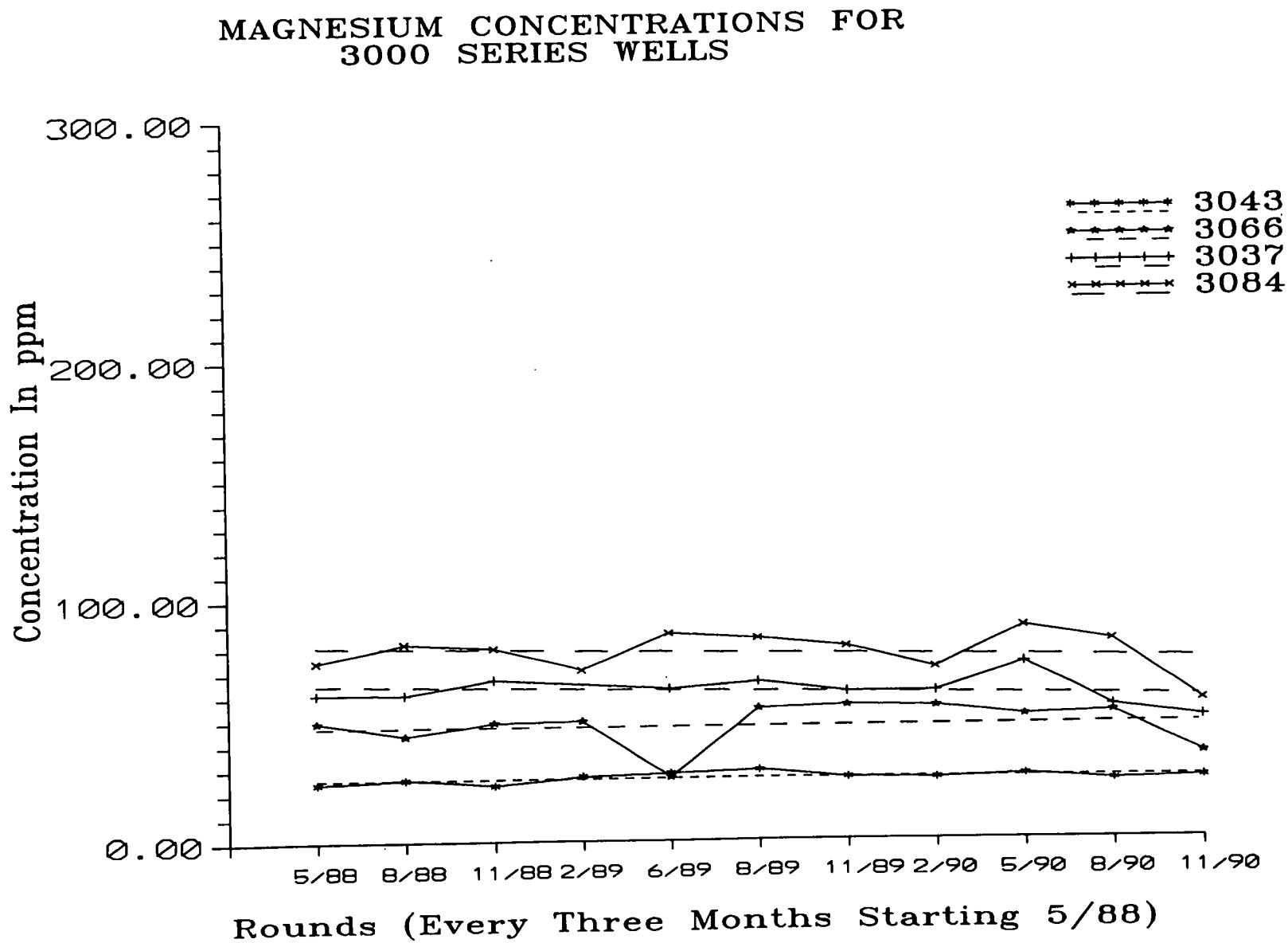

MAGNESIUM CONCENTRATIONS FOR
3000 SERIES WELLS
300.00
200.00
100.00
0.00
Concentration In ppm
3043
3066
3037
3084
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.100

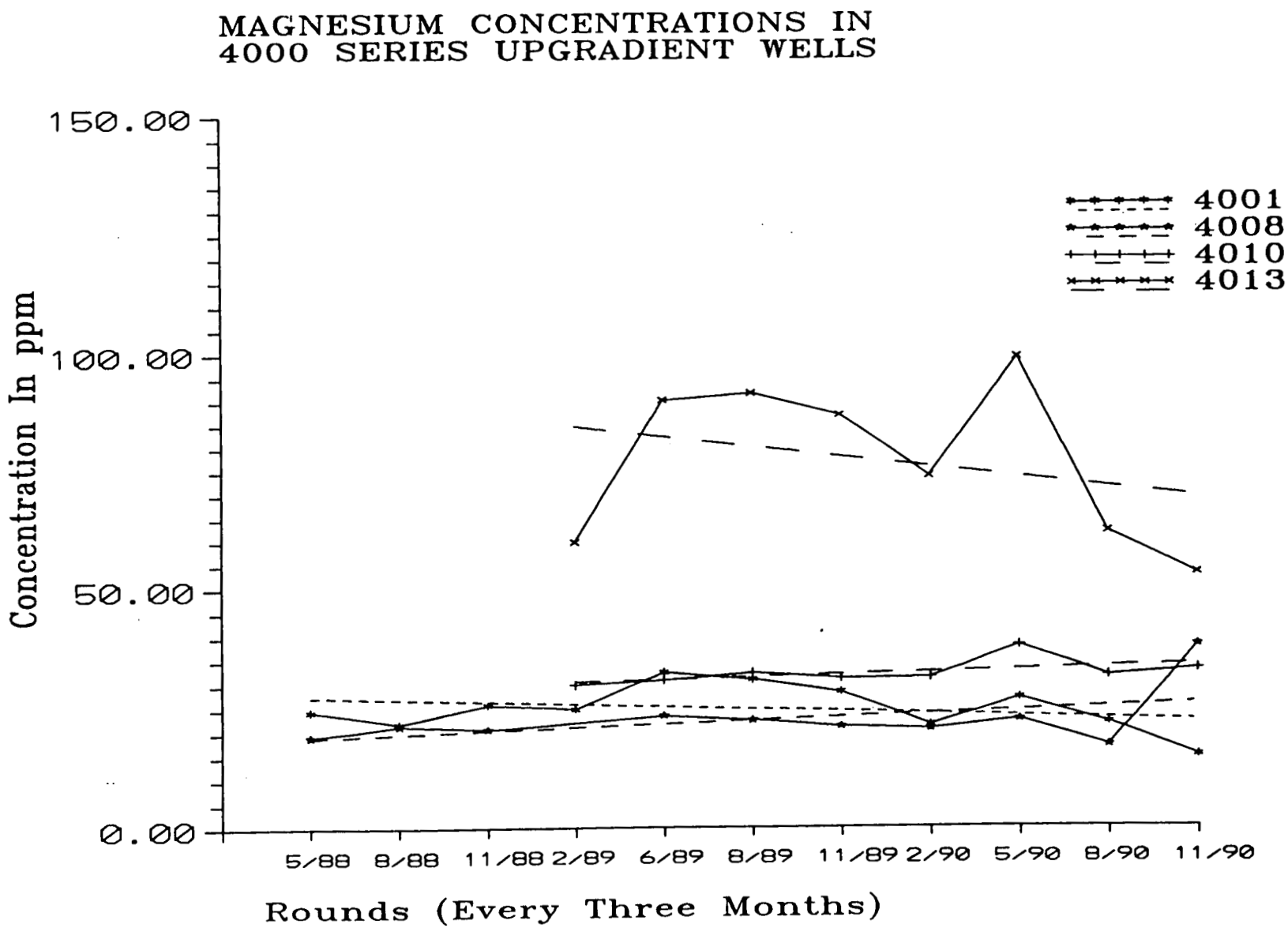

MAGNESIUM CONCENTRATIONS IN
4000 SERIES UPGRADIENT WELLS
150.00
100.00
50.00
0.00
Concentration In ppm
4001
4008
4010
4013
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.101

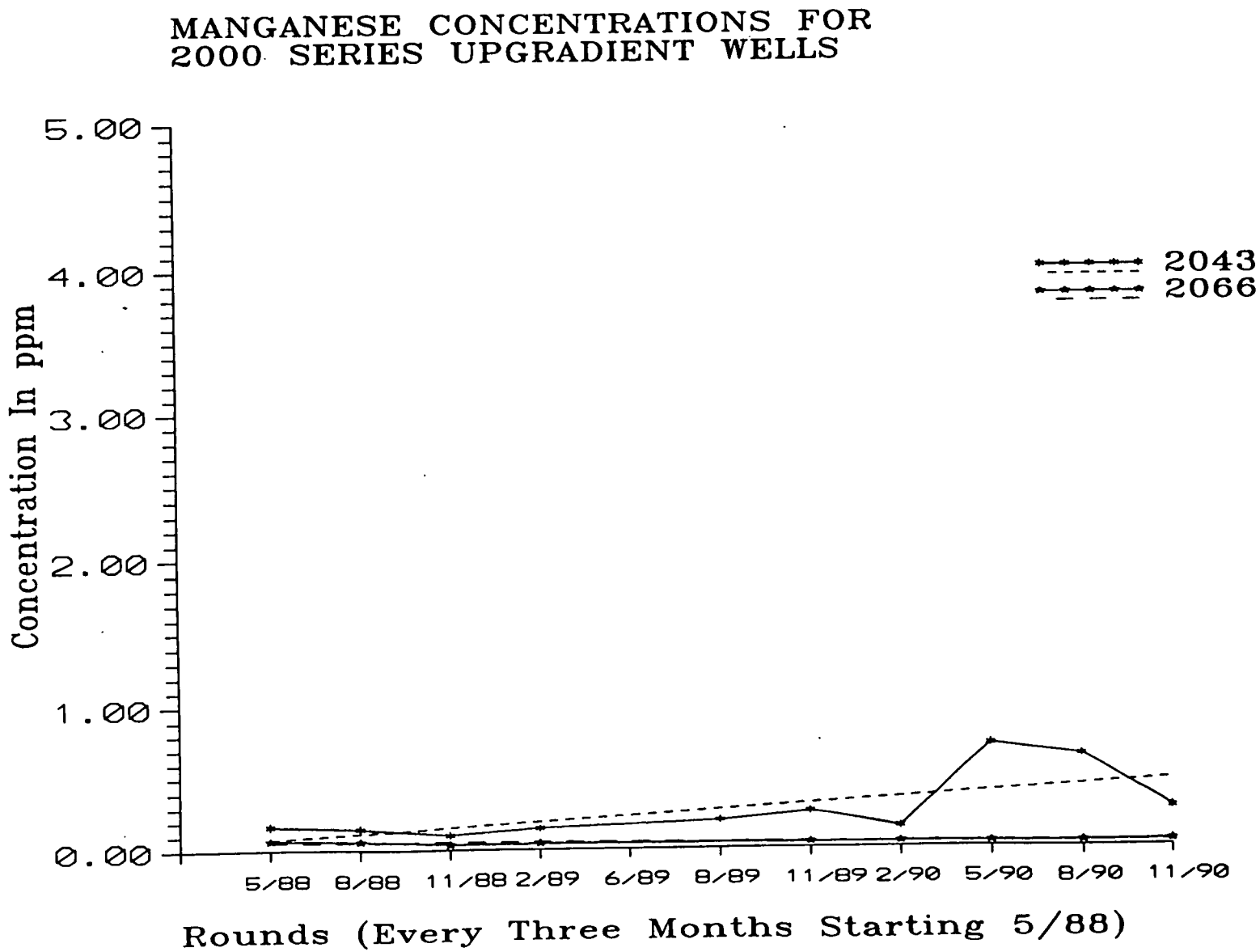

MANGANESE CONCENTRATIONS FOR
2000 SERIES UPGRADIENT WELLS
Concentration In ppm
5.00
4.00
3.00
2.00
1.00
0.00
2043
2066
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.102

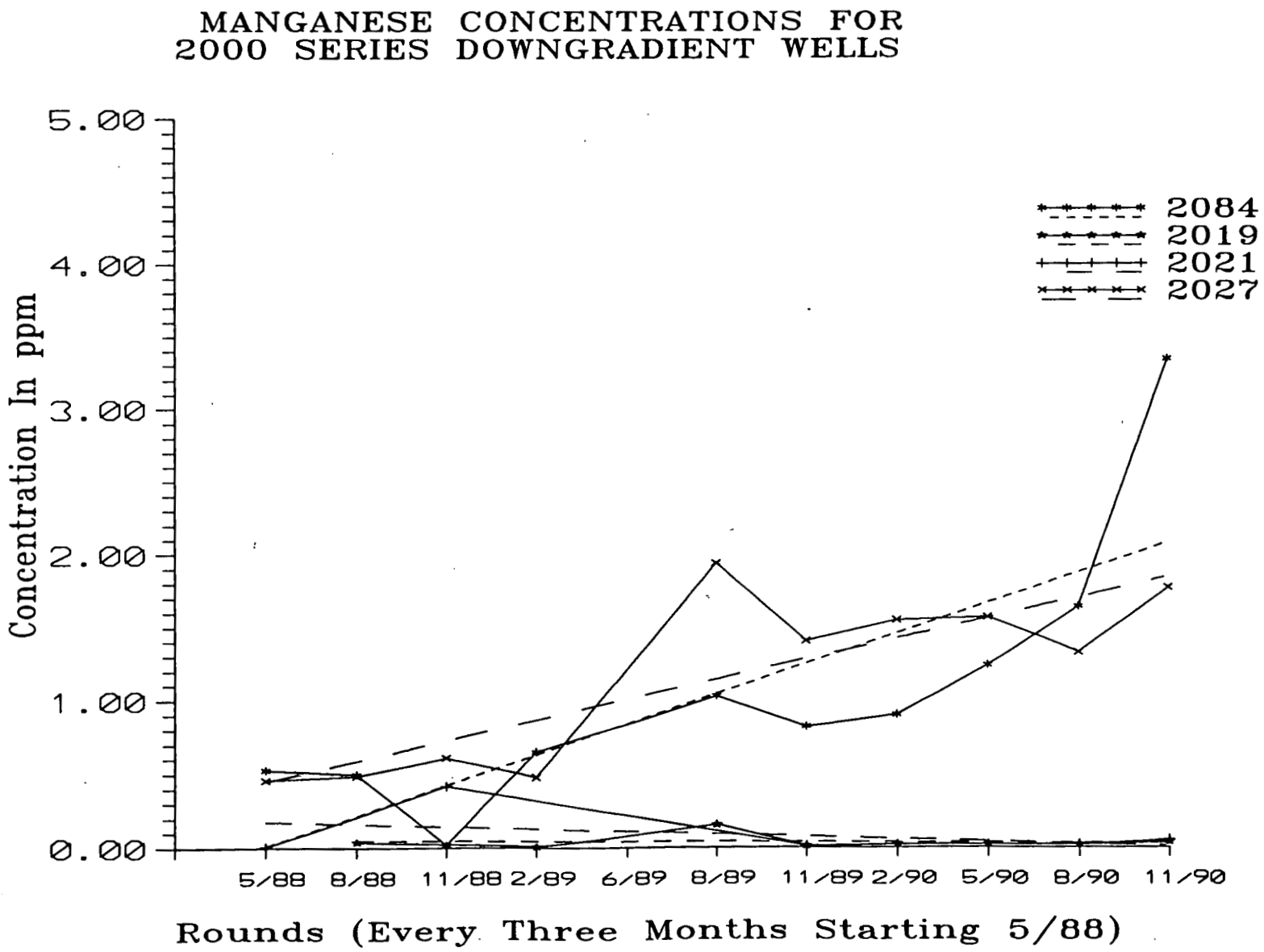

MANGANESE CONCENTRATIONS FOR
2000 SERIES DOWNGRADIENT WELLS
Concentration In ppm
5.00
4.00
3.00
2.00
1.00
0.00
2084
2019
2021
2027
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.103

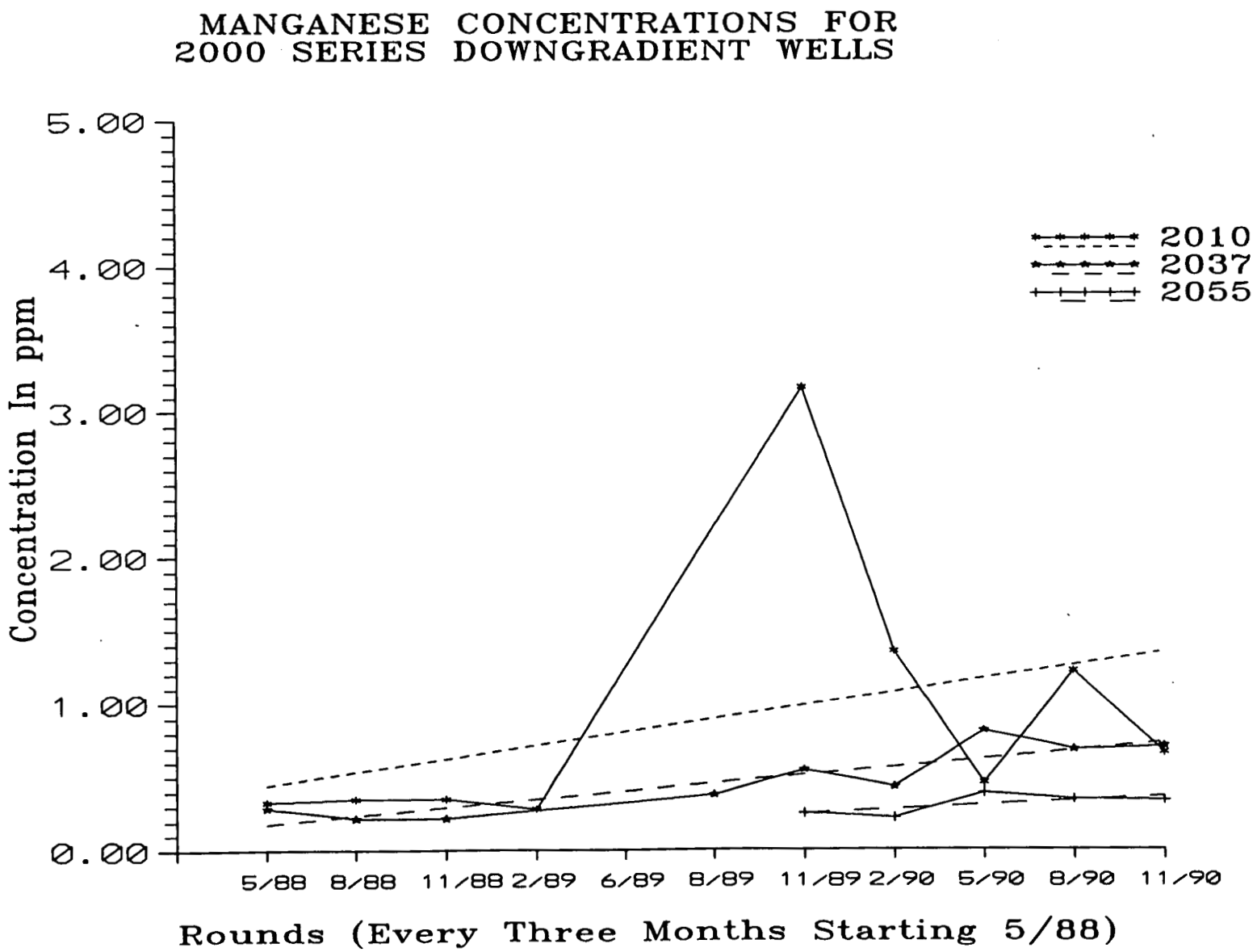

MANGANESE CONCENTRATIONS FOR
2000 SERIES DOWNGRADIENT WELLS
Concentration In ppm
5.00
4.00
3.00
2.00
1.00
0.00
2010
2037
2055
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.104

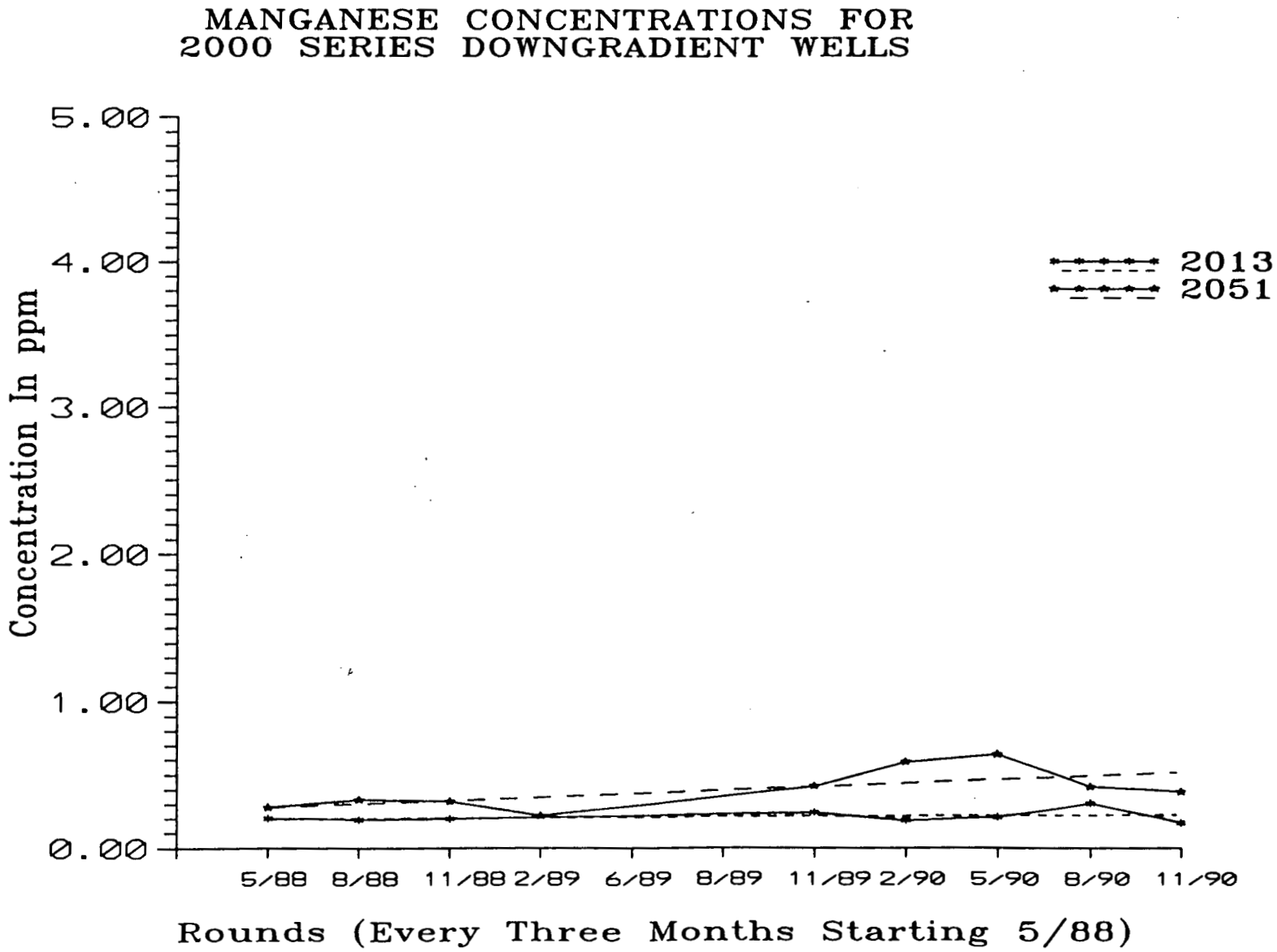

MANGANESE CONCENTRATIONS FOR
2000 SERIES DOWNGRADIENT WELLS
Concentration In ppm
5.00
4.00
3.00
2.00
1.00
0.00
2013
2051
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.105

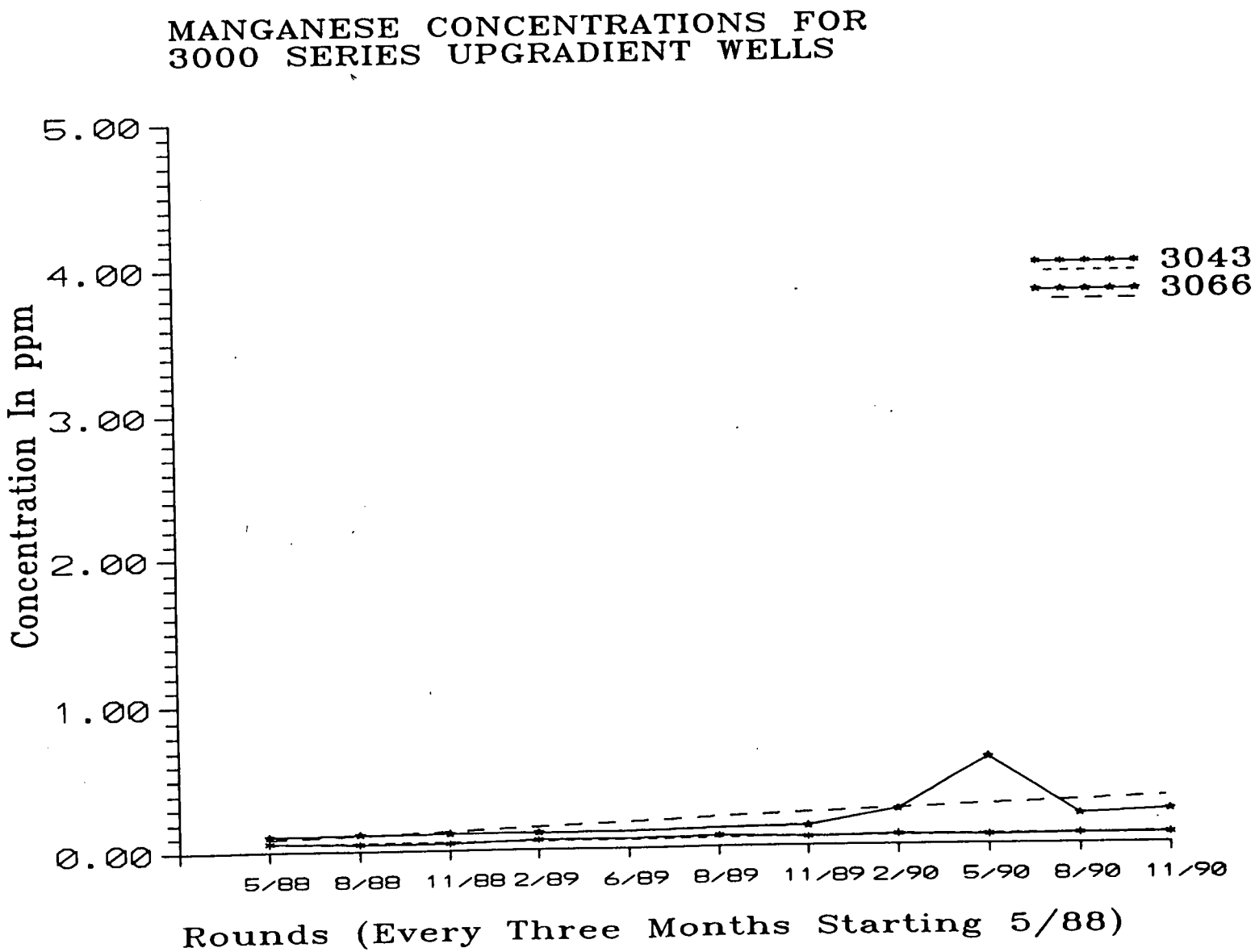

MANGANESE CONCENTRATIONS FOR
3000 SERIES UPGRADIENT WELLS
Concentration In ppm
5.00
4.00
3.00
2.00
1.00
0.00
3043
3066
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.106

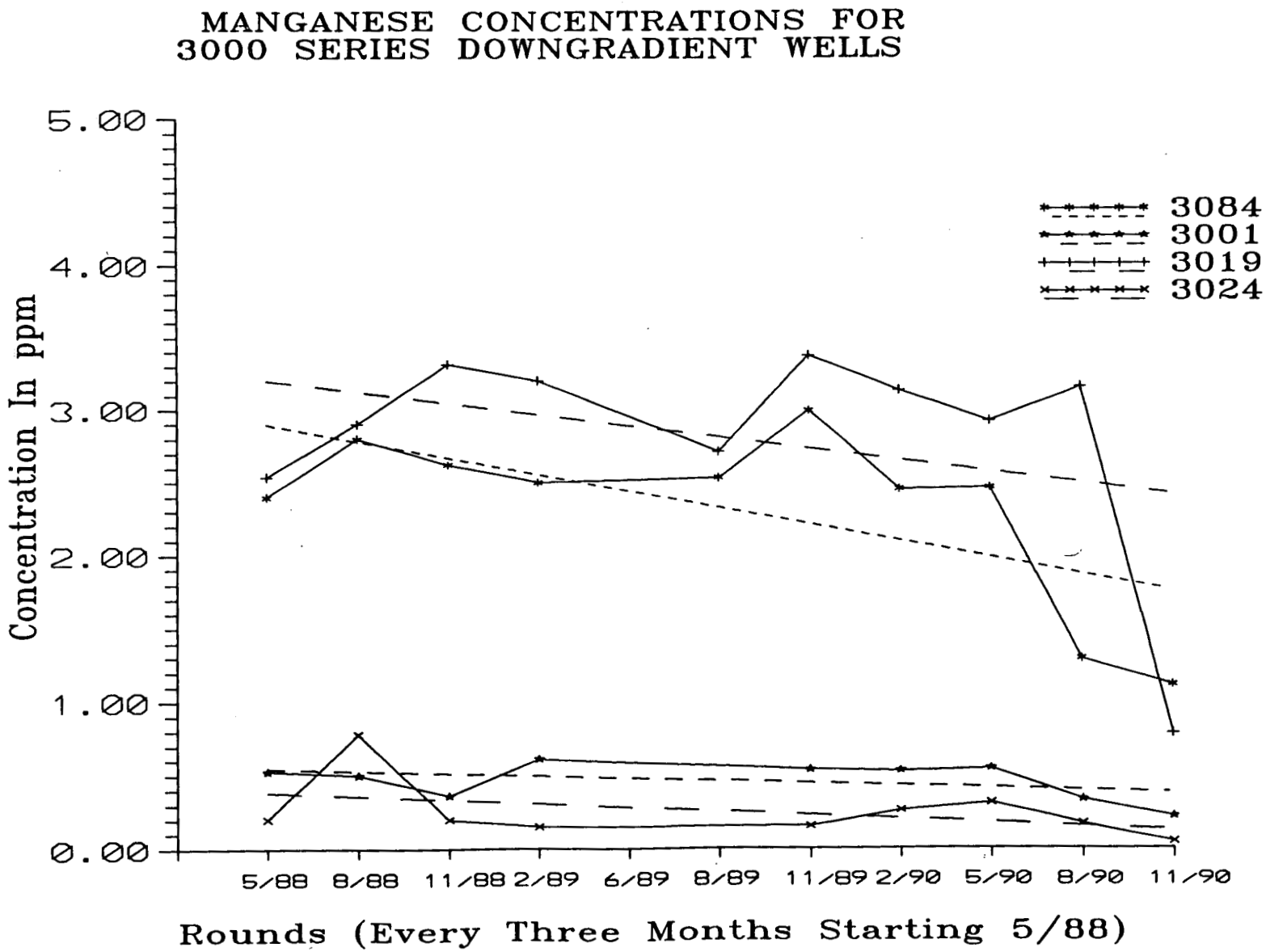

MANGANESE CONCENTRATIONS FOR
3000 SERIES DOWNGRADIENT WELLS
Concentration In ppm
5.00
4.00
3.00
2.00
1.00
0.00
3084
3001
3019
3024
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.107

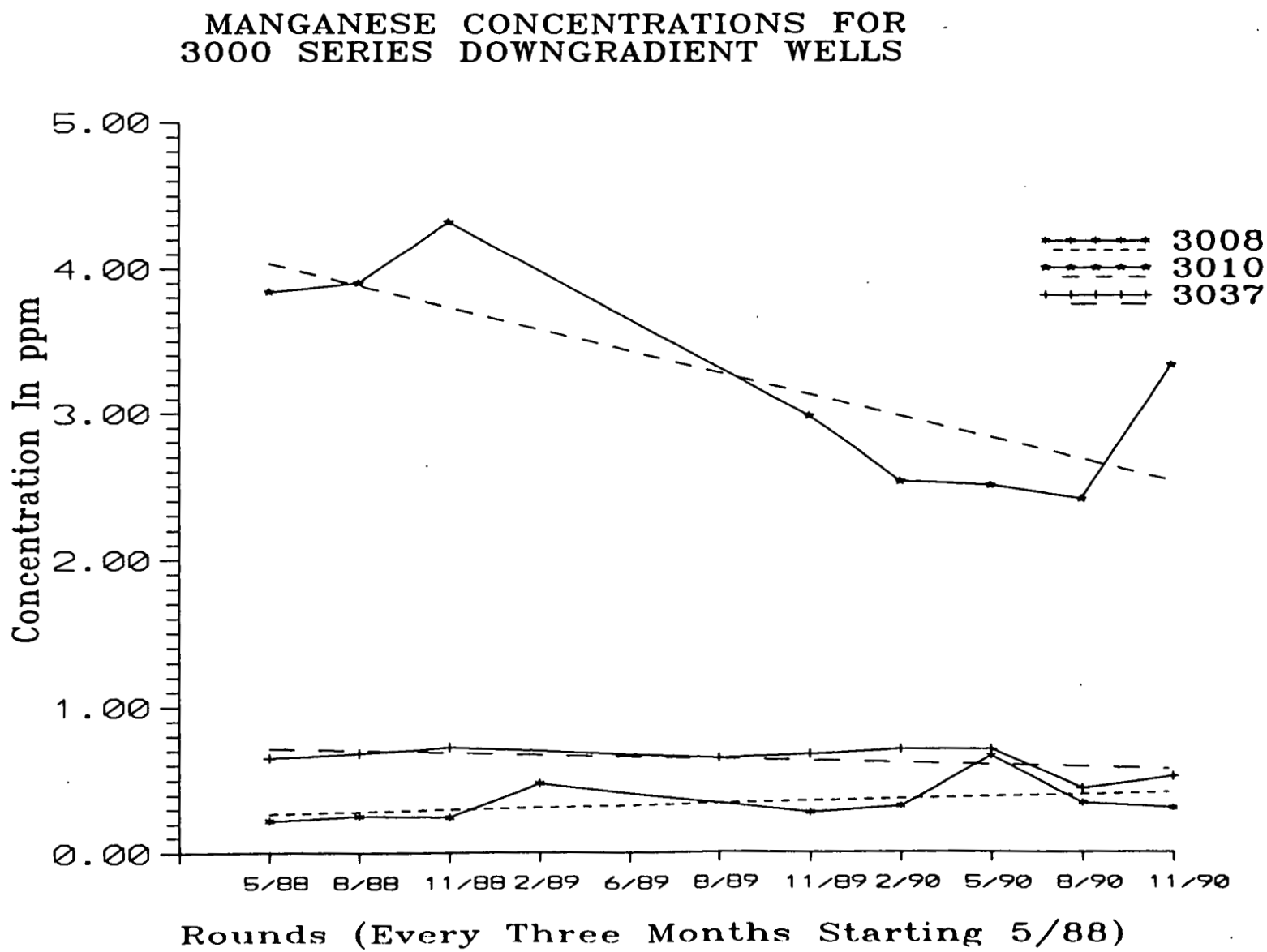

MANGANESE CONCENTRATIONS FOR
3000 SERIES DOWNGRADIENT WELLS
Concentration In ppm
5.00
4.00
3.00
2.00
1.00
0.00
3008
3010
3037
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.108

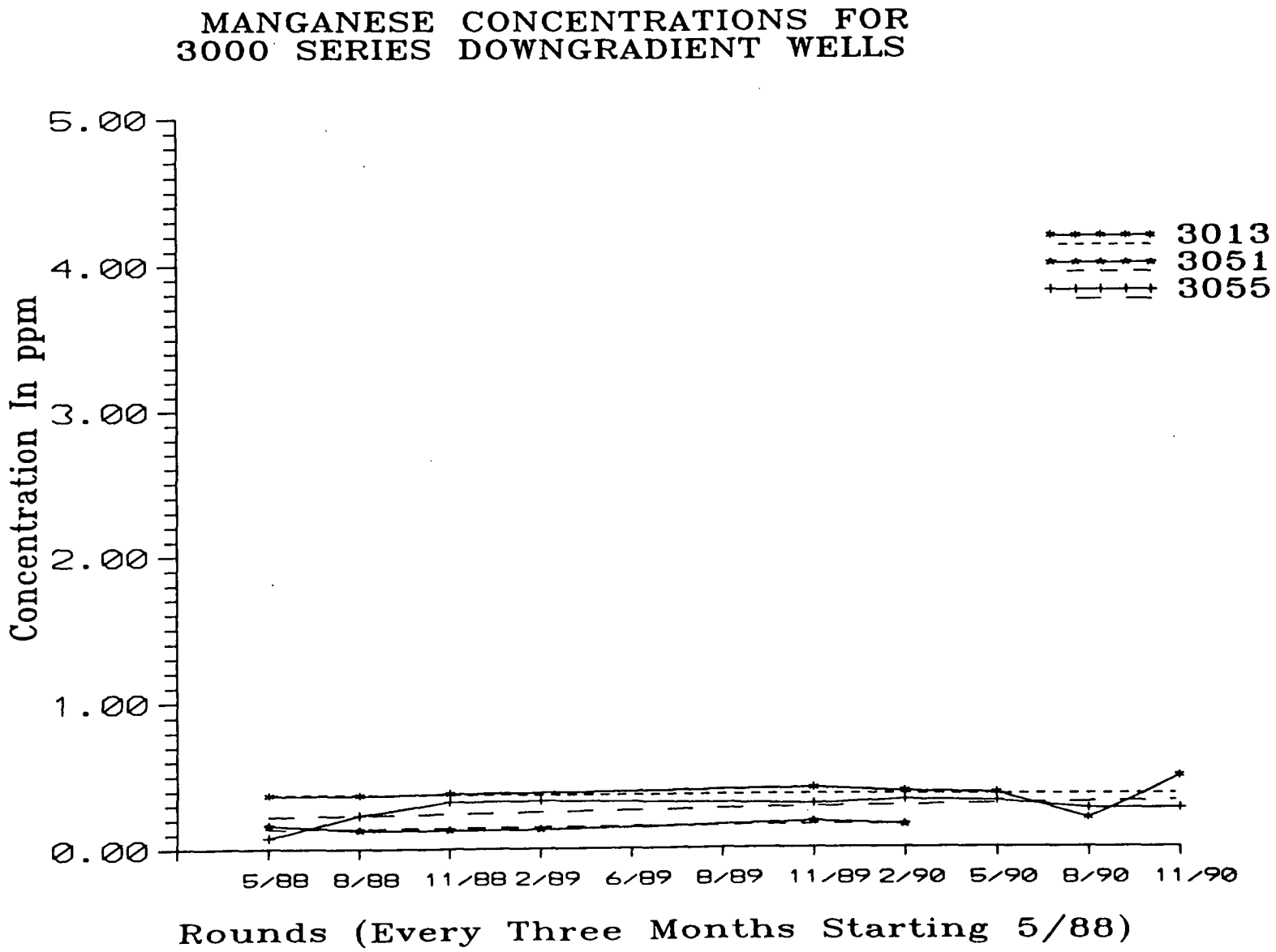

MANGANESE CONCENTRATIONS FOR
3000 SERIES DOWNGRADIENT WELLS
Concentration In ppm
5.00
4.00
3.00
2.00
1.00
0.00
3013
3051
3055
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.109

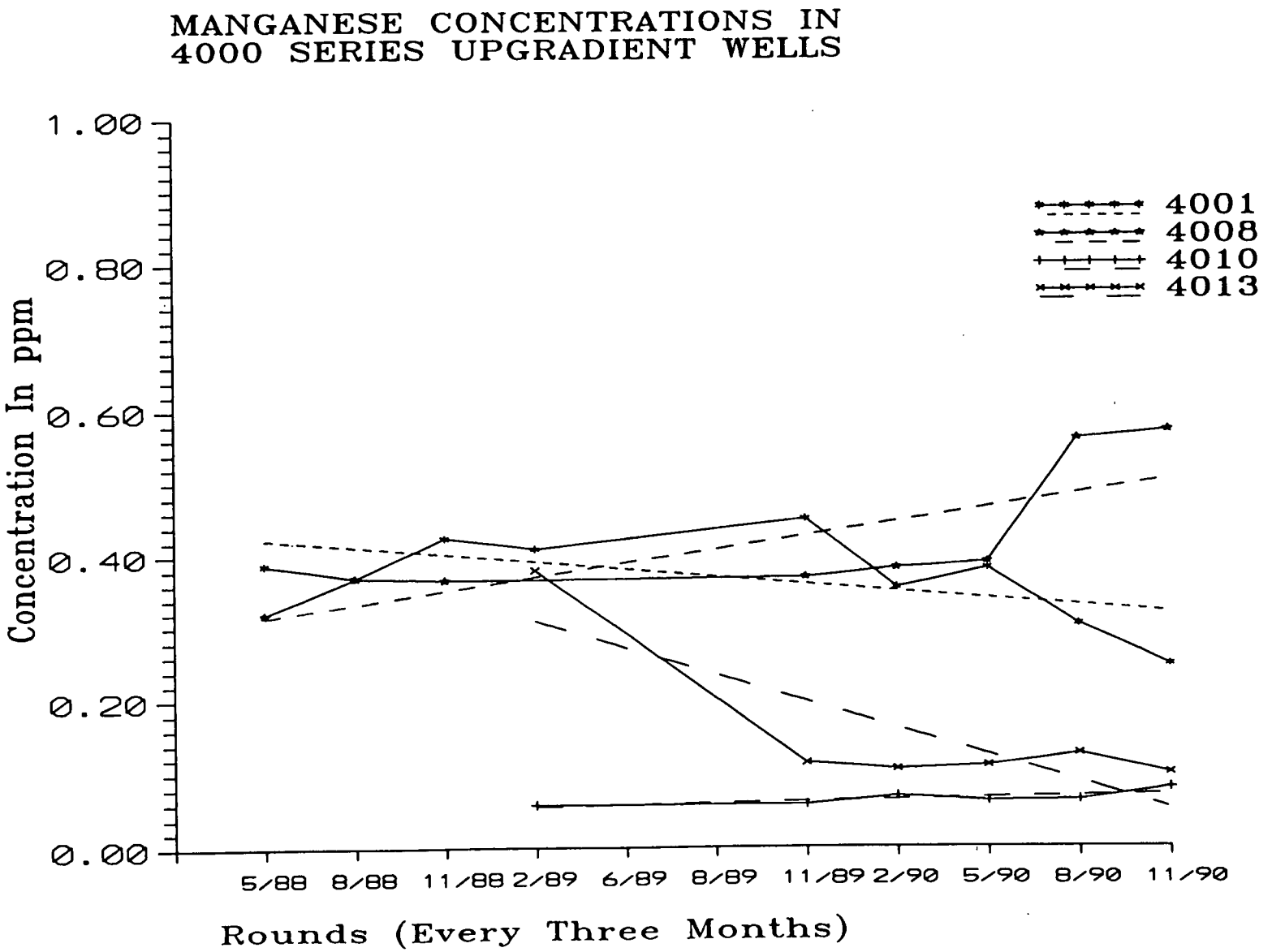

MANGANESE CONCENTRATIONS IN
4000 SERIES UPGRADIENT WELLS
Concentration In ppm
1.00
0.80
0.60
0.40
0.20
0.00
4001
4008
4010
4013
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months)

Figure 3.110

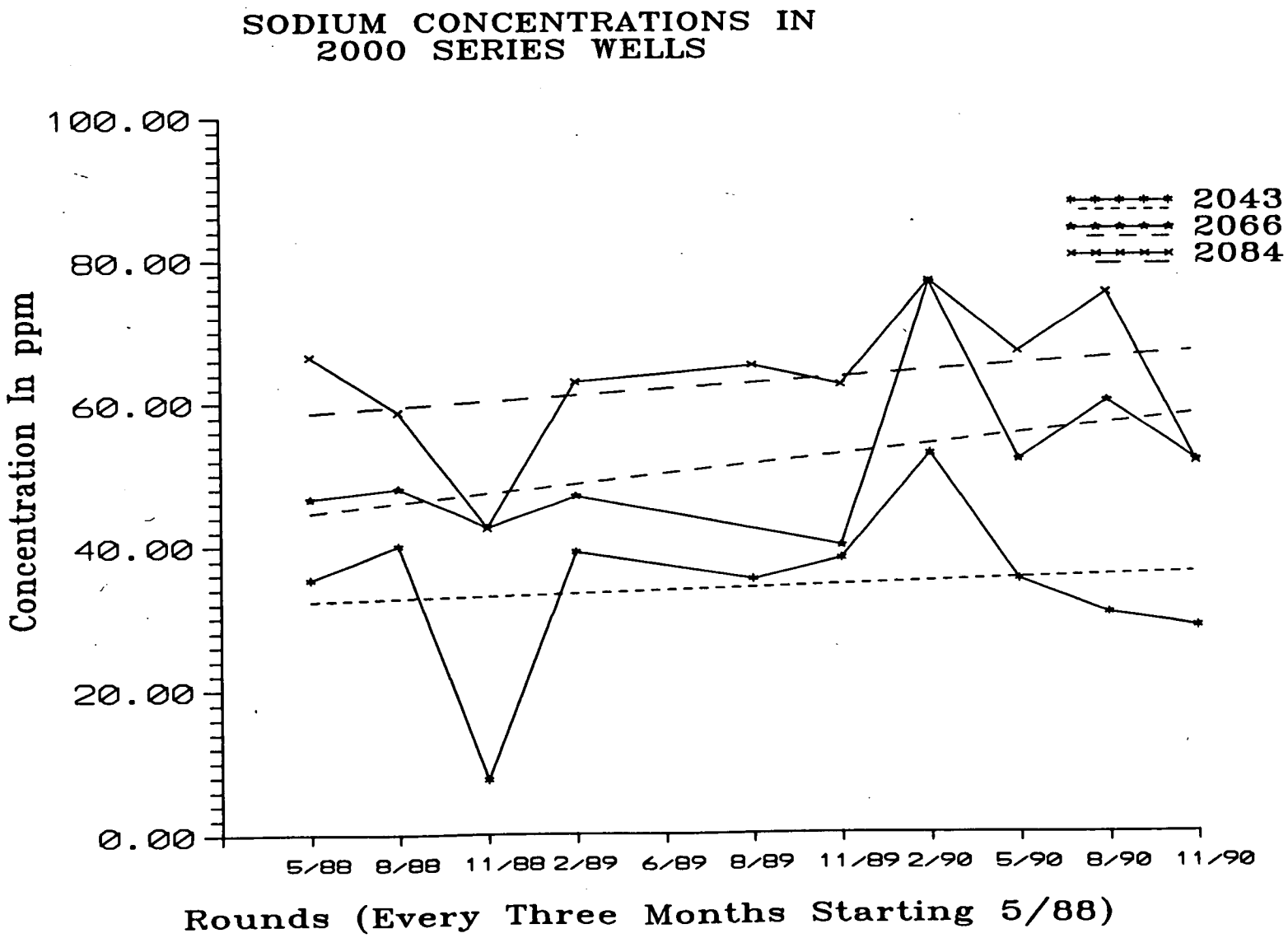

SODIUM CONCENTRATIONS IN
2000 SERIES WELLS
100.00
80.00
60.00
40.00
20.00
0.00
Concentration In ppm
2043
2066
2084
5/88
8/88
11/88
2/89
6/89
8/89
11/89
2/90
5/90
8/90
11/90
Rounds (Every Three Months Starting 5/88)

Figure 3.111

Conductivity Contour Map For 2000 Series Wells As Of May, 1990

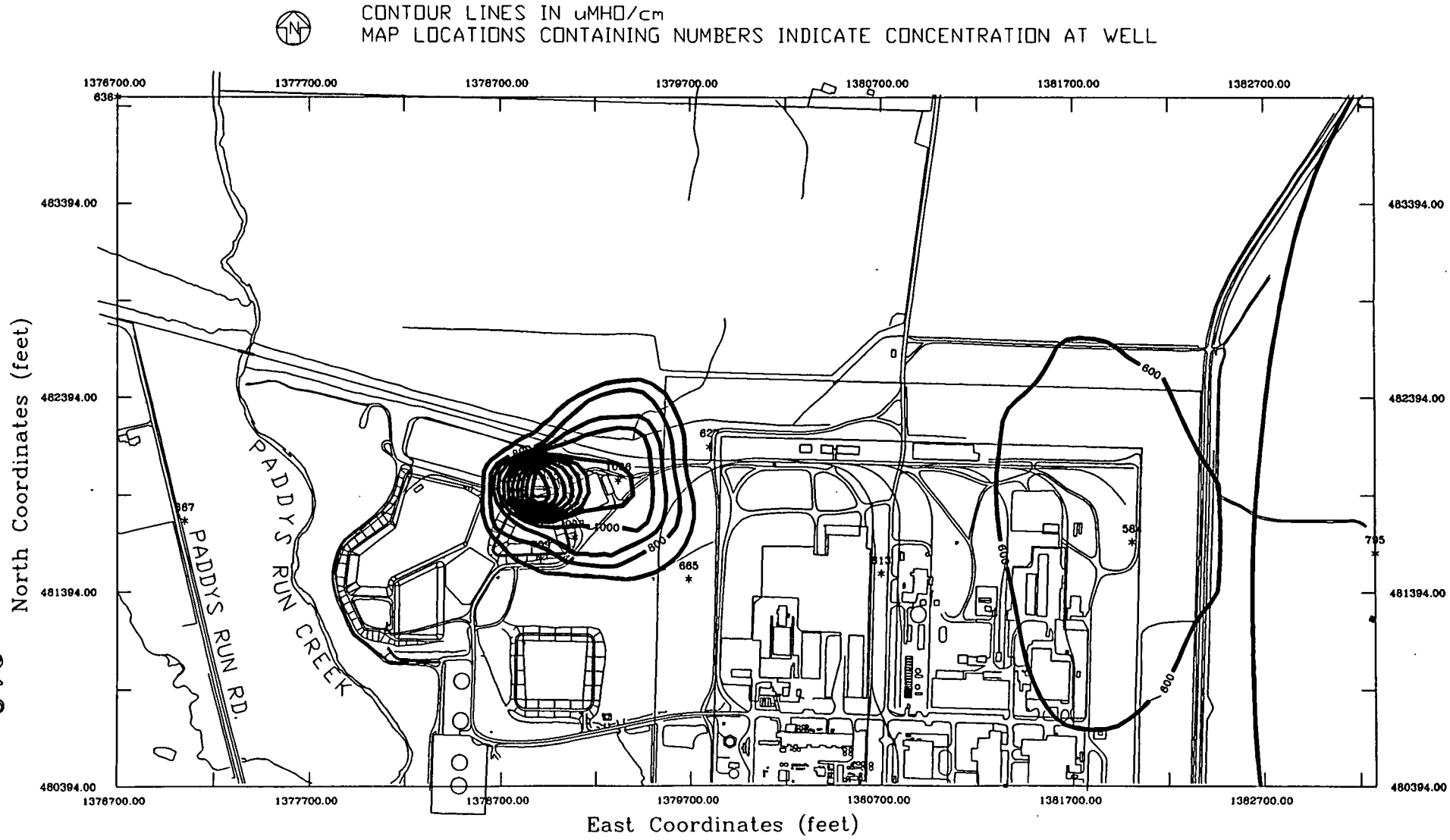


Figure 3.112

Conductivity Contour For 2000 Series Wells As Of November, 1990

CONTOUR LINES IN uMHO/cm
MAP LOCATIONS CONTAINING NUMBERS INDICATE CONCENTRATION AT WELL

Figure 3.113

Conductivity Contour Map For 3000 Series Wells As Of May, 1990

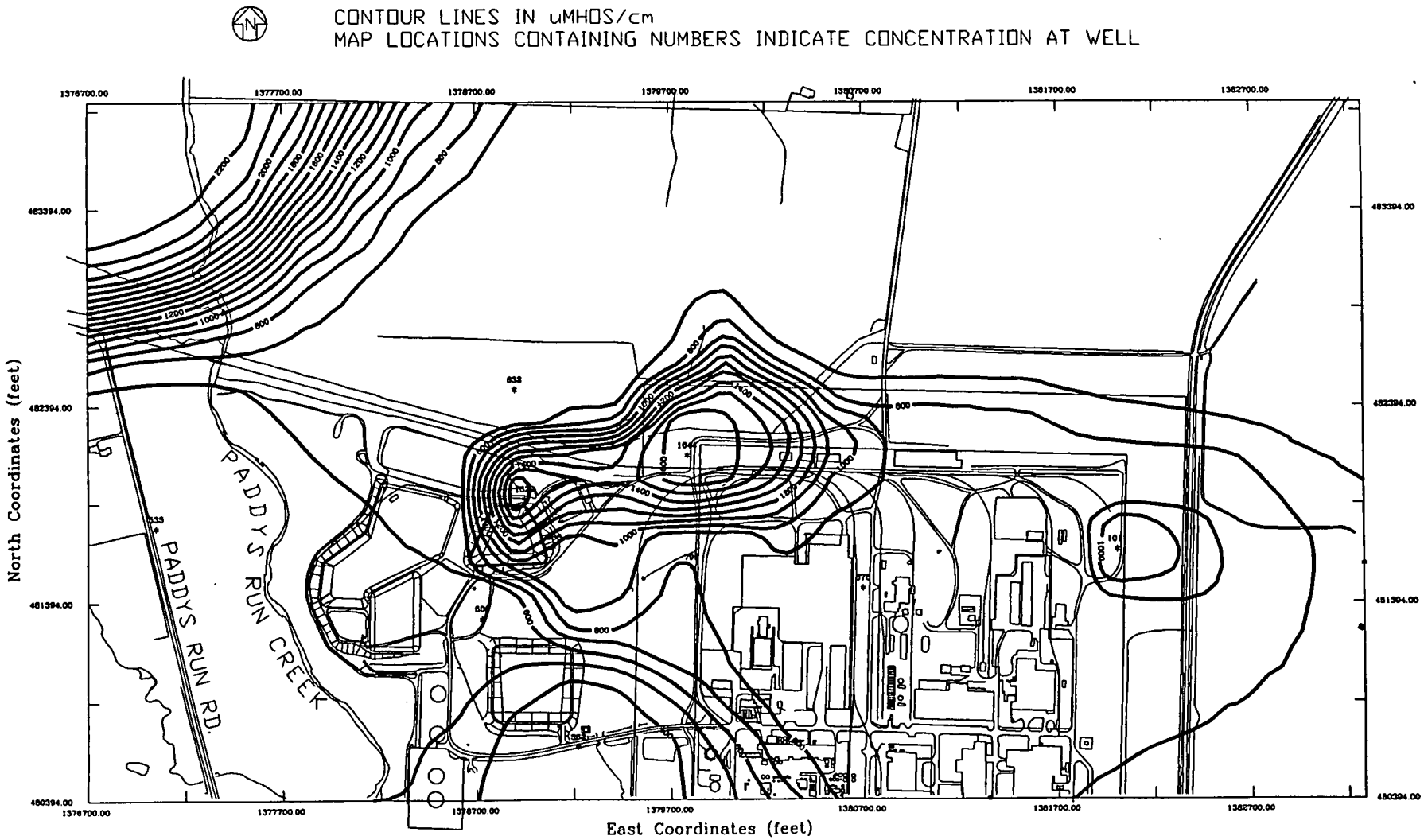


Figure 3.114

Conductivity Contour Map For 3000 Series Wells As Of November, 1990

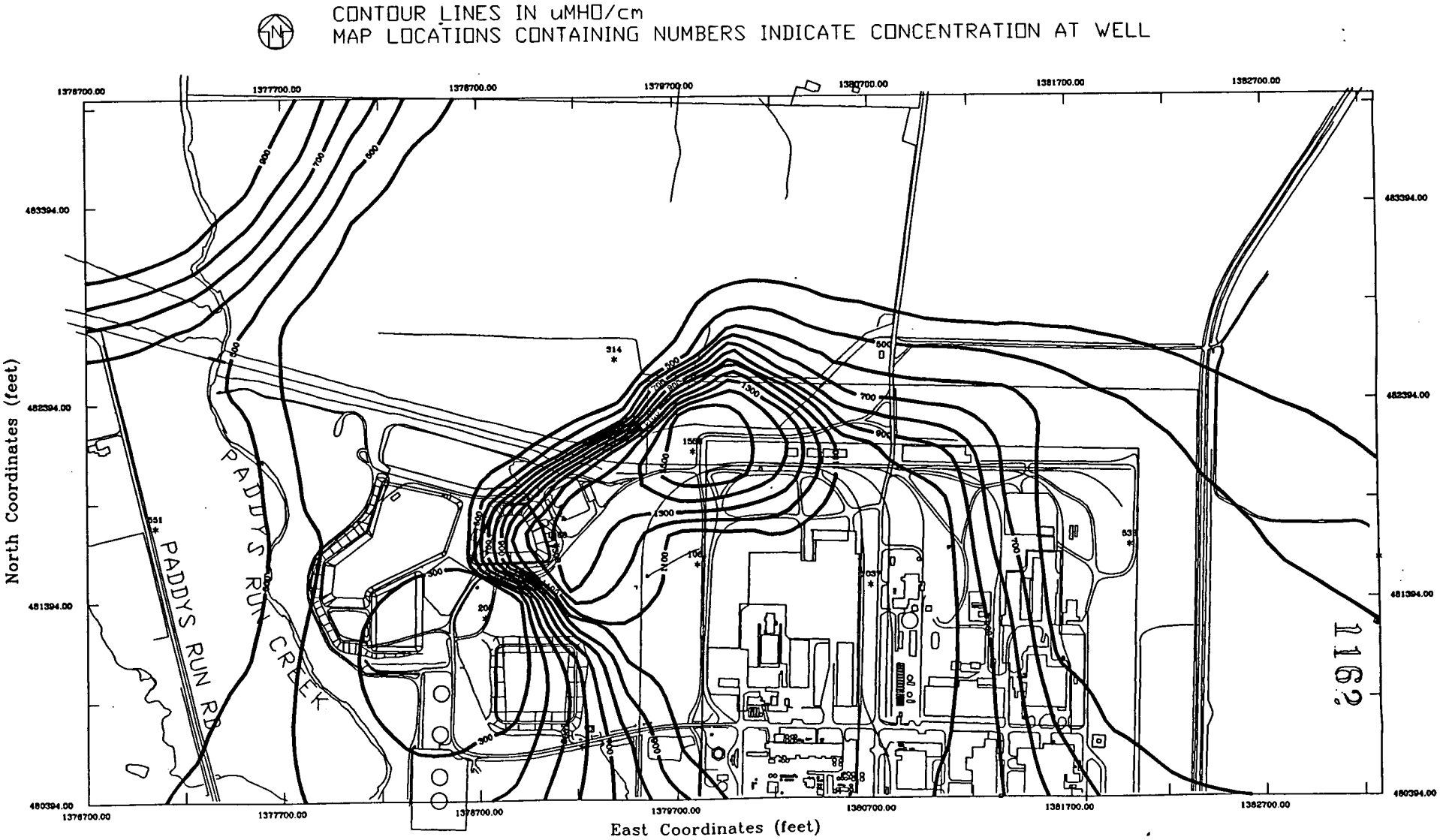


Figure 3.115

pH Contour Map For 2000 Series Wells As Of May, 1990

CONTOUR LINES IN STANDARD UNITS
MAP LOCATIONS CONTAINING NUMBERS INDICATE CONCENTRATION AT WELL

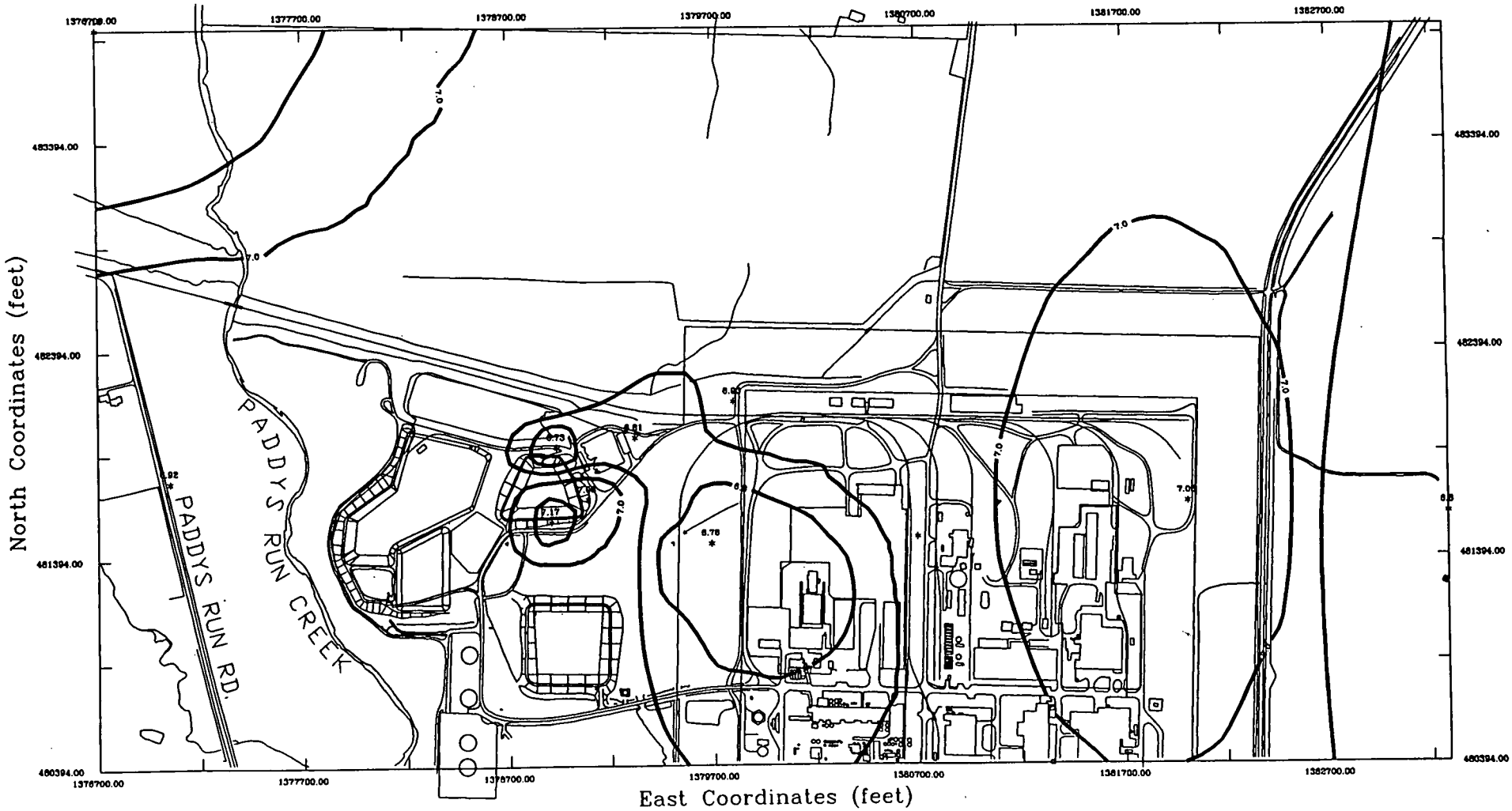


Figure 3.116

pH Contour Map For 2000 Series Wells As Of November, 1990

CONTOUR LINES IN STANDARD UNITS
MAP LOCATIONS CONTAINING NUMBERS INDICATE CONCENTRATION AT WELL

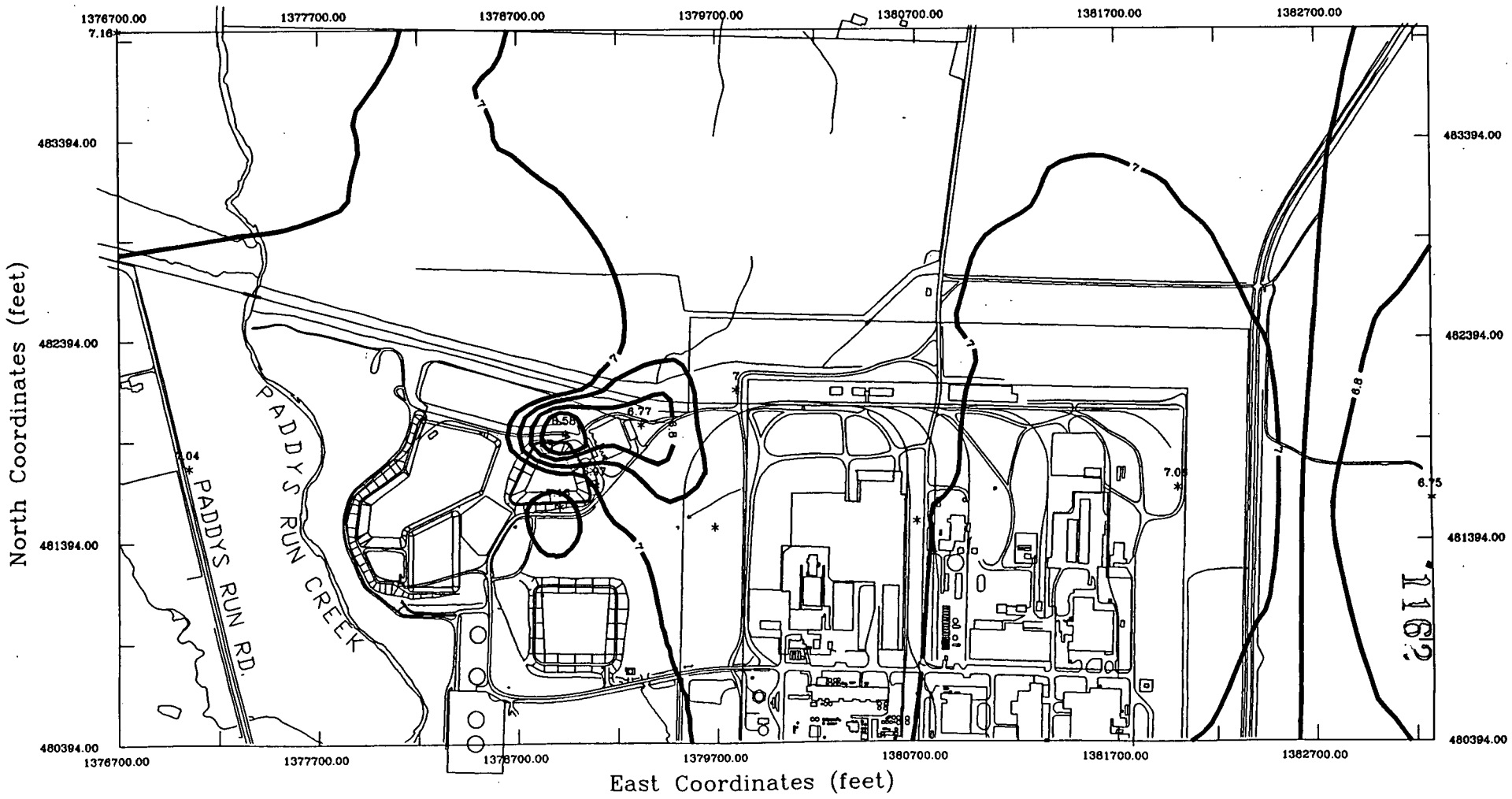


Figure 3.117

pH Contour Map For 3000 Series Wells As Of May, 1990

CONTOUR LINES IN STANDARD UNITS
MAP LOCATIONS CONTAINING NUMBERS INDICATE CONCENTRATION AT WELL

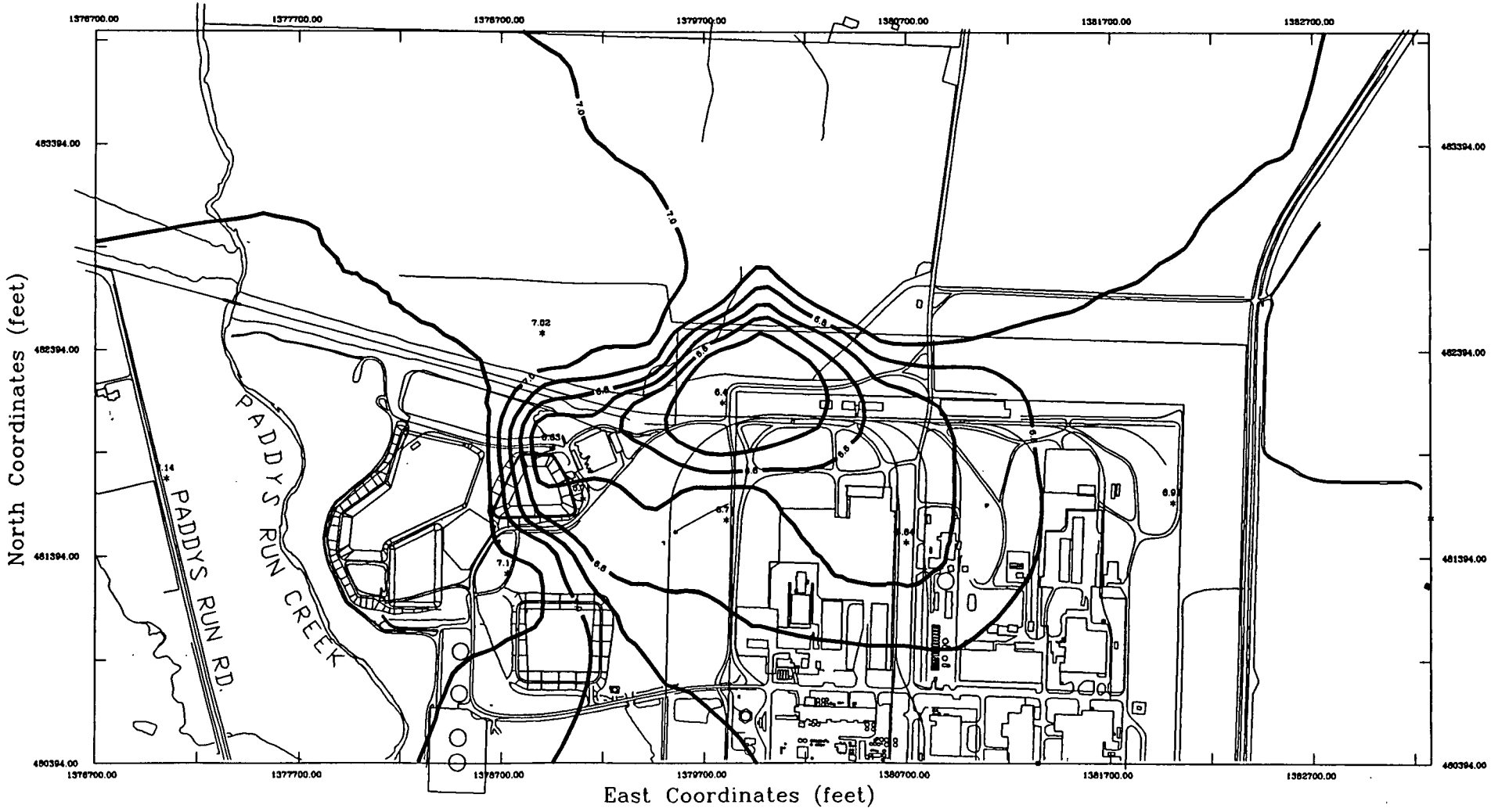


Figure 3.118

pH Contour Map For 3000 Series Wells As Of November, 1990

CONTOURS IN STANDARD UNITS
MAP LOCATIONS CONTAINING NUMBERS INDICATE CONCENTRATION AT WELL

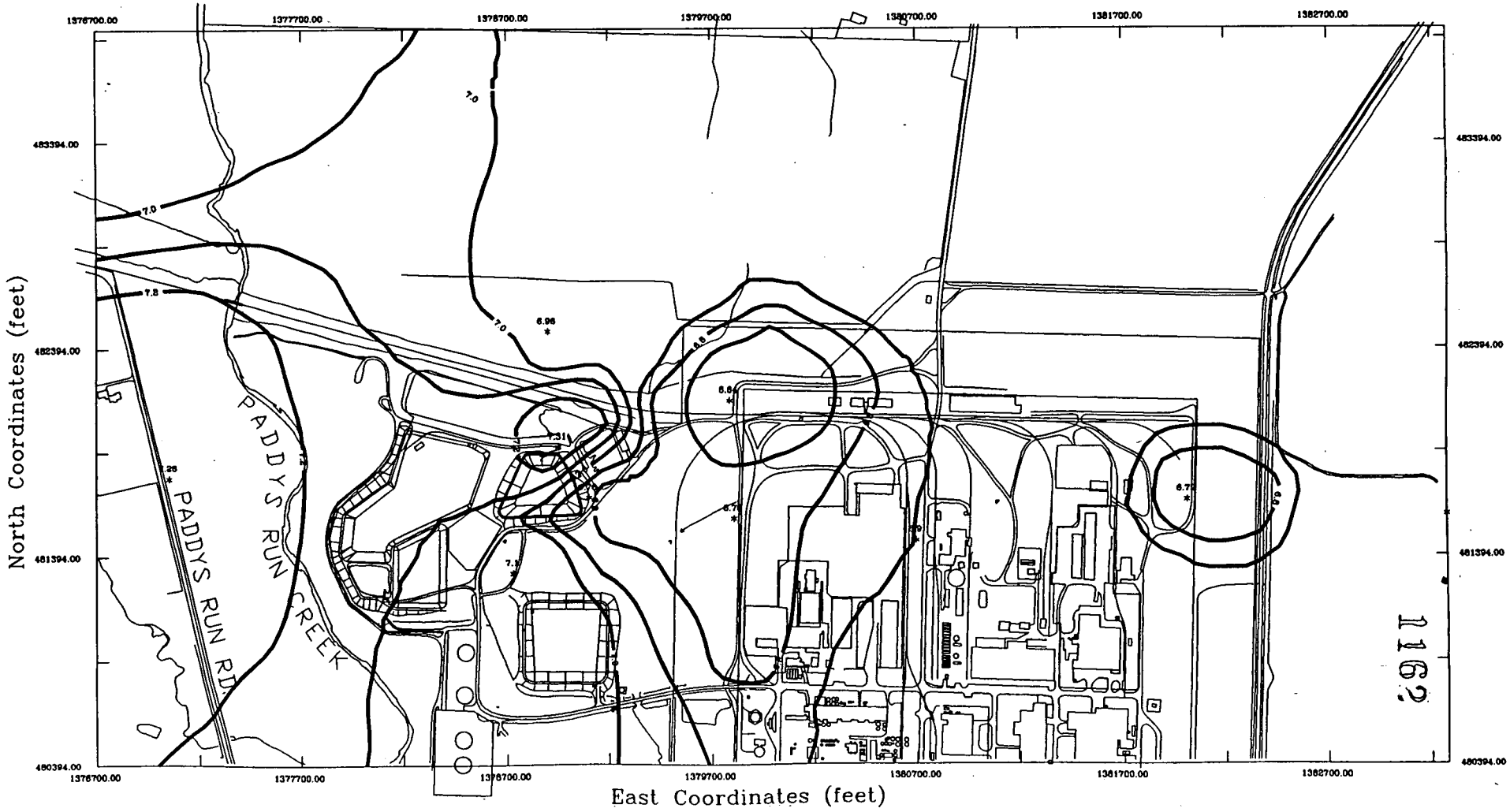


Figure 3.119

Sulfate Contour Map For 2000 Series Wells As Of November, 1990

CONCENTRATION LINES EVERY 100 PPM
MAP LOCATIONS CONTAINING NUMBERS INDICATE CONCENTRATION AT WELL

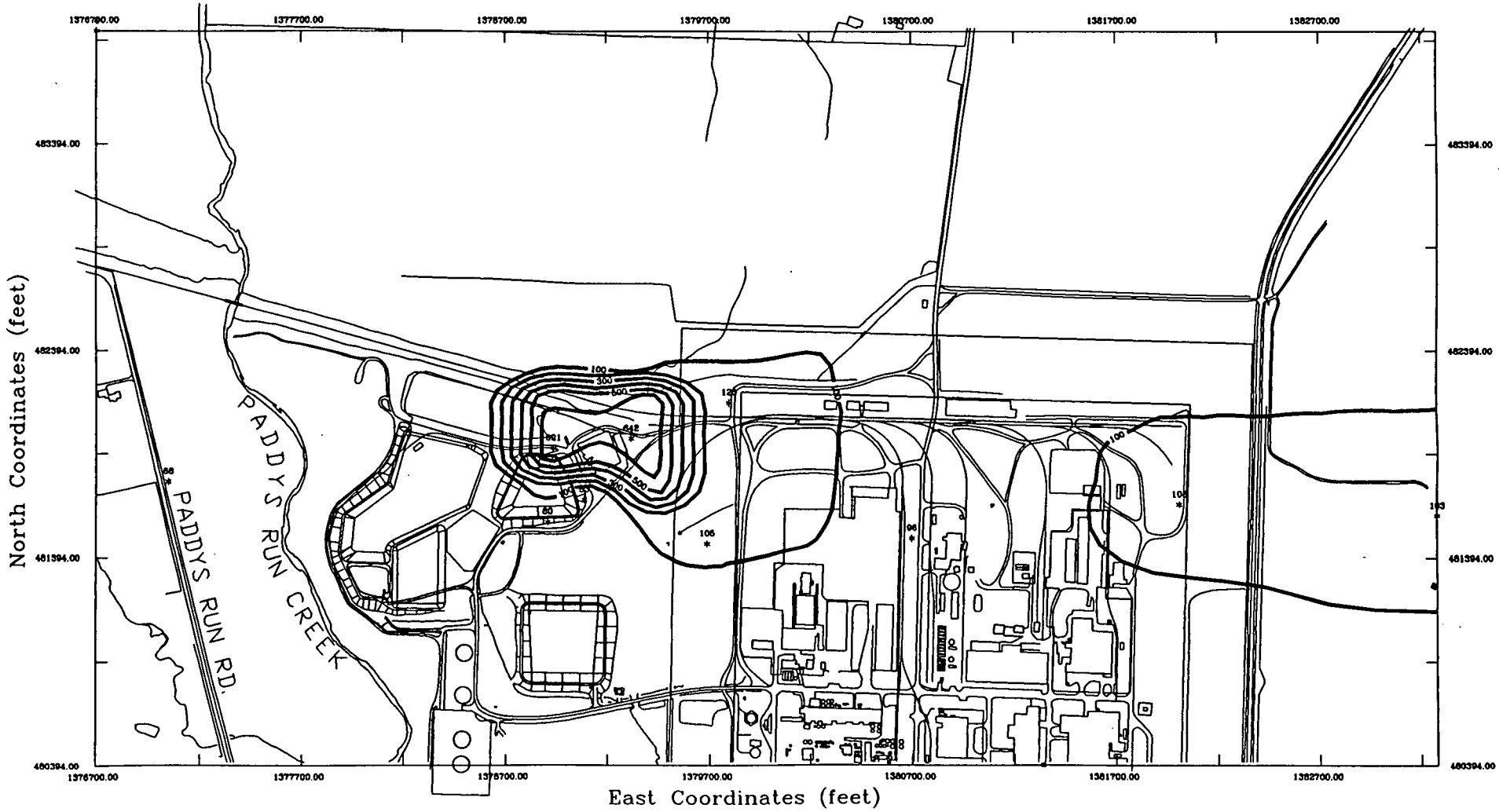


Figure 3.120

Sulfate Contour Map For 3000 Series Wells As Of November, 1990

CONCENTRATION LINES EVERY 50 PPM
MAP LOCATIONS CONTAINING NUMBERS INDICATE CONCENTRATION AT WELL

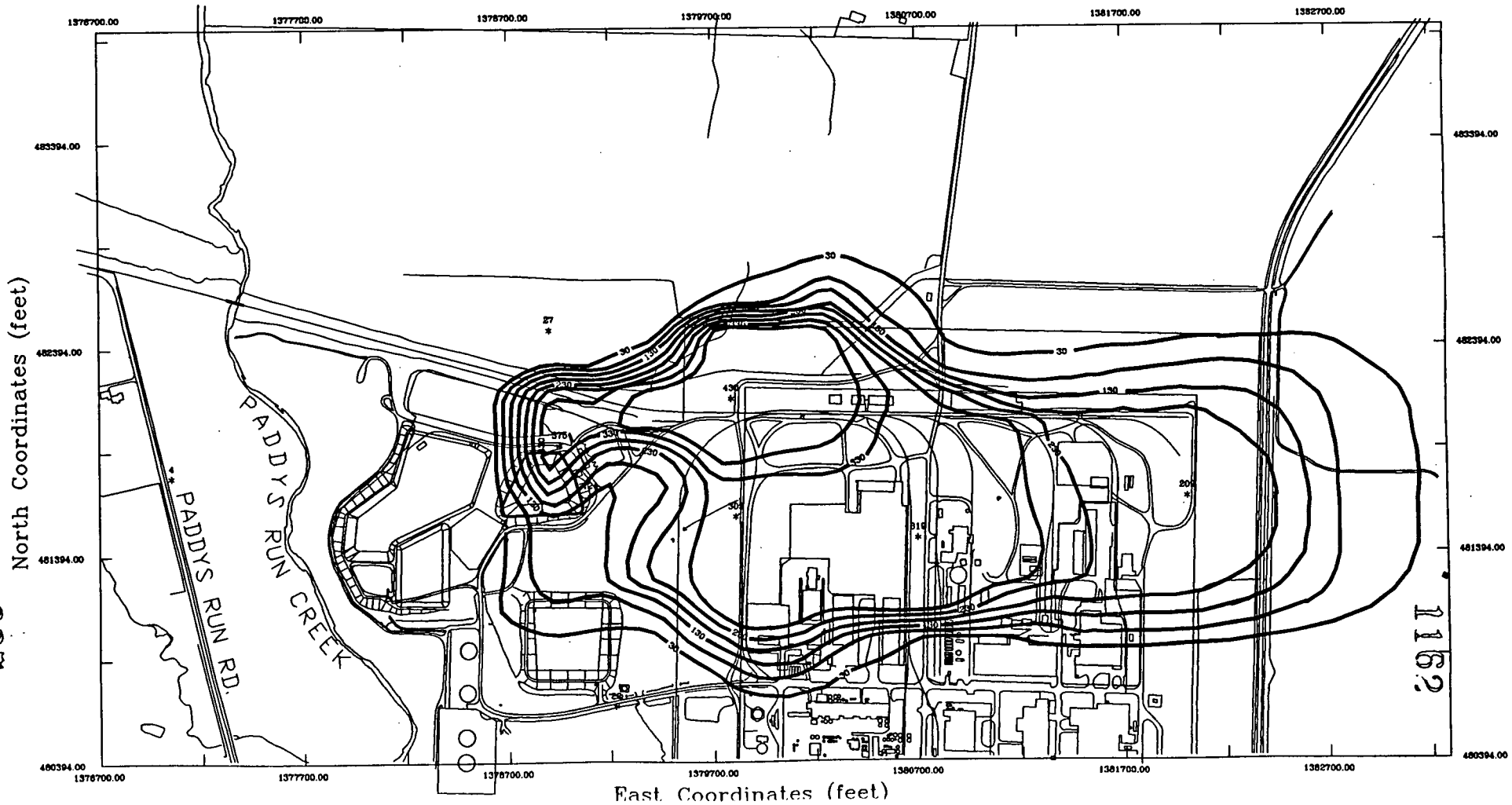


Figure 3.121A

Vertical Cross Section Of Aquifer

Showing Sulfate Concentrations In ppm

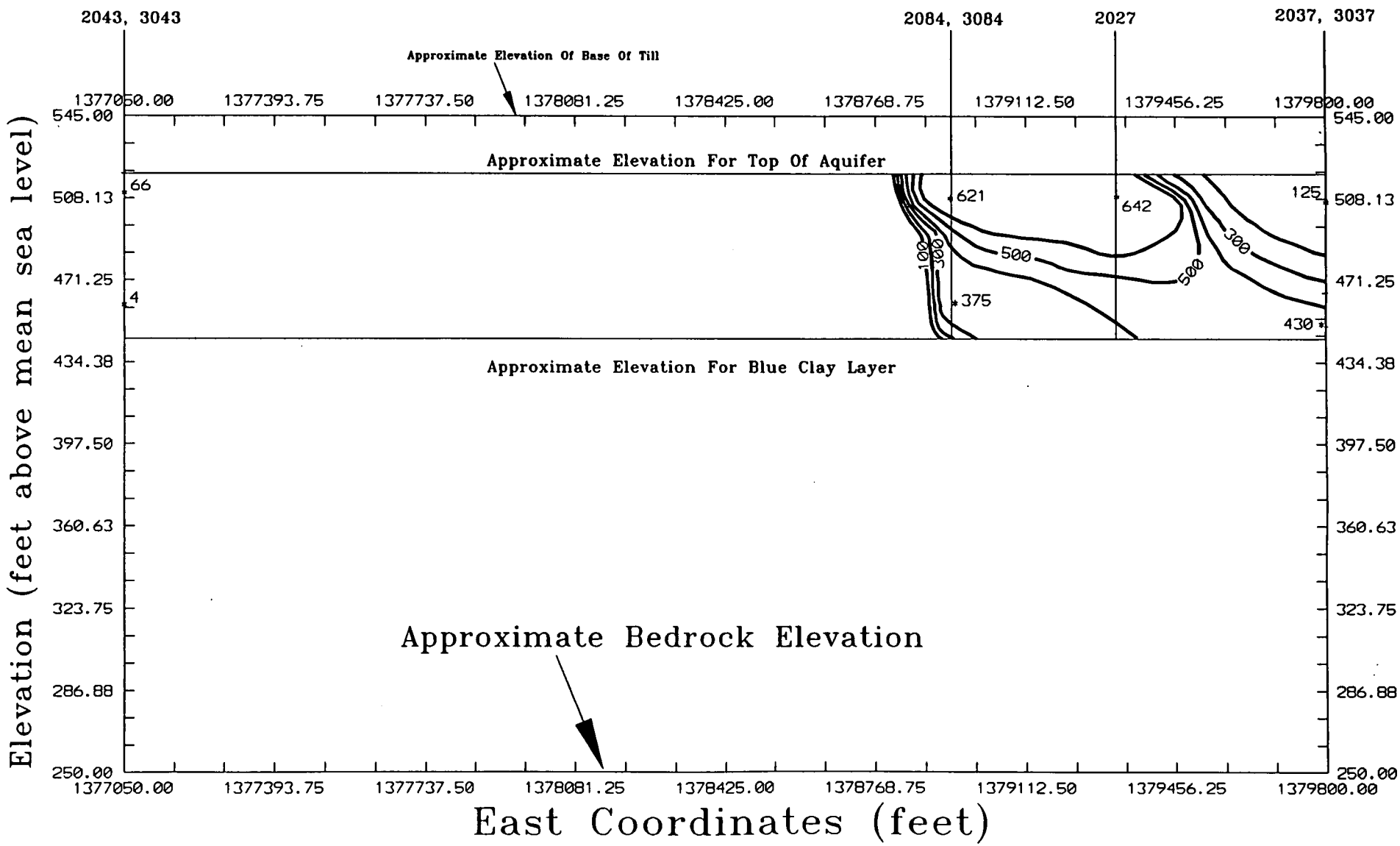


Figure 3.121B

Aquifer Cross Section Orientation

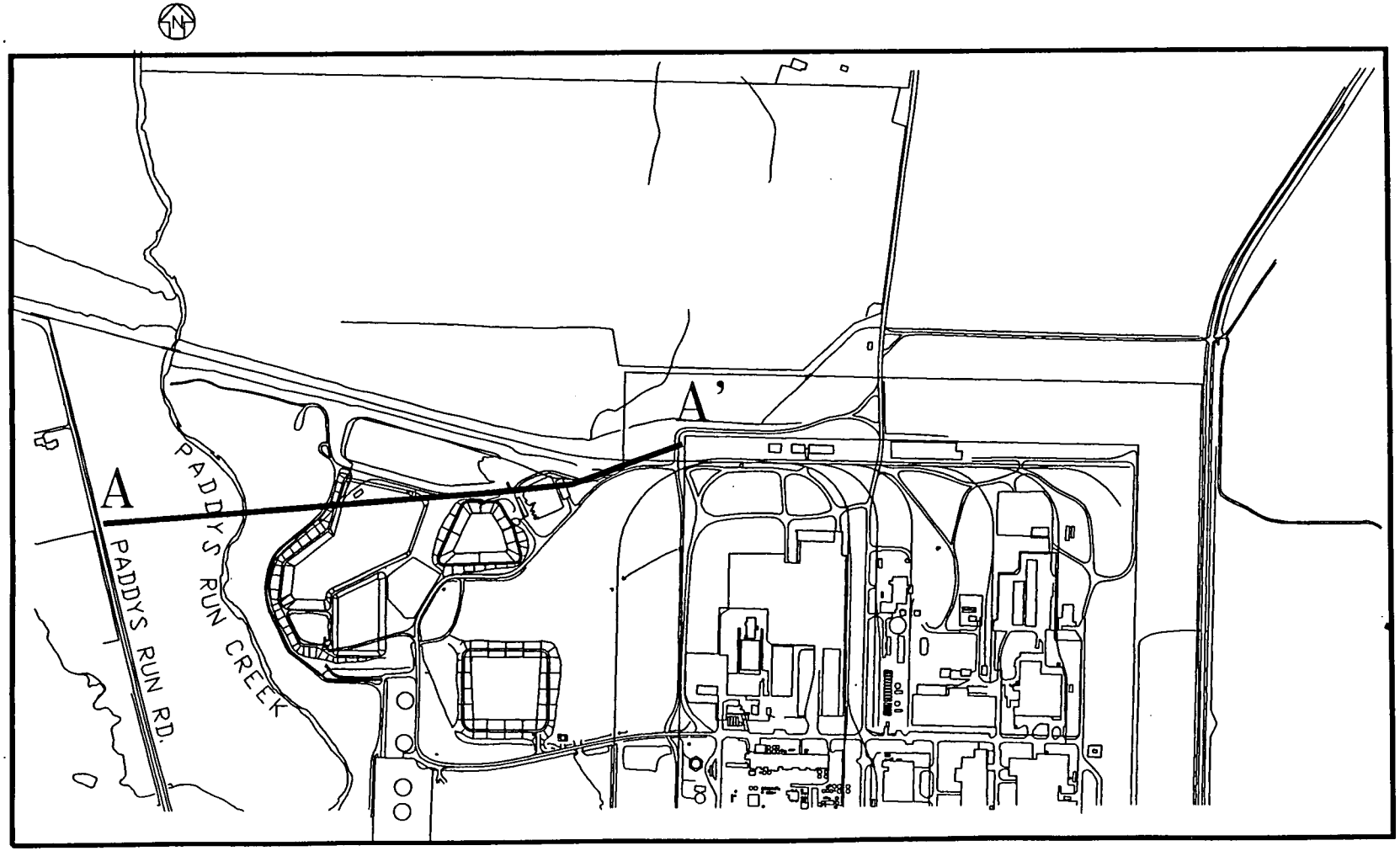


Figure 3.122

Nitrate Contour Map For 3000 Series Wells As Of November, 1990

CONTOUR LINES EVERY 0.5 PPM
MAP LOCATIONS CONTAINING NUMBERS INDICATE CONCENTRATION AT WELL

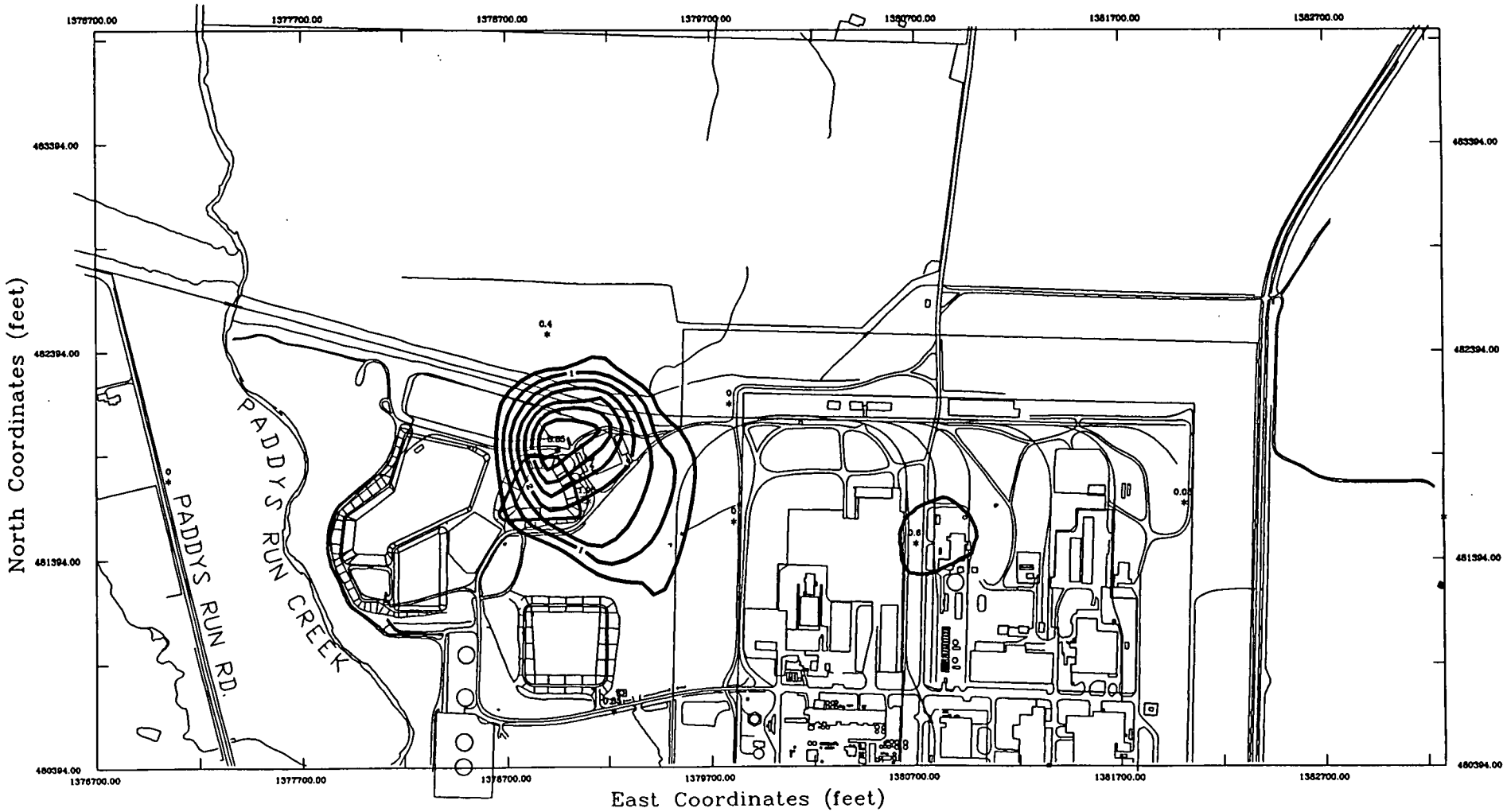


Figure 3.122

Nitrate Contour Map For 3000 Series Wells As Of November, 1990

CONTOUR LINES EVERY 0.5 PPM
MAP LOCATIONS CONTAINING NUMBERS INDICATE CONCENTRATION AT WELL

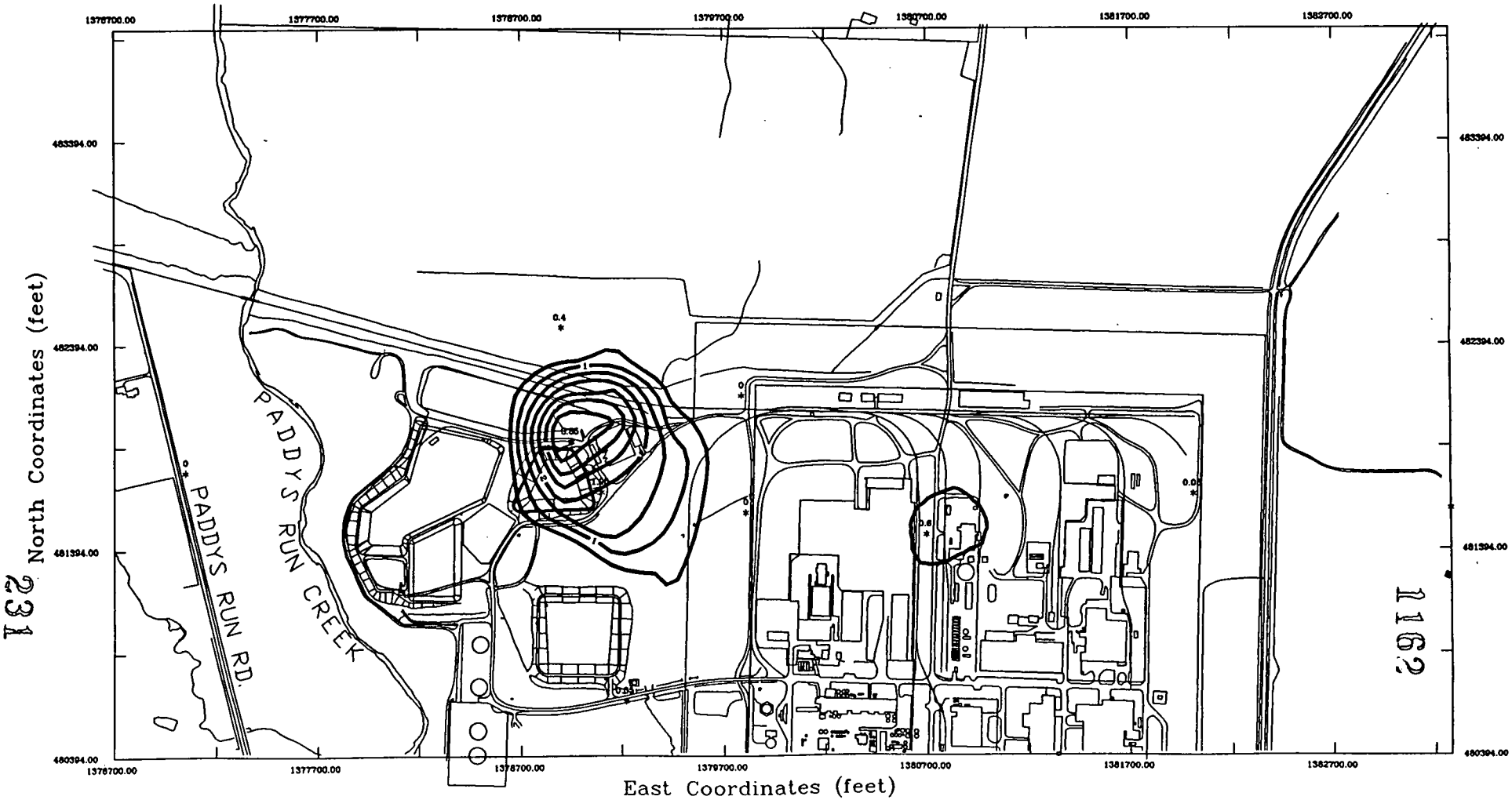


Figure 3.123

Nitrate Contour Map For 2000 Series Wells As Of November, 1990

CONTOUR LINES EVERY 1 PPM
MAP LOCATIONS CONTAINING NUMBERS INDICATE CONCENTRATION AT WELL

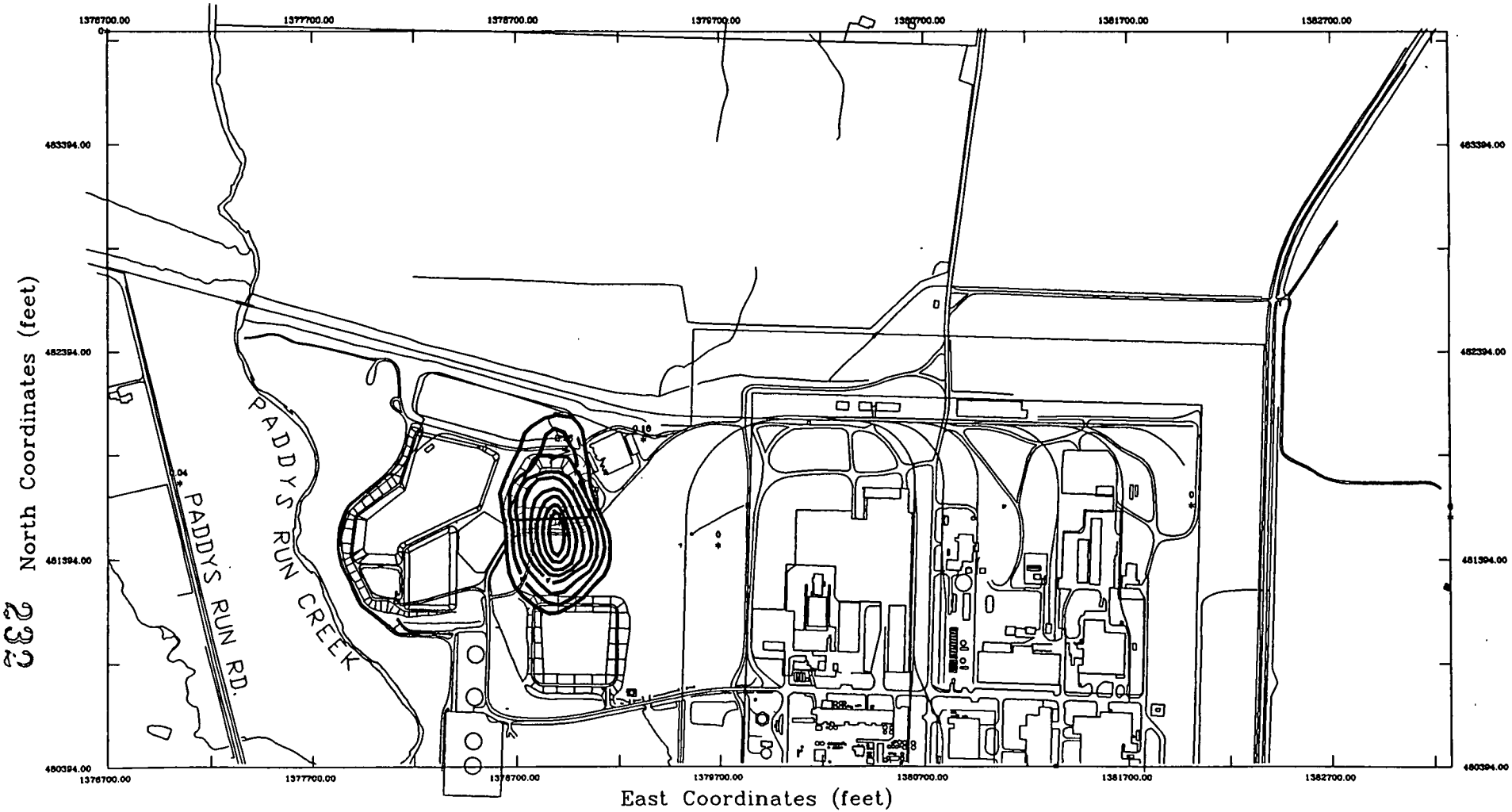


Figure 3.124

Calcium Contour Map For 2000 Series Wells As Of November, 1990

CONTOUR LINES EVERY 25 PPM
MAP LOCATIONS CONTAINING NUMBERS INDICATE CONCENTRATION AT WELL

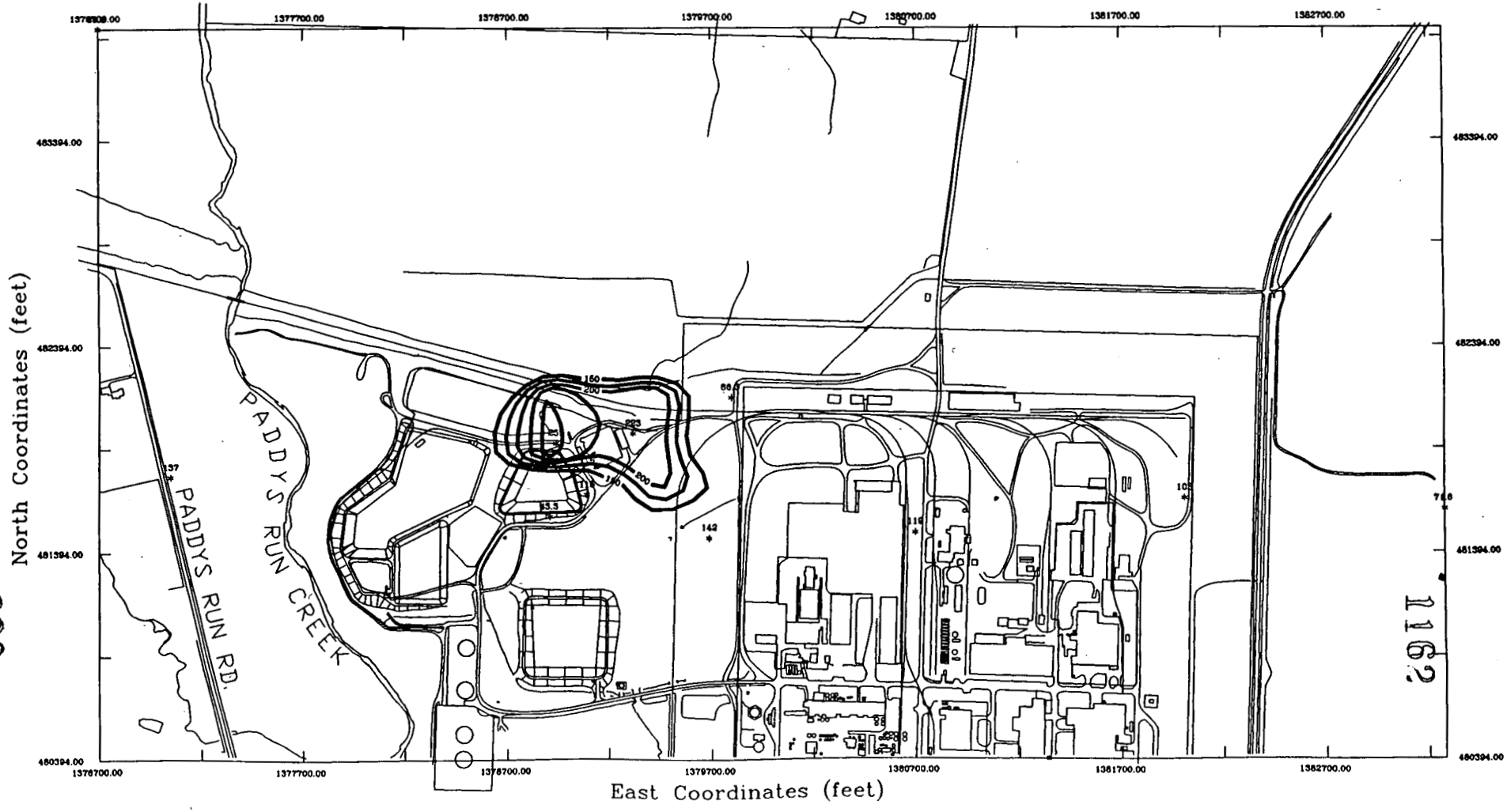


Figure 3.125

Calcium Contour Map For 3000 Series Wells As Of November, 1990

CONCENTRATION LINES EVERY 10 PPM
MAP LOCATIONS CONTAINING NUMBERS INDICATE CONCENTRATION AT WELL

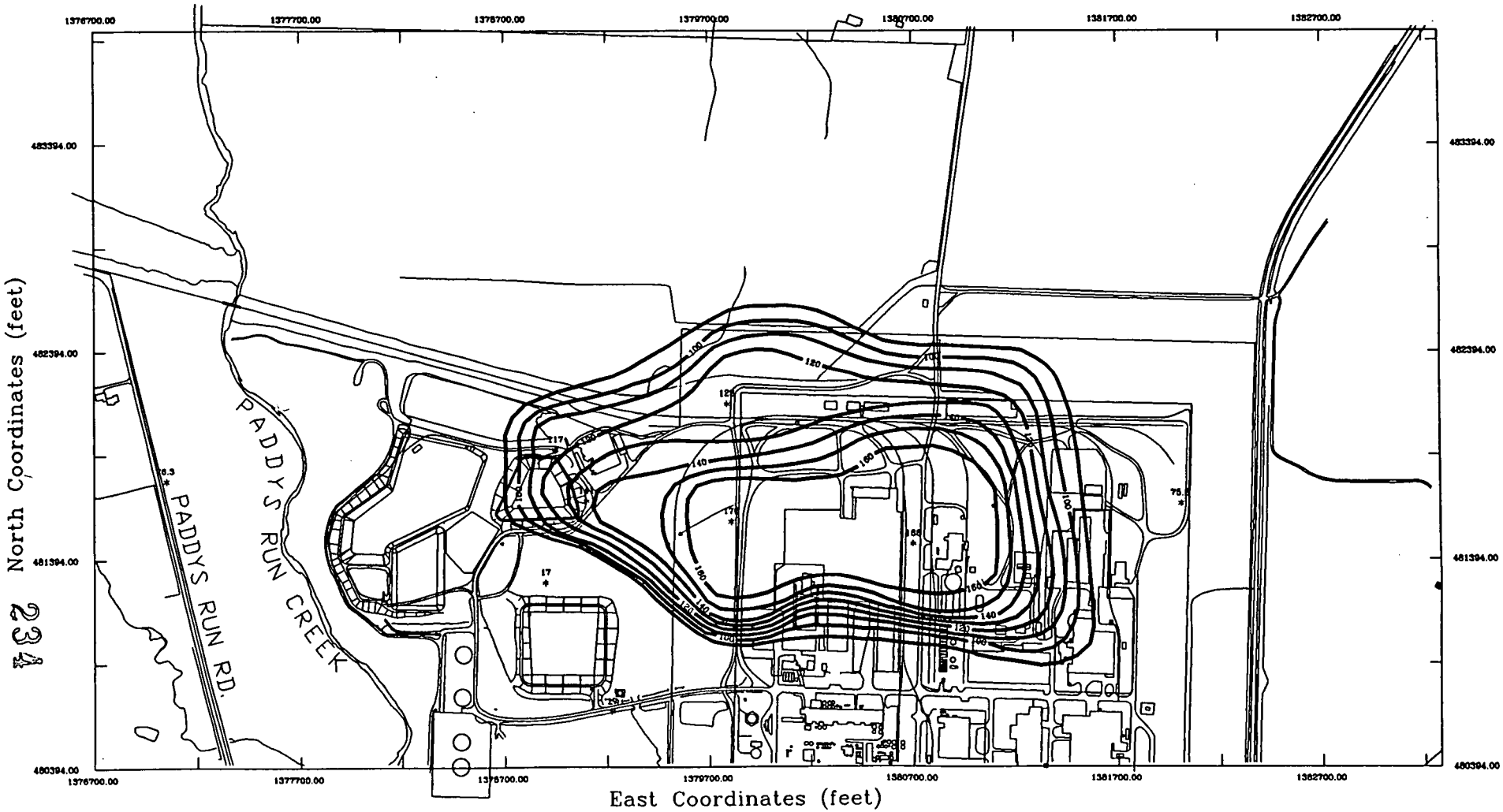


Figure 3.126

Iron Contour Map For 2000 Series Wells As Of November, 1990

CONCENTRATION LINES EVERY 5 PPM
MAP LOCATIONS CONTAINING NUMBERS INDICATE CONCENTRATION AT WELL

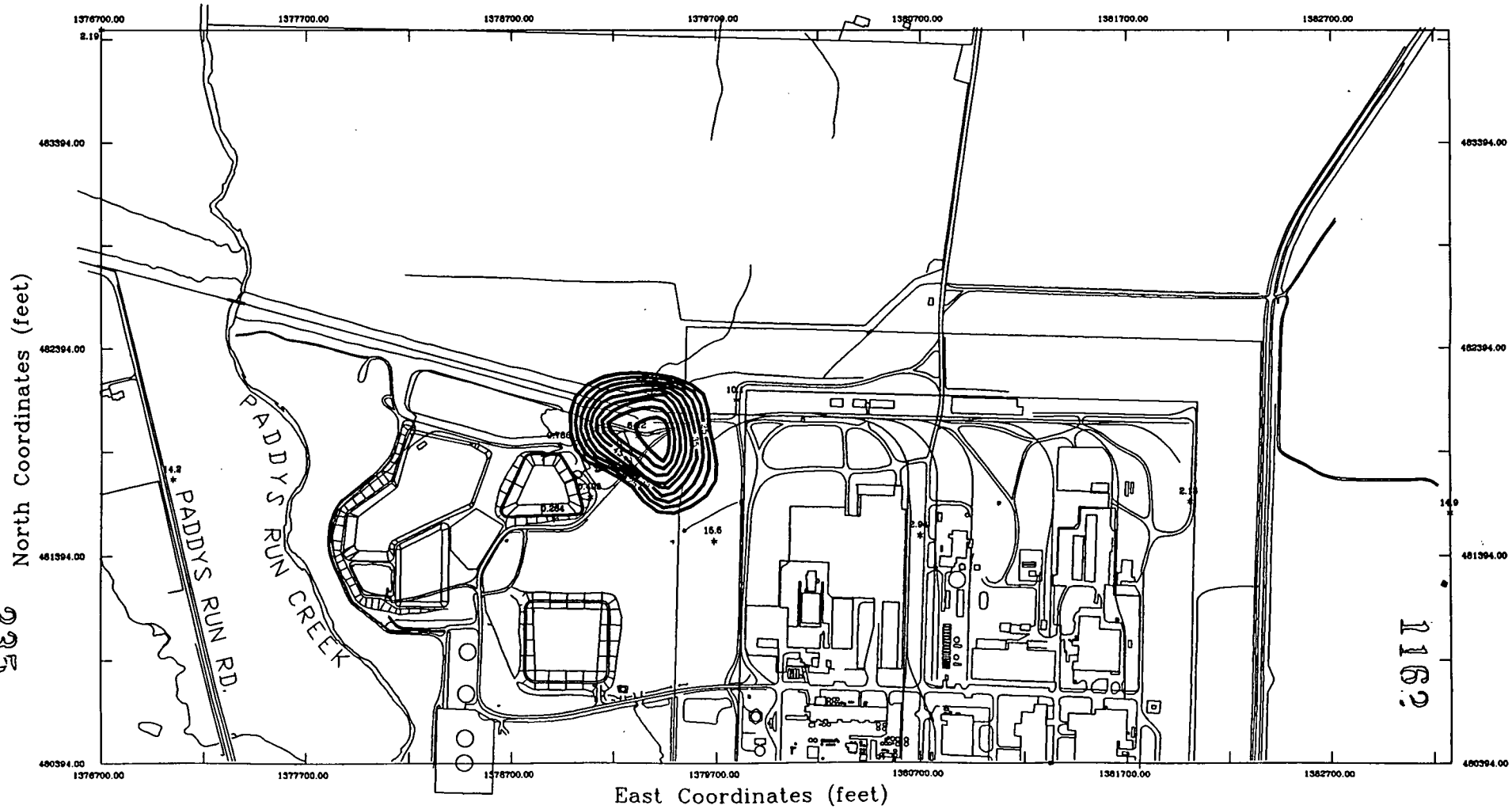


Figure 3.127

Magnesium Contour Map For 2000 Series Wells As OF November, 1990

CONCENTRATION LINES EVERY 10 PPM
MAP LOCATIONS CONTAINING NUMBERS INDICATE CONCENTRATION AT WELL

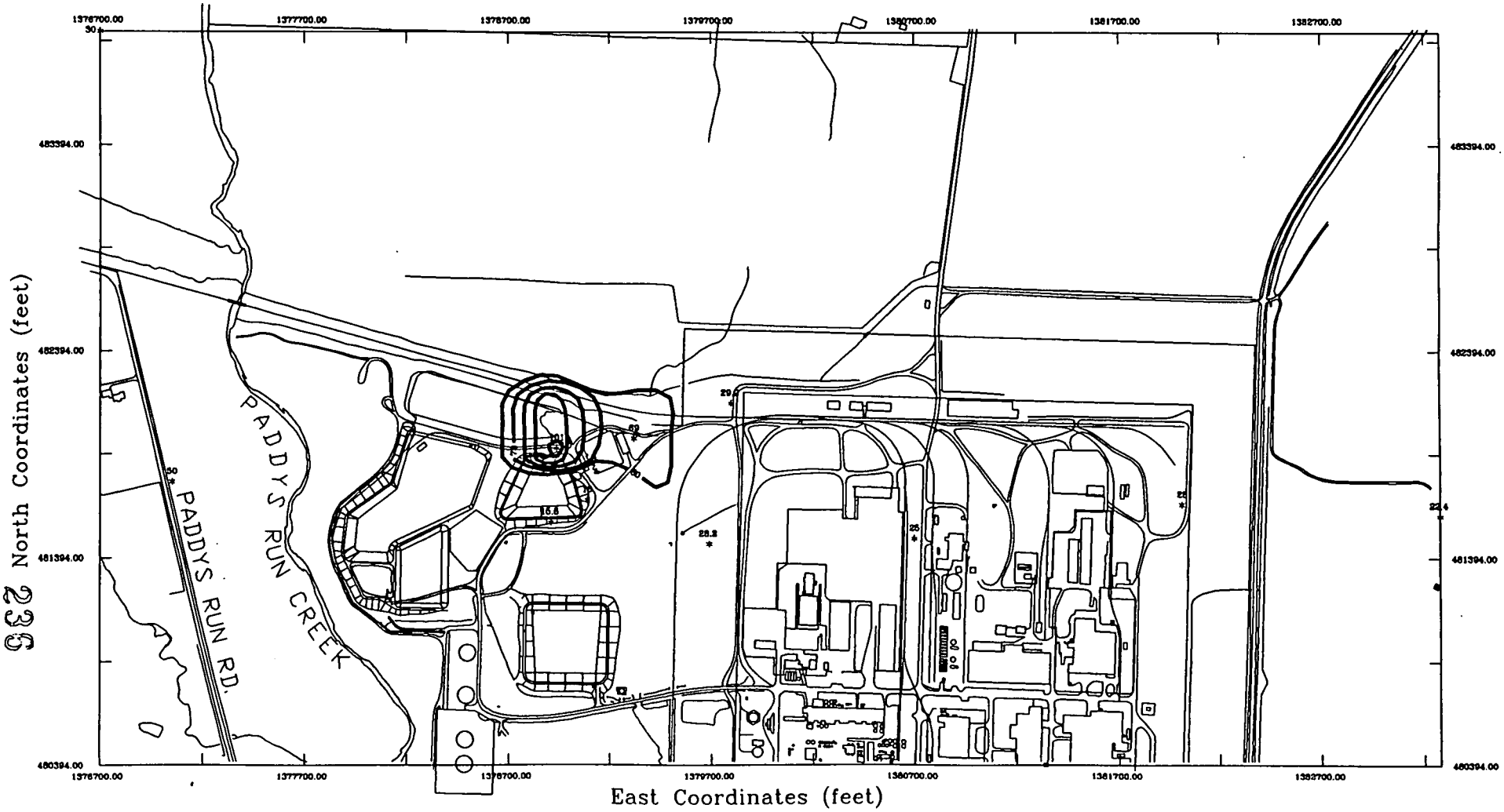


Figure 3.128

Manganese Contour Map For 2000 Series Wells As Of November, 1990

CONCENTRATION LINES EVERY 0.5 PPM
MAP LOCATIONS CONTAINING NUMBERS INDICATE CONCENTRATION AT WELL

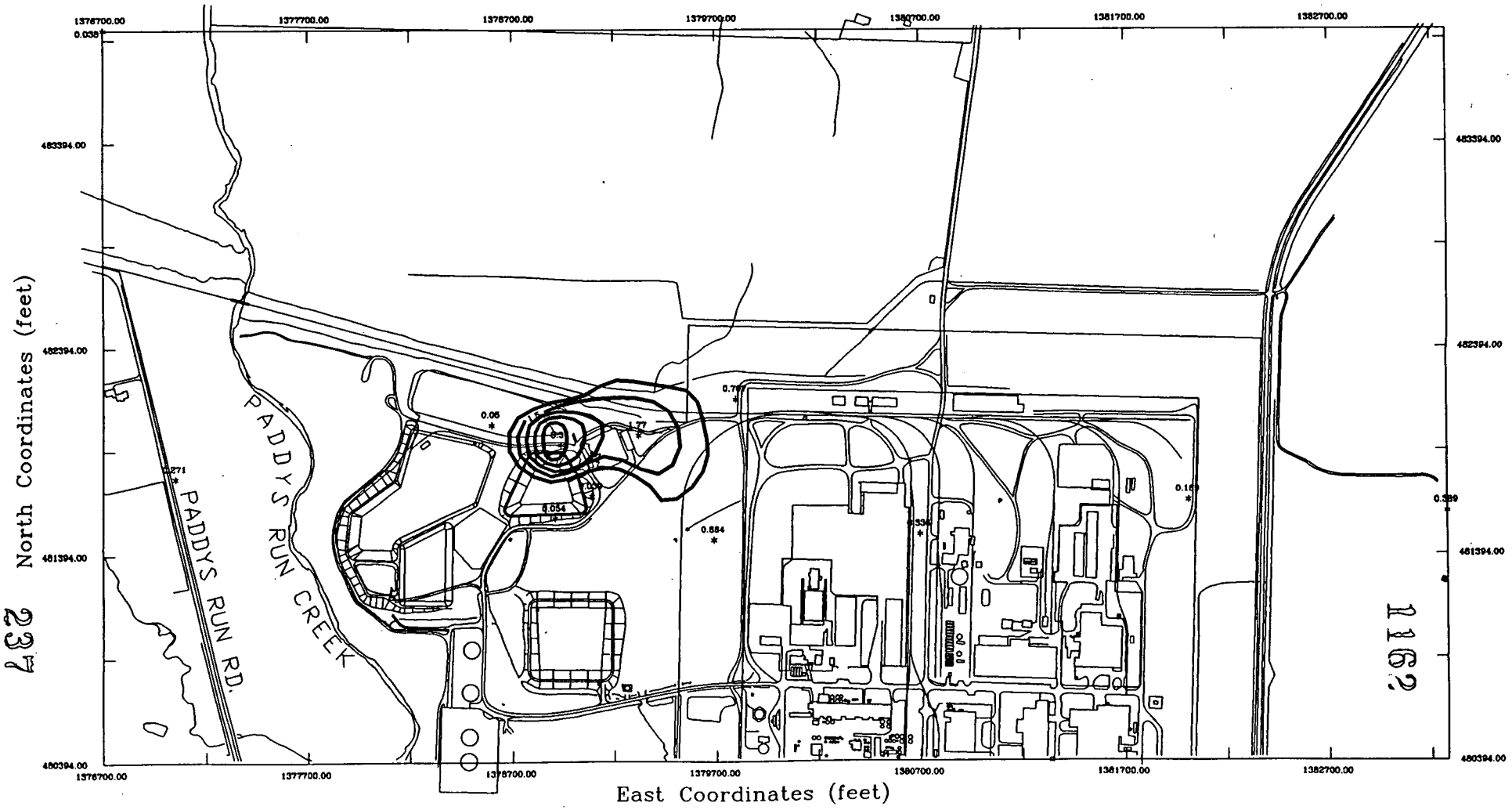


Figure 3.129

Manganese Contour Map For 3000 Series Wells As Of November, 1990

CONCENTRATION LINES EVERY 0.5 PPM
MAP LOCATIONS CONTAINING NUMBERS INDICATE CONCENTRATION AT WELL

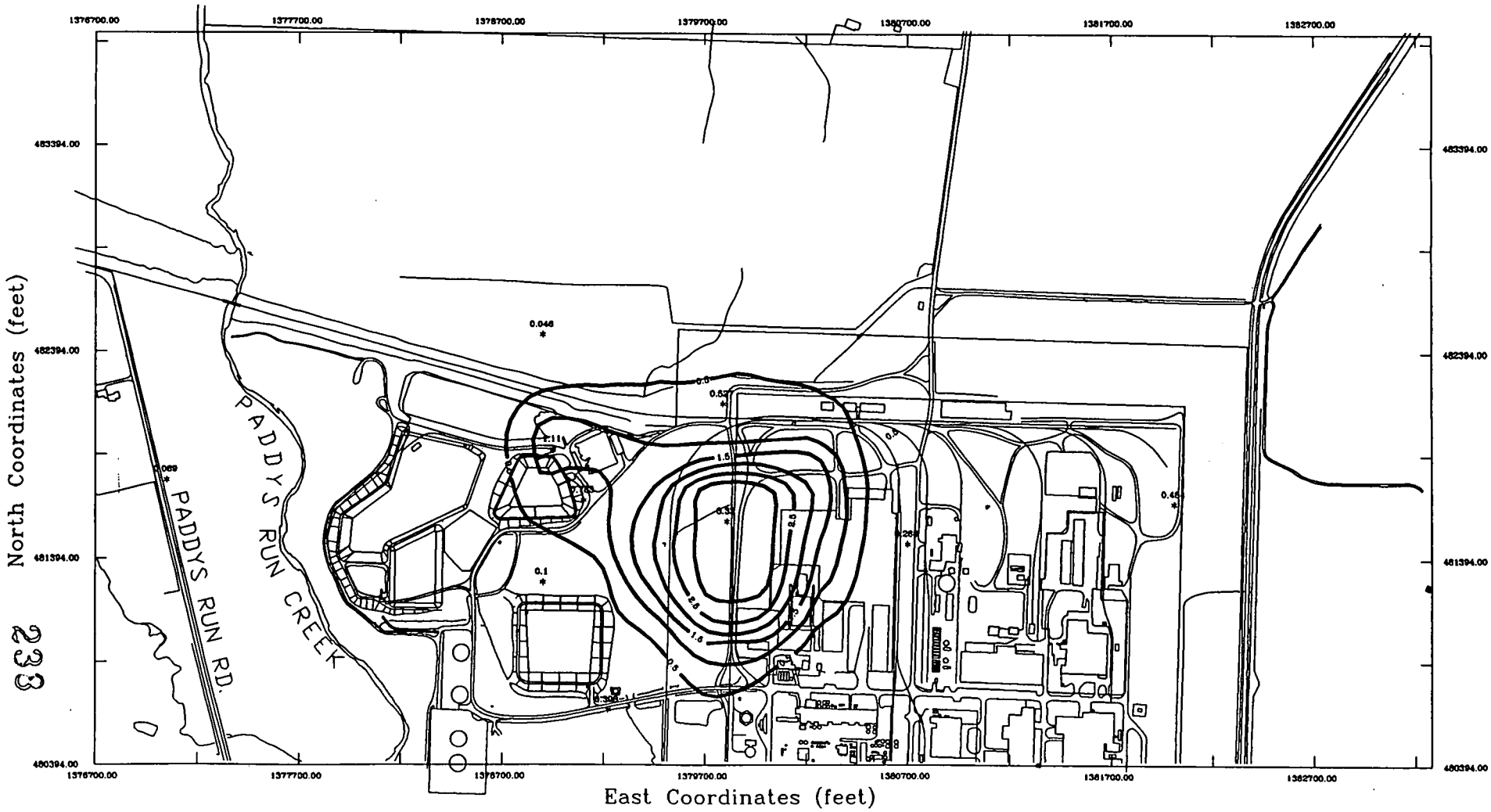
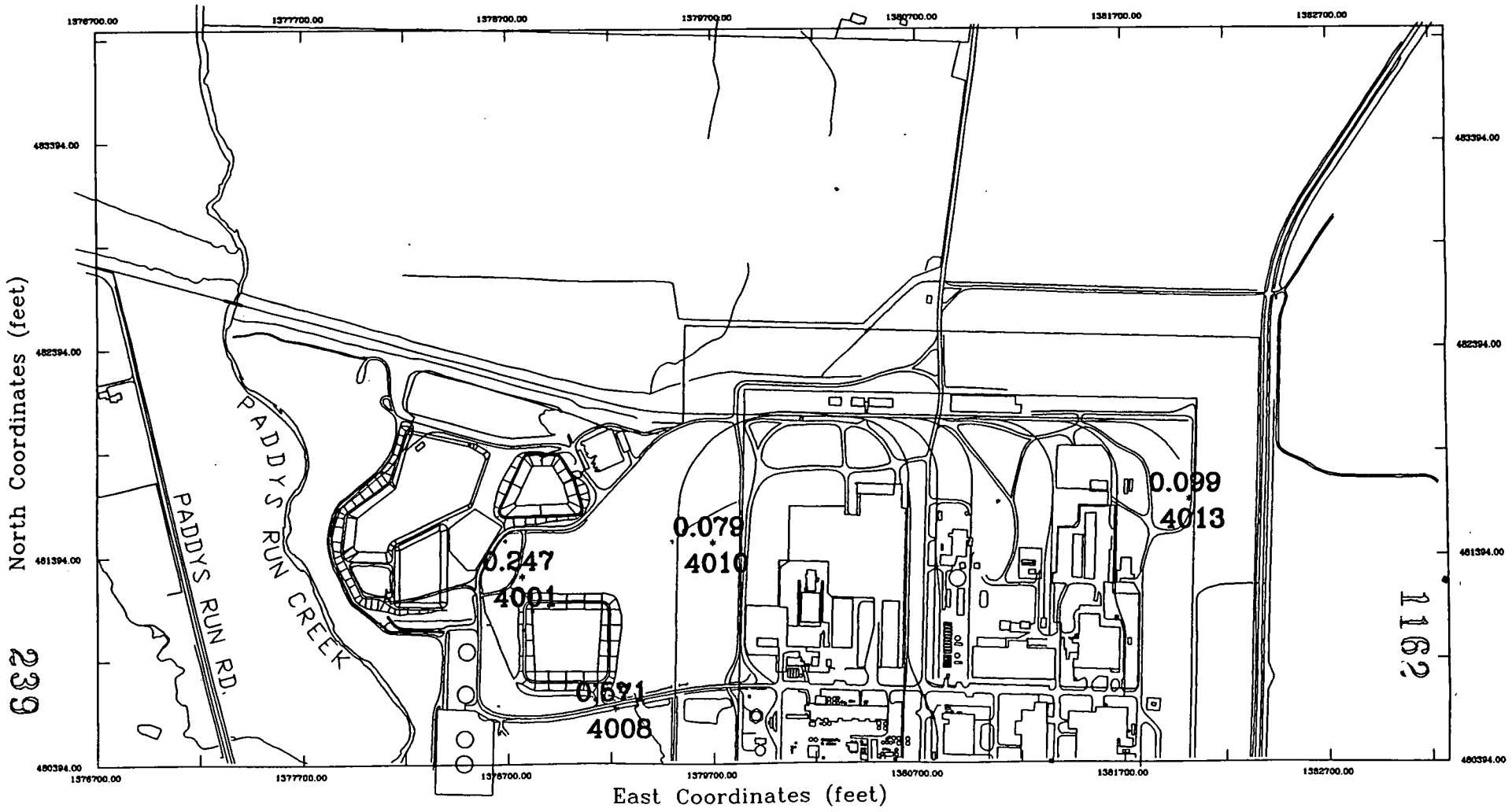


Figure 3.130

Manganese Concentrations In 4000 Series Wells For November, 1990

CONCENTRATIONS REPRESENTED OVER THE WELL NUMBERS



1990 RCRA ANNUAL GROUNDWATER QUALITY REPORT

APPENDIX I

ERRATA TO THE 1989 ANNUAL REPORT

1990 RCRA ANNUAL GROUNDWATER QUALITY REPORT

The tables that follow were found to be missing from the appendicies for The RCRA Groundwater Quality Assessment Program Progress Report For 1989, Final Update. Pages i, ii, and iii belong in Appendix V of the 1989 report. Pages iv, v, and vi belong in Table VI-1 of Appendix VI of the 1989 report.

RCRA Groundwater Data as of 21-Aug-90

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
	4013	1,1-Dichloroethane					0.005 U		0.0025 U	2	2	1.00	15	
	1024	2-Propanone					0.002 BJ		0.0025 U	2	2	1.00		
	1052	2-Propanone					0.029 B	0.002 J	0.0025 U	3	3	1.00		PQL = 0.100
	1025	2-Propanone	0.011 B				0.003 BJ	0.01 U	0.0025 U	4	4	1.00	15	
	1027	2-Propanone					0.003 BJ	0.003 BJ	0.0025 U	3	3	1.00	15	
	1028	2-Propanone					0.006 BJ			1	1	1.00	15	
	1030	2-Propanone					0.01 U		0.0025 U	2	2	1.00	15	
	1031	2-Propanone						0.015	0.0125 U	1	2	0.50	15	
	1038	2-Propanone					0.003 BJ	0.004 BJ	0.0025 U	3	3	1.00	15	
	1074	2-Propanone	0.004 BJ				0.003 BJ	0.01 U	0.0025 U	4	4	1.00	15	
	1079	2-Propanone					0.004 BJ	0.01 U	0.0025 U	3	3	1.00	15	
	1080	2-Propanone					0.008 BJ	0.003 J	0.0025 U	3	3	1.00	15	
	1081	2-Propanone					0.004 BJ	0.003 BJ	0.0025 U	3	3	1.00	15	
	1082	2-Propanone					0.003 BJ	0.01 U	0.0025 U	3	3	1.00	15	
	1083	2-Propanone	0.01 U				0.005 BJ	0.003 BJ	0.0025 U	4	4	1.00	15	
	2043	2-Propanone					0.002 BJ	0.01 U	0.0025 U	3	3	1.00		
	2066	2-Propanone					0.003 BJ	0.006 J	0.0025 U	3	3	1.00		PQL = 0.100
	2010	2-Propanone	0.008 J				0.008 BJ	0.007 BJ	0.0025 U	4	4	1.00	15	
	2013	2-Propanone					0.01 U		0.0025 U	2	2	1.00	15	
	2019	2-Propanone	0.013				0.002 BJ	0.002 J	0.0025 U	4	4	1.00	15	
	2021	2-Propanone	0.01 U				0.003 BJ	0.012 B	0.0025 U	4	4	1.00	15	
	2027	2-Propanone	0.01 U				0.004 BJ	0.01 U	0.0025 U	4	4	1.00	15	
	2037	2-Propanone	0.01 U				0.007 BJ	0.01 U	0.0025 U	4	4	1.00	15	
	2051	2-Propanone					0.028 B	0.003 J		2	2	1.00	15	
	2055	2-Propanone					0.018 B	0.005 BJ	0.0025 U	3	3	1.00	15	
	2084	2-Propanone					0.021 B	0.01 U	0.0025 U	3	3	1.00	15	
	3043	2-Propanone					0.005 BJ	0.01 U	0.0025 U	3	3	1.00		
	3066	2-Propanone					0.011 U	0.004 J	0.0025 U	3	3	1.00		PQL = 0.100
	3001	2-Propanone	0.037 B				0.014 B	0.01 B	0.0025 U	4	4	1.00	15	
	3008	2-Propanone					0.004 BJ	0.004 BJ	0.0025 U	3	3	1.00	15	
	3010	2-Propanone					0.006 BJ	0.008 BJ	0.0025 U	3	3	1.00	15	
	3013	2-Propanone					0.004 BJ		0.0025 U	2	2	1.00	15	
	3019	2-Propanone					0.007 BJ	0.008 BJ	0.0025 U	3	3	1.00	15	
	3024	2-Propanone					0.003 BJ		0.0025 U	2	2	1.00	15	
	3037	2-Propanone					0.007 BJ	0.01 U	0.0025 U	3	3	1.00	15	
	3051	2-Propanone					0.084 B	0.008 J	0.0005 U	3	3	1.00	15	
	3055	2-Propanone					0.035 B	0.004 BJ	0.0025 U	3	3	1.00	15	
	3084	2-Propanone					0.01 U	0.006 J	0.0025 U	3	3	1.00	15	
	4001	2-Propanone					0.035 U	0.011 U	0.0025 U	3	3	1.00	15	
	4008	2-Propanone					0.002 U	0.005 BJ	0.0025 U	3	3	1.00	15	

2463

1169

* Constituent found in statistically significant amount(s) ** Signifies an outlier *** See Cross Reference listing number ? Background well with relatively high values

RCRA Groundwater Data as of 21-Aug-90

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7		TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
										totals	28	57			
	3043	Nitrate	0.12	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.02		5	7	0.71		2 x maximum background
	3066	Nitrate	0.1 U	2.5 J	0.1 U	0.23 max	0.1 U	0.1 U	0.05		5	7	0.71		value = 0.46
										totals	10	14			Z = -1.457 O.K.
	3001	Nitrate	0.01 U	2.5 U	0.1 U	0.02 U	0.1 U	0.1 U	0.11		6	7	0.86	9	
	3008	Nitrate	0.1 U	0.1 U	31.7 **	0.02 U	0.1 U	0.1 U	0.23		5	7	0.71	9	
	3010	Nitrate	22.8	5 U	2.77	0.19	0.1 U	0.1 U	0.02 U		4	7	0.57	9	Was previously # 8
	3013	Nitrate	0.1 U	2.5 U	0.1 U	0.1	0.19	0.12	0.14		3	7	0.43	8	Was previously # 9
•	3019	Nitrate	8.4	10.1	16.4	18	0.431	36.4	36.3		0	7	0.00	8	
•	3024	Nitrate	0.24	0.1 U	0.15	0.05 U	0.604	0.65	0.13		2	7	0.29	8	
•	3037	Nitrate	0.1 U	5 U	0.1 U	0.02	1.32	0.582	0.03		3	7	0.43	8	
	3051	Nitrate	0.17	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.24		4	7	0.57	9	
	3055	Nitrate	0.1	2.5 J	0.1 U	0.05	0.1 U	0.114	0.04		3	7	0.43	8	Was previously # 9
•	3084	Nitrate	0.1 U	2.5 U	16.9	12	7.22	0.865	7.4		2	7	0.29	8	
	4001	Nitrate	0.1	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.35		5	7	0.71	9	
	4008	Nitrate	0.1 U	12.5	0.1 U		0.1 U	0.17	0.1		3	6	0.50	9	
	4010	Nitrate				0.02 U	0.1 U	0.1 U	0.04		3	4	0.75	9	
	4013	Nitrate				0.02 U	0.16	0.1 U	0.4		3	4	0.75	9	
										totals	46	91			
?	1024	Phenol							0.012 max		0	1	0.00		2 x maximum background
	1052	Phenol						0.002 J	0.005 U		2	2	1.00		value = 0.024
										totals	2	3			Z = -0.220 O.K.
	1025	Phenol	0.01 U					0.01 U	0.011		2	3	0.67	9	Was previously # 15
	1028	Phenol							0.023		0	1	0.00	8	
	1030	Phenol							0.012		0	1	0.00	8	
	1031	Phenol						0.01 U	0.012		1	2	0.50	9	Was previously # 15
	1038	Phenol							0.01		0	1	0.00	8	
	1074	Phenol	0.01 U					0.01 U	0.005 U		3	3	1.00	9	Was previously # 15
	1079	Phenol						0.01 U	0.024		1	2	0.50	9	Was previously # 15
	1080	Phenol						0.01 U	0.025		1	2	0.50	9	Was previously # 15
	1081	Phenol						0.01 U	0.006		1	2	0.50	9	Was previously # 15
	1082	Phenol	0.01 U						0.005 U		2	2	1.00	9	Was previously # 15
	1083	Phenol							0.005 U		1	1	1.00	9	
										totals	12	20			
	2043	Phenol						0.01 U	0.005 U		2	2	1.00		2 x maximum background
?	2066	Phenol							0.018 max		0	1	0.00		value = 0.036
										totals	2	3			Z = -0.424 O.K.

• Constituent found in statistically significant amount(s) ** Signifies an outlier *** See Cross Reference listing number ? Background well with relatively high valu

RCRA Groundwater Data as of 21-Aug-90

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
	3013	Total Organic Halide		0.05 U	0.05 U	0.085	0.01 U		0.01 U	4	5	0.80	9	
	3019	Total Organic Halide		0.05 U	0.05 U	0.05 U	0.01 U	0.088	0.01 U	5	6	0.83	9	
	3024	Total Organic Halide				0.01 U	0.01 U		0.01 U	3	3	1.00	9	
	3037	Total Organic Halide		0.05 U	0.2	0.027	0.01 U	0.013	0.01 U	3	6	0.50	9	Was previously # 8
	3051	Total Organic Halide			0.05 U	0.029	0.01 U	0.01 U	0.01 U	4	5	0.80	9	
	3055	Total Organic Halide			0.05 U		0.01 U	0.015	0.023	2	4	0.50	9	
	3084	Total Organic Halide		0.05 U	0.05 U	0.05 U	0.01 U	0.022	0.024	4	6	0.67	9	
	4001	Total Organic Halide			0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	5	5	1.00	9	
	4008	Total Organic Halide		0.05 U	0.05 U		0.01 U	0.01 U	0.01 U	5	5	1.00	9	
	4010	Total Organic Halide				0.05 U	0.0511	0.01 U	0.01 U	3	4	0.75	9	
	4013	Total Organic Halide					0.0737		0.01 U	1	2	0.50	9	Was previously # 8
										53	69			
	1024	Total organic carbon					3.266	1 U	1	1	3	0.33	17	
	1052	Total organic carbon					4.69	1 U	1	1	3	0.33	17	
	1025	Total organic carbon					4.13	2.27	3	0	3	0.00	17	
	1027	Total organic carbon					3.45	1 U	1	1	3	0.33	17	
	1028	Total organic carbon					9.08			0	1	0.00	17	
	1030	Total organic carbon							9	0	1	0.00	17	
	1031	Total organic carbon					15.8	11.1	9	0	3	0.00	17	
	1038	Total organic carbon					1.96	1 U	3	1	3	0.33	17	
	1074	Total organic carbon					3.28	1.81	1 U	1	3	0.33	17	
	1079	Total organic carbon					4.473	1 U	2	1	3	0.33	17	
	1080	Total organic carbon					4.979	1.25	2	0	3	0.00	17	
	1081	Total organic carbon					4.92	1.28	3	0	3	0.00	17	
	1082	Total organic carbon					3.759	2.49	3	0	3	0.00	17	
	1083	Total organic carbon					2.76	1 U	2	1	3	0.33	17	
	2043	Total organic carbon					4.928	2.13	3	0	3	0.00	17	
	2066	Total organic carbon					6.362	1.65	4	0	3	0.00	17	
	2010	Total organic carbon					1.907	1 U	3	1	3	0.33	17	
	2013	Total organic carbon					3.8	1.11	1	0	3	0.00	17	
	2019	Total organic carbon					19.3	1.62	2	0	3	0.00	17	
	2021	Total organic carbon					2.839	1 U	1	1	3	0.33	17	
	2027	Total organic carbon					2.684	3.33		0	2	0.00	17	
	2037	Total organic carbon					3.63	1.49	2	0	3	0.00	17	
	2051	Total organic carbon					6.02	0.552	1 U	1	3	0.33	17	
	2055	Total organic carbon					52.8 **	1 U	1	1	3	0.33	17	
	2084	Total organic carbon					4.03	1.58	1	0	3	0.00	17	
	3043	Total organic carbon					3.32	2.15	3	0	3	0.00	17	
	3066	Total organic carbon					14.513	2.91	4	0	3	0.00	17	

* Constituent found in statistically significant amount(s) ** Signifies an outlier *** See Cross Reference listing number ? Background well with relatively high valu

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Table VI-1 RCRA Appendix IX Sample Results

DATE	WELL	DUPLIC.	TRIP	SPIKE	RESULTS	UNITS	QUALIFIER	PARAMETER
09/11/89	1025	NO	NO	NO	0.05	MG/L	U	(1,1'-Biphenyl)-4-amine
09/11/89	1025	NO	NO	NO	0.005	MG/L	U	1,1,1,2-Tetrachloroethane
09/11/89	1025	NO	NO	NO	0.005	MG/L	U	1,1,1-Trichloroethane
09/11/89	1025	NO	NO	NO	0.005	MG/L	U	1,1,2,2-Tetrachloroethane
09/11/89	1025	NO	NO	NO	0.005	MG/L	U	1,1,2-Trichloroethane
09/11/89	1025	NO	NO	NO	0.005	MG/L	U	1,1-Dichloroethane
09/11/89	1025	NO	NO	NO	0.005	MG/L	U	1,1-Dichloroethane
09/11/89	1025	NO	NO	NO	0.005	MG/L	U	1,1-Dichloroethene
09/11/89	1025	NO	NO	NO	0.00005	MG/L	U	1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	1,2,4,5-Tetrachlorobenzene
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	1,2,4-Trichlorobenzene
09/11/89	1025	NO	NO	NO	0.005	MG/L	U	1,2-Dibromoethane
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	1,2-Dichlorobenzene
09/11/89	1025	NO	NO	NO	0.005	MG/L	U	1,2-Dichloroethane
09/11/89	1025	NO	NO	NO	0.005	MG/L	U	1,2-Dichloropropane
09/11/89	1025	NO	NO	NO	0.04	MG/L	U	1,2-Ethanediamine
09/11/89	1025	NO	NO	NO	0.0001	MG/L	U	1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	1,3-Benzodioxole, 5-(1-propenyl)-
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	1,3-Dichlorobenzene
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	1,3-Dinitrobenzene
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	1,4-Dichlorobenzene
09/11/89	1025	NO	NO	NO	1	MG/L	U	1,4-Dioxane
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	1,4-Naphthoquinone
09/11/89	1025	NO	NO	NO	0.12	MG/L	U	1-Naphthylamine
09/11/89	1025	NO	NO	NO	0.005	MG/L	U	1-Propene, 3-chloro-
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	2,3,4,6-Tetrachlorophenol
09/11/89	1025	NO	NO	NO	0.05	MG/L	U	2,4,5-Trichlorophenol
09/11/89	1025	NO	NO	NO	0.0001	MG/L	U	2,4,5-Trichlorophenoxyacetic acid
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	2,4,6-Trichlorophenol
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	2,4-Dichlorophenol
09/11/89	1025	NO	NO	NO	0.0002	MG/L	U	2,4-Dichlorophenoxyacetic acid, salts and esters

SEE THE COVER PAGE OF THIS TABLE FOR QUALIFIER DESCRIPTIONS

Table VI-1 RCRA Appendix IX Sample Results

DATE	WELL	DUPLIC.	TRIP	SPIKE	RESULTS	UNITS	QUALIFIER	PARAMETER
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	2,4-Dimethylphenol
09/11/89	1025	NO	NO	NO	0.05	MG/L	U	2,4-Dinitrophenol
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	2,4-Dinitrotoluene
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	2,6-Dichlorophenol
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	2,6-Dinitrotoluene
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	2-Butanone
09/11/89	1025	NO	NO	NO	0.005	MG/L	U	2-Chloro-1,3-butadiene
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	2-Chloronaphthalene
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	2-Chlorophenol
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	2-Hexanone
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	2-Methylnaphthalene
09/11/89	1025	NO	NO	NO	0.05	MG/L	U	2-Nitroaniline
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	2-Nitrophenol
09/11/89	1025	NO	NO	NO	0.07	MG/L	U	2-Picoline
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	2-Propanone
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	2-Propanone
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	2-Propenal
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	2-Propenenitrile
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	2-Propenenitrile, 2-methyl-
09/11/89	1025	NO	NO	NO	0.02	MG/L	U	3,3'-Dichlorobenzidine
09/11/89	1025	NO	NO	NO	0.05	MG/L	U	3-Nitroaniline
09/11/89	1025	NO	NO	NO	0.0001	MG/L	U	4,4'-DDD
09/11/89	1025	NO	NO	NO	0.0001	MG/L	U	4,4'-DDE
09/11/89	1025	NO	NO	NO	0.0001	MG/L	U	4,4'-DDT
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	4-Bromophenyl phenyl ether
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	4-Chloro-3-methylphenol
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	4-Chlorophenylphenyl ether
09/11/89	1025	NO	NO	NO	0.01	MG/L	U	4-Methyl-2-pentanone
09/11/89	1025	NO	NO	NO	0.05	MG/L	U	4-Nitrophenol
09/11/89	1025	NO	NO	NO	0.02	MG/L	U	5-Nitro-o-toluidine
09/11/89	1025	NO	NO	NO	0.02	MG/L	U	7,12-Dimethylbenz(a)anthracene

SEE THE COVER PAGE OF THIS TABLE FOR QUALIFIER DESCRIPTIONS

Table VI-1 RCRA Appendix IX Sample Results

DATE	WELL	DUPLIC.	TRIP	SPIKE	RESULTS	UNITS	QUALIFIER	PARAMETER
09/08/89	1052	NO	NO	NO	0.005	MG/L	U	Toluene
09/08/89	1052	NO	NO	NO	0.005	MG/L	U	Toluene
09/08/89	1052	NO	NO	NO	0.01	MG/L	U	Total Organic Halides
09/08/89	1052	NO	NO	NO	1	MG/L	U	Total organic carbon
09/08/89	1052	NO	NO	NO	0.005	MG/L	U	Total xylenes
09/08/89	1052	NO	NO	NO	0.001	MG/L	U	Toxaphene
09/08/89	1052	NO	NO	NO	0.005	MG/L	U	Tribromomethane
09/08/89	1052	NO	NO	NO	0.005	MG/L	U	Trichloroethene
09/08/89	1052	NO	NO	NO	0.005	MG/L	U	Trichloroethene
09/08/89	1052	NO	NO	NO	0.005	MG/L	U	Trichlorofluoromethane
09/08/89	1052	NO	NO	NO	0.0196	MG/L	B	Vanadium
09/08/89	1052	NO	NO	NO	0.02	MG/L		Vanadium
09/08/89	1052	NO	NO	NO	0.01	MG/L	U	Vinyl acetate
09/08/89	1052	NO	NO	NO	0.01	MG/L	U	Vinyl chloride
09/08/89	1052	NO	NO	NO	0.0393	MG/L	E	Zinc
09/08/89	1052	NO	NO	NO	0.039	MG/L		Zinc
09/08/89	1052	NO	NO	NO	0.08	MG/L	U	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
09/08/89	1052	NO	NO	NO	0.00005	MG/L	U	alpha-BHC
09/08/89	1052	NO	NO	NO	0.0005	MG/L	U	alpha-Chlordane
09/08/89	1052	NO	NO	NO	0.00005	MG/L	U	beta-BHC
09/08/89	1052	NO	NO	NO	0.17	MG/L	U	beta-Naphthylamine
09/08/89	1052	NO	NO	NO	0.01	MG/L	U	bis(2-Chloroethoxy)methane
09/08/89	1052	NO	NO	NO	0.01	MG/L	U	bis(2-Chloroethyl) ether
09/08/89	1052	NO	NO	NO	0.01	MG/L	U	bis(2-Chloroisopropyl) ether
09/08/89	1052	NO	NO	NO	0.01	MG/L	U	bis(2-Ethylhexyl) phthalate
09/08/89	1052	NO	NO	NO	0.005	MG/L	U	cis-1,3-Dichloropropene
09/08/89	1052	NO	NO	NO	0.00005	MG/L	U	delta-BHC
09/08/89	1052	NO	NO	NO	0.0005	MG/L	U	gamma-Chlordane
09/08/89	1052	NO	NO	NO	0.01	MG/L	U	m-Cresol
09/08/89	1052	NO	NO	NO	0.01	MG/L	U	o-Cresol
09/08/89	1052	NO	NO	NO	0.01	MG/L	U	o-Toluidine

SEE THE COVER PAGE OF THIS TABLE FOR QUALIFIER DESCRIPTIONS

APPENDIX II

WATER ELEVATION TABLES

WELL #	DATE MEASURED	TOP OF WELL	TOP OF CASING	REF. POINT	WATER LEVEL MEASURED	WATER LEVEL (AMSL)
1004	07/24/90	581.09	581.62	2	31.67	549.95
1004	08/14/90	581.09	581.62	1	32.86	548.23
1004	09/24/90	581.09	581.62	1	32.87	548.22
1004	11/17/90	581.09	581.62	1	32.90	548.19
1004	12/13/90	581.09	581.62	1	N/A	
1024	01/21/90	582.54	582.82	1	2.78	579.76
1024	02/14/90	582.54	582.82	1	4.48	578.06
1024	04/21/90	582.54	582.82	1	3.34	579.20
1024	04/03/90	582.54	582.82	1	4.58	577.96
1024	05/18/90	582.54	582.82	1	2.36	580.18
1024	06/18/90	582.54	582.82	1	9.85	572.69
1024	07/18/90	582.54	582.82	1	9.77	572.77
1024	08/08/90	582.54	582.82	1	10.72	571.82
1024	09/18/90	582.54	582.82	1	11.05	571.49
1024	10/18/90	582.54	582.82	1	15.20	567.34
1024	11/14/90	582.54	582.82	1	6.41	576.13
1024	12/07/90	582.54	582.82	1	3.31	576.13
1025	01/22/90	582.99	583.51	1	12.36	570.63
1025	04/24/90	582.99	583.51	1	12.04	570.95
1025	04/04/90	582.99	583.51	1	11.98	571.01
1025	05/19/90	582.99	583.51	1	12.61	570.38
1025	06/21/90	582.99	583.51	1	11.36	571.63
1025	07/18/90	582.99	583.51	1	11.15	571.84
1025	08/14/90	582.99	583.51	1	15.27	567.72
1025	09/24/90	582.99	583.51	1	10.91	572.08
1025	10/24/90	582.99	583.51	1	10.72	572.27
1025	11/17/90	582.99	583.51	1	13.23	569.76
1025	12/13/90	582.99	583.51	1	11.42	569.76
1027	01/22/90	585.02	585.57	1	8.19	576.83
1027	02/16/90	585.02	585.57	1	7.54	577.48
1027	04/04/90	585.02	585.57	1	8.37	576.65
1027	04/24/90	585.02	585.57	1	8.70	576.32
1027	05/19/90	585.02	585.57	1	8.11	576.91
1027	06/19/90	585.02	585.57	1	9.44	575.58
1027	07/19/90	585.02	585.57	1	8.95	576.07
1027	08/14/90	585.02	585.57	1	10.23	574.79
1027	09/24/90	585.02	585.57	1	8.88	576.14
1027	10/24/90	585.02	585.57	1	8.07	576.95
1027	11/17/90	585.02	585.57	1	9.18	575.84
1027	12/13/90	585.02	585.57	1	8.78	575.84
1028	01/22/90	588.41	589.01	1	30.10	558.31
1028	04/04/90	588.41	589.01	1	29.86	558.55
1028	04/24/90	588.41	589.01	1	29.88	558.53
1028	05/19/90	588.41	589.01	1	29.10	559.31

WELL #	DATE MEASURED	TOP OF WELL	TOP OF CASING	REF. POINT	WATER LEVEL MEASURED	WATER LEVEL (AMSL)
1028	06/21/90	588.41	589.01	1	30.32	558.09
1028	07/18/90	588.41	589.01	1	30.42	557.99
1028	08/14/90	588.41	589.01	1	32.50	555.91
1028	09/24/90	588.41	589.01	1	30.66	557.75
1028	10/24/90	588.41	589.01	1	29.66	558.75
1028	11/17/90	588.41	589.01	1	30.28	558.13
1028	12/13/90	588.41	589.01	1	30.29	558.13
1030	01/22/90	577.99	578.52	1	29.07	548.92
1030	02/16/90	577.99	578.52	1	28.75	549.24
1030	04/04/90	577.99	578.52	1	29.90	548.09
1030	04/24/90	577.99	578.52	1	29.52	548.47
1030	05/19/90	577.99	578.52	1	30.27	547.72
1030	06/19/90	577.99	578.52	1	29.34	548.65
1030	08/14/90	577.99	578.52	1	26.77	551.22
1030	09/24/90	577.99	578.52	1	28.13	549.86
1030	10/24/90	577.99	578.52	1	N/A	
1030	11/17/90	577.99	578.52	1	29.82	548.17
1030	12/13/90	577.99	578.52	1	28.67	548.17
1031	01/22/90	577.75	578.37	1	24.87	552.88
1031	02/16/90	577.75	578.37	1	24.63	553.12
1031	04/24/90	577.75	578.37	1	24.70	553.05
1031	04/04/90	577.75	578.37	1	24.36	553.39
1031	05/19/90	577.75	578.37	1	24.05	553.70
1031	06/21/90	577.75	578.37	1	24.64	553.11
1031	07/24/90	577.75	578.37	1	24.24	553.51
1031	08/14/90	577.75	578.37	1	24.20	553.55
1031	09/24/90	577.75	578.37	1	24.37	553.38
1031	10/24/90	577.75	578.37	1	25.00	552.75
1031	11/17/90	577.75	578.37	1	24.50	553.25
1031	12/13/90	577.75	578.37	1	24.55	553.25
1038	01/22/90	584.09	584.61	1	14.18	569.91
1038	02/16/90	584.09	584.61	1	16.59	567.50
1038	04/24/90	584.09	584.61	1	14.18	569.91
1038	04/04/90	584.09	584.61	1	14.00	570.09
1038	05/19/90	584.09	584.61	1	14.23	569.86
1038	06/19/90	584.09	584.61	1	30.65	553.44
1038	07/24/90	584.09	584.61	1	13.92	570.17
1038	08/14/90	584.09	584.61	1	14.38	569.71
1038	09/24/90	584.09	584.61	1	13.86	570.23
1038	10/23/90	584.09	584.61	1	14.37	569.72
1038	11/17/90	584.09	584.61	1	14.30	569.79
1038	12/13/90	584.09	584.61	1	13.88	569.79
1052	01/21/90	586.92	587.43	1	4.90	582.02
1052	02/16/90	586.92	587.43	1	3.07	583.85

REFERENCE POINT 1 IS TOP OF WELL, 2 IS TOP OF CASING/PAGE 2

WELL #	DATE MEASURED	TOP OF WELL	TOP OF CASING	REF. POINT	WATER LEVEL MEASURED	WATER LEVEL (AMSL)
1052	04/01/90	586.92	587.43	1	3.61	583.31
1052	04/23/90	586.92	587.43	1	4.84	582.08
1052	05/17/90	586.92	587.43	1	68.80	518.12
1052	06/18/90	586.92	587.43	1	6.71	580.21
1052	07/17/90	586.92	587.43	1	5.27	581.65
1052	08/08/90	586.92	587.43	1	8.08	578.84
1052	09/19/90	586.92	587.43	1	8.92	578.00
1052	10/17/90	586.92	587.43	1	4.02	582.90
1052	10/17/90	586.92	587.43	1	4.02	582.90
1052	10/31/90	586.92	587.43	1	3.90	583.02
1052	11/14/90	586.92	587.43	1	4.82	582.10
1052	11/20/90	586.92	587.43	1	4.26	582.66
1052	12/12/90	586.92	587.43	1	3.71	582.10
1072	10/24/90	577.72	578.18	1	N/A	
1074	01/22/90	580.21	580.68	1	5.98	574.23
1074	02/16/90	580.21	580.68	1	4.17	576.04
1074	04/24/90	580.21	580.68	1	5.32	574.89
1074	04/03/90	580.21	580.68	1	4.58	575.63
1074	05/19/90	580.21	580.68	1	4.18	576.03
1074	06/19/90	580.21	580.68	1	5.73	574.48
1074	07/24/90	580.21	580.68	1	6.08	574.13
1074	08/14/90	580.21	580.68	1	7.32	572.89
1074	09/24/90	580.21	580.68	1	7.24	572.97
1074	11/17/90	580.21	580.68	1	18.64	561.57
1074	12/13/90	580.21	580.68	1	8.22	561.57
1079	01/21/90	583.98	584.48	1	23.26	560.72
1079	02/14/90	583.98	584.48	1	23.15	560.83
1079	04/21/90	583.98	584.48	1	23.61	560.37
1079	04/02/90	583.98	584.48	1	23.98	560.00
1079	05/18/90	583.98	584.48	1	27.26	556.72
1079	06/18/90	583.98	584.48	1	24.61	559.37
1079	07/18/90	583.98	584.48	1	23.71	560.27
1079	08/08/90	583.98	584.48	1	23.13	560.85
1079	09/26/90	583.98	584.48	1	25.01	558.97
1079	09/18/90	583.98	584.48	1	25.44	558.54
1079	10/19/90	583.98	584.48	1	23.43	560.55
1079	11/14/90	583.98	584.48	1	29.14	554.84
1079	12/07/90	583.98	584.48	1	25.33	554.84
1080	01/22/90	583.60	584.07	1	15.62	567.98
1080	02/19/90	583.60	584.07	1	14.88	568.72
1080	04/02/90	583.60	584.07	1	14.82	568.78
1080	04/24/90	583.60	584.07	1	14.88	568.72
1080	05/18/90	583.60	584.07	1	18.95	564.65
1080	06/19/90	583.60	584.07	1	14.96	568.64

WELL #	DATE MEASURED	TOP OF WELL	TOP OF CASING	REF. POINT	WATER LEVEL MEASURED	WATER LEVEL (AMSL)
1080	08/14/90	583.60	584.07	1	15.23	568.37
1080	09/24/90	583.60	584.07	1	14.91	568.69
1080	10/23/90	583.60	584.07	1	16.24	567.36
1081	01/22/90	592.15	592.71	1	16.52	575.63
1081	02/16/90	592.15	592.71	1	28.83	563.32
1081	04/04/90	592.15	592.71	1	15.87	576.28
1081	04/24/90	592.15	592.71	1	16.15	576.00
1081	05/19/90	592.15	592.71	1	14.66	577.49
1081	06/21/90	592.15	592.71	1	16.02	576.13
1081	07/18/90	592.15	592.71	1	16.08	576.07
1081	08/14/90	592.15	592.71	1	16.36	575.79
1081	09/24/90	592.15	592.71	1	16.44	575.71
1081	10/24/90	592.15	592.71	1	15.10	577.05
1081	11/17/90	592.15	592.71	1	16.40	575.75
1081	12/13/90	592.15	592.71	1	N/A	
1082	01/22/90	585.59	586.14	1	8.18	577.41
1082	02/16/90	585.59	586.14	1	20.72	564.87
1082	04/04/90	585.59	586.14	1	7.97	577.62
1082	04/24/90	585.59	586.14	1	4.51	581.08
1082	05/19/90	585.59	586.14	1	6.00	579.59
1082	06/21/90	585.59	586.14	1	23.84	561.75
1082	07/18/90	585.59	586.14	1	8.67	576.92
1082	08/14/90	585.59	586.14	1	9.98	575.61
1082	09/24/90	585.59	586.14	1	9.10	576.49
1082	10/24/90	585.59	586.14	1	6.87	578.72
1082	11/17/90	585.59	586.14	1	10.65	574.94
1082	12/13/90	585.59	586.14	1	N/A	
1083	01/22/90	585.04	585.60	1	3.67	581.37
1083	02/16/90	585.04	585.60	1	3.30	581.74
1083	04/24/90	585.04	585.60	1	4.61	580.43
1083	04/04/90	585.04	585.60	1	4.13	580.91
1083	05/19/90	585.04	585.60	1	3.69	581.35
1083	06/19/90	585.04	585.60	1	5.56	579.48
1083	07/19/90	585.04	585.60	1	4.71	580.33
1083	08/14/90	585.04	585.60	1	6.21	578.83
1083	09/24/90	585.04	585.60	1	4.78	580.26
1083	10/24/90	585.04	585.60	1	N/A	
1083	11/17/90	585.04	585.60	1	5.18	579.86
1083	12/13/90	585.04	585.60	1	N/A	
2010	01/22/90	584.09	584.62	1	63.28	520.81
2010	02/16/90	584.09	584.62	1	62.88	521.21
2010	04/24/90	584.09	584.62	1	61.14	522.95
2010	04/04/90	584.09	584.62	1	63.25	520.84
2010	05/19/90	584.09	584.62	1	60.65	523.44

REFERENCE POINT 1 IS TOP OF WELL, 2 IS TOP OF CASING/PAGE 4

WELL #	DATE MEASURED	TOP OF WELL	TOP OF CASING	REF. POINT	WATER LEVEL MEASURED	WATER LEVEL (AMSL)
2010	06/21/90	584.09	584.62	1	59.72	524.37
2010	07/24/90	584.09	584.62	1	60.22	523.87
2010	08/14/90	584.09	584.62	1	60.41	523.68
2010	09/24/90	584.09	584.62	1	61.15	522.94
2010	10/23/90	584.09	584.62	1	61.41	522.68
2010	11/17/90	584.09	584.62	1	61.26	522.83
2010	12/13/90	584.09	584.62	1	61.34	522.83
2013	01/22/90	589.77	590.45	2	71.17	519.28
2013	02/16/90	589.77	590.45	2	70.66	519.79
2013	04/23/90	589.77	590.45	2	68.35	522.10
2013	04/04/90	589.77	590.45	2	68.54	521.91
2013	05/18/90	589.77	590.45	2	68.04	522.41
2013	06/21/90	589.77	590.45	2	67.10	523.35
2013	07/19/90	589.77	590.45	2	67.72	522.73
2013	08/10/90	589.77	590.45	2	67.80	522.65
2013	09/21/90	589.77	590.45	2	68.80	521.65
2013	10/21/90	589.77	590.45	2	69.13	521.32
2013	11/18/90	589.77	590.45	2	69.00	521.45
2013	12/13/90	589.77	590.45	2	69.00	521.45
2019	01/22/90	584.81	585.37	2	63.95	521.42
2019	02/16/90	584.81	585.37	2	63.47	521.90
2019	04/04/90	584.81	585.37	2	62.18	523.19
2019	04/24/90	584.81	585.37	2	62.03	523.34
2019	05/19/90	584.81	585.37	2	61.52	523.85
2019	06/21/90	584.81	585.37	2	60.57	524.80
2019	07/18/90	584.81	585.37	2	61.03	524.34
2019	08/14/90	584.81	585.37	2	61.26	524.11
2019	09/24/90	584.81	585.37	2	61.89	523.48
2019	10/24/90	584.81	585.37	2	61.92	523.45
2019	11/17/90	584.81	585.37	2	61.96	523.41
2019	12/13/90	584.81	585.37	2	N/A	N/A
2021	01/22/90	584.86	585.92	2	64.32	521.60
2021	02/16/90	584.86	585.92	2	63.82	522.10
2021	04/24/90	584.86	585.92	2	62.44	523.48
2021	04/03/90	584.86	585.92	2	62.81	523.11
2021	05/19/90	584.86	585.92	2	61.85	524.07
2021	06/21/90	584.86	585.92	2	60.96	524.96
2021	07/18/90	584.86	585.92	2	61.46	524.46
2021	08/14/90	584.86	585.92	2	61.74	524.18
2021	09/24/90	584.86	585.92	2	61.74	524.18
2021	10/24/90	584.86	585.92	2	62.40	523.52
2021	11/17/90	584.86	585.92	2	62.34	523.58
2021	12/13/90	584.86	585.92	2	62.34	523.58
2027	01/22/90	585.55	586.09	1	64.44	521.11

WELL #	DATE MEASURED	TOP OF WELL	TOP OF CASING	REF. POINT	WATER LEVEL MEASURED	WATER LEVEL (AMSL)
2027	02/16/90	585.55	586.09	1	63.98	521.57
2027	04/24/90	585.55	586.09	1	62.50	523.05
2027	04/04/90	585.55	586.09	1	62.63	522.92
2027	05/19/90	585.55	586.09	1	62.05	523.50
2027	06/19/90	585.55	586.09	1	61.08	524.47
2027	07/19/90	585.55	586.09	1	61.50	524.05
2027	08/14/90	585.55	586.09	1	61.68	523.87
2027	09/24/90	585.55	586.09	1	62.36	523.19
2027	10/24/90	585.55	586.09	1	62.54	523.01
2027	11/17/90	585.55	586.09	1	62.50	523.05
2027	12/13/90	585.55	586.09	1	62.50	523.05
2037	01/22/90	590.54		1	69.96	520.58
2037	02/16/90	590.54		1	69.48	521.06
2037	04/24/90	590.54		1	67.84	522.70
2037	04/04/90	590.54		1	67.97	522.57
2037	05/19/90	590.54		1	67.40	523.14
2037	06/19/90	590.54		1	66.42	524.12
2037	07/24/90	590.54		1	66.90	523.64
2037	08/14/90	590.54		1	67.05	523.49
2037	09/24/90	590.54		1	68.54	522.00
2037	10/23/90	590.54		1	68.12	522.42
2037	11/17/90	590.54		1	67.97	522.57
2037	12/13/90	590.54		1	67.97	522.57
2043	01/21/90	579.73	580.06	1	57.07	522.66
2043	02/14/90	579.73	580.06	1	56.75	522.98
2043	04/03/90	579.73	580.06	1	55.97	523.76
2043	04/22/90	579.73	580.06	1	55.64	524.09
2043	05/15/90	579.73	580.06	1	55.27	524.46
2043	06/17/90	579.73	580.06	1	54.35	525.38
2043	07/17/90	579.73	580.06	1	5.08	574.65
2043	08/07/90	579.73	580.06	1	54.64	525.09
2043	09/19/90	579.73	580.06	1	55.04	524.69
2043	10/20/90	579.73	580.06	1	55.17	524.56
2043	11/15/90	579.73	580.06	1	54.94	524.79
2043	12/13/90	579.73	580.06	1	54.94	524.79
2051	01/21/90	609.38	609.96	1	90.96	518.42
2051	02/16/90	609.38	609.96	1	90.32	519.06
2051	04/23/90	609.38	609.96	1	87.84	521.54
2051	04/03/90	609.38	609.96	1	88.24	521.14
2051	05/18/90	609.38	609.96	1	87.42	521.96
2051	06/18/90	609.38	609.96	1	86.34	523.04
2051	07/17/90	609.38	609.96	1	87.23	522.15
2051	08/08/90	609.38	609.96	1	87.50	521.88
2051	09/25/90	609.38	609.96	1	88.86	520.52
2051	10/17/90	609.38	609.96	1	N/A	N/A

WELL #	DATE MEASURED	TOP OF WELL	TOP OF CASING	REF. POINT	WATER LEVEL MEASURED	WATER LEVEL (AMSL)
2051	11/14/90	609.38	609.96	1	88.74	520.64
2051	12/13/90	609.38	609.96	1	88.74	520.64
2055	01/22/90	588.22	588.74	1	68.21	520.01
2055	02/16/90	588.22	588.74	1	67.83	520.39
2055	04/05/90	588.22	588.74	1	66.03	522.19
2055	04/23/90	588.22	588.74	1	65.66	522.56
2055	05/18/90	588.22	588.74	1	65.41	522.81
2055	06/21/90	588.22	588.74	1	64.44	523.78
2055	07/25/90	588.22	588.74	1	64.72	523.50
2055	08/11/90	588.22	588.74	1	65.03	523.19
2055	09/20/90	588.22	588.74	1	66.02	522.20
2055	10/23/90	588.22	588.74	1	66.05	522.17
2055	11/18/90	588.22	588.74	1	65.99	522.23
2055	12/13/90	588.22	588.74	1	65.99	522.23
2066	01/21/90	579.88	580.38	1	40.76	539.12
2066	02/14/90	579.88	580.38	1	41.02	538.86
2066	03/31/90	579.88	580.38	1	40.63	539.25
2066	04/22/90	579.88	580.38	1	40.80	539.08
2066	05/15/90	579.88	580.38	1	40.88	539.00
2066	06/17/90	579.88	580.38	1	41.85	538.03
2066	07/17/90	579.88	580.38	1	41.12	538.76
2066	08/07/90	579.88	580.38	1	40.97	538.91
2066	10/20/90	579.88	580.38	1	N/A	
2066	11/15/90	579.88	580.38	1	40.86	539.02
2066	12/13/90	579.88	580.38	1	40.86	539.02
2084	01/22/90	585.10	585.49	1	63.64	521.46
2084	02/16/90	585.10	585.49	1	63.18	521.92
2084	04/04/90	585.10	585.49	1	61.98	523.12
2084	04/24/90	585.10	585.49	1	61.81	523.29
2084	05/19/90	585.10	585.49	1	61.35	523.75
2084	06/21/90	585.10	585.49	1	60.41	524.69
2084	07/18/90	585.10	585.49	1	60.79	524.31
2084	08/14/90	585.10	585.49	1	60.94	524.16
2084	09/24/90	585.10	585.49	1	61.62	523.48
2084	10/24/90	585.10	585.49	1	61.71	523.39
2084	11/17/90	585.10	585.49	1	61.67	523.43
2084	12/13/90	585.10	585.49	1	61.67	523.43
3001	01/22/90	585.67	586.01	2	63.97	522.04
3001	02/16/90	585.67	586.01	2	63.44	522.57
3001	04/03/90	585.67	586.01	2	62.54	523.47
3001	04/24/90	585.67	586.01	2	62.16	523.85
3001	05/19/90	585.67	586.01	2	61.27	524.74
3001	06/19/90	585.67	586.01	2	60.51	525.50
3001	08/14/90	585.67	586.01	2	61.53	524.48

WELL #	DATE MEASURED	TOP OF WELL	TOP OF CASING	REF. POINT	WATER LEVEL MEASURED	WATER LEVEL (AMSL)
3001	10/24/90	585.67	586.01	2	N/A	
3008	01/22/90	576.76	577.76	2	56.25	521.51
3008	02/16/90	576.76	577.76	2	55.68	522.08
3008	04/24/90	576.76	577.76	2	54.72	523.04
3008	04/03/90	576.76	577.76	2	54.57	523.19
3008	05/19/90	576.76	577.76	2	53.60	524.16
3008	06/21/90	576.76	577.76	2	52.64	525.12
3008	07/24/90	576.76	577.76	2	53.34	524.42
3008	08/14/90	576.76	577.76	2	53.75	524.01
3008	09/24/90	576.76	577.76	2	55.44	522.32
3008	10/23/90	576.76	577.76	2	54.45	523.31
3008	11/17/90	576.76	577.76	2	54.32	523.44
3008	12/13/90	576.76	577.76	2	54.32	523.44
3010	01/22/90	587.84	587.94	2	67.39	520.55
3010	02/16/90	587.84	587.94	2	67.02	520.92
3010	04/04/90	587.84	587.94	2	65.32	522.62
3010	04/24/90	587.84	587.94	2	65.20	522.74
3010	05/19/90	587.84	587.94	2	64.75	523.19
3010	06/21/90	587.84	587.94	2	63.81	524.13
3010	07/24/90	587.84	587.94	2	64.24	523.70
3010	08/14/90	587.84	587.94	2	64.53	523.41
3010	09/24/90	587.84	587.94	2	65.22	522.72
3010	10/23/90	587.84	587.94	2	64.93	523.01
3010	11/17/90	587.84	587.94	2	66.34	521.60
3010	12/13/90	587.84	587.94	2	66.34	521.60
3013	01/22/90	589.71	590.52	2	71.19	519.33
3013	02/16/90	589.71	590.52	2	70.68	519.84
3013	04/04/90	589.71	590.52	2	68.52	522.00
3013	04/23/90	589.71	590.52	2	68.35	522.17
3013	05/18/90	589.71	590.52	2	68.05	522.47
3013	06/21/90	589.71	590.52	2	67.11	523.41
3013	07/19/90	589.71	590.52	2	67.53	522.99
3013	08/10/90	589.71	590.52	2	67.81	522.71
3013	09/21/90	589.71	590.52	2	68.79	521.73
3013	10/21/90	589.71	590.52	2	69.14	521.38
3013	11/18/90	589.71	590.52	2	69.01	521.51
3013	12/13/90	589.71	590.52	2	69.01	521.51
3019	01/22/90	584.96	585.21	2	63.77	521.44
3019	02/16/90	584.96	585.21	2	63.32	521.89
3019	04/04/90	584.96	585.21	2	62.06	523.15
3019	04/24/90	584.96	585.21	2	61.85	523.36
3019	05/19/90	584.96	585.21	2	61.38	523.83
3019	06/21/90	584.96	585.21	2	60.40	524.81
3019	07/19/90	584.96	585.21	2	6.09	579.12

REFERENCE POINT 1 IS TOP OF WELL, 2 IS TOP OF CASING/PAGE 8

WELL #	DATE MEASURED	TOP OF WELL	TOP OF CASING	REF. POINT	WATER LEVEL MEASURED	WATER LEVEL (AMSL)
3019	08/14/90	584.96	585.21	2	61.13	524.08
3019	09/24/90	584.96	585.21	2	61.74	523.47
3019	10/24/90	584.96	585.21	2	61.82	523.39
3019	11/17/90	584.96	585.21	2	61.84	523.37
3019	12/13/90	584.96	585.21	2	N/A	N/A
3024	01/21/90	581.83	582.09	1	60.35	521.48
3024	02/14/90	581.83	582.09	1	60.27	521.56
3024	04/03/90	581.83	582.09	1	58.94	522.89
3024	04/21/90	581.83	582.09	1	58.52	523.31
3024	05/18/90	581.83	582.09	1	58.23	523.60
3024	06/18/90	581.83	582.09	1	57.02	524.81
3024	07/18/90	581.83	582.09	1	57.37	524.46
3024	08/08/90	581.83	582.09	1	57.50	524.33
3024	09/18/90	581.83	582.09	1	58.36	523.47
3024	10/18/90	581.83	582.09	1	59.00	522.83
3024	11/14/90	581.83	582.09	1	58.27	523.56
3024	12/13/90	581.83	582.09	1	58.27	523.56
3037	01/22/90	590.27	590.75	1	69.67	520.60
3037	02/16/90	590.27	590.75	1	69.20	521.07
3037	04/24/90	590.27	590.75	1	67.55	522.72
3037	04/04/90	590.27	590.75	1	67.68	522.59
3037	05/19/90	590.27	590.75	1	67.14	523.13
3037	06/19/90	590.27	590.75	1	66.14	524.13
3037	07/24/90	590.27	590.75	1	66.61	523.66
3037	08/14/90	590.27	590.75	1	66.75	523.52
3037	09/24/90	590.27	590.75	1	67.54	522.73
3037	10/23/90	590.27	590.75	1	67.84	522.43
3037	11/17/90	590.27	590.75	1	67.69	522.58
3037	12/13/90	590.27	590.75	1	67.69	522.58
3043	01/21/90	580.18	580.40	1	57.45	522.73
3043	02/14/90	580.18	580.40	1	57.14	523.04
3043	04/03/90	580.18	580.40	1	56.32	523.86
3043	04/22/90	580.18	580.40	1	56.01	524.17
3043	05/15/90	580.18	580.40	1	55.64	524.54
3043	06/17/90	580.18	580.40	1	54.72	525.46
3043	07/16/90	580.18	580.40	1	55.00	525.18
3043	08/07/90	580.18	580.40	1	55.02	525.16
3043	09/19/90	580.18	580.40	1	55.43	524.75
3043	10/20/90	580.18	580.40	1	55.86	524.32
3043	11/15/90	580.18	580.40	1	55.33	524.85
3043	12/13/90	580.18	580.40	1	55.33	524.85
3051	01/21/90	607.97	608.71	1	89.55	518.42
3051	02/16/90	607.97	608.71	1	88.91	519.06
3051	10/17/90	607.97	608.71	1	N/A	

WELL #	DATE MEASURED	TOP OF WELL	TOP OF CASING	REF. POINT	WATER LEVEL MEASURED	WATER LEVEL (AMSL)
3055	01/22/90	589.01	589.37	2	69.17	520.20
3055	02/16/90	589.01	589.37	2	68.81	520.56
3055	04/05/90	589.01	589.37	2	67.02	522.35
3055	04/23/90	589.01	589.37	2	65.66	523.71
3055	05/18/90	589.01	589.37	2	66.46	522.91
3055	06/21/90	589.01	589.37	2	65.36	524.01
3055	07/25/90	589.01	589.37	2	65.90	523.47
3055	08/11/90	589.01	589.37	2	66.01	523.36
3055	09/20/90	589.01	589.37	2	66.99	522.38
3055	10/23/90	589.01	589.37	2	67.02	522.35
3055	11/18/90	589.01	589.37	2	66.74	522.63
3055	12/13/90	589.01	589.37	2	66.74	522.63
3066	01/21/90	579.85	580.36	1	57.27	522.58
3066	02/14/90	579.85	580.36	1	57.29	522.56
3066	03/31/90	579.85	580.36	1	56.22	523.63
3066	04/22/90	579.85	580.36	1	56.04	523.81
3066	05/15/90	579.85	580.36	1	55.78	524.07
3066	06/17/90	579.85	580.36	1	54.98	524.87
3066	07/17/90	579.85	580.36	1	55.03	524.82
3066	08/07/90	579.85	580.36	1	55.07	524.78
3066	09/19/90	579.85	580.36	1	55.34	524.51
3066	10/20/90	579.85	580.36	1	56.74	523.11
3084	01/22/90	584.99	585.47	1	63.52	521.47
3084	02/16/90	584.99	585.47	1	63.06	521.93
3084	04/04/90	584.99	585.47	1	61.85	523.14
3084	04/24/90	584.99	585.47	1	61.69	523.30
3084	05/19/90	584.99	585.47	1	61.22	523.77
3084	06/21/90	584.99	585.47	1	60.29	524.70
3084	07/18/90	584.99	585.47	1	60.66	524.33
3084	08/14/90	584.99	585.47	1	60.83	524.16
3084	09/24/90	584.99	585.47	1	61.50	523.49
3084	10/24/90	584.99	585.47	1	61.61	523.38
3084	11/17/90	584.99	585.47	1	61.56	523.43
3084	12/13/90	584.99	585.47	1	61.56	523.43
4001	01/22/90	585.50	586.50	2	65.22	521.28
4001	02/16/90	585.50	586.50	2	64.75	521.75
4001	04/03/90	585.50	586.50	2	63.70	522.80
4001	04/24/90	585.50	586.50	2	63.18	523.32
4001	05/19/90	585.50	586.50	2	62.52	523.98
4001	06/19/90	585.50	586.50	2	61.85	524.65
4001	07/24/90	585.50	586.50	2	62.51	523.99
4001	08/14/90	585.50	586.50	2	62.70	523.80
4001	09/24/90	585.50	586.50	2	63.40	523.10
4001	10/24/90	585.50	586.50	2	N/A	

WELL #	DATE MEASURED	TOP OF WELL	TOP OF CASING	REF. POINT	WATER LEVEL MEASURED	WATER LEVEL (AMSL)
4001	11/17/90	585.50	586.50	2	63.24	523.26
4001	12/13/90	585.50	586.50	2	63.24	523.26
4008	01/22/90	576.83	577.85	2	57.15	520.70
4008	02/16/90	576.83	577.85	2	56.78	521.07
4008	04/03/90	576.83	577.85	2	55.38	522.47
4008	04/24/90	576.83	577.85	2	54.20	523.65
4008	05/19/90	576.83	577.85	2	54.51	523.34
4008	06/21/90	576.83	577.85	2	53.41	524.44
4008	07/24/90	576.83	577.85	2	54.30	523.55
4008	08/14/90	576.83	577.85	2	54.14	523.71
4008	09/24/90	576.83	577.85	2	55.03	522.82
4008	10/23/90	576.83	577.85	2	54.96	522.89
4008	11/17/90	576.83	577.85	2	54.89	522.96
4008	12/13/90	576.83	577.85	2	54.89	522.96
4010	01/22/90	583.97	584.53	1	63.72	520.25
4010	02/16/90	583.97	584.53	1	62.94	521.03
4010	04/24/90	583.97	584.53	1	61.13	522.84
4010	04/04/90	583.97	584.53	1	61.28	522.69
4010	05/19/90	583.97	584.53	1	60.69	523.28
4010	06/21/90	583.97	584.53	1	59.73	524.24
4010	07/24/90	583.97	584.53	1	60.24	523.73
4010	08/14/90	583.97	584.53	1	60.46	523.51
4010	09/24/90	583.97	584.53	1	61.30	522.67
4010	10/23/90	583.97	584.53	1	61.41	522.56
4010	11/17/90	583.97	584.53	1	61.27	522.70
4010	12/13/90	583.97	584.53	1	61.27	522.70
4013	01/22/90	590.22	590.43	1	71.21	519.01
4013	02/16/90	590.22	590.43	1	70.71	519.51
4013	04/23/90	590.22	590.43	1	68.35	521.87
4013	04/04/90	590.22	590.43	1	68.53	521.69
4013	05/18/90	590.22	590.43	1	68.10	522.12
4013	06/21/90	590.22	590.43	1	67.12	523.10
4013	07/19/90	590.22	590.43	1	67.55	522.67
4013	08/10/90	590.22	590.43	1	67.64	522.58
4013	09/21/90	590.22	590.43	1	68.83	521.39
4013	10/21/90	590.22	590.43	1	69.10	521.12
4013	11/18/90	590.22	590.43	1	69.04	521.18
4013	12/13/90	590.22	590.43	1	69.04	521.18

Appendix III

MATHEMATICAL CALCULATIONS

CONDUCTIVITY MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED LATERALLY BETWEEN MONITORING WELLS 2084 AND 2027

The distance between the wells is calculated using the coordinates for each well. The distance between Monitoring well 2084 and 2027 is:

	EAST COORDINATE	NORTH COORDINATE	DEPTH
Monitoring Well 2084	1378940.30	481922.56	N/A
Monitoring Well 2027	- 1379317.37	- 481969.29	N/A
	377.07	46.73	N/A

Using the formula $r^2 = a^2 + b^2$, the straight distance between the wells can be calculated from the East and North distances.

$$r^2 = 377.07^2 + 46.73^2$$

$$r = 377.07^2 + 46.73^2$$

$$r = 379.95 \text{ ft}$$

The straight distance between Monitoring Wells 2084 and 2027 is 379.95 ft.

The vertical distance between Monitoring Wells 2084 and 2027 does not impact the calculation because the two monitoring wells are screened in the same zone.

The linear equations for the change in conductivity are:

Monitoring Well 2084: C = -22.7364*TIME + 1741.33

Monitoring Well 2027: C = -15.8091*TIME + 1310.58

Where C is the average conductivity at time (TIME). If we choose a time

CONDUCTIVITY MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED LATERALLY BETWEEN MONITORING WELLS 2084 AND 2027

(TIME = 1), and we solve the Monitoring Well 2027 equation for conductivity, the result is:

$$C = -15.8091*(1) + 1310.58$$

$$C = 1294.8 \text{ ppm}$$

The conductivity calculated at time (TIME= 1) for Monitoring Well 2027 is then inserted into the conductivity value in the Monitoring Well 2084 equation, and the equation is solved for time (TIME).

$$1294.8 = -22.7364*TIME + 1741.33$$

$$TIME = (1294.8 - 1741.33) \div -22.7364$$

$$TIME = 19.64 \text{ quarters or } 4.91 \text{ years.}$$

This time represents the travel time for the 1294.8 uMHOs/cm conductivity level from Monitoring Well 2084 to 2027.

If we take the distance calculated between the two Monitoring Wells and divide it by the travel time for the stated level, the result is the average distance travelled by the conductivity level per year.

$$380 \text{ feet} / 4.91 \text{ years} = 77.4 \text{ feet/yr}$$

CONDUCTIVITY MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED VERTICALLY BETWEEN MONITORING WELLS 2084 AND 3084

The distance between the wells is calculated using the coordinates for each well. The distance between Monitoring well 2084 and 3084 is:

	EAST COORDINATE	NORTH COORDINATE	DEPTH
Monitoring Well 2084	1378940.30	481922.56	509.10
Monitoring Well 3084	- 1378947.20	- 481920.37	468.99
	6.9	2.19	40.11

Using the formula $r^2 = a^2 + b^2$, the straight distance between the wells can be calculated from the East and North distances.

$$r^2 = 6.9^2 + 2.19^2$$

$$r = 6.9^2 + 2.19^2$$

$$r = 7.24 \text{ ft}$$

The straight distance between Monitoring Wells 2084 and 3084 is 7.24 ft.

Using the formula $r^2 = a^2 + b^2$, the vertical distance between the wells can be calculated from the straight distance and the vertical difference between the wells.

$$r^2 = 7.24^2 + 40.11^2$$

$$r = 7.24^2 + 40.11^2$$

$$r = 40.76 \text{ ft}$$

The vertical distance between Monitoring Wells 2084 and 3084 is 40.76 ft.

CONDUCTIVITY MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED VERTICALLY BETWEEN MONITORING WELLS 2084 AND 3084

The linear equations for the change in conductivity are:

Monitoring Well 2084: C = -22.7364*TIME + 1741.33

Monitoring Well 3084: C = -32.9134*TIME + 1680.52

Where C is the average conductivity at time (TIME). If we choose a time (TIME = 1), and we solve the Monitoring Well 3084 equation for conductivity, the result is:

C = -32.9134*(1) + 1680.52

C = 1647.61 ppm

The conductivity calculated at time (TIME= 1) for Monitoring Well 3084 is then inserted into the conductivity value in the Monitoring Well 2084 equation, and the equation is solved for time (TIME).

1647.61 = -22.7364*TIME + 1741.33

TIME = (1647.61 - 1741.33) ÷ -22.7364

TIME = 4.12 quarters or 1.031 years.

This time represents the travel time for the 1647.61 uMHOs/cm conductivity level from Monitoring Well 2084 to 3084.

If we take the distance calculated between the two Monitoring Wells and divide it by the travel time for the stated level, the result is the average distance travelled by the conductivity level per year.

40.76 feet / 1.031 years = 39.53 feet/year

CONDUCTIVITY MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED DIAGONALLY BETWEEN MONITORING WELLS 2027 AND 3037

The distance between the wells is calculated using the coordinates for each well. The distance between Monitoring well 2027 and 3037 is:

	EAST COORDINATE	NORTH COORDINATE	DEPTH
Monitoring Well 2027	1379317.37	481969.29	512.15
Monitoring Well 3037	- 1379791.96	- 482141.43	453.77
	172.14	474.59	56.0

Using the formula $r^2 = a^2 + b^2$, the straight distance between the wells can be calculated from the East and North distances.

$$r^2 = 172.14^2 + 474.59^2$$

$$r = 172.14^2 + 474.59^2$$

$$r = 504.89 \text{ ft}$$

The straight distance between Monitoring Wells 2027 and 3037 is 504.89 ft.

Using the formula $r^2 = a^2 + b^2$, the vertical distance between the wells can be calculated from the straight distance and the vertical difference between the wells.

$$r^2 = 504.89^2 + 56.0^2$$

$$r = 504.89^2 + 56.0^2$$

$$r = 507.94 \text{ ft}$$

The vertical distance between Monitoring Wells 2027 and 3037 is 507.94 ft.

CONDUCTIVITY MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED DIAGONALLY BETWEEN MONITORING WELLS 2027 AND 3037

The linear equations for the change in conductivity are:

Monitoring Well 2027: $C = -15.8091*TIME + 1310.58$

Monitoring Well 3037: $C = -4.83636*TIME + 1598.75$

Where C is the average conductivity at time (TIME). If we choose a time (TIME = 1), and we solve the Monitoring Well 2027 equation for conductivity, the result is:

$$C = -15.8091*(1) + 1310.58$$

$$C = 1294.8 \text{ ppm}$$

The conductivity calculated at time (TIME= 1) for Monitoring Well 2027 is then inserted into the conductivity value in the Monitoring Well 3037 equation, and the equation is solved for time (TIME).

$$1294.8 = -4.83636*TIME + 1598.75$$

$$TIME = (1294.8 - 1598.75) \bullet -4.83636$$

$$TIME = 62.853 \text{ quarters or } 15.71 \text{ years.}$$

This time represents the travel time for the 1294.8 uMHOs/cm conductivity level from Monitoring Well 2027 to 3037.

If we take the distance calculated between the two Monitoring Wells and divide it by the travel time for the stated level, the result is the average distance travelled by the conductivity level per year.

507.94 feet / 15.71 years = 32.33 feet/year

CHLORIDE MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED LATERALLY BETWEEN MONITORING WELLS 2027 AND 2084

The distance between the wells is calculated using the coordinates for each well. The distance between Monitoring well 2084 and 2027 is:

	EAST COORDINATE	NORTH COORDINATE	DEPTH
Monitoring Well 2084	1378940.30	481922.56	N/A
Monitoring Well 2027	- 1379317.37	- 481969.29	N/A
	377.07	46.73	N/A

Using the formula $r^2 = a^2 + b^2$, the straight distance between the wells can be calculated from the East and North distances.

$$r^2 = 377.07^2 + 46.73^2$$

$$r = \sqrt{377.07^2 + 46.73^2}$$

$$r = 379.95 \text{ ft}$$

The straight distance between Monitoring Wells 2084 and 2027 is 380 ft.

The vertical distance between Monitoring Wells 2084 and 2027 does not impact the calculation because the two monitoring wells are screened in the same zone.

The linear equations for the change in concentration are:

Monitoring Well 2084: $C = - 2.87273*TIME + 195.145$

Monitoring Well 2027: $C = - 1.25909*TIME + 98.0909$

CHLORIDE MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED LATERALLY BETWEEN MONITORING WELLS 2027 AND 2084

Where C is the average concentration at time (TIME). If we choose a time (TIME = 1), and we solve the Monitoring Well 2027 equation for concentration, the result is:

$$C = -1.25909*(1) + 98.0909$$

$$C = 96.83181$$

The concentration calculated at time (TIME= 1) for Monitoring Well 2027 is then inserted into the concentration value in the Monitoring Well 2084 equation, and the equation is solved for time (TIME).

$$96.832 = -2.7972*TIME + 194.944$$

$$TIME = (96.832 - 194.944) \div -2.7972$$

$$TIME = 35.075 \text{ quarters or } 8.77 \text{ years.}$$

This time represents the travel time for the 96.832ppm chloride level from Monitoring Well 2027 to 2084.

If we take the distance calculated between the two Monitoring Wells and divide it by the travel time for the stated level, the result is the average distance travelled by the 96.832ppm level per year.

380 feet / 8.77 years = 43.34 feet/yr

CALCIUM MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED LATERALLY BETWEEN MONITORING WELLS 2010 AND 2055

The distance between the wells is calculated using the coordinates for each well. The distance between Monitoring well 2010 and 2055 is:

	EAST COORDINATE	NORTH COORDINATE	DEPTH
Monitoring Well 2055	1380703.99	481488.08	N/A
Monitoring Well 2010	- 1379691.07	- 481460.53	N/A
	1012.92	27.55	N/A

Using the formula $r^2 = a^2 + b^2$, the straight distance between the wells can be calculated from the East and North distances.

$$r^2 = 1012.92^2 + 27.55^2$$

$$r = 1012.92^2 + 27.55^2$$

$$r = 1013.3 \text{ ft}$$

The straight distance between Monitoring Wells 2010 and 2055 is 1013.3 ft.

The vertical distance between Monitoring Wells 2010 and 2055 does not impact the calculation because the two monitoring wells are screened in the same zone.

The linear equations for the change in concentration are:

Monitoring Well 2010: C = 0.0181818*TIME + 188.255

Monitoring Well 2055: C = 1.82143*TIME + 107

CALCIUM MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED LATERALLY BETWEEN MONITORING WELLS 2010 AND 2055

Where C is the average concentration at time (TIME). If we choose a time (TIME = 1), and we solve the Monitoring Well 2010 equation for concentration, the result is:

$$C = 0.0181818*(1) + 188.255$$

$$C = 188.27$$

The concentration calculated at time (TIME= 1) for Monitoring Well 2010 is then inserted into the concentration value in the Monitoring Well 2055 equation, and the equation is solved for time (TIME).

$$188.27 = 1.82143*TIME + 107$$

$$TIME = (188.27 - 107) \div 1.82143$$

$$TIME = 44.62 \text{ quarters or } 11.16 \text{ years.}$$

This time represents the travel time for the 188.27ppm calcium level from Monitoring Well 2010 to 2055.

If we take the distance calculated between the two Monitoring Wells and divide it by the travel time for the stated level, the result is the average distance travelled by the 188.27ppm level per year.

$$1013.3 \text{ feet} / 11.16 \text{ years} = 90.84 \text{ feet/yr}$$

SULFATE MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED LATERALLY BETWEEN MONITORING WELLS 2027 AND 2084

The distance between the wells is calculated using the coordinates for each well. The distance between Monitoring well 2084 and 2027 is:

	EAST COORDINATE	NORTH COORDINATE	DEPTH
Monitoring Well 2084	1378940.30	481922.56	N/A
Monitoring Well 2027	- 1379317.37	- 481969.29	N/A
	377.07	46.73	N/A

Using the formula $r^2 = a^2 + b^2$, the straight distance between the wells can be calculated from the East and North distances.

$$r^2 = 377.07^2 + 46.73^2$$

$$r = 377.07^2 + 46.73^2$$

$$r = 379.95 \text{ ft}$$

The straight distance between Monitoring Wells 2027 and 2084 is 380 ft.

The vertical distance between Monitoring Wells 2027 and 2084 does not impact the calculation because the two monitoring wells are screened in the same zone.

The linear equations for the change in concentration are:

Monitoring Well 2084: C = 45.6091*TIME + 257.436

Monitoring Well 2027: C = 5.67273*TIME + 394.873

SULFATE MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED LATERALLY BETWEEN MONITORING WELLS 2027 AND 2084

Where C is the average concentration at time (TIME). If we choose a time (TIME = 4), and we solve the Monitoring Well 2084 equation for concentration, the result is:

$$C = 45.6091*(4) + 257.436$$

$$C = 439.8724 \text{ ppm}$$

The concentration calculated at time (TIME= 4) for Monitoring Well 2084 is then inserted into the concentration value in the Monitoring Well 2027 equation, and the equation is solved for time (TIME).

$$439.8724 = 5.67273*TIME + 394.873$$

$$TIME = (439.8724 - 394.873) \div 5.67273$$

$$TIME = 7.933 \text{ quarters or } 1.983 \text{ years.}$$

This time represents the travel time for the 439.8724 ppm sulfate level from Monitoring Well 2084 to 2027.

If we take the distance calculated between the two Monitoring Wells and divide it by the travel time for the stated level, the result is the average distance travelled by the sulfate level per year.

$$380 \text{ feet} / 1.983 \text{ years} = 191.6 \text{ feet/yr}$$

MAGNESIUM MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED LATERALLY BETWEEN MONITORING WELLS 2084 AND 2027

The distance between the wells is calculated using the coordinates for each well. The distance between Monitoring well 2084 and 2027 is:

	EAST COORDINATE	NORTH COORDINATE	DEPTH
Monitoring Well 2084	1378940.30	481922.56	N/A
Monitoring Well 2027	- 1379317.37	- 481969.29	N/A
	377.07	46.73	N/A

Using the formula $r^2 = a^2 + b^2$, the straight distance between the wells can be calculated from the East and North distances.

$$r^2 = 377.07^2 + 46.73^2$$

$$r = 377.07^2 + 46.73^2$$

$$r = 379.95 \text{ ft}$$

The straight distance between Monitoring Wells 2084 and 2027 is 380 ft.

The vertical distance between Monitoring Wells 2084 and 2027 does not impact the calculation because the two monitoring wells are screened in the same zone.

The linear equations for the change in concentration are:

Monitoring Well 2084: C = 3.2273*TIME + 62.4909

Monitoring Well 2027: C = 2.84818*TIME + 39.3927

MAGNESIUM MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED LATERALLY BETWEEN MONITORING WELLS 2084 AND 2027

Where C is the average concentration at time (TIME). If we choose a time (TIME = 1), and we solve the Monitoring Well 2084 equation for concentration, the result is:

$$C = 3.2273*(1) + 62.4909$$

$$C = 65.7182$$

The concentration calculated at time (TIME= 1) for Monitoring Well 2084 is then inserted into the concentration value in the Monitoring Well 2027 equation, and the equation is solved for time (TIME).

$$65.7182 = 2.84818*TIME + 39.3927$$

$$TIME = (65.7182 - 39.3927) \div 2.84818$$

$$TIME = 9.08 \text{ quarters or } 2.269 \text{ years.}$$

This time represents the travel time for the 65.7182ppm magnesium level from Monitoring Well 2084 to 2027.

If we take the distance calculated between the two Monitoring Wells and divide it by the travel time for the stated level, the result is the average distance travelled by the 65.7182ppm level per year.

$$380 \text{ feet} / 2.269 \text{ years} = 167.44 \text{ feet/yr}$$

MAGNESIUM MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED LATERALLY BETWEEN MONITORING WELLS 3084 AND 3037

The distance between the wells is calculated using the coordinates for each well. The distance between Monitoring well 3084 and 3037 is:

	EAST COORDINATE	NORTH COORDINATE	DEPTH
Monitoring Well 3084	1378947.28	481920.37	N/A
Monitoring Well 3037	- 1379791.96	- 482141.43	N/A
	844.68	221.06	N/A

Using the formula $r^2 = a^2 + b^2$, the straight distance between the wells can be calculated from the East and North distances.

$$r^2 = 844.68^2 + 221.06^2$$

$$r = 844.68^2 + 221.06^2$$

$$r = 873.13 \text{ ft}$$

The straight distance between Monitoring Wells 3084 and 3037 is 873.13 ft.

The vertical distance between Monitoring Wells 3084 and 3037 does not impact the calculation because the two monitoring wells are screened in the same zone.

The linear equations for the change in concentration are:

Monitoring Well 3084: C = -0.64*TIME + 81.6218

Monitoring Well 3037: C = -0.629735*TIME + 65.7544

MAGNESIUM MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED LATERALLY BETWEEN MONITORING WELLS 3084 AND 3027

Where C is the average concentration at time (TIME). If we choose a time (TIME = 1), and we solve the Monitoring Well 3037 equation for concentration, the result is:

$$C = -0.629735*(1) + 65.7544$$

$$C = 65.12\text{ppm}$$

The concentration calculated at time (TIME= 1) for Monitoring Well 3037 is then inserted into the concentration value in the Monitoring Well 3084 equation, and the equation is solved for time (TIME).

$$65.12 = -0.64*TIME + 81.6218$$

$$TIME = (65.12-81.6218) \div -0.64$$

$$TIME = 25.78 \text{ quarters or } 6.45 \text{ years.}$$

This time represents the travel time for the 65.12ppm magnesium level from Monitoring Well 3037 to 3084.

If we take the distance calculated between the two Monitoring Wells and divide it by the travel time for the stated level, the result is the average distance travelled by the 65.12ppm level per year.

$$873.13 \text{ feet} / 6.45 \text{ years} = 135.45 \text{ feet/yr}$$

MANGANESE MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED LATERALLY BETWEEN MONITORING WELLS 2084 AND 2027

The distance between the wells is calculated using the coordinates for each well. The distance between Monitoring well 2084 and 2027 is:

	EAST COORDINATE	NORTH COORDINATE	DEPTH
Monitoring Well 2084	1378940.30	481922.56	N/A
Monitoring Well 2027	- 1379317.37	- 481969.29	N/A
	377.07	46.73	N/A

Using the formula $r^2 = a^2 + b^2$, the straight distance between the wells can be calculated from the East and North distances.

$$r^2 = 377.07^2 + 46.73^2$$

$$r = 377.07^2 + 46.73^2$$

$$r = 379.95 \text{ ft}$$

The straight distance between Monitoring Wells 2084 and 2027 is 380 ft.

The vertical distance between Monitoring Wells 2084 and 2027 does not impact the calculation because the two monitoring wells are screened in the same zone.

The linear equations for the change in concentration are:

Monitoring Well 2027: C = 0.139253*TIME + 0.31196

Monitoring Well 2084: C = 0.206908*TIME + -0.19444

MANGANESE MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED LATERALLY BETWEEN MONITORING WELLS 2084 AND 2027

Where C is the average concentration at time (TIME). If we choose a time (TIME = 7), and we solve the Monitoring Well 2084 equation for concentration, the result is:

$$C = 0.206908*(7) + -0.19444$$

$$C = 1.254\text{ppm}$$

The concentration calculated at time (TIME= 7) for Monitoring Well 2084 is then inserted into the concentration value in the Monitoring Well 2027 equation, and the equation is solved for time (TIME).

$$1.254 = 0.139253*\text{TIME} + 0.31196$$

$$\text{TIME} = (1.254 - 0.31196) \div 0.139253$$

$$\text{TIME} = 6.76 \text{ quarters or } 1.691 \text{ years.}$$

This time represents the travel time for the 1.254ppm manganese level from Monitoring Well 2084 to 2027.

If we take the distance calculated between the two Monitoring Wells and divide it by the travel time for the stated level, the result is the average distance travelled by the 1.254ppm level per year.

$$380 \text{ feet} / 1.691 \text{ years} = 224.70 \text{ feet/yr}$$

MANGANESE MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED LATERALLY BETWEEN MONITORING WELLS 3084 AND 3027

The distance between the wells is calculated using the coordinates for each well. The distance between Monitoring well 3084 and 3027 is:

	EAST COORDINATE	NORTH COORDINATE	DEPTH
Monitoring Well 3084	1378947.28	481920.37	N/A
Monitoring Well 3027	- 1379791.96	- 482141.43	N/A
	844.68	221.06	N/A

Using the formula $r^2 = a^2 + b^2$, the straight distance between the wells can be calculated from the East and North distances.

$$r^2 = 844.68^2 + 221.06^2$$

$$r = 844.68^2 + 221.06^2$$

$$r = 873.13 \text{ ft}$$

The straight distance between Monitoring Wells 3084 and 3037 is 873.13 ft.

The vertical distance between Monitoring Wells 3084 and 3037 does not impact the calculation because the two monitoring wells are screened in the same zone.

The linear equations for the change in concentration are:

Monitoring Well 3084: C = -0.11382*TIME + 3.0093

Monitoring Well 3037: C = -0.0136763*TIME + 0.727394

MANGANESE MIGRATION IN THE SAND AND GRAVEL AQUIFER CALCULATED LATERALLY BETWEEN MONITORING WELLS 3084 AND 3037

Where C is the average concentration at time (TIME). If we choose a time (TIME = 1), and we solve the Monitoring Well 3037 equation for concentration, the result is:

$$C = -0.0136763*(1) + 0.727394$$

$$C = 0.71372$$

The concentration calculated at time (TIME= 1) for Monitoring Well 3037 is then inserted into the concentration value in the Monitoring Well 3084 equation, and the equation is solved for time (TIME).

$$0.71372 = -0.11382*TIME + 3.0093$$

$$TIME = (0.71372 - 3.0093) \div -0.11382$$

$$TIME = 20.17 \text{ quarters or } 5.04 \text{ years.}$$

This time represents the travel time for the 0.71372ppm manganese level from Monitoring Well 3037 to 3084.

If we take the distance calculated between the two Monitoring Wells and divide it by the travel time for the stated level, the result is the average distance travelled by the 0.71372ppm level per year.

$$873.13 \text{ feet} / 5.04 \text{ years} = 173.17 \text{ feet/yr}$$

Appendix IV

FIELD DATA

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FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 1004						
1004	02-18-90	Dissolved Oxygen	N/A	N/A	N/A	mg/l
1004	05-02-90	Dissolved Oxygen	N/A	N/A	N/A	mg/l
1004	08-07-90	Dissolved Oxygen	N/A	N/A	N/A	mg/l
1004	11-08-90	Dissolved Oxygen	N/A	N/A	N/A	mg/l
1004	02-18-90	pH	N/A	N/A	N/A	SU
1004	05-02-90	pH	N/A	N/A	N/A	SU
1004	08-07-90	pH	N/A	N/A	N/A	SU
1004	11-08-90	pH	N/A	N/A	N/A	SU
1004	02-18-90	Specific Conductivity	N/A	N/A	N/A	mMHO/cm
1004	05-02-90	Specific Conductivity	N/A	N/A	N/A	mMHO/cm
1004	08-07-90	Specific Conductivity	N/A	N/A	N/A	mMHO/cm
1004	11-08-90	Specific Conductivity	N/A	N/A	N/A	mMHO/cm
1004	02-18-90	Temperature	N/A	N/A	N/A	C
1004	05-02-90	Temperature	N/A	N/A	N/A	C
1004	08-07-90	Temperature	N/A	N/A	N/A	C
1004	11-08-90	Temperature	N/A	N/A	N/A	C
1004	02-18-90	Water Level From Well Top	N/A	N/A	N/A	FT
1004	05-02-90	Water Level From Well Top	N/A	N/A	N/A	FT
1004	08-07-90	Water Level From Well Top	N/A	N/A	N/A	FT
1004	11-08-90	Water Level From Well Top	N/A	N/A	N/A	FT
1004	02-18-90	Total Depth Of Well	N/A	N/A	N/A	FT
1004	05-02-90	Total Depth Of Well	N/A	N/A	N/A	FT
1004	08-07-90	Total Depth Of Well	32.73	N/A	N/A	FT
1004	11-08-90	Total Depth Of Well	N/A	N/A	N/A	FT
1004	02-18-90	Total Purge Amount	N/A	N/A	N/A	GAL
1004	05-02-90	Total Purge Amount	N/A	N/A	N/A	GAL
1004	08-07-90	Total Purge Amount	N/A	N/A	N/A	GAL
1004	11-08-90	Total Purge Amount	N/A	N/A	N/A	GAL

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N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 1024						
1024	02-18-90	Dissolved Oxygen	4.40	2.40	N/A	mg/l
1024	05-15-90	Dissolved Oxygen	1.50	2.40	N/A	mg/l
1024	08-08-90	Dissolved Oxygen	2.30	2.40	3.00	mg/l
1024	11-13-90	Dissolved Oxygen	2.40	2.60	2.20	mg/l
1024	02-18-90	pH	7.16	6.86	N/A	SU
1024	05-15-90	pH	6.98	6.93	N/A	SU
1024	08-08-90	pH	7.10	6.94	6.97	SU
1024	11-13-90	pH	7.01	7.02	7.01	SU
1024	02-18-90	Specific Conductivity	0.50	0.53	N/A	mMHO/cm
1024	05-15-90	Specific Conductivity	0.61	0.60	N/A	mMHO/cm
1024	08-08-90	Specific Conductivity	0.60	0.60	0.60	mMHO/cm
1024	11-13-90	Specific Conductivity	0.29	0.30	0.52	mMHO/cm
1024	02-18-90	Temperature	N/A	7.70	N/A	C
1024	05-15-90	Temperature	13.10	12.90	N/A	C
1024	08-08-90	Temperature	15.10	13.80	14.70	C
1024	11-13-90	Temperature	12.10	13.50	12.80	C
1024	02-18-90	Water Level From Well Top	3.40	N/A	N/A	FT
1024	05-15-90	Water Level From Well Top	2.55	N/A	N/A	FT
1024	08-08-90	Water Level From Well Top	10.72	N/A	N/A	FT
1024	11-13-90	Water Level From Well Top	5.63	N/A	N/A	FT
1024	02-18-90	Total Depth Of Well	30.60	N/A	N/A	FT
1024	05-15-90	Total Depth Of Well	30.21	N/A	N/A	FT
1024	08-08-90	Total Depth Of Well	30.21	N/A	N/A	FT
1024	11-13-90	Total Depth Of Well	30.20	N/A	N/A	FT
1024	02-18-90	Total Purge Amount	54.40	N/A	N/A	GAL
1024	05-15-90	Total Purge Amount	54.19	N/A	N/A	GAL
1024	08-08-90	Total Purge Amount	38.18	N/A	N/A	GAL
1024	11-13-90	Total Purge Amount	48.10	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 1025						
1025	02-15-90	Dissolved Oxygen	1.40	1.35	N/A	mg/l
1025	05-03-90	Dissolved Oxygen	5.40	5.00	N/A	mg/l
1025	08-06-90	Dissolved Oxygen	2.80	5.80	7.20	mg/l
1025	11-07-90	Dissolved Oxygen	2.00	3.20	N/A	mg/l
1025	02-15-90	pH	6.81	8.10	N/A	SU
1025	05-03-90	pH	6.62	6.64	N/A	SU
1025	08-06-90	pH	6.46	6.44	6.92	SU
1025	11-07-90	pH	6.32	6.30	N/A	SU
1025	02-15-90	Specific Conductivity	0.37	0.34	N/A	mMHO/cm
1025	05-03-90	Specific Conductivity	1.00	1.00	N/A	mMHO/cm
1025	08-06-90	Specific Conductivity	3.84	3.75	3.51	mMHO/cm
1025	11-07-90	Specific Conductivity	3.84	3.69	N/A	mMHO/cm
1025	02-15-90	Temperature	12.70	13.60	N/A	C
1025	05-03-90	Temperature	11.90	12.10	N/A	C
1025	08-06-90	Temperature	15.50	14.20	16.30	C
1025	11-07-90	Temperature	14.40	14.10	N/A	C
1025	02-15-90	Water Level From Well Top	12.39	N/A	N/A	FT
1025	05-03-90	Water Level From Well Top	12.10	N/A	N/A	FT
1025	08-06-90	Water Level From Well Top	11.05	N/A	N/A	FT
1025	11-07-90	Water Level From Well Top	11.05	N/A	N/A	FT
1025	02-15-90	Total Depth Of Well	25.53	N/A	N/A	FT
1025	05-03-90	Total Depth Of Well	25.54	N/A	N/A	FT
1025	08-06-90	Total Depth Of Well	25.55	N/A	N/A	FT
1025	11-07-90	Total Depth Of Well	25.55	N/A	N/A	FT
1025	02-15-90	Total Purge Amount	26.28	N/A	N/A	GAL
1025	05-03-90	Total Purge Amount	26.33	N/A	N/A	GAL
1025	08-06-90	Total Purge Amount	28.41	N/A	N/A	GAL
1025	11-07-90	Total Purge Amount	28.41	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 1027						
1027	02-15-90	Dissolved Oxygen	2.90	2.50	N/A	mg/l
1027	05-02-90	Dissolved Oxygen	3.50	2.10	N/A	mg/l
1027	08-02-90	Dissolved Oxygen	0.60	1.10	0.60	mg/l
1027	11-01-90	Dissolved Oxygen	2.90	2.70	2.10	mg/l
1027	02-15-90	pH	7.46	7.55	N/A	SU
1027	05-02-90	pH	7.58	7.22	N/A	SU
1027	08-02-90	pH	7.39	7.22	7.31	SU
1027	11-01-90	pH	7.28	7.13	7.13	SU
1027	02-15-90	Specific Conductivity	0.68	0.65	N/A	mMHO/cm
1027	05-02-90	Specific Conductivity	0.47	0.55	N/A	mMHO/cm
1027	08-02-90	Specific Conductivity	0.37	0.50	0.51	mMHO/cm
1027	11-01-90	Specific Conductivity	0.25	0.51	0.50	mMHO/cm
1027	02-15-90	Temperature	N/A	13.80	N/A	C
1027	05-02-90	Temperature	11.40	12.50	N/A	C
1027	08-02-90	Temperature	16.20	14.10	14.10	C
1027	11-01-90	Temperature	18.00	17.70	17.50	C
1027	02-15-90	Water Level From Well Top	8.50	N/A	N/A	FT
1027	05-02-90	Water Level From Well Top	8.78	N/A	N/A	FT
1027	08-02-90	Water Level From Well Top	9.79	N/A	N/A	FT
1027	11-01-90	Water Level From Well Top	9.00	N/A	N/A	FT
1027	02-15-90	Total Depth Of Well	32.00	N/A	N/A	FT
1027	05-02-90	Total Depth Of Well	32.60	N/A	N/A	FT
1027	08-02-90	Total Depth Of Well	32.66	N/A	N/A	FT
1027	11-01-90	Total Depth Of Well	32.60	N/A	N/A	FT
1027	02-15-90	Total Purge Amount	47.00	N/A	N/A	GAL
1027	05-02-90	Total Purge Amount	46.66	N/A	N/A	GAL
1027	08-02-90	Total Purge Amount	44.80	N/A	N/A	GAL
1027	11-01-90	Total Purge Amount	46.20	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 1028						
1028	02-15-90	Dissolved Oxygen	1.90	N/A	N/A	mg/l
1028	05-03-90	Dissolved Oxygen	5.60	N/A	N/A	mg/l
1028	08-06-90	Dissolved Oxygen	7.40	N/A	N/A	mg/l
1028	08-07-90	Dissolved Oxygen	N/A	4.70	N/A	mg/l
1028	08-08-90	Dissolved Oxygen	N/A	5.00	N/A	mg/l
1028	08-13-90	Dissolved Oxygen	5.60	N/A	N/A	mg/l
1028	08-14-90	Dissolved Oxygen	N/A	4.00	N/A	mg/l
1028	11-01-90	Dissolved Oxygen	2.60	N/A	N/A	mg/l
1028	02-15-90	pH	6.81	N/A	N/A	SU
1028	05-03-90	pH	6.66	N/A	N/A	SU
1028	08-06-90	pH	6.94	N/A	N/A	SU
1028	08-07-90	pH	N/A	6.45	N/A	SU
1028	08-08-90	pH	N/A	6.42	N/A	SU
1028	08-13-90	pH	6.67	N/A	N/A	SU
1028	08-14-90	pH	N/A	6.54	N/A	SU
1028	11-01-90	pH	6.46	N/A	N/A	SU
1028	02-15-90	Specific Conductivity	0.45	N/A	N/A	mMHO/cm
1028	05-03-90	Specific Conductivity	1.00	N/A	N/A	mMHO/cm
1028	08-06-90	Specific Conductivity	3.76	N/A	N/A	mMHO/cm
1028	08-07-90	Specific Conductivity	N/A	4.33	N/A	mMHO/cm
1028	08-08-90	Specific Conductivity	N/A	1.00	N/A	mMHO/cm
1028	08-13-90	Specific Conductivity	N/A	1.00	N/A	mMHO/cm
1028	08-14-90	Specific Conductivity	N/A	1.00	N/A	mMHO/cm
1028	11-01-90	Specific Conductivity	N/A	1.00	N/A	mMHO/cm
1028	02-15-90	Temperature	13.90	N/A	N/A	C
1028	05-03-90	Temperature	12.10	N/A	N/A	C
1028	08-06-90	Temperature	15.30	N/A	N/A	C
1028	08-07-90	Temperature	N/A	13.20	N/A	C
1028	08-08-90	Temperature	N/A	13.40	N/A	C
1028	08-13-90	Temperature	14.70	N/A	N/A	C
1028	08-14-90	Temperature	N/A	14.00	N/A	C
1028	11-01-90	Temperature	14.40	N/A	N/A	C
1028	02-15-90	Water Level From Well Top	29.72	N/A	N/A	FT
1028	05-03-90	Water Level From Well Top	30.10	N/A	N/A	FT
1028	08-06-90	Water Level From Well Top	30.40	N/A	N/A	FT
1028	08-13-90	Water Level From Well Top	30.70	N/A	N/A	FT
1028	08-14-90	Water Level From Well Top	31.86	N/A	N/A	FT
1028	08-15-90	Water Level From Well Top	32.26	N/A	N/A	FT

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
1028	08-16-90	Water Level From Well Top	32.02	N/A	N/A	FT
1028	08-NA-90	Water Level From Well Top	32.13	N/A	N/A	FT
1028	11-01-90	Water Level From Well Top	30.05	N/A	N/A	FT
1028	02-15-90	Total Depth Of Well	32.58	N/A	N/A	FT
1028	05-03-90	Total Depth Of Well	32.60	N/A	N/A	FT
1028	08-06-90	Total Depth Of Well	32.58	N/A	N/A	FT
1028	08-13-90	Total Depth Of Well	32.60	N/A	N/A	FT
1028	08-14-90	Total Depth Of Well	32.64	N/A	N/A	FT
1028	08-15-90	Total Depth Of Well	32.62	N/A	N/A	FT
1028	08-16-90	Total Depth Of Well	32.63	N/A	N/A	FT
1028	08-NA-90	Total Depth Of Well	32.63	N/A	N/A	FT
1028	11-01-90	Total Depth Of Well	32.56	N/A	N/A	FT
1028	02-15-90	Total Purge Amount	5.72	N/A	N/A	GAL
1028	05-03-90	Total Purge Amount	4.90	N/A	N/A	GAL
1028	08-06-90	Total Purge Amount	4.27	N/A	N/A	GAL
1028	08-13-90	Total Purge Amount	3.72	N/A	N/A	GAL
1028	08-14-90	Total Purge Amount	N/A	N/A	N/A	GAL
1028	08-15-90	Total Purge Amount	N/A	N/A	N/A	GAL
1028	08-16-90	Total Purge Amount	N/A	N/A	N/A	GAL
1028	08-NA-90	Total Purge Amount	0.97	N/A	N/A	GAL
1028	11-01-90	Total Purge Amount	4.90	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

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FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 1030						
1030	02-18-90	Dissolved Oxygen	N/A	N/A	N/A	mg/l
1030	05-09-90	Dissolved Oxygen	2.30	N/A	N/A	mg/l
1030	08-21-90	Dissolved Oxygen	5.30	N/A	N/A	mg/l
1030	11-08-90	Dissolved Oxygen	4.00	N/A	N/A	mg/l
1030	02-18-90	pH	N/A	N/A	N/A	SU
1030	05-09-90	pH	7.10	N/A	N/A	SU
1030	08-21-90	pH	6.95	N/A	N/A	SU
1030	11-08-90	pH	6.90	N/A	N/A	SU
1030	02-18-90	Specific Conductivity	N/A	N/A	N/A	mMHO/cm
1030	05-09-90	Specific Conductivity	1.44	N/A	N/A	mMHO/cm
1030	08-21-90	Specific Conductivity	1.28	N/A	N/A	mMHO/cm
1030	11-08-90	Specific Conductivity	1.23	N/A	N/A	mMHO/cm
1030	02-18-90	Temperature	N/A	N/A	N/A	C
1030	05-09-90	Temperature	14.30	N/A	N/A	C
1030	08-21-90	Temperature	14.80	N/A	N/A	C
1030	11-08-90	Temperature	12.00	N/A	N/A	C
1030	02-18-90	Water Level From Well Top	28.83	N/A	N/A	FT
1030	05-09-90	Water Level From Well Top	29.18	N/A	N/A	FT
1030	08-21-90	Water Level From Well Top	26.45	N/A	N/A	FT
1030	11-08-90	Water Level From Well Top	25.81	N/A	N/A	FT
1030	02-18-90	Total Depth Of Well	32.00	N/A	N/A	FT
1030	05-09-90	Total Depth Of Well	32.00	N/A	N/A	FT
1030	08-21-90	Total Depth Of Well	32.10	N/A	N/A	FT
1030	11-08-90	Total Depth Of Well	32.05	N/A	N/A	FT
1030	02-18-90	Total Purge Amount	6.34	N/A	N/A	GAL
1030	05-09-90	Total Purge Amount	5.52	N/A	N/A	GAL
1030	08-21-90	Total Purge Amount	11.07	N/A	N/A	GAL
1030	11-08-90	Total Purge Amount	12.22	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 1031						
1031	02-18-90	Dissolved Oxygen	2.50	2.40	N/A	mg/l
1031	05-03-90	Dissolved Oxygen	2.80	2.50	N/A	mg/l
1031	08-22-90	Dissolved Oxygen	1.50	2.60	2.40	mg/l
1031	11-16-90	Dissolved Oxygen	1.60	1.70	2.00	mg/l
1031	02-18-90	pH	9.26	9.50	N/A	SU
1031	05-03-90	pH	9.20	9.48	N/A	SU
1031	08-22-90	pH	9.72	9.85	9.96	SU
1031	11-16-90	pH	8.49	9.28	9.35	SU
1031	02-18-90	Specific Conductivity	1.00	1.00	N/A	mMHO/cm
1031	05-03-90	Specific Conductivity	2.83	2.84	N/A	mMHO/cm
1031	08-22-90	Specific Conductivity	3.24	2.96	3.16	mMHO/cm
1031	11-16-90	Specific Conductivity	2.63	2.78	2.92	mMHO/cm
1031	02-18-90	Temperature	N/A	11.00	N/A	C
1031	05-03-90	Temperature	13.00	N/A	N/A	C
1031	08-22-90	Temperature	14.80	14.60	14.80	C
1031	11-16-90	Temperature	13.70	13.80	13.70	C
1031	02-18-90	Water Level From Well Top	24.70	N/A	N/A	FT
1031	05-03-90	Water Level From Well Top	24.72	N/A	N/A	FT
1031	08-22-90	Water Level From Well Top	24.35	N/A	N/A	FT
1031	11-16-90	Water Level From Well Top	24.25	N/A	N/A	FT
1031	02-18-90	Total Depth Of Well	28.58	N/A	N/A	FT
1031	05-03-90	Total Depth Of Well	29.61	N/A	N/A	FT
1031	08-22-90	Total Depth Of Well	29.60	N/A	N/A	FT
1031	11-16-90	Total Depth Of Well	29.61	N/A	N/A	FT
1031	02-18-90	Total Purge Amount	9.76	N/A	N/A	GAL
1031	05-03-90	Total Purge Amount	9.58	N/A	N/A	GAL
1031	08-22-90	Total Purge Amount	10.28	N/A	N/A	GAL
1031	11-16-90	Total Purge Amount	10.50	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 1038						
1038	02-15-90	Dissolved Oxygen	2.80	3.10	N/A	mg/l
1038	05-02-90	Dissolved Oxygen	2.50	2.70	N/A	mg/l
1038	08-02-90	Dissolved Oxygen	2.20	2.00	2.30	mg/l
1038	11-01-90	Dissolved Oxygen	1.40	2.60	4.00	mg/l
1038	02-15-90	pH	7.14	7.23	N/A	SU
1038	05-02-90	pH	6.93	6.94	N/A	SU
1038	08-02-90	pH	6.76	6.80	6.88	SU
1038	11-01-90	pH	6.83	6.93	7.02	SU
1038	02-15-90	Specific Conductivity	0.86	0.85	N/A	mMHO/cm
1038	05-02-90	Specific Conductivity	0.82	0.79	N/A	mMHO/cm
1038	08-02-90	Specific Conductivity	0.80	0.84	0.85	mMHO/cm
1038	11-01-90	Specific Conductivity	0.81	0.44	0.85	mMHO/cm
1038	02-15-90	Temperature	N/A	14.40	N/A	C
1038	05-02-90	Temperature	12.70	12.90	N/A	C
1038	08-02-90	Temperature	15.00	14.70	14.40	C
1038	11-01-90	Temperature	15.10	14.90	14.30	C
1038	02-15-90	Water Level From Well Top	14.60	N/A	N/A	FT
1038	05-02-90	Water Level From Well Top	14.33	N/A	N/A	FT
1038	08-02-90	Water Level From Well Top	13.95	N/A	N/A	FT
1038	11-01-90	Water Level From Well Top	13.86	N/A	N/A	FT
1038	02-15-90	Total Depth Of Well	30.11	N/A	N/A	FT
1038	05-02-90	Total Depth Of Well	29.61	N/A	N/A	FT
1038	08-02-90	Total Depth Of Well	29.60	N/A	N/A	FT
1038	11-01-90	Total Depth Of Well	29.60	N/A	N/A	FT
1038	02-15-90	Total Purge Amount	31.02	N/A	N/A	GAL
1038	05-02-90	Total Purge Amount	29.93	N/A	N/A	GAL
1038	08-02-90	Total Purge Amount	30.66	N/A	N/A	GAL
1038	11-01-90	Total Purge Amount	30.80	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 1052						
1052	02-19-90	Dissolved Oxygen	3.20	3.50	N/A	mg/l
1052	05-15-90	Dissolved Oxygen	1.40	2.90	N/A	mg/l
1052	08-27-90	Dissolved Oxygen	0.90	N/A	N/A	mg/l
1052	08-28-90	Dissolved Oxygen	N/A	8.20	8.10	mg/l
1052	11-14-90	Dissolved Oxygen	3.80	2.40	4.40	mg/l
1052	02-19-90	pH	7.50	7.75	N/A	SU
1052	05-15-90	pH	7.19	7.11	N/A	SU
1052	08-27-90	pH	6.96	N/A	N/A	SU
1052	08-28-90	pH	N/A	7.20	7.15	SU
1052	11-14-90	pH	7.16	7.11	7.09	SU
1052	02-19-90	Specific Conductivity	0.90	0.87	N/A	mMHO/cm
1052	05-15-90	Specific Conductivity	0.67	0.65	N/A	mMHO/cm
1052	08-27-90	Specific Conductivity	0.75	N/A	N/A	mMHO/cm
1052	08-28-90	Specific Conductivity	N/A	0.66	0.65	mMHO/cm
1052	11-14-90	Specific Conductivity	0.36	0.38	0.36	mMHO/cm
1052	02-19-90	Temperature	N/A	8.10	N/A	C
1052	05-15-90	Temperature	N/A	12.50	N/A	C
1052	08-27-90	Temperature	16.20	N/A	N/A	C
1052	08-28-90	Temperature	N/A	13.90	13.50	C
1052	11-14-90	Temperature	13.10	13.20	13.20	C
1052	02-19-90	Water Level From Well Top	3.50	N/A	N/A	FT
1052	05-15-90	Water Level From Well Top	3.34	N/A	N/A	FT
1052	08-27-90	Water Level From Well Top	9.25	N/A	N/A	FT
1052	08-28-90	Water Level From Well Top	18.10	N/A	N/A	FT
1052	11-14-90	Water Level From Well Top	4.82	N/A	N/A	FT
1052	02-19-90	Total Depth Of Well	31.48	N/A	N/A	FT
1052	05-15-90	Total Depth Of Well	31.50	N/A	N/A	FT
1052	08-27-90	Total Depth Of Well	31.55	N/A	N/A	FT
1052	08-28-90	Total Depth Of Well	31.55	N/A	N/A	FT
1052	11-14-90	Total Depth Of Well	31.50	N/A	N/A	FT
1052	02-19-90	Total Purge Amount	55.96	N/A	N/A	GAL
1052	05-15-90	Total Purge Amount	55.17	N/A	N/A	GAL
1052	08-27-90	Total Purge Amount	43.68	N/A	N/A	GAL
1052	08-28-90	Total Purge Amount	N/A	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
1052	11-14-90	Total Purge Amount	52.26	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 1072						
1072	02-18-90	Dissolved Oxygen	N/A	N/A	N/A	mg/l
1072	05-02-90	Dissolved Oxygen	N/A	N/A	N/A	mg/l
1072	08-21-90	Dissolved Oxygen	N/A	N/A	N/A	mg/l
1072	02-18-90	pH	N/A	N/A	N/A	SU
1072	05-02-90	pH	N/A	N/A	N/A	SU
1072	08-21-90	pH	N/A	N/A	N/A	SU
1072	02-18-90	Specific Conductivity	N/A	N/A	N/A	mMHO/cm
1072	05-02-90	Specific Conductivity	N/A	N/A	N/A	mMHO/cm
1072	08-21-90	Specific Conductivity	N/A	N/A	N/A	mMHO/cm
1072	02-18-90	Temperature	N/A	N/A	N/A	C
1072	05-02-90	Temperature	N/A	N/A	N/A	C
1072	08-21-90	Temperature	N/A	N/A	N/A	C
1072	02-18-90	Water Level From Well Top	N/A	N/A	N/A	FT
1072	05-02-90	Water Level From Well Top	N/A	N/A	N/A	FT
1072	08-21-90	Water Level From Well Top	N/A	N/A	N/A	FT
1072	11-08-90	Water Level From Well Top	N/A	N/A	N/A	FT
1072	02-18-90	Total Depth Of Well	N/A	N/A	N/A	FT
1072	05-02-90	Total Depth Of Well	N/A	N/A	N/A	FT
1072	08-21-90	Total Depth Of Well	32.65	N/A	N/A	FT
1072	02-18-90	Total Purge Amount	N/A	N/A	N/A	GAL
1072	05-02-90	Total Purge Amount	N/A	N/A	N/A	GAL
1072	08-21-90	Total Purge Amount	N/A	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

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FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 1074						
1074	02-19-90	Dissolved Oxygen	4.60	4.60	N/A	mg/l
1074	05-08-90	Dissolved Oxygen	1.80	5.50	N/A	mg/l
1074	08-20-90	Dissolved Oxygen	3.90	N/A	N/A	mg/l
1074	08-21-90	Dissolved Oxygen	N/A	7.40	8.10	mg/l
1074	11-16-90	Dissolved Oxygen	1.10	5.50	6.40	mg/l
1074	02-19-90	pH	7.40	7.30	N/A	SU
1074	05-08-90	pH	7.12	7.35	N/A	SU
1074	08-20-90	pH	7.01	N/A	N/A	SU
1074	08-21-90	pH	N/A	6.96	7.07	SU
1074	11-16-90	pH	6.78	7.16	7.32	SU
1074	02-19-90	Specific Conductivity	0.85	0.86	N/A	mMHO/cm
1074	05-08-90	Specific Conductivity	0.96	0.96	N/A	mMHO/cm
1074	08-20-90	Specific Conductivity	1.05	N/A	N/A	mMHO/cm
1074	08-21-90	Specific Conductivity	N/A	1.00	1.00	mMHO/cm
1074	11-16-90	Specific Conductivity	1.01	1.00	0.99	mMHO/cm
1074	02-19-90	Temperature	10.20	10.70	N/A	C
1074	05-08-90	Temperature	N/A	13.80	N/A	C
1074	08-20-90	Temperature	18.20	N/A	N/A	C
1074	08-21-90	Temperature	N/A	15.10	15.50	C
1074	11-16-90	Temperature	14.90	15.00	15.10	C
1074	02-18-90	Water Level From Well Top	4.36	N/A	N/A	FT
1074	05-08-90	Water Level From Well Top	4.51	N/A	N/A	FT
1074	08-20-90	Water Level From Well Top	7.55	N/A	N/A	FT
1074	08-21-90	Water Level From Well Top	17.81	N/A	N/A	FT
1074	11-16-90	Water Level From Well Top	8.05	N/A	N/A	FT
1074	02-18-90	Total Depth Of Well	24.60	N/A	N/A	FT
1074	05-08-90	Total Depth Of Well	24.60	N/A	N/A	FT
1074	08-20-90	Total Depth Of Well	24.63	N/A	N/A	FT
1074	08-21-90	Total Depth Of Well	24.62	N/A	N/A	FT
1074	11-16-90	Total Depth Of Well	24.61	N/A	N/A	FT
1074	02-18-90	Total Purge Amount	40.48	N/A	N/A	GAL
1074	05-08-90	Total Purge Amount	39.36	N/A	N/A	GAL
1074	08-20-90	Total Purge Amount	33.46	N/A	N/A	GAL
1074	08-21-90	Total Purge Amount	N/A	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
1074	11-16-90	Total Purge Amount	32.44	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

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FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 1079						
1079	02-16-90	Dissolved Oxygen	3.00	3.30	N/A	mg/l
1079	05-11-90	Dissolved Oxygen	3.00	6.50	N/A	mg/l
1079	08-27-90	Dissolved Oxygen	2.60	2.40	6.40	mg/l
1079	11-14-90	Dissolved Oxygen	4.10	4.20	N/A	mg/l
1079	11-15-90	Dissolved Oxygen	N/A	7.60	6.10	mg/l
1079	02-16-90	pH	7.04	6.98	N/A	SU
1079	05-11-90	pH	7.10	7.18	N/A	SU
1079	08-27-90	pH	6.89	6.86	7.17	SU
1079	11-14-90	pH	6.74	6.73	N/A	SU
1079	11-15-90	pH	N/A	7.00	6.97	SU
1079	02-16-90	Specific Conductivity	0.91	0.87	N/A	mMHO/cm
1079	05-11-90	Specific Conductivity	0.92	0.87	N/A	mMHO/cm
1079	08-27-90	Specific Conductivity	0.89	0.89	0.94	mMHO/cm
1079	11-14-90	Specific Conductivity	0.89	0.84	N/A	mMHO/cm
1079	11-15-90	Specific Conductivity	N/A	0.95	0.94	mMHO/cm
1079	02-16-90	Temperature	N/A	13.50	N/A	C
1079	05-11-90	Temperature	N/A	13.70	N/A	C
1079	08-27-90	Temperature	14.00	13.70	15.30	C
1079	11-14-90	Temperature	12.90	13.00	N/A	C
1079	11-15-90	Temperature	N/A	13.80	13.90	C
1079	02-16-90	Water Level From Well Top	23.20	N/A	N/A	FT
1079	05-11-90	Water Level From Well Top	23.22	N/A	N/A	FT
1079	08-27-90	Water Level From Well Top	22.79	N/A	N/A	FT
1079	11-14-90	Water Level From Well Top	22.70	N/A	N/A	FT
1079	02-16-90	Total Depth Of Well	33.15	N/A	N/A	FT
1079	05-11-90	Total Depth Of Well	32.68	N/A	N/A	FT
1079	08-27-90	Total Depth Of Well	32.75	N/A	N/A	FT
1079	11-14-90	Total Depth Of Well	32.65	N/A	N/A	FT
1079	02-16-90	Total Purge Amount	19.90	N/A	N/A	GAL
1079	05-11-90	Total Purge Amount	18.53	N/A	N/A	GAL
1079	08-27-90	Total Purge Amount	19.51	N/A	N/A	GAL
1079	11-14-90	Total Purge Amount	19.49	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 1080						
1080	02-22-90	Dissolved Oxygen	6.80	6.10	N/A	mg/l
1080	05-14-90	Dissolved Oxygen	3.40	2.70	N/A	mg/l
1080	08-15-90	Dissolved Oxygen	3.70	2.80	2.70	mg/l
1080	11-12-90	Dissolved Oxygen	3.50	3.60	2.40	mg/l
1080	02-22-90	pH	6.96	6.96	N/A	SU
1080	05-14-90	pH	6.90	6.97	N/A	SU
1080	08-15-90	pH	6.83	6.90	7.00	SU
1080	11-12-90	pH	6.96	6.91	6.94	SU
1080	02-22-90	Specific Conductivity	0.96	0.95	N/A	mMHO/cm
1080	05-14-90	Specific Conductivity	0.90	0.92	N/A	mMHO/cm
1080	08-15-90	Specific Conductivity	0.95	0.96	0.97	mMHO/cm
1080	11-12-90	Specific Conductivity	0.52	0.50	0.50	mMHO/cm
1080	02-22-90	Temperature	N/A	13.70	N/A	C
1080	05-14-90	Temperature	12.40	12.60	N/A	C
1080	08-15-90	Temperature	14.60	13.60	13.50	C
1080	11-12-90	Temperature	12.80	14.20	14.70	C
1080	02-22-90	Water Level From Well Top	14.25	N/A	N/A	FT
1080	05-14-90	Water Level From Well Top	14.85	N/A	N/A	FT
1080	08-15-90	Water Level From Well Top	15.25	N/A	N/A	FT
1080	11-12-90	Water Level From Well Top	14.71	N/A	N/A	FT
1080	02-22-90	Total Depth Of Well	33.60	N/A	N/A	FT
1080	05-14-90	Total Depth Of Well	32.65	N/A	N/A	FT
1080	08-15-90	Total Depth Of Well	32.70	N/A	N/A	FT
1080	11-12-90	Total Depth Of Well	32.65	N/A	N/A	FT
1080	02-22-90	Total Purge Amount	38.70	N/A	N/A	GAL
1080	05-14-90	Total Purge Amount	34.29	N/A	N/A	GAL
1080	08-15-90	Total Purge Amount	34.18	N/A	N/A	GAL
1080	11-12-90	Total Purge Amount	35.10	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

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FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 1081						
1081	02-15-90	Dissolved Oxygen	7.20	6.80	N/A	mg/l
1081	05-24-90	Dissolved Oxygen	4.70	3.80	N/A	mg/l
1081	08-20-90	Dissolved Oxygen	2.30	N/A	N/A	mg/l
1081	08-21-90	Dissolved Oxygen	N/A	7.10	7.40	mg/l
1081	11-11-90	Dissolved Oxygen	4.60	N/A	N/A	mg/l
1081	11-12-90	Dissolved Oxygen	N/A	10.90	8.20	mg/l
1081	02-15-90	pH	7.15	7.14	N/A	SU
1081	05-24-90	pH	6.90	6.99	N/A	SU
1081	08-20-90	pH	6.62	N/A	N/A	SU
1081	08-21-90	pH	N/A	6.85	6.83	SU
1081	11-11-90	pH	6.81	N/A	N/A	SU
1081	11-12-90	pH	N/A	6.80	6.91	SU
1081	02-15-90	Specific Conductivity	1.49	1.50	N/A	mMHO/cm
1081	05-24-90	Specific Conductivity	1.59	1.52	N/A	mMHO/cm
1081	08-20-90	Specific Conductivity	1.58	N/A	N/A	mMHO/cm
1081	08-21-90	Specific Conductivity	N/A	1.56	1.57	mMHO/cm
1081	11-11-90	Specific Conductivity	1.46	N/A	N/A	mMHO/cm
1081	11-12-90	Specific Conductivity	N/A	1.34	1.32	mMHO/cm
1081	02-15-90	Temperature	N/A	14.40	N/A	C
1081	05-24-90	Temperature	N/A	14.50	N/A	C
1081	08-20-90	Temperature	15.20	N/A	N/A	C
1081	08-21-90	Temperature	N/A	14.40	14.90	C
1081	11-11-90	Temperature	11.60	N/A	N/A	C
1081	11-12-90	Temperature	N/A	3.70	9.80	C
1081	02-15-90	Water Level From Well Top	16.25	N/A	N/A	FT
1081	05-24-90	Water Level From Well Top	15.35	N/A	N/A	FT
1081	08-20-90	Water Level From Well Top	16.59	N/A	N/A	FT
1081	08-21-90	Water Level From Well Top	27.38	N/A	N/A	FT
1081	11-11-90	Water Level From Well Top	16.15	N/A	N/A	FT
1081	02-15-90	Total Depth Of Well	35.15	N/A	N/A	FT
1081	05-24-90	Total Depth Of Well	34.65	N/A	N/A	FT
1081	08-20-90	Total Depth Of Well	34.70	N/A	N/A	FT
1081	08-21-90	Total Depth Of Well	34.69	N/A	N/A	FT
1081	11-11-90	Total Depth Of Well	34.68	N/A	N/A	FT

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N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
1081	02-15-90	Total Purge Amount	38.50	N/A	N/A	GAL
1081	05-24-90	Total Purge Amount	37.81	N/A	N/A	GAL
1081	08-20-90	Total Purge Amount	35.48	N/A	N/A	GAL
1081	08-21-90	Total Purge Amount	N/A	N/A	N/A	GAL
1081	11-11-90	Total Purge Amount	36.30	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

1162

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 1082						
1082	02-15-90	Dissolved Oxygen	8.80	8.10	N/A	mg/l
1082	05-24-90	Dissolved Oxygen	3.90	3.20	N/A	mg/l
1082	08-20-90	Dissolved Oxygen	4.70	N/A	N/A	mg/l
1082	08-21-90	Dissolved Oxygen	N/A	7.10	7.30	mg/l
1082	11-11-90	Dissolved Oxygen	4.80	N/A	N/A	mg/l
1082	11-12-90	Dissolved Oxygen	N/A	5.80	6.10	mg/l
1082	02-15-90	pH	7.34	7.48	N/A	SU
1082	05-24-90	pH	7.23	7.20	N/A	SU
1082	08-20-90	pH	6.86	N/A	N/A	SU
1082	08-21-90	pH	N/A	7.05	7.05	SU
1082	11-11-90	pH	7.24	N/A	N/A	SU
1082	11-12-90	pH	N/A	6.89	7.02	SU
1082	02-15-90	Specific Conductivity	0.92	0.97	N/A	mMHO/cm
1082	05-24-90	Specific Conductivity	1.04	1.08	N/A	mMHO/cm
1082	08-20-90	Specific Conductivity	1.12	N/A	N/A	mMHO/cm
1082	08-21-90	Specific Conductivity	N/A	1.06	1.04	mMHO/cm
1082	11-11-90	Specific Conductivity	0.96	N/A	N/A	mMHO/cm
1082	11-12-90	Specific Conductivity	N/A	1.03	0.98	mMHO/cm
1082	02-15-90	Temperature	N/A	11.30	N/A	C
1082	05-24-90	Temperature	N/A	18.50	N/A	C
1082	08-20-90	Temperature	17.70	N/A	N/A	C
1082	08-21-90	Temperature	N/A	15.00	15.00	C
1082	11-11-90	Temperature	11.10	N/A	N/A	C
1082	11-12-90	Temperature	N/A	13.40	11.60	C
1082	02-15-90	Water Level From Well Top	8.10	N/A	N/A	FT
1082	05-24-90	Water Level From Well Top	7.20	N/A	N/A	FT
1082	08-20-90	Water Level From Well Top	10.09	N/A	N/A	FT
1082	08-21-90	Water Level From Well Top	20.24	N/A	N/A	FT
1082	11-12-90	Water Level From Well Top	8.25	N/A	N/A	FT
1082	02-15-90	Total Depth Of Well	25.30	N/A	N/A	FT
1082	05-24-90	Total Depth Of Well	24.70	N/A	N/A	FT
1082	08-20-90	Total Depth Of Well	24.75	N/A	N/A	FT
1082	08-21-90	Total Depth Of Well	24.75	N/A	N/A	FT
1082	11-12-90	Total Depth Of Well	24.75	N/A	N/A	FT

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N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
1082	02-15-90	Total Purge Amount	34.40	N/A	N/A	GAL
1082	05-24-90	Total Purge Amount	34.28	N/A	N/A	GAL
1082	08-20-90	Total Purge Amount	28.72	N/A	N/A	GAL
1082	08-21-90	Total Purge Amount	N/A	N/A	N/A	GAL
1082	11-12-90	Total Purge Amount	32.32	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

1162

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 1083						
1083	02-16-90	Dissolved Oxygen	3.70	3.30	N/A	mg/l
1083	05-07-90	Dissolved Oxygen	1.70	5.10	N/A	mg/l
1083	08-06-90	Dissolved Oxygen	3.00	3.20	5.00	mg/l
1083	11-11-90	Dissolved Oxygen	2.40	4.20	4.20	mg/l
1083	02-16-90	pH	8.33	7.75	N/A	SU
1083	05-07-90	pH	6.88	6.90	N/A	SU
1083	08-06-90	pH	6.73	6.91	7.04	SU
1083	11-11-90	pH	6.78	6.95	6.90	SU
1083	02-16-90	Specific Conductivity	0.75	0.75	N/A	mMHO/cm
1083	05-07-90	Specific Conductivity	0.87	0.81	N/A	mMHO/cm
1083	08-06-90	Specific Conductivity	0.93	0.90	0.89	mMHO/cm
1083	11-11-90	Specific Conductivity	0.77	0.77	0.85	mMHO/cm
1083	02-16-90	Temperature	N/A	10.20	N/A	C
1083	05-07-90	Temperature	12.70	12.40	N/A	C
1083	08-06-90	Temperature	17.10	15.80	15.30	C
1083	11-11-90	Temperature	12.40	12.30	11.90	C
1083	02-16-90	Water Level From Well Top	3.30	N/A	N/A	FT
1083	05-07-90	Water Level From Well Top	3.62	N/A	N/A	FT
1083	08-06-90	Water Level From Well Top	5.85	N/A	N/A	FT
1083	11-11-90	Water Level From Well Top	4.23	N/A	N/A	FT
1083	02-16-90	Total Depth Of Well	22.62	N/A	N/A	FT
1083	05-07-90	Total Depth Of Well	22.64	N/A	N/A	FT
1083	08-06-90	Total Depth Of Well	22.62	N/A	N/A	FT
1083	11-11-90	Total Depth Of Well	22.63	N/A	N/A	FT
1083	02-16-90	Total Purge Amount	38.64	N/A	N/A	GAL
1083	05-07-90	Total Purge Amount	37.26	N/A	N/A	GAL
1083	08-06-90	Total Purge Amount	32.85	N/A	N/A	GAL
1083	11-11-90	Total Purge Amount	36.00	N/A	N/A	GAL

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N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 2010						
2010	02-23-90	Dissolved Oxygen	2.40	3.20	N/A	mg/l
2010	05-10-90	Dissolved Oxygen	2.30	2.10	N/A	mg/l
2010	08-01-90	Dissolved Oxygen	1.60	1.30	1.90	mg/l
2010	11-13-90	Dissolved Oxygen	2.80	2.10	2.30	mg/l
2010	02-23-90	pH	6.97	7.04	N/A	SU
2010	05-10-90	pH	6.96	6.95	N/A	SU
2010	08-01-90	pH	6.50	6.76	6.86	SU
2010	11-13-90	pH	6.72	6.78	6.81	SU
2010	02-23-90	Specific Conductivity	0.67	0.65	N/A	mMHO/cm
2010	05-10-90	Specific Conductivity	0.66	0.67	N/A	mMHO/cm
2010	08-01-90	Specific Conductivity	1.15	1.17	1.16	mMHO/cm
2010	11-13-90	Specific Conductivity	0.59	0.60	0.61	mMHO/cm
2010	02-23-90	Temperature	N/A	11.00	N/A	C
2010	05-10-90	Temperature	N/A	12.50	N/A	C
2010	08-01-90	Temperature	14.20	14.70	14.70	C
2010	11-13-90	Temperature	9.90	10.90	11.20	C
2010	02-23-90	Water Level From Well Top	62.35	N/A	N/A	FT
2010	05-10-90	Water Level From Well Top	60.58	N/A	N/A	FT
2010	08-01-90	Water Level From Well Top	60.30	N/A	N/A	FT
2010	11-13-90	Water Level From Well Top	61.28	N/A	N/A	FT
2010	02-23-90	Total Depth Of Well	76.80	N/A	N/A	FT
2010	05-10-90	Total Depth Of Well	76.50	N/A	N/A	FT
2010	08-01-90	Total Depth Of Well	76.60	N/A	N/A	FT
2010	11-13-90	Total Depth Of Well	76.80	N/A	N/A	FT
2010	02-23-90	Total Purge Amount	28.90	N/A	N/A	GAL
2010	05-10-90	Total Purge Amount	31.18	N/A	N/A	GAL
2010	08-01-90	Total Purge Amount	31.93	N/A	N/A	GAL
2010	11-13-90	Total Purge Amount	30.40	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 2013						
2013	02-12-90	Dissolved Oxygen	2.70	1.50	N/A	mg/l
2013	05-10-90	Dissolved Oxygen	9.20	3.80	N/A	mg/l
2013	08-09-90	Dissolved Oxygen	1.40	0.80	1.20	mg/l
2013	11-07-90	Dissolved Oxygen	6.40	2.20	1.80	mg/l
2013	02-12-90	pH	7.28	7.21	N/A	SU
2013	05-10-90	pH	7.29	7.05	N/A	SU
2013	08-09-90	pH	6.80	6.86	6.96	SU
2013	11-07-90	pH	7.09	7.06	7.10	SU
2013	02-12-90	Specific Conductivity	0.46	0.61	N/A	mMHO/cm
2013	05-10-90	Specific Conductivity	0.56	0.58	N/A	mMHO/cm
2013	08-09-90	Specific Conductivity	0.60	0.61	0.62	mMHO/cm
2013	11-07-90	Specific Conductivity	0.58	0.57	0.57	mMHO/cm
2013	02-12-90	Temperature	N/A	14.10	N/A	C
2013	05-10-90	Temperature	12.80	13.80	N/A	C
2013	08-09-90	Temperature	15.10	15.70	15.70	C
2013	11-07-90	Temperature	14.10	13.80	14.00	C
2013	02-12-90	Water Level From Well Top	73.85	N/A	N/A	FT
2013	05-10-90	Water Level From Well Top	68.05	N/A	N/A	FT
2013	08-09-90	Water Level From Well Top	67.90	N/A	N/A	FT
2013	11-07-90	Water Level From Well Top	69.03	N/A	N/A	FT
2013	02-12-90	Total Depth Of Well	80.27	N/A	N/A	FT
2013	05-10-90	Total Depth Of Well	79.77	N/A	N/A	FT
2013	08-09-90	Total Depth Of Well	80.46	N/A	N/A	FT
2013	11-07-90	Total Depth Of Well	80.70	N/A	N/A	FT
2013	02-12-90	Total Purge Amount	12.84	N/A	N/A	GAL
2013	05-10-90	Total Purge Amount	22.96	N/A	N/A	GAL
2013	08-09-90	Total Purge Amount	24.61	N/A	N/A	GAL
2013	11-07-90	Total Purge Amount	22.80	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 2019						
2019	02-09-90	Dissolved Oxygen	N/A	N/A	N/A	mg/l
2019	05-01-90	Dissolved Oxygen	2.10	1.50	N/A	mg/l
2019	08-06-90	Dissolved Oxygen	6.10	5.10	1.40	mg/l
2019	11-05-90	Dissolved Oxygen	6.10	2.60	2.40	mg/l
2019	02-09-90	pH	6.70	6.65	N/A	SU
2019	05-01-90	pH	7.01	7.06	N/A	SU
2019	08-06-90	pH	7.04	7.18	7.11	SU
2019	11-05-90	pH	6.86	6.97	7.03	SU
2019	02-09-90	Specific Conductivity	1.02	1.01	N/A	mMHO/cm
2019	05-01-90	Specific Conductivity	0.98	0.98	N/A	mMHO/cm
2019	08-06-90	Specific Conductivity	0.80	0.80	0.79	mMHO/cm
2019	11-05-90	Specific Conductivity	0.80	0.73	0.75	mMHO/cm
2019	02-09-90	Temperature	N/A	13.00	N/A	C
2019	05-01-90	Temperature	13.00	13.10	N/A	C
2019	08-06-90	Temperature	14.00	14.30	14.40	C
2019	11-05-90	Temperature	14.30	13.20	13.10	C
2019	02-09-90	Water Level From Well Top	63.46	N/A	N/A	FT
2019	05-01-90	Water Level From Well Top	62.13	N/A	N/A	FT
2019	08-06-90	Water Level From Well Top	61.15	N/A	N/A	FT
2019	11-05-90	Water Level From Well Top	61.38	N/A	N/A	FT
2019	02-09-90	Total Depth Of Well	80.00	N/A	N/A	FT
2019	05-01-90	Total Depth Of Well	79.95	N/A	N/A	FT
2019	08-06-90	Total Depth Of Well	82.15	N/A	N/A	FT
2019	11-05-90	Total Depth Of Well	80.05	N/A	N/A	FT
2019	02-09-90	Total Purge Amount	33.08	N/A	N/A	GAL
2019	05-01-90	Total Purge Amount	34.91	N/A	N/A	GAL
2019	08-06-90	Total Purge Amount	41.14	N/A	N/A	GAL
2019	11-05-90	Total Purge Amount	36.57	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 2021						
2021	02-12-90	Dissolved Oxygen	1.90	1.20	N/A	mg/l
2021	05-02-90	Dissolved Oxygen	1.30	0.90	N/A	mg/l
2021	08-16-90	Dissolved Oxygen	1.20	1.00	2.10	mg/l
2021	11-09-90	Dissolved Oxygen	2.20	2.80	1.40	mg/l
2021	02-12-90	pH	7.46	7.46	N/A	SU
2021	05-02-90	pH	7.09	7.17	N/A	SU
2021	08-16-90	pH	6.98	7.15	7.31	SU
2021	11-09-90	pH	7.06	7.16	7.12	SU
2021	02-12-90	Specific Conductivity	0.80	0.78	N/A	mMHO/cm
2021	05-02-90	Specific Conductivity	0.70	0.71	N/A	mMHO/cm
2021	08-16-90	Specific Conductivity	0.68	0.67	0.69	mMHO/cm
2021	11-09-90	Specific Conductivity	0.66	0.61	0.61	mMHO/cm
2021	02-12-90	Temperature	N/A	12.30	N/A	C
2021	05-02-90	Temperature	12.80	12.70	N/A	C
2021	08-16-90	Temperature	13.90	13.20	14.80	C
2021	11-09-90	Temperature	11.30	11.60	10.70	C
2021	02-12-90	Water Level From Well Top	64.25	N/A	N/A	FT
2021	05-02-90	Water Level From Well Top	62.50	N/A	N/A	FT
2021	08-16-90	Water Level From Well Top	61.75	N/A	N/A	FT
2021	11-09-90	Water Level From Well Top	62.00	N/A	N/A	FT
2021	02-12-90	Total Depth Of Well	75.50	N/A	N/A	FT
2021	05-02-90	Total Depth Of Well	76.75	N/A	N/A	FT
2021	08-16-90	Total Depth Of Well	75.30	N/A	N/A	FT
2021	11-09-90	Total Depth Of Well	75.21	N/A	N/A	FT
2021	02-12-90	Total Purge Amount	22.50	N/A	N/A	GAL
2021	05-02-90	Total Purge Amount	27.92	N/A	N/A	GAL
2021	08-16-90	Total Purge Amount	26.54	N/A	N/A	GAL
2021	11-09-90	Total Purge Amount	25.80	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 2027						
2027	02-19-90	Dissolved Oxygen	4.80	4.10	N/A	mg/l
2027	05-09-90	Dissolved Oxygen	4.90	4.20	N/A	mg/l
2027	08-02-90	Dissolved Oxygen	1.80	2.70	1.80	mg/l
2027	11-01-90	Dissolved Oxygen	4.70	4.40	1.60	mg/l
2027	11-11-90	Dissolved Oxygen	2.20	2.80	3.20	mg/l
2027	02-19-90	pH	6.69	6.67	N/A	SU
2027	05-09-90	pH	6.97	6.81	N/A	SU
2027	08-02-90	pH	6.94	6.92	6.87	SU
2027	11-01-90	pH	6.74	6.68	6.72	SU
2027	11-11-90	pH	6.65	6.77	6.83	SU
2027	02-19-90	Specific Conductivity	1.07	0.97	N/A	mMHO/cm
2027	05-09-90	Specific Conductivity	0.74	1.09	N/A	mMHO/cm
2027	08-02-90	Specific Conductivity	1.04	1.21	1.38	mMHO/cm
2027	11-01-90	Specific Conductivity	0.89	1.08	1.32	mMHO/cm
2027	11-11-90	Specific Conductivity	1.14	1.19	1.00	mMHO/cm
2027	02-19-90	Temperature	N/A	13.60	N/A	C
2027	05-09-90	Temperature	15.00	15.50	N/A	C
2027	08-02-90	Temperature	15.30	14.90	15.90	C
2027	11-01-90	Temperature	14.40	14.80	16.20	C
2027	11-11-90	Temperature	12.00	13.40	11.30	C
2027	02-19-90	Water Level From Well Top	64.60	N/A	N/A	FT
2027	05-09-90	Water Level From Well Top	62.10	N/A	N/A	FT
2027	08-02-90	Water Level From Well Top	61.55	N/A	N/A	FT
2027	11-11-90	Water Level From Well Top	62.57	N/A	N/A	FT
2027	02-19-90	Total Depth Of Well	79.10	N/A	N/A	FT
2027	05-09-90	Total Depth Of Well	77.45	N/A	N/A	FT
2027	08-02-90	Total Depth Of Well	77.60	N/A	N/A	FT
2027	11-11-90	Total Depth Of Well	77.50	N/A	N/A	FT
2027	02-19-90	Total Purge Amount	29.00	N/A	N/A	GAL
2027	05-09-90	Total Purge Amount	30.07	N/A	N/A	GAL
2027	08-02-90	Total Purge Amount	31.44	N/A	N/A	GAL
2027	11-11-90	Total Purge Amount	29.24	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

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FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 2037						
2037	02-14-90	Dissolved Oxygen	2.00	2.20	N/A	mg/l
2037	05-07-90	Dissolved Oxygen	4.40	4.50	N/A	mg/l
2037	08-02-90	Dissolved Oxygen	1.40	1.90	1.90	mg/l
2037	11-11-90	Dissolved Oxygen	3.00	2.60	1.80	mg/l
2037	11-15-90	Dissolved Oxygen	1.10	1.70	2.20	mg/l
2037	02-14-90	pH	6.72	6.70	N/A	SU
2037	05-07-90	pH	6.92	6.93	N/A	SU
2037	08-02-90	pH	6.87	7.05	7.08	SU
2037	11-11-90	pH	6.80	7.00	6.93	SU
2037	11-15-90	pH	6.90	6.89	6.91	SU
2037	02-14-90	Specific Conductivity	0.69	0.66	N/A	mMHO/cm
2037	05-07-90	Specific Conductivity	0.64	0.63	N/A	mMHO/cm
2037	08-02-90	Specific Conductivity	0.72	0.67	0.69	mMHO/cm
2037	11-11-90	Specific Conductivity	0.59	0.60	0.62	mMHO/cm
2037	11-15-90	Specific Conductivity	0.66	0.65	0.66	mMHO/cm
2037	02-14-90	Temperature	N/A	12.30	N/A	C
2037	05-07-90	Temperature	14.80	14.60	N/A	C
2037	08-02-90	Temperature	15.60	14.50	15.30	C
2037	11-11-90	Temperature	12.80	12.90	12.70	C
2037	11-15-90	Temperature	14.00	14.10	14.00	C
2037	02-14-90	Water Level From Well Top	69.80	N/A	N/A	FT
2037	05-07-90	Water Level From Well Top	67.75	N/A	N/A	FT
2037	08-02-90	Water Level From Well Top	66.90	N/A	N/A	FT
2037	11-11-90	Water Level From Well Top	68.00	N/A	N/A	FT
2037	02-14-90	Total Depth Of Well	84.42	N/A	N/A	FT
2037	05-07-90	Total Depth Of Well	84.41	N/A	N/A	FT
2037	08-02-90	Total Depth Of Well	84.30	N/A	N/A	FT
2037	11-11-90	Total Depth Of Well	84.45	N/A	N/A	FT
2037	02-14-90	Total Purge Amount	29.24	N/A	N/A	GAL
2037	05-07-90	Total Purge Amount	32.64	N/A	N/A	GAL
2037	08-02-90	Total Purge Amount	34.08	N/A	N/A	GAL
2037	11-11-90	Total Purge Amount	32.22	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 2043						
2043	02-20-90	Dissolved Oxygen	3.10	2.50	N/A	mg/l
2043	05-17-90	Dissolved Oxygen	1.80	1.20	N/A	mg/l
2043	08-06-90	Dissolved Oxygen	1.40	2.80	2.10	mg/l
2043	11-06-90	Dissolved Oxygen	1.10	1.00	2.00	mg/l
2043	02-20-90	pH	7.39	7.21	N/A	SU
2043	05-17-90	pH	6.86	6.92	N/A	SU
2043	08-06-90	pH	6.94	7.07	7.16	SU
2043	11-06-90	pH	7.09	7.04	7.09	SU
2043	02-20-90	Specific Conductivity	0.66	0.57	N/A	mMHO/cm
2043	05-17-90	Specific Conductivity	0.68	0.67	N/A	mMHO/cm
2043	08-06-90	Specific Conductivity	0.79	0.74	0.72	mMHO/cm
2043	11-06-90	Specific Conductivity	0.66	0.66	0.65	mMHO/cm
2043	02-20-90	Temperature	N/A	11.50	N/A	C
2043	05-17-90	Temperature	12.80	N/A	N/A	C
2043	08-06-90	Temperature	13.80	14.90	13.70	C
2043	11-06-90	Temperature	11.40	12.00	10.80	C
2043	02-20-90	Water Level From Well Top	56.95	N/A	N/A	FT
2043	05-17-90	Water Level From Well Top	55.05	N/A	N/A	FT
2043	08-06-90	Water Level From Well Top	54.70	N/A	N/A	FT
2043	11-06-90	Water Level From Well Top	55.10	N/A	N/A	FT
2043	02-20-90	Total Depth Of Well	70.63	N/A	N/A	FT
2043	05-17-90	Total Depth Of Well	70.70	N/A	N/A	FT
2043	08-06-90	Total Depth Of Well	70.60	N/A	N/A	FT
2043	11-06-90	Total Depth Of Well	70.60	N/A	N/A	FT
2043	02-20-90	Total Purge Amount	27.36	N/A	N/A	GAL
2043	05-17-90	Total Purge Amount	30.66	N/A	N/A	GAL
2043	08-06-90	Total Purge Amount	31.15	N/A	N/A	GAL
2043	11-06-90	Total Purge Amount	30.30	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 2051						
2051	02-21-90	Dissolved Oxygen	2.90	2.10	N/A	mg/l
2051	05-17-90	Dissolved Oxygen	1.90	2.50	N/A	mg/l
2051	08-20-90	Dissolved Oxygen	7.30	7.40	7.00	mg/l
2051	11-14-90	Dissolved Oxygen	2.80	1.60	1.80	mg/l
2051	02-21-90	pH	6.99	6.98	N/A	SU
2051	05-17-90	pH	6.78	6.80	N/A	SU
2051	08-20-90	pH	6.68	6.80	6.82	SU
2051	11-14-90	pH	6.71	6.75	6.75	SU
2051	02-21-90	Specific Conductivity	0.78	0.76	N/A	mMHO/cm
2051	05-17-90	Specific Conductivity	0.82	0.80	N/A	mMHO/cm
2051	08-20-90	Specific Conductivity	0.75	0.75	0.76	mMHO/cm
2051	11-14-90	Specific Conductivity	0.56	0.32	0.42	mMHO/cm
2051	02-21-90	Temperature	N/A	12.50	N/A	C
2051	05-17-90	Temperature	16.00	13.70	N/A	C
2051	08-20-90	Temperature	14.30	14.20	14.30	C
2051	11-14-90	Temperature	11.70	11.80	10.80	C
2051	02-21-90	Water Level From Well Top	89.36	N/A	N/A	FT
2051	05-17-90	Water Level From Well Top	87.38	N/A	N/A	FT
2051	08-20-90	Water Level From Well Top	88.05	N/A	N/A	FT
2051	11-14-90	Water Level From Well Top	88.74	N/A	N/A	FT
2051	02-21-90	Total Depth Of Well	104.38	N/A	N/A	FT
2051	05-17-90	Total Depth Of Well	104.35	N/A	N/A	FT
2051	08-20-90	Total Depth Of Well	104.30	N/A	N/A	FT
2051	11-14-90	Total Depth Of Well	104.30	N/A	N/A	FT
2051	02-21-90	Total Purge Amount	30.04	N/A	N/A	GAL
2051	05-17-90	Total Purge Amount	33.24	N/A	N/A	GAL
2051	08-20-90	Total Purge Amount	31.80	N/A	N/A	GAL
2051	11-14-90	Total Purge Amount	30.48	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 2055						
2055	02-14-90	Dissolved Oxygen	3.60	2.50	N/A	mg/l
2055	05-11-90	Dissolved Oxygen	1.80	2.60	N/A	mg/l
2055	08-14-90	Dissolved Oxygen	1.60	0.96	2.10	mg/l
2055	10-10-90	Dissolved Oxygen	1.40	1.20	1.70	mg/l
2055	11-06-90	Dissolved Oxygen	2.20	2.00	1.80	mg/l
2055	02-14-90	pH	7.21	7.25	N/A	SU
2055	05-11-90	pH	6.96	6.94	N/A	SU
2055	08-14-90	pH	6.95	6.96	6.94	SU
2055	10-10-90	pH	6.90	6.89	6.90	SU
2055	11-06-90	pH	6.93	7.12	7.03	SU
2055	02-14-90	Specific Conductivity	0.58	0.58	N/A	mMHO/cm
2055	05-11-90	Specific Conductivity	0.64	0.65	N/A	mMHO/cm
2055	08-14-90	Specific Conductivity	0.63	0.61	0.65	mMHO/cm
2055	10-10-90	Specific Conductivity	0.58	0.58	0.54	mMHO/cm
2055	11-06-90	Specific Conductivity	0.52	0.55	0.55	mMHO/cm
2055	02-14-90	Temperature	N/A	2.80	N/A	C
2055	05-11-90	Temperature	13.80	N/A	N/A	C
2055	08-14-90	Temperature	14.50	14.70	15.60	C
2055	10-10-90	Temperature	13.60	13.40	13.10	C
2055	11-06-90	Temperature	12.50	12.70	12.20	C
2055	02-14-90	Water Level From Well Top	67.90	N/A	N/A	FT
2055	05-11-90	Water Level From Well Top	66.75	N/A	N/A	FT
2055	08-14-90	Water Level From Well Top	65.25	N/A	N/A	FT
2055	10-10-90	Water Level From Well Top	66.14	N/A	N/A	FT
2055	11-06-90	Water Level From Well Top	66.27	N/A	N/A	FT
2055	02-14-90	Total Depth Of Well	83.10	N/A	N/A	FT
2055	05-11-90	Total Depth Of Well	81.77	N/A	N/A	FT
2055	08-14-90	Total Depth Of Well	81.85	N/A	N/A	FT
2055	10-10-90	Total Depth Of Well	81.75	N/A	N/A	FT
2055	11-06-90	Total Depth Of Well	81.75	N/A	N/A	FT
2055	02-14-90	Total Purge Amount	30.40	N/A	N/A	GAL
2055	05-11-90	Total Purge Amount	29.42	N/A	N/A	GAL
2055	08-14-90	Total Purge Amount	32.52	N/A	N/A	GAL
2055	10-10-90	Total Purge Amount	30.50	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

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FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
2055	11-06-90	Total Purge Amount	30.32	N/A	N/A	GAL

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N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 2066						
2066	02-22-90	Dissolved Oxygen	1.20	2.10	N/A	mg/l
2066	05-16-90	Dissolved Oxygen	1.00	1.10	N/A	mg/l
2066	08-06-90	Dissolved Oxygen	1.70	2.00	3.30	mg/l
2066	11-06-90	Dissolved Oxygen	1.70	0.90	0.80	mg/l
2066	02-22-90	pH	7.32	7.30	N/A	SU
2066	05-16-90	pH	7.02	7.12	N/A	SU
2066	08-06-90	pH	7.25	7.27	7.34	SU
2066	11-06-90	pH	7.14	7.16	7.20	SU
2066	02-22-90	Specific Conductivity	0.62	0.62	N/A	mMHO/cm
2066	05-16-90	Specific Conductivity	4.00	0.64	N/A	mMHO/cm
2066	08-06-90	Specific Conductivity	0.66	0.63	0.67	mMHO/cm
2066	11-06-90	Specific Conductivity	0.56	0.58	0.57	mMHO/cm
2066	02-22-90	Temperature	13.40	13.80	N/A	C
2066	05-16-90	Temperature	13.70	13.80	N/A	C
2066	08-06-90	Temperature	14.70	14.00	15.30	C
2066	11-06-90	Temperature	11.20	11.90	10.50	C
2066	02-22-90	Water Level From Well Top	40.23	N/A	N/A	FT
2066	05-16-90	Water Level From Well Top	40.71	N/A	N/A	FT
2066	08-06-90	Water Level From Well Top	41.00	N/A	N/A	FT
2066	11-06-90	Water Level From Well Top	39.90	N/A	N/A	FT
2066	02-22-90	Total Depth Of Well	64.52	N/A	N/A	FT
2066	05-16-90	Total Depth Of Well	64.50	N/A	N/A	FT
2066	08-06-90	Total Depth Of Well	64.50	N/A	N/A	FT
2066	11-06-90	Total Depth Of Well	64.52	N/A	N/A	FT
2066	02-22-90	Total Purge Amount	48.58	N/A	N/A	GAL
2066	05-16-90	Total Purge Amount	46.60	N/A	N/A	GAL
2066	08-06-90	Total Purge Amount	46.03	N/A	N/A	GAL
2066	11-06-90	Total Purge Amount	48.20	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 2084						
2084	02-21-90	Dissolved Oxygen	3.20	3.40	N/A	mg/l
2084	05-24-90	Dissolved Oxygen	1.80	2.20	N/A	mg/l
2084	08-16-90	Dissolved Oxygen	2.10	1.10	1.10	mg/l
2084	11-11-90	Dissolved Oxygen	2.10	2.80	3.80	mg/l
2084	02-21-90	pH	6.84	6.92	N/A	SU
2084	05-24-90	pH	6.66	6.73	N/A	SU
2084	08-16-90	pH	6.66	6.65	6.66	SU
2084	11-11-90	pH	6.45	6.58	6.74	SU
2084	02-21-90	Specific Conductivity	1.61	1.67	N/A	mMHO/cm
2084	05-24-90	Specific Conductivity	1.92	1.84	N/A	mMHO/cm
2084	08-16-90	Specific Conductivity	1.00	1.00	1.00	mMHO/cm
2084	11-11-90	Specific Conductivity	1.52	1.49	1.51	mMHO/cm
2084	02-21-90	Temperature	N/A	11.30	N/A	C
2084	05-24-90	Temperature	N/A	15.90	N/A	C
2084	08-16-90	Temperature	16.50	16.20	15.50	C
2084	11-11-90	Temperature	10.80	11.80	10.60	C
2084	02-21-90	Water Level From Well Top	63.25	N/A	N/A	FT
2084	05-24-90	Water Level From Well Top	61.20	N/A	N/A	FT
2084	08-16-90	Water Level From Well Top	61.05	N/A	N/A	FT
2084	11-11-90	Water Level From Well Top	61.80	N/A	N/A	FT
2084	02-21-90	Total Depth Of Well	77.10	N/A	N/A	FT
2084	05-24-90	Total Depth Of Well	76.95	N/A	N/A	FT
2084	08-16-90	Total Depth Of Well	77.00	N/A	N/A	FT
2084	11-11-90	Total Depth Of Well	77.00	N/A	N/A	FT
2084	02-21-90	Total Purge Amount	27.70	N/A	N/A	GAL
2084	05-24-90	Total Purge Amount	30.85	N/A	N/A	GAL
2084	08-16-90	Total Purge Amount	31.20	N/A	N/A	GAL
2084	11-11-90	Total Purge Amount	29.78	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 3001						
3001	02-09-90	Dissolved Oxygen	0.90	1.00	N/A	mg/l
3001	05-08-90	Dissolved Oxygen	1.80	1.40	N/A	mg/l
3001	08-21-90	Dissolved Oxygen	4.60	1.40	1.30	mg/l
3001	11-12-90	Dissolved Oxygen	2.40	2.00	1.40	mg/l
3001	02-09-90	pH	7.13	6.95	N/A	SU
3001	05-08-90	pH	7.18	7.11	N/A	SU
3001	08-21-90	pH	6.96	7.40	7.45	SU
3001	11-12-90	pH	8.01	7.10	8.14	SU
3001	02-09-90	Specific Conductivity	0.40	0.49	N/A	mMHO/cm
3001	05-08-90	Specific Conductivity	0.47	0.50	N/A	mMHO/cm
3001	08-21-90	Specific Conductivity	0.44	0.23	0.24	mMHO/cm
3001	11-12-90	Specific Conductivity	0.19	0.21	0.19	mMHO/cm
3001	02-09-90	Temperature	N/A	11.60	N/A	C
3001	05-08-90	Temperature	12.50	12.80	N/A	C
3001	08-21-90	Temperature	13.50	13.70	14.00	C
3001	11-12-90	Temperature	10.30	10.50	10.20	C
3001	02-09-90	Water Level From Well Top	63.45	N/A	N/A	FT
3001	05-08-90	Water Level From Well Top	61.87	N/A	N/A	FT
3001	08-21-90	Water Level From Well Top	61.68	N/A	N/A	FT
3001	11-12-90	Water Level From Well Top	62.05	N/A	N/A	FT
3001	02-09-90	Total Depth Of Well	110.00	N/A	N/A	FT
3001	05-08-90	Total Depth Of Well	130.00	N/A	N/A	FT
3001	08-21-90	Total Depth Of Well	129.94	N/A	N/A	FT
3001	11-12-90	Total Depth Of Well	130.00	N/A	N/A	FT
3001	02-09-90	Total Purge Amount	205.29	N/A	N/A	GAL
3001	05-08-90	Total Purge Amount	300.25	N/A	N/A	GAL
3001	08-21-90	Total Purge Amount	534.41	N/A	N/A	GAL
3001	11-12-90	Total Purge Amount	532.00	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 3008						
3008	02-20-90	Dissolved Oxygen	2.40	2.70	N/A	mg/l
3008	05-16-90	Dissolved Oxygen	2.20	N/A	N/A	mg/l
3008	08-28-90	Dissolved Oxygen	7.10	2.80	1.60	mg/l
3008	11-15-90	Dissolved Oxygen	3.40	1.60	1.70	mg/l
3008	02-20-90	pH	7.65	7.84	N/A	SU
3008	05-16-90	pH	7.91	N/A	N/A	SU
3008	08-28-90	pH	8.17	7.86	7.86	SU
3008	11-15-90	pH	7.74	8.02	8.29	SU
3008	02-20-90	Specific Conductivity	0.23	0.26	N/A	mMHO/cm
3008	05-16-90	Specific Conductivity	0.21	N/A	N/A	mMHO/cm
3008	08-28-90	Specific Conductivity	0.22	0.36	0.37	mMHO/cm
3008	11-15-90	Specific Conductivity	0.12	0.13	0.13	mMHO/cm
3008	02-20-90	Temperature	N/A	9.60	N/A	C
3008	05-16-90	Temperature	13.50	N/A	N/A	C
3008	08-28-90	Temperature	14.00	15.00	15.20	C
3008	11-15-90	Temperature	13.60	15.30	13.90	C
3008	02-20-90	Water Level From Well Top	55.70	N/A	N/A	FT
3008	05-16-90	Water Level From Well Top	53.55	N/A	N/A	FT
3008	08-28-90	Water Level From Well Top	54.00	N/A	N/A	FT
3008	11-15-90	Water Level From Well Top	54.15	N/A	N/A	FT
3008	02-20-90	Total Depth Of Well	118.13	N/A	N/A	FT
3008	05-16-90	Total Depth Of Well	118.10	N/A	N/A	FT
3008	08-28-90	Total Depth Of Well	118.10	N/A	N/A	FT
3008	11-15-90	Total Depth Of Well	118.09	N/A	N/A	FT
3008	02-20-90	Total Purge Amount	124.85	N/A	N/A	GAL
3008	05-16-90	Total Purge Amount	126.45	N/A	N/A	GAL
3008	08-28-90	Total Purge Amount	125.57	N/A	N/A	GAL
3008	11-15-90	Total Purge Amount	125.25	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 3010						
3010	02-23-90	Dissolved Oxygen	2.90	4.20	N/A	mg/l
3010	05-15-90	Dissolved Oxygen	0.40	0.60	N/A	mg/l
3010	08-02-90	Dissolved Oxygen	1.40	1.80	1.90	mg/l
3010	11-01-90	Dissolved Oxygen	1.80	1.20	1.40	mg/l
3010	02-23-90	pH	7.10	7.27	N/A	SU
3010	05-15-90	pH	6.92	6.71	N/A	SU
3010	08-02-90	pH	6.80	6.73	6.81	SU
3010	11-01-90	pH	6.89	6.76	6.76	SU
3010	02-23-90	Specific Conductivity	0.97	1.01	N/A	mMHO/cm
3010	05-15-90	Specific Conductivity	0.93	0.80	N/A	mMHO/cm
3010	08-02-90	Specific Conductivity	1.08	1.09	1.06	mMHO/cm
3010	11-01-90	Specific Conductivity	0.98	1.06	1.04	mMHO/cm
3010	02-23-90	Temperature	N/A	9.20	N/A	C
3010	05-15-90	Temperature	14.00	13.50	N/A	C
3010	08-02-90	Temperature	15.30	15.50	14.50	C
3010	11-01-90	Temperature	12.10	13.10	13.10	C
3010	02-23-90	Water Level From Well Top	66.40	N/A	N/A	FT
3010	05-15-90	Water Level From Well Top	64.75	N/A	N/A	FT
3010	08-02-90	Water Level From Well Top	64.26	N/A	N/A	FT
3010	11-01-90	Water Level From Well Top	65.30	N/A	N/A	FT
3010	02-23-90	Total Depth Of Well	136.80	N/A	N/A	FT
3010	05-15-90	Total Depth Of Well	130.28	N/A	N/A	FT
3010	08-02-90	Total Depth Of Well	130.35	N/A	N/A	FT
3010	11-01-90	Total Depth Of Well	130.40	N/A	N/A	FT
3010	02-23-90	Total Purge Amount	310.46	N/A	N/A	GAL
3010	05-15-90	Total Purge Amount	288.79	N/A	N/A	GAL
3010	08-02-90	Total Purge Amount	291.26	N/A	N/A	GAL
3010	11-01-90	Total Purge Amount	286.89	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 3013						
3013	02-13-90	Dissolved Oxygen	1.50	1.90	N/A	mg/l
3013	05-10-90	Dissolved Oxygen	10.30	5.70	N/A	mg/l
3013	08-13-90	Dissolved Oxygen	4.90	4.50	5.10	mg/l
3013	11-16-90	Dissolved Oxygen	5.20	1.50	2.40	mg/l
3013	02-13-90	pH	6.70	6.60	N/A	SU
3013	05-10-90	pH	7.05	6.91	N/A	SU
3013	08-13-90	pH	6.85	6.86	6.89	SU
3013	11-16-90	pH	7.19	6.79	6.90	SU
3013	02-13-90	Specific Conductivity	0.93	0.88	N/A	mMHO/cm
3013	05-10-90	Specific Conductivity	0.96	1.01	N/A	mMHO/cm
3013	08-13-90	Specific Conductivity	1.00	1.07	1.06	mMHO/cm
3013	11-16-90	Specific Conductivity	0.38	0.53	0.52	mMHO/cm
3013	02-13-90	Temperature	9.49	14.00	N/A	C
3013	05-10-90	Temperature	12.60	13.40	N/A	C
3013	08-13-90	Temperature	15.50	15.40	15.00	C
3013	11-16-90	Temperature	14.20	14.10	14.50	C
3013	02-13-90	Water Level From Well Top	70.60	N/A	N/A	FT
3013	05-10-90	Water Level From Well Top	68.06	N/A	N/A	FT
3013	08-13-90	Water Level From Well Top	67.90	N/A	N/A	FT
3013	11-16-90	Water Level From Well Top	68.80	N/A	N/A	FT
3013	02-13-90	Total Depth Of Well	115.40	N/A	N/A	FT
3013	05-10-90	Total Depth Of Well	115.35	N/A	N/A	FT
3013	08-13-90	Total Depth Of Well	115.45	N/A	N/A	FT
3013	11-16-90	Total Depth Of Well	115.45	N/A	N/A	FT
3013	02-13-90	Total Purge Amount	87.36	N/A	N/A	GAL
3013	05-10-90	Total Purge Amount	92.64	N/A	N/A	GAL
3013	08-13-90	Total Purge Amount	93.15	N/A	N/A	GAL
3013	11-16-90	Total Purge Amount	91.38	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 3019						
3019	02-09-90	Dissolved Oxygen	1.70	1.20	N/A	mg/l
3019	05-01-90	Dissolved Oxygen	1.00	1.20	N/A	mg/l
3019	08-06-90	Dissolved Oxygen	4.20	5.60	2.60	mg/l
3019	11-01-90	Dissolved Oxygen	1.40	1.40	3.20	mg/l
3019	02-09-90	pH	6.59	6.57	N/A	SU
3019	05-01-90	pH	6.68	6.71	N/A	SU
3019	08-06-90	pH	6.92	6.95	7.08	SU
3019	11-01-90	pH	6.76	6.78	7.18	SU
3019	02-09-90	Specific Conductivity	1.18	1.00	N/A	mMHO/cm
3019	05-01-90	Specific Conductivity	0.98	0.99	N/A	mMHO/cm
3019	08-06-90	Specific Conductivity	1.24	1.31	0.80	mMHO/cm
3019	11-01-90	Specific Conductivity	1.36	1.37	0.73	mMHO/cm
3019	02-09-90	Temperature	N/A	13.00	N/A	C
3019	05-01-90	Temperature	13.10	N/A	N/A	C
3019	08-06-90	Temperature	13.90	13.90	14.20	C
3019	11-01-90	Temperature	14.20	13.80	14.10	C
3019	02-09-90	Water Level From Well Top	63.32	N/A	N/A	FT
3019	05-01-90	Water Level From Well Top	61.96	N/A	N/A	FT
3019	08-06-90	Water Level From Well Top	61.00	N/A	N/A	FT
3019	11-01-90	Water Level From Well Top	61.69	N/A	N/A	FT
3019	02-09-90	Total Depth Of Well	125.30	N/A	N/A	FT
3019	05-01-90	Total Depth Of Well	125.30	N/A	N/A	FT
3019	08-06-90	Total Depth Of Well	125.30	N/A	N/A	FT
3019	11-01-90	Total Depth Of Well	125.23	N/A	N/A	FT
3019	02-09-90	Total Purge Amount	123.96	N/A	N/A	GAL
3019	05-01-90	Total Purge Amount	124.08	N/A	N/A	GAL
3019	08-06-90	Total Purge Amount	125.96	N/A	N/A	GAL
3019	11-01-90	Total Purge Amount	124.40	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

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FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 3024						
3024	02-18-90	Dissolved Oxygen	6.80	1.90	N/A	mg/l
3024	06-01-90	Dissolved Oxygen	4.20	2.70	N/A	mg/l
3024	08-08-90	Dissolved Oxygen	3.90	4.00	4.00	mg/l
3024	11-13-90	Dissolved Oxygen	6.20	2.10	6.10	mg/l
3024	02-18-90	pH	7.52	6.64	N/A	SU
3024	06-01-90	pH	7.12	7.02	N/A	SU
3024	08-08-90	pH	7.25	7.01	6.97	SU
3024	11-13-90	pH	7.55	6.96	7.48	SU
3024	02-18-90	Specific Conductivity	0.38	0.59	N/A	mMHO/cm
3024	06-01-90	Specific Conductivity	0.37	0.63	N/A	mMHO/cm
3024	08-08-90	Specific Conductivity	0.64	0.62	0.63	mMHO/cm
3024	11-13-90	Specific Conductivity	0.38	0.31	0.24	mMHO/cm
3024	02-18-90	Temperature	N/A	11.40	N/A	C
3024	06-01-90	Temperature	13.70	13.90	N/A	C
3024	08-08-90	Temperature	15.00	14.60	14.70	C
3024	11-13-90	Temperature	10.60	10.40	10.30	C
3024	02-18-90	Water Level From Well Top	60.50	N/A	N/A	FT
3024	06-01-90	Water Level From Well Top	57.52	N/A	N/A	FT
3024	08-08-90	Water Level From Well Top	57.50	N/A	N/A	FT
3024	11-13-90	Water Level From Well Top	58.47	N/A	N/A	FT
3024	02-18-90	Total Depth Of Well	112.50	N/A	N/A	FT
3024	06-01-90	Total Depth Of Well	112.00	N/A	N/A	FT
3024	08-08-90	Total Depth Of Well	111.91	N/A	N/A	FT
3024	11-13-90	Total Depth Of Well	112.00	N/A	N/A	FT
3024	02-18-90	Total Purge Amount	104.00	N/A	N/A	GAL
3024	06-01-90	Total Purge Amount	106.73	N/A	N/A	GAL
3024	08-08-90	Total Purge Amount	106.59	N/A	N/A	GAL
3024	11-13-90	Total Purge Amount	104.80	N/A	N/A	GAL

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N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 3037						
3037	02-23-90	Dissolved Oxygen	1.00	1.40	N/A	mg/l
3037	05-07-90	Dissolved Oxygen	1.20	2.20	N/A	mg/l
3037	08-27-90	Dissolved Oxygen	1.30	1.30	1.50	mg/l
3037	11-15-90	Dissolved Oxygen	1.80	2.00	1.80	mg/l
3037	02-23-90	pH	6.62	6.65	N/A	SU
3037	05-07-90	pH	6.71	6.40	N/A	SU
3037	08-27-90	pH	6.81	6.76	6.85	SU
3037	11-15-90	pH	6.64	6.64	6.65	SU
3037	02-23-90	Specific Conductivity	1.30	1.38	N/A	mMHO/cm
3037	05-07-90	Specific Conductivity	1.44	1.64	N/A	mMHO/cm
3037	08-27-90	Specific Conductivity	1.54	1.76	1.63	mMHO/cm
3037	11-15-90	Specific Conductivity	1.45	1.56	1.66	mMHO/cm
3037	02-23-90	Temperature	N/A	13.30	N/A	C
3037	05-07-90	Temperature	13.50	13.30	N/A	C
3037	08-27-90	Temperature	15.40	14.50	14.80	C
3037	11-15-90	Temperature	13.30	13.60	13.70	C
3037	02-23-90	Water Level From Well Top	68.32	N/A	N/A	FT
3037	05-07-90	Water Level From Well Top	67.43	N/A	N/A	FT
3037	08-27-90	Water Level From Well Top	66.98	N/A	N/A	FT
3037	11-15-90	Water Level From Well Top	67.50	N/A	N/A	FT
3037	02-23-90	Total Depth Of Well	143.20	N/A	N/A	FT
3037	05-07-90	Total Depth Of Well	136.62	N/A	N/A	FT
3037	08-27-90	Total Depth Of Well	136.54	N/A	N/A	FT
3037	11-15-90	Total Depth Of Well	137.55	N/A	N/A	FT
3037	02-23-90	Total Purge Amount	149.76	N/A	N/A	GAL
3037	05-07-90	Total Purge Amount	135.54	N/A	N/A	GAL
3037	08-27-90	Total Purge Amount	136.27	N/A	N/A	GAL
3037	11-15-90	Total Purge Amount	137.23	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 3043						
3043	02-20-90	Dissolved Oxygen	3.40	3.80	N/A	mg/l
3043	05-17-90	Dissolved Oxygen	2.80	1.60	N/A	mg/l
3043	08-07-90	Dissolved Oxygen	1.40	1.30	2.10	mg/l
3043	11-05-90	Dissolved Oxygen	2.40	1.90	1.60	mg/l
3043	02-20-90	pH	7.13	7.16	N/A	SU
3043	05-17-90	pH	7.12	7.14	N/A	SU
3043	08-07-90	pH	7.07	7.21	6.79	SU
3043	11-05-90	pH	7.22	7.26	7.26	SU
3043	02-20-90	Specific Conductivity	0.49	0.49	N/A	mMHO/cm
3043	05-17-90	Specific Conductivity	0.52	0.54	N/A	mMHO/cm
3043	08-07-90	Specific Conductivity	0.45	0.56	0.57	mMHO/cm
3043	11-05-90	Specific Conductivity	0.53	0.55	0.55	mMHO/cm
3043	02-20-90	Temperature	12.10	12.10	N/A	C
3043	05-17-90	Temperature	15.60	14.40	N/A	C
3043	08-07-90	Temperature	12.70	12.60	14.20	C
3043	11-05-90	Temperature	13.40	13.30	13.30	C
3043	02-20-90	Water Level From Well Top	57.20	N/A	N/A	FT
3043	05-17-90	Water Level From Well Top	55.42	N/A	N/A	FT
3043	08-07-90	Water Level From Well Top	55.15	N/A	N/A	FT
3043	11-05-90	Water Level From Well Top	54.50	N/A	N/A	FT
3043	02-20-90	Total Depth Of Well	121.33	N/A	N/A	FT
3043	05-17-90	Total Depth Of Well	121.65	N/A	N/A	FT
3043	08-07-90	Total Depth Of Well	121.70	N/A	N/A	FT
3043	11-05-90	Total Depth Of Well	121.61	N/A	N/A	FT
3043	02-20-90	Total Purge Amount	128.26	N/A	N/A	GAL
3043	05-17-90	Total Purge Amount	129.74	N/A	N/A	GAL
3043	08-07-90	Total Purge Amount	130.37	N/A	N/A	GAL
3043	11-05-90	Total Purge Amount	131.40	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 3055						
3055	02-14-90	Dissolved Oxygen	2.00	3.10	N/A	mg/l
3055	05-11-90	Dissolved Oxygen	1.20	2.10	N/A	mg/l
3055	08-14-90	Dissolved Oxygen	1.00	0.98	1.50	mg/l
3055	11-07-90	Dissolved Oxygen	1.30	1.60	2.00	mg/l
3055	02-14-90	pH	6.80	6.80	N/A	SU
3055	05-11-90	pH	6.64	6.64	N/A	SU
3055	08-14-90	pH	6.70	6.77	6.83	SU
3055	11-07-90	pH	6.90	6.90	7.01	SU
3055	02-14-90	Specific Conductivity	1.04	1.04	N/A	mMHO/cm
3055	05-11-90	Specific Conductivity	1.04	0.88	N/A	mMHO/cm
3055	08-14-90	Specific Conductivity	0.78	0.84	1.05	mMHO/cm
3055	11-07-90	Specific Conductivity	0.92	1.04	1.01	mMHO/cm
3055	02-14-90	Temperature	N/A	13.10	N/A	C
3055	05-11-90	Temperature	13.40	13.50	N/A	C
3055	08-14-90	Temperature	13.80	13.30	14.30	C
3055	11-07-90	Temperature	11.20	12.50	12.70	C
3055	02-14-90	Water Level From Well Top	68.98	N/A	N/A	FT
3055	05-11-90	Water Level From Well Top	66.75	N/A	N/A	FT
3055	08-14-90	Water Level From Well Top	66.22	N/A	N/A	FT
3055	11-07-90	Water Level From Well Top	67.12	N/A	N/A	FT
3055	02-14-90	Total Depth Of Well	123.04	N/A	N/A	FT
3055	05-11-90	Total Depth Of Well	123.10	N/A	N/A	FT
3055	08-14-90	Total Depth Of Well	123.10	N/A	N/A	FT
3055	11-07-90	Total Depth Of Well	123.05	N/A	N/A	FT
3055	02-14-90	Total Purge Amount	168.12	N/A	N/A	GAL
3055	05-11-90	Total Purge Amount	110.39	N/A	N/A	GAL
3055	08-14-90	Total Purge Amount	111.43	N/A	N/A	GAL
3055	11-07-90	Total Purge Amount	109.50	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 3066						
3066	02-22-90	Dissolved Oxygen	1.50	1.30	N/A	mg/l
3066	05-18-90	Dissolved Oxygen	0.40	1.80	N/A	mg/l
3066	08-07-90	Dissolved Oxygen	0.98	1.00	1.80	mg/l
3066	11-05-90	Dissolved Oxygen	3.60	0.90	1.60	mg/l
3066	02-22-90	pH	7.40	6.89	N/A	SU
3066	05-18-90	pH	7.52	7.08	N/A	SU
3066	08-07-90	pH	6.97	6.89	7.15	SU
3066	11-05-90	pH	7.28	6.95	7.07	SU
3066	02-22-90	Specific Conductivity	0.84	1.80	N/A	mMHO/cm
3066	05-18-90	Specific Conductivity	0.81	2.28	N/A	mMHO/cm
3066	08-07-90	Specific Conductivity	0.76	1.01	1.14	mMHO/cm
3066	11-05-90	Specific Conductivity	0.75	1.00	1.42	mMHO/cm
3066	02-22-90	Temperature	13.00	13.30	N/A	C
3066	05-18-90	Temperature	15.90	15.60	N/A	C
3066	08-07-90	Temperature	13.40	13.00	13.80	C
3066	11-05-90	Temperature	13.50	13.50	13.40	C
3066	02-22-90	Water Level From Well Top	56.45	N/A	N/A	FT
3066	05-18-90	Water Level From Well Top	55.70	N/A	N/A	FT
3066	08-07-90	Water Level From Well Top	55.10	N/A	N/A	FT
3066	11-05-90	Water Level From Well Top	55.00	N/A	N/A	FT
3066	02-22-90	Total Depth Of Well	139.00	N/A	N/A	FT
3066	05-18-90	Total Depth Of Well	139.50	N/A	N/A	FT
3066	08-07-90	Total Depth Of Well	139.20	N/A	N/A	FT
3066	11-05-90	Total Depth Of Well	139.00	N/A	N/A	FT
3066	02-22-90	Total Purge Amount	165.10	N/A	N/A	GAL
3066	05-18-90	Total Purge Amount	164.16	N/A	N/A	GAL
3066	08-07-90	Total Purge Amount	164.75	N/A	N/A	GAL
3066	11-05-90	Total Purge Amount	164.50	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 3084						
3084	02-21-90	Dissolved Oxygen	3.20	3.90	N/A	mg/l
3084	05-24-90	Dissolved Oxygen	1.00	1.30	N/A	mg/l
3084	08-15-90	Dissolved Oxygen	0.98	1.00	1.40	mg/l
3084	11-11-90	Dissolved Oxygen	4.80	4.30	4.40	mg/l
3084	02-21-90	pH	7.08	7.02	N/A	SU
3084	05-24-90	pH	7.08	6.63	N/A	SU
3084	08-15-90	pH	6.77	6.67	6.82	SU
3084	11-11-90	pH	6.88	7.31	7.28	SU
3084	02-21-90	Specific Conductivity	1.44	1.45	N/A	mMHO/cm
3084	05-24-90	Specific Conductivity	1.63	1.63	N/A	mMHO/cm
3084	08-15-90	Specific Conductivity	1.63	N/A	1.56	mMHO/cm
3084	11-11-90	Specific Conductivity	1.11	1.07	1.15	mMHO/cm
3084	02-21-90	Temperature	N/A	12.30	N/A	C
3084	05-24-90	Temperature	N/A	14.20	N/A	C
3084	08-15-90	Temperature	14.40	13.90	15.60	C
3084	11-11-90	Temperature	10.00	7.60	11.50	C
3084	02-21-90	Water Level From Well Top	63.25	N/A	N/A	FT
3084	05-24-90	Water Level From Well Top	61.08	N/A	N/A	FT
3084	08-15-90	Water Level From Well Top	60.93	N/A	N/A	FT
3084	11-11-90	Water Level From Well Top	61.68	N/A	N/A	FT
3084	02-21-90	Total Depth Of Well	114.60	N/A	N/A	FT
3084	05-24-90	Total Depth Of Well	115.05	N/A	N/A	FT
3084	08-15-90	Total Depth Of Well	114.96	N/A	N/A	FT
3084	11-11-90	Total Depth Of Well	114.75	N/A	N/A	FT
3084	02-21-90	Total Purge Amount	102.70	N/A	N/A	GAL
3084	05-24-90	Total Purge Amount	105.74	N/A	N/A	GAL
3084	08-15-90	Total Purge Amount	105.84	N/A	N/A	GAL
3084	11-11-90	Total Purge Amount	103.96	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 4001						
4001	02-08-90	Dissolved Oxygen	1.80	1.90	N/A	mg/l
4001	05-08-90	Dissolved Oxygen	1.40	1.30	N/A	mg/l
4001	08-27-90	Dissolved Oxygen	5.90	1.10	1.60	mg/l
4001	11-08-90	Dissolved Oxygen	2.00	2.50	2.80	mg/l
4001	02-08-90	pH	7.42	7.34	N/A	SU
4001	05-08-90	pH	7.56	7.12	N/A	SU
4001	08-27-90	pH	7.53	7.26	7.83	SU
4001	11-08-90	pH	7.02	7.64	7.58	SU
4001	02-08-90	Specific Conductivity	0.37	0.44	N/A	mMHO/cm
4001	05-08-90	Specific Conductivity	0.29	0.52	N/A	mMHO/cm
4001	08-27-90	Specific Conductivity	0.57	0.56	0.50	mMHO/cm
4001	11-08-90	Specific Conductivity	0.53	0.27	0.26	mMHO/cm
4001	02-08-90	Temperature	N/A	13.20	N/A	C
4001	05-08-90	Temperature	13.40	13.00	N/A	C
4001	08-27-90	Temperature	14.30	14.20	14.30	C
4001	11-08-90	Temperature	11.70	11.30	11.10	C
4001	02-08-90	Water Level From Well Top	64.95	N/A	N/A	FT
4001	05-08-90	Water Level From Well Top	63.01	N/A	N/A	FT
4001	08-27-90	Water Level From Well Top	62.79	N/A	N/A	FT
4001	11-08-90	Water Level From Well Top	63.24	N/A	N/A	FT
4001	02-08-90	Total Depth Of Well	156.62	N/A	N/A	FT
4001	05-08-90	Total Depth Of Well	153.65	N/A	N/A	FT
4001	08-27-90	Total Depth Of Well	153.24	N/A	N/A	FT
4001	11-08-90	Total Depth Of Well	153.69	N/A	N/A	FT
4001	02-08-90	Total Purge Amount	183.34	N/A	N/A	GAL
4001	05-08-90	Total Purge Amount	177.56	N/A	N/A	GAL
4001	08-27-90	Total Purge Amount	177.19	N/A	N/A	GAL
4001	11-08-90	Total Purge Amount	177.19	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 4008						
4008	02-20-90	Dissolved Oxygen	2.90	2.70	N/A	mg/l
4008	05-10-90	Dissolved Oxygen	2.10	1.60	N/A	mg/l
4008	08-13-90	Dissolved Oxygen	3.75	2.90	1.80	mg/l
4008	11-05-90	Dissolved Oxygen	1.80	1.40	1.60	mg/l
4008	02-20-90	pH	7.44	7.52	N/A	SU
4008	05-10-90	pH	7.44	7.33	N/A	SU
4008	08-13-90	pH	5.09	7.17	7.38	SU
4008	11-05-90	pH	6.65	7.17	7.14	SU
4008	02-20-90	Specific Conductivity	0.37	0.38	N/A	mMHO/cm
4008	05-10-90	Specific Conductivity	0.47	0.44	N/A	mMHO/cm
4008	08-13-90	Specific Conductivity	0.02	0.46	0.36	mMHO/cm
4008	11-05-90	Specific Conductivity	0.46	0.36	0.35	mMHO/cm
4008	02-20-90	Temperature	9.60	8.80	N/A	C
4008	05-10-90	Temperature	12.80	12.50	N/A	C
4008	08-13-90	Temperature	23.30	13.30	13.80	C
4008	11-05-90	Temperature	13.10	12.80	12.80	C
4008	02-20-90	Water Level From Well Top	56.70	N/A	N/A	FT
4008	05-10-90	Water Level From Well Top	54.53	N/A	N/A	FT
4008	08-13-90	Water Level From Well Top	54.23	N/A	N/A	FT
4008	11-05-90	Water Level From Well Top	54.50	N/A	N/A	FT
4008	02-20-90	Total Depth Of Well	127.85	N/A	N/A	FT
4008	05-10-90	Total Depth Of Well	123.95	N/A	N/A	FT
4008	08-13-90	Total Depth Of Well	124.22	N/A	N/A	FT
4008	11-05-90	Total Depth Of Well	124.00	N/A	N/A	FT
4008	02-20-90	Total Purge Amount	142.30	N/A	N/A	GAL
4008	05-10-90	Total Purge Amount	135.99	N/A	N/A	GAL
4008	08-13-90	Total Purge Amount	137.11	N/A	N/A	GAL
4008	11-05-90	Total Purge Amount	136.15	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

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FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 4010						
4010	02-26-90	Dissolved Oxygen	4.10	4.00	N/A	mg/l
4010	05-14-90	Dissolved Oxygen	0.90	1.70	N/A	mg/l
4010	08-02-90	Dissolved Oxygen	2.00	2.10	2.70	mg/l
4010	11-01-90	Dissolved Oxygen	2.40	2.20	1.70	mg/l
4010	02-26-90	pH	7.32	7.27	N/A	SU
4010	05-14-90	pH	7.28	7.27	N/A	SU
4010	08-02-90	pH	7.03	7.09	7.23	SU
4010	11-01-90	pH	7.27	7.23	7.32	SU
4010	02-26-90	Specific Conductivity	0.58	0.54	N/A	mMHO/cm
4010	05-14-90	Specific Conductivity	0.56	0.62	N/A	mMHO/cm
4010	08-02-90	Specific Conductivity	0.62	0.64	0.64	mMHO/cm
4010	11-01-90	Specific Conductivity	0.60	0.60	0.59	mMHO/cm
4010	02-26-90	Temperature	N/A	8.50	N/A	C
4010	05-14-90	Temperature	13.60	14.00	N/A	C
4010	08-02-90	Temperature	13.70	15.40	14.50	C
4010	11-01-90	Temperature	12.10	12.60	12.70	C
4010	02-26-90	Water Level From Well Top	62.95	N/A	N/A	FT
4010	05-14-90	Water Level From Well Top	61.25	N/A	N/A	FT
4010	08-02-90	Water Level From Well Top	60.25	N/A	N/A	FT
4010	11-01-90	Water Level From Well Top	61.20	N/A	N/A	FT
4010	02-26-90	Total Depth Of Well	211.00	N/A	N/A	FT
4010	05-14-90	Total Depth Of Well	203.80	N/A	N/A	FT
4010	08-02-90	Total Depth Of Well	203.75	N/A	N/A	FT
4010	11-01-90	Total Depth Of Well	203.55	N/A	N/A	FT
4010	02-26-90	Total Purge Amount	296.10	N/A	N/A	GAL
4010	05-14-90	Total Purge Amount	279.26	N/A	N/A	GAL
4010	08-02-90	Total Purge Amount	281.12	N/A	N/A	GAL
4010	11-01-90	Total Purge Amount	278.80	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

FIELD RESULTS FOR 1990 RCRA SAMPLING

WELL NUMBER	DATE SAMPLE TESTED	FIELD TEST	START OF PURGE	START OF SAMPLE	END OF SAMPLE	UNITS
** 4013						
4013	02-13-90	Dissolved Oxygen	2.00	1.90	N/A	mg/l
4013	05-10-90	Dissolved Oxygen	3.30	3.10	N/A	mg/l
4013	08-13-90	Dissolved Oxygen	1.50	2.60	1.40	mg/l
4013	11-08-90	Dissolved Oxygen	2.80	1.40	1.60	mg/l
4013	02-13-90	pH	6.96	6.85	N/A	SU
4013	05-10-90	pH	7.01	7.02	N/A	SU
4013	08-13-90	pH	7.03	7.00	7.35	SU
4013	11-08-90	pH	7.11	7.09	7.63	SU
4013	02-13-90	Specific Conductivity	1.03	1.59	N/A	mMHO/cm
4013	05-10-90	Specific Conductivity	1.58	1.59	N/A	mMHO/cm
4013	08-13-90	Specific Conductivity	1.56	1.72	1.37	mMHO/cm
4013	11-08-90	Specific Conductivity	1.35	1.55	1.18	mMHO/cm
4013	02-13-90	Temperature	N/A	14.00	N/A	C
4013	05-10-90	Temperature	12.30	13.30	N/A	C
4013	08-13-90	Temperature	15.20	15.60	15.20	C
4013	11-08-90	Temperature	11.90	10.20	11.00	C
4013	02-13-90	Water Level From Well Top	70.55	N/A	N/A	FT
4013	05-10-90	Water Level From Well Top	68.75	N/A	N/A	FT
4013	08-13-90	Water Level From Well Top	67.95	N/A	N/A	FT
4013	11-08-90	Water Level From Well Top	69.07	N/A	N/A	FT
4013	02-13-90	Total Depth Of Well	213.60	N/A	N/A	FT
4013	05-10-90	Total Depth Of Well	213.20	N/A	N/A	FT
4013	08-13-90	Total Depth Of Well	213.10	N/A	N/A	FT
4013	11-08-90	Total Depth Of Well	212.95	N/A	N/A	FT
4013	02-13-90	Total Purge Amount	286.10	N/A	N/A	GAL
4013	05-10-90	Total Purge Amount	282.98	N/A	N/A	GAL
4013	08-13-90	Total Purge Amount	284.35	N/A	N/A	GAL
4013	11-08-90	Total Purge Amount	281.86	N/A	N/A	GAL

N/A - INDICATES DATA NOT AVAILABLE

1990 RCRA ANNUAL GROUNDWATER QUALITY REPORT

Appendix V

STATISTICAL ASSESSMENT

DESCRIPTION OF STATISTICAL TECHNIQUES USED IN RCRA GROUNDWATER ASSESSMENT

The criteria for determining which statistical method to use for each data set is shown in Figure A. A description of each of the statistical methods is provided in this Appendix.

Student's t Test

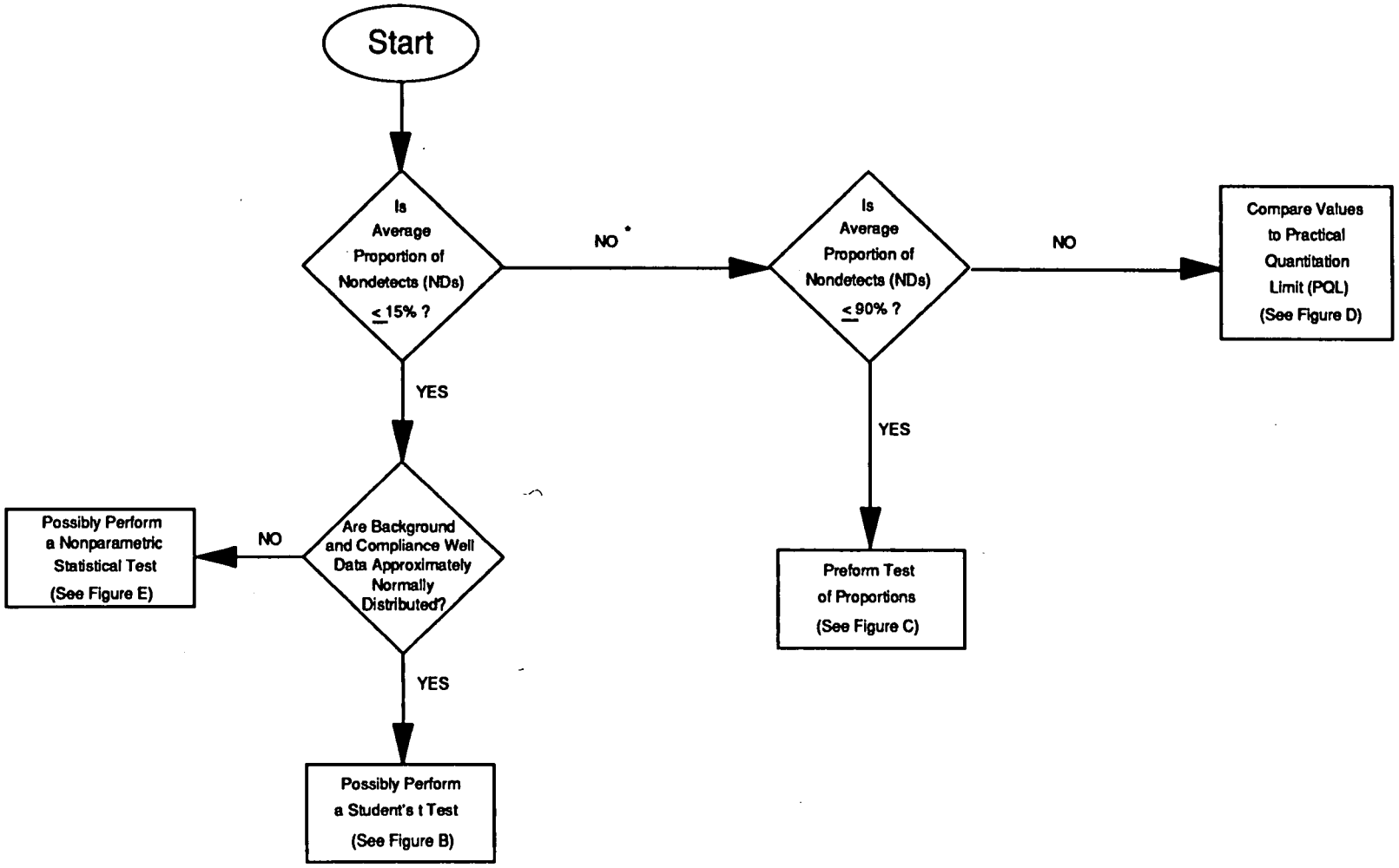
The assumptions underlying the derivation of the Student's t are: independence, normality, and homogeneous variance. Mathematical statisticians have found that moderate departures from normality and homogeneous variance (which is the least critical) do not have a marked effect on the distribution of the t statistic. Tests for non-normality, i.e. a coefficient-of-variation (or CV) and chi square test and a test for homogeneous variance, i. e. an F statistic, were calculated and in those instances that were deemed to be significant the data was either log transformed or a nonparametric statistical test was performed. (See Figure F)

The assumption of independence is the most crucial for the Student's t Test. Independence was assumed since the wells were purged completely when sampled and due to the fact that they were sampled quarterly, which should allow sufficient time for migration of the constituents.

Lotus 1-2-3 software was utilized for performing all t Test calculations. Due to the abundance of data that qualified for a Student's t Test (see Figures A and B), the compliance wells were first screened to determine if any data exceeded a calculated tolerance limit (T.L.). A Student's t Test was then performed only if one or more values from a compliance well exceeded this T.L.

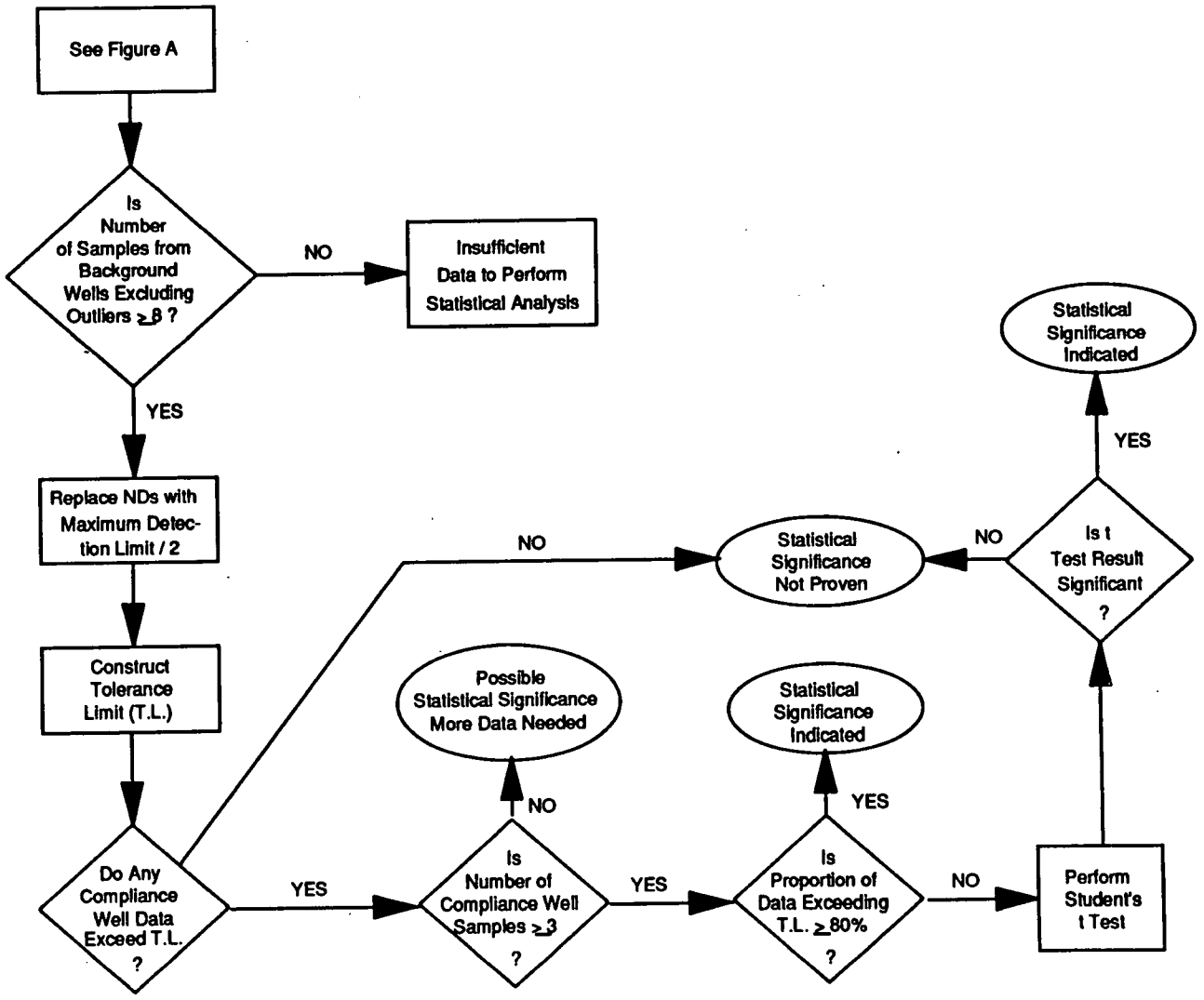
Figure A

Criteria for the Selection of a Statistical Method to Analyze RCRA Groundwater Data



* No Group of Wells Exhibited an Average Proportion of Nondetects Between 15% and 30%

Figure B
Student's t Test Logic Diagram



A one-sided T.L.[1] was constructed based on 95% confidence and 95% coverage of the data representing the two background wells. There must had been at least eight analyses available from the background wells in order to construct a meaningful T.L. The two background wells were considered one unit when calculating their central tendency and dispersion of data. The mean and variance were needed to create the T.L. and to perform the Student's t Test.

The Student's t Test calculated a range for the difference between the means of the background constituent concentration vs. the individual compliance well constituent concentration with an alpha error of 1%[2]. A one-tailed test of significance was used[3]. If the range for the difference overlapped zero, then the H_o: $\eta_B - \eta_C = 0$ was not contradicted by the available data and the compliance well was determined to not show evidence of statistically significant concentrations. If the range had negative values at both ends (except for pH and conductivity), then the compliance well was determined to show statistically significant concentrations and the null hypothesis that there was no statistically significant difference between the two means was rejected.

1 An exception to this was when tolerance limits for pH and conductivity were determined. A two-sided tolerance interval or limits was calculated for screening the compliance well data. This was because a pH or conductivity reading that was too high or too low could be evidence of a statistically significant value.

2 The USEPA Interim Final Guide for "Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities," pp. 2-4, item no. 2 states that an alpha error of 1% should be applied in this instance.

3 An exception to this was when the interval statement for pH and conductivity was determined. The alpha error of 0.01 was divided by two, since it involved a two-tailed test of significance.

Since Lotus 1-2-3 was used to calculate the standard deviation (or s) of the sample data, a slight adjustment was made to the spreadsheet calculation. The spreadsheet calculates s by dividing the square root of the sum of squared deviations from their mean by the square root of n instead of by the square root of n-1. In other words, the Lotus formula erroneously assumes that s is an unbiased estimator of the population standard deviation σ. Therefore, when the standard deviation of a sample was calculated, the Lotus-calculated standard deviation was multiplied by the square root of n and divided by the square root of n-1.

Below is an example which illustrates the mechanics of when and how a Student's t Test was performed:

Example

RCRA WELL DATA TO DATE

	VERDICT WELL#	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	TOTAL NONDETECTS	TOTAL SAMPLES TAKEN	NONDETECTS OVERTOTAL
	1024	Calcium	83.8	130	**90.4	89	89.2	95.6	0	5	0.0
	1052	Calcium	91.5	100	105	110	99.5	113	0	6	0.0
•	1080	Calcium	94.3	120	114	130	139	146	0	6	0.0

• *Constituent found in statistically significant amount(s)* ** Signifies a statistical outlier

The concentration found in the second round for background well 1024 was determined to be a statistical outlier with an alpha error of 1% based on the following Dixon text calculations:

$$r = \frac{X_2 - X_1}{X_n - X_1}$$

where X_1 = suspect outlier; X_2 = the value of next larger or smaller magnitude; and X_n = the value at the opposite end of the range.

By substituting actual data one gets:

$$r = \frac{95.6 - 130}{83.8 - 130} = 0.745$$

Since the calculated r is > the critical value for r (i.e., 0.698), 130 ppm calcium is determined to be a statistical outlier.

The following are the calculations for constructing the upper 95% coverage T.L. with a tolerance coefficient of 95%:

n_B = the number of analyses from the two background wells 1024 and 1052, excluding statistical outliers = 11. If n_B = 11, then K (tolerance factor)[4] = 2.815

y_B = the average of the analytical data from the two background wells, excluding statistical outliers = 97
SD_B = the standard deviation of the analytical data from the two background wells, excluding statistical outliers = 9.38

The one-sided upper tolerance limit (T.L.) = $y_B + K\ SD_B$

4 The K tolerance factor was taken from the USEPA Interim Final Guide for "Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, "dated April 1989, Appendix B, Table 5.

Ground-Water Monitoring Data at RCRA Facilities, "dated April 1989, Appendix B, Table 5.

By substituting actual data one gets:
T.L. = 97 + (2.815) (9.38) = 123.39

Compliance well # 1080 has 3 values out of 6 that exceed the T.L. All the criteria for performing a Student's t Test described in Figures A and B are met. The following are the calculations involved in performing such a test using well # 1080 as the test group and background wells 1024 and 1052 as the control group:

The formula used for the Student's t test is:

$$(\bar{y}_B - \bar{y}_C) \pm t(n_B + n_C - 2df,\ 0.01) \times \sqrt{\left(\frac{1}{n_B} + \frac{1}{n_C}\right) \times s^2 pooled}$$

where $s^2 pooled = \dfrac{(df_B s_B^2 + df_C s_C^2)}{(df_B + df_C)}$

where $df_B = n_B - 1$ where n_B = number of samples taken from the two background wells, and

$df_C = n_C - 1$ where n_C = number of samples taken from the compliance well.

By substituting the actual data one gets:

$$(97 - 123.9) \pm 2.602_{(11+6-2df,\ 0.01)} \times \sqrt{\left(\frac{1}{11} + \frac{1}{6}\right) \times s^2 pooled}$$

where $s^2 pooled = \dfrac{(10 \times 87.91) + (5 \times 348.6)}{(10 + 5)} = 174.81$

or, if simplified, the range for the difference between the two means becomes:

$-26.9 \pm 2.602 \times 6.71 = -9.4$ through -44.4

Since this interval estimate does not overlap zero, the t Test is considered significant. Consequently, the null hypothesis that there is no statistically significant difference between the two means is contradicted by the available data, and is therefore rejected. The compliance well data is declared to be statistically significant.

The formula used above in performing the Student's t test was derived from the following equation which calculates the t statistic:

$$t = \frac{(\bar{y}_B - \bar{y}_C) - (n_B - n_C)}{\sqrt{\left(\frac{1}{n_B} + \frac{1}{n_C}\right) \times s^2 \text{ pooled}}}$$

Test of Proportions

The Test of Proportions method was used to compare two background wells with a corresponding group of compliance wells when there was a significant proportion of nondetectable (ND) values (see Figures A and C). This method is explained below and is also described in Section 8.1.2 of the USEPA Interim Final Guidance titled, "Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities," dated, April 1989.

Example

RCRA WELL DATA TO DATE

VERDICT	WELL#	CONSTITUENT	SAMPLING ROUND 1	2	3	4	5	6	TOTAL NONDETECTS	TOTAL SAMPLES TAKEN	NONDETECTS OVERTOTAL
	2043	Nitrate	0.1U	0.1U	0.1U	0.1U	0.1U	0.869max	5	6	0.83
	2066	Nitrate	0.1U	2.5J	0.1U	0.02U	0.1U	0.1U	5	6	0.83
								totals	10	12	
	2010	Nitrate	0.02U	2.5U	0.1U	0.02U	0.1U	0.1U	6	6	1.00
	2013	Nitrate	0.1U	5U	0.1U	0.03	0.1U	0.13	4	6	0.67
•	2019	Nitrate	17.0	23.4	24.6	22.0	28.4	60.6	0	6	0.00
•	2021	Nitrate	9.2	0.28	0.1U	53.0	38.6	23.5	1	6	0.17
	2027	Nitrate	0.1U	0.11	0.1U	0.02U	0.1U	0.1U	5	6	0.83
	2037	Nitrate	0.15	2.5U	0.1U	0.02U	0.1U	0.1U	5	6	0.83
	2051	Nitrate	0.1U	0.12	0.1U	0.1U	0.1U		4	5	0.80
	2055	Nitrate				0.1U	0.1U		2	2	1.00
•	2084	Nitrate	0.1U	16.0	32.4	2.8	9.01	7.66	1	6	0.17
								totals	28	49	

• Constituent found in statistically significant amount(s) U Signifies Nondetects

Let:

n_b = the total number of background well samples analyzed = 12

n_c = the total number of compliance well samples analyzed = 49

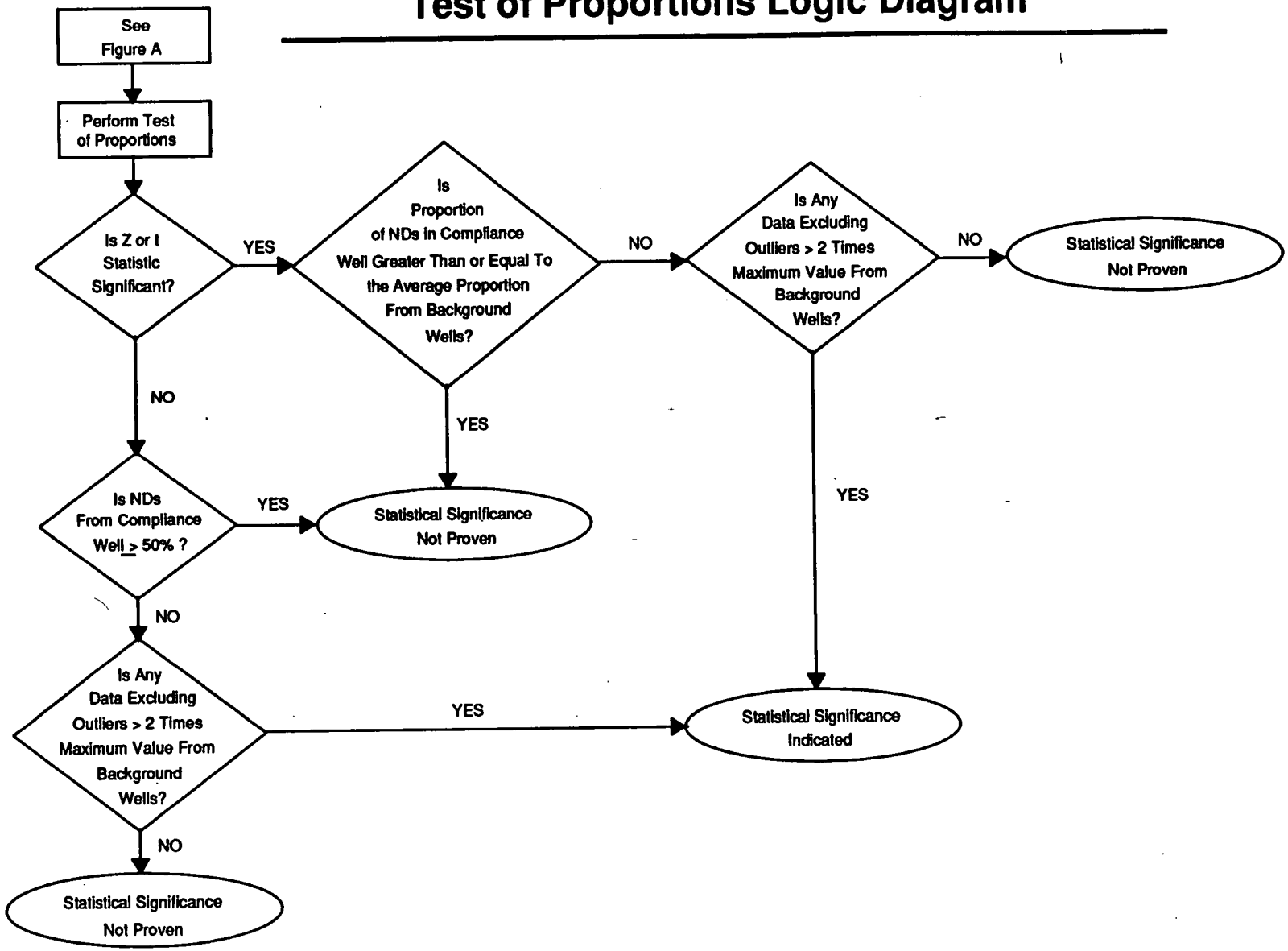
n = $n_b + n_c = 61$

X = the number of background well samples in which the compound was detected = 2

Y = the number of compliance well samples in which the compound was detected = 21

P = the proportion of detected values = $(X + Y)/n = (2 + 21)/61 = 0.377$

Figure C
Test of Proportions Logic Diagram



Compute:
$nP = 61 \times 0.377 = 23$
$n(1 - P) = 61 \times (1 - 0.377) = 38$
Since both nP and n(1 - P) are both greater than or equal to 5, the normal distribution approximation to the binomial distribution may be used in this example.

Compute the proportion of detects in the background well samples:
$P_b = X/n_b = 2/12 = 0.1666$

Compute the proportion of detects in the compliance well samples:
$P_c = Y/n_c = 21/49 = 0.4285$

Compute the standard error of the difference in proportions:
$S_D = (((X+Y)/(n_b+n_c))\ (1 - (X+Y)/(n_b+n_c))\ (1/n_b + 1/n_c))^{1/2}$
$= (((2+21)/(12+49))\ (1 - (2+21)/(12+49))\ (1/12 + 1/49))^{1/2}$
$= 0.1560$
and form the statistic:
$Z = (P_b - P_c)/S_D = (0.1666 - 0.4285)/0.1560 = -1.677$

Compare the absolute value of the Z statistic to the 97.5 percentile from the standard normal distribution, 1.96. Since this absolute value is less than 1.96, there is no statistically significant evidence that the proportion of samples with nitrate levels above the detection limit differs in the compliance well and background well samples.

A 5% alpha error was employed because the USEPA requires that all RCRA facilities use no less than a 5% alpha error when making multiple well comparisons, which is the case in this example. A two-sided test of significance was applied to provide information about differences in either direction.

However, in an effort to be conservative in identifying all instances of statistical significance, even if the normality test was met and the Z statistic was insignificant, a further evaluation of the data was made. All compliance wells in a group being evaluated by the Test of Proportions method which had less than 50% NDs were compared to twice the maximum value observed from either of the two respective background wells. If any data (that was not a statistical outlier) exceeded this calculated value, the compliance well data was determined to be statistically significant.

To illustrate this, in the example above, the maximum detectable value from the two background wells (2043 and 2066) was 0.869 ppm of nitrate. Two times this value equals 1.738 ppm of nitrate. Compliance wells 2019, 2021, and 2084 each have less than 50% NDs and at least one value, which is not a statistical outlier, that exceeds 1.738 ppm of nitrate. Therefore, these wells are also considered to have statistically significant concentrations.

Comparisons of Volatile Organic Compounds (VOCs) to Practical Quantitation Limits (PQLs)

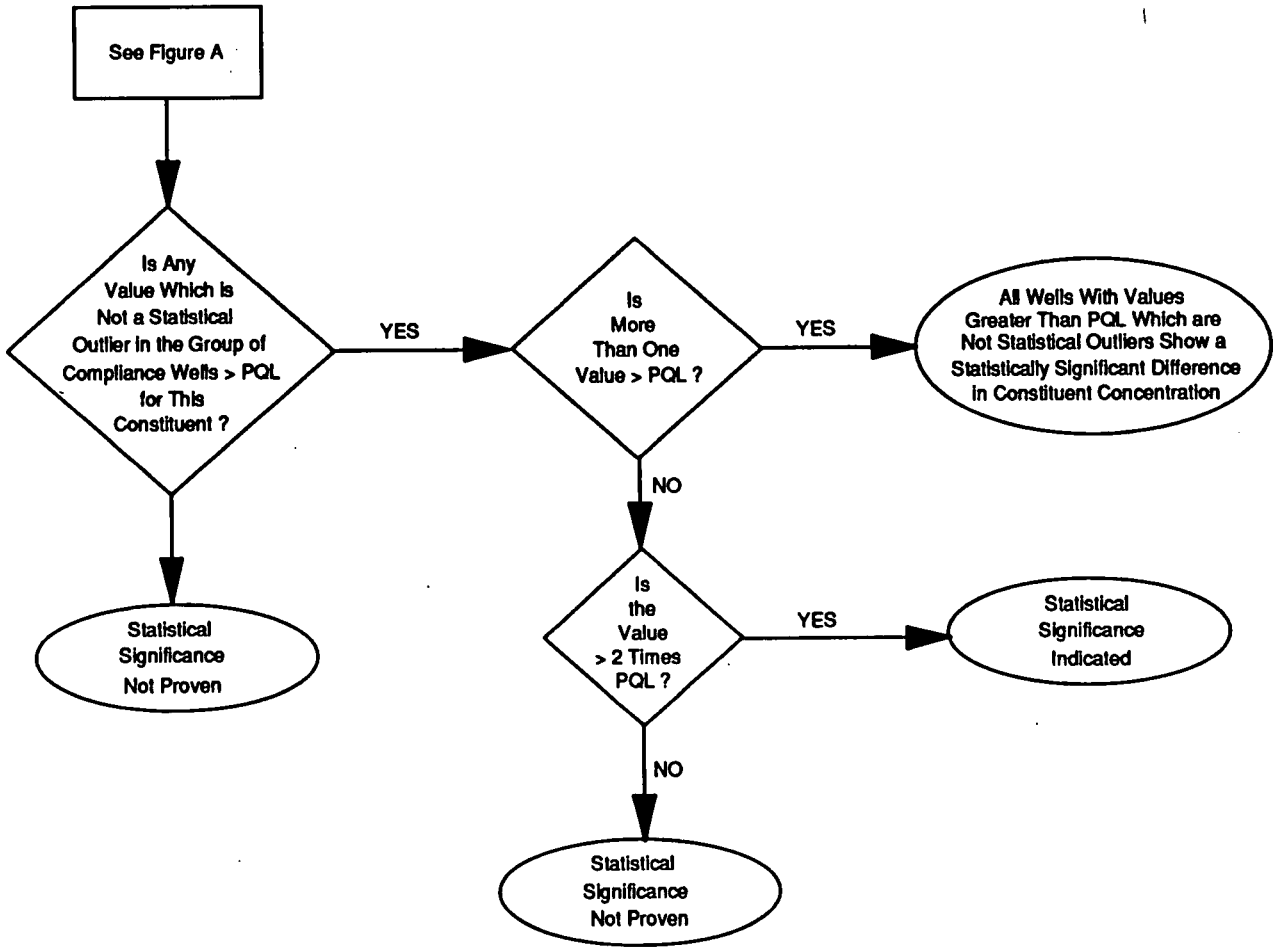
The VOC's were compared to the PQL because over 90% of the sample results were below the detection limit. An example of the methodology utilized is shown in Figure D.

If two or more values for a given compliance well and of a particular VOC exceeded the PQL, then that compliance well was determined to have a statistically significant concentration. If there was only one value exceeding the PQL with subsequent values indicating non-detectable, or if there was only one value available that exceeded the PQL, then the value is question was considered suspect until further data can support or overturn the detected sample.

1,1-Dichloroethane, Tetrachloroethene, and Trichloroethene have been found in two sample events collected from well 1031 with the concentrations between 30 and 550 ppb. A letter of notification was sent to the OEPA to notify them of this determination.

The finding of VOC's in blanks sent to the laboratory had an impact on the validity of the data. Any result that was obtained when a blank was determined to be contaminated was not included in the analysis. The results that were obtained when a blank was contaminated can be identified by a (B) qualifier next to the result in the statistical table in Appendix VII.

Figure D
Comparison to Practical Quantitation Limit (PQL)



The Kruskal-Wallis And Wilcoxon-Mann-Whitney Nonparametric Statistical Tests

The Kruskal-Wallis and Wilcoxon-Mann-Whitney nonparametric statistical tests can be used to determine if two independent groups have been drawn from the same population. These tests are very powerful in that they will frequently identify a statistically significant bias when one does, in fact, exist. These tests were used as alternatives to the Student's t Test when the t test's normality assumption could not be met based on either a coefficient of variation test or the chi-square test.

Both nonparametric tests rank the combined observations from the two independent groups while maintaining the identity of the group with which each observation is associated. The sums of the rankings of each of the two groups are calculated. These tests were one-tailed tests with a 1% alpha level of significance. Therefore, if the compliance well data ranked disproportionately higher than the background (upgradient) well data, then the test statistic would be significant.

If the number of compliance well data and background well data each exceeded 10 observations, then the Wilcoxon-Mann-Whitney test was used; otherwise the Kruskal-Wallis test was applied.

STATDISK software was used to automate this process. There is a maximum of 11 samples drawn to-date from each well. There is also a minimum restriction of 11 observations needed from each well in order to perform the Wilcoxon-Mann-Whitney test. So this test was used only when the background and compliance well were sampled every quarter to-date. If the Kruskal-Wallis test was applied, such as in the vast majority of the cases, then only one background well could be used (11 observations instead of 22). The background well with the higher average concentration was selected for comparison with the compliance well. The higher background well was selected because these tests are very powerful and will therefore tend to identify a positive result if in fact one exists.

Figure E
Nonparametric Tests Logic Diagram

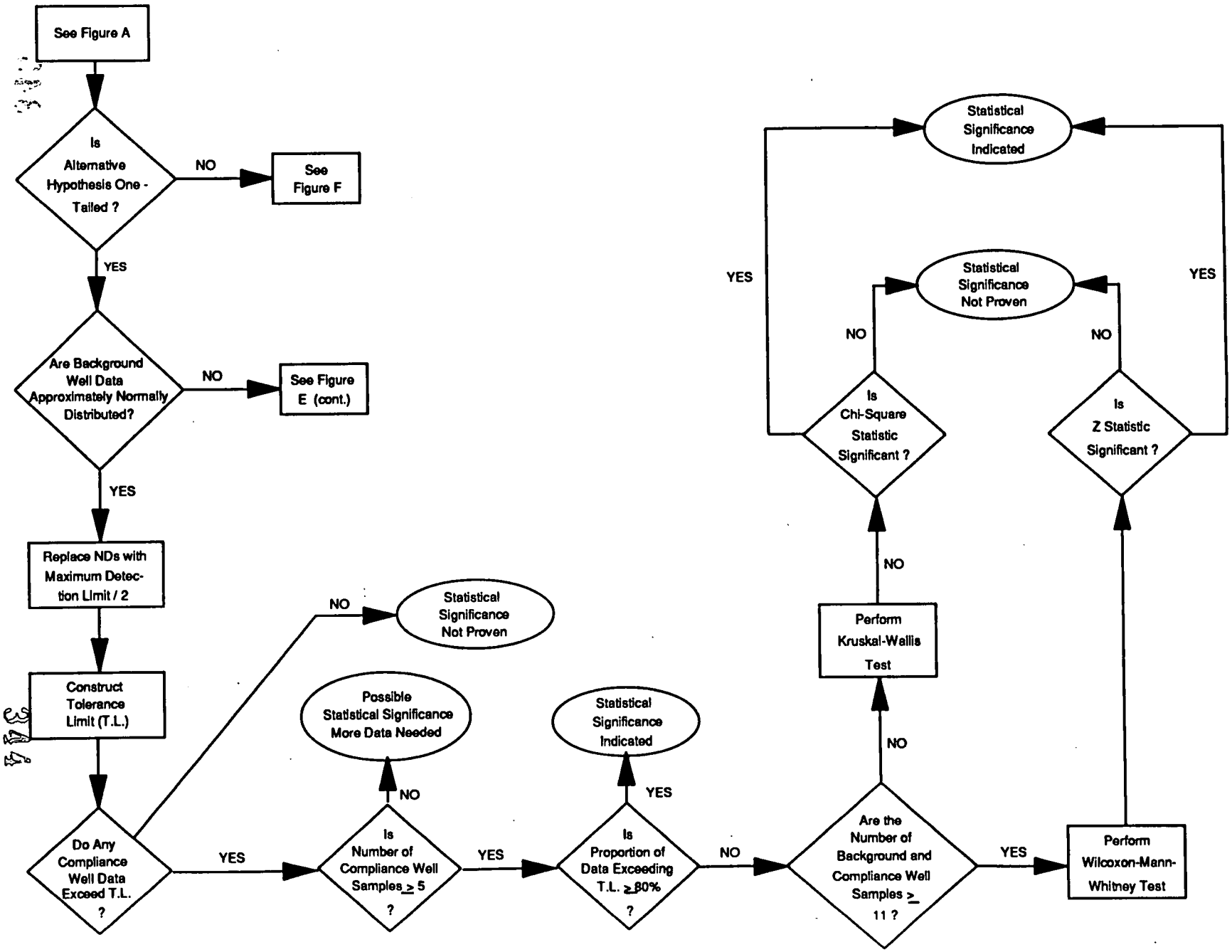


Figure E (cont.)
Nonparametric Tests Logic Diagram

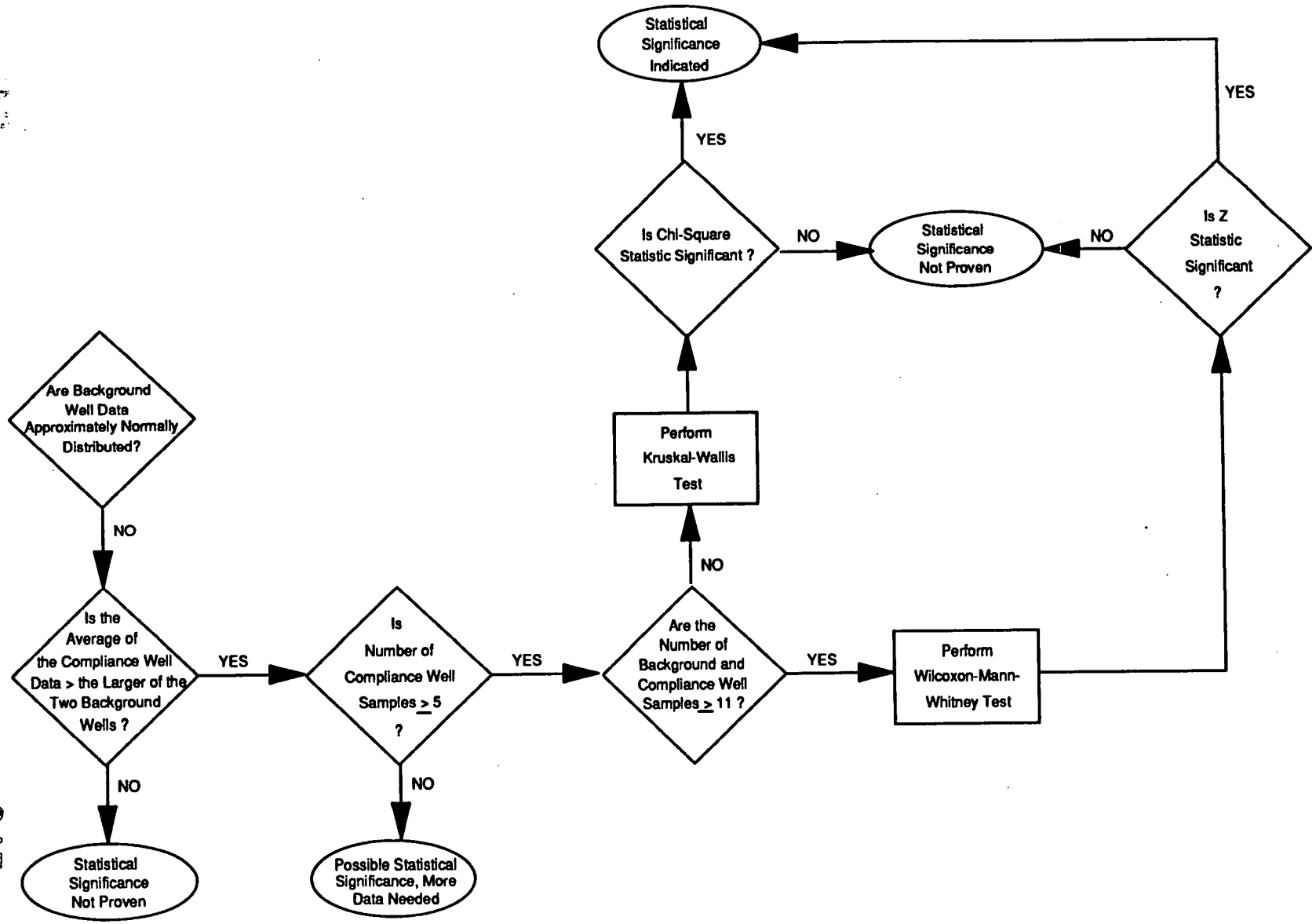
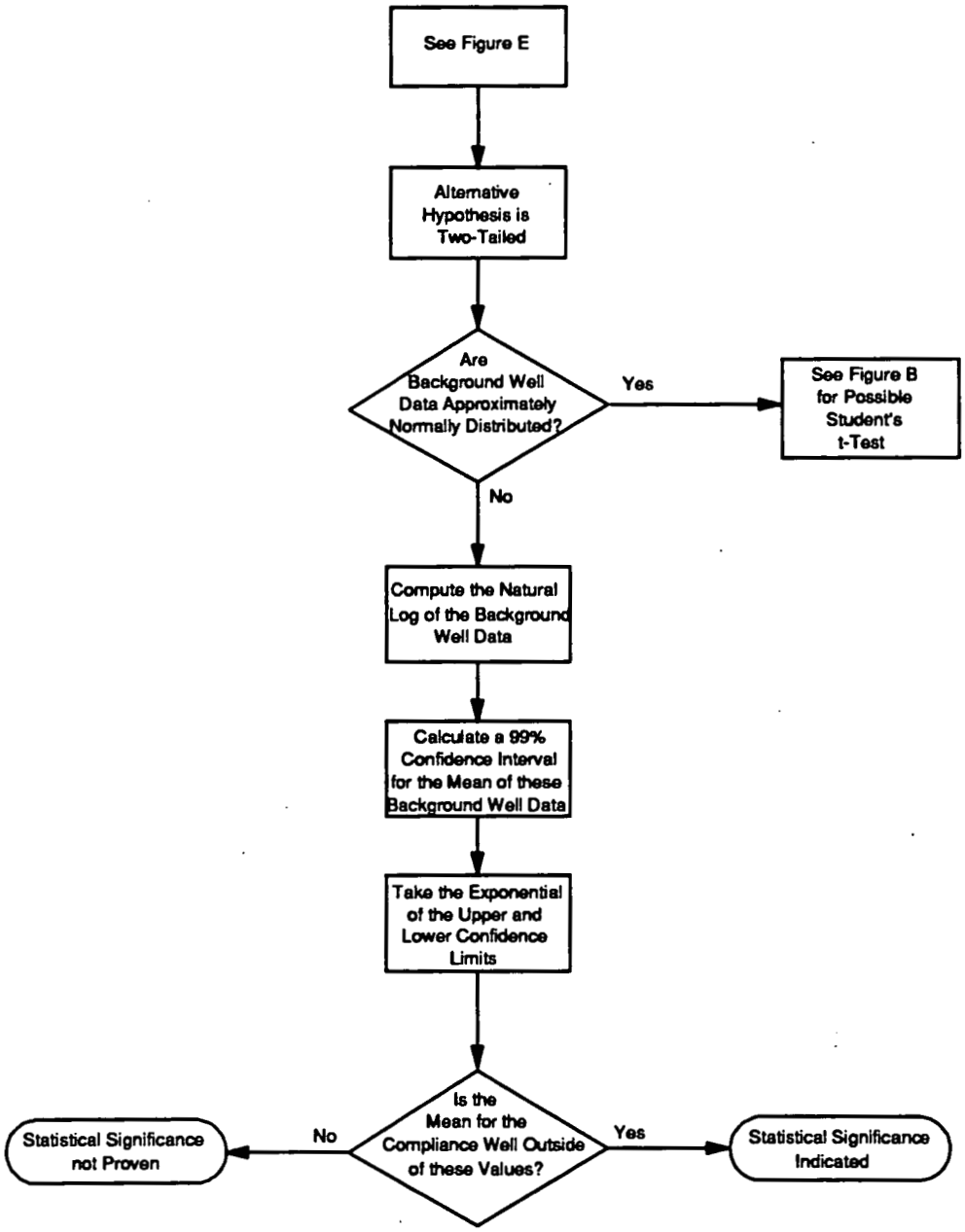


Figure F
Confidence Interval for Non-Normal Data
Logic Diagram



Statistical Analysis Tables

Identification of Qualifiers For RCRA Well Data Tables

Organic Qualifiers

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCB's analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and reanalyzed. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.

Inorganic Qualifiers

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

B - The report value is less than the contract required detection limit (CRDL) but greater than the instrument detection limit (IDL).

W - Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

CROSS REFERENCES TO RCRA WELL DATA EVALUATIONS

Cross Ref. #	Description
(1)	All data from the compliance well lie below the tolerance limit (T.L.) (or within the T.L.'s for pH or conductivity) - the concentrations are statistically insignificant.
(2)	The number of samples from the compliance well was $\geq$ 3 and one or more of the values from the compliance well exceeded the respective tolerance limit (T.L.). A Student's t test was performed. The Student's t test calculated a range for the difference between the means of the background wells and the compliance well with an alpha error of 1%.
	(a) The range for the difference between the means overlapped zero; therefore, the H_o: η_B-η_C = 0 was not contradicted by the available data, and the compliance well was determined to have statistically insignificant concentrations.
	(b) The range for the difference between the means had negative values at both ends (except for pH and conductivity where they were either both negative or both positive); therefore, the compliance well was determined to have a statistically significant amount of the constituent and the null hypothesis that there was no statistical difference between the two means was rejected.
(3)	The number of samples from the compliance well was $\geq$ 3 and approximately 80% or greater of the values exceeded the respective tolerance limit (T.L.). Based on this information, the well was declared to have a statistically significant amount of the constituent and no further test was performed.
(4)	Concluded that the compliance well had a statistically significant amount of the constituent without performing an actual test. This decision was based on the fact that a Student's t test determined another compliance well in the same group (except for pH and conductivity) had statistically significant amount(s) of the constituent. The evaluated well had a smaller calculated average concentration and either somewhat similar or greater variability than this well.
(5)	A Student's t test was performed, <u>including</u> a high statistical outlier that was associated with this compliance well, and the test was determined to be <u>not significant</u>. The outlier was the only value from this well that significantly exceeded the T.L. This conservative type of methodology was administered because the statistical outliers could not be confirmed due to time constraints.
(6)	A Student's t test was performed, <u>excluding</u> a high statistical outlier that was associated with this compliance well, and the test was determined to still be <u>significant</u>. The outlier as well as several other values from this well significantly exceed the T.L. This type of methodology (i.e. excluding the outlier from the analysis) was administered because the statistical outliers could not be confirmed due to time constraints.
(7)	There was sufficient data from the two background wells to construct a tolerance limit (T.L.), but the compliance well had only 1 or 2 samples to compare to the T.L. Therefore, a valid Student's t test could not have been performed, if called for. The well was evaluated solely by comparing each value to respective T.L. An additional comparison was made to the appropriate MCL, if applicable. This was provided for informational purposes only. All such comparisons can be placed into one of the following categories and verdicts:

Compliance Wells with 1 Value

Compliance Wells with 1 Value

	Criteria	Verdict
(7a)	< T.L. and < MCL	O.K.
(7b)	< T.L. and no MCL	O.K.
(7c)	< T.L. but > MCL	O.K.
(7d)	> T.L. and > MCL	Possible statistical significance - more data needed to confirm
(7e)	> T.L. and no MCL	Possible statistical significance - more data needed to confirm

Compliance Wells with 2 Values

	Criteria	Verdict
(7f)	Both values < T.L. and < MCL	O.K.
(7g)	Both values < T.L. and no MCL	O.K.
(7h)	Both values < T.L. but > MCL	O.K.
(7i)	Both values > T.L. and > MCL	Possible statistical significance - more data needed to confirm
(7j)	Both values significantly > T.L. but < MCL	Possible statistical significance - more data needed to confirm
(7k)	Both values > T.L. and no MCL	Possible statistical significance - more data needed to confirm

(8) The Z or t statistic from the Test of Proportions[1] was insignificant; however, to be conservative a further evaluation of the data was made. All quantified data (excluding statistical outliers) from the compliance wells which had less than 50% NDs were compared to two times the maximum value observed from the two respective background wells. Based on other empirical observations, if any of these measurements exceeded this calculated value, then the affected well was declared to have statistically significant concentration(s) of the constituent. Correspondingly, if the converse were true, then the well was declared to have statistically insignificant concentrations.

(9) The Z or t statistic from the Test of Proportions[1] was insignificant and the proportion of NDs from the compliance well was $\geq$ 50% - the concentrations are statistically insignificant.

(10) The Z statistic from the Test of Proportions[1] was significant (i. e., $|Z| > 1.96$). However, the proportion of NDs in this compliance well was $\geq$ the average proportion of NDs observed in the two respective background wells. Therefore, this well does not indicate statistically significant concentrations.

(11) The Z statistic from the Test of Proportions[1] was significant (i. e., $|Z| > 1.96$); the proportion of detectables in the background well(s) was significantly higher than in the compliance wells. An additional study is required to determine this cause.

Footnote

1 The Test of Proportions statistical method is described in the USEPA Interim Final Guide titled, "Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities," dated, April 1989 (see Section 8.1.2).

(12) The Z statistic from the Test of Proportions[1] was significant (i. e., $|Z| > 1.96$). Each compliance well which had a smaller proportion of NDs than that experienced by the two respective background wells were evaluated further to quantitatively determine their status. Based on other empirical observations, if any quantified data from these wells (excluding statistical outliers) exceeded two times the maximum value observed from the two background wells, the affected well was determined to have statistically significant concentration(s). Correspondingly, if the converse were true, then the well did not show statistically significant concentrations.

(13) A detectable value of a volatile organic compound (VOC) exceeded twice the Practical Quantitation Limit (PQL); therefore, the affected compliance well was declared to have a statistically significant amount of the constituent[2].

(14) Two or more values of a volatile organic compound (VOC) from within this group of compliance wells exceeded the Practical Quantitation Limit (PQL). Therefore, those compliance wells with values exceeding the PQL were declared to have statistically significant concentration(s)[2].

(15) All compliance well data were less than or equal to background well data, the Practical Quantitation Limit (PQL), or the detection limit - the concentrations are statistically insignificant.

(16) From within its group of compliance wells, this well had the only detectable value for this specific volatile organic compound (VOC). The value exceeded the Practical Quantitation Limit (PQL) but was less than or equal to two times the PQL. A measurement bias or error is therefore assumed, and the well is declared to have statistically insignificant concentration(s)[2].

(17) Not enough data to perform a meaningful statistical analysis.

(18) The background well data were determined to be significantly normal. A two-tailed test of significance was called for so a 99% confidence interval for the mean of the background wells was calculated based on the natural log of the background well data. The mean for this compliance well lies within the upper and lower confidence limits; the compliance well was determined to have statistically insignificant concentrations.

(19) The background well data were determined to be significantly nonnormal. A two-tailed test of significance was called for so a 99% confidence interval for the mean of the background wells was calculated based on the natural log of the background well data. The mean for this compliance well lies outside the upper and lower confidence limits; the compliance well was determined to have a statistically significant amount of the constituent.

(20) The compliance well and/or background well data were determined to be significantly nonnormal. A one-tailed test of significance was called for either because the compliance well mean exceeded the background well mean or the compliance well had a value that exceeded the tolerance limit (see Figure E). Thus, a nonparametric test (i.e., Wilcoxon-Mann-Whitney or Kruskal-Wallis) was performed. The test statistic was insignificant: therefore, the compliance well was determined to have statistically insignificant concentrations.

Footnote

2 The rationale for this type of methodology is based on a similar comparison of a VOC detectable measurement to the PQL that has been mandated by the state of Illinois EPA.

(21) The compliance well and/or background well data were determined to be significantly nonnormal. A one-tailed test of significance was called for either because the compliance well mean exceeded the background well mean or the compliance well had a value that exceeded the tolerance limit (see Figure E). Thus a nonparametric test (i.e., Wilcoxon-Mann-Whitney or Kruskal-Wallis) was performed. The text statistic was significant; therefore, the compliance well was determined to have a statistically significant amount of the constituent.

RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
	1024	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		
	1052	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		PQL = 0.005
	1025	1,1-Dichloroethane	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	1027	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1028	1,1-Dichloroethane					0.005 U					0.001 U		2	2	1.00	15	
	1030	1,1-Dichloroethane					0.005 U		0.0025 U					2	2	1.00	15	
•	1031	1,1-Dichloroethane						0.03	0.045	0.0372	0.0214	0.024	0.0208	0	6	0.00	13	
	1038	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.005 U	0.001 U	7	7	1.00	15	
	1074	1,1-Dichloroethane	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	1079	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1080	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1081	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1082	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1083	1,1-Dichloroethane	0.005 U				0.002 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2043	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		
	2066	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		PQL = 0.005
	2010	1,1-Dichloroethane	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2013	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	2019	1,1-Dichloroethane	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2021	1,1-Dichloroethane	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.0011	7	8	0.88	15	
	2027	1,1-Dichloroethane	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2037	1,1-Dichloroethane	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2051	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	2055	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	2084	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3043	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		
	3066	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		PQL = 0.005
	3001	1,1-Dichloroethane	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	3008	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3010	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.02 U	0.001 U	7	7	1.00	15	
	3013	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3019	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3024	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3037	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3051	1,1-Dichloroethane					0.005 U	0.005 U	0.0005 U					3	3	1.00	15	
	3055	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3084	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	4001	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	4008	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	4010	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	

• Constituent found in statistically significant amount(s) ** Signifies an outlier *** See Cross Reference listing number ? Background well with relatively high values

1162

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RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
			SAMPLING ROUNDS															
	4013	1,1-Dichloroethane					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1024	2-Propanone					0.002 BJ	0.005 BJ	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00		
	1052	2-Propanone					0.029 B	0.002 J	0.0025 U	0.002 U	0.0166	0.002 U	0.002 U	6	7	0.86		PQL = 0.100
	1025	2-Propanone	0.011 B				0.003 BJ	0.01 U	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	8	8	1.00	15	
	1027	2-Propanone					0.003 BJ	0.003 BJ	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	
	1028	2-Propanone					0.006 BJ					0.002 U		2	2	1.00	15	
	1030	2-Propanone					0.01 U		0.0025 U					2	2	1.00	15	
	1031	2-Propanone						0.015	0.0125 U	0.078	0.0307	0.01 U	0.01 U	3	6	0.50	15	
	1038	2-Propanone					0.003 BJ	0.004 BJ	0.0025 U	0.002 U	0.002 U	0.01 U	0.002 U	7	7	1.00	15	
	1074	2-Propanone	0.004 BJ				0.003 BJ	0.01 U	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	8	8	1.00	15	
	1079	2-Propanone					0.004 BJ	0.01 U	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	
	1080	2-Propanone					0.008 BJ	0.003 J	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	
	1081	2-Propanone					0.004 BJ	0.003 BJ	0.0025 U	0.002 U	0.0021	0.002 U	0.002 U	6	7	0.86	15	
	1082	2-Propanone					0.003 BJ	0.01 U	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	
	1083	2-Propanone	0.01 U				0.005 BJ	0.003 BJ	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	8	8	1.00	15	
	2043	2-Propanone					0.002 BJ	0.01 U	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00		
	2066	2-Propanone					0.003 BJ	0.006 J	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00		PQL = 0.100
	2010	2-Propanone	0.008 J				0.008 BJ	0.007 BJ	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	8	8	1.00	15	
	2013	2-Propanone					0.01 U	0.003 BJ	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	
	2019	2-Propanone	0.013				0.002 BJ	0.002 J	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	8	0.88	15	
	2021	2-Propanone	0.01 U				0.003 BJ	0.012 B	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	8	8	1.00	15	
	2027	2-Propanone	0.01 U				0.004 BJ	0.01 U	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	8	8	1.00	15	
	2037	2-Propanone	0.01 U				0.007 BJ	0.01 U	0.0025 U	0.002 U	0.001 U	0.002 U	0.002 U	8	8	1.00	15	
	2051	2-Propanone					0.028 B	0.003 J	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	
	2055	2-Propanone					0.018 B	0.005 BJ	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	
	2084	2-Propanone					0.021 B	0.01 U	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	
	3043	2-Propanone					0.005 BJ	0.01 U	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00		
	3066	2-Propanone					0.011 U	0.004 J	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00		PQL = 0.100
	3001	2-Propanone	0.037 B				0.014 B	0.01 B	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	8	8	1.00	15	
	3008	2-Propanone					0.004 BJ	0.004 BJ	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	
	3010	2-Propanone					0.006 BJ	0.008 BJ	0.0025 U	0.002 U	0.002 U	0.04 U	0.002 U	7	7	1.00	15	
	3013	2-Propanone					0.004 BJ	0.004 BJ	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	
	3019	2-Propanone					0.007 BJ	0.008 BJ	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	
	3024	2-Propanone					0.003 BJ	0.003 BJ	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	
	3037	2-Propanone					0.007 BJ	0.01 U	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	
	3051	2-Propanone					0.084 B	0.008 J	0.0005 U					3	3	1.00	15	
	3055	2-Propanone					0.035 B	0.004 BJ	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	
	3084	2-Propanone					0.01 U	0.006 J	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	

* Constituent found in statistically significant amount(s) ** Signifies an outlier *** See Cross Reference listing number ? Background well with relatively high values

RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
	4001	2-Propanone					0.035 U	0.011 U	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	
	4008	2-Propanone					0.002 U	0.005 BJ	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	
	4010	2-Propanone					0.004 U	0.005 BJ	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	
	4013	2-Propanone					0.005 U	0.004 BJ	0.0025 U	0.002 U	0.002 U	0.002 U	0.002 U	7	7	1.00	15	
	1024	Aluminum					0.1206	0.123	3.11	0.261	2.29	2.54	15.8	0	7	0.00		
	1052	Aluminum					0.337	0.141	5.2	3.33	0.249	0.25 U	8.07	1	7	0.14		
	1025	Aluminum	0.175 B				0.287	0.582	11.8	1.13	47.3	47	12.3	1	8	0.13	20	Was previously # 17
	1027	Aluminum					0.127	0.136	0.262	0.591	0.314	0.25 U	0.53	1	7	0.14	5	Was previously # 17
	1028	Aluminum					0.275					0.5 U		1	2	0.50	5	Was previously # 17
	1030	Aluminum					0.188		6.92					0	2	0.00	17	Was previously # 17
	1031	Aluminum					0.226	0.215	1.5	0.541	2.18	0.25 U	0.25 U	2	7	0.29	15	Was previously # 17
	1038	Aluminum					0.168	0.149	4.83	2.67	39.6	23	34.6	0	7	0.00	20	Was previously # 17
	1074	Aluminum	0.0418 B				0.131	0.19	3.55	1.15	1.56	0.53	8.13	1	8	0.13	15	Was previously # 17
	1079	Aluminum					0.162	0.181	7.92	1.63	3.54	35.4 **	0.57	0	7	0.00	20	Was previously # 17
	1080	Aluminum					0.165	0.604	6.9	15.9	28.5	0.98	13.8	0	7	0.00	20	Was previously # 17
	1081	Aluminum					0.197	2.16	2	2.13	4.35	3.39	0.25 U	1	7	0.14	15	Was previously # 17
	1082	Aluminum					0.295	0.208	16 **	0.936	36.8	0.92	1.71	0	7	0.00	20	Was previously # 17
	1083	Aluminum	0.0474 B				0.192	1.97	6.69	0.449	12.1	29.7	6.4	1	8	0.13	20	Was previously # 17
?	2043	Aluminum					0.116	0.163	0.266	0.066	10.9	9.19	1.47	0	7	0.00		
	2066	Aluminum					0.0816	0.143	0.339	0.025 U	0.053	0.25 U	0.25 U	3	7	0.43		T.L. = 10.56
	2010	Aluminum	0.1 U				0.123	0.262	0.07	5.06	1.05	2.59	2.02	1	8	0.13	15	Was previously # 17
	2013	Aluminum					0.113	0.15	0.062	0.025 U	0.164	0.25 U	0.25 U	3	7	0.43	15	Was previously # 17
	2019	Aluminum	0.05 U				0.1405	0.16	0.08	0.081	0.05 U	0.25 U	0.25 U	4	8	0.50	15	Was previously # 17
	2021	Aluminum	0.0121 B				0.128	0.173	0.122	0.055	0.08	0.25 U	0.25 U	3	8	0.38	15	Was previously # 17
	2027	Aluminum	0.0114 U				0.2065	0.275	0.256	3.37	3.94	4.12	4.18	1	8	0.13	15	Was previously # 17
	2037	Aluminum	0.0133 B				0.187	0.19	0.072	0.093	4.21	4.79	1.69	1	8	0.13	15	Was previously # 17
	2051	Aluminum					0.181	0.182	0.235	1.86	7.96	2.66	1.33	0	7	0.00	15	Was previously # 17
	2055	Aluminum					0.134	0.165	1.67	0.862	2.38	1.02	0.25 U	1	7	0.14	15	Was previously # 17
	2084	Aluminum					0.232	0.252	0.054	0.299	2.16	1.15	2.24	0	7	0.00	15	Was previously # 17
	3043	Aluminum					0.09	0.156	0.05 U	0.097	0.055	0.5 U	0.5 U	3	7	0.43		
?	3066	Aluminum					0.112	0.142	0.847	4.03	3.53	2.83	1.78	0	7	0.00		
	3001	Aluminum	0.0199 B				0.09	0.167	0.05 U	0.05 U	0.05 U	0.5 U	0.5 U	6	8	0.75	15	Was previously # 17
	3008	Aluminum					0.118	0.102	3.18	0.05 U	0.161	0.5 U	0.5 U	3	7	0.43	15	Was previously # 17
	3010	Aluminum					0.163	0.188	0.063	0.05 U	0.05 U	0.5 U	0.5 U	4	7	0.57	15	Was previously # 17
	3013	Aluminum					0.154	0.19	0.899	0.072	0.05 U	0.5 U	0.5 U	3	7	0.43	15	Was previously # 17
	3019	Aluminum					0.218	0.181	0.141	0.05 U	0.05 U	0.5 U	0.5 U	4	7	0.57	15	Was previously # 17
	3024	Aluminum					0.138	0.175	0.078	0.139	0.136	0.5 U	0.5 U	2	7	0.29	15	Was previously # 17
	3037	Aluminum					0.2006	0.224	0.05 U	0.309	0.05 U	0.5 U	0.5 U	4	7	0.57	15	Was previously # 17

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RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
			SAMPLING ROUNDS															
	3051	Aluminum					0.125	0.153	0.05 U	0.05 U				2	4	0.50	15	Was previously # 17
	3055	Aluminum					0.198	0.193	0.083	0.165	0.05 U	0.5 U	0.5 U	3	7	0.43	15	Was previously # 17
	3084	Aluminum					0.192	0.212	0.05 U	0.05 U	0.054	0.5 U	0.5 U	4	7	0.57	15	Was previously # 17
	4001	Aluminum					0.0974	0.147	0.05 U	0.05 U	0.05 U	0.5 U	0.5 U	5	7	0.71	15	Was previously # 17
	4008	Aluminum					0.1063	0.106	0.067	0.05 U	0.05 U	0.5 U	0.5 U	4	7	0.57	15	Was previously # 17
	4010	Aluminum					0.0843	0.116	0.05 U	0.133	0.054	0.5 U	0.5 U	3	7	0.43	15	Was previously # 17
	4013	Aluminum					0.194	0.238	0.05 U	0.081	0.05 U	0.5 U	0.5 U	4	7	0.57	15	Was previously # 17
	1024	Arsenic	0.2 U	0.01 U	0.002 U	0.003			0.006	0.006	0.006	0.009	0.035	3	9	0.33		2 x maximum backgrou
	1052	Arsenic	0.2 U	0.01 U	0.002 U	0.003 U		0.002 U	0.005	0.008	0.0025 U	0.0025 U	0.012	7	10	0.70		value = 0.07
													totals	10	19			Z = 0.7366 O.K.
	1025	Arsenic	0.0026 BW		0.002	0.004		0.002 UW	0.007	0.0025 U	0.022	0.034	0.013	3	9	0.33	8	
	1027	Arsenic	0.2 U	0.01 U	0.002 U	0.002 U			0.0025 U	0.004	0.007	0.004	0.005	5	9	0.56	9	
	1028	Arsenic										0.006		0	1	0.00	8	
	1030	Arsenic							0.0025 U					1	1	1.00	9	
	1031	Arsenic			0.003	0.002 U		0.002 U	0.0025 U	0.0025 U	0.004	0.0025 U	0.0025 U	6	8	0.75	9	
	1038	Arsenic	0.2 U	0.002 U	0.002 U	0.002 U			0.009	0.014	0.033	0.0025 U	0.068	5	9	0.56	9	
	1074	Arsenic	0.0031 BW	0.002 U	0.002 U	0.003 U		0.002 U	0.0025 U	0.0025 U	0.004	0.0025 U	0.006	8	10	0.80	9	
	1079	Arsenic	0.2 U	0.2 U	0.002 U	0.002 U		0.002 U	0.005	0.003	0.005	0.019	0.0025 U	6	10	0.60	9	
	1080	Arsenic	0.2 U	0.01 U	0.005	0.004		0.0067 B	0.013	0.013	0.027	0.013	0.026	3	10	0.30	8	Was previously # 9
	1081	Arsenic	0.2 U	0.002 U	0.002 U	0.003			0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	7	9	0.78	9	
	1082	Arsenic	0.2 U		0.002 U	0.002 U		0.002 U	0.006	0.0025 U	0.011	0.0025 U	0.0025 U	7	9	0.78	9	
	1083	Arsenic	0.0019 U	0.002 U	0.002 U	0.002 U			0.0025 U	0.0025 U	0.007	0.025	0.009	6	9	0.67	9	
													totals	57	94			
	2043	Arsenic	0.2 U	0.01 U	0.002 U	0.002 U		0.002 U	0.0025 U	0.0025 U	0.01	0.011	0.004	7	10	0.70		
?	2066	Arsenic	0.2 U	0.03	0.042	0.021			0.023	0.025	0.027	0.027	0.031	1	9	0.11		Z = 2.4494 > 1.96 Background well may be contaminated
													totals	8	19			
	2010	Arsenic	0.005 U	0.01 U	0.02	0.003 U			0.0025 U	0.017	0.005	0.008	0.007	4	9	0.44	11	
	2013	Arsenic	0.2 U	0.01 U	0.002 U				0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	7	8	0.88	11	
	2019	Arsenic	0.002 U	0.4	0.002 U	0.003 U		0.002 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	9	10	0.90	11	
	2021	Arsenic	0.0047 B	0.2 U	0.002 U	0.003 U			0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	9	9	1.00	11	
	2027	Arsenic	0.0019 U	0.01 U	0.002 U	0.003 U		0.002 U	0.008	0.027	0.055	0.043	0.041	6	10	0.60	11	
	2037	Arsenic	0.0022 B	0.01 U	0.002 U			0.002 U	0.0025 U	0.0025 U	0.011	0.007	0.005	6	9	0.67	11	
	2051	Arsenic	0.2 U	0.01 U	0.002 U	0.002 U			0.0025 U	0.003	0.009	0.003	0.005	5	9	0.56	11	
	2055	Arsenic							0.0025 U	0.0025 U	0.005	0.0025 U	0.003	3	5	0.60	11	
	2084	Arsenic	0.2 U	0.002 U	0.002 U	0.003 U		0.002 U	0.0025 U	0.0025 U	0.004	0.003	0.012	7	10	0.70	11	
													totals	56	79			

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RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER- DICT	WELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
?	3043	Arsenic	0.2 U	0.01	0.014	0.011		0.0124	0.014	0.014	0.012	0.012	0.013	1	10	0.10		
?	3066	Arsenic	0.2 U	0.1	0.084	0.1			0.101	0.123	0.127	0.131	0.052	1	9	0.11		
	3001	Arsenic	0.0019 U	0.02	0.002 U	0.003 U			0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	8	9	0.89	15	
	3008	Arsenic	0.2 U	0.002 U	0.002 U	0.003 U			0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	9	9	1.00	15	
	3010	Arsenic	0.2 U	0.01 U	0.002 U				0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	8	8	1.00	15	
	3013	Arsenic	0.2 U	0.01 U	0.002 U				0.0025 U	0.0025 U	0.0025 U	0.003	0.013	6	8	0.75	15	
	3019	Arsenic	0.2 U	0.2 U	0.002 U	0.003 U		0.002 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	10	10	1.00	15	
	3024	Arsenic	0.2 U	0.01 U	0.002 U	0.002 U			0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	9	9	1.00	15	
	3037	Arsenic	0.2 U	0.01 U	0.002 U			0.002 U	0.0025 U	0.0025	0.0025 U	0.0025 U	0.0025 U	8	9	0.89	15	
	3051	Arsenic	0.2 U	0.01 U	0.002 U	0.002 U			0.0025 U	0.0025 U				6	6	1.00	15	
	3055	Arsenic	0.002 U	0.01 U	0.002 U	0.003 U			0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	9	9	1.00	15	
	3084	Arsenic	0.2 U	0.002 U	0.002 U	0.003 U		0.002 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	10	10	1.00	15	
	4001	Arsenic	0.2 U	0.01 U	0.002 U	0.003 U			0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	9	9	1.00	15	
	4008	Arsenic	0.2 U	0.002 U	0.002 U				0.004	0.004	0.005	0.0025 U	0.0025 U	5	8	0.63	15	
	4010	Arsenic				0.003 U			0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	6	6	1.00	15	
	4013	Arsenic				0.003 U			0.0025 U	0.0025 U	0.003	0.003	0.0025 U	4	6	0.67	15	
	1024	Barium	0.091	0.1 U	0.09	0.09	0.0944	0.112	0.254	0.253	0.1 U	0.01 U	0.342	3	11	0.27		
	1052	Barium	0.112	0.1 U	0.081	0.057	0.106	0.062 B	0.209	0.2 U	0.1 U	0.1 U	0.225	5	11	0.45		T.L. = 0.3345
	1025	Barium	0.0573 B		0.091	0.086	0.0665	0.093	0.656	0.1 U	0.835	0.629	0.434	2	10	0.20	2a	
	1027	Barium	0.051	0.1 U	0.037	0.077	0.0689	0.074	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	6	11	0.55	1	
	1028	Barium					0.106					0.237		0	2	0.00	7f	Was previously # 7a
	1030	Barium					0.0647		0.1 U					2	3	0.67	7f	
	1031	Barium			0.105	0.116	0.811	0.088	0.362	0.497	0.1 U	0.229	0.1 U	2	9	0.22	2a	
	1038	Barium	0.025 U	0.045	0.04	0.05	0.0431	0.048	0.1 U	0.1 U	0.1 U	0.276	0.539	4	11	0.36	2a	Was previously # 1
	1074	Barium	0.0418 B	0.092	0.097	0.069	0.079	0.084 B	0.264	0.1 U	0.1 U	0.1 U	0.1 U	6	11	0.55	1	
	1079	Barium	0.041	0.055	0.052	0.054	0.473	0.049 B	0.216	0.219	0.1 U	0.235	0.1 U	3	11	0.27	2a	
	1080	Barium	0.048	0.1 U	0.038	0.046	0.0461	0.057 B	0.1 U	0.1 U	0.21	0.1 U	0.202	5	11	0.45	1	
	1081	Barium	0.025 U	0.032	0.031	0.039	0.032	2 **	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	6	11	0.55	5	
	1082	Barium	0.053		0.044	0.077	0.0899	0.102 BE	0.341	0.1 U	0.356	0.1 U	0.1 U	4	10	0.40	2a	
	1083	Barium	0.0369 B	0.082	0.083	0.085	0.0846	1.8 **	0.1 U	0.268	0.242	0.516	0.209	2	11	0.18	5	
?	2043	Barium	0.195	0.2	0.04	0.272	0.2509	0.251	0.292	0.289	0.367	0.625	0.411	0	11	0.00		
?	2066	Barium	0.758	0.8	0.668	0.7	0.658	0.789	0.895	0.805	0.81	0.797	0.784	0	11	0.00		
	2010	Barium	0.0873 B	0.2 U	0.067	0.056	0.0753	0.054	0.393	0.2 U	0.2 U	0.2 U	0.2 U	6	11	0.55	15	
	2013	Barium	0.06	0.2 U	0.072		0.0705	0.076	0.2 U	0.2 U	0.2 U	0.2 U	0.225	5	10	0.50	15	
	2019	Barium	0.056 B	0.053	0.055	0.053	0.0679	0.077	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	6	11	0.55	15	
	2021	Barium	0.067 B	0.07	0.073	0.071	0.425	0.067	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	6	11	0.55	15	
	2027	Barium	0.105 B	0.2 U	0.059	0.082	0.0816	0.054 BE	0.2 U	0.651	0.634	0.487	0.457	4	11	0.36	15	
	2037	Barium	0.0814 B	0.2 U	0.086		0.095	0.094 B	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	8	10	0.80	15	
	2051	Barium	0.073	0.5 U	0.07	0.078	0.0938	0.088	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	6	11	0.55	15	

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RCRA WELL DATA TO DATE

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			SAMPLING ROUNDS															
	2055	Barium					0.0918	0.096	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5	7	0.71	15	
	2084	Barium	0.08	0.07	0.088	0.073	0.0828	0.074 B	0.374	0.357	0.2 U	0.2 U	0.2 U	4	11	0.36	15	
?	3043	Barium	0.214	0.3	0.3	0.279	0.249	0.255	0.241	0.291	0.271	0.326	0.325	0	11	0.00		
?	3066	Barium	0.509	0.5	0.493	0.48	0.0717	0.538	0.584	0.717	0.621	0.672	0.443	0	11	0.00		
	3001	Barium	0.046	0.05	0.085	0.053	0.0481	0.058	0.205	0.2 U	0.2 U	0.2 U	0.2 U	4	11	0.36	15	
	3008	Barium	0.05 U	0.035	0.052	0.049	0.0589	0.051	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	6	11	0.55	15	
	3010	Barium	0.05 U	0.2 U	0.023		0.0271	0.027	0.2 U	0.25	0.2 U	0.2 U	0.2 U	6	10	0.60	15	
	3013	Barium	0.08	0.2 U	0.089		0.083	0.084	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	6	10	0.60	15	
	3019	Barium	0.05 U	0.027	0.025	0.026	0.0292	0.033 B	0.333	0.236	0.2 U	0.2 U	0.2 U	5	11	0.45	15	
	3024	Barium	0.088	0.2 U	0.1	0.141	0.143	0.142	0.371	0.326	0.2 U	0.2 U	0.2 U	4	11	0.36	15	
	3037	Barium	0.06	0.2 U	0.049		0.0465	0.052	0.225	0.2 U	0.2 U	0.2 U	0.2 U	5	10	0.50	15	
	3051	Barium	0.158	0.5 U	0.19	0.198	0.189	0.204	0.226	0.301				1	8	0.13	15	
	3055	Barium	0.067	0.2 U	0.076	0.087	0.0864	0.088	0.2 U	0.2 U	0.2 U	0.2 U	0.204	5	11	0.45	15	
	3084	Barium	0.05 U	0.03	0.027	0.025	0.0342	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	6	11	0.55	15	
	4001	Barium	0.058	0.2 U	0.085	0.061	0.0799	0.082	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	6	11	0.55	15	
	4008	Barium	0.05 U	0.032	0.034		0.0372	0.037	0.216	0.2 U	0.2 U	0.2 U	0.2 U	5	10	0.50	15	
	4010	Barium				0.45	0.395	0.44	0.512	0.541	0.499	0.505	0.475	0	8	0.00	15	
	4013	Barium				0.1	0.185	0.187	0.264	0.356	0.253	0.2 U	0.221	1	8	0.13	15	
	1024	Beryllium					0.0018	0.001	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	5	7	0.71		
	1052	Beryllium					0.001 U	0.0012 B	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	7	7	1.00		
													totals	12	14			Z = -0.123 O.K.
	1025	Beryllium	0.0024 U				0.0025	0.0025 B	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	6	7	0.86	9	
	1027	Beryllium					0.001 U	0.001	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	6	7	0.86	9	
	1028	Beryllium					0.0022					0.01 U		2	3	0.67	9	
	1030	Beryllium					0.001 U		0.01 U					2	2	1.00	9	
	1031	Beryllium					0.0019	0.0013 B	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	6	7	0.86	9	
	1038	Beryllium					0.001 U	0.001	0.01 U	0.01 U	0.01 U	0.01 U	0.011	5	7	0.71	9	
	1074	Beryllium	0.0024 U				0.001 U	0.001	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	7	8	0.88	9	
	1079	Beryllium					0.001	0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	5	7	0.71	9	Was previously # 8
	1080	Beryllium					0.001	0.002 B	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	6	7	0.86	9	Was previously # 8
	1081	Beryllium					0.0013	0.052 **	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	6	7	0.86	9	Was previously # 8
	1082	Beryllium					0.001 U	0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	6	7	0.86	9	
	1083	Beryllium	0.0024 U				0.001 U	0.047 **	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	8	8	1.00	9	
													totals	65	77			
	2043	Beryllium					0.001 U	0.0017 B	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	7	7	1.00		
	2066	Beryllium					0.001 U	0.001	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	6	7	0.86		

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RCRA WELL DATA TO DATE

VER> DICT	WELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
	2010	Beryllium	0.005 U				0.001 U	0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	7	8	0.88	15	
	2013	Beryllium					0.001 U	0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	6	7	0.86	15	
	2019	Beryllium	0.001 U				0.001 U	0.0014 B	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	8	8	1.00	15	
	2021	Beryllium	0.0024 U				0.001 U	0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	7	8	0.88	15	
	2027	Beryllium	0.0024 U				0.001 U	0.0024 B	0.01 U	0.01 U	0.01 U	0.01 U	0.011	7	8	0.88	15	
	2037	Beryllium	0.0024 U				0.001 U	0.002 B	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	8	8	1.00	15	
	2051	Beryllium					0.001 U	0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	6	7	0.86	15	
	2055	Beryllium					0.001 U	0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	6	7	0.86	15	
	2084	Beryllium					0.0034	0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	5	7	0.71	15	
	3043	Beryllium					0.001 U	0.0018 B	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	7	7	1.00		
	3066	Beryllium					0.001 U	0.001	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	6	7	0.86		
													totals	13	14			Z = -1.146 O.K.
	3001	Beryllium	0.0024 U				0.001 U	0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	7	8	0.88	9	
	3008	Beryllium					0.0022	0.001	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	5	7	0.71	9	Was previously # 8
	3010	Beryllium					0.001 U	0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	6	7	0.86	9	
	3013	Beryllium					0.001	0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	5	7	0.71	9	Was previously # 8
	3019	Beryllium					0.001 U	0.0013 B	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	7	7	1.00	9	
	3024	Beryllium					0.0022	0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	5	7	0.71	9	Was previously # 8
	3037	Beryllium					0.001 U	0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	7	7	1.00	9	
	3051	Beryllium					0.001 U	0.002 B	0.01 U	0.01 U				3	4	0.75	9	
	3055	Beryllium					0.001 U	0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	6	7	0.86	9	
	3084	Beryllium					0.0031	0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	5	7	0.71	9	
	4001	Beryllium					0.001 U	0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	6	7	0.86	9	
	4008	Beryllium					0.0018	0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	5	7	0.71	9	Was previously # 8
	4010	Beryllium					0.001 U	0.001	0.01 U	0.01 U	0.01 U	0.01 U	0.011	5	7	0.71	9	
	4013	Beryllium					0.0013	0.002	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	5	7	0.71	9	Was previously # 8
													totals	77	96			
	1024	Calcium	83.8	130	90.4	89	89.2	95.6	98.2	95.8	104	99.6	146	0	11	0.00		
	1052	Calcium	91.5	100	105	110	99.5	113	117	117	112	70	82.6	0	11	0.00		T.L. = 141
•	1025	Calcium	386		520	521	499	570	583	524	656	718	472	0	10	0.00	3	
	1027	Calcium	105	130	67.5	125	124	132	110	71.8	93.7	84	47.7	0	11	0.00	1	Was previously # 7e
	1028	Calcium					448					323		0	2	0.00	7k	Was previously # 2a
	1030	Calcium					154		213					0	2	0.00	7k	
•	1031	Calcium			322	234	313	315	331	348	259	282	189	0	9	0.00	3	
•	1038	Calcium	135	133	126	147	145	156	165	336	521	187	514	0	11	0.00	3	Was previously # 4
•	1074	Calcium	123	121	123	130	128	126	289 **	143	91	145	62.7	0	11	0.00	2b	Was previously # 6
•	1079	Calcium	120	112.2	130	132	132	143	148	151	104	222	80.3	0	11	0.00	4	
•	1080	Calcium	94.3	120	114	130	139	146	147	176	401 **	156	114	0	11	0.00	2b	
•	1081	Calcium	230.3	228	223	230	250	153	261	294	304	319	193	0	11	0.00	3	

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RCRA WELL DATA TO DATE

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*	1082	Calcium	129.8		129	143	160	176	198	143	300	181	95.1	0	10	0.00	4	
*	1083	Calcium	157	145	141	155	160	152	154	157	172	275	148	0	11	0.00	3	Was previously # 4
	2043	Calcium	103	100	72.4	110	106	121	104	110	268	142	137	0	11	0.00		
	2066	Calcium	68.8	73	65.7	78	74.2	81.7	84.5	74.9	72.9	48.8	69.8	0	11	0.00		T.L. = 203
*	2010	Calcium	130	180	186	150	124	386	332	183	90	169	142	0	11	0.00	2b	
	2013	Calcium	111	110	119		112	120	101	115	72	95.6	103	0	10	0.00	1	
*	2019	Calcium	122.3	143	138	140	164	178	155	173	266	77.6	115	0	11	0.00	2b	
*	2021	Calcium	138	160	277	180	149	156	131	137	122	86.4	43.3	0	11	0.00	2b	Was previously # 3
*	2027	Calcium	274	210	106	210	333	449	258	292	189	183	223	0	11	0.00	2b	Was previously # 3
*	2037	Calcium	124	120	132		145	228	189	138	145	99.4	86.3	0	10	0.00	2b	
*	2051	Calcium	128	190	154	131	249	209	213	255	265	195	71.6	0	11	0.00	2b	Was previously # 4
	2055	Calcium					105	124	111	117	157	113	119	0	7	0.00	1	
*	2084	Calcium	259	264	164	340	325	306	317	338	363	397	259	0	11	0.00	3	
	3043	Calcium	82.8	86	78.4	91.1	87.1	144	89.3	97.6	89.4	38.8	76.3	0	11	0.00		
	3066	Calcium	153	160	156	160	150	169	168	186	171	193	137	0	11	0.00		T.L. = 229
	3001	Calcium	89.3	87.2	173	100	93.4	105	91.6	95.8	66	20.1	5.8	0	11	0.00	1	
	3008	Calcium	53.2	58.4	85.5	87	90	83.2	78.4	94.9	66.9	31.6	17	0	11	0.00	1	
*	3010	Calcium	297	320	337		244	247	219	232	230	178	170	0	10	0.00	4	Was previously # 3
	3013	Calcium	185	200	202		19.7	212	182	204	126	84.8	75.3	0	10	0.00	1	
*	3019	Calcium	212	248	273	300	244	270	253	294	404	150	141	0	11	0.00	2b	Was previously # 3
	3024	Calcium	81.7	85	135	134	133	133	116	135	119	117	44.2	0	11	0.00	1	
*	3037	Calcium	254	280	291		277	305	261	305	227	214	123	0	10	0.00	4	Was previously # 3
	3051	Calcium	127	140	130	136	145	146	163	148				0	8	0.00	1	
	3055	Calcium	104	160	197	200	203	211	175	192	211	162	166	0	11	0.00	1	
*	3084	Calcium	241	258	284	250	265	258	247	268	289	189	117	0	11	0.00	3	
	4001	Calcium	90.4	93	102	99	115	122	104	87.8	87.5	26.7	19.5	0	11	0.00	1	
	4008	Calcium	70.2	78.8	79		86.9	86.4	76.7	90.4	74.1	46.4	50.7	0	10	0.00	1	
	4010	Calcium				99	87.5	98.9	92.1	100	96.1	43.6	88.9	0	8	0.00	1	
*	4013	Calcium				170	252	270	243	265	174	150	138	0	8	0.00	2b	
	1024	Chloride	1.4	18 **	1.9	1.5	0.25 U	1.5	2	2	2	3	2	1	10	0.10		
	1052	Chloride	5.8	4	3.8	5.9	2.5	7.5	6	8	7	7	8	0	11	0.00		T.L. = 10.19
*	1025	Chloride			845	940	830	1040	899	740	889	859	788	0	9	0.00	3	
	1027	Chloride	8.8	9.6	7.9	3	2	11	9	5	4	4	0.5 U	1	11	0.09	2a	
	1028	Chloride					520					692		0	2	0.00	7i	Was previously # 7d
	1030	Chloride							5					0	1	0.00	7a	
*	1031	Chloride			1120	889.7	1060	1150	1100	1100	970	892	755	0	9	0.00	3	
*	1038	Chloride	14.9	10	2	17.5	5.8	11	16	16	19	17	19	0	11	0.00	3	Was previously # 2b
*	1074	Chloride	108	105	123	130	130	160	128	146	154	143	133	0	11	0.00	3	

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	1079	Chloride	1.8	1	10	1	0.5	3	3	2	3	3	6	0	11	0.00	1	
	1080	Chloride	5.1	2.5	8.3	5.8	0.5	5	5	5	6	6	4	0	11	0.00	1	
•	1081	Chloride	26.9	17.5	3	35	30	34	34	34	34	37	36	0	11	0.00	3	
•	1082	Chloride	23.8		2	19	38	49	39	33	31	34	37	0	10	0.00	3	
•	1083	Chloride	31.4	32.5	44.8	37.5	58	61.5	57	47	51	58	67	0	11	0.00	3	
	2043	Chloride	51.1	66	54.2		2.75	51.2		44	41	28	33	0	9	0.00		
	2066	Chloride	96	68	64	69	62	56.5	69	67	67	68	67	0	11	0.00		T.L. = 103.38
	2010	Chloride	27	31	29	32	32.9	27	33	39	39	32	36	0	11	0.00	1	
	2013	Chloride	62.6	25	26.5	25	26	26.5	23	26	26	26	24	0	11	0.00	1	
	2019	Chloride	38.4	48	50	50	41.2	51.5	47	48	62	46	47	0	11	0.00	1	
	2021	Chloride	42.4	47	54.1	49	66.6	75.5	63	47	46	40	41	0	11	0.00	1	
•	2027	Chloride	79.9	120	75	79	140	77	104	87	57	70	107	0	11	0.00	2b	
	2037	Chloride	25.4	27	22.2	24	24	29	24	24	27	27	24	0	11	0.00	1	
	2051	Chloride	5.8	39	212 **	24	26.4		26	26	26	25	24	0	10	0.00	5	
	2055	Chloride					23.6	26.5	29	31	28	28	28	0	7	0.00	1	
•	2084	Chloride	200	185	150	170	176	250	184	172	167	154	149	0	11	0.00	3	
	3043	Chloride	2.75	11.5	15.1		11.8	23	15	15	21	29	26	0	10	0.00		
?	3066	Chloride	826	680	660	80 **	647	735	679	690	586	692	317	0	11	0.00		T.L. = 1113
	3001	Chloride	21.1	25	19.1	21	15.4	19.9	19	20	17	16	19	0	11	0.00	1	
	3008	Chloride	54	18	18.5	22	22	20	20	20	21	18	18	0	11	0.00	1	
	3010	Chloride	74.2	68	70.2	62	54.3	51	54	52	56	56	66	0	11	0.00	1	
	3013	Chloride	70.3	62	60	21	56	60	52	55	53	20	42	0	11	0.00	1	
	3019	Chloride	170	70	82.3	79	12.4	54.5	58	54	52	15	9	0	11	0.00	1	
	3024	Chloride	9	3.7	19.4	20	17.8	22	21	19	20	21	4	0	11	0.00	1	
	3037	Chloride	4	230	212	200	206	250	209	216	215	179	191	0	11	0.00	1	
	3051	Chloride	53.6	79	245	63	71.6	74	44	70				0	8	0.00	1	
	3055	Chloride	51.5	58	54.8	56	47.4	56.7	46	51	51	49	49	0	11	0.00	1	
	3084	Chloride	153	207	212	230	235	210	223	223	224	172	43	0	11	0.00	1	
	4001	Chloride	24.3	20	22	29	35.6	34	30	22	27	21	20	0	11	0.00	1	
	4008	Chloride	10.9	11.5	11		10	13	12	12	11	11	11	0	10	0.00	1	
	4010	Chloride				39	34	32	30	30	30	31	30	0	8	0.00	1	
	4013	Chloride				220	240	248	246	241	247	153	147	0	8	0.00	1	

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	1024	Chromium	0.02 U	0.12	0.02 U	0.022	0.0345	0.025	0.005	0.005 U	0.008	0.008	0.005 U	4	11	0.36		
	1052	Chromium	0.02 U	0.01 U	0.02 U	0.02	0.0379	0.024	0.058	0.033	0.005 U	0.011	0.129	4	11	0.36		T.L. = 0.128
	1025	Chromium	0.0017 U		0.02 U	0.066	0.0618	0.038	0.073	0.34	0.35	0.326	0.107	2	10	0.20	20	Was previously # 8
	1027	Chromium	0.02 U	0.01 U	0.02 U	0.03	0.0346	0.031	0.005 U	0.006	0.005 U	0.005	0.011	5	11	0.45	15	Was previously # 9
	1028	Chromium					0.0637					0.049		0	2	0.00	17	Was previously # 8
	1030	Chromium					0.0436		0.246					0	2	0.00	17	Was previously # 8
	1031	Chromium			0.02 U	0.0215	0.0364	0.029	3.48	0.191	0.681	0.154	0.907	1	9	0.11	20	Was previously # 8
	1038	Chromium	0.02 U	0.02 U	0.02 U	0.036	0.039	0.034	0.011	0.019	0.068	0.035	0.076	3	11	0.27	15	Was previously # 8
	1074	Chromium	0.0017 U	0.02 U	0.02 U	0.04	0.0413	0.0345	0.343	0.607	1.15	0.126	0.214	3	11	0.27	20	Was previously # 8
	1079	Chromium	0.02 U	0.02 U	0.02 U	0.029	0.0328	0.0385	0.015	0.007	0.011	0.092	0.02	3	11	0.27	15	Was previously # 8
	1080	Chromium	0.02 U	0.01 U	0.02 U	0.03	0.0354	0.062	0.009	0.069	0.053	0.005 U	0.102	4	11	0.36	15	Was previously # 8
	1081	Chromium	0.02 U	0.02 U	0.02 U	0.043	0.05	0.221	0.013	0.012	0.015	0.012	0.079	3	11	0.27	15	Was previously # 8
	1082	Chromium	0.02 U		0.02 U	0.039	0.042	0.0374	0.026	0.008	0.055	0.007	0.024	2	10	0.20	15	Was previously # 8
	1083	Chromium	0.0017 U	0.02 U	0.02 U	0.039	0.0397	0.205	0.008	0.006	0.028	0.088	0.043	3	11	0.27	20	Was previously # 8
	2043	Chromium	0.02 U	0.01 U	0.02 U	0.024	0.0415	0.0303	0.011	0.008	0.09	0.312	0.036	3	11	0.27		
	2066	Chromium	0.02 U	0.01 U	0.02 U	0.02	0.0259	0.022	0.01	0.005 U	0.005 U	0.005 U	0.005 U	7	11	0.64		
	2010	Chromium	0.01 U	0.01 U	0.02 U	0.03	0.0282	0.041	0.005 U	0.048	0.009	0.026	0.015	4	11	0.36	15	Was previously # 9
	2013	Chromium	0.02 U	0.01 U	0.02 U		0.0299	0.027	0.01	0.008	0.005	0.005 U	0.005 U	5	10	0.50	15	Was previously # 9
	2019	Chromium	0.02 U	0.02 U	0.02 U	0.02	0.0404	0.03	0.005 U	0.008	0.007	0.005 U	0.008	5	11	0.45	15	Was previously # 9
	2021	Chromium	0.0017 U	0.02 U	0.02 U	0.02	0.0368	0.033	0.005 U	0.008	0.005 U	0.005 U	0.01	6	11	0.55	15	Was previously # 9
	2027	Chromium	0.0017 U	0.01 U	0.02 U	0.03	0.0527	0.038	0.007	0.021	0.022	0.019	0.025	3	11	0.27	15	Was previously # 9
	2037	Chromium	0.0017 U	0.01 U	0.02 U		0.0404	0.035	0.005 U	0.005 U	0.057	0.037	0.04	5	10	0.50	15	Was previously # 9
	2051	Chromium	0.02 U	0.01 U	0.02 U	0.026	0.0472	0.037	0.009	0.017	0.079	0.018	0.028	3	11	0.27	15	Was previously # 8
	2055	Chromium					0.0287	0.03	0.011	0.005	0.014	0.008	0.009	0	7	0.00	15	Was previously # 8
	2084	Chromium	0.02 U	0.02 U	0.02 U	0.05	0.0855	0.039	0.005	0.006	0.05	0.02	0.029	3	11	0.27	15	Was previously # 8
	3043	Chromium	0.02 U	0.01 U	0.02 U	0.021	0.021	0.0292	0.005 U	0.005 U	0.005 U	0.005 U	0.015	7	11	0.64		2 x maximum background
	3066	Chromium	0.02 U	0.01 U	0.02 U	0.03	0.0378	0.027	0.013	0.016	0.065	0.013	0.029	3	11	0.27		value = 0.12
													totals	10	22			Z = 0.5513 O.K.
	3001	Chromium	0.0017 U	0.02 U	0.02 U	0.02	0.0259	0.028	0.005 U	0.007	0.005 U	0.005 U	0.017	6	11	0.55	9	
	3008	Chromium	0.02 U	0.02 U	0.02 U	0.02	0.032	0.027	0.005 U	0.005 U	0.022	0.005 U	0.022	6	11	0.55	9	
	3010	Chromium	0.02 U	0.01 U	0.02 U		0.0399	0.036	0.005 U	0.005 U	0.005 U	0.005 U	0.016	7	10	0.70	9	
	3013	Chromium	0.02 U	0.01 U	0.02 U		0.0402	0.04	0.007	0.011	0.005 U	0.005 U	0.017	5	10	0.50	9	
	3019	Chromium	0.02 U	0.02 U	0.02 U	0.03	0.0484	0.035	0.005 U	0.009	0.005 U	0.005 U	0.012	6	11	0.55	9	
	3024	Chromium	0.02 U	0.56 **	0.02 U	0.028	0.0441	0.042	0.005 U	0.006	0.005 U	0.005 U	0.019	5	11	0.45	8	
	3037	Chromium	0.02 U	0.01	0.02 U		0.0572	0.037	0.005	0.005 U	0.005 U	0.012	0.009	4	10	0.40	8	
	3051	Chromium	0.02 U	0.01 U	0.02 U	0.025	0.0374	0.029	0.005 U	0.005 U				5	8	0.63	9	
	3055	Chromium	0.02 U	0.01 U	0.02 U	0.03	0.0431	0.04	0.005 U	0.005 U	0.005 U	0.007	0.006	6	11	0.55	9	
	3084	Chromium	0.02 U	0.04	0.02 U	0.05	0.0774	0.0352	0.005 U	0.005 U	0.005 U	0.012	0.033	5	11	0.45	8	

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RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICTWELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	8	9	10	11		TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
4001	Chromium	0.02 U	0.01 U	0.02 U	0.02	0.0319	0.029	0.005 U	0.009	0.005 U	0.005 U	0.017		6	11	0.55	9	
4008	Chromium	0.02 U	0.02 U	0.02 U		0.0328	0.023	0.005 U	0.005 U	0.005 U	0.005 U	0.012		7	10	0.70	9	
4010	Chromium				0.02	0.0229	0.025	0.005 U	0.005 U	0.005 U	0.005 U	0.02		4	8	0.50	9	Was previously # 8
4013	Chromium				0.03	0.05	0.043	0.008	0.006	0.005 U	0.037	0.109		1	8	0.13	8	
													totals	73	141			
1024	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00		
1052	Cobalt					0.0131	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		6	7	0.86		
													totals	13	14			Z = -0.374 O.K.
1025	Cobalt	0.0052 U				0.0159	0.012 B	0.025 U	0.025 U	0.025 U	0.038	0.025 U		6	8	0.75	9	
1027	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	9	
1028	Cobalt					0.017					0.025 U			1	2	0.50	9	Was previously # 8
1030	Cobalt					0.01 U		0.025 U						2	2	1.00	9	
1031	Cobalt					0.0121	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		6	7	0.86	9	
1038	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	9	
1074	Cobalt	0.0052 U				0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		8	8	1.00	9	
1079	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	9	
1080	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.027	0.025 U	0.025 U		6	7	0.86	9	
1081	Cobalt					0.01 U	0.486	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		6	7	0.86	9	
1082	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	9	
1083	Cobalt	0.0052 U				0.01 U	0.44	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	8	0.88	9	
													totals	70	77			
2043	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00		
2066	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00		
													totals	14	14			
2010	Cobalt	0.01 U				0.01 U	0.012	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	8	0.88	17	
2013	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	17	
2019	Cobalt	0.01 U				0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		8	8	1.00	17	
2021	Cobalt	0.0052 U				0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		8	8	1.00	17	
2027	Cobalt	0.0052 U				0.01 U	0.013	0.025 U	0.025 U	0.025 U	0.025 U	0.03 U		7	8	0.88	17	
2037	Cobalt	0.0052 U				0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.049	0.025 U		7	8	0.88	17	
2051	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	17	
2055	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	17	
2084	Cobalt					0.011	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		6	7	0.86	17	
													totals	64	68			
3043	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00		

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RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	1	2	3	4	5	6	7	8	9	10	11		TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
			SAMPLING ROUNDS																
	3066	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00		
	3001	Cobalt	0.0052 U				0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		8	8	1.00	15	
	3008	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	15	
	3010	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	15	
	3013	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	15	
	3019	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	15	
	3024	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	15	
	3037	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	15	
	3051	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U					4	4	1.00	15	
	3055	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	15	
	3084	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	15	
	4001	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	15	
	4008	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	15	
	4010	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	15	
	4013	Cobalt					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	15	
	1024	Copper	0.01 U	0.025 U	0.01 U	0.013	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.085		9	11	0.82		2 x maximum background
	1052	Copper	0.02 U	0.03 U	0.01 U	0.01 U	0.0137	0.01 U	0.025 U	0.028	0.025 U	0.025 U	0.049		8	11	0.73		value = 0.16
														totals	17	22			Z = -1.002 O.K.
	1025	Copper	0.0067 U		0.01 U	0.034	0.01 U	0.01 U	0.042	0.03	0.08	0.085	0.034		4	10	0.40	8	Was previously # 9
	1027	Copper	0.01 U	0.03 U	0.01 U	0.014	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		10	11	0.91	9	
	1028	Copper					0.01 U					0.073			1	2	0.50	9	
	1030	Copper					0.01 U		0.156						1	2	0.50	9	
	1031	Copper			0.02	0.0238	0.01 U	0.01 U	0.076	0.03	0.025 U	0.025 U	0.025 U		5	9	0.56	9	Was previously # 8
	1038	Copper	0.01 U	0.01 U	0.01 U	0.016	0.01 U	0.01 U	0.025 U	0.04	0.08	0.128	0.081		6	11	0.55	9	
	1074	Copper	0.0067	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.029	0.029	0.025 U	0.025 U		8	11	0.73	9	
	1079	Copper	0.01 U	0.01 U	0.01 U	0.017	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.033	0.025 U		9	11	0.82	9	
	1080	Copper	0.02 U	0.03 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.034	0.025 U	0.044		9	11	0.82	9	
	1081	Copper	0.01 U	0.01 U	0.01 U	0.023	0.01 U	0.236	0.025 U	0.028	0.033	0.025 U	0.025 U		7	11	0.64	9	
	1082	Copper	0.01 U		0.01 U	0.018	0.01 U	0.01 U	0.04	0.025 U	0.064	0.025 U	0.025 U		7	10	0.70	9	
	1083	Copper	0.0067 U	0.01 U	0.01 U	0.02	0.01 U	0.213	0.025 U	0.025 U	0.043	0.058	0.029		6	11	0.55	9	
														totals	73	110			
	2043	Copper	0.01 U	0.03 U	0.01 U	0.022	0.01 U	0.01 U	0.033	0.025 U	0.06	0.047	0.025 U		7	11	0.64		
	2066	Copper	0.01 U	0.03 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		11	11	1.00		
														totals	18	22			Z = -0.125 O.K.
	2010	Copper	0.01 U	0.03 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		11	11	1.00	9	
	2013	Copper	0.02 U	0.03 U	0.01 U		0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.043	0.025 U		9	10	0.90	9	
	2019	Copper	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.029	0.025 U	0.025 U		10	11	0.91	9	

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VER-DICT	WELL #	CONSTITUENT	1	2	3	4	5	6	7	8	9	10	11		TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
			SAMPLING ROUNDS																
	2021	Copper	0.0697	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.039	0.038		8	11	0.73	9	
	2027	Copper	0.0067 U	0.03 U	0.01 U	0.01 U	0.01 U	0.01 U	0.045	0.033	0.036	0.025 U	0.025 U		8	11	0.73	9	
	2037	Copper	0.0067 U	0.03 U	0.01 U		0.01 U	0.0322	0.025 U	0.025 U	0.025 U	0.025 U	0.027		8	10	0.80	9	
	2051	Copper	0.01 U	0.01 U	0.01 U	0.012	0.01 U	0.01 U	0.027	0.039	0.039	0.231	0.025 U		6	11	0.55	9	
	2055	Copper					0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		7	7	1.00	9	
	2084	Copper	0.04	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.042	0.025 U	0.031		8	11	0.73	9	
														totals	75	93			
	3043	Copper	0.01 U	0.03 U	0.01 U	0.022	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		10	11	0.91		
	3066	Copper	0.01 U	0.03 U	0.01 U	0.01 U	0.01 U	0.01 U	0.028	0.025 U	0.025 U	0.025 U	0.025 U		10	11	0.91		
														totals	20	22			Z = 0.4709 O.K.
	3001	Copper	0.0067 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		11	11	1.00	9	
	3008	Copper	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.048	0.025 U	0.025 U		10	11	0.91	9	
	3010	Copper	0.01 U	0.03 U	0.01 U		0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		10	10	1.00	9	
	3013	Copper	0.02 U	0.03 U	0.01 U		0.01 U	0.01 U	0.026	0.025 U	0.025 U	0.025 U	0.025 U		9	10	0.90	9	
	3019	Copper	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		11	11	1.00	9	
	3024	Copper	0.017 U	0.025	0.01 U	0.012	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		9	11	0.82	9	
	3037	Copper	0.01 U	0.03 U	0.01 U		0.01 U	0.01 U	0.028	0.025 U	0.025 U	0.025 U	0.025 U		9	10	0.90	9	
	3051	Copper	0.01 U	0.01 U	0.01 U	0.012	0.01 U	0.01 U	0.03	0.025 U					6	8	0.75	9	
	3055	Copper	0.01 U	0.03 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		11	11	1.00	9	
	3084	Copper	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		11	11	1.00	9	
	4001	Copper	0.01 U	0.03 U	0.026	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		10	11	0.91	9	
	4008	Copper	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		10	10	1.00	9	
	4010	Copper				0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		8	8	1.00	9	
	4013	Copper				0.01 U	0.01 U	0.01 U	0.027	0.025 U	0.025 U	0.025 U	0.025 U		7	8	0.88	9	
														totals	132	141			
	1024	Fluoride	0.83	1.3	0.94	1	0.94	0.98	0.85	0.68	0.62	0.92	0.82		0	11	0.00		
	1052	Fluoride	1.35	1.3	0.92	0.9	0.94	1	0.79	1.13	0.82	0.78	0.73		0	11	0.00		T.L. = 1.38
	1025	Fluoride			0.54	0.44	0.49	0.36	0.55	0.7	0.97	0.36	0.42		0	9	0.00	1	
	1027	Fluoride	1.2	1.7	1.1	0.96	1	0.96	0.78	0.86	1.64	0.56	0.52		0	11	0.00	2a	Was previously # 1
	1028	Fluoride					0.225					0.22			0	2	0.00	7f	Was previously # 7a
	1030	Fluoride							0.65						0	1	0.00	7a	
•	1031	Fluoride			1.5	1.53	1.7	1.6	1.18	1.24	1.72	1.56	1.12		0	9	0.00	2b	
	1038	Fluoride	0.76	0.75	0.64	0.46	0.6	0.5	0.55	0.79	3.18	0.96	0.45		0	11	0.00	1	
•	1074	Fluoride	1.25	1.5	1.05	1.2	1.14	1.3	0.99	1.04	1	1	0.86		0	11	0.00	2b	Was previously # 1
	1079	Fluoride	0.99	1.18	1.1	1.2	1.14	1.1	0.9	1.27	0.61	0.87	0.98		0	11	0.00	1	
	1080	Fluoride	1.3	1.3	1	1	1	0.92	0.86	0.62	0.57	1	0.66		0	11	0.00	1	
	1081	Fluoride	0.8	0.96	0.74	0.39	0.415	0.49	0.39	0.79	0.53	0.38	0.38		0	11	0.00	1	
	1082	Fluoride	1.1		1.25	0.72	0.86	0.58	0.76	0.87	0.92	0.7	0.61		0	10	0.00	1	

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	1083	Fluoride	0.41	0.55	0.35	0.24	0.3	0.35	0.24	0.32	0.54	0.43	0.3	0	11	0.00	1	
?	2043	Fluoride	0.58	0.58	0.28	0.49	0.52	0.55		0.72	0.53	0.38	0.41	0	10	0.00		
?	2066	Fluoride	0.94	0.9	0.78	1	0.4	0.88	1.02	0.63	0.78	0.68	0.5	0	11	0.00		T.L. = 1.156
	2010	Fluoride	0.2	0.1	0.13	0.2	0.16	0.088	0.18	0.25	0.21	0.11	0.22	0	11	0.00	1	
	2013	Fluoride	0.31	0.1	0.185	0.2	0.24	0.18	0.21	0.21	0.18	0.24	0.19	0	11	0.00	1	
	2019	Fluoride	0.41	0.37	0.24	0.3	0.28	0.29	0.31	0.27	0.35	0.27	0.29	0	11	0.00	1	
	2021	Fluoride	0.35	0.34	0.23	0.2	0.24	0.24	0.24	0.26	0.36	0.3	0.34	0	11	0.00	1	
	2027	Fluoride	0.3	1.8 **	0.17	0.2	0.12	0.5	0.72	0.44	0.46	0.46	0.51	0	11	0.00	5	
	2037	Fluoride	0.51	0.2	0.26	0.2	0.2	0.17	0.25	0.2	0.35	0.22	0.22	0	11	0.00	1	
	2051	Fluoride	0.27	0.26	0.33	0.15	0.27		0.28	0.48	0.44	0.3	0.29	0	10	0.00	1	
	2055	Fluoride					0.187	0.14	0.17	0.2	0.55	0.2	0.18	0	7	0.00	1	
	2084	Fluoride	0.21	0.21	0.175	0.1	0.165	0.1	0.17	0.26	0.26	0.11	0.27	0	11	0.00	1	
	3043	Fluoride	0.46	0.34	0.19	0.3	0.37	0.32	0.29	0.63	0.38	0.24	0.27	0	11	0.00		
	3066	Fluoride	0.23	0.05 U	0.12	0.4	0.11	0.094	0.15	0.19	0.22	0.2	0.18	1	11	0.09		T.L. = 0.5968
	3001	Fluoride	0.16 U	0.29	0.19	0.1	0.169	0.15	0.16	0.14	0.12	0.08	0.09	1	11	0.09	1	
	3008	Fluoride	0.4	0.14	0.1	0.1	0.14	0.1	0.92 **	0.26	0.1	0.08	0.1	0	11	0.00	5	Was previously # 2a
	3010	Fluoride	0.24	0.1 U	0.105	0.1 U	0.082	0.05	0.11	0.1	0.17	0.07	0.12	2	11	0.18	1	
	3013	Fluoride	0.26	0.1 U	0.113	0.5	0.155	0.115	0.36	0.12	0.12	0.33	0.2	1	11	0.09	1	
	3019	Fluoride	0.21	0.14	0.1 U	0.1 U	0.088	0.09	0.17	0.1	0.2	0.45	0.64	2	11	0.18	1	
	3024	Fluoride	0.73	1.9 **	0.5 U	0.4	0.44	0.43	0.39	0.38	0.42	0.41	0.58	1	11	0.09	5	
	3037	Fluoride	0.35	0.1	0.145	0.1	0.1	0.1	0.14	0.3	0.4	0.15	0.15	0	11	0.00	1	
	3051	Fluoride	0.35	0.24	0.3	0.14	0.24	0.22	0.18	0.3				0	8	0.00	1	
	3055	Fluoride	0.53	0.1 U	0.105	0.1	0.13	0.089	0.12	0.13	0.13	0.12	0.11	1	11	0.09	1	
	3084	Fluoride	0.29	0.16	0.1 U	0.1	0.11	0.12	0.13	0.16	0.31	0.11	0.82 **	1	11	0.09	5	Was previously # 1
	4001	Fluoride	0.3	1.1 **	0.12	0.1	0.165	0.135	0.18	0.22	0.11	0.16	0.19	0	11	0.00	5	
	4008	Fluoride	0.39	0.3	0.2		0.24	0.18	1.18 **	0.36	0.22	0.17	0.18	0	10	0.00	5	
	4010	Fluoride				0.5	0.5	0.46	0.48	0.47	0.46	0.39	0.51	0	8	0.00	1	
	4013	Fluoride				0.5	0.45	0.45	0.44	0.36	0.33	0.52	0.43	0	8	0.00	1	
	1024	Iron	0.667	4.9	2.1	0.061	1.074	0.154	4.66	2.12	5.05	7.9	78.3	0	11	0.00		
	1052	Iron	0.0025 U	0.05 U	0.0025 U	0.06	0.258	0.079	6.68	3.97	1.63	0.799	33.5	3	11	0.27		
	1025	Iron	0.304		0.218	0.82	0.111	0.286	18	3.37	51.6	70.1	35.7	0	10	0.00	20	Was previously # 2a
	1027	Iron	0.3	2.1	0.13	0.106	0.631	0.507	1.67	0.878	0.871	1.45	1.31	0	11	0.00	15	Was previously # 1
	1028	Iron					0.164					21.3		0	2	0.00	17	Was previously # 7a
	1030	Iron					0.105		8					0	2	0.00	17	Was previously # 7l
	1031	Iron			0.015	0.118	0.601	0.102	12.5	1.25	6.15	1.97	2	0	9	0.00	15	Was previously # 2a
	1038	Iron	0.53	0.16	0.376	0.14	0.156	0.295	10.8	14.9	74.8	40	113	0	11	0.00	20	Was previously # 2a
	1074	Iron	0.0492 B	0.005 U	0.043	0.08	0.0766	0.118	6.48	2.08	3.1	0.663	14.5	2	11	0.18	15	Was previously # 1
	1079	Iron	0.034	0.177	0.005	0.369	0.685	0.091	8.31	2.26	4.04	38.5	1.18	0	11	0.00	15	Was previously # 2a

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RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	8	9	10	11		TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
	1080	Iron	0.005 U	0.1 U	0.162	0.06	0.552	0.507	7.83	8.45	30.6	3.39	3.298		2	11	0.18	15	Was previously # 2a
	1081	Iron	0.23	0.005 U	0.125	0.062	0.0822	1.25	2.49	4.19	5.76	2.94	1.77		1	11	0.09	15	Was previously # 1
	1082	Iron	0.12		0.015	0.062	0.28	0.102	18.5	0.911	29.7	1.15	3.9		0	10	0.00	15	Was previously # 2a
	1083	Iron	0.0773 B	0.005 U	0.006	0.073	0.102	1.16	1.66	0.443	4.87	96	1.57		2	11	0.18	15	Was previously # 1
	2043	Iron	0.259	1.1	0.06	1.04	0.873	0.843	1.72	0.839	25.7	46.8	14.2		0	11	0.00		
	2066	Iron	1.6	1.7	1.703	1.6	1.73	0.506	2.1	1.84	1.61	2.11	2.19		0	11	0.00		
	2010	Iron	0.265	4.7	2.07	0.09	2.03	4.71	4.73	33.6	7.1	18.9	15.5		0	11	0.00	20	Was previously # 2a.
	2013	Iron	2.58	2.6	2.67		2.42	2.51	2.46	2.59	2.42	1.81	2.18		0	10	0.00	15	Was previously # 1
	2019	Iron	0.1	0.005 U	0.041	0.1	0.0556	0.085	0.156	0.157	0.05 U	0.05 U	0.405		3	11	0.27	15	Was previously # 1
	2021	Iron	0.0127 B	0.008	2.51	0.09	14.8	0.065	0.162	0.079	0.155	0.676	0.264		1	11	0.09	15	Was previously # 5
*	2027	Iron	8.06	6.1	3.28	4.7	5.804	3.27	51.2	53.1	69.6	77.8	64.2		0	11	0.00	21	Was previously # 3
	2037	Iron	2.7	3.1	3.19		3.47	5.54	5.05	3.18	4.2	15.4	10.1		0	10	0.00	15	Was previously # 3
	2051	Iron	1.721	4.5	3.2	2.95	5.06	4.45	5.22	10.6	18.9	8.7	14.9		0	11	0.00	15	Was previously # 2b
	2055	Iron					2.51	2.45	4.54	3.6	7.39	5.21	2.94		0	7	0.00	15	Was previously # 2b
	2084	Iron	2.3	4.2	0.166	2.3	2.085	3.03	2.59	8.79	22.9	16.5	0.786		0	11	0.00	15	Was previously # 2b
	3043	Iron	1.52	4	3.6	4.14	3.66	3.63	3.41	3.75	3.45	3.88	3.7		0	11	0.00		
?	3066	Iron	19.3	18	16.7	16	0.289	18.2	19.6	22.1	25.9	24.7	12.5		0	11	0.00		
	3001	Iron	3.5	2.8	4.5	2.5	3.21	2.78	2.55	3.15	2.84	2.29	1.85		0	11	0.00	15	Was previously # 1
	3008	Iron	0.68	1.7	1.39	6.5	1.079	0.71	3.67	12.4	52.2	15.5	10.5		0	11	0.00	15	Was previously # 1
	3010	Iron	0.26	0.5	1.14		2.1	5.84	5.76	2.39	3.72	2.74	12.5		0	10	0.00	15	Was previously # 1
	3013	Iron	6.58	7.1	7.21		6.69	6.9	7.1	7.08	6.67	4.84	11.53		0	10	0.00	15	Was previously # 1
	3019	Iron	0.23	0.037	0.094	0.14	0.0906	0.065	0.103	0.079	0.082	0.07	1.35		0	11	0.00	15	Was previously # 1
	3024	Iron	0.005 U	3	4.2	4.1	4.16	4	4.22	4.66	4.42	4.92	1.03		1	11	0.09	15	Was previously # 1
	3037	Iron	3.02	15	16.9		13.09	14.6	15.1	15.5	14.6	6.51	13.8		0	10	0.00	15	Was previously # 1
	3051	Iron	0.583	3.7	3.4	3.3	3.42	3.01	4.41	3.7					0	8	0.00	15	Was previously # 1
	3055	Iron	1.87	5.5	7.73	7.3	7.34	7.96	7.75	8.25	8.08	3.73	1.97		0	11	0.00	15	Was previously # 1
	3084	Iron	0.6	0.3	0.084	0.1	0.192	0.126	0.254	0.183	0.08	0.567	0.864		0	11	0.00	15	Was previously # 1
	4001	Iron	4.64	4.7	5.07	4.7	5.38	5.79	5.38	4.32	3.9	3.94	4.6		0	11	0.00	15	Was previously # 1
	4008	Iron	1.96	2.4	2.73		2.43	2.36	2.37	2.26	2.15	5.24	6.93		0	10	0.00	15	Was previously # 1
	4010	Iron				3.7	3.53	4.16	4.07	3.97	3.78	4.29	3.37		0	8	0.00	15	Was previously # 1
	4013	Iron				6.2	6.38	9.64	9.49	9.73	9.02	2.17	1.37		0	8	0.00	15	Was previously # 1
	1024	Lead	0.05 U	0.2 U	0.004	0.002 U	0.0027	0.003	0.005 U	0.005 U	0.005 U	0.005 U	0.046		7	11	0.64		2 x maximum background
	1052	Lead	0.05 U	0.005 U	0.002 U	0.002 U	0.0028	0.002 UN	0.005 U	0.005 U	0.005 U	0.005 U	0.029		9	11	0.82		value = 0.08
														totals	16	22			Z = -0.660 O.K.
	1025	Lead	0.0105 UN		0.002 U	0.003	0.002 U	0.002	0.01	0.005 U	0.023	0.084	0.017		4	10	0.40	8	Was previously # 9
	1027	Lead	0.05 U	0.005 U	0.002 U	0.002 U	0.002 U	0.003	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		10	11	0.91	9	
	1028	Lead					0.002 U					1.15			1	2	0.50	9	

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RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
						SAMPLING ROUNDS												
	1030	Lead					0.002 U		0.016					1	2	0.50	9	
	1031	Lead			0.002 U	0.002 U	0.002 U	0.006	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	8	9	0.89	9	
	1038	Lead	0.05 U	0.002 U	0.002 U	0.002 U	0.002 U	0.003	0.005 U	0.009	0.034	0.016	0.058	6	11	0.55	9	
	1074	Lead	0.0105 UW	0.002 U	0.003	0.002 U	0.0054	0.002 BN	0.008	0.005 U	0.005 U	0.005 U	0.009	7	11	0.64	9	Was previously # 8
	1079	Lead	0.05 U	0.05 U	0.016	0.002 U	0.0058	0.008	0.005 U	0.005 U	0.005 U	0.013	0.005 U	7	11	0.64	9	
	1080	Lead	0.06	0.005 U	0.002 U	0.002 U	0.002 U	0.004	0.005	0.01	0.026	0.005 U	0.035	5	11	0.45	8	Was previously # 9
	1081	Lead	0.05 U	0.002 U	0.002 U	0.002 U	0.0025	0.004	0.005 U	0.005 U	0.005	0.005 U	0.005 U	8	11	0.73	9	
	1082	Lead	0.05 U		0.002 U	0.002 U	0.002 U	0.002 UW	0.007	0.005 U	0.01	0.005 U	0.005 U	8	10	0.80	9	
	1083	Lead	0.0021 U	0.002 U	0.002 U	0.002 U	0.002 U	0.003	0.005 U	0.005 U	0.007	0.026	0.017	7	11	0.64	9	
													totals	72	110			
	2043	Lead	0.05 U	0.005 U	0.002	0.006	0.0026	0.002 U	0.007	0.008	0.029	0.019	0.01	3	11	0.27		2 x maximum background
	2066	Lead	0.05 U	0.005 U	0.015	0.009	0.002 U	0.005	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	8	11	0.73		value = 0.04
													totals	11	22			Z = 1.1616 O.K.
	2010	Lead	0.005 U	0.005 U	0.012	0.002 U	0.0047	0.004	0.005 U	0.012	0.005	0.005 U	0.015	5	11	0.45	8	Was previously # 9
	2013	Lead	0.05 U	0.005 U	0.002 U		0.0161	0.002 U	0.005 U	0.005 U	0.005 U	0.006	0.005 U	8	10	0.80	9	
	2019	Lead	0.0024 B	0.05 U	0.002 U	0.002 U	0.0033	0.0026 BN	0.005 U	0.005 U	0.005 U	0.005 U	0.01	9	11	0.82	9	
	2021	Lead	0.021 U	0.05 U	0.002 U	0.002 U	0.0024	0.002	0.005 U	0.005 U	0.005 U	0.022	0.026	7	11	0.64	9	
	2027	Lead	0.0021 U	0.005 U	0.002 U	0.002 U	0.002 U	0.002 UW	0.005 U	0.011	0.015	0.006	0.014	7	11	0.64	9	
	2037	Lead	0.0021 U	0.005 U	0.003		0.0066	0.005 N	0.005 U	0.005 U	0.029	0.018	0.042	5	10	0.50	9	
	2051	Lead	0.05 U	0.005 U	0.004	0.002 U	0.002 U	0.002 U	0.005 U	0.008	0.015	0.005 U	0.008	7	11	0.64	9	
	2055	Lead					0.002	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	6	7	0.86	9	
	2084	Lead	0.05 U	0.02	0.002 U	0.002 U	0.0033	0.004 BN	0.011	0.005 U	0.016	0.013	0.03	5	11	0.45	8	
													totals	59	93			
	3043	Lead	0.05 U	0.005 U	0.005	0.029	0.0044	0.003	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	7	11	0.64		2 x maximum background
	3066	Lead	0.05 U	0.005 U	0.002	0.002 U	0.002 U	0.002 U	0.006	0.005 U	0.016	0.005 U	0.009	7	11	0.64		value = 0.04
													totals	14	22			Z = 0.9877 O.K.
	3001	Lead	0.0021 UW	0.043	0.002 U	0.002 U	0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.008	9	11	0.82	9	
	3008	Lead	0.05 U	0.002 U	0.002 U	0.002 U	0.0039	0.002 U	0.007	0.01	0.042	0.014	0.007	5	11	0.45	8	Was previously # 9
	3010	Lead	0.05 U	0.005 U	0.002 U		0.0042	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.017	8	10	0.80	9	
	3013	Lead	0.05 U	0.005 U	0.004		0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	9	10	0.90	9	
	3019	Lead	0.05 U	0.05 U	0.002 U	0.002 U	0.0087	0.002 BN	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	10	11	0.91	9	
	3024	Lead	0.05 U	0.2 U	0.004	0.002 U	0.002 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	10	11	0.91	9	
	3037	Lead	0.05 U	0.005 U	0.002		0.0022	0.003	0.005 U	0.005 U	0.01	0.006	0.005 U	5	10	0.50	9	
	3051	Lead	0.05 U	0.005 U	0.002 U	0.002 U	0.002 U	0.005 BN	0.005 U	0.005 U				7	8	0.88	9	
	3055	Lead	0.002	0.005 U	0.002 U	0.002 U	0.0032	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	9	11	0.82	9	
	3084	Lead	0.05 U	0.038	0.002 U	0.002 U	0.0187	0.005	0.005 U	0.005 U	0.005 U	0.005 U	0.018	8	11	0.73	9	
	4001	Lead	0.05 U	0.005 U	0.002 U	0.002 U	0.002 U	0.007	0.005 U	0.005 U	0.005 U	0.006	0.018	8	11	0.73	9	

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RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
	4008	Lead	0.05 U	0.002	0.002 U		0.0037	0.002 U	0.005 U	0.005 U	0.005 U	0.013	0.011	6	10	0.60	9	
	4010	Lead				0.002 U	0.002 U	0.004	0.005 U	0.005 U	0.005 U	0.005 U	0.008	6	8	0.75	9	
	4013	Lead				0.002 U	0.0025	0.006	0.005 U	0.005 U	0.005 U	0.008	0.056	4	8	0.50	9	

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RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
	1024	Magnesium	40.5	31	44.4	44	44.2	46	43.8	43.4	58	53.6	41	0	11	0.00		
	1052	Magnesium	36.4	42	39.2	42	46.2	44	43.8	46.4	39	40.8	38	0	11	0.00		T.L. = 55.999
•	1025	Magnesium	150		208	218	210	212	207	182	279	277	237	0	10	0.00	3	
	1027	Magnesium	38.5	45	24.4	48.3	47.4	48.1	42.5	31.1	50	32.4	31	0	11	0.00	1	
	1028	Magnesium					190					215		0	2	0.00	7k	Was previously # 7e
	1030	Magnesium					111		115					0	2	0.00	7k	
	1031	Magnesium			7.62	25.4	5.68	8.54	4.9	3.7	9.3	5.2	8	0	9	0.00	1	
•	1038	Magnesium	60.9	60.6	56	66.3	65.4	66.2	69.2	105	195	108	192	0	11	0.00	3	Was previously # 4
•	1074	Magnesium	62.1	63.9	62.5	63	70.6	65.2	68	65.8	78	71.6	32.4	0	11	0.00	3	Was previously # 4
•	1079	Magnesium	54.6	52.56	57.5	59.6	62	64.6	64	61	78	100	30	0	11	0.00	2b	Was previously # 4
•	1080	Magnesium	65.9	66	68.5	70	87.6	56.1	82	83.8	237	89.2	89	0	11	0.00	3	Was previously # 4
•	1081	Magnesium	91.6	96.8	86.3	90.1	96	65.9	100	95	102	111	66	0	11	0.00	3	Was previously # 4
•	1082	Magnesium	69		65	72.8	79.5	79.1	86	69	101	81.6	53	0	10	0.00	3	Was previously # 4
•	1083	Magnesium	47	48.1	43.5	51.2	51.5	65.6	48.6	44.4	88	118	99	0	11	0.00	2b	
	2043	Magnesium	36.4	38	25.9	38.8	38.5	41	37.2	33.5	76	68.8	50	0	11	0.00		
	2066	Magnesium	27.2	24	26	28	30.45	31.3	34	27.3	28.2	26.8	30	0	11	0.00		T.L. = 67.533
	2010	Magnesium	32.4	39	37.1	32	31	60.4	52.8	42.7	33.9	41,8	28.2	0	11	0.00	1	Was previously # 2a
	2013	Magnesium	27.4	22	27.9		27.6	28.1	26.7	26.2	27.4	35.2	28	0	10	0.00	1	
	2019	Magnesium	27.58	29.3	28.6	28	30.5	31	30.4	29.5	28.8	20.6	16	0	11	0.00	1	
	2021	Magnesium	31.3	28.6	78.7	24	51.1	24.2	22.3	21.7	21.6	21.2	15.8	0	11	0.00	2a	
•	2027	Magnesium	49.8	44	27.3	44	68.2	72.2	54.2	61.6	70	61	69	0	11	0.00	2b	
	2037	Magnesium	28	29	28.5		34.3	42.2	30.9	20	52	39.6	29.2	0	10	0.00	1	
	2051	Magnesium	34.5	44	34.8	34.8	59.9	49.9	52.4	63.8	59	46.8	22.4	0	11	0.00	1	Was previously # 2b
	2055	Magnesium					26.6	28.5	27.8	26.6	48	29.6	25	0	7	0.00	1	
•	2084	Magnesium	77.7	77.6	27	78	89.4	100	99	69.4	87	94	101	0	11	0.00	3	
	3043	Magnesium	24.6	26	23.5	26.8	27.8	29	25.5	25.1	26.4	24	25	0	11	0.00		
	3066	Magnesium	49.8	44	49.5	50	26.2	54.6	55.6	55	51	52.4	35	0	11	0.00		T.L. = 66.916
	3001	Magnesium	26.3	25.5	37.9	25	27.8	26.4	25.6	27.2	27.6	24.4	18.8	0	11	0.00	1	
	3008	Magnesium	22	22.9	22	23	24.02	24	23.1	22.3	23.6	23.6	18.3	0	11	0.00	1	
	3010	Magnesium	46.6	36	46.2		33.2	32.2	30.4	28.2	31.5	25.6	32	0	10	0.00	1	
	3013	Magnesium	43.6	51	45.2		46.5	47.6	42.9	43.8	51	52.4	37.1	0	10	0.00	1	
	3019	Magnesium	25.5	28.8	31.7	33	28.2	29.6	30.4	31.5	31.7	26.6	33	0	11	0.00	1	
	3024	Magnesium	21.2	46	28.1	28.1	27.8	26.6	25.2	24.9	24.5	26.8	15.7	0	11	0.00	1	
•	3037	Magnesium	61.3	61	67.2		62.9	65.7	61.2	61.4	73	54.8	50	0	10	0.00	2b	Was previously # 1
	3051	Magnesium	36.9	38	35.7	37.7	42	39.5	45	36				0	8	0.00	1	
	3055	Magnesium	29.6	28	34.4	34	39.1	36.4	33.8	33.7	39.9	34	28	0	11	0.00	1	
•	3084	Magnesium	74.6	82.1	80.2	71	85.8	83.7	80	71.2	88	82	57	0	11	0.00	3	
	4001	Magnesium	24.7	22	25.9	25	32.6	31.1	28.5	21.6	27.2	22	15	0	11	0.00	1	
	4008	Magnesium	19.3	21.5	20.8		23.6	22.6	21.2	20.7	22.6	17.2	38	0	10	0.00	1	
	4010	Magnesium				30	31.1	32.4	31.3	31.5	38	31.8	33	0	8	0.00	1	

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RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
*	4013	Magnesium				60	90.3	91.7	87	74	99	62	53	0	8	0.00	2b	
	1024	Manganese	0.08	0.22	0.03	0.09			0.245	0.115	0.15	0.174	1.05	0	9	0.00		
	1052	Manganese	0.075	0.08	0.108	0.009		0.0185	0.149	0.119	0.026	0.027	0.542	0	10	0.00		
*	1025	Manganese	0.455		0.52	0.33		0.398	0.845	0.38	1.63	2.57	1.3	0	9	0.00	21	Was previously # 3
	1027	Manganese	0.081	0.07	0.077	0.126			0.169	0.055	0.063	0.109	0.064	0	9	0.00	15	Was previously # 1
	1028	Manganese										0.699		0	1	0.00	17	Was previously # 7c
	1030	Manganese							0.279					0	1	0.00	17	Was previously # 5
	1031	Manganese			0.011	0.0263		0.0141 B	0.625	0.058	0.21	0.062	0.079	1	8	0.13	15	Was previously # 2b
	1038	Manganese	0.286	0.204	0.21	0.217			0.434	0.901	2.01	1.29	3.51	0	9	0.00	20	Was previously # 1
	1074	Manganese	0.088	0.114	0.258	0.096		0.06	0.317	0.096	0.084	0.087	0.268	0	10	0.00	15	Was previously # 1
	1079	Manganese	0.126	0.161	0.173	0.111		0.0833	0.235	0.128	0.166	0.824	0.071	0	10	0.00	15	Was previously # 1
	1080	Manganese	0.038	0.07	0.047	0.05		0.0336	0.221	0.277	0.704	0.289	0.839	0	10	0.00	15	Was previously # 1
	1081	Manganese	0.041	0.003	0.012	0.015			0.053	0.165	0.109	0.062	0.054	0	9	0.00	15	Was previously # 1
	1082	Manganese	0.02		0.008	0.01		0.0133 B	0.304	0.031	0.537	0.033	0.106	1	9	0.11	15	Was previously # 1
	1083	Manganese	0.0627	0.079	0.054	0.04			0.073	0.07	0.491	1.68	0.566	0	9	0.00	20	Was previously # 1
?	2043	Manganese	0.168	0.15	0.1	0.145		0.192	0.252	0.144	0.715	0.632	0.271	0	10	0.00		
	2066	Manganese	0.068	0.06	0.036	0.04			0.037	0.037	0.033	0.036	0.038	0	9	0.00		T.L. = 0.637
*	2010	Manganese	0.329	0.35	0.351	0.28			3.17	1.36	0.457	1.22	0.664	0	9	0.00	2b	Was previously # 3
	2013	Manganese	0.2	0.19	0.198				0.242	0.186	0.208	0.309	0.169	0	8	0.00	1	
	2019	Manganese	0.0025 B	0.04	0.004	0.006		0.157	0.01 U	0.02 U	0.02 U	0.02 U	0.039	5	10	0.50	1	
	2021	Manganese	0.0057 B	0.003	0.42	0.0025 U			0.01 U	0.02 U	0.02 U	0.02 U	0.054	6	9	0.67	1	Was previously # 5
*	2027	Manganese	0.461	0.49	0.613	0.48		1.94	1.41	1.55	1.57	1.33	1.77	0	9	0.00	2b	Was previously # 3
*	2037	Manganese	0.287	0.22	0.218			0.378	0.547	0.432	0.814	0.685	0.707	0	9	0.00	2b	
*	2051	Manganese	0.278	0.33	0.32	0.22			0.426	0.588	0.639	0.424	0.389	0	9	0.00	2b	
	2055	Manganese							0.249	0.22	0.388	0.343	0.336	0	5	0.00	1	
*	2084	Manganese	0.53	0.5	0.02	0.65		1.03	0.824	0.903	1.24	1.64	3.34	0	10	0.00	4	Was previously # 3
	3043	Manganese	0.06	0.05	0.05	0.068		0.078	0.062	0.073	0.063	0.07	0.069	0	10	0.00		
?	3066	Manganese	0.11	0.12	0.122	0.12			0.138	0.249	0.608	0.204	0.233	0	9	0.00		T.L. = 0.4485
*	3001	Manganese	0.529	0.5	0.362	0.61			0.536	0.527	0.543	0.334	0.216	0	9	0.00	2b	Was previously # 3
*	3008	Manganese	0.22	0.25	0.243	0.48			0.274	0.322	0.663	0.345	0.308	0	9	0.00	2b	Was previously # 3
*	3010	Manganese	3.84	3.9	4.32				2.98	2.53	2.5	2.41	3.33	0	8	0.00	3	
*	3013	Manganese	0.37	0.37	0.382				0.41	0.387	0.375	0.197	0.484	0	8	0.00	2b	Was previously # 3
*	3019	Manganese	2.54	2.9	3.31	3.2		2.71	3.37	3.13	2.92	3.15	0.783	0	10	0.00	3	
	3024	Manganese	0.202	0.78 **	0.2	0.149			0.156	0.259	0.314	0.168	0.046	0	9	0.00	5	
*	3037	Manganese	0.65	0.68	0.722			0.651	0.673	0.709	0.711	0.445	0.527	0	9	0.00	3	
	3051	Manganese	0.161	0.13	0.13	0.134			0.178	0.157				0	6	0.00	1	
	3055	Manganese	0.078	0.23	0.325	0.33			0.302	0.33	0.319	0.266	0.266	0	9	0.00	1	Was previously # 2b
*	3084	Manganese	2.4	2.8	2.62	2.5		2.53	2.99	2.45	2.46	1.29	1.11	0	10	0.00	3	

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RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
*	4001	Manganese	0.388	0.37	0.425	0.41			0.451	0.355	0.381	0.302	0.247	0	9	0.00	2b	Was previously # 3
*	4008	Manganese	0.319	0.37	0.367				0.37	0.382	0.39	0.56	0.571	0	8	0.00	2b	Was previously # 3
	4010	Manganese				0.058			0.058	0.069	0.062	0.063	0.079	0	6	0.00	1	Was previously # 7h
	4013	Manganese				0.38			0.114	0.105	0.11	0.126	0.099	0	6	0.00	1	Was previously # 7m
	1024	Methylene chloride					0.01 B	0.008 B	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		
	1052	Methylene chloride					0.01 B	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		PQL = 0.005
	1025	Methylene chloride	0.016 B				0.01 B	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	1027	Methylene chloride					0.011 B	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1028	Methylene chloride					0.01 B					0.001 U		2	2	1.00	15	
	1030	Methylene chloride					0.008 B		0.0025 U					2	2	1.00	15	
	1031	Methylene chloride						0.006 B	0.0125 U	0.005	0.005	0.005 U	0.005 U	4	6	0.67	15	
	1038	Methylene chloride					0.007 B	0.003 BJ	0.0025 U	0.001 U	0.001 U	0.005 U	0.001 U	7	7	1.00	15	
	1074	Methylene chloride	0.002 BJ				0.009 B	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	1079	Methylene chloride					0.013 B	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1080	Methylene chloride					0.018 B	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1081	Methylene chloride					0.009 B	0.003 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1082	Methylene chloride					0.007 B	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1083	Methylene chloride	0.005 U				0.009 B	0.003 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2043	Methylene chloride					0.008 B	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		
	2066	Methylene chloride					0.007 B	0.008 B	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		PQL = 0.005
	2010	Methylene chloride	0.009 B				0.009 B	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2013	Methylene chloride					0.01 B	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	2019	Methylene chloride	0.022 **				0.009 B	0.004 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	8	0.88	15	
	2021	Methylene chloride	0.005 U				0.007 B	0.022 B	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2027	Methylene chloride	0.005 U				0.01 B	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2037	Methylene chloride	0.005 U				0.006 B	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2051	Methylene chloride					0.009 B	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	2055	Methylene chloride					0.009 B	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	2084	Methylene chloride					0.006 B	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3043	Methylene chloride					0.008 B	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		
	3066	Methylene chloride					0.007 B	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		PQL = 0.005
	3001	Methylene chloride	0.005 B				0.011 B	0.003 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	3008	Methylene chloride					0.005 B	0.009 B	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3010	Methylene chloride					0.007 B	0.003 BJ	0.0025 U	0.001 U	0.001 U	0.02 U	0.001 U	7	7	1.00	15	
	3013	Methylene chloride					0.007 B	0.014 B	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3019	Methylene chloride					0.006 B	0.007 B	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3024	Methylene chloride					0.007 B	0.003 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3037	Methylene chloride					0.007 B	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	

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RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
						SAMPLING ROUNDS												
	3051	Methylene chloride					0.009 B	0.001 BJ	0.0005 U					3	3	1.00	15	
	3055	Methylene chloride					0.01 B	0.004 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3084	Methylene chloride					0.009 B	0.003 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	4001	Methylene chloride					0.009 B	0.001 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	4008	Methylene chloride					0.008 B	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	4010	Methylene chloride					0.006 B	0.003 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	4013	Methylene chloride					0.012 B	0.008 B	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	

RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	8	9	10	11		TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
	1024	Nickel	0.021	0.18	0.02 U	0.026	0.0224	0.02 U	0.005 U	0.005 U	0.005 U	0.005 U	0.083		6	11	0.55		2 x maximum background
	1052	Nickel	0.02 U	0.04 U	0.02 U	0.03 U	0.0134	0.03	0.039	0.045	0.005 U	0.005 U	0.062		6	11	0.55		value = 0.36
														totals	12	22			Z = -1.2601 O.K.
*	1025	Nickel	0.0138 B		0.024	0.143	0.097	0.056	0.065	0.489	0.193	0.179	0.077		1	10	0.10	8	
	1027	Nickel	0.022 U	0.04 U	0.02 U	0.02	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		10	11	0.91	9	
*	1028	Nickel					0.981					0.829			0	2	0.00	8	
	1030	Nickel					0.136		0.193						0	2	0.00	8	
*	1031	Nickel			0.03	0.0489	0.0392	0.028 B	1.61	0.16	0.257	0.132	0.253		1	9	0.11	8	
	1038	Nickel	0.02 U	0.02 U	0.02 U	0.029	0.0226	0.02 U	0.005 U	0.02	0.088	0.048	0.005 U		6	11	0.55	9	
*	1074	Nickel	0.0123 U	0.107	0.223	0.49	0.52	0.282	0.368	0.719	0.448	0.68	0.615		1	11	0.09	8	
	1079	Nickel	0.021	0.02 U	0.02 U	0.031	0.023	0.053	0.018	0.005 U	0.005 U	0.046	0.011		4	11	0.36	8	
	1080	Nickel	0.02 U	0.04 U	0.02 U	0.03 U	0.253	0.033 B	0.01	0.019	0.006	0.005 U	0.05		6	11	0.55	9	
	1081	Nickel	0.02 U	0.02 U	0.02 U	0.037	0.0271	0.499	0.005 U	0.014	0.007	0.005 U	0.005 U		6	11	0.55	9	
	1082	Nickel	0.02 U		0.02 U	0.034	0.0267	0.027 B	0.032	0.005	0.058	0.005 U	0.006		4	10	0.40	8	
	1083	Nickel	0.0123 U	0.058	0.02 U	0.028	0.02 U	0.456 **	0.005 U	0.005 U	0.028	0.066	0.051		5	11	0.45	8	Was previously # 9
														totals	44	110			
	2043	Nickel	0.02 U	0.04 U	0.02 U	0.023	0.0212	0.026	0.005 U	0.005 U	0.1	0.055	0.009		5	11	0.45		2 x maximum background
	2066	Nickel	0.02 U	0.04 U	0.02 U	0.03 U	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.005 U	0.006		10	11	0.91		value = 0.2
														totals	15	22			Z = -0.4534 O.K.
	2010	Nickel	0.03 U	0.04 U	0.02 U	0.03 U	0.02 U	0.032	0.013	0.023	0.005 U	0.02	0.01		6	11	0.55	9	
	2013	Nickel	0.02 U	0.04 U	0.02 U		0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		10	10	1.00	9	
	2019	Nickel	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.005 U	0.006		10	11	0.91	9	
	2021	Nickel	0.0123 U	0.02 U	0.02 U	0.03 U	0.0233	0.02 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		10	11	0.91	9	
	2027	Nickel	0.0123 U	0.04 U	0.02 U	0.03 U	0.0257	0.037 B	0.005 U	0.015	0.022	0.014	0.02		6	11	0.55	9	
	2037	Nickel	0.0123 U	0.04 U	0.02 U		0.02 U	0.0211 B	0.005 U	0.005 U	0.044	0.057	0.03		7	10	0.70	9	
	2051	Nickel	0.02 U	0.03 U	0.02 U	0.02 U	0.0248	0.022	0.005 U	0.013	0.021	0.005 U	0.006		6	11	0.55	9	
	2055	Nickel					0.02 U	0.024	0.005 U	0.005 U	0.008	0.005	0.005 U		4	7	0.57	9	
	2084	Nickel	0.02 U	0.02 U	0.02 U	0.03 U	0.0407	0.03	2 **	0.009	0.011	0.016	0.031		4	11	0.36	8	Was previously # 9
														totals	63	93			
	3043	Nickel	0.02 U	0.04 U	0.02 U	0.02	0.02 U	0.022 B	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		10	11	0.91		2 x maximum background
	3066	Nickel	0.02 U	0.04 U	0.02 U	0.03 U	0.02 U	0.027	0.005 U	0.005 U	0.012	0.005 U	0.008		8	11	0.73		value = 0.054
														totals	18	22			Z = -0.2589 O.K.
	3001	Nickel	0.0123 U	0.02 U	0.02 U	0.03 U	0.02 U	0.021	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		10	11	0.91	9	
	3008	Nickel	0.02 U	0.02 U	0.02 U	0.03 U	0.0313	0.02 U	0.005 U	0.005 U	0.008	0.005 U	0.005 U		9	11	0.82	9	
	3010	Nickel	0.02 U	0.04 U	0.02 U		0.02 U	0.021	0.005 U	0.005 U	0.005 U	0.005 U	0.011		8	10	0.80	9	

* Constituent found in statistically significant amounts ** Signifies an outlier *** See Cross Reference listing number 7 Background well with relatively high values

RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	8	9	10	11		TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
	3013	Nickel	0.02 U	0.04 U	0.02 U		0.02 U	0.023	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		9	10	0.90	9	
	3019	Nickel	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U		11	11	1.00	9	
	3024	Nickel	0.02 U	0.78	0.02 U	0.02 U	0.0231	0.02 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		9	11	0.82	9	
	3037	Nickel	0.04	0.04 U	0.02 U		0.0282	0.028 B	0.005 U	0.024	0.005 U	0.005 U	0.005 U		7	10	0.70	9	
	3051	Nickel	0.022 U	0.03 U	0.02 U	0.02 U	0.02 U	0.022	0.005 U	0.005 U					7	8	0.88	9	
	3055	Nickel	0.02 U	0.04 U	0.02 U	0.03 U	0.0207	0.03	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U		9	11	0.82	9	
	3084	Nickel	0.02 U	0.02 U	0.02 U	0.03	0.0437	0.03	0.011	0.005 U	0.005 U	0.013	0.015		5	11	0.45	8	
	4001	Nickel	0.02 U	0.04 U	0.02 U	0.03 U	0.02	0.025	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		9	11	0.82	9	
	4008	Nickel	0.02 U	0.02 U	13.4		0.0269	0.02 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		8	10	0.80	9	
	4010	Nickel				0.03 U	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013		7	8	0.88	9	
	4013	Nickel				0.03 U	0.0276	0.035	0.005 U	0.005 U	0.005 U	0.053	0.056		4	8	0.50	9	
														totals	112	141			
	1024	Nitrate	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.44	0.02	0.07	0.05	0.02 U		7	11	0.64		
	1052	Nitrate	0.1 U	0.3	0.037	0.11	0.15	0.1 U	0.35	0.07	0.04	0.1	0.09		2	11	0.18		T.L. = 0.367
*	1025	Nitrate	19.5		45.4	176	164	132	152	114	146	130	142		0	10	0.00	3	Was previously # 12
	1027	Nitrate	0.3	0.13	0.1 U	0.1 U	0.44	0.1 U	0.32	0.13	0.04	0.02 U	0.03		4	11	0.36	20	Was previously # 12
	1028	Nitrate					156					247			0	2	0.00	7f	Was previously # 12
	1030	Nitrate							1.41						0	1	0.00	7d	Was previously # 12
*	1031	Nitrate			25.8	41.4	45.7	33.1	25.4	30.1	26.9	12.5	30.6		0	9	0.00	3	Was previously # 12
	1038	Nitrate	0.1 U	0.1 U	0.1 U	0.1	0.1 U	0.25	0.32	0.09	0.09	0.02 U	0.03		5	11	0.45	1	Was previously # 10
	1074	Nitrate	0.39	0.13	0.1 U	0.02 U	0.1 U	0.1 U	0.26	0.1	0.02 U	0.02 U	0.04		6	11	0.55	20	Was previously # 10
	1079	Nitrate	0.22	0.1 U	0.1 U	0.14	0.23	0.142	0.44	0.17	0.06	0.33	0.28		2	11	0.18	20	Was previously # 12
	1080	Nitrate	0.1 U	0.1	0.06	0.04	0.11	0.1 U	0.24	0.16	0.03	0.04	0.06		2	11	0.18	1	Was previously # 12
*	1081	Nitrate	56	27.5	11.7	21.5	19.6	14.9	16.5	8.84	9.31	14.9	11.4		0	11	0.00	3	Was previously # 12
	1082	Nitrate	0.2		0.05 U	0.05 U	0.24	0.132	0.38	0.05	0.02	0.01 U	0.01 U		4	10	0.40	20	Was previously # 12
*	1083	Nitrate	0.3	1.6	9.41	4.37	3.29	2.27	2.33	1.09	1.32	0.64	2.23		0	11	0.00	3	Was previously # 12
	2043	Nitrate	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.869		0.02 U	0.02 U	0.17	0.04		7	10	0.70		2 x maximum background
	2066	Nitrate	0.1 U	2.5 J	0.1 U	0.02 U	0.1	0.1 U	0.03	0.02	0.02	0.04	0.02 U		6	11	0.55		value = 1.738
														totals	13	21			Z = -1.5181 O.K.
	2010	Nitrate	0.02 U	2.5 U	0.1 U	0.02 U	0.1 U	0.1 U	0.09	0.05	0.02	0.02	0.02 U		7	11	0.64	9	
	2013	Nitrate	0.1 U	5 U	0.1 U	0.03	0.1 U	0.13	0.03	0.13	0.02	0.02 U	0.02 U		6	11	0.55	9	
*	2019	Nitrate	17	23.4	24.6	22	28.4	60.6	71	54.1	49.6	25.7	0.02 U		1	11	0.09	8	
*	2021	Nitrate	9.2	0.28	0.1 U	53	38.6	23.5	33.6	24.4	20.3	10.2	8.9		1	11	0.09	8	
	2027	Nitrate	0.1 U	0.11	0.1 U	0.02 U	0.1 U	0.1 U	0.14	0.08	0.14	0.13	0.18		5	11	0.45	8	Was previously # 9
	2037	Nitrate	0.15	2.5 U	0.1 U	0.02 U	0.1 U	0.1 U	0.05	0.02 U	0.02 U	0.02	0.02 U		8	11	0.73	9	
	2051	Nitrate	0.1 U	0.12	0.1 U	0.1 U	0.1 U		0.03	0.05	0.05	0.02 U	0.02 U		6	10	0.60	9	
	2055	Nitrate					0.1 U	0.1 U	0.31	0.02 U	0.02 U	0.02 U	0.02 U		6	7	0.86	9	
*	2084	Nitrate	0.1 U	16	32.4	2.8	9.01	7.66	5.76	12.9	8.53	0.67	2.26		1	11	0.09	8	

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RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	1	2	3	4	5	6	7	8	9	10	11		TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
						SAMPLING ROUNDS								totals	41	94			
	3043	Nitrate	0.12	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.02	0.02 U	0.02	0.45	0.02 U		7	11	0.64		2 x maximum background
	3066	Nitrate	0.1 U	2.5 J	0.1 U	0.23	0.1 U	0.1 U	0.05	0.03	0.08	1.45	0.02 U		6	11	0.55		value = 2.9
														totals	13	22			Z = -1.1596 O.K.
	3001	Nitrate	0.01 U	2.5 U	0.1 U	0.02 U	0.1 U	0.1 U	0.11	0.02 U	0.02 U	0.02 U	0.02 U		10	11	0.91	9	
	3008	Nitrate	0.1 U	0.1 U	31.7 **	0.02 U	0.1 U	0.1 U	0.23	0.03	0.04	0.14	0.05		5	11	0.45	8	Was previously # 9
	3010	Nitrate	22.8	5 U	2.77	0.19	0.1 U	0.1 U	0.02 U	0.02	0.02	0.02 U	0.02 U		6	11	0.55	9	
	3013	Nitrate	0.1 U	2.5 U	0.1 U	0.1	0.19	0.12	0.14	0.03	0.03	0.14	0.06		3	11	0.27	8	
*	3019	Nitrate	8.4	10.1	16.4	18	0.431	36.4	36.3	24.1	60.9	7.28	1.95		0	11	0.00	8	
	3024	Nitrate	0.24	0.1 U	0.15	0.05 U	0.604	0.65	0.13	0.06	0.02 U	0.02 U	0.4		4	11	0.36	8	
	3037	Nitrate	0.1 U	5 U	0.1 U	0.02	1.32	0.582	0.03	0.02	0.02 U	0.15	0.02 U		5	11	0.45	8	
	3051	Nitrate	0.17	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.24	0.02 U					5	8	0.63	9	
	3055	Nitrate	0.1	2.5 J	0.1 U	0.05	0.1 U	0.114	0.04	0.02 U	0.02 U	0.08	0.6		5	11	0.45	8	
*	3084	Nitrate	0.1 U	2.5 U	16.9	12	7.22	0.865	7.4	8.58	4.73	16.4	3.85		2	11	0.18	8	
	4001	Nitrate	0.1	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.35	0.02 U	0.02 U	0.15	0.03		7	11	0.64	9	
	4008	Nitrate	0.1 U	2.5 U	0.1 U		0.1 U	0.17	0.1	0.02 U	0.02 U	0.25	0.02 U		7	10	0.70	9	
	4010	Nitrate				0.02 U	0.1 U	0.1 U	0.04	0.09	0.02	0.11	0.03		3	8	0.38	8	
	4013	Nitrate				0.02 U	0.1 U	0.1 U	0.4	0.72	0.02 U	0.15	0.39		4	8	0.50	9	Was previously # 8
														totals	66	144			
	1024	Phenols	0.01 U	0.05 U	0.03	0.01 U			0.012	0.005 U	0.005 U	0.005 U	0.005 U		7	9	0.78		2 x maximum background
	1052	Phenols	0.01 U	0.04	0.015	0.005			0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		6	9	0.67		value = 0.024
														totals	13	18			Z = -0.6080 O.K.
	1025	Phenols	0.014		0.01 U	0.01 U			0.011	0.005 U	0.005 U	0.005 U	0.005 U		6	8	0.75	9	
	1027	Phenols	0.02	0.05 U	0.011	0.01 U			0.023	0.005 U	0.005 U	0.005 U	0.005 U		6	9	0.67	9	
	1028	Phenols										0.005 U			1	1	1.00	9	Was previously # 8
	1030	Phenols							0.012						0	1	0.00	8	
	1031	Phenols			0.042	0.02			0.012	0.012	0.005 U	0.014	0.005 U		2	7	0.29	8	Was previously # 9
	1038	Phenols	0.02	0.02	0.01 U	0.01 U			0.01	0.005 U	0.005 U	0.005 U	0.005 U		6	9	0.67	9	Was previously # 8
	1074	Phenols	0.06	0.02	0.01 U	0.007			0.005 U	0.012	0.005 U	0.005 U	0.008		4	9	0.44	8	Was previously # 9
	1079	Phenols	0.01 U	0.01 U	0.03	0.02			0.024	0.005 U	0.005 U	0.005 U	0.005 U		6	9	0.67	9	
	1080	Phenols	0.01 U	0.01	0.012	0.007			0.025	0.005 U	0.005 U	0.005 U	0.005 U		5	9	0.56	9	
	1081	Phenols	0.01 U	0.02	0.01 U	0.01 U			0.006	0.005 U	0.005 U	0.005	0.005 U		6	9	0.67	9	
	1082	Phenols	0.01 U		0.01 U	0.014			0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		7	8	0.88	9	
	1083	Phenols	0.01 U	0.02	0.01 U	0.01 U			0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		8	9	0.89	9	
														totals	57	71			

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RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	1	2	3	4	5	6	7	8	9	10	11		TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
			SAMPLING ROUNDS																
	2043	Phenols	0.02	0.03	0.01 U	0.09			0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		6	9	0.67		
	2066	Phenols	0.01	0.01 U	0.01 U	0.008			0.018	0.011	0.005 U	0.005 U	0.005 U		5	9	0.56		
														totals	11	18			Z = 0.7411 O.K.
	2010	Phenols	0.011	0.01 U	0.01 U	0.03			0.005	0.005 U	0.005 U	0.01	0.005 U		5	9	0.56	9	
	2013	Phenols	0.02	0.01 U	0.03	0.005 U			0.005 U	0.005 U	0.005 U	0.036	0.005 U		6	9	0.67	9	
	2019	Phenols	0.01 U	0.02	0.01 U	0.005 U			0.013	0.005 U	0.005 U	0.005 U	0.005 U		7	9	0.78	9	
	2021	Phenols	0.01 U	0.01 U	0.01 U	0.005 U			0.017	0.005 U	0.005 U	0.005 U	0.005 U		8	9	0.89	9	
	2027	Phenols	0.01 U	0.05 U	0.01 U	0.034			0.005 U	0.005 U	0.005 U	0.006	0.008		6	9	0.67	9	
	2037	Phenols	0.017	0.01 U	0.01 U	0.012			0.016	0.016	0.005 U	0.005 U	0.005 U		5	9	0.56	9	
	2051	Phenols	0.01 U	0.002 U	0.03	0.03			0.013	0.005 U	0.005 U	0.005 U	0.005 U		6	9	0.67	9	Was previously # 8
	2055	Phenols							0.016	0.005 U	0.005 U	0.005 U	0.005 U		4	5	0.80	9	Was previously # 8
	2084	Phenols	0.01	0.01 U	0.01 U	0.005 U			0.016	0.005 U	0.005 U	0.005 U	0.005 U		7	9	0.78	9	Was previously # 8
														totals	54	77			
	3043	Phenols	0.05	0.02	0.01 U	0.01			0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		6	9	0.67		
	3066	Phenols	0.01 U	0.01 U	0.01 U	0.005 U			0.068	0.006	0.005 U	0.005 U	0.005 U		7	9	0.78		
														totals	13	18			Z = -0.2789 O.K.
	3001	Phenols	1.2	0.01 U	0.01 U	0.009			0.005 U	0.011	0.005 U	0.005 U	0.01		6	9	0.67	9	
	3008	Phenols	0.01 U	0.01 U	0.01 U	0.005 U			0.009	0.005 U	0.005 U	0.009	0.005 U		7	9	0.78	9	Was previously # 8
	3010	Phenols	0.01 U	0.01 U	0.01 U	0.033			0.013	0.005 U	0.005 U	0.013	0.005 U		6	9	0.67	9	Was previously # 8
	3013	Phenols	0.02	0.01 U	0.01 U	0.012			0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		7	9	0.78	9	
	3019	Phenols	0.01 U	0.02	0.012	0.006			0.007	0.005 U	0.005 U	0.005 U	0.005 U		5	9	0.56	9	Was previously # 8
	3024	Phenols	0.02	0.05 U	0.01 U	0.01 U			0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		8	9	0.89	9	
	3037	Phenols	0.01	0.01 U	0.01 U	0.005 U			0.005	0.005 U	0.005 U	0.013	0.005 U		6	9	0.67	9	Was previously # 8
	3051	Phenols	0.01 U	0.002 U	0.03	0.01 U			0.006	0.008					3	6	0.50	9	Was previously # 8
	3055	Phenols	0.02	0.01 U	0.01 U	0.165			0.005 U	0.005 U	0.008	0.005 U	0.005 U		6	9	0.67	9	
	3084	Phenols	0.02	0.01 U	0.01 U	0.024			0.016	0.005 U	0.005 U	0.005 U	0.005 U		6	9	0.67	9	
	4001	Phenols	0.02	0.05 U	0.01 U	0.005 U			0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		8	9	0.89	9	
	4008	Phenols	0.01 U	0.01	0.017				0.044	0.005 U	0.005 U	0.005 U	0.005 U		5	8	0.63	9	Was previously # 8
	4010	Phenols				0.005 U			0.007	0.005 U	0.008	0.053	0.005 U		4	6	0.67	9	Was previously # 8
	4013	Phenols				0.007			0.005 U	0.005 U	0.037	0.005 U	0.02		4	6	0.67	9	

RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
			SAMPLING ROUNDS															
	1024	Silver	0.01 U	0.01 U	0.01 U	0.0005 U	0.0105	0.011	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82		
	1052	Silver	0.01 U	0.01 U	0.01 U	0.01 U	0.017	0.012	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82		
													totals	18	22			Z = 0.1026 O.K.
	1025	Silver	0.0043 U		0.0005 U	0.0005 U	0.01 U	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	10	10	1.00	9	
	1027	Silver	0.02 U	0.01 U	0.02 U	0.0005 U	0.0128	0.013	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82	9	
	1028	Silver					0.01 U					0.001 U		2	2	1.00	9	
	1030	Silver					0.0146		0.001 U					1	2	0.50	9	
	1031	Silver			0.02 U	0.0005 U	0.0131	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	8	9	0.89	9	
	1038	Silver	0.01 U	0.01 U	0.0005 U	0.0005 U	0.0139	0.014	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82	9	
	1074	Silver	0.0043 U	0.01 U	0.02 U	0.01	0.013	0.0123	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	8	11	0.73	9	
	1079	Silver	0.01 U	0.01 U	0.0005 U	0.0005 U	0.169	0.015	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82	9	
	1080	Silver	0.01 U	0.01 U	0.01 U	0.01 U	0.173	0.014	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82	9	
	1081	Silver	0.01 U	0.01 U	0.0005 U	0.0005 U	0.0132	0.06	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82	9	
	1082	Silver	0.01 U		0.0005 U	0.0005 U	0.0154	0.015	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	8	10	0.80	9	
	1083	Silver	0.0043 U	0.01 U	0.0005 U	0.0005 U	0.0139	0.062	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82	9	
													totals	91	110			
	2043	Silver	0.01 U	0.01 U	0.01 U	0.0005 U	0.0127	0.0133	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82		
	2066	Silver	0.01 U	0.01 U	0.01 U	0.01 U	0.014	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	10	11	0.91		
													totals	19	22			Z = -0.6243 O.K.
	2010	Silver	0.01 U	0.01 U	0.019	0.01 U	0.011	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82	9	
	2013	Silver	0.01 U	0.01 U	0.01 U		0.0115	0.011	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	8	10	0.80	9	
	2019	Silver	0.0005 U	0.01 U	0.0005 U	0.01 U	0.0205	0.013	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82	9	
	2021	Silver	0.0043 U	0.01 U	0.0005 U	0.01 U	0.0186	0.013	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82	9	
	2027	Silver	0.0043 U	0.01 U	0.0005 U	0.01 U	0.0187	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	10	11	0.91	9	
	2037	Silver	0.0043 U	0.01 U	0.0005 U		0.02	0.0145	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	8	10	0.80	9	
	2051	Silver	0.01 U	0.01 U	0.0005 U	0.0005 U	0.0205	0.013	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82	9	
	2055	Silver					0.0148	0.012	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	5	7	0.71	9	Was previously # 8
	2084	Silver	0.01 U	0.01 U	0.02 U	0.01	0.0184	0.012	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	8	11	0.73	9	
													totals	75	93			
	3043	Silver	0.01 U	0.01 U	0.01 U	0.0005 U	0.01 U	0.014	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	10	11	0.91		
	3066	Silver	0.01 U	0.01 U	0.0005 U	0.01 U	0.0182	0.011	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82		
													totals	19	22			Z = -0.6916 O.K.
	3001	Silver	0.0043 U	0.01 U	0.02 U	0.01 U	0.0146	0.012	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82	9	
	3008	Silver	0.01 U	0.01 U	0.0005 U	0.01 U	0.0108	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	10	11	0.91	9	
	3010	Silver	0.01 U	0.01 U	0.017		0.0124	0.013	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	7	10	0.70	9	

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RCRA WELL DATA TO DATE

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3013	Silver	0.01 U	0.01 U	0.01 U		0.0132	0.013	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	8	10	0.80	9	
3019	Silver	0.01 U	0.01 U	0.0005 U	0.01 U	0.0208	0.012	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82	9	
3024	Silver	0.01 U	0.01 U	0.01 U	0.0005 U	0.0138	0.012	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82	9	
3037	Silver	0.01 U	0.01 U	0.0005 U		0.0213	0.0114	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	8	10	0.80	9	
3051	Silver	0.01 U	0.01 U	0.0005 U	0.0005 U	0.0188	0.011	0.001 U	0.001 U				6	8	0.75	9	
3055	Silver	0.01 U	0.01 U	0.0005 U	0.01 U	0.0204	0.014	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82	9	
3084	Silver	0.01 U	0.01 U	0.0005 U	0.01	0.0197	0.0113	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	8	11	0.73	9	
4001	Silver	0.01 U	0.01 U	0.0005 U	0.01 U	0.0173	0.013	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	11	0.82	9	
4008	Silver	0.02 U	0.01 U	0.0005 U		0.0104	0.01 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	9	10	0.90	9	
4010	Silver				0.01 U	0.0103	0.011	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	6	8	0.75	9	
4013	Silver				0.01 U	0.0145	0.014	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	6	8	0.75	9	
												totals	113	141			
1024	Sodium	19.7	12	12.4	16.6			27.9	25.7	15.9	14.9	13	0	9	0.00		
1052	Sodium	6.86	9	7.83	84		12.8	25.9	201	14.2	14.8	29.8	0	10	0.00		T.L. = 138.2
• 1025	Sodium	110		183	171		210	215	258	187	248	169	0	9	0.00	3	
1027	Sodium	9.02	12	6.61	13.8			24.8	114	29.4	29.4	29.9	0	9	0.00	1	
1028	Sodium										354		0	1	0.00	7e	
1030	Sodium							57					0	1	0.00	7b	
• 1031	Sodium			224	202		223	533	442	191	249	121	0	8	0.00	3	
1038	Sodium	8.7	8.3	7.11	8.66			13.8	11.9	12	14	10.3	0	9	0.00	1	
1074	Sodium	17.8	18.8	18.4	20		18	15.2	30.9	21.2	20	12.8	0	10	0.00	1	
1079	Sodium	17.4	14.24	16.9	20.2		18.1	21.7	47.3	24.2	31.2	14.6	0	10	0.00	1	
1080	Sodium	51.3	36	23.9	24		20.6	23.5	37.3	35.6	18.5	13.1	0	10	0.00	1	Was previously # 2a
1081	Sodium	46.1	34.8	138	161			54.6	89.3	51.9	46.1	50.1	0	9	0.00	20	Was previously # 3
1082	Sodium	14.7		13.3	15.4		18.7	28.6	26.8	18.4	19	18.9	0	9	0.00	1	
1083	Sodium	17.1	22	18.7	20.2			16.3	33.2	24.1	29.6	26.3	0	9	0.00	1	
2043	Sodium	35.3	40	7.6	39.2		35.3	38.2	52.8	35.1	30.4	28.5	0	10	0.00		
2066	Sodium	46.6	48	42.7	47			40	76.7	51.9	60	51.7	0	9	0.00		T.L. = 76.66
2010	Sodium	14.6	15	14	19			11.7	38.6	15	20	8.3	0	9	0.00	1	
2013	Sodium	12.2	12	11.6				14.4	23.4	11.6	15.7	14.6	0	8	0.00	1	
2019	Sodium	24.64	23.3	23.1	25		41.5	38.4	49	65.1	68.8	54	0	10	0.00	1	
2021	Sodium	46.8	47.8	59.4	44			49.8	49.3	39.3	35.7	19.3	0	9	0.00	1	Was previously # 2b
2027	Sodium	30.6	34	10.9	29		33.4	36.5	51.8	25.7	37	37.3	0	10	0.00	1	
2037	Sodium	14.9	14	11.6			13.9	19.9	21.1	16	17.6	14.1	0	9	0.00	1	
2051	Sodium	10.4	14	9.6	13.2			16.3	24.9	12.7	13.5	7.22	0	9	0.00	1	
2055	Sodium							8.9	25.7	15.5	17.8	17.6	0	5	0.00	1	Was previously # 7g
• 2084	Sodium	66.5	58.7	42.6	63		65.2	62.5	76.9	67	75.1	51.5	0	10	0.00	2b	Was previously # 3
3043	Sodium	13.8	16	14.9	15		16.3	24.6.	32.5	19.2	24	22.7	0	10	0.00		

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?	3066	Sodium	276	320	274	270			312	439	266	342	137	0	9	0.00		T.L. = 512.4
	3001	Sodium	9.38	9.8	24.4	11			15	14.4	9.3	9.27	7.5	0	9	0.00	1	
	3008	Sodium	10.4	9.8	10.3	11			17	18.2	11.3	12.2	9.2	0	9	0.00	1	
	3010	Sodium	96.8	110	90.5				71.2	110	67.8	73.6	69	0	8	0.00	1	
	3013	Sodium	42.2	46	45.7				50.6	40.1	52.9	34.2	35.2	0	8	0.00	1	
	3019	Sodium	38.5	42.3	50.4	49		48.3	47.8	58.8	61.8	71.2	19.1	0	10	0.00	1	
	3024	Sodium	24.8	38	12.1	9.97			38.4	18.6	11.3	16.2	25.2	0	9	0.00	1	
	3037	Sodium	62.7	59	51.2			57.1	64.6	109	75.7	102	47.7	0	9	0.00	1	
	3051	Sodium	26.6	33	23.4	239			22	45.8				0	6	0.00	1	
	3055	Sodium	56.8	53	38.7	43			131	68.4	46	48	48.4	0	9	0.00	1	
	3084	Sodium	68	66.1	58	68		65.1	63.3	69	71	90.8	26.3	0	10	0.00	1	
	4001	Sodium	15.2	15	15.5	16			20	24.7	24.9	19.8	16.4	0	9	0.00	1	
	4008	Sodium	7.8	9.1	8.82				35.7	20.9	10.6	31.6	10.9	0	8	0.00	1	
	4010	Sodium				32			21.2	46.5	29.3	32	28.3	0	6	0.00	1	Was previously # 7g
	4013	Sodium				58			83.7	115	72	136	81	0	6	0.00	1	Was previously # 7g
	1024	Sulfate	50	130	109	48	49.1	55.7	48	43	46	50	44	0	11	0.00		
	1052	Sulfate	15	1 U	34.8	85	239	89.6	94	101	83	75	97	1	11	0.09		T.L. = 189.81
•	1025	Sulfate			390	211	277	677	338	318	197	368	368	0	9	0.00	3	
•	1027	Sulfate	60	140	96.7	432 **	164	162	139	127	162	79	41	0	11	0.00	2b	Was previously # 5
	1028	Sulfate					643					565		0	2	0.00	7i	Was previously # 7d
	1030	Sulfate							153					0	1	0.00	7a	
•	1031	Sulfate			113	141.8	267	144	173	146	213	224	221	0	9	0.00	2b	
•	1038	Sulfate	200	132	132	153	158	155	136	144	191	174	172	0	11	0.00	2b	Was previously # 1
	1074	Sulfate	60.9	411 **	43.8	64	83.9	83.1	71	29	75	83	78	0	11	0.00	5	
•	1079	Sulfate	158	855 **	105	190	203	228	200	185	244	211	231	0	11	0.00	6	
•	1080	Sulfate	200	190	98.7	160	193	243	190	188	164	187	216	0	11	0.00	2b	Was previously # 1
•	1081	Sulfate	590	355	604	136	563	384	392	412	403	637	396	0	11	0.00	3	
•	1082	Sulfate	298		510	19.6	271	195	213	166	19	240	191	0	10	0.00	2b	
	1083	Sulfate	185	139	127	153	146	153	143	139	132	134	134	0	11	0.00	1	
?	2043	Sulfate	40	13	166	5.4	16.1	38.8		26	35	88	66	0	10	0.00		
	2066	Sulfate	1 U	0.75 U	133	1 U	2.79	13.4	7	7	7	8	4	3	11	0.27		T.L. = 136.37
•	2010	Sulfate	160	310	271	140	79.6	739	546	157	148	601	105	0	11	0.00	3	
•	2013	Sulfate	85	100	97.2	110	114	0.025	88	87	102	111	108	0	11	0.00	21	Was previously # 3
	2019	Sulfate	14	58	88.5	79	85.6	54.8	79	73	97	93	83	0	11	0.00	20	Was previously # 2b
•	2021	Sulfate	111	52	293	82	89.1	90.8	71	67	84	86	80	0	11	0.00	21	Was previously # 6
•	2027	Sulfate	645	300	158	250	569	726	515	276	233	404	642	0	11	0.00	3	
•	2037	Sulfate	157	130	95.2	140	193	474	295	128	128	146	125	0	11	0.00	3	
•	2051	Sulfate	120	311	166	119	799		394	259	177	187	103	0	10	0.00	3	
•	2055	Sulfate					153	116	88	97	139	123	96	0	7	0.00	21	Was previously # 3
•	2084	Sulfate	428	339	200	480	562	498	583	536	505	1090	621	0	11	0.00	3	

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	3043	Sulfate	8	12	182	5.5	4.75	1 U	4	6	5	4	4	1	11	0.09		
	3066	Sulfate	29	7.5 U	105	63	9.68	14.4	9	11	38	10	50	1	11	0.09		T.L. = 125.75
	3001	Sulfate	81.9	62	176	67	120	91.5	62	70	78	11	5	0	11	0.00	20	Was previously # 2b
	3008	Sulfate	73	1 U	25.1	71	90.5	65.4	60	73	20	39	22	1	11	0.09	1	
•	3010	Sulfate	800	730	712	520	559	376	358	379	304	320	305	0	11	0.00	3	
•	3013	Sulfate	322	280	252	130	356	318	238	247	289	105	209	0	11	0.00	3	
•	3019	Sulfate	650	390	87.7	450	379	380	403	352	336	173	124	0	11	0.00	3	
•	3024	Sulfate	63	58	112	160	122	130	110	116	117	104	27	0	11	0.00	21	Was previously # 2b
•	3037	Sulfate	475	440	394	390	467	475	382	474	499	413	430	0	11	0.00	3	
•	3051	Sulfate	103	130	73	106	186	131	23	143				0	8	0.00	21	Was previously # 2b
•	3055	Sulfate	159	340	217	360	589	388	265	288	321	319	319	0	11	0.00	3	
•	3084	Sulfate	530	335	457	400	421	376	382	240	410	349	375	0	11	0.00	3	
	4001	Sulfate	10	7.3	247	5	76.5	36.5	36	8	9	2	3	0	11	0.00	1	Was previously # 5
	4008	Sulfate	1 U	1 U	42.2		10.5	13.1	9	11	11	4	3	2	10	0.20	15	Was previously # 1
	4010	Sulfate				36	50.4	46.2	60	76	80	77	72	0	8	0.00	1	
•	4013	Sulfate				310	302	394	267	299	365	223	221	0	8	0.00	3	

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	1024	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		
	1052	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		PQL = 0.005
	1025	Tetrachlorethene	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	1027	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1028	Tetrachlorethene					0.005 U					0.001 U		2	2	1.00	15	
	1030	Tetrachlorethene					0.005 U		0.0025 U					2	2	1.00	15	
*	1031	Tetrachlorethene						0.3 E	0.248	0.126	0.15	0.186	0.195	1	6	0.17	13	
	1038	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.005 U	0.001 U	7	7	1.00	15	
	1074	Tetrachlorethene	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	1079	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1080	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1081	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1082	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1083	Tetrachlorethene	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2043	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		
	2066	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		PQL = 0.005
	2010	Tetrachlorethene	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2013	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	2019	Tetrachlorethene	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2021	Tetrachlorethene	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2027	Tetrachlorethene	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2037	Tetrachlorethene	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2051	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	2055	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	2084	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3043	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		
	3066	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		PQL = 0.005
	3001	Tetrachlorethene	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	3008	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3010	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.02 U	0.001 U	7	7	1.00	15	
	3013	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3019	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3024	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3037	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3051	Tetrachlorethene					0.005 U	0.005 U	0.0005 U					3	3	1.00	15	
	3055	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3084	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	4001	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	4008	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	4010	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	

* Constituent found in statistically significant amount(s) ** Signifies an outlier *** See Cross Reference listing number 7 Background well with relatively high values

RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
	4013	Tetrachlorethene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1024	Toluene					0.005 U	0.003 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		
	1052	Toluene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		PQL = 0.005
	1025	Toluene	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	1027	Toluene					0.005 U	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1028	Toluene					0.005 U					0.001 U		2	2	1.00	15	
	1030	Toluene					0.005 U		0.0025 U					2	2	1.00	15	
	1031	Toluene						0.002 J	0.0125 U	0.0015	0.0011	0.005 U	0.005 U	4	6	0.67	15	
	1038	Toluene					0.005 U	0.002 BJ	0.0027	0.001 U	0.001 U	0.005 U	0.001 U	6	7	0.86	15	
	1074	Toluene	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	1079	Toluene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1080	Toluene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1081	Toluene					0.005 U	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1082	Toluene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1083	Toluene	0.005 U				0.005 U	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2043	Toluene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		
	2066	Toluene					0.005 U	0.005 B	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		PQL = 0.005
	2010	Toluene	0.005 U				0.005 U	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2013	Toluene					0.005 U	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	2019	Toluene	0.005 U				0.005 U	0.003 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2021	Toluene	0.005 U				0.005 U	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2027	Toluene	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2037	Toluene	0.005 U				0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	8	8	1.00	15	
	2051	Toluene					0.005 U	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	2055	Toluene					0.005 U	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	2084	Toluene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3043	Toluene					0.003 J	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		
	3066	Toluene					0.005 U	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00		PQL = 0.005
	3001	Toluene	0.01 **				0.005 U	0.003 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.0022	6	8	0.75	15	
	3008	Toluene					0.005 U	0.005 B	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3010	Toluene					0.002 J	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.02 U	0.001 U	7	7	1.00	15	
	3013	Toluene					0.005 U	0.003 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3019	Toluene					0.005 U	0.004 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3024	Toluene					0.005 U	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3037	Toluene					0.003 J	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3051	Toluene					0.008	0.002 BJ	0.0005 U					2	3	0.67	16	
	3055	Toluene					0.005 U	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	3084	Toluene					0.005 U	0.005 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	

* Constituent found in statistically significant amount(s) ** Signifies an outlier *** See Cross Reference listing number ? Background well with relatively high values

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RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
			SAMPLING ROUNDS															
	4001	Toluene					0.002 J	0.005 B	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	4008	Toluene					0.005 U	0.003 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	4010	Toluene					0.005 U	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	4013	Toluene					0.005 U	0.002 BJ	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	7	7	1.00	15	
	1024	Total Organic Halides			0.05 U	0.01 U	0.067	0.126	0.01 U	0.01 U	0.01 U	0.026	0.614 **	5	9	0.56		2 x maximum background
	1052	Total Organic Halides			0.05 U	0.05 U	0.0078	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	8	9	0.89		value = 0.252
													totals	13	18			Z = -0.996 O.K.
	1025	Total Organic Halides			0.05 U	0.05 U	0.0599	0.039	0.01 U	0.028	0.119	0.044	0.285 **	3	9	0.33	8	Was previously # 9
	1027	Total Organic Halides			0.05 U	0.05 U	0.0116	0.012	0.01 U	0.01 U	0.01 U	0.01 U	0.109	6	9	0.67	9	
	1028	Total Organic Halides					0.0324					0.156		0	2	0.00	8	
	1030	Total Organic Halides							0.01 U					1	1	1.00	9	
*	1031	Total Organic Halides			0.67	0.896	0.74	0.132	0.752	0.713	0.387	0.706	0.868	0	9	0.00	8	
	1038	Total Organic Halides		0.05 U	0.05 U	0.05 U	0.0105	0.011	0.01 U	0.016	0.01 U	0.01 U	0.078	6	10	0.60	9	
	1074	Total Organic Halides		0.05 U	0.05 U	0.05 U	0.01 U	0.014	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	9	10	0.90	9	
	1079	Total Organic Halides			0.05 U	0.013	0.01 U	0.01 U	0.01 U	0.019	0.01 U	0.01 U	0.01 U	7	9	0.78	9	
	1080	Total Organic Halides			0.05 U	0.05 U	0.01 U	0.015	0.01 U	0.014	0.01 U	0.027	0.023	5	9	0.56	9	
	1081	Total Organic Halides		0.05 U	0.05 U	0.05 U	0.01 U	0.021	0.01 U	0.01 U	0.025	0.01 U	0.029	7	10	0.70	9	
	1082	Total Organic Halides			0.05 U	0.05 U	0.01 U	0.021	0.01 U	0.01 U	0.031	0.01 U	0.023	6	9	0.67	9	
	1083	Total Organic Halides		0.05 U	0.05 U	0.05 U	0.0198	0.012	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	8	10	0.80	9	
													totals	58	97			
	2043	Total Organic Halides			0.05 U	0.023	0.324	0.01 U		0.01 U	0.01 U	0.01 U	0.016	5	8	0.63		
	2066	Total Organic Halides			0.05 U	0.05 U	0.01 U	0.01 U	0.0139	0.034	0.01 U	0.01 U	0.029	6	9	0.67		
													totals	11	17			Z = 1.2526 O.K.
	2010	Total Organic Halides		0.05 U	0.05 U	0.016	0.0149	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.069	7	10	0.70	9	
	2013	Total Organic Halides		0.05 U	0.05 U	0.012	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.044	0.01 U	8	10	0.80	9	
	2019	Total Organic Halides		0.05 U	0.05 U	0.05 U	0.013	0.01 U	0.01 U	0.01 U	0.031	0.01 U	0.01 U	8	10	0.80	9	
	2021	Total Organic Halides		0.05 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10	10	1.00	9	
	2027	Total Organic Halides			0.05 U	0.05 U	0.01 U	0.028	0.01 U	0.01 U	0.01 U	0.021	0.107	6	9	0.67	9	
	2037	Total Organic Halides		0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02	9	10	0.90	9	
	2051	Total Organic Halides			0.05 U	0.023	0.01 U	0.034	0.01 U	0.023	0.01 U	0.01 U	0.01 U	6	9	0.67	9	
	2055	Total Organic Halides					0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	7	7	1.00	9	
	2084	Total Organic Halides		0.05 U	0.05 U	0.05	0.01 U	0.013	0.01 U	0.01 U	0.02	0.051	0.01 U	6	10	0.60	9	
									totals				totals	67	85			
	3043	Total Organic Halides			0.05 U	0.01 U	0.0206	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	8	9	0.89		
	3066	Total Organic Halides			0.05 U	0.05 U	0.01 U	0.01 U	11.2	0.038	0.1	0.05	0.064	4	9	0.44		

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RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICTWELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL.	*** COMMENTS
												totals	12	18			Z = 0.5212 O.K.
3001	Total Organic Halides		0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	10	10	1.00	9	
3008	Total Organic Halides		0.05 U	0.05 U	0.05 U	0.01 U	0.01 U	0.013	0.01 U	0.01 U	0.01 U	0.01 U	9	10	0.90	9	
3010	Total Organic Halides		0.05 U	0.05 U	0.01	0.0409	0.031	0.01 U	0.022	0.01 U	0.01 U	0.061	5	10	0.50	9	
3013	Total Organic Halides		0.05 U	0.05 U	0.085	0.01 U		0.01 U	0.01 U	0.01 U	0.02	0.01 U	7	9	0.78	9	
3019	Total Organic Halides		0.05 U	0.05 U	0.05 U	0.01 U	0.088	0.01 U	0.01 U	0.016	0.022	0.185	6	10	0.60	9	
3024	Total Organic Halides				0.01 U	0.01 U	0.018 U	0.01 U	0.01 U	0.01 U	0.01 U	0.043	7	8	0.88	9	
3037	Total Organic Halides		0.05 U	0.2	0.027	0.01 U	0.013	0.01 U	0.011	0.01 U	0.045	0.01 U	5	10	0.50	9	
3051	Total Organic Halides			0.05 U	0.029	0.01 U	0.01 U	0.01 U	0.01 U				5	6	0.83	9	
3055	Total Organic Halides			0.05 U		0.01 U	0.015	0.023	0.01 U	0.01 U	0.01 U	0.01 U	6	8	0.75	9	
3084	Total Organic Halides		0.05 U	0.05 U	0.05 U	0.01 U	0.022	0.024	0.023	0.027	0.01 U	0.024	5	10	0.50	9	
4001	Total Organic Halides			0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.027	8	9	0.89	9	
4008	Total Organic Halides		0.05 U	0.05 U		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.036	8	9	0.89	9	
4010	Total Organic Halides				0.05 U	0.0511	0.01 U	0.01 U	0.01 U	0.01 U	0.011	0.079	5	8	0.63	9	
4013	Total Organic Halides					0.01 U	0.022	0.01 U	0.01 U	0.01 U	0.024	0.035	4	7	0.57	9	
								totals				totals	90	124			
1024	Total Organic Carbon					3.266	1 U	1	1 U	2	50	3	2	7	0.29		
1052	Total Organic Carbon					4.69	1 U	1	1	8	4	6	1	7	0.14		
1025	Total Organic Carbon					4.13	2.27	3	2	3	6	3	0	7	0.00	15	Was previously # 17
1027	Total Organic Carbon					3.45	1 U	1	2	4	4	6	1	7	0.14	15	Was previously # 17
1028	Total Organic Carbon					9.08					6		0	2	0.00	15	Was previously # 17
1030	Total Organic Carbon							9					0	1	0.00	17	
* 1031	Total Organic Carbon					15.8	11.1	9	11	11	9	8	0	7	0.00	21	Was previously # 17
1038	Total Organic Carbon					1.96	1 U	3	1 U	2	2	2	2	7	0.29	15	Was previously # 17
1074	Total Organic Carbon					3.28	1.81	1 U	1 U	2	3	5	2	7	0.29	15	Was previously # 17
1079	Total Organic Carbon					4.473	1 U	2	1 U	2	5	6	2	7	0.29	15	Was previously # 17
1080	Total Organic Carbon					4.979	1.25	2	1	3	3	6	0	7	0.00	15	Was previously # 17
1081	Total Organic Carbon					4.92	1.28	3	2	35	5	7	0	7	0.00	15	Was previously # 17
1082	Total Organic Carbon					3.759	2.49	3	2	33	5	11	0	7	0.00	15	Was previously # 17
1083	Total Organic Carbon					2.76	1 U	2	1	4	5	8	1	7	0.14	15	Was previously # 17
2043	Total Organic Carbon					4.928	2.13	3	1	10	4	3	0	7	0.00		
2066	Total Organic Carbon					6.362	1.65	4	4	9	4	9	0	7	0.00		
2010	Total Organic Carbon					1.907	1 U	3	1 U	2	1	5	2	7	0.29	15	Was previously # 17
2013	Total Organic Carbon					3.8	1.11	1	1 U	2	2	2	1	7	0.14	15	Was previously # 17
2019	Total Organic Carbon					19.3	1.62	2	1 U	5	2	3	1	7	0.14	20	Was previously # 17
2021	Total Organic Carbon					2.839	1 U	1	1 U	3	2	1	2	7	0.29	15	Was previously # 17
2027	Total Organic Carbon					2.684	3.33	2	1	3	1	8	0	7	0.00	15	Was previously # 17
2037	Total Organic Carbon					3.63	1.49	2	1	3	1	6	0	7	0.00	15	Was previously # 17

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RCRA Groundwater Date as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
							SAMPLING ROUNDS											
	2051	Total Organic Carbon					6.02	0.552	1 U	1	4	3	5	1	7	0.14	15	Was previously # 17
	2055	Total Organic Carbon					52.8	1 U	1	2	1	4	3	1	7	0.14	20	Was previously # 17
	2084	Total Organic Carbon					4.03	1.58	1	1 U	31	4	8	1	7	0.14	20	Was previously # 17
	3043	Total Organic Carbon					3.32	2.15	3	3	14	3	5	0	7	0.00		
	3066	Total Organic Carbon					14.513	2.91	4	16	1 U	10	9	1	7	0.14		
	3001	Total Organic Carbon					7.463	3.01	5		5	8	4	0	5	0.00	15	Was previously # 17
	3008	Total Organic Carbon					2.412	1 U	1 U	1 U	5	1 U	2	4	7	0.57	15	Was previously # 17
	3010	Total Organic Carbon					2.039	1 U	1	2	3	3	2	1	7	0.14	15	Was previously # 17
	3013	Total Organic Carbon					4.04	0.001 U	2	2	3	4	6	1	7	0.14	15	Was previously # 17
	3019	Total Organic Carbon					5.52	3.92	3	1	4	3	2	0	7	0.00	15	Was previously # 17
	3024	Total Organic Carbon					6.17	1.29	4	1 U	20	3	5	1	7	0.14	15	Was previously # 17
	3037	Total Organic Carbon					6.45	2.01	2	2	7	7	10	0	7	0.00	15	Was previously # 17
	3051	Total Organic Carbon					9.57	1.05	3	1 U				1	4	0.25	15	Was previously # 17
	3055	Total Organic Carbon					2.697	1.06	1	2	6	4	2	0	7	0.00	15	Was previously # 17
	3084	Total Organic Carbon					2.972	2.67	1	1 U	21	1 U	14	2	7	0.29	15	Was previously # 17
	4001	Total Organic Carbon					20.63	2.89	4	4	6	6	4	0	7	0.00	15	Was previously # 17
	4008	Total Organic Carbon					1.283	2.04	4	1 U	4	2	3	1	7	0.14	15	Was previously # 17
	4010	Total Organic Carbon					2.935	1.24	3	6	8	6	1 U	1	7	0.14	15	Was previously # 17
	4013	Total Organic Carbon					4.65	1.17	4	6	12	8	8	0	7	0.00	15	Was previously # 17

RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICTWELL #	CONSTITUENT	1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
		SAMPLING ROUNDS															
1024	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0027	0.0010 U	0.0010 U	0.0010 U	6	7	0.86		
1052	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00		PQL = 0.005
1025	Trichloroethene	0.001 BJ				0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	8	8	1.00	15	
1027	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	
1028	Trichloroethene					0.005 U					0.0010 U		2	2	1.00	15	
1030	Trichloroethene					0.005 U		0.0025 U					2	2	1.00	15	
* 1031	Trichloroethene						0.53 E	0.527	0.2140	0.1370	0.3340	0.2920	1	6	0.17	13	
1038	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	7	7	1.00	15	
1074	Trichloroethene	0.005 U				0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	8	8	1.00	15	
1079	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	
1080	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	
1081	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	
1082	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	
1083	Trichloroethene	0.005 U				0.029 **	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	8	0.88	15	
2043	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00		
2066	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00		PQL = 0.005
2010	Trichloroethene	0.005 U				0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	8	8	1.00	15	
2013	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	
2019	Trichloroethene	0.005 U				0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	8	8	1.00	15	
2021	Trichloroethene	0.005 U				0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	8	8	1.00	15	
2027	Trichloroethene	0.005 U				0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	8	8	1.00	15	
2037	Trichloroethene	0.005 U				0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	8	8	1.00	15	
2051	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	
2055	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	
2084	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	
3043	Trichloroethene					0.002 J	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00		
3066	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00		PQL = 0.005
3001	Trichloroethene	0.005 U				0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	8	8	1.00	15	
3008	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	
3010	Trichloroethene					0.002 J	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0200 U	0.0010 U	7	7	1.00	15	
3013	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	
3019	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	
3024	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	
3037	Trichloroethene					0.003 J	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	
3051	Trichloroethene					0.009	0.005 U	0.0005 U					2	3	0.67	16	
3055	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	
3084	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	
4001	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	
4008	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	
4010	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	7	7	1.00	15	

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RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	1	2	3	4	5	6	7	8	9	10	11		TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
	4013	Trichloroethene					0.005 U	0.005 U	0.0025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U		7	7	1.00	15	
	1024	Vanadium					0.0195	0.018	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.1780		4	7	0.57		2 x maximum background
	1052	Vanadium					0.0329	0.02	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0940		4	7	0.57		value = 0.356
														totals	8	14			Z = 0.0906 O.K.
	1025	Vanadium	0.0034 U				0.0673	0.061	0.05 U	0.0500 U	0.1640	0.1830	0.1240		4	8	0.50	9	Was previously # 17
	1027	Vanadium					0.0224	0.022	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71	9	Was previously # 17
	1028	Vanadium					0.0611					0.0600			0	2	0.00	8	Was previously # 17
	1030	Vanadium					0.0325		0.05 U						1	2	0.50	9	Was previously # 17
	1031	Vanadium					0.0332	0.031	0.05 U	0.0500 U	0.0710	0.0500 U	0.0500 U		4	7	0.57	9	Was previously # 17
	1038	Vanadium					0.0279	0.026	0.05 U	0.0500 U	0.1660	0.0840	0.3550		2	7	0.29	8	Was previously # 17
	1074	Vanadium	0.0034 U				0.0248	0.023 B	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		7	8	0.88	9	Was previously # 17
	1079	Vanadium					0.0249	0.027 B	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		6	7	0.86	9	Was previously # 17
	1080	Vanadium					0.0282	0.03	0.05 U	0.0500 U	0.0560	0.0500 U	0.2610		3	7	0.43	8	Was previously # 17
	1081	Vanadium					0.039	0.51	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71	9	Was previously # 17
	1082	Vanadium					0.0308	0.03 B	0.05 U	0.0500 U	0.1	0.0500 U	0.0500 U		5	7	0.71	9	Was previously # 17
	1083	Vanadium	0.0034 U				0.0266	0.464 **	0.05 U	0.0500 U	0.0650	0.0840	0.0740		3	8	0.38	8	Was previously # 17
														totals	45	77			
	2043	Vanadium					0.0234	0.023 B	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		6	7	0.86		
	2066	Vanadium					0.0167	0.016	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71		
														totals	11	14			Z = -0.1969 O.K.
	2010	Vanadium	0.01 U				0.0184	0.041	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		6	8	0.75	9	Was previously # 17
	2013	Vanadium					0.0191	0.018	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71	9	Was previously # 17
	2019	Vanadium	0.01 B				0.0283	0.024	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		6	8	0.75	9	Was previously # 17
	2021	Vanadium	0.0034 U				0.0234	0.023	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		6	8	0.75	9	Was previously # 17
	2027	Vanadium	0.0034 U				0.0437	0.044 B	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		7	8	0.88	9	Was previously # 17
	2037	Vanadium	0.0034 U				0.027	0.03 B	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		7	8	0.88	9	Was previously # 17
	2051	Vanadium					0.0365	0.029	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71	9	Was previously # 17
	2055	Vanadium					0.0187	0.021	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71	9	Was previously # 17
	2084	Vanadium					0.0548	0.0392 B	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0920		5	7	0.71	9	Was previously # 17
														totals	52	68			
	3043	Vanadium					0.0143	0.023	0.05 U	0.0500 U	0.0500 U	0.0700	0.0500 U		4	7	0.57		
	3066	Vanadium					0.0258	0.018	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71		
														totals	9	14			Z = 0.5841 O.K.

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RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICTWELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	8	9	10	11		TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL.	*** COMMENTS
3001	Vanadium	0.0034 U				0.01 U	0.019	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		7	8	0.88	9	Was previously # 17
3008	Vanadium					0.0177	0.014	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71	9	Was previously # 17
3010	Vanadium					0.0319	0.029	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71	9	Was previously # 17
3013	Vanadium					0.0285	0.028	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71	9	Was previously # 17
3019	Vanadium					0.0362	0.031	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71	9	Was previously # 17
3024	Vanadium					0.0244	0.021	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71	9	Was previously # 17
3037	Vanadium					0.0382	0.034	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71	9	Was previously # 17
3051	Vanadium					0.0258	0.022	0.05 U	0.0500 U					2	4	0.50	9	Was previously # 17
3055	Vanadium					0.029	0.028	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71	9	Was previously # 17
3084	Vanadium					0.0488	0.034	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71	9	Was previously # 17
4001	Vanadium					0.0205	0.019	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71	9	Was previously # 17
4008	Vanadium					0.0164	0.014	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71	9	Was previously # 17
4010	Vanadium					0.0155	0.017	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71	9	Was previously # 17
4013	Vanadium					0.0379	0.036	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U		5	7	0.71	9	Was previously # 17
													totals	69	96			
1024	Zinc					0.0317	0.042	0.028	0.0100 U	0.0100 U	0.0100 U	0.1470		3	7	0.43		
1052	Zinc					0.0421	0.039	0.054	0.0100 U	0.0100 U	0.0100 U	0.0990		3	7	0.43		T.L. = 0.139
1025	Zinc	0.0155 B				0.0305	0.292	0.098	0.0200 U	0.1240	0.1880	0.0850		2	8	0.25	20	Was previously # 17
1027	Zinc					0.0208	0.013	0.02 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U		5	7	0.71	1	Was previously # 17
1028	Zinc					0.0552					0.0200 U			1	2	0.50	1	Was previously # 17
1030	Zinc					0.0268		0.1						0	2	0.00	1	Was previously # 17
1031	Zinc					0.0048	0.03	0.02 U	0.0200 U	0.0200 U	0.0200 U	0.0250		4	7	0.57	1	Was previously # 17
1038	Zinc					0.0115	0.016	0.04	0.0290	0.1310	0.1640	0.2630		0	7	0.00	20	Was previously # 17
1074	Zinc	0.0143 B				0.0229	0.127	0.023	0.0200 U	0.0200 U	0.0200 U	0.0510		4	8	0.50	1	Was previously # 17
1079	Zinc					0.0323	0.024	0.036	0.0200 U	0.0300	0.1180	0.0430		1	7	0.14	1	Was previously # 17
1080	Zinc					0.0314	0.037	0.037	0.0430	0.0770	0.0220	0.1390		0	7	0.00	1	Was previously # 17
1081	Zinc					0.0179	0.501	0.024	0.0200 U	0.0 U	0.0200 U	0.0250		3	7	0.43	20	Was previously # 17
1082	Zinc					0.0794	0.021	0.073	0.0200 U	0.1	0.0200 U	0.0290		2	7	0.29	1	Was previously # 17
1083	Zinc	0.0269				0.0277	0.454	0.035	0.0200 U	0.0620	0.1480	0.0770		1	8	0.13	20	Was previously # 17
2043	Zinc					0.0568	0.056	0.081	0.0490	0.2020	0.1220	0.0540		0	7	0.00		
2066	Zinc					0.0202	0.052	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U		5	7	0.71		T.L. = 0.191
2010	Zinc	0.0248				0.0514	0.038	0.036	0.0390	0.0200 U	0.0200 U	0.0410		2	8	0.25	15	
2013	Zinc					0.0203	0.03	0.02 U	0.0200 U	0.0770	0.0200 U	0.0200 U		4	7	0.57	15	
2019	Zinc	0.01 U				0.0613	0.032	0.02 U	0.0200 U	0.0 U	0.0200 U	0.0200 U		6	8	0.75	15	
2021	Zinc	0.0581				0.0637	0.017	0.02 U	0.0200 U	0.0200 U	0.0320	0.0360		3	8	0.38	15	
2027	Zinc	0.228				0.0801	0.026	0.107	0.0300	0.0610	0.0280	0.0430		0	8	0.00	15	
2037	Zinc	0.0996				0.185	0.056	0.025	0.0230	0.0430	0.0540	0.0630		0	8	0.00	15	
2051	Zinc					0.039	0.09	0.051	0.0560	0.1060	0.0620	0.0490		0	7	0.00	15	
2055	Zinc					0.0325	0.039	0.041	0.0200 U	0.0330	0.0400	0.0200 U		2	7	0.29	15	
2084	Zinc					0.1351	0.066	0.099	0.0200 U	0.0200 U	0.0670	0.0610		2	7	0.29	15	

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RCRA Groundwater Data as of 08-Feb-91

RCRA WELL DATA TO DATE

VER-DICT	WELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
	3043	Zinc					0.0318	0.0271	0.037	0.0100 U	0.0100 U	0.0200	0.0250	2	7	0.29		
	3066	Zinc					0.0253	0.038	0.05	0.0500	0.1160	0.0380	0.0640	0	7	0.00		T.L. = 0.226
	3001	Zinc	0.0884				0.131	0.021	0.02 U	0.22	0.02 U	0.02 U	0.028	3	8	0.38	1	Was previously # 17
	3008	Zinc					0.0443	0.035	0.188	0.1100	0.4930	0.1170	0.1020	0	7	0.00	20	Was previously # 17
	3010	Zinc					0.017	0.033	0.046	0.0220	0.0200 U	0.0200 U	0.0330	2	7	0.29	1	Was previously # 17
	3013	Zinc					0.0267	0.048	0.02 U	0.0200 U	0.0260	0.0200 U	0.0490	3	7	0.43	1	Was previously # 17
	3019	Zinc					0.0295	0.035	0.02 U	0.0320	0.0200 U	0.0200 U	0.0200 U	4	7	0.57	1	Was previously # 17
	3024	Zinc					0.0371	0.133	0.02	0.0200 U	0.0200 U	0.0200 U	0.0300	3	7	0.43	1	Was previously # 17
	3037	Zinc					0.267	0.039	0.034	0.0310	0.0290	0.1070	0.0720	0	7	0.00	20	Was previously # 17
	3051	Zinc					0.0374	0.104	0.02 U	0.0290				1	4	0.25	1	Was previously # 17
	3055	Zinc					0.0988	0.048	0.02 U	0.0530	0.0230	0.0550	0.0590	1	7	0.14	1	Was previously # 17
	3084	Zinc					0.0406	0.029	0.024	0.0290	0.0200 U	0.0260	0.0600	1	7	0.14	1	Was previously # 17
	4001	Zinc					0.0156	0.022	0.02 U	0.0250	0.0200 U	0.1600	0.2050	2	7	0.29	1	Was previously # 17
	4008	Zinc					0.0228	0.017	0.02 U	0.0360	0.0200 U	0.2890	0.2190	2	7	0.29	20	Was previously # 17
	4010	Zinc					0.0284	0.027	0.02 U	0.0200 U	0.0200 U	0.0200 U	0.0370	4	7	0.57	1	Was previously # 17
	4013	Zinc					0.0407	0.108	0.02 U	0.0600	0.0200 U	0.0340	0.0450	2	7	0.29	1	Was previously # 17

RCRA Groundwater Data as of 08-Feb-91

VER- DICT	WELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
	1024	Specific Conductivity	480	700	575	800	975	625	600	529	598	597	303	0	11	0.00		T.L. = > 1091.6
	1052	Specific Conductivity	480	700	575	690	990	625	700	871	646	662	380	0	11	0.00		or < 190.3
•	1025	Specific Conductivity	2900	3520	3450	3400	3850	4020	3750	342	1000	3750	3690	0	11	0.00	3	
	1027	Specific Conductivity	725	750	620	6200	710	750	800	650	546	498	510	0	11	0.00	5	
•	1028	Specific Conductivity					3750	3800	3275			4330		0	4	0.00	3	
	1030	Specific Conductivity					1580		1255					0	2	0.00	7k	
•	1031	Specific Conductivity			3250	2800	3000	3150	2900	1000	2840	2960	2780	0	9	0.00	3	
	1038	Specific Conductivity	900	890	820	780	810	825	810	854	793	836	444	0	11	0.00	1	
•	1074	Specific Conductivity	1100	1050	825	810	900	900	900	855	957	1002	999	0	11	0.00	2b	
	1079	Specific Conductivity	800	800	750	150	1300	900	790	868	869	892	948	0	11	0.00	2a	
	1080	Specific Conductivity	500	990	730	430	960	900	850	948	918	959	495	0	11	0.00	1	
•	1081	Specific Conductivity	1290	1450	1450	1550	1675	1610	900	1502	1515	1562	1340	0	11	0.00	3	
•	1082	Specific Conductivity	800		830	800	800	1095	1050	971	1081	1064	1032	0	10	0.00	2b	
	1083	Specific Conductivity	850	970	460	820	1000	975	800	750	807	899	771	0	11	0.00	1	
	2043	Specific Conductivity	910	830	780	700	700	1890	705	574	667	739	664	0	11	0.00		UCL = 855.3
	2066	Specific Conductivity	600	680	590	1270	625	650	600	623	636	632	584	0	11	0.00		LCL = 610.5
•	2010	Specific Conductivity	690	1050	820		675	1690	1520	654	665	1165	603	0	10	0.00	19	Was previously # 2b
	2013	Specific Conductivity	780	650	1100	550	610	600	550	610	584	612	571	0	11	0.00	18	Was previously # 2a
•	2019	Specific Conductivity	850	800	800	710	910	1010	940	1013	983	797	732	0	11	0.00	19	Was previously # 2b
•	2021	Specific Conductivity	1100	1180	970	975	990	830	850	780	709	668	612	0	11	0.00	19	Was previously # 4
•	2027	Specific Conductivity	1450	1175	1000	1010	1550	1925	810	971	1086	1209	1187	0	11	0.00	19	Was previously # 3
	2037	Specific Conductivity	690	700	630	680	690	975	905	663	627	668	649	0	11	0.00	18	Was previously # 2a
	2051	Specific Conductivity	700	950	800	710	1025	990	995	760	795	751	320	0	11	0.00	18	Was previously # 2b
	2055	Specific Conductivity					590	620		575	647	613	582	0	6	0.00	18	Was previously # 7g
•	2084	Specific Conductivity	1600	1950	1250	1690	1760	1525	1880	1672	1835	1000	1492	0	11	0.00	19	Was previously # 3
	3043	Specific Conductivity	500	500	550	490	525	1500	490	491	535	563	551	0	11	0.00		LCL = 419.1
	3066	Specific Conductivity	2050	2320	2150	680	1910	1930	2200	1800	2280	1008	1000	0	11	0.00		T.L. = 3650
	3001	Specific Conductivity	481	480	480	500	510	505	462	487	500	233	208	0	11	0.00	1	
•	3008	Specific Conductivity	420	390	400	490	500	550	470	256		362	131	0	10	0.00	19	Was previously # 1
	3010	Specific Conductivity	2810	1450	1280	800	1120	1200	1100	1011	799	1086	1061	0	11	0.00	1	
	3013	Specific Conductivity	1120	1080	1000	500	1080	950	990	882	1011	1074	533	0	11	0.00	1	
	3019	Specific Conductivity	1200	1040	1200	1100	1180	1200	1210	999	988	1309	1368	0	11	0.00	1	
	3024	Specific Conductivity	440	700	625	750	495	625	595	588	632	615	314	0	11	0.00	1	
	3037	Specific Conductivity	1930	1470	1510	1490	1510	1495	1530	1376	1644	1756	1556	0	11	0.00	1	
	3051	Specific Conductivity	810	800	700	710	800	800	810	643				0	8	0.00	1	
	3055	Specific Conductivity	1170	1100	1000	950	960	1050	975	1041	878	842	1037	0	11	0.00	1	
	3084	Specific Conductivity	1650	1600	1390	1620	1580	1485	1490	1451	1629		1067	0	10	0.00	1	
	4001	Specific Conductivity	510	550	480	450	625	625	590	435	522	562	265	0	11	0.00	1	
	4008	Specific Conductivity	420	480	430	440	418	470	440	380	444	456	360	0	11	0.00	1	
	4010	Specific Conductivity				675	625	650	600	542	615	643	603	0	8	0.00	1	

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RCRA Groundwater Data as of 08-Feb-91

VER-DICTWELL #	CONSTITUENT	SAMPLING ROUNDS 1	2	3	4	5	6	7	8	9	10	11	TOTAL NON-DETECTS	TOTAL SAMPLES TAKEN	NON-DETECTS OVER TOTAL	STAT. METH. AND CONCL. ***	COMMENTS
4013	Specific Conductivity				1450	1580	1590	1560	1589	1586	1716	1546	0	8	0.00	1	
1024	pH	7.1	7.21	7.39	7.1	7.35	7.24	7.2	6.86	6.93	6.94	7.02	0	11	0.00		T.L. = > 7.786
1052	pH	7.35	7.26	7.26	7.53	7.49	7.1	6.95	7.75	7.11	7.20	7.11	0	11	0.00		or < 6.619
• 1025	pH	7	6.84	6.73	7	6.62	6.15	6.4	8.10	6.64	6.44	6.30	0	11	0.00	2b	
1027	pH	6.3	7.3	7.1	6.95	7.1	7.1	7.3	7.55	7.22	7.22	7.13	0	11	0.00	2a	
• 1028	pH					5.91	6.85	6.1			6.54		0	4	0.00	2b	
1030	pH					7		6.9					0	2	0.00	7g	
• 1031	pH			9.7	9.19	7.2	9.45	9.25	9.50	9.48	9.85	9.28	0	9	0.00	3	
• 1038	pH	7	7.2	6.3	6.85	6.7	7	6.7	7.23	6.94	6.80	6.93	0	11	0.00	2b	
1074	pH	7.3	7.4	7.91	7.1	7	7.14	6.8	7.30	7.35	6.96	7.16	0	11	0.00	2a	
1079	pH	7.4	7.45	7.28	7.15	7.1	7.1	7.2	6.98	7.18	6.86	7.00	0	11	0.00	1	
1080	pH	8.4	7.35	7.55	7.2	7.5	6.99	7.1	6.96	6.97	6.90	6.91	0	11	0.00	2a	
1081	pH	7.2	7.2	7.1	7.1	7.19	6.86	6.8	7.14	6.99	6.85	6.80	0	11	0.00	1	
1082	pH	7.3		7	7.4	7.02	6.65	6.05	7.48	7.20	7.05	6.89	0	10	0.00	2a	
1083	pH	7	7.2	7.2	7.1	6.8	7.1	7.2	7.75	6.90	6.91	6.95	0	11	0.00	1	
2043	pH	7.25	7.12	7.28	7	7.5	6.4	7.28	7.21	6.92	7.07	7.04	0	11	0.00		T.L. = > 7.932
2066	pH	7.6	6.5	6.72	7.25	7.2	7.5	7.3	7.30	7.12	7.27	7.16	0	11	0.00		or < 6.340
2010	pH	7.21	6.93	7.1		6.99	6.8	6.6	7.04	6.95	6.76	6.78	0	10	0.00	1	
2013	pH	7.3	7.27	6.88	7.42	7.25	7.25	7.37	7.21	7.05	6.86	7.06	0	11	0.00	1	
2019	pH	6.8	7.3	8.1	7	7.2	7	6.7	6.65	7.06	7.18	6.97	0	11	0.00	2a	Was previously # 1
2021	pH	7.15	7.3	7.4	7.1	7.6	7.1	7.4	7.46	7.17	7.15	7.16	0	11	0.00	1	
2027	pH	6.7	7.2	7.1	6.92	6.8	6.38	7	6.67	6.81	6.92	6.77	0	11	0.00	1	
2037	pH	7.19	7.33	6.69	7.15	7.1	7	6.95	6.70	6.93	7.05	7.00	0	11	0.00	1	
2051	pH	7.2	7.04	7.3	7.15	7.05	6.4	7.04	6.98	6.80	6.80	6.75	0	11	0.00	1	
2055	pH					7.22	7.19		7.25	6.94	6.96	7.12	0	6	0.00	1	
2084	pH	6.8	7	7.1	7	6.75	6.55	6.7	6.92	6.73	6.65	6.58	0	11	0.00	1	
3043	pH	7.4	7.62	7.37	7.3	7.37	7.1	7.35	7.16	7.14	7.21	7.26	0	11	0.00		T.L. = > 7.694
3066	pH	7.12	7	7.18	7.4	6.92	7.1	7.1	6.89	7.08	6.89	6.95	0	11	0.00		or < 6.662
3001	pH	7.34	7.4	8	7.1	7.48	7.34	7.45	6.95	7.11	7.40	7.10	0	11	0.00	2a	
3008	pH	6.87	7.7	7.48	7.31	7.86	7.25	7.55	7.84		7.86	8.02	0	10	0.00	2a	
3010	pH	6.74	6.89	7.3	7.1	6.76	6.9	7	7.27	6.71	6.73	6.76	0	11	0.00	1	
3013	pH	7.1	7.2	6.35	8.2	7.05	7.08	7.2	6.60	6.91	6.86	6.79	0	11	0.00	2a	
• 3019	pH	6.6	6.9	7	7	7	6.9	6.9	6.57	6.71	6.95	6.78	0	11	0.00	2b	
3024	pH	7.5	7.21	7.41	7	7.25	7.2	7.34	6.64	7.02	7.01	6.96	0	11	0.00	2a	Was previously # 1
• 3037	pH	6.9	6.78	7	6.85	6.85	6.85	6.95	6.65	6.40	6.76	6.64	0	11	0.00	2b	Was previously # 1
3051	pH	7.2	7.25	7.27	7.4	6.9	7.19	6.88	6.94				0	8	0.00	1	
• 3055	pH	6.8	7	7.3	7	7.1	7	7.15	6.80	6.64	6.77	6.90	0	11	0.00	2b	Was previously # 1
• 3084	pH	6.6	6.9	7.38	7.2	6.98	6.65	6.84	7.02	6.63	6.67	7.31	0	11	0.00	2b	

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4001	pH	7.4		7.51	7.1	7.6	7.4	7.49	7.34	7.12	7.26	7.64	0	10	0.00	1	
4008	pH	7.4	7.5	7	7	7.3	7.4	7.65	7.52	7.33	7.17	7.17	0	11	0.00	1	
4010	pH				7.1	7.36	7.6	7.39	7.27	7.27	7.09	7.23	0	8	0.00	1	
4013	pH				7	7.25	7.38	7.35	6.85	7.02	7.00	7.09	0	8	0.00	1	