REVIEW OF CORRECTIVE ACTION IN THE UPPER WIND RIVER SAND AT PETROTOMICS' TAILINGS AREA

PREPARED BY:

PETROTOMICS COMPANY

June, 1997

9706240169 970612
PDR ADOCK 04006659
B PDR

TABLE OF CONTENTS

NUMBER		PAGE
INTRODUCTION		1
1.0	BACKGROUND	2
2.0	SUMMARY AND CONCLUSIONS	3
3.0	COLLECTION RATES FROM TAILINGS AND UPPER WIND RIVER SAND	6
4.0	GROUND WATER FLOW IN THE UPPER WIND RIVER SAND	7
5.0	WATER QUALITY OF THE UPPER WIND RIVER SAND	12
5.1	pH	12
5.2	CHLORIDE	13
5.3	TDS	14
5.4	SULFATE	14
5.5	CADMIUM	14
5.6	CHROMIUM	15
5.7	LEAD and NICKEL	15
5.8	SELENIUM	16
5.9	URANIUM	16
5.10	RADIUM-226 PLUS RADIUM-228	17
5.11	THORIUM-230	18
6.0	EFFECT OF CORRECTIVE ACTION ON THE UPPER WIND RIVER SAND	31
6.1	COLLECTION VOLUMES	32
6.2	CONSTITUENT VOLUMES	32
7.0	BACKGROUND WATER QUALITY	36
8.0	REFERENCES	38
Appendix - WATER QUALITY DATA FOR DESIGNATED WELLS		39

TABLE OF CONTENTS - TABLES

Number		Page
4-1	BASIC WELL DATA FOR UPPER WIND RIVER WELLS	9
4-2	UPPER SAND WATER LEVELS - 5 WELLS: 1980-1997.....	11
6-1	VOLUME PUMPED FROM UPPER WELLS	34
6-2	VOLUME OF CONSTITUENTS REMOVED FROM UPPER SAND, 1987 THROUGH 1st QUARTER 1997	35
7-1	RANGE OF CONCENTRATIONS FOR BACKGROUND WELLS, 39SC - 41SC, 1st Q 1994 - 1st Q 1997.....	37

TABLE OF CONTENTS - EXHIBITS

Number		Page
4-1	WATER-LEVEL ELEVATION ..... JUNE 1997, FT-MSL.	10
5-1	FIELD pH ..... JUNE 1997, STANDARD UNITS.	20
5-2	CHLORIDE CONCENTRATIONS ..... JUNE 1997, mg/l.	21
5-3	TDS CONCENTRATIONS ..... JUNE 1997, mg/l.	22
5-4	SULFATE CONCENTRATIONS ..... JUNE 1997, mg/l.	23
5-5	CADMIUM CONCENTRATIONS ..... JUNE 1997, mg/l.	24
5-6	CHROMIUM CONCENTRATIONS ..... JUNE 1997, mg/l.	25
5-7	NICKEL CONCENTRATIONS ..... JUNE 1997, mg/l.	26
5-8	SELENIUM CONCENTRATIONS ..... JUNE 1997, mg/l.	27
5-9	URANIUM CONCENTRATIONS ..... JUNE 1997, mg/l.	28
5-10	RADIUM-226 PLUS RADIUM-228 ..... JUNE 1997, pCi/l.	29
5-11	THORIUM-230 CONCENTRATIONS ..... JUNE 1997, pCi/l.	30

INTRODUCTION

Due to the necessity of completing the radon barrier cover by October 1997 in accordance with US NRC License Condition No. 50.A. (3)a., all wells within the tailings were abandoned in the summer of 1996. License Amendment No.49 deleted the requirement for vacuum enhanced pumping of tailings wells, as well as all other pumping of tailings wells.

During the year 1996, Petrotomics continued to pump tailings water and Upper sand water to clay-lined evaporation ponds, removing 1.5 million gallons from the tailings and 2.0 million gallons from the Upper sand. Spray enhanced evaporation was not continued during the summer months due to the lack of solutions to run the system.

In September 1996, Petrotomics Company submitted to the US NRC an Alternate Concentration Limit application to amend USNRC Source Material License SUA-551. This application is currently under review.

Additional corrective action pumping has been performed during this period from Main sand well 12-DC.

1.0 BACKGROUND INFORMATION

Detailed background information on the Petrotomics site can be obtained in Sections 1.0 and 3.0 of *Review of Corrective Action in the Upper Wind River Sand at Petrotomics' Tailings Area*, submitted to the Nuclear Regulatory Commission in June 1994.

2.0 SUMMARY AND CONCLUSIONS

The purpose of this report is to evaluate the effects of Petrotomics' Corrective Action Plan on ground water contained in the Upper Wind River sand. Eight constituents have been identified as hazardous constituents for which corrective action is required.

An updated water-level elevation map was constructed to define the present flow conditions in the Upper Wind River sand There has been little change in water-level elevations over the past year. Since March, 1996, water levels in the Upper Wind River sand decreased by an average of 0.5' due to the corrective action at this site. A total of 46 Upper sand wells were monitored over the past year, with 2 wells showing an increased water level, 10 showing no change from the previous year, and 27 wells showing a decline. Seven wells are now dry or do not contain sufficient saturation to allow pumping. The zero saturation line limits the extent of migration of constituents and is shown on the concentration maps. The zero saturation boundary has effectively stopped seepage in the Upper Wind River sand to the south and west of the tailings.

Concentration contour maps for field pH, chloride, TDS, sulfate, cadmium, chromium, nickel, selenium, uranium, radium-226 plus radium-228, and thorium-230 were developed to show the areal extent of constituents at this site and the effects the corrective action has had on the water quality over the past year.

Chromium and nickel are the heavy metals with the largest concentrations in the Upper Wind River water. Significant levels

of cadmium also exist at the site. Concentrations of these hazardous constituents have been relatively stable the past year with decreases in a few wells and increases in others. Nickel concentration patterns are slightly different than the other heavy metals. A source of nickel other than tailings seepage is indicated, and therefore, this parameter may not be useful for defining the extent of tailings seepage.

Uranium and thorium-230 well define the extent of radionuclide seepage impact. The extent of movement of these two radionuclides is similar to that observed for the heavy metals, except nickel. Radium concentrations are naturally occurring from the ore-bearing Wind River sands, which makes radium a poor constituent for definition of areal extent of radionuclide seepage from the tailings. Radium concentrations have varied over a larger range than most parameters. Radium is therefore questionable as a hazardous constituent for this site, because radium occurs in high concentrations naturally.

Hazardous constituents have been found as far as approximately three-quarters of a mile north of the tailings, based on data from the northern wells. The background concentrations are defined at this site by the average values from Upper Wind River wells 39SC and 41SC, as designated in NRC License SUA-551, condition 47B. Upper Wind River wells 5SC and 42SC are the points of compliance for this site. The concentrations of four hazardous constituents observed at the two background wells over the past year exceeded the established site standards in at least one of the wells, which

indicates that the Upper sand background standards are of questionable validity.

In general, the hazardous constituents at this site remain fairly stable. Collection rates from the Upper Wind River sand wells are expected to continue to decline as infiltration of meteoric water is retarded by the clay cap covering the tailings.

3.0 COLLECTION RATES FROM TAILINGS AND UPPER WIND RIVER SAND

Approximately 88.5 million gallons have been pumped from Upper Wind River and tailings sources to the evaporation ponds during the period from December 1987 through the first quarter of 1997. Average total discharge rate from Upper and tailings sources to the evaporation ponds has decreased over the past few years, mainly due to the decline in the overall saturated thickness of the sand.

4.0 GROUND WATER FLOW IN THE UPPER WIND RIVER SAND

Table 4-1 presents basic well data for the Upper Wind River sand wells. An updated water-level elevation map, Exhibit 4-1, was constructed for the Upper Wind River sand to define the present (February 1997) flow conditions. The zero saturation limit in the Upper Wind River sand was defined with the use of this 1997 water-level elevation map and the base of the Upper Wind River sand map (see Exhibit 3-3 of Hydro-Engineering, 1986). The zero saturation limits shown on Exhibit 4-1 were also used to interpret the limits of hazardous constituent concentration contours. A zero saturation limit exists to the south and west of the tailings, due to the rise in elevation of the base of the Upper Wind River sand in these areas. Also, the Upper Wind River sand outcrops to the south and west. Zero saturation areas also exist to the north of the tailings between Upper sand wells 59SC and 55SC, south of well 59SC, and near well 53SC. The saturated thickness of the Upper sand in the vicinity of the northern wells 55SC, 56SC, and 57SC and in the northeast wells 66SC, 67SC, and 68SC is very thin, therefore, little water exists in these areas. An area of saturation exists in the Upper sand between the Pit 4 reservoir and well 58SC due to the higher permeability in this area, which allowed the water-level elevation to be greater in this area than previously expected.

Table 4-2 shows water levels from five Upper sand wells during the first quarter of even numbered years since 1980, and 1997. The chart accompanying Table 4-2 clearly shows the continuous

decline in water levels north of the tailings pond that have resulted from Petrotomics' past corrective action activities. Water levels in the five wells shown in Table 4-2 have declined by an average of approximately 11.7 feet since 1980.

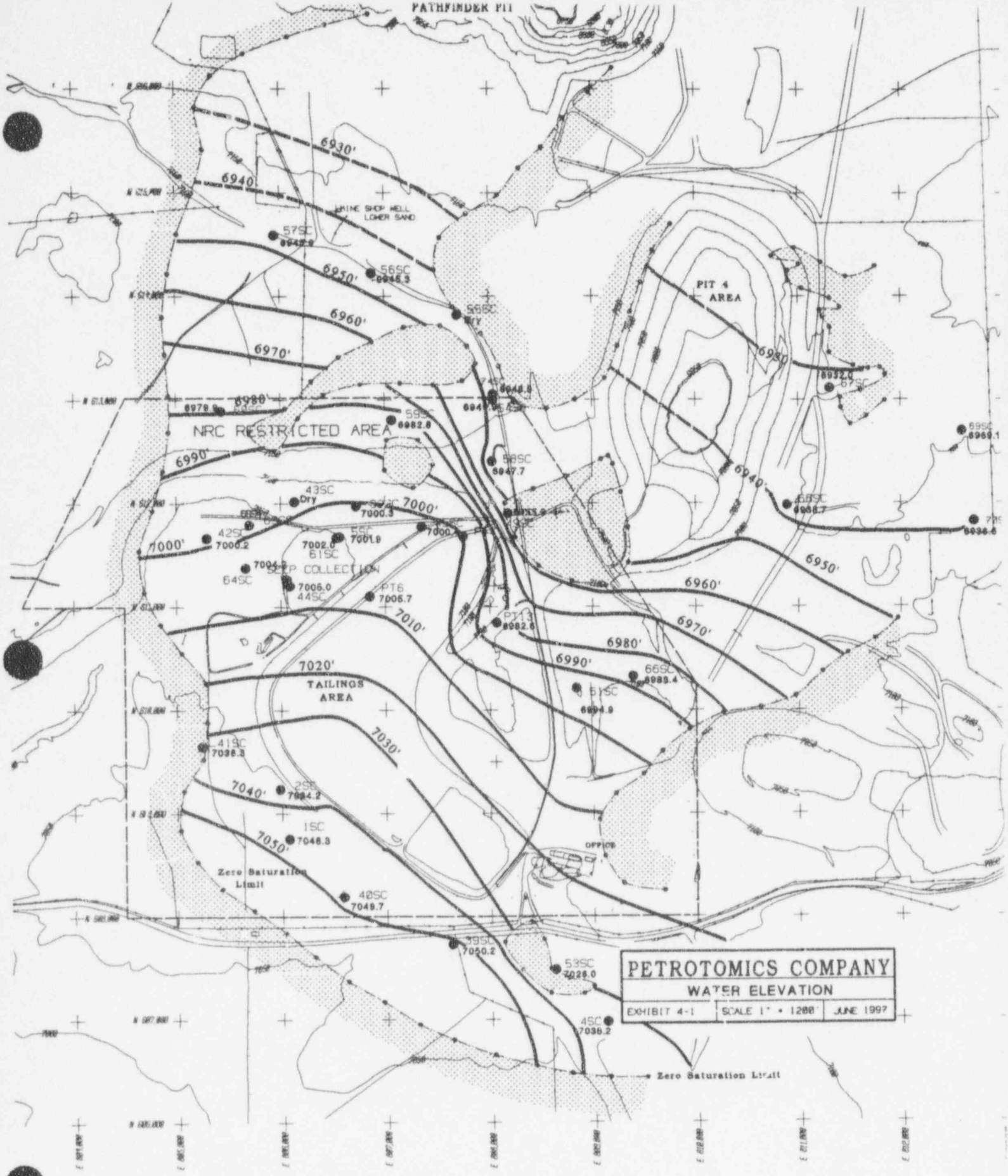
Ground water flow direction in the Upper Wind River sand in February 1997 is generally to the north and is generally similar to that observed in February 1996. There was little change in the water level contours for the Upper Wind River sand in the past year.

The drainable volume of water in the Upper Wind River sand was estimated based on the saturated thickness contours and a specific yield of 0.1. Volumes for the Upper Wind River sand were estimated west of the 809,000E coordinate, south of the 615,000N coordinate and north of the 607,000N coordinate. The zero saturation boundary limits the area on the west side. Volumes south, east, and north of this area are thought to be very small and not significant relative to the overall ground water restoration of this site. The zero saturation boundaries within the area were also used in the calculations. A drainable volume of 174 million gallons of water was estimated to be contained in the Upper sand as of February 1992. Based on the volume of water removed since 1992, it is estimated that 152.8 million gallons of drainable water remain in the Upper Wind River sand as of the end of the first quarter of 1997.

WELL NAME	MP ABOVE LSD (ft)	MP ELEV (ft-msl)	DIAM (in)	TOTAL DEPTH (ft-mp)	PERF INTERVAL (ft-bgl)	WATER LEVEL DATE	ELEV (ft-msl)	SEAL INTERVAL (ft-bgl)	ELEV BASE OF TAILINGS (ft-msl)	ELEV BASE OF UPPER SAND (ft-msl)
1 SC	0.5	7062.1	3.0	26.3	15.8 - 25.8	Feb/13/95	7048.4	7.4 - 14.4		7033.0
2 SC	1.1	7052.2	3.0	22.3	12.5 - 21.2	Feb/13/95	7034.5	5.7 - 9.7		7031.0
4 SC	1.2	7070.7	3.0	42.3	21.1 - 41.1	Feb/13/95	7036.2			7033.0
5 SC	0.7	7051.1	3.0	55.5	45.4 - 54.8	Feb/13/95	7002.0	15.4 - 36.4		6995.0
8 SC	0.6	7065.8	3.0	63.1	52.5 - 62.5	Jun/7/95	<7002.7	42.3 - 54.3		7000.0
39 SC	1.7	7069.3	4.0	26.2	11.5 - 26.5	Feb/13/95	7049.7			7043.0
40 SC	0.6	7056.8	4.0	19.1	8.5 - 18.5	Feb/13/95	7049.1			7036.0
41 SC	0.7	7054.8	4.0	23.3	7.6 - 22.6	Feb/13/95	7038.2			7037.0
42 SC	0.6	7038.5	4.0	43.8	23.2 - 43.2	Feb/13/95	6999.8			6997.0
43 SC	2.0	7063.3	5.0	67.5	45.5 - 65.5	Feb/13/95	<6995.8	34.5 - 41.5		6997.4
44 SC	1.0	7043.1	3.0	43.9	22.9 - 42.9	Feb/13/95	7005.1			7003.0
45 SC	0.7	7073.0	4.0	73.6	52.9 - 72.9	Feb/13/95	7000.8			7002.0
49 SC	2.1	7119.3	5.0	163.7	112.6 - 132.6 141.6 - 161.6	Feb/13/95	<6955.8			6985.0
50 SC	2.6	7117.3	5.0	131.8	109.2 - 129.2	Feb/13/95	<6985.5	89.7 - 95.7		6973.0
51 SC	1.1	7100.6	5.0	110.8	89.7 - 109.7	Nov/29/93	6995.5	81.0 - 88.0		6991.5
53 SC	2.7	7081.4	5.0	56.8	34.1 - 54.1	Feb/13/95	7026.2	17.0 - 24.0		7029.0
54 SC	1.5	7156.8	5.0	210.3	168.8 - 208.8	Sep/14/94	6949.9			6941.0
55 SC	4.8	7173.5	5.0	237.2	212.4 - 232.4	Apr/21/94	<6936.3	194.9 - 197.4		6938.3
56 SC	1.1	7168.2	5.0	223.1	192.0 - 222.0	Feb/13/95	6947.8	183.9 - 186.9		6948.2
57 SC	1.4	7159.6	5.0	213.9	192.5 - 212.5	Feb/13/95	6949.4	187.5 - 190.5		6952.5
58 SC	1.1	7133.4	5.0	191.8	130.7 - 190.7	Jun/16/94	6948.0	118.6 - 121.6		6947.7
59 SC	0.9	7177.7	5.0	199.6	178.7 - 198.7	Feb/13/95	6983.0	167.3 - 169.3		6981.3
60 SC	1.4	7192.1	5.0	212.7	191.3 - 211.3	Feb/13/95	6980.4	184.0 - 185.2		6978.7
61 SC	1.3	7051.5	5.0	58.8	42.5 - 57.5	Feb/13/95	7002.2	34.1 - 37.1		7000.0
62 SC	1.7	7066.0	5.0	72.7	51.0 - 71.0	Mar/7/94	7000.3	43.0 - 46.0		6997.0
63 SC	1.3	7047.0	5.0	59.9	43.6 - 58.6	Aug/23/93	6994.0	40.2 - 43.2		6988.0
64 SC	1.8	7035.4	5.0	35.9	20.3 - 34.3	Aug/23/93	7004.2	16.0 - 18.0		7003.0
65 SC	0.7	7134.4	5.0	166.0	145.3 - 165.3	May/17/95	<6968.4			6962.0
66 SC	2.7	7092.4	5.0	111.7	79.0 - 109.0	Feb/13/95	6989.5	53.0 - 59.0	>7090.7 #	6987.7
67 SC	1.0	7135.1	5.0	239.7	218.7 - 238.7	Feb/13/95	6930.4	129.0 - 207.0	7045.0 #	6920.0
67 SCOB	1.8	7153.6	2.0	202.8	181.0 - 201.0	Apr/25/94	7028.5	172.0 - 181.0		
68 SC	1.2	7147.2	5.0	219.4	198.2 - 218.2	Feb/13/95	6941.1	168.0 - 183.0	7055.0 #	6934.7
69 SC	1.7	7155.2	5.0	226.0	200.0 - 220.0	Feb/13/95	6975.8	22.0 - 193.0		6934.5
70 SC	1.7	7126.7	5.0	208.5	182.5 - 202.5	Feb/13/95	6939.7	29.0 - 170.0		6926.0
71SC	2.7	7099.9	5.0	107.0	84.0-104.0	Feb/13/95	6996.0	79.0-84.0		6995.2
72SC	1.7	7064.3	5.0	68.0	45.5-65.5	Feb/13/95	7000.3	41.0-45.5		6999.6
73SC	2.3	7037.1	5.0	36.0	13.0-33.0	May/18/95	7003.8	2.0-15.0		7002.8
74SC	1.9	7160.9	5.0	219.0	177.0-217.0	Feb/13/95	6949.8	15.0-160.0		6945.0
PT 6	0.6	7100.7	5.0	110.0	74.4 - 109.4	Apr/4/95	7005.2	50.8 - 71.3		6994.0
PT 7	1.8	7100.9	5.0	100.8	59.0 - 99.0	Aug/24/93	7071.7	34.2 - 36.7		7008.4
PT 8	0.5	7099.8	5.0	80.3	59.8 - 79.8	Feb/9/95	7033.0	33.0 - 35.0		7020.3
PT 9	1.6	7101.4	5.0	75.2	53.6 - 73.6	Feb/9/95	7039.3	44.4 - 46.4		7027.4
PT 10	1.4	7101.7	5.0	79.4	58.0 - 78.0	Feb/9/95	7053.1	53.4 - 56.4		7014.9
PT 11	1.5	7101.7	5.0	89.8	68.3 - 88.3	Feb/9/95	7057.6	62.8 - 65.8		7015.4
PT 12	2.3	7102.3	5.0	101.9	79.6 - 99.6	Feb/9/95	7007.9	67.8 - 69.8		7006.2
PT 13	1.0	7104.0	5.0	125.5	104.5 - 124.5	Feb/9/95	6982.7	91.0 - 94.0	7066.0	6984.0
OB 7	2.5	7102.5	2.0	87.6	65.1 - 85.1	Feb/9/95	7017.5	45.0 - 48.0		7014.1

NOTE: # = BASE OF WHITE RIVER SAND

TABLE 4-1. BASIC WELL DATA FOR UPPER WIND RIVER WELLS


PATHFINDER PIT
6930'
6940'
6950'
6960'
6970'
6980'
6990'
7000'
7010'
7020'
7030'
7040'
7050'
PIT 4
AREA
NRC RESTRICTED AREA
TAILINGS
AREA
SEEP COLLECTION
Zero Saturation
Limit
OFFICE
57SC
56SC
55SC
43SC
Dry
42SC
7000.2
61SC
64SC
7005.0
44SC
PT6
7005.7
PT13
6982.6
66SC
6983.4
61SC
6994.9
41SC
7036.3
2SC
7044.2
1SC
7048.3
40SC
7049.7
39SC
7050.2
53SC
7026.0
4SC
7036.2
67SC
6952.0
68SC
6956.7
6936.6
58SC
6947.7
6978.9
6982.8
6969.1
PETROTOMICS COMPANY
WATER ELEVATION
EXHIBIT 4-1
SCALE 1" = 1200'
JUNE 1997
Zero Saturation Limit

YEAR	5-SC	42-SC	43-SC	44-SC	45-SC
1980	7013.9	7010.9	7008.9	7019.7	7008.6
1982	7013.2	7011.0	7009.1	7013.5	7009.4
1984	7013.1	7005.9		7011.3	7007.7
1986	7009.5	7004.7	6997.6	7010.9	7007.0
1988	7007.8	7003.2	6999.9	7011.1	7005.9
1990	7005.3	7002.6	6998.1	7008.8	7003.8
1992	7003.4	7000.6	6995.8	7006.7	7002.3
1994	7003.2	6997.7	6995.8	7005.8	7001.0
1995	7002.0	6999.8	6995.8	7005.1	7000.8
1996	7002.0	7000.2	6995.8	7005.3	7000.6
1997	7001.9	7000.2	6995.8	7005.0	7000.4

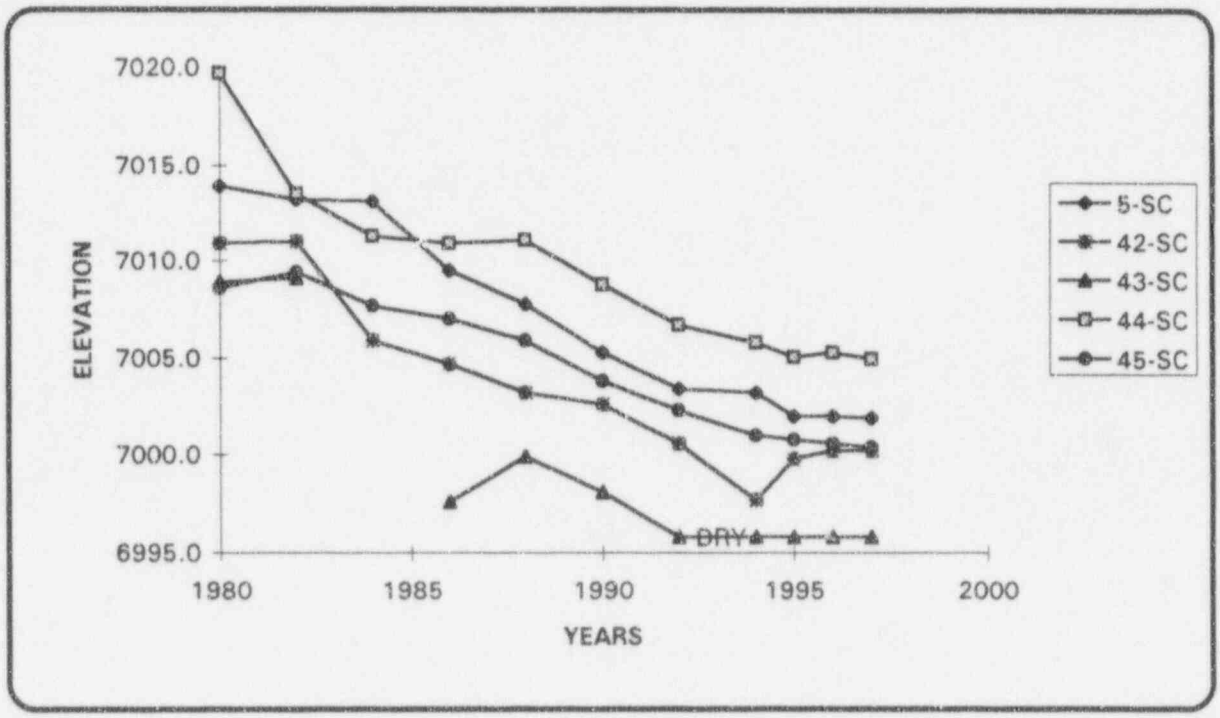


TABLE 4-2. UPPER SAND WATER LEVELS
5 WELLS: 1980-1997

5.0 WATER QUALITY OF THE UPPER WIND RIVER SAND

This update of the extent of hazardous and major constituents has been defined by utilizing the concentrations of the following hazardous constituents:

Cadmium (Cd)	Selenium (Se)	Thorium-230 (Th230)
Chromium (Cr)	Uranium (U)	Radium-226 (Ra226)
Lead (Pb)	Nickel (Ni)	Radium-228 (Ra228

To assist in definition of constituent mobility, pH was also utilized. Chloride (Cl), total dissolved solids (TDS), and sulfate (SO_4) were used to define the extent of major constituents.

First quarter of 1997 water sampling data were used to update the extent of concentrations, except for wells 8-SC, 43-SC, 49-SC, 50-SC, 55-SC, 60SC and 65-SC, which contain insufficient/no water to sample.

Barium and arsenic were listed as hazardous constituents in Hydro-Engineering (May 1988). However, all concentrations of arsenic and barium were so low that these constituents did not warrant further discussion and were removed from the license in 1993. Radium-226 and radium-228 are evaluated as radium-226+228 in this analysis.

Water quality data for the Upper Wind River wells listed in License Condition 47-A are attached as an Appendix to this report.

5.1 pH

The mobility of most of the hazardous constituents is pH dependent. Therefore, a definition of pH levels will aid

in the definition of concentrations of most of the constituents. Exhibit 5-1 presents contours of field pH values in the first quarter of 1997. In general, the pH in the Upper Wind River sand has been fairly stable during the past year, with the major change being a southerly pullback of the 6.0 pH isopleth in the area to the north of the tailings pond and a shrinking in size of the 3.0 pH isopleth. This would indicate that natural attenuation and the decreased hydraulic head due to tailings and Upper Sand dewatering are effective in limiting the northerly spread of low pH ground water.

5.2 CHLORIDE

The concentration of chloride in water in the Upper Wind River sand helps to define seepage from the tailings because chloride is a conservative ion. Exhibit 5-2 presents contours of chloride concentrations in the first quarter of 1997. Chloride concentrations under and immediately downgradient from the tailings pond have not significantly changed in the Upper Wind River sand in the last year. The 300 mg/l chloride isopleth to the north of the tailings pulled back to the southeast approximately 800'. This is a pullback of 2,200' in 3 years in this area. This movement is similar to what was observed with the pH, and is apparently the result of the same factors. The chloride concentration at well 4SC in February 1997 was 710 mg/l, which indicates an isolated zone of significantly higher chloride concentrations south and upgradient of the tailings which is not related to tailings seepage.

5.3 TDS

Exhibit 5-3 presents the TDS concentrations for the Upper sand for the first quarter of 1997. TDS concentrations in the Upper sand have not significantly changed in the past year. An additional 900' southerly pullback of the 10,000 mg/l TDS isopleth in the vicinity of well 57SC has been observed again this year, the result of the same factors described in Section 5.1. This is a pull back of 1,600' in 2 years in this area.

5.4 SULFATE

Sulfate concentrations in the first quarter of 1997 are generally lower than those observed in the past year. Exhibit 5-4 presents the sulfate concentrations in the Upper Sand for the first quarter of 1997. A pullback of the northerly isopleth lines for 10,000, 5,000 and 3,000 are noted. The greatest change being in the 3,000 and 5,000 isopleths by approximately 600'. This is a pull back of 1,800' in 2 years in this area.

5.5 CADMIUM

Exhibit 5-5 presents the cadmium concentrations for the first quarter of 1997. The areal extent of cadmium concentrations in excess of the 0.014 mg/l site standard to the north of the tailings remained approximately the same as last year, The laboratory failed to meet the requested LLD of 0.01. The 0.01 isopleth has been removed based on available data. Reruns of this data has

been requested but is not currently available.

The concentrations north of the tailings which shifted west last year have shifted back to the east as before.

5.6 CHROMIUM

Exhibit 5-6 presents the chromium concentrations for the Upper Wind River sand for the first quarter of 1997. The chromium concentrations seen in 1997 are generally lower north of the tailings than the values observed in 1996. Well 51SC, located to the east of the tailings pond, showed a significant decrease in the past year. The level is closer to the pre 1996 levels.

5.7 LEAD and NICKEL

All of the lead concentrations for the first quarter of 1997 were at or below the 0.05 mg/l site standard. Since all values were below the site standard, a contour map of lead concentrations was not compiled.

The site standard for nickel is 0.22 mg/l. Larger concentrations of naturally occurring nickel likely exist at this site. The upgradient concentration varied up to a value of 0.57 mg/l in the past year. In general, nickel concentrations were slightly higher in this upgradient area than in 1996, downgradient areas were mixed, with eastern wells slightly higher than in the previous year, and western wells slightly lower. The 0.5 isopleth has drawn back approximately 1,200' in the north.

Nickel contours, as shown in Exhibit 5-7, do not fit the

pattern of the other heavy metals. Nickel appears to be mobile at a higher pH value than most of the other hazardous constituents. The elevated concentrations upgradient from the tailings indicate a dual source for this constituent. A source other than tailings seepage, possibly associated with the naturally occurring uranium, probably produced some of the concentrations on the east side of the tailings. This data shows that nickel is not a good heavy metal to define hazardous constituent movement from the tailings.

5.8 SELENIUM

The site standard for selenium was selected to be 0.01 mg/l based on the January 1988 analyses. The laboratory added the digestive step to their selenium analytical technique starting in March of 1989. This change in analytical procedure has been largely responsible for larger concentrations being observed in Upper Wind River sand wells upgradient and downgradient from the tailings. The selenium concentrations in water collected from background wells 39SC and 41SC did not exceed the site standard during the past year. Exhibit 5-8 presents the first quarter of 1997 selenium contours. This map shows that the areal extent of significant selenium concentrations is small and located well within the NRC Restricted Area.

5 9 URANIUM

The uranium contours for the Upper Wind River sand in the first quarter of 1997 are shown on Exhibit 5-9. Concentrations

vary on the site from less than 0.001 to nearly 7.4 mg/l. The site standard for uranium is 0.16 mg/l. Significant uranium concentrations have not migrated to the north of the tailings on the east side. The uranium concentrations to the northwest and south of the tailings pond are slightly higher than those observed in 1996. This may be due to loading of the tailings due to reclamation radon barrier cover placement. The above site standard values observed in well 4-SC, located upgradient from the tailings pond, may represent a small area of naturally occurring uranium mineralization in the Upper sand.

5.10 RADIUM-226 PLUS RADIUM-228

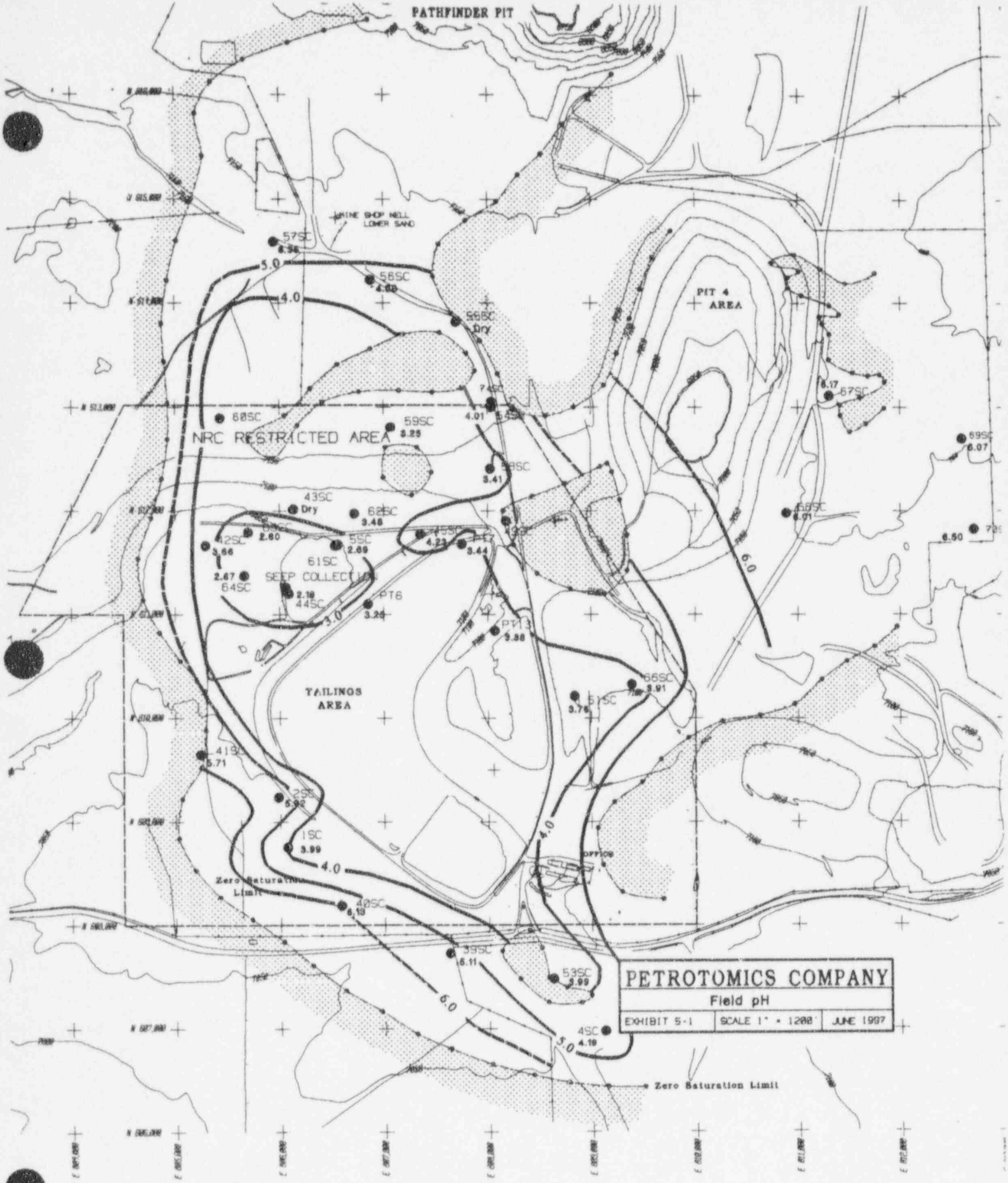
The sum of the concentrations of radium-226 and radium-228 was used to analyze the extent of radium in the Upper Wind River sand. The sum of the radium constituents is more appropriate as the site standard and should be used to evaluate the extent of these constituents. The site standard for radium-226 plus radium-228 is the drinking water standard of 5 pCi/l. Concentrations in upgradient wells 1SC, 40SC, 41SC, and 53SC in the first quarter of 1997 ranged up to 15.8 pCi/l, higher than the site standard. A large area to the east of the tailings pond also contains significant concentrations of combined radium. This area of known uranium-mineralized sand has naturally occurring radium concentrations significantly greater than the site standard. Exhibit 5-10 presents the radium-226 plus radium-228 contours in the first quarter of 1997. The pattern of contours for radium

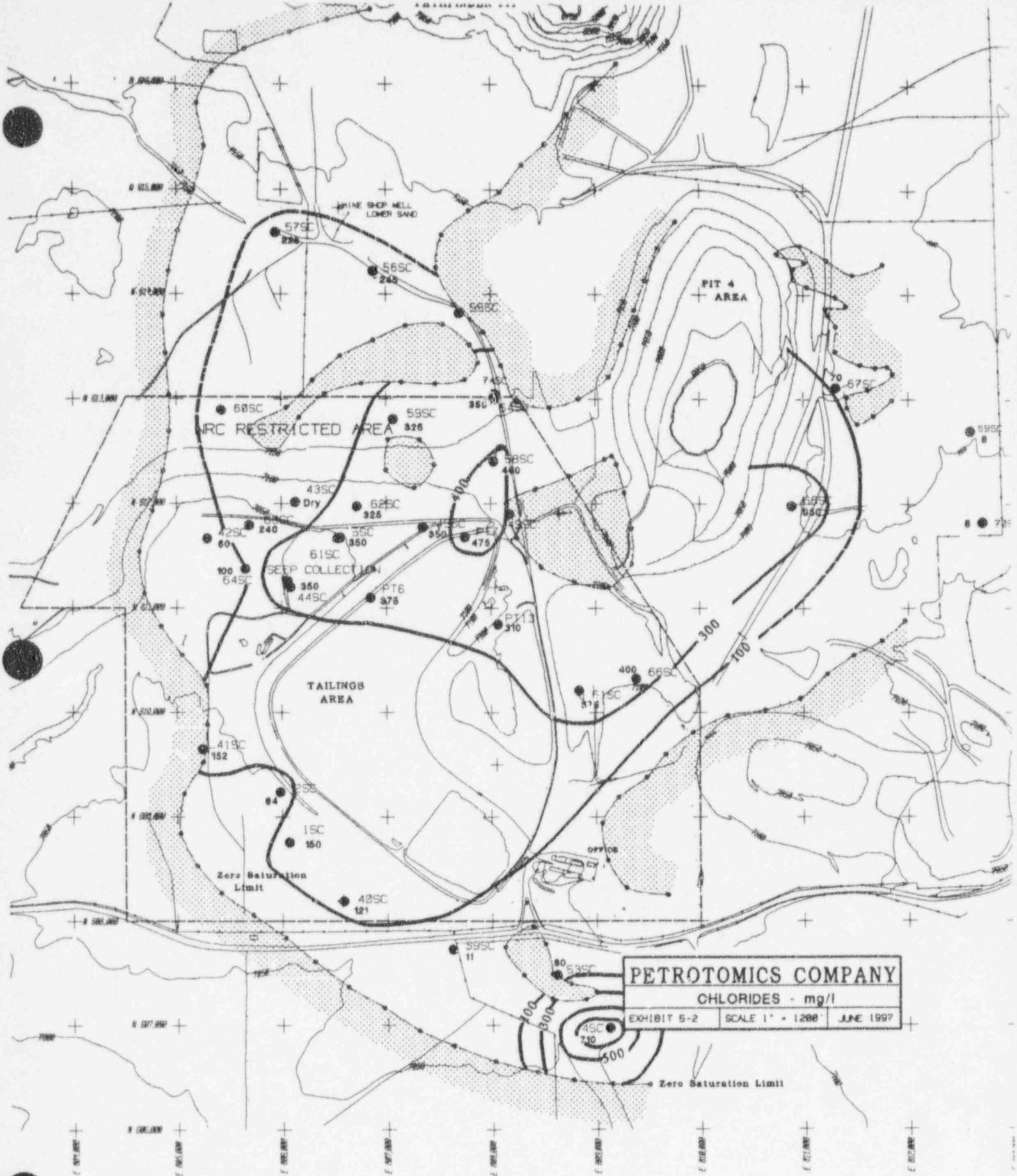
is significantly different than the other radionuclides, uranium and thorium-230. Radium concentrations do not correlate to any of the other hazardous constituents except, perhaps, nickel. These two skewed concentration patterns may be due to the naturally mineralized characteristics of the Upper Wind River sand. Some of the lowest concentrations are in the high permeability zone where maximum concentrations were observed for other parameters. The radium-226 plus radium-228 concentration contours indicate that a source different from Petrotomics' tailings is probably responsible for most of the elevated radium values. It is likely that this source is natural because the Wind River sands are the uranium ore-bearing unit in the Shirley Basin. Natural radium concentrations of up to 1,700 pCi/l have been observed in the Wind River water where the sand is mineralized (Harshman, 1972). Since radium contours do not reflect the effects of tailings seepage on the Upper Wind River sand, they should not be used to define the extent of contamination.

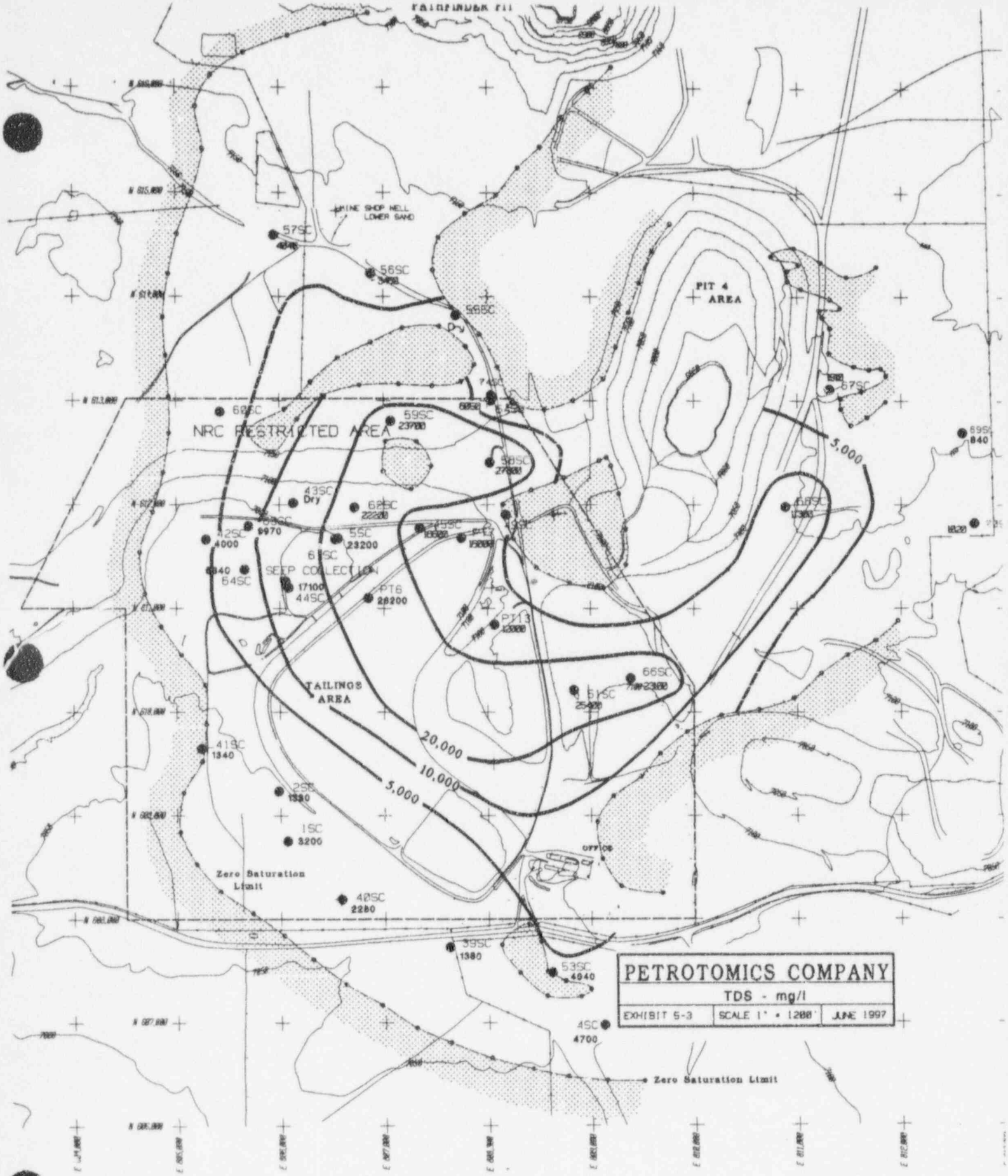
5.11 THORIUM-230

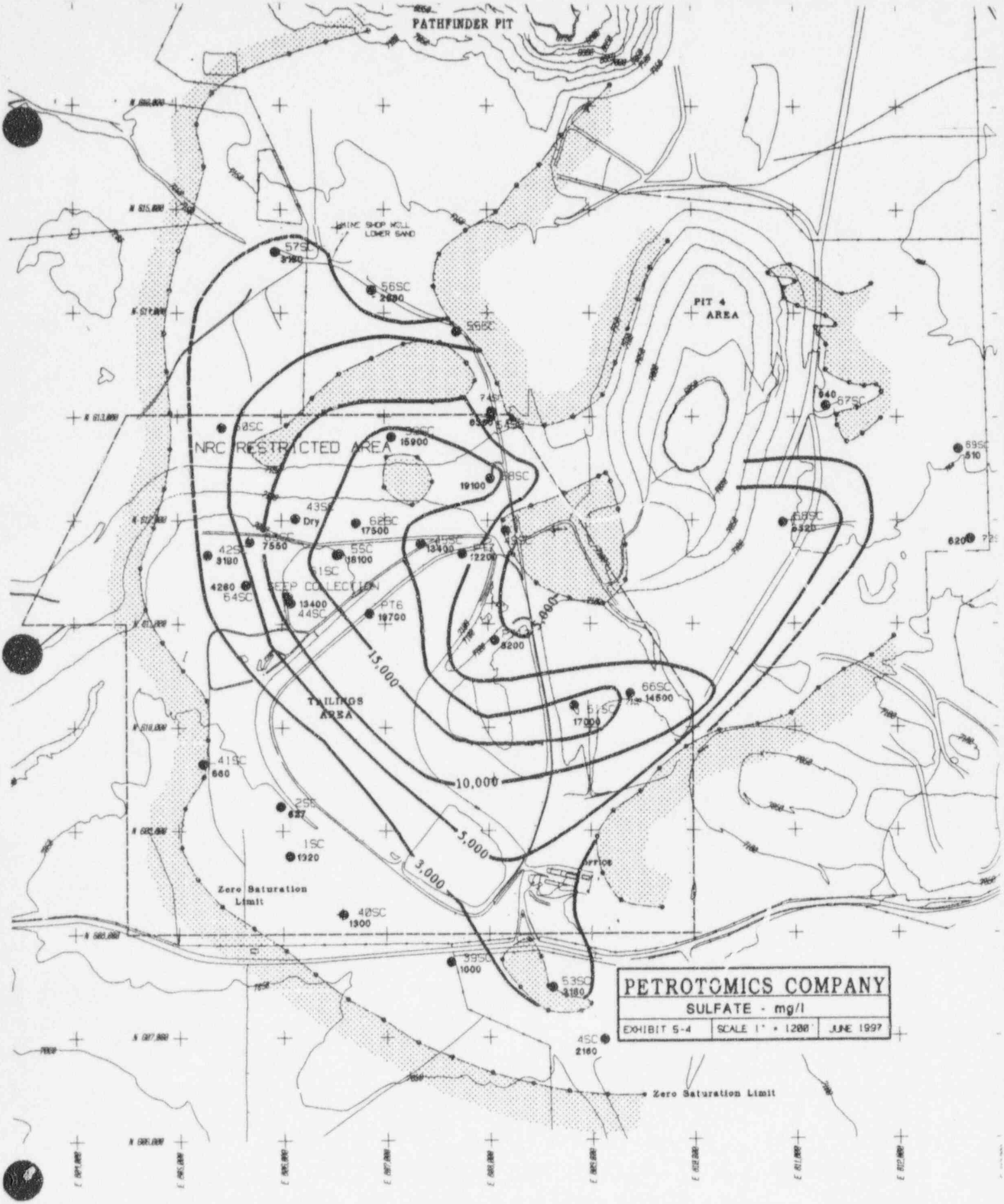
Exhibit 5-11 presents the thorium-230 concentration contours for the Upper Wind River sand in the first quarter of 1997. The overall pattern of thorium-230 bearing groundwater is little changed from the previous year. There has been a shrinking of the 1,000 pCi isoplete on the south side to the northwest. It appears that thorium-230 concentrations south and east of the tailings pond are declining slightly. This could be explained by

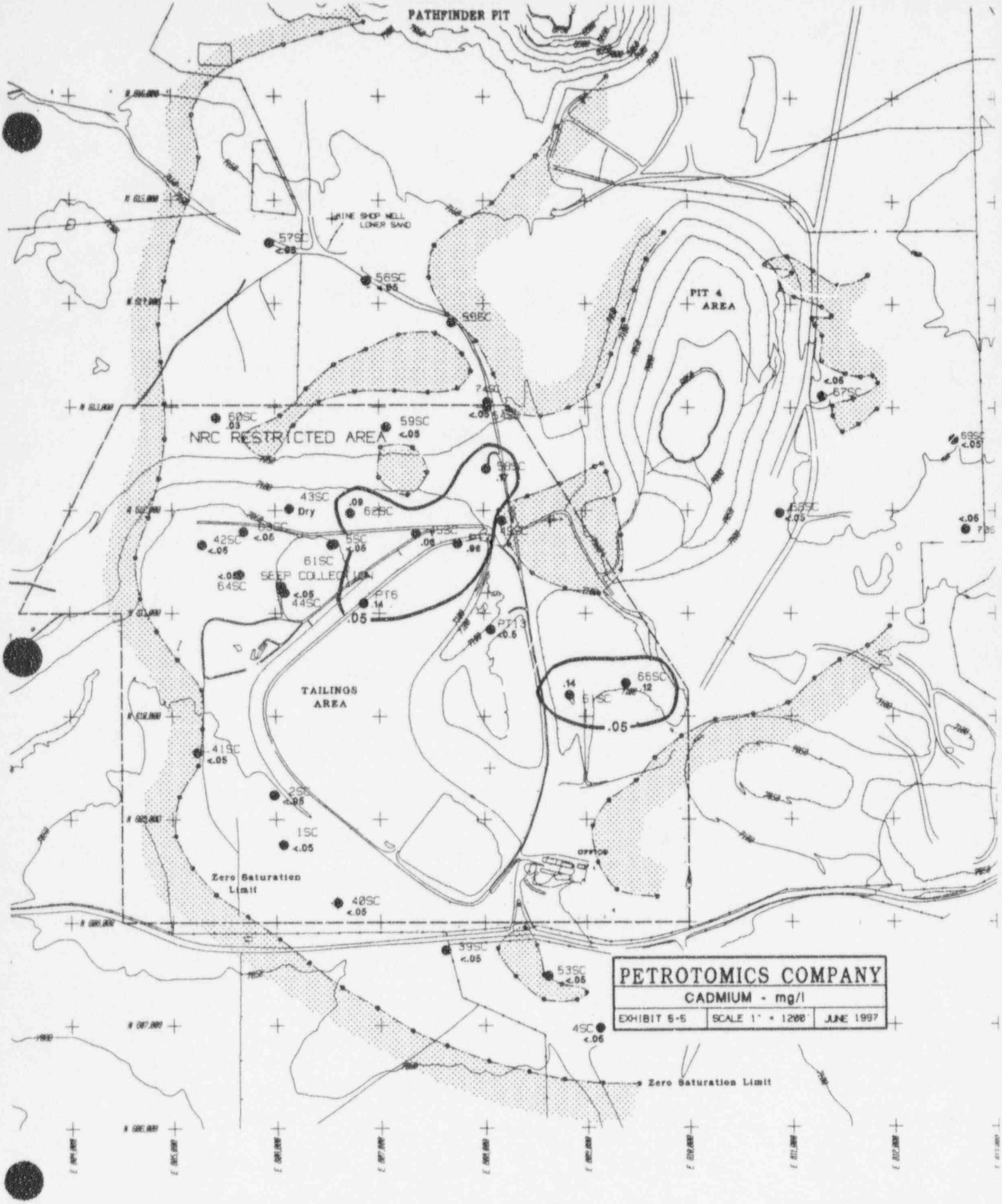
natural attenuation along the periphery of the thorium-230 plume as tailings and Upper sand dewatering operations lower the overall water levels in the vicinity of the tailings pond.

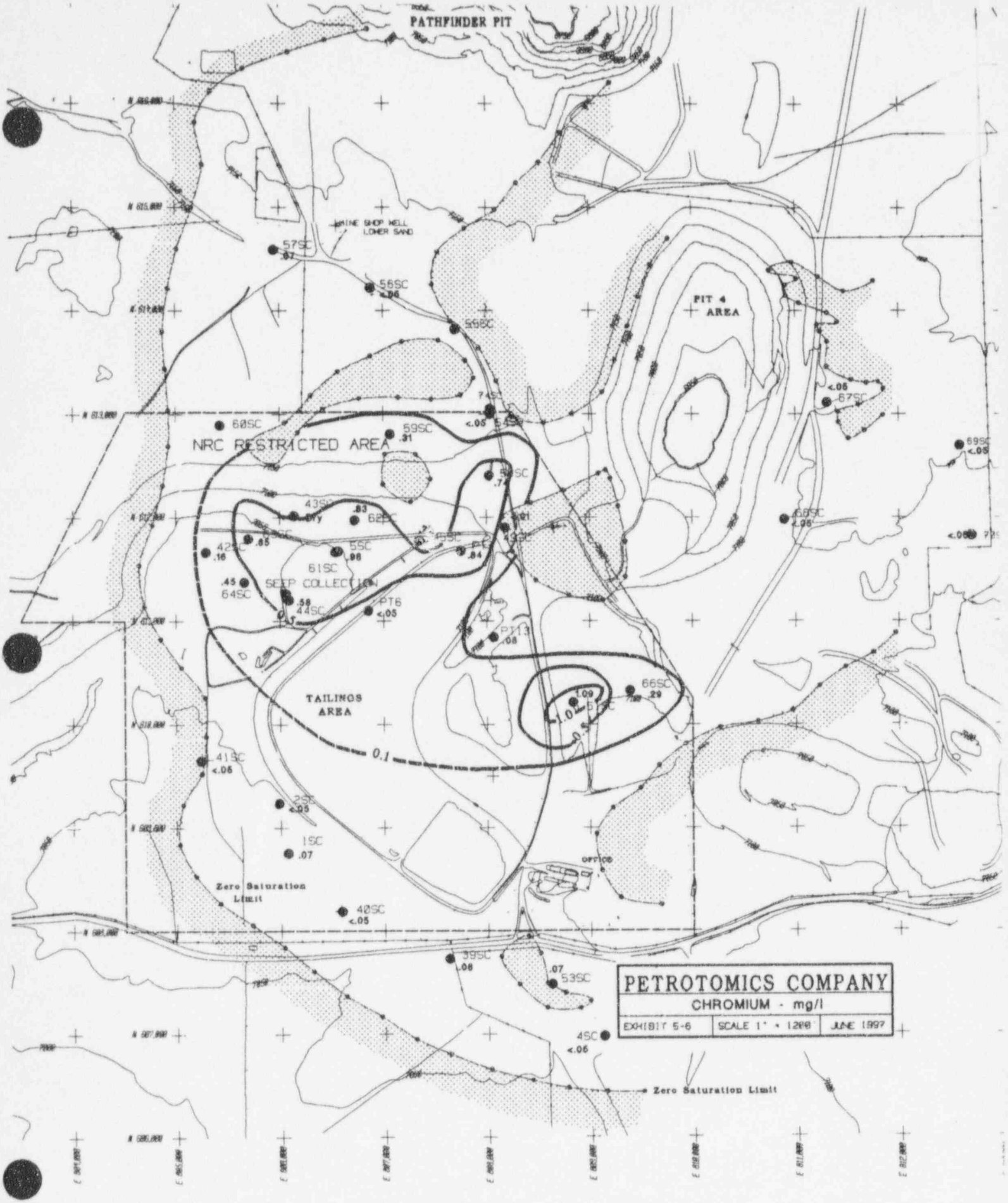

PATHFINDER PIT
MINE SHOP HILL LOWER SAND
57SC
56SC
58SC Dry
PIT 4 AREA
67SC
60SC
59SC
NRC RESTRICTED AREA
43SC Dry
62SC
42SC
55SC
61SC
SEEP COLLECTION
64SC
PT6
PT13
TAILINGS AREA
66SC
41SC
2SC
1SC
Zero Saturation Limit
40SC
39SC
53SC
4SC
5.0
4.0
6.0
3.0
PETROTOMICS COMPANY
Field pH
EXHIBIT 5-1
SCALE 1" = 1200'
JUNE 1987
Zero Saturation Limit

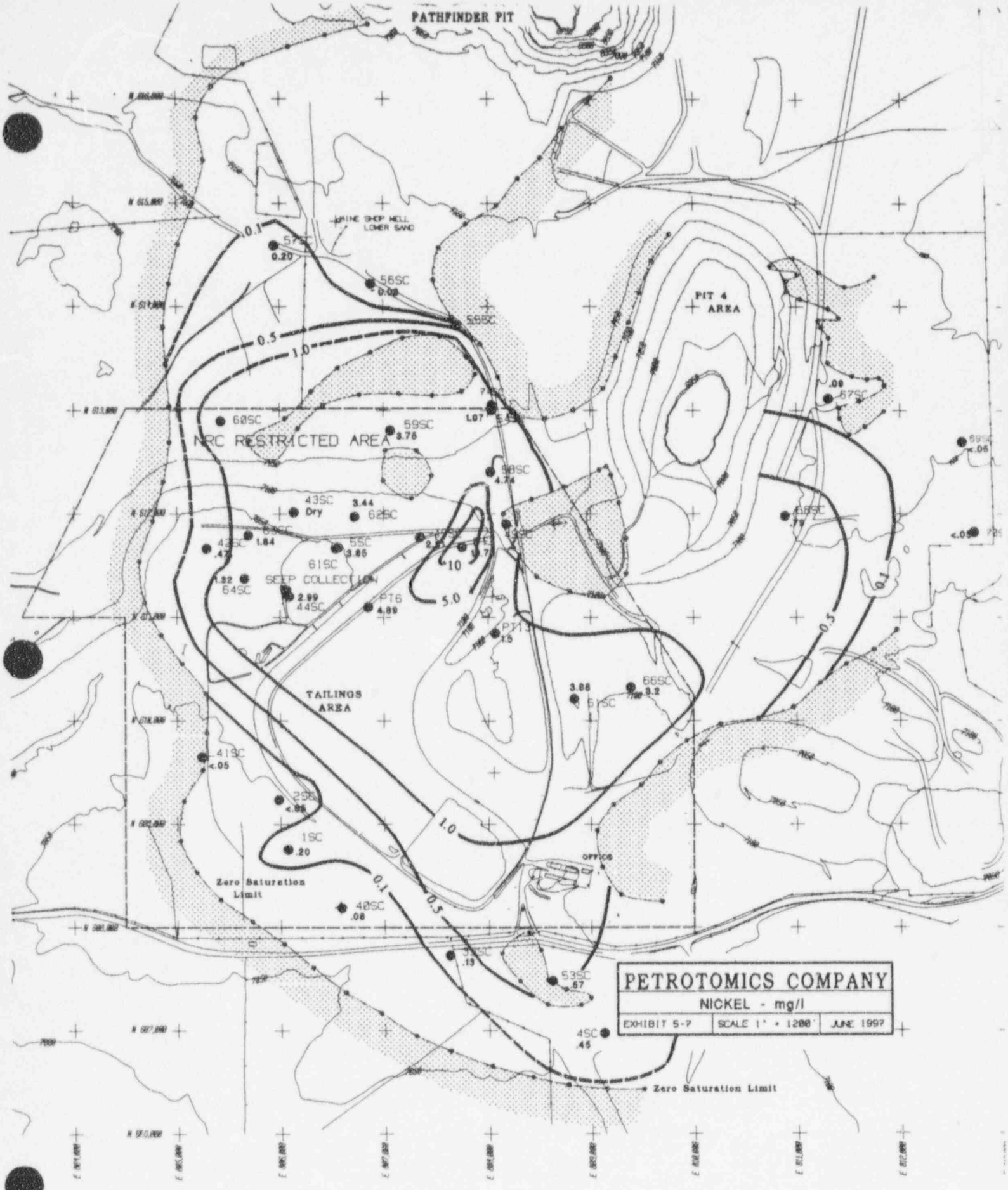

MINE SHOP WELL
LOWER SAND
57SC
256
56SC
243
58SC
PIT 4
AREA
67SC
70
60SC
59SC
326
NRC RESTRICTED AREA
58SC
480
43SC
Dry
62SC
325
42SC
60
240
55C
350
61SC
SEEP COLLECTION
100
64SC
350
44SC
PT6
375
PT4
475
PT13
310
300
100
400
66SC
TAILINGS
AREA
41SC
152
64
1SC
150
Zero Saturation
Limit
40SC
121
OFFICE
39SC
11
80
53SC
100
300
1SC
710
500
Zero Saturation Limit
PETROTOMICS COMPANY
CHLORIDES - mg/l
EXHIBIT 5-2
SCALE 1" = 1200'
JUNE 1997

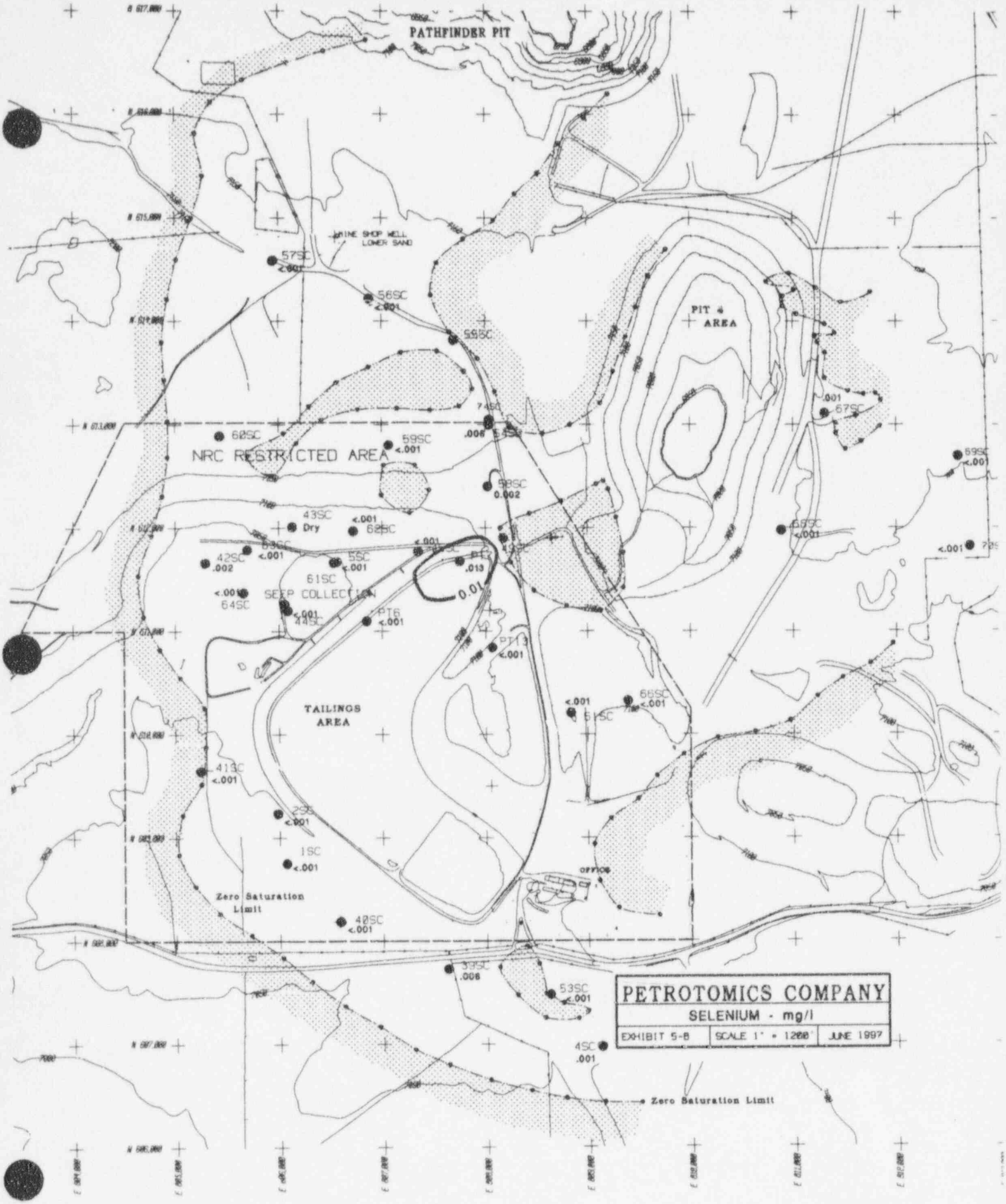

FAIRFINDER PIT
PINE SHOP HELL LOWER SAND
57SC
56SC
56BSC
PIT 4 AREA
67SC
NRC RESTRICTED AREA
69SC
840
59SC
23700
5,000
58SC
27800
43SC
Dry
62SC
22200
69SC
12300
42SC
4000
55SC
23200
65SC
9970
64SC
6340
SEEP COLLECTION
17100
44SC
PT6
28200
PT13
13000
TAILINGS AREA
66SC
51SC
25000
20,000
10,000
5,000
41SC
1340
2SC
1330
1SC
3200
Zero Saturation Limit
40SC
2280
39SC
1380
53SC
4940
4SC
4700
Zero Saturation Limit
PETROTOMICS COMPANY
TDS - mg/l
EXHIBIT 5-3
SCALE 1" = 1200'
JUNE 1997

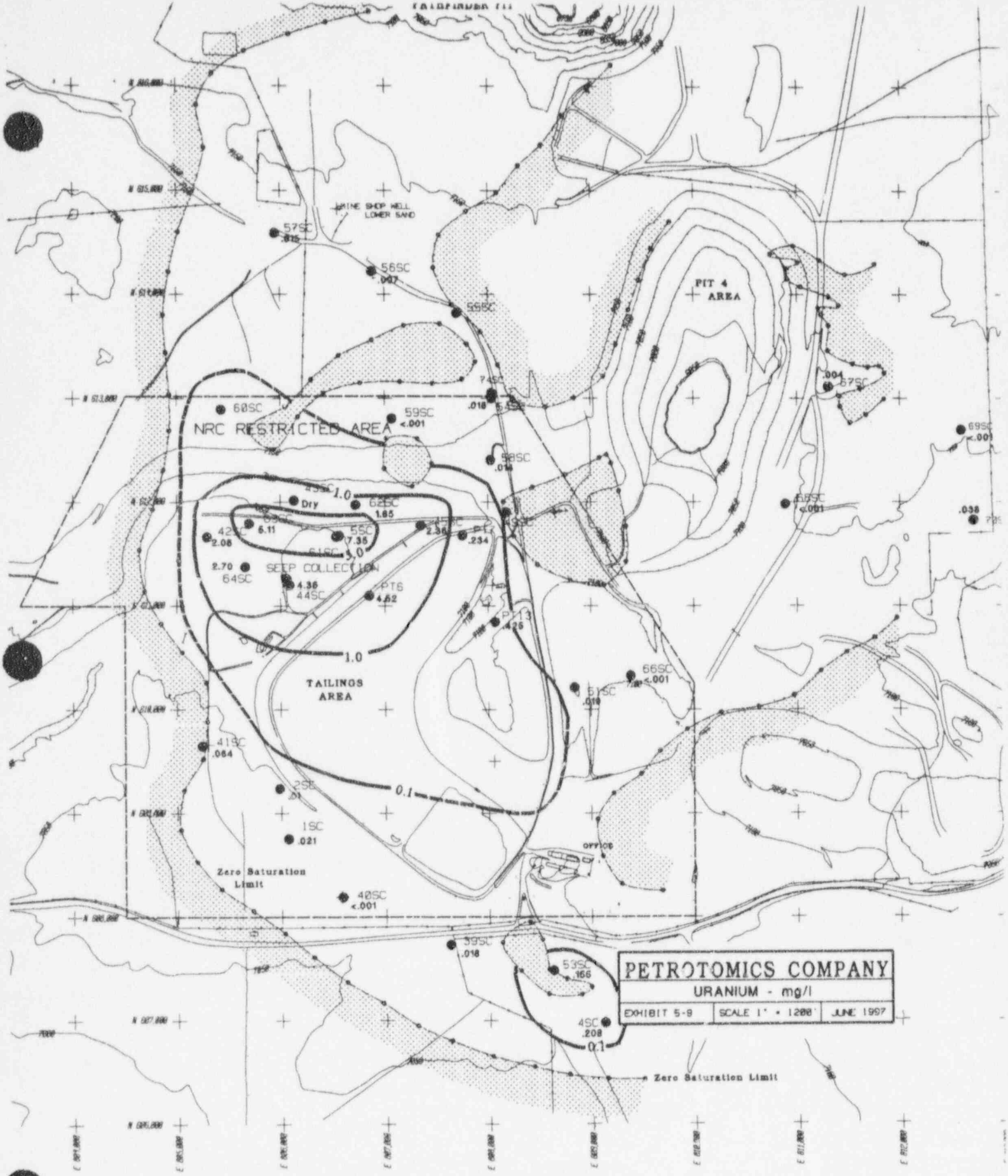

PATHFINDER PIT
MINE SHOP HILL LOWER SAND
PIT 4 AREA
NRC RESTRICTED AREA
TAILINGS AREA
SEEP COLLECTION
PT6
Zero Saturation Limit
15,000
10,000
5,000
3,000
PETROTOMICS COMPANY
SULFATE - mg/l
EXHIBIT 5-4
SCALE 1" = 1200'
JUNE 1997
Zero Saturation Limit

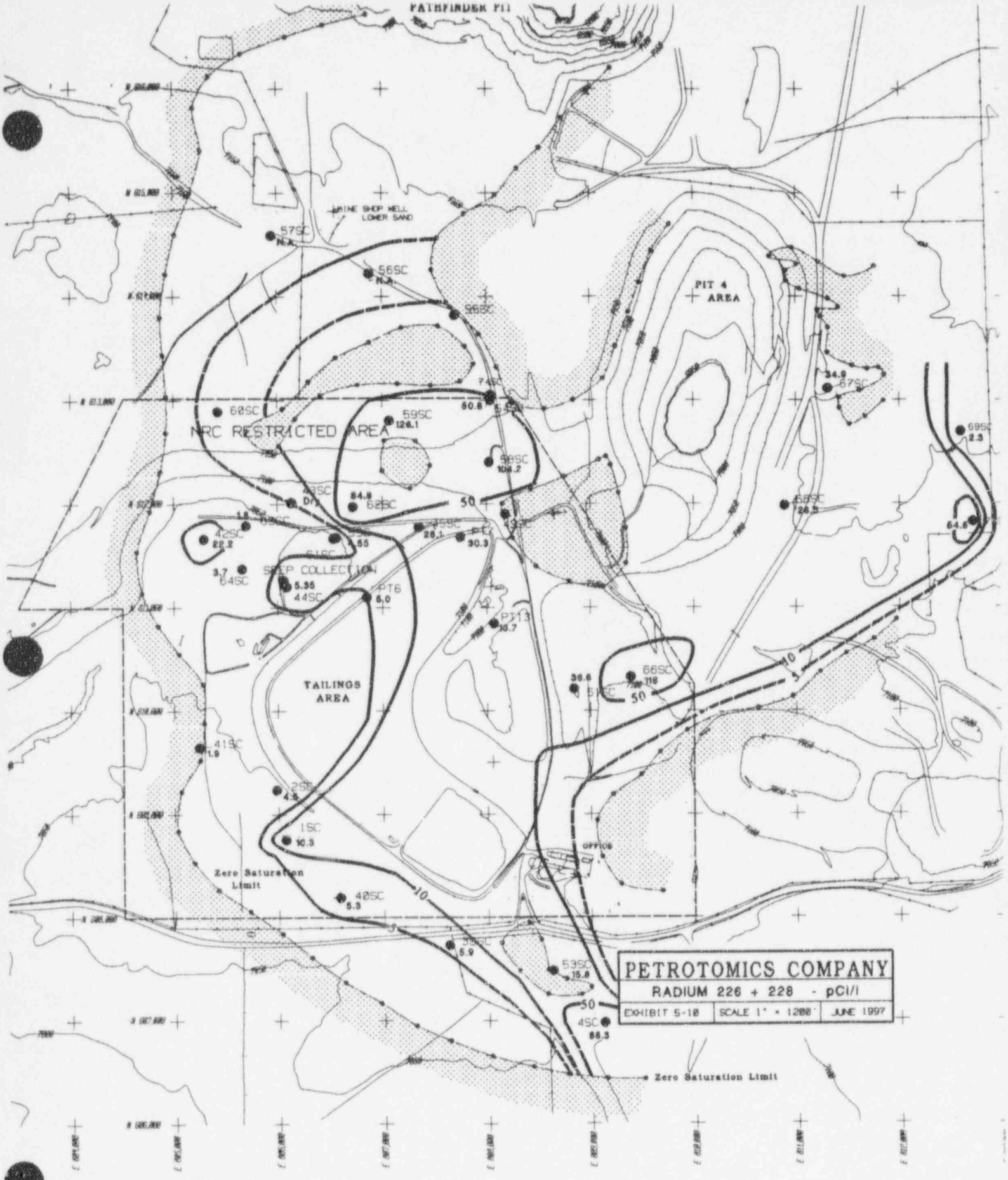

PATHFINDER PIT
MINE SHOP WELL
LOWER SAND
57SC
<.05
56SC
<.05
58SC
PIT 4
AREA
<.06
67SC
60SC
.03
59SC
<.05
NRC RESTRICTED AREA
69SC
<.05
43SC
Dry
62SC
.09
42SC
<.05
<.06
61SC
SEEP COLLECTION
64SC
<.05
44SC
<.05
PT6
.14
.05
PT13
<0.5
TAILINGS
AREA
66SC
.14
.12
61SC
.05
41SC
<.05
2SC
<.05
1SC
<.05
Zero Saturation
Limit
40SC
<.05
39SC
<.05
53SC
<.05
45C
<.06
Zero Saturation Limit
PETROTOMICS COMPANY
CADMIUM - mg/l
EXHIBIT 5-5
SCALE 1" = 1200
JUNE 1997

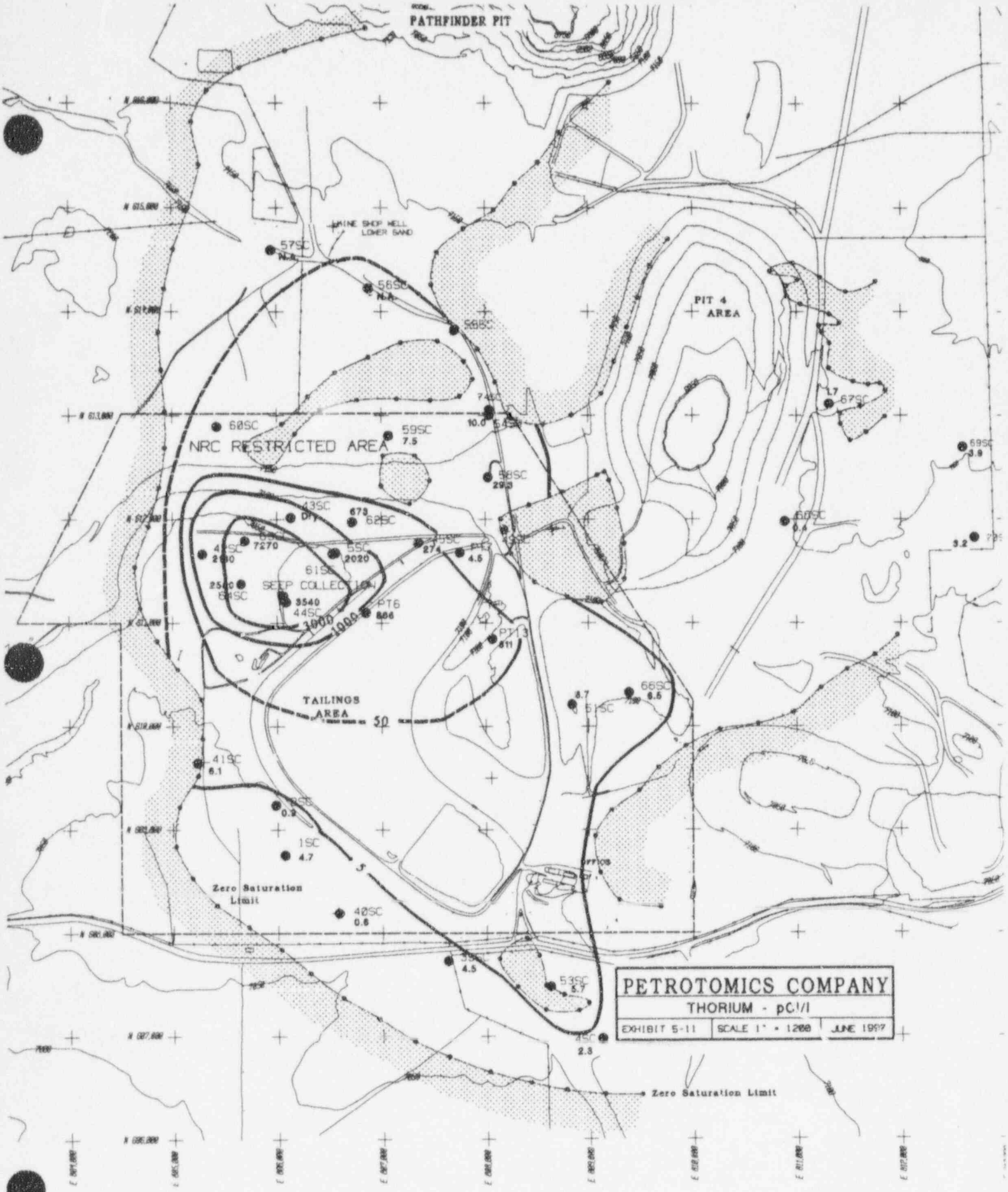

PATHFINDER PIT
MINE SHOP WELL
LOWER SAND
57SC
.07
56SC
.06
55SC
PIT 4
AREA
<.05
67SC
69SC
<.05
60SC
59SC
.31
NRC RESTRICTED AREA
<.05
43SC
.83
62SC
.85
42SC
.16
55SC
.98
61SC
SEEP COLLECTION
.45
64SC
.58
44SC
PT6
<.05
PT13
.08
TAILINGS
AREA
1.09
66SC
.29
1.0
0.5
0.1
41SC
<.05
2SC
<.05
1SC
.07
Zero Saturation
Limit
OFFICE
40SC
<.05
39SC
.08
.07
53SC
4SC
<.05
Zero Saturation Limit
PETROTOMICS COMPANY
CHROMIUM - mg/l
EXHIBIT 5-6
SCALE 1" = 1200'
JUNE 1997


PATHFINDER PIT
MINE SHOP HILL LOWER SAND
PIT 4 AREA
NRC RESTRICTED AREA
TAILINGS AREA
SEEP COLLECTION
Zero Saturation Limit
0.1
0.5
1.0
5.0
10
57SC 0.20
56SC 0.08
55SC
60SC
59SC 3.78
43SC Dry
3.44
62SC
61SC
64SC 1.32
44SC 2.99
PT6 4.89
PT1 15
5SC 3.85
1.84
4SC .43
58SC 4.74
68SC .79
67SC .09
69SC <.05
66SC 3.2
3.88
63SC
41SC <.05
2SC <.05
1SC .20
40SC .08
53SC .67
4SC .45
OFFICES
PETROTOMICS COMPANY
NICKEL - mg/l
EXHIBIT 5-7
SCALE 1" = 1200'
JUNE 1997
Zero Saturation Limit


PATHFINDER PIT
MINE SHOP WELL
LOWER SAND
PIT 4
AREA
NRC RESTRICTED AREA
SEEP COLLECTION
TAILINGS
AREA
Zero Saturation
Limit
57SC
<.001
56SC
<.001
55SC
60SC
59SC
<.001
67SC
.001
58SC
0.002
43SC
Dry
62SC
<.001
42SC
.002
54SC
<.001
55C
<.001
61SC
64SC
<.001
44SC
PT6
<.001
PT5
.013
0.01
PT13
<.001
66SC
<.001
51SC
41SC
<.001
2SC
<.001
1SC
<.001
40SC
<.001
39SC
.008
53SC
<.001
4SC
.001
Zero Saturation Limit
PETROTOMICS COMPANY
SELENIUM - mg/l
EXHIBIT 5-8
SCALE 1" = 1200'
JUNE 1997


NRC RESTRICTED AREA
PIT 4 AREA
TAILINGS AREA
SEEP COLLECTION
Zero Saturation Limit
Zero Saturation Limit
PETROTOMICS COMPANY
URANIUM - mg/l
EXHIBIT 5-9
SCALE 1" = 1200'
JUNE 1997


PATHFINDER PIT
MINE SHOP WELL
LOWER SAND
PIT 4
AREA
NRC RESTRICTED AREA
SEEP COLLECTION
TAILINGS
AREA
Zero Saturation
Limit
OFFICE
PETROTOMICS COMPANY
RADIUM 226 + 228 - pCi/l
EXHIBIT 5-18
SCALE 1" = 1200'
JUNE 1997
Zero Saturation Limit


PATHFINDER PIT
MINE SHOP HILL LOWER SAND
PIT 4 AREA
NRC RESTRICTED AREA
SEEP COLLECTION
TAILINGS AREA
Zero Saturation Limit
Zero Saturation Limit
PETROTOMICS COMPANY
THORIUM - pCi/l
EXHIBIT 5-11
SCALE 1" = 1200
JUNE 1979

6.0 EFFECT OF CORRECTIVE ACTION ON THE UPPER WIND RIVER SAND

The pumping rate from the Upper Wind River sand has continued to decrease with time due to the general lowering of water levels and reduced infiltration through the clay cap now covering the tailings pond. Continued dewatering of the tailings has also decreased the volume of tailings solutions migrating into the Upper Sand. Water level and water quality conditions in the Upper Wind River sand are very similar to those observed in 1996, except for a few changes on the distal edge of Upper sand saturated zones. The pH in most wells has remained stable in the past year. The reduction in the source of low pH water is thought to have caused an overall stabilization, and in some areas, an improvement in the pH of groundwater in the Upper Wind River sand.

Cadmium concentrations in the Upper Wind River sand have been fairly stable during the last year. Chromium concentrations appear to have decreased slightly over the past year. Lead concentrations continued to be below the site standard of 0.05 mg/l during the past year. Nickel concentrations generally decreased to the north. Selenium values above site standards were little changed from the previous year and very limited in areal extent.

Uranium concentrations increased slightly over the past year in most wells. Radium 226 and 228 showed above site standard concentrations in the majority of the wells tested over the past year. However, the proximity of numerous naturally occurring uranium ore bodies to the tailings pond makes it very difficult to determine if high radium values are the result of tailings

seepage or natural. Thorium-230 concentrations in 1996 were generally similar to the values observed in the previous year.

Petrotomics' current corrective action is gradually decreasing the water levels in the Upper Wind River sand. The water quality and the areal extent of the contamination in the Upper Wind River has not changed substantially in the past year. Continued gradual change is expected in the future as pumping operations reduce the amount of hazardous constituents in the Upper Wind River sands.

6.1 COLLECTION VOLUMES

Table 6-1 presents the volume of water pumped from the Upper Wind River sand since 1987. These volumes of collected water are presented for each of the collection points. This table shows that a total of 42.6 million gallons of water has been pumped from the Upper sand through the first quarter of 1997. An additional 44.2 million gallons of water has been pumped from the tailings.

6.2 CONSTITUENT VOLUMES

The volume of fluid removed from the Upper sand for each well for each year was accumulated based on weekly pumping rate measurements. The yearly volume pumped from each well was multiplied by the average yearly concentration of each constituent for that well to obtain the quantity of constituents removed. If a constituent concentration was below the detection level, the detection level value was used in the computation of constituent quantity. Table 6-2 presents the volumes of constituents

constituent quantity. Table 6-2 presents the volumes of constituents removed from the Upper sand from 1987 through the first quarter of 1997. This table presents the years on the top of the table, with the right-hand column being an accumulation of all the years. The table shows that a total of 4.08 million kg of total dissolved solids have been removed from the Upper sand. A much lower chloride load (volume times concentration) has been removed due to the smaller concentration of this constituent. Approximately 20.5 and 1110 kg of cadmium and chromium, respectively, have been removed from the Upper sand. A significantly larger volume of nickel (545.5 kg) has been removed due to the higher concentrations of this constituent. A volume of 860 kg of uranium has been pumped from the Upper sand. The volume of radionuclide constituents removed is reported in microcuries. A total of approximately 6,377 microcuries of radium-226 and 228 has been removed from the Upper sand, while approximately 268,800 microcuries of thorium-230 has been removed.

WELL	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1Q 1997	TOTALS
SEEP COLL		3,091,738	1,050,134	4,032								4,145,904
SEEP SUMP				914,054	1,381,464	432,936		400,276	711,144	473,962		4,313,836
51SC	54,734	621,331	125,798		57,859		4,738	3,528				867,988
54SC			460,454	584,035	508,536	258,552	90,518	197,971	257,746	403,805		2,761,617
58SC				1,313,726	2,038,982	1,484,885	724,349	628,589	341,107	364,896	131,544	7,028,078
59SC				5,645	362,376	338,597	22,781	77,616	94,550	59,774	84,470	1,045,799
62SC					85,378	58,262	11,189	17,035	13,406	19,253		204,523
63SC					564,480	613,771	121,988	90,518	34,675	28,123		1,453,535
64SC					281,837	524,664	206,338	77,112		4,939		1,094,890
PT6	213,494	6,921,029	3,610,757	1,077,250	1,739,405	1,025,539	497,650	729,993	341,510	449,971		16,606,598
PT7		73,584	144,850	67,334	87,494	91,526	165,110	165,413	86,789	164,102		1,046,202
PT9						779,688	1,115,957	100,296				1,995,941
TOTALS	268,228	10,707,682	5,391,993	3,966,076	7,107,811	5,608,410	2,960,598	2,488,347	1,880,927	1,968,825	216,014	42,564,911

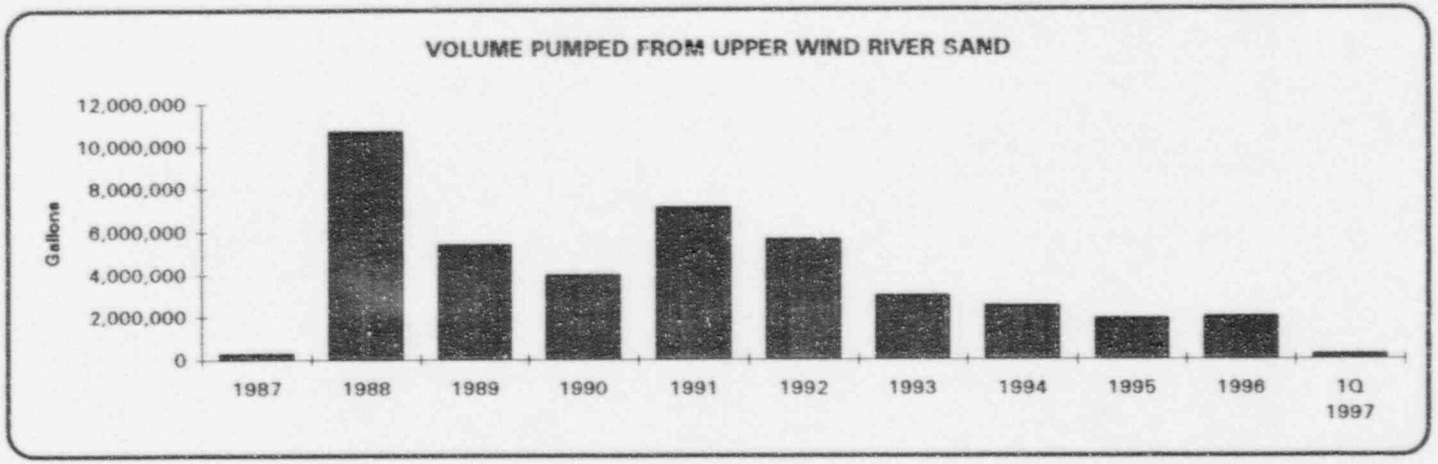


TABLE 6-1. VOLUME PUMPED FROM UPPER WELLS
1987 to 1st Q 1997 - in gallons

CONSTITUENTS	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1Q 1997	TOTALS
TDS	32,999	1,200,593	534,395	390,955	642,771	495,931	264,621	210,279	146,825	151,094	11,837	4,082,299
CHLORIDE	335	14,684	6,802	5,319	9,098	7,138	3,767	3,353	2,561	2,778	302	56,138
SULFATE	20,547	757,806	354,389	246,431	413,383	320,146	181,691	163,878	98,873	108,418	9,273	2,672,838
ARSENIC	0.01	0.66	0.03	0.03	0.08	0.09	0.02	0.03	0.02			0.97
BARIUM	0.1	2.0	1.0	0.8	1.4	1.1	0.6	0.5	0.4			7.7
CADMIUM	0.2	6.4	3.5	1.3	2.6	2.0	1.8	1.1	0.8	0.7	0.1	20.5
CHROMIUM	1.0	26.6	13.0	19.2	15.8	14.9	11.6	4.7	0.3	2.62	0.242	109.9
LEAD	0.5	24.0	12.8	3.3	7.5	1.7	0.6	0.3	0.05	0.03	0.002	50.7
NICKEL	5.6	121.7	20.9	60.6	107.0	81.8	52.4	45.2	28.9	19.3	2.1	545.5
SELENIUM	0.01	0.09	1.37	0.88	0.43	1.55	0.30	0.21	0.15	0.01	0.004	5.01
URANIUM	8	390	97	81	103	82	42	24	17	15	0	860
RADIUM 226 *	40	1,144	42	101	133	112	35	641	307	85	13	2,655
RADIUM 228 *		88	101	773	1,366	617	147	240	162	183	45	3,722
THORIUM 230 *	3,517	68,044	28,248	6,735	33,346	50,547	44,469	21,262	3,127	9,513	14	288,822
TOTAL GALLONS PUMPED	2[illegible]3,228	10,707,682	5,391,993	3,966,076	7,107,811	5,608,410	2,960,598	2,488,349	1,880,927	1,968,825	216,014	42,564,913

NOTE: All measurements are in kilograms, except where noted.
* Ra226, Ra228 and Th230 are measured in microcuries

TABLE 6-2. VOLUME OF CONSTITUENTS REMOVED FROM THE UPPER SAND
DECEMBER 1987 THROUGH 1st QUARTER 1997

7.0 BACKGROUND WATER QUALITY

Wells 39SC and 41SC are the designated background wells for the Upper Wind River sand at the Petrotomics' tailings site (see NRC License SUA-551, Condition 47B). Table 7-1 presents the range in hazardous constituent concentrations observed in those background wells from the second quarter of 1996 to the first quarter of 1997. Site standards for this site are presented for comparison purposes.

The site standards for four of the eight hazardous constituents were exceeded in at least one of the background wells during the quarterly sampling over the past year. The concentrations in excess of the site standards are mainly the result of using the mean concentrations of two wells when the site standards were established.

CONSTITUENT	RANGE OF CONCENTRATIONS 39SC & 41SC	SITE STANDARDS
pH (Standard Units))	6.91 - 4.50	None
Cadmium (mg/l)	<0.001 - <0.05	0.014
Chromium (mg/l)	0.04- 0.06	0.05
Lead (mg/l)	<0.002 - 0.005	0.05
Nickel (mg/l)	<0.05 - 0.13	0.22
Selenium (mg/l)	<0.001 - 0.006	0.01
Uranium (mg/l)	0.018 - 0.076	0.16
Ra226 + 228 (pCi/l)	0.0 - 5.9	5.00
Th 230 (pCi/l)	1.0 - 6.10	3.94

TABLE 7-1. RANGE OF CONCENTRATIONS FOR BACKGROUND WELLS 39SC & 41SC
2nd QTR 1996 - 1st QTR 1997

8.0 REFERENCES

Harshman, E. N., 1972, *Geology and Uranium Deposits, Shirley Basin, Wyoming*, USGS.

Hydro-Engineering, 1986, *Updated Ground-Water Hydrology of Petrotomics' Tailings Area*, Consulting Report for Petrotomics Company.

Hydro-Engineering, 1988, *Compliance Monitoring in the Upper Wind River Aquifer at Petrotomics' Tailings Area*, Consulting Report for Petrotomics Company.

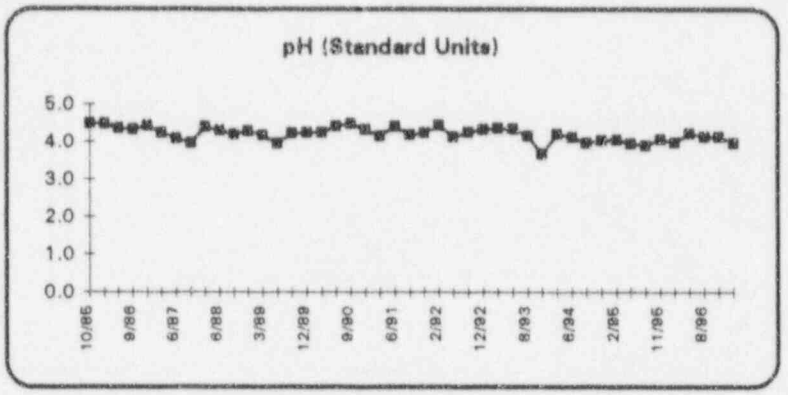
Petrotomics Company, 1996, *Review of Corrective Action in the Upper Wind River Aquifer at Petrotomics' Tailings Area*.

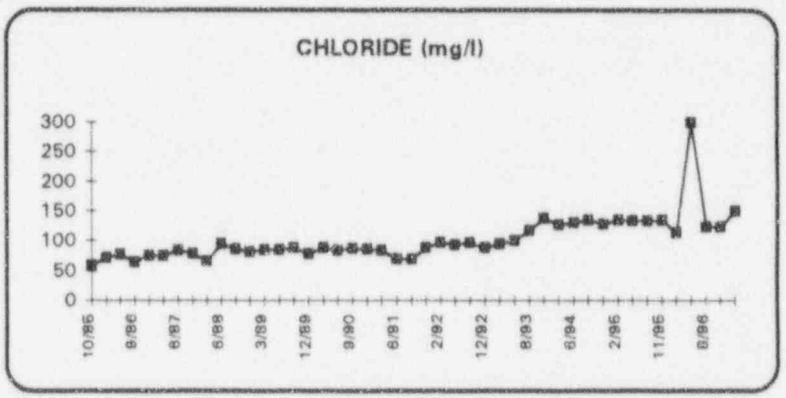
APPENDIX

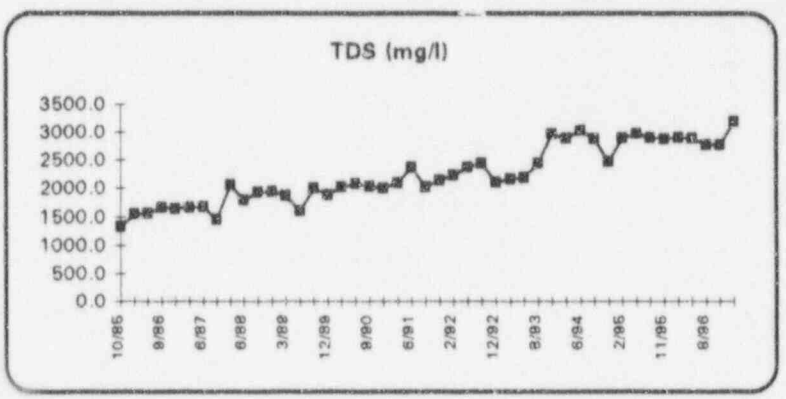
WATER QUALITY DATA FOR THE UPPER WIND RIVER WATER

WELL 1SC

DATE	pH	CHLORIDE	TDS
Oct-85	4.5	58	1336.0
Mar-86	4.5	72	1550.0
May-86	4.4	77	1562.0
Sep-86	4.3	64	1671.0
Nov-86	4.4	75	1641.0
Mar-87	4.3	75	1667.0
Jun-87	4.1	84	1678.0
Sep-87	4.0	78	1456.0
Jan-88	4.4	86	2067.0
Jun-88	4.3	95	1793.0
Sep-88	4.2	86	1931.0
Nov-88	4.3	82	1952.0
Mar-89	4.2	85	1883.0
May-89	3.9	85	1615.0
Sep-89	4.2	88	2004.0
Dec-89	4.3	78	1893.0
Mar-90	4.2	89	2029.0
Jun-90	4.4	84	2083.0
Sep-90	4.5	87	2038.0
Dec-90	4.3	86	2000.0
Feb-91	4.2	84	2092.0
Jun-91	4.4	70	2378.0
Sep-91	4.2	70	2025.0
Dec-91	4.3	88	2148.0
Feb-92	4.4	97	2232.0
Jun-92	4.1	94	2372.0
Aug-92	4.3	97	2451.0
Dec-92	4.3	88	2110.0
Feb-93	4.4	94	2166.0
May-93	4.4	100	2185.0
Aug-93	4.2	117	2449.0
Nov-93	3.7	138	2981.0
Mar-94	4.2	127	2900.0
Jun-94	4.1	130	3040.0
Sep-94	4.0	135	2880.0
Dec-94	4.0	128	2480.0
Feb-95	4.1	135	2900.0
May-95	4.0	134.	2980.0
Aug-95	3.9	133.	2910.0
Nov-95	4.1	135.	2890.0
Feb-96	4.0	114.	2910.0
Jun-96	4.2	300	2900.0
Aug-96	4.1	123	2780.0
Aug-96	4.1	123.	2780.0
Feb-97	4.0	150.	3200.0

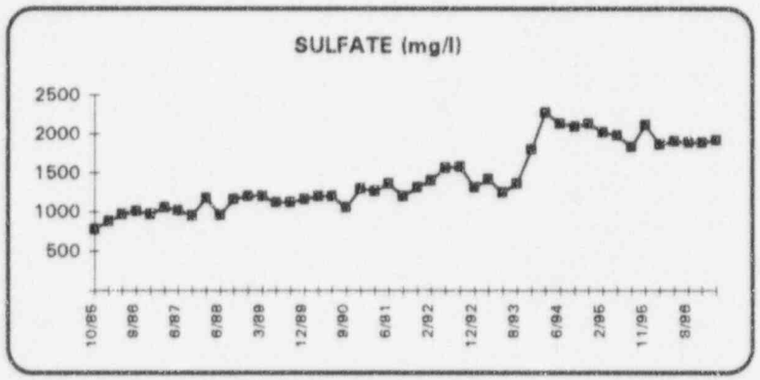


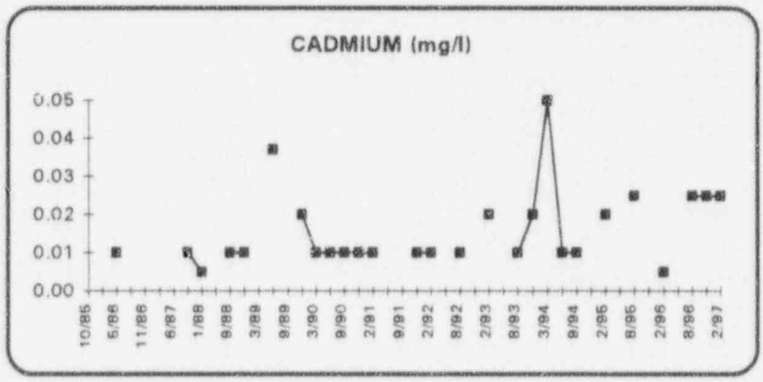


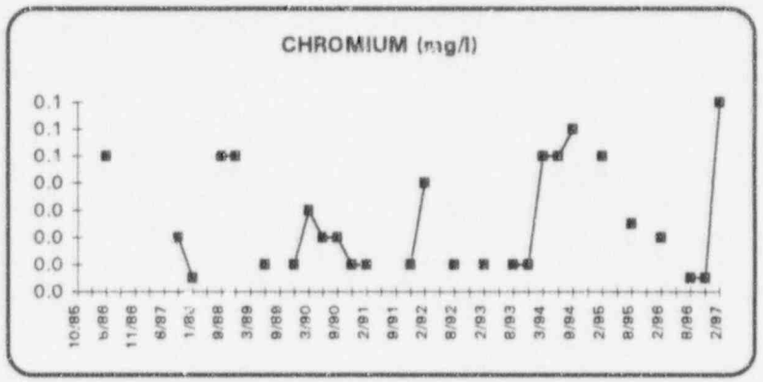


WELL 1SC

DATE	SO4	Cadmium	Chromium
Oct-85	780		
Mar-86	882		
May-86	975	0.01	0.1
Sep-86	1010		
Nov-86	973		
Mar-87	1060		
Jun-87	1020		
Sep-87	953	0.01	0.0
Jan-88	1180	0.01	0.0
Jun-88	960		
Sep-88	1160	0.01	0.1
Nov-88	1200	0.01	0.1
Mar-89	1200		
May-89	1120	0.04	0.0
Sep-89	1120		
Dec-89	1160	0.02	0.0
Mar-90	1200	0.01	0.0
Jun-90	1200	0.01	0.0
Sep-90	1080	0.01	0.0
Dec-90	1300	0.01	0.0
Feb-91	1267	0.01	0.0
Jun-91	1360		
Sep-91	1200		
Dec-91	1310	0.01	0.0
Feb-92	1400	0.01	0.0
Jun-92	1560		
Aug-92	1580	0.01	0.0
Dec-92	1310		
Feb-93	1420	0.02	0.0
May-93	1250		
Aug-93	1360	0.01	0.0
Nov-93	1800	0.02	0.0
Mar-94	2280	0.05	0.1
Jun-94	2130	0.01	0.1
Sep-94	2090	0.01	0.1
Dec-94	2130		
Feb-95	2020	0.02	0.1
May-95	1980		
Aug-95	1830	.025	0.0
Nov-95	2120		
Feb-96	1860	.005	0.0
Jun-96	1900		
Aug-96	1890	0.025	0.0
Aug 96	1890	.025	0.0
Feb-97	1920	.025	0.1

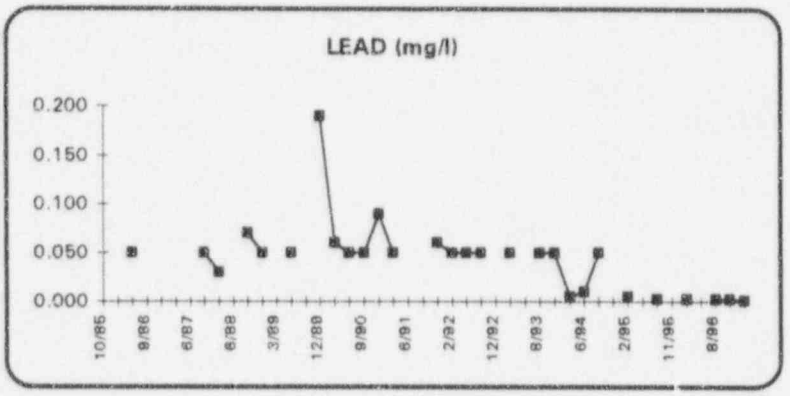


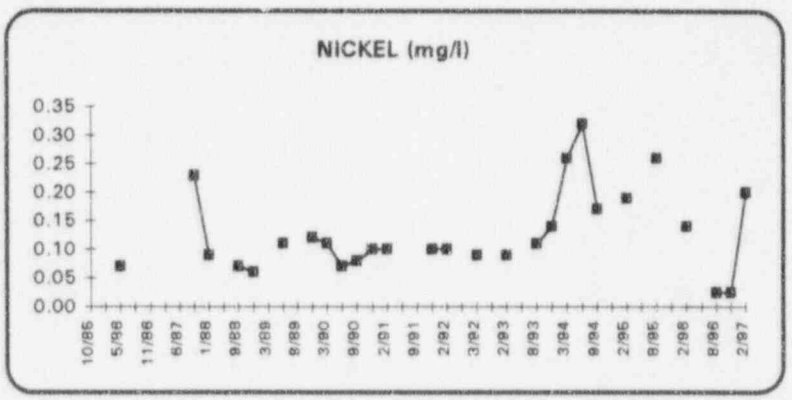


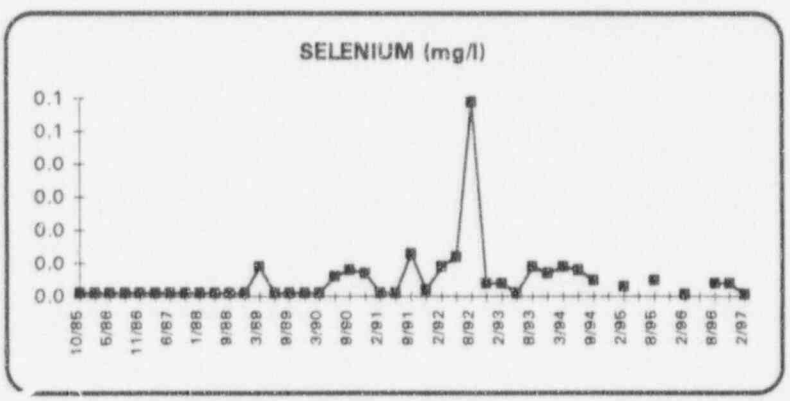


WELL 1SC

DATE	LEAD	NICKEL	SELENIUM
Oct-85			0.0
Mar-86			0.0
May-86	0.050	0.07	0.0
Sep-86			0.0
Nov-86			0.0
Mar-87			0.0
Jun-87			0.0
Sep-87	0.050	0.23	0.0
Jan-88	0.030	0.09	0.0
Jun-88			0.0
Sep-88	0.070	0.07	0.0
Nov-88	0.050	0.06	0.0
Mar-89			0.0
May-89	0.050	0.11	0.0
Sep-89			0.0
Dec-89	0.190	0.12	0.0
Mar-90	0.060	0.11	0.0
Jun-90	0.050	0.07	0.0
Sep-90	0.050	0.08	0.0
Dec-90	0.090	0.10	0.0
Feb-91	0.050	0.10	0.0
Jun-91			0.0
Sep-91			0.0
Dec-91	0.060	0.10	0.0
Feb-92	0.050	0.10	0.0
Jun-92	0.050		0.0
Aug-92	0.050	0.09	0.1
Dec-92			0.0
Feb-93	0.050	0.09	0.0
May-93			0.0
Aug-93	0.050	0.11	0.0
Nov-93	0.050	0.14	0.0
Mar-94	0.005	0.26	0.0
Jun-94	0.010	0.32	0.0
Sep-94	0.050	0.17	0.0
Dec-94			
Feb-95	0.005	0.19	0.0
May-95			
Aug-95	.0025	0.26	0.0
Nov-95			
Feb-96	.0025	0.14	0.0
Jun-96			
Aug-96	0.0025	0.025	0.0
Aug-96	.0025	0.025	0.0
Feb-97	.001	0.200	0.0

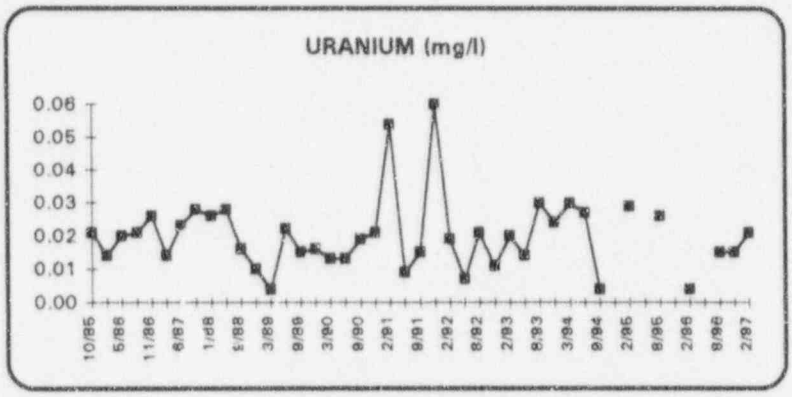


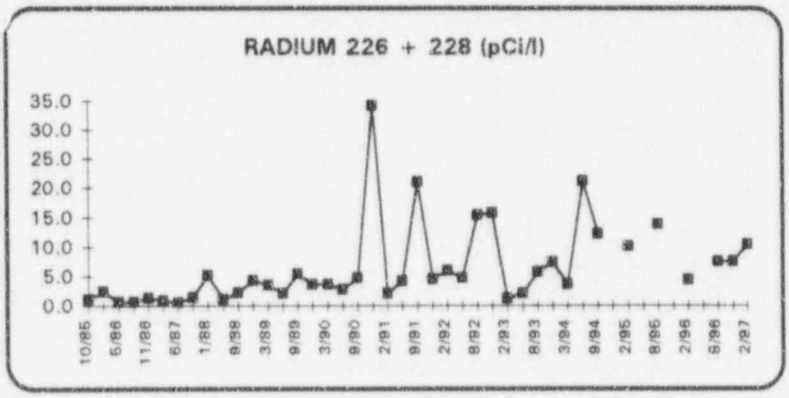


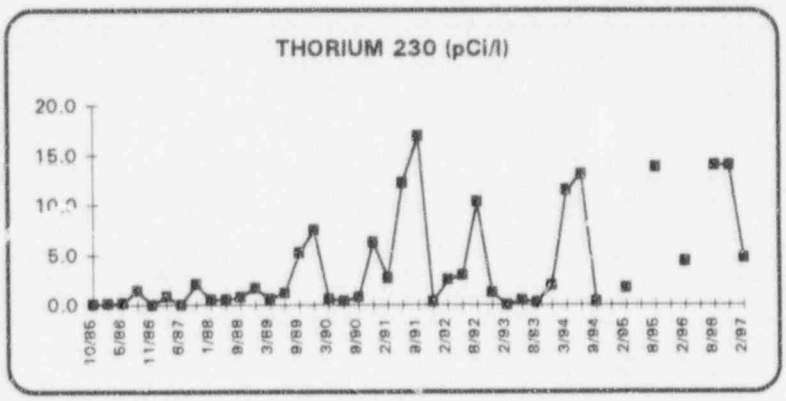


WELL 1SC

DATE	URANIUM	Ra 6+8	Th 230
Oct-85	0.02	1.1	0.1
Mar-86	0.01	2.4	0.1
May-86	0.02	0.7	0.2
Sep-86	0.02	0.6	1.5
Nov-86	0.03	1.3	0.0
Mar-87	0.01	0.9	
Jun-87	0.02	0.5	0.2
Sep-87	0.03	1.4	2.1
Jan-88	0.03	5.2	0.5
Jun-88	0.03	1.1	0.5
Sep-88	0.02	2.2	0.8
Nov-88	0.01	4.3	1.7
Mar-89	0.00	3.5	0.6
May-89	0.02	2.1	1.2
Sep-89	0.02	5.4	5.2
Dec-89	0.02	3.6	7.5
Mar-90	0.01	3.7	0.6
Jun-90	0.01	2.8	0.4
Sep-90	0.02	4.8	0.8
Dec-90	0.02	34.2	6.3
Feb-91	0.05	2.1	2.7
Jun-91	0.01	4.2	12.2
Sep-91	0.02	21.1	16.9
Dec-91	0.06	4.6	0.3
Feb-92	0.02	6.0	2.5
Jun-92	0.01	4.8	3.0
Aug-92	0.02	15.4	10.3
Dec-92	0.01	15.7	1.3
Feb-93	0.02	1.2	0.0
May-93	0.01	2.1	0.5
Aug-93	0.03	5.7	0.3
Nov-93	0.02	7.5	1.9
Mar-94	0.03	3.7	11.5
Jun-94	0.03	21.1	13.1
Sep-94	0.00	12.2	0.3
Dec-94			
Feb-95	0.03	10.1	1.7
May-95			
Aug-95	.028	13.8	13.8
Nov-95			
Feb-96	.004	4.4	4.4
Jun-96			
Aug-96	0.015	7.5	14.0
Aug-96	.015	7.5	14.0
Feb-97	.021	10.4	4.7

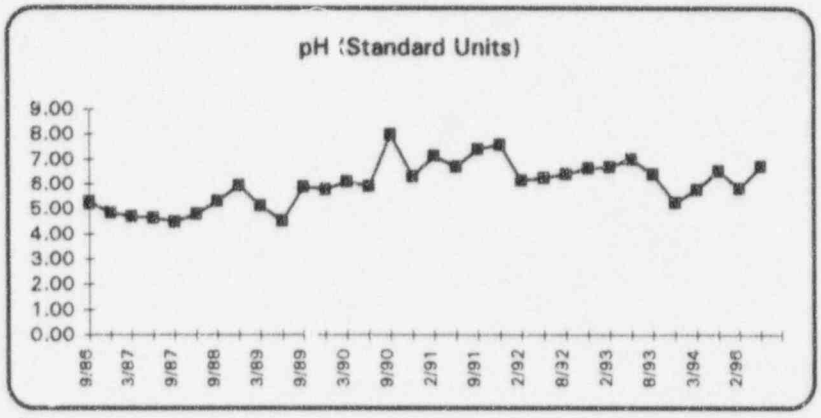


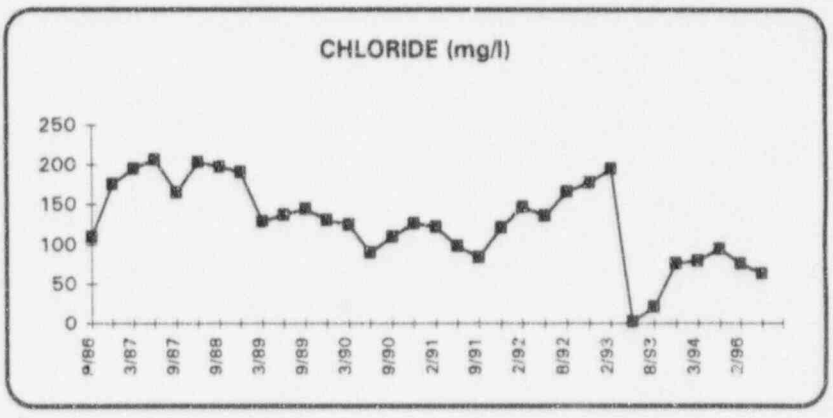


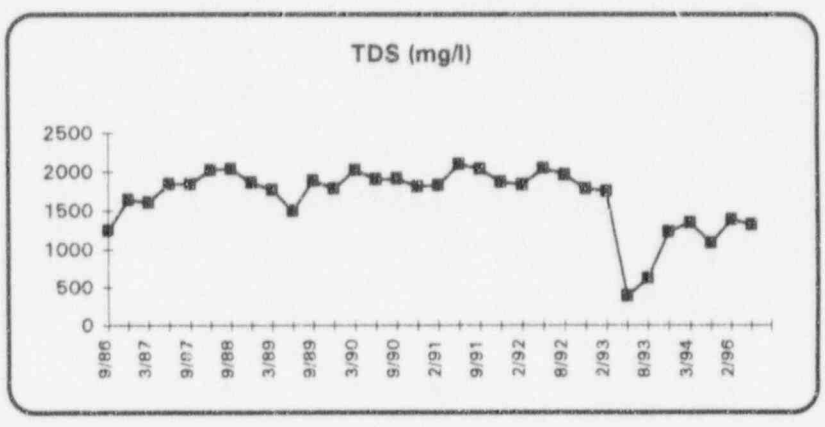


WELL 2SC

DATE	pH	CHLORIDE	TDS
Sep-86	5.29	110	1247
Nov-86	4.84	178	1644
Mar-87	4.89	196	1614
Jun-87	4.65	206	1847
Sep-87	4.49	166	1851
Jun-88	4.80	203	2029
Sep-88	5.33	197	2044
Nov-88	5.95	191	1867
Mar-89	5.14	129	1776
May-89	4.64	137	1504
Sep-89	5.89	144	1894
Dec-89	5.78	130	1790
Mar-90	6.10	126	2024
Jun-90	5.92	90	1905
Sep-90	6.01	110	1919
Dec-90	6.32	126	1815
Feb-91	7.15	122	1833
Jun-91	6.71	99	2102
Sep-91	7.41	86	2041
Dec-91	7.68	121	1877
Feb-92	6.15	147	1839
Jun-92	6.25	136	2061
Aug-92	6.43	166	1971
Dec-92	6.66	177	1789
Feb-93	6.71	196	1767
May-93	7.03	2	388
Aug-93	6.43	22	624
Nov-93	6.26	77	1230
Mar-94	6.80	80	1350
Feb-95	6.66	95.	1090
Feb-96	6.86	77.	1390
Feb-97	6.73	84.	1330

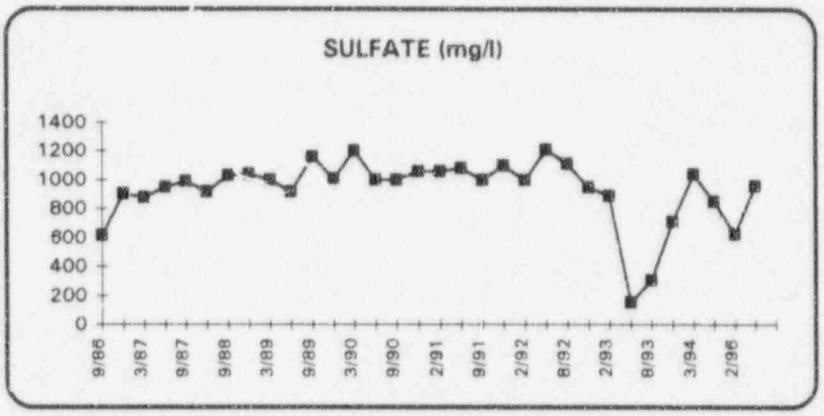


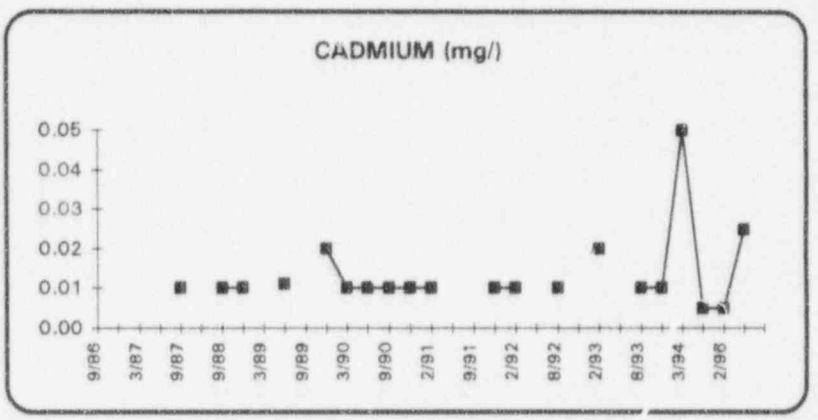


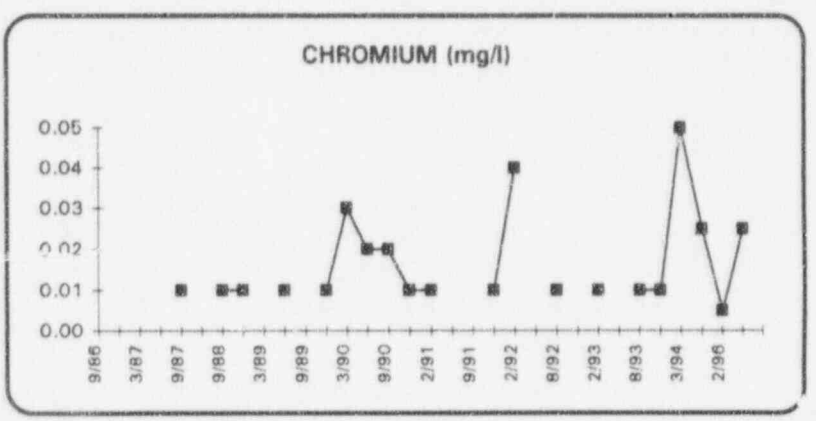


WELL 2SC

DATE	SULFATE	Cadmium	Chromium
Sep-86	618		
Nov-86	904		
Mar-87	880		
Jun-87	960		
Sep-87	990	0.01	0.01
Jun-88	920		
Sep-88	1030	0.01	0.01
Nov-88	1040	0.01	0.01
Mar-89	1000		
May-89	920	0.01	0.01
Sep-89	1160		
Dec-89	1010	0.02	0.01
Mar-90	1200	0.01	0.03
Jun-90	1000	0.01	0.02
Sep-90	1000	0.01	0.02
Dec-90	1060	0.01	0.01
Feb-91	1060	0.01	0.01
Jun-91	1080		
Sep-91	1000		
Dec-91	1100	0.01	0.01
Feb-92	1000	0.01	0.04
Jun-92	1210		
Aug-92	1110	0.01	0.01
Dec-92	960		
Feb-93	890	0.02	0.01
May-93	162		
Aug-93	307	0.01	0.01
Nov-93	710	0.01	0.01
Mar-94	1040	0.06	0.06
Feb-95	863	.01	.03
Feb-96	627	.01	.01
Feb-97	860	0.026	0.026

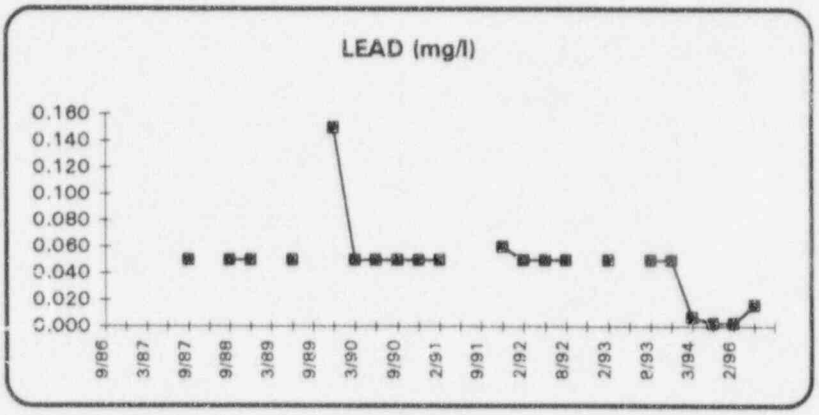


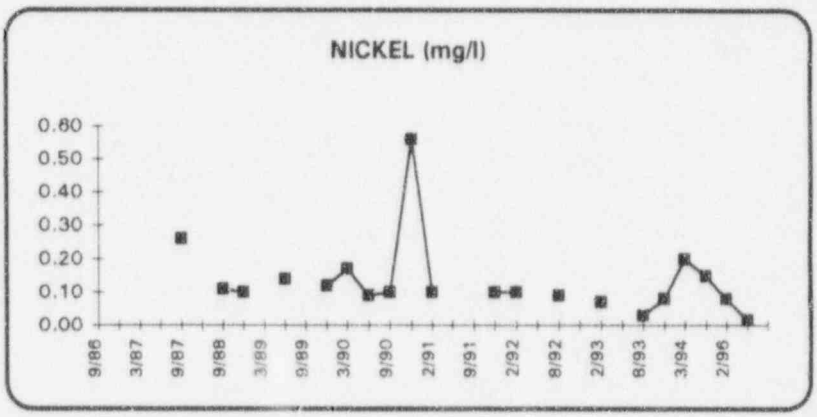


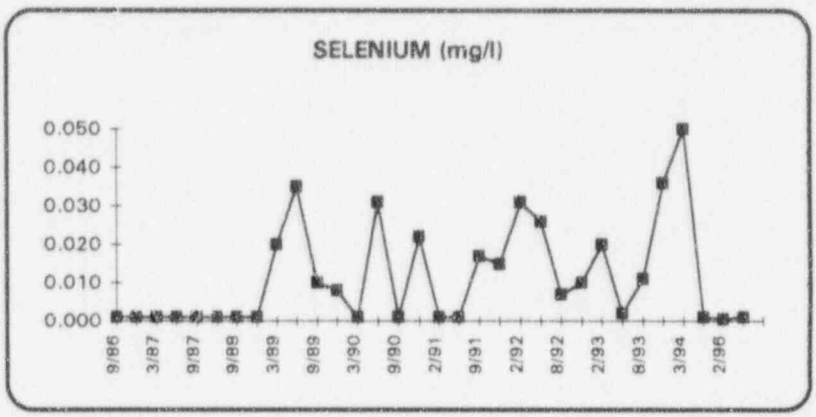


WELL 2SC

DATE	LEAD	NICKEL	SELENIUM
Sep-86			0.001
Nov-86			0.001
Mar-87			0.001
Jun-87			0.001
Sep-87	0.050	0.26	0.001
Jun-88			0.001
Sep-88	0.050	0.11	0.001
Nov-88	0.050	0.10	0.001
Mar-89			0.020
May-89	0.050	0.14	0.035
Sep-89			0.010
Dec-89	0.150	0.12	0.008
Mar-90	0.050	0.17	0.001
Jun-90	0.050	0.09	0.031
Sep-90	0.050	0.10	0.001
Dec-90	0.050	0.56	0.022
Feb-91	0.050	0.10	0.001
Jun-91			0.001
Sep-91			0.017
Dec-91	0.050	0.10	0.016
Feb-92	0.050	0.10	0.031
Jun-92	0.050		0.026
Aug-92	0.050	0.09	0.007
Dec-92			0.010
Feb-93	0.050	0.07	0.020
May-93			0.002
Aug-93	0.050	0.03	0.011
Nov-93	0.050	0.08	0.036
Mar-94	0.007	0.20	0.050
Feb-95	.0025	0.15	.001
Feb-96	.0025	0.080	.0005
Feb-97	0.016	0.016	0.001

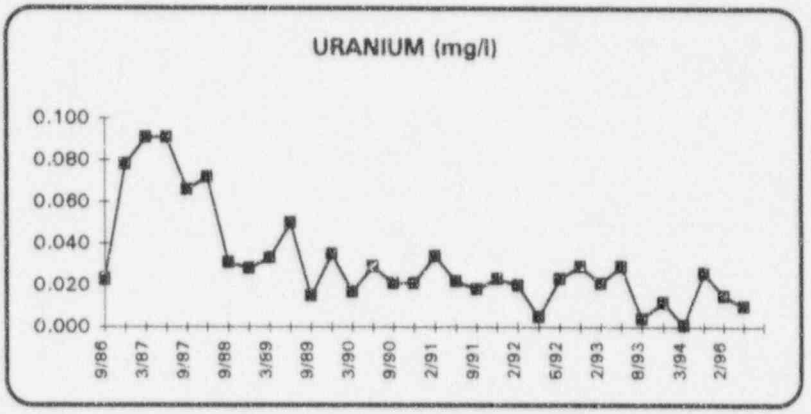


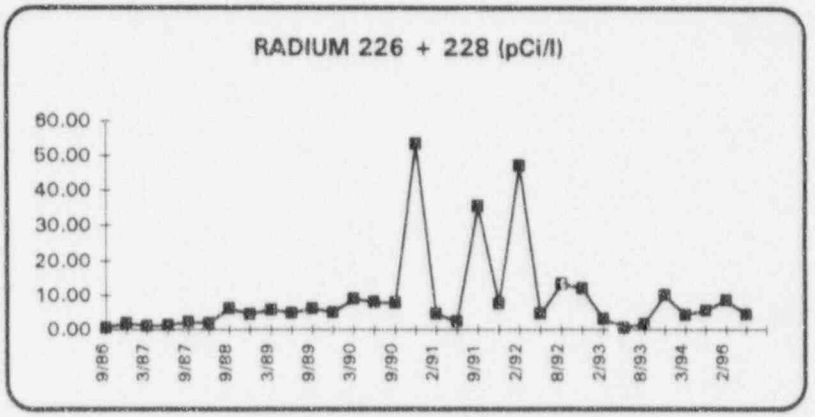


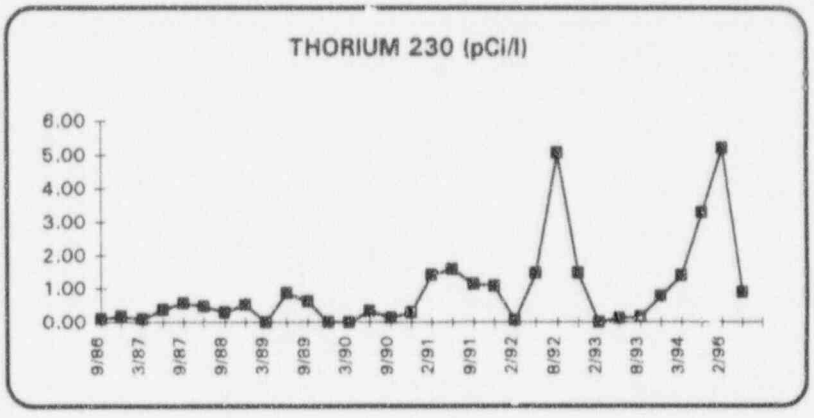


WELL 2SC

DATE	URANIUM	Ra 6+8	Th 230
Sep-86	0.023	0.61	0.09
Nov-86	0.078	1.79	0.17
Mar-87	0.091	1.06	0.10
Jun-87	0.091	1.31	0.37
Sep-87	0.088	2.32	0.57
Jun-88	0.072	1.95	0.46
Sep-88	0.031	6.19	0.29
Nov-88	0.028	4.46	0.53
Mar-89	0.033	5.75	0.00
May-89	0.050	4.86	0.88
Sep-89	0.015	6.30	0.61
Dec-89	0.035	5.04	0.00
Mar-90	0.017	9.05	0.00
Jun-90	0.028	8.06	0.32
Sep-90	0.021	7.92	0.14
Dec-90	0.021	53.43	0.30
Feb-91	0.034	4.73	1.42
Jun-91	0.022	2.39	1.58
Sep-91	0.018	35.46	1.14
Dec-91	0.023	7.64	1.09
Feb-92	0.020	47.14	0.06
Jun-92	0.005	4.64	1.47
Aug-92	0.023	13.27	5.07
Dec-92	0.029	12.13	1.47
Feb-93	0.021	3.17	0.00
May-93	0.029	0.67	0.12
Aug-93	0.004	1.66	0.16
Nov-93	0.012	10.07	0.78
Mar-94	0.001	4.40	1.40
Feb-95	0.026	5.70	3.30
Feb-96	0.016	8.70	5.20
Feb-97	0.01	4.60	0.90

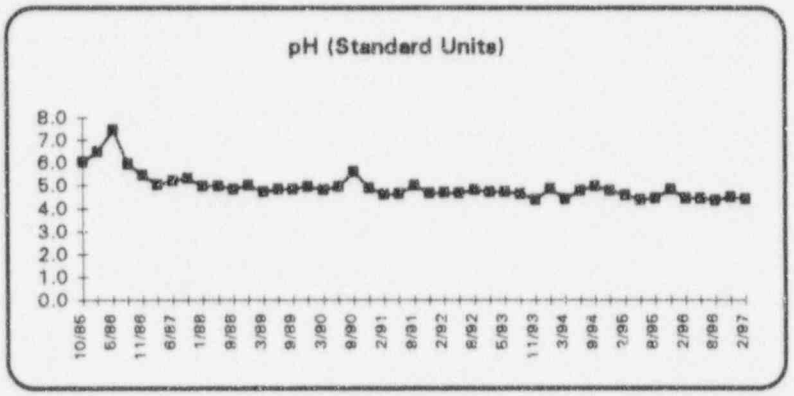


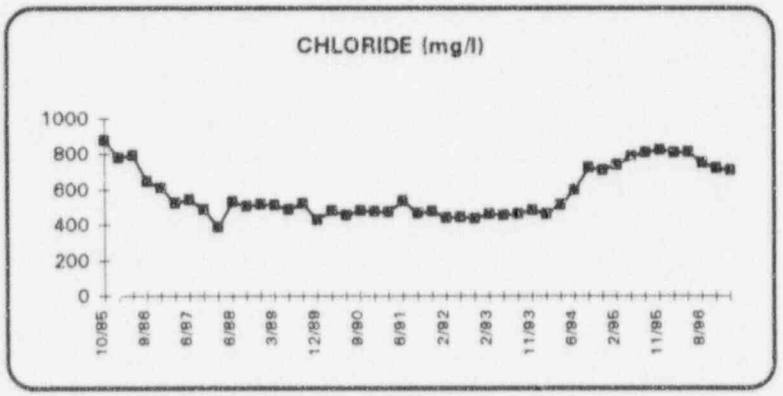


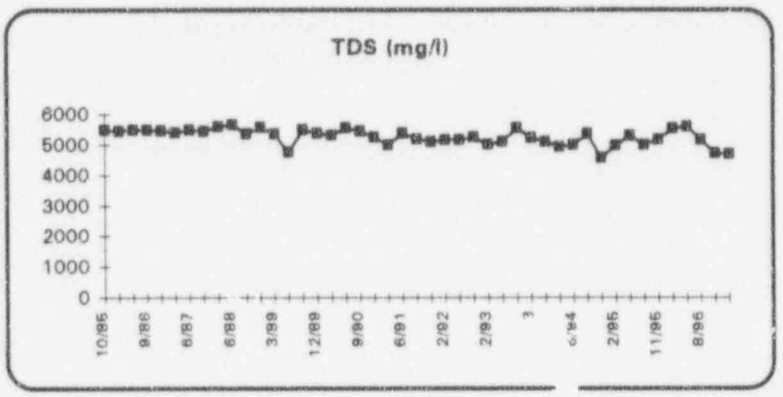


WELL 4SC

DATE	pH	CHLORIDE	TDS
Oct-85	6.0	880	5494
Mar-86	6.5	780	5438
May-86	7.5	794	5494
Sep-86	6.0	648	5488
Nov-86	5.5	610	5462
Mar-87	5.1	526	5407
Jun-87	5.2	545	5494
Sep-87	5.3	488	5443
Jan-88	5.0	388	5599
Jun-88	5.0	532	5655
Sep-88	4.9	506	5361
Nov-88	5.0	517	5570
Mar-89	4.7	515	5368
May-89	4.8	490	4769
Sep-89	4.8	523	5486
Dec-89	5.0	431	5391
Mar-90	4.8	482	5325
Jun-90	5.0	457	5556
Sep-90	5.6	481	5451
Dec-90	4.9	477	5253
Feb-91	4.6	474	4993
Jun-91	4.6	536	5362
Sep-91	5.0	468	5186
Dec-91	4.7	478	5106
Feb-92	4.7	440	5159
Jun-92	4.7	445	5171
Aug-92	4.8	439	5244
Feb-93	4.7	462	5016
May-93	4.7	455	5096
Aug-93	4.6	463	5544
Nov-93	4.4	484	5229
Dec-93	4.9	465	5096
Mar-94	4.4	514	4940
Jun-94	4.8	600	5000
Sep-94	5.0	725	5350
Dec-94	4.8	710	4570
Feb-95	4.6	740	4980
May-95	4.4	785.	5300
Aug-95	4.4	808.	5000
Nov-95	4.8	825.	5160
Feb-96	4.4	810.	5520
Jun-96	4.4	812	5600
Aug-96	4.4	750	5160
Nov-96	4.5	720	4720
Feb-97	4.4	710	4700

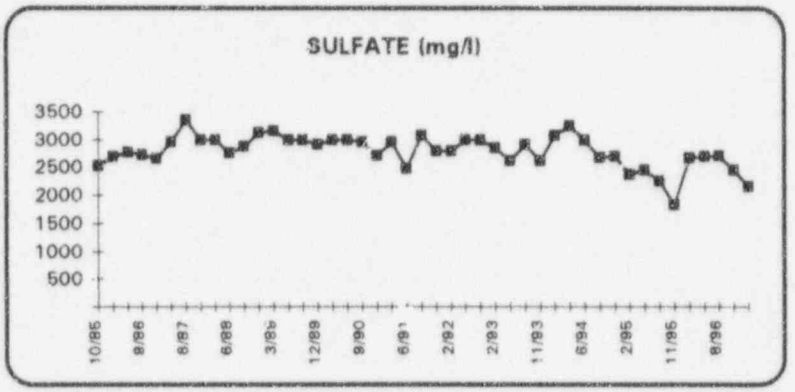


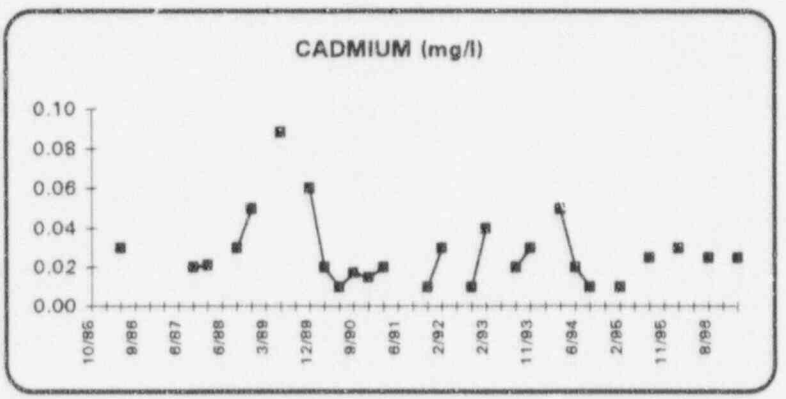


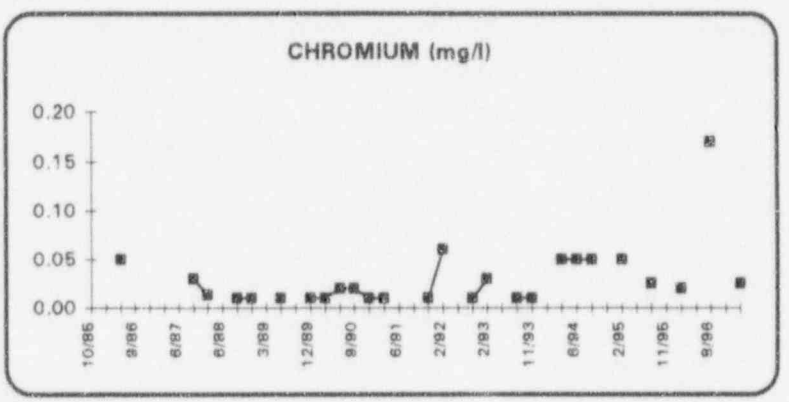


WELL 4SC

DATE	SO4	Cadmium	Chromium
Oct-85	2530		
Mar-86	2696		
May-86	2780	0.03	0.05
Sep-86	2722		
Nov-86	2660		
Mar-87	2960		
Jun-87	3360		
Sep-87	3000	0.02	0.03
Jan-88	3000	0.02	0.01
Jun-88	2760		
Sep-88	2880	0.03	0.01
Nov-88	3120	0.05	0.01
Mar-89	3160		
May-89	3000	0.09	0.01
Sep-89	3000		
Dec-89	2920	0.06	0.01
Mar-90	3000	0.02	0.01
Jun-90	3000	0.01	0.02
Sep-90	2960	0.02	0.02
Dec-90	2720	0.02	0.01
Feb-91	2960	0.02	0.01
Jun-91	2480		
Sep-91	3080		
Dec-91	2800	0.01	0.01
Feb-92	2800	0.03	0.06
Jun-92	3000		
Aug-92	3000	0.01	0.01
Feb-93	2860	0.04	0.03
May-93	2620		
Aug-93	2920	0.02	0.01
Nov-93	2620	0.03	0.01
Dec-93	3080		
Mar-94	3260	0.05	0.05
Jun-94	3000	0.02	0.05
Sep-94	2680	0.01	0.05
Dec-94	2700		
Feb-95	2380	0.01	0.05
May-95	2460		
Aug-95	2260	.025	.025
Nov-95	1840		
Feb-96	2680	.03	.02
Jun-96	2700		
Aug-96	2720	0.03	0.17
Nov-96	2460		
Feb-97	2160	0.03	0.03

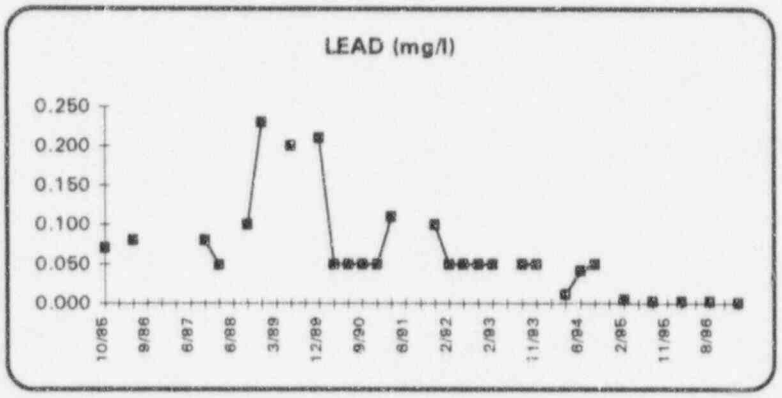


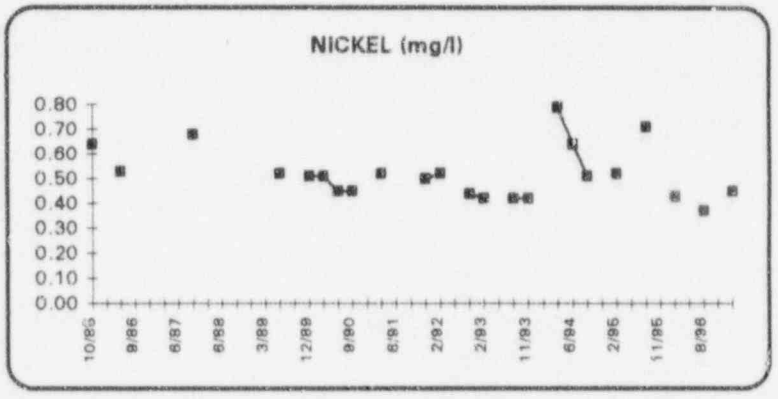


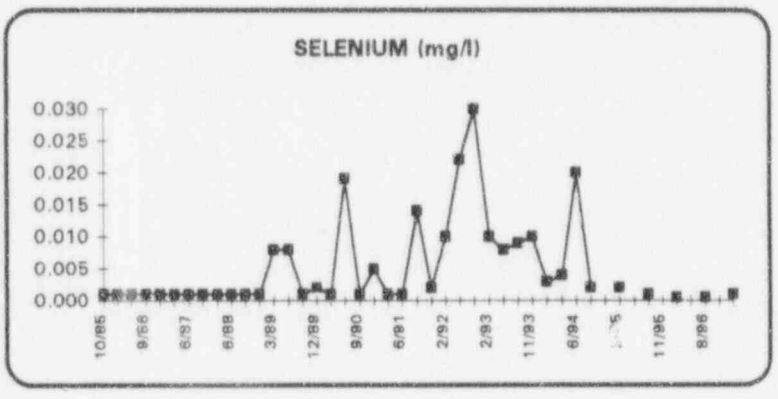


WELL 4SC

DATE	LEAD	NICKEL	SELENIUM
Oct-85	0.070	0.64	0.001
Mar-86			0.001
May-86	0.080	0.53	0.001
Sep-86			0.001
Nov-86			0.001
Mar-87			0.001
Jun-87			0.001
Sep-87	0.080	0.68	0.001
Jan-88	0.049		0.001
Jun-88			0.001
Sep-88	0.100		0.001
Nov-88	0.230		0.001
Mar-89			0.008
May-89	0.200	0.52	0.008
Sep-89			0.001
Dec-89	0.210	0.51	0.002
Mar-90	0.050	0.51	0.001
Jun-90	0.050	0.45	0.019
Sep-90	0.050	0.45	0.001
Dec-90	0.050		0.005
Feb-91	0.110	0.52	0.001
Jun-91			0.001
Sep-91			0.014
Dec-91	0.100	0.50	0.002
Feb-92	0.050	0.52	0.010
Jun-92	0.050		0.022
Aug-92	0.050	0.44	0.030
Feb-93	0.050	0.42	0.010
May-93			0.008
Aug-93	0.050	0.42	0.009
Nov-93	0.050	0.42	0.010
Dec-93			0.003
Mar-94	0.012	0.79	0.004
Jun-94	0.041	0.64	0.020
Sep-94	0.050	0.51	0.002
Dec-94			
Feb-95	0.005	0.52	0.002
May-95			
Aug-95	.0025	.71	.001
Nov-95			
Feb-96	.0025	.43	.0005
Jun-96			
Aug-96	0.003	0.37	0.0005
Nov-96			
Feb-97	0.001	0.45	0.001

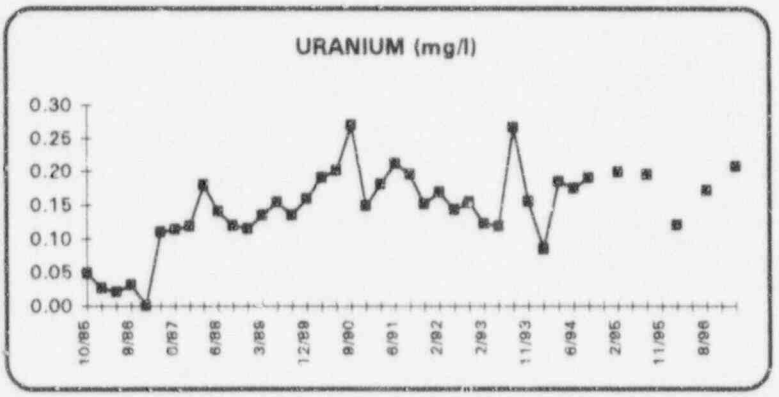


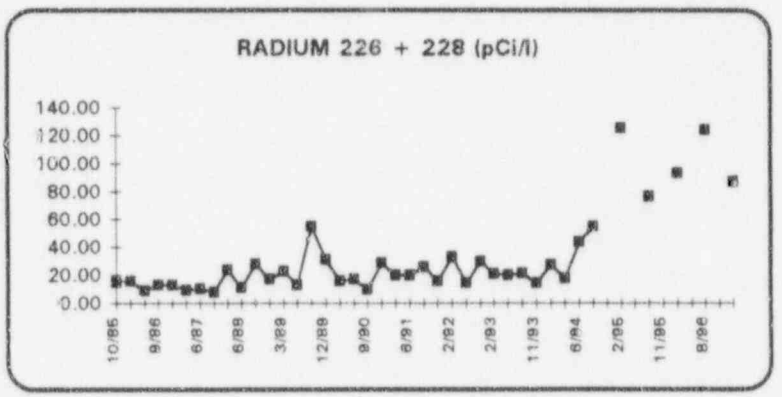


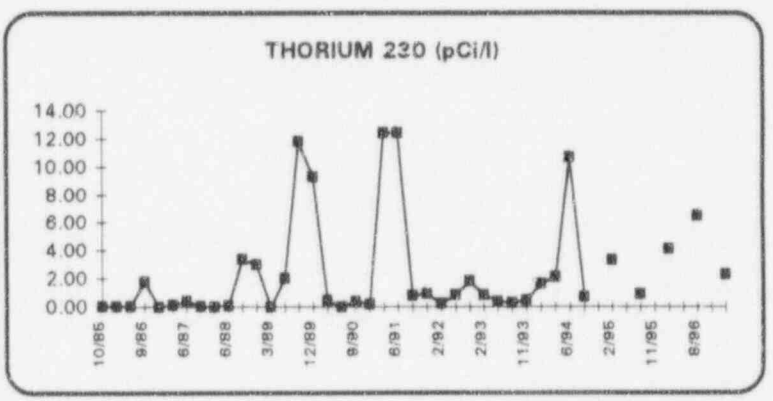


WELL 4SC

DATE	URANIUM	Ra 6+8	Th 230
Oct-85	0.05	14.99	0.04
Mar-86	0.03	15.80	0.03
May-86	0.02	8.74	0.04
Sep-86	0.03	13.00	1.79
Nov-86	0.00	13.10	0.00
Mar-87	0.11	9.20	0.12
Jun-87	0.11	10.20	0.42
Sep-87	0.12	8.12	0.06
Jan-88	0.18	23.66	0.00
Jun-88	0.14	11.30	0.10
Sep-88	0.12	28.00	3.37
Nov-88	0.12	17.20	3.00
Mar-89	0.14	23.00	0.00
May-89	0.16	13.30	2.00
Sep-89	0.14	55.00	11.80
Dec-89	0.16	31.31	9.31
Mar-90	0.19	15.90	0.48
Jun-90	0.20	17.10	0.00
Sep-90	0.27	10.00	0.38
Dec-90	0.15	29.00	0.20
Feb-91	0.18	20.10	12.40
Jun-91	0.21	20.00	12.40
Sep-91	0.20	26.00	0.78
Dec-91	0.15	16.10	0.94
Feb-92	0.17	33.00	0.25
Jun-92	0.14	14.60	0.82
Aug-92	0.16	30.00	1.80
Feb-93	0.12	21.00	0.82
May-93	0.12	19.84	0.37
Aug-93	0.27	21.64	0.29
Nov-93	0.16	14.51	0.48
Dec-93	0.09	27.61	1.63
Mar-94	0.19	17.70	2.10
Jun-94	0.18	43.90	10.70
Sep-94	0.19	55.10	0.70
Dec-94			
Feb-95	0.20	125.70	3.30
May-95			
Aug-95	0.20	76.60	0.90
Nov-95			
Feb-96	0.12	93.20	4.10
Jun-96			
Aug-96	0.17	124.00	6.50
Nov-96			
Feb-97	0.21	87.30	2.30

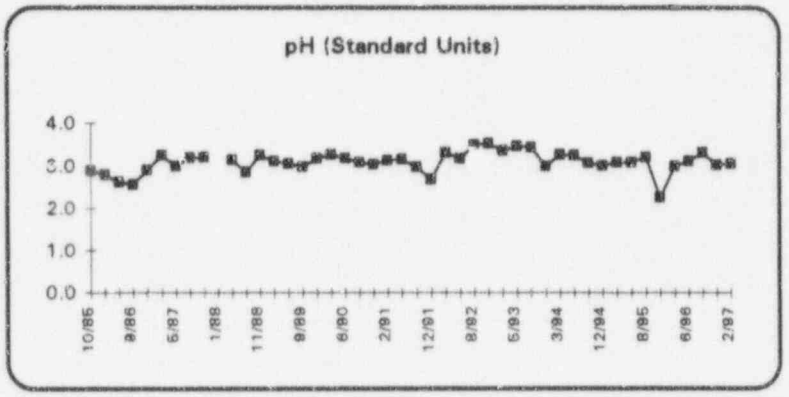


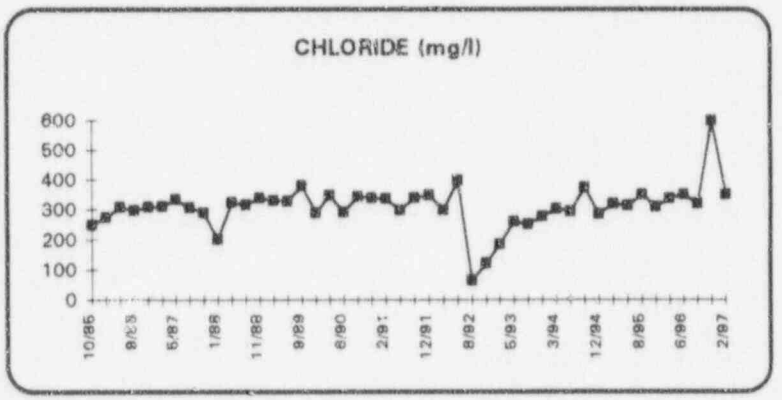


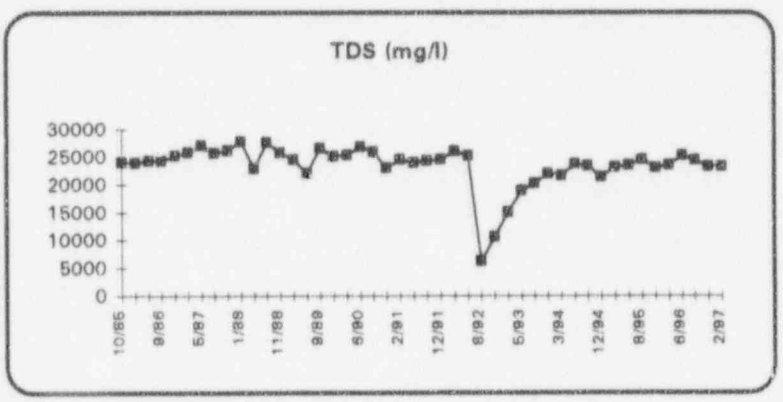


WELL 5SC

DATE	pH	CHLORIDE	TDS
Oct-85	2.9	250	23996
Mar-86	2.8	275	23980
May-86	2.6	310	24268
Sep-86	2.6	300	24234
Nov-86	2.9	309	25236
Mar-87	3.3	311	25782
May-87	3.0	336	27085
Jun-87	3.2	307	25662
Sep-87	3.2	291	26118
Jan-88		201	27765
Jun-88	3.1	324	22846
Sep-88	2.9	316	27690
Nov-88	3.3	340	25812
Mar-89	3.1	331	24568
May-89	3.1	330	22016
Sep-89	3.0	381	26592
Nov-89	3.2	290	25040
Mar-90	3.3	348	25331
Jun-90	3.2	293	26849
Aug-90	3.1	344	25857
Dec-90	3.0	339	22997
Feb-91	3.1	337	24482
Jun-91	3.2	299	23903
Sep-91	3.0	341	24233
Dec-91	2.7	348	24485
Feb-92	3.3	300	26070
Jul-92	3.2	399	25208
Aug-92	3.5	64	6258
Dec-92	3.5	121	10629
Mar-93	3.4	184	15084
May-93	3.5	261	19865
Aug-93	3.4	252	20192
Nov-93	3.0	278	21960
Mar-94	3.3	303	21600
Jun-94	3.3	295	23700
Sep-94	3.1	375	23400
Dec-94	3.0	285	21400
Feb-95	3.1	320	23100
May-95	3.1	315	23500
Aug-95	3.2	350	24500
Nov-95	2.3	310	23000
Feb-96	3.0	338	23500
Jun-96	3.1	350	25200
Aug-96	3.3	320	24400
Nov-96	3.0	600	23200
Feb-97	3.1	350	23200

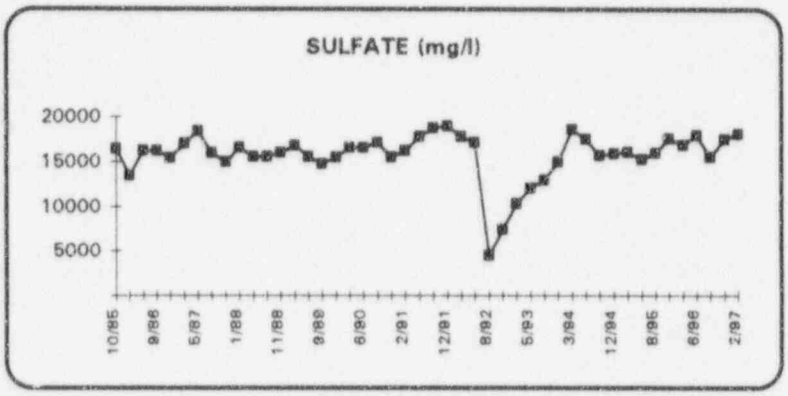


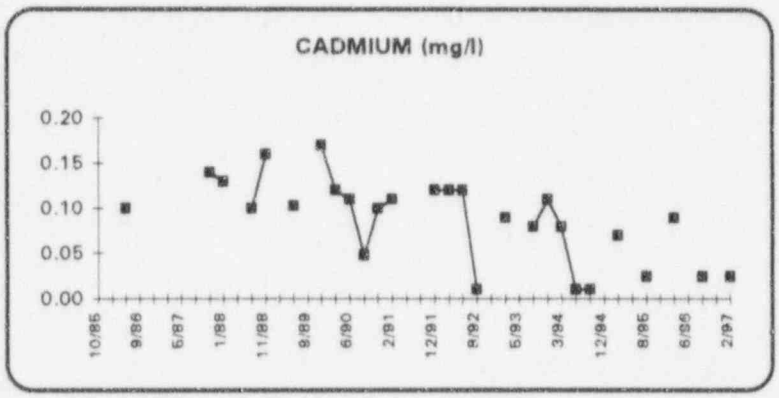


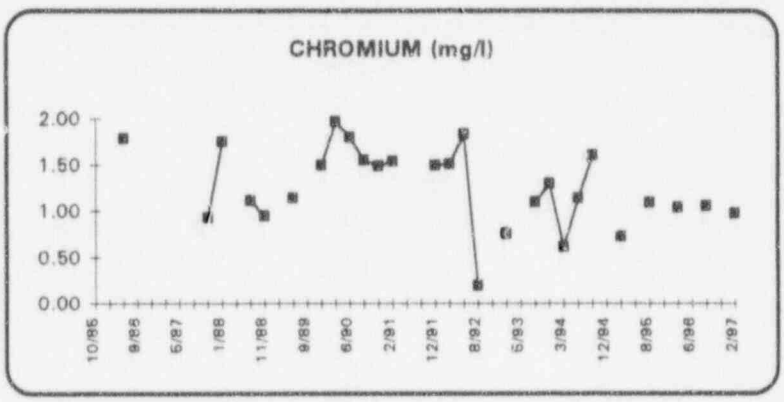


WELL 5SC

DATE	SO4	Cadmium	Chromium
Oct-85	16450		
Mar-86	13480		
May-86	16200	0.10	1.79
Sep-86	16250		
Nov-86	15420		
Mar-87	17000		
May-87	18400		
Jun-87	16000		
Sep-87	15000	0.14	0.93
Jan-88	16600	0.13	1.75
Jun-88	15800		
Sep-88	15800	0.10	1.11
Nov-88	16000	0.16	0.95
Mar-89	16800		
May-89	15600	0.10	1.14
Sep-89	14800		
Nov-89	15500	0.17	1.50
Mar-90	16600	0.12	1.97
Jun-90	16800	0.11	1.80
Aug-90	17200	0.05	1.55
Dec-90	15500	0.10	1.49
Feb-91	16200	0.11	1.54
Jun-91	17800		
Sep-91	18800		
Dec-91	19000	0.12	1.50
Feb-92	17800	0.12	1.51
Jul-92	17200	0.12	1.84
Aug-92	4480	0.01	0.20
Dec-92	7400		
Mar-93	10320	0.09	0.76
May-93	12080		
Aug-93	12960	0.08	1.10
Nov-93	15000	0.11	1.30
Mar-94	18600	0.08	0.62
Jun-94	17500	0.01	1.14
Sep-94	15700	0.01	1.60
Dec-94	15900		
Feb-95	16100	0.07	0.73
May-95	15300		
Aug-95	16000	.025	1.09
Nov-95	17600		
Feb-96	16900	.09	1.04
Jun-96	18000		
Aug-96	15600	0.025	1.06
Nov-96	17500		
Feb-97	18100	0.025	0.98

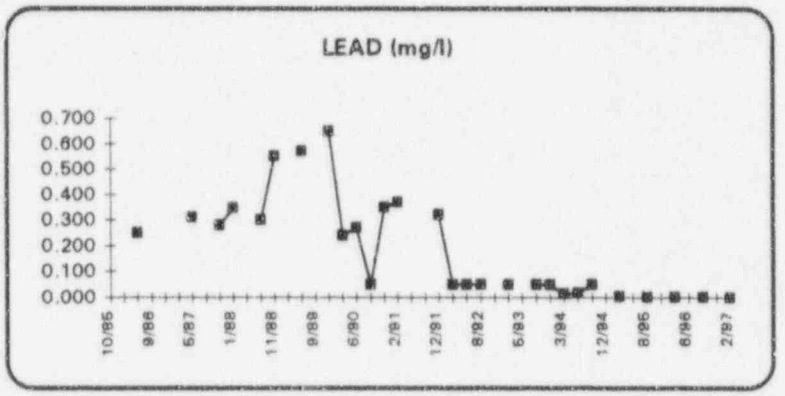


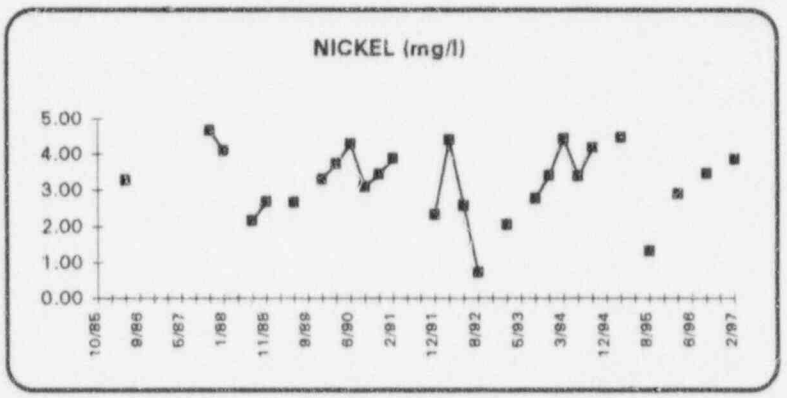


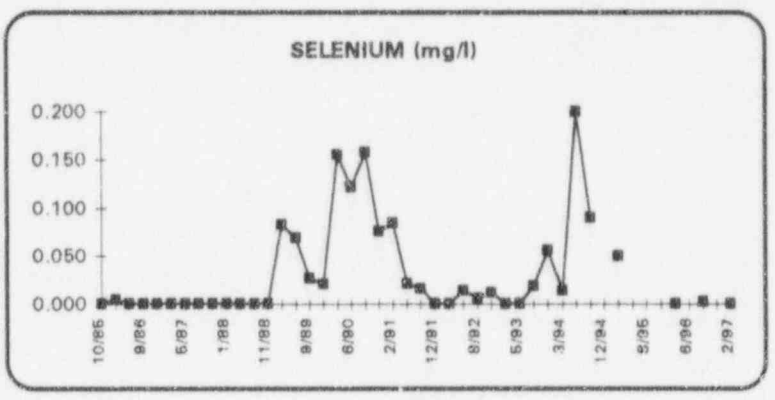


WELL 5SC

DATE	LEAD	NICKEL	SELENIUM
Oct-85			0.001
Mar-86			0.005
May-86	0.250	3.27	0.001
Sep-86			0.001
Nov-86			0.001
Mar-87			0.001
May-87	0.310		0.001
Jun-87			0.001
Sep-87	0.280	4.67	0.001
Jan-88	0.345	4.09	0.001
Jun-88			0.001
Sep-88	0.300	2.15	0.001
Nov-88	0.550	2.68	0.001
Mar-89			0.083
May-89	0.570	2.66	0.089
Sep-89			0.027
Nov-89	0.650	3.30	0.021
Mar-90	0.240	3.74	0.155
Jun-90	0.270	4.30	0.122
Aug-90	0.050	3.10	0.158
Dec-90	0.350	3.44	0.076
Feb-91	0.370	3.88	0.085
Jun-91			0.022
Sep-91			0.016
Dec-91	0.320	2.31	0.001
Feb-92	0.050	4.40	0.001
Jul-92	0.050	2.58	0.014
Aug-92	0.050	0.72	0.006
Dec-92			0.012
Mar-93	0.050	2.04	0.001
May-93			0.001
Aug-93	0.050	2.77	0.019
Nov-93	0.050	3.40	0.056
Mar-94	0.018	4.44	0.014
Jun-94	0.017	3.38	0.200
Sep-94	0.050	4.18	0.090
Dec-94			
Feb-95	0.005	4.48	0.050
May-95			
Aug-95	.0025	1.32	
Nov-95			
Feb-96	.0025	2.9	0.0005
Jun-96			
Aug-96	0.003	3.46	0.003
Nov-96			
Feb-97	0.001	3.85	0.001

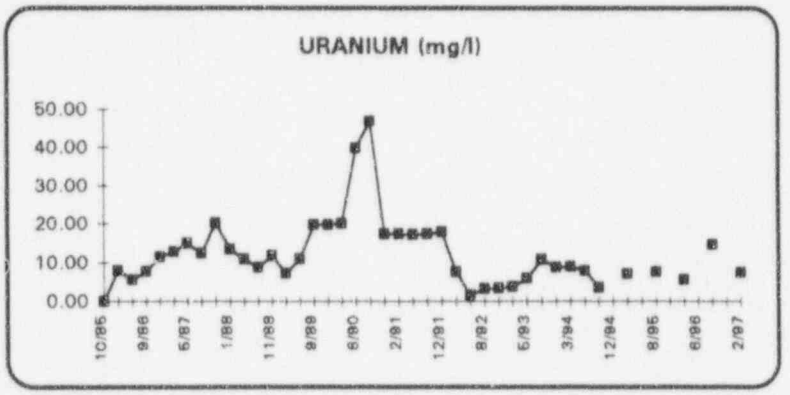


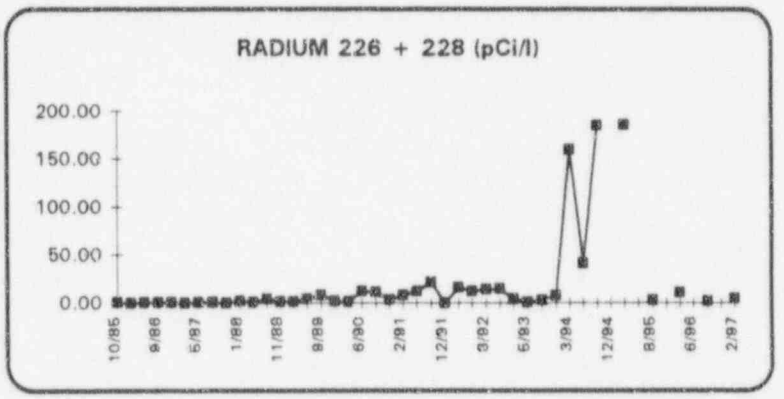


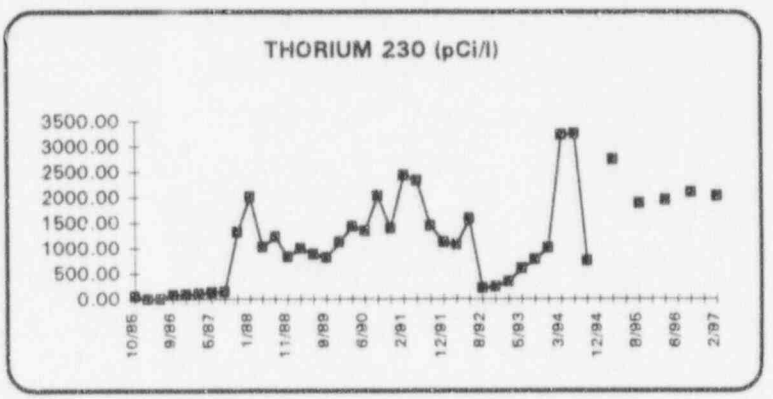


WELL 5SC

DATE	URANIUM	Ra 6+8	Th 230
Oct-85	0.08	0.55	48.80
Mar-86	7.90	0.33	4.16
May-86	5.50	0.75	2.46
Sep-86	7.77	0.39	70.60
Nov-86	11.40	0.58	89.80
Mar-87	12.80	0.28	108.00
May-87	15.00	0.48	125.00
Jun-87	12.40	0.47	146.00
Sep-87	20.20	0.20	1325.00
Jan-88	13.50	2.10	2014.00
Jun-88	11.00	0.55	1020.00
Sep-88	8.70	3.90	1230.00
Nov-88	11.80	1.50	827.00
Mar-89	7.30	1.50	1001.00
May-89	11.00	4.30	881.00
Sep-89	19.70	8.30	825.00
Nov-89	19.70	1.80	1134.00
Mar-90	20.10	1.40	1430.00
Jun-90	39.90	11.90	1340.00
Aug-90	47.00	11.30	2039.00
Dec-90	17.30	3.70	1394.00
Feb-91	17.30	7.90	2438.00
Jun-91	17.20	12.30	2334.00
Sep-91	17.30	22.00	1444.00
Dec-91	17.80	0.22	1123.00
Feb-92	7.52	16.50	1075.00
Jul-92	1.59	11.90	1592.00
Aug-92	3.22	14.10	212.00
Dec-92	3.31	14.80	248.00
Mar-93	3.73	4.00	340.00
May-93	5.87	0.98	604.00
Aug-93	10.70	2.89	783.00
Nov-93	8.82	7.13	1008.00
Mar-94	8.85	159.50	3230.00
Jun-94	7.96	41.40	3280.00
Sep-94	3.61	184.80	761.00
Dec-94			
Feb-95	7.00	186.10	2750.00
May-95			
Aug-95	7.56	2.50	1880
Nov-95			
Feb-96	5.55	11.10	1950
Jun-96			
Aug-96	14.70	1.70	2100.00
Nov-96			
Feb-97	7.35	4.50	2020.00

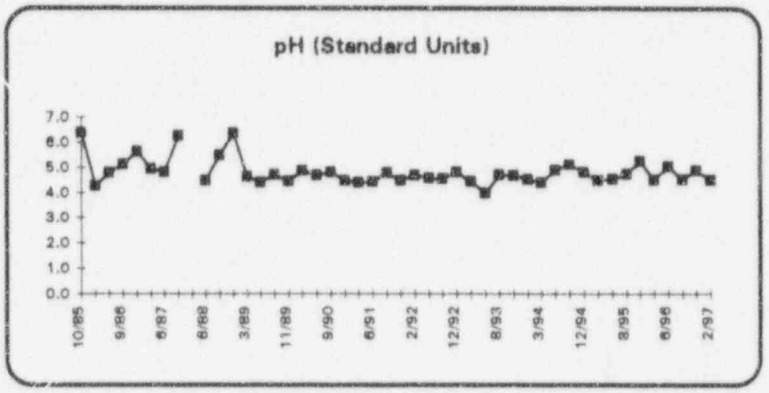


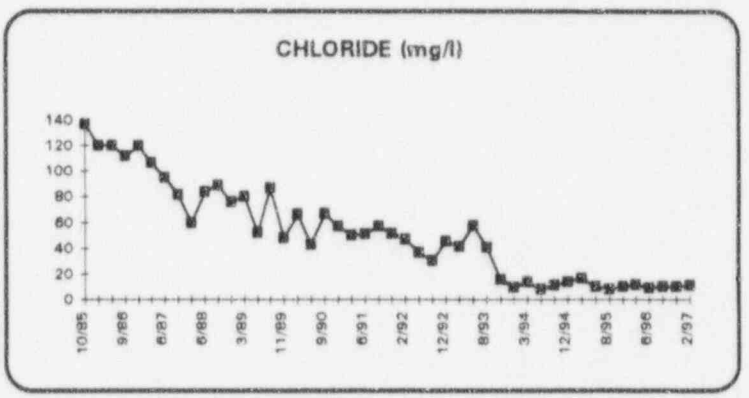


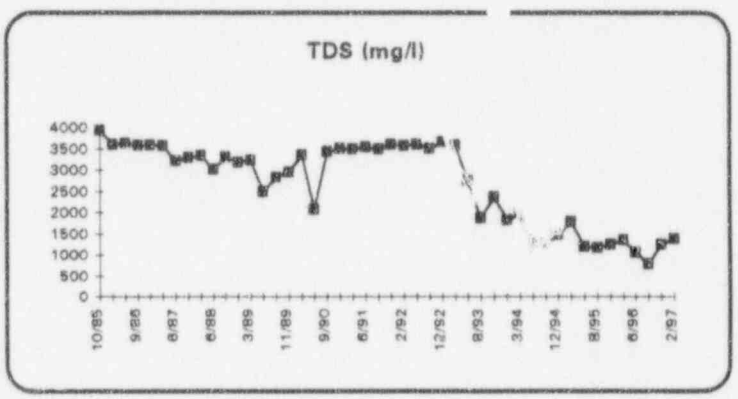


WELL 39SC

DATE	pH	CHLORIDE	TDS
Oct-85	6.4	137	3939
Mar-86	4.3	120	3598
May-86	4.8	120	3634
Sep-86	5.1	112	3591
Nov-86	5.6	120	3586
Mar-87	4.9	107	3576
Jun-87	4.8	95	3216
Sep-87	6.3	82	3288
Jan-88		80	3332
Jun-88	4.5	84	3017
Sep-88	5.5	89	3305
Nov-88	6.4	76	3186
Mar-89	4.6	80	3224
May-89	4.4	52	2486
Sep-89	4.7	87	2831
Nov-89	4.5	48	2980
Mar-90	4.9	67	3359
Jun-90	4.7	43	2080
Sep-90	4.8	67	3432
Dec-90	4.5	57	3511
Feb-91	4.4	50	3493
Jun-91	4.4	51	3533
Sep-91	4.8	57	3494
Dec-91	4.5	52	3596
Feb-92	4.7	47	3570
Jun-92	4.6	37	3594
Aug-92	4.6	31	3502
Dec-92	4.8	46	3661
Mar-93	4.5	42	3590
May-93	4.0	58	2747
Aug-93	4.7	41	1871
Nov-93	4.7	16	2367
Nov-93	4.5	10	1828
Mar-94	4.4	14	1970
Jun-94	4.9	8	1300
Sep-94	5.1	11	1260
Dec-94	4.8	14	1480
Feb-95	4.5	17	1790
May-95	4.5	10	1200
Aug-95	4.7	8	1170
Nov-95	5.3	10	1240
Feb-96	4.5	12	1360
Jun-96	5.0	9	1060
Aug-96	4.5	10	790
Nov-96	4.9	10	1250
Feb-97	4.5	11	1380

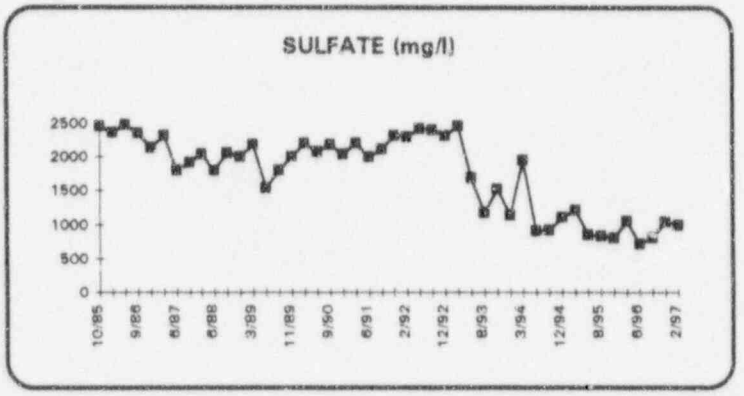


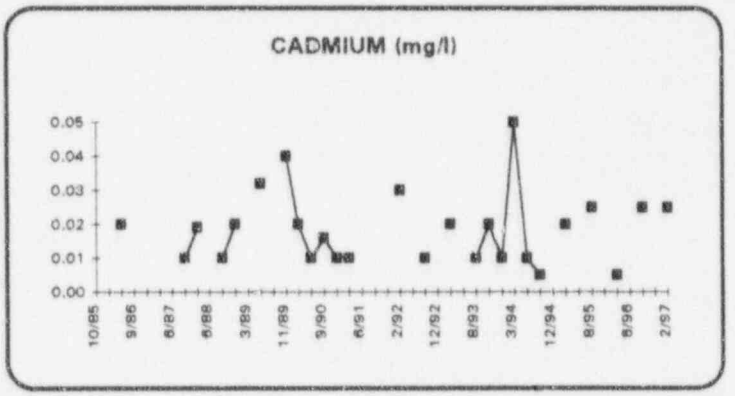


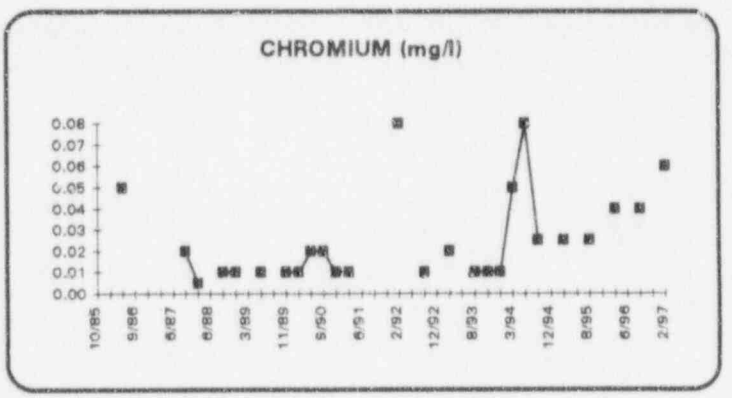


WELL 39SC

DATE	SULFATE	Cadmium	Chromium
Oct-85	2460		
Mar-86	2366		
May-86	2480	0.02	0.05
Sep-86	2354		
Nov-86	2140		
Mar-87	2320		
Jun-87	1800		
Sep-87	1920	0.01	0.02
Jan-88	2040	0.02	0.01
Jun-88	1800		
Sep-88	2060	0.01	0.01
Nov-88	2000	0.02	0.01
Mar-89	2180		
May-89	1540	0.03	0.01
Sep-89	1800		
Nov-89	2000	0.04	0.01
Mar-90	2200	0.02	0.01
Jun-90	2080	0.01	0.02
Sep-90	2180	0.02	0.02
Dec-90	2040	0.01	0.01
Feb-91	2200	0.01	0.01
Jun-91	2000		
Sep-91	2120		
Dec-91	2320		
Feb-92	2300	0.03	0.08
Jun-92	2420		
Aug-92	2400	0.01	0.01
Dec-92	2320		
Mar-93	2460	0.02	0.02
May-93	1700		
Aug-93	1180	0.01	0.01
Nov-93	1520	0.02	0.01
Nov-93	1140	0.01	0.01
Mar-94	1950	0.05	0.05
Jun-94	910	0.01	0.08
Sep-94	920	0.005	0.025
Dec-94	1110		
Feb-95	1220	.02	.025
May-95	850		
Aug-95	830	0.025	0.025
Nov-95	801		
Feb-96	1050	0.005	0.04
Jun-96	720		
Aug-96	806	0.025	0.04
Nov-96	1040		
Feb-97	1000	0.025	0.06

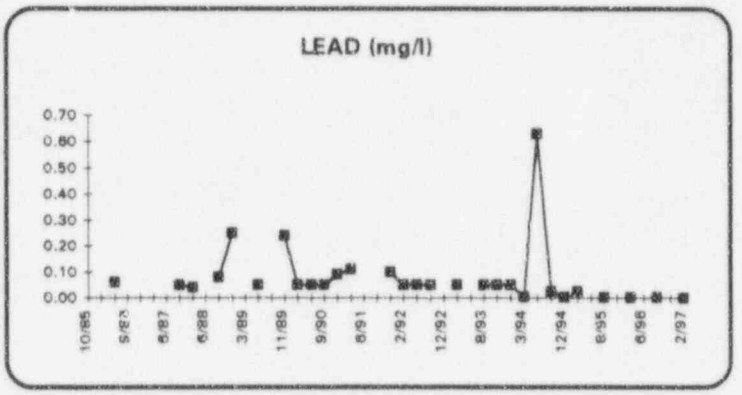


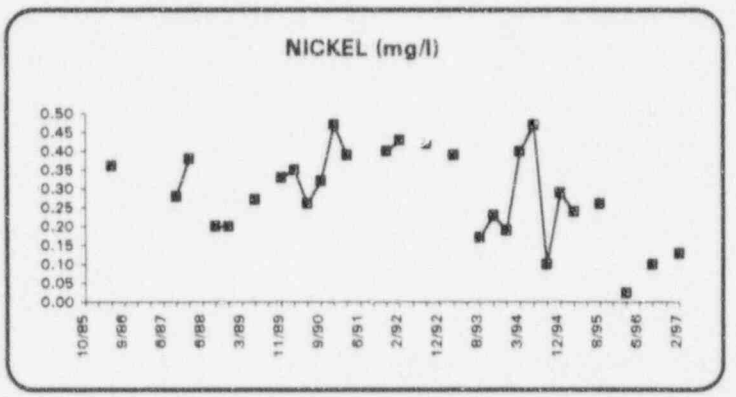


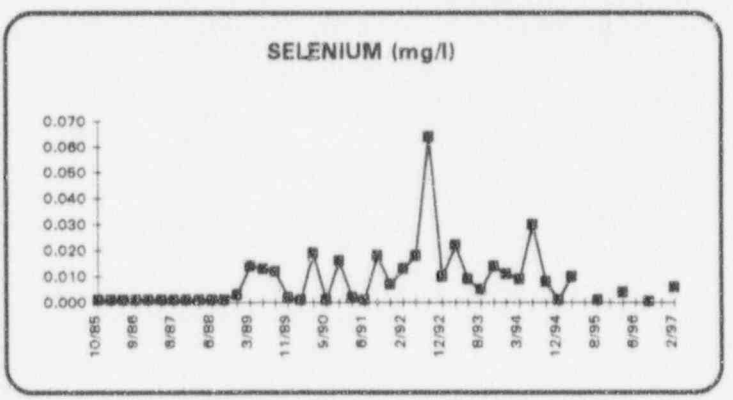


WELL 39SC

DATE	LEAD	NICKEL	SELENIUM
Oct-85			0.001
Mar-86			0.001
May-86	0.06	0.38	0.001
Sep-86			0.001
Nov-86			0.001
Mar-87			0.001
Jun-87			0.001
Sep-87	0.05	0.28	0.001
Jan-88	0.04	0.38	0.001
Jun-88			0.001
Sep-88	0.08	0.20	0.001
Nov-88	0.25	0.20	0.003
Mar-89			0.014
May-89	0.05	0.27	0.013
Sep-89			0.012
Nov-89	0.24	0.33	0.002
Mar-90	0.05	0.35	0.001
Jun-90	0.05	0.26	0.019
Sep-90	0.05	0.32	0.001
Dec-90	0.09	0.47	0.016
Feb-91	0.11	0.39	0.002
Jun-91			0.001
Sep-91			0.018
Dec-91	0.10	0.40	0.007
Feb-92	0.05	0.43	0.013
Jun-92	0.05		0.018
Aug-92	0.05	0.42	0.064
Dec-92			0.010
Mar-93	0.05	0.39	0.022
May-93			0.009
Aug-93	0.05	0.17	0.005
Nov-93	0.05	0.23	0.014
Nov-93	0.05	0.19	0.011
Mar-94	0.01	0.40	0.009
Jun-94	0.63	0.47	0.030
Sep-94	0.025	0.10	0.008
Dec-94	0.0025	0.29	0.001
Feb-95	0.025	0.24	0.010
May-95			
Aug-95	0.0026	0.26	0.001
Nov-95			
Feb-96	0.0025	0.025	0.004
Jun-96			
Aug-96	0.0025	0.10	0.0005
Nov-96			
Feb-97	0.001	0.13	0.006

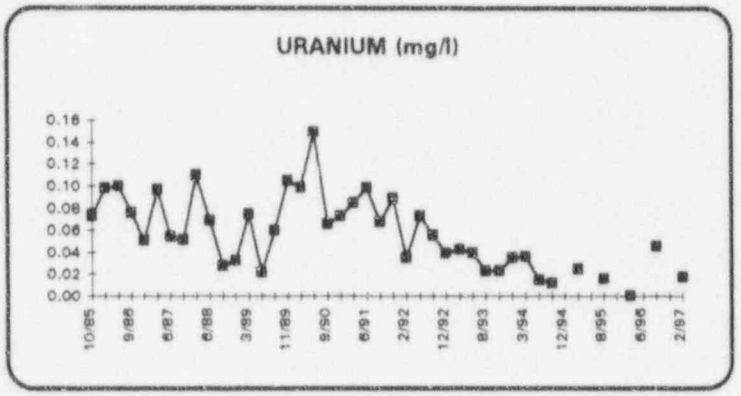


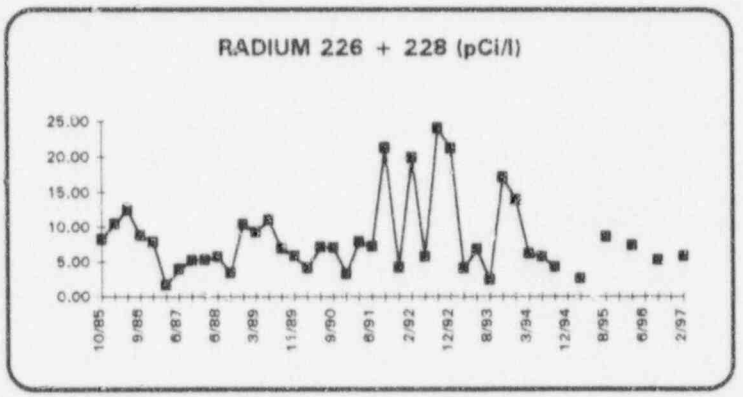


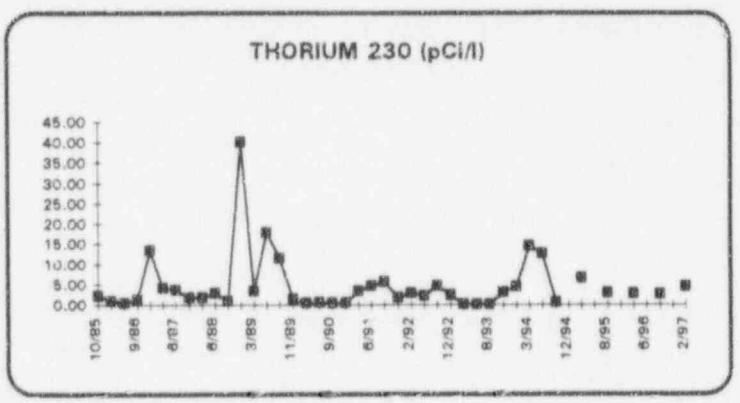


WELL 39SC

DATE	URANIUM	Ra 6+8	Th 230
Oct-85	0.07	8.24	2.22
Mar-86	0.10	10.50	0.94
May-86	0.10	12.50	0.55
Sep-86	0.08	8.81	1.28
Nov-86	0.05	7.87	13.50
Mar-87	0.10	1.67	4.17
Jun-87	0.06	4.00	3.64
Sep-87	0.05	5.17	1.77
Jan-88	0.11	5.29	1.73
Jun-88	0.07	5.80	2.90
Sep-88	0.03	3.42	0.99
Nov-88	0.03	10.38	40.20
Mar-89	0.08	9.29	3.38
May-89	0.02	11.08	18.00
Sep-89	0.06	6.99	11.50
Nov-89	0.11	5.83	1.39
Mar-90	0.10	4.11	0.55
Jun-90	0.15	7.15	0.64
Sep-90	0.07	7.04	0.53
Dec-90	0.07	3.25	0.56
Feb-91	0.09	7.87	3.39
Jun-91	0.10	7.21	4.65
Sep-91	0.07	21.27	5.63
Dec-91	0.09	4.17	1.79
Feb-92	0.04	19.90	2.82
Jun-92	0.07	5.75	2.28
Aug-92	0.06	24.04	4.70
Dec-92	0.04	21.18	2.39
Mar-93	0.04	4.10	0.15
May-93	0.04	6.90	0.19
Aug-93	0.02	2.46	0.24
Nov-93	0.02	17.14	3.05
Nov-93	0.04	13.97	4.54
Mar-94	0.04	6.20	14.50
Jun-94	0.02	5.80	12.60
Sep-94	0.012	4.30	0.60
Dec-94			
Feb-95	0.03	2.60	6.50
May-95			
Aug-95	0.02	8.60	2.90
Nov-95			
Feb-96	0.0005	7.40	2.70
Jun-96			
Aug-96	0.05	5.30	2.50
Nov-96			
Feb-97	0.02	5.90	4.50

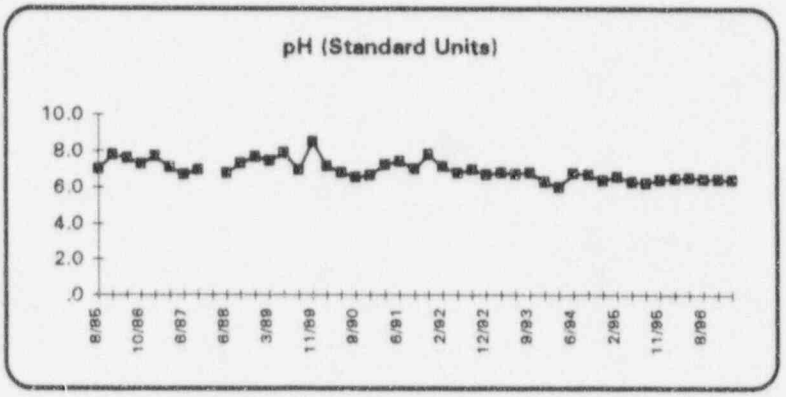


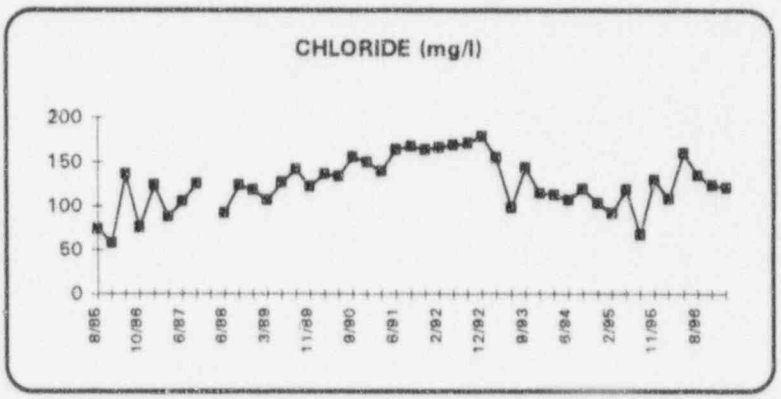


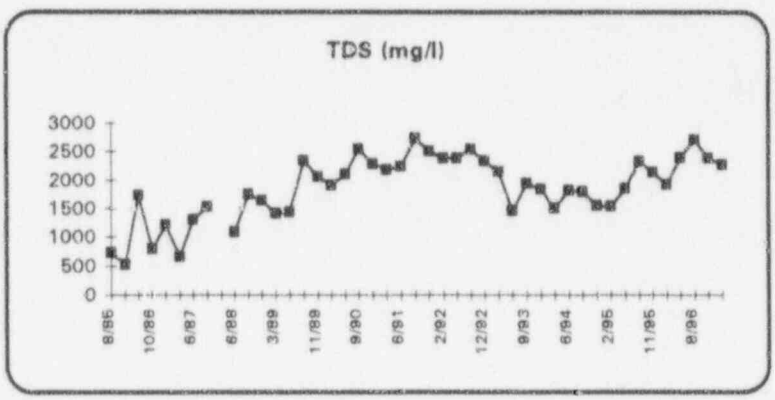


WELL 40SC

DATE	pH	CHLORIDE	TDS
Aug-85	7.0	74	734
May-86	7.8	58	528
Sep-86	7.6	137	1732
Oct-86	7.3	76	804
Nov-86	7.8	124	1222
Mar-87	7.1	88	663
Jun-87	6.7	106	1304
Sep-87	7.0	126	1537
Jan-88			
Jun-88	6.8	93	1099
Sep-88	7.3	124	1760
Nov-88	7.7	119	1649
Mar-89	7.5	107	1425
May-89	7.9	127	1442
Sep-89	7.0	142	2351
Nov-89	8.5	123	2066
Mar-90	7.2	137	1922
Jun-90	6.8	134	2112
Sep-90	6.6	156	2549
Dec-90	6.7	150	2291
Feb-91	7.3	140	2185
Jun-91	7.5	164	2248
Sep-91	7.1	168	2743
Dec-91	7.8	164	2514
Feb-92	7.2	166	2386
Jun-92	6.9	169	2395
Aug-92	7.0	171	2545
Dec-92	6.7	179	2348
Feb-93	6.8	155	2157
May-93	6.8	98	1462
Sep-93	6.8	144	1947
Nov-93	6.3	115	1855
Mar-94	6.1	113	1510
Jun-94	6.8	107	1830
Sep-94	6.7	120	1810
Dec-94	6.4	104	1560
Feb-95	6.6	93	1540
May-95	6.3	119	1860
Aug-95	6.3	68	2330
Nov-95	6.4	130	2140
Feb-96	6.5	109	1930
Jun-96	6.5	160	2400
Aug-96	6.5	135	2720
Nov-96	6.5	124	2390
Feb-97	6.4	121	2280

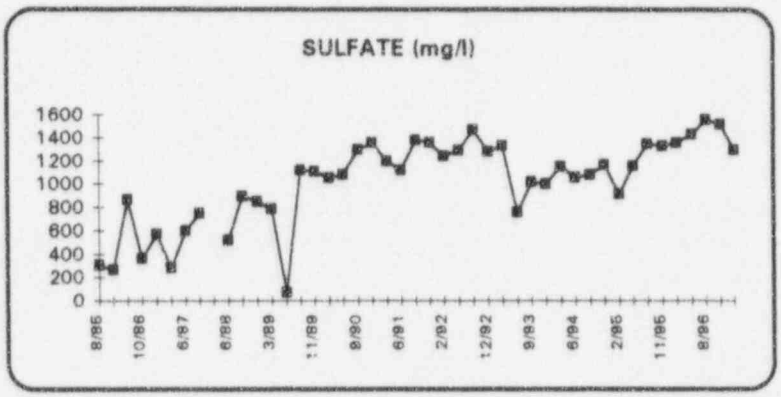


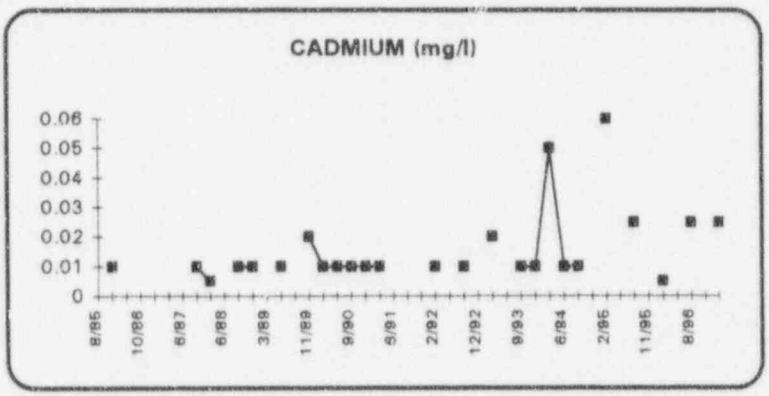


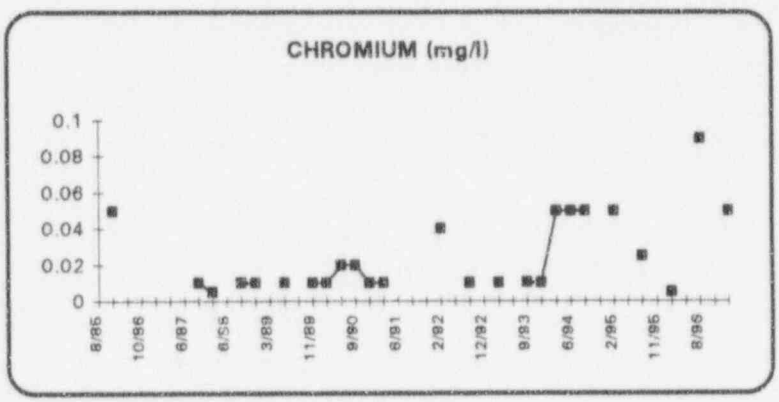


WELL 40SC

DATE	SO4	Cadmium	Chromium
Aug-85	310		
May-86	266	0.01	0.05
Sep-86	867		
Oct-86	361		
Nov-86	573		
Mar-87	284		
Jun-87	800		
Sep-87	750	0.01	0.01
Jan-88		0.01	0.01
Jun-88	520		
Sep-88	893	0.01	0.01
Nov-88	853	0.01	0.01
Mar-89	787		
May-89	75	0.01	0.01
Sep-89	1120		
Nov-89	1110	0.02	0.01
Mar-90	1050	0.01	0.01
Jun-90	1080	0.01	0.02
Sep-90	1300	0.01	0.02
Dec-90	1360	0.01	0.01
Feb-91	1200	0.01	0.01
Jun-91	1120		
Sep-91	1380		
Dec-91	1360		
Feb-92	1240	0.01	0.04
Jun-92	1290		
Aug-92	1470	0.01	0.01
Dec-92	1280		
Feb-93	1330	0.02	0.01
May-93	760		
Sep-93	1020	0.01	0.01
Nov-93	1000	0.01	0.01
Mar-94	1150	0.05	0.05
Jun-94	1060	0.01	0.05
Sep-94	1080	0.01	0.05
Dec-94	1170		
Feb-95	920	0.06	0.05
May-95	1160		
Aug-95	1350	.025	.025
Nov-95	1330		
Feb-96	1360	.005	.005
Jun-96	1430		
Aug-96	1560	0.025	0.09
Nov-96	1520		
Feb-97	1300	0.025	0.05

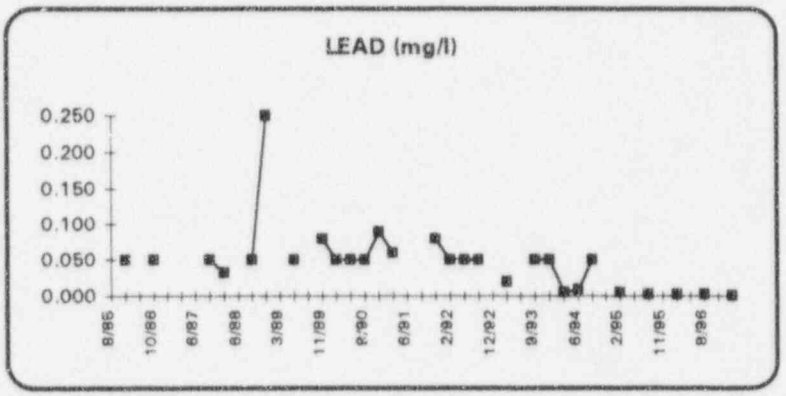


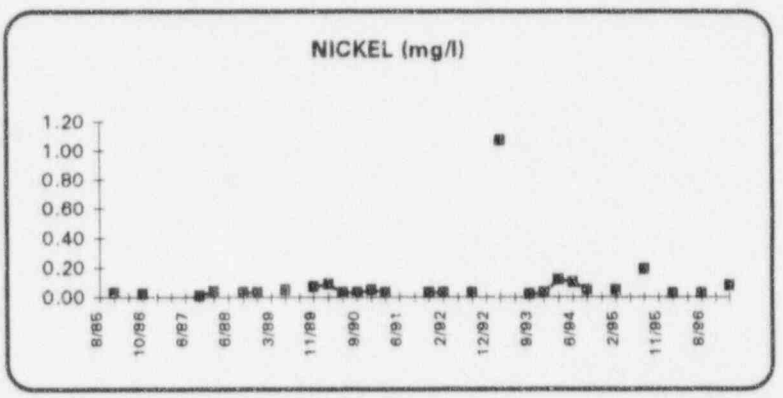


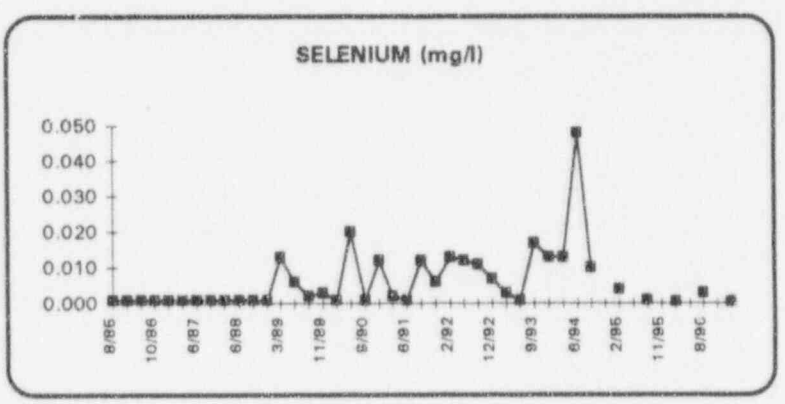


WELL 40SC

DATE	LEAD	NICKEL	SELENIUM
Aug-85			0.001
May-88	0.050	0.03	0.001
Sep-86			0.001
Oct-86	0.050	0.02	0.001
Nov-86			0.001
Mar-87			0.001
Jun-87			0.001
Sep-87	0.050	0.01	0.001
Jan-88	0.032	0.04	0.001
Jun-88			0.001
Sep-88	0.050	0.03	0.001
Nov-88	0.250	0.03	0.001
Mar-89			0.013
May-89	0.050	0.05	0.006
Sep-89			0.002
Nov-89	0.080	0.07	0.003
Mar-90	0.050	0.09	0.001
Jun-90	0.050	0.03	0.020
Sep-90	0.050	0.03	0.001
Dec-90	0.090	0.05	0.012
Feb-91	0.060	0.03	0.002
Jun-91			0.001
Sep-91			0.012
Dec-91	0.080	0.03	0.006
Feb-92	0.050	0.03	0.013
Jun-92	0.050		0.012
Aug-92	0.050	0.03	0.011
Dec-92			0.007
Feb-93	0.020	1.07	0.003
May-93			0.001
Sep-93	0.050	0.02	0.017
Nov-93	0.050	0.03	0.013
Mar-94	0.005	0.12	0.013
Jun-94	0.009	0.10	0.048
Sep-94	0.050	0.05	0.010
Dec-94			
Feb-95	0.005	0.05	0.004
May-95			
Aug-95	.0025	.19	.001
Nov-95			
Feb-96	.0025	.025	.0005
Jun-96			
Aug-96	0.003	0.03	0.003
Nov-96			
Feb-97	0.001	0.08	0.001

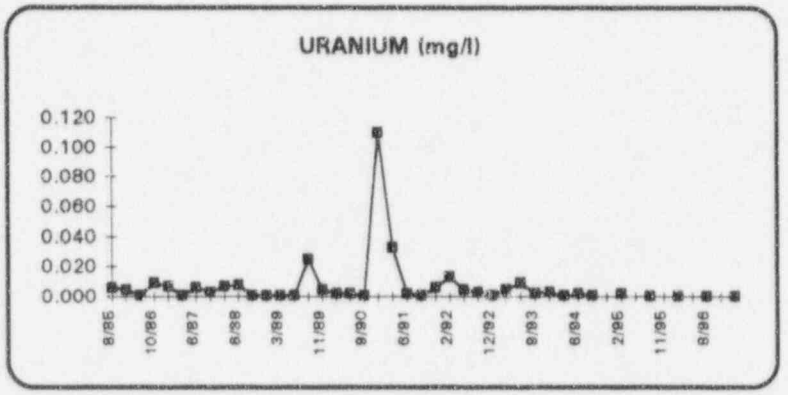


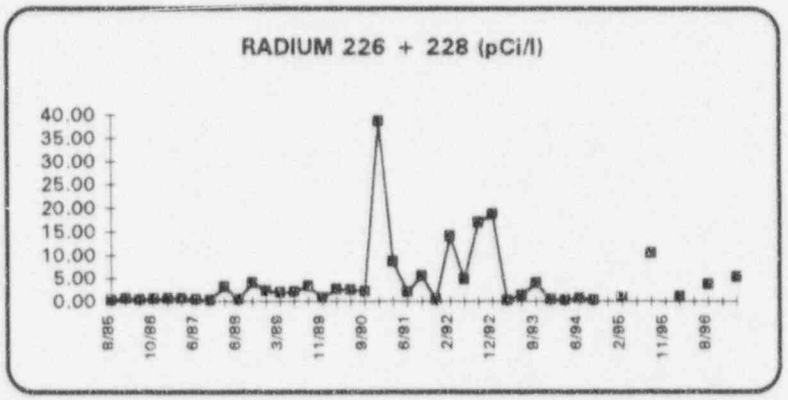


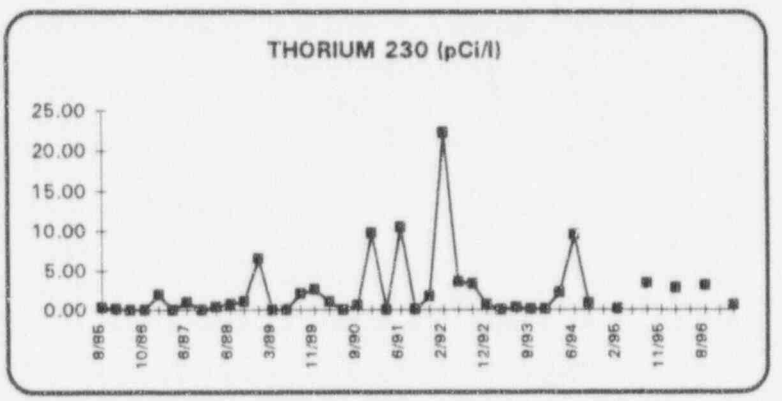


WELL 40SC

DATE	URANIUM	Ra 6+8	Th 230
Aug-85	0.006	0.30	0.29
May-86	0.005	0.63	0.13
Sep-86	0.001	0.35	0.00
Oct-86	0.009	0.59	0.00
Nov-86	0.007	0.76	1.96
Mar-87	0.001	0.73	0.00
Jun-87	0.006	0.45	0.96
Sep-87	0.003	0.33	0.00
Jan-88	0.007	3.19	0.44
Jun-88	0.008	0.46	0.74
Sep-88	0.001	4.07	1.04
Nov-88	0.001	2.40	6.53
Mar-89	0.001	1.99	0.00
May-89	0.001	2.04	0.00
Sep-89	0.025	3.38	2.03
Nov-89	0.005	0.83	2.57
Mar-90	0.002	2.67	1.07
Jun-90	0.002	2.47	0.00
Sep-90	0.001	2.22	0.56
Dec-90	0.110	38.71	9.80
Feb-91	0.033	8.74	0.00
Jun-91	0.002	2.11	10.50
Sep-91	0.001	5.59	0.07
Dec-91	0.006	0.39	1.70
Feb-92	0.013	14.19	22.20
Jun-92	0.005	4.94	3.59
Aug-92	0.003	17.13	3.37
Dec-92	0.001	18.81	0.62
Feb-93	0.005	0.31	0.00
May-93	0.009	1.39	0.30
Sep-93	0.002	4.11	0.09
Nov-93	0.003	0.42	0.07
Mar-94	0.001	0.30	2.20
Jun-94	0.002	0.70	9.50
Sep-94	0.001	0.30	0.80
Dec-94			
Feb-95	0.002	1.00	0.20
May-95			
Aug-95	.0005	10.50	3.30
Nov-95			
Feb-96	.0005	1.10	2.80
Jun-96			
Aug-96	0.001	3.80	3.10
Nov-96			
Feb-97	0.001	5.30	0.60

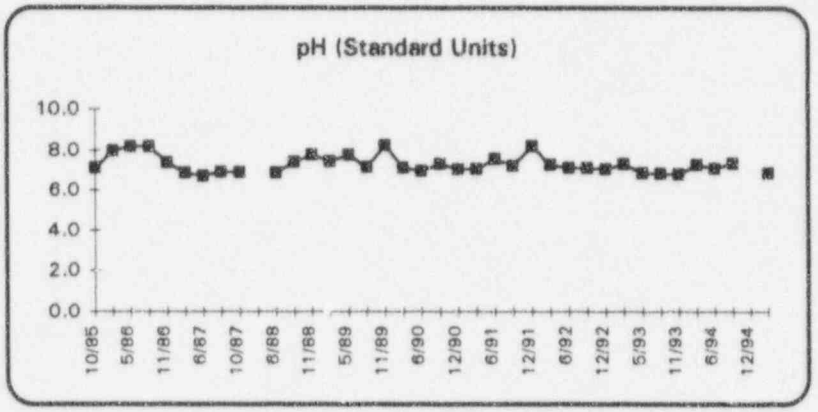


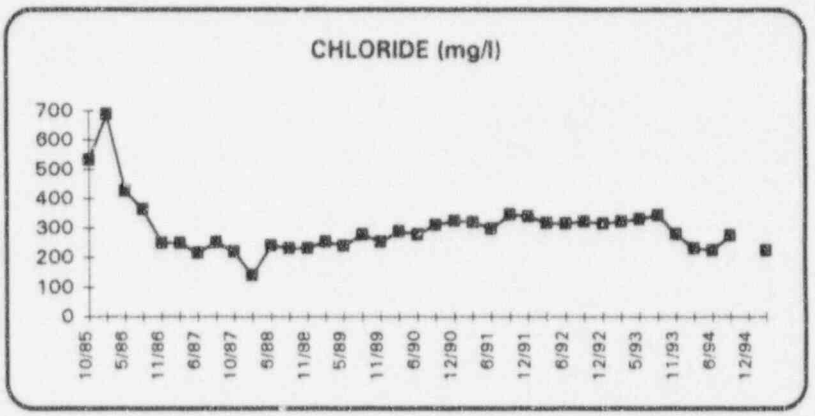


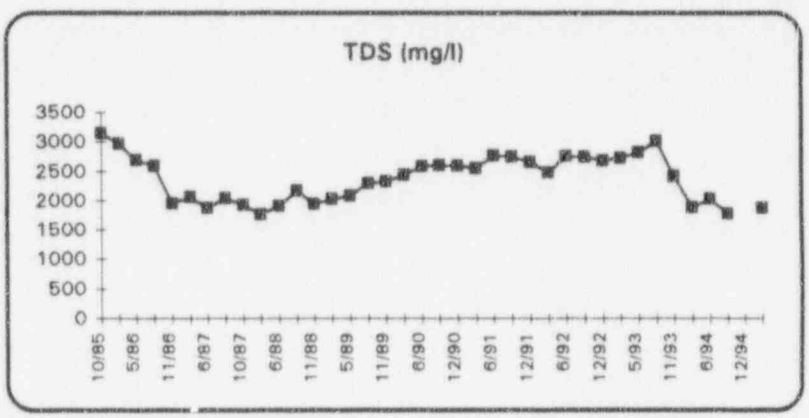


WELL 41SC

DATE	pH	CHLORIDE	TDS
Oct-85	7.1	532	3144
Mar-86	8.0	690	2969
May-86	8.2	426	2694
Sep-86	8.2	365	2598
Nov-86	7.4	249	1956
Mar-87	6.9	250	2065
Jun-87	6.7	216	1879
Sep-87	6.9	252	2046
Oct-87	6.9	221	1927
Jan-88		142	1762
Jun-88	6.9	240	1908
Sep-88	7.4	232	2175
Nov-88	7.8	231	1947
Mar-89	7.5	253	2035
May-89	7.8	240	2086
Aug-89	7.2	279	2301
Nov-89	8.3	253	2326
Mar-90	7.1	290	2437
Jun-90	7.0	278	2579
Sep-90	7.3	312	2604
Dec-90	7.1	324	2590
Feb-91	7.1	320	2545
Jun-91	7.6	299	2776
Sep-91	7.2	346	2747
Dec-91	8.2	339	2665
Feb-92	7.3	318	2486
Jun-92	7.1	315	2761
Aug-92	7.1	323	2747
Dec-92	7.1	316	2679
Mar-93	7.3	322	2730
May-93	6.9	331	2823
Aug-93	6.9	345	3018
Nov-93	6.8	280	2413
Mar-94	7.3	232	1890
Jun-94	7.1	225	2030
Sep-94	7.4	275	1780
Dec-94			
Feb-95	6.9	225	1880

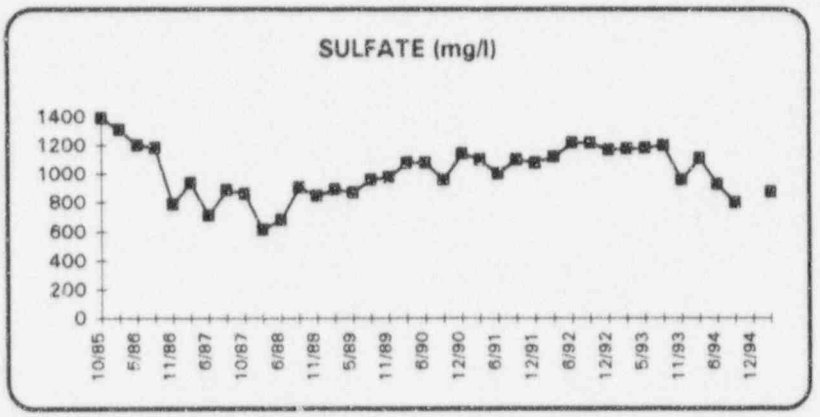


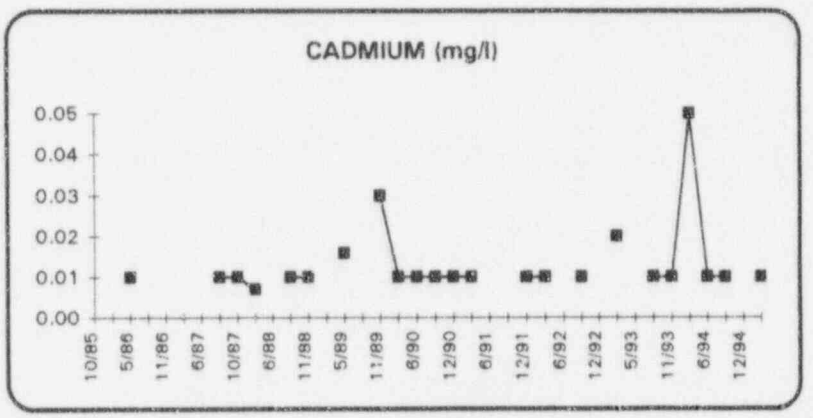


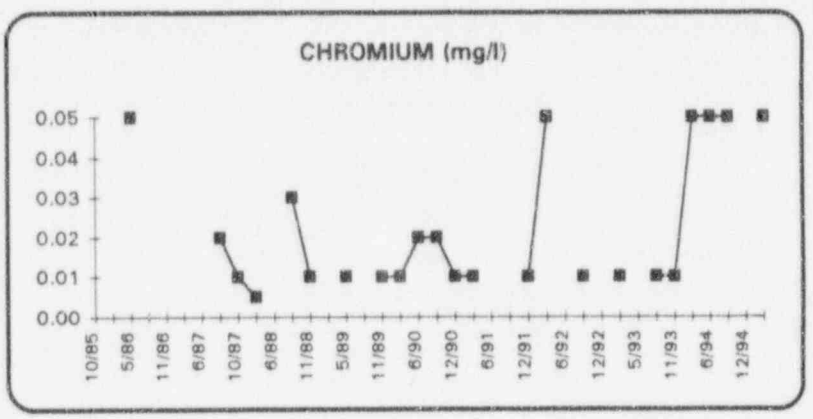


WELL 41SC

DATE	SULFATE	Cadmium	Chromium
Oct-85	1390		
Mar-86	1309		
May-86	1200	0.01	0.05
Sep-86	1181		
Nov-86	790		
Mar-87	940		
Jun-87	710		
Sep-87	890	0.01	0.02
Oct-87	860	0.01	0.01
Jan-88	610	0.01	0.01
Jun-88	680		
Sep-88	907	0.01	0.03
Nov-88	847	0.01	0.01
Mar-89	893		
May-89	870	0.02	0.01
Aug-89	960		
Nov-89	980	0.03	0.01
Mar-90	1080	0.01	0.01
Jun-90	1080	0.01	0.02
Sep-90	960	0.01	0.02
Dec-90	1140	0.01	0.01
Feb-91	1100	0.01	0.01
Jun-91	1000		
Sep-91	1100		
Dec-91	1080	0.01	0.01
Feb-92	1120	0.01	0.05
Jun-92	1220		
Aug-92	1220	0.01	0.01
Dec-92	1170		
Mar-93	1180	0.02	0.01
May-93	1184		
Aug-93	1200	0.01	0.01
Nov-93	960	0.01	0.01
Mar-94	1110	0.05	0.05
Jun-94	930	0.01	0.05
Sep-94	800	0.01	0.05
Dec-94			
Feb-95	875	0.01	0.05

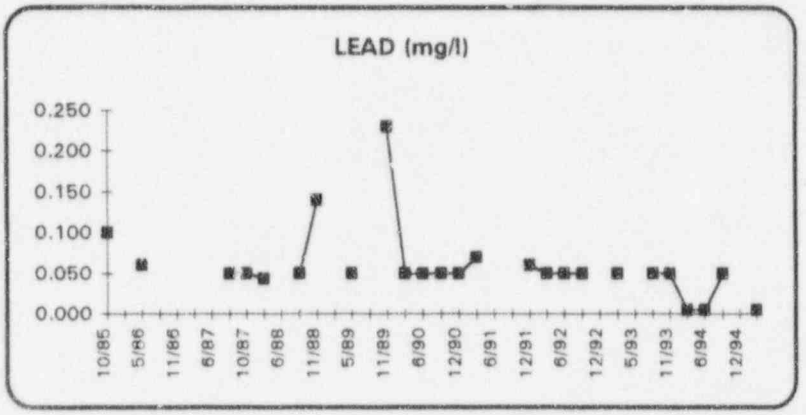


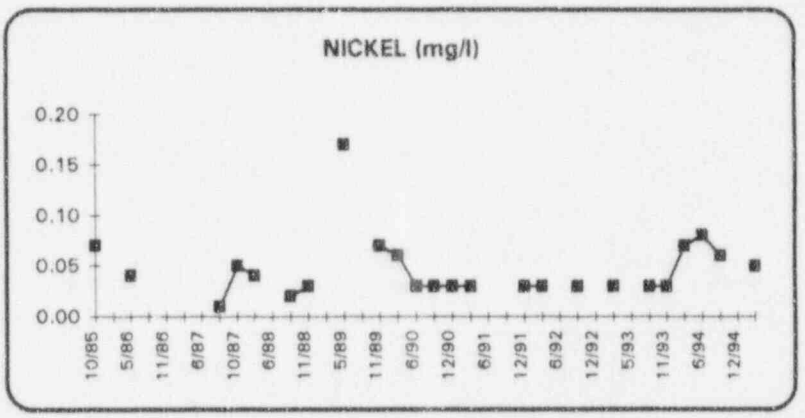


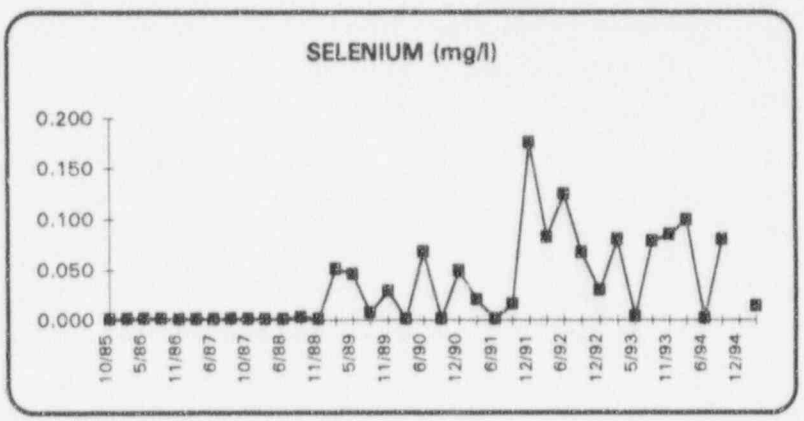


WELL 41SC

DATE	LEAD	NICKEL	SELENIUM
Oct-85	0.100	0.07	0.001
Mar-86			0.002
May-86	0.060	0.04	0.002
Sep-86			0.002
Nov-86			0.001
Mar-87			0.001
Jun-87			0.001
Sep-87	0.050	0.01	0.002
Oct-87	0.050	0.05	0.001
Jan-88	0.043	0.04	0.001
Jun-88			0.001
Sep-88	0.050	0.02	0.003
Nov-88	0.140	0.03	0.001
Mar-89			0.051
May-89	0.050	0.17	0.046
Aug-89			0.008
Nov-89	0.230	0.07	0.029
Mar-90	0.050	0.06	0.001
Jun-90	0.050	0.03	0.068
Sep-90	0.050	0.03	0.001
Dec-90	0.050	0.03	0.049
Feb-91	0.070	0.03	0.021
Jun-91			0.001
Sep-91			0.016
Dec-91	0.060	0.03	0.176
Feb-92	0.050	0.03	0.082
Jun-92	0.050		0.125
Aug-92	0.050	0.03	0.067
Dec-92			0.030
Mar-93	0.050	0.03	0.080
May-93			0.004
Aug-93	0.050	0.03	0.078
Nov-93	0.050	0.03	0.085
Mar-94	0.005	0.07	0.100
Jun-94	0.005	0.08	0.002
Sep-94	0.050	0.06	0.080
Dec-94			
Feb-95	0.005	0.05	0.014

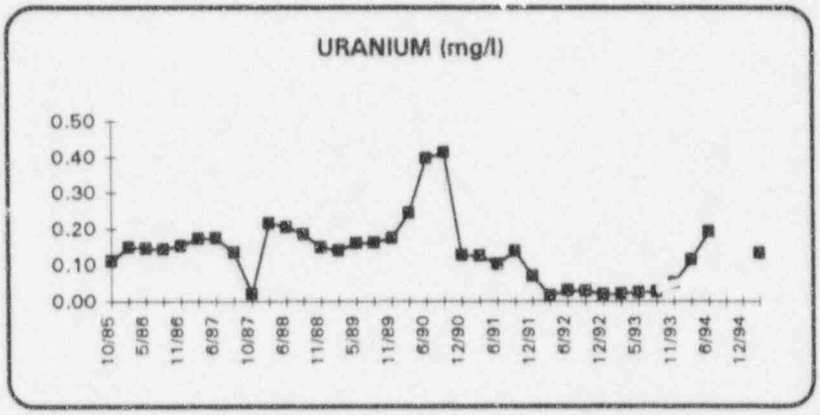


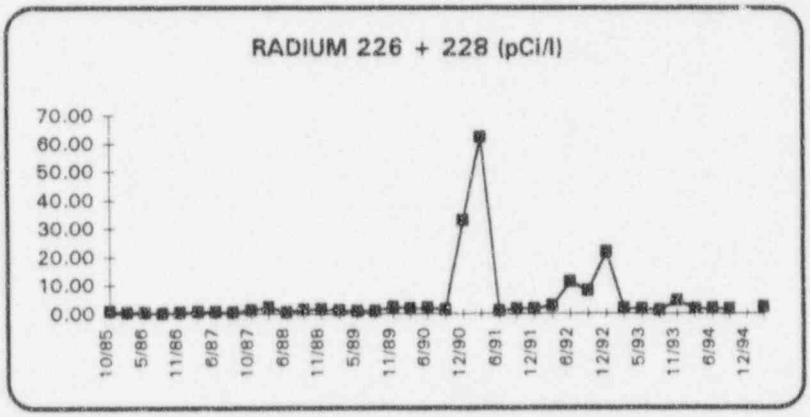


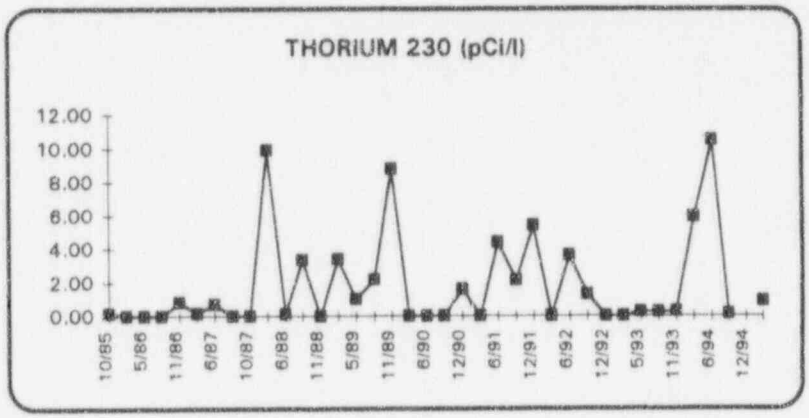


WELL 41SC

DATE	URANIUM	Ra 6+8	Th 230
Oct-85	0.11	1.00	0.15
Mar-86	0.15	0.35	0.00
May-86	0.15	0.56	0.01
Sep-86	0.14	0.34	0.00
Nov-86	0.15	0.47	0.81
Mar-87	0.17	0.66	0.15
Jun-87	0.18	0.65	0.69
Sep-87	0.14	0.46	0.00
Oct-87	0.02	1.20	0.00
Jan-88	0.22	2.40	9.90
Jun-88	0.21	0.53	0.10
Sep-88	0.19	1.27	3.35
Nov-88	0.15	1.66	0.00
Mar-89	0.14	1.15	3.37
May-89	0.16	0.84	1.00
Aug-89	0.16	0.90	2.19
Nov-89	0.18	2.25	8.79
Mar-90	0.24	1.73	0.00
Jun-90	0.40	2.14	0.00
Sep-90	0.41	1.41	0.00
Dec-90	0.13	32.81	1.60
Feb-91	0.13	62.29	0.00
Jun-91	0.10	0.88	4.39
Sep-91	0.14	1.59	2.13
Dec-91	0.07	1.65	5.38
Feb-92	0.02	2.66	0.00
Jun-92	0.03	11.35	3.62
Aug-92	0.03	8.00	1.28
Dec-92	0.02	21.91	0.00
Mar-93	0.02	1.81	0.00
May-93	0.03	1.66	0.23
Aug-93	0.03	1.16	0.25
Nov-93	0.05	4.64	0.27
Mar-94	0.12	1.60	5.90
Jun-94	0.19	1.90	10.50
Sep-94		1.50	0.10
Dec-94			
Feb-95	0.13	2.20	0.90

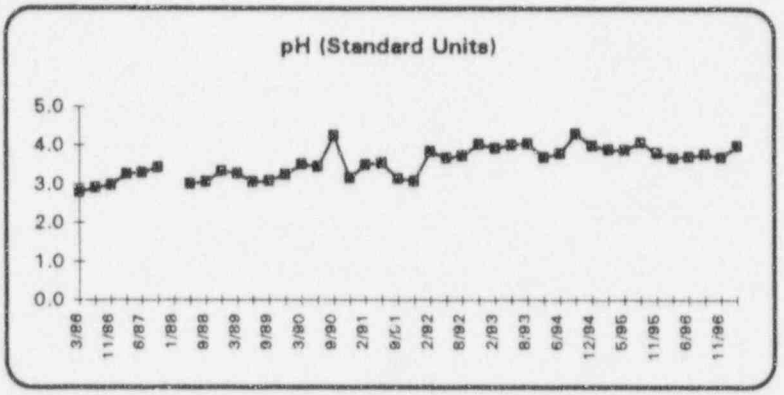


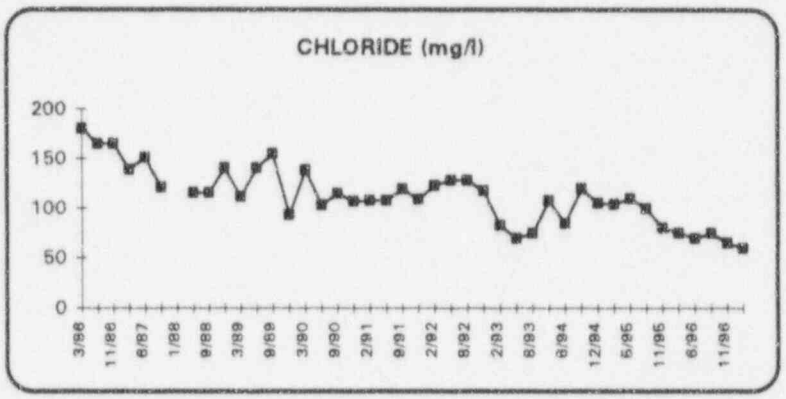


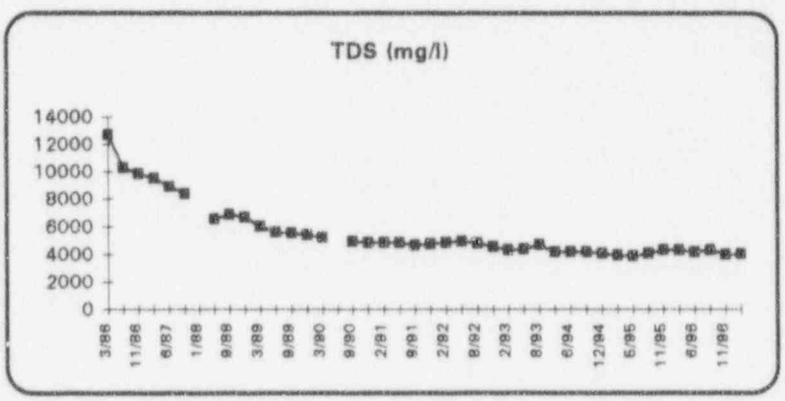


WELL 42SC

DATE	pH	CHLORIDE	TDS
Mar-86	2.8	180	12733
Sep-86	2.9	165	10292
Nov-86	3.0	165	9876
Mar-87	3.3	139	9536
Jun-87	3.3	151	8926
Sep-87	3.4	121	8400
Jan-88			
Jun-88	3.0	116	6568
Sep-88	3.1	116	6863
Nov-88	3.3	141	6092
Mar-89	3.3	112	6020
May-89	3.1	141	5612
Sep-89	3.1	155	5532
Nov-89	3.3	93	5431
Mar-90	3.5	139	5241
Jun-90	3.5	103	
Sep-90	4.3	115	4933
Nov-90	3.2	107	4852
Feb-91	3.5	108	4859
Jun-91	3.6	108	4819
Sep-91	3.1	120	4633
Dec-91	3.1	109	4749
Feb-92	3.9	123	4831
Jul-92	3.7	128	4932
Aug-92	3.7	128	4773
Dec-92	4.0	118	4540
Feb-93	3.9	83	4318
May-93	4.0	70	4345
Aug-93	4.1	75	4682
Mar-94	3.7	108	4160
Jun-94	3.8	85	4200
Sep-94	4.3	120	4160
Dec-94	4.0	105	4100
Feb-95	3.9	104	3920
May-95	3.9	110.	3880
Aug-95	4.1	100.	4100
Nov-95	3.8	80.	4300
Feb-96	3.7	75.	4300
Jun-96	3.7	70	4160
Aug-96	3.8	75	4300
Nov-96	3.7	65	4000
Feb-97	4.0	60	4020

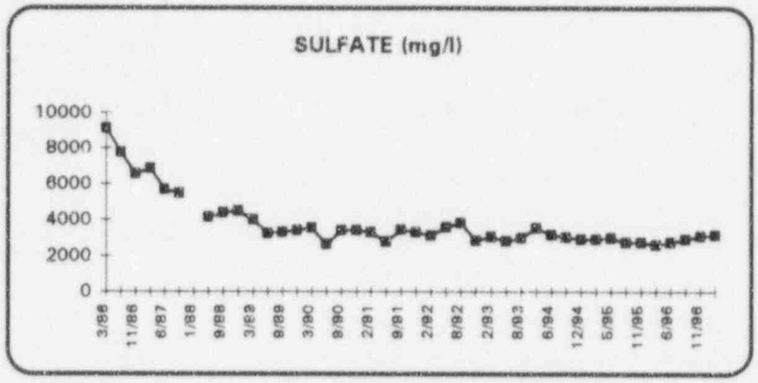


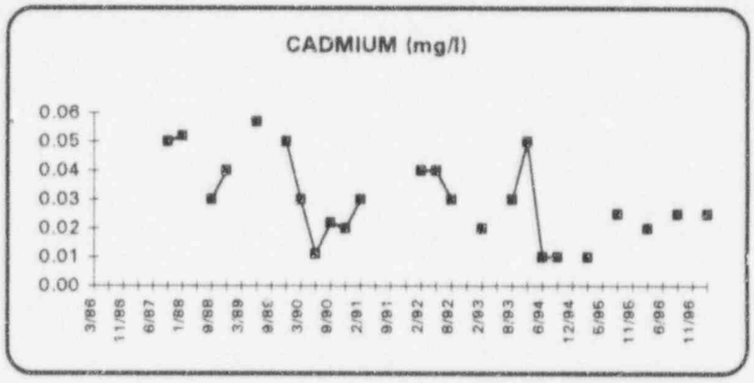


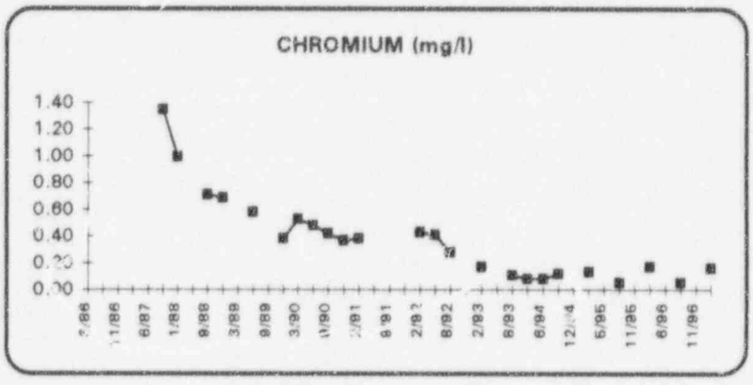


WELL 42SC

DATE	SO4	Cadmium	Chromium
Mar-86	9115		
Sep-86	7775		
Nov-86	6540		
Mar-87	6880		
Jun-87	5680		
Sep-87	5480	0.05	1.35
Jan-88		0.05	1.00
Jun-88	4160		
Sep-88	4400	0.03	0.71
Nov-88	4480	0.04	0.69
Mar-89	4000		
May-89	3240	0.06	0.58
Sep-89	3320		
Nov-89	3400	0.05	0.38
Mar-90	3560	0.03	0.53
Jun-90	2640	0.01	0.48
Sep-90	3400	0.02	0.42
Nov-90	3400	0.02	0.37
Feb-91	3320	0.03	0.38
Jun-91	2800		
Sep-91	3440		
Dec-91	3300		
Feb-92	3120	0.04	0.43
Jul-92	3580	0.04	0.41
Aug-92	3840	0.03	0.28
Dec-92	2840		
Feb-93	3080	0.02	0.17
May-93	2820		
Aug-93	3000	0.03	0.11
Mar-94	3540	0.05	0.08
Jun-94	3180	0.01	0.08
Sep-94	3040	0.01	0.12
Dec-94	2910		
Feb-95	2910	0.01	0.13
May-95	3000		
Aug-95	2780	.025	.05
Nov-95	2760		
Feb-96	2600	.02	.17
Jun-96	2770		
Aug-96	2920	0.025	0.05
Nov-96	3100		
Feb-97	3180	0.025	0.16

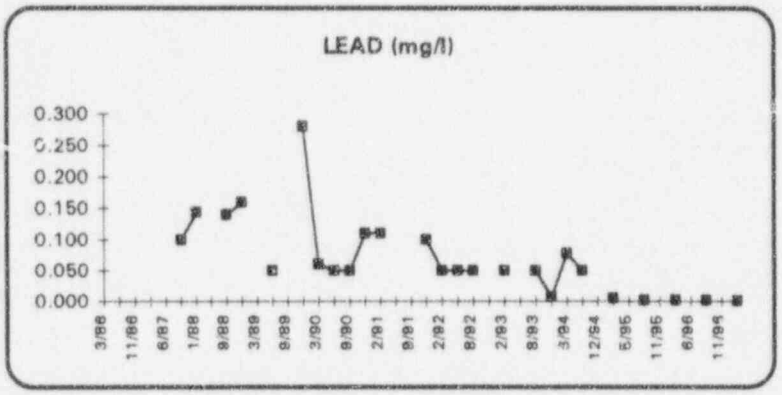


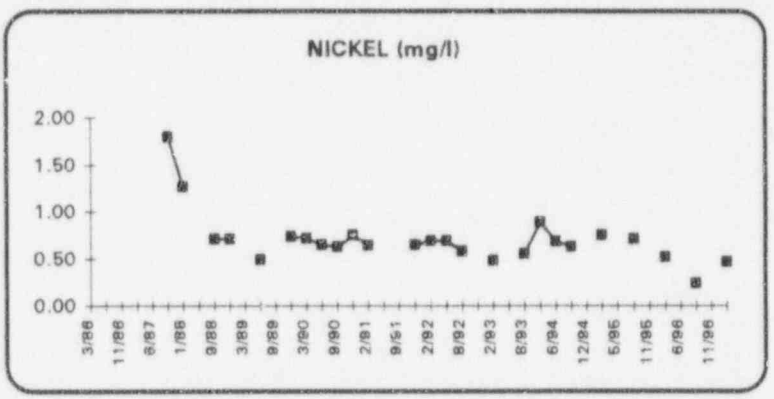


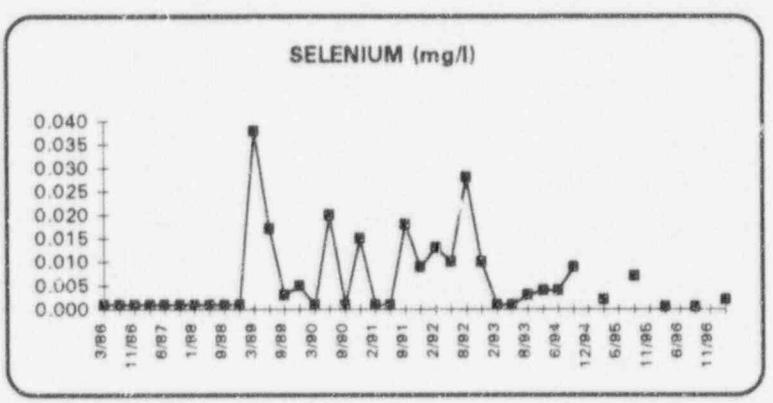


WELL 42SC

DATE	LEAD	NICKEL	SELENIUM
Mar-86			0.001
Sep-86			0.001
Nov-86			0.001
Mar-87			0.001
Jun-87			0.001
Sep-87	0.100	1.80	0.001
Jan-88	0.144	1.27	0.001
Jun-88			0.001
Sep-88	0.140	0.71	0.001
Nov-88	0.160	0.71	0.001
Mar-89			0.038
May-89	0.050	0.49	0.017
Sep-89			0.003
Nov-89	0.280	0.74	0.005
Mar-90	0.060	0.72	0.001
Jun-90	0.050	0.65	0.020
Sep-90	0.050	0.63	0.001
Nov-90	0.110	0.75	0.015
Feb-91	0.110	0.64	0.001
Jun-91			0.001
Sep-91			0.018
Dec-91	0.100	0.65	0.009
Feb-92	0.050	0.69	0.013
Jul-92	0.050	0.69	0.010
Aug-92	0.050	0.58	0.028
Dec-92			0.010
Feb-93	0.050	0.48	0.001
May-93			0.001
Aug-93	0.050	0.55	0.003
Mar-94	0.007	0.89	0.004
Jun-94	0.078	0.68	0.004
Sep-94	0.050	0.63	0.009
Dec-94			
Feb-95	0.005	0.75	0.002
May-95			
Aug-95	0.003	0.71	.007
Nov-95			
Feb-96	0.003	0.52	.0005
Jun-96			
Aug-96	0.0025	0.24	0.0005
Nov-96			
Feb-97	0.0010	0.47	0.002

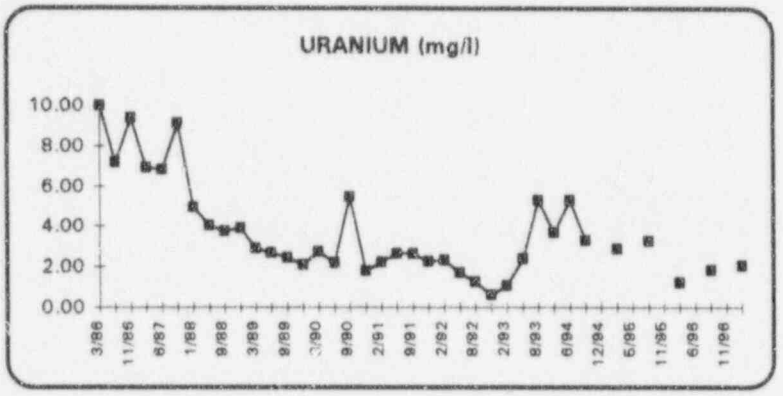


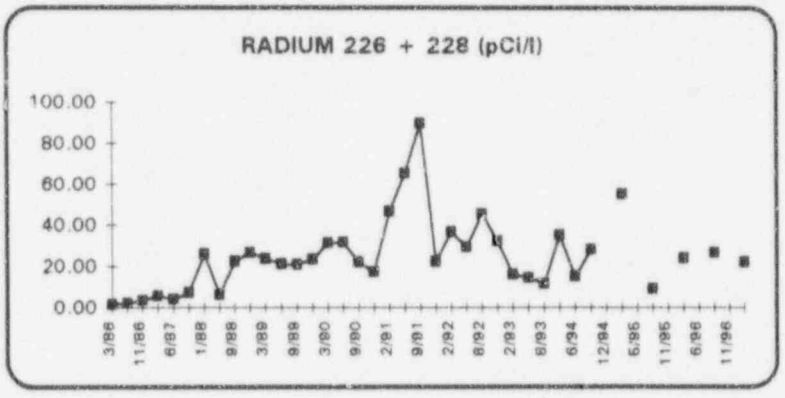


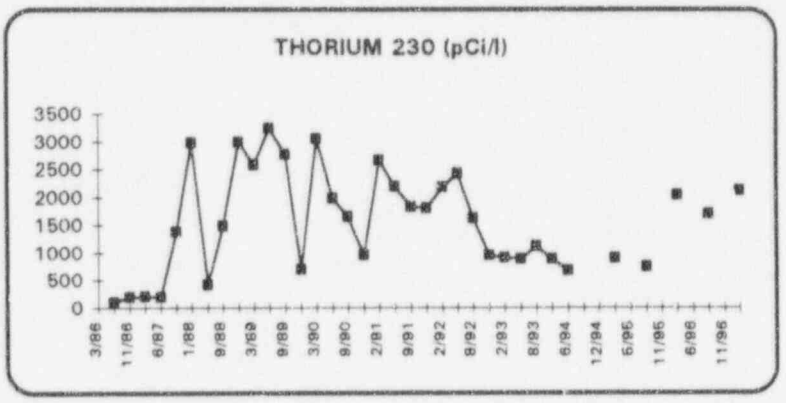


WELL 42SC

DATE	URANIUM	Ra 6+8	Th 230
Mar-86	10.00	1.63	
Sep-86	7.18	2.19	101
Nov-86	9.39	3.46	189
Mar-87	6.91	5.78	207
Jun-87	6.83	4.26	199
Sep-87	9.12	7.19	1383
Jan-88	4.95	26.05	2978
Jun-88	4.05	6.38	419
Sep-88	3.75	22.71	1496
Nov-88	3.90	26.65	2984
Mar-89	2.90	23.76	2579
May-89	2.70	21.48	3243
Sep-89	2.45	21.12	2767
Nov-89	2.10	23.57	706
Mar-90	2.74	31.43	3058
Jun-90	2.21	31.99	1984
Sep-90	5.48	22.40	1654
Nov-90	1.80	17.39	960
Feb-91	2.22	46.87	2666
Jun-91	2.64	65.40	2192
Sep-91	2.66	89.76	1830
Dec-91	2.26	22.76	1810
Feb-92	2.34	37.03	2183
Jul-92	1.71	29.58	2427
Aug-92	1.25	45.65	1632
Dec-92	0.63	32.36	963
Feb-93	1.06	16.15	918
May-93	2.40	14.65	888
Aug-93	5.31	11.87	1128
Mar-94	3.70	35.50	891
Jun-94	5.32	15.40	679
Sep-94	3.30	28.30	
Dec-94			
Feb-95	2.87	55.20	910
May-95			
Aug-95	3.27	9.20	756.00
Nov-95			
Feb-96	1.24	24.20	2040.00
Jun-96			
Aug-96	1.84	26.70	1700
Nov-96			
Feb-97	2.08	22.20	2130

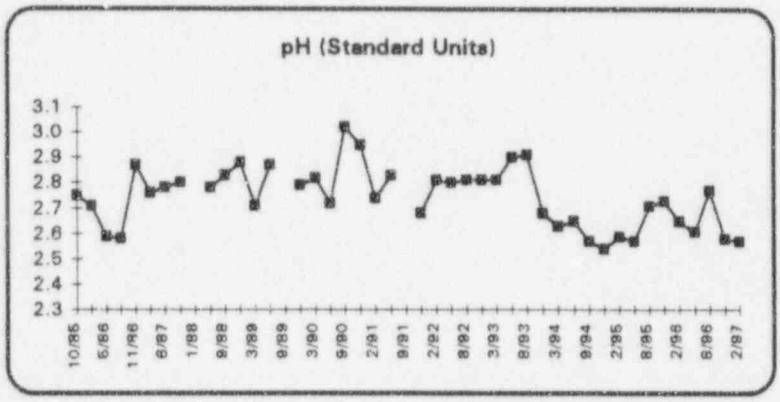


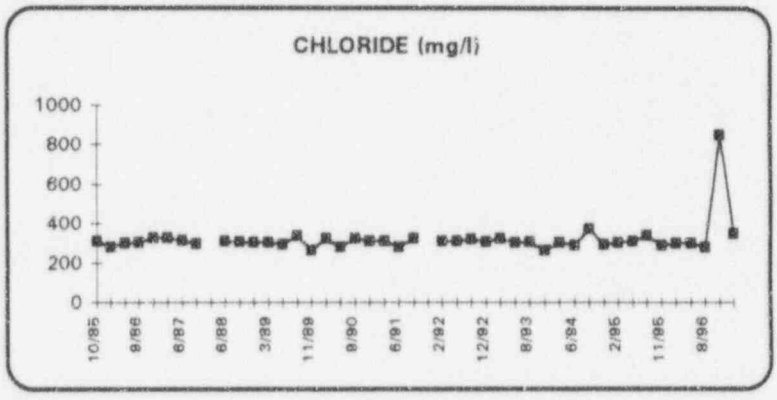


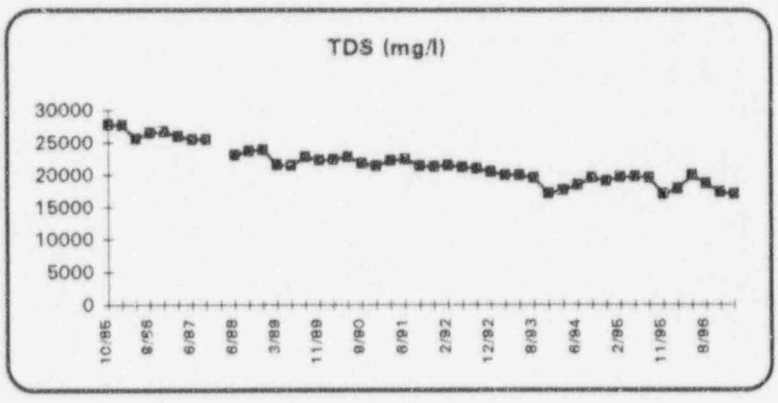


WELL 44SC

DATE	pH	CHLORIDE	TDS
Oct-85	2.8	310	27839
Mar-86	2.7	280	27655
May-86	2.6	302	25600
Sep-86	2.6	305	26498
Nov-86	2.9	328	26668
Mar-87	2.8	327	25944
Jun-87	2.8	316	25488
Sep-87	2.8	299	25486
Jan-88			
Jun-88	2.8	311	23048
Sep-88	2.8	308	23713
Nov-88	2.9	304	23836
Mar-89	2.7	306	21560
May-89	2.9	294	21492
Sep-89		339	22774
Nov-89	2.8	264	22264
Mar-90	2.8	323	22399
Jun-90	2.7	283	22769
Sep-90	3.0	325	21723
Dec-90	3.0	312	21327
Feb-91	2.7	312	22183
Jun-91	2.8	280	22378
Sep-91		324	21406
Dec-91	2.7		21303
Feb-92	2.8	310	21517
Jun-92	2.8	311	21178
Aug-92	2.8	321	20979
Dec-92	2.8	308	20433
Mar-93	2.8	324	19939
May-93	2.9	305	20010
Aug-93	2.9	309	19545
Nov-93	2.7	266	17170
Mar-94	2.6	303	17700
Jun-94	2.7	290	18500
Sep-94	2.6	375	19600
Dec-94	2.5	295	19100
Feb-95	2.6	305	19700
May-95	2.6	310.	19800
Aug-95	2.7	340.	19600
Nov-95	2.7	290.	17100
Feb-96	2.7	300.	17900
Jun-96	2.6	300.	20000
Aug-96	2.8	280.	18700
Nov-96	2.6	850.	17400
Feb-97	2.6	350.	17100

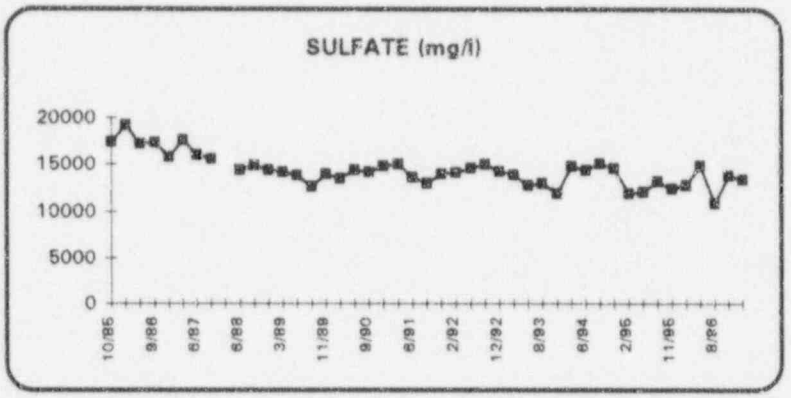


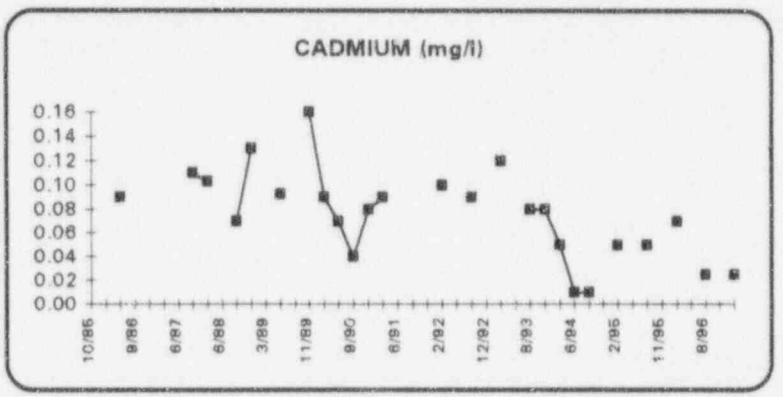


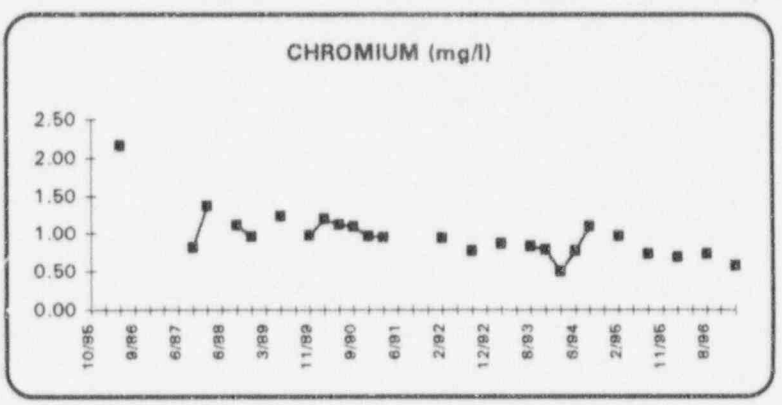


WELL 44SC

DATE	SO4	Cadmium	Chromium
Oct-85	17400		
Mar-86	19200		
May-86	17200	0.09	2.16
Sep-86	17350		
Nov-86	15800		
Mar-87	17600		
Jun-87	16000		
Sep-87	15600	0.11	0.82
Jan-88		0.10	1.37
Jun-88	14400		
Sep-88	14900	0.07	1.11
Nov-88	14400	0.13	0.96
Mar-89	14200		
May-89	13800	0.09	1.23
Sep-89	12600		
Nov-89	14000	0.16	0.98
Mar-90	13500	0.09	1.20
Jun-90	14400	0.07	1.12
Sep-90	14200	0.04	1.10
Dec-90	14800	0.08	0.97
Feb-91	15000	0.09	0.95
Jun-91	13600		
Sep-91	13000		
Dec-91	14000		
Feb-92	14100	0.10	0.94
Jun-92	14600		
Aug-92	15000	0.09	0.77
Dec-92	14240		
Mar-93	13920	0.12	0.87
May-93	12800		
Aug-93	12960	0.08	0.83
Nov-93	11900	0.08	0.79
Mar-94	14800	0.05	0.50
Jun-94	14400	0.01	0.77
Sep-94	15100	0.01	1.10
Dec-94	14800		
Feb-95	11900	0.05	0.97
May-95	12100		
Aug-95	13200	.05	.73
Nov-95	12400		
Feb-96	12800	.07	.69
Jun-96	14900		
Aug-96	10900	0.025	0.73
Nov-96	13800		
Feb-97	13400	0.025	0.58

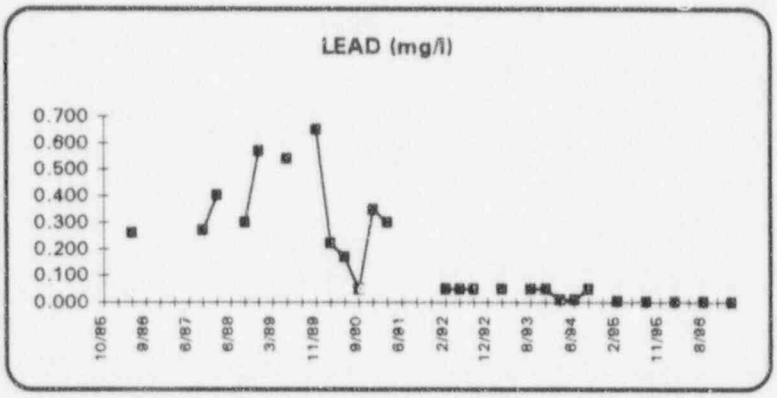


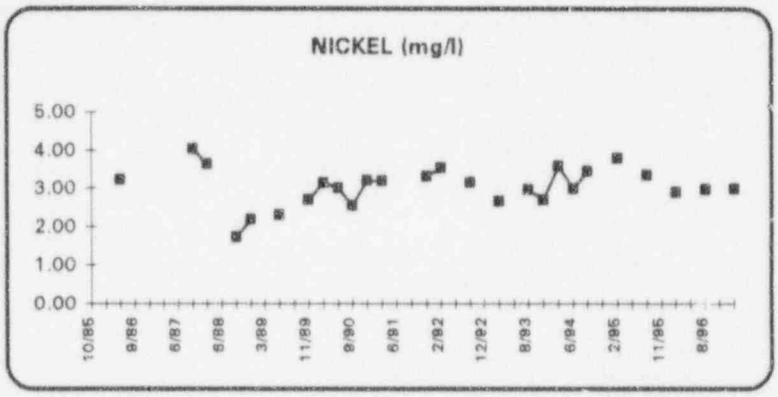


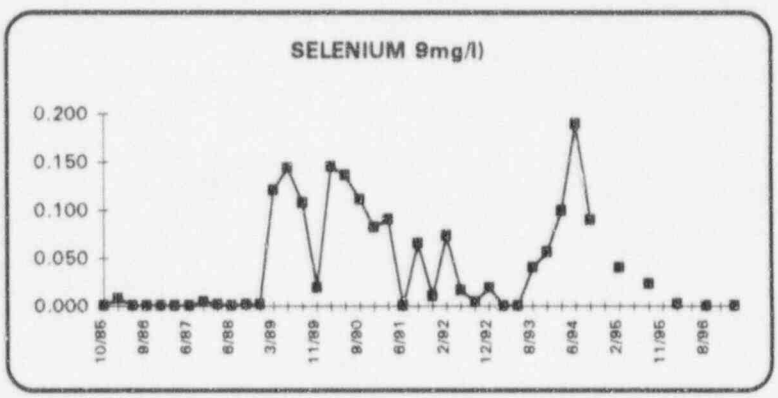


WELL 44SC

DATE	LEAD	NICKEL	SELENIUM
Oct-85			0.001
Mar-86			0.008
May-86	0.260	3.23	0.001
Sep-86			0.001
Nov-86			0.001
Mar-87			0.001
Jun-87			0.001
Sep-87	0.270	4.02	0.005
Jan-88	0.403	3.83	0.002
Jun-88			0.001
Sep-88	0.300	1.72	0.002
Nov-88	0.570	2.19	0.002
Mar-89			0.121
May-89	0.540	2.31	0.144
Sep-89			0.108
Nov-89	0.650	2.70	0.020
Mar-90	0.220	3.14	0.145
Jun-90	0.170	3.00	0.136
Sep-90	0.050	2.55	0.111
Dec-90	0.350	3.20	0.083
Feb-91	0.300	3.19	0.091
Jun-91			0.001
Sep-91			0.066
Dec-91		3.31	0.011
Feb-92	0.050	3.54	0.074
Jun-92	0.050		0.017
Aug-92	0.050	3.16	0.005
Dec-92			0.020
Mar-93	0.050	2.66	0.001
May-93			0.001
Aug-93	0.050	2.97	0.041
Nov-93	0.050	2.70	0.057
Mar-94	0.010	3.59	0.100
Jun-94	0.011	2.98	0.190
Sep-94	0.050	3.45	0.090
Dec-94			
Feb-95	0.005	3.79	0.041
May-95			
Aug-95	.0025	3.34	.024
Nov-95			
Feb-96	.0025	2.90	.003
Jun-96			
Aug-96	0.0025	2.97	0.0005
Nov-96			
Feb-97	0.0010	2.99	0.0005

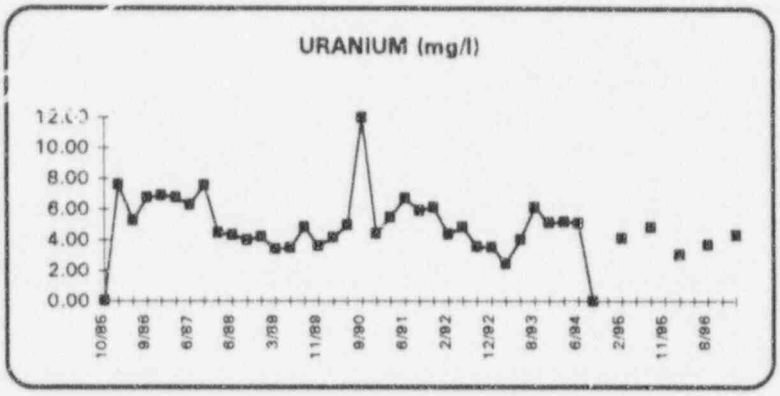


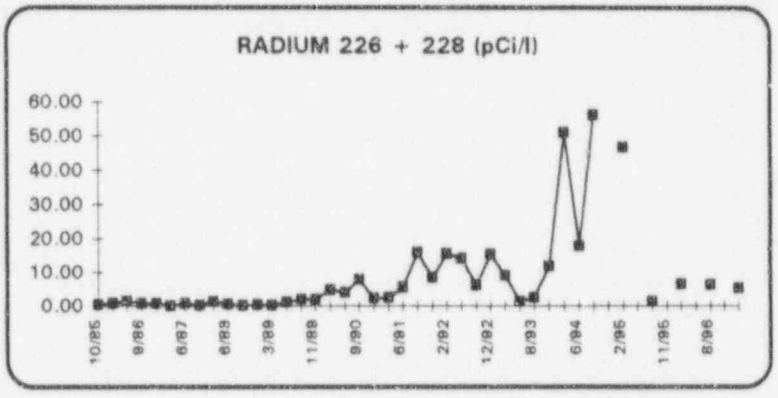


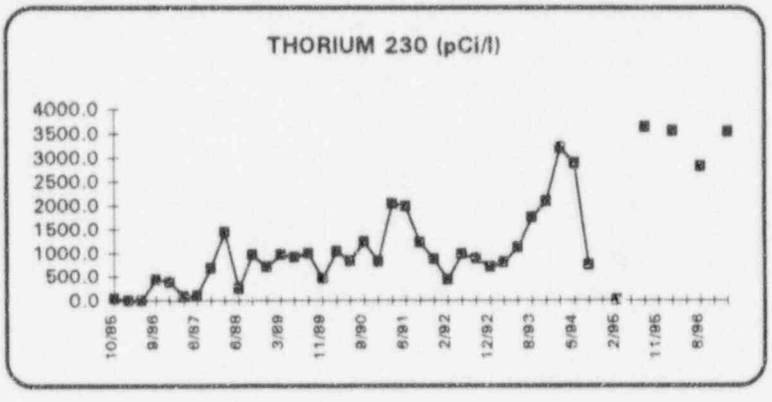


WELL 44SC

DATE	URANIUM	Ra 6+8	Th 230
Oct-85	0.05	0.48	43.0
Mar-86	7.60	0.72	1.1
May-86	5.28	1.62	0.9
Sep-86	6.76	0.74	437.0
Nov-86	6.90	0.72	381.0
Mar-87	6.75	0.09	79.0
Jun-87	6.31	0.73	95.0
Sep-87	7.58	0.20	681.0
Jan-88	4.45	1.42	1438.0
Jun-88	4.35	0.58	248.0
Sep-88	4.00	0.14	972.0
Nov-88	4.20	0.43	708.0
Mar-89	3.40	0.22	965.0
May-89	3.50	1.16	910.0
Sep-89	4.85	1.98	990.0
Nov-89	3.60	1.84	457.0
Mar-90	4.15	4.73	1029.0
Jun-90	5.00	4.01	826.0
Sep-90	12.00	7.98	1234.0
Dec-90	4.41	2.38	814.0
Feb-91	5.48	2.51	2044.0
Jun-91	6.73	5.60	1985.0
Sep-91	5.90	15.98	1227.0
Dec-91	6.14	8.53	875.0
Feb-92	4.37	15.65	437.0
Jun-92	4.83	14.30	981.0
Aug-92	3.56	6.07	880.0
Dec-92	3.54	15.48	707.0
Mar-93	2.45	9.13	808.0
May-93	4.03	1.28	1118.0
Aug-93	6.13	2.55	1758.0
Nov-93	5.16	11.84	2102.0
Mar-94	5.20	50.90	3200.0
Jun-94	5.09	17.90	2880.0
Sep-94	0.00	56.10	743.0
Dec-94			
Feb-95	4.12	46.70	15.8
May-95			
Aug-95	4.84	1.30	3630.0
Nov-95			
Feb-96	3.08	6.50	3550.0
Jun-96			
Aug-96	3.71	6.40	2820.0
Nov-96			
Feb-97	4.35	5.35	3540.0

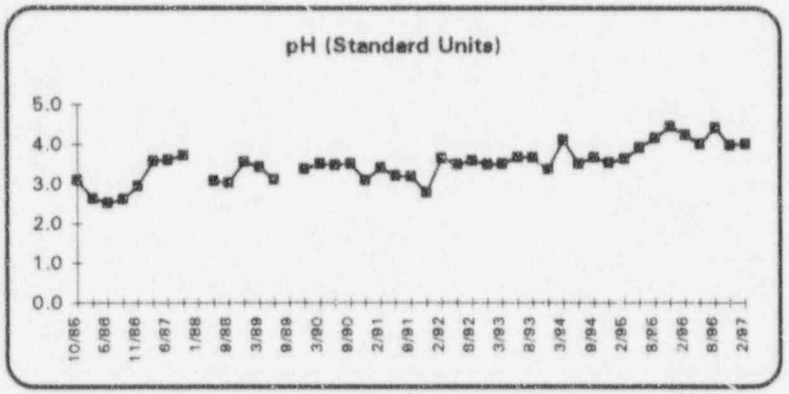


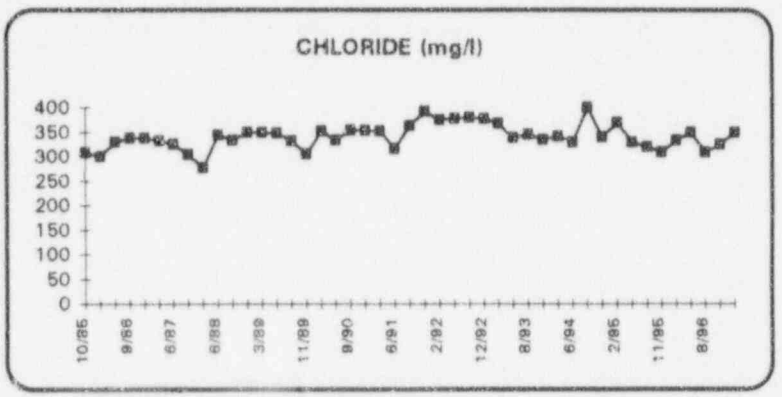


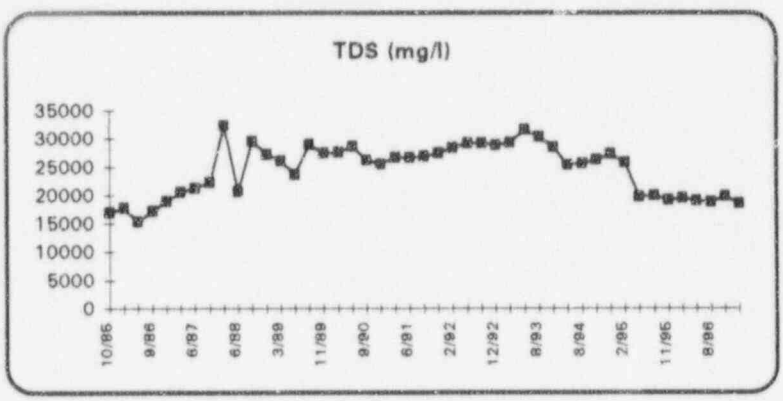


WELL 45SC

DATE	pH	CHLORIDE	TDS
Oct-85	3.1	308	16969
Mar-86	2.6	300	17834
May-86	2.5	329	15312
Sep-86	2.6	337	17240
Nov-86	3.0	337	18918
Mar-87	3.6	332	20572
Jun-87	3.6	325	21274
Sep-87	3.7	304	22328
Jan-88		278	32311
Jun-88	3.1	344	20653
Sep-88	3.0	333	29592
Nov-88	3.6	349	27247
Mar-89	3.4	350	26140
May-89	3.1	348	23684
Sep-89		332	28937
Nov-89	3.4	306	27465
Mar-90	3.5	352	27642
Jun-90	3.5	334	28647
Sep-90	3.5	353	26258
Dec-90	3.1	354	25579
Feb-91	3.4	352	25634
Jun-91	3.2	316	26694
Sep-91	3.2	363	26867
Dec-91	2.8	392	27514
Feb-92	3.7	375	28418
Jul-92	3.5	377	29279
Aug-92	3.6	380	29214
Dec-92	3.5	378	28930
Mar-93	3.5	368	29332
May-93	3.7	339	31688
Aug-93	3.7	345	30371
Nov-93	3.4	335	28551
Mar-94	4.1	342	25400
Jun-94	3.5	330	25600
Sep-94	3.7	400	26300
Dec-94	3.5	340	27400
Feb-95	3.6	370	25900
May-95	3.91	330.	19700
Aug-95	4.16	320.	20000
Nov-95	4.46	310.	19150
Feb-96	4.24	333.	19500
Jun-96	4.0	350	19100
Aug-96	4.4	310	18800
Nov-96	4.0	325	19900
Feb-97	4.0	350	18600

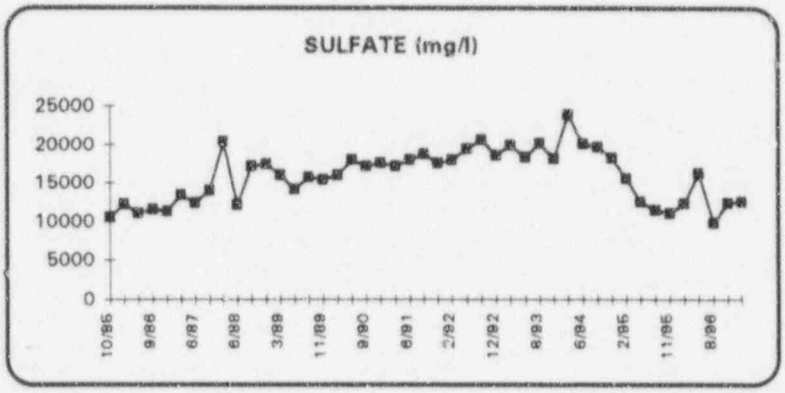


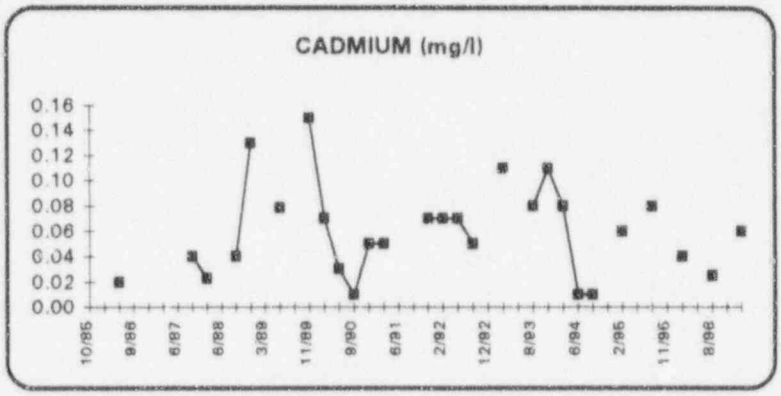


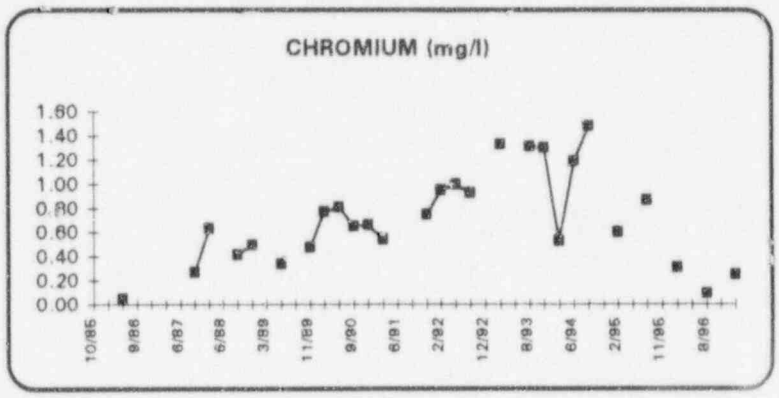


WELL 45SC

DATE	SULFATE	Cadmium	Chromium
Oct-85	10600		
Mar-86	12220		
May-86	11100	0.02	0.05
Sep-86	11600		
Nov-86	11360		
Mar-87	13400		
Jun-87	12400		
Sep-87	14000	0.04	0.27
Jan-88	20400	0.02	0.63
Jun-88	12200		
Sep-88	17200	0.04	0.42
Nov-88	17450	0.13	0.50
Mar-89	16000		
May-89	14200	0.08	0.34
Sep-89	15800		
Nov-89	15400	0.15	0.48
Mar-90	16000	0.07	0.77
Jun-90	18000	0.03	0.81
Sep-90	17200	0.01	0.65
Dec-90	17600	0.05	0.66
Feb-91	17200	0.05	0.54
Jun-91	18000		
Sep-91	18800		
Dec-91	17600	0.07	0.75
Feb-92	18000	0.07	0.95
Jul-92	19500	0.07	1.00
Aug-92	20600	0.05	0.93
Dec-92	18600		
Mar-93	20000	0.11	1.33
May-93	18400		
Aug-93	20200	0.08	1.31
Nov-93	18200	0.11	1.30
Mar-94	23900	0.08	0.53
Jun-94	20100	0.01	1.19
Sep-94	19700	0.01	1.48
Dec-94	18300		
Feb-95	15600	0.06	0.60
May-95	12600		
Aug-95	11500	.08	.87
Nov-95	11100		
Feb-96	12300	.04	.31
Jun-96	16300		
Aug-96	9800	0.025	0.09
Nov-96	12400		
Feb-97	12600	0.060	0.25

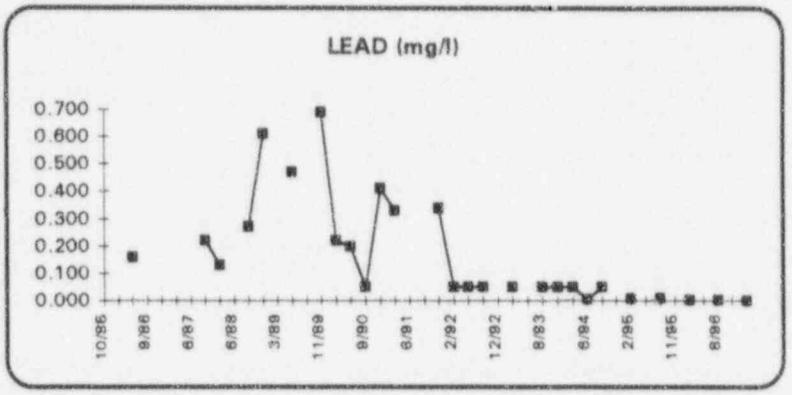


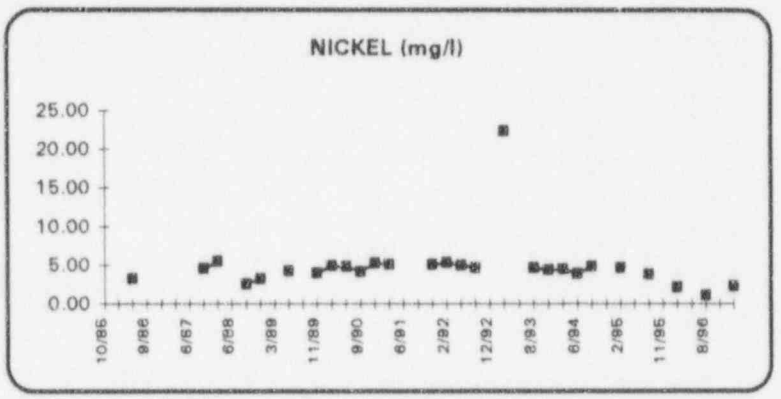


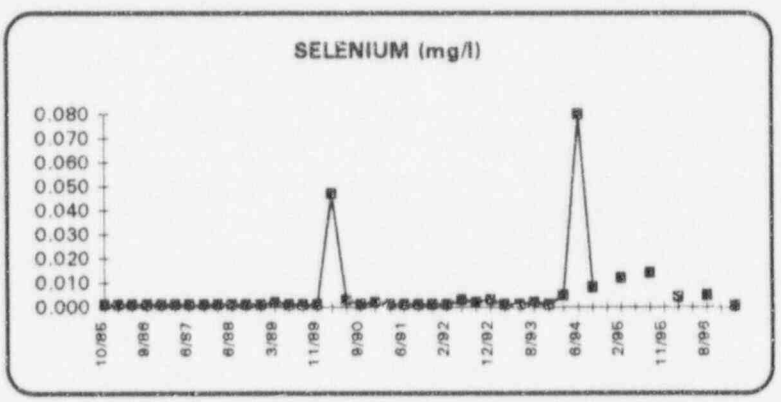


WELL 45SC

DATE	LEAD	NICKEL	SELENIUM
Oct-85			0.001
Mar-86			0.001
May-86	0.160	3.25	0.001
Sep-86			0.001
Nov-86			0.001
Mar-87			0.001
Jun-87			0.001
Sep-87	0.220	4.56	0.001
Jan-88	0.131	5.45	0.001
Jun-88			0.001
Sep-88	0.270	2.52	0.001
Nov-88	0.610	3.21	0.001
Mar-89			0.002
May-89	0.470	4.24	0.001
Sep-89			0.001
Nov-89	0.690	4.00	0.001
Mar-90	0.220	4.90	0.047
Jun-90	0.200	4.80	0.003
Sep-90	0.050	4.10	0.001
Dec-90	0.410	5.22	0.002
Feb-91	0.330	5.04	0.001
Jun-91			0.001
Sep-91			0.001
Dec-91	0.340	5.05	0.001
Feb-92	0.050	5.36	0.001
Jul-92	0.050	5.01	0.003
Aug-92	0.050	4.65	0.002
Dec-92			0.003
Mar-93	0.050	22.40	0.001
May-93			0.001
Aug-93	0.050	4.86	0.002
Nov-93	0.050	4.40	0.001
Mar-94	0.050	4.46	0.005
Jun-94	0.005	3.87	0.080
Sep-94	0.050	4.79	0.008
Dec-94			
Feb-95	0.007	4.67	0.012
May-95			
Aug-95	.009	3.76	.014
Nov-95			
Feb-96	.0025	2.10	.004
Jun-96			
Aug-96	0.0025	1.14	0.0050
Nov-96			
Feb-97	0.0010	2.31	0.0005

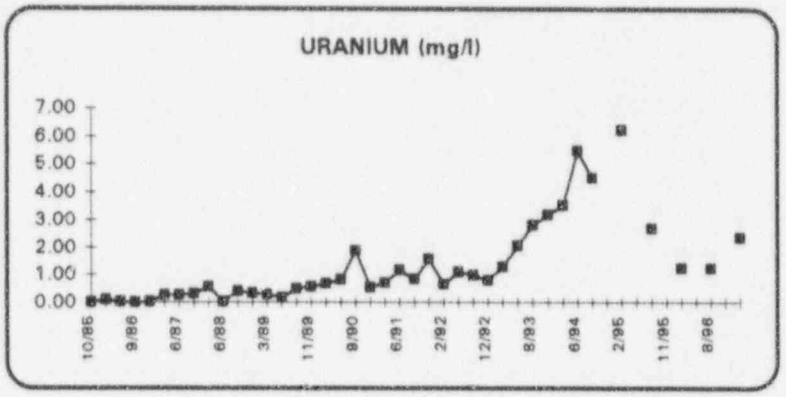


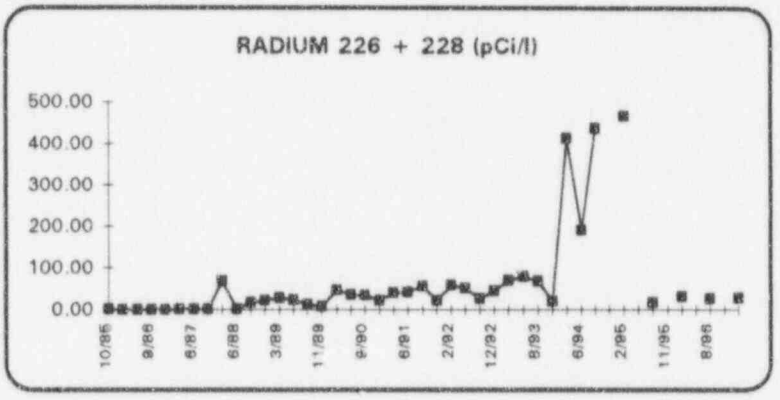


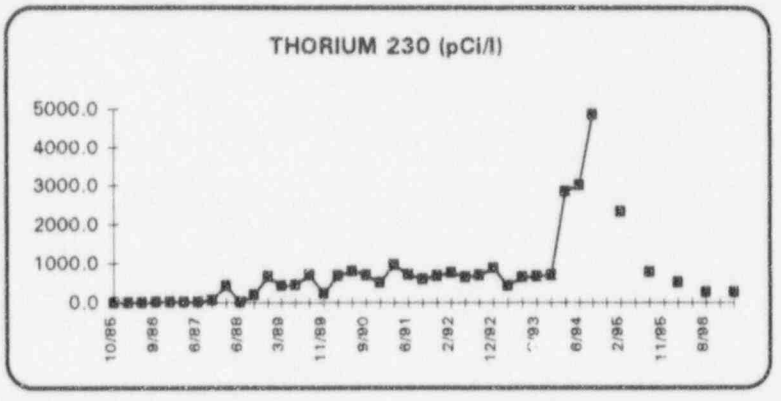


WELL 45SC

DATE	URANIUM	Ra 6+8	Th 230
Oct-85	0.00	0.79	0.2
Mar-86	0.10	0.77	0.2
May-86	0.02	0.25	0.1
Sep-86	0.01	0.54	21.9
Nov-86	0.01	0.56	11.7
Mar-87	0.26	1.16	12.7
Jun-87	0.26	2.17	10.9
Sep-87	0.30	2.24	64.0
Jan-88	0.56	68.93	429.0
Jun-88	0.03	1.98	14.1
Sep-88	0.39	17.50	207.0
Nov-88	0.33	22.08	666.0
Mar-89	0.28	27.48	443.0
May-89	0.16	23.98	447.0
Sep-89	0.48	12.14	710.0
Nov-89	0.57	8.18	238.0
Mar-90	0.67	47.59	692.0
Jun-90	0.82	36.37	804.0
Sep-90	1.88	34.34	699.0
Dec-90	0.54	21.19	526.0
Feb-91	0.71	40.96	981.0
Jun-91	1.17	41.62	725.0
Sep-91	0.83	55.72	608.0
Dec-91	1.58	21.36	684.0
Feb-92	0.66	59.97	766.0
Jul-92	1.09	51.12	656.0
Aug-92	0.98	27.29	700.0
Dec-92	0.80	45.87	893.0
Mar-93	1.28	69.59	430.0
May-93	2.05	79.43	660.0
Aug-93	2.82	68.98	676.0
Nov-93	3.18	20.73	698.0
Mar-94	3.53	414.80	2860.0
Jun-94	5.48	190.40	3020.0
Sep-94	4.51	437.90	4860.0
Dec-94			
Feb-95	6.22	466.70	2330.0
May-95			
Aug-95	2.69	17.90	784.00
Nov-95			
Feb-96	1.23	30.50	523.00
Jun-96			
Aug-96	1.25	26.80	276.0
Nov-96			
Feb-97	2.36	28.10	274.0

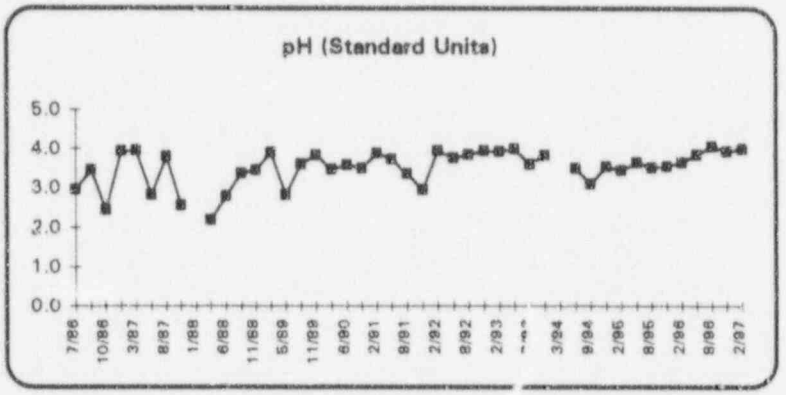


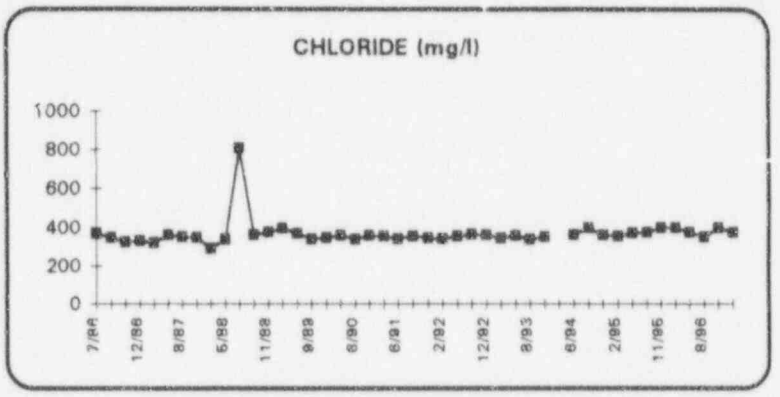


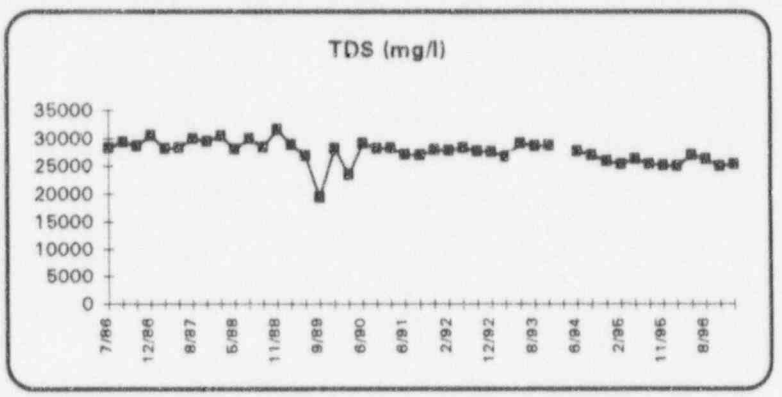


WELL 51SC

DATE	pH	CHLORIDE	TDS
Jul-86	3.0	368	28376
Aug-86	3.5	348	29433
Oct-86	2.5	324	28722
Dec-86	3.9	330	30508
Mar-87	4.0	320	28240
Jun-87	2.8	383	28278
Aug-87	3.8	353	29933
Oct-87	2.6	349	29497
Jan-88		289	30401
May-88	2.2	339	28082
Jun-88	2.8	806	29910
Sep-88	3.4	363	28487
Nov-88	3.5	375	31584
Mar-89	3.9	396	28917
May-89	2.8	388	26980
Sep-89	3.6	339	19410
Nov-89	3.8	343	28230
Mar-90	3.5	358	23560
Jun-90	3.6	339	29161
Aug-90	3.5	359	28174
Feb-91	3.9	355	28311
Jun-91	3.7	342	27204
Sep-91	3.4	354	27017
Dec-91	3.0	345	27958
Feb-92	4.0	342	27885
Jul-92	3.8	354	28272
Aug-92	3.9	364	27687
Dec-92	4.0	363	27591
Feb-93	3.9	345	26765
May-93	4.0	359	29119
Aug-93	3.6	338	28645
Nov-93	3.8	352	28815
Mar-94			
Jun-94	3.5	360	27800
Sep-94	3.1	400	27000
Dec-94	3.6	360	26000
Feb-95	3.5	355	25400
May-95	3.7	370	26300
Aug-95	3.5	375	25400
Nov-95	3.6	400	25200
Feb-96	3.7	400	25000
Jun-96	3.9	375	27000
Aug-96	4.1	350	26300
Nov-96	3.9	400	25100
Feb-97	4.0	375	25400

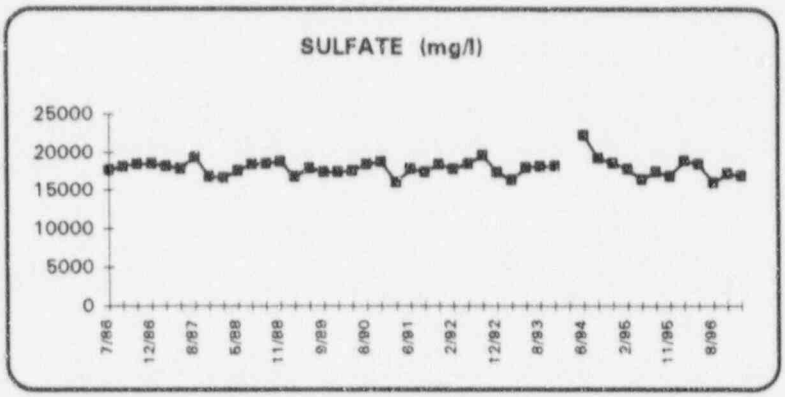


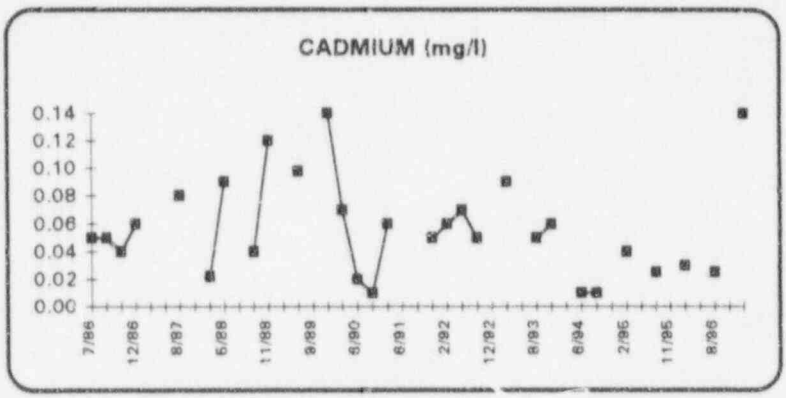


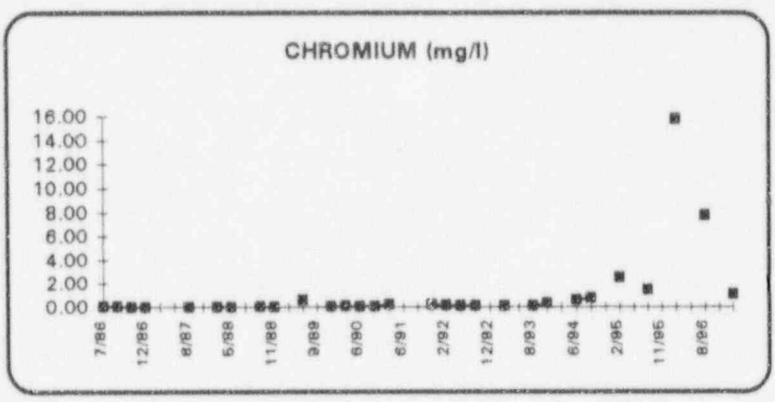


WELL 51SC

DATE	SULFATE	Cadmium	Chromium
Jul-86	17700	0.05	0.05
Aug-86	18100	0.05	0.05
Oct-86	18430	0.04	0.02
Dec-86	18529	0.06	0.01
Mar-87	18200		
Jun-87	17800		
Aug-87	19400	0.08	0.01
Oct-87	16800		
Jan-88	16660	0.02	0.01
May-88	17600	0.09	0.01
Jun-88	18400		
Sep-88	18500	0.04	0.06
Nov-88	18800	0.12	0.01
Mar-89	16800		
May-89	17900	0.10	0.58
Sep-89	17400		
Nov-89	17400	0.14	0.05
Mar-90	17600	0.07	0.12
Jun-90	18400	0.02	0.05
Aug-90	18800	0.01	0.06
Feb-91	16000	0.06	0.23
Jun-91	17800		
Sep-91	17400		
Dec-91	18400	0.05	0.21
Feb-92	17800	0.06	0.15
Jul-92	18500	0.07	0.09
Aug-92	19600	0.05	0.10
Dec-92	17400		
Feb-93	16400	0.09	0.10
May-93	18000		
Aug-93	18200	0.05	0.12
Nov-93	18300	0.06	0.32
Mar-94			
Jun-94	22300	0.01	0.61
Sep-94	19300	0.01	0.78
Dec-94	18600		
Feb-95	17800	0.04	2.52
May-95	16500		
Aug-95	17500	.025	1.46
Nov-95	16900		
Feb-96	18900	.03	15.8
Jun-96	18500		
Aug-96	16000	0.025	7.73
Nov-96	17200		
Feb-97	17000	0.14	1.09

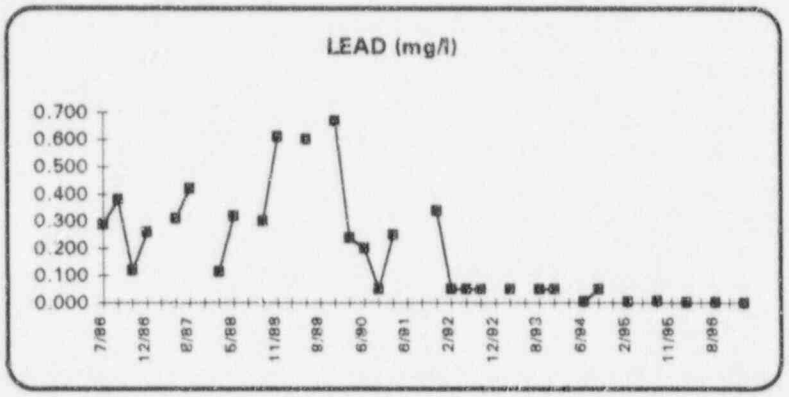


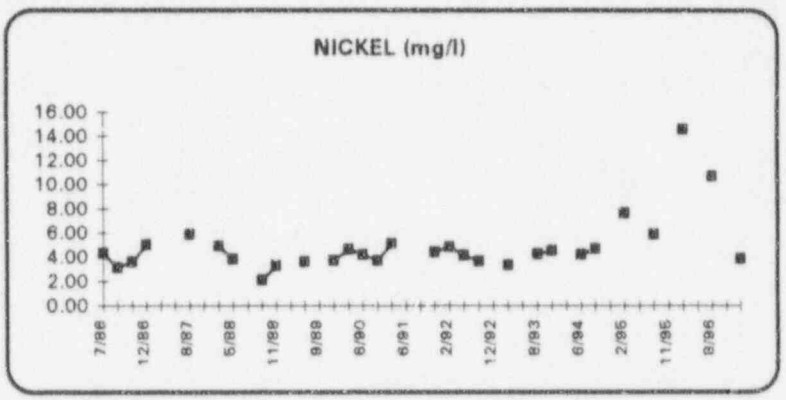


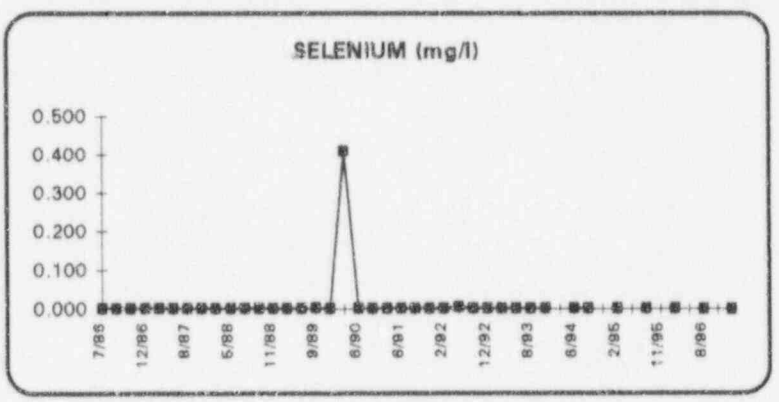


WELL 51SC

DATE	LEAD	NICKEL	SELENIUM
Jul-86	0.290	4.30	0.001
Aug-86	0.380	3.15	0.001
Oct-86	0.120	3.62	0.001
Dec-86	0.260	5.02	0.001
Mar-87			0.001
Jun-87	0.310		0.001
Aug-87	0.420	5.85	0.001
Oct-87			0.001
Jan-88	0.115	4.92	0.001
May-88	0.320	3.83	0.001
Jun-88			0.001
Sep-88	0.300	2.12	0.001
Nov-88	0.610	3.29	0.001
Mar-89			0.001
May-89	0.600	3.63	0.001
Sep-89			0.003
Nov-89	0.670	3.70	0.001
Mar-90	0.240	4.65	0.410
Jun-90	0.200	4.20	0.001
Aug-90	0.050	3.74	0.001
Feb-91	0.250	5.12	0.001
Jun-91			0.001
Sep-91			0.001
Dec-91	0.340	4.41	0.001
Feb-92	0.050	4.86	0.001
Jul-92	0.050	4.13	0.005
Aug-92	0.050	3.64	0.002
Dec-92			0.001
Feb-93	0.050	3.32	0.001
May-93			0.002
Aug-93	0.050	4.24	0.001
Nov-93	0.050	4.50	0.001
Mar-94			
Jun-94	0.005	4.22	0.002
Sep-94	0.050	4.68	0.002
Dec-94			
Feb-95	0.005	7.65	0.002
May-95			
Aug-95	.006	5.86	.001
Nov-95			
Feb-96	.0025	14.60	.002
Jun-96			
Aug-96	0.0025	10.70	0.0005
Nov-96			
Feb-97	0.0010	3.88	0.0005

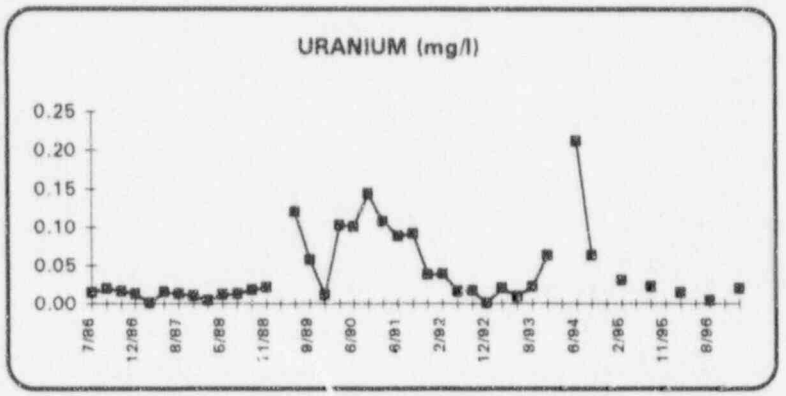


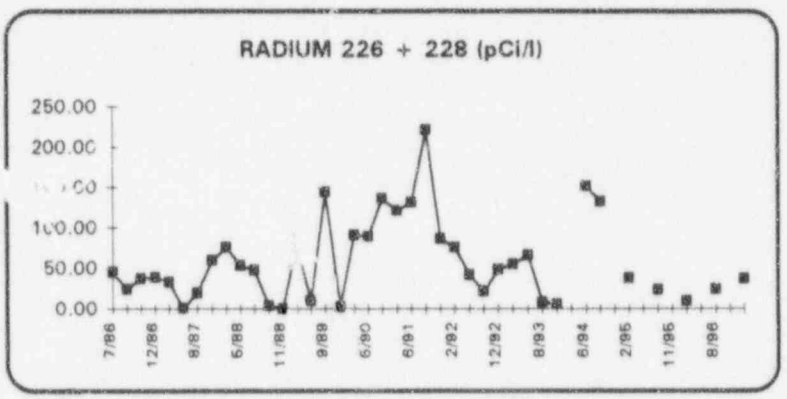


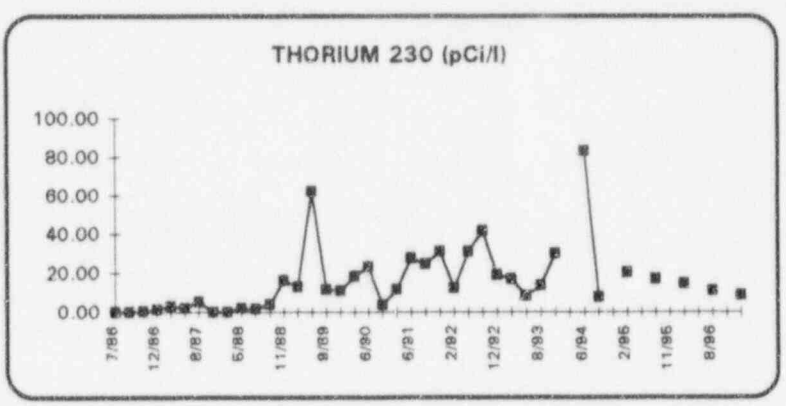


WELL 51SC

DATE	URANIUM	Ra 6+8	Th 230
Jul-86	0.01	44.80	0.09
Aug-86	0.02	24.30	0.14
Oct-86	0.02	37.30	0.20
Dec-86	0.01	38.80	1.45
Mar-87	0.00	32.80	3.17
Jun-87	0.02	1.09	1.95
Aug-87	0.01	19.50	5.24
Oct-87	0.01	59.80	0.00
Jan-88	0.00	75.80	0.00
May-88	0.01	53.40	2.02
Jun-88	0.01	47.10	1.70
Sep-88	0.02	4.17	3.95
Nov-88	0.02	0.11	16.40
Mar-89		77.90	13.20
May-89	0.12	9.64	62.10
Sep-89	0.06	144.30	11.80
Nov-89	0.01	2.06	11.10
Mar-90	0.10	90.90	18.50
Jun-90	0.10	89.20	23.50
Aug-90	0.14	136.30	3.84
Feb-91	0.11	121.60	11.80
Jun-91	0.09	131.70	27.60
Sep-91	0.09	222.10	24.80
Dec-91	0.04	86.10	31.10
Feb-92	0.04	75.50	12.30
Jul-92	0.02	42.20	31.10
Aug-92	0.02	21.82	41.80
Dec-92	0.00	48.20	19.00
Feb-93	0.02	54.62	16.90
May-93	0.01	66.10	8.42
Aug-93	0.02	8.44	13.60
Nov-93	0.06	5.96	30.20
Mar-94			
Jun-94	0.21	152.30	83.20
Sep-94	0.06	132.30	7.70
Dec-94			
Feb-95	0.03	37.90	20.30
May-95			
Aug-95	.022	23.50	17.20
Nov-95			
Feb-96	.014	9.50	14.70
Jun-96			
Aug-96	0.004	24.50	11.10
Nov-96			
Feb-97	0.019	36.60	8.70

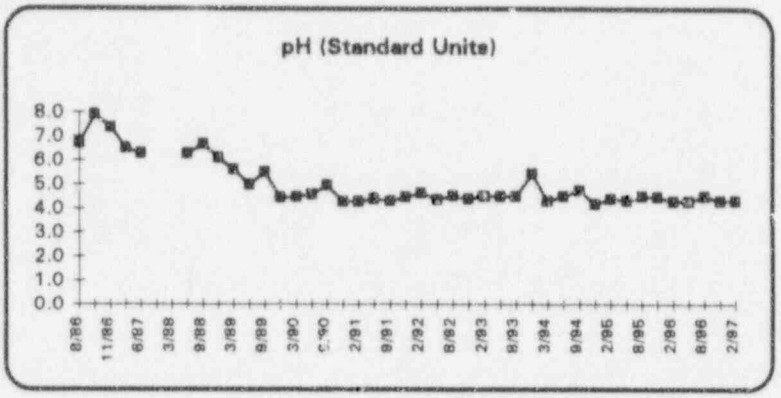


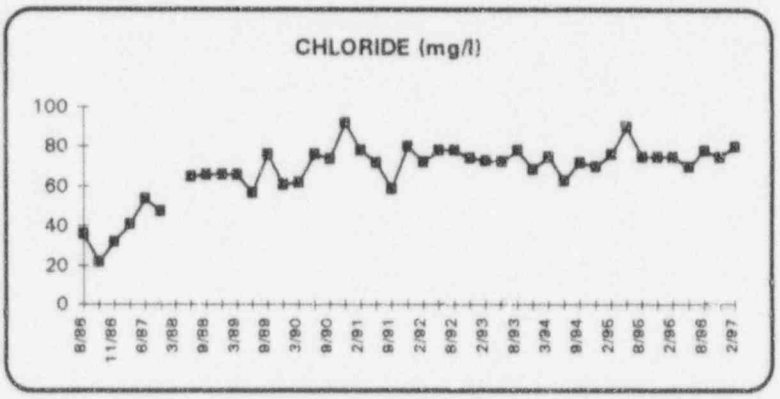


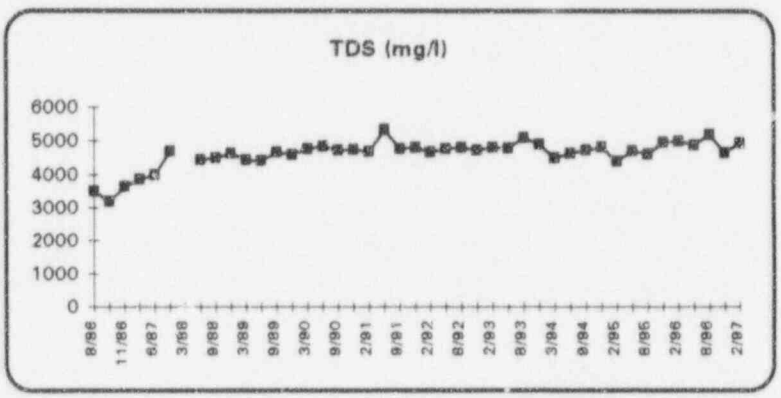


WELL 53SC

DATE	pH	CHLORIDE	TDS
Aug-86	6.7	36	3510
Sep-86	7.9	22	3204
Nov-86	7.4	32	3652
Mar-87	6.5	41	3859
Jun-87	6.3	54	3995
Jan-88		48	4703
Mar-88			
Jun-88	6.3	65	4432
Sep-88	6.7	66	4502
Nov-88	6.1	66	4629
Mar-89	5.6	66	4442
May-89	5.0	57	4430
Sep-89	5.5	76	4674
Nov-89	4.5	61	4591
Mar-90	4.5	62	4779
Jun-90	4.6	76	4850
Sep-90	5.0	74	4727
Dec-90	4.3	92	4755
Feb-91	4.3	78	4695
May-91	4.4	72	5345
Sep-91	4.3	59	4770
Dec-91	4.5	80	4805
Feb-92	4.6	72	4666
Jun-92	4.4	78	4773
Aug-92	4.5	78	4817
Dec-92	4.4	74	4732
Feb-93	4.5	73	4804
May-93	4.5	72	4789
Aug-93	4.5	78	5107
Nov-93	5.4	69	4918
Mar-94	4.3	75	4500
Jun-94	4.5	63	4630
Sep-94	4.8	72	4740
Dec-94	4.2	70	4840
Feb-95	4.4	76	4400
May-95	4.3	90.	4720
Aug-95	4.5	75.	4620
Nov-95	4.5	75.	4960
Feb-96	4.3	75.	5000
Jun-96	4.3	70	4880
Aug-96	4.5	78	5200
Nov-96	4.3	75	4660
Feb-97	4.3	80	4940

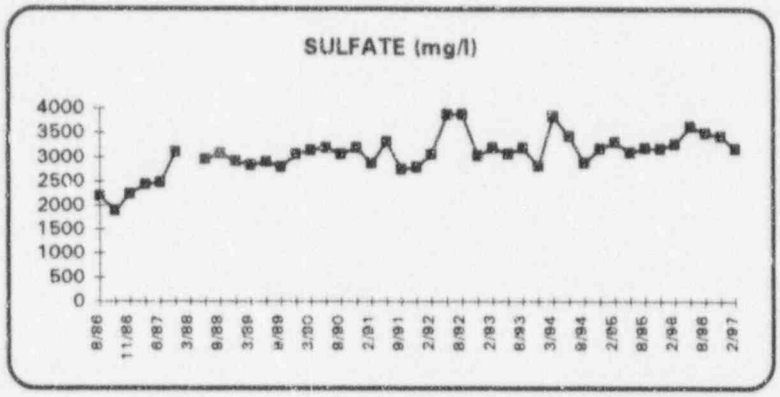


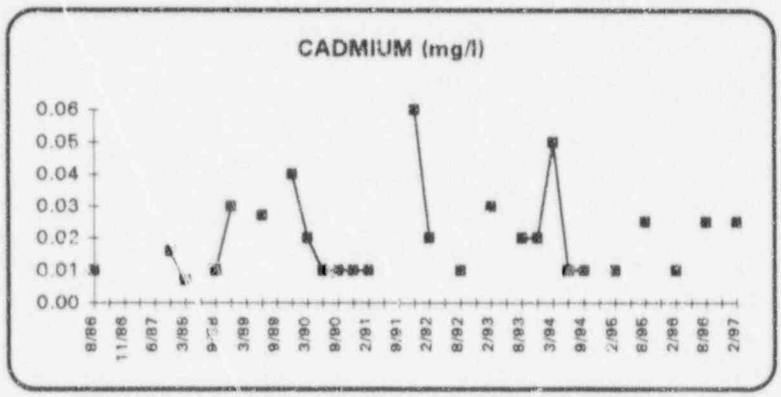


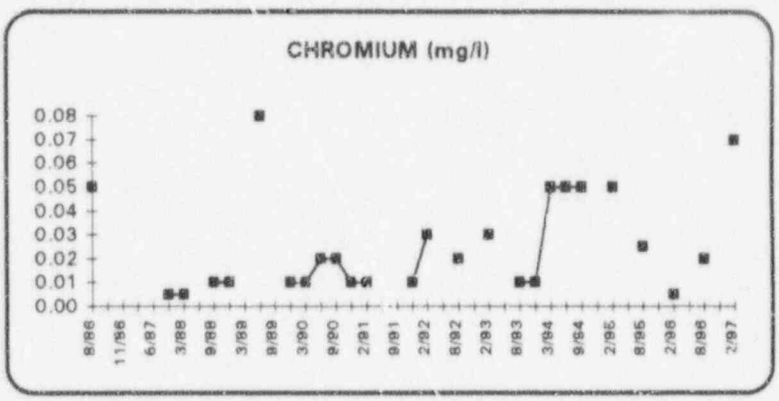


WELL 53SC

DATE	SULFATE	Cadmium	Chromium
Aug-86	2190	0.01	0.05
Sep-86	1888		
Nov-86	2230		
Mar-87	2440		
Jun-87	2480		
Jan-88	3100	0.02	0.01
Mar-88		0.01	0.01
Jun-88	2960		
Sep-88	3060	0.01	0.01
Nov-88	2920	0.03	0.01
Mar-89	2840		
May-89	2900	0.03	0.08
Sep-89	2800		
Nov-89	3060	0.04	0.01
Mar-90	3150	0.02	0.01
Jun-90	3200	0.01	0.02
Sep-90	3060	0.01	0.02
Dec-90	3200	0.01	0.01
Feb-91	2880	0.01	0.01
May-91	3320		
Sep-91	2760		
Dec-91	2800	0.06	0.01
Feb-92	3060	0.02	0.03
Jun-92	3880		
Aug-92	3880	0.01	0.02
Dec-92	3040		
Feb-93	3200	0.03	0.03
May-93	3080		
Aug-93	3200	0.02	0.01
Nov-93	2820	0.02	0.01
Mar-94	3840	0.05	0.05
Jun-94	3440	0.01	0.05
Sep-94	2890	0.01	0.05
Dec-94	3190		
Feb-95	3320	0.01	0.05
May-95	3110		
Aug-95	3200	.025	.025
Nov-95	3180		
Feb-96	3280	.01	.005
Jun-96	3640		
Aug-96	3510	0.025	0.02
Nov-96	3440		
Feb-97	3180	0.025	0.07

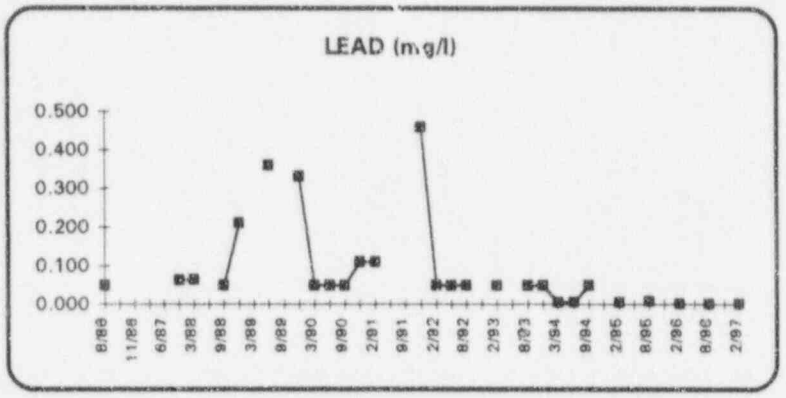


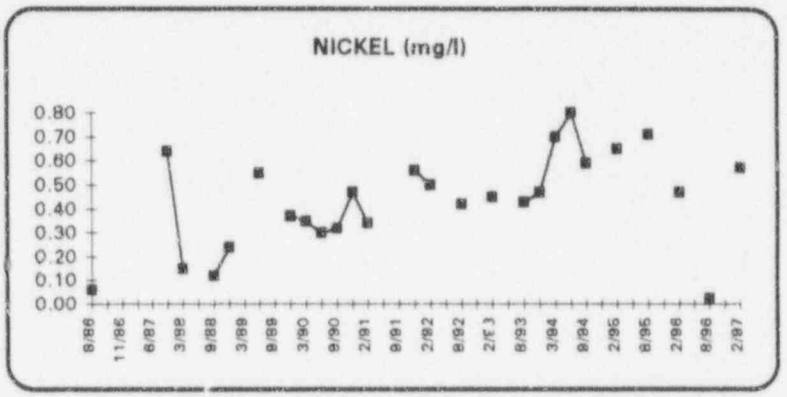


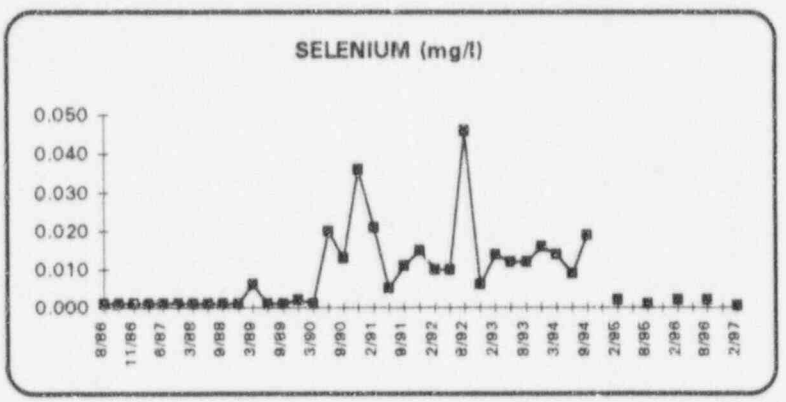


WELL 53SC

DATE	LEAD	NICKEL	SELENIUM
Aug-86	0.050	0.06	0.001
Sep-86			0.001
Nov-86			0.001
Mar-87			0.001
Jun-87			0.001
Jan-88	0.083	0.64	0.001
Mar-88	0.065	0.15	0.001
Jun-88			0.001
Sep-88	0.050	0.12	0.001
Nov-88	0.210	0.24	0.001
Mar-89			0.006
May-89	0.360	0.55	0.001
Sep-89			0.001
Nov-89	0.330	0.37	0.002
Mar-90	0.050	0.35	0.001
Jun-90	0.050	0.30	0.020
Sep-90	0.050	0.32	0.013
Dec-90	0.110	0.47	0.036
Feb-91	0.110	0.34	0.021
May-91			0.005
Sep-91			0.011
Dec-91	0.460	0.56	0.015
Feb-92	0.050	0.50	0.010
Jun-92	0.050		0.010
Aug-92	0.050	0.42	0.046
Dec-92			0.006
Feb-93	0.050	0.45	0.014
May-93			0.012
Aug-93	0.050	0.43	0.012
Nov-93	0.050	0.47	0.016
Mar-94	0.005	0.70	0.014
Jun-94	0.005	0.80	0.009
Sep-94	0.050	0.59	0.019
Dec-94			
Feb-95	0.005	0.65	0.002
May-95			
Aug-95	.008	0.71	.001
Nov-95			
Feb-96	.0025	0.57	.002
Jun-96			
Aug-96	0.0025	0.025	0.002
Nov-96			
Feb-97	0.001	0.57	0.0005

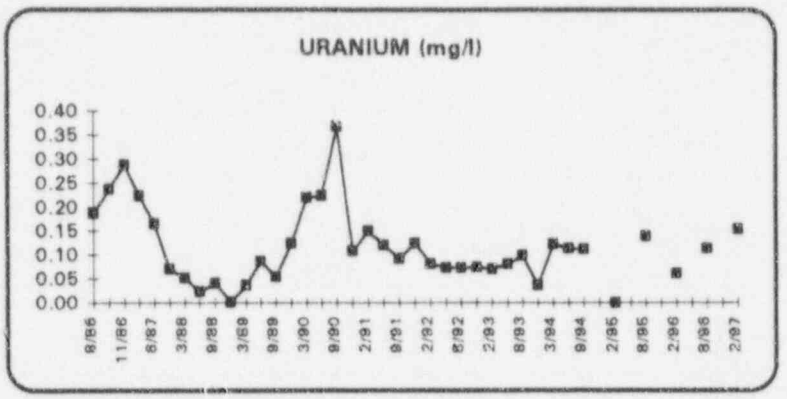


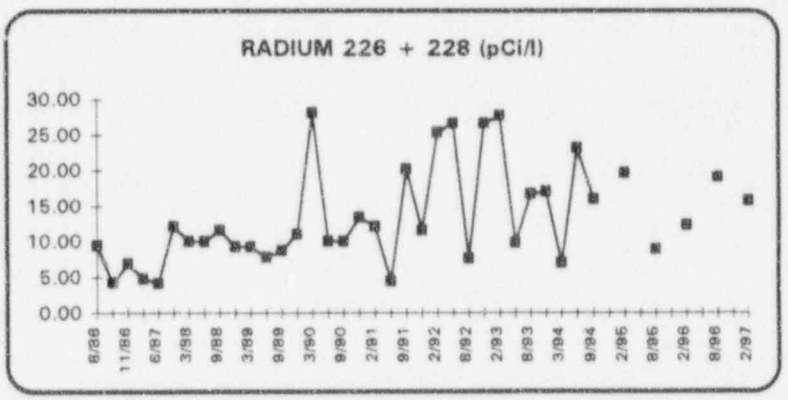


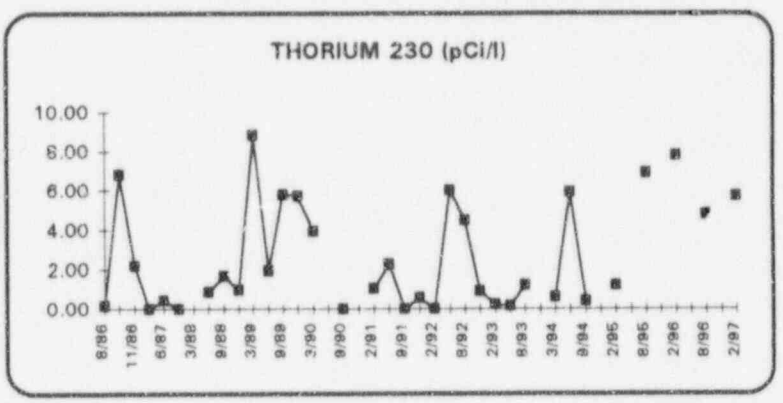


WELL 53SC

DATE	URANIUM	Ra 6+8	Th 230
Aug-86	0.19	9.41	0.15
Sep-86	0.24	4.22	6.82
Nov-86	0.29	6.92	2.20
Mar-87	0.22	4.78	0.00
Jun-87	0.17	4.09	0.44
Jan-88	0.07	12.10	0.00
Mar-88	0.05	9.97	
Jun-88	0.02	10.00	0.85
Sep-88	0.04	11.55	1.66
Nov-88	0.00	9.23	0.98
Mar-89	0.04	9.23	8.83
May-89	0.09	7.78	1.94
Sep-89	0.05	8.72	5.79
Nov-89	0.13	11.03	5.73
Mar-90	0.22	28.10	3.91
Jun-90	0.22	10.01	
Sep-90	0.37	9.99	0.00
Dec-90	0.11	13.42	
Feb-91	0.15	12.12	1.04
May-91	0.12	4.41	2.27
Sep-91	0.09	20.17	0.00
Dec-91	0.13	11.59	0.55
Feb-92	0.08	25.33	0.00
Jun-92	0.07	26.57	6.02
Aug-92	0.07	7.64	4.47
Dec-92	0.07	26.59	0.89
Feb-93	0.07	27.75	0.22
May-93	0.08	9.84	0.17
Aug-93	0.10	16.63	1.20
Nov-93	0.04	17.06	
Mar-94	0.12	7.00	0.60
Jun-94	0.11	23.10	5.90
Sep-94	0.11	16.00	0.40
Dec-94			
Feb-95	0.00	19.60	1.20
May-95			
Aug-95	0.14	8.90	6.90
Nov-95			
Feb-96	0.06	12.30	7.80
Jun-96			
Aug-96	0.11	19.10	4.80
Nov-96			
Feb-97	0.16	15.80	5.70

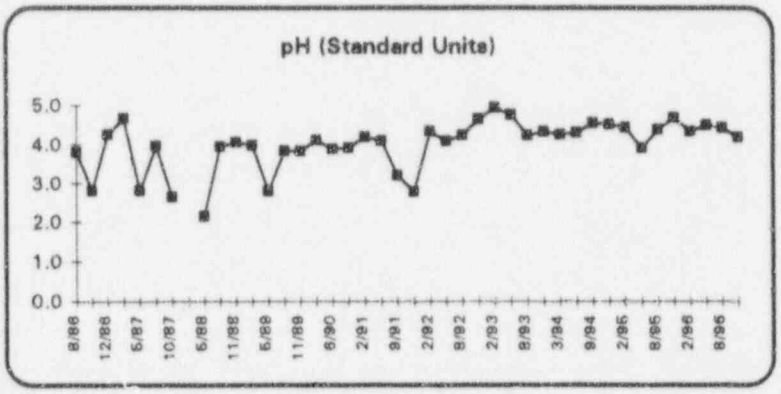


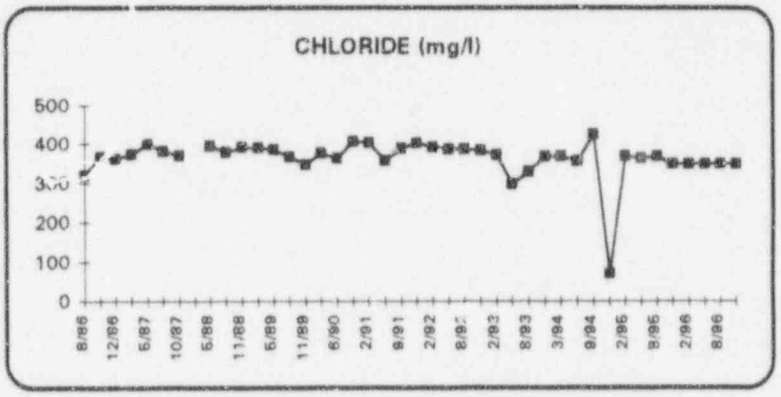


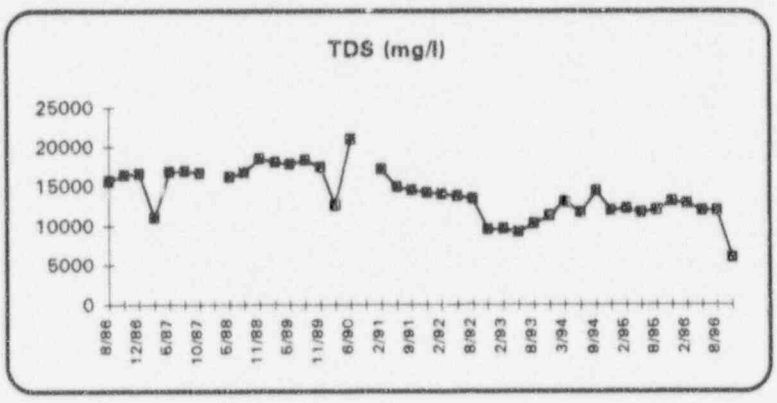


WELL 54SC

DATE	pH	CHLORIDE	TDS
Aug-86	3.8	319	15645
Oct-86	2.8	367	16396
Dec-86	4.3	363	16583
Mar-87	4.7	375	11038
May-87	2.8	400	16800
Aug-87	4.0	382	16935
Oct-87	2.7	371	16682
Jan-88			
May-88	2.2	396	16166
Sep-88	4.0	379	16750
Nov-88	4.1	392	18516
Mar-89	4.0	391	18075
May-89	2.8	386	17836
Sep-89	3.8	368	18309
Nov-89	3.8	347	17368
Mar-90	4.1	378	12626
Jun-90	3.9	365	20928
Aug-90	3.9	407	
Feb-91	4.2	404	17170
Jun-91	4.1	358	14966
Sep-91	3.2	389	14561
Dec-91	2.8	402	14224
Feb-92	4.4	392	14024
Jul-92	4.1	387	13784
Aug-92	4.3	388	13435
Dec-92	4.7	384	9562
Feb-93	5.0	373	9637
May-93	4.8	298	9282
Aug-93	4.3	329	10302
Nov-93	4.3	369	11298
Mar-94	4.3	370	13000
Jun-94	4.3	358	11750
Sep-94	4.6	425	14400
Dec-94	4.5	72	12000
Feb-95	4.4	370	12200
May-95	3.9	365.	11750
Aug-95	4.4	370.	12050
Nov-95	4.7	350.	13100
Feb-96	4.3	350.	12900
Jun-96	4.5	350	12000
Aug-96	4.4	350	12000
Feb-97	4.2	350	6050

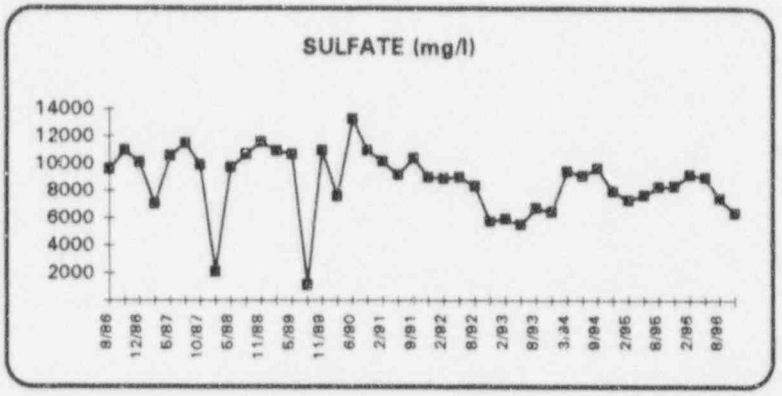


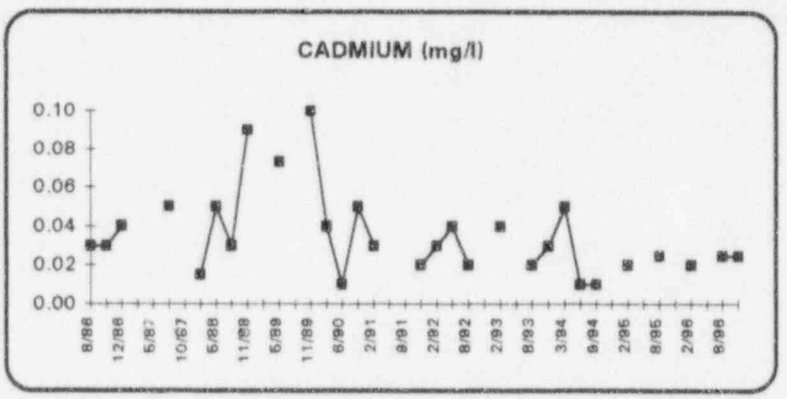


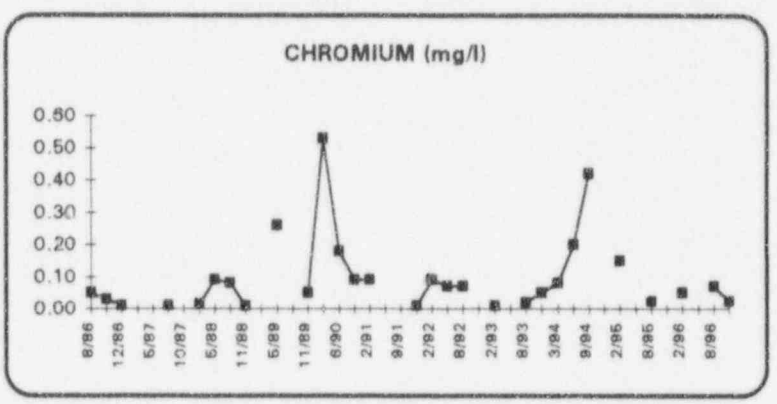


WELL 54SC

DATE	SULFATE	Cadmium	Chromium
Aug-86	9550	0.03	0.05
Oct-86	10980	0.03	0.03
Dec-86	10068	0.04	0.01
Mar-87	7040		
May-87	10560		
Aug-87	11480	0.05	0.01
Oct-87	9900		
Jan-88	2080	0.02	0.02
May-88	9700	0.05	0.09
Sep-88	10722	0.03	0.08
Nov-88	11600	0.09	0.01
Mar-89	10933		
May-89	10700	0.07	0.26
Sep-89	1110		
Nov-89	11000	0.10	0.05
Mar-90	7600	0.04	0.53
Jun-90	13280	0.01	0.18
Aug-90	11000	0.05	0.09
Feb-91	10200	0.03	0.09
Jun-91	9200		
Sep-91	10400		
Dec-91	9000	0.02	0.01
Feb-92	8900	0.03	0.09
Jul-92	9000	0.04	0.07
Aug-92	8330	0.02	0.07
Dec-92	5760		
Feb-93	5920	0.04	0.01
May-93	5520		
Aug-93	6720	0.02	0.02
Nov-93	6440	0.03	0.05
Mar-94	9440	0.05	0.08
Jun-94	9100	0.01	0.20
Sep-94	9680	0.01	0.42
Dec-94	7960		
Feb-95	7300	0.02	0.15
May-95	7680		
Aug-95	8280	.025	.025
Nov-95	8320		
Feb-96	9200	.02	.05
Jun-96	9000		
Aug-96	7450	0.025	0.07
Feb-97	6360	0.025	0.025

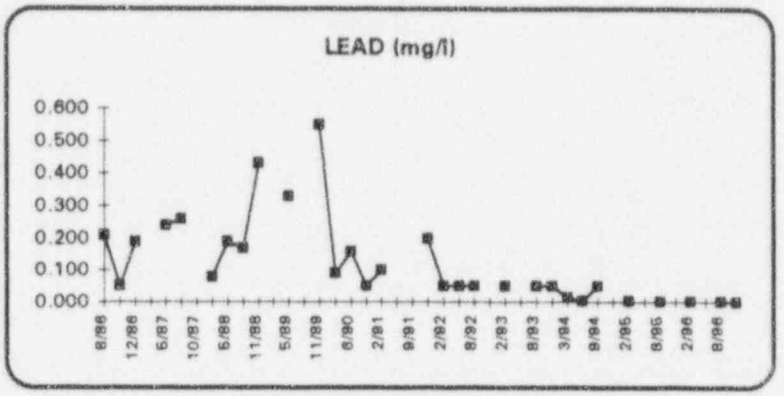


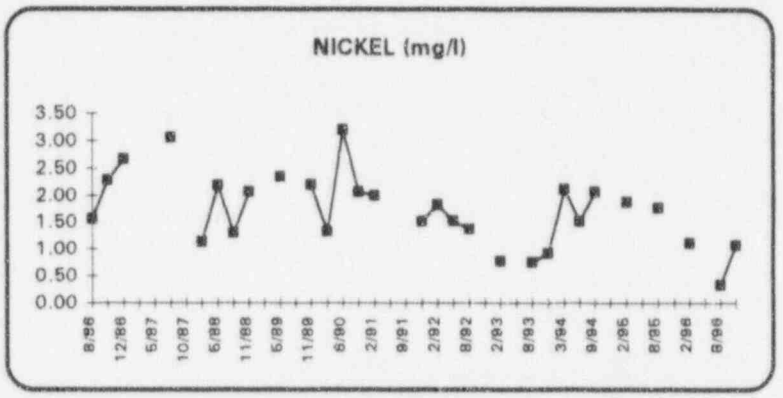


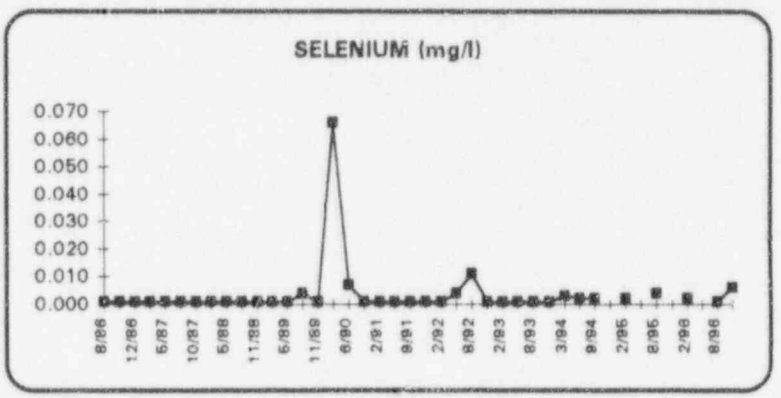


WELL 54SC

DATE	LEAD	NICKEL	SELENIUM
Aug-86	0.210	1.57	0.001
Oct-86	0.050	2.28	0.001
Dec-86	0.190	2.66	0.001
Mar-87			0.001
May-87	0.240		0.001
Aug-87	0.260	3.06	0.001
Oct-87			0.001
Jan-88	0.078	1.14	0.001
May-88	0.190	2.19	0.001
Sep-88	0.170	1.30	0.001
Nov-88	0.430	2.07	0.001
Mar-89			0.001
May-89	0.330	2.34	0.001
Sep-89			0.004
Nov-89	0.550	2.20	0.001
Mar-90	0.090	1.33	0.006
Jun-90	0.160	3.20	0.007
Aug-90	0.050	2.07	0.001
Feb-91	0.100	2.00	0.001
Jun-91			0.001
Sep-91			0.001
Dec-91	0.200	1.52	0.001
Feb-92	0.050	1.83	0.001
Jul-92	0.050	1.53	0.004
Aug-92	0.050	1.37	0.011
Dec-92			0.001
Feb-93	0.050	0.78	0.001
May-93			0.001
Aug-93	0.050	0.75	0.001
Nov-93	0.050	0.92	0.001
Mar-94	0.015	2.12	0.003
Jun-94	0.005	1.52	0.002
Sep-94	0.050	2.07	0.002
Dec-94			
Feb-95	0.005	1.88	0.002
May-95			
Aug-95	.0025	1.77	.004
Nov-95			
Feb-96	.0025	1.11	.002
Jun-96			
Aug-96	0.0025	0.34	0.001
Feb-97	0.0010	1.07	0.006

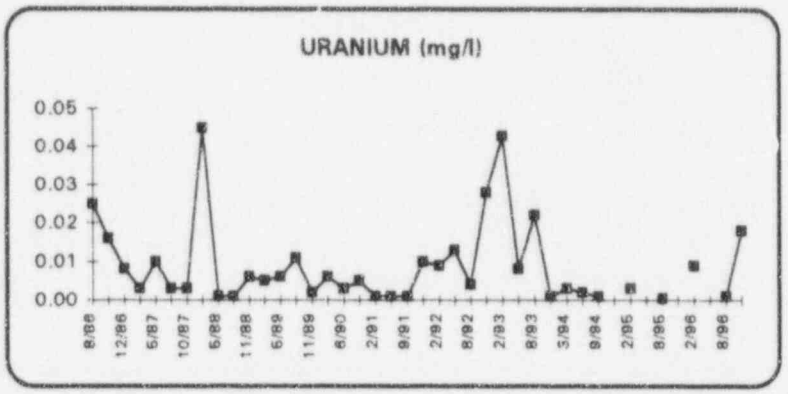


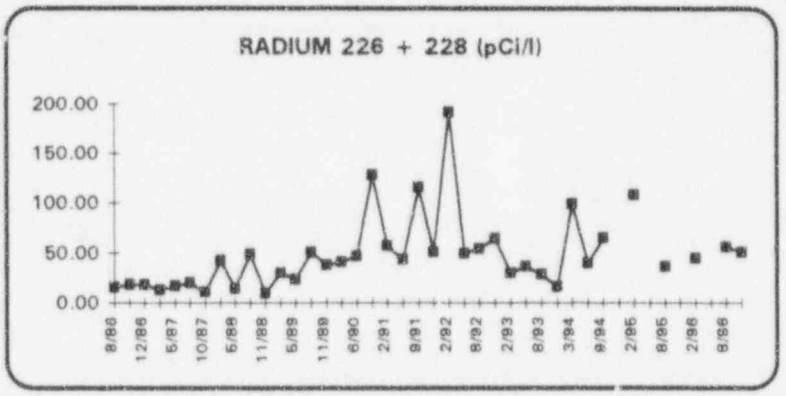


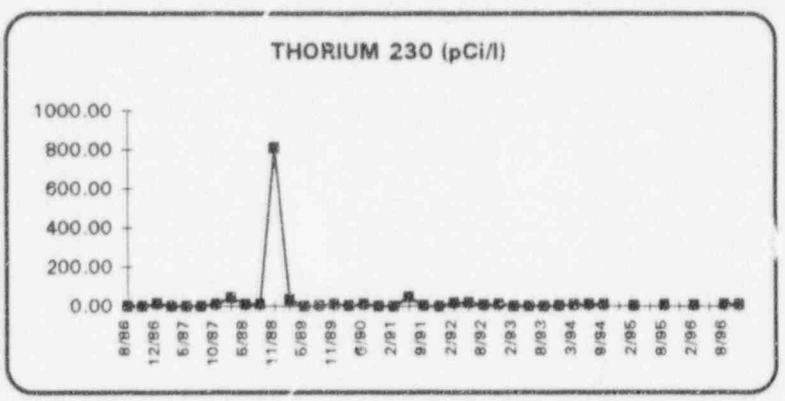


WELL 54SC

DATE	URANIUM	Ra 5+8	Th 230
Aug-86	0.03	15.80	0.15
Oct-86	0.02	18.00	0.22
Dec-86	0.01	18.60	11.70
Mar-87	0.00	12.80	0.08
May-87	0.01	17.10	0.22
Aug-87	0.00	20.10	0.00
Oct-87	0.00	10.80	11.20
Jan-88	0.05	42.49	42.00
May-88	0.00	14.60	10.10
Sep-88	0.00	48.70	8.60
Nov-88	0.01	9.71	809.00
Mar-89	0.01	30.30	33.40
May-89	0.01	23.80	0.74
Sep-89	0.01	51.00	1.74
Nov-89	0.00	37.73	9.41
Mar-90	0.01	41.00	3.99
Jun-90	0.00	46.90	9.39
Aug-90	0.01	128.10	0.00
Feb-91	0.00	57.60	0.00
Jun-91	0.00	43.86	46.00
Sep-91	0.00	116.00	3.37
Dec-91	0.01	51.10	0.00
Feb-92	0.01	192.29	17.90
Jul-92	0.01	50.00	17.90
Aug-92	0.00	54.40	6.29
Dec-92	0.03	64.60	10.00
Feb-93	0.04	29.84	0.24
May-93	0.01	36.80	0.00
Aug-93	0.02	29.02	0.53
Nov-93	0.00	16.31	1.90
Mar-94	0.00	99.50	6.80
Jun-94	0.00	40.10	9.20
Sep-94	0.00	65.50	8.40
Dec-94			
Feb-95	0.00	108.20	3.10
May-95			
Aug-95	0.00	36.40	5.10
Nov-95			
Feb-96	0.01	44.80	7.40
Jun-96			
Aug-96	0.00	56.50	11.20
Feb-97	0.02	50.80	10.00

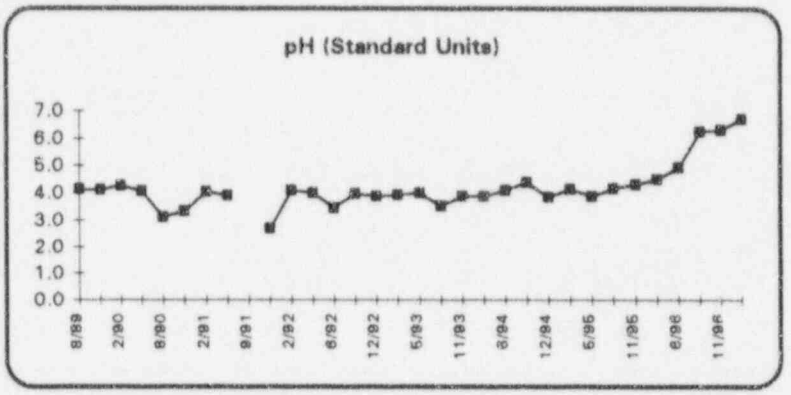


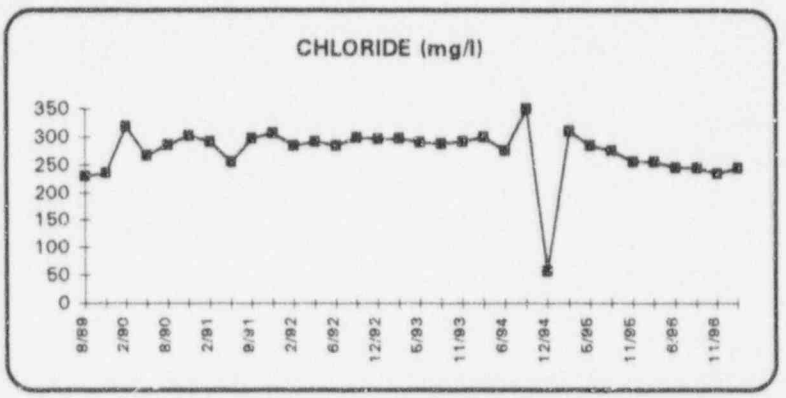


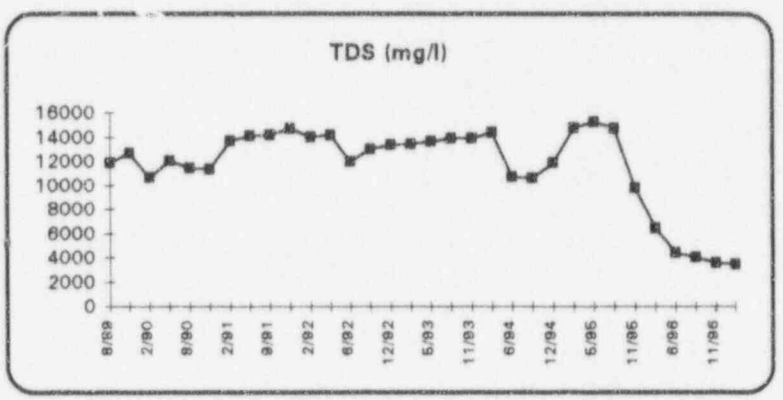


WELL 56SC

DATE	pH	CHLORIDE	TDS
Aug-89	4.1	230	11869
Nov-89	4.1	236	12686
Feb-90	4.3	318	10650
Jun-90	4.1	267	12033
Aug-90	3.1	286	11458
Nov-90	3.3	302	11378
Feb-91	4.0	292	13689
May-91	3.9	256	14108
Sep-91		297	14190
Dec-91	2.7	307	14703
Feb-92	4.1	285	14008
May-92	4.0	292	14211
Jun-92	3.5	285	12009
Aug-92	4.0	299	13016
Dec-92	3.9	296	13398
Mar-93	3.9	298	13458
May-93	4.0	291	13631
Aug-93	3.5	288	13896
Nov-93	3.9	292	13946
Mar-94	3.9	300	14400
Jun-94	4.1	275	10700
Sep-94	4.4	350	10600
Dec-94	3.9	57	11900
Feb-95	4.2	310	14800
May-95	3.9	285.	15250
Aug-95	4.2	275.	14700
Nov-95	4.3	255.	9800
Feb-96	4.5	255.	6470
Jun-96	5.0	245	4440
Aug-96	6.3	245	4040
Nov-96	6.3	235	3600
Feb-97	6.7	245	3460

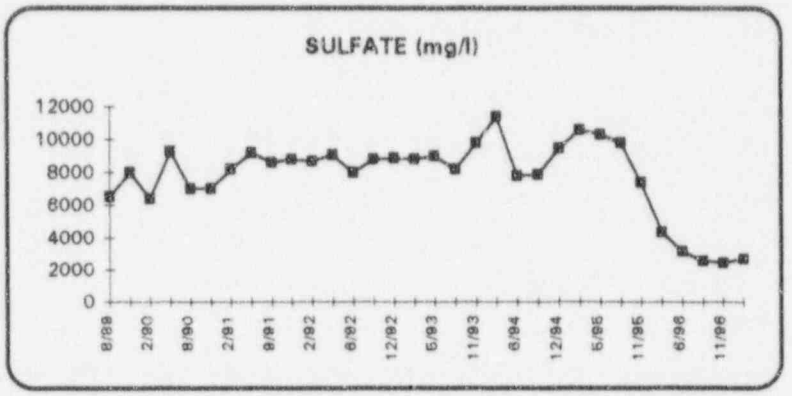


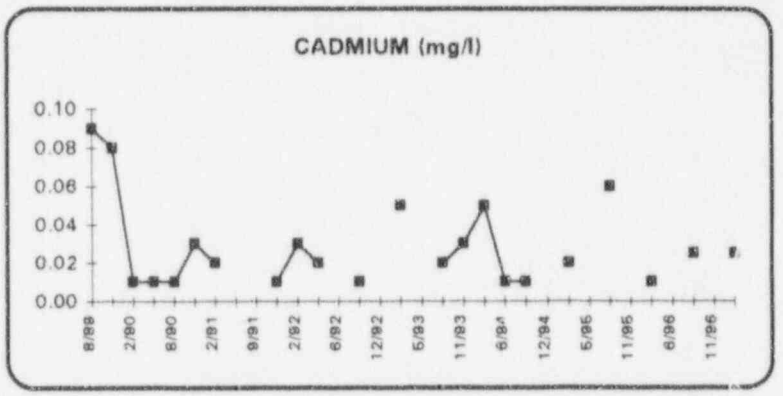


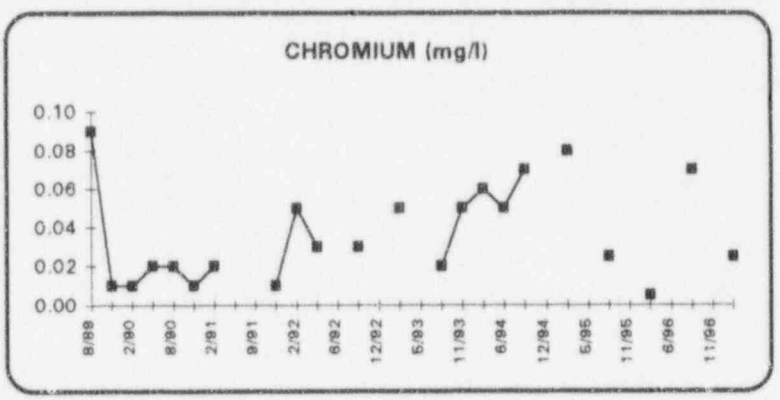


WELL 56SC

DATE	SULFATE	Cadmium	Chromium
Aug-89	6520	0.09	0.09
Nov-89	8000	0.08	0.01
Feb-90	6400	0.01	0.01
Jun-90	9280	0.01	0.02
Aug-90	7000	0.01	0.02
Nov-90	7000	0.03	0.01
Feb-91	8200	0.02	0.02
May-91	9200		
Sep-91	8600		
Dec-91	8800	0.01	0.01
Feb-92	8700	0.03	0.05
May-92	9100	0.02	0.03
Jun-92	8000		
Aug-92	8800	0.01	0.03
Dec-92	8880		
Mar-93	8800	0.05	0.05
May-93	9000		
Aug-93	8200	0.02	0.02
Nov-93	9800	0.03	0.05
Mar-94	11400	0.05	0.06
Jun-94	7800	0.01	0.05
Sep-94	7880	0.01	0.07
Dec-94	9480		
Feb-95	10600	0.02	0.08
May-95	10320		
Aug-95	9800	.06	.025
Nov-95	7400		
Feb-96	4340	.01	.005
Jun-96	3140		
Aug-96	2560	0.025	0.07
Nov-96	2420		
Feb-97	2680	0.025	0.025

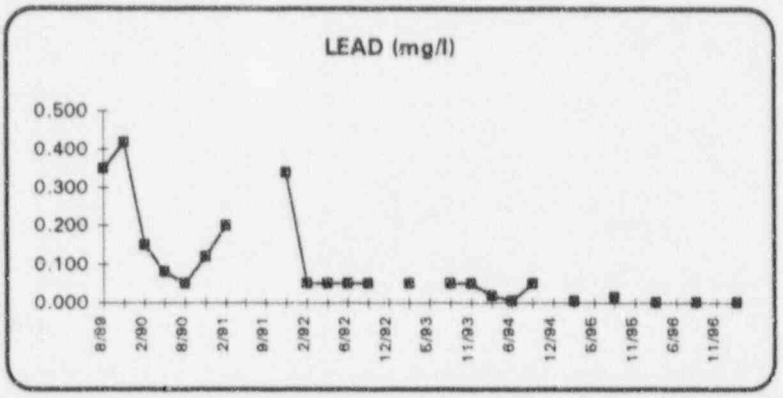


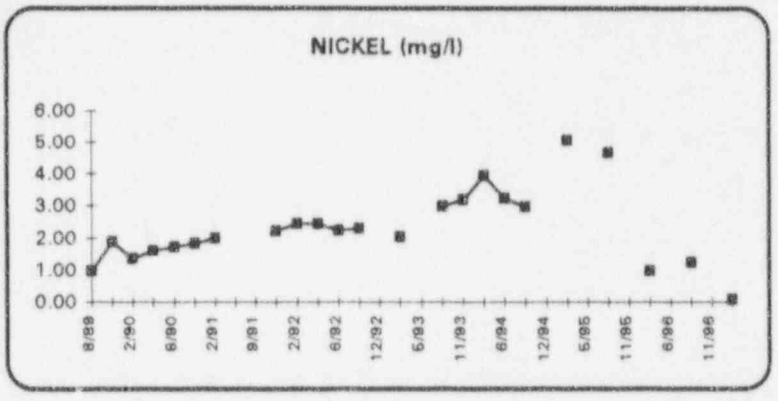


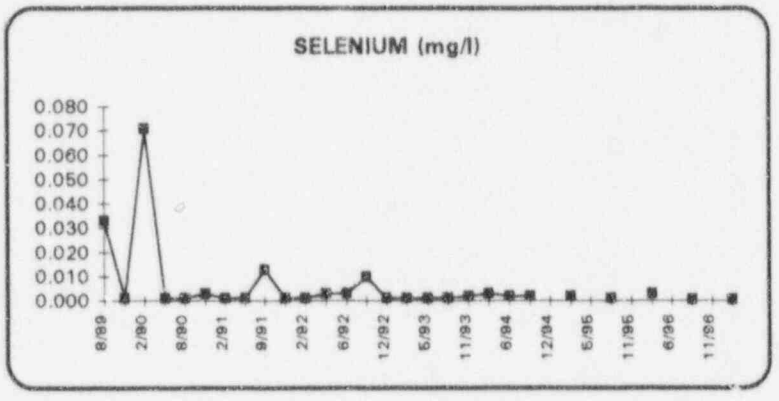


WELL 56SC

DATE	LEAD	NICKEL	SELENIUM
Aug-89	0.350	0.97	0.033
Nov-89	0.420	1.90	0.001
Feb-90	0.150	1.36	0.071
Jun-90	0.080	1.60	0.001
Aug-90	0.050	1.73	0.001
Nov-90	0.120	1.84	0.003
Feb-91	0.200	2.00	0.001
May-91			0.001
Sep-91			0.013
Dec-91	0.340	2.22	0.001
Feb-92	0.050	2.44	0.001
May-92	0.050	2.44	0.003
Jun-92	0.050	2.23	0.003
Aug-92	0.050	2.29	0.010
Dec-92			0.001
Mar-93	0.050	2.04	0.001
May-93			0.001
Aug-93	0.050	3.00	0.001
Nov-93	0.050	3.20	0.002
Mar-94	0.018	3.95	0.003
Jun-94	0.006	3.24	0.002
Sep-94	0.050	2.96	0.002
Dec-94			
Feb-95	0.005	5.06	0.002
May-95			
Aug-95	.015	4.68	.001
Nov-95			
Feb-96	.0025	0.98	.003
Jun-96			
Aug-96	.0025	1.24	0.0005
Nov-96			
Feb-97	.001	0.08	0.0005

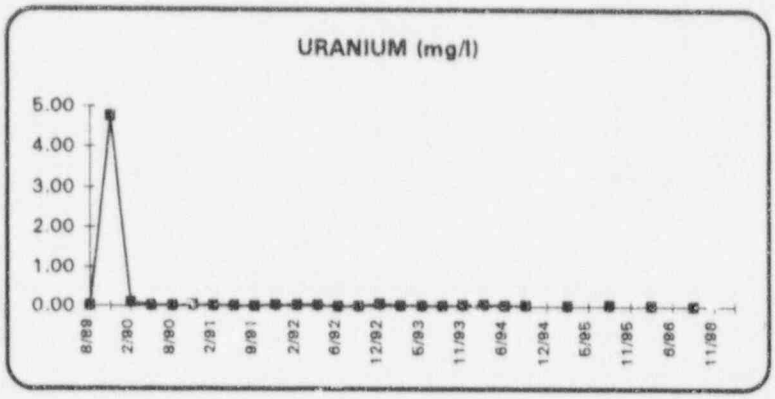


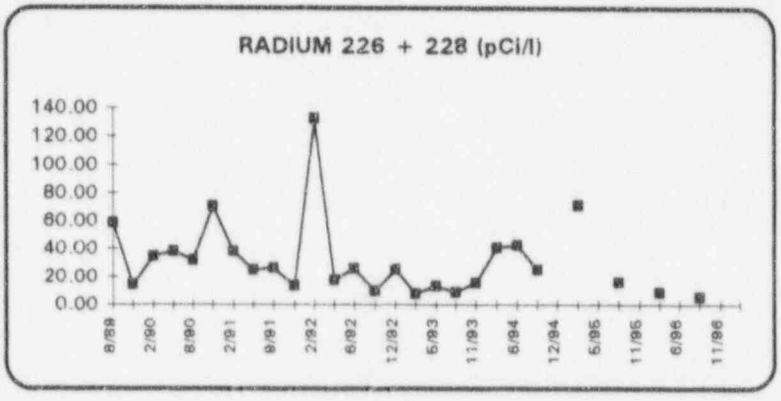


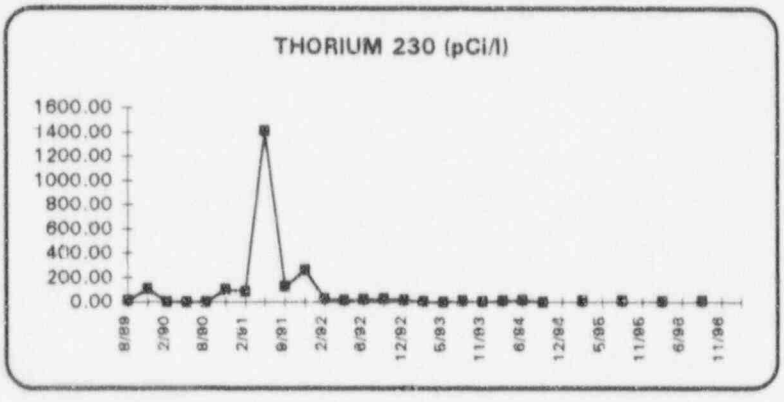


WELL 56SC

DATE	URANIUM	Ra 6+8	Th 230
Aug-89	0.02	58.60	8.89
Nov-89	4.75	14.34	109.00
Feb-90	0.09	34.60	1.33
Jun-90	0.02	38.46	0.00
Aug-90	0.02	31.87	0.29
Nov-90	0.04	70.55	101.00
Feb-91	0.02	38.24	83.30
May-91	0.02	25.04	1406.00
Sep-91	0.01	26.39	127.00
Dec-91	0.03	13.61	262.00
Feb-92	0.03	132.51	27.00
May-92	0.03	17.67	13.70
Jun-92	0.01	25.79	22.60
Aug-92	0.01	9.88	25.00
Dec-92	0.06	25.59	13.90
Mar-93	0.01	7.95	3.99
May-93	0.01	13.19	2.55
Aug-93	0.01	8.64	8.32
Nov-93	0.03	15.77	6.20
Mar-94	0.05	40.90	9.40
Jun-94	0.02	43.20	16.10
Sep-94	0.03	25.40	2.60
Dec-94			
Feb-95	0.02	71.50	10.70
May-95			
Aug-95	0.03	18.30	9.80
Nov-95			
Feb-96	0.01	8.70	6.70
Jun-96			
Aug-96	0.0005	5.60	10.30
Nov-96			
Feb-97			

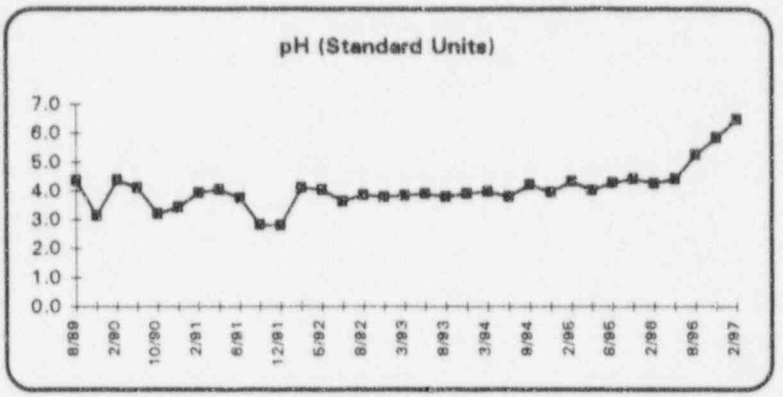


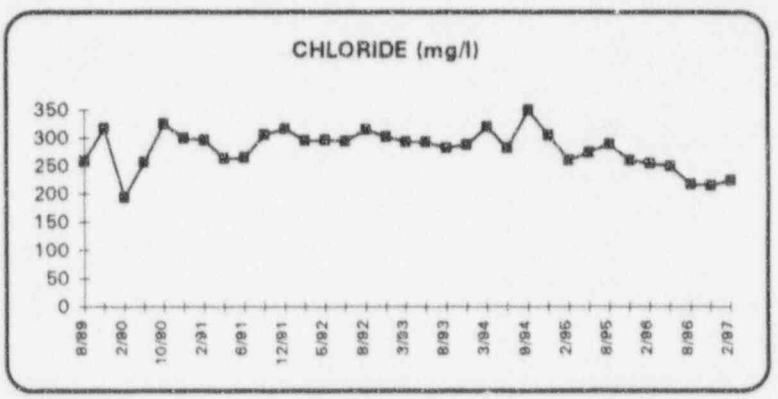


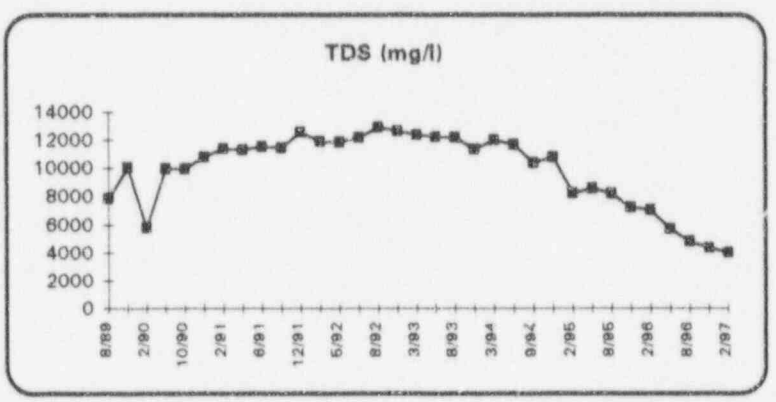


WELL 57SC

DATE	pH	CHLORIDE	TDS
Aug-89	4.4	259	7899
Dec-89	3.1	318	10067
Feb-90	4.4	194	5809
Jun-90	4.1	257	9970
Oct-90	3.2	326	9957
Nov-90	3.4	300	10814
Feb-91	3.9	297	11417
May-91	4.0	264	11312
Jun-91	3.7	265	11564
Sep-91	2.8	306	11442
Dec-91	2.8	318	12559
Feb-92	4.1	295	11929
May-92	4.0	297	11881
Jun-92	3.6	294	12199
Aug-92	3.9	315	12938
Dec-92	3.8	302	12650
Mar-93	3.8	293	12391
May-93	3.9	293	12247
Aug-93	3.8	283	12176
Nov-93	3.9	288	11360
Mar-94	4.0	320	12000
Jun-94	3.8	283	11700
Sep-94	4.2	350	10400
Dec-94	4.0	305	10800
Feb-95	4.3	260	8270
May-95	4.0	275	8570
Aug-95	4.3	290	8200
Nov-95	4.4	260	7230
Feb-96	4.3	255	7050
Jun-96	4.4	250	5680
Aug-96	5.3	218	4820
Nov-96	5.9	215	4360
Feb-97	6.5	225	4040

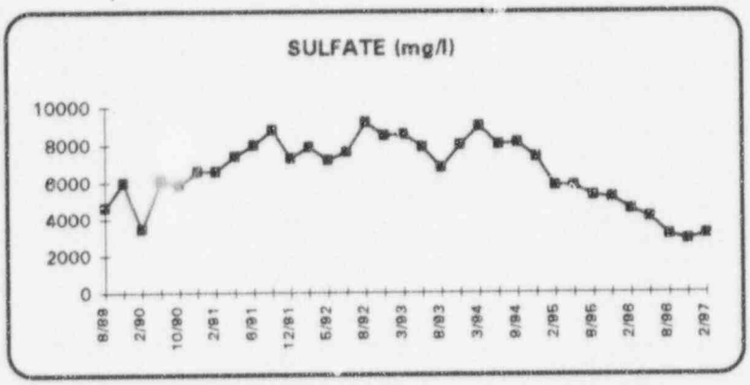


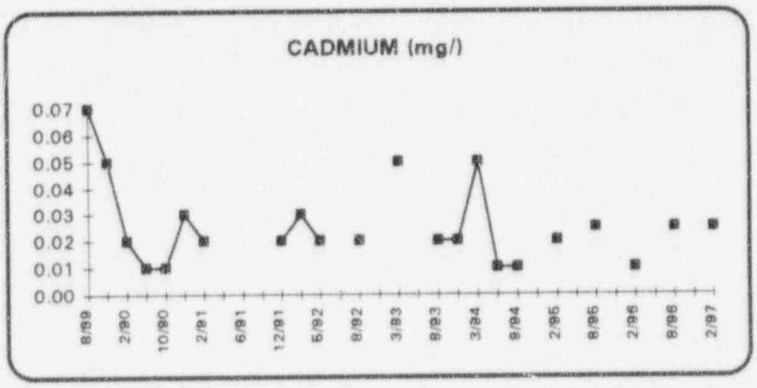


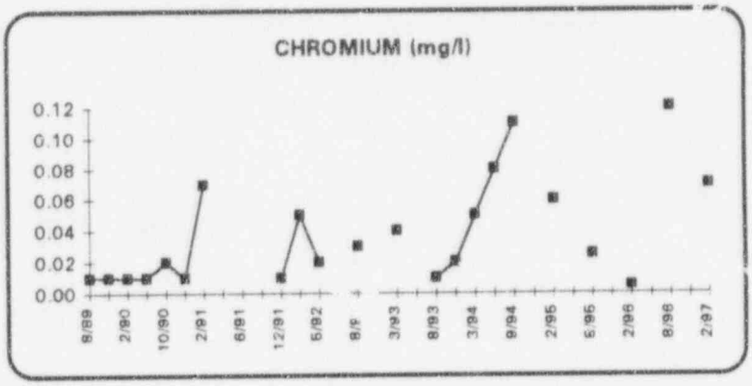


WELL 57SC

DATE	SULFATE	Cadmium	Chromium
Aug-89	4640	0.07	0.01
Dec-89	6000	0.05	0.01
Feb-90	3480	0.02	0.01
Jun-90	6080	0.01	0.01
Oct-90	5900	0.01	0.02
Nov-90	6600	0.03	0.01
Feb-91	6600	0.02	0.07
May-91	7400		
Jun-91	8000		
Sep-91	8800		
Dec-91	7300	0.02	0.01
Feb-92	7900	0.03	0.05
May-92	7200	0.02	0.02
Jun-92	7640		
Aug-92	9200	0.02	0.03
Dec-92	8480		
Mar-93	8560	0.05	0.04
May-93	7900		
Aug-93	6800	0.02	0.01
Nov-93	8000	0.02	0.02
Mar-94	9000	0.05	0.05
Jun-94	8040	0.01	0.08
Sep-94	8120	0.01	0.11
Dec-94	7360		
Feb-95	5820	0.02	0.06
May-95	5820		
Aug-95	5300	.025	.025
Nov-95	5180		
Feb-96	4560	.01	.005
Jun-96	4100		
Aug-96	3140	0.025	0.12
Nov-96	2880		
Feb-97	3180	0.025	0.07

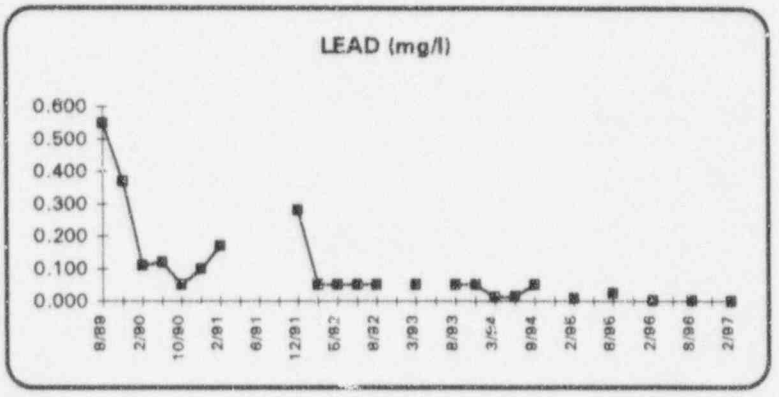


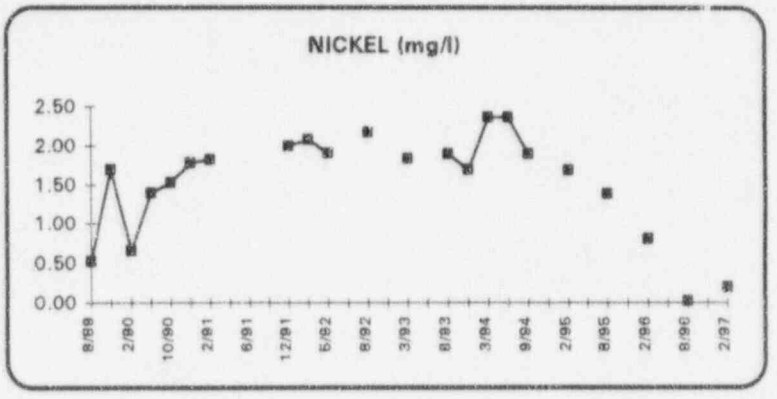


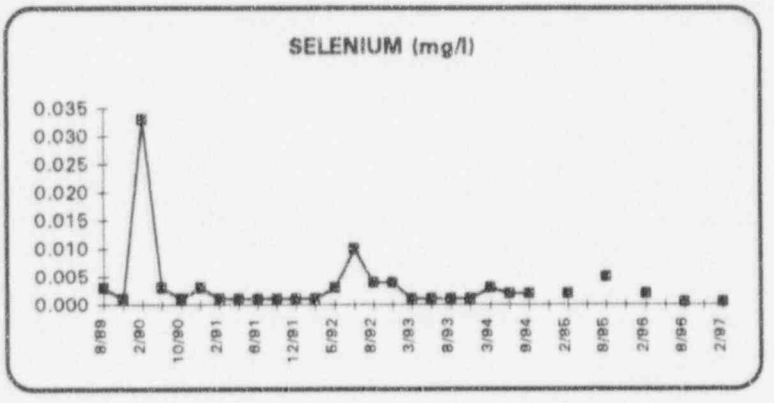


WELL 57SC

DATE	LEAD	NICKEL	SELENIUM
Aug-89	0.550	0.53	0.003
Dec-89	0.370	1.70	0.001
Feb-90	0.110	0.66	0.033
Jun-90	0.120	1.40	0.003
Oct-90	0.050	1.53	0.001
Nov-90	0.100	1.78	0.003
Feb-91	0.170	1.82	0.001
May-91			0.001
Jun-91			0.001
Sep-91			0.001
Dec-91	0.280	2.00	0.001
Feb-92	0.050	2.08	0.001
May-92	0.050	1.91	0.003
Jun-92	0.050		0.010
Aug-92	0.050	2.17	0.004
Dec-92			0.004
Mar-93	0.050	1.84	0.001
May-93			0.001
Aug-93	0.050	1.90	0.001
Nov-93	0.050	1.70	0.001
Mar-94	0.012	2.37	0.003
Jun-94	0.015	2.37	0.002
Sep-94	0.050	1.90	0.002
Dec-94			
Feb-95	0.009	1.69	0.002
May-95			
Aug-95	.025	1.39	.005
Nov-95			
Feb-96	.0025	0.81	.002
Jun-96			
Aug-96	0.0025	0.025	0.001
Nov-96			
Feb-97	0.0010	0.200	0.001

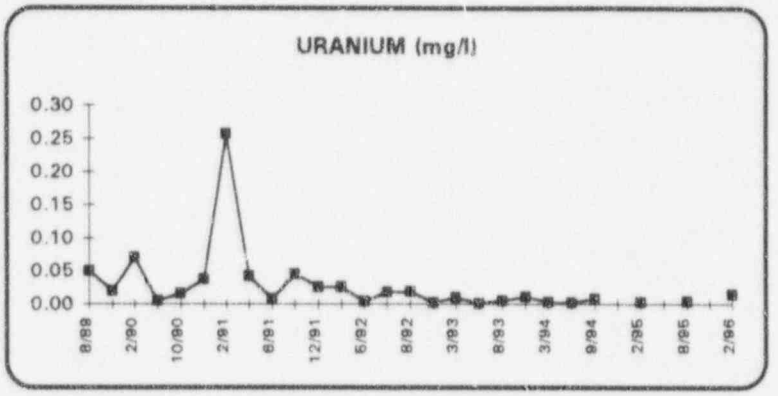


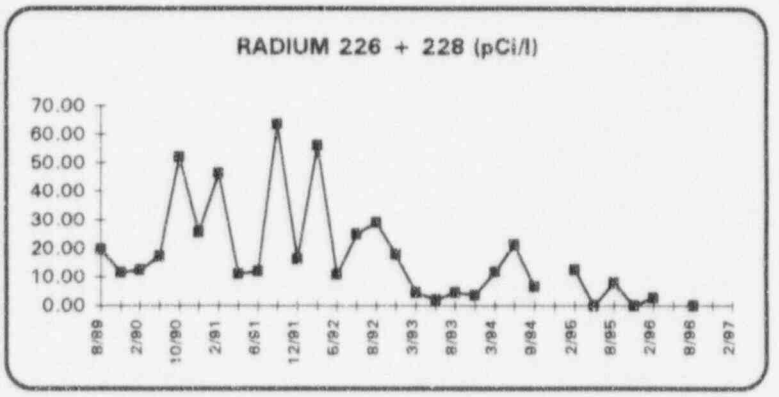


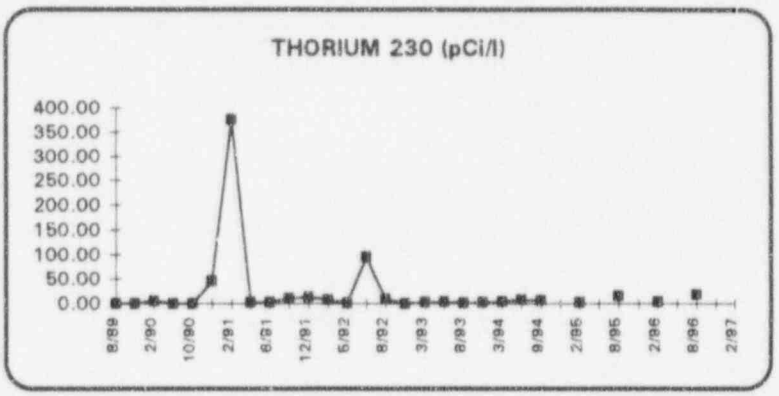


WELL 57SC

DATE	URANIUM	Ra 6+8	Th 230
Aug-89	0.05	19.79	0.00
Dec-89	0.02	11.52	0.07
Feb-90	0.07	12.55	5.38
Jun-90	0.01	17.32	0.00
Oct-90	0.02	52.20	0.00
Nov-90	0.04	25.50	46.50
Feb-91	0.26	46.42	376.00
May-91	0.04	11.03	2.34
Jun-91	0.01	11.98	2.35
Sep-91	0.05	63.57	10.90
Dec-91	0.03	16.21	12.60
Feb-92	0.03	56.28	7.99
May-92	0.00	10.83	1.74
Jun-92	0.02	24.90	96.00
Aug-92	0.02	28.94	9.93
Dec-92	0.00	17.94	0.00
Mar-93	0.01	4.59	2.00
May-93	0.00	1.96	4.20
Aug-93	0.01	4.60	0.68
Nov-93	0.01	3.71	3.25
Mar-94	0.00	11.80	4.10
Jun-94	0.00	21.30	7.60
Sep-94	0.01	6.50	6.20
Dec-94			
Feb-95	0.00	12.40	2.60
May-95		0.00	
Aug-95	0.00	7.90	15.30
Nov-95		0.00	
Feb-96	0.02	2.70	4.50
Jun-96			
Aug-96	0.005	0.04	18.30
Nov-96			
Feb-97			

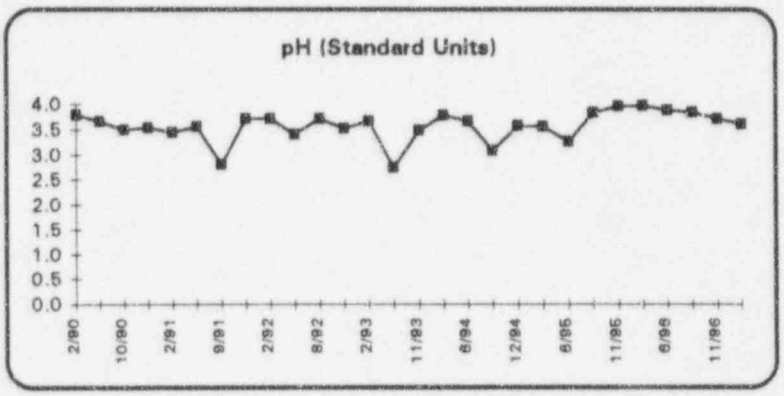


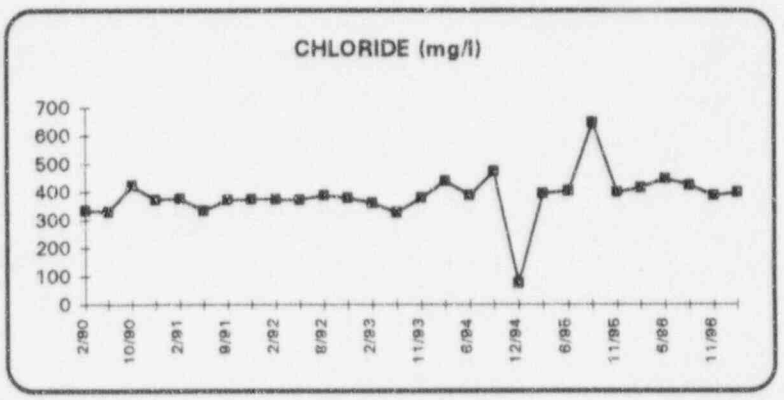


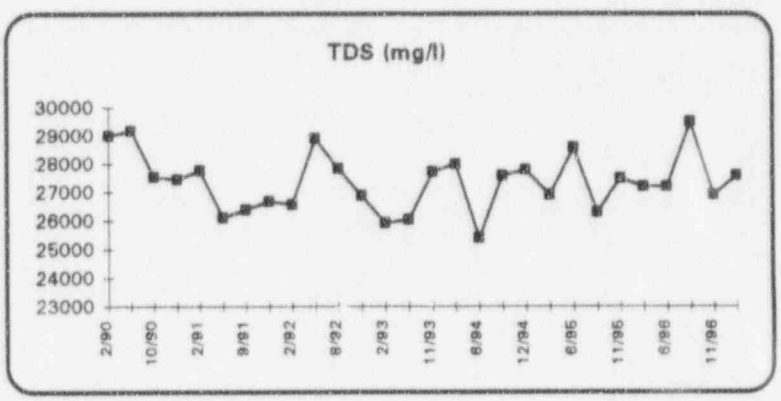


WELL 58SC

DATE	pH	CHLORIDE	TDS
Feb-90	3.8	333	28992
Jun-90	3.7	329	29189
Oct-90	3.5	423	27536
Jan-91	3.5	374	27445
Feb-91	3.5	377	27762
Jun-91	3.6	333	26115
Sep-91	2.8	372	26376
Dec-91	3.7	376	26678
Feb-92	3.7	375	26558
Jun-92	3.4	372	28899
Aug-92	3.7	388	27842
Dec-92	3.5	381	26885
Feb-93	3.7	362	25934
Aug-93	2.8	326	26053
Nov-93	3.5	379	27717
Mar-94	3.8	440	28000
Jun-94	3.7	390	25400
Sep-94	3.1	475	27600
Dec-94	3.6	77	27800
Feb-95	3.6	395	26900
Jun-95	3.3	405.	28600
Aug-95	3.8	650.	26300
Nov-95	4.0	400.	27500
Feb-96	4.0	417.	27200
Jun-96	3.89	450	27200
Aug-96	3.8	425	29500
Nov-96	3.7	390	26900
Feb-97	3.6	400	27600

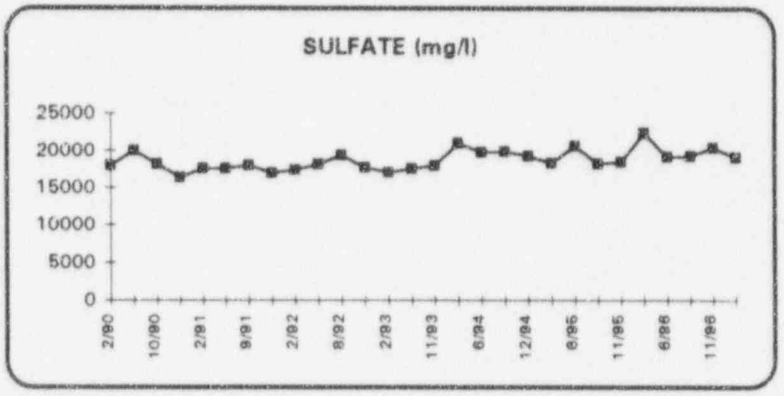


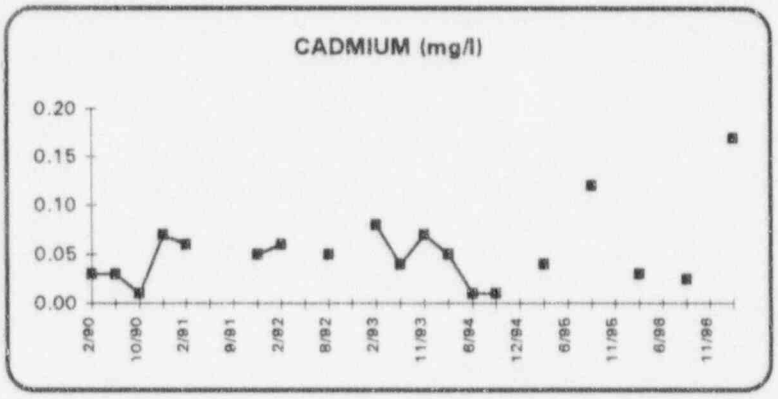


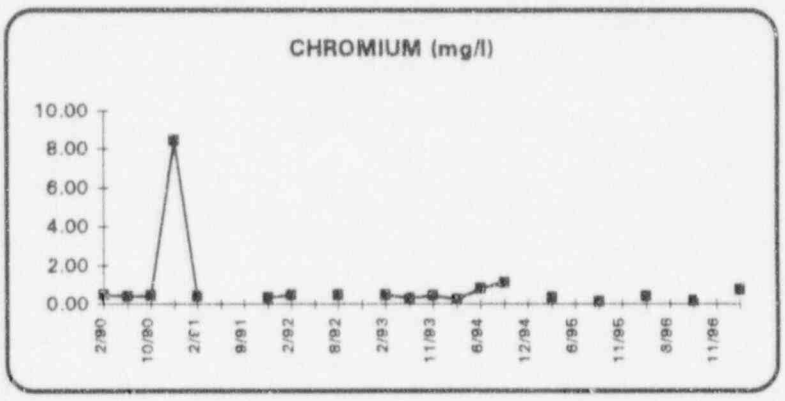


WELL 58SC

DATE	SULFATE	Cadmium	Chromium
Feb-90	18000	0.03	0.46
Jun-90	20000	0.03	0.39
Oct-90	18200	0.01	0.43
Jan-91	16400	0.07	8.45
Feb-91	17600	0.06	0.41
Jun-91	17600		
Sep-91	18000		
Dec-91	17000	0.05	0.34
Feb-92	17400	0.06	0.46
Jun-92	18200		
Aug-92	19400	0.05	0.46
Dec-92	17800		
Feb-93	17100	0.08	0.48
Aug-93	17600	0.04	0.30
Nov-93	18000	0.07	0.45
Mar-94	21000	0.05	0.25
Jun-94	19800	0.01	0.81
Sep-94	19900	0.01	1.12
Dec-94	19300		
Feb-95	18400	0.04	0.32
Jun-95	20700		
Aug-95	18300	.12	.14
Nov-95	18500		
Feb-96	22400	.03	.4
Jun-96	19200		
Aug-96	19300	0.025	0.17
Nov-96	20400		
Feb-97	19100	0.170	0.74

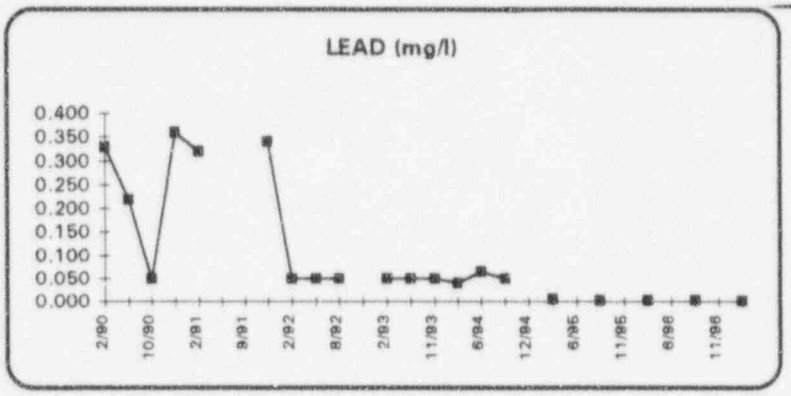


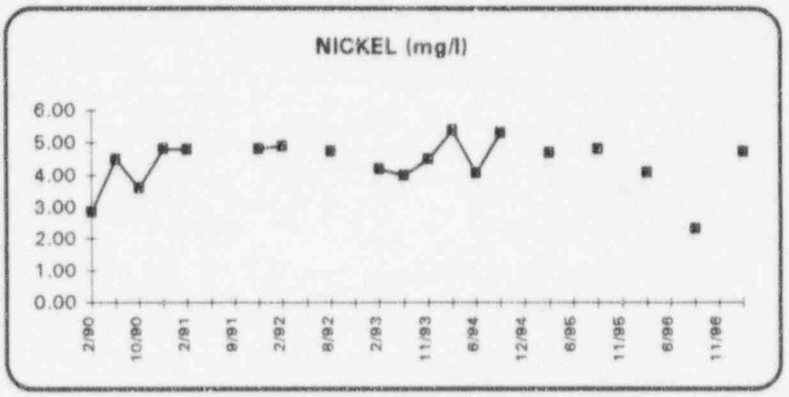


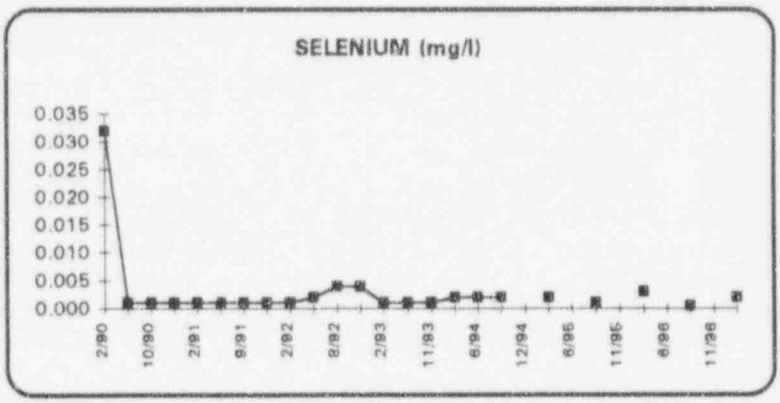


WELL 58SC

DATE	LEAD	NICKEL	SELENIUM
Feb-90	0.330	2.85	0.032
Jun-90	0.220	4.50	0.001
Oct-90	0.050	3.60	0.001
Jan-91	0.360	4.83	0.001
Feb-91	0.320	4.81	0.001
Jun-91			0.001
Sep-91			0.001
Dec-91	0.340	4.82	0.001
Feb-92	0.050	4.90	0.001
Jun-92	0.050		0.002
Aug-92	0.050	4.75	0.004
Dec-92			0.004
Feb-93	0.050	4.20	0.001
Aug-93	0.050	4.00	0.001
Nov-93	0.050	4.50	0.001
Mar-94	0.040	5.40	0.002
Jun-94	0.065	4.08	0.002
Sep-94	0.050	5.31	0.002
Dec-94			
Feb-95	0.005	4.71	0.002
Jun-95			
Aug-95	.0025	4.83	.001
Nov-95			
Feb-96	.0025	4.10	.003
Jun-96			
Aug-96	0.0025	2.33	0.0005
Nov-96			
Feb-97	0.0010	4.74	0.002

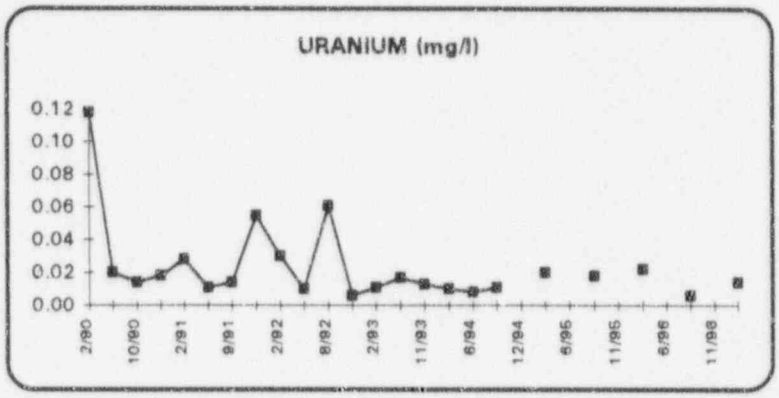


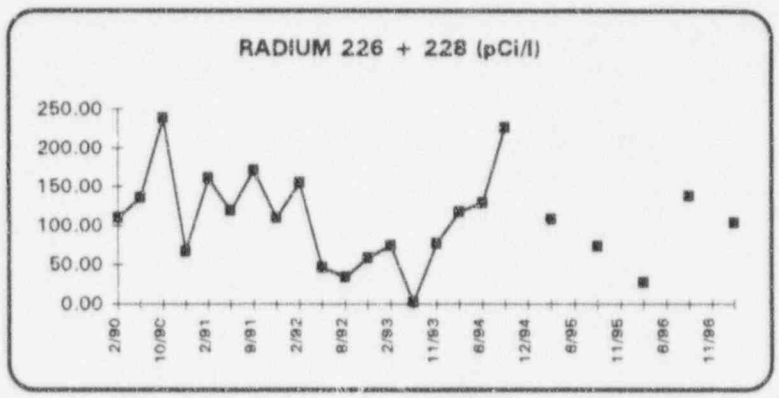


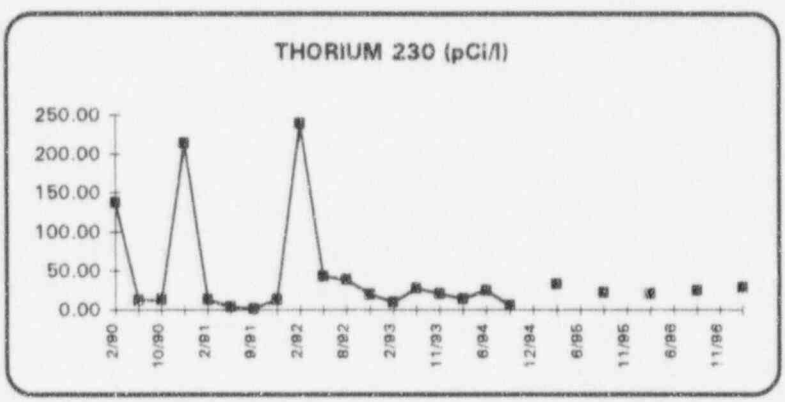


WELL 58SC

DATE	URANIUM	Ra 6+8	Th 230
Feb-90	0.12	109.77	138.00
Jun-90	0.02	135.70	12.20
Oct-90	0.01	238.30	13.70
Jan-91	0.02	67.10	214.00
Feb-91	0.03	161.30	13.50
Jun-91	0.01	119.18	4.60
Sep-91	0.01	171.56	2.01
Dec-91	0.06	110.10	13.20
Feb-92	0.03	154.78	239.00
Jun-92	0.01	46.80	43.30
Aug-92	0.06	34.50	39.10
Dec-92	0.01	59.00	20.40
Feb-93	0.01	74.90	10.20
Aug-93	0.02	2.78	27.30
Nov-93	0.01	76.80	21.10
Mar-94	0.01	117.40	14.00
Jun-94	0.01	128.80	25.20
Sep-94	0.01	226.40	5.60
Dec-94			
Feb-95	0.02	108.60	33.50
Jun-95			
Aug-95	.018	73.90	23.00
Nov-95			
Feb-96	.022	27.80	21.10
Jun-96			
Aug-96	0.01	138.40	25.50
Nov-96			
Feb-97	0.01	104.20	29.30

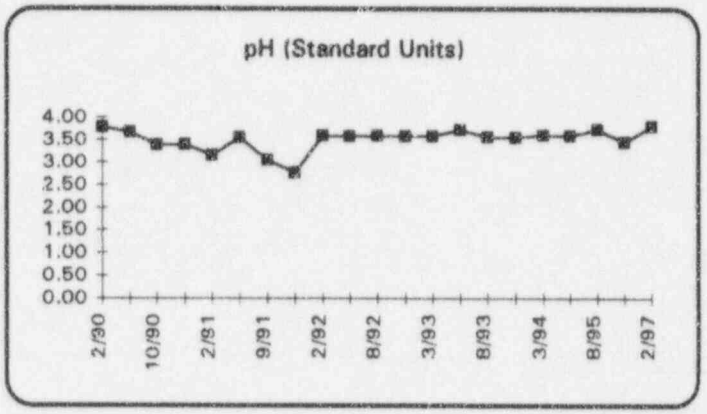


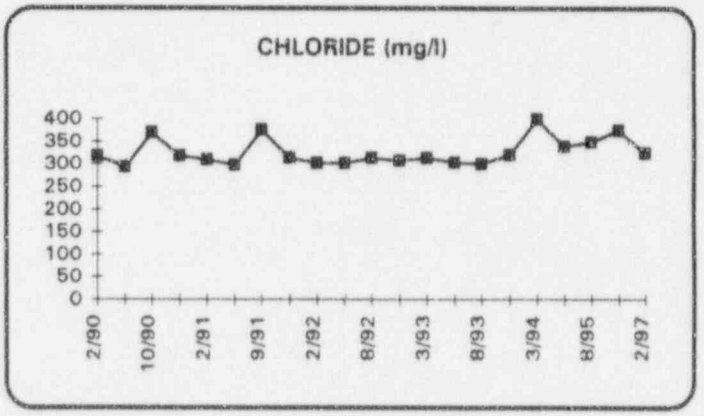


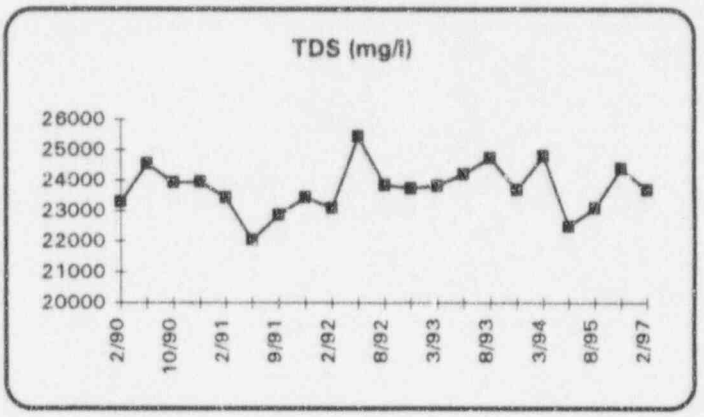


WELL 59SC

DATE	pH	CHLORIDE	TDS
Feb-90	3.78	318	23289
Jun-90	3.67	283	24550
Oct-90	3.38	370	23920
Jan-91	3.40	317	23945
Feb-91	3.16	309	23436
Jun-91	3.56	297	22050
Sep-91	3.06	376	22863
Dec-91	2.77	313	23431
Feb-92	3.60	302	23096
Jun-92	3.58	302	25439
Aug-92	3.60	313	23840
Dec-92	3.58	308	23732
Mar-93	3.59	313	23812
May-93	3.73	303	24209
Aug-93	3.57	301	24743
Nov-93	3.55	321	23683
Mar-94	3.61	400	24800
Feb-95	3.60	340	22600
Aug-95	3.74	350	23100
Feb-96	3.46	375	24400
Feb-97	3.82	326	23700

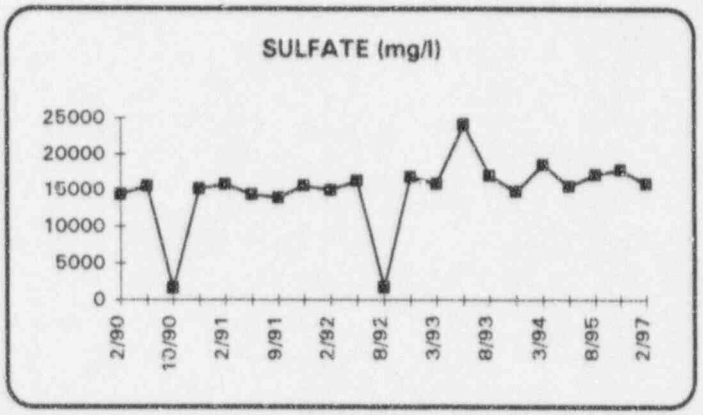


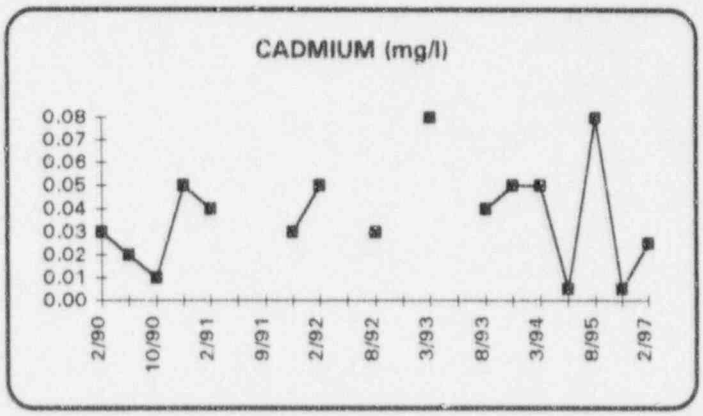


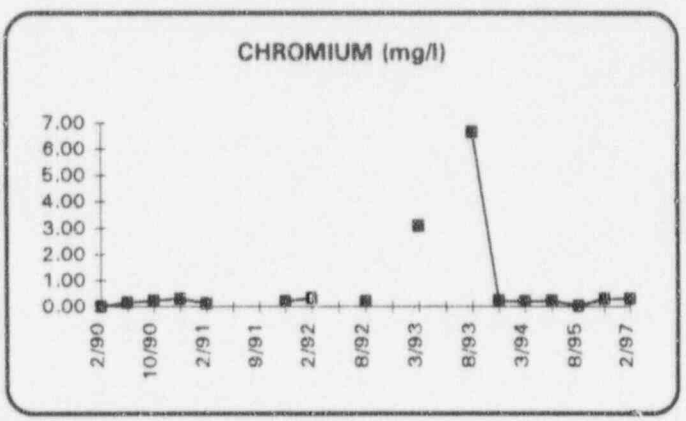


WELL 59SC

DATE	SULFATE	Cadmium	Chromium
Feb-90	14400	0.03	0.01
Jun-90	15600	0.02	0.15
Oct-90	1560	0.01	0.22
Jan-91	15200	0.05	0.30
Feb-91	15800	0.04	0.13
Jun-91	14400		
Sep-91	14000		
Dec-91	15700	0.03	0.19
Feb-92	15000	0.05	0.32
Jun-92	16400		
Aug-92	1700	0.03	0.19
Dec-92	16800		
Mar-93	15800	0.08	3.10
May-93	24209		
Aug-93	17086	0.04	6.65
Nov-93	14900	0.05	0.23
Mar-94	16600	0.05	0.21
Feb-95	15600	0.005	0.22
Aug-95	17200	0.08	0.03
Feb-96	17900	0.005	0.30
Feb-97	15900	0.03	0.31

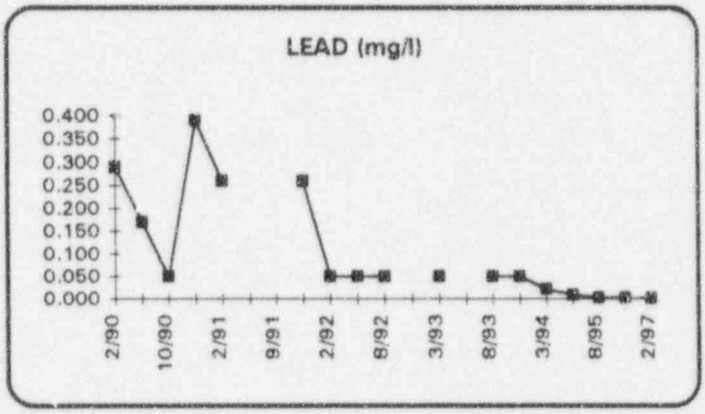


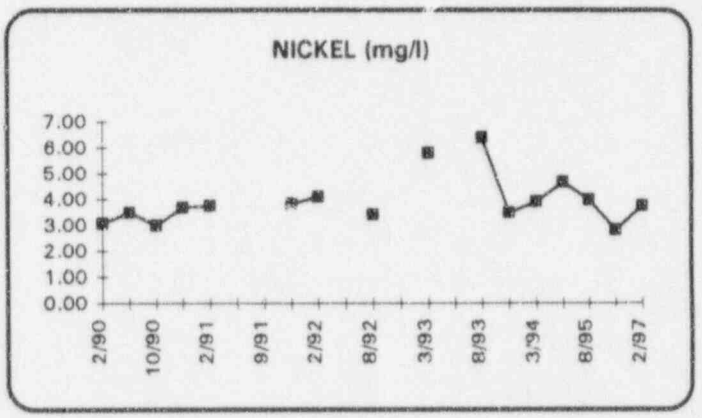


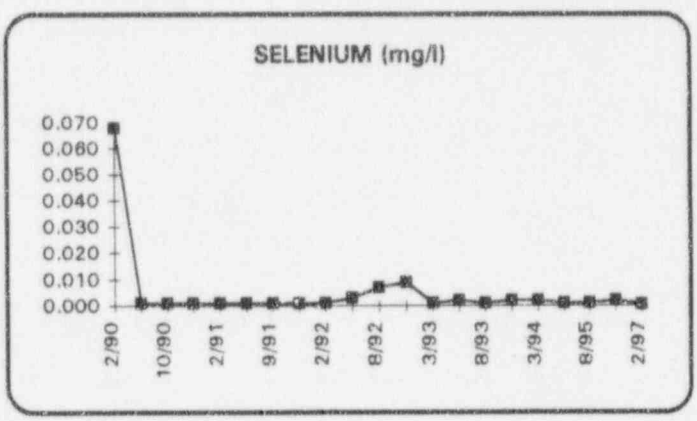


WELL 59SC

DATE	LEAD	NICKEL	SELENIUM
Feb-90	0.290	3.06	0.068
Jun-90	0.170	3.50	0.001
Oct-90	0.060	3.00	0.001
Jan-91	0.390	3.69	0.001
Feb-91	0.260	3.77	0.001
Jun-91			0.001
Sep-91			0.001
Dec-91	0.260	3.83	0.001
Feb-92	0.060	4.10	0.001
Jun-92	0.060		0.003
Aug-92	0.060	3.42	0.007
Dec-92			0.009
Mar-93	0.060	5.80	0.001
May-93			0.002
Aug-93	0.060	6.40	0.001
Nov-93	0.060	3.50	0.002
Mar-94	0.021	3.91	0.002
Feb-95	.008	4.68	0.001
Aug-95	.0025	3.98	0.001
Feb-96	.0025	2.81	0.002
Feb-97	.001	3.75	0.0006

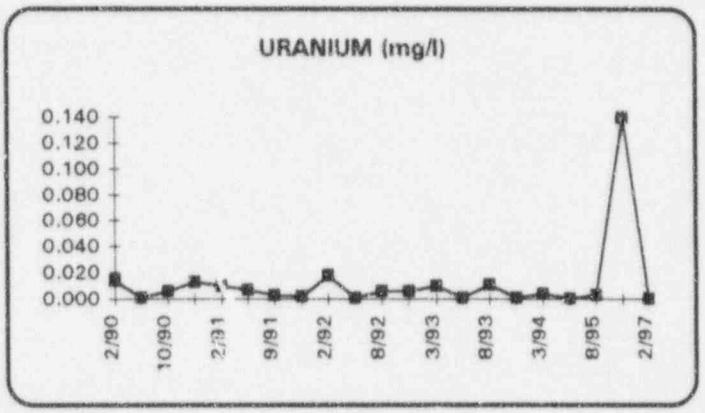


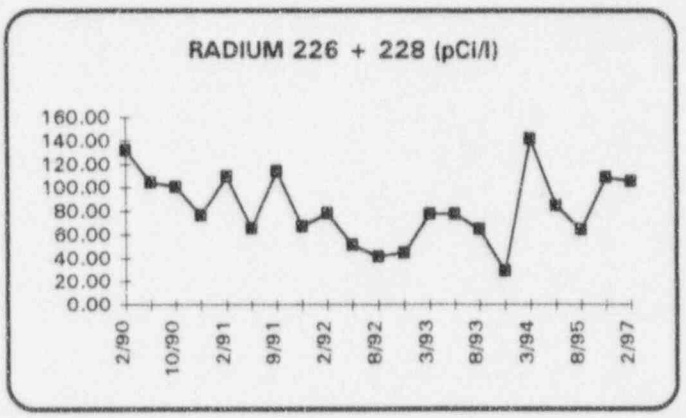


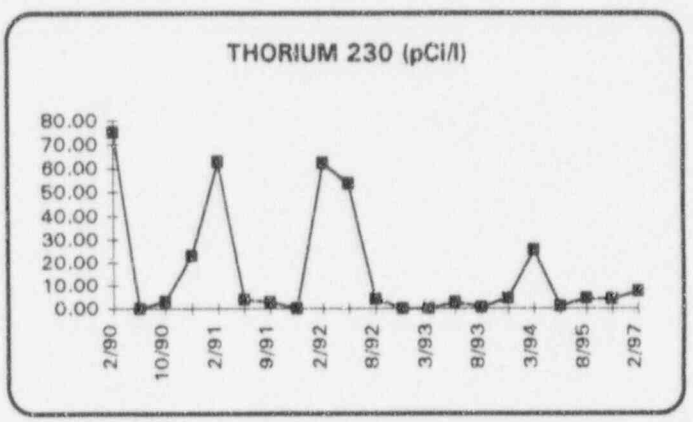


WELL 59SC

DATE	URANIUM	Ra 6+8	Th 230
Feb-90	0.014	132.10	75.20
Jun-90	0.001	104.88	0.00
Oct-90	0.008	100.52	3.08
Jan-91	0.013	76.84	23.00
Feb-91	0.010	109.38	62.90
Jun-91	0.007	85.46	3.75
Sep-91	0.003	114.02	2.87
Dec-91	0.002	87.36	0.00
Feb-92	0.018	78.53	62.30
Jun-92	0.001	51.35	53.60
Aug-92	0.006	41.40	4.22
Dec-92	0.006	44.66	0.00
Mar-93	0.010	77.98	0.00
May-93	0.001	77.68	2.80
Aug-93	0.011	64.96	0.66
Nov-93	0.001	29.08	4.36
Mar-94	0.004	142.30	25.40
Feb-95	0.0005	84.80	1.10
Aug-95	0.003	64.60	4.60
Feb-96	0.140	109.00	4.20
Feb-97	0.0005	106.00	7.60

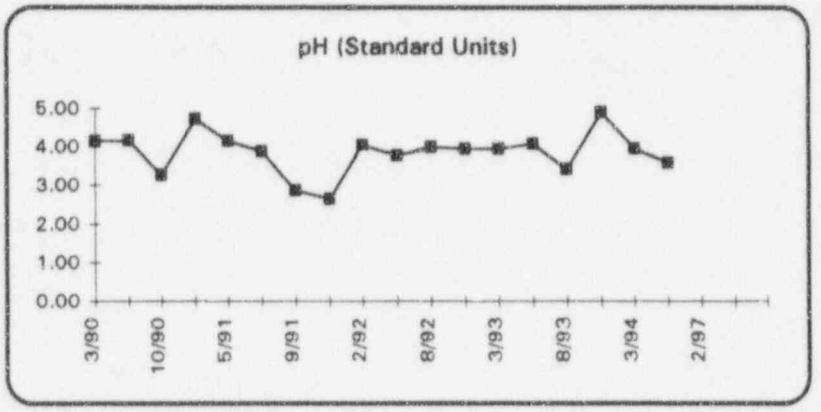


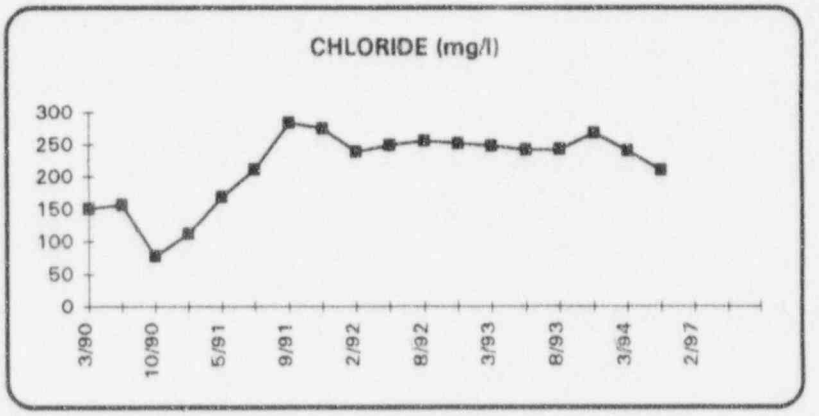


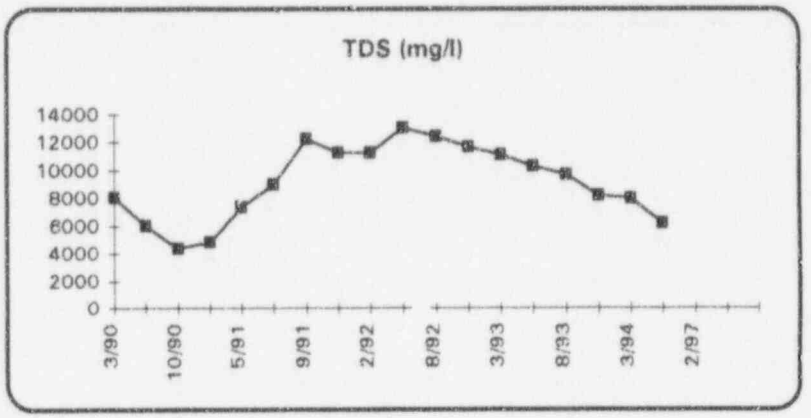


WELL 60SC

DATE	pH	CHLORIDE	TDS
Mar-90	4.15	151	8082
Jun-90	4.17	167	6042
Oct-90	3.28	78	4361
Feb-91	4.73	112	4864
May-91	4.16	168	7361
Jun-91	3.88	211	9023
Sep-91	2.88	284	12238
Dec-91	2.65	275	11258
Feb-92	4.06	238	11258
Jun-92	3.79	248	13045
Aug-92	4.01	256	12428
Dec-92	3.96	262	11706
Mar-93	3.96	247	11113
May-93	4.09	241	10300
Aug-93	3.43	242	9715
Nov-93	4.91	268	8207
Mar-94	3.97	240	8030
Feb-96	3.58	210	6230
Feb-97			

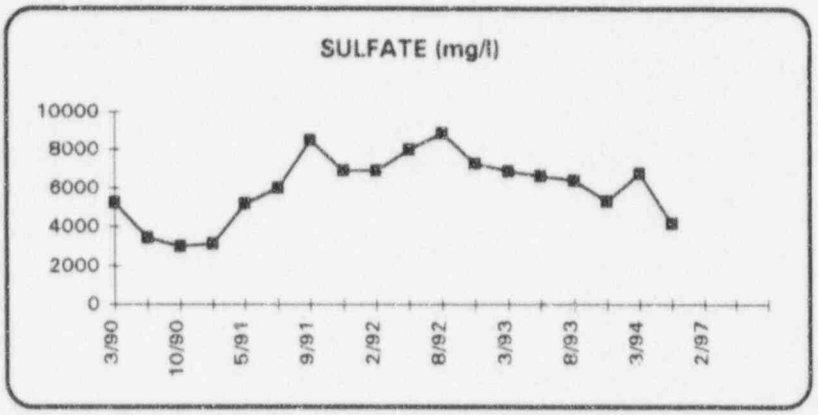


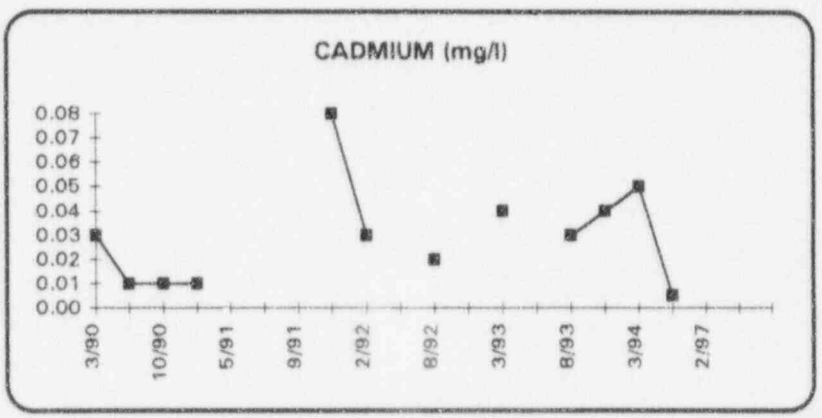


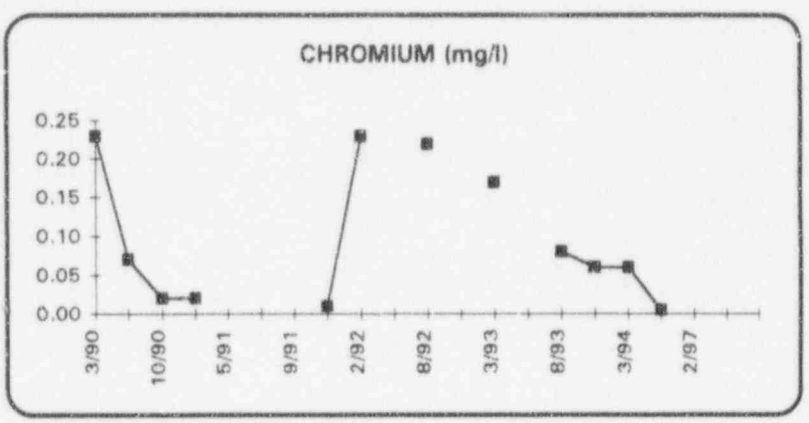


WELL 60SC

DATE	SULFATE	Cadmium	Chromium
Mar-90	5260	0.03	0.23
Jun-90	3440	0.01	0.07
Oct-90	2980	0.01	0.02
Feb-91	3140	0.01	0.02
May-91	5200		
Jun-91	6000		
Sep-91	8533		
Dec-91	6900	0.08	0.01
Feb-92	6900	0.03	0.23
Jun-92	8000		
Aug-92	8900	0.02	0.22
Dec-92	7280		
Mar-93	6880	0.04	0.17
May-93	6640		
Aug-93	6400	0.03	0.08
Nov-93	5320	0.04	0.06
Mar-94	6780	0.05	0.06
Feb-96	4180	0.005	0.005
Feb-97			

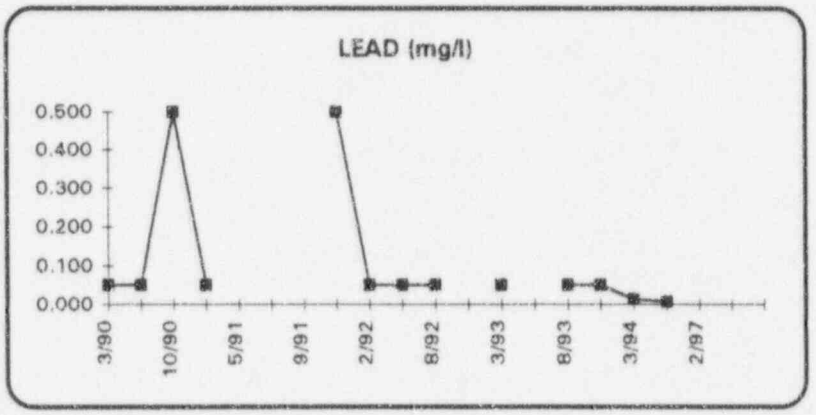


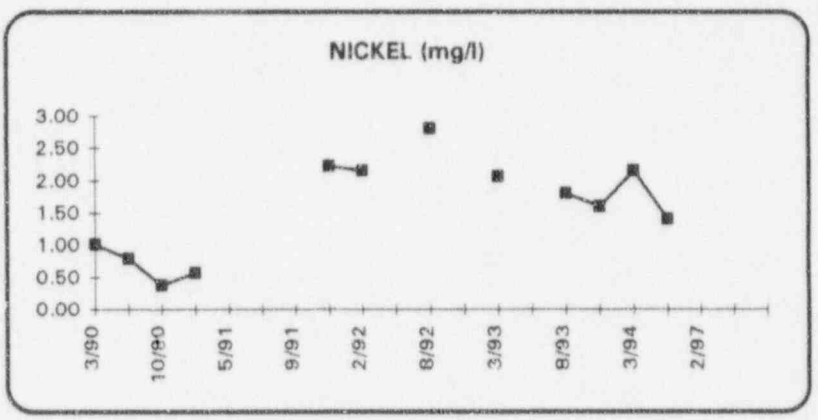


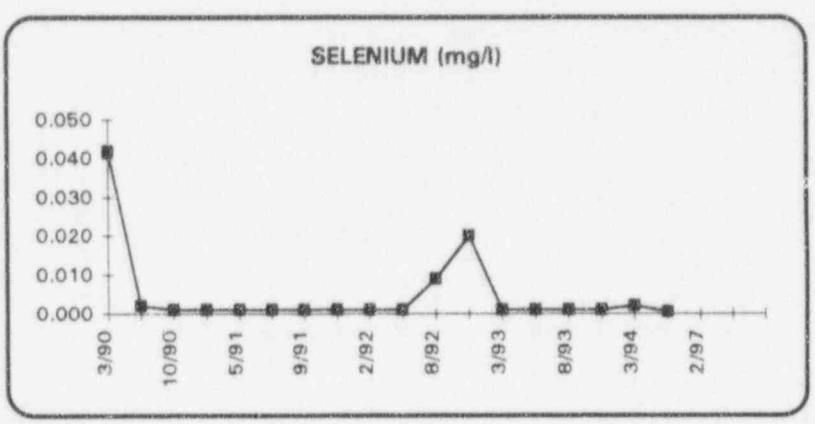


WELL 60SC

DATE	LEAD	NICKEL	SELENIUM
Mar-90	0.050	1.01	0.042
Jun-90	0.050	0.79	0.002
Oct-90	0.500	0.37	0.001
Feb-91	0.050	0.57	0.001
May-91			0.001
Jun-91			0.001
Sep-91			0.001
Dec-91	0.500	2.23	0.001
Feb-92	0.050	2.18	0.001
Jun-92	0.050		0.001
Aug-92	0.050	2.81	0.009
Dec-92			0.020
Mar-93	0.050	2.07	0.001
May-93			0.001
Aug-93	0.030	1.80	0.001
Nov-93	0.050	1.60	0.001
Mar-94	0.014	2.16	0.002
Feb-96	0.007	1.41	0.0006
Feb-97			

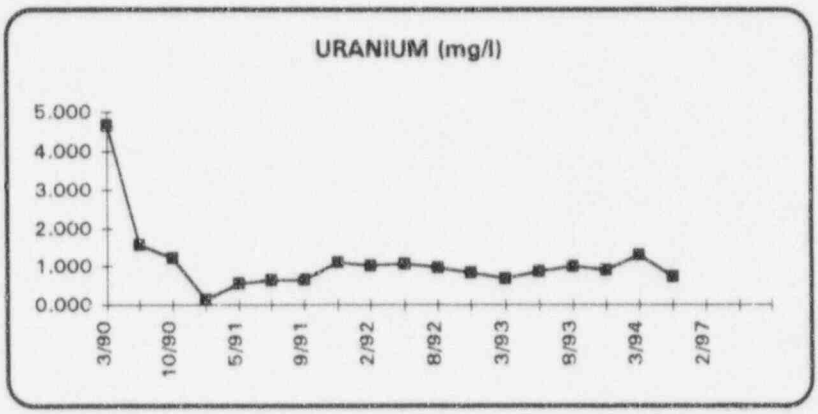


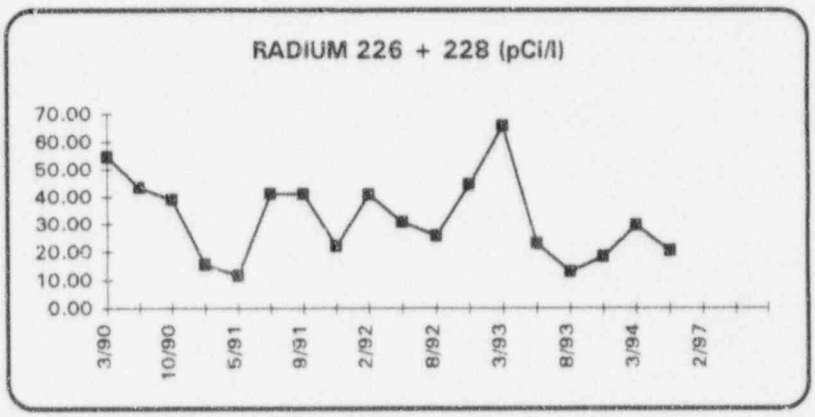


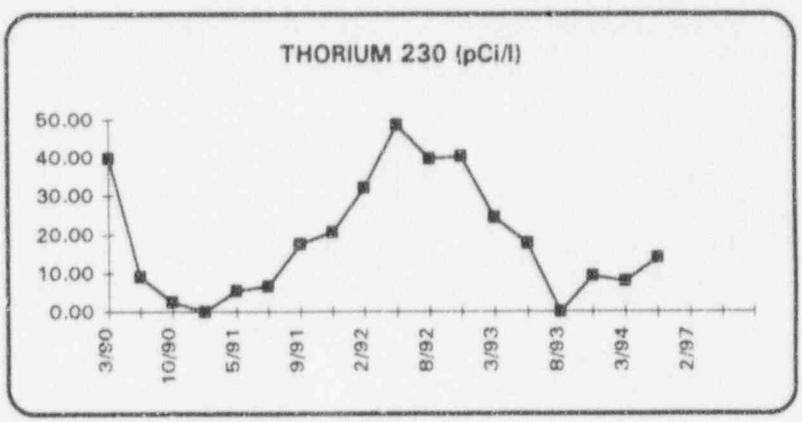


WELL 60SC

DATE	URANIUM	Ra 6+8	Th 230
Mar-90	4.670	54.50	39.90
Jun-90	1.580	43.40	9.08
Oct-90	1.230	39.00	2.60
Feb-91	0.139	15.53	0.00
May-91	0.661	11.65	6.38
Jun-91	0.637	41.00	6.63
Sep-91	0.648	41.15	17.60
Dec-91	1.100	22.14	20.60
Feb-92	1.030	40.87	32.10
Jun-92	1.080	30.69	48.60
Aug-92	0.870	26.01	39.70
Dec-92	0.846	44.51	40.40
Mar-93	0.689	65.84	24.60
May-93	0.868	23.18	17.70
Aug-93	1.000	12.96	0.00
Nov-93	0.914	18.53	9.37
Mar-94	1.310	29.70	8.00
Feb-95	0.741	20.60	14.10
Feb-97			

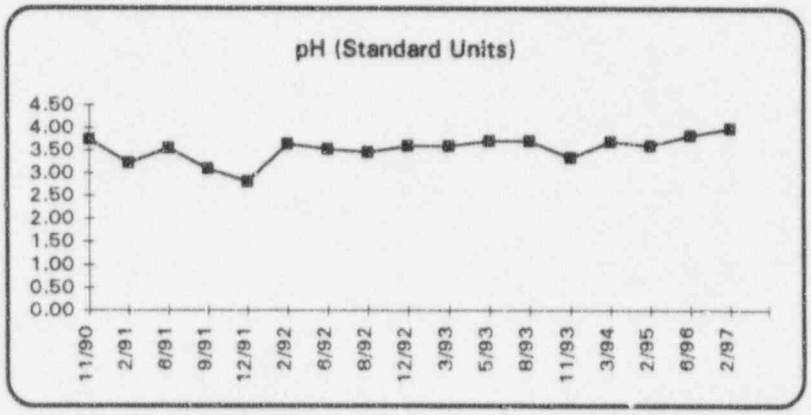


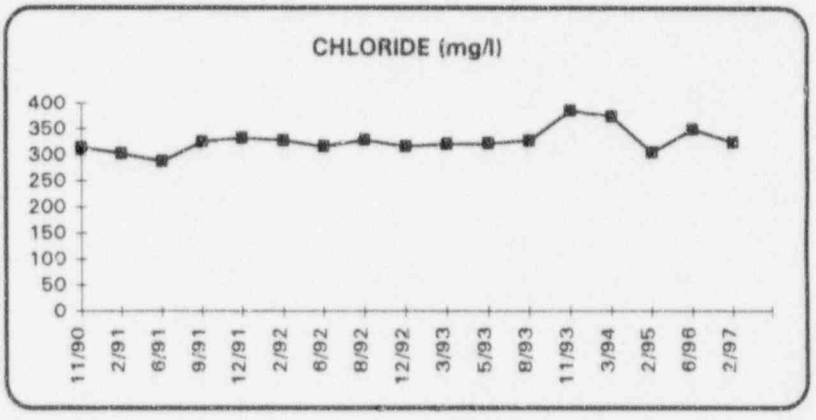


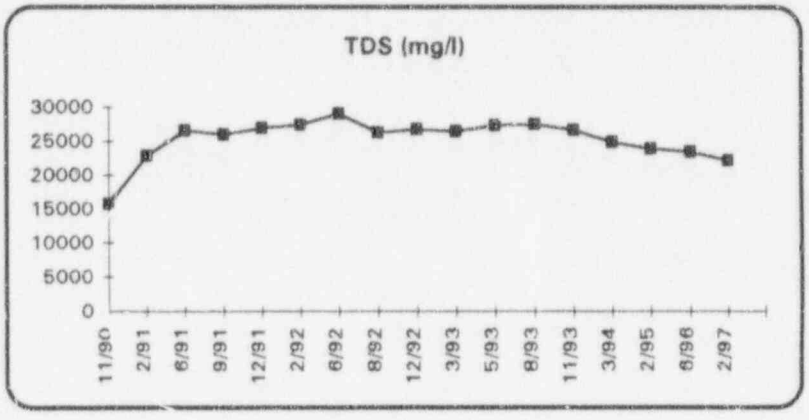


WELL 62SC

DATE	pH	CHLORIDE	TDS
Nov-90	3.75	314	16764
Feb-91	3.22	302	22692
Jun-91	3.55	288	26533
Sep-91	3.10	326	25965
Dec-91	2.81	332	26928
Feb-92	3.65	327	27384
Jun-92	3.54	316	29007
Aug-92	3.48	329	26267
Dec-92	3.61	316	26766
Mar-93	3.60	321	26480
May-93	3.72	323	27288
Aug-93	3.72	327	27469
Nov-93	3.35	386	26644
Mar-94	3.70	375	24900
Feb-95	3.62	305	23900
Jun-96	3.85	350	23600
Feb-97	4.01	326	22200

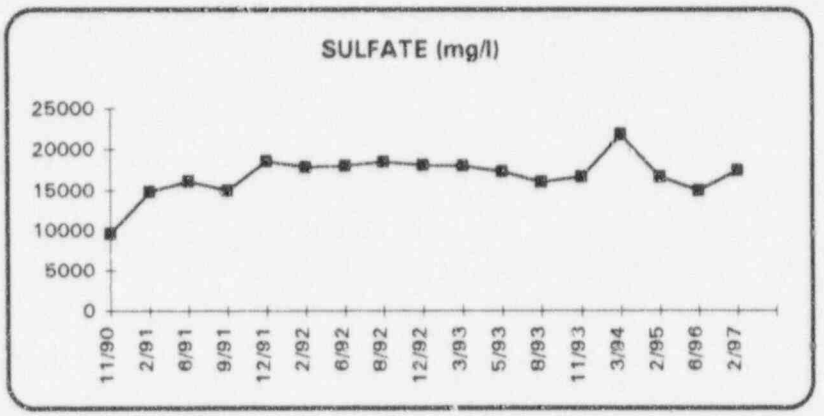


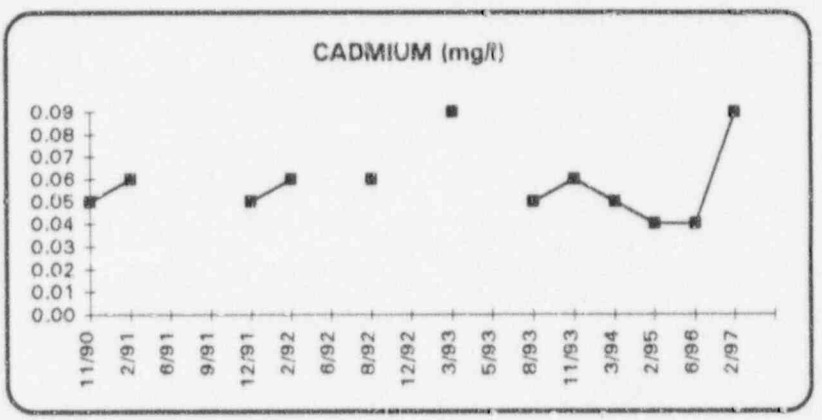


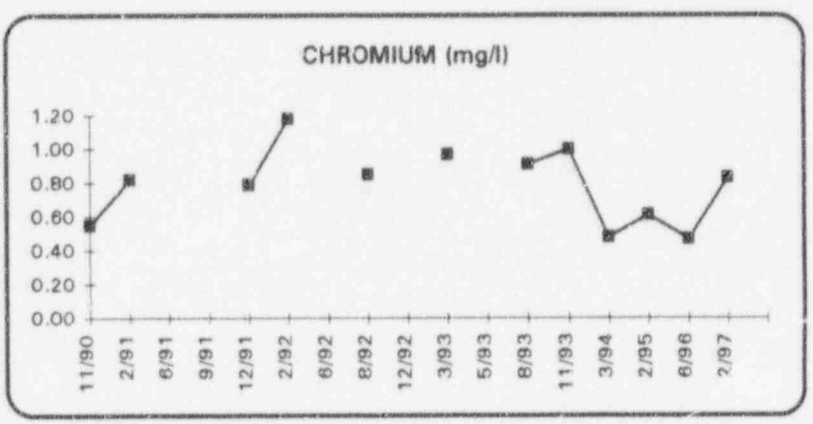


WELL 62SC

DATE	SULFATE	Cadmium	Chromium
Nov-90	9800	0.05	0.55
Feb-91	14800	0.06	0.82
Jun-91	16100		
Sep-91	15000		
Dec-91	18800	0.05	0.79
Feb-92	17900	0.06	1.18
Jun-92	18000		
Aug-92	18500	0.06	0.85
Dec-92	18100		
Mar-93	18000	0.09	0.97
May-93	17300		
Aug-93	16000	0.05	0.91
Nov-93	16700	0.06	1.00
Mar-94	21900	0.05	0.48
Feb-95	16700	0.04	0.61
Jun-96	15000	0.04	0.47
Feb-97	17500	0.09	0.83

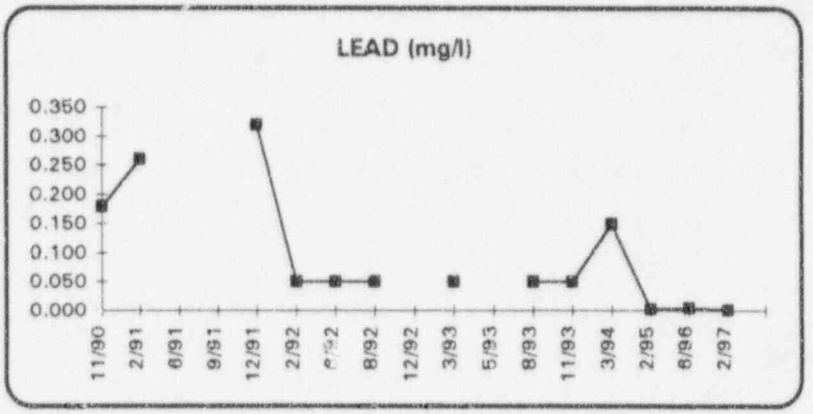


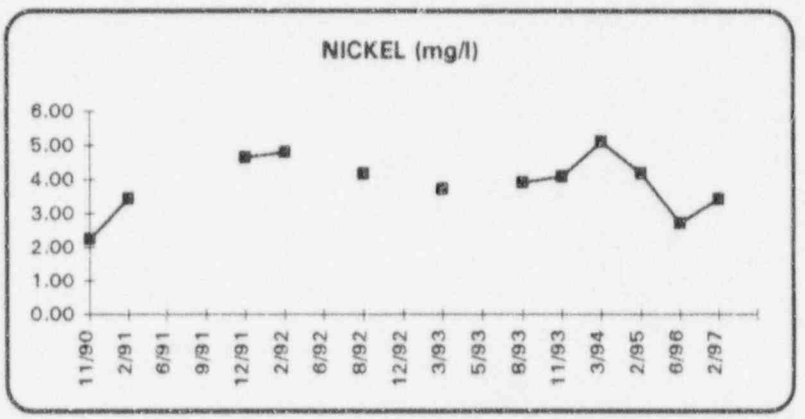


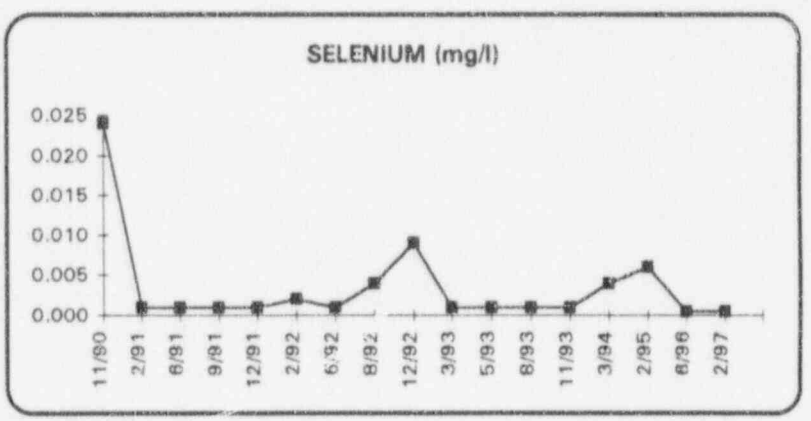


WELL 62SC

DATE	LEAD	NICKEL	SELENIUM
Nov-90	0.180	2.26	0.024
Feb-91	0.260	3.45	0.001
Jun-91			0.001
Sep-91			0.001
Dec-91	0.320	4.66	0.001
Feb-92	0.050	4.81	0.002
Jun-92	0.050		0.001
Aug-92	0.050	4.17	0.004
Dec-92			0.009
Mar-93	0.050	3.73	0.001
May-93			0.001
Aug-93	0.050	3.93	0.001
Nov-93	0.050	4.10	0.001
Mar-94	0.150	5.11	0.004
Feb-95	0.0025	4.20	0.006
Jun-96	0.005	2.73	0.0005
Feb-97	0.001	3.44	0.0005

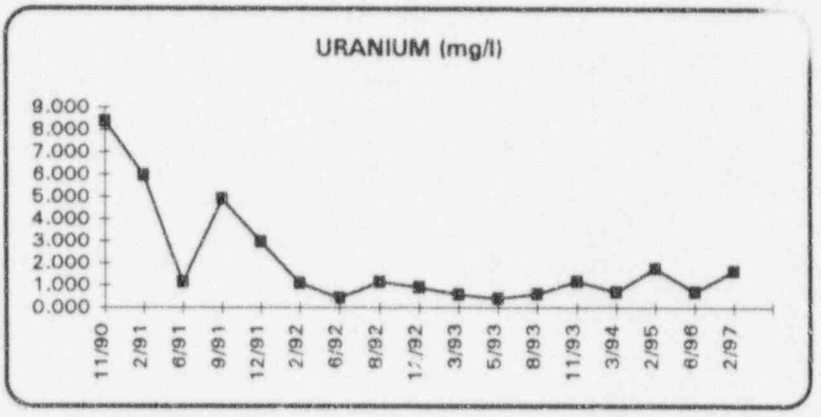


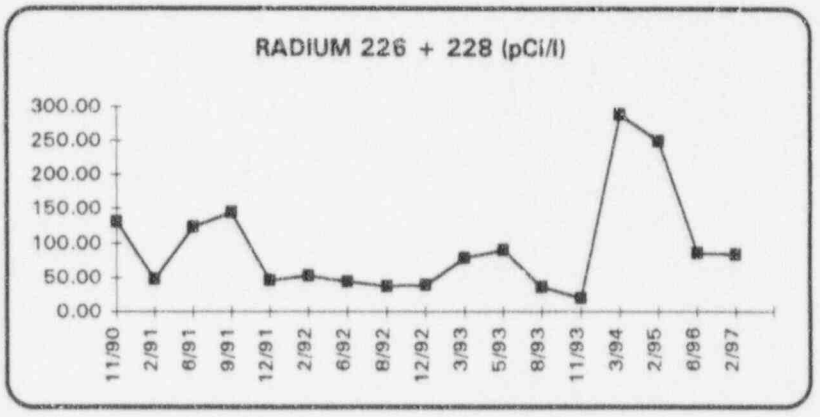


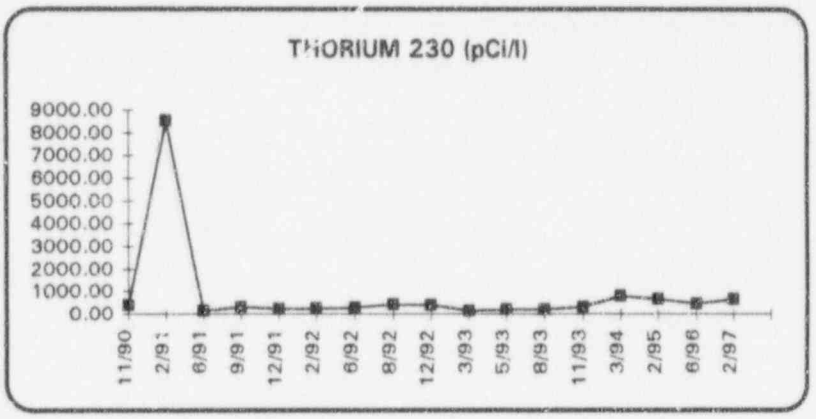


WELL 62SC

DATE	URANIUM	Ra 6 + 8	Th 230
Nov-90	8.380	131.64	412.00
Feb-91	5.980	47.65	8639.00
Jun-91	1.150	123.90	140.00
Sep-91	4.920	144.66	318.00
Dec-91	2.980	45.66	244.00
Feb-92	1.100	52.93	249.00
Jun-92	0.452	44.47	294.00
Aug-92	1.140	37.82	428.00
Dec-92	0.917	39.68	390.00
Mar-93	0.588	78.00	141.00
May-93	0.416	90.01	216.00
Aug-93	0.825	38.45	210.00
Nov-93	1.170	20.34	320.00
Mar-94	0.716	289.30	797.00
Feb-95	1.770	260.20	674.00
Jun-96	0.719	66.30	463.00
Feb-97	1.660	84.80	673.00

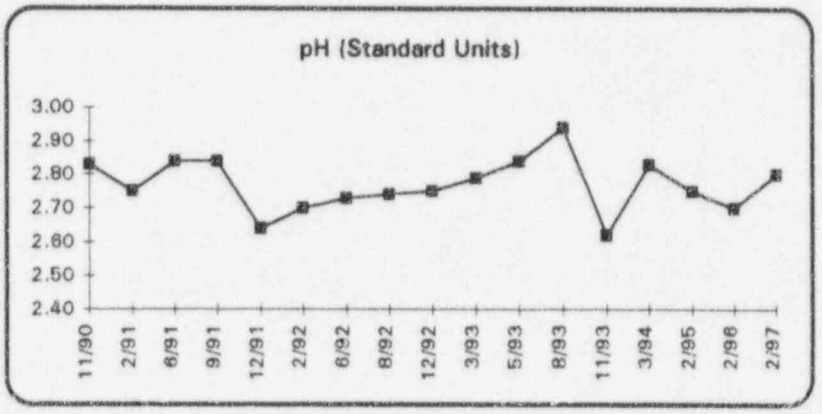


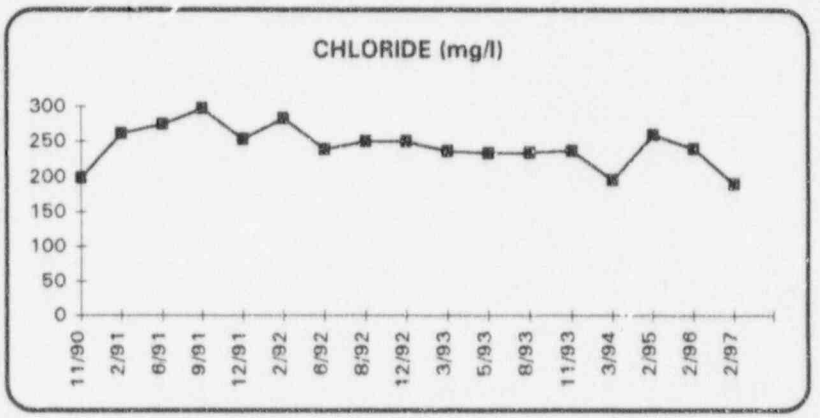


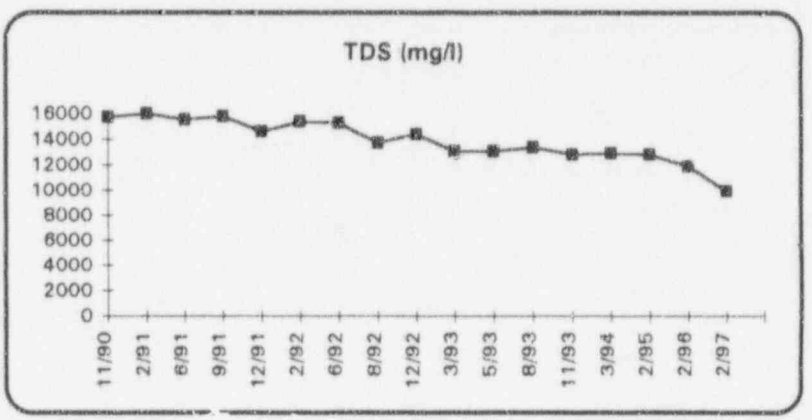


WELL 63SC

DATE	pH	CHLORIDE	TDS
Nov-90	2.83	199	16728
Feb-91	2.76	262	15996
Jun-91	2.84	276	16536
Sep-91	2.84	297	16780
Dec-91	2.64	263	14805
Feb-92	2.70	283	16405
Jun-92	2.73	239	15260
Aug-92	2.74	250	13750
Dec-92	2.76	250	14407
Mar-93	2.79	236	13060
May-93	2.84	233	13091
Aug-93	2.84	234	13388
Nov-93	2.62	237	12811
Mar-94	2.83	196	12800
Feb-95	2.76	260	12800
Feb-96	2.70	240	11900
Feb-97	2.80	190	9970

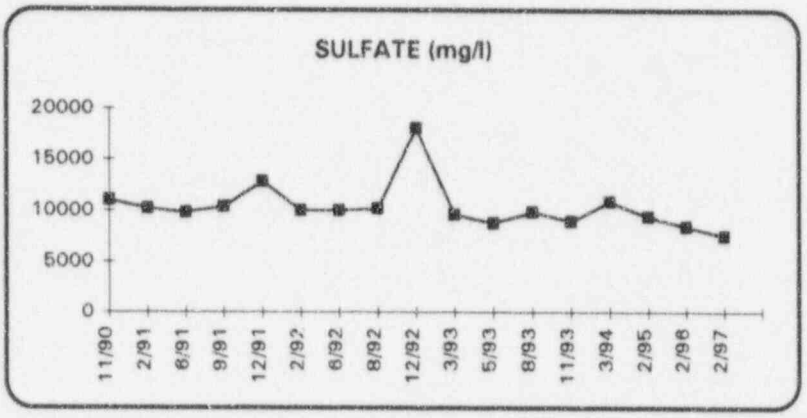


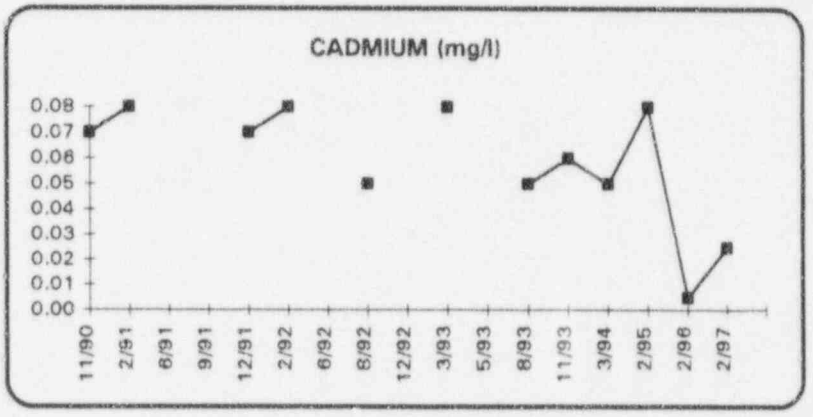


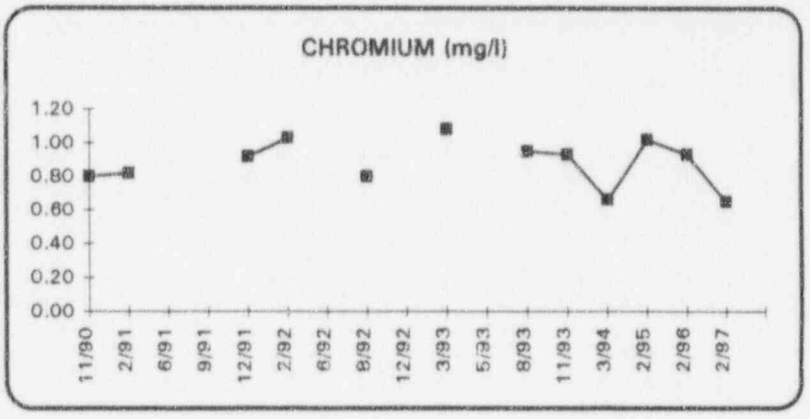


WELL 63SC

DATE	SULFATE	Cadmium	Chromium
Nov-90	11000	0.07	0.80
Feb-91	10200	0.08	0.82
Jun-91	9800		
Sep-91	10400		
Dec-91	12800	0.07	0.92
Feb-92	10000	0.08	1.03
Jun-92	10000		
Aug-92	10200	0.05	0.80
Dec-92	18100		
Mar-93	9900	0.08	1.08
May-93	8800		
Aug-93	9900	0.05	0.95
Nov-93	9000	0.06	0.83
Mar-94	10900	0.05	0.86
Feb-95	9400	0.080	1.02
Feb-96	8480	0.005	0.93
Feb-97	7550	0.03	0.65

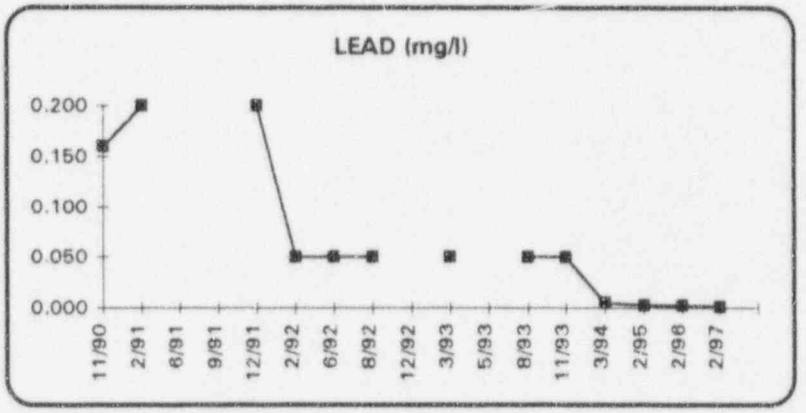


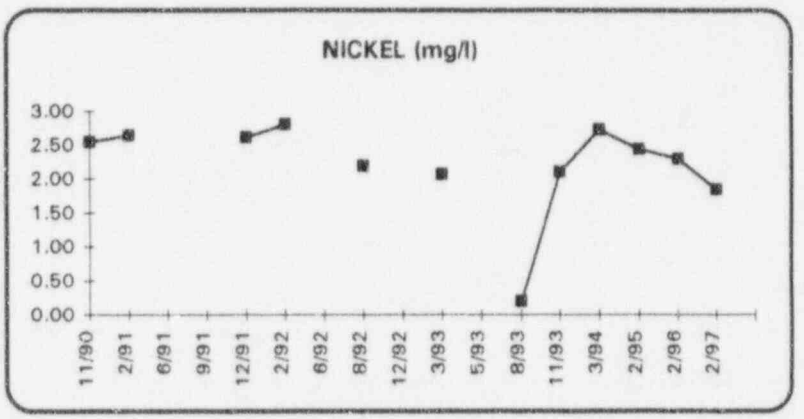


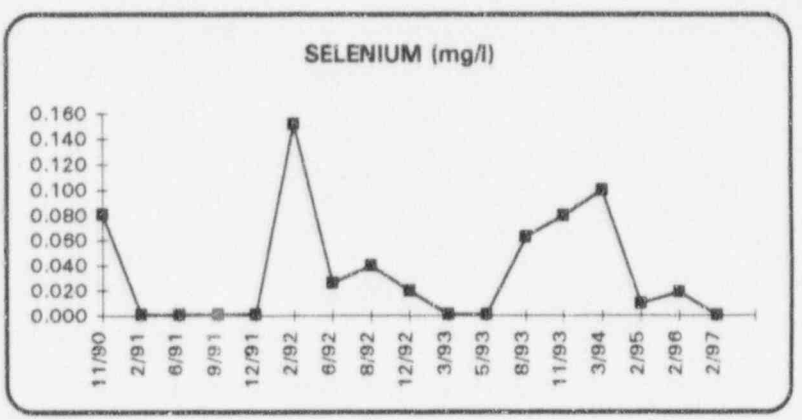


WELL 63SC

DATE	LEAD	NICKEL	SELENIUM
Nov-90	0.160	2.55	0.081
Feb-91	0.200	2.64	0.001
Jun-91			0.001
Sep-91			0.001
Dec-91	0.200	2.61	0.001
Feb-92	0.050	2.81	0.152
Jun-92	0.050		0.026
Aug-92	0.050	2.19	0.040
Dec 92			0.020
Mar-93	0.050	2.06	0.001
May-93			0.001
Aug-93	0.050	0.20	0.063
Nov-93	0.050	2.10	0.080
Mar-94	0.005	2.73	0.100
Feb-95	0.0025	2.44	0.010
Feb-96	0.0025	2.30	0.019
Feb-97	0.0010	1.84	0.0005

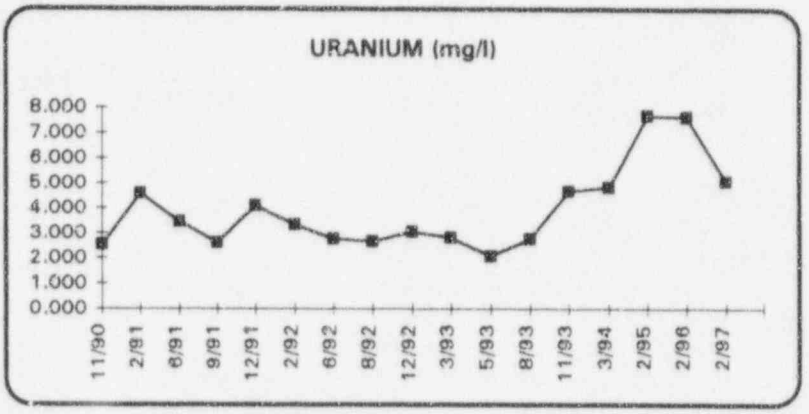


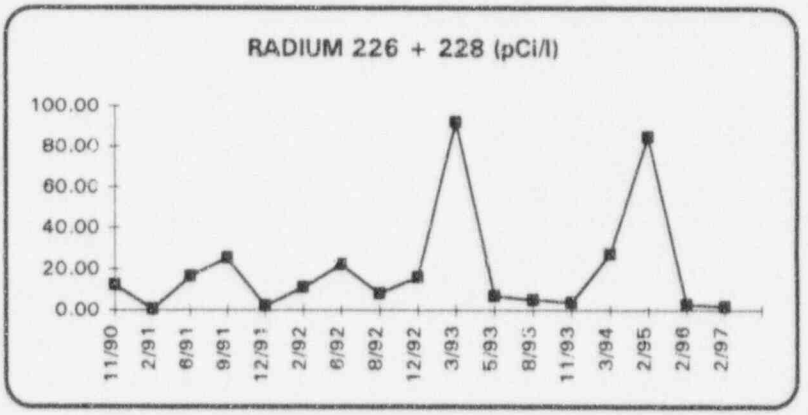


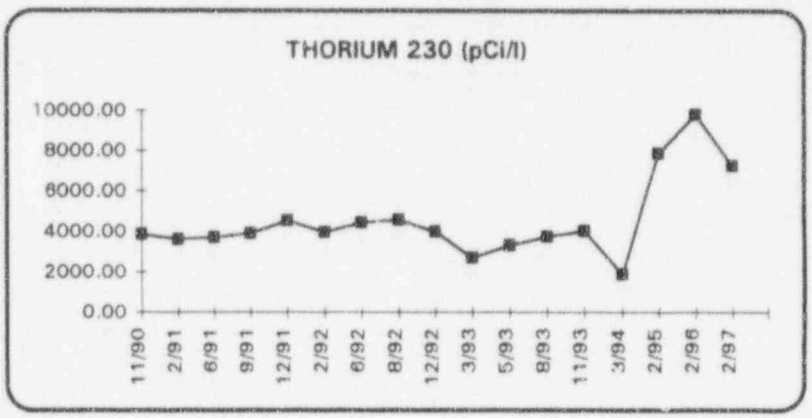


WELL 63SC

DATE	URANIUM	Ra 6+8	Th 230
Nov-90	2.530	12.40	3875.00
Feb-91	4.600	0.62	3597.00
Jun-91	3.450	16.48	3726.00
Sep-91	2.610	26.50	3919.00
Dec-91	4.110	2.36	4539.00
Feb-92	3.330	11.06	3956.00
Jun-92	2.770	22.31	4448.00
Aug-92	2.670	8.14	4572.00
Dec-92	3.040	16.34	3988.00
Mar-93	2.810	92.43	2722.00
May-93	2.080	6.91	3332.00
Aug-93	2.780	5.17	3732.00
Nov-93	4.700	3.91	4020.00
Mar-94	4.840	27.30	1900.00
Feb-95	7.660	85.00	7880.00
Feb-96	7.630	2.90	9800.00
Feb-97	5.110	1.80	7270.00

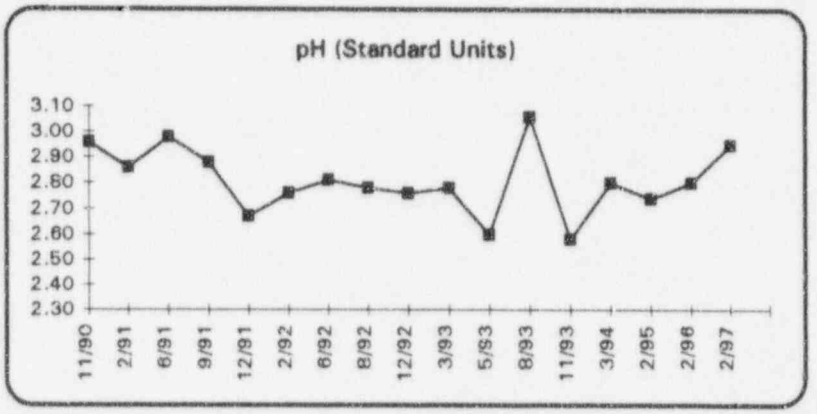


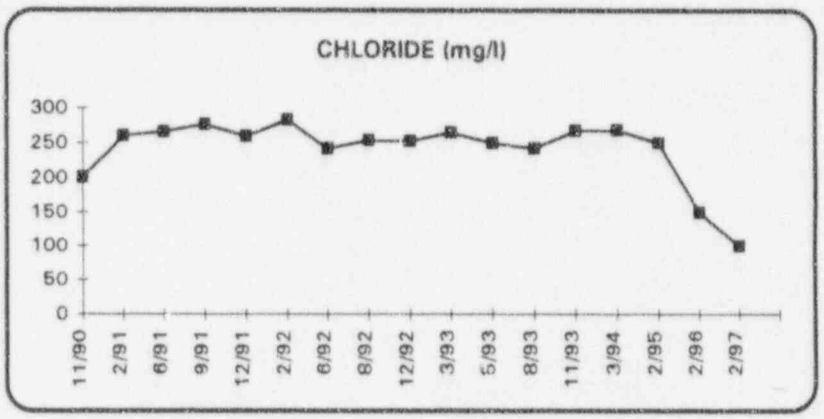


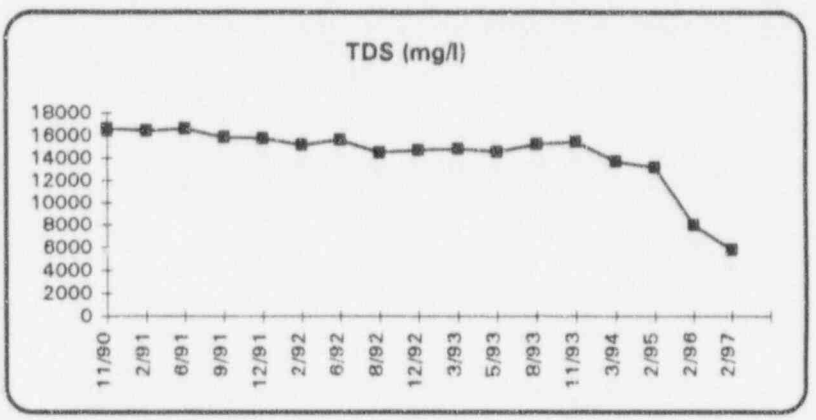


WELL 64SC

DATE	pH	CHLORIDE	TDS
Nov-90	2.96	201	16627
Feb-91	2.86	260	16478
Jun-91	2.98	266	16634
Sep-91	2.88	276	16893
Dec-91	2.67	269	15771
Feb-92	2.76	283	16203
Jun-92	2.81	241	15670
Aug-92	2.78	254	14503
Dec-92	2.76	263	14714
Mar-93	2.78	265	14860
May-93	2.60	250	14587
Aug-93	3.06	242	16270
Nov-93	2.58	268	16492
Mar-94	2.80	269	13700
Feb-95	2.74	250	13200
Feb-96	2.80	150	8000
Feb-97	2.95	100	5840

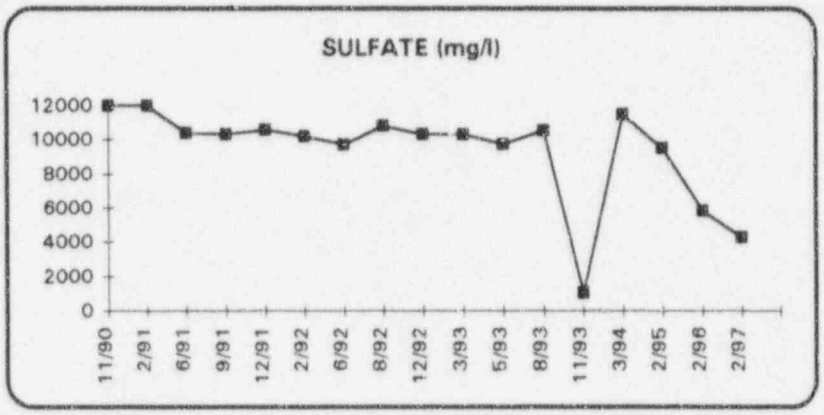


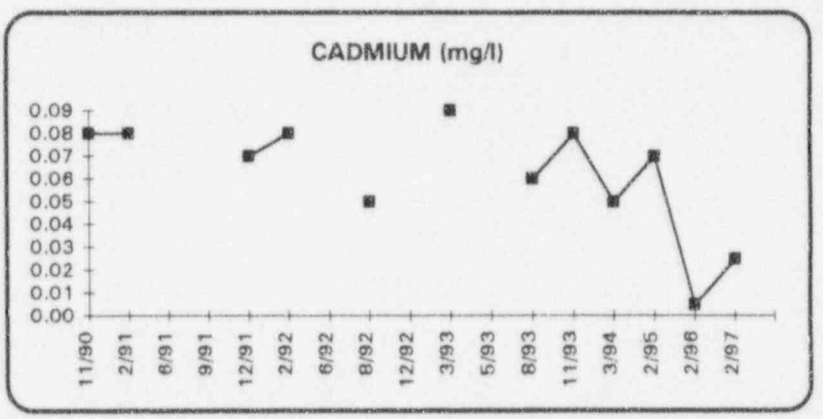


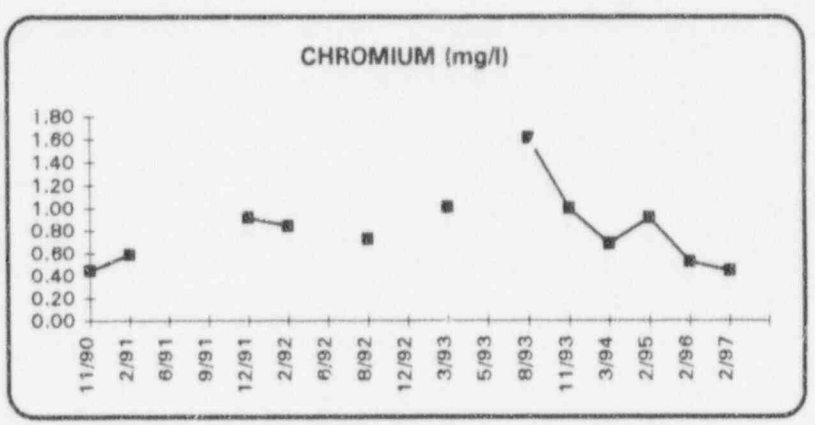


WELL 64SC

DATE	SULFATE	Cadmium	Chromium
Nov-90	12000	0.08	0.46
Feb-91	12000	0.08	0.59
Jun-91	10400		
Sep-91	10300		
Dec-91	10600	0.07	0.92
Feb-92	10200	0.08	0.84
Jun-92	9700		
Aug-92	10800	0.05	0.73
Dec-92	10300		
Mar-93	10320	0.09	1.01
May-93	9760		
Aug-93	10680	0.08	1.61
Nov-93	1030	0.08	1.00
Mar-94	11600	0.05	0.69
Feb-95	9620	0.07	0.92
Feb-96	5840	0.006	0.53
Feb-97	4280	0.026	0.45

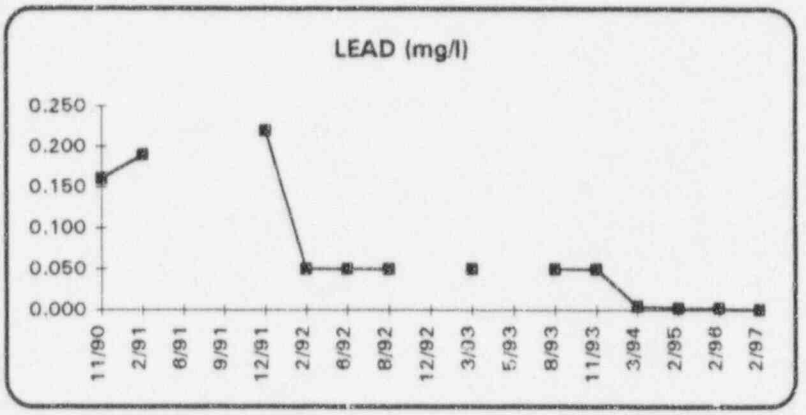


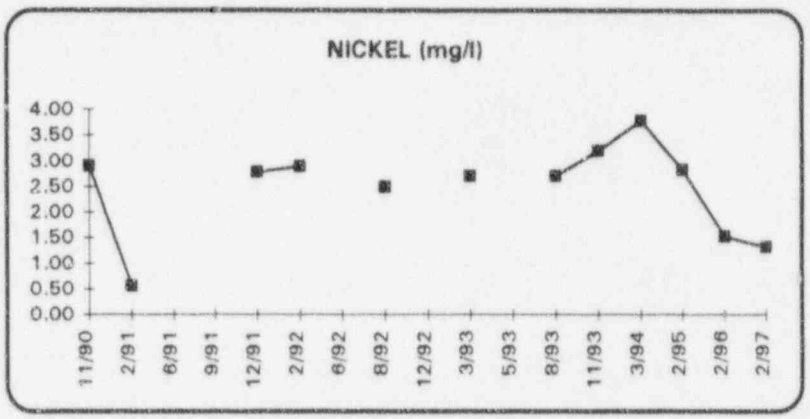


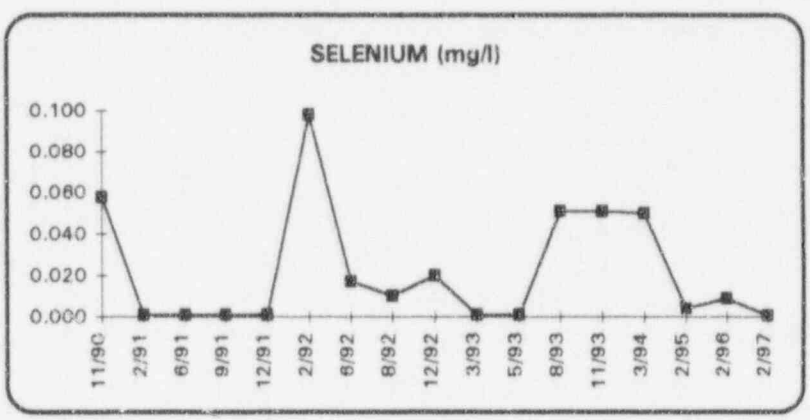


WELL 64SC

DATE	LEAD	NICKEL	SELENIUM
Nov-90	0.160	2.90	0.058
Feb-91	0.190	0.66	0.001
Jun-91			0.001
Sep-91			0.001
Dec-91	0.220	2.78	0.001
Feb-92	0.050	2.89	0.098
Jun-92	0.050		0.017
Aug-92	0.050	2.48	0.010
Dec-92			0.020
Mar-[illegible]	0.050	2.70	0.001
May-93			0.001
Aug-93	0.050	2.70	0.051
Nov-93	0.050	3.20	0.051
Mar-94	0.005	3.78	0.050
Feb-95	0.0025	2.83	0.004
Feb-96	0.0025	1.53	0.009
Feb-97	0.0010	1.32	0.0005

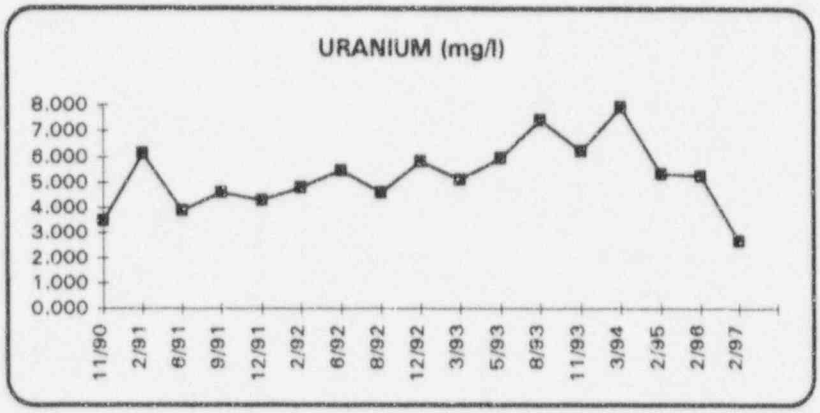


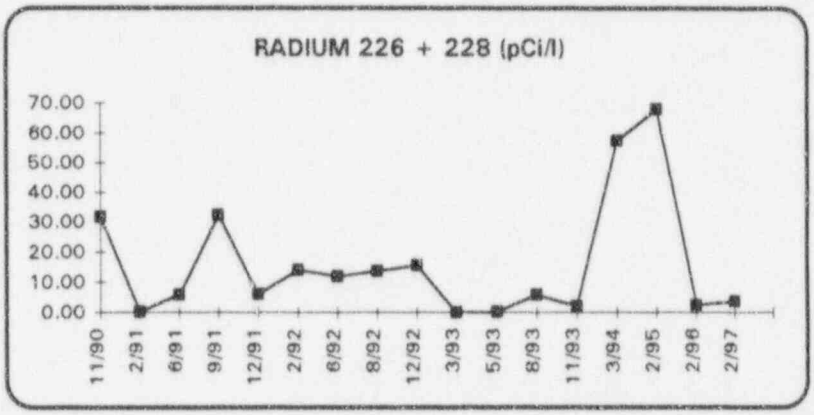


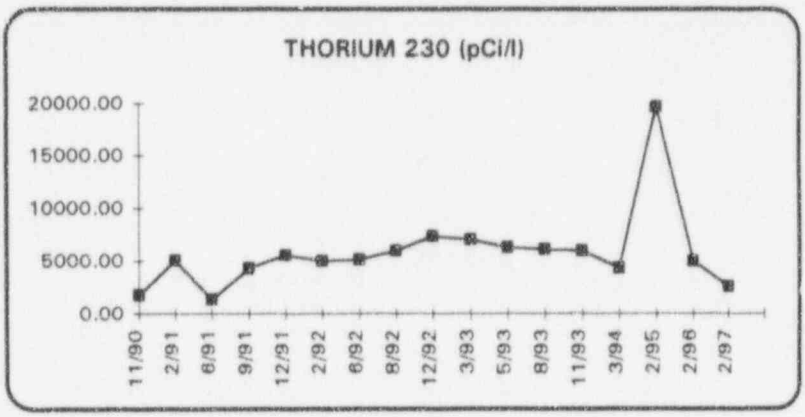


WELL 64SC

DATE	URANIUM	Ra 6+8	Th 230
Nov-90	3.490	31.84	1787.00
Feb-91	6.140	0.19	6041.00
Jun-91	3.880	5.96	1368.00
Sep-91	4.610	32.44	4302.00
Dec-91	4.310	6.08	6569.00
Feb-92	4.810	14.08	4992.00
Jun-92	5.490	11.97	5107.00
Aug-92	4.620	13.59	5993.00
Dec-92	5.840	16.70	7376.00
Mar-93	5.120	0.08	7033.00
May-93	5.960	0.28	6319.00
Aug-93	7.450	5.81	6101.00
Nov-93	6.230	1.96	5996.00
Mar-94	7.940	57.40	4350.00
Feb-95	5.360	68.10	19700.00
Feb-96	5.270	2.30	5020.00
Feb-97	2.700	3.70	2580.00

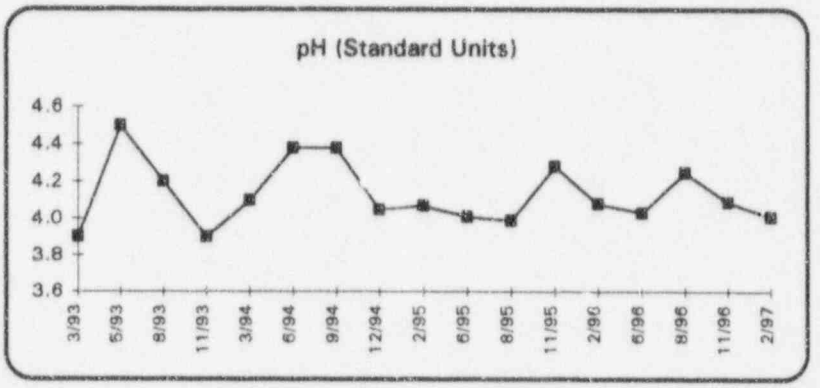


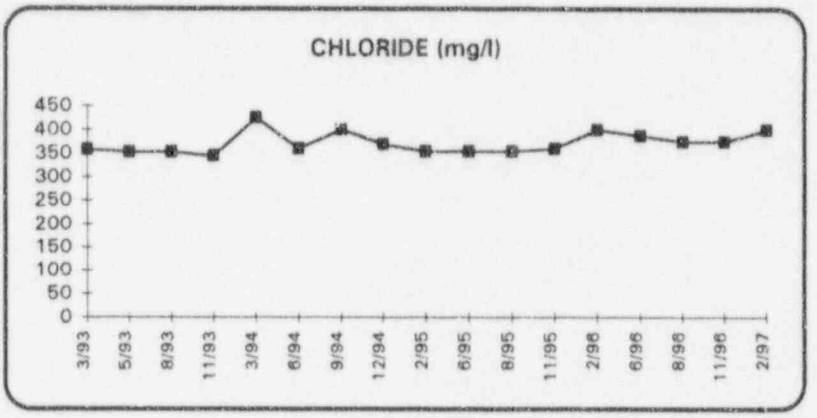


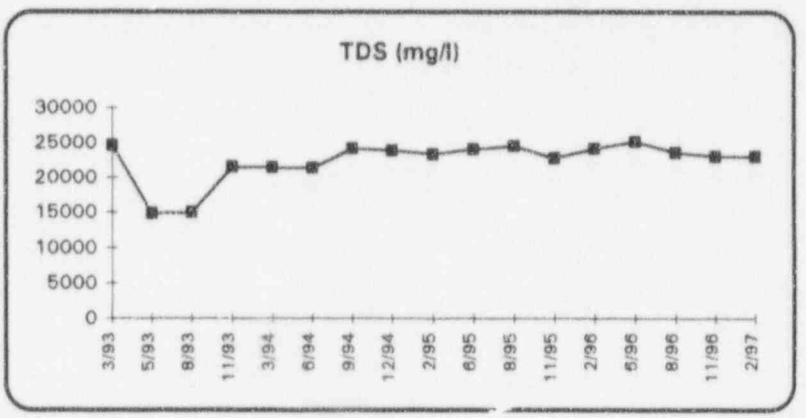


WELL 66SC

DATE	pH	CHLORIDE	TDS
Mar-93	3.9	359	24601
May-93	4.5	353	14852
Aug-93	4.2	353	15084
Nov-93	3.9	345	21581
Mar-94	4.1	425	21500
Jun-94	4.4	360	21400
Sep-94	4.4	400	24200
Dec-94	4.1	370	23900
Feb-95	4.1	355	23400
Jun-95	4.01	355	24100
Aug-95	3.99	355	24600
Nov-95	4.28	360	22800
Feb-96	4.08	400	24200
Jun-96	4.03	388	25200
Aug-96	4.25	375	23600
Nov-96	4.09	375	23100
Feb-97	4.01	400	23100

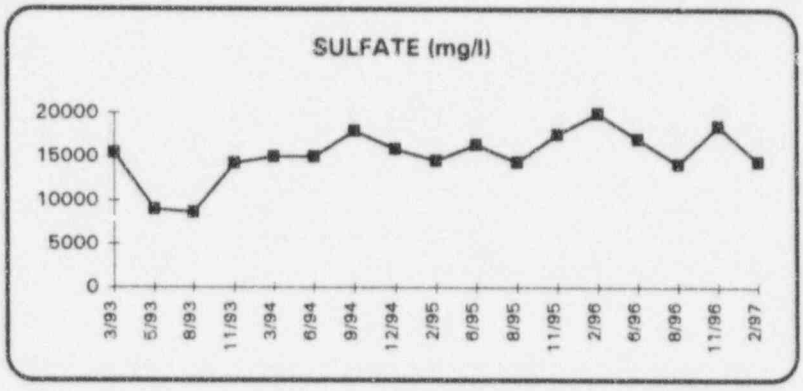


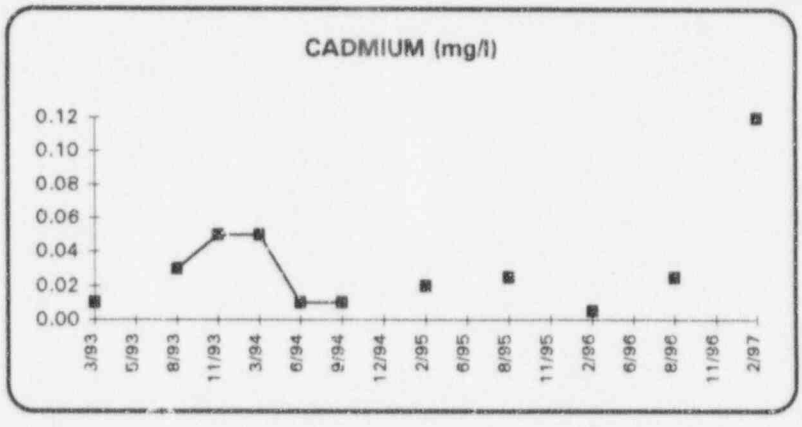


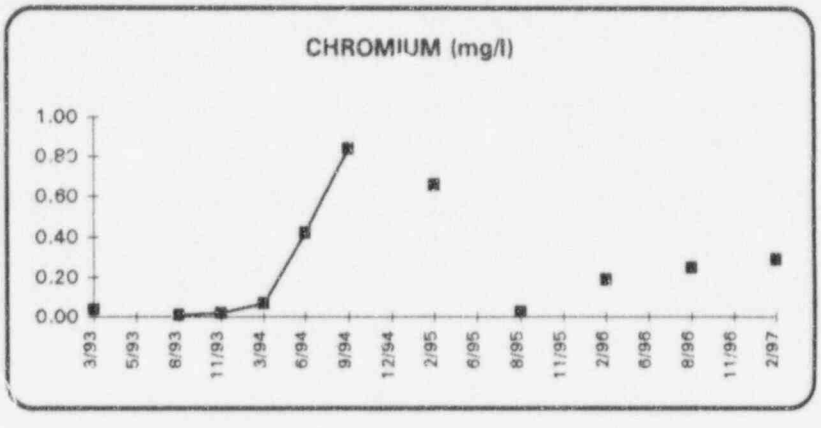


WELL 66SC

DATE	SULFATE	Cadmium	Chromium
Mar-93	15440	0.01	0.04
May-93	9000		
Aug-93	8640	0.03	0.01
Nov-93	14300	0.05	0.02
Mar-94	15000	0.05	0.07
Jun-94	15000	0.01	0.42
Sep-94	18000	0.01	0.84
Dec-94	15900		
Feb-95	14600	0.02	0.66
Jun-95	16400		
Aug-95	14400	0.025	0.025
Nov-95	17600		
Feb-96	20000	0.005	0.190
Jun-96	17100		
Aug-96	14200	0.025	0.250
Nov-96	18600		
Feb-97	14500	0.120	0.290

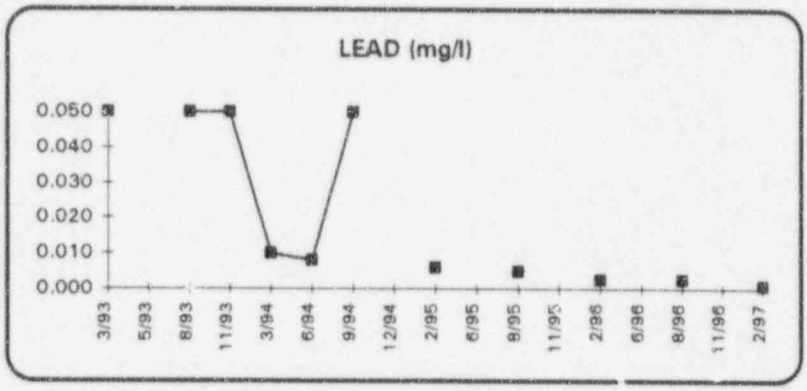


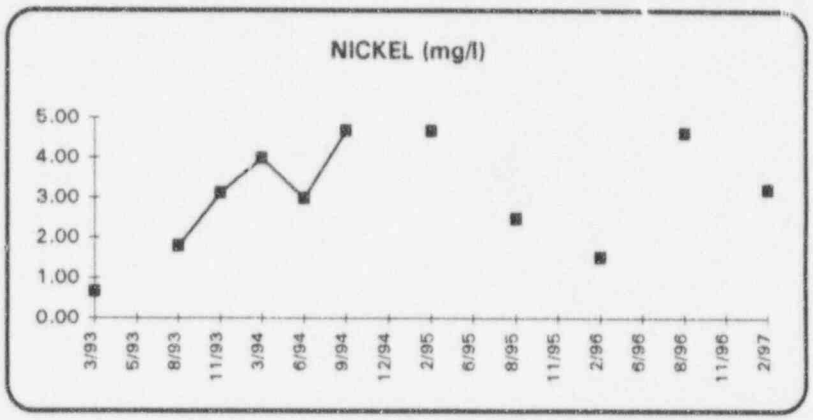


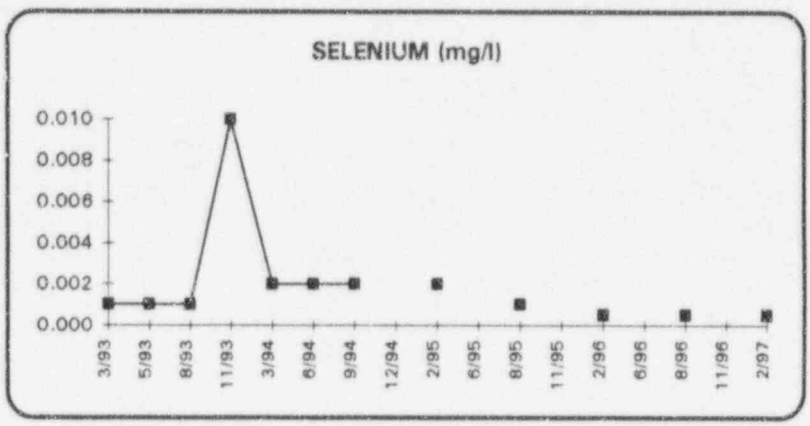


WELL 66SC

DATE	LEAD	NICKEL	SELENIUM
Mar-93	0.050	0.67	0.001
May-93			0.001
Aug-93	0.050	1.80	0.001
Nov-93	0.050	3.10	0.010
Mar-94	0.010	3.98	0.002
Jun-94	0.01	2.97	0.002
Sep-94	0.050	4.67	0.002
Dec-94			
Feb-95	0.008	4.68	0.002
Jun-95			
Aug-95	0.005	2.47	0.0010
Nov-95			
Feb-96	0.0025	1.52	0.0005
Jun-96			
Aug-96	0.0025	4.63	0.0005
Nov-96			
Feb-97	0.0010	3.20	0.0005

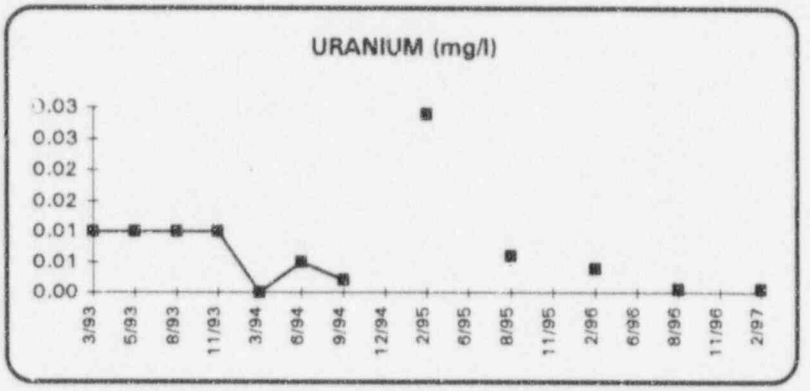


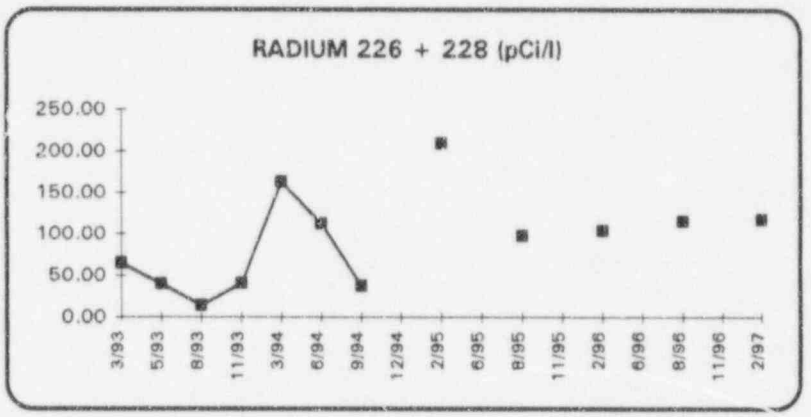


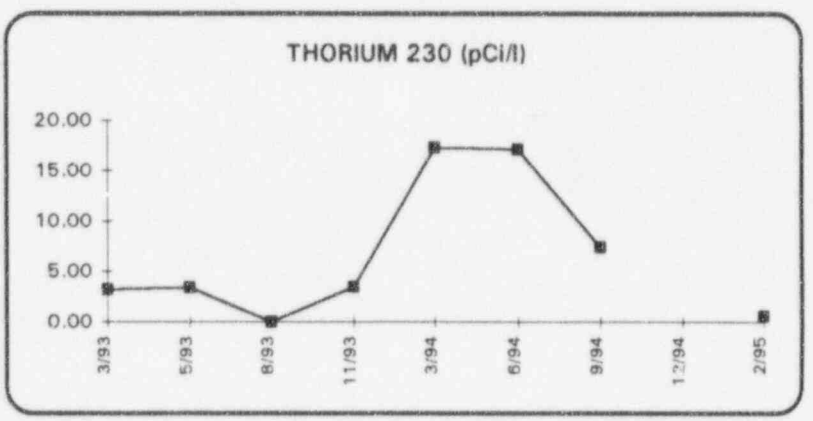


WELL 66SC

DATE	URANIUM	Ra 6+8	Th 230
Mar-93	0.01	65.02	3.19
May-93	0.01	40.19	3.41
Aug-93	0.01	13.84	0.00
Nov-93	0.01	40.63	3.48
Mar-94	0.00	163.30	17.30
Jun-94	0.01	112.80	17.10
Sep-94	0.00	37.70	7.40
Dec-94			
Feb-95	0.03	209.10	0.60
Jun-95			
Aug-95	0.006	98.00	7.30
Nov-95			
Feb-96	0.004	104.20	1.80
Jun-96			
Aug-96	0.001	115.30	8.90
Nov-96			
Feb-97	0.001	118.00	6.50

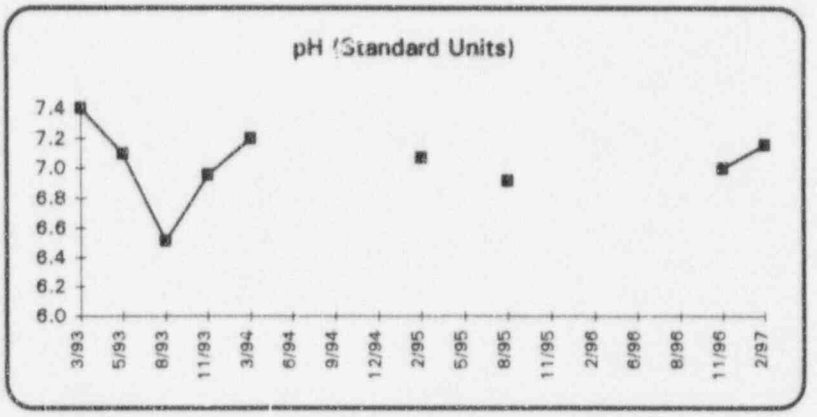


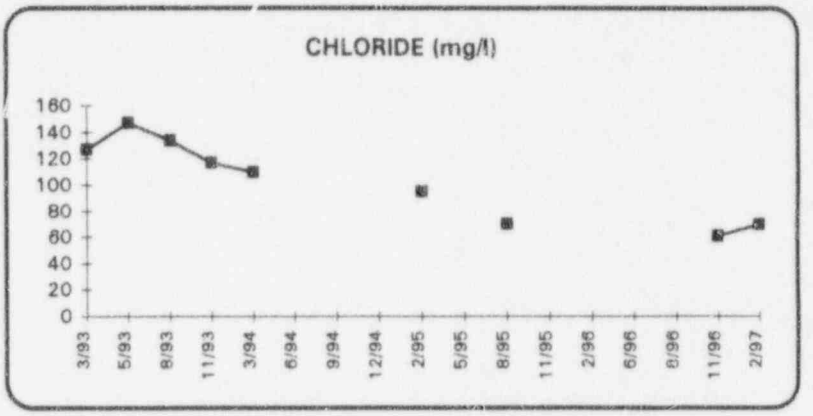


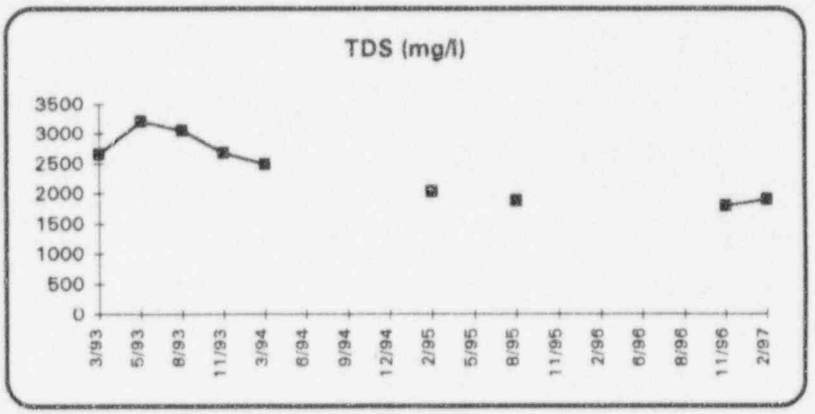


WELL 67SC

DATE	pH	CHLORIDE	TDS
Mar-93	7.4	127	2665
May-93	7.1	147	3207
Aug-93	6.5	134	3055
Nov-93	7.0	117	2681
Mar-94	7.2	110	2490
Jun-94			
Sep-94			
Dec-94			
Feb-95	7.1	95	2040
May-95			
Aug-95	6.9	70	1890
Nov-95			
Feb-96			
Jun-96			
Aug-96			
Nov-96	7.0	61	1800
Feb-97	7.2	70	1910

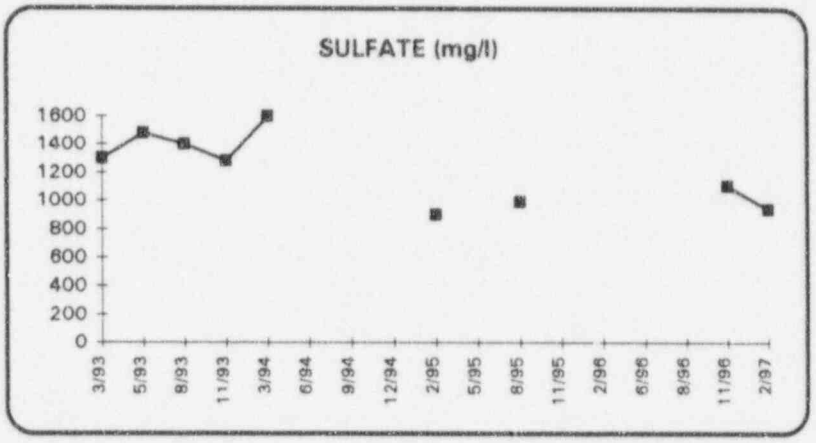


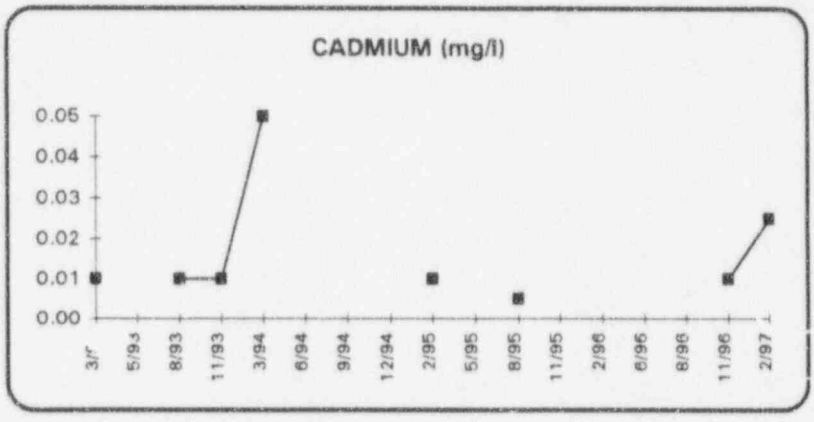


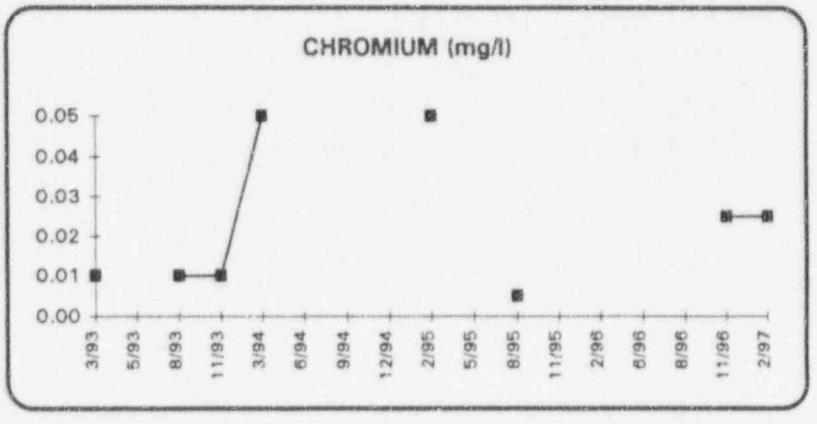


WELL 67SC

DATE	SULFATE	Cadmium	Chromium
Mar-93	1300	0.01	0.01
May-93	1480		
Aug-93	1400	0.01	0.01
Nov-93	1280	0.01	0.01
Mar-94	1600	0.05	0.05
Jun-94			
Sep-94			
Dec-94			
Feb-95	900	0.01	0.05
May-95			
Aug-95	990	0.01	0.01
Nov-95			
Feb-96			
Jun-96			
Aug-96			
Nov-96	1105	0.01	0.025
Feb-97	940	0.025	0.025

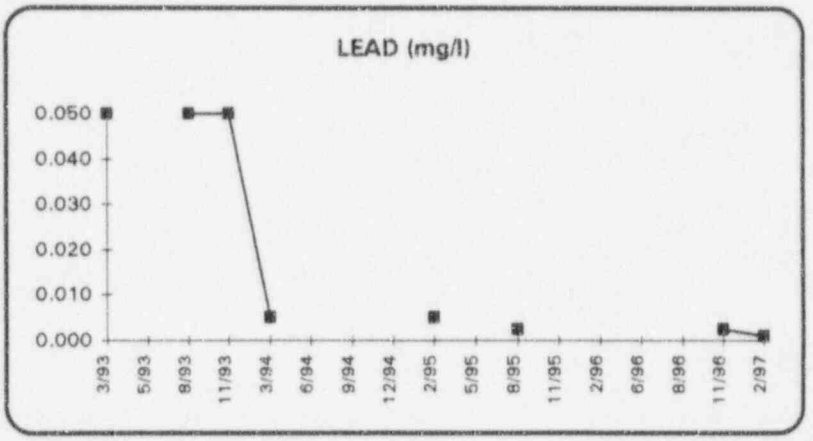


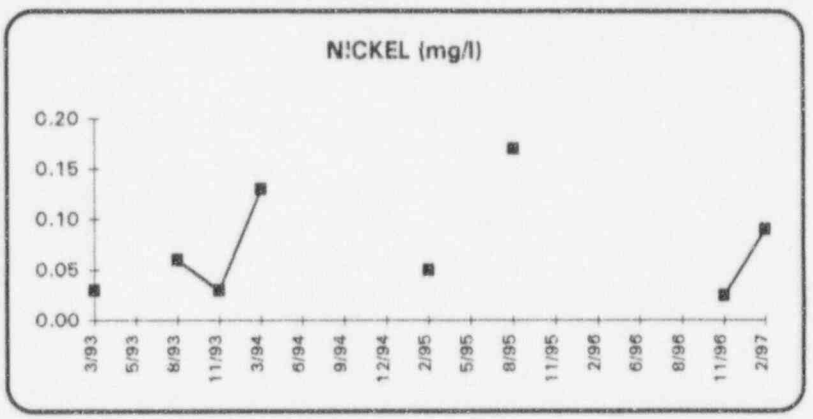


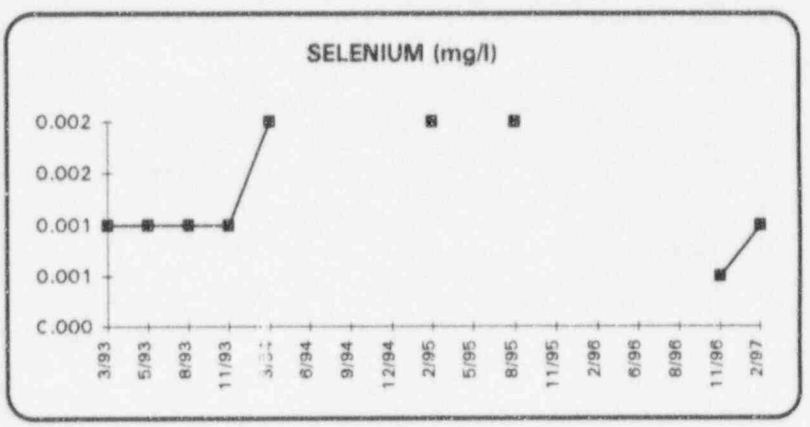


WELL 67SC

DATE	LEAD	NICKEL	SELENIUM
Mar-93	0.050	0.03	0.001
May-93			0.001
Aug-93	0.050	0.06	0.001
Nov-93	0.050	0.03	0.001
Mar-94	0.005	0.13	0.002
Jun-94			
Sep-94			
Dec-94			
Feb-95	0.005	0.05	0.002
May-95			
Aug-95	0.003	0.17	0.002
Nov-95			
Feb-96			
Jun-96			
Aug-96			
Nov-96	0.0025	0.025	0.0005
Feb-97	0.001	0.09	0.001

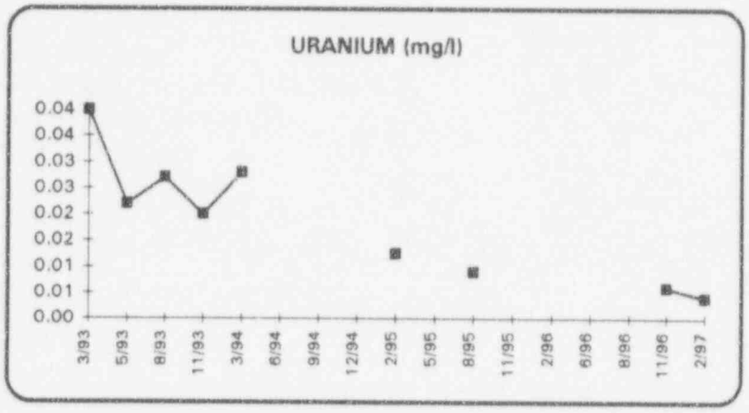


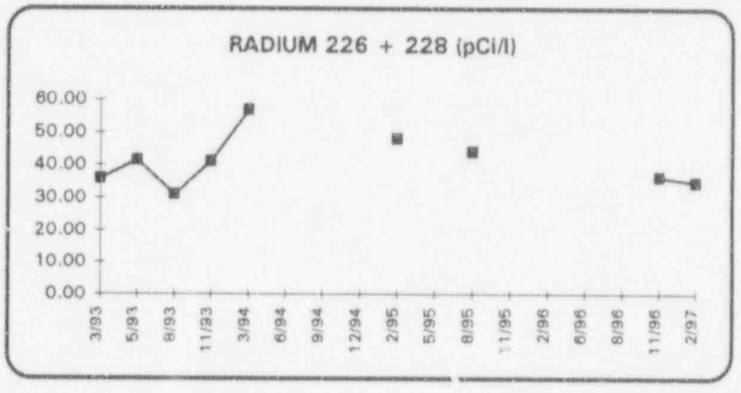


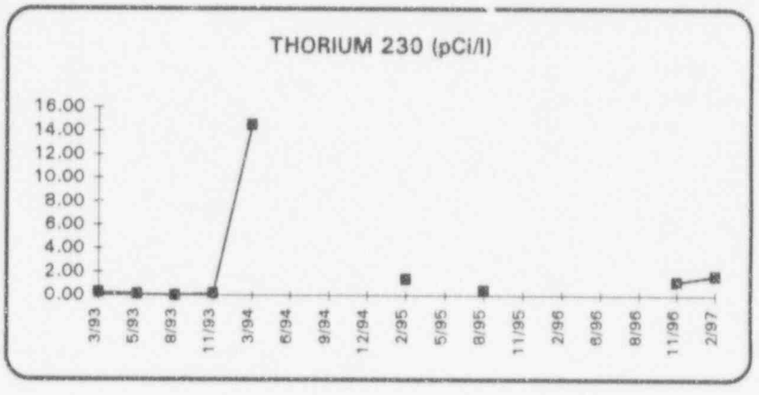


WELL 67SC

DATE	URANIUM	Ra 8+8	Th 230
Mar-93	0.04	35.90	0.24
May-93	0.02	41.60	0.09
Aug-93	0.03	31.08	0.00
Nov-93	0.02	41.20	0.17
Mar-94	0.03	56.80	14.50
Jun-94			
Sep-94			
Dec-94			
Feb-95	0.01	48.00	1.40
May-95			
Aug-95	0.01	44.10	0.40
Nov-95			
Feb-96			
Jun-96			
Aug-96			
Nov-96	0.01	36.60	1.20
Feb-97	0.00	34.90	1.70

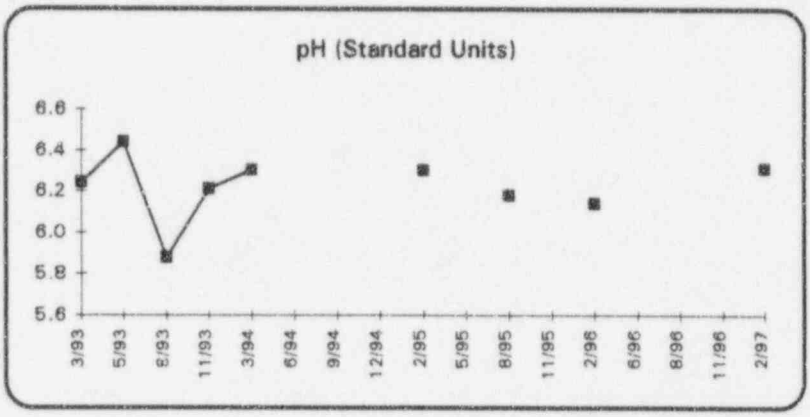


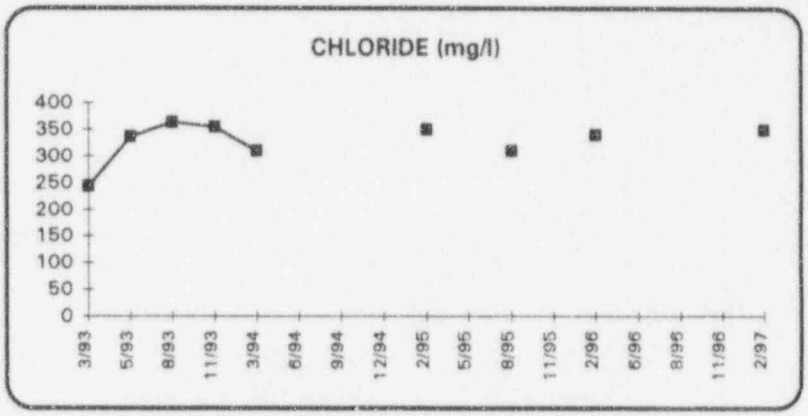


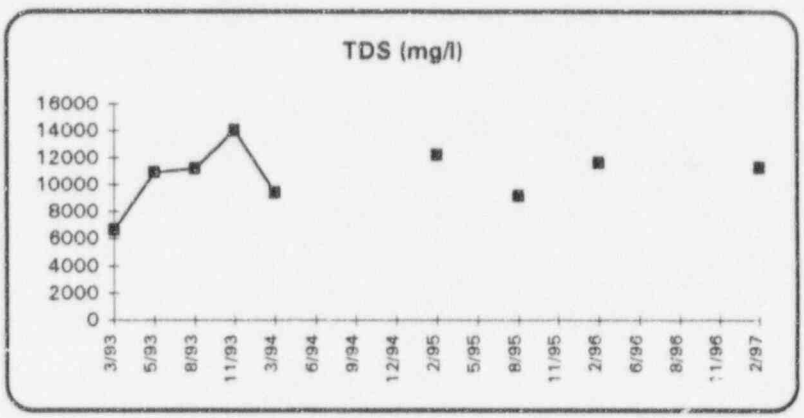


WELL 68SC

DATE	pH	CHLORIDE	TDS
Mar-93	6.2	243	6630
May-93	6.4	336	10695
Aug-93	5.9	363	11194
Nov-93	6.2	355	14052
Mar-94	6.3	310	9430
Jun-94			
Sep-94			
Dec-94			
Feb-95	6.3	350	12200
May-95			
Aug-95	6.2	310	9150
Nov-95			
Feb-96	6.1	340	11650
Jun-96			
Aug-96			
Nov-96			
Feb-97	6.3	350	11300

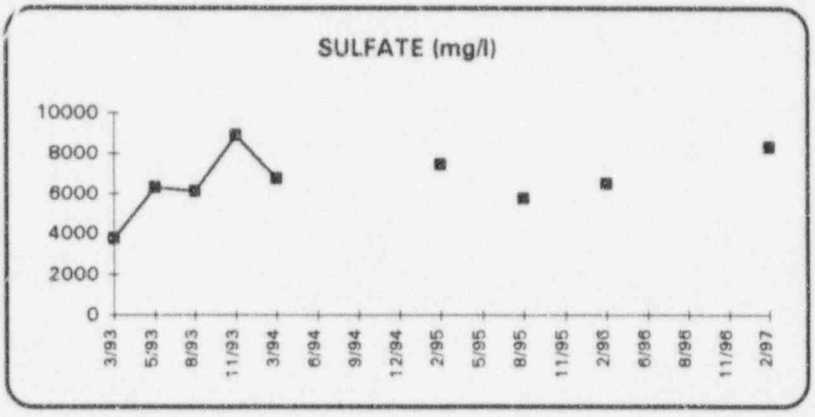


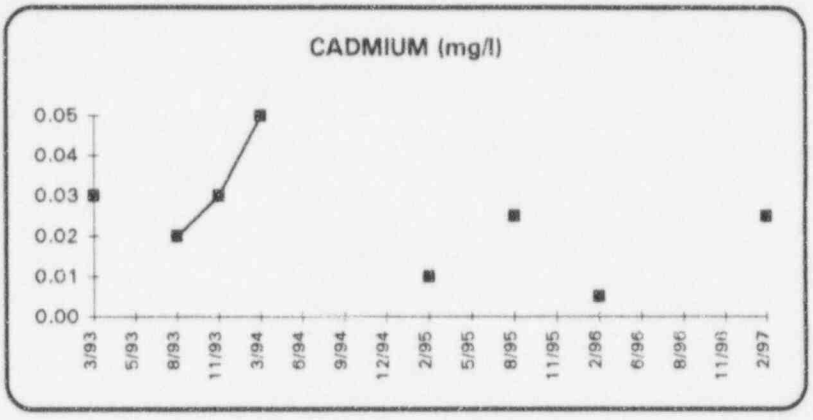


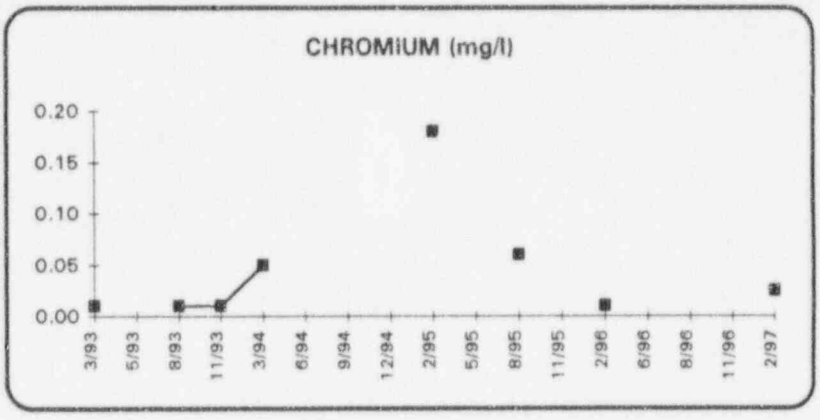


WELL 68SC

DATE	SULFATE	Cadmium	Chromium
Mar-93	3760	0.03	0.01
May-93	6300		
Aug-93	6133	0.02	0.01
Nov-93	8900	0.03	0.01
Mar-94	6760	0.05	0.05
Jun-94			
Sep-94			
Dec-94			
Feb-95	7480	0.01	0.18
May-95			
Aug-95	5780	0.025	0.06
Nov-95			
Feb-96	6500	0.005	0.01
Jun-96			
Aug-96			
Nov-96			
Feb-97	8320	0.025	0.025

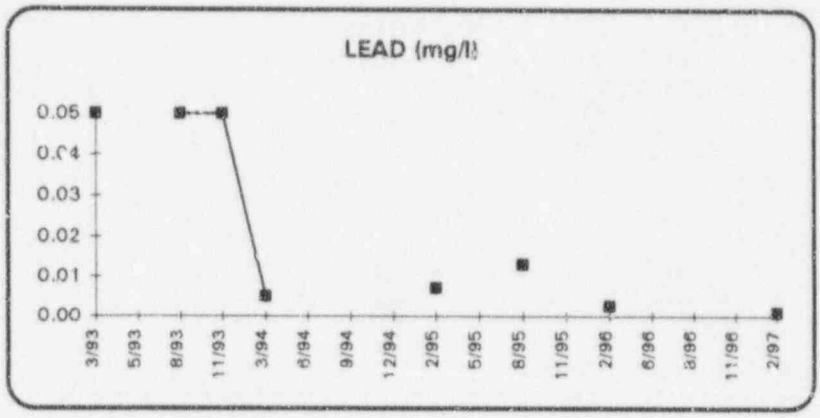


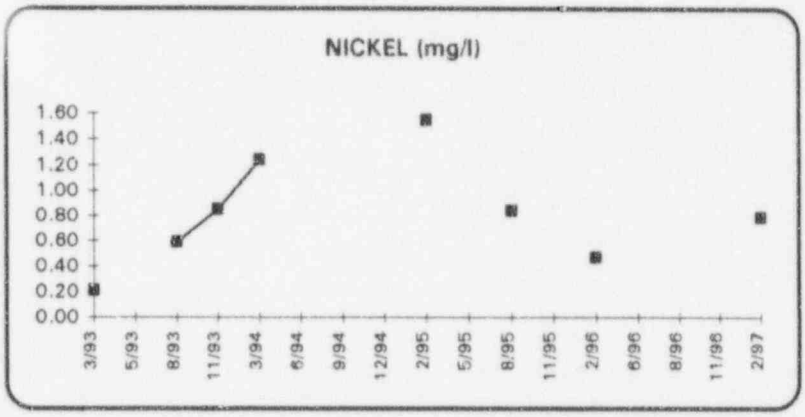


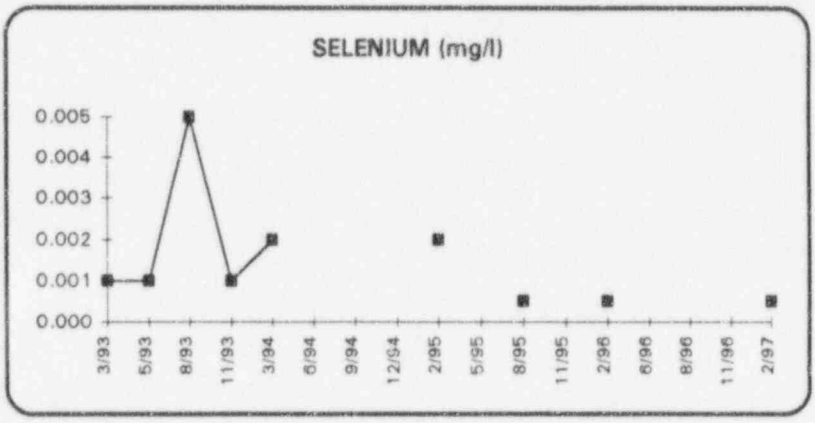


WELL 68SC

DATE	LEAD	NICKEL	SELENIUM
Mar-93	0.05	0.21	0.001
May-93			0.001
Aug-93	0.05	0.59	0.005
Nov-93	0.05	0.85	0.001
Mar-94	0.01	1.24	0.002
Jun-94			
Sep-94			
Dec-94			
Feb-95	0.007	1.55	0.002
May-95			
Aug-95	0.013	0.84	0.0005
Nov-95			
Feb-96	0.0025	0.47	0.0005
Jun-96			
Aug-96			
Nov-96			
Feb-97	0.001	0.79	0.0005

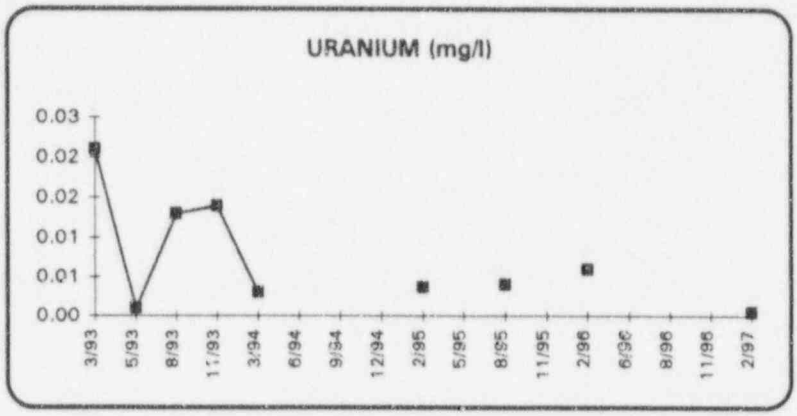


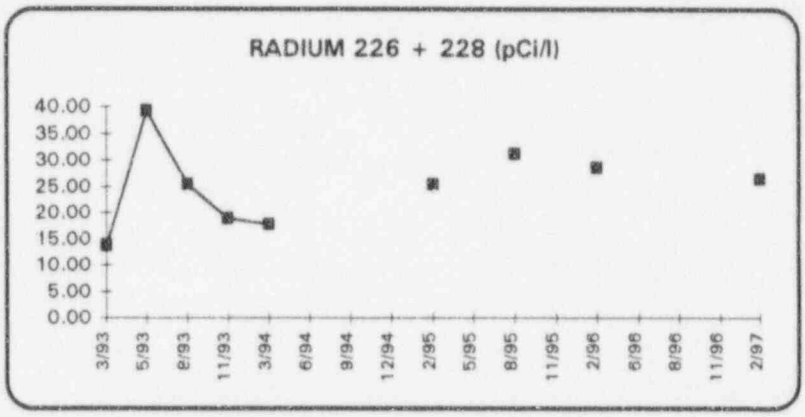


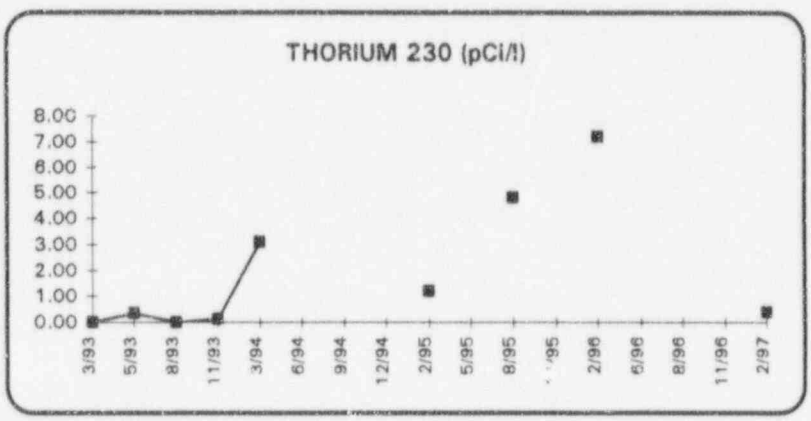


WELL 68SC

DATE	URANIUM	Ra 6+8	Th 230
Mar-93	0.02	13.74	0.00
May-93	0.00	39.20	0.34
Aug-93	0.01	25.45	0.00
Nov-93	0.01	18.88	0.12
Mar-94	0.00	17.80	3.10
Jun-94			
Sep-94			
Dec-94			
Feb-95	0.004	25.40	1.20
May-95			
Aug-95	0.004	31.20	4.80
Nov-95			
Feb-96	0.008	28.70	7.20
Jun-96			
Aug-96			
Nov-96			
Feb-97	0.0005	26.50	0.40

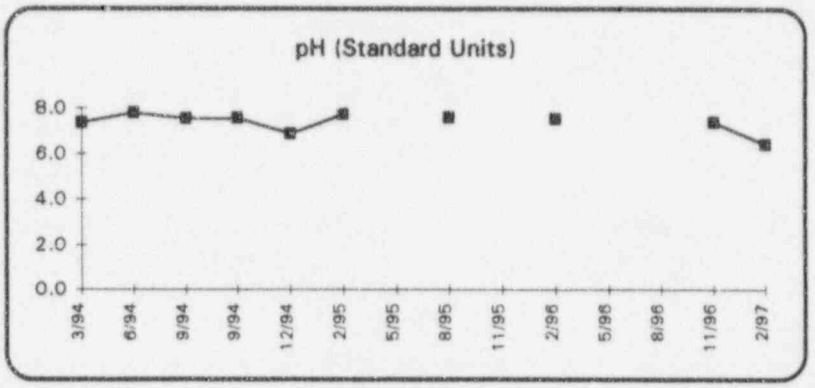


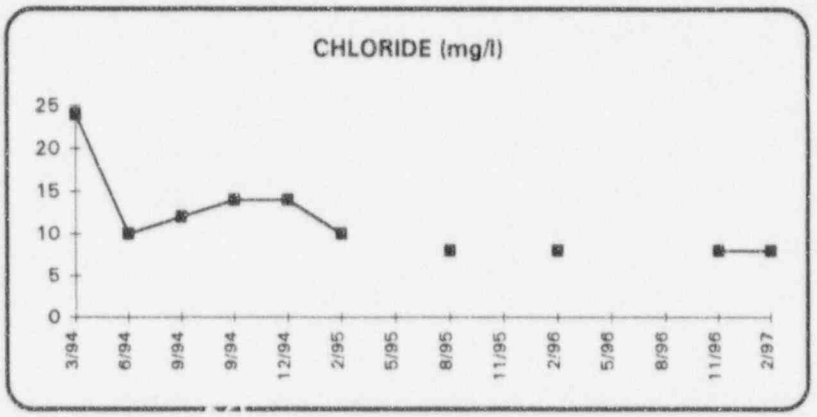


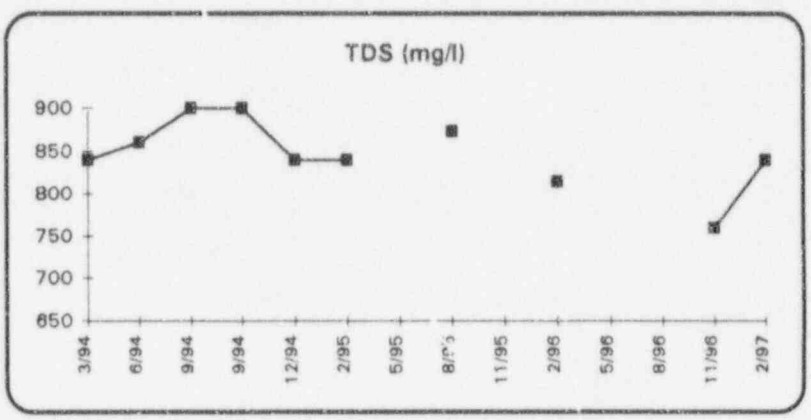


WELL 69SC

DATE	pH	CHLORIDE	TDS
Mar-94	7.4	24	840
Jun-94	7.8	10	860
Sep-94	7.5	12	900
Sep-94	7.6	14	900
Dec-84	6.9	14	840
Feb-95	7.8	10	840
May-95			
Aug-95	7.6	8	873
Nov-95			
Feb-96	7.5	8	815
May-96			
Aug-96			
Nov-96	7.4	8	760
Feb-97	6.4	8	840

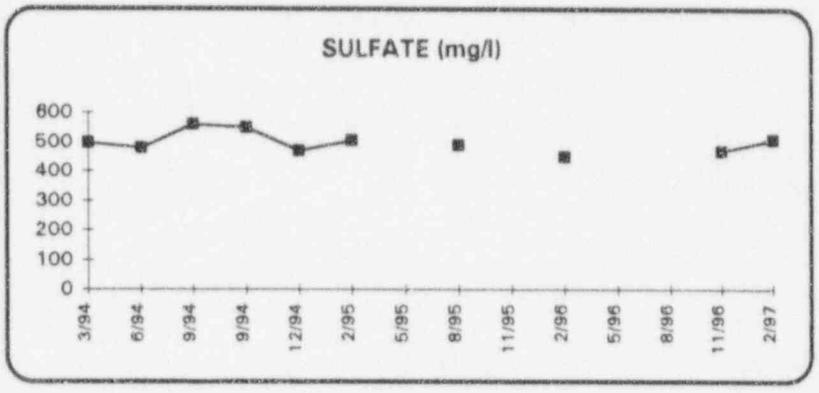


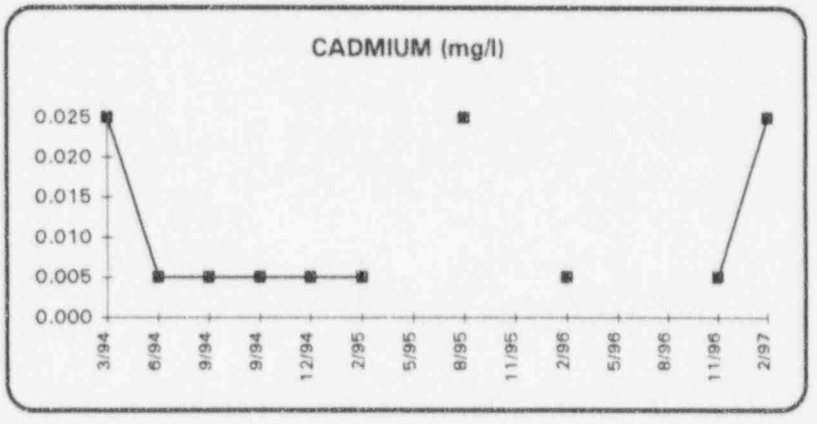


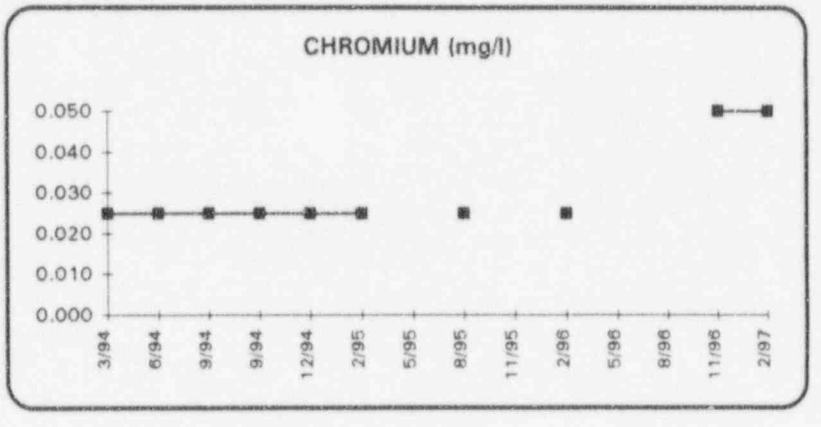


WELL 69SC

DATE	SULFATE	Cadmium	Chromium
Mar-94	498	0.025	0.025
Jun-94	480	0.005	0.025
Sep-94	560	0.005	0.025
Sep-94	550	0.005	0.025
Dec-94	470	0.005	0.025
Feb-95	506	0.005	0.025
May-95			
Aug-95	490	0.025	0.025
Nov-95			
Feb-96	450	0.005	0.025
May-96			
Aug-96			
Nov-96	470	0.005	0.05
Feb-97	510	0.025	0.05

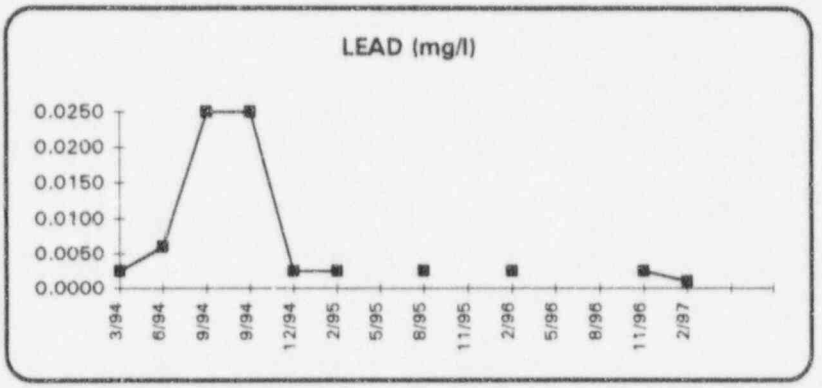


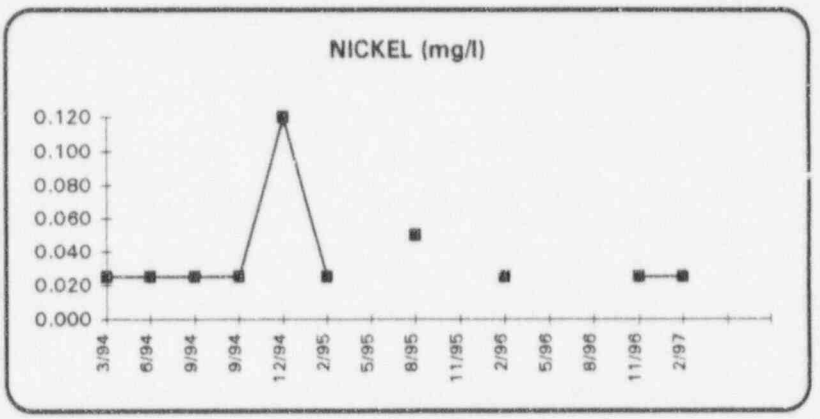


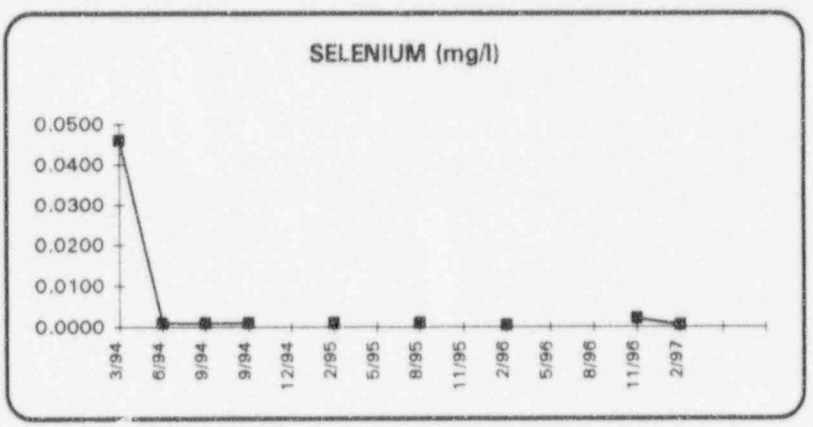


WELL 69SC

DATE	LEAD	NICKEL	SELENIUM
Mar-94	0.0025	0.025	0.0460
Jun-94	0.006	0.025	0.001
Sep-94	0.025	0.025	0.001
Sep-94	0.025	0.025	0.001
Dec-94	0.0025	0.12	
Feb-95	0.0025	0.025	0.001
May-95			
Aug-95	0.0025	0.05	0.001
Nov-95			
Feb-96	0.0025	0.025	0.0005
May-96			
Aug-96			
Nov-96	0.0025	0.025	0.002
Feb-97	0.001	0.025	0.0005

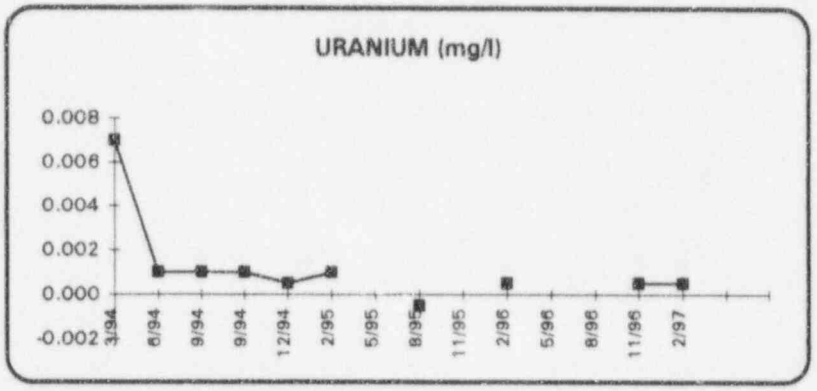


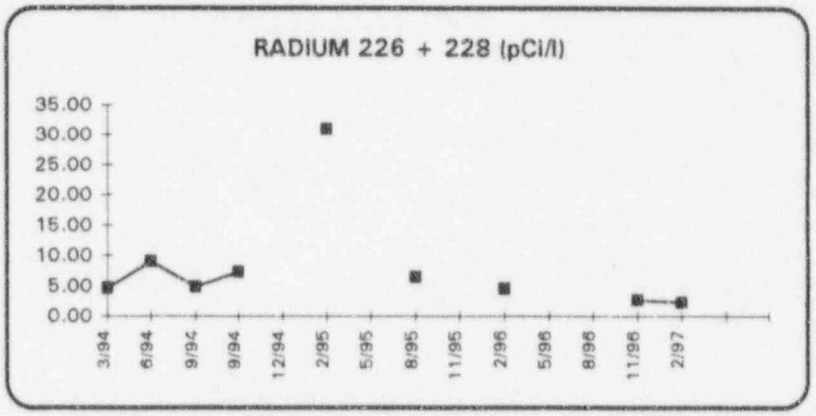


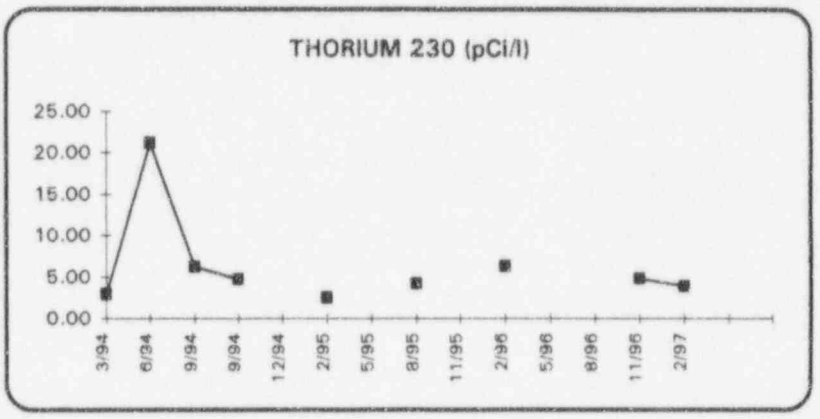


WELL 69SC

DATE	URANIUM	Ra 8+8	Th 230
Mar-94	0.007	4.60	2.90
Jun-94	0.001	9.00	21.20
Sep-94	0.001	4.80	6.20
Sep-94	0.001	7.30	4.70
Dec-94	0.001		
Feb-95	0.001	31.00	2.50
May-95			
Aug-95	-0.001	6.50	4.20
Nov-95			
Feb-96	0.001	4.50	6.30
May-96			
Aug-96			
Nov-96	0.001	2.70	4.80
Feb-97	0.001	2.30	3.90

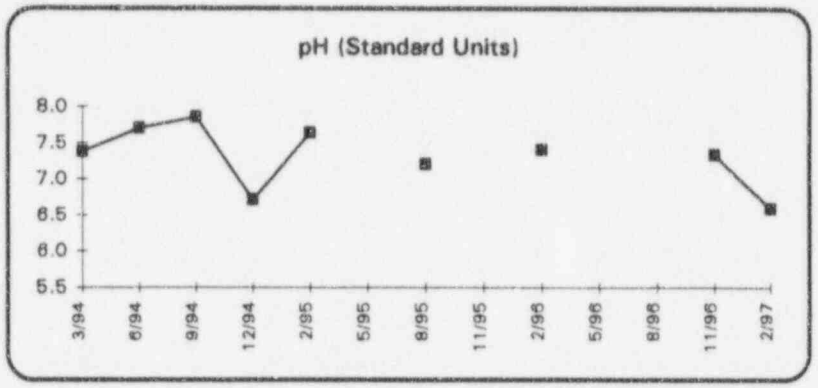


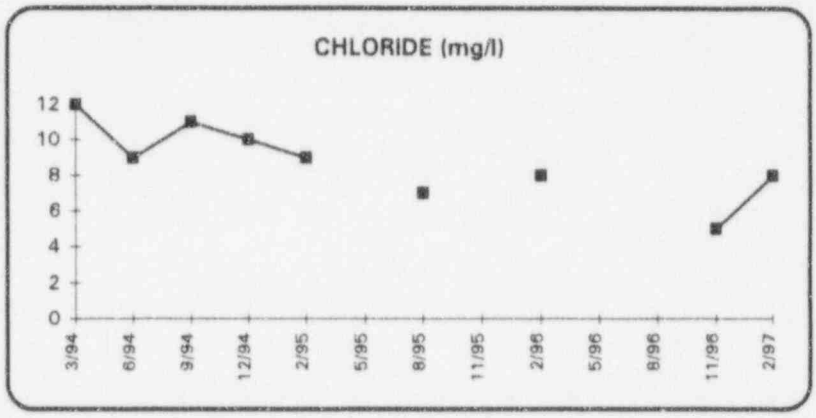


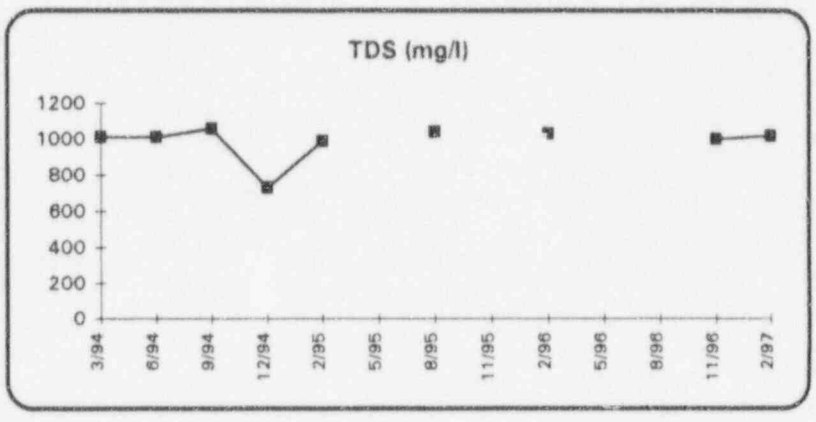


WELL 70SC

DATE	pH	CHLORIDE	TDS
Mar-94	7.4	12	1010
Jun-94	7.7	9	1010
Sep-94	7.9	11	1060
Dec-94	6.7	10	730
Feb-95	7.6	9	990
May-95			
Aug-95	7.2	7	1040
Nov-95			
Feb-96	7.4	8	1030
May-96			
Aug-96			
Nov-96	7.3	5	1000
Feb-97	6.6	8	1020

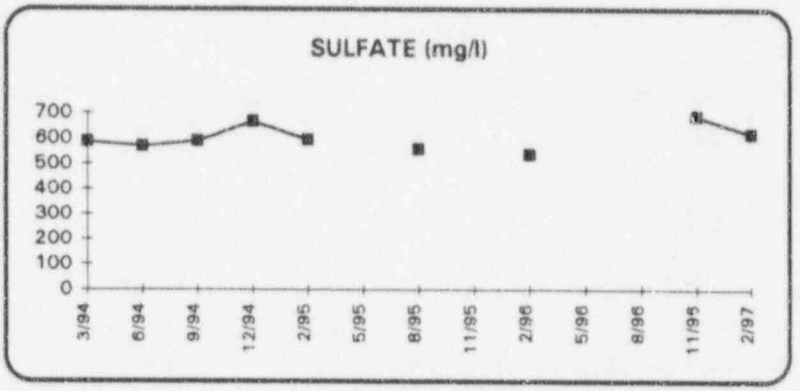


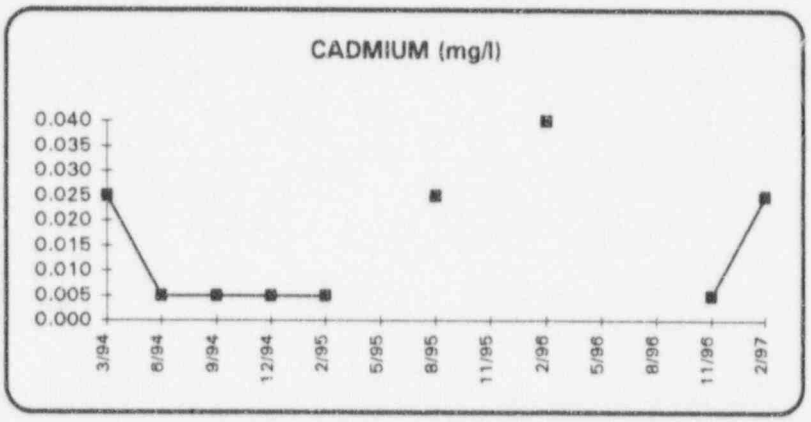


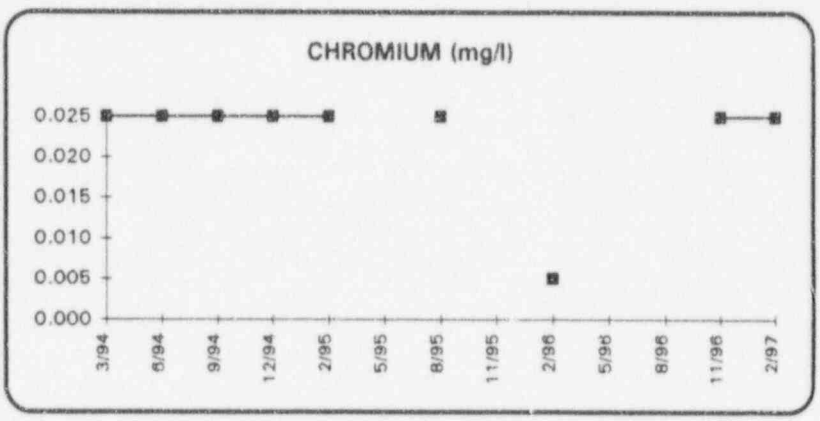


WELL 70SC

DATE	SULFATE	Cadmium	Chromium
Mar-94	588	0.025	0.025
Jun-94	570	0.005	0.025
Sep-94	590	0.005	0.025
Dec-94	667	0.005	0.025
Feb-95	598	0.005	0.025
May-95			
Aug-95	560	0.025	0.025
Nov-95			
Feb-96	538	0.040	0.005
May-96			
Aug-96			
Nov-96	690	0.005	0.025
Feb-97	620	0.025	0.025

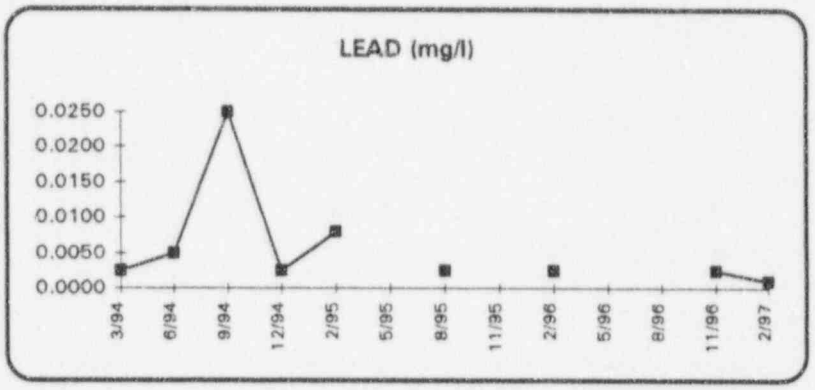


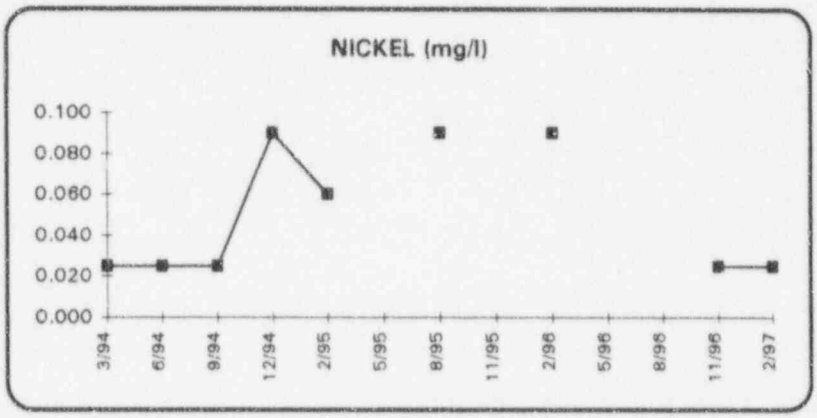


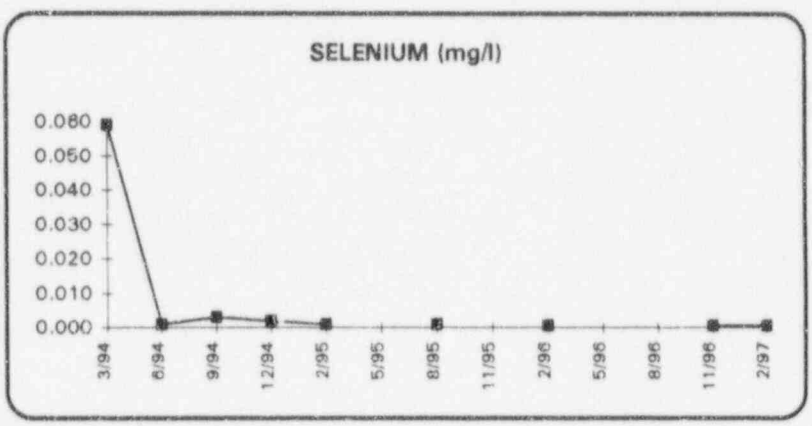


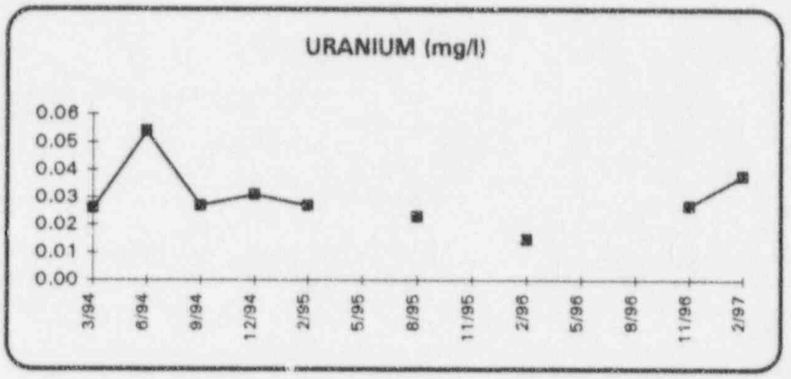
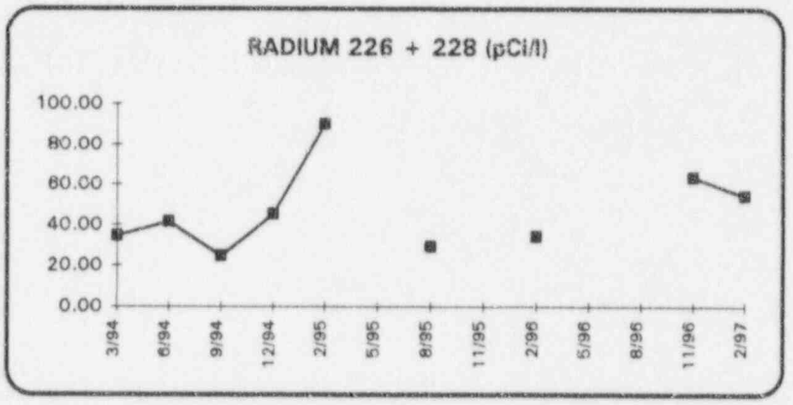
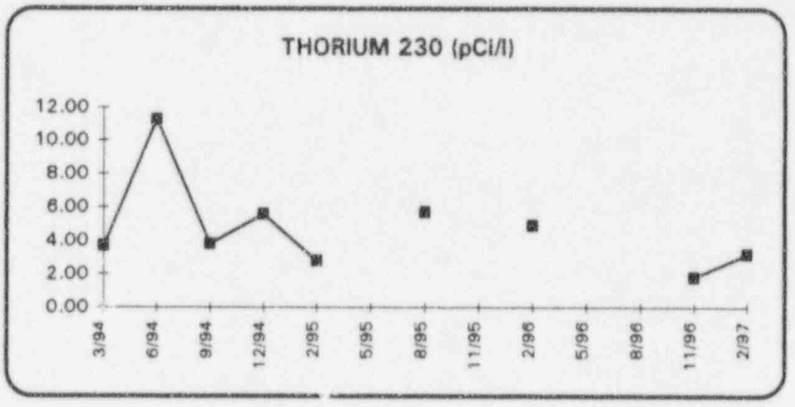
WELL 70SC

DATE	LEAD	NICKEL	SELENIUM
Mar-94	0.0025	0.025	0.059
Jun-94	0.01	0.025	0.001
Sep-94	0.025	0.025	0.003
Dec-94	0.0025	0.09	0.002
Feb-95	0.01	0.06	0.001
May-95			
Aug-95	0.0025	0.09	0.001
Nov-95			
Feb-96	0.0025	0.09	0.0005
May-96			
Aug-96			
Nov-96	0.0025	0.025	0.0005
Feb-97	0.001	0.025	0.0005







WELL 70SC

DATE	URANIUM	Ra 6+8	Th 230
Mar-94	0.03	34.70	3.70
Jun-94	0.05	41.40	11.30
Sep-94	0.03	24.80	3.80
Dec-94	0.03	45.30	5.60
Feb-95	0.03	90.20	2.80
May-95			
Aug-95	0.02	29.40	5.70
Nov-95			
Feb-96	0.01	34.50	4.90
May-96			
Aug-96			
Nov-96	0.03	63.90	1.80
Feb-97	0.04	54.60	3.20