GROUND-WATER MONITORING AND PERFORMANCE REVIEW
FOR
HOMESTAKE'S GRANTS PROJECT

NRC LICENSE SUA-1471 AND DISCHARGE PLAN DP-200, 2000

FOR:

HOMESTAKE MINING COMPANY OF CALIFORNIA

BY:

HYDRO-ENGINEERING, LLC
MARCH, 2001

SHANE M. PORTER
E.I.T.

GEORGE L. HOFFMAN, P.E.
5831 N.M. HYDROLOGIST

TABLE OF CONTENTS

GROUND-WATER MONITORING
FOR HOMESTAKE'S GRANTS PROJECT

APPENDICES

NOTE: TABLE OF CONTENTS IS PRESENTED AFTER THE TAB OF EACH SECTION

SECTION 1

TABLE OF CONTENTS

GROUND-WATER MONITORING
FOR HOMESTAKE'S GRANTS PROJECT

FIGURES

1.0 EXECUTIVE SUMMARY AND INTRODUCTION

1.1 EXECUTIVE SUMMARY

Homestake Mining Company manages a groundwater restoration program as defined by Nuclear Regulatory Commission (NRC) License SUA-1471, and New Mexico Environmental Division (ED), DP-200 permit. The current operating program is a dynamic on-going strategy based on a restoration plan, which began in 1977, and is scheduled to be completed in 2010.

Homestake's long-term goal is to restore the ground-water aquifer to levels as close as possible with respect to the up-stream background levels. A ground-water collection area (see shaded area on Figure 2.1-1, Page 2.1-10) has been established between the northern most line of injection wells and the collection wells. Ground-water flow that enters this area from the tailings areas is within the collection area. All ground water in the alluvial aquifer that is within the collection area is moving to the collection wells and will eventually be collected. Once restoration within the zone is complete and approved by the agencies, the site is to be transferred to the Department of Energy who has the responsibility for long term care and maintenance.

The data reported within this document represents the results of the monitoring program for 2000. This is a yearly reporting requirement. A similar report has been submitted to the agencies for each year since 1983 (see list in Section 1.2).

The restoration program is designed to remove the contaminants from the ground water by flushing the alluvial aquifer with water from the fresh water deep wells or water produced from the reverse osmosis (R.O.) plant. A line of upstream collection wells is used to collect the contaminated water, which is pumped to the R.O. plant or the evaporation ponds.

Historically, the contaminants are found in two different aquifer systems. The primary aquifer is the alluvial system, which averages approximately 100 foot in depth, and extends generally north to south encompassing both the Lobo Creek and San Mateo alluvial aquifers. In addition, the second aquifer system is in the Chinle formation. It is comprised of three separate aquifers, the Upper, Middle and Lower Chinle aquifers. The Upper and Middle Chinle sub-crop to the alluvial system near the project site. Low-level

concentrations have been observed in the Upper and Middle Chinle aquifers near their subcrops.

The restoration program, as described above, is made up of injection and collection well systems. R.O. product water or fresh water pumped from deep wells is injected in a continuous line across the site. The injection line forms a water barrier that contains the contaminants within the collection area. The contaminated ground water is pumped and collected from a series of wells from within the collection area. The collected aquifer water is pumped to the R.O. plant or to two large lined evaporation ponds for solar evaporation.

In the years from 1977 to the present, the combination of injection wells and the up-stream collection system has gradually moved the contaminated ground-water plume up-stream leaving the restored portions of the aquifer at or below background levels.

An average of 741 gpm was pumped into the alluvial fresh-water injection systems in 2000. An additional 87 gpm of fresh water was injected into the Upper and Middle Chinle aquifer systems. An average rate of 204 gpm in 2000 of R.O. product water was injected into the alluvial aquifer and is included in the fresh-water injection rate for the alluvial aquifer. Significant production of R.O. product started in July of 1999 with consistent operation during 2000 except during two equipment repair periods.

In 2000, an average collection rate was maintained at 274 gpm for the alluvial aquifer. An additional 40 gpm was pumped from the aquifer and re-injected within the collection area. The Upper Chinle collection averaged 25 gpm in 2000, which consisted of pumping well CE2. The upgradient collection averaged 86 gpm in 2000, while average rates of 15 and 23 gpm were pumped from the toe drains and tailings dewatering, respectively.

The continuing evaluation of the performance of the Grants restoration system, including the 2000 results, show that sulfate, uranium, selenium and molybdenum are still the key parameters at this site. During the restoration of the key parameters, the restoration of other parameters with low levels of concentrations is also completed at the same time. The monitoring program has shown that any low levels of nitrate, radium-226,

radium-228, vanadium and thorium-230 are also restored when the key parameters are restored in the area.

Sulfate concentrations exceed the background only near the large and small tailings in the Grants Project area.

Uranium concentrations exceed the significant level of 0.43 mg/l, within the collection area, near the tailings. There are also five wells in Felice Acres, two in southern Broadview Acres, and one well in Murray Acres that contain concentrations of uranium exceeding the background levels. Irrigation is being used to further reduce the low levels of uranium that exceed background levels in a small area southwest of Felice Acres in Section 3.

Selenium concentrations also exceed the background levels in the collection area near the large tailing pile and in portions of Section 3 as mentioned above. None of the subdivision wells contained selenium concentrations above background.

Molybdenum concentrations exist in only one subdivision well in central Felice Acres above 0.1 mg/l. All remaining elevated molybdenum concentrations are near the large and small tailings. Migration of this constituent has been limited due to natural retardation by the alluvial aquifer.

All radium concentrations in the alluvial aquifer were less than the NRC site standard except for one outlier. The outlier was 5.5 pCi/l in well PM, which was measured one other time in 2000 at less than 1.6 pCi/l. The highest value in the previous three years from this well was less than 1.9 pCi/l. This shows that this parameter should be removed as a site standard for this site.

Vanadium concentrations exceed the site standard in three wells close to the tailings pile. Additional monitoring of this constituent will continue. This parameter is expected to continue to decline to below background levels and should be removed as a site standard in the near future.

The thorium concentration in four wells near the tailings exceeded the site standard in 2000. The results of this constituent vary significantly at these low levels. The wells that exceed the standard vary in location each year, giving little confidence in results

less than a few pCi/l. The site records for thorium indicate that thorium is a minor parameter at this site and that it should be removed as a site standard.

Observed background concentrations at this site were similar to those in previous years with significant selenium concentrations of 0.59 mg/l and uranium concentrations of 0.19 mg/l. Background sulfate concentrations also range over similar amounts as in previous years up to 1420 mg/l. No significant molybdenum concentrations were observed in the background concentrations in 2000.

Nitrate background concentrations varied up to 17.4 mg/l in 2000 showing that natural levels exist upgradient from this site above the State site standard. An area between the large and small tailings contains higher nitrate concentrations than the background levels and this small area needs additional restoration. Nitrate concentrations are not important beyond the Homestake Grants Project area and, therefore, this constituent will be easily remediated with the restoration of the remaining parameters.

Fresh-water injection into Upper Chinle well CW13, east of the East Fault, continued in 2000. This injection has resulted in the water-level elevation in the Upper Chinle aquifer, east of the East Fault to be higher than the water-level elevation in the alluvial aquifer, which, therefore, prevents recharge from the alluvial aquifer into the Upper Chinle aquifer.

Fresh-water injection continued in 2000 in Upper Chinle well CW5 just north of Broadview Acres. This injection has resulted in reversal of the Upper Chinle water flowing back to the north toward the tailings piles from this area. Collection from Upper Chinle well CE2 was initiated in 1999 and continued in 2000 and is used in conjunction with the CW5 and CW25 injection to restore this area. Injection into CW25 was started in 2000.

All sulfate concentrations in the Upper Chinle aquifer are below background concentrations and, therefore, no restoration of this constituent is needed in the Upper Chinle aquifer.

Five Upper Chinle uranium concentrations exceeded the background concentrations in 2000. Restoration of these elevated values should result from the CE2 collection and the CW5 and CW25 injection.

The selenium concentrations in the Upper Chinle aquifer do not exceed the range in background concentrations. One selenium value in 2000 exceeded the NRC and State standards for selenium in the Upper Chinle aquifer near the tailings. The site standard for selenium is considered by HMC to be too low since the background values continue to be higher.

The concentrations for molybdenum exceeded the site standard in five wells in the Upper Chinle aquifer during 2000. Restoration for these locations should occur from the CE2 collection and CW5 and CW25 injection.

The nitrate standard for this site is significantly greater than any of the concentrations observed in 2000 in the Upper Chinle aquifer showing that this parameter is not significant in this aquifer.

None of the radium, vanadium or thorium-230 concentrations exceeded the NRC site standards for these parameters in the Upper Chinle aquifer wells in 2000 showing that these parameters are not important in this aquifer as expected due to their very limited concentrations in the alluvial aquifer.

The ground-water flow in the Middle Chinle aquifer in 2000 is very similar to that observed previously. Fresh-water injection started in December of 1997 into well CW14. The fresh water is building up a mound of ground water in this area, which will result in reversing the flow of Middle Chinle water back toward the alluvial subcrop. Well CW44 is being used for irrigation supply, which will increase the flow from Broadview Acres in the Middle Chinle aquifer to the south.

Water quality in the Middle Chinle aquifer is generally good with all concentrations meeting the background sulfate concentrations. Uranium and selenium concentrations in the western portion of Felice Acres are only slightly above significant levels due to the alluvial recharge to the Middle Chinle aquifer just south of Felice Acres. Irrigation of this water is being used to reduce these slightly elevated concentrations in western Felice Acres. In the Middle Chinle formation both uranium and selenium are naturally occurring elements so it is difficult to evaluate the total impact on the aquifer.

Molybdenum, nitrate, radium, vanadium and thorium-230 concentrations in the Middle Chinle aquifer all meet the site standards for these constituents and show that only uranium and selenium are the important parameters relative to this aquifer system.

1.2 INTRODUCTION

This report, as required by the New Mexico Environmental Division (ED) discharge plan DP-200 and the Nuclear Regulatory Commission (NRC) License SUA-1471, presents results of the 2000 annual ground-water monitoring program at Homestake's Grants Project. Homestake Mining Company (HMC) conducted uranium milling operations five miles northeast of Milan, New Mexico from 1958 to 1990 (see Figure 1.2-1). Referred to as the Grants Project, HMC deposited uranium tailings from the alkaline (high pH) Grants mills into two unlined piles (large and small tailings) that overlie San Mateo alluvium. The San Mateo alluvium is simply referred to as the alluvium or alluvial aquifer in this report. In 1977, due to concerns about ground-water selenium levels, HMC installed a system of wells and pumps in order to inject fresh water into the alluvium at the property boundary and to withdraw contaminated water from the alluvium near the tailings.

Previous monitoring reports have been published in quarterly, semi-annual and annual reports[1], which were presented to the ED and the NRC.

Four subdivisions, Broadview, Murray and Felice Acres and Pleasant Valley Estates, are adjacent to the HMC site. These subdivisions are shown on the various figures of the Grants Project area.

Monitoring data for the ground water west of the project site was included in the 1995 through 2000 reports. This area has been designated the "West Area" and it is so labeled on the figures of this report.

The following information outlines the format of this report. The table of contents next to the cover page contains only the major section numbers and titles. A complete table of contents is presented behind the tabs of all of the individual sections, which also includes the list of figures and tables for the section. Figures and tables are numbered by sub-sections and, therefore, located after the text of each sub-section with figures being presented before tables. The “West Area” figures have been printed on the back of the page to enable the west and project areas to be viewed simultaneously.

---

[1] See Hydro-Engineering 1983b, 1983c, 1984a, 1984b, 1984c, 1985a, 1985b, 1985c, 1985d, 1986a, 1986b, 1986c, 1987a, 1987b, 1988a, 1988b, 1990, 1991, 1992, 1993a, 1994, 1995, 1996, 1997, 1998, 1999 and 2000a.

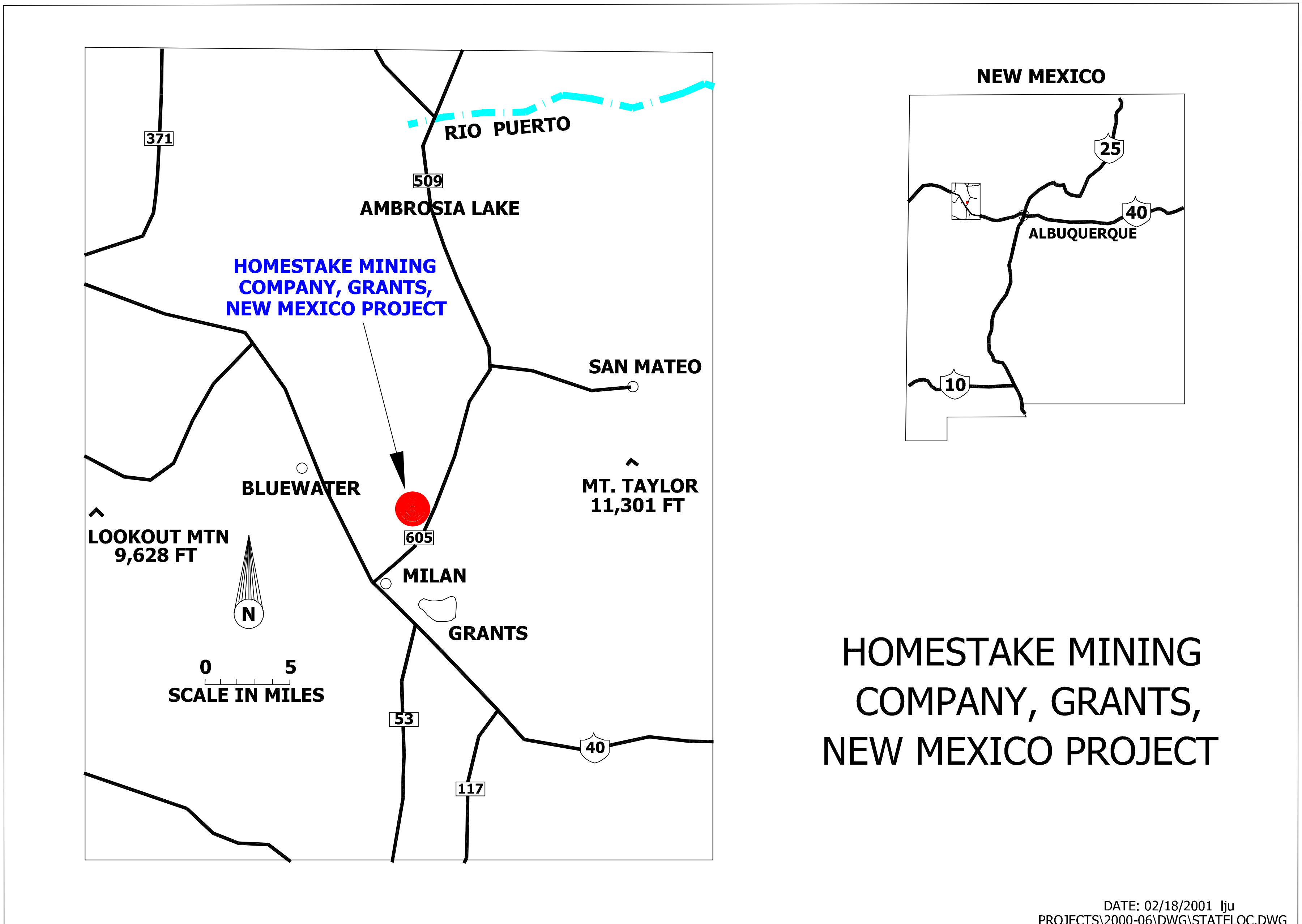


FIGURE 1.2-1. LOCATION OF THE GRANTS PROJECT

SECTION 2

TABLE OF CONTENTS

GROUND-WATER MONITORING FOR HOMESTAKE'S GRANTS PROJECT

Page Number

FIGURES

SECTION 2
TABLE OF CONTENTS

GROUND-WATER MONITORING
FOR HOMESTAKE'S GRANTS PROJECT
(continued)

Page Number

FIGURES
(continued)

TABLES

2.0 OPERATIONS

2.1 CURRENT OPERATIONS SUMMARY

The Grants Project ground-water remediation system consists of collection of contaminated ground water near the tailings and injection of fresh water and R.O. product water downgradient. These collection and injection systems continued to operate in 2000 along with the reverse osmosis (R.O.) plant to treat the majority of collection. The R.O. produces an R.O. product that is much better quality than the natural alluvial water and it is used for injection in place of some of the fresh water to aid the restoration program. Figure 2.1-1 on page 2.1-10 shows the location of the present (end of 2000) injection and collection systems along with their starting dates of operation. This figure also shows the location of the R.O. plant. The pink areas on Figure 2.1-1 show where the tailings piles have been re-contoured to drain and have interim cover or final reclamation barrier. The red "X" symbols show the location of alluvial collection wells. The green dots depict locations of dewatering wells in the large tailings. The green line around the large tailings indicates the location of the toe drain, which intercepts seepage from the tailings and prevents it from moving into the uppermost part of the alluvial aquifer. The open blue and cyan circles on Figure 2.1-1 show the locations where fresh water or R.O. product is presently being injected, and the solid blue circles show where re-injection is occurring. Collection wells used for re-injection are shown in magenta. The cyan circles indicate fresh-water injection into the Upper (CW5, CW13 and CW25) or Middle (CW14) Chinle aquifers. The three points of compliance (POC) are also shown on this figure as black boxes. Water collected from the site is pumped to the R.O. plant or discharged into lined collection ponds or one of two lined evaporation ponds (light blue areas).

The area where the ground-water flow is controlled by the fresh-water injection and collection system is called the "Collection Area" and is shown by the yellow cross-hatched pattern on Figure 2.1-1. All of the alluvial ground water within the collection area converges to the collection wells.

2.1.1 R.O. PLANT

The R.O. plant consists of a pre-treatment unit, which has a discharge to the evaporation ponds and feeds the 300-gpm low-pressure R.O. unit. The R.O. product from the low-pressure unit is discharged to the injection wells, while the brine from the low-pressure unit feeds a 75-gpm high-pressure R.O. unit. The R.O. product from the high-pressure unit also goes to the injection wells, while the brine from the high-pressure R.O. unit is discharged to the evaporation ponds. For the first 3 months of 2000, Upper Chinle well CE2 was used as feed to the R.O. plant in addition to the alluvial water. The R.O. product injection piping has the capability of being discharged to the J and WR injection wells and into the X wells to the south and east of the small tailings pile. Through the end of 2000, R.O. product water was discharged into the X line and injected into wells X1 through X10, X28 through X31 and into wells K6 and KM.

The R.O. product water injected into wells K6 and KM has been for testing of restoration of R.O. product water in the K area. The results continued to show that the R.O. product water is much more efficient at reducing the uranium and molybdenum concentrations than the fresh water.

2.1.2 COLLECTION

The alluvial aquifer collection rate increased in 2000 due to the full time use of the R.O. unit. Upgradient collection continues north of County Road 53, collecting background alluvial aquifer water for transfer to the drainage system further west, and for injection into some large tailings wells for tailings flush testing (triangle symbols on Figure 2.1-1). This collection reduces the amount of alluvial water flow into the tailings area. Upper Chinle collection continued from well CE2 as feed to the R.O. plant and as injection water for some of the tailings flush testing.

2.1.2.1 ALLUVIAL

The red X's on Figure 2.1-1 show the location of five lines of collection wells. The S and D-lines are adjacent to the large tailings, and the K and C-lines are adjacent to

the small tailings. Five new K wells were drilled in the small tailings pile on the south side of the No. 1 evaporation pond and added to the collection system in 2000. All of the K line collection wells south of the small tailings had been turned off at the end of 2000 with the exception of wells KEB and Y, which will be turned off in early 2001. The L-line is south of the small tailings. Alluvial water is pumped from these lines of collection wells to the R.O. plant or directly to the lined ponds, or it is pumped to the re-injection wells. Figure 2.1-2 on page 2.1-11 presents collection rates for the last five years at the Grants Project. The alluvial collection system rates are shown on this figure as red squares, which increased in 2000 due to the full time operation of the R.O. plant. Alluvial collection averaged 274 gpm in 2000. An additional average rate of 40 gpm was also pumped from the alluvium for re-injection in 2000 (magenta X's).

2.1.2.2 UPGRADIENT

Collection of alluvial water upgradient of the tailings piles started in January of 1993 and continued through 2000. Well P1 was not pumped in 2000, but wells P2, P3 and P4 were pumped continuously throughout the year (triangle symbols on Figure 2.1-1). This upgradient water was transferred to the next drainage channel to the west for most of the year. From July to December, this upgradient water was pumped to the large tailings pile where it was injected into the tailings wells as part of the tailings flush testing. The transfer of this upgradient water is intended to prevent this alluvial water from entering the Grants Project area at the north side of the large tailings. The upgradient collection rate for this effort averaged 86 gpm during 2000 (see green triangles on Figure 2.1-2).

2.1.2.3 UPPER CHINLE

Figure 2.1-2 also shows the collection rate for Upper Chinle collection well CE2 (see Figure 5.1-1B for location), which is on the south side of the collection ponds. Upper Chinle collection was started in new well CE2 in 1999 and is expected to continue for several years. Well CE2 was used to feed the R.O. plant from January to April, and was

used to supply water to the large tailings pile for the tailings flush testing for the remainder of 2000. The yearly average collection rate from the Upper Chinle was 25 gpm.

2.1.2.4 QUANTITY OF CONSTITUENTS COLLECTED FROM THE ALLUVIAL AQUIFER

Table 2.1-1 (page 2.1-15) presents the quantities of chemical constituents collected from the ground-water system, the tailings and the toe drains. The ground-water collection system has produced an average pumping rate of 247 gpm between 1978 and 2000. The collection rate that has been re-injected into the alluvial aquifer is not included in the values in Table 2.1-1. The quantity of constituents removed in 2000 was computed by multiplying the average concentration of a particular constituent for each collection well by the volume of water pumped from each well for that year. The average concentration was computed by dividing the total gallons of water pumped from the collection system in the year into the total number of pounds and converting to mg/l.

2.1.3 INJECTION

The fresh-water and R.O. injection system, which aids in the reversal of the piezometric surface back toward the collection wells, consists of a line of injection wells which is oriented generally west-northwest from the south side of the small tailings to the north side of Murray Acres and continuation of this line to the northwest and north to the north side of Section 27 (Figure 2.1-1). This injection line also extends on the southeast and east sides of the small tailings and is called the X-line in the small tailings area and consists of wells X1 through X10 and new wells X28 through X31. The R.O. product water was injected into the X-line during 2000. The R.O. product water has been injected in the X-line wells starting at well X28 and continuing to the northeast through well X10. R.O. product water was also injected into wells KM and K6 in 2000 to test R.O. product restoration in this area. A fresh-water injection test into alluvial wells in Sections 28 and 29 was initiated in 1999 and continued through January of 2000.

2.1.3.1 BROADVIEW ACRES

The Broadview Acres injection system started in 1977 with the G line on the north side of this subdivision. The J-line, wells X1 through X10, and wells X28 through X31 are also considered part of the Broadview Acres injection system. Well KM was added to the Broadview injection system in 1999 to test the effectiveness of the R.O. product water in restoration. Injection into the majority of the G-line was discontinued in mid-April in order to supply more water to injection wells near the collection area. Figure 2.1-3 (page 2.1-12) presents injection rates for the last six years for the Broadview Acres injection system, which averaged 410 gpm during 2000. This figure also shows the rates of R.O. product water injection (see brown diamonds) that are included in the total Broadview Acres rates. The R.O. product injection averaged 204 gpm in 2000.

2.1.3.2 MURRAY ACRES

The M line injection system was initially used in 1983. All wells adjacent to the northeast corner and to the north and west of Murray Acres are included in the Murray Acres injection system. This system includes all of the M and WR injection wells. Injection into the M-line west of well WR1R was discontinued at the end of September and injection into the WR-line, north of WR10, began. The Murray Acres injection system averaged 331 gpm in 2000.

2.1.3.3 UPPER CHINLE

From 1984 through early 1995 the Upper Chinle injection system consisted of injecting fresh water into Upper Chinle well CW5 located on the north side of Broadview Acres. This effort restored most of the area in the Upper Chinle aquifer between the two faults. Injection into well CW5 was resumed in April of 1997 to complete the restoration of this aquifer.

Restoration of the Upper Chinle east of the East Fault started in 1996 by developing a head in the Upper Chinle aquifer that was greater than the alluvial head. Injection of fresh water into well CW13, an Upper Chinle well, started in June, 1996 and

has prevented alluvial water from entering the Upper Chinle east of the East Fault. Injection in Upper Chinle well CW25, located on the western edge of the Upper Chinle outcrop east of Murray Acres, began in 2000. Injection into CW25 will develop a head in the Upper Chinle aquifer that forces flow in the Upper Chinle back to collection well CE2. The green diamonds on Figure 2.1-3 present the monthly average injection rates for 2000 into Upper Chinle wells CW5, CW13 and CW25, which averaged 61 gpm.

2.1.3.4 MIDDLE CHINLE

Injection of fresh water into Middle Chinle well CW14 was started in December of 1997. This injection was started to prevent the alluvial water that recharges the Middle Chinle on the south side of Felice Acres from moving north of Broadview Acres. The injection rate averaged 26 gpm in 2000. This injection has prevented the movement of constituents further to the north.

2.1.3.5 SECTIONS 28 AND 29

A test of fresh-water injection was initiated in late 1999 and conducted through January of 2000 by pumping San Andres well 951, which is located in Section 20, (see Figure 8.0-1A for location of supply well 951) and injection was plumbed to alluvial wells 682, 656, 894, 633 and 655. This fresh-water injection in Sections 28 and 29 is planned to block the low concentrations in Section 28 until irrigation can be used to reduce these low concentrations. Figure 2.1-3 shows the injection rate that was discharged into the Sections 28 and 29 wells. No water is thought to have extended down to wells 633 and 655 during the 1999 or early 2000 injection due to the large injectivity available in the three western wells. The yearly average injection rate into Sections 28 and 29 was 24 gpm in 2000. The yearly average is down from 1999 because the injection test occurred only in the month of January in 2000.

2.1.4 RE-INJECTION

Alluvial water containing low concentrations of contaminants is being collected and is then re-injected into higher concentration alluvial areas in the collection area in order to initiate restoration of those areas. This lower concentration water will be as effective (see sulfate, uranium, selenium and molybdenum concentrations in plots for wells T and TA) as fresh water during the initial stages of restoration and, therefore, this is a beneficial use of this slightly contaminated ground water. Water collected from the K-line on the south side of the small tailings and L-line was re-injected into alluvial wells X11 through X27, 1A, D2, D3, D4, DAA, DAB, DL, DW and DY. The re-injection rate averaged 40 gpm for 2000.

2.1.5 TAILINGS CONDITIONS

Tailings wells have been installed from 1994 through 2000. Data collected from these wells has been used to determine the amount of water in the re-contoured, stabilized tailings that is drainable. The tailings wells have also been useful in the evaluation of the tailings dewatering program. No dewatering of the tailings occurred in 1998 and 1999 due to limited capacity in the evaporation ponds except for a small rate in late 1999 for some testing. The complete dewatering program was restarted in 2000.

Figure 2.1-4 presents the locations of tailings wells that were pumped in 2000. The cumulative volume of tailings water pumped from 1995 through 2000 is presented on Figure 2.1-5. A total volume of nearly 49 million gallons of water had been removed from the tailings by the end of 2000. A total of 12 million gallons was pumped from the tailings in 2000. The yearly average collection rate, including down periods, from the tailings was 23 gpm in 2000.

Tables B.1-1 and B.1-2 of Appendix B present chemical analyses of tailings well water for 2000.

2.1.6 TOE DRAIN CONDITIONS

A series of toe drains has been installed around the large tailings pile to intercept perched ground water seeping from the tailings into the alluvium. The locations of the toe drains and their associated sumps are also shown on Figure 2.1-4. Ten sumps are located around the perimeter of the large tailings pile with two of these sumps tied to the old tailings decant towers (reclaim sumps). Eight of these sumps are connected to the toe drain systems, which are situated around the perimeter of the tailings. Figure 2.1-5 shows that greater than 117 million gallons of water has been pumped from the toe drains. Approximately 15 gpm of water was collected in 2000 from the toe drains, which is a 2 gpm decline from the 1999 value.

Table 2.1-1 also presents the 2000 quantity of constituents collected from the toe drains. Samples from the toe drains for 2000 are presented in Tables B.2-1 and B.2-2 of Appendix B.

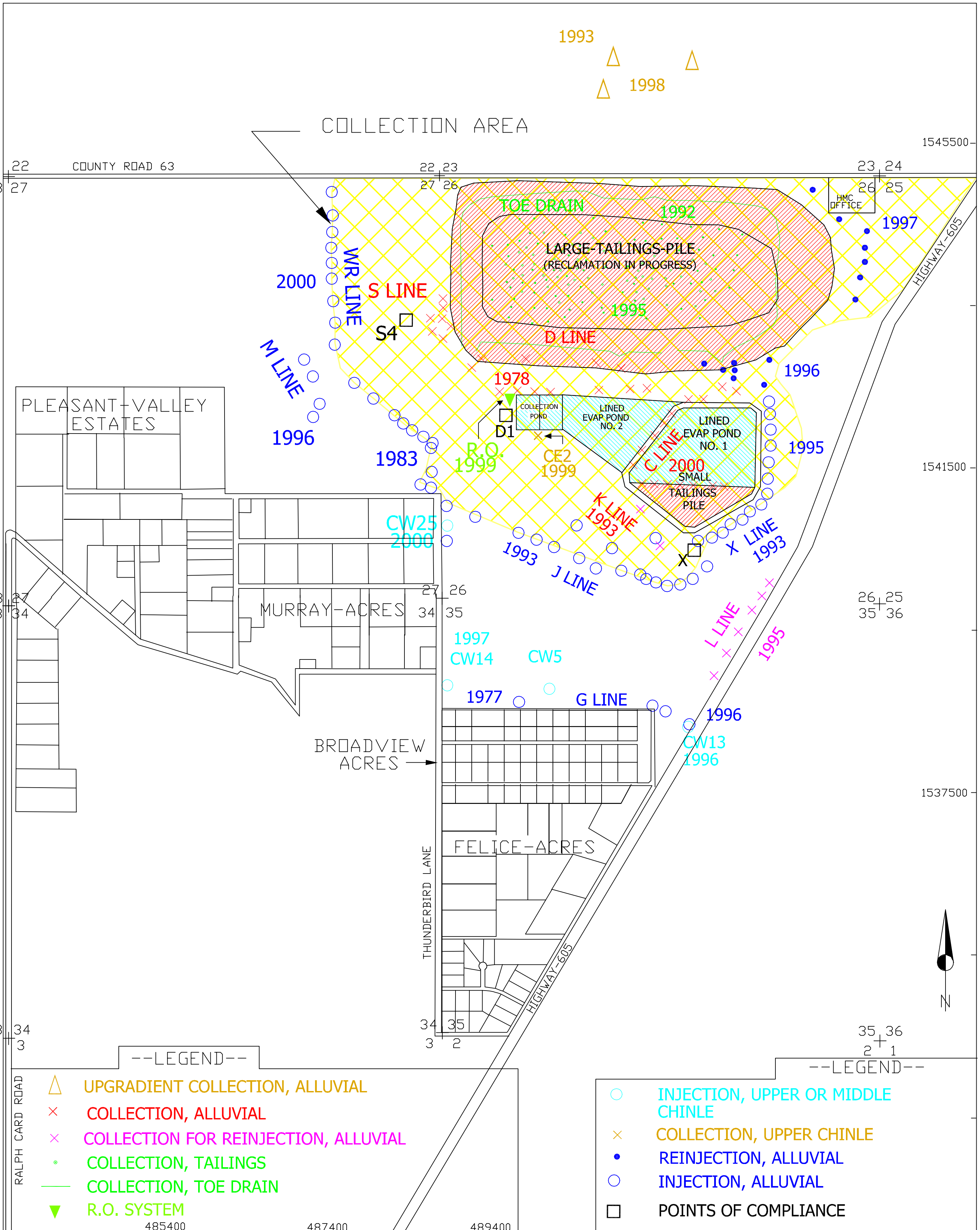
2.1.7 LINED EVAPORATION PONDS

The use of lined evaporation collection ponds began in October of 1986 when the two small collection ponds were constructed. The large evaporation pond, No. 1, on the small tailings began receiving water in November of 1990. The usage of the second large evaporation pond began in March of 1996. The majority of the water from the collection system, and the water from the tailings dewatering wells and toe drains is pumped to the R.O. plant as feed water. Some collection water is pumped directly to the collection ponds or evaporation ponds. Excess water is transferred from the East Collection pond to the No. 2 evaporation pond. When necessary, water is transferred from the No. 2 evaporation pond to the No. 1 evaporation pond. Both ponds use spray systems to enhance evaporation.

A few water samples have been collected from the No. 1 and No. 2 large evaporation ponds, discharge to the evaporation ponds from the East Collection pond (E COLL POND), and the West Collection pond (W COLL POND). The results of these samples are presented in Tables B.3-1 and B.3-2 of Appendix B.

2.1.8 IRRIGATION

Two irrigation systems were constructed and tested in 1999 and operated in 2000. A 150-acre center pivot was installed in the southwest quarter of Section 33 and 120 acres of flood irrigation in the eastern half of Section 34 were developed. Figures 4.1-1A and 4.1-1B show the supply wells for these two irrigation areas. Wells 631, 632, 862, 863, 869, 648, 649, 647, 496, 653, 657, 658 and CW44 were used for the irrigation supply in 2000. These supply wells are piped together and are used on only one irrigation area at a time. These areas were successfully irrigated during the entire 2000 growing season. A total of 715 AC-FT of water was applied to the two irrigation areas in 2000.



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 03/28/01 lju

FIGURE 2.1-1. LOCATIONS OF PRESENT INJECTION AND COLLECTION SYSTEMS WITH START OF OPERATION DATES

PROJECTS\2001-06\DWGS\2001FIGS

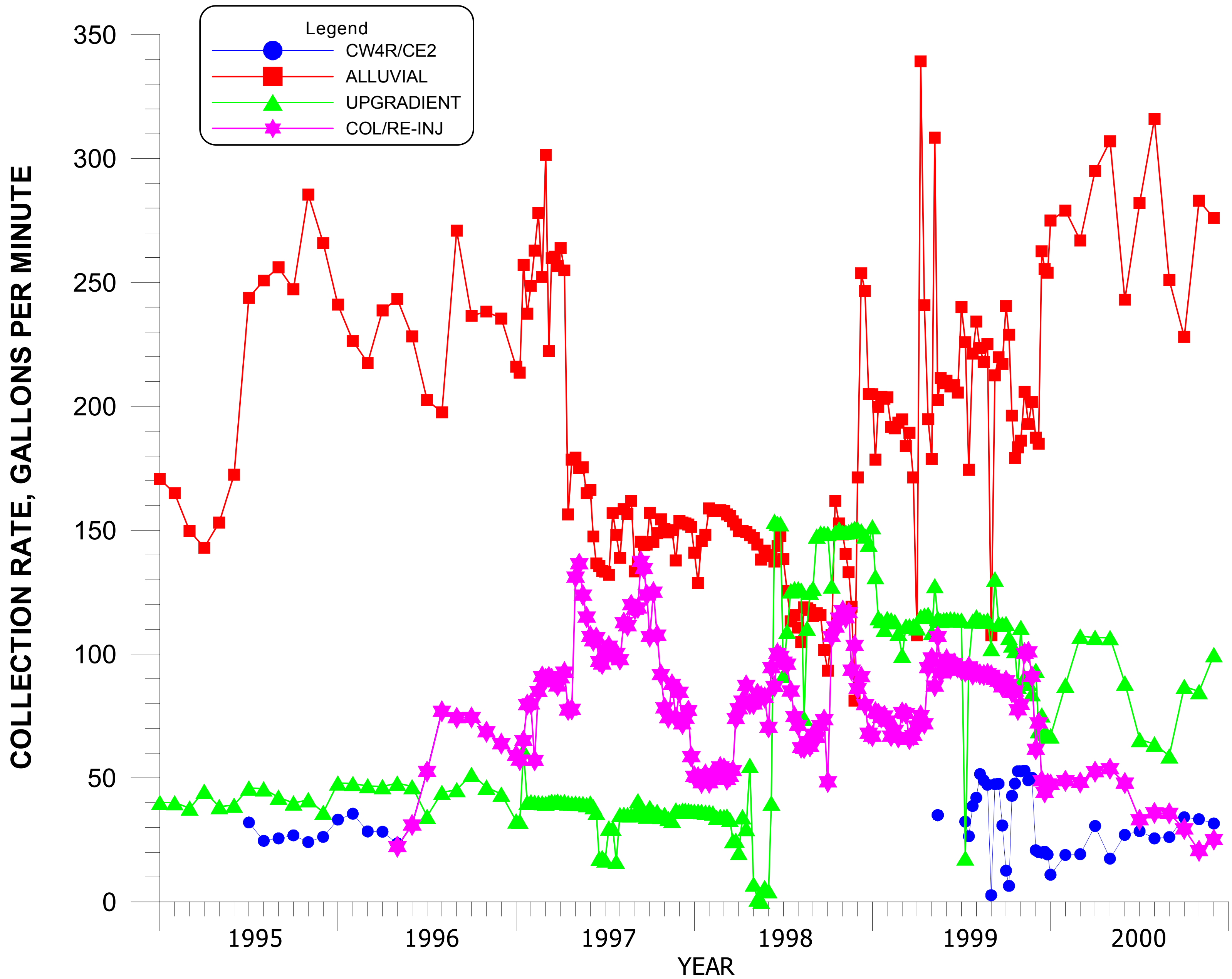


FIGURE 2.1-2. AVERAGE MONTHLY COLLECTION RATES FOR THE ALLUVIAL AND UPPER CHINLE AQUIFERS.

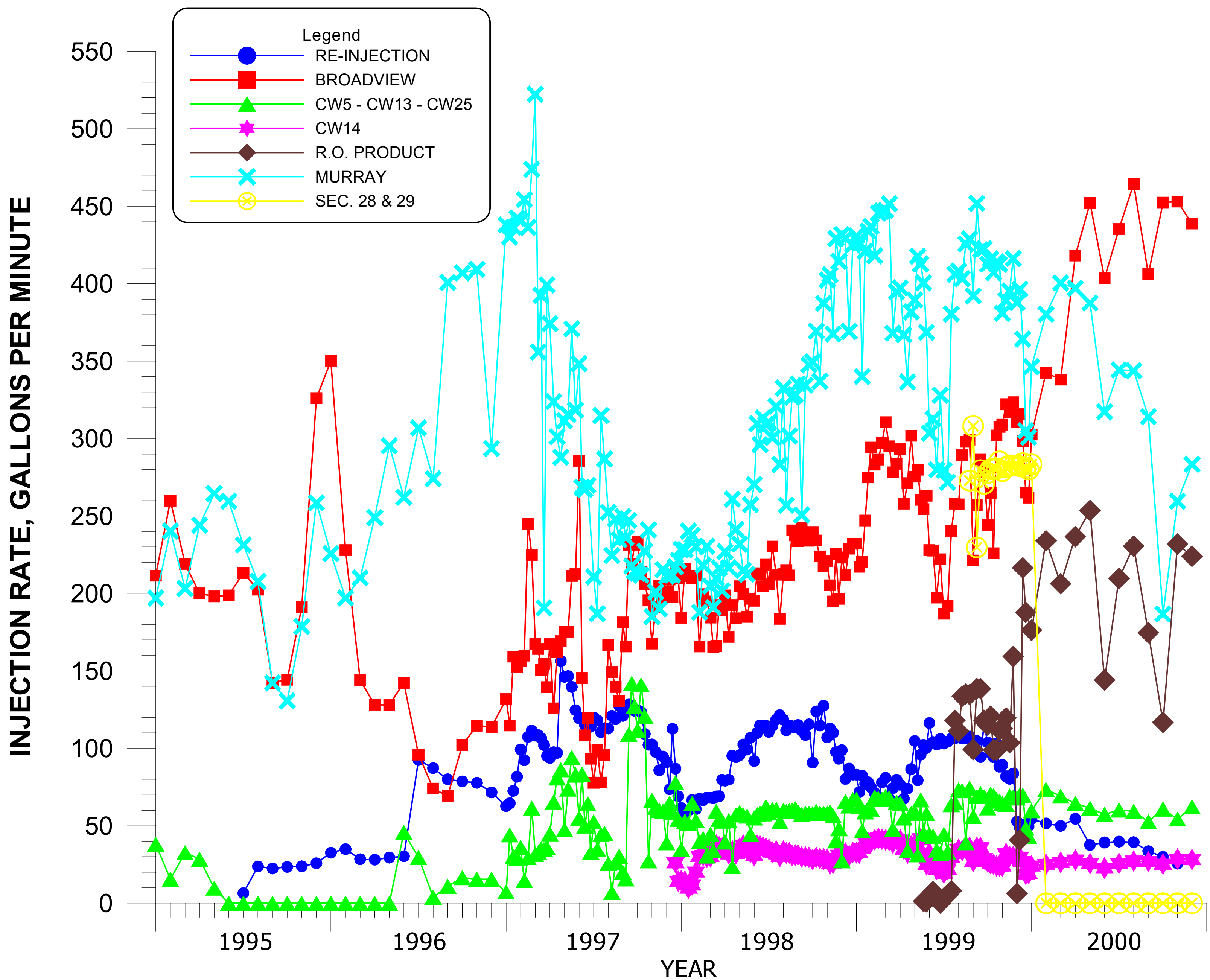


FIGURE 2.1-3. AVERAGE MONTHLY INJECTION RATES FOR THE ALLUVIAL AND UPPER CHINLE AQUIFERS.

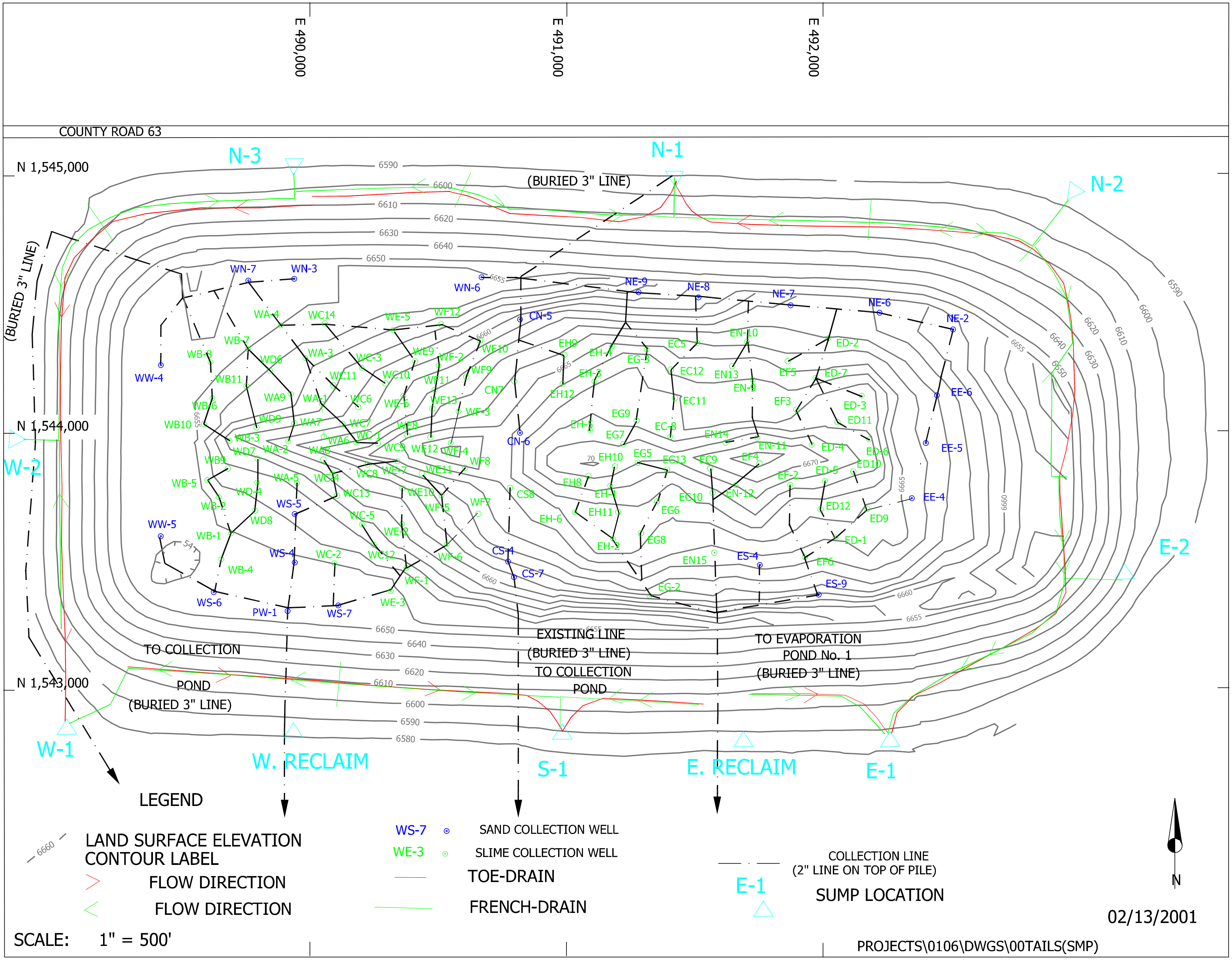


FIGURE 2.1-4 LOCATIONS OF TAILINGS DEWATERING WELLS, TOE DRAINS AND SUMPS

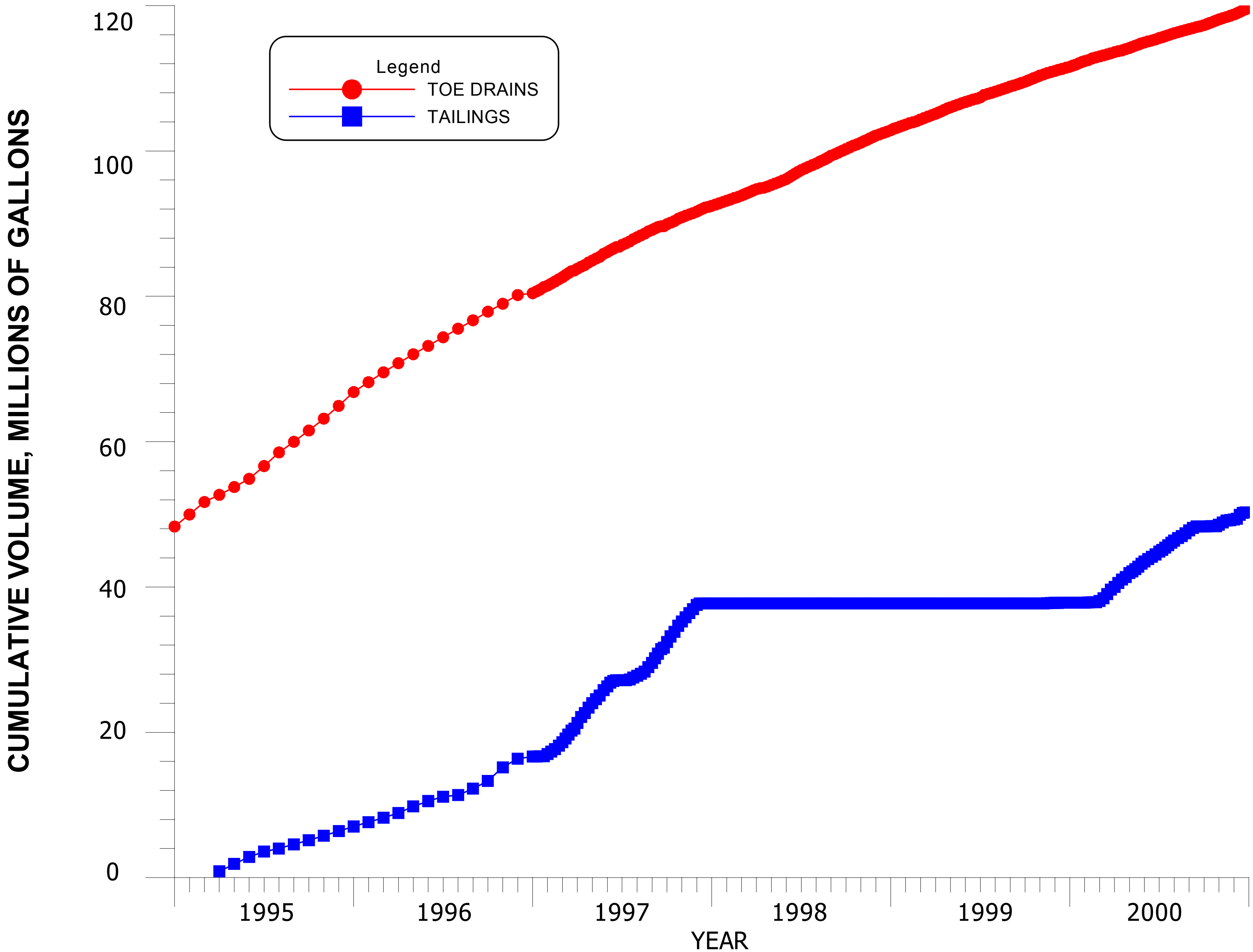


FIGURE 2.1-5. CUMULATIVE VOLUME OF COLLECTION FROM TAILINGS DEWATERING WELLS AND TOE DRAINS.

TABLE 2.1-1. QUANTITIES OF CONSTITUENTS COLLECTED.

YEAR	SOURCE	TOTAL VOLUME PUMPED (GAL)	SULFATE (SO4) CONC. (MG/L)	SULFATE (SO4) AMT. (LB)	URANIUM (U) CONC. (MG/L)	URANIUM (U) AMT. (LB)	MOLYBDENUM (MO) CONC. (MG/L)	MOLYBDENUM (MO) AMT. (LB)	SELENIUM (SE) CONC. (MG/L)	SELENIUM (SE) AMT. (LB)
1978	G.W.	27670033	5200	1200620	35	8081	40	9236	2	462
1979	G.W.	46371629	5200	2012095	35	13543	40	15478	2	774
1980	G.W.	39385860	5200	1708978	35	11503	40	13146	2	657
1981	G.W.	91613183	5200	3975155	35	26756	40	30578	2	1529
1982	G.W.	159848025	5200	6935910	35	46684	40	53353	2	2668
1983	G.W.	167018540	5200	7247043	35	48778	40	55746	2	2787
1984	G.W.	203258522	5200	8819519	35	59362	40	67842	2	3392
1985	G.W.	194074421	5200	8421015	35	56680	40	64777	2	3239
1986	G.W.	199326030	5200	8648886	35	58214	40	66530	2	3326
1987	G.W.	180881740	5200	7848576	35	52827	40	60374	2	3019
1988	G.W.	166460826	5200	7222843	35	48615	40	55560	2	2778
1989	G.W.	175780800	5200	7627243	35	51337	40	58671	2	2934
1990	G.W.	164378919	5200	7132508	35	48007	40	54865	2	2743
1991	G.W.	171497720	5200	7441397	35	50086	40	57242	2	2862
1992	G.W.	128398849	4925	5276234	27.2	29134	35.9	38419	1.60	1718
1992	TOE	8544670	12117	864006	53.2	3793	106.5	7595	1.73	123
1993	G.W.	115795020	5011	4841203	28.1	27130	45.4	43885	1.47	1425
1993	TOE	18357680	12117	1856262	53.2	8150	106.5	16315	1.73	265
1994	G.W.	98294087	4423	3624762	26.0	21146	27.3	22349	1.42	1162
1994	TOE	18337680	12117	1854240	53.2	8141	106.5	16299	1.73	264
1995	G.W.	108306398	3256	2942827	16.1	14553	19.2	17355	1.65	1491
1995	TOE	17711370	11370	1680500	54.6	8069	94.4	13952	2.25	332
1995	TAILS	5905740	8191	403680	36.1	1778	89.7	4420	0.15	7
1996	G.W.	122064160	3899	3967919	20.9	21225	26.8	27259	1.92	1950
1996	TOE	15431810	11537	1484295	46.4	5970	105.0	13509	1.29	166
1996	TAILS	9181390	9434	722129	40.2	3077	108.0	8236	0.18	14
1997	G.W.	94465562	4955	3836678	26.9	20892	33.4	25887	3.17	2456
1997	TOE	12029390	11094	1113808	41.8	419	100.0	10040	0.81	81
1997	TAILS	21292900	10284	1827575	45.8	8139	92.4	16420	0.14	25
1998	G.W.	74459130	5088	3161866	29.6	18385	34.8	21625	1.85	1151
1998	TOE	10321780	9870	850257	42.5	3665	95.2	8203	0.73	63
1999	G.W.	117752408	3363	3305027	16.6	16314	14.8	14545	2.06	2024
1999	TOE	8809890	11560	849976	54.3	3993	106.0	7794	0.46	34
1999	TAILS	120550	9420	9478	40.9	41	111.5	112	0.19	0
2000	G.W.	146609842	3358	4108868	18.8	23004	20.6	25206	1.94	2374
2000	TOE	8032870	9734	652590	58.6	3929	118.0	7911	0.34	23
2000	TAILS	12446810	9710	1008685	37.8	3927	127.0	13193	0.30	31
SUM G.W.		2,993,711,704		121,307,172		772,255		899,928		48,921
SUM TOE		117,577,140		11,205,933		46,129		101,617		1,351
SUM TAILS		48,947,390		3,971,547		16,962		42,381		77
COMBINED SUM		3,160,236,234		136,484,653		835,346		1,043,926		50,349

NOTE: Average concentrations for 1978 to 1991 were used in calculating the quantities of constituents removed.
Concentrations from the collection wells have gradually decreased from 1978 through 1991.
G.W. = Ground water; TOE = Toe drains on edge of tailings; TAILS = Large tailings collection wells

2.2 FUTURE OPERATION

Restoration in 2001 is to continue as a combination of fresh-water and R.O. product injection and contaminated water collection to maintain the overall piezometric gradient reversal between the lines of injection (M Line and J Line) and collection near the tailings piles. The reverse osmosis (R.O.) plant should operate full time again in 2001. This plant processes 300 gpm of collection water and results in a discharge to the lined evaporation pond of approximately 70 gpm and approximately 230 gpm used for R.O. product injection into the alluvium. The larger collection rate and use of the very good quality R.O. product for injection will continue to increase the progress in restoration.

Water collected from the alluvial and Chinle aquifers, where there are relatively low levels of selenium and uranium, will continue to be used for collection for re-injection in the initial phase of restoration. This re-injection will occur in the alluvium where concentrations are greater than those of the injection water until such time as injection with fresh water or R.O. product water will better complete the restoration. The low concentration re-injection water will be limited to areas within the reversal zone upgradient of the J and M injection lines. For the purpose of this document, the reversal zone is called the collection area. To date, re-injection has occurred in wells X5 through X27, 1A, D2 through D4 and DAA, DAB, DL, DW and DY.

Collection from Upper Chinle well CE2 will continue to intercept concentrations in this aquifer. Injection into Upper Chinle wells CW5, CW13 and CW25 is planned to continue to control flow in these areas of the Upper Chinle aquifer. The injection into well CW14 will be continued to build the head in this area of the Middle Chinle aquifer to prevent alluvial water from flowing into this portion of the Middle Chinle aquifer.

Irrigation with water from Sections 3 and 33 and southern Felice Acres is planned for the entire growing season in 2001. A third irrigation area is planned for Section 28, which, used along with the Sections 28 and Section 29 fresh-water injection, should start restoration of these slightly elevated concentrations.

SECTION 3

TABLE OF CONTENTS

GROUND-WATER MONITORING
FOR HOMESTAKE'S GRANTS PROJECT

Page Number

FIGURES

TABLES

3.0 SITE STANDARDS AND BACKGROUND CONDITIONS

3.1 SITE STANDARDS

Six water-quality site standards (U, Se, Mo, Ra226 + Ra228, Th230 and V) have been set for the Homestake site by the United States Nuclear Regulatory Commission (NRC). These site standards are applicable at three points of compliance. Points of compliance wells are S4, D1 and X (see Figure 2.1-1 for locations). Table 3.1-1 presents the six site standards (see Table 3.3-1 for comparison with background). The established site standards are presently exceeded by the full range in background values for many of the constituents. Therefore, naturally occurring concentrations will cause compliance issues at this site. The New Mexico standards for uranium, selenium, molybdenum, radium-226 plus radium-228, sulfate, chloride, TDS and nitrate for this site are also presented in Table 3.1-1.

TABLE 3.1-1. GRANTS PROJECT WATER-QUALITY STANDARDS.

Constituents	Homestake Standards	
	NRC	**New Mexico**
Uranium	0.04	5
Selenium	0.1	0.12
Molybdenum	0.03	1.0@
Vanadium	0.02	-----
RA-226 + Ra-228	5	30
Thorium-230	0.3	-----
Sulfate	-----	976
Chloride	-----	250
TDS	-----	1770
Nitrate	-----	12.4

NOTE: All concentrations are in mg/l except: Ra-226 + Ra-228 and Th-230, which are in pCi/l.
@ = Irrigation Standard

3.2 GROUND-WATER BACKGROUND WATER QUALITY

The hydrologic background conditions at the Grants site are those that exist upgradient or north of the large tailings pile. These conditions have been monitored since 1976. Ground-water flow in the San Mateo alluvial system is generally from the northeast to the southwest (see Figure 3.2-1). Lobo Creek joins San Mateo Creek at the Homestake site, although neither creek has a well-defined channel at the site. Surface-water flow exists only after extreme precipitation and then generally only within some reaches of the channel.

Hydrographs for five of the upgradient wells (P, Q, R, DD and ND) that have been used to define the background hydrologic conditions of the alluvial aquifer are presented in Section 4 of this report. Wells DD, P, P1, P2, P3, P4, Q, R and ND, located just north of the large tailings on the Homestake property, have been used for monitoring alluvial background water quality.

Additional alluvial background wells located further north were sampled in 2000 (wells 920 and 921, see Figure 3.2-1 for locations). Information gathered from these wells has been used to further define the piezometric surface and water-quality conditions in the upgradient alluvial aquifer.

Figure 3.2-1 presents the latest 2000 water-quality data for the background wells[1] for six parameters: sulfate, uranium, selenium, chloride, TDS and nitrate. All molybdenum concentrations in these upgradient wells are less than 0.03 mg/l. The sulfate concentrations for these wells upgradient of the large tailings vary from 526 to 1420 mg/l and averaged 1075 in 2000. Uranium concentrations also vary over a large range, from less than 0.01 to 0.19 mg/l with an average of 0.09 mg/l. Four natural uranium concentrations are four times the NRC site standard of 0.04 mg/l. Selenium concentrations vary over an even larger range, from 0.01 to 0.59 mg/l, with an average value of 0.23 mg/l. The largest 2000 background for selenium is six times the NRC site standard.

Chloride concentrations in water sampled from the upgradient wells averaged 58 mg/l in 2000. The range was from a low of 47 mg/l to a high of 67 mg/l. The TDS

---

[1] Wells DD, ND, P, P1, P2, P3, P4, Q, R, 920 and 921.

concentrations averaged 2080 mg/l and varied from 1290 to 2690 mg/l. Nitrate concentrations also vary naturally over a large range in the alluvial aquifer from 1.3 to 17.4 mg/l in 2000. Nitrate concentrations averaged 8.7 mg/l in 2000. Time versus concentration plots for upgradient wells DD, P, Q, R and ND are presented in Section 4.3 of this report.

The 95th percentile of the historical background data for this site was defined by ERG (1999a and 1999b). The 95% level is being used to define the upper limit of background. The average background concentration has been used in the past for establishing the standards and discussion of background values. The 95% level is a better value for use in background discussions because it better defines the full range of background. Figure 3.2-1 presents the 95% background levels for the Grants constituents.

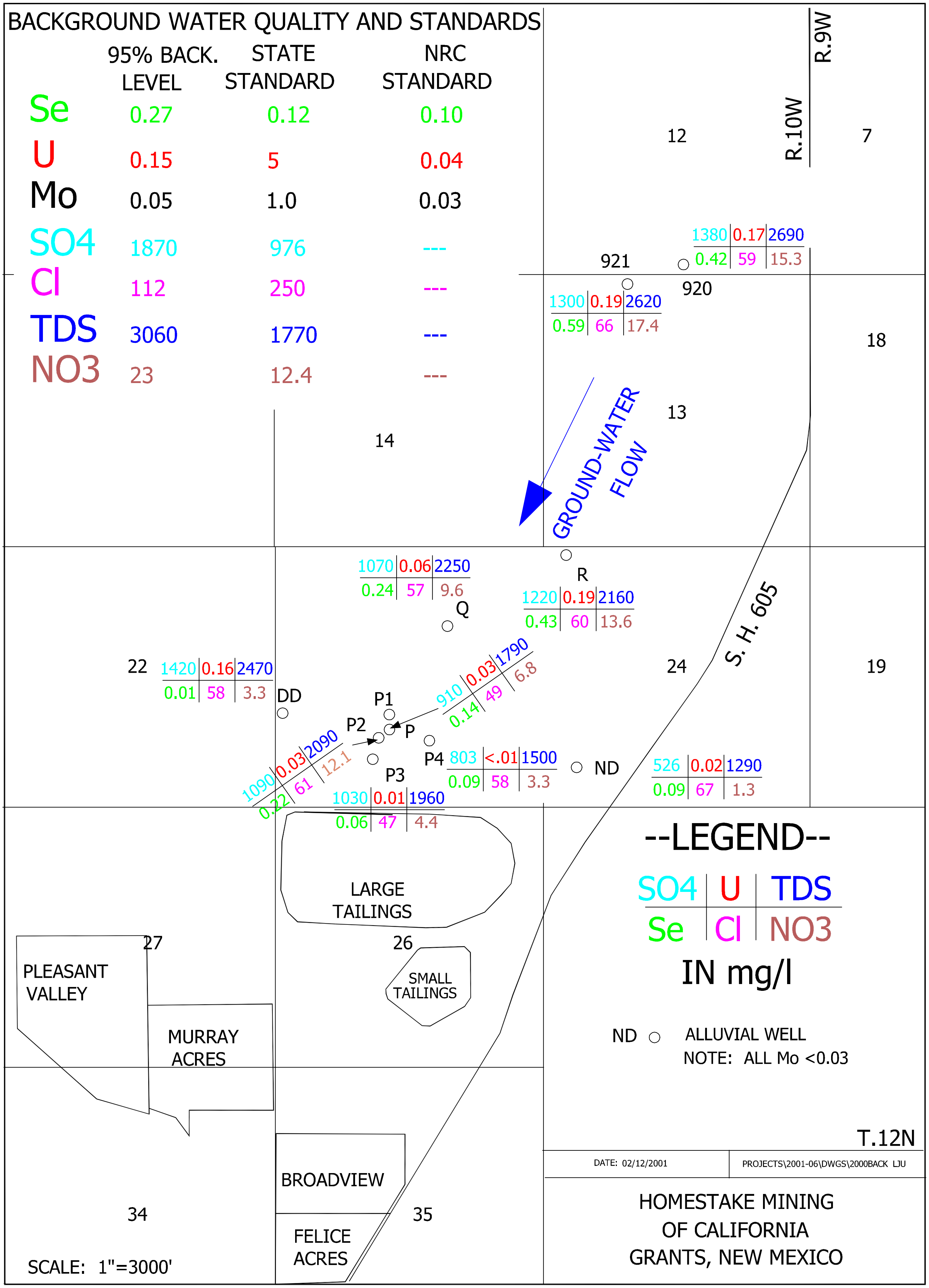


FIGURE 3.2-1. BACKGROUND GROUND-WATER QUALITY

3.3 COMPARISON OF SITE STANDARDS TO BACKGROUND

The range in concentrations (see Section 3.2) in the upgradient wells during 2000 was such that water in 5 out of 10 concentrations in background wells[1] were equal to, or exceeded, the NRC site standards for selenium. Additionally, 5 out of 10 uranium values were equal to, or exceeded, the NRC site standard. These site standards were set based on an average of concentrations in three samples[2] collected from December 1988, January 1989 and February 1989 from upgradient well P. As shown by the present data, there is a large natural areal variability in the background water quality. Therefore, the historical database for all of the background wells more adequately defines background concentrations as used in the two ERG (1999a and 1999b) studies. Naturally occurring background variation is demonstrated by the uranium concentrations, where concentrations in the Fall of 2000 varied from less than 0.01 to 0.19 mg/l (see red values on Figure 3.2-1). The higher values are four times the site standard of 0.04 mg/l.

Table 3.3-1 presents the 95th percentile of background concentrations (see ERG 1999a and 1999b for computation of 95% levels) for selenium, uranium, molybdenum, sulfate, chloride, TDS and nitrate along with the State and NRC standards. The 95% values for selenium and uranium are significantly greater than the NRC standards, while sulfate, TDS and nitrate levels are significantly greater than the State standards.

TABLE 3.3-1. COMPARISON OF UPPER LIMIT OF BACKGROUND WATER QUALITY AND SITE STANDARDS.

Constituents	95% Background Level	State Standard	NRC Standard
Selenium	0.27	0.12	0.1
Uranium	0.15	5	0.04
Molybdenum	0.05	1.0@	0.03
Sulfate	1870	976	-----
Chloride	112	250	-----
TDS	3060	1770	-----
Nitrate	23	12.4	-----

NOTE: All values are in mg/l
@ = Irrigation Standard

[1]Wells DD, ND, P, P1, P2, P3, P4, Q, R, 920 and 921.
[2] Average of 3 samples from well P in 1988 and 1989.

SECTION 4

TABLE OF CONTENTS

GROUND-WATER MONITORING FOR HOMESTAKE'S GRANTS PROJECT

FIGURES

SECTION 4

TABLE OF CONTENTS

GROUND-WATER MONITORING
FOR HOMESTAKE'S GRANTS PROJECT

FIGURES
(continued)

Page Number

SECTION 4

TABLE OF CONTENTS

GROUND-WATER MONITORING FOR HOMESTAKE'S GRANTS PROJECT

FIGURES (continued)

SECTION 4

TABLE OF CONTENTS

**GROUND-WATER MONITORING
FOR HOMESTAKE'S GRANTS PROJECT**

**FIGURES
(continued)**

Page Number

SECTION 4

TABLE OF CONTENTS

GROUND-WATER MONITORING
FOR HOMESTAKE'S GRANTS PROJECT

FIGURES
(continued)

Page Number

SECTION 4

TABLE OF CONTENTS

GROUND-WATER MONITORING
FOR HOMESTAKE'S GRANTS PROJECT

FIGURES
(continued)

SECTION 4

TABLE OF CONTENTS

GROUND-WATER MONITORING FOR HOMESTAKE'S GRANTS PROJECT

TABLES

<u>Page Number</u>

4.0 ALLUVIAL AQUIFER MONITORING

This section presents 2000 monitoring results for the alluvial aquifer, the most important ground-water system at the Grants site. Well completions are presented first, with the water levels and water-quality results following.

4.1 ALLUVIAL WELL COMPLETIONS

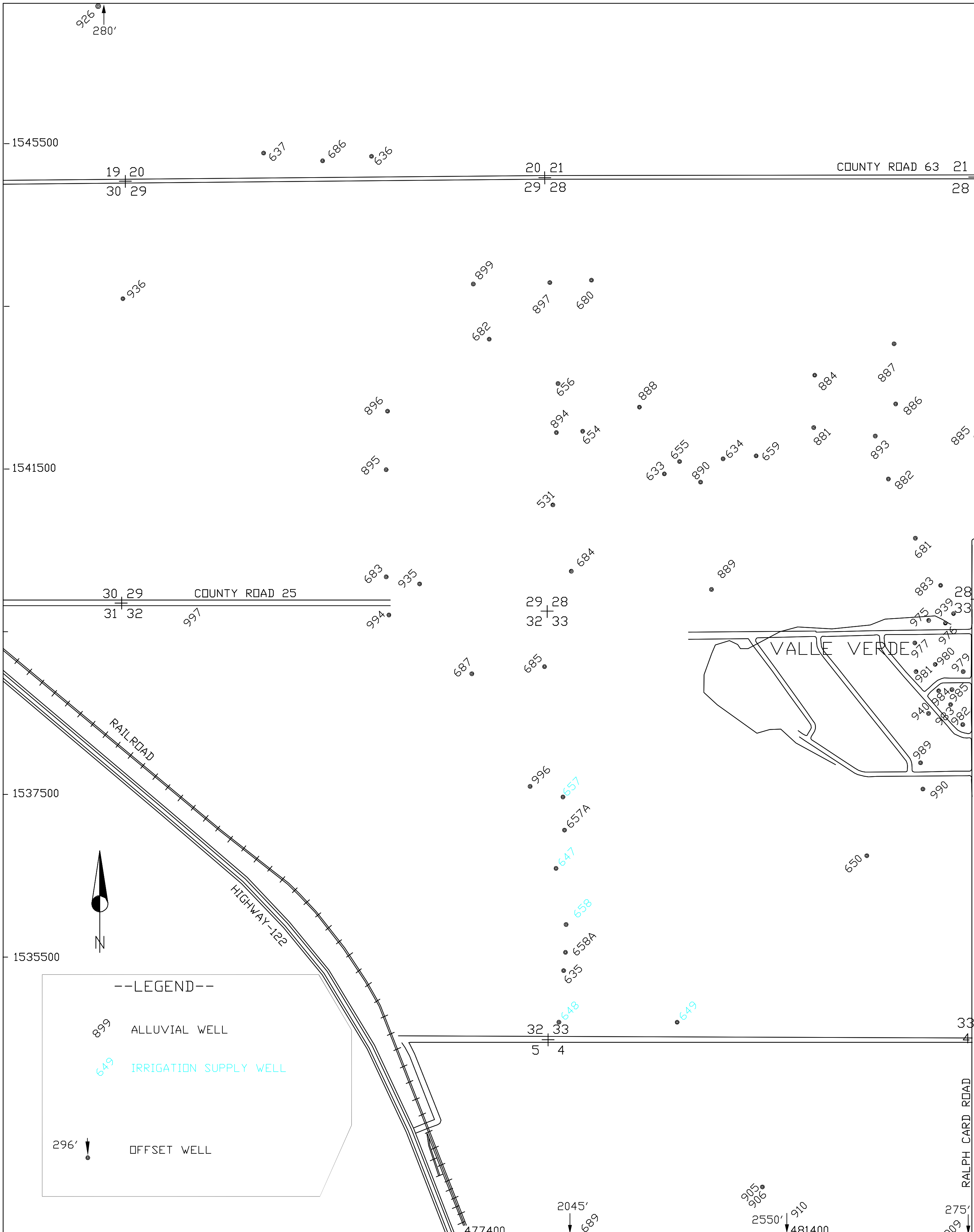
New alluvial wells drilled in 2000 are C13 and C14, K7 through K11 and X28 through X31. Discussion of the new and previously installed alluvial wells is presented in this section. Wells C13 and C14 were drilled for monitoring restoration in the C area. Wells K7 through K11 were drilled on the south side of the No. 1 evaporation pond for collection, while wells X28 through X31 were drilled on the southeast side of the small tailings for injection. Figures 4.1-1A and 4.1-1B show locations of the alluvial wells west of and near the Homestake Grants Project, respectively. These figures are plotted at a scale of 1" = 1600'. Each of the new wells are located on Figure 4.1-1B.

Alluvial wells 532, 914, 916, 917, 920, 921, 922 and 999 contain data but exist outside of Figures 4.1-1A and 4.1-1B. Drawing 1.1-1 of Hydro-Engineering, 1996 shows the wells that exist outside of the figures in this report.

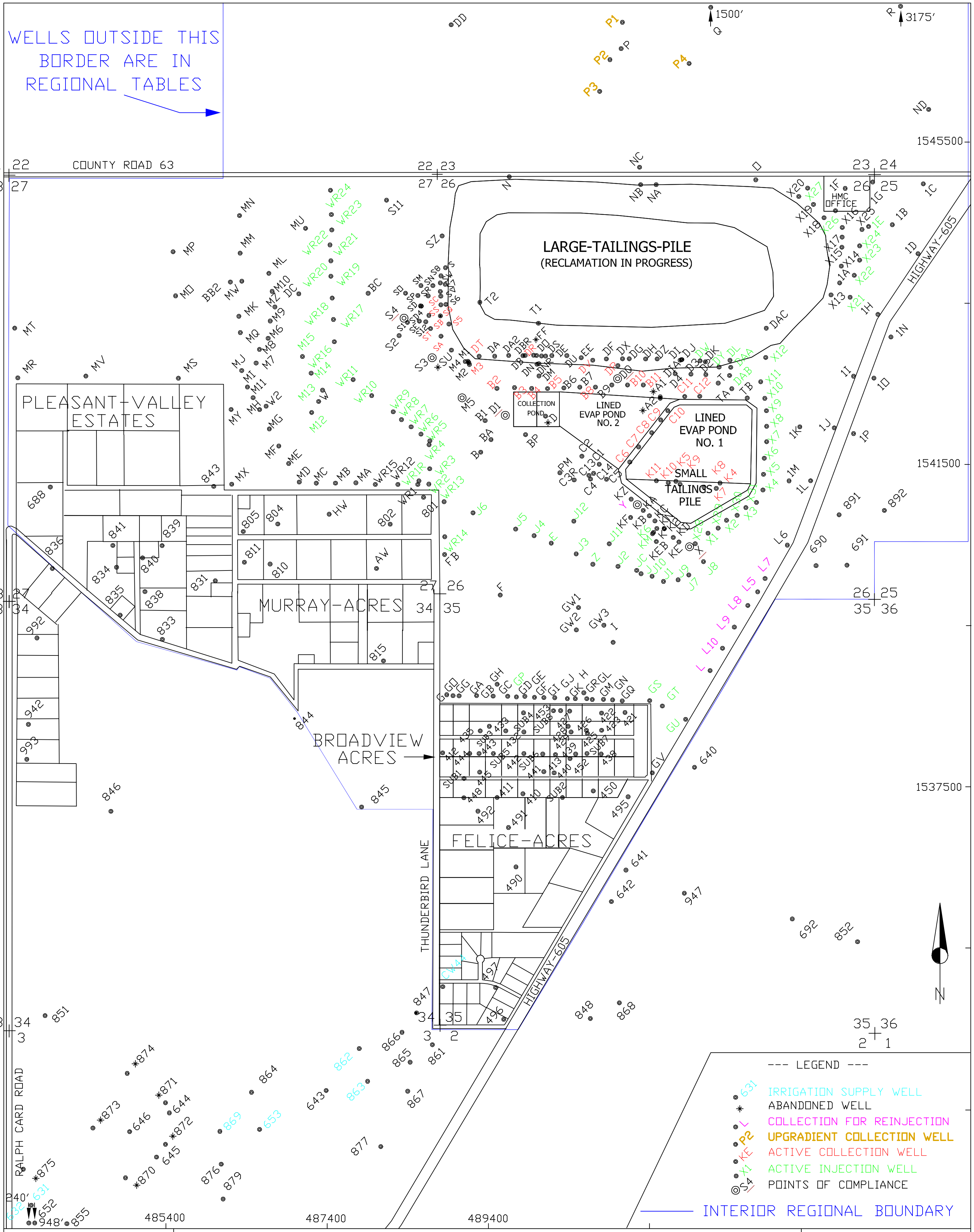
The currently active injection and collection wells are labeled with different colors on Figures 4.1-1A and 4.1-1B so that they can be distinguished from monitoring wells. These figures also show the wells used for irrigation water supply during the 2000 irrigation season. Table 4.1-1 presents basic well data for alluvial wells located on the Homestake property that have been used to define the alluvial ground-water hydrology. Many additional alluvial wells outside of the Homestake property have also been used for that purpose. The basic well data table presents the location, well depth, casing diameter, water-level information, depth to the base of the alluvium and casing perforation intervals for each well.

Table 4.1-2 presents the same type of basic well data for alluvial wells in Broadview and Felice Acres. These two subdivisions are just south of the Homestake property. Figure 4.1-1B also shows the locations of the subdivision wells. Table 4.1-3 presents similar basic data for alluvial wells located in Murray Acres and Pleasant Valley Estates.

Table 4.1-4 presents data for regional wells located outside of the subdivisions and the Homestake property. The limits of the Grants Project site boundary are delineated with a heavy line on Figure 4.1-1B. Wells outside this area are considered to be regional, and data for them are included in the regional water-quality and basic well data tables. The project site boundary includes Broadview, Felice and Murray Acres and Pleasant Valley Estates subdivisions. Slightly greater than 100 alluvial wells have been included on the regional table, which brings the total number of alluvial wells used to characterize this site to greater than 400. The wells are listed in numerical or alphabetic order based on their well names.



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 03/16/01
FIGURE 4.1-1A. ALLUVIAL WELL LOCATIONS (WEST AREA).		PROJECTS\2001-06\2000WQAL LJU
		page 4.1-3



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE:

FIGURE 4.1-1B. ALLUVIAL WELL LOCATIONS

PROJECTS\2001-06\DWGS\2001FIGS

TABLE 4.1-1. BASIC WELL DATA FOR THE ALLUVIAL HOMESTAKE WELLS.

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO BASE OF ALLUVIUM (FT-LSD)	ELEV. TO BASE OF ALLUVIUM (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	SATURATED THICKNESS
0690	1540279	493465	65.0	5.0	09/16/1998	62.50	6519.56	2.5	6582.06	55	6524.6 A	25-65	0.0
0691	1540276	493860	66.0	5.0	09/16/1998	57.36	6531.45	2.9	6588.81	55	6530.9 A	26-66	0.5
0891	1540904	493751	54.0	5.0	09/16/1998	54.30	6526.82	2.1	6581.12	50	6529.0 A	24-54	0.0
0892	1540954	494317	50.0	5.0	09/16/1998	51.00	6536.21	2.0	6587.21	42	6543.2 A	30-50	0.0
1A	1543790	493768	64.6	5.0	12/05/2000	38.28	6547.15	2.6	6585.43	47	6535.8 A	39-51	11.3
1B	1544502	494412	51.8	5.0	09/28/2000	37.65	6546.77	1.5	6584.42	50	6532.9 A	20-50	13.8
1C	1545018	494799	52.9	5.0	09/28/2000	43.26	6544.73	2.5	6587.99	43	6542.5 A	34-54	2.2
1D	1544142	494752	42.9	5.0	09/29/2000	29.00	6556.97	2.2	6585.97	40	6543.8 A	22-42	13.2
1E	1544481	494116	51.4	5.0	09/28/2000	8.00	6576.31	2.1	6584.31	43	6539.2 A	34-54	37.1
1F	1544952	493831	61.8	5.0	09/28/2000	44.06	6543.32	1.8	6587.38	54	6531.6 A	30-60	11.7
1G	1545034	494170	57.5	5.0	09/28/2000	42.24	6544.83	2.3	6587.07	48	6536.8 A	35-55	8.1
1H	1543363	494266	55.4	5.0	10/03/2000	30.61	6555.78	1.8	6586.39	43	6541.6 A	25-55	14.2
1I	1542627	493928	49.8	5.0	10/03/2000	34.26	6564.09	1.3	6598.35	35	6562.1 A	27-47	2.0
1J	1541986	493695	50.3	5.0	10/03/2000	37.48	6547.92	2.0	6585.40	40	6543.4 A	30-50	4.5
1K	1541992	493275	55.6	5.0	10/03/2000	35.06	6549.07	1.8	6584.13	47	6535.3 A	30-55	13.7
1L	1541256	493416	53.4	5.0	10/03/2000	35.71	6542.90	3.1	6578.61	40	6535.5 A	35-55	7.4
1M	1541327	493133	43.1	5.0	10/03/2000	29.31	6546.22	1.3	6575.53	33	6541.2 A	25-54	5.0
1N	1543100	494396	45.6	5.0	10/03/2000	29.60	6561.25	2.4	6590.85	25	6563.5 A	15-44	0.0
1O	1542592	494175	44.0	5.0	10/03/2000	43.88	6551.06	0.8	6594.94	29	6565.1 A	14-34	0.0
1P	1541902	493924	52.8	5.0	10/03/2000	38.14	6547.10	2.6	6585.24	35	6547.6 A	20-40	0.0
* A1	1542365	491539	55.6	4.0	01/12/1994	45.29	6527.86	1.1	6573.15	55	6517.0 A	37-57	10.8
* A2	1542356	491539	46.4	4.0	12/23/1991	47.98	6525.42	1.1	6573.40	---	--- A	27-47	---
B	1541684	489311	68.6	4.0	12/27/2000	42.20	6528.70	2.4	6570.90	60	6508.5 A	49-69	20.2
B1	1542071	489370	90.9	5.0	07/13/2000	45.11	6526.54	0.6	6571.65	82	6489.0 A	62-82	37.5
B2	1542475	489515	83.0	5.0	12/05/2000	49.78	6524.47	2.0	6574.25	72	6500.3 A	55-75	24.2
B3	1542480	489731	87.0	5.0	12/05/2000	62.15	6512.14	2.6	6574.29	77	6494.7 A	58-78	17.4
B4	1542471	489942	88.8	5.0	12/05/2000	59.60	6515.06	7.4	6574.66	82	6485.3 A	63-83	29.8
B5	1542474	490141	91.0	5.0	12/05/2000	57.23	6516.23	1.4	6573.46	81	6491.1 A	62-82	25.2
B6	1542478	490341	90.0	5.0	12/05/2000	48.94	6528.75	2.0	6577.69	80	6495.7 A	63-83	33.1
B7	1542488	490540	87.0	5.0	09/22/1995	43.82	6530.58	2.2	6574.40	77	6495.2 A	53-78	35.4
B8	1542488	490734	87.0	5.0	12/05/2000	49.94	6525.81	2.3	6575.75	77	6496.4 A	53-78	29.4
B9	1542514	490935	86.0	5.0	12/05/2000	50.32	6525.85	2.2	6576.17	76	6498.0 A	51-78	27.9
B10	1542517	491133	84.8	5.0	12/05/2000	70.46	6506.31	2.3	6576.77	75	6499.5 A	51-78	6.8
B11	1542517	491329	84.9	5.0	12/05/2000	61.04	6516.35	2.2	6577.39	77	6498.2 A	42-80	18.2
BA	1541835	489440	86.0	5.0	12/27/2000	44.10	6527.48	1.7	6571.58	76	6493.9 A	64-78	33.6
BB2	1543791	486213	56.6	4.0	12/14/2000	48.84	6524.96	0.6	6573.80	---	--- A	42-62	---

TABLE 4.1-1. BASIC WELL DATA FOR THE ALLUVIAL HOMESTAKE WELLS. (cont'd.)

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO BASE OF ALLUVIUM (FT-LSD)	ELEV. TO BASE OF ALLUVIUM (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	SATURATED THICKNESS
BC	1543655	487910	82.8	4.0	12/14/2000	47.20	6527.41	2.6	6574.61	75	6497.0 A	63-83	30.4
BP	1541882	489841	85.4	4.0	12/14/2000	46.34	6525.96	3.0	6572.30	75	6494.3 A	40-85	31.7
C	1541762	490854	79.7	4.0	05/16/1994	41.50	6529.34	0.3	6570.84	75	6495.5 A	59-79	33.8
C1	1541533	490780	76.0	5.0	12/05/2000	40.50	6524.62	0.8	6565.12	67	6497.3 A	41-68	27.3
C2	1541630	490566	76.0	5.0	12/05/2000	36.10	6529.02	0.9	6565.12	66	6498.2 A	42-67	30.8
C3	1541344	490481	75.0	5.0	06/20/1994	36.20	6532.33	0.9	6568.53	65	6502.6 A	45-67	29.7
C3R	1541338	490472	75.0	5.0	12/05/2000	37.72	6531.66	2.0	6569.38	66	6501.4 A	43-68	30.3
C4	1541348	490675	75.0	5.0	10/02/2000	39.66	6531.24	1.3	6570.90	66	6503.6 A	46-66	27.6
C5	1541344	490869	72.0	5.0	07/19/2000	38.60	6531.22	0.8	6569.82	62	6507.0 A	43-63	24.2
C6	1541533	491142	80.8	5.0	12/05/2000	61.52	6523.37	1.6	6584.89	72	6511.3 A	34-74	12.1
C7	1541734	491280	72.4	5.0	12/05/2000	62.48	6521.96	1.5	6584.44	61	6521.9 A	25-65	0.0
C8	1541906	491415	78.1	5.0	12/05/2000	53.97	6530.52	1.6	6584.49	67	6515.9 A	31-71	14.6
C9	1542075	491545	77.0	5.0	12/05/2000	66.26	6518.29	1.5	6584.55	65	6518.1 A	27-67	0.2
C10	1542182	491629	71.6	5.0	12/05/2000	65.98	6519.28	2.7	6585.26	65	6517.6 A	30-70	1.7
C11	1542376	491844	68.2	5.0	12/05/2000	43.20	6538.18	2.4	6581.38	60	6519.0 A	35-65	19.2
C12	1542375	492029	63.5	5.0	12/05/2000	41.25	6539.30	2.6	6580.55	55	6522.9 A	34-64	16.4
C13	1541394	490655	63.0	5.0	11/28/2000	37.82	6532.19	2.0	6570.01	63	6505.0 A	36-70	27.2
C14	1541413	490713	63.0	5.0	11/28/2000	38.74	6530.95	2.0	6569.69	63	6504.7 A	36-70	26.3
* D	1542127	490118	89.7	4.0	07/28/1986	48.04	6524.85	0.8	6572.89	90	6482.1 A	71-91	42.8
D1	1542140	489615	89.4	4.0	12/14/2000	46.80	6524.10	1.0	6570.90	80	6489.9 A	58-90	34.2
D2	1542641	492107	70.0	5.0	11/29/1999	0.50	6579.67	3.0	6580.17	62	6515.2 A	40-70	64.5
D3	1542646	491917	80.0	5.0	11/29/1999	0.50	6579.63	2.5	6580.13	72	6505.6 A	40-80	74.0
D4	1542652	491724	78.0	5.0	11/29/1999	0.50	6578.93	2.5	6579.43	70	6506.9 A	48-78	72.0
DA	1542864	489488	99.1	5.0	12/04/1997	61.40	6524.15	3.0	6585.55	90	6492.6 A	50-100	31.6
DA2	1542881	489656	82.1	5.0	01/13/1995	51.11	6536.18	2.8	6587.29	83	6501.5 A	64-74	34.7
DAA	1542733	492411	62.7	5.0	12/05/2000	2.00	6578.60	2.2	6580.60	54	6524.4 A	30-60	54.2
DAB	1542633	492399	65.1	5.0	12/05/2000	0.50	6579.38	2.3	6579.88	56	6521.6 A	30-60	57.8
DAC	1543218	492851	67.7	5.0	---	---	---	4.1	6620.36	45	6571.3 A	20-30	---
DB	1542874	489842	73.2	5.0	09/08/1998	66.15	6523.33	0.5	6589.48	---	--- A	55-85	---
DBR	1542877	489855	55.6	5.0	01/25/1995	52.19	6536.97	4.8	6589.16	---	--- A	-	---
DC	1543646	487060	64.1	4.0	12/14/2000	45.30	6526.01	2.7	6571.31	---	--- A	45-65	---
DD	1546989	488943	78.5	4.0	04/06/2000	57.96	6534.63	1.9	6592.59	83	6507.7 A	40-80	26.9
DE	1542877	490193	70.2	5.0	10/05/1998	63.70	6527.65	0.8	6591.35	80	6510.6 A	60-90	17.1
DF	1542839	490869	88.5	5.0	11/02/1998	60.75	6529.84	0.6	6590.59	---	--- A	65-95	---
DG	1542839	491157	88.9	5.0	02/14/1996	61.80	6529.98	0.4	6591.78	---	--- A	65-95	---
DH	1542835	491365	61.7	5.0	12/24/1991	52.65	6538.69	4.8	6591.34	---	--- A	65-95	---

TABLE 4.1-1. BASIC WELL DATA FOR THE ALLUVIAL HOMESTAKE WELLS. (cont'd.)

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO BASE OF ALLUVIUM (FT-LSD)	ELEV. TO BASE OF ALLUVIUM (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	SATURATED THICKNESS
DI	1542821	491788	86.1	5.0	12/09/1997	57.87	6531.75	2.3	6589.62	75	6512.3 A	35-85	19.4
DIA	1542821	491793	---	4.0	12/23/1991	50.41	6543.22	1.4	6593.63	---	--- A	-	---
DJ	1542821	491793	85.7	5.0	08/24/1988	46.87	6542.69	0.7	6589.56	75	6513.9 A	35-85	28.8
DK	1542799	492094	65.4	5.0	12/23/1991	43.58	6542.33	0.7	6585.91	55	6530.2 A	35-55	12.1
DL	1542813	492398	64.4	5.0	12/05/2000	2.00	6582.87	2.9	6584.87	55	6527.0 A	35-55	55.9
DM	1542628	490035	62.8	5.0	12/14/2000	52.00	6523.08	3.0	6575.08	---	--- A	-	---
DN	1542776	490020	66.7	4.0	12/14/2000	51.52	6525.14	3.7	6576.66	---	--- A	-	---
DNR	1542779	490031	79.7	4.0	12/05/2000	51.80	6525.26	3.3	6577.06	---	--- A	-	---
DO	1542874	490049	75.8	5.0	12/05/2000	65.20	6525.13	1.6	6590.33	75	6513.7 A	65-75	11.4
DP	1542754	491012	79.8	5.0	12/07/1998	51.42	6528.29	3.5	6579.71	---	--- A	-	---
DQ	1542592	491006	85.3	5.0	11/21/2000	50.66	6525.77	2.2	6576.43	---	--- A	-	---
DR	1542884	489966	87.8	5.0	12/05/2000	66.05	6524.78	2.7	6590.83	85	6503.1 A	65-85	21.6
DS	1542876	490118	---	5.0	08/02/1999	65.22	6523.59	0.9	6588.81	77	6510.9 A	62-77	12.7
DT	1542871	489293	72.3	5.0	12/05/2000	59.80	6524.01	2.7	6583.81	99	6482.1 A	59-99	41.9
DU	1542879	490380	84.6	5.0	07/06/1988	51.56	6539.51	1.8	6591.07	81	6508.3 A	61-81	31.2
DV	1542826	490702	80.0	5.0	12/05/2000	58.45	6527.15	2.9	6585.60	77	6505.7 A	60-80	21.4
DW	1542818	492029	73.4	5.0	12/05/2000	2.50	6586.16	3.6	6588.66	59	6526.1 A	45-60	60.1
DX	1542838	491074	---	6.0	08/02/1999	61.80	6530.18	1.0	6591.98	80	6511.0 A	60-90	19.2
DY	1542737	492271	65.7	5.0	12/05/2000	1.50	6579.11	2.3	6580.61	56	6522.3 A	15-65	56.8
DZ	1542834	491501	81.8	5.0	12/14/2000	59.92	6530.61	2.2	6590.53	---	--- A	-	---
E	1540553	490187	61.7	4.0	12/05/2000	2.00	6566.94	1.7	6568.94	60	6507.2 A	44-64	59.7
EE	1542853	490523	91.2	5.0	01/31/1995	45.26	6542.85	0.6	6588.11	80	6507.5 A	50-90	35.3
F	1539908	489554	63.8	4.0	12/14/2000	34.19	6530.63	1.2	6564.82	62	6501.6 A	45-65	29.0
FB	1540417	488857	62.0	4.0	10/19/2000	34.03	6531.63	2.0	6565.66	58	6505.7 A	43-58	26.0
* FF	1542878	490017	---	4.0	06/21/1983	41.08	6535.46	0.2	6576.54	124	6452.3 A	52-132	83.1
G	1538672	488890	78.3	4.0	04/03/2000	4.00	6559.09	2.0	6563.09	75	6486.1 A	50-80	73.0
GA	1538657	489255	---	4.0	04/03/2000	4.00	6558.79	1.8	6562.79	62	6499.0 A	45-65	59.8
GB	1538654	489456	65.2	4.0	04/03/2000	4.00	6558.99	1.9	6562.99	64	6497.1 A	45-65	61.9
GC	1538650	489654	---	4.0	04/03/2000	4.00	6561.17	2.5	6565.17	78	6484.7 A	60-80	76.5
GD	1538646	489855	---	4.0	12/04/1995	0.50	6565.12	1.8	6565.62	72	6491.8 A	55-75	73.3
GE	1538637	489972	117.0	4.0	04/03/2000	4.00	6562.27	2.4	6566.27	65	6498.9 A	50-120	63.4
GF	1538632	490097	119.2	4.0	04/03/2000	4.00	6562.01	1.8	6566.01	67	6497.2 A	50-120	64.8
GG	1538662	489055	58.7	4.0	04/03/2000	4.00	6559.13	1.8	6563.13	57	6504.3 A	48-68	54.8
GH	1538807	489509	69.2	4.0	11/29/2000	31.90	6530.86	1.3	6562.76	67	6494.5 A	55-65	36.4
GI	1538631	490218	119.0	4.0	04/03/2000	4.00	6561.85	1.5	6565.85	67	6497.4 A	50-120	64.5
GJ	1538629	490382	119.2	4.0	04/03/2000	4.00	6562.15	2.0	6566.15	65	6499.1 A	50-120	63.0

TABLE 4.1-1. BASIC WELL DATA FOR THE ALLUVIAL HOMESTAKE WELLS. (cont'd.)

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO BASE OF ALLUVIUM (FT-LSD)	ELEV. TO BASE OF ALLUVIUM (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	SATURATED THICKNESS
GK	1538622	490482	115.7	4.0	04/03/2000	4.00	6562.76	2.4	6566.76	67	6497.4 A	50-120	65.4
GL	1538614	490701	119.3	4.0	04/03/2000	4.00	6563.15	2.1	6567.15	71	6494.0 A	50-120	69.1
GM	1538605	490824	118.2	4.0	04/03/2000	4.00	6563.65	2.1	6567.65	69	6496.5 A	50-120	67.1
GN	1538602	490944	116.5	4.0	04/03/2000	4.00	6563.97	1.8	6567.97	70	6496.2 A	50-120	67.8
GO	1538663	488973	122.3	4.0	04/03/2000	4.00	6559.00	1.6	6563.00	75	6486.4 A	50-120	72.6
GP	1538649	489752	121.4	4.0	12/05/2000	5.00	6559.87	2.1	6564.87	68	6494.8 A	50-120	65.1
GQ	1538599	491067	70.0	4.0	12/23/1991	41.17	6526.99	0.9	6568.16	71	6496.3 A	50-70	30.7
GR	1538619	490619	---	4.0	12/23/1991	36.55	6528.66	1.0	6565.21	75	6489.2 A	50-85	39.5
GS	1538597	491408	86.4	5.0	12/05/2000	33.00	6541.31	2.0	6574.31	80	6492.3 A	50-85	49.0
GT	1538534	491565	84.0	5.0	12/05/2000	8.30	6567.87	2.1	6576.17	76	6498.1 A	60-84	69.8
GU	1538367	491854	80.0	5.0	12/05/2000	5.00	6570.65	2.0	6575.65	73	6500.6 A	60-80	70.0
GV	1537701	491428	83.0	5.0	09/28/2000	49.51	6527.87	2.5	6577.38	74	6500.9 A	62-82	27.0
GW1	1539755	490530	73.0	5.0	05/04/1993	34.17	6531.10	1.0	6565.27	65	6499.3 A	48-73	31.8
GW2	1539471	490497	75.0	5.0	05/04/1993	34.47	6531.61	1.0	6566.08	68	6497.1 A	47-75	34.5
GW3	1539532	490835	72.0	5.0	05/04/1993	34.42	6531.86	1.0	6566.28	62	6503.3 A	45-72	28.6
H	1538703	490582	69.3	4.0	12/23/1991	37.93	6528.65	1.8	6566.58	69	6495.8 A	50-70	32.9
I	1539319	490954	70.0	4.0	07/18/2000	32.90	6534.30	1.6	6567.20	68	6497.6 A	52-72	36.7
J	1540174	491302	65.6	4.0	12/05/2000	6.00	6564.19	3.4	6570.19	56	6510.8 A	46-68	53.4
J1	1540082	491585	57.0	6.0	12/05/2000	18.80	6553.05	3.8	6571.85	55	6513.1 A	50-57	40.0
J2	1540271	491013	58.0	6.0	12/05/2000	26.00	6544.19	2.9	6570.19	55	6512.3 A	50-58	31.9
J3	1540414	490499	70.0	6.0	12/05/2000	27.40	6541.74	2.6	6569.14	66	6500.5 A	43-70	41.2
J4	1540643	489974	80.0	6.0	12/05/2000	18.00	6551.52	3.9	6569.52	68	6497.6 A	40-70	53.9
J5	1540728	489747	65.0	6.0	12/05/2000	10.55	6559.24	2.8	6569.79	61	6506.0 A	50-65	53.2
J6	1540919	489221	67.0	6.0	12/05/2000	7.10	6563.00	3.7	6570.10	65	6501.4 A	48-67	61.6
J7	1540168	491892	61.9	5.0	12/05/2000	19.50	6550.88	2.1	6570.38	53	6515.3 A	40-60	35.6
J8	1540318	492064	63.2	5.0	12/05/2000	23.30	6547.49	2.4	6570.79	52	6516.4 A	35-61	31.1
J9	1540101	491759	68.0	5.0	12/05/2000	24.60	6546.60	2.0	6571.20	58	6511.2 A	36-68	35.4
J10	1540138	491436	66.0	5.0	12/05/2000	18.00	6552.91	3.5	6570.91	54	6513.4 A	36-66	39.5
J11	1540545	490909	66.0	5.0	12/05/2000	12.00	6557.86	2.0	6569.86	55	6512.9 A	36-66	45.0
J12	1540827	490466	70.0	5.0	12/05/2000	18.44	6551.86	3.0	6570.30	60	6507.3 A	40-70	44.6
JC	1540215	491240	60.0	5.0	12/05/2000	22.10	6546.34	1.8	6568.44	50	6516.6 A	35-55	29.7
K	1540730	491590	61.7	4.0	10/31/1997	45.96	6527.55	3.8	6573.51	60	6509.7 A	44-64	17.8
K2	1540736	491587	58.9	4.0	10/18/2000	26.73	6545.48	2.5	6572.21	58	6511.7 A	46-56	33.8
K3	1540744	491571	56.7	2.0	10/31/1997	43.44	6527.23	1.3	6570.67	---	--- A	53-58	---
K4	1541211	492371	86.2	5.0	12/05/2000	80.59	6521.43	2.5	6602.02	80	6519.5 A	65-85	1.9
K5	1541269	491935	86.4	5.0	12/05/2000	80.58	6521.15	2.8	6601.73	80	6518.9 A	55-85	2.2

TABLE 4.1-1. BASIC WELL DATA FOR THE ALLUVIAL HOMESTAKE WELLS. (cont'd.)

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO BASE OF ALLUVIUM (FT-LSD)	ELEV. TO BASE OF ALLUVIUM (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	SATURATED THICKNESS
K6	1540689	491459	58.0	5.0	12/05/2000	18.00	6552.07	2.0	6570.07	---	--- A	33-58	---
K7	1541232	492237	86.0	5.0	12/05/2000	64.58	6536.95	2.0	6601.53	79	6520.5 A	56-86	16.4
K8	1541250	492081	86.0	1.0	12/05/2000	57.46	6543.03	2.0	6600.49	78	6520.5 A	66-86	22.5
K9	1541287	491787	86.0	5.0	12/05/2000	68.96	6531.38	2.0	6600.34	79	6519.3 A	56-86	12.0
K10	1541306	491638	87.0	5.0	12/05/2000	63.94	6536.87	2.0	6600.81	81	6517.8 A	47-87	19.1
K11	1541325	491490	84.0	5.0	12/05/2000	70.90	6529.71	2.0	6600.61	78	6520.6 A	64-84	9.1
KA	1540959	491331	67.8	5.0	12/05/2000	31.92	6540.27	1.9	6572.19	65	6505.3 A	42-72	35.0
KB	1540893	491406	61.8	5.0	08/15/2000	32.28	6539.37	0.8	6571.65	60	6510.8 A	40-70	28.5
KC	1540826	491477	68.6	5.0	12/06/2000	27.50	6542.81	0.7	6570.31	59	6510.6 A	42-72	32.2
KD	1540627	491701	62.1	5.0	08/15/2000	26.93	6543.29	0.6	6570.22	---	--- A	40-70	---
KE	1540566	491776	60.8	5.0	08/09/2000	27.51	6544.77	2.5	6572.28	---	--- A	40-70	---
KEB	1540570	491487	59.9	5.0	12/05/2000	27.04	6542.69	1.5	6569.73	50	6518.2 A	40-60	24.5
KF	1540870	491169	63.5	5.0	12/27/2000	30.20	6540.01	2.2	6570.21	50	6518.0 A	30-60	22.0
KM	1540671	491444	52.4	5.0	12/05/2000	19.00	6550.77	2.2	6569.77	---	--- A	-	---
KN	1540734	491492	50.1	5.0	08/15/2000	25.30	6544.29	2.3	6569.59	---	--- A	-	---
KZ	1541100	491183	58.4	5.0	12/27/2000	34.45	6537.27	1.2	6571.72	---	--- A	-	---
L	1538970	492150	67.0	4.0	12/05/2000	49.18	6525.79	0.8	6574.97	59	6515.2 A	46-66	10.6
L5	1539946	492730	60.2	5.0	12/05/2000	48.46	6527.61	1.3	6576.07	50	6524.8 A	25-55	2.8
L6	1540526	493110	51.1	5.0	09/28/2000	33.86	6540.78	2.1	6574.64	50	6522.5 A	25-55	18.2
L7	1540113	492842	67.8	5.0	12/05/2000	46.81	6529.80	2.3	6576.61	62	6512.3 A	36-66	17.5
L8	1539773	492621	73.9	5.0	12/05/2000	45.34	6531.15	2.1	6576.49	65	6509.4 A	32-72	21.8
L9	1539509	492463	74.9	5.0	12/05/2000	46.61	6530.62	2.2	6577.23	64	6511.0 A	43-73	19.6
L10	1539250	492310	74.2	5.0	12/05/2000	46.10	6530.73	2.0	6576.83	63	6511.8 A	53-73	18.9
M1	1542797	489157	103.4	4.0	01/03/1989	79.80	6505.17	1.5	6584.97	120	6463.5 A	66-106	41.7
M2	1542785	489159	40.4	4.0	01/20/1995	34.85	6541.41	1.4	6576.26	---	--- A	-	---
M3	1542805	489151	105.3	4.0	05/01/2000	60.52	6515.58	1.0	6576.10	---	--- A	79-99	---
M4	1542804	489134	81.8	5.0	10/31/2000	56.72	6521.54	3.7	6578.26	---	--- A	78-82	---
M5	1542360	489080	92.3	5.0	12/14/2000	49.48	6525.86	3.2	6575.34	84	6488.1 A	60-90	37.7
M6	1543097	486674	110.0	5.0	09/05/2000	2.16	6572.88	2.2	6575.04	65	6507.9 A	60-110	65.0
M7	1542790	486523	83.0	5.0	09/05/2000	3.28	6569.57	2.4	6572.85	71	6499.4 A	63-83	70.1
M8	1542960	486567	83.0	5.0	09/05/2000	33.71	6541.52	2.4	6575.23	57	6515.8 A	53-83	25.7
M9	1543310	486699	103.0	5.0	09/05/2000	37.10	6539.71	3.2	6576.81	78	6495.6 A	63-103	44.1
M10	1543677	486723	88.0	5.0	09/05/2000	52.55	6520.81	2.4	6573.36	86	6485.0 A	58-88	35.9
M11	1542358	486486	118.0	5.0	09/05/2000	48.72	6524.50	3.0	6573.22	109	6461.2 A	58-118	63.3
M12	1542174	487209	124.0	5.0	12/05/2000	3.87	6569.64	2.5	6573.51	118	6453.0 A	57-124	116.7
M13	1542450	487336	117.0	5.0	12/05/2000	29.81	6546.35	3.0	6576.16	108	6465.2 A	57-117	81.2

TABLE 4.1-1. BASIC WELL DATA FOR THE ALLUVIAL HOMESTAKE WELLS. (cont'd.)

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO BASE OF ALLUVIUM (FT-LSD)	ELEV. TO BASE OF ALLUVIUM (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	SATURATED THICKNESS
M14	1542661	487216	117.0	5.0	12/05/2000	29.42	6547.75	2.7	6577.17	109	6465.5 A	57-117	82.3
M15	1542872	487094	102.0	5.0	12/05/2000	3.71	6575.37	3.5	6579.08	93	6482.6 A	52-102	92.7
MA	1541290	487767	85.0	4.0	10/02/2000	39.30	6532.92	1.0	6572.22	85	6486.2 A	70-85	46.7
MB	1541296	487512	90.0	4.0	09/05/2000	2.05	6570.01	1.0	6572.06	85	6486.1 A	60-90	84.0
MC	1541304	487264	100.0	4.0	09/05/2000	2.12	6569.94	1.0	6572.06	95	6476.1 A	70-100	93.9
MD	1541311	487050	105.0	4.0	09/05/2000	2.00	6569.46	1.0	6571.46	105	6465.5 A	75-105	104.0
ME	1541537	486934	105.0	4.0	09/05/2000	1.61	6569.31	1.0	6570.92	105	6464.9 A	75-105	104.4
MF	1541757	486808	110.0	4.0	09/05/2000	2.22	6570.06	1.0	6572.28	110	6461.3 A	90-110	108.8
MG	1541972	486694	110.0	4.0	09/05/2000	1.72	6571.36	1.0	6573.08	110	6462.1 A	90-110	109.3
MH	1542208	486569	110.0	4.0	09/05/2000	2.13	6571.79	1.0	6573.92	110	6462.9 A	90-110	108.9
MI	1542486	486413	110.0	4.0	09/05/2000	2.24	6574.03	1.0	6576.27	110	6465.3 A	90-110	108.8
MJ	1542682	486350	60.0	4.0	09/05/2000	47.12	6525.82	1.8	6572.94	60	6511.1 A	40-60	14.7
MK	1543373	486324	57.0	4.5	09/05/2000	25.62	6548.17	1.5	6573.79	92	6480.3 A	-	67.9
ML	1543902	486691	76.0	5.0	09/05/2000	3.46	6569.24	2.3	6572.70	80	6490.4 A	56-76	78.9
MM	1544154	486324	63.0	5.0	09/05/2000	3.46	6573.99	2.4	6577.45	50	6525.1 A	33-63	48.9
MN	1544613	486325	63.0	5.0	12/18/1996	64.15	6513.41	1.9	6577.56	42	6533.7 A	23-63	0.0
MO	1543620	485518	88.0	4.5	12/14/2000	62.28	6510.61	2.0	6572.89	80	6490.9 A	45-85	19.7
MP	1544164	485492	80.0	5.0	12/18/1996	62.66	6511.82	2.1	6574.48	50	6522.4 A	33-63	0.0
MQ	1543173	486326	98.0	5.0	12/14/2000	62.74	6511.56	1.6	6574.30	88	6484.7 A	58-98	26.9
MR	1542609	483574	100.0	5.0	11/01/2000	66.04	6500.22	1.8	6566.26	100	6464.5 A	54-94	35.8
MS	1542607	485570	82.0	5.0	11/01/2000	58.99	6511.68	1.5	6570.67	89	6480.2 A	52-82	31.5
MT	1543221	483531	98.0	4.5	11/01/2000	66.07	6501.36	2.3	6567.43	87	6478.1 A	34-94	23.2
MU	1544461	487143	80.0	5.0	11/01/2000	47.26	6526.93	1.5	6574.19	72	6500.7 A	50-80	26.2
MV	1542618	484418	105.0	4.5	10/22/1998	65.97	6503.81	1.3	6569.78	95	6473.5 A	75-105	30.3
MW	1543802	486346	85.0	5.0	09/05/2000	3.09	6571.82	1.9	6574.91	83	6490.0 A	35-85	81.8
MX	1541287	486244	103.0	5.0	12/14/2000	50.73	6517.88	1.7	6568.61	94	6472.9 A	63-103	45.0
MY	1542200	486213	112.0	5.0	12/14/2000	56.60	6516.96	3.0	6573.56	102	6468.6 A	72-112	48.4
MZ	1543485	486757	92.0	5.0	09/05/2000	22.61	6554.03	0.0	6576.64	84	6492.6 A	60-92	61.4
N	1545101	489665	92.0	4.0	10/31/2000	52.54	6531.43	0.9	6583.97	80	6503.1 A	54-94	28.4
NA	1545000	491488	91.4	5.0	04/18/1996	55.24	6535.74	1.1	6590.98	80	6509.9 A	50-90	25.9
NB	1545000	491296	96.4	5.0	04/18/1996	50.11	6543.19	2.1	6593.30	80	6511.2 A	50-90	32.0
NC	1545220	491282	95.0	4.0	10/31/2000	52.39	6533.44	0.8	6585.83	85	6500.0 A	65-95	33.4
ND	1545927	494872	70.0	4.0	08/02/2000	47.67	6545.22	1.1	6592.89	65	6526.8 A	50-70	18.4
NE5	1544279	492332	156.8	5.0	10/20/2000	150.75	6516.25	4.0	6667.00	150	--- T	50-110	---
										150	6513.0 A	135-155	3.3
NW5	1544408	489433	149.8	5.0	08/18/2000	128.47	6529.11	3.6	6657.58	155	--- T	39-79	---

TABLE 4.1-1. BASIC WELL DATA FOR THE ALLUVIAL HOMESTAKE WELLS. (cont'd.)

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO BASE OF ALLUVIUM (FT-LSD)	ELEV. TO BASE OF ALLUVIUM (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	SATURATED THICKNESS
NW5	1544408	489433	149.8	5.0	08/18/2000	128.47	6529.11	3.6	6657.58	155	6498.9 A	119-159	30.2
O	1545060	492725	69.9	4.0	10/31/2000	48.62	6539.21	1.3	6587.83	77	6509.5 A	40-70	29.7
P	1546691	491058	109.1	4.0	11/28/2000	53.24	6534.02	1.7	6587.26	107	6478.6 A	82-112	55.5
P1	1547017	491060	105.0	6.0	11/28/2000	55.75	6536.72	0.8	6592.47	105	6486.7 A	60-105	50.0
P2	1546555	490912	105.0	6.0	12/04/2000	61.41	6528.38	0.9	6589.79	105	6483.9 A	60-105	44.5
P3	1546159	490785	95.0	5.0	12/04/2000	62.41	6527.54	2.2	6589.95	85	6502.8 A	55-95	24.8
P4	1546504	491899	92.0	5.0	12/04/2000	81.26	6508.26	3.6	6589.52	84	6501.9 A	52-92	6.3
PM	1541426	490292	81.9	4.0	12/14/2000	36.46	6530.96	1.8	6567.42	---	--- A	-	---
Q	1548693	492153	98.3	4.0	03/14/2000	50.11	6543.71	2.3	6593.82	100	6491.5 A	72-102	52.2
R	1550372	494514	86.3	4.0	05/11/2000	43.51	6560.52	0.3	6604.03	95	6508.7 A	60-90	51.8
S	1543871	488816	72.2	4.0	12/06/2000	55.41	6525.76	2.0	6581.17	75	6504.2 A	52-72	21.6
S1	1543288	488401	85.0	2.0	12/27/2000	51.38	6523.81	5.3	6575.19	85	6484.9 A	60-85	38.9
S2	1543127	488299	100.0	3.0	12/27/2000	48.88	6524.84	2.0	6573.72	100	6471.7 A	90-100	53.1
S3	1542857	488714	122.6	5.0	12/14/2000	50.51	6524.27	6.2	6574.78	116	6452.6 A	80-120	71.7
S4	1543344	488359	112.4	5.0	12/06/2000	51.04	6524.25	2.3	6575.29	108	6465.0 A	50-110	59.3
S5	1543269	488923	115.0	5.0	12/05/2000	60.21	6514.48	1.0	6574.69	105	6468.7 A	54-106	45.8
S6	1543515	488874	113.2	5.0	01/03/2000	55.85	6524.22	1.3	6580.07	105	6473.8 A	55-105	50.5
S7	1543763	488874	97.0	5.0	01/04/1999	57.38	6522.51	1.0	6579.89	82	6496.9 A	40-84	25.6
S8	1543968	488879	43.8	5.0	08/22/1995	43.28	6537.06	1.0	6580.34	40	6539.3 A	12-42	0.0
S11	1544793	488150	76.2	5.0	12/14/2000	53.37	6525.02	1.9	6578.39	70	6506.5 A	48-78	18.5
S12	1543297	488628	93.0	5.0	09/11/2000	56.30	6522.55	2.1	6578.85	80	6496.8 A	53-93	25.8
SA	1543122	488811	123.7	5.0	12/05/2000	67.24	6513.07	1.0	6580.31	115	6464.3 A	100-130	48.8
SB	1543371	488811	125.0	5.0	12/05/2000	57.43	6523.66	0.9	6581.09	115	6465.2 A	100-130	58.5
SC	1543617	488815	105.4	5.0	12/05/2000	57.11	6521.69	1.2	6578.80	103	6474.6 A	55-105	47.1
SD	1543490	488564	90.1	5.0	12/23/1991	63.14	6515.17	0.6	6578.31	107	6470.7 A	50-110	44.5
SD4	1543497	488556	95.0	5.0	06/01/1993	61.44	6517.33	1.1	6578.77	95	6482.7 A	45-95	34.7
SE	1543301	488550	111.8	5.0	09/05/2000	56.32	6521.67	0.5	6577.99	88	6489.5 A	50-90	32.2
SE4	1543308	488560	105.3	2.0	08/18/2000	89.24	6488.76	0.8	6578.00	---	--- A	-	---
SM	1543748	488566	86.0	5.0	12/05/2000	55.21	6523.53	0.7	6578.74	---	--- A	-	---
SN	1543752	488716	67.5	4.0	12/05/2000	55.48	6523.78	1.1	6579.26	---	--- A	-	---
SO	1543652	488381	92.3	5.0	12/27/2000	54.92	6523.87	0.6	6578.79	---	--- A	-	---
SP	1543630	488531	94.4	4.0	12/27/2000	55.18	6523.48	2.0	6578.66	---	--- A	-	---
SQ	1543507	488814	95.0	5.0	12/05/2000	55.10	6524.10	0.9	6579.20	95	6483.3 A	55-95	40.8
SR	1543611	488669	95.0	5.0	11/02/1998	58.25	6520.94	0.8	6579.19	95	6483.4 A	50-90	37.5
SS	1543374	488666	101.0	5.0	12/05/2000	66.88	6511.50	1.2	6578.38	90	6487.2 A	51-101	24.3
ST	1543215	488688	97.0	5.0	12/05/2000	57.62	6521.69	2.2	6579.31	96	6481.1 A	55-97	40.6

TABLE 4.1-1. BASIC WELL DATA FOR THE ALLUVIAL HOMESTAKE WELLS. (cont'd.)

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO BASE OF ALLUVIUM (FT-LSD)	ELEV. TO BASE OF ALLUVIUM (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	SATURATED THICKNESS
* SU	1542946	488953	110.0	5.0	09/05/1995	35.60	6542.50	0.7	6578.10	110	6467.4 A	50-110	75.1
SV	1543676	488813	78.2	6.0	07/18/2000	55.70	6523.55	1.7	6579.25	100	6477.6 A	55-105	46.0
SW	1543783	488812	81.9	6.0	07/03/1994	60.70	6520.59	2.9	6581.29	75	6503.4 A	35-80	17.2
SX	1544510	489025	45.0	5.0	---	---	---	1.0	6581.49	40	6540.5 A	20-40	---
SZ	1544367	488833	62.6	5.0	12/05/2000	49.63	6531.84	0.4	6581.47	60	6521.1 A	40-70	10.8
T	1542536	492260	70.2	4.0	03/01/1999	61.95	6517.28	2.4	6579.23	68	6508.8 A	61-71	8.4
T1	1543285	490027	---	5.0	12/12/1986	146.13	6517.78	1.0	6663.91	161	6501.9 A	121-171	15.9
T2	1543538	489303	186.0	5.0	12/16/1996	136.64	6528.18	1.0	6664.82	180	6483.8 A	100-186	44.4
TA	1542471	492426	62.4	5.0	12/05/2000	31.80	6548.50	2.4	6580.30	55	6522.9 A	35-65	25.6
TB	1542351	492616	64.4	5.0	12/05/2000	32.32	6551.25	1.9	6583.57	55	6526.7 A	35-65	24.6
W	1542302	487297	99.3	4.0	12/14/2000	46.33	6525.81	0.3	6572.14	117	6454.8 A	58-118	71.0
W2	1542251	486654	79.1	4.0	03/02/1998	56.21	6515.29	0.9	6571.50	---	--- A	-	---
WN4	1543958	489961	142.4	5.0	08/18/2000	132.14	6530.64	2.0	6662.78	165	--- T	40-100	---
										165	6495.8 A	50-190	34.9
WR1	1541280	488529	---	5.0	06/27/1989	46.54	6521.86	0.8	6568.40	---	--- A	-	---
WR1R	1541302	488536	85.0	5.0	12/05/2000	28.62	6539.85	0.0	6568.47	85	6483.5 A	-	56.4
WR2	1541290	488678	94.1	5.0	12/05/2000	2.52	6566.07	0.9	6568.59	85	6482.7 A	65-95	83.4
WR3	1541490	488671	82.3	5.0	12/05/2000	32.96	6536.58	2.7	6569.54	83	6483.8 A	63-93	52.7
WR4	1541788	488678	62.0	5.0	12/05/2000	1.92	6570.89	0.0	6572.81	---	--- A	-	---
WR5	1541813	488683	72.4	5.0	12/05/2000	38.69	6532.54	0.6	6571.23	80	6490.6 A	60-80	41.9
WR6	1541902	488566	96.8	5.0	12/05/2000	3.04	6569.99	1.3	6573.03	84	6487.7 A	55-85	82.3
WR7	1541997	488456	97.3	5.0	12/05/2000	38.91	6534.82	2.0	6573.73	84	6487.8 A	55-85	47.0
WR8	1542095	488328	110.2	5.0	12/05/2000	38.72	6533.88	0.4	6572.60	100	6472.2 A	50-100	61.7
WR9	1542185	488217	111.3	5.0	12/05/2000	46.82	6526.23	0.8	6573.05	100	6472.3 A	50-100	54.0
WR10	1542389	487961	120.6	5.0	12/05/2000	48.52	6524.67	0.7	6573.19	110	6462.5 A	60-110	62.2
WR11	1542586	487728	120.5	5.0	12/05/2000	48.29	6526.20	0.3	6574.49	110	6464.2 A	60-110	62.0
WR12	1541280	488277	96.7	4.0	10/02/2000	12.70	6555.49	1.1	6568.19	85	6482.1 A	55-85	73.4
WR13	1541068	488861	70.0	5.0	12/05/2000	18.98	6550.19	3.2	6569.17	60	6506.0 A	50-60	44.2
WR14	1540638	488863	70.0	5.0	12/05/2000	17.75	6549.16	2.3	6566.91	61	6503.6 A	50-60	45.5
WR15	1541280	488016	70.0	4.0	10/02/2000	2.20	6568.99	0.0	6571.19	75	6496.2 A	60-75	72.8
WR16	1543051	487495	122.3	5.0	12/05/2000	44.22	6528.56	1.9	6572.78	100	6470.9 A	40-120	57.7
WR17	1543328	487485	124.4	5.0	12/05/2000	4.71	6568.38	2.2	6573.09	75	6495.9 A	40-120	72.5
WR18	1543597	487465	73.6	5.0	12/05/2000	2.43	6570.48	2.2	6572.91	70	6500.7 A	20-70	69.8
WR19	1543873	487458	87.8	5.0	12/05/2000	3.91	6571.02	2.2	6574.93	74	6498.7 A	25-85	72.3
WR20	1544059	487449	102.3	5.0	12/05/2000	8.26	6566.21	2.1	6574.47	80	6492.4 A	42-102	73.8
WR21	1544241	487449	88.9	5.0	12/05/2000	24.00	6552.05	2.1	6576.05	77	6496.9 A	28-88	55.1

TABLE 4.1-1. BASIC WELL DATA FOR THE ALLUVIAL HOMESTAKE WELLS. (cont'd.)

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO BASE OF ALLUVIUM (FT-LSD)	ELEV. TO BASE OF ALLUVIUM (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	SATURATED THICKNESS
WR22	1544434	487462	91.5	5.0	12/05/2000	35.65	6542.24	2.4	6577.89	86	6489.5 A	30-90	52.7
WR23	1544632	487445	94.3	5.0	12/05/2000	3.30	6573.17	2.2	6576.47	77	6497.3 A	32-92	75.9
WR24	1544938	487438	89.2	5.0	12/05/2000	32.00	6556.67	3.0	6588.67	82	6503.7 A	50-90	53.0
X	1540512	491892	50.7	4.0	12/05/2000	24.00	6547.61	1.7	6571.61	---	--- A	-	---
X1	1540671	492129	54.0	5.0	12/05/2000	8.45	6565.09	3.9	6573.54	47	6522.6 A	37-47	42.5
X2	1540836	492363	53.0	6.0	12/05/2000	10.13	6561.80	1.9	6571.93	45	6525.0 A	40-45	36.8
X3	1540992	492599	52.0	5.0	12/05/2000	6.00	6567.28	2.0	6573.28	42	6529.3 A	32-42	38.0
X4	1541210	492814	54.0	5.0	12/05/2000	21.70	6555.24	3.2	6576.94	45	6528.7 A	37-45	26.5
X5	1541408	492821	44.0	6.0	12/05/2000	16.40	6561.21	3.6	6577.61	35	6539.0 A	24-36	22.2
X6	1541609	492828	46.0	6.0	12/05/2000	9.10	6569.62	3.5	6578.72	35	6540.2 A	22-37	29.4
X7	1541808	492851	56.0	6.0	12/05/2000	8.60	6571.83	3.4	6580.43	45	6532.0 A	32-46	39.8
X8	1542007	492852	61.0	5.0	12/05/2000	13.00	6568.76	3.4	6581.76	51	6527.4 A	32-52	41.4
X9	1542194	492852	61.0	5.0	12/05/2000	27.00	6555.92	3.6	6582.92	51	6528.3 A	24-52	27.6
X10	1542352	492835	61.0	5.0	12/05/2000	27.00	6555.43	3.6	6582.43	53	6525.8 A	30-55	29.6
X11	1542553	492782	57.0	5.0	12/05/2000	0.50	6581.50	3.0	6582.00	53	6526.0 A	17-57	55.5
X12	1542861	492852	57.0	5.0	12/05/2000	0.50	6582.83	3.0	6583.33	53	6527.3 A	17-57	55.5
X13	1543640	493665	56.0	5.0	12/05/2000	39.46	6547.48	2.5	6586.94	51	6533.4 A	16-56	14.0
X14	1544002	493777	56.0	5.0	12/05/2000	38.33	6547.87	2.1	6586.20	49	6535.1 A	16-56	12.8
X15	1544222	493800	57.0	5.0	12/05/2000	39.21	6543.70	2.3	6582.91	51	6529.6 A	17-57	14.1
X16	1544473	493795	47.0	5.0	12/05/2000	39.45	6545.34	2.3	6584.79	47	6535.5 A	22-47	9.8
X17	1544356	493793	55.0	5.0	12/05/2000	38.52	6547.32	3.3	6585.84	48	6534.6 A	35-55	12.7
X18	1544593	493569	57.0	5.0	12/05/2000	27.19	6558.89	3.8	6586.08	49	6533.3 A	37-57	25.6
X19	1544753	493437	63.0	5.0	12/05/2000	31.21	6553.99	4.5	6585.20	56	6524.8 A	33-63	29.2
X20	1544855	493256	71.0	5.0	12/05/2000	46.31	6539.42	3.5	6585.73	64	6518.2 A	31-71	21.2
X21	1543606	493894	55.0	5.0	12/05/2000	38.99	6547.34	2.7	6586.33	51	6532.6 A	35-55	14.7
X22	1543874	493946	56.0	5.0	12/05/2000	39.21	6546.49	2.6	6585.70	50	6533.1 A	36-56	13.4
X23	1544064	494012	56.0	5.0	12/05/2000	38.96	6546.98	2.8	6585.94	47	6536.1 A	36-56	10.8
X24	1544244	494011	56.0	5.0	12/05/2000	39.94	6545.78	2.6	6585.72	46	6537.1 A	36-56	8.7
X25	1544445	494042	53.0	5.0	12/05/2000	39.41	6546.22	2.8	6585.63	46	6536.9 A	33-53	9.3
X26	1544693	493702	53.0	5.0	12/05/2000	35.34	6552.30	2.8	6587.64	43	6541.8 A	33-53	10.5
X27	1544953	493374	71.0	5.0	12/05/2000	46.27	6539.03	5.1	6585.30	64	6516.2 A	31-71	22.8
X28	1540545	491971	56.0	5.0	12/05/2000	16.80	6553.16	2.0	6569.96	48	6520.0 A	16-56	33.2
X29	1540735	492256	51.0	5.0	12/05/2000	8.00	6562.03	2.0	6570.03	43	6525.0 A	11-51	37.0
X30	1540897	492493	51.0	5.0	12/05/2000	8.00	6564.53	2.0	6572.53	43	6527.5 A	11-51	37.0
X31	1541052	492731	51.0	5.0	12/05/2000	16.50	6557.63	2.0	6574.13	44	6528.1 A	11-51	29.5
Y	1541025	491256	60.8	4.0	12/05/2000	38.61	6534.27	2.4	6572.88	57	6513.5 A	54-59	20.8

TABLE 4.1-1. BASIC WELL DATA FOR THE ALLUVIAL HOMESTAKE WELLS. (cont'd.)

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO BASE OF ALLUVIUM (FT-LSD)	ELEV. TO BASE OF ALLUVIUM (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	SATURATED THICKNESS
Z	1540290	490701	73.9	4.0	12/05/2000	5.00	6564.22	0.6	6569.22	68	6500.6 A	60-70	63.6

Note: A = Alluvial Aquifer
M = Middle Chinle Aquifer
T = Tailings Aquifer
* = Well Abandoned
? = Uncertain Identity

TABLE 4.1-2. BASIC WELL DATA FOR THE ALLUVIAL AQUIFER BROADVIEW AND FELICE ACRES WELLS.

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO BASE OF ALLUVIUM (FT-LSD)	ELEV. TO BASE OF ALLUVIUM (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	SATURATED THICKNESS
						Broadview							
0410	1537440	489840	105.0	6.0	12/06/1994	33.36	6526.30	1.0	6559.66	75	6483.7 A	90-105	42.6
0411	1537400	489510	70.0	6.0	08/07/1996	35.10	6524.90	0.0	6560.00	70	6490.0 A	65-70	34.9
0412	1537940	488830	---	6.0	---	---	---	2.8	6561.00	---	--- A	-	---
0413	1537900	490100	---	---	04/27/1994	35.25	6530.75	0.0	6566.00	---	--- A	-	---
0421	1538450	491100	88.0	5.0	01/30/1996	37.58	6534.42	0.9	6572.00	92	6479.1 A	72-102	55.3
0422	1538440	490810	80.0	4.0	04/06/1994	32.82	6537.18	1.0	6570.00	75	6494.0 A	60-80	43.2
0423	1538230	490800	---	---	---	---	---	0.0	6570.00	---	--- A	-	---
0425	1538430	490630	90.0	6.0	04/07/1994	32.42	6534.58	1.0	6567.00	71	6495.0 A	50-90	39.6
0426	1538230	490620	100.0	---	11/10/1981	30.65	6534.35	0.0	6565.00	80	6485.0 A	80-100	49.4
0427	1538450	490410	121.0	6.0	04/12/1994	35.00	6535.00	0.0	6570.00	81	6489.0 A	62-120	46.0
0428	1538280	490390	110.0	4.0	---	---	---	0.0	6570.00	66	6504.0 A	83-104	---
0429	1538210	490430	100.0	6.0	09/01/1995	37.21	6532.79	0.0	6570.00	74	6496.0 A	58-75	36.8
0430	1538469	490300	145.0	---	---	---	---	0.0	6568.00	---	--- A	-	---
										114	6454.0 U	-	---
0431	1538045	490090	130.0	6.0	04/12/1994	35.00	6533.00	0.0	6568.00	60	6508.0 A	125-130	25.0
										60	6450.0 U	125-130	83.0
0432	1538210	489840	---	---	---	---	---	0.0	6565.00	---	--- A	-	---
0433	1538220	489620	90.0	4.0	05/02/1997	36.05	6527.95	1.5	6564.00	75	6487.5 A	58-84	40.5
0435	1538220	489300	85.0	6.0	08/07/1996	34.75	6526.25	1.3	6561.00	85	6474.7 A	-	51.5
0438	1537940	490810	120.0	4.0	---	---	---	0.0	6571.00	105	6466.0 A	70-100	---
0439	1537940	490490	97.0	4.0	08/07/1996	39.80	6527.20	1.0	6567.00	75	6491.0 A	77-97	36.2
0440	1537700	490230	---	---	---	---	---	0.0	6566.00	---	--- A	-	---
0441	1537720	490090	116.0	6.0	01/30/1995	35.19	6530.81	1.0	6566.00	78	6487.0 A	106-116	43.8
0442	1537940	489840	100.0	4.0	08/07/1996	37.15	6527.85	0.0	6565.00	80	6485.0 A	70-100	42.8
0443	1537940	489280	---	4.0	---	---	---	0.0	6561.00	75	6486.0 A	60-80	---
0444	1537940	489180	80.0	---	05/18/1994	28.84	6532.16	0.0	6561.00	---	--- A	-	---
0445	1537720	489300	108.0	6.0	---	---	---	0.0	6561.00	79	6482.0 A	75-105	---
0446	1537720	488850	110.0	6.0	09/08/1983	41.28	6518.72	0.0	6560.00	60	6500.0 U	60-95	18.7
										60	6500.0 A	60-95	18.7
0447	1537490	490480	142.0	6.0	04/11/1985	41.18	6526.82	0.0	6568.00	---	--- A	120-142	---
										80	6488.0 U	120-142	38.8
0448	1537400	489100	---	---	---	---	---	0.0	6561.00	---	--- A	-	---
0450	1537480	490710	---	6.0	01/25/1995	42.29	6528.71	1.0	6571.00	85	6485.0 A	70-105	43.7
* 0451	1537700	490600	---	---	---	---	---	0.0	0.00	---	--- A	-	---
0452	1537880	490420	100.0	4.0	08/07/1996	41.20	6525.80	0.8	6567.00	85	6481.2 A	40-100	44.6

TABLE 4.1-2. BASIC WELL DATA FOR THE ALLUVIAL AQUIFER BROADVIEW AND FELICE ACRES WELLS. (cont'd.)

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO BASE OF ALLUVIUM (FT-LSD)	ELEV. TO BASE OF ALLUVIUM (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	SATURATED THICKNESS
0453	1538375	490300	110.0	4.0	08/30/2000	34.08	6533.92	0.9	6568.00	80	6487.1 A	60-110	46.8
* 0454	1537920	489025	---	4.0	---	---	---	0.0	0.00	---	--- A	-	---
SUB1	1537620	489100	---	4.0	08/31/2000	33.15	6527.85	1.0	6561.00	---	--- A	-	---
SUB2	1537395	490320	---	4.0	07/17/1998	40.92	6526.65	1.0	6567.57	---	--- A	-	---
SUB3	1538280	489420	84.0	6.0	08/31/2000	28.18	6528.89	1.0	6557.07	72	6484.1 A	56-72	44.8
SUB4	1538440	489840	100.0	4.0	09/21/1978	49.11	6515.89	1.0	6565.00	78	6486.0 A	60-85	29.9
SUB5	1537940	489470	86.0	4.0	---	---	---	0.0	6562.31	66	6496.3 A	55-80	---
SUB6	1537940	490090	82.0	4.0	---	---	---	0.0	6566.00	80	6486.0 A	52-82	---
SUB7	1537940	490630	98.0	4.0	---	---	---	0.0	6568.00	85	6483.0 A	78-98	---
SUB8	1538450	490210	150.0	5.0	---	---	---	0.0	6568.00	72	6496.0 A	60-90	---
SUB9	---	---	---	---	---	---	---	0.0	0.00	---	--- A	-	---
						Felice Acres							
0481	1538350	490180	320.0	4.0	---	---	---	0.0	6568.00	110	6458.0 A	270-310	---
										110	6298.0 M	270-310	---
0482	1536985	489604	260.0	5.0	04/11/1996	35.85	6526.81	0.0	6562.66	80	6482.7 A	220-260	44.2
										80	6352.7 M	220-260	174.2
0483	1536586	489753	280.0	---	07/24/1996	36.93	6525.73	0.0	6562.66	---	--- A	-	---
										---	--- M	-	---
0490	1536540	489756	63.0	4.0	10/18/2000	36.19	6526.23	1.2	6562.42	75	6486.2 A	20-80	40.0
0491	1537025	489662	63.0	4.0	12/29/1984	40.33	6522.29	1.3	6562.62	40	6521.3 A	30-63	1.0
0492	1537220	489280	60.0	4.0	03/03/1999	32.13	6528.55	1.2	6560.68	55	6504.5 A	40-60	24.1
0495	1537400	497100	---	---	---	---	---	0.0	6571.00	---	--- A	-	---
0496	1534650	489603	94.4	5.0	06/05/2000	77.56	6484.96	1.6	6562.52	86	6474.9 A	53-93	10.0
0497	1535039	489503	94.0	5.0	08/15/2000	55.68	6506.94	2.0	6562.62	89	6471.6 A	64-94	35.3
CW44	1535048	488891	208.0	6.0	12/14/2000	55.48	6505.26	2.5	6560.74	94	6464.2 A	-	41.0
										94	6428.2 M	69-208	77.0

Note: A = Alluvial Aquifer
M = Middle Chinle Aquifer
T = Tailings Aquifer
* = Well Abandoned
? = Uncertain Identity

TABLE 4.1-3. BASIC WELL DATA FOR THE ALLUVIAL AQUIFER MURRAY ACRES AND PLEASANT VALLEY WELLS.

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO BASE OF ALLUVIUM (FT-LSD)	ELEV. TO BASE OF ALLUVIUM (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	SATURATED THICKNESS
Murray													
0801	1541020	488600	100.0	4.0	12/21/1994	36.85	6530.88	0.7	6567.73	85	6482.0 A	80-100	48.9
0802	1540790	488190	98.0	6.0	05/22/1997	40.20	6522.52	1.0	6562.72	81	6480.7 A	75-81	41.8
0803	1540800	487430	290.0	6.0	09/19/1983	84.86	6476.14	0.0	6561.00	85	--- C	85-180	---
										85	6476.0 A	85-180	0.1
0804	1540790	486790	137.0	6.0	05/22/1996	45.88	6516.12	2.0	6562.00	85	6475.0 A	125-136	41.1
0805	1540695	486373	140.0	5.0	10/06/1994	59.34	6507.66	1.0	6567.00	110	6456.0 A	100-140	51.7
0810	1540290	486700	105.0	6.0	---	---	---	0.0	6562.00	81	6481.0 A	75-101	---
0811	1540320	486373	140.0	4.0	---	---	---	0.0	6563.00	110	6453.0 A	100-140	---
0815	1539090	488100	255.0	4.0	05/22/1991	29.14	6526.12	1.0	6555.26	---	--- A	-	---
0844	1538376	487002	75.0	4.0	11/28/2000	33.90	6522.23	1.2	6556.13	70	6484.9 A	35-75	37.3
0845	1537280	487833	65.0	4.0	07/25/2000	34.16	6522.89	1.7	6557.05	55	6500.4 A	45-65	22.5
AW	1540235	488015	156.0	6.0	01/05/1998	15.00	6548.43	0.1	6563.43	63	6500.3 A	-	48.1
										63	6463.3 U	66-155	85.1
HW	1540900	487430	115.0	6.0	11/09/1994	40.00	6517.00	0.0	6557.00	95	6462.0 A	60-94	55.0
Pleasant Valley													
0688	1541257	483955	105.0	5.0	11/28/2000	59.36	6503.26	2.9	6562.62	95	6464.7 A	65-105	38.5
0831	1540090	486030	---	---	09/06/1983	54.95	6506.05	1.0	6561.00	---	--- A	-	---
0833	1539250	485350	110.0	6.0	12/10/1996	46.61	6511.39	1.0	6558.00	103	6454.0 A	60-90	57.4
0834	1540260	484800	100.0	4.0	---	---	---	0.0	6560.00	80	6480.0 A	60-80	---
0835	1539610	484795	98.0	5.0	05/02/2000	49.74	6509.26	1.0	6559.00	94	6464.0 A	73-94	45.3
0836	1540250	484010	90.0	4.0	---	---	---	0.0	6558.00	80	6478.0 A	65-80	---
0838	1540600	485640	100.0	---	07/22/1995	49.03	6513.97	1.0	6563.00	---	--- A	-	---
0839	1541120	485465	100.0	5.0	12/19/1994	50.00	6510.00	1.3	6560.00	94	6464.7 A	80-96	45.3
0840	1540440	485360	98.0	6.0	09/08/1983	47.32	6513.68	1.0	6561.00	94	6466.0 A	73-94	47.7
0841	1540835	485020	100.0	---	07/22/1995	54.66	6506.34	0.0	6561.00	---	--- A	-	---
0843	1541265	485995	120.0	4.0	06/27/1989	52.40	6517.60	1.0	6570.00	112	6457.0 A	100-110	60.6

Note: A = Alluvial Aquifer
M = Middle Chinle Aquifer
T = Tailings Aquifer
* = Well Abandoned
? = Uncertain Identity

TABLE 4.1-4. BASIC WELL DATA FOR THE ALLUVIAL AQUIFER REGIONAL WELLS.

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO BASE OF ALLUVIUM (FT-LSD)	ELEV. TO BASE OF ALLUVIUM (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	SATURATED THICKNESS
0531	1541086	478262	---	---	10/30/1996	79.24	6474.55	2.0	6553.79	---	--- A	-	---
0532	1518700	482400	---	---	---	---	---	0.0	6515.00	---	--- A	-	---
0533	---	---	---	---	---	---	---	0.0	0.00	---	--- A	-	---
0631	1532234	483756	118.0	6.0	09/06/2000	101.30	6439.80	2.0	6541.10	109	6430.1 A	58-118	9.7
0632	1531850	483767	110.0	6.0	09/06/2000	99.58	6441.72	3.0	6541.30	102	6436.3 A	70-110	5.4
0633	1541467	479642	83.0	8.0	05/02/2000	74.83	6482.73	0.0	6557.56	95	6462.6 A	11-83	20.2
0634	1541652	480363	103.0	4.5	09/12/2000	71.28	6488.79	2.8	6560.07	95	6462.3 A	80-100	26.5
0635	1535363	478401	63.0	12.0	---	---	---	---	6546.25	---	--- A	4-63	---
0636	1545374	476038	127.0	4.5	02/10/2000	95.05	6478.39	2.3	6573.44	119	6452.1 A	103-123	26.2
0637	1545409	474710	128.7	4.5	02/10/2000	99.21	6475.99	2.5	6575.20	118	6454.7 A	104-124	21.3
0640	1537790	491961	84.0	5.0	07/20/2000	52.03	6527.94	2.2	6579.97	77	6500.8 A	64-84	27.2
0641	1536494	491110	95.0	5.0	07/25/2000	50.39	6522.97	2.5	6573.36	87	6483.9 A	65-95	39.1
0642	1536104	490932	95.0	5.0	07/25/2000	50.92	6520.96	2.4	6571.88	89	6480.5 A	65-95	40.5
0643	1533760	487386	108.0	5.0	10/31/2000	68.10	6483.23	1.5	6551.33	93	6456.8 A	58-108	26.4
0644	1533481	485450	110.0	5.0	10/31/2000	68.81	6475.09	2.2	6543.90	102	6439.7 A	55-110	35.4
0645	1532924	485282	80.0	5.0	10/19/1998	66.48	6477.31	2.5	6543.79	70	6471.3 A	60-80	6.0
0646	1533246	484953	100.0	5.0	10/31/2000	70.77	6472.58	1.5	6543.35	91	6450.9 A	60-100	21.7
0647	1536623	478308	140.0	4.5	09/06/2000	106.18	6445.73	1.4	6551.91	132	6418.5 A	80-140	27.2
0648	1534730	478343	120.0	4.5	09/06/2000	98.79	6449.00	0.5	6547.79	120	6427.3 A	80-120	21.7
0649	1534730	479798	124.0	4.5	09/06/2000	81.92	6461.37	0.3	6543.29	115	6428.0 A	84-124	33.4
0650	1536779	482135	109.0	4.5	04/14/1998	71.10	6476.01	2.2	6547.11	103	6441.9 A	89-109	34.1
0652	1531170	483779	88.0	5.0	10/31/2000	77.82	6460.33	1.5	6538.15	79	6457.6 A	60-88	2.7
0653	1533283	486570	206.0	6.0	09/06/2000	169.00	6375.97	1.3	6544.97	97	6446.7 A	69-206	0.0
										97	6408.7 L	-	0.0
0654	1541994	478636	120.0	4.5	09/07/2000	73.81	6476.69	1.4	6550.50	106	6443.1 A	60-120	33.6
0655	1541620	479830	96.0	8.0	05/02/2000	75.15	6483.03	---	6558.18	88	--- A	21-84	---
0656	1542578	478333	88.0	8.0	05/02/2000	77.32	6476.75	---	6554.07	88	--- A	6-88	---
0657	1537497	478392	128.0	6.0	06/05/2000	94.08	6457.73	2.2	6551.81	120	6429.6 A	87-128	28.1
0657A	1537083	478412	35.0	8.0	04/13/1999	37.00	6512.00	---	6549.00	---	--- A	17-35	---
0658	1535922	478436	130.0	6.0	09/02/2000	101.00	6449.18	0.4	6550.18	129	6420.8 A	89-130	28.4
0658A	1535589	478423	30.6	12.0	---	---	---	---	6546.10	---	--- A	14-31	---
0659	1541689	480772	101.0	4.5	09/12/2000	70.06	6490.11	2.0	6560.17	97	6461.2 A	61-101	28.9
0680	1543850	478746	80.0	4.5	10/25/1996	77.39	6481.48	2.0	6558.87	75	6481.9 A	50-80	0.0
0681	1540676	482734	117.0	6.0	09/24/1998	64.18	6496.34	2.1	6560.52	111	6447.4 A	67-117	48.9
0682	1543125	477489	94.0	4.0	05/02/2000	79.05	6474.92	2.8	6553.97	102	6449.2 A	54-94	25.7
0683	1540198	476217	120.0	6.0	10/30/2000	84.42	6471.62	2.0	6556.04	140	6414.0 A	80-120	57.6

TABLE 4.1-4. BASIC WELL DATA FOR THE ALLUVIAL AQUIFER REGIONAL WELLS. (cont'd.)

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO BASE OF ALLUVIUM (FT-LSD)	ELEV. TO BASE OF ALLUVIUM (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	SATURATED THICKNESS
0684	1540273	478499	143.0	6.0	10/30/2000	82.26	6471.02	2.0	6553.28	118	6433.3 A	83-143	37.7
0685	1539098	478170	100.0	4.5	11/02/2000	88.40	6468.17	1.7	6556.57	116	6438.9 A	60-100	29.3
0686	1545319	475438	115.0	4.5	09/26/2000	103.61	6475.19	1.8	6578.80	136	6441.0 A	75-115	34.2
0687	1539011	477276	102.0	6.0	11/02/2000	87.73	6468.23	2.1	6555.96	120	6433.8 A	62-102	34.4
0689	1530024	478478	80.0	4.5	07/20/2000	70.26	6471.76	2.6	6542.02	75	6464.4 A	60-80	7.3
0692	1535892	493175	90.0	5.0	07/20/2000	65.90	6518.92	2.5	6584.82	80	6502.3 A	58-90	16.6
0846	1537219	484730	75.0	4.0	11/28/2000	43.84	6505.08	1.1	6548.92	65	6482.8 A	40-65	22.3
0847	1534736	488508	92.0	5.0	11/22/1996	53.88	6504.39	2.6	6558.27	80	6475.7 A	52-92	28.7
0848	1534634	490660	92.0	5.0	07/20/2000	58.45	6514.04	2.6	6572.49	91	6478.8 A	52-92	35.2
0851	1534692	483909	91.0	5.0	08/23/2000	72.36	6474.08	3.3	6546.44	80	6463.1 A	41-91	10.9
0852	1535610	493989	74.0	5.0	11/22/1996	73.26	6516.88	2.5	6590.14	70	6517.7 A	54-74	0.0
0855	1532111	484184	105.0	5.0	08/23/2000	79.03	6462.08	2.1	6541.11	97	6442.0 A	70-105	20.1
0861	1534332	488702	100.0	5.0	08/22/2000	67.21	6492.64	2.3	6559.85	65	6492.6 A	50-100	0.1
0862	1534265	487800	110.0	5.0	08/22/2000	67.10	6489.08	3.3	6556.18	97	6455.9 A	63-103	33.2
0863	1533867	487912	110.0	5.0	08/25/2000	67.80	6488.76	2.5	6556.56	94	6460.1 A	63-103	28.6
0864	1533735	486464	95.0	5.0	08/22/2000	66.60	6480.12	1.9	6546.72	78	6466.9 A	44-84	13.3
0865	1534123	488429	97.0	5.0	08/22/2000	65.18	6491.60	2.2	6556.78	88	6466.6 A	37-97	25.0
0866	1534494	488340	120.0	5.0	08/22/2000	62.63	6495.49	1.8	6558.12	80	6476.3 A	33-113	19.2
0867	1533762	488409	88.0	5.0	08/22/2000	64.80	6491.10	2.0	6555.90	86	6467.9 A	48-88	23.2
0868	1534848	491033	103.0	5.0	08/23/2000	60.00	6514.74	2.2	6574.74	94	6478.5 A	53-103	36.2
0869	1533251	486073	94.0	5.0	08/22/2000	69.06	6475.43	2.0	6544.49	99	6443.5 A	44-94	31.9
* 0870	1532680	484906	93.0	5.0	01/11/1996	68.56	6475.60	1.9	6544.16	95	6447.3 A	69-89	28.3
0871	1533603	485400	100.0	5.0	01/11/1996	66.86	6477.85	2.4	6544.71	93	6449.3 A	60-100	28.5
* 0872	1533092	485407	100.0	5.0	01/11/1996	65.80	6477.51	1.8	6543.31	96	6445.5 A	55-100	32.0
* 0873	1533286	484505	100.0	5.0	01/11/1996	67.55	6475.46	1.9	6543.01	96	6445.1 A	60-100	30.3
* 0874	1533968	484925	105.0	5.0	01/11/1996	68.68	6476.66	2.2	6545.34	110	6433.1 A	55-105	43.5
* 0875	1532785	483634	125.0	5.0	01/11/1996	69.85	6472.99	1.7	6542.84	116	6425.1 A	65-125	47.9
0876	1532853	486088	95.0	5.0	08/22/2000	67.54	6476.72	1.9	6544.26	85	6457.4 A	58-88	19.4
0877	1533068	488067	70.0	5.0	08/18/1998	63.58	6489.50	1.9	6553.08	65	6486.2 A	58-68	3.3
0879	1532401	486104	70.0	5.0	08/18/1997	64.68	6479.87	2.2	6544.55	62	6480.4 A	48-68	0.0
0881	1542034	481478	96.0	4.5	09/27/2000	73.08	6491.96	2.0	6565.04	103	6460.0 A	76-96	31.9
0882	1541404	482396	110.0	4.5	09/27/2000	64.66	6496.50	2.0	6561.16	98	6461.2 A	70-110	35.3
0883	1540097	483039	100.0	5.0	09/27/2000	59.04	6498.09	1.9	6557.13	96	6459.3 A	60-90	38.8
0884	1542677	481498	90.0	5.0	09/27/2000	73.58	6492.52	0.9	6566.10	85	6480.2 A	58-88	12.4
0885	1541919	483474	100.0	5.0	09/27/2000	64.34	6500.30	1.5	6564.64	95	6468.1 A	70-100	32.2
0886	1542327	482487	90.0	5.0	09/27/2000	68.41	6496.14	1.5	6564.55	87	6476.1 A	60-90	20.1

TABLE 4.1-4. BASIC WELL DATA FOR THE ALLUVIAL AQUIFER REGIONAL WELLS. (cont'd.)

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO BASE OF ALLUVIUM (FT-LSD)	ELEV. TO BASE OF ALLUVIUM (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	SATURATED THICKNESS
0887	1543063	482469	67.0	5.0	03/12/1998	69.21	6498.52	1.5	6567.73	60	6506.2 A	42-67	0.0
0888	1542285	479335	105.0	5.0	09/26/2000	77.47	6479.86	1.1	6557.33	90	6466.2 A	75-105	13.6
0889	1540047	480222	65.0	5.0	10/24/1996	63.31	6486.32	1.5	6549.63	60	6488.2 A	35-65	0.0
0890	1541365	480088	101.0	5.0	09/27/2000	73.70	6484.73	1.7	6558.43	93	6463.7 A	81-101	21.0
0893	1541934	482244	98.0	4.5	09/27/2000	68.70	6495.27	2.1	6563.97	93	6468.9 A	78-98	26.4
0894	1541976	478317	78.0	4.5	09/26/2000	77.60	6476.69	3.0	6554.29	97	6454.3 A	58-78	22.4
0895	1541521	476222	104.0	5.0	09/26/2000	80.07	6473.77	2.4	6553.84	116	6435.4 A	61-101	38.3
0896	1542246	476237	113.0	5.0	09/26/2000	81.18	6474.43	2.0	6555.61	117	6436.6 A	73-113	37.8
0897	1543819	478237	93.0	4.0	09/27/1998	83.28	6478.97	2.0	6562.25	70	6490.3 A	63-93	0.0
0899	1543801	477288	110.0	4.0	09/26/2000	95.30	6475.54	2.0	6570.84	120	6448.8 A	70-110	26.7
0905	1532700	480860	120.0	5.0	---	---	---	0.0	6545.00	120	6425.0 A	100-120	---
0906	1532900	489450	---	---	08/29/1995	74.65	6462.75	0.0	6537.40	---	--- A	-	---
0909	1531900	483400	140.0	4.0	11/19/1982	77.45	6461.45	0.0	6538.90	112	6426.9 A	80-135	34.6
										112	6426.9 L	80-135	34.6
0910	1528800	481150	138.0	5.0	---	---	---	0.0	6535.00	132	6403.0 A	120-134	---
0912	1471000	478250	---	---	---	---	---	0.0	6530.00	---	--- A	-	---
0913	1555800	500950	---	8.0	01/24/1996	38.40	6604.60	0.3	6643.00	---	--- A	-	---
0914	1555500	500850	---	6.0	05/09/2000	40.06	6601.94	1.4	6642.00	---	--- A	-	---
0915	1552650	499650	100.0	4.0	---	---	---	0.0	6625.00	70	6555.0 A	55-85	---
0916	1552350	499600	160.0	4.0	04/26/1994	40.00	6585.00	0.0	6625.00	---	--- A	45-70	---
0917	1542200	514600	---	---	---	---	---	0.0	6800.00	---	--- A	-	---
0920	1555800	496900	---	7.0	05/11/1994	33.40	6594.20	0.7	6627.60	---	--- A	-	---
0921	1555400	495800	---	5.0	05/09/2000	38.60	6585.40	1.9	6624.00	---	--- A	-	---
0922	1555200	492500	---	6.0	05/10/2000	53.00	6568.70	1.7	6621.70	---	--- A	-	---
0924	1547500	438900	135.0	4.0	---	---	---	0.0	6592.90	112	6480.9 A	94-114	---
0925	1548600	480800	150.0	4.0	---	---	---	0.0	6601.40	140	6461.4 A	126-141	---
0926	1547500	482700	134.0	4.0	---	---	---	0.0	6596.90	132	6464.9 A	123-132	---
0935	1540115	476629	300.0	16.0	10/30/2000	86.70	6471.42	2.6	6558.12	125	6430.5 A	95-132	40.9
0936	1543621	472978	160.0	5.0	---	---	---	0.0	6573.38	160	6413.4 A	100-160	---
0939	1539750	483200	97.0	8.0	07/25/1996	59.31	6497.69	2.3	6557.00	---	--- A	-	---
0940	1537750	482850	70.0	---	07/24/1996	57.30	6495.70	8.8	6553.00	---	--- A	-	---
0942	1538300	483710	102.0	---	---	---	---	0.0	6550.20	95	6455.2 A	85-95	---
0947	1536206	491841	100.0	4.0	07/27/1994	54.63	6520.55	0.0	6575.18	95	6480.2 A	70-100	40.4
0950	1560400	498300	81.0	5.0	07/12/2000	25.70	6631.30	0.5	6657.00	---	--- A	-	---
0952	1534550	477800	140.0	---	---	---	---	0.0	6550.00	---	--- A	-	---
0975	1539640	482880	---	---	---	---	---	0.0	6556.00	---	--- A	-	---

TABLE 4.1-4. BASIC WELL DATA FOR THE ALLUVIAL AQUIFER REGIONAL WELLS. (cont'd.)

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO BASE OF ALLUVIUM (FT-LSD)	ELEV. TO BASE OF ALLUVIUM (FT-MSL)		CASING PERFOR-ATIONS (FT-LSD)	SATURATED THICKNESS
0976	1539630	483100	115.0	---	---	---	---	0.0	0.00	---	---	A	-	---
0977	1539400	482730	---	---	12/09/1995	61.47	6495.53	1.0	6557.00	---	---	A	-	---
0979	1539010	483280	105.0	5.0	---	---	---	0.0	6651.00	100	6551.0	A	90-100	---
0980	1539040	483080	---	---	11/08/1995	57.70	6497.30	0.0	6555.00	---	---	A	-	---
0981	1538970	482820	---	---	---	---	---	0.0	6554.00	---	---	A	-	---
0982	1538370	483290	110.0	5.0	---	---	---	0.0	6651.00	105	6546.0	A	90-105	---
0983	1538590	483100	---	---	---	---	---	0.0	6552.00	---	---	A	-	---
0984	1538750	482950	103.0	5.0	---	---	---	0.0	6651.00	98	6553.0	A	88-98	---
0985	1538820	483180	115.0	5.0	07/18/1996	58.75	6592.25	0.0	6651.00	102	6549.0	A	90-110	43.3
0989	1537890	482760	---	---	11/02/1995	58.10	6494.90	1.0	6553.00	---	---	A	-	---
0992	1539340	483780	100.0	5.0	---	---	---	0.0	6652.00	95	6557.0	A	85-95	---
0993	1537860	483680	102.0	5.0	---	---	---	0.0	6650.00	98	6552.0	A	85-98	---
0994	1539700	476240	144.0	6.0	10/24/2000	86.70	6468.30	0.0	6555.00	---	---	A	95-110	---
										---	---	L	95-110	---
0996	1537621	477989	138.0	5.0	11/03/2000	87.76	6464.76	1.7	6552.52	136	6414.8	A	126-136	49.9
0997	1539821	473807	---	---	03/12/1996	76.90	6491.40	0.0	6568.30	---	---	A	-	---
0999	1524230	480187	---	---	---	---	---	0.0	6527.00	---	---	A	-	---
1012	---	---	---	6.0	---	---	---	0.0	0.00	---	---	A	-	---
1013	---	---	---	4.0	---	---	---	0.0	0.00	---	---	A	-	---
1014	---	---	---	9.0	---	---	---	0.0	0.00	---	---	A	-	---
1015	---	---	---	6.0	---	---	---	0.0	0.00	---	---	A	-	---
1018	---	---	---	5.0	---	---	---	0.0	0.00	---	---	A	-	---
1020	---	---	---	5.0	01/18/1996	15.17	-15.17	0.0	0.00	---	---	A	-	---
1021	---	---	---	---	01/18/1996	18.00	-18.00	0.0	0.00	---	---	A	-	---

Note: A = Alluvial Aquifer
M = Middle Chinle Aquifer
T = Tailings Aquifer
* = Well Abandoned
? = Uncertain Identity

4.2 ALLUVIAL WATER LEVELS

4.2.1 WATER-LEVEL ELEVATION - ALLUVIAL

This section presents information necessary to define the direction that ground water moves in the alluvial aquifer. Water-level elevations are used to define the gradient of the alluvial water table, which in turn can be used to define the direction of ground-water flow.

Figures 4.2-1A and 4.2-1B present Fall of 2000 alluvial aquifer water-level elevations for what has been termed the west area and the Grants Project area near Homestake's tailings, respectively. Additionally, these figures show, with patterned areas, where the alluvial aquifer is absent due to lack of saturation. These areas were defined based on the 1998 water-level elevation map and base of the alluvium map. Adjustments in the alluvial aquifer limits using 2000 water-level elevation data were not done, because the differences were very small. These unsaturated areas exist where the elevation of the base of the alluvium is equal to or greater than the water-level elevation. Locations of the alluvial wells, with their respective well names listed adjacent to the well symbol, are plotted on Figures 4.1-1A and 4.1-1B. The 2000 ground-water flow patterns in the alluvial aquifer are very similar to those observed in the Fall of 1999, with a similar depression on the south side of the large tailings due to the collection system (see Figures 4.2-1A and 4.2-1B of Hydro-Engineering, L.L.C., 1998). The ridge of water on the southeast side of the small tailings was increased in 2000. One-foot water-level elevation contour intervals were drawn near the collection wells where space allowed. Water-level elevations define the area of collection and a pattern outlines this area on Figure 2.1-1. The area of collection is between the fresh-water injection and the collection wells where water is flowing back to the collection wells. The area of the large tailings is also within the collection area because alluvial ground water in this area flows to the collection wells.

The water-level contours declined in Section 3 due to the irrigation supply from six wells in this section (see Figure 4.2-1B). The main changes in water levels in Figure 4.2-1A are in Section 33 due to the five irrigation supply wells in this area.

Several wells have been drilled in the area of the zero saturation boundaries to better define the limits of the alluvial aquifer. Water was observed in some of these wells in the Chinle shale below the alluvium, indicating that there may be zones of perched water in the upper part of the Chinle shale. These wells have been used to help define where the zero saturation of the alluvium occurs and their water levels should be used with caution.

Figure 4.2-1A shows the direction of alluvial ground-water flow in the area immediately west of the Grants Project area with red flow arrows. Flow in the San Mateo alluvium is forced to flow through the western portion of Section 28 due to the zero saturation limits to the north and south of this area. The San Mateo alluvial water then mixes with the Rio San Jose alluvial water, which continues to flow to the south. The gradient has been increased due to the irrigation but is still very flat in the Rio San Jose alluvium due to its large transmitting ability. Alluvial ground water that flows through the northern portion of Section 3 (see Figure 4.2-1B) joins the Rio San Jose ground-water system in the eastern portion of Section 4.

Water-level data for the HMC alluvial wells are presented in Table A.1-1 of Appendix A. Table A.1-2 presents alluvial water-level data measured in wells located in Murray Acres, Broadview Acres, Felice Acres, and Pleasant Valley Estates. The water levels from the four subdivisions are presented in numeric and alphabetical order, with wells 453, Sub1 and Sub3 from Broadview Acres and wells 490, 496, 497 and CW44 from Felice Acres. Water levels from wells 844 and 845 are from Murray Acres, while wells 688 and 835 are located in Pleasant Valley. The alluvial water-level data for the regional wells are presented in Table A.1-3 of Appendix A.

4.2.2 WATER-LEVEL CHANGE - ALLUVIAL

Figure 4.2-2 presents wells that were grouped together on water-level elevation versus time plots. The figure number of the water-level elevation plots for each group of wells is shown by the well groupings. The colors used for the well name and well symbol on Figure 4.2-2 are the same as those used on the water-level elevation plots. Water-level elevation data considered to be inaccurate were removed

from the plots for better visual presentation of trends, but the excluded data remains in the Appendix A tabulations. These time plots present only the last five years of data to better show the 2000 trends.

Water levels in the alluvial aquifer have been fairly stable during the last year. Figure 4.2-3 presents water-level elevation data for upgradient wells P, Q, R, DD and ND. A very gradual increasing trend has been observed in upgradient wells R and ND for several years. A rise in the water level in well P occurred during 2000. Figure 4.2-4 presents water-level elevation data for the wells located on the north side, (upgradient) of the large tailings. The wells included on Figure 4.2-4 are N, NC, O and S11. Wells N and O are located on the northwest and northeast corners of the large tailings pile, respectively. Well NC is located to the north of the large tailings pile, with well S11 to the west of the northwest corner of the large tailings. The increase in the upgradient collection has caused a gradual decline in water levels in wells N and NC. Water-level rise is being observed in well S11 due to fresh-water injection to the west.

Water-level elevation data are presented for two sets of gradient reversal wells located near the S line of the collection system. Reversal wells SP and SO are located just northeast of the majority of the S line of collection wells. Figure 4.2-5 presents water-level elevation data for these two wells and shows that the alluvial hydraulic gradient is reversed between wells SO and SP. A larger reversal had been developed in this area in 1999 and 2000. Wells S1 and S2 are the two reversal wells downgradient of the S line of collection wells (see Figures 4.1-1B and 4.2-2 for location). Recent data from these two wells show reversal of the ground-water surface downgradient of the S collection wells (see Figure 4.2-6) has increased in this area.

Figure 4.2-7 presents water-level elevation data for a group of wells located west of the S line of collection wells. Water-level elevations in wells BC, DC, S4 and MU increased in 2000, while the level dropped in well MO.

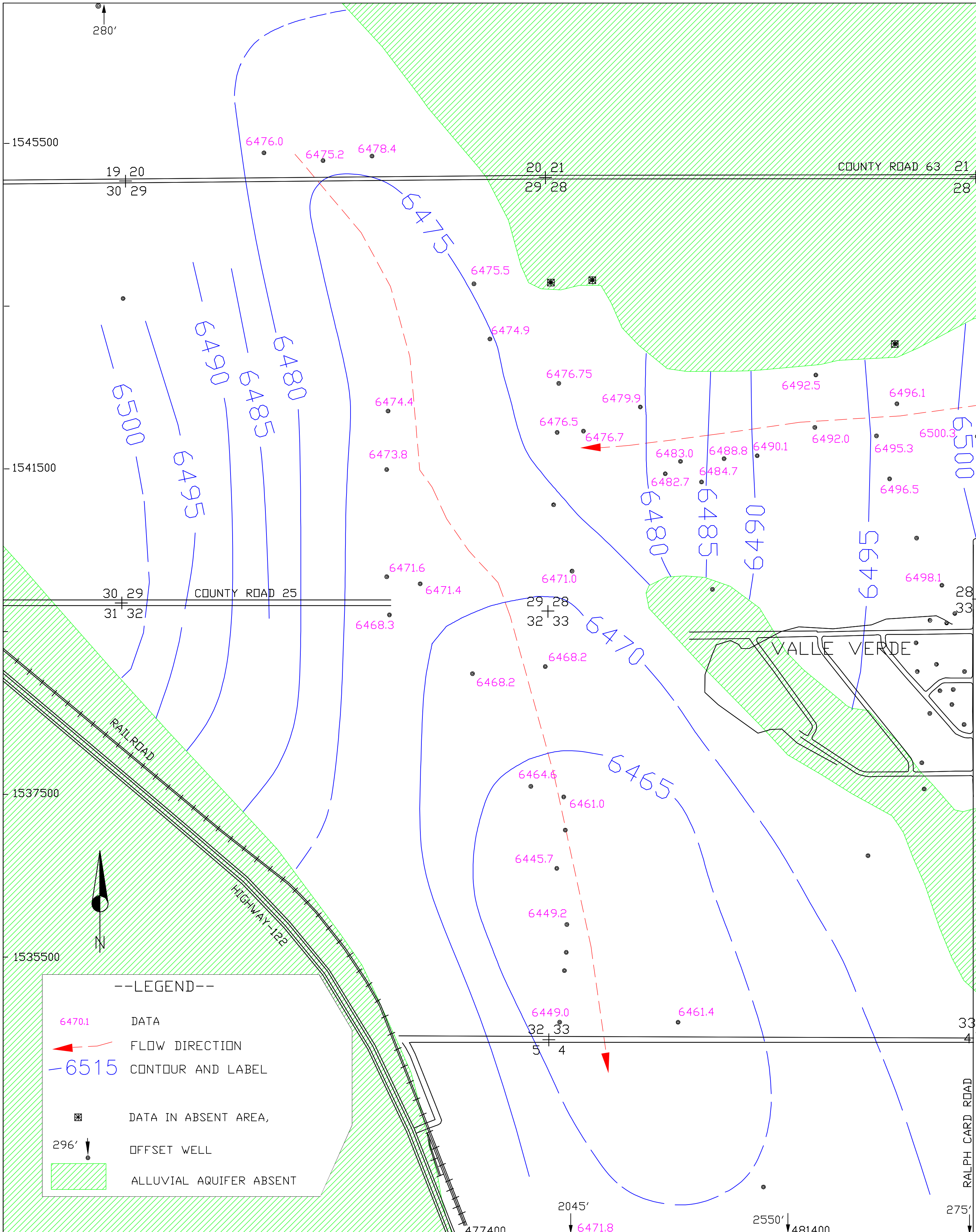
The alluvial hydraulic gradient northeast of the Murray Acres injection system, between wells WR11 and S3, was increased in 2000. The collection and injection at the planned 2001 rates should continue to increase this reversal with time (see Figure 4.2-8).

The pair of reversal wells B and BA is used to define the gradient between the M and J injection lines and the D collection line. Figure 4.2-9 presents water-level elevation data for wells B and BA. Well B is downgradient of well BA, and a ground-water reversal is demonstrated when its water-level elevation is greater than that in well BA. A ground-water gradient from the south to the north exists in this area and the gradient reversal was increased in 1999 and maintained in 2000. Water levels in this area declined gradually in 2000.

Figure 4.2-10 presents water-level elevation plots for alluvial wells BP, B1, D1, M5 and PM, which are located near the collection ponds (lined). This plot shows that the water levels were fairly steady in 2000 in all of these wells except for a large rise in well PM.

Water-level elevations in the alluvial aquifer near the small tailings collection system, at reversal wells KF and KZ, are presented on Figure 4.2-11. Well KF is further south and closer to the J injection line and, therefore, naturally downgradient of well KZ. This plot shows that during 2000 a reversal of the ground-water gradient was maintained. This pair of reversal wells will be adequate to define the ground-water gradient between the major zone of fresh-water injection and the collection system until the injected fresh water moves to the north of these wells. Figure 4.2-12 presents water-level elevation data for wells B10, DZ, L6 and TB. This data demonstrates the changes in water levels near the north and east sides of the small tailings. The variable water levels in well B10 are due to the collection from this well. The R.O. injection to the east of well TB has caused the water level to rise in this area. Figure 4.2-13 shows the water-level elevation plots for wells I, KN, X and Y. Water levels rose in well X in 2000 and greatly increased in wells KN and Y.

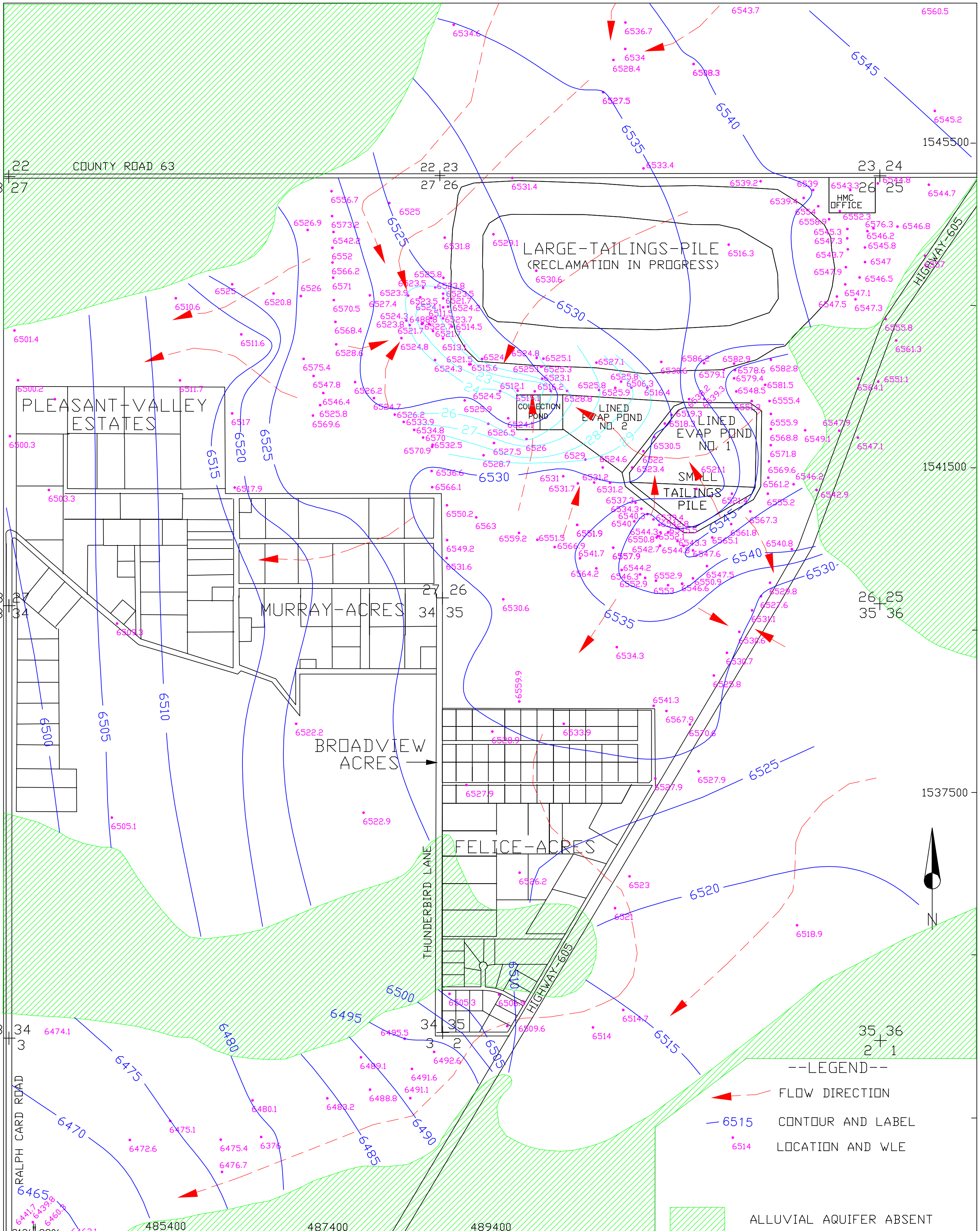
Water-level elevations in the alluvial aquifer south of the Broadview Acres injection system declined during 2000 due to less injection in this area (see water levels for wells Sub1, 453 and 490 on Figure 4.2-14). Water levels were fairly steady in alluvial wells FB, 844, 846, 688 and MX during 2000 (see Figure 4.2-15).



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 03/16/01

FIGURE 4.2-1A. WATER-LEVEL ELEVATION FOR THE ALLUVIAL AQUIFER, (WEST AREA), FALL 2000, FT-MSL

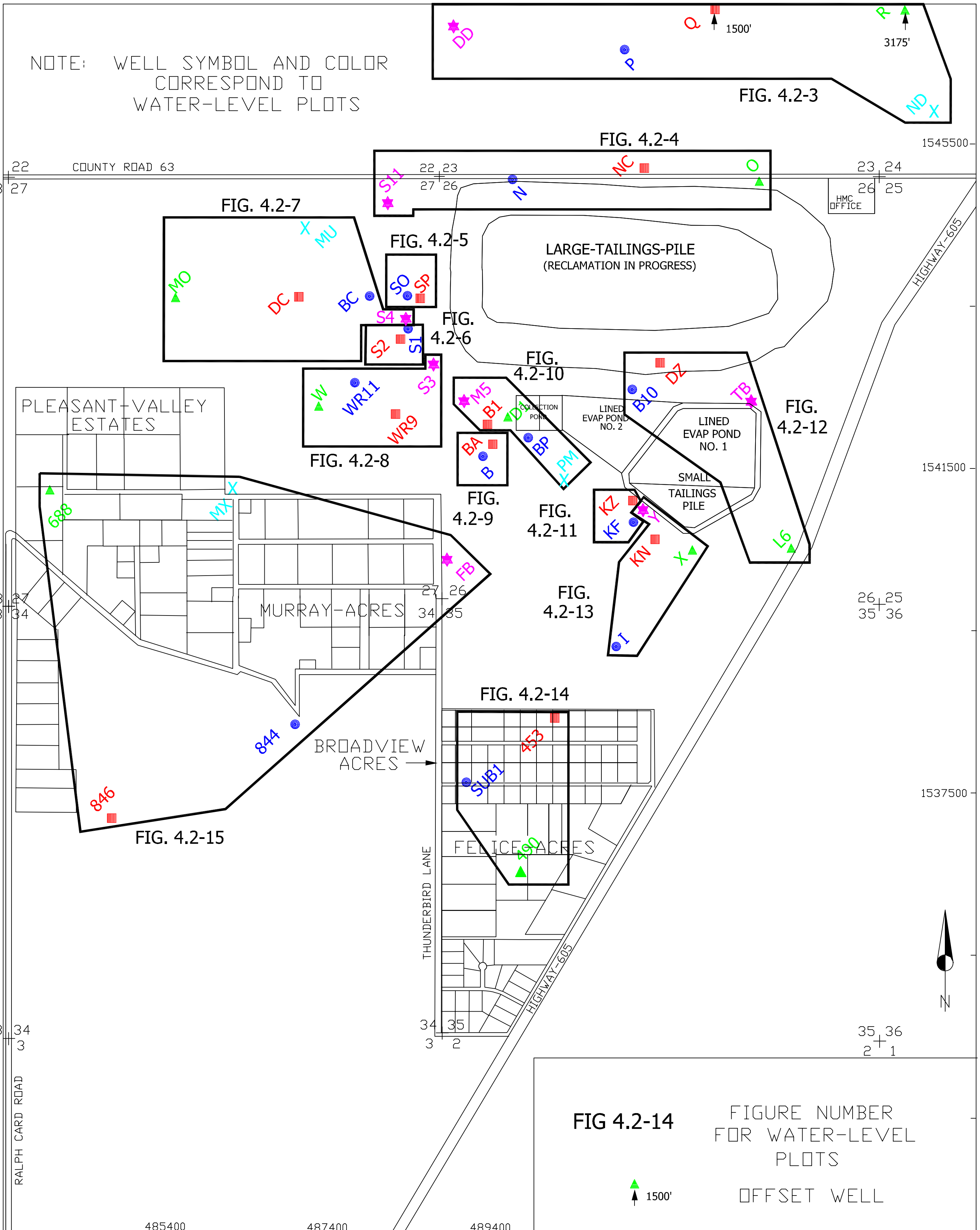
PROJECTS\2001-06\2000WQAL LJU



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 03/27/01

FIGURE 4.2-1B. WATER-LEVEL ELEVATION FOR THE ALLUVIAL AQUIFER, FALL 2000, FT-MSL

projects\2001-06
dwgs\2000eqal lju



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 02/16/01 lju

FIGURE 4.2-2. LOCATIONS OF ALLUVIAL WELLS WITH WATER-LEVEL PLOTS

PROJECTS\2001-06\DWGS\2001FIGS

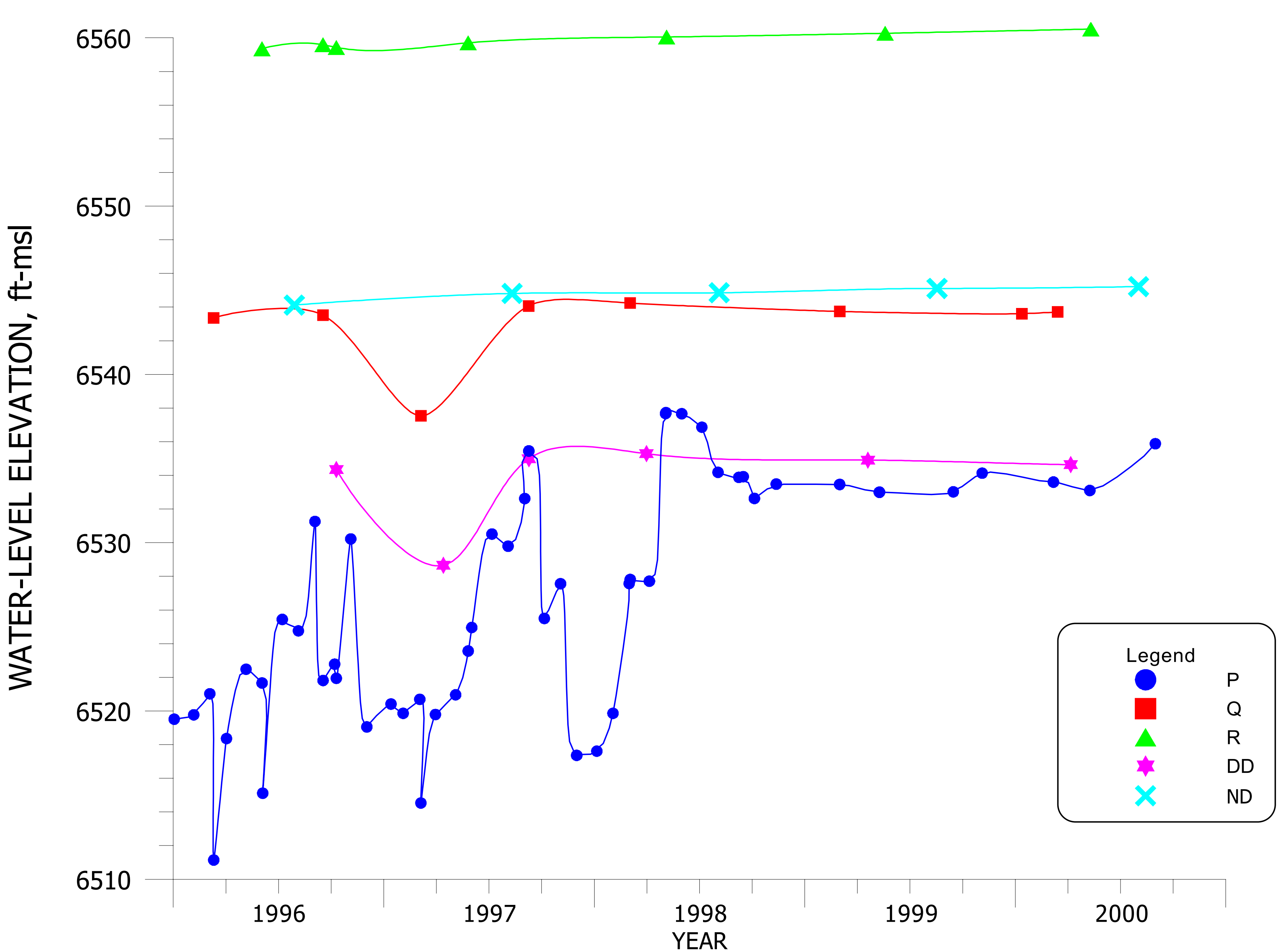


FIGURE 4.2-3. WATER-LEVEL ELEVATION FOR WELLS P, Q, R, DD AND ND.

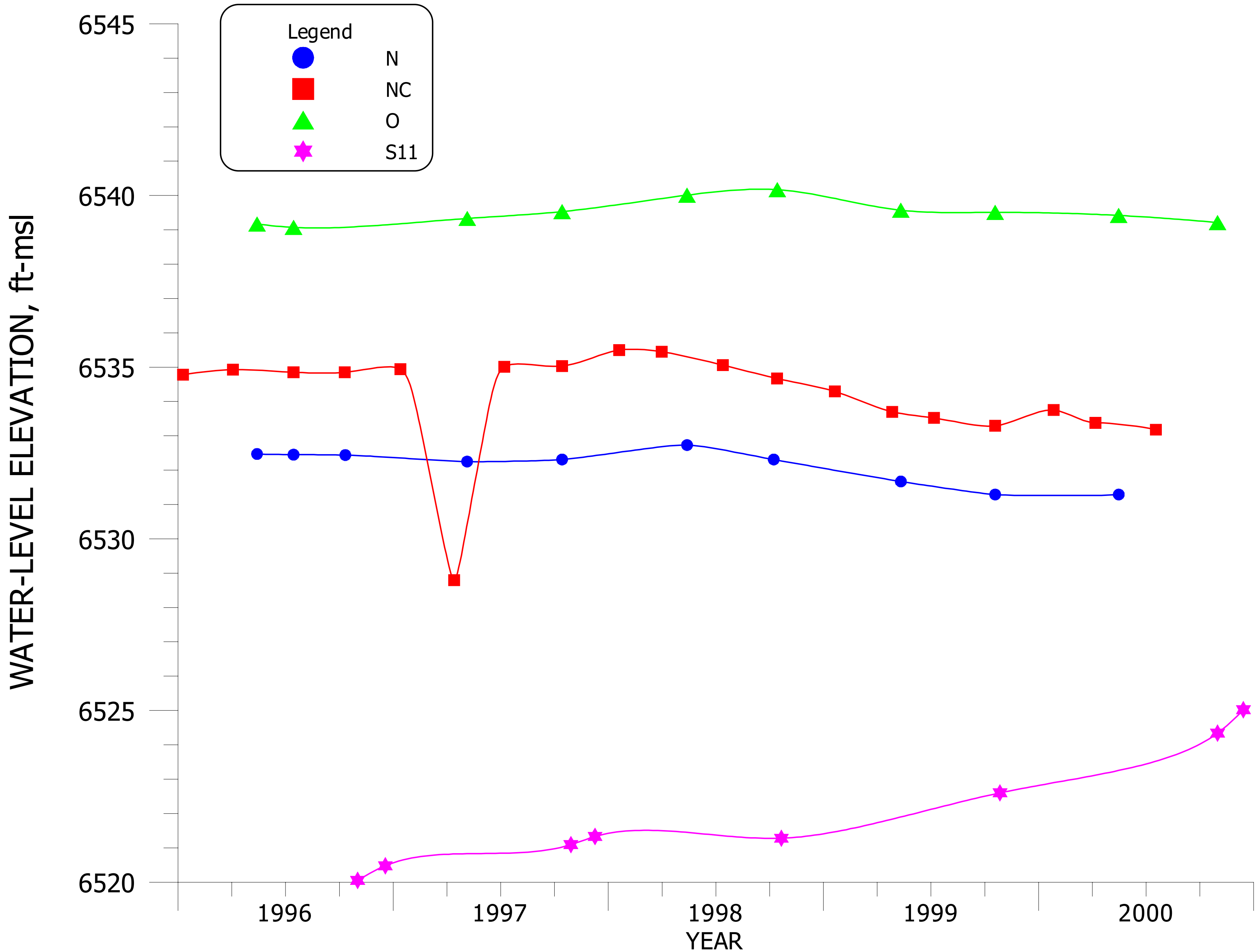


FIGURE 4.2-4. WATER-LEVEL ELEVATION FOR WELLS N, NC, 0 AND S11.

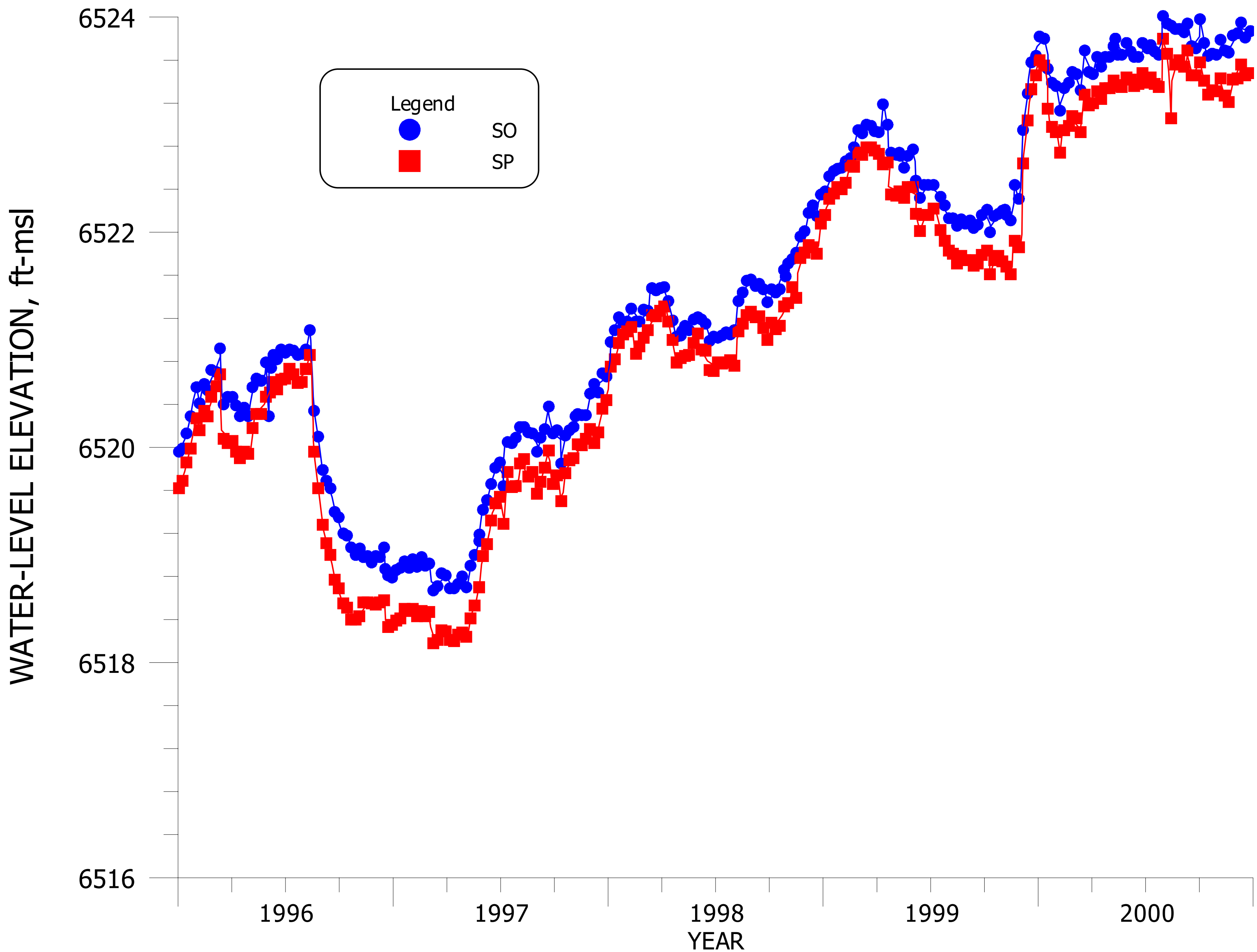


FIGURE 4.2-5. WATER-LEVEL ELEVATION FOR WELLS SO AND SP.

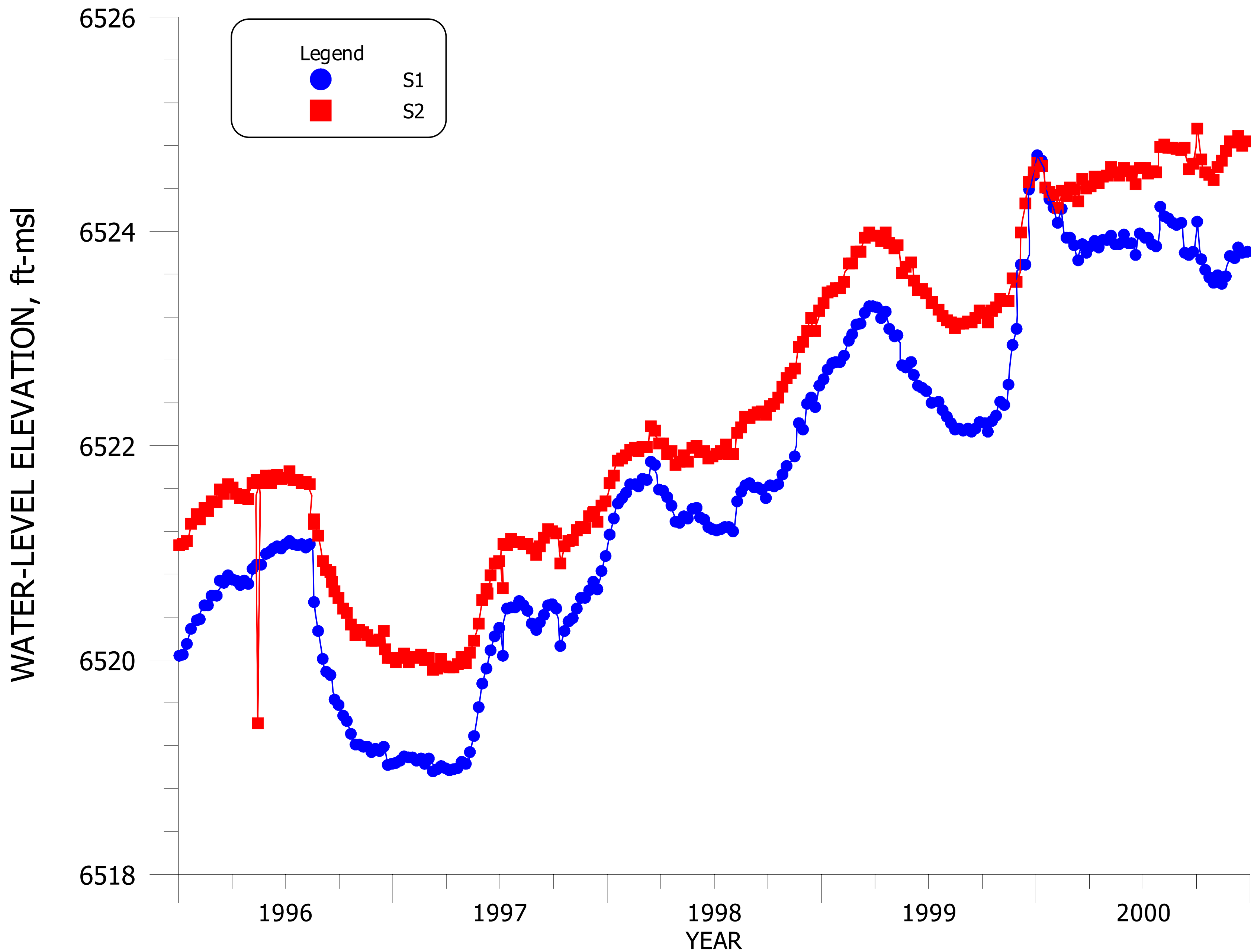


FIGURE 4.2-6. WATER-LEVEL ELEVATION FOR WELLS S1 AND S2.

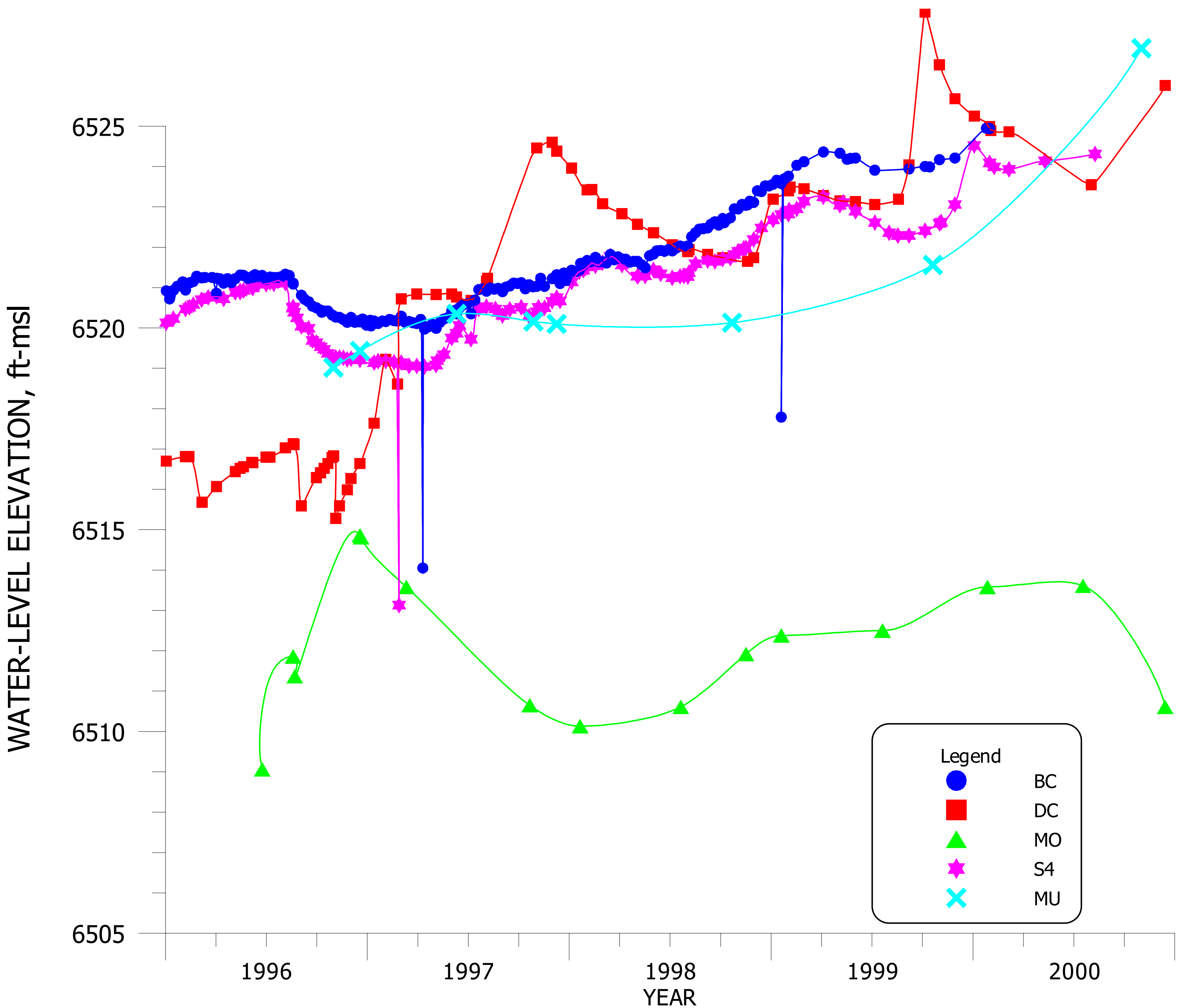


FIGURE 4.2-7. WATER-LEVEL ELEVATION FOR WELLS BC, DC, MO, S4 AND MU.

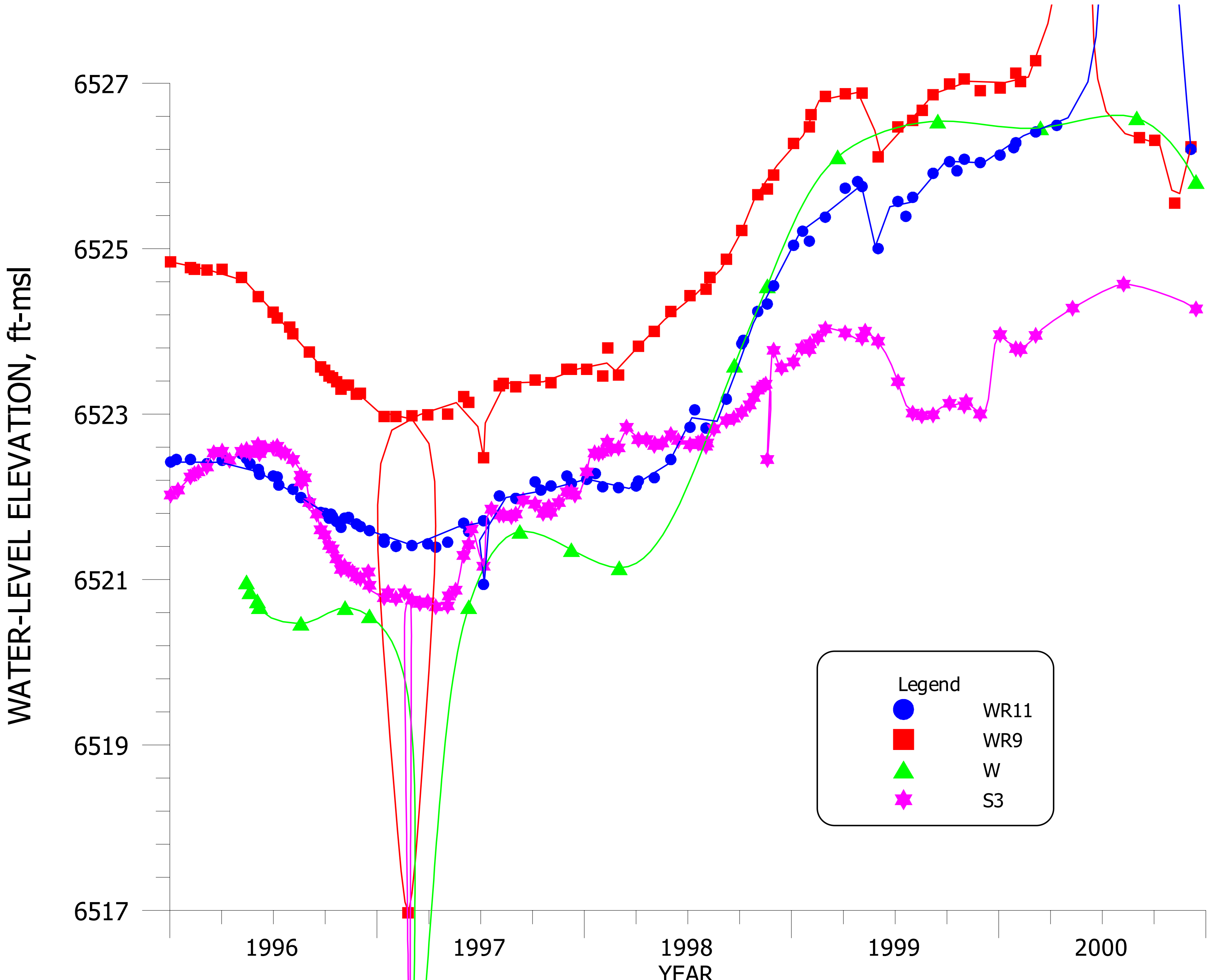


FIGURE 4.2-8. WATER-LEVEL ELEVATION FOR WELLS WR11, WR9, W AND S3.

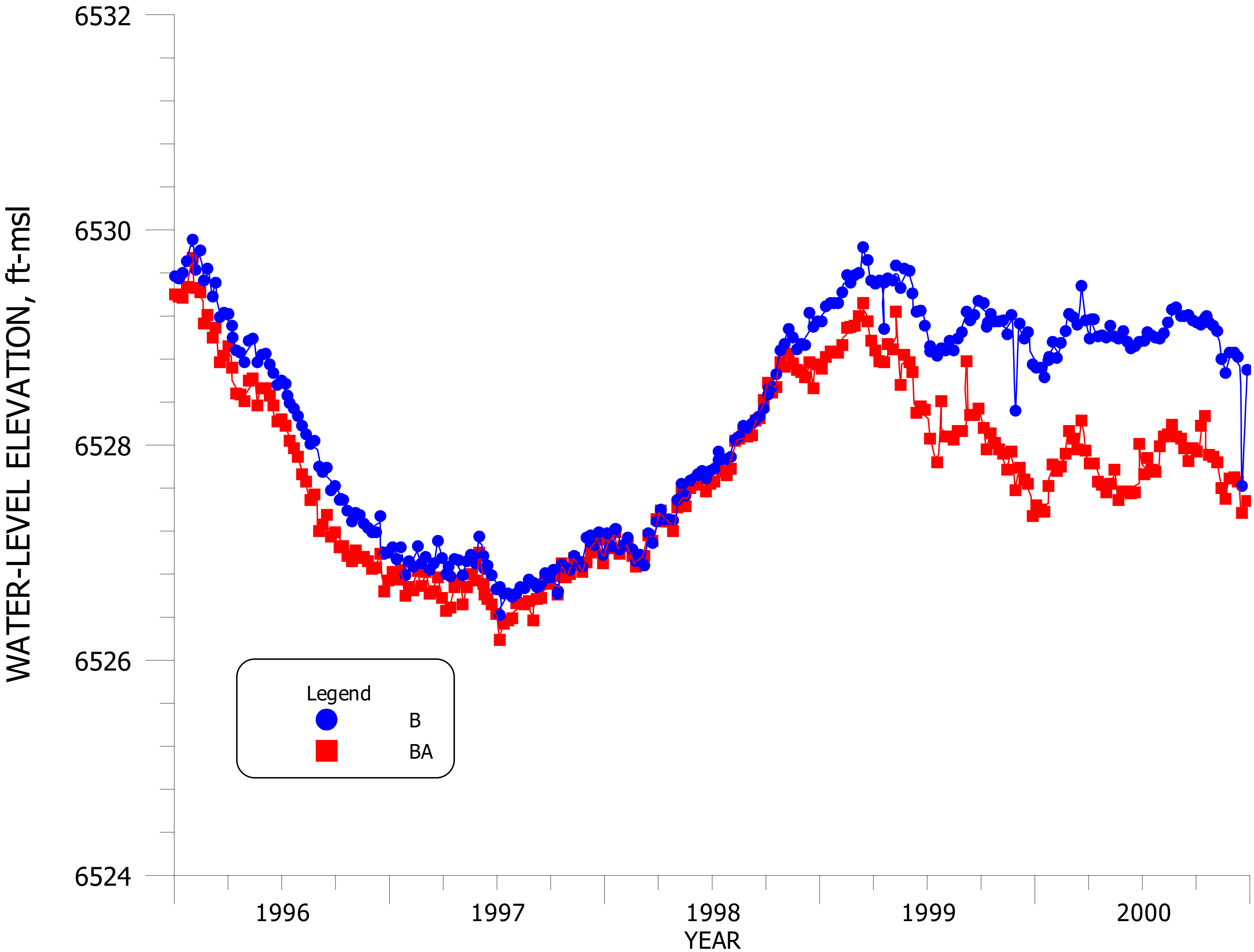


FIGURE 4.2-9. WATER-LEVEL ELEVATION FOR WELLS B AND BA.

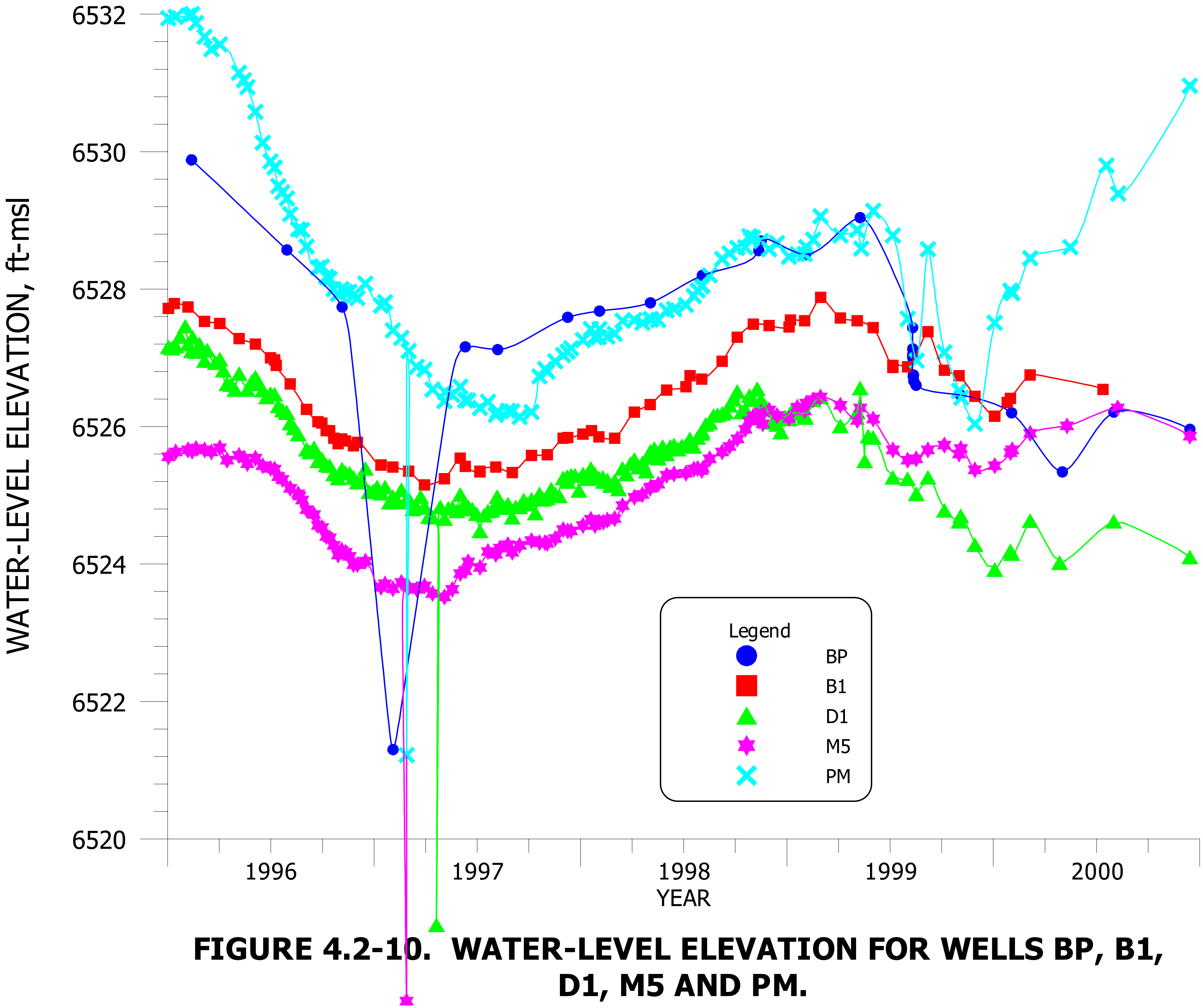


FIGURE 4.2-10. WATER-LEVEL ELEVATION FOR WELLS BP, B1, D1, M5 AND PM.

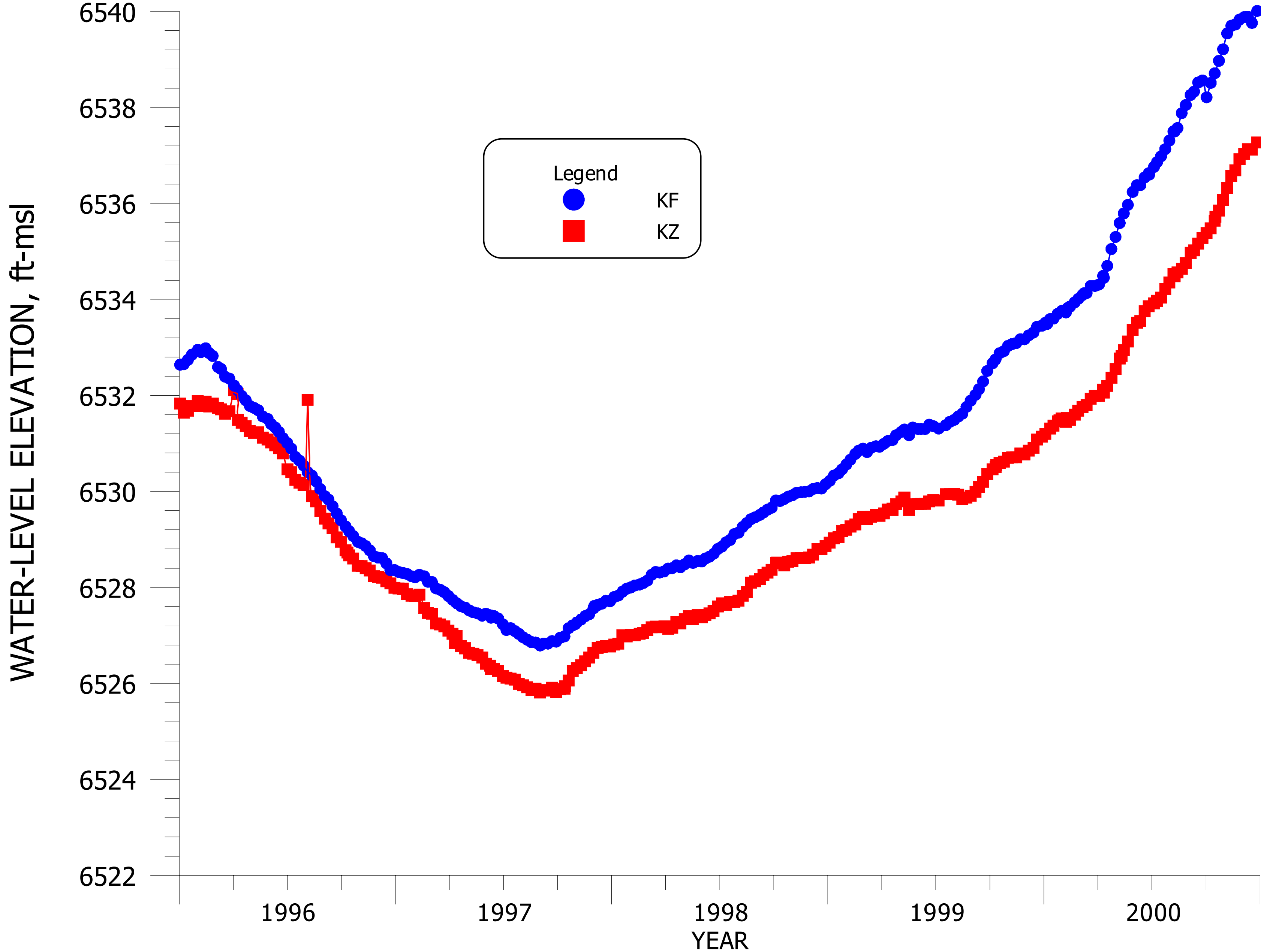


FIGURE 4.2-11. WATER-LEVEL ELEVATION FOR WELLS KF AND KZ.

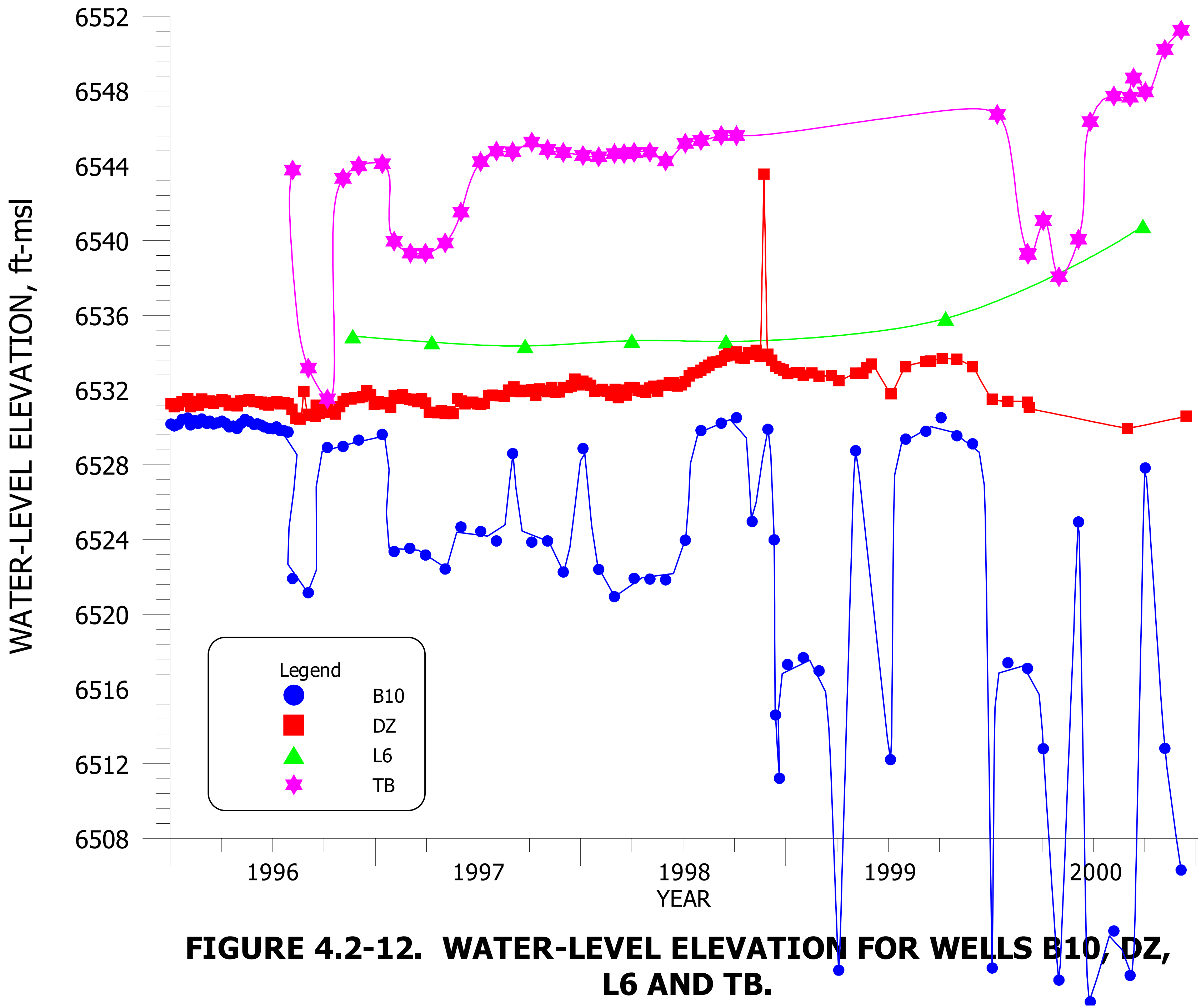


FIGURE 4.2-12. WATER-LEVEL ELEVATION FOR WELLS B10, DZ, L6 AND TB.

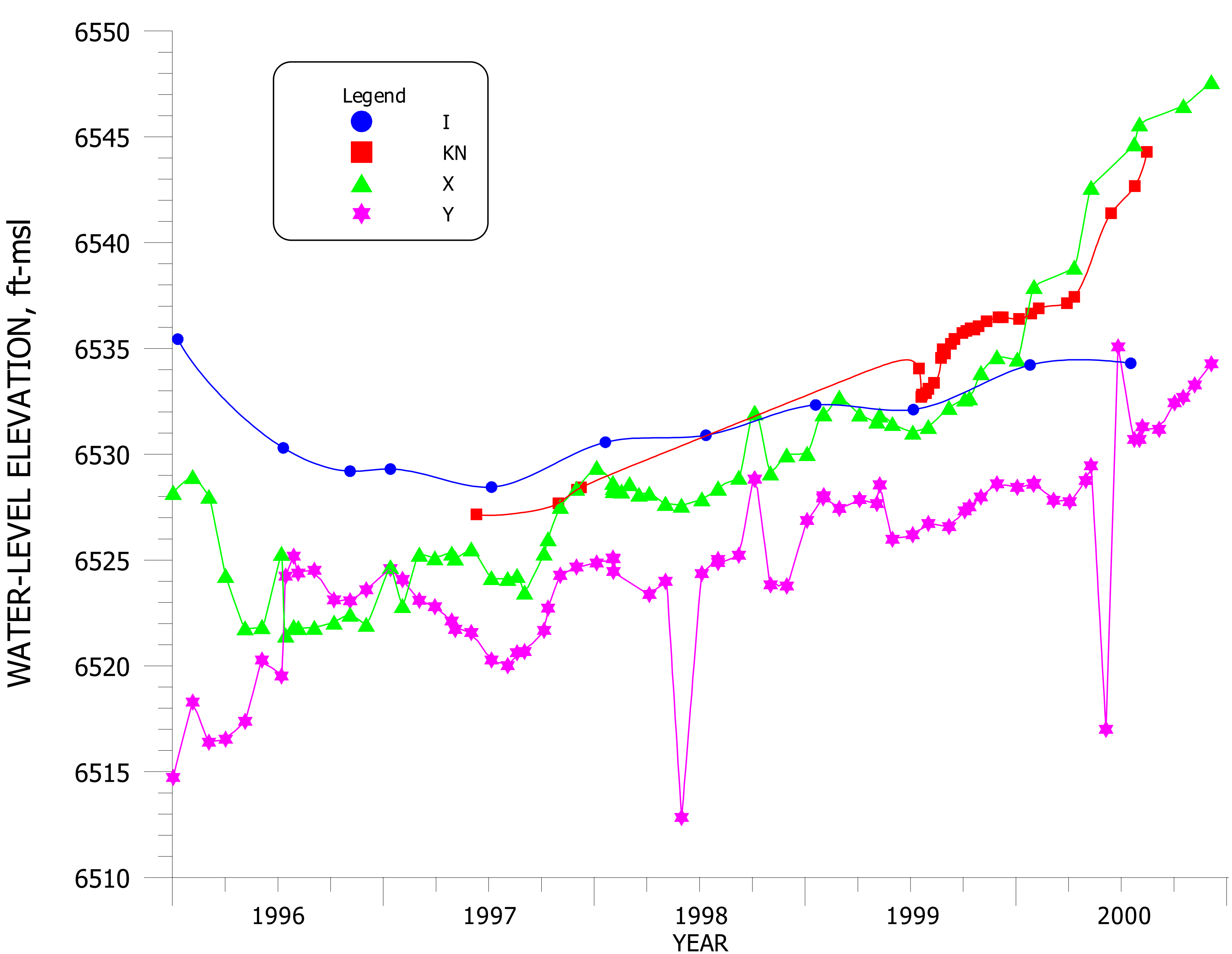


FIGURE 4.2-13. WATER-LEVEL ELEVATION FOR WELLS I, KN, X AND Y.

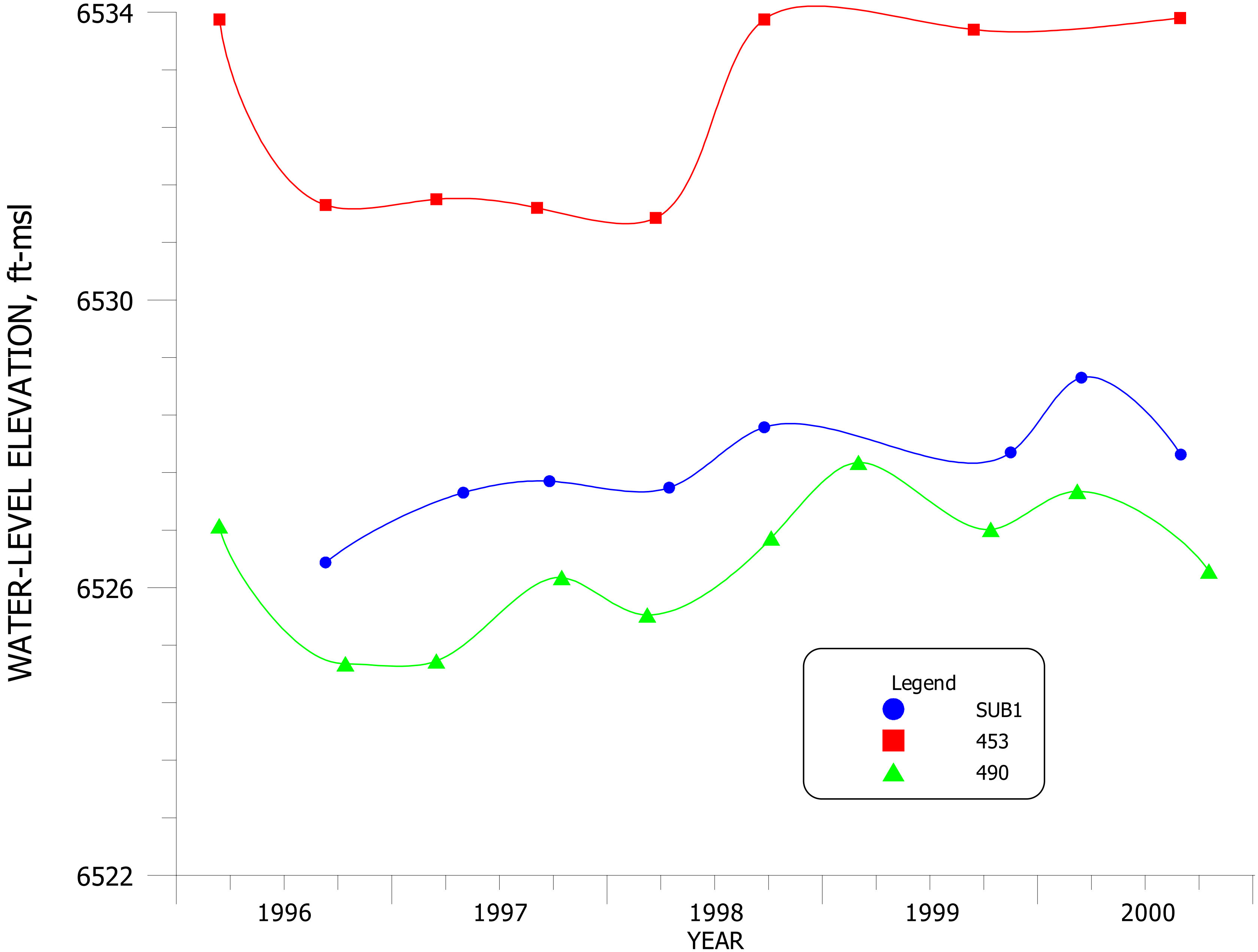


FIGURE 4.2-14. WATER-LEVEL ELEVATION FOR WELLS SUB1, 453 AND 490.

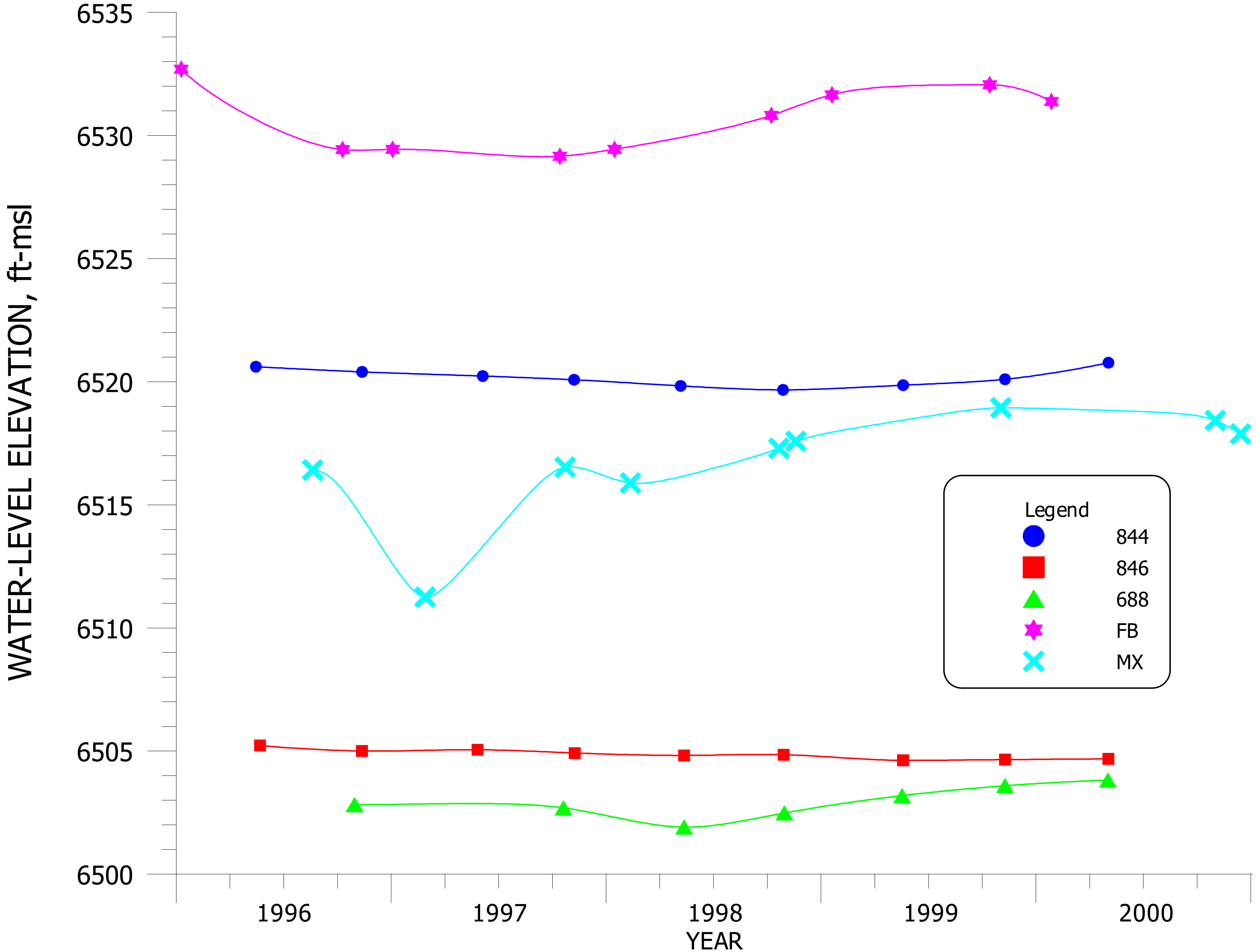


FIGURE 4.2-15. WATER-LEVEL ELEVATION FOR WELLS 844, 846, 688, FB AND MX.

4.3 ALLUVIAL WATER QUALITY

This section presents the 2000 water-quality data for the alluvial aquifer. The major constituents that are typically measured at this site are sulfate, chloride and TDS, with sulfate concentrations being the most important indication for contaminant remediation. Selenium, uranium and molybdenum are the hazardous constituents of most concern at this site. Nitrate, radium, chromium, vanadium and thorium are also discussed in the monitoring report but are not very important at this site. Tables B.4-1 through B.4-6 of Appendix B present the 2000 alluvial water-quality data for each well. The most recent value observed during the monitoring in 2000 was used for the concentration contour figures. The basic well data tables are presented in Section 4.1 for the alluvial wells.

Colored patterns are used on some of the figures to delineate important concentration limits for each of the constituents. Wells located near the unsaturated portion of the alluvial aquifer are depicted with a square symbol and water-quality data from these sources are potentially unreliable.

4.3.1 SULFATE - ALLUVIAL

Sulfate concentrations have been used as the main indicator constituent for this site because concentrations are large in the tailings solution. Concentrations of sulfate in the alluvial aquifer for the Fall of 2000 are presented on Figures 4.3-1A and 4.3-1B. Background concentrations observed in 2000 range from 526 to 1420 mg/l. The background and standard information is presented in the left upper corner on the east area figure for each parameter. The New Mexico sulfate standard for this site is 976 mg/l. An updated statistical evaluation of the background sulfate concentration with data through 1998 showed that concentrations as great as 1870 mg/l could be naturally occurring at this site. Therefore, this concentration has been used to show a blue pattern where significant sulfate concentrations exist. This information is presented in a box in the upper left side of Figure 4.3-1B for sulfate. No sulfate concentrations in the alluvial aquifer exceed 1870 mg/l on the west map (see Figure 4.3-1A). The areas that exceed this concentration and, therefore, contain the blue shading on Figure 4.3-1B are primarily adjacent to the two tailings piles. Sulfate concentrations in an area of the large tailings pile are thought to still exceed 10,000

mg/l. A significant amount of additional reduction in sulfate concentration has existed along the restoration zone, south and east of the small tailings pile, in 2000. The sulfate concentrations observed in Broadview and Felice Acres were less than 1000 mg/l in 2000, except for a value of 1400 mg/l from well Sub3. Sulfate concentrations are slightly less than 1000 mg/l in the east half of the western side in Section 3. Sulfate concentrations exceed 1000 mg/l in the southwest portion of Murray and Pleasant Valley. Sulfate concentrations exceed 1000 mg/l adjacent to the zero saturation boundary in the northern portion of Section 27 (see Figure 4.3-1B) and in two areas in Section 28 (see Figure 4.3-1A). Downgradient of the Grants Project site, the sulfate concentrations are all within natural range of background and, therefore, no restoration of sulfate is needed beyond the Grants Project area.

Water-quality concentrations versus time have been developed for the alluvial aquifer for sulfate, uranium, selenium and molybdenum. The groupings of wells used for these plots are shown on Figure 4.3-2. This figure shows the sulfate figure numbers for each of these groupings. The color and symbol used for each well are the same as those used in the time plots for each constituent. The sulfate figure number is shown on Figure 4.3-2 near each group of wells. Figure numbers for other water-quality parameters are not shown on this map but the location map should be useful for the other time concentration plots because the color, symbol and well groupings are the same.

Figure 4.3-3 presents the sulfate concentrations plotted versus time for upgradient wells P, Q, R, DD and ND. This plot shows that an overall, gradual increasing trend is possibly occurring in the upgradient wells ND and R. The values for well DD for the last two years indicate a decline in this area of the alluvial aquifer. The changes in sulfate concentration in these wells are well within the range observed for sulfate in the upgradient wells. The increases could be due to higher concentrations upgradient of Homestake's background wells flowing into this area.

The second group of time concentration plots for the alluvial aquifer is for wells W, WR11, NC and WR7 (see Figure 4.3-4). This plot shows that the sulfate concentration for wells W, WR11, NC and WR7 have all been near the injection concentration for the last several years.

Sulfate concentrations in alluvial well S3 were steady in 2000 after an overall declining trend (see Figure 4.3-5). The sulfate concentration for well S2 has been fairly steady for the last two years after a rising trend during the previous two years. Overall steady sulfate concentrations were observed in well S4 in 2000. Concentrations have been steady to the northwest of the large tailings at well S11.

Figure 4.3-6 presents the sulfate concentrations versus time for alluvial wells BC, DC, MO and MU. The sulfate concentrations declined in alluvial wells BC, DC and MO in 2000, while concentrations slightly increased in well MU.

The fifth sulfate concentration plot for the alluvial wells is presented for wells B, B1, BP, D1, M5 and PM (see Figure 4.3-7). This figure shows that the overall sulfate concentrations in each of these wells declined in 2000 with the exception of fairly steady concentrations in BP.

Figure 4.3-8 presents the sulfate concentrations versus time for wells B10, DQ, S5, T, TA and TB. The sulfate concentrations in collection wells B10 and DQ have decreased during 2000, while sulfate concentrations in wells S5 and TA have decreased after increasing. Values in well T were decreasing prior to the last 2000 value. Sulfate concentrations in well TB declined to a low value of 335 mg/l showing the influence of the R.O. injection.

Figure 4.3-9 presents the sulfate concentrations versus time for alluvial wells on the west side of the small tailings. This plot shows fairly steady sulfate concentrations in wells C4 and C8 in 2000, while concentrations in wells C6 and C12 started declining in 2000.

Figure 4.3-10 presents the sulfate concentrations versus time for alluvial wells on the south side of the small tailings. This figure shows that the sulfate concentrations in these wells decreased with time due to the R.O. product injection in this area. Sulfate concentrations in alluvial wells KC and X increased toward the end of the year due to use of fresh water when the R.O. plant was down. Sulfate concentrations in collection well K5 show significant restoration in 2000.

Sulfate concentrations in collection wells to the southeast of the small tailings and small tailings monitoring wells are represented in Figure 4.3-11. This figure shows a significant decrease in sulfate concentration with time in collection well L5 in 2000 similar to the decline trend observed in 1999. Concentrations steadily declined in

collection wells L9 and L10 and monitoring well L6. Concentrations in collection well K4 greatly declined in 2000 until concentrations became fairly steady. The steady concentrations indicate that the R.O. product water has reached well K4 and the concentrations are a mixture of R.O. product and contaminated water to the northwest of well K4. Collection from well K4 ceased in December 2000 to allow the R.O. water to move beyond well K4.

Figure 4.3-12 presents the sulfate concentration time plots for Broadview Acres alluvial wells 453, Sub1, Sub2 and Sub3. Small variations were observed in three of these Broadview wells in 2000 and their concentrations are all near the injection concentration. An increase in concentrations in well Sub3 was observed in 2000 similar to the 1997 and 1998 higher values.

Figure 4.3-13 presents sulfate concentrations versus time for Felice Acres alluvial wells 490, 492, 496 and 497. The sulfate concentrations in these four wells show a small decline in 2000.

Figure 4.3-14 shows sulfate concentrations for Murray Acres and Pleasant Valley alluvial wells 802, 844, 846, 688 and FB. This plot shows that sulfate concentrations for alluvial well 802 gradually declined in 2000. An overall gradual decreasing trend has also been observed in well 844. An overall increasing trend in alluvial well 846 has been observed with concentrations fairly steady in wells FB and 688.

4.3.2 TOTAL DISSOLVED SOLIDS - ALLUVIAL

Total dissolved solids (TDS) concentration contours for the alluvial aquifer during the Fall of 2000 are presented on Figures 4.3-15A and 4.3-15B. The background TDS concentrations measured upgradient of the large tailings in the Fall of 2000 varied from 1290 mg/l to 2690 mg/l. Based on our updated statistical analysis, a TDS concentration of 3060 mg/l or larger is needed to be confident that the concentrations are not naturally occurring. A light blue pattern is shown on Figure 4.3-15B to indicate where the TDS concentrations exist above 3060 mg/l. None of the concentrations in the west area exceed this level. The TDS concentrations near the tailings exceed 3060 mg/l for approximately 1900 feet to the west of the large tailings. The small area of concentrations greater than 3060 mg/l that existed in the area of the L collection wells

to the southeast of the small tailings was removed in 2000. Some TDS concentrations in the large tailings area are thought to exceed 20,000 mg/l. A zone of 2000 mg/l extends to the west of the large tailings to the west side of Section 28 (see Figure 4.3-15A). An additional area of TDS concentrations greater than 2000 mg/l exists in the southern portion of Pleasant Valley and the southwest portion of Murray Acres and to the south of this area. A small area of TDS concentrations above 2000 mg/l extends into the southeast corner of Section 28. The only other area of TDS concentrations above 2000 is a small area of TDS concentrations slightly above 2000 mg/l in Section 3. Only the areas adjacent to the two tailings piles need restoration based on TDS.

4.3.3 CHLORIDE - ALLUVIAL

Chloride concentrations are important in defining tailings seepage due to the conservative nature of this constituent and low concentrations upgradient. The 2000 chloride concentration figures for the alluvial aquifer are presented as Figures 4.3-16A and 4.3-16B. Upgradient chloride concentrations in the alluvial aquifer varied from 49 to 66 mg/l in the Fall of 2000. The fresh-water injection systems have used water with chloride concentrations of approximately 200 mg/l. A significant portion of the alluvial aquifer around the large and small tailings contained chloride concentrations in excess of the State drinking water standard of 250 mg/l. A light blue pattern is shown to define where concentrations exceed 250 mg/l. Figure 4.1-16A presents three chloride values measured in 2000 in the west area, along with the 1999 chloride contours. No chloride concentrations have existed in the past in the west area above 250 mg/l. The 1999 contours are presented in Figure 4.3-16A to portray the expected concentration change with the limited 2000 data. Some higher chloride concentrations are input into the system from the northern portion of the Rio San Jose alluvial system in Section 20 (see Figures 4.3-16A). These values do not reach the 250 mg/l level.

Chloride concentrations do not exceed 250 mg/l in the subdivisions with only one value in Felice Acres above 200 mg/l. These two figures show that restoration is only needed near the tailings for chloride.

4.3.4 URANIUM - ALLUVIAL

Uranium is also a very important parameter to this site due to the significant levels in the tailings seepage. Uranium data for the Fall of 2000 are presented on Figures 4.3-17A and 4.3-17B. Background uranium concentrations during the Fall of 2000 varied from less than 0.01 to 0.19 mg/l and the site standard is 0.04 mg/l (see notes in upper left corner of Figure 4.3-17B). A uranium concentration of 0.43 mg/l has been chosen as the important uranium value at this site. The light blue pattern on Figures 4.3-17A and 4.3-17B shows where uranium concentrations exceed 0.43 mg/l. Uranium concentrations exceed this level in the area of the large and small tailings pond and extend approximately 1500 feet to the west of the large tailings pile. Uranium concentrations above 0.43 mg/l also extend down to the L collection wells to the south of the small tailings. Uranium concentrations also exceed 0.43 mg/l in two small areas in the central and western portions of Section 27 and a narrow band through the central portion of Section 28. These uranium concentrations only slightly exceed the 0.43 mg/l value. Lower uranium concentrations extend further to the west, joining the Rio San Jose alluvial system in the eastern portion of Section 29. Uranium concentrations are also input to this area from the Rio San Jose alluvial system from Section 20. These lower concentrations have joined together and extend down to the southwest corner of Section 33.

An additional area of uranium concentrations above 0.43 mg/l exists in the southern portion of Felice Acres and to the southwest into Section 3 (see Figure 4.3-17B). These concentrations extend for approximately one-half mile to the southwest of the southwest corner of Felice Acres. One small additional area in the northeast portion of Murray Acres at well 802 exceeds the 0.43 mg/l concentration. Some additional restoration is needed in each of these areas based on uranium concentrations.

Uranium versus time plots are presented for this constituent to demonstrate the variations observed. Figure 4.3-2 shows the location of the alluvial wells used for the uranium time plots. The figure numbers shown on Figure 4.3-2 correspond to the sulfate time plots. The same grouping of wells was used for the uranium plots and their symbols and colors are the same as the sulfate plots. Figure 4.3-18 presents the uranium concentrations versus time for upgradient wells P, Q, R, DD and ND. The uranium concentrations in these five wells have been fairly steady for the last six years

except for a small decline in 1999 and 2000 in well ND. The concentration in well DD has consistently been several times greater than the uranium concentrations in the other four wells. The range in background uranium concentration for 2000 and the NRC site standard are shown on Figure 4.3-17B.

Uranium concentrations for alluvial wells W, WR11, NC and WR7 are presented on Figure 4.3-19. This time concentration plot for these wells shows that uranium concentrations have been low and steady for the last five years in wells W and NC. A decline in concentration in well WR7 was observed in 1998 into 2000, while an overall increase was observed in well WR11.

A decrease in uranium concentrations was observed in 2000 for well S4 (see Figure 4.3-20). Uranium concentrations in wells S2 and S3 were fairly steady in 2000, while concentrations stayed low in well S11.

Figure 4.3-21 presents the uranium concentration plots for alluvial wells west of the large tailings pile. This plot shows that uranium concentrations are low and gradually declining in well BC, while concentrations were steady in well MO. Concentrations are also low in wells DC and MU.

Figure 4.3-22 presents the uranium concentrations for alluvial wells B, B1, BP, D1, M5 and PM. Fairly steady 2000 concentrations have been observed in each of these wells in 2000.

Uranium concentrations versus time for alluvial wells B10, DQ, S5, T, TA and TB are presented in Figure 4.3-23. This figure shows that overall concentrations in collection well B10 and monitoring wells DQ and T were declining in 2000 until an increase at the end of the year. A rising trend is being observed in alluvial well S5 for 2000. Fairly steady concentrations are observed in well TA, while concentrations gradually declined in well TB.

Figure 4.3-24 presents the uranium concentrations for collection wells on the west side of the small tailings. This plot shows that uranium concentrations in collection wells C8 and C12 show an overall decline in concentration. Overall uranium concentrations in well C6 increased in 2000, while concentrations stayed low in well C4.

Figure 4.3-25 presents uranium concentrations for wells on the south side of the small tailings. Uranium concentrations declined significantly in collection wells KC and K2, due to the R.O. product injection into this area. Concentrations in wells X and

Y have also been affected by the R.O. product injection. The uranium concentrations in small tailings collection well K5 decreased significantly in 2000.

Uranium concentrations for alluvial wells K4, L5, L6, L9 and L10 are presented on Figure 4.3-26. This plot shows a large decrease in uranium concentrations in 2000 after a large increase in 1999 in well K4. The uranium concentrations have gradually increased in well L6 over the last few years. The uranium concentrations in collection wells L5, L9 and L10 show a gradual decline in 2000.

Figure 4.3-27 presents uranium concentrations versus time for four Broadview Acres alluvial wells: Sub1, 453, Sub2 and Sub3. Uranium concentrations in wells Sub1 and Sub2 have been similar and fairly steady in 2000. Uranium concentrations to the north in wells 453 and Sub3 have been small for several years.

Figure 4.3-28 presents the uranium concentrations for Felice Acres wells 490, 492, 496 and 497. Uranium concentrations in these four alluvial wells have also been fairly steady for the last three years, except for a small decline in uranium in well 497 in 2000. A very gradual decreasing trend in uranium concentrations in wells 490 and 492 is indicated in 1999 and 2000 but additional monitoring with time is needed to determine whether this decline is significant.

Figure 4.3-29 presents the uranium concentrations for wells in the Murray and Pleasant Valley subdivision areas. Uranium concentrations peaked in late 1998 in well 802 with a small decrease in the last two years. Uranium concentrations in the remaining alluvial wells in this area are low and concentrations in alluvial well 802 would be expected to gradually decrease with time.

4.3.5 SELENIUM - ALLUVIAL

Selenium is one of the important parameters at the Grants site due to significant levels of this constituent historically in the tailings. Figures 4.3-30A and 4.3-30B present the selenium concentrations for the west and east sides. Although the selenium site standard is 0.1 mg/l, only values equaling or exceeding 0.27 mg/l can be considered non-naturally occurring, based on statistical analysis. The important selenium concentration at this site has been selected to be greater than 0.27 mg/l. A blue pattern on the concentration contour figures is used to show where concentrations

exceed 0.27 mg/l. No areas of selenium concentrations above 0.27 exist in the west area (see Figure 4.3-30A). A 0.1 mg/l contour extends approximately one mile into the west area in the central portion of Section 28 and also extends slightly into Section 4 from the Section 3 area.

Concentrations exceeding 0.27 mg/l exist around the large and small tailings pile (see Figure 4.3-30B). The 0.27 mg/l concentrations extend approximately 1500 feet to the west of the large tailings and extends down to the south of the small tailings in the area of the L collection wells. An additional two areas of concentrations that exceed 0.27 mg/l exists in Section 3, southwest of Felice Acres. None of the concentrations in the subdivisions exceed 0.1 mg/l, except for two wells in southern Felice Acres where concentrations are 0.11 and 0.12 mg/l. This shows that the area near the tailings and portions of Section 3 need additional restoration based on selenium.

The time concentration plots for selenium are presented to define the variations with time for this constituent in the alluvial aquifer. Figure 4.3-2 should be used to determine the location of wells in each of the groups of plots. The symbols and colors used on Figure 4.3-2 are the same on each constituent time plot. Figure 4.3-31 presents the selenium concentrations for background wells P, Q, R, DD and ND. This plot shows a gradual increasing trend for the last several years in selenium concentrations for upgradient well R. The average selenium concentration from well P has been higher since well P has not been continuously pumped as part of the upgradient collection in early 1998. Selenium concentrations in upgradient well Q have been fairly steady over the last four years. Selenium concentrations in upgradient well ND increased over the last two years. The NRC and State site standards and the 2000 range in selenium values for all upgradient wells are also shown on Figure 4.3-30B.

Figure 4.3-32 presents the selenium concentrations for wells W, WR11, NC and WR7. Selenium concentrations in these wells have stayed low for the last several years with the exception of one outlier in well WR7.

Figure 4.3-33 shows an overall declining trend in well S4. An overall gradual decreasing trend has been observed in well S3 with the 2000 values fairly constant. A significant increase has been observed in well S2 during the last four years. A small increase has also been observed in well S11.

Figure 4.3-34 presents the selenium concentrations for wells BC, DC, MO and MU. An overall decrease in selenium concentration is being observed in well DC. Selenium concentrations have stayed low in well BC and fairly steady in wells MO and MU.

The selenium concentrations for alluvial wells to the southwest of the large tailings are presented in Figure 4.3-35. This figure shows an overall decrease in selenium concentrations in wells B, B1, D1, M5 and PM during 2000. Overall steady concentrations were observed in well BP.

Figure 4.3-36 presents the selenium concentrations for wells B10, DQ, S5, T, TA and TB. An increasing trend in selenium is being observed in well B10 in 2000, while selenium concentrations in well DQ were gradually decreasing. A decline in selenium concentrations in wells TA and TB occurred in 2000, while fairly steady concentrations were observed in well S5. The last measurement in 2000 for well TA showed a significant increase.

The selenium concentrations versus time for collection wells on the west side of the small tailings pile are presented in Figure 4.3-37. This plot shows that the selenium concentrations in well C8 exhibit a general decline in 2000. Fairly steady concentrations are being observed in wells C4, C6 and C12.

Figure 4.3-38 presents selenium concentrations versus time for wells on the south side of the small tailings. This figure presents values for wells KC, K2, K5, X and Y. This plot shows a large decline in 2000 in wells K5 and Y selenium concentrations due to the R.O. product injection in this area. Selenium concentrations have gradually continued to decline in wells K2, KC and X due to the R.O. product injection near these wells.

Figure 4.3-39 presents the selenium concentrations for wells K4, L5, L6, L9 and L10. A large decreasing trend is indicated by the data for wells K4 and L5. Fairly steady selenium concentrations with time are being observed in collection wells L9 and L10. Selenium concentrations have remained high in monitoring well L6.

Figures 4.3-40 and 4.3-41 present the selenium concentrations for the Broadview and Felice Acres alluvial wells. These plots show that the selenium concentrations have been reduced and maintained at low levels for at least the last ten years in these two subdivisions, except for the slightly higher values in southern Felice

wells 496 and 497. Selenium concentrations are presented for the Murray Acres and Pleasant Valley areas in Figure 4.3-42. This plot shows low selenium concentrations in these monitoring wells in this area of the alluvial aquifer. A very gradual increasing trend within the background range has been observed in well 846.

4.3.6 MOLYBDENUM - ALLUVIAL

This section discusses the molybdenum concentrations in the alluvial aquifer at the Grants Project during the Fall of 2000. Figure 4.3-43 presents the concentration contours. All molybdenum concentrations in the west area in 2000 are less than 0.03 mg/l as they have been in the past. Therefore, no molybdenum figure for the west area was developed for 2000. The extent of movement of molybdenum is significantly less than that of selenium and uranium. Molybdenum concentrations exceed 100 mg/l near the large tailings and a 10 mg/l contour extends around both the small and large tailings. Significant molybdenum concentrations extend approximately 800 feet west of the large tailings pile and also to the southeast of the small tailings pile to the L collection wells. One alluvial well in Felice Acres slightly exceeds 0.1 mg/l of molybdenum.

The light blue patterned area on Figure 4.3-43 shows the area where molybdenum concentrations exceed 0.73 mg/l. This concentration has been chosen as the significant level of this constituent at this site. This shows that molybdenum concentrations need to be restored only adjacent to the tailings and near the L collection line.

Molybdenum concentrations versus time plots have been developed for the alluvial aquifer because this parameter is significant to this aquifer. Figure 4.3-44 presents the molybdenum concentrations for the background wells P, Q, R, DD and ND. This plot shows that the concentrations have remained low in these five wells. The color and symbol used on the molybdenum plots are shown on Figure 4.3-2.

Figure 4.3-45 presents the molybdenum concentrations for wells W, WR11, NC and WR7. Molybdenum concentrations have been low in wells W, WR11, NC and WR5 for the last few years with a small decline in well WR7.

A gradual increasing trend with time is being observed in well S2, while the molybdenum concentrations in wells S3 and S4 were steady in 2000 (see Figure 4.3-

46). Molybdenum concentrations in well S11 were not detected prior to dropping this constituent from this well.

Figure 4.3-47 presents the molybdenum concentrations for wells BC, DC, MO and MU. Molybdenum concentrations in each of these wells are low and steady.

Figure 4.3-48 presents the molybdenum concentrations for wells B, B1, BP, D1, M5 and PM. Molybdenum concentrations in well M5 were fairly steady in 2000 after significantly declining in 2000. An increase in concentration was observed in monitoring well B1 in 2000. A fairly steady concentration will time is being observed in wells B, BP, D1 and PM.

Figure 4.3-49 presents the molybdenum concentrations for wells B10, DQ, S5, T, TA and TB. A sharp decline in the molybdenum concentration in well DQ was observed in 2000 after an overall increase during the previous few years. An increase in molybdenum concentration in well S5 was observed in 2000. Molybdenum concentrations in wells T and TB gradually declined in 2000.

Molybdenum concentrations for wells on the west side of the small tailings are presented in Figure 4.3-50. This figure shows large molybdenum concentrations in wells C6, C8 and C12.

Figure 4.3-51 presents the molybdenum concentrations for the wells on the south side of the small tailings. This plot shows a decline in molybdenum concentrations in wells KC, K2 and Y during the last year. A small decrease in molybdenum concentrations in well X was also observed in 2000. The decrease in molybdenum in 2000 in collection well K5 has been significant.

Figure 4.3-52 presents molybdenum concentrations further to the southeast in wells K4, L5, L6, L9 and L10. A significant decreasing trend was observed in wells L5, L6 and K4 during 2000. Fairly steady molybdenum concentrations in wells L9 and L10 were observed.

Molybdenum concentrations for alluvial wells in Broadview and Felice Acres are presented in Figure 4.3-53 and 4.3-54. The molybdenum concentrations in Broadview wells Sub1, Sub2, 453 and Sub3 have been low for the last several years. A slightly higher molybdenum concentration exists in well 490 in Felice Acres with no consistent trend with time.

Figure 4.3-55 shows the molybdenum concentration in wells in the Murray Acres and Pleasant Valley area. This plot shows that molybdenum concentrations have remained low in these alluvial wells.

4.3.7 NITRATE - ALLUVIAL

Some of the nitrate concentrations upgradient of the Grants site generally exceed the State drinking water standard of 12.4 mg/l of nitrate for this site (see Table 3.1-1). A statistical analysis of the upgradient data through 1998 shows that a nitrate concentration of 23 mg/l is needed to be 95% confident that it is not from natural upgradient levels. Figures 4.3-56A and 4.3-56B present the nitrate concentrations during the Fall of 2000 for the alluvial aquifer. The nitrate concentrations north and upgradient of the tailings at this site have affected the nitrate concentrations downgradient of the large tailings in the northern portion of Sections 27 and 28. It is difficult to determine whether the tailings has affected the nitrate concentrations in this area due to the naturally higher concentrations upgradient. The nitrate concentrations in the northeast portion of Section 27 that exceed 23 mg/l are likely natural levels due to the ground-water flow in this area. Figure 4.3-56A shows that higher nitrate concentrations exist in Section 20 and extend down into Section 29. These higher nitrate concentrations in the Rio San Jose alluvial system are also upgradient and enter the combination San Mateo and Rio San Jose system upgradient of where the Homestake site alluvial water meets the Rio San Jose. Therefore, none of these nitrate concentrations can be attributed to the Homestake tailings seepage.

Nitrate concentrations exceed 23 mg/l in an area between the large and small tailings. It is likely that the tailings seepage has affected the nitrate concentrations in this small area and it is, therefore, the only area that requires restoration relative to nitrate concentrations. This parameter will be easily restored during the restoration of other constituents. Time plots for nitrate concentrations in the alluvial aquifer have not been developed because this parameter is not very important to this site.

4.3.8 RADIUM-226 AND RADIUM-228 - ALLUVIAL

Figure 4.3-57 presents radium concentrations in the Grants Project area. The radium concentrations are very small in the alluvial aquifer in the west area and the few values monitored were significantly less than 5 pCi/l. A figure for radium for the west area is, therefore, not presented. The radium-226 concentrations are presented horizontally, while the radium-228 values are shown at a 45^{o} angle and in a magenta color. The State standard for radium-226 plus radium-228 is 30 pCi/l, while the NRC site standard is 5 pCi/l (see upper left corner of Figure 4.3-57 for this information). Three radium-226 concentrations in the three vertical drains in the large tailings exceeded the site standard in 2000. One radium concentration outside of the tailings exceeded the standard with a value of 5.5 pCi/l from well PM. The other radium analyses for this well in 2000 was less than 1.6 pCi/l and the two 1999 values were less than 1.8 pCi/l. One of the background wells had a 2000 value of less than 4.9 pCi/l. This shows the randomness of the values outside of the tailings that exceed 5 pCi/l. Past data has shown that radium is not mobile at this site in the alluvial aquifer. Radium concentrations at the Grants Site are, therefore, not significant, and these parameters should be dropped as a site standard. Radium-226 should be monitored annually at the three POC wells to demonstrate that concentrations are not increasing.

4.3.9 CHROMIUM - ALLUVIAL

Chromium has been removed as a standard for this site. Figure 4.3-58 presents the chromium concentrations measured during the Fall of 2000 to show that concentrations of this constituent are not increasing at the POC wells. All of the chromium concentrations in 2000 were less than detection. Monitoring of chromium has been decreased to annual measurements of only a few alluvial wells.

4.3.10 VANADIUM - ALLUVIAL

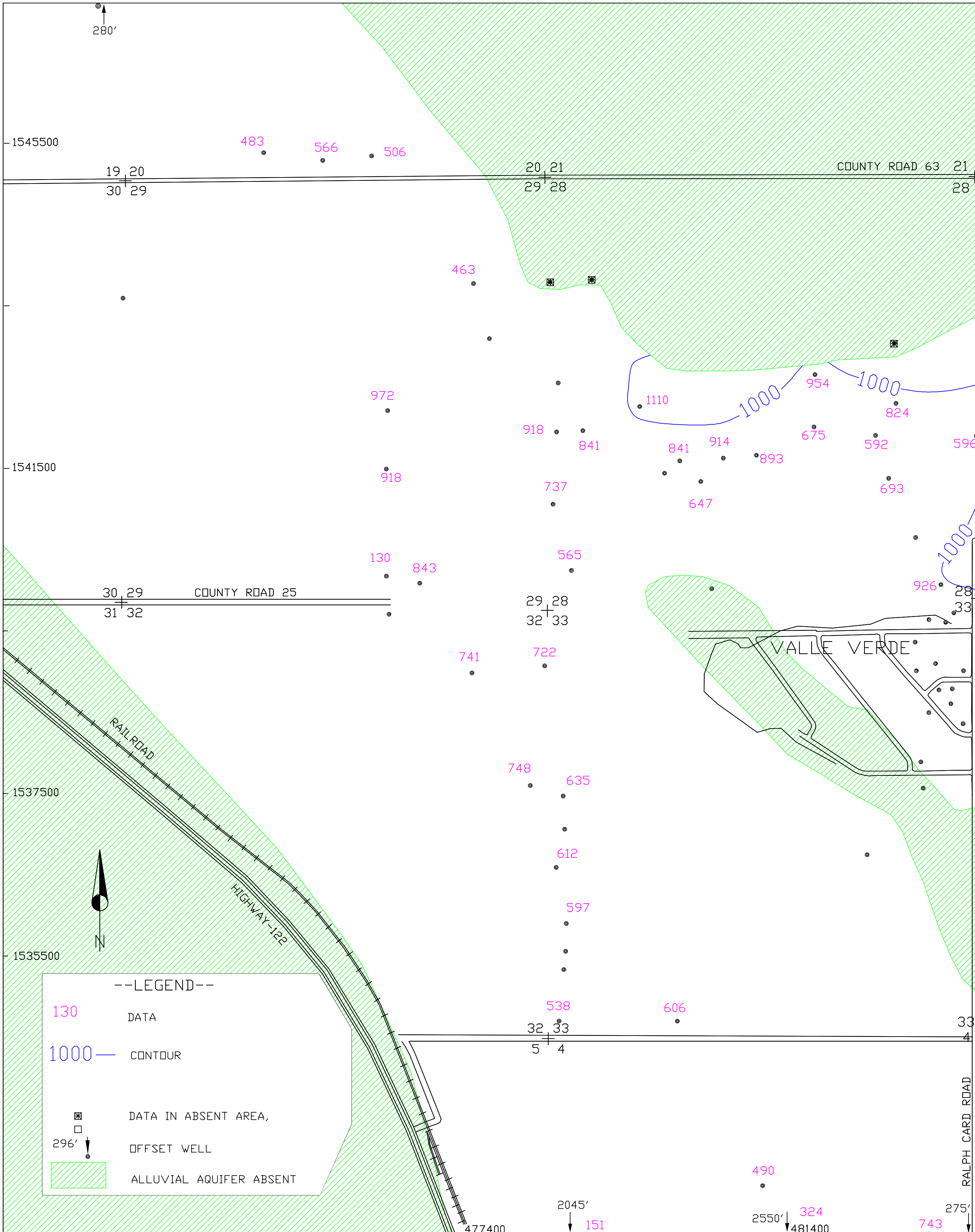
Vanadium concentrations are shown on Figure 4.3-59 for 2000. None of the vanadium concentrations in the POC wells exceeded the site standard of 0.02 mg/l. POC well X with the last 2000 value of 0.02 mg/l was the only POC well that routinely contained a vanadium concentration above the site standard. Therefore, none of the

POC wells are expected to contain vanadium concentrations above the site standard of 0.02 mg/l in 2001. The R.O. product injection has effectively restored the area near well X.

Three wells near the tailings contained vanadium concentrations above the site standard in 2000. Vanadium values for wells DQ and K7 of 0.03 mg/l were measured in 2000. A value of 0.38 mg/l for well S was also measured in 2000. This parameter will easily restore with the restoration of the key parameters.

4.3.11 THORIUM-230 - ALLUVIAL

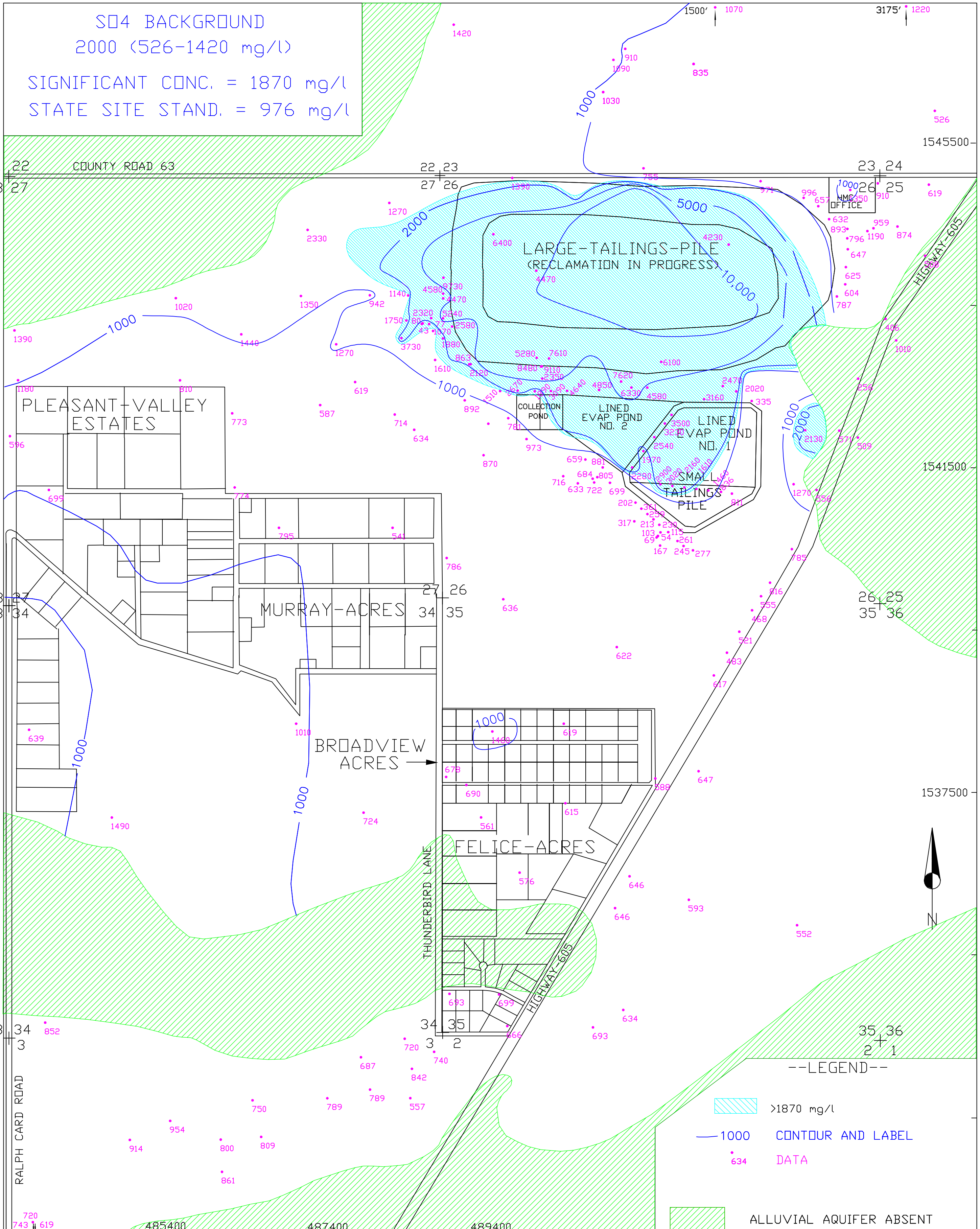
Figure 4.3-60 presents the 2000 thorium concentrations for the alluvial aquifer. Thorium concentrations are low at this site. The very low site standard of 0.3 pCi/l is due to the low background concentrations and no drinking water standard has been established for this constituent. The maximum thorium-230 concentration in the Fall of 2000 from a POC well was 0.4 pCi/l for well S4 with a split of 0.3 pCi/l. The other three 2000 measurements for this well were less than 0.2 pCi/l. A few higher thorium-230 concentrations were measured in 2000 of 0.7, 0.9, 0.9, 1.1 and 1.3 pCi/l for wells BP, M3, K10, K8 and DQ, respectively. The DQ and BP values had splits of 0.3 and 0.2 pCi/l, indicating no significant difference between these values. The four DQ values in 1999 averaged 0.2 pCi/l. Thorium-230 should be removed as a site standard and only monitored at the three POC wells annually.



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 03/16/01

FIGURE 4.3-1A. SULFATE CONCENTRATIONS FOR THE ALLUVIAL AQUIFER (WEST AREA), FALL 2000, mg/l

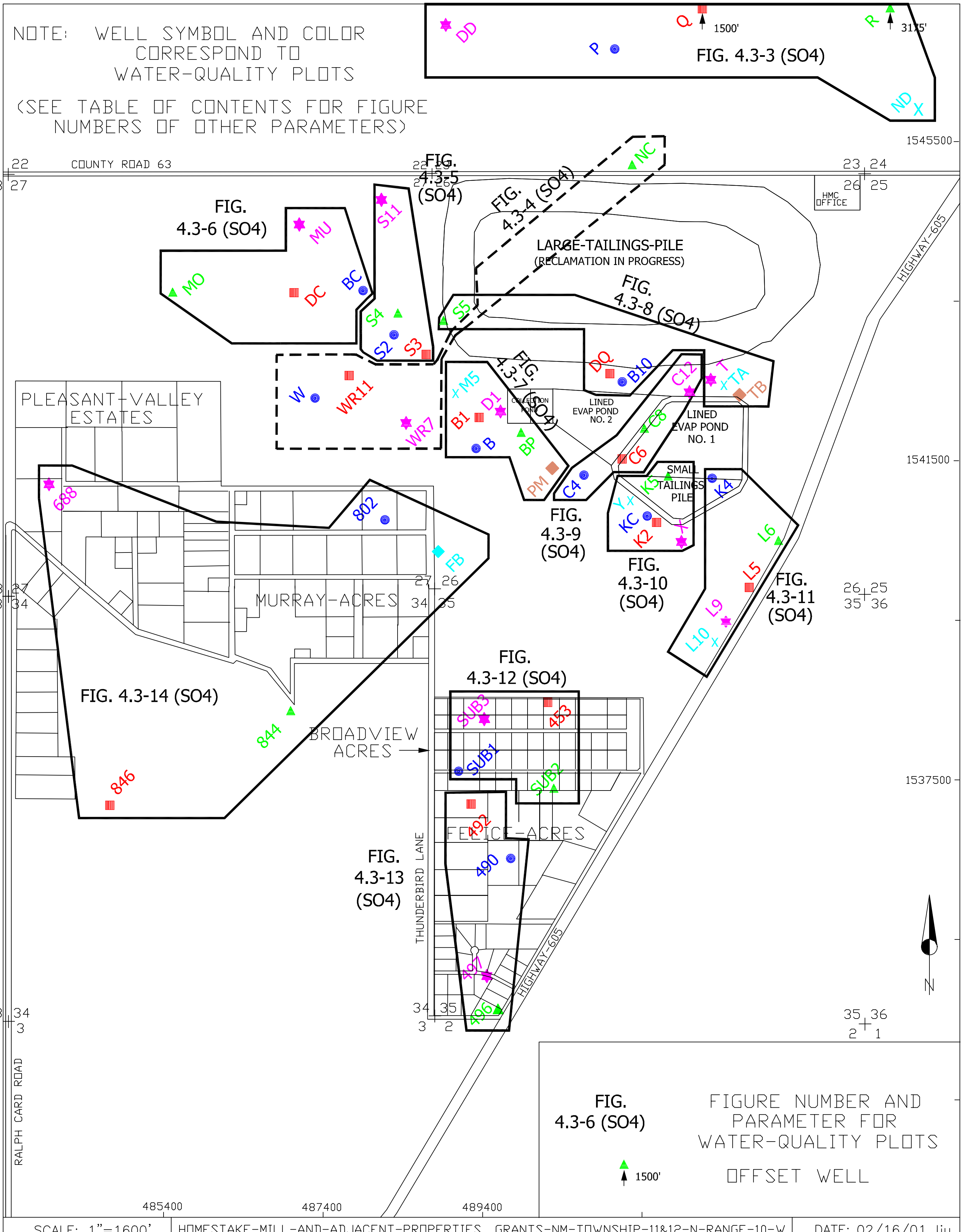
PROJECTS\2001-06\ 2000WQAL LJU



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 03/27/01

FIGURE 4.3-1B. SULFATE CONCENTRATIONS FOR THE ALLUVIAL AQUIFER, FALL 2000, mg/l

projects\2001-06
dwgs\2000eqal lju



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 02/16/01 lju

FIGURE 4.3-2. LOCATION OF ALLUVIAL WELLS WITH WATER-QUALITY PLOTS

PROJECTS\2001-06\DWGS\2001FIGS

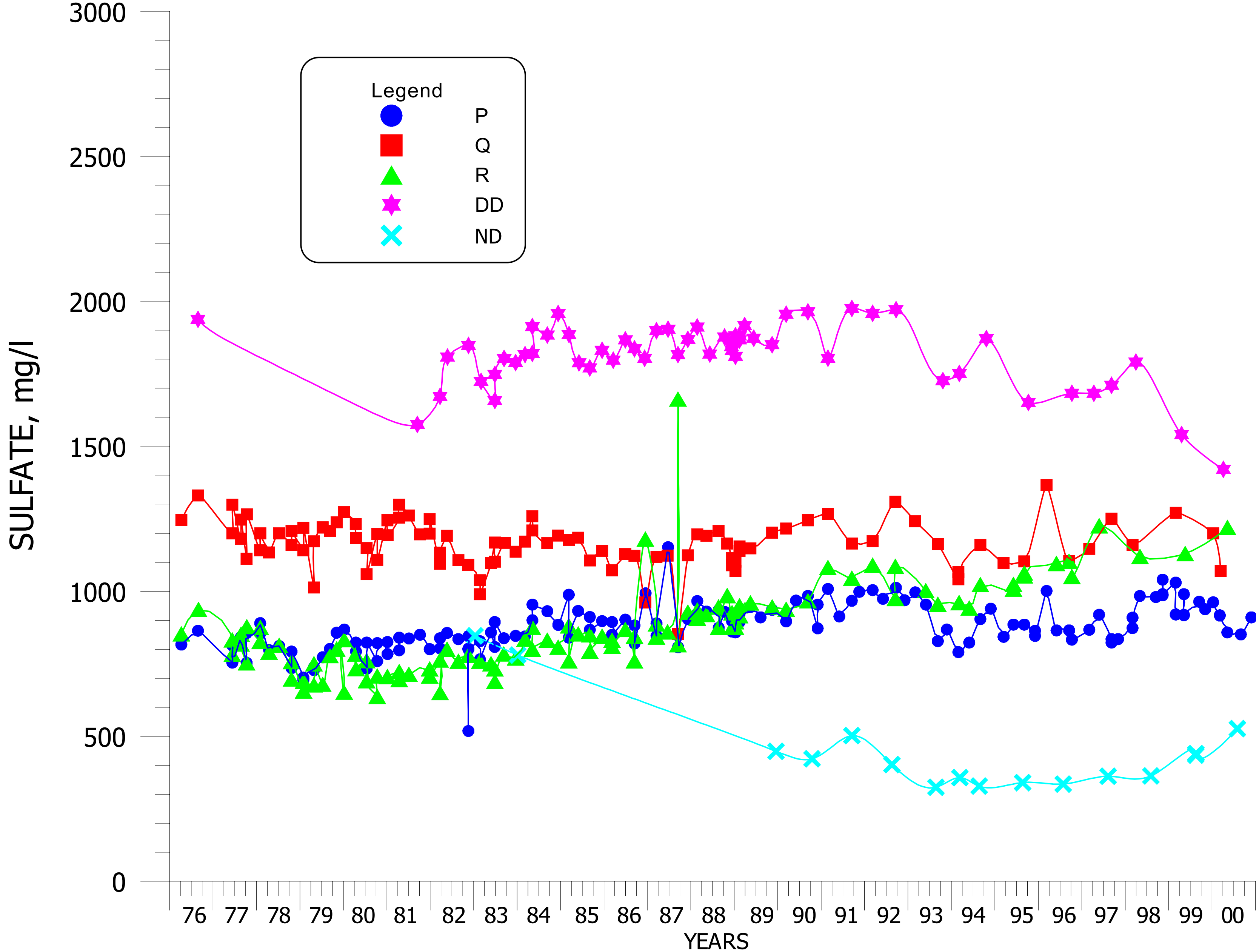


FIGURE 4.3-3. SULFATE CONCENTRATIONS FOR WELLS P, Q, R, DD AND ND.

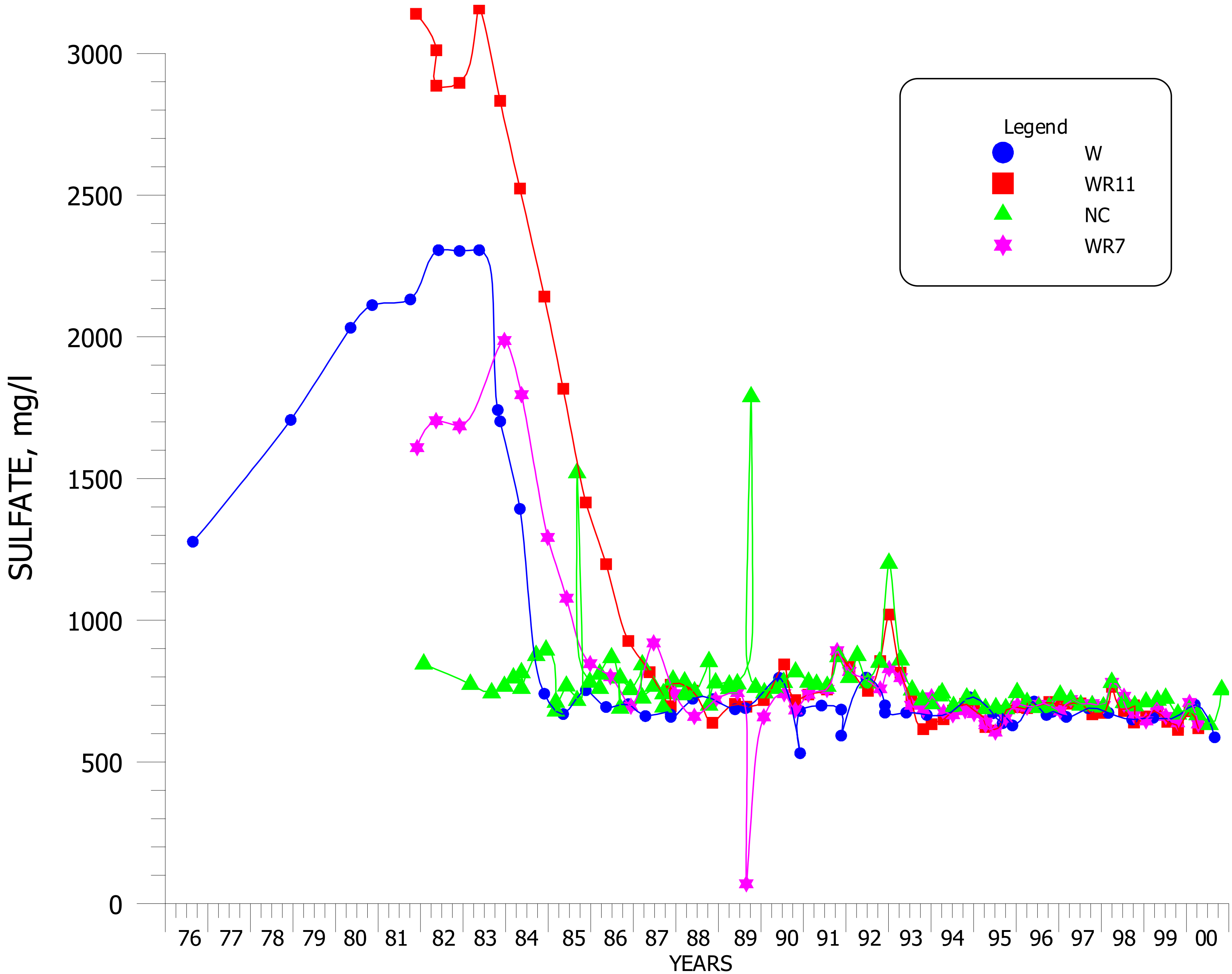


FIGURE 4.3-4. SULFATE CONCENTRATIONS FOR WELLS W, WR11, NC AND WR7.

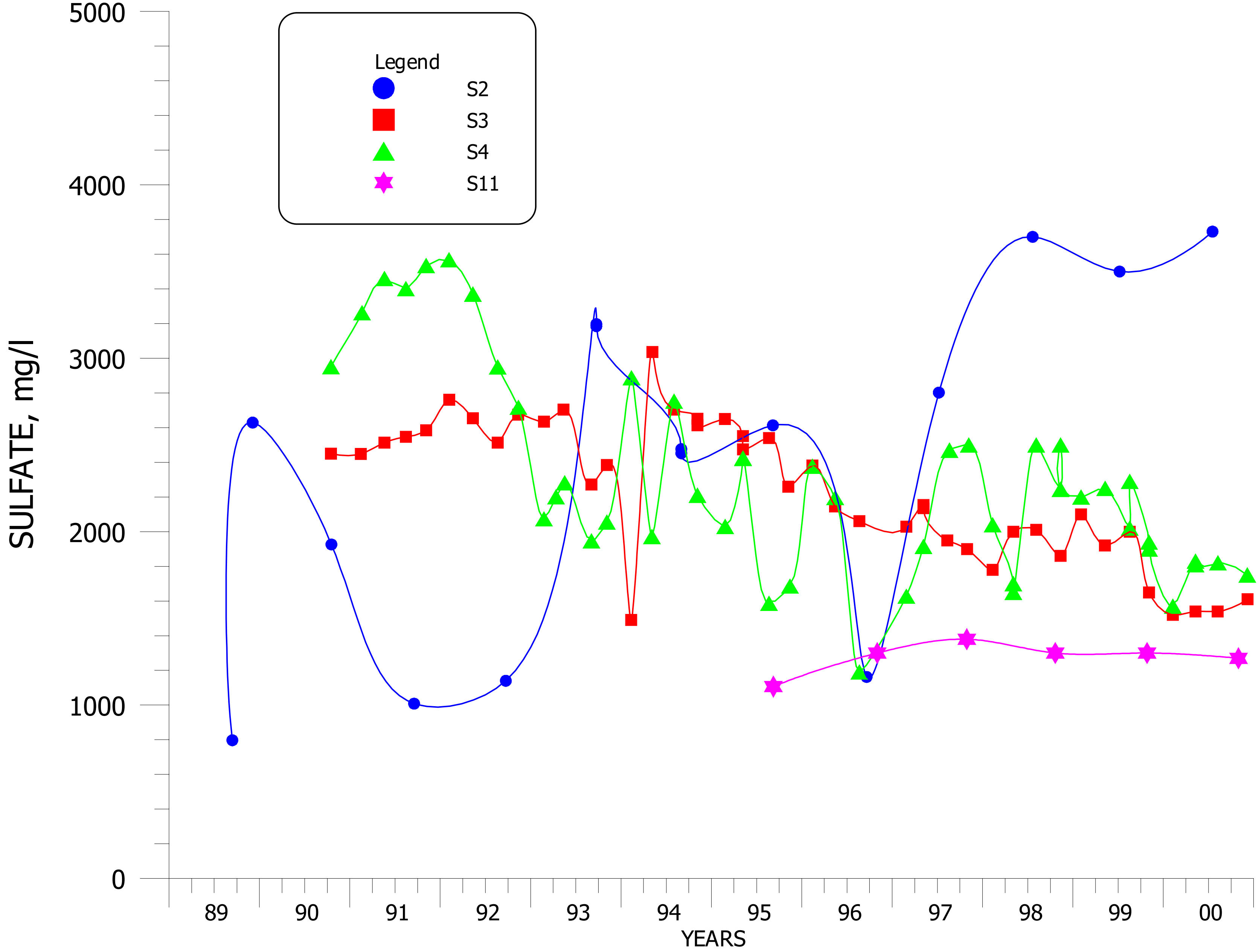


FIGURE 4.3-5. SULFATE CONCENTRATIONS FOR WELLS S2, S3, S4 AND S11.

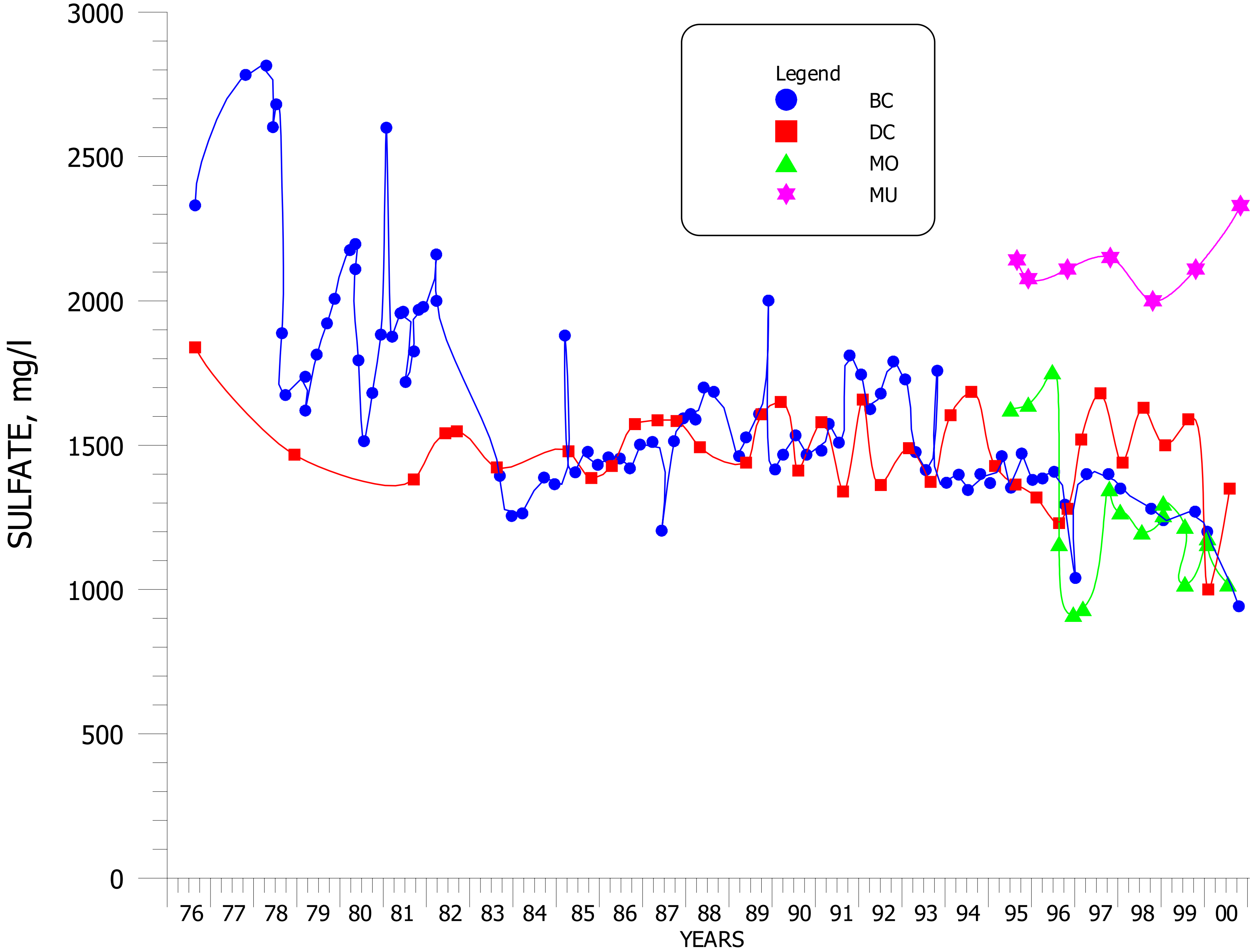


FIGURE 4.3-6. SULFATE CONCENTRATIONS FOR WELLS BC, DC, MO AND MU.

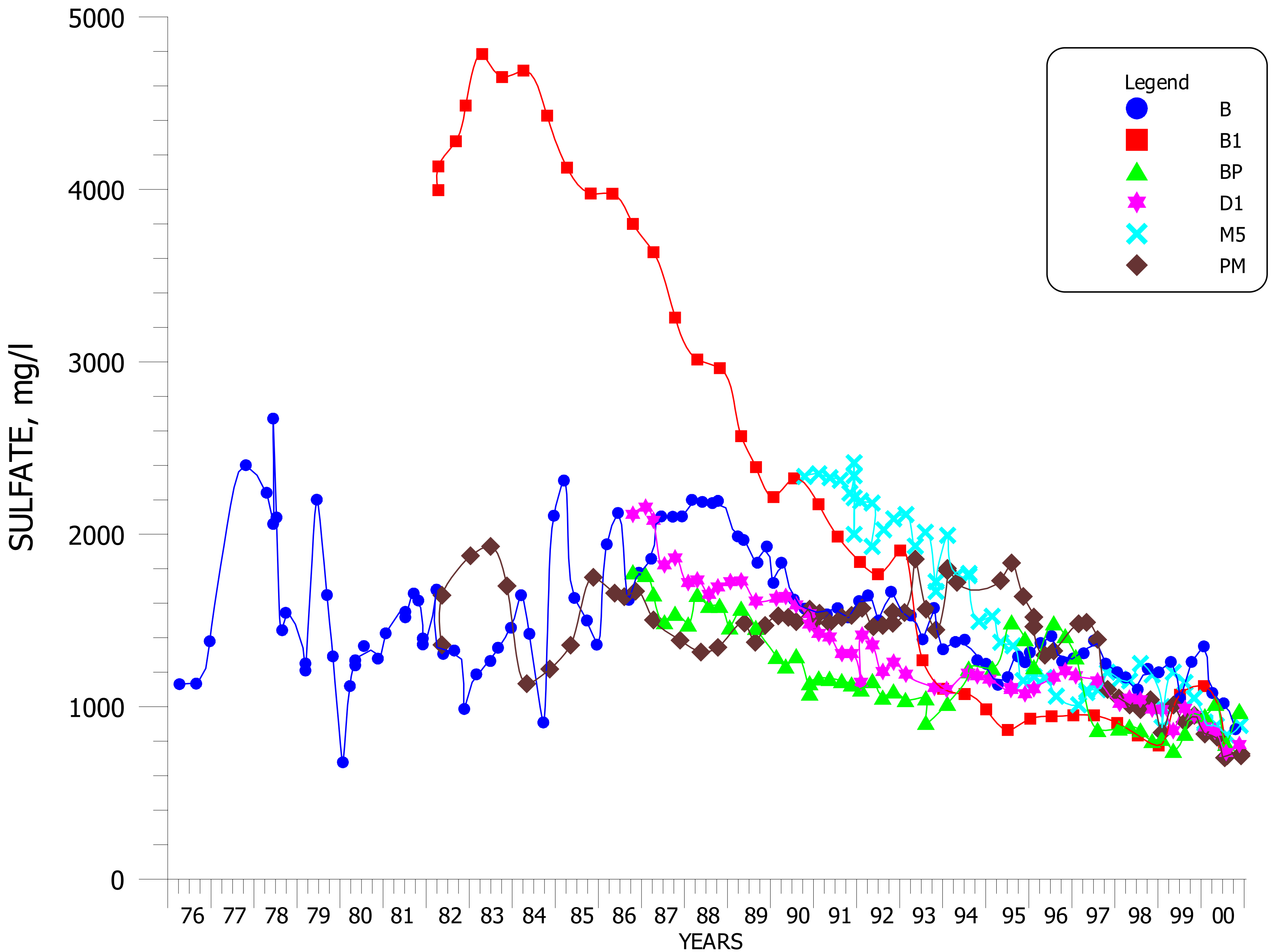


FIGURE 4.3-7. SULFATE CONCENTRATIONS FOR WELLS B, B1, BP, D1, M5 AND PM.

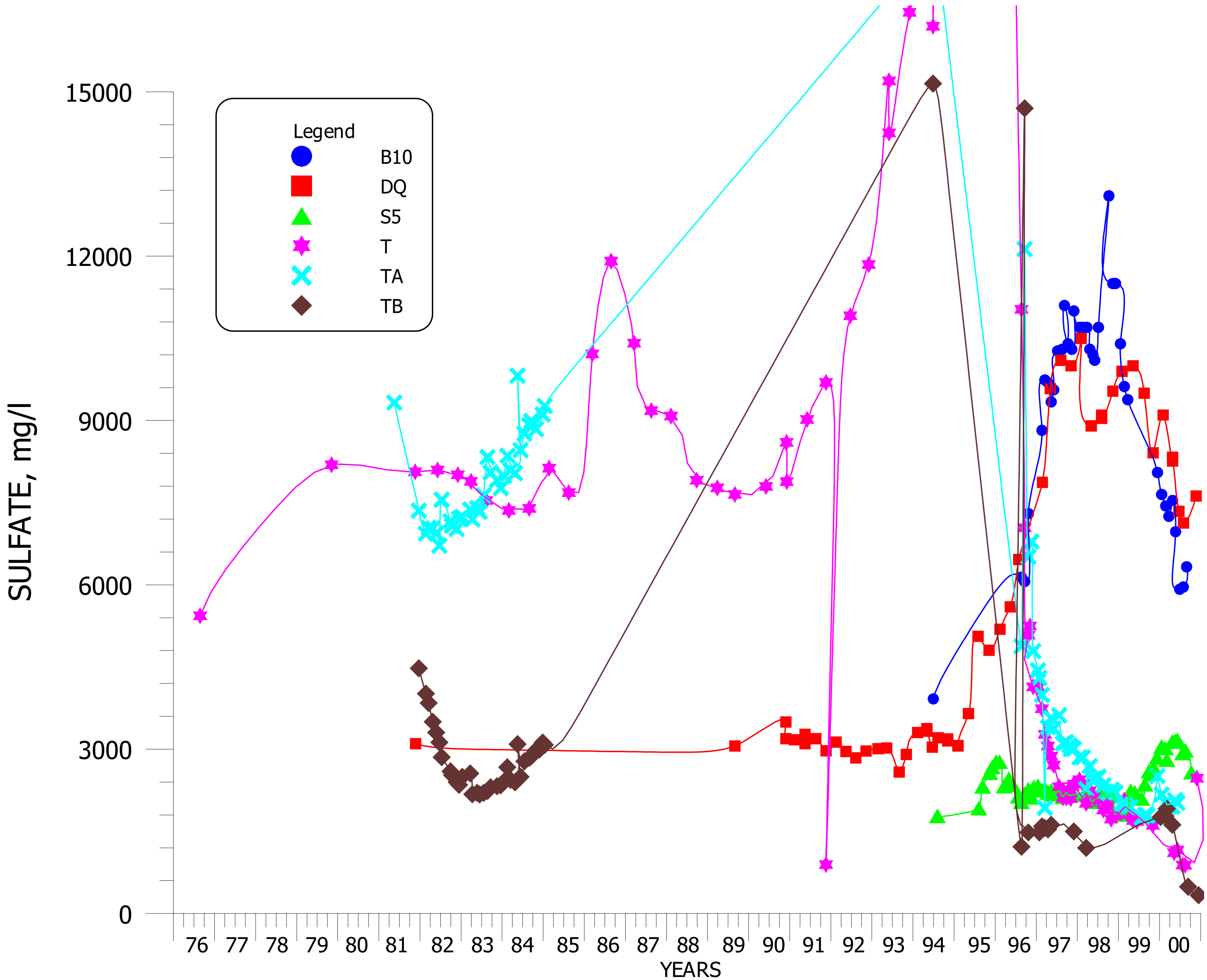


FIGURE 4.3-8. SULFATE CONCENTRATIONS FOR WELLS B10, DQ, S5, T, TA AND TB.

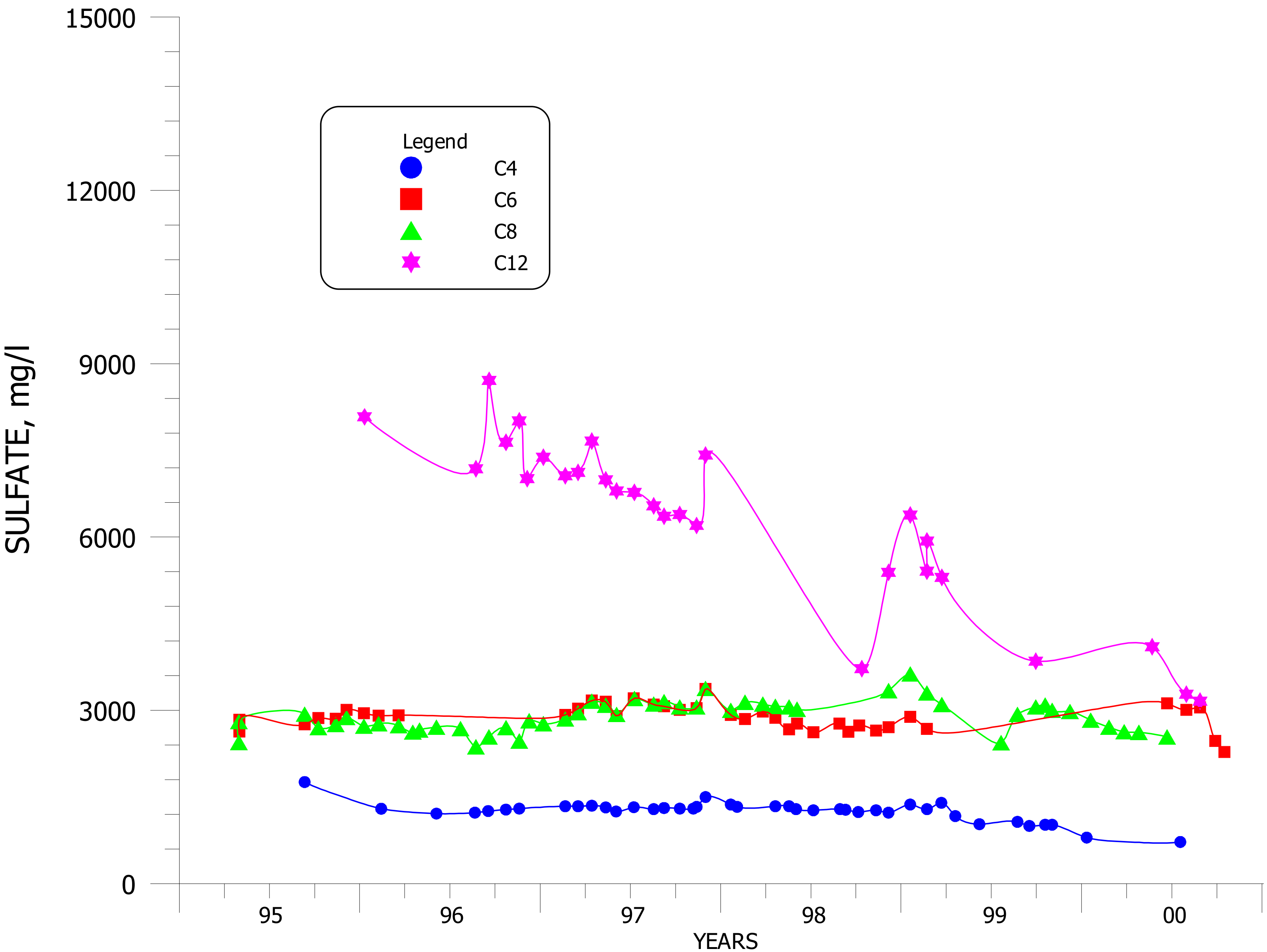


FIGURE 4.3-9. SULFATE CONCENTRATIONS FOR WELLS C4, C6, C8 AND C12.

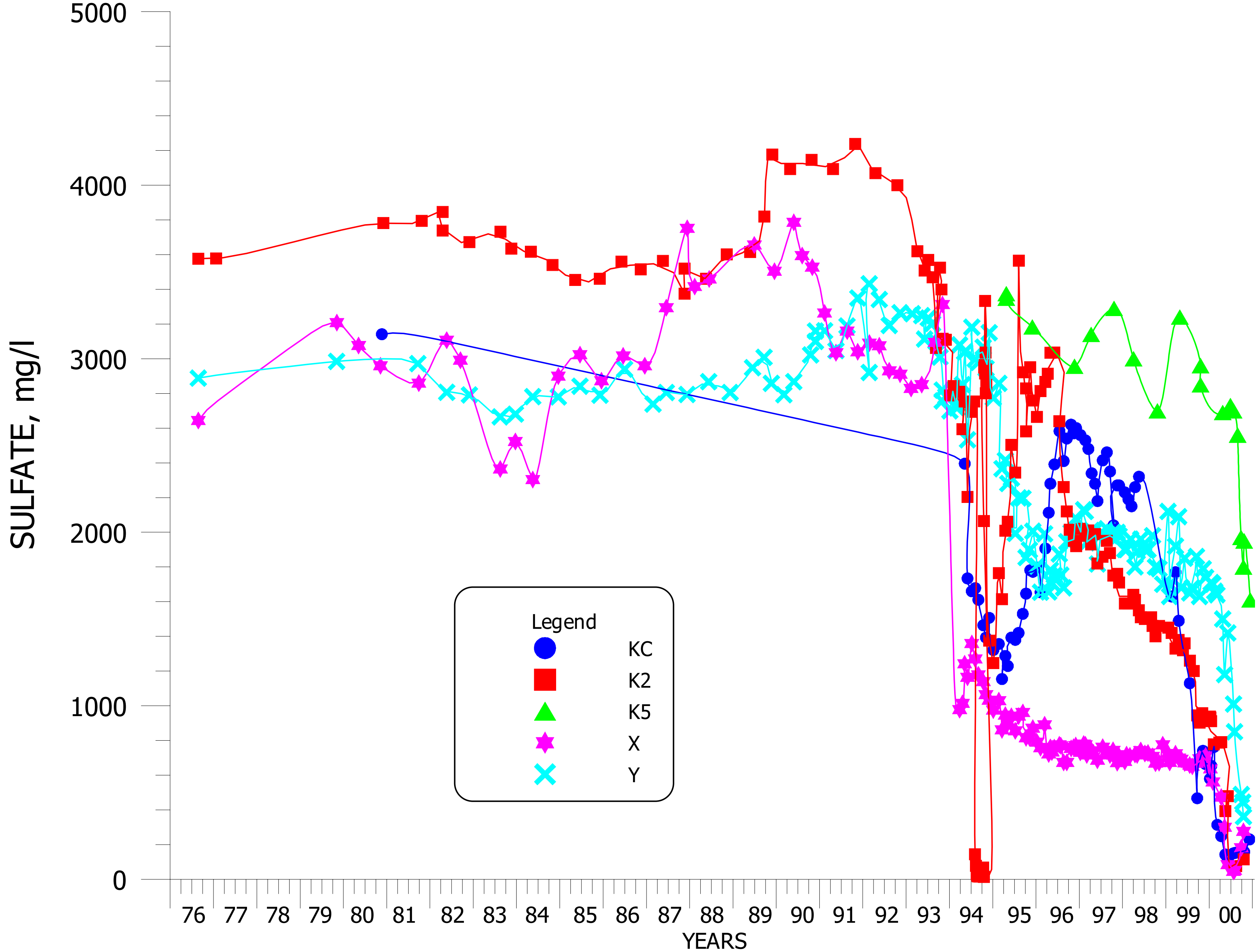


FIGURE 4.3-10. SULFATE CONCENTRATIONS FOR WELLS KC, K2, K5, X AND Y.

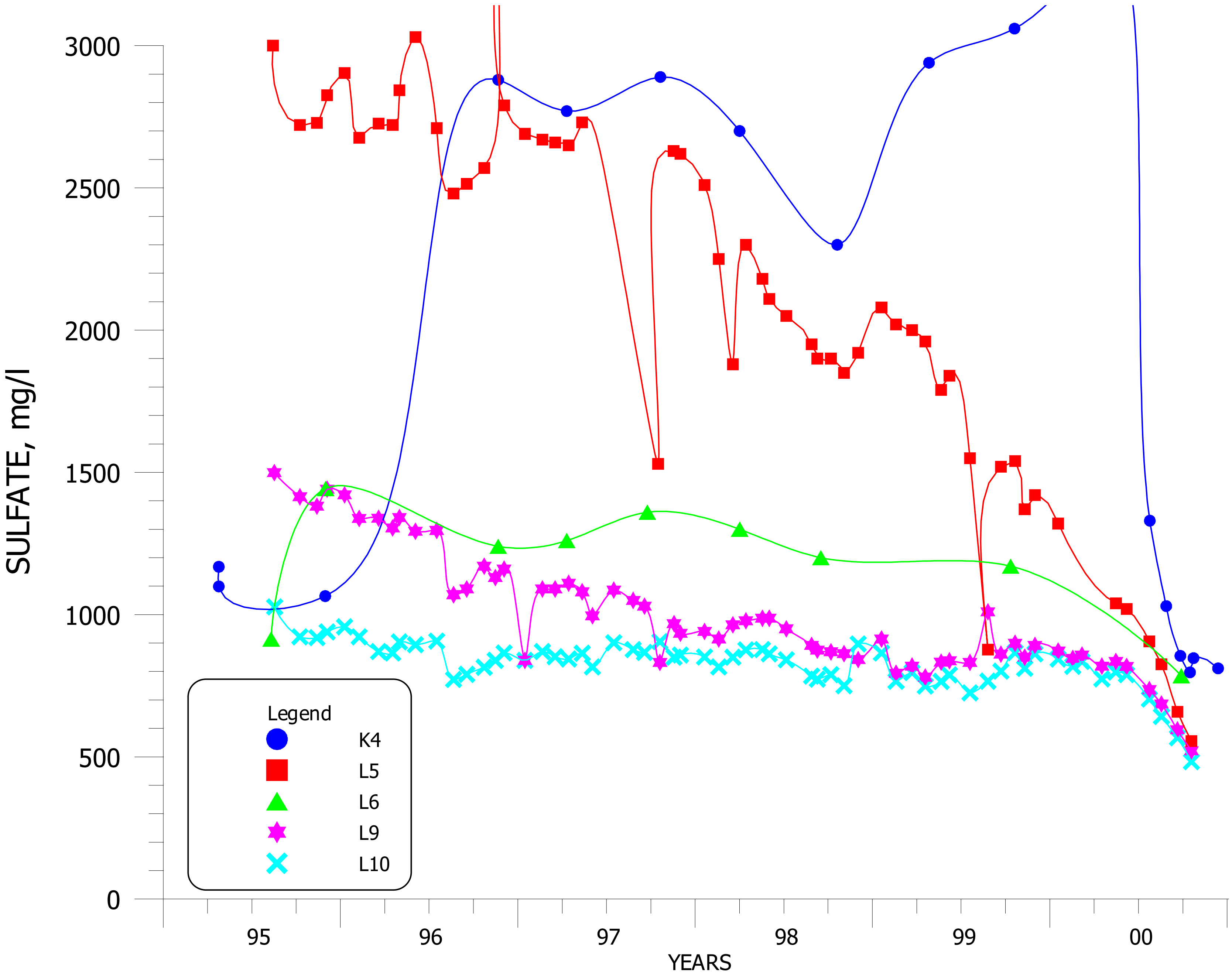


FIGURE 4.3-11. SULFATE CONCENTRATIONS FOR WELLS K4, L5, L6, L9 AND L10.

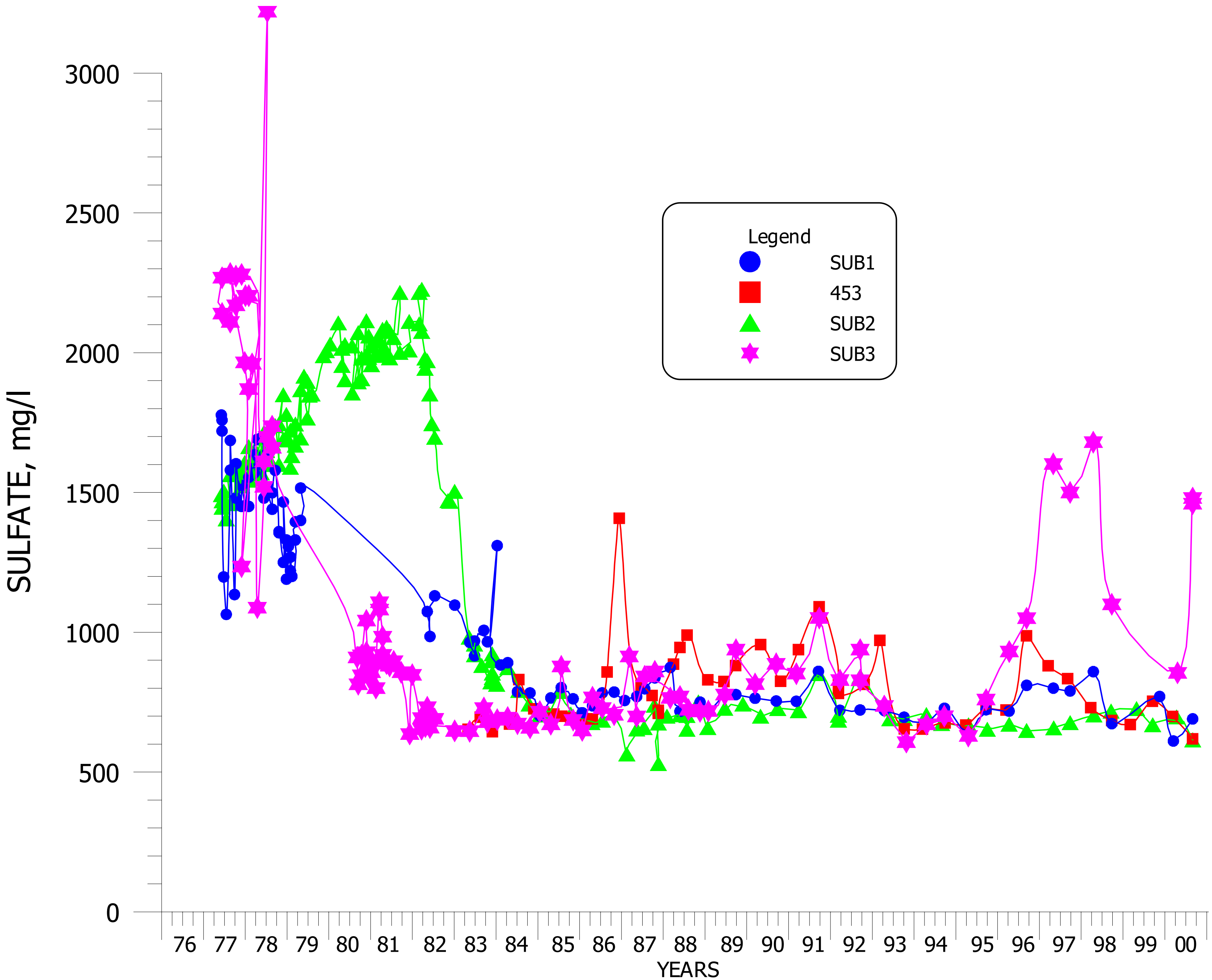


FIGURE 4.3-12. SULFATE CONCENTRATIONS FOR WELLS SUB1, 453, SUB2 AND SUB3.

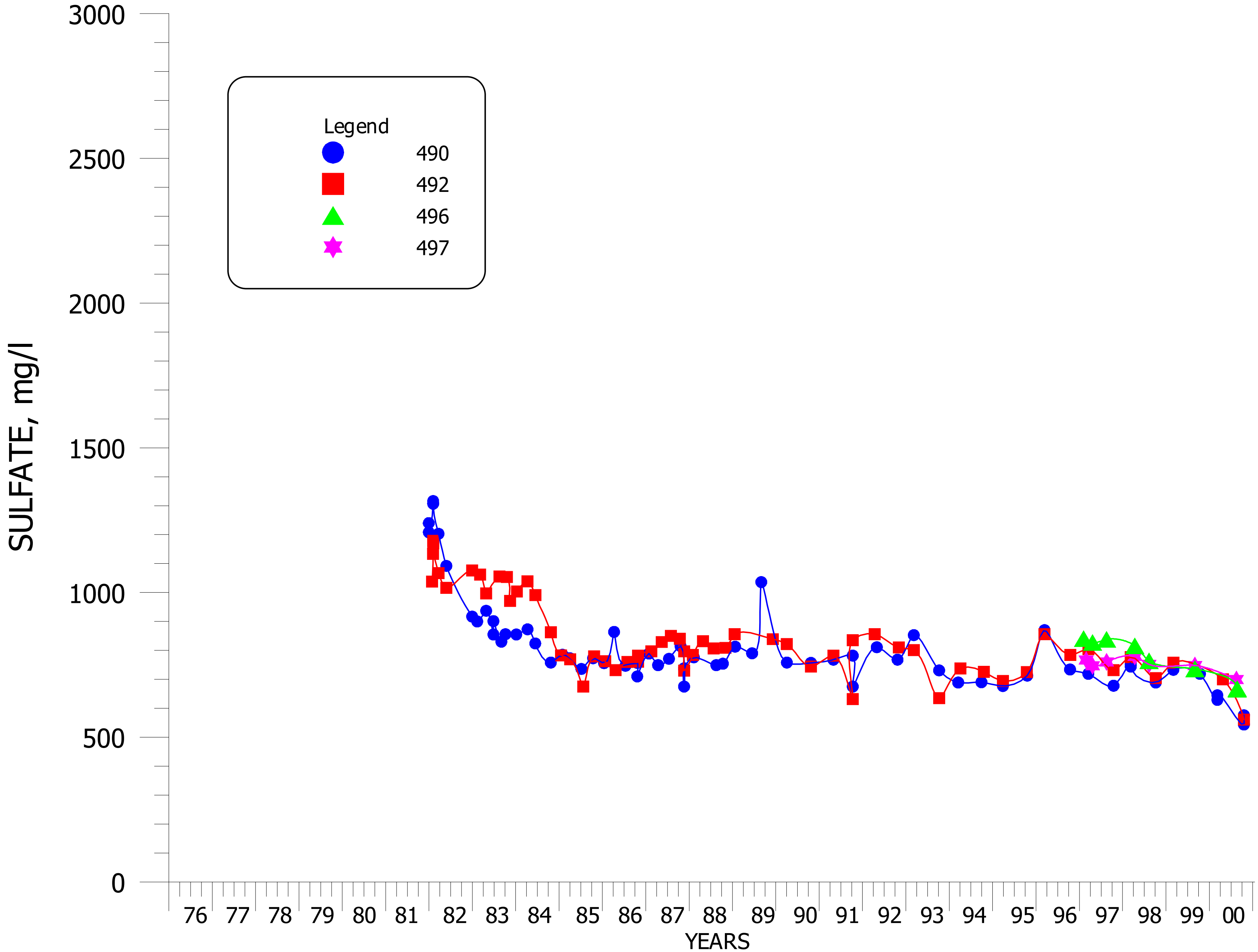


FIGURE 4.3-13. SULFATE CONCENTRATIONS FOR WELLS 490, 492, 496 AND 497.

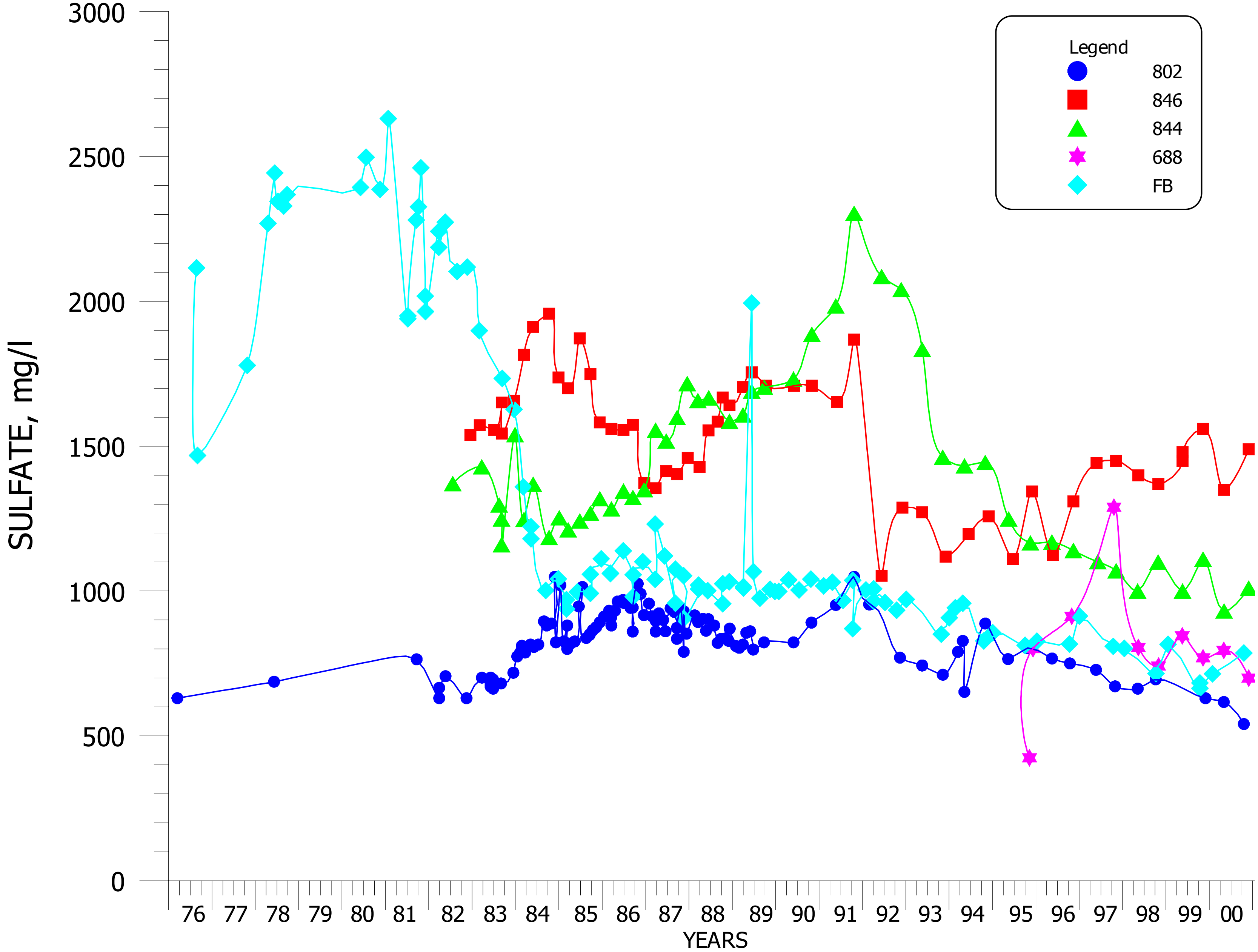
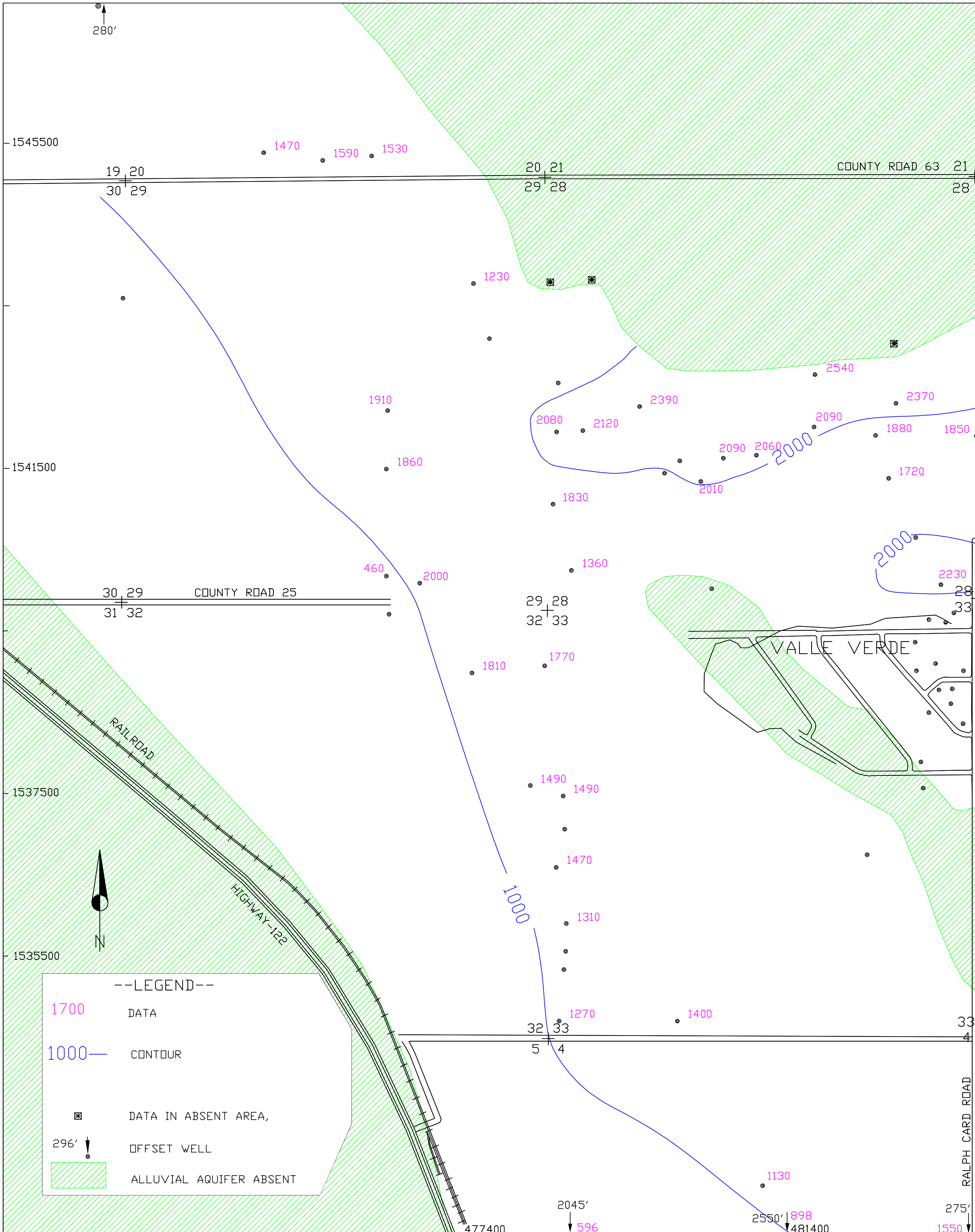


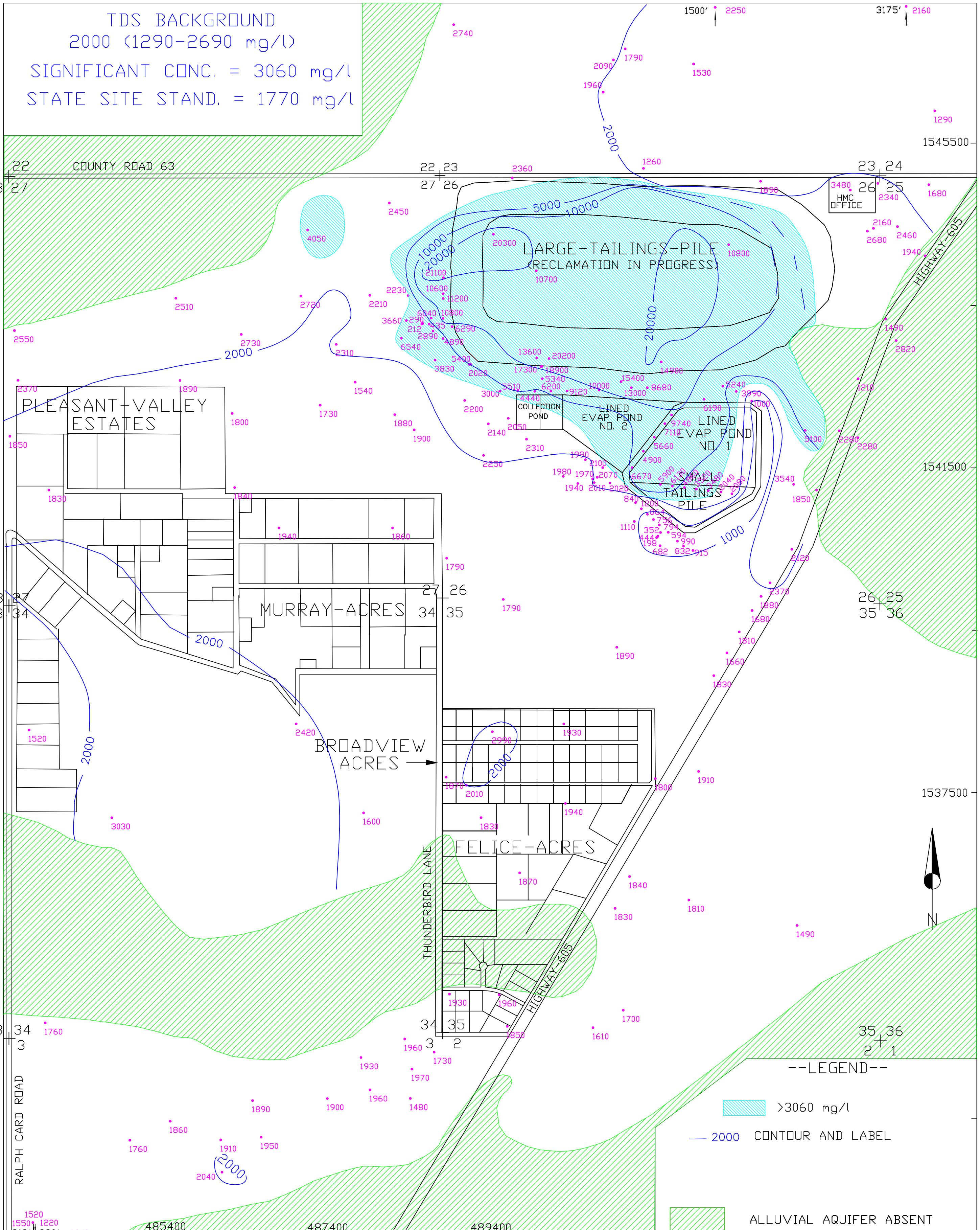
FIGURE 4.3-14. SULFATE CONCENTRATIONS FOR WELLS 802, 846, 844, 688 AND FB.



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 03/16/01

FIGURE 4.3-15A. TDS CONCENTRATIONS FOR THE ALLUVIAL AQUIFER (WEST AREA), FALL 2000, mg/l

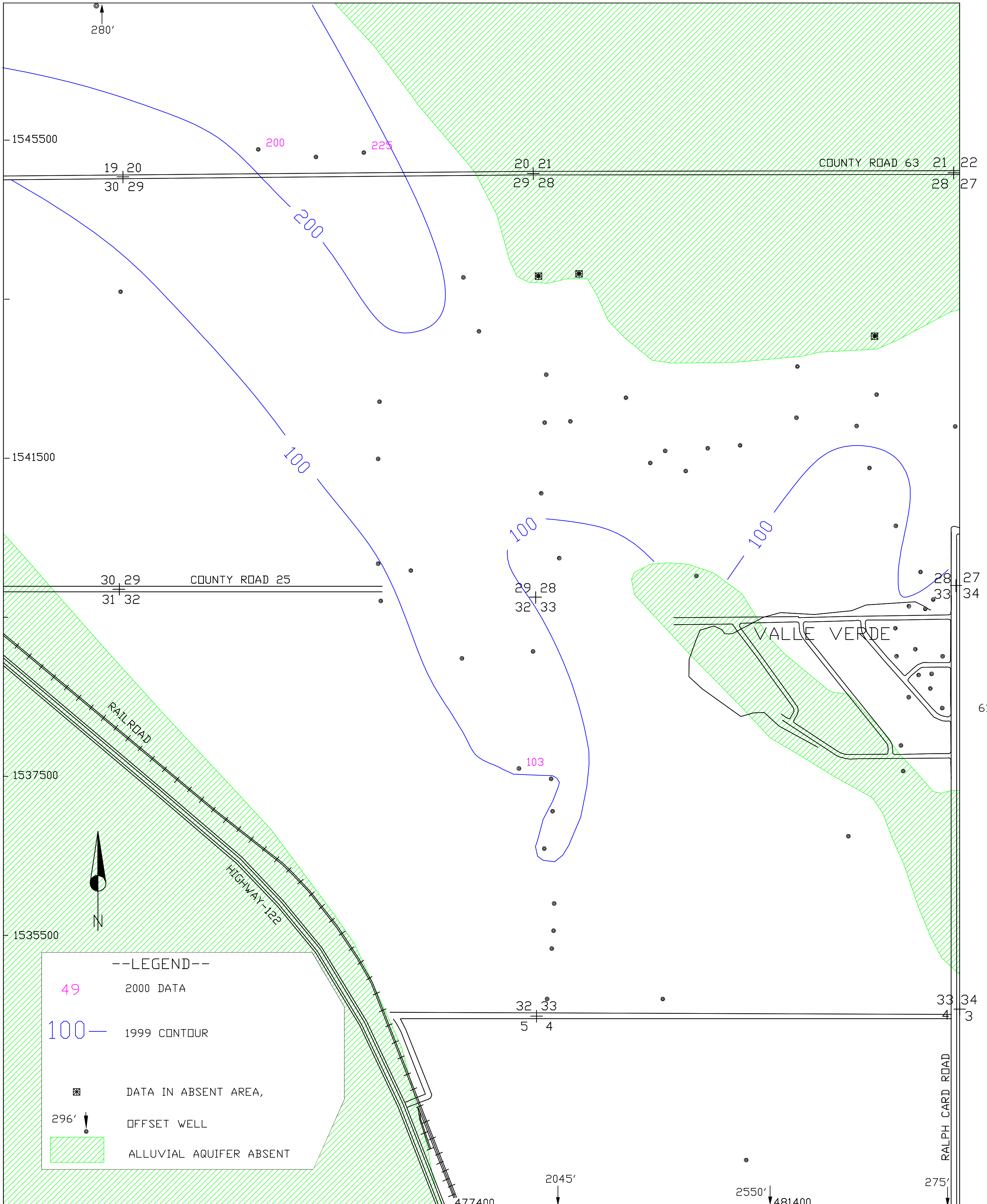
PROJECTS\2001-06\2000WQAL LJU



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 03/27/01

FIGURE 4.3-15B. TDS CONCENTRATIONS FOR THE ALLUVIAL AQUIFER, FALL 2000, mg/l

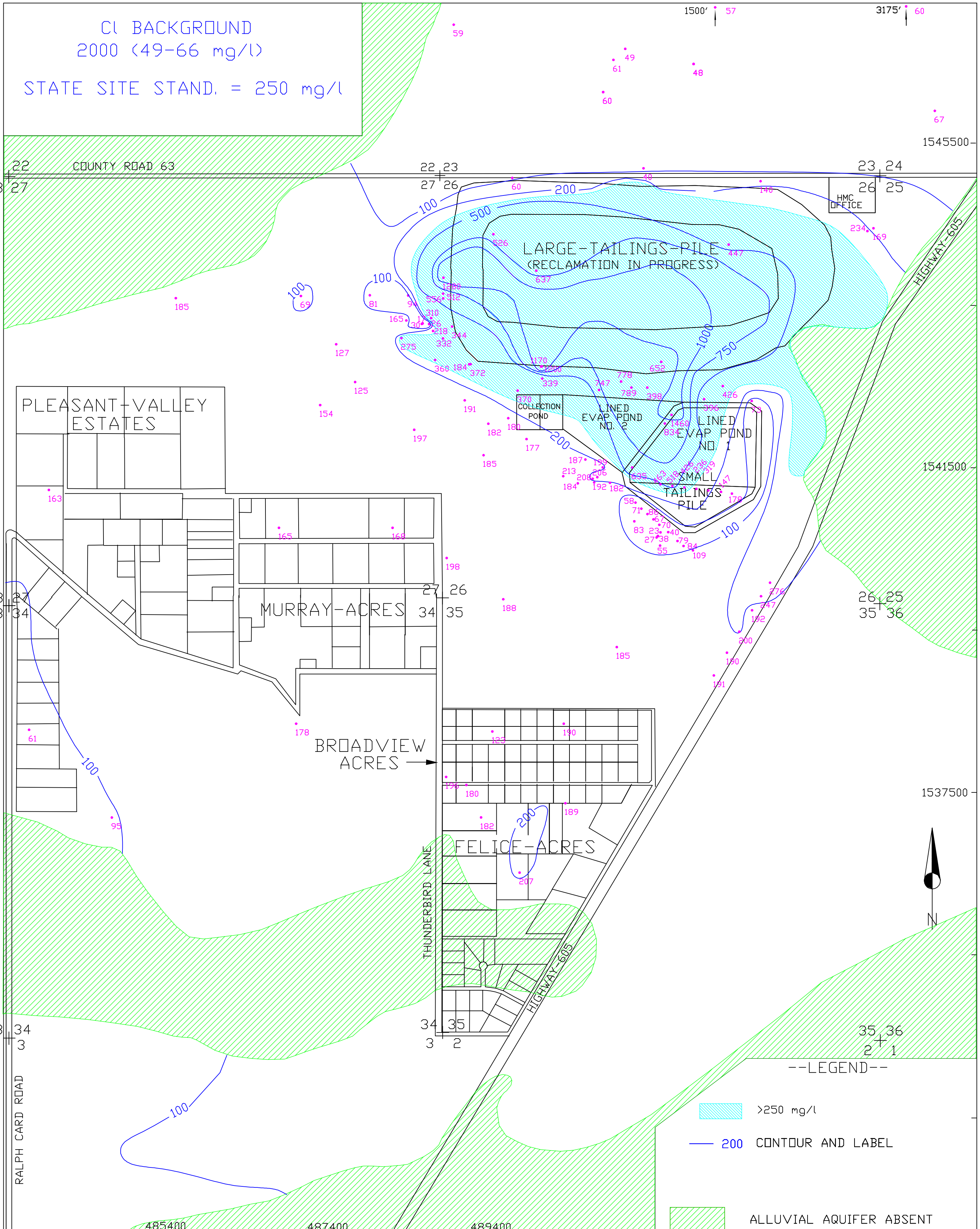
projects\2001-06 dwgs\2000eqal lju



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 03/16/01

FIGURE 4.3-16A. CHLORIDE CONCENTRATIONS FOR THE ALLUVIAL AQUIFER, (WEST AREA), FALL 2000, mg/l

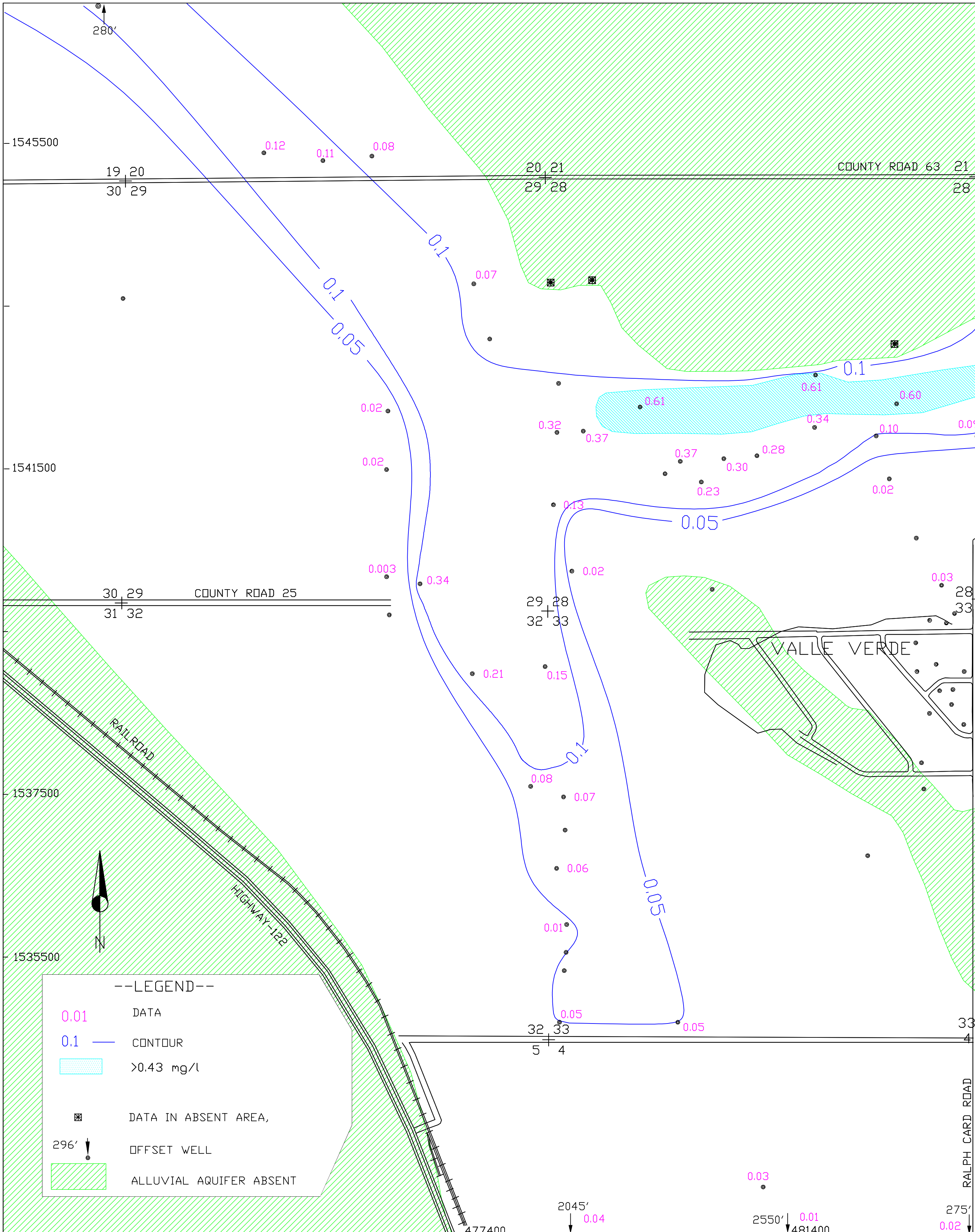
PROJECTS\2001-06\2000WQAL LJU



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 03/27/01

FIGURE 4.3-16B. CHLORIDE CONCENTRATIONS FOR THE ALLUVIAL AQUIFER, FALL 2000, mg/l

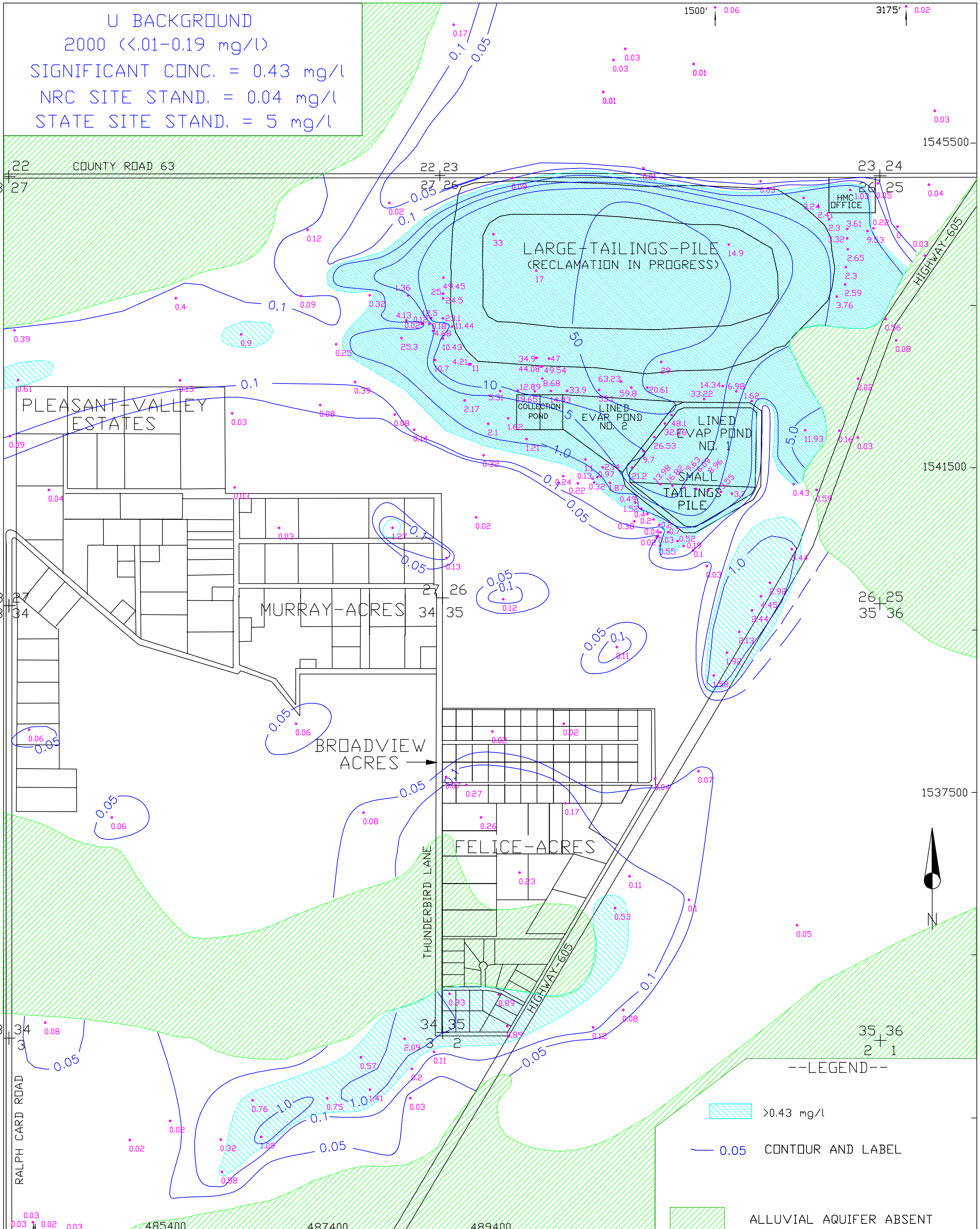
projects\2001-06
dwgs\2000eqal lju



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 03/16/01

FIGURE 4.3-17A. URANIUM CONCENTRATIONS FOR THE ALLUVIAL AQUIFER (WEST AREA), FALL 2000, mg/l

PROJECTS\2001-06\2000WQAL LJU



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 03/27/01

FIGURE 4.3-17B. URANIUM CONCENTRATIONS FOR THE ALLUVIAL AQUIFER, FALL 2000, mg/l

projects\2001-06
dwgs\2000eqal lju

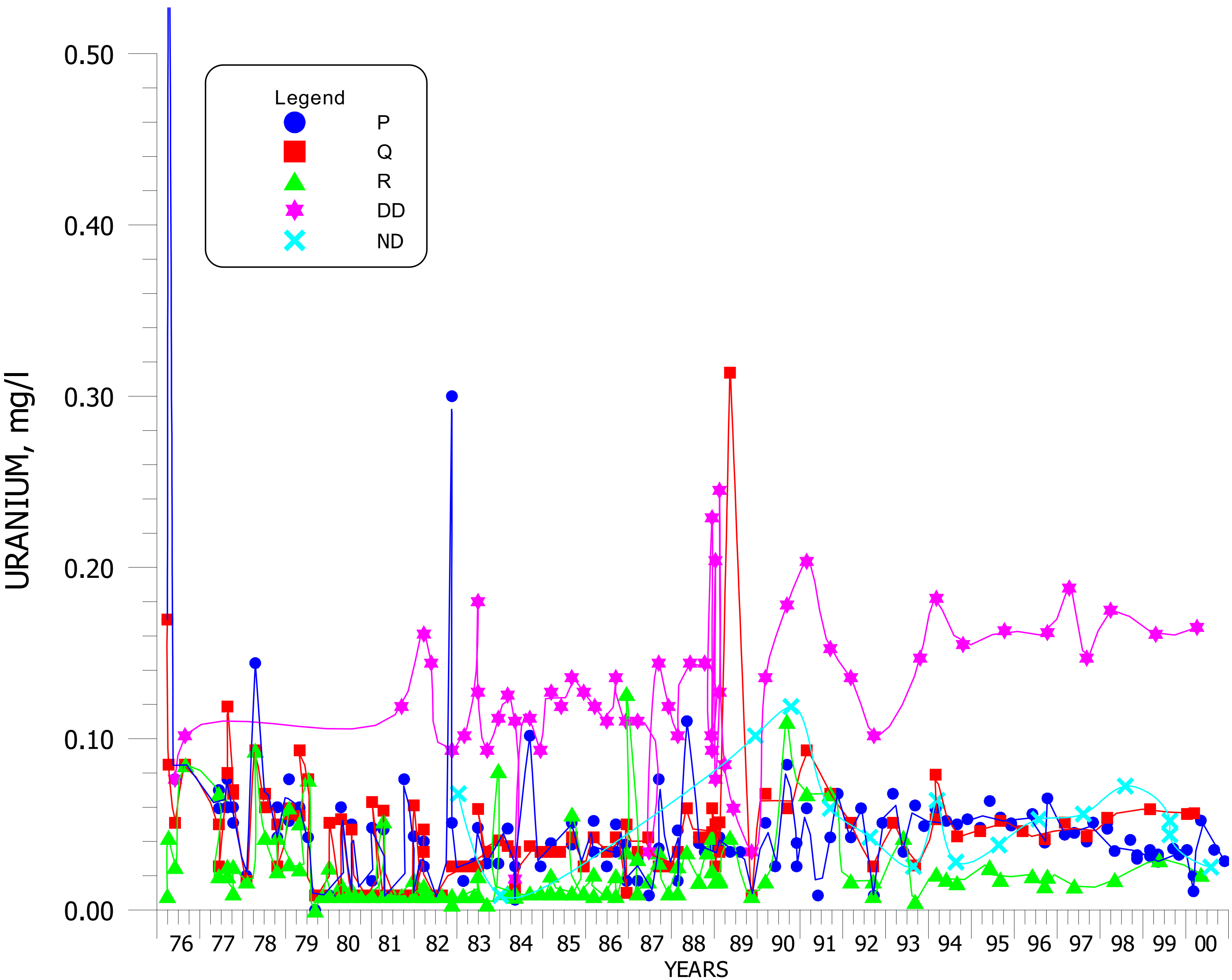


FIGURE 4.3-18. URANIUM CONCENTRATIONS FOR WELLS P, Q, R, DD AND ND.

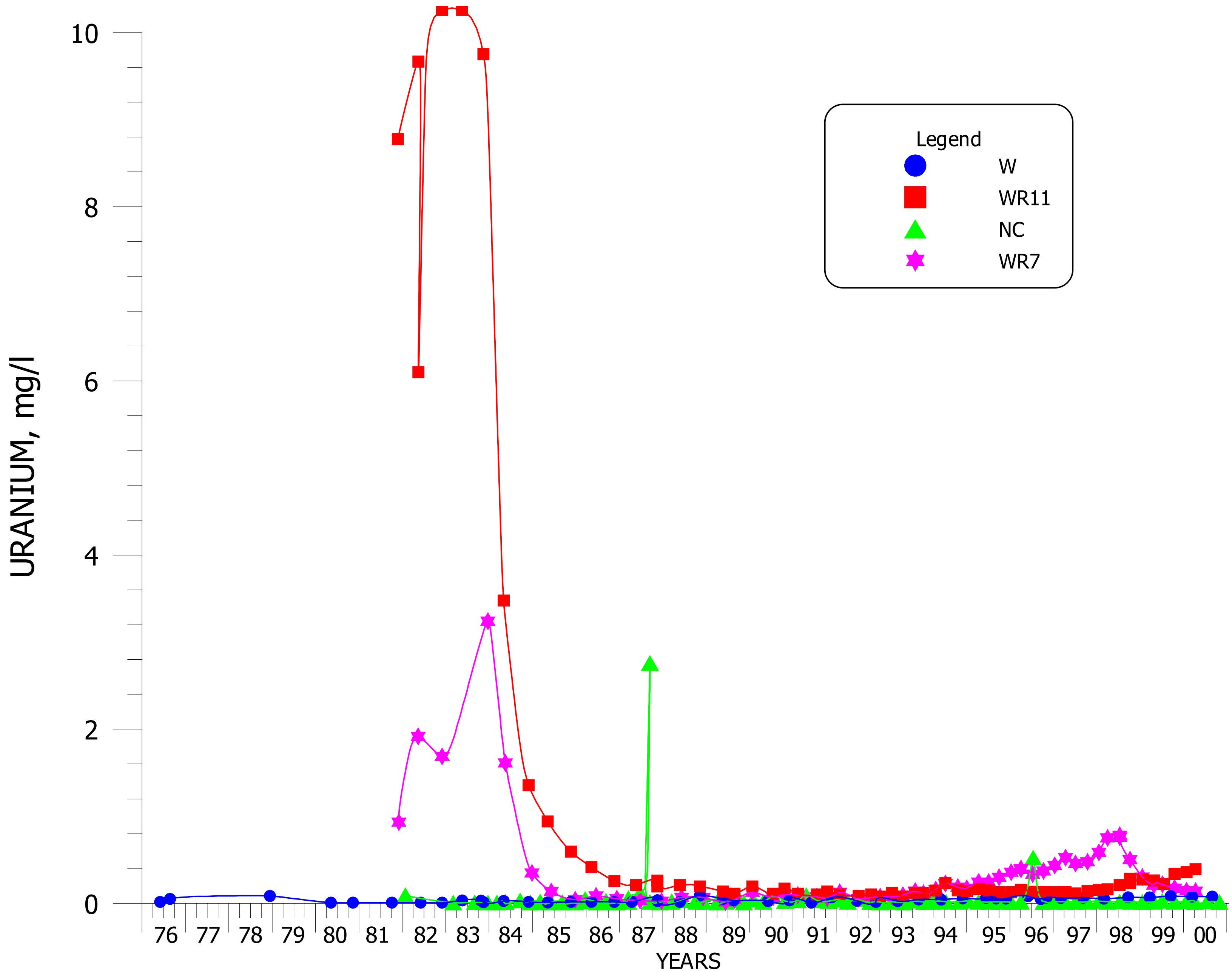


FIGURE 4.3-19. URANIUM CONCENTRATIONS FOR WELLS W, WR11, NC AND WR7.

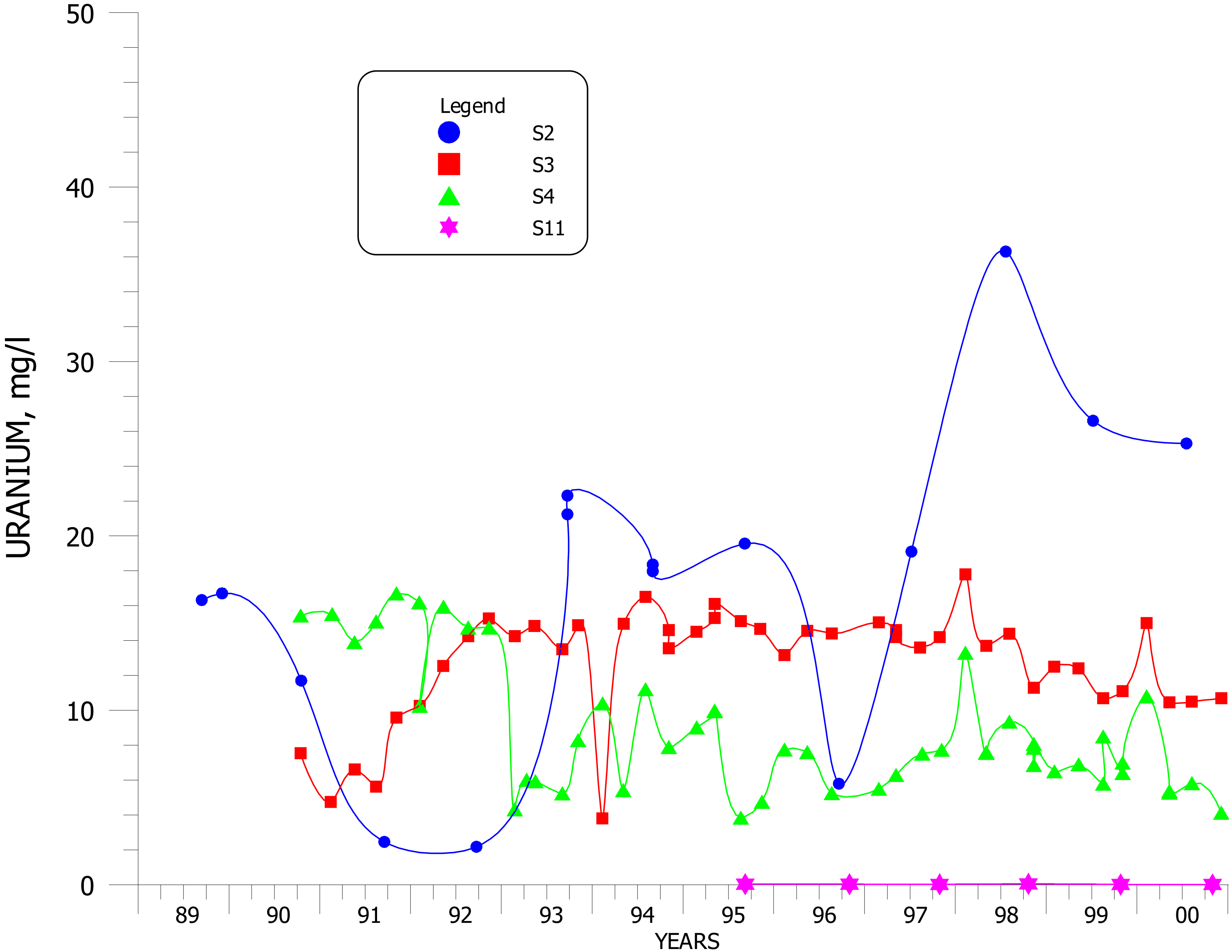


FIGURE 4.3-20. URANIUM CONCENTRATIONS FOR WELLS S2, S3, S4 AND S11.

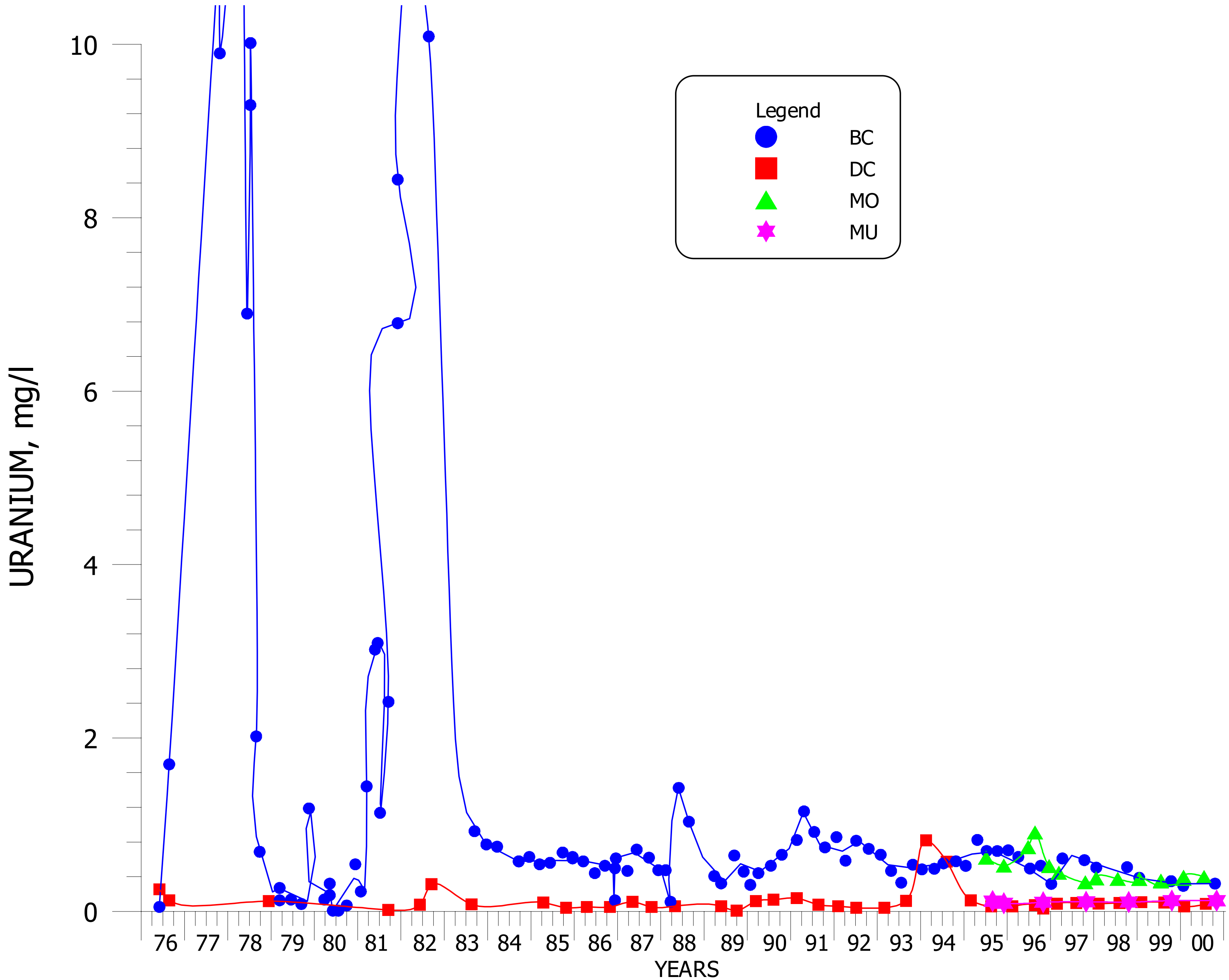


FIGURE 4.3-21. URANIUM CONCENTRATIONS FOR WELLS BC, DC, MO AND MU.

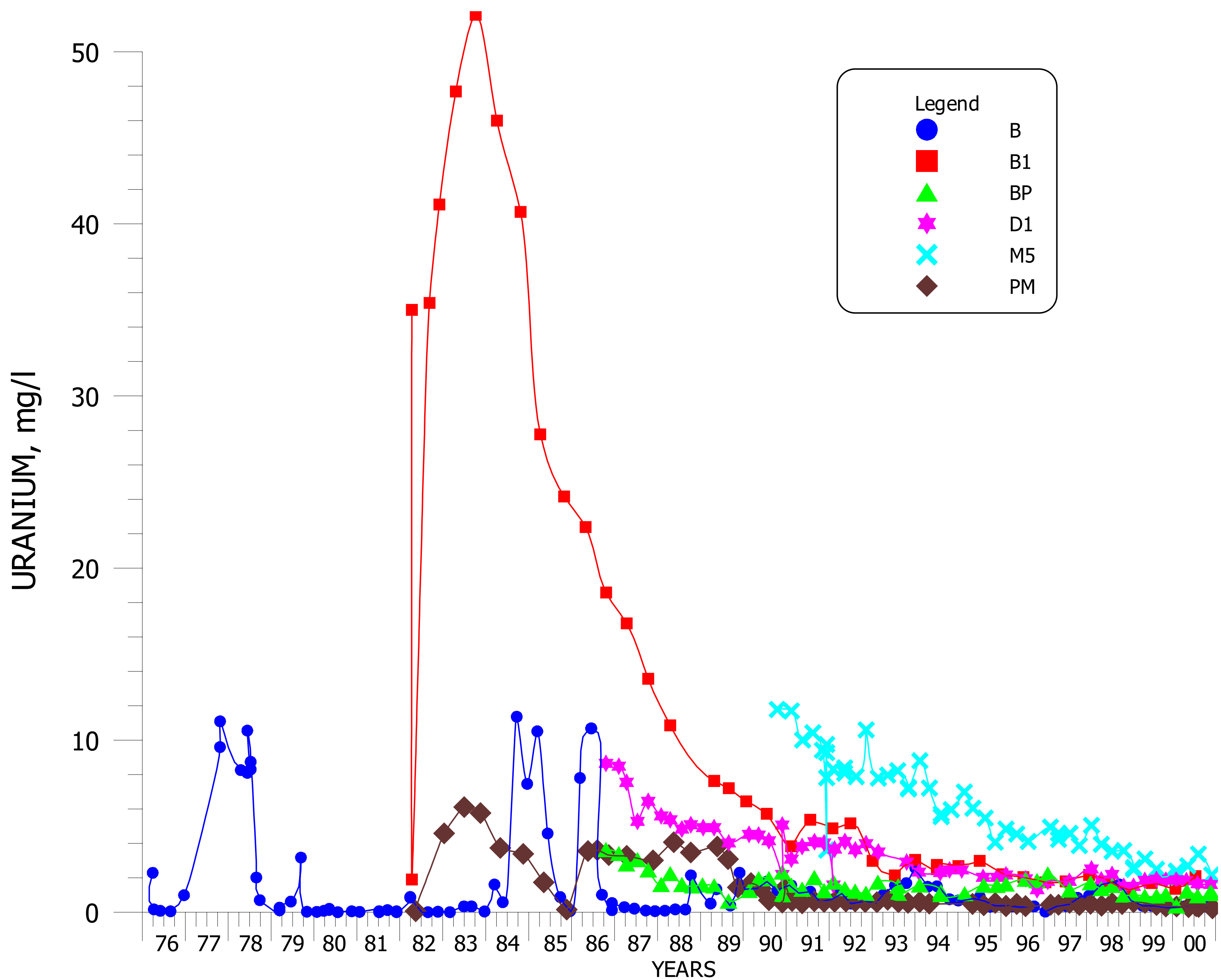


FIGURE 4.3-22. URANIUM CONCENTRATIONS FOR WELLS B, B1, BP, D1, M5 AND PM.

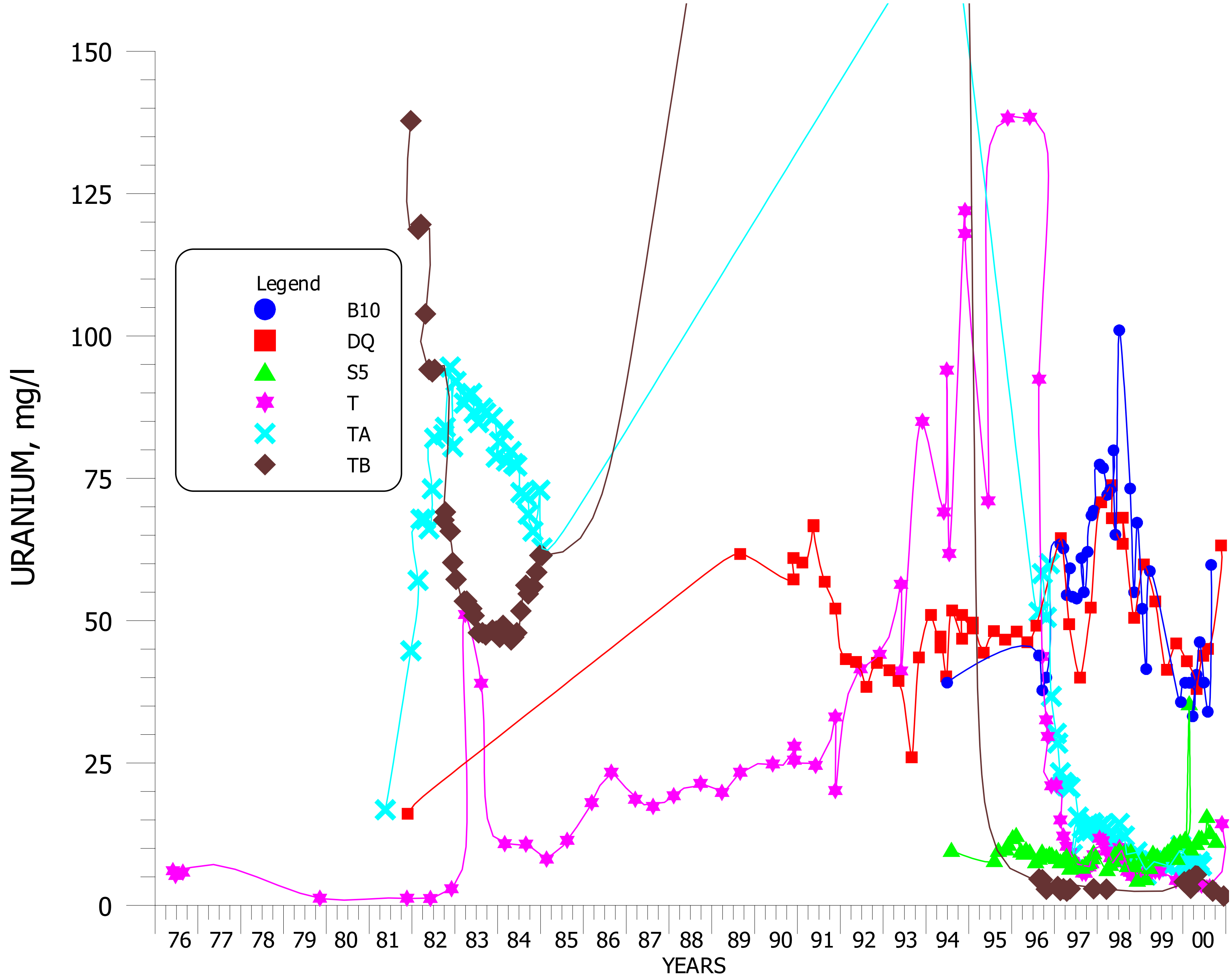


FIGURE 4.3-23. URANIUM CONCENTRATIONS FOR WELLS B10, DQ, S5, T, TA AND TB.

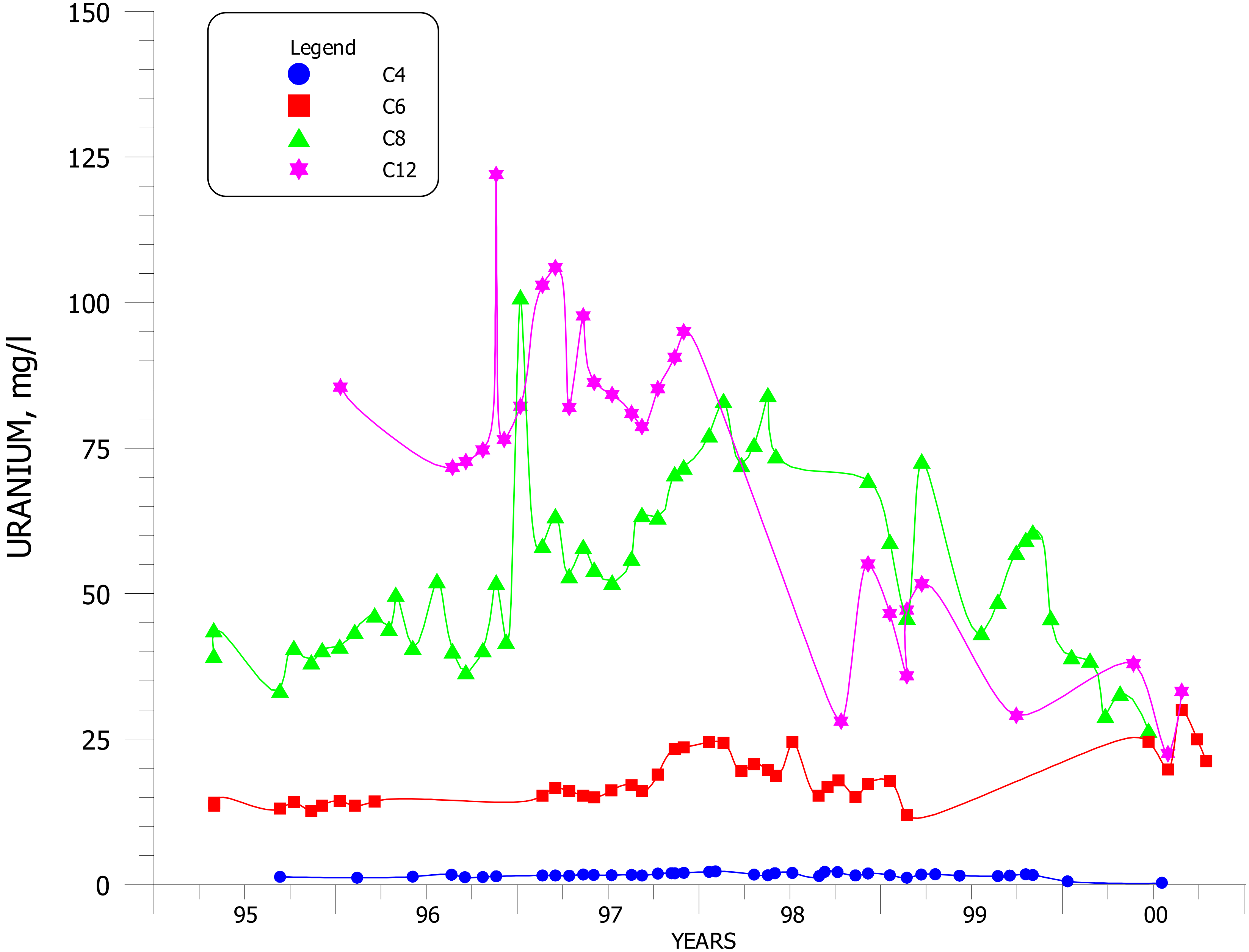


FIGURE 4.3-24. URANIUM CONCENTRATIONS FOR WELLS C4, C6, C8 AND C12.

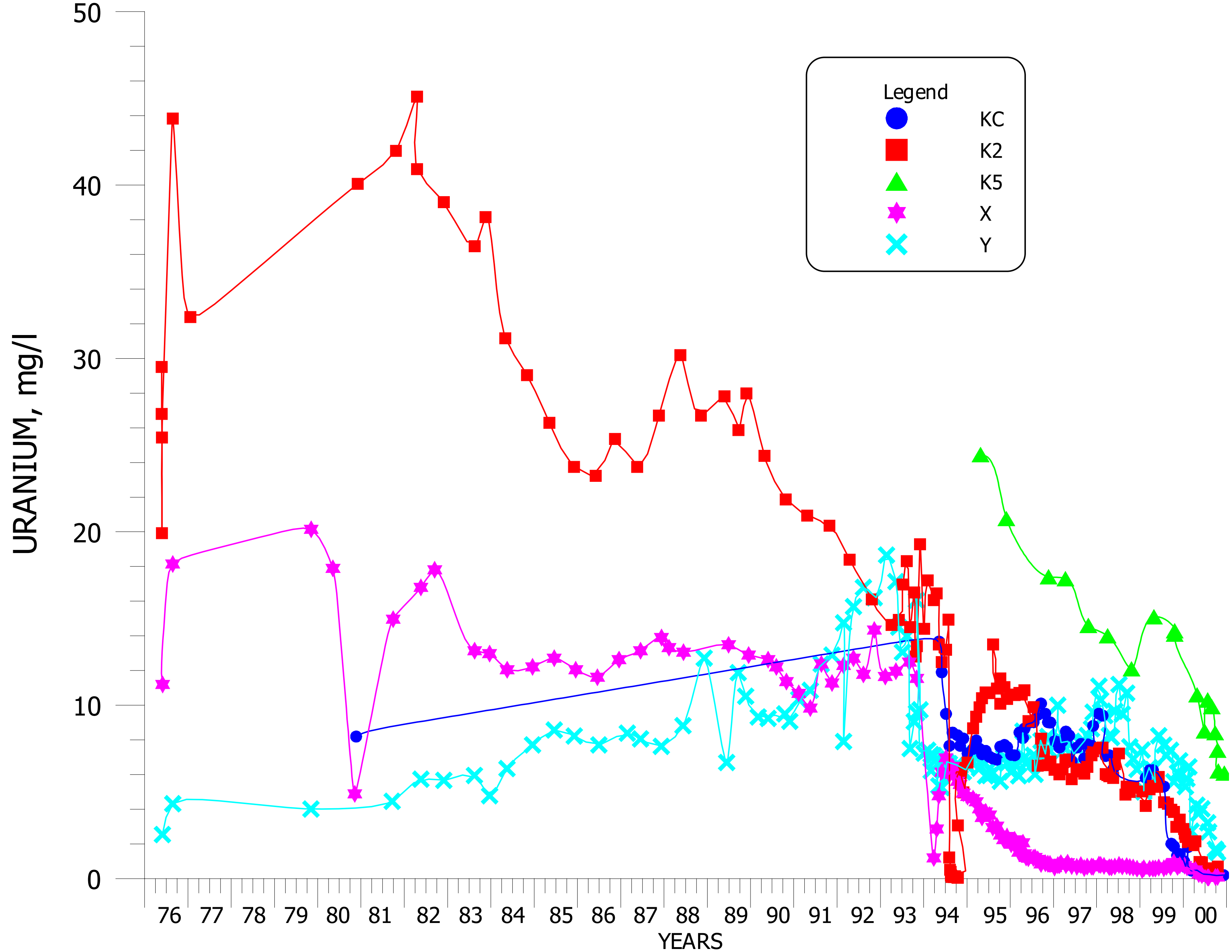


FIGURE 4.3-25. URANIUM CONCENTRATIONS FOR WELLS KC, K2, K5, X AND Y.

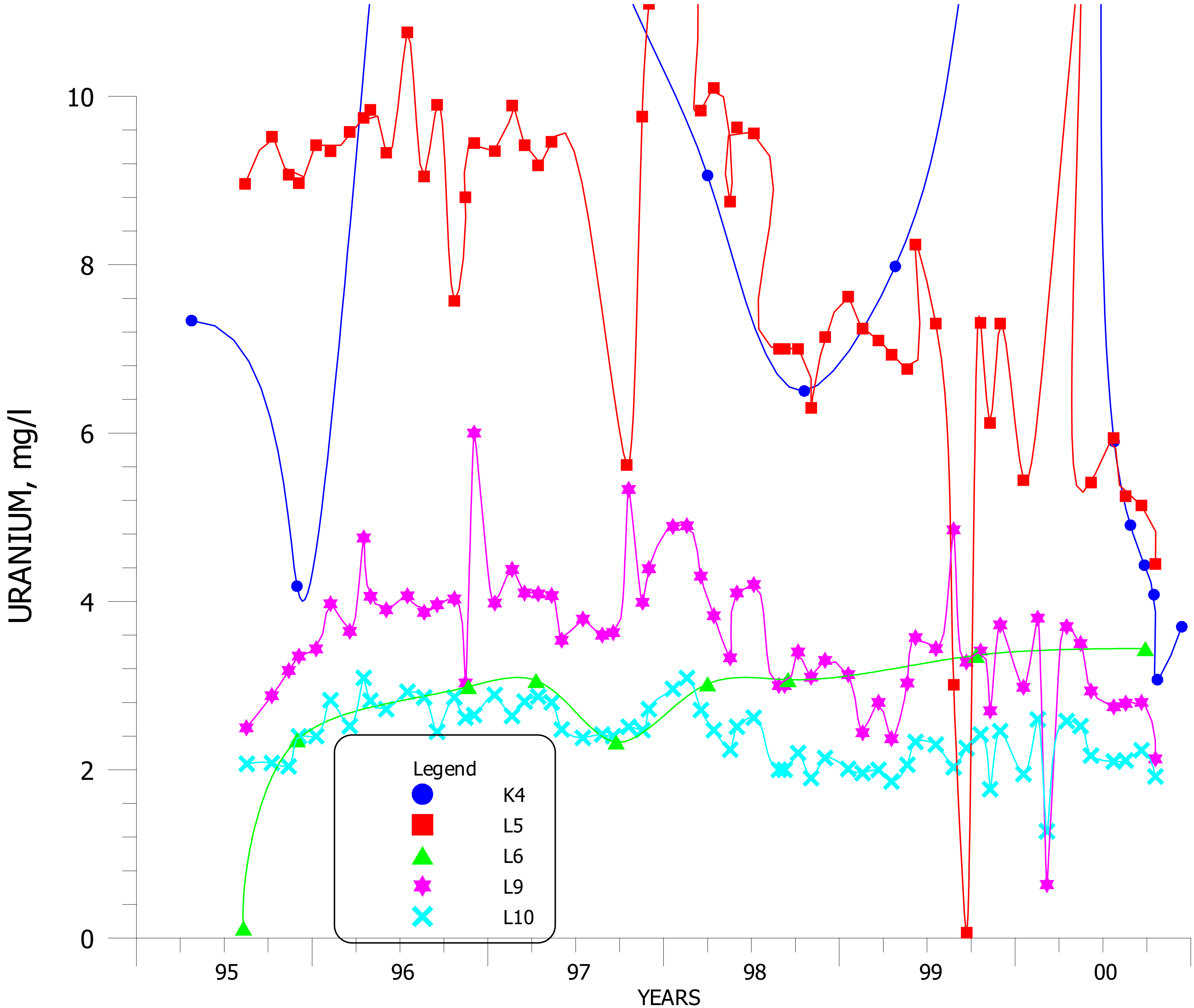


FIGURE 4.3-26. URANIUM CONCENTRATIONS FOR WELLS K4, L5, L6, L9 AND L10.

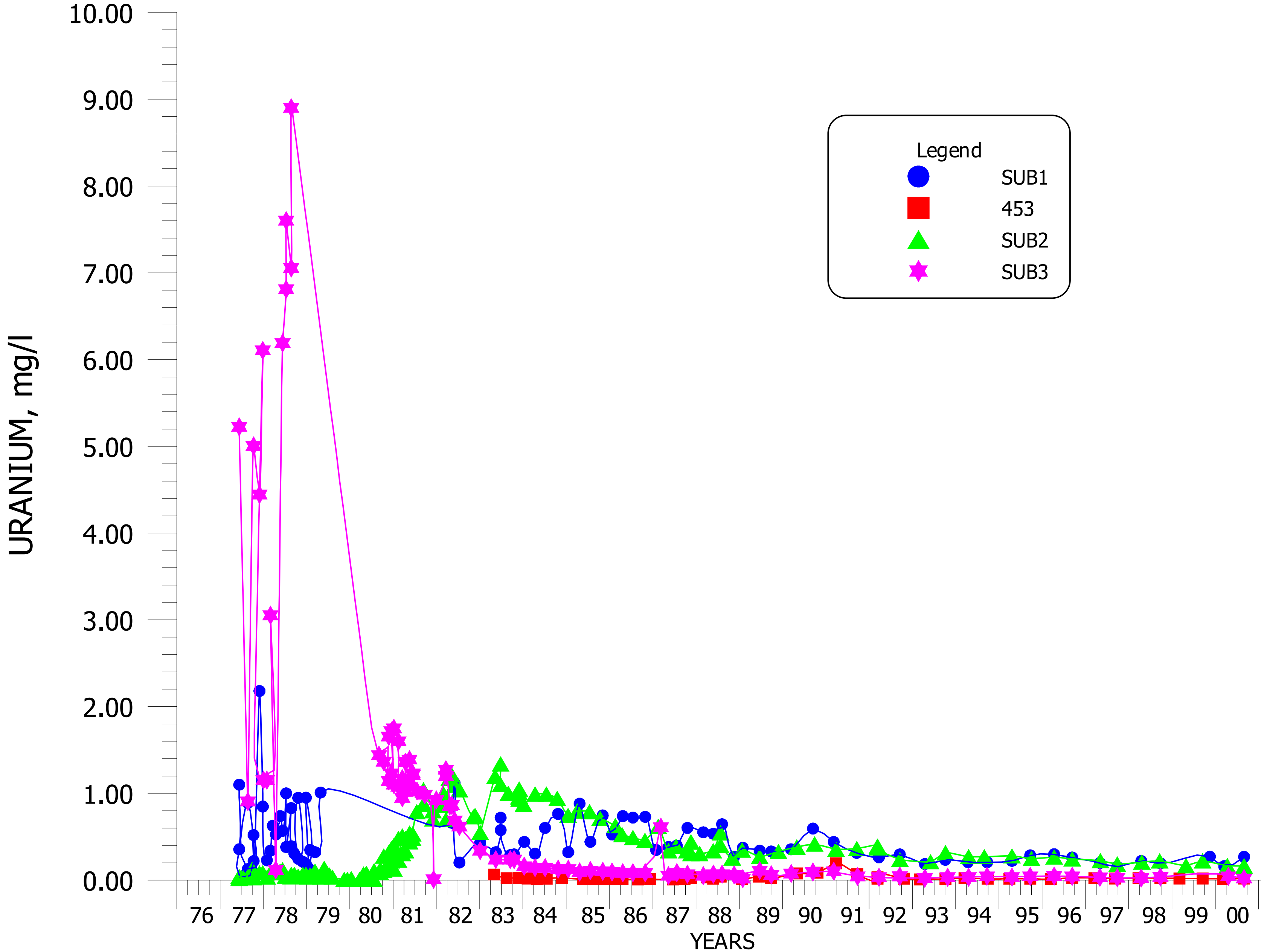


FIGURE 4.3-27. URANIUM CONCENTRATIONS FOR WELLS SUB1, 453, SUB2 AND SUB3.

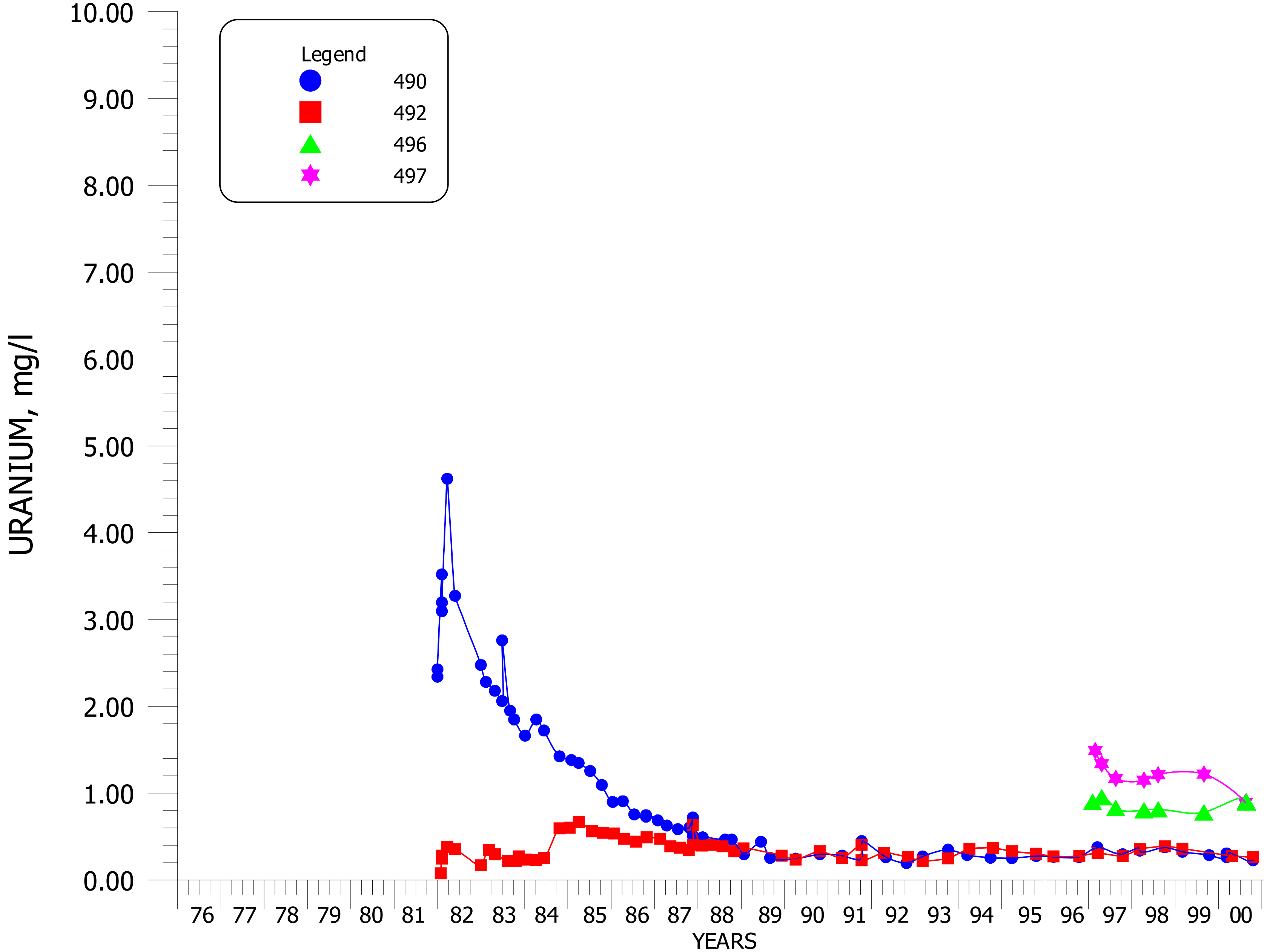


FIGURE 4.3-28. URANIUM CONCENTRATIONS FOR WELLS 490, 492, 496 AND 497.

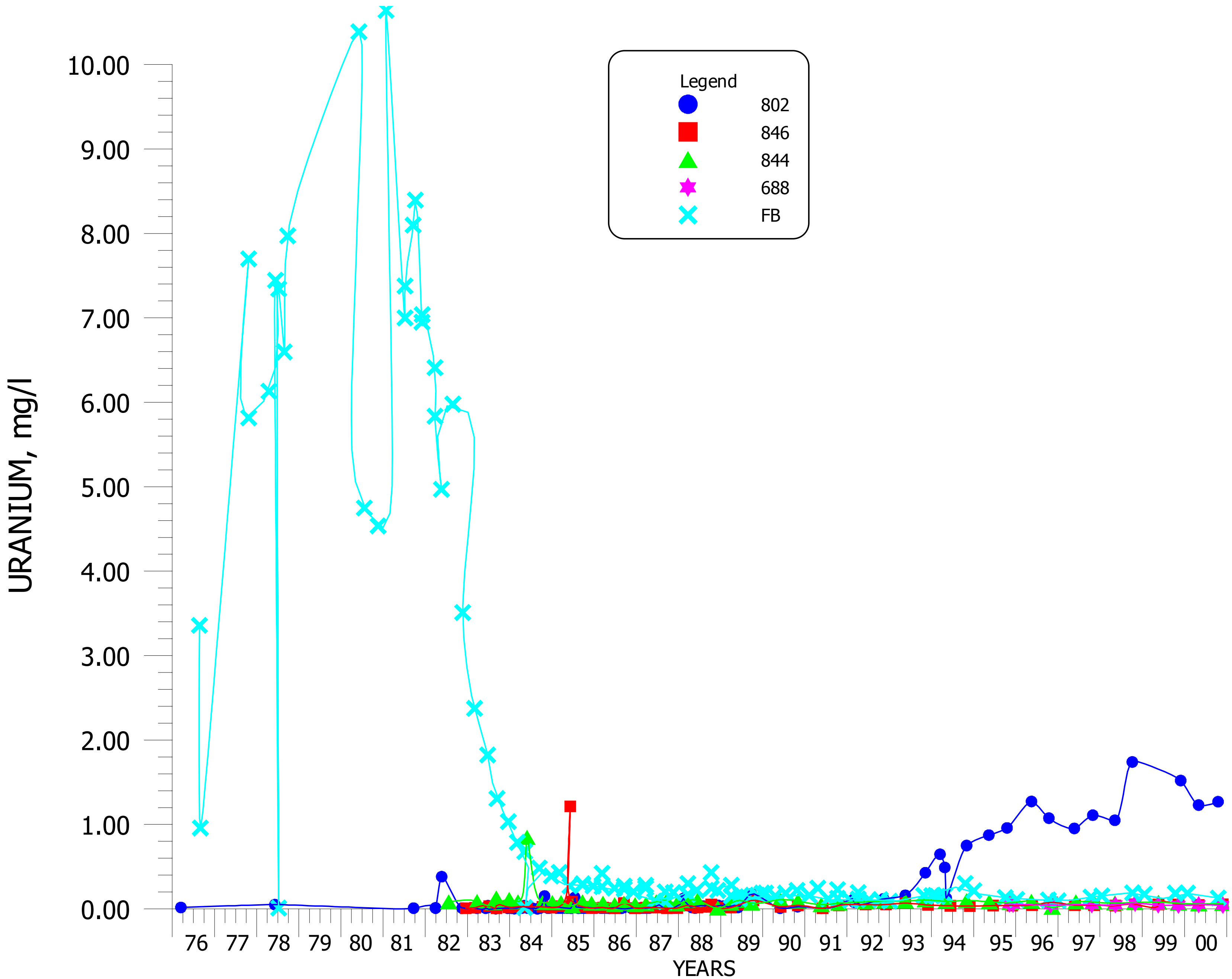
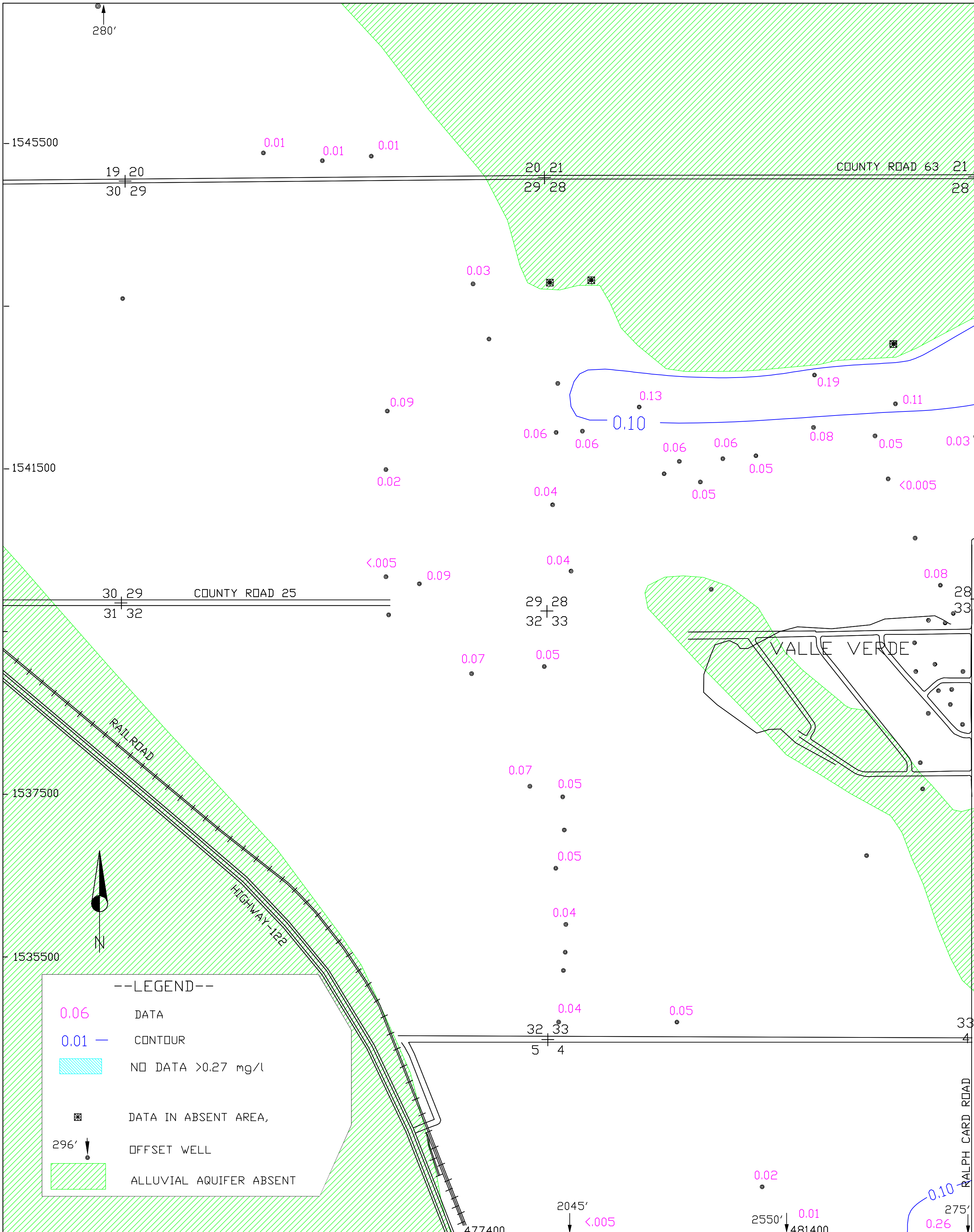


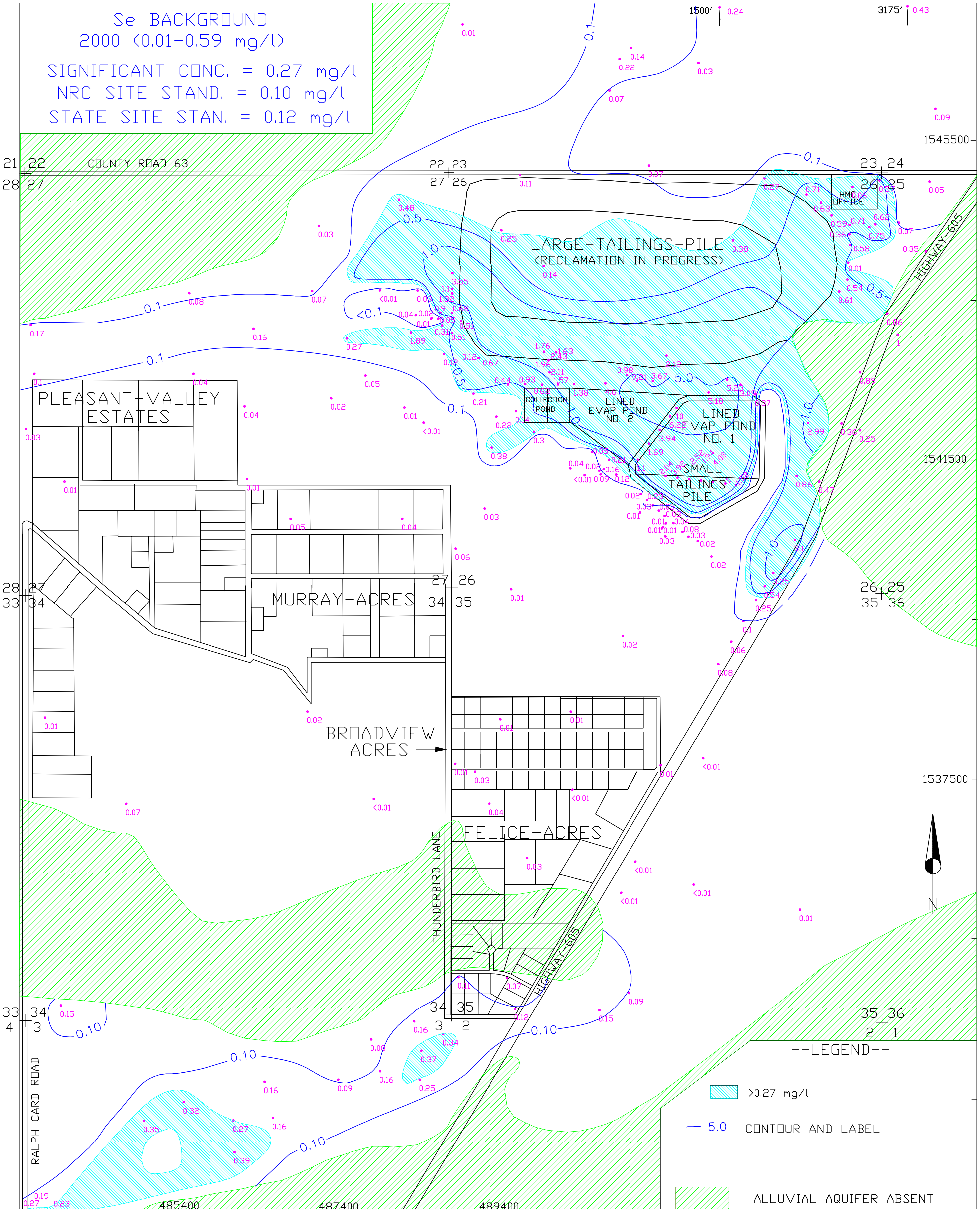
FIGURE 4.3-29. URANIUM CONCENTRATIONS FOR WELLS 802, 846, 844, 688 AND FB.



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 03/16/01

FIGURE 4.3-30A. SELENIUM CONCENTRATIONS FOR THE ALLUVIAL AQUIFER (WEST AREA), FALL 2000, mg/l

PROJECTS\2001-06\
2000WQAL LJU



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 03/27/01

FIGURE 4.3-30B. SELENIUM CONCENTRATIONS FOR THE ALLUVIAL AQUIFER, FALL 2000, mg/l

projects\2001-06
dwgs\2000eqal lju

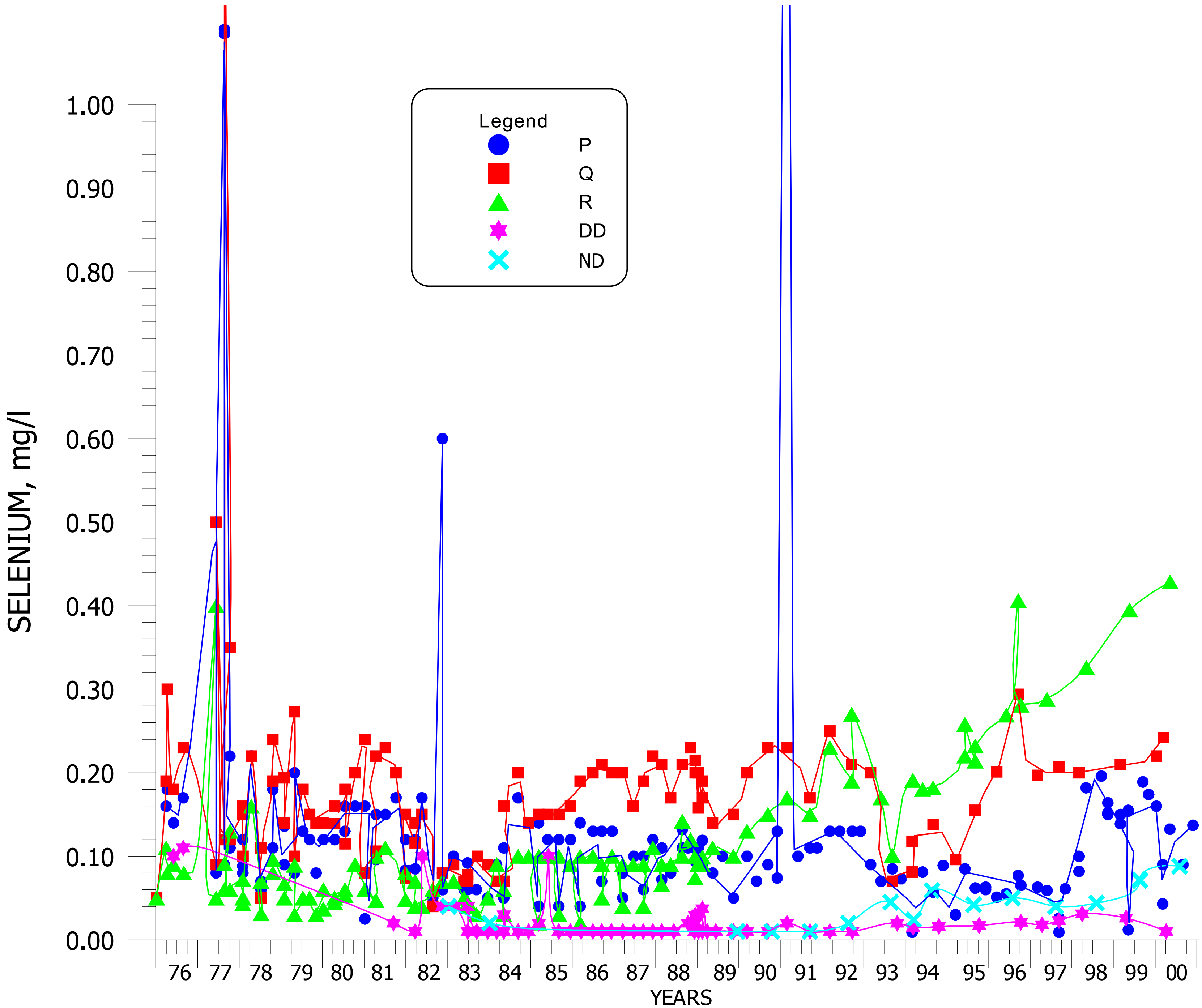


FIGURE 4.3-31. SELENIUM CONCENTRATIONS FOR WELLS P, Q, R, DD AND ND.

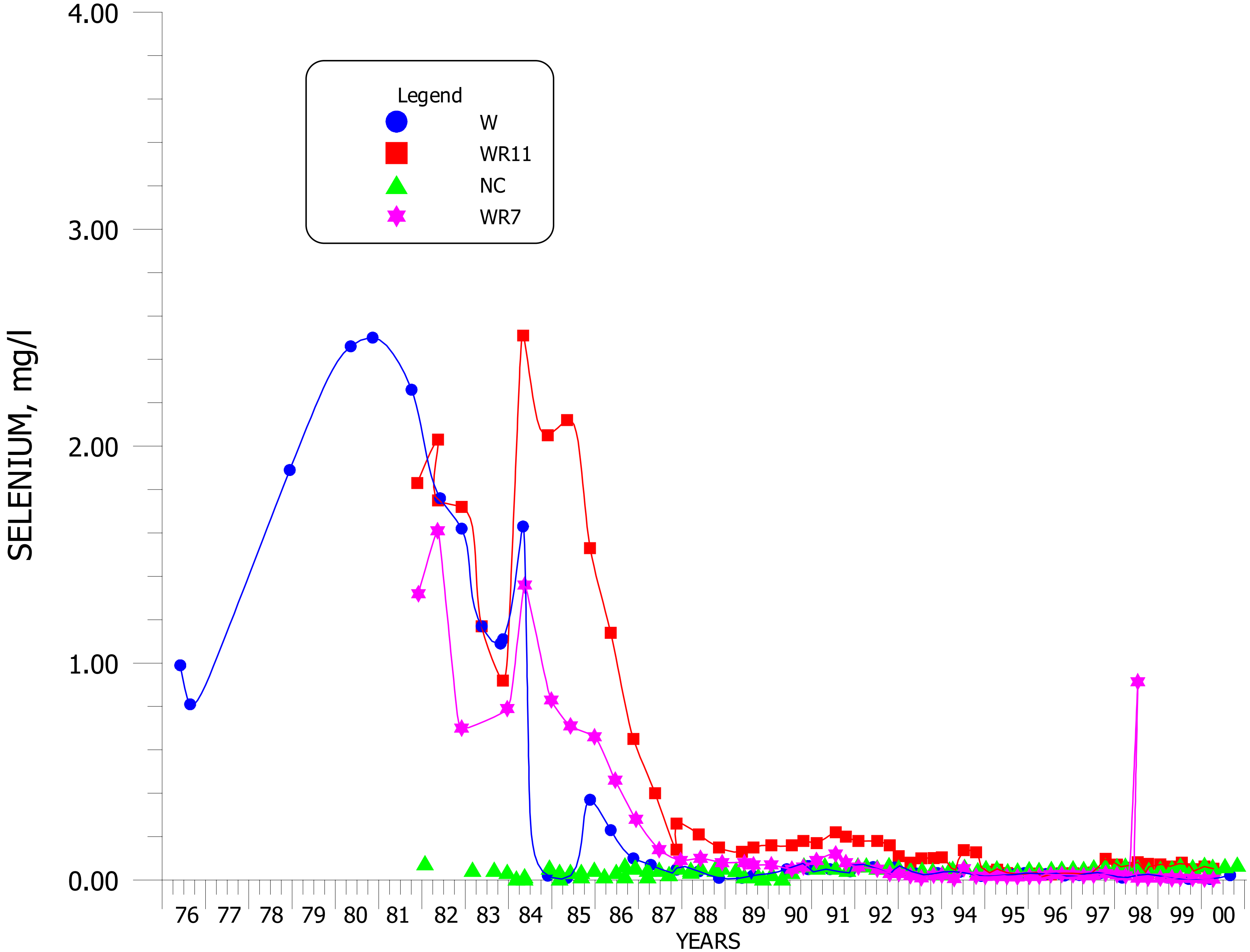


FIGURE 4.3-32. SELENIUM CONCENTRATIONS FOR WELLS W, WR11, NC AND WR7.

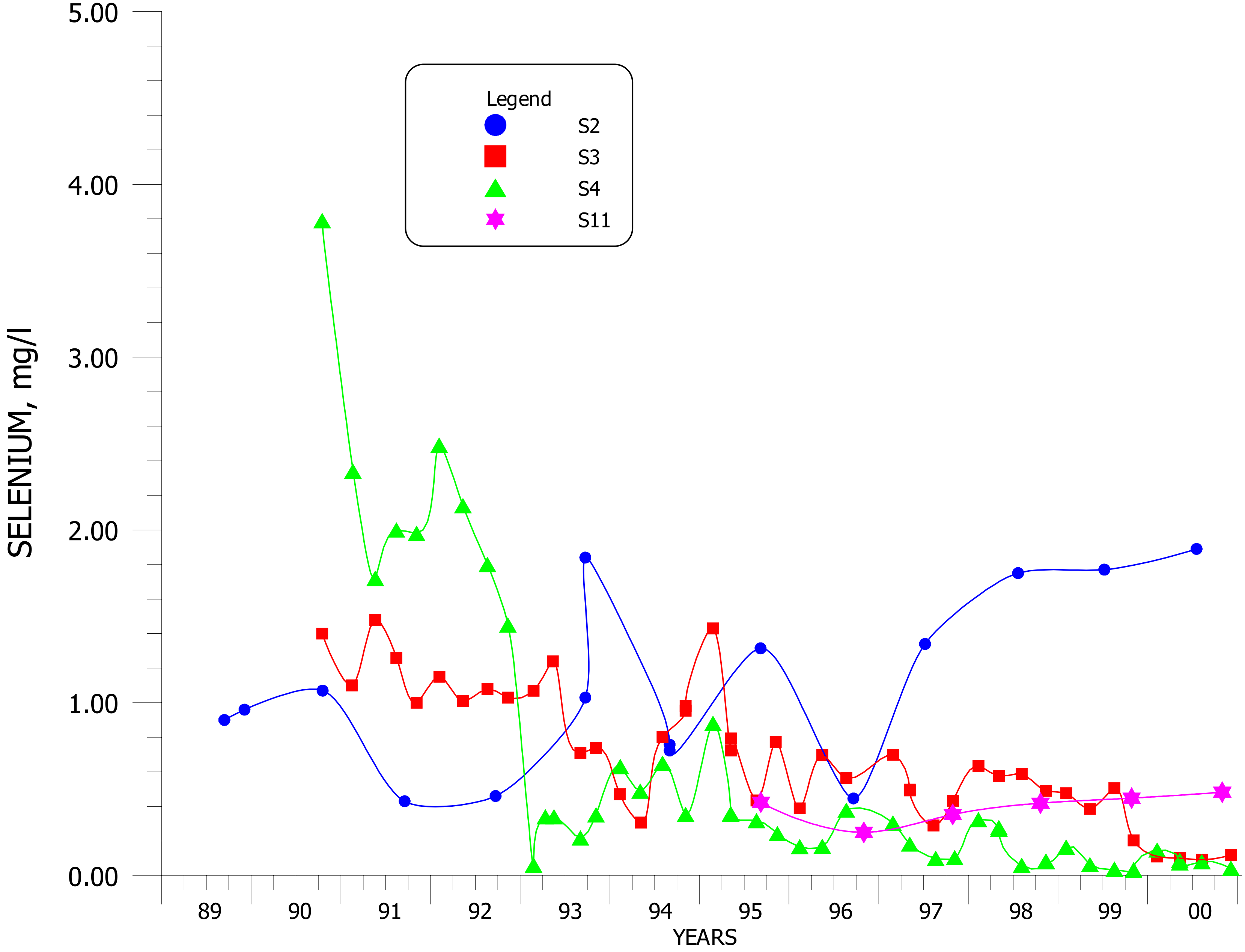


FIGURE 4.3-33. SELENIUM CONCENTRATIONS FOR WELLS S2, S3, S4 AND S11.

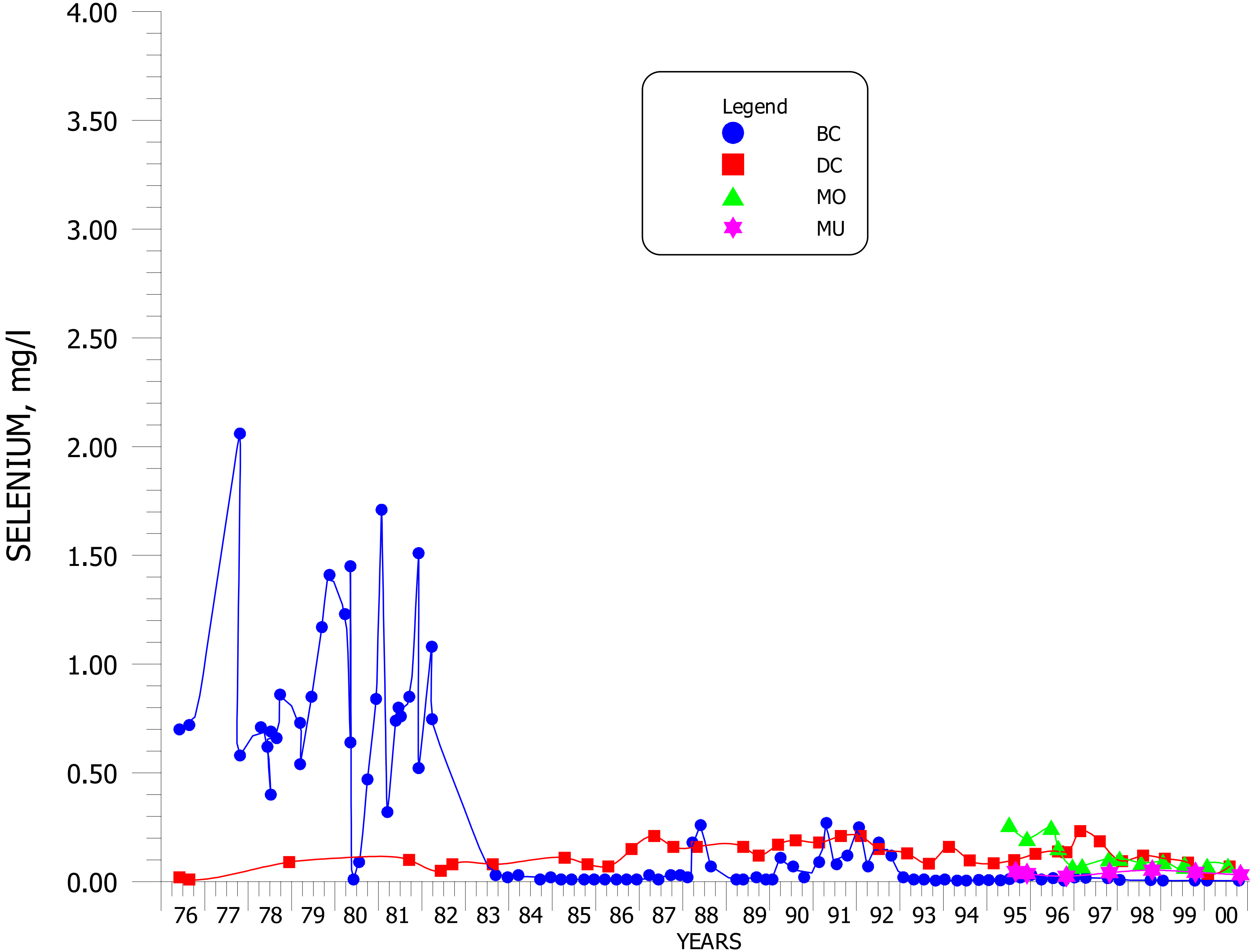


FIGURE 4.3-34. SELENIUM CONCENTRATIONS FOR WELLS BC, DC MO AND MU.

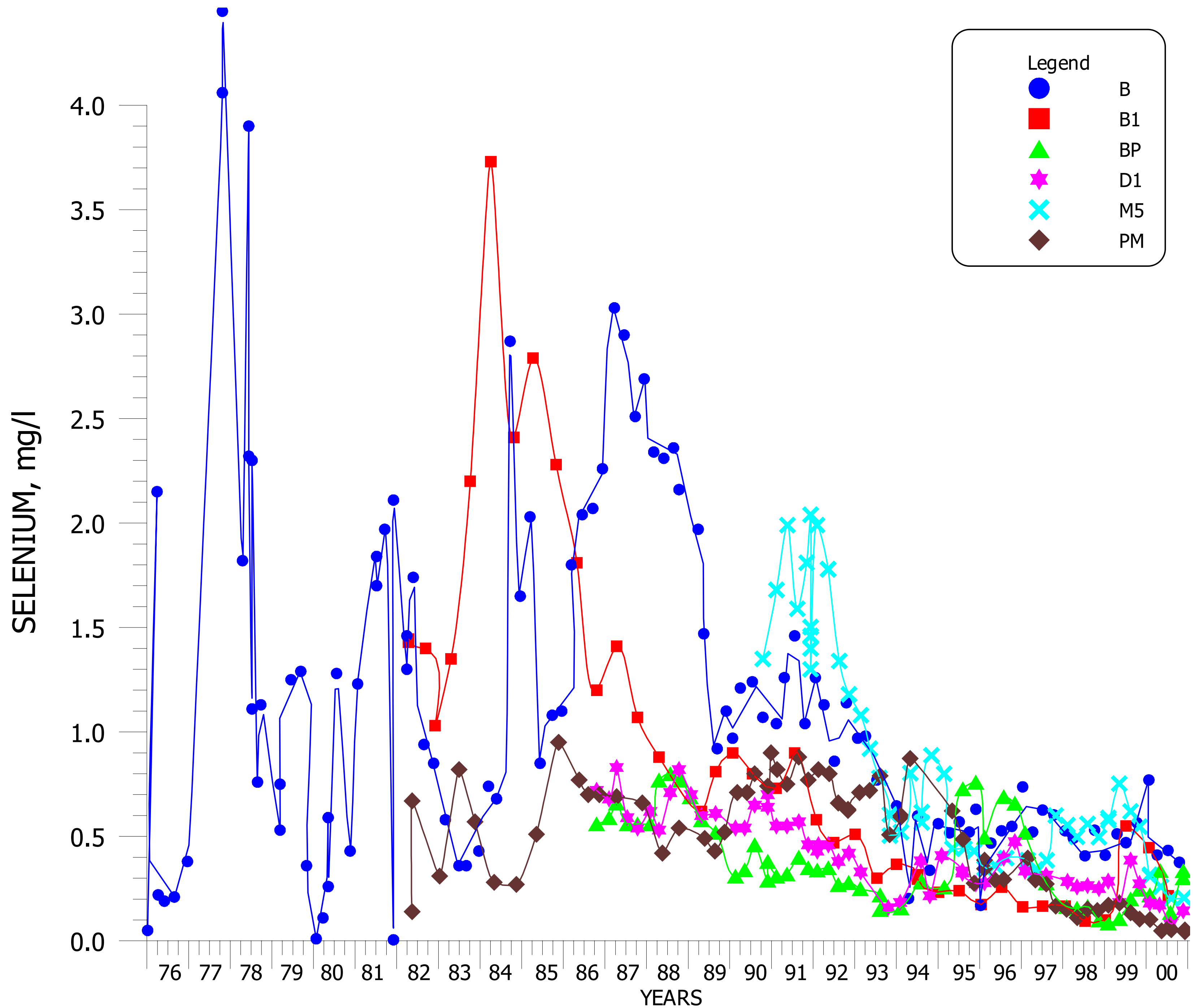


FIGURE 4.3-35. SELENIUM CONCENTRATIONS FOR WELLS B, B1, BP, D1, M5 AND PM.

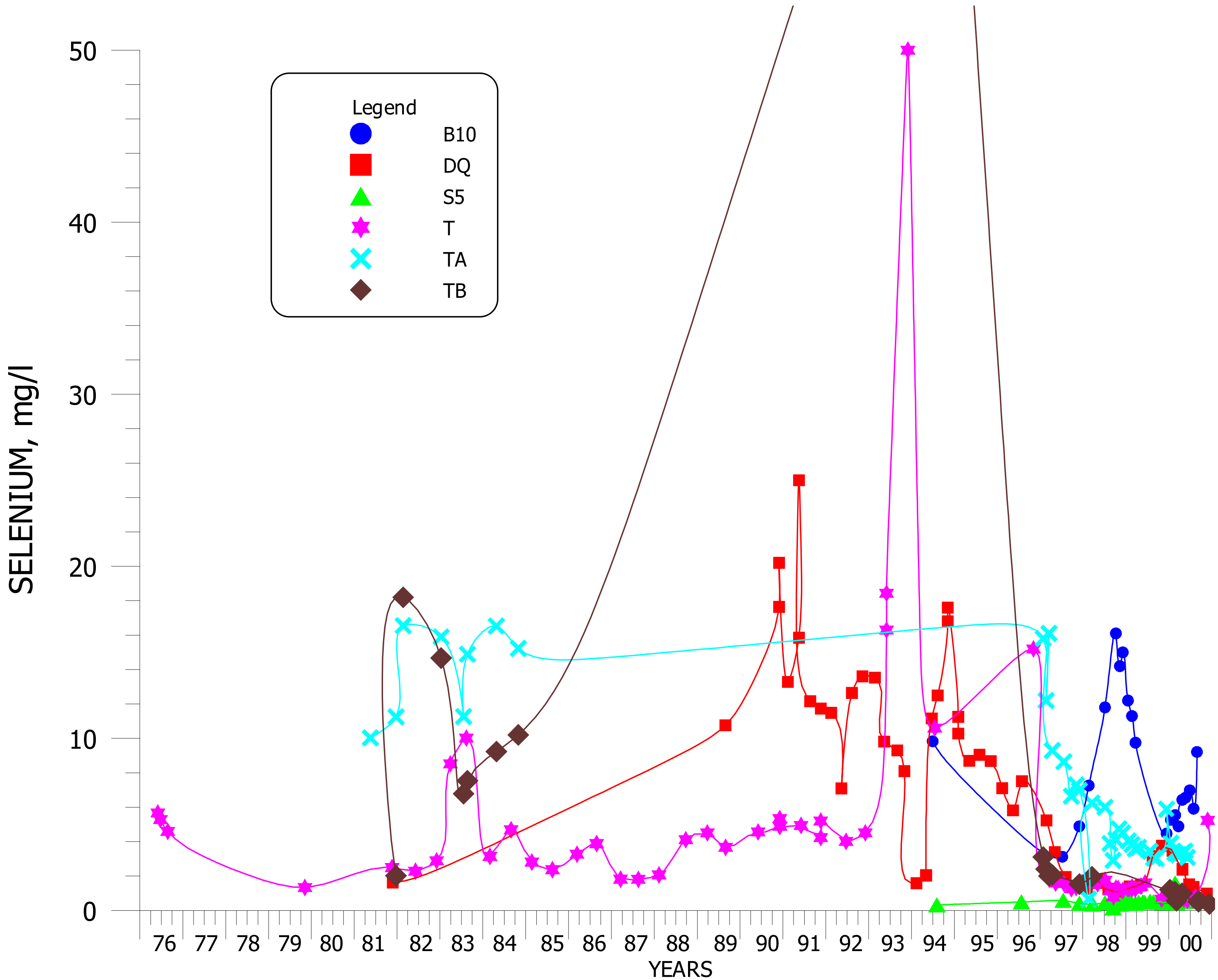


FIGURE 4.3-36. SELENIUM CONCENTRATIONS FOR WELLS B10, DQ, S5, T, TA AND TB.

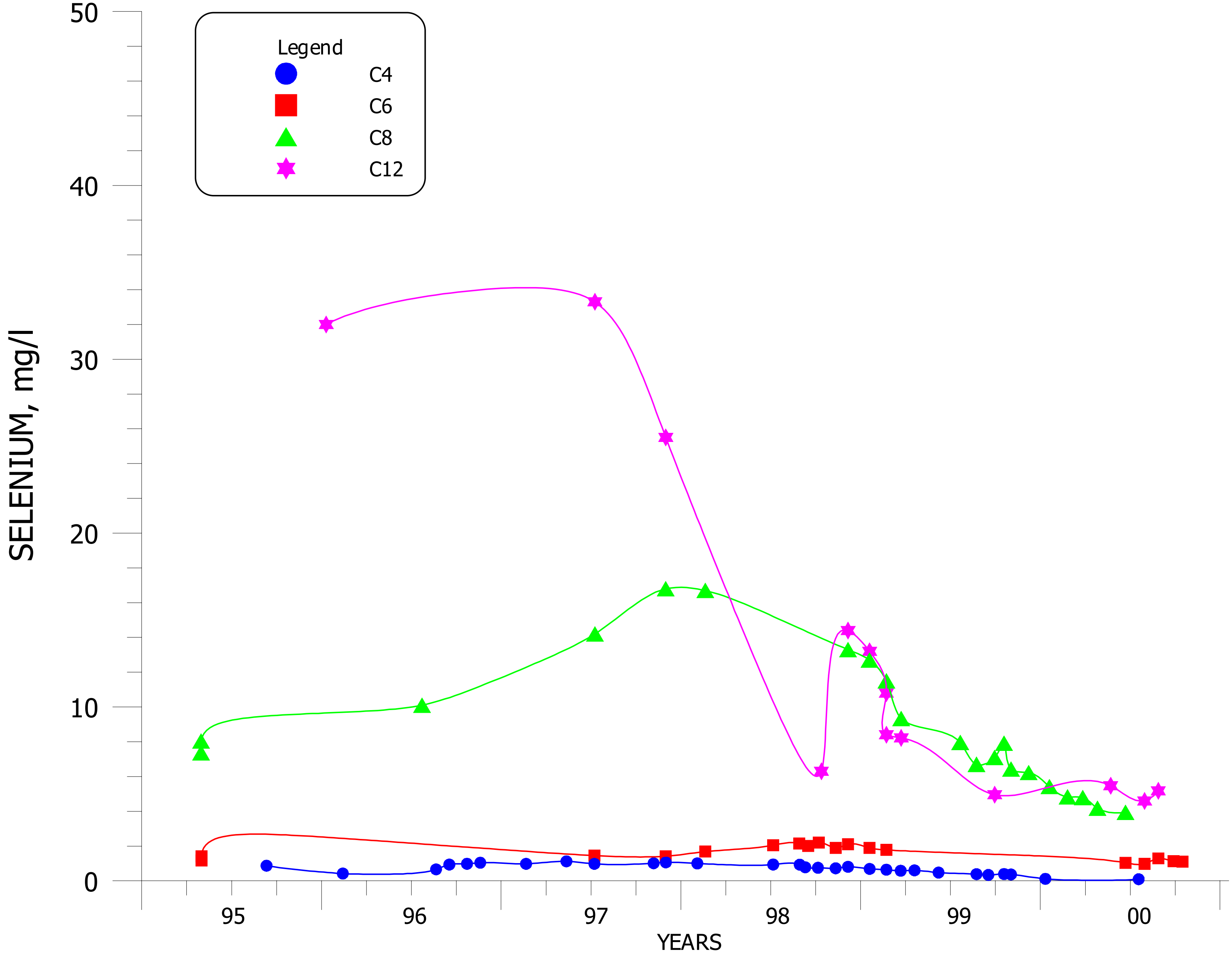


FIGURE 4.3-37. SELENIUM CONCENTRATIONS FOR WELLS C4, C6, C8 AND C12.

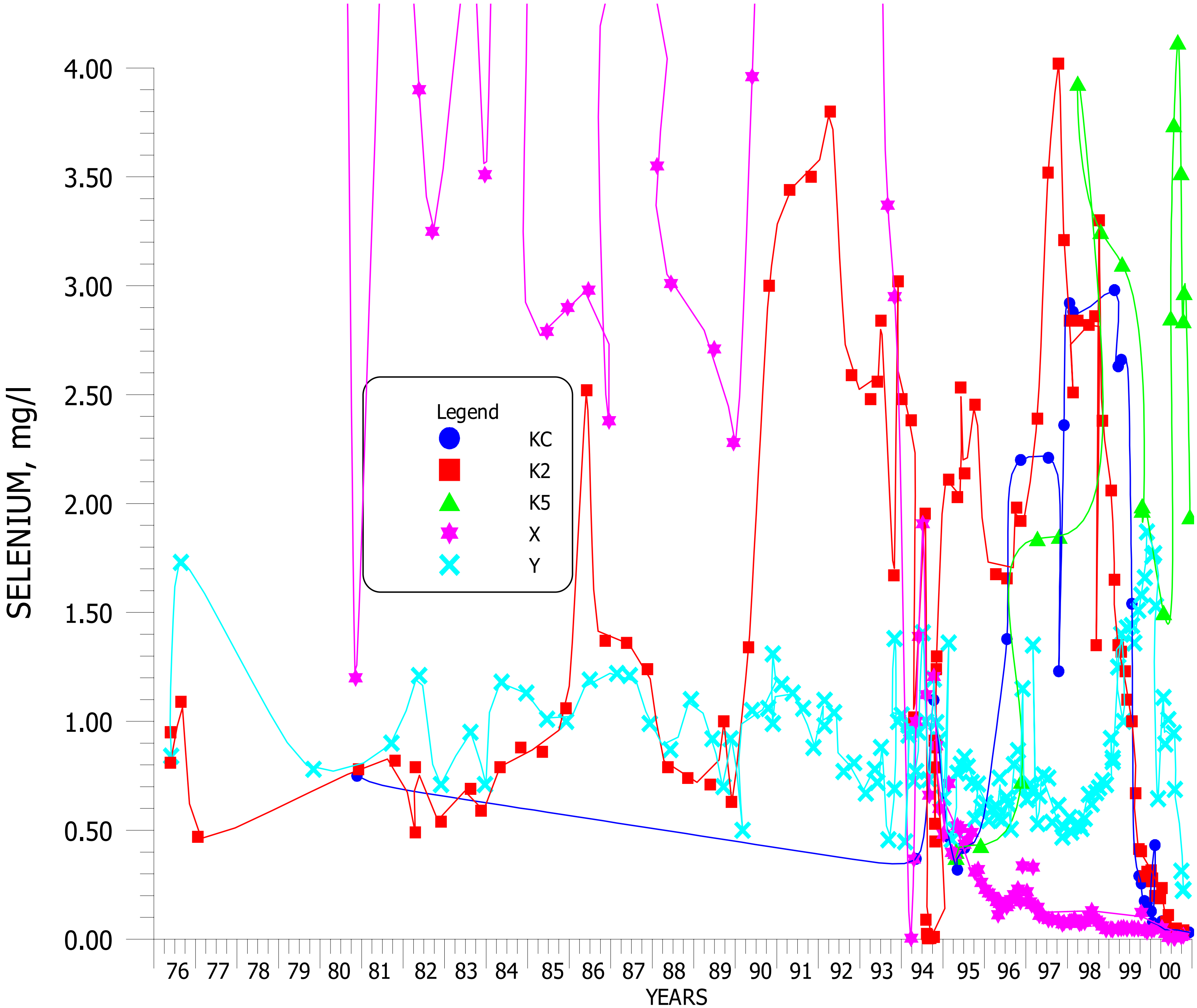


FIGURE 4.3-38. SELENIUM CONCENTRATIONS FOR WELLS KC, K2, K5, X AND Y.

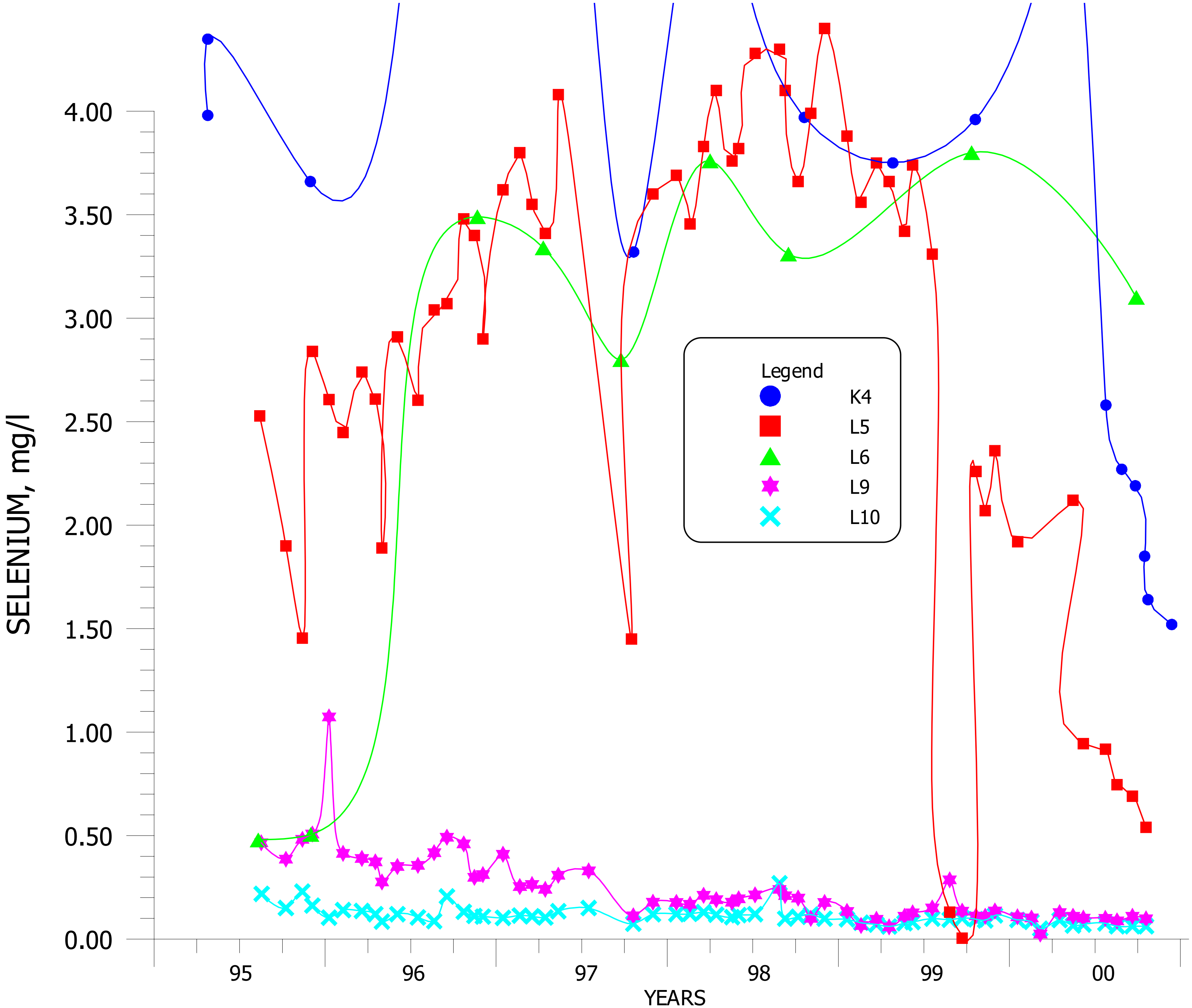


FIGURE 4.3-39. SELENIUM CONCENTRATIONS FOR WELLS K4, L5, L6, L9 AND L10.

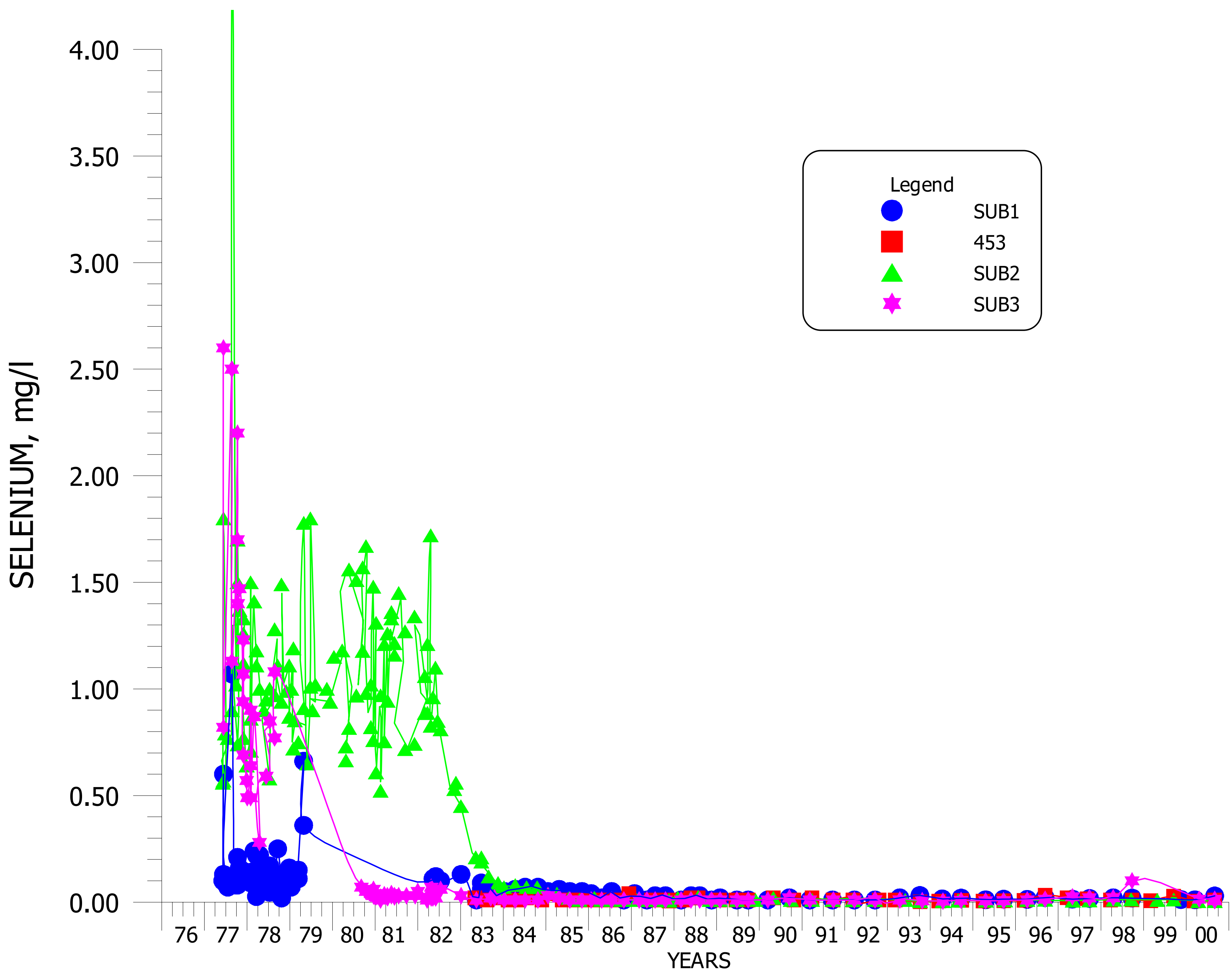


FIGURE 4.3-40. SELENIUM CONCENTRATIONS FOR WELLS SUB1, 453, SUB2 AND SUB3.

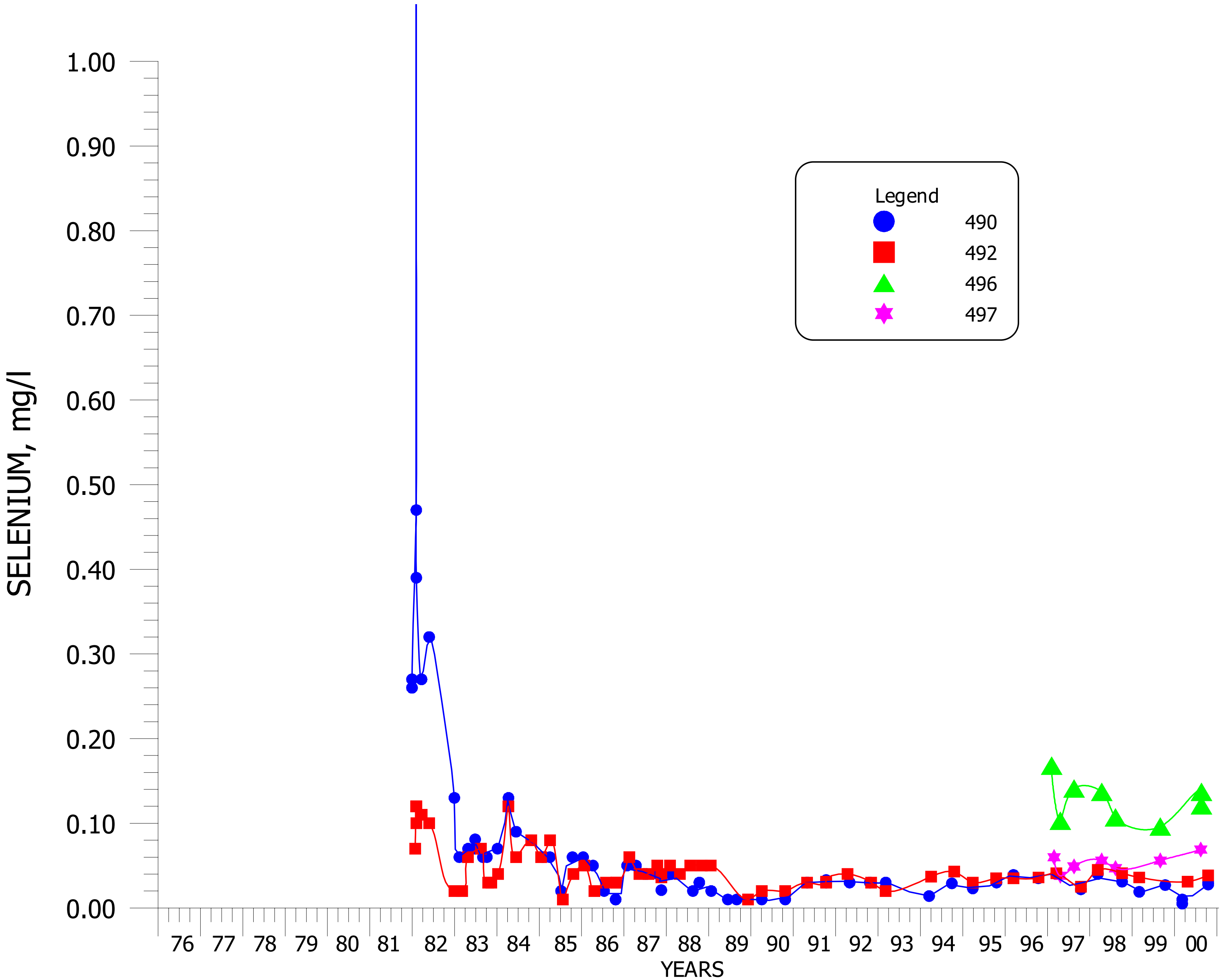


FIGURE 4.3-41. SELENIUM CONCENTRATIONS FOR WELLS 490, 492, 496 AND 497.

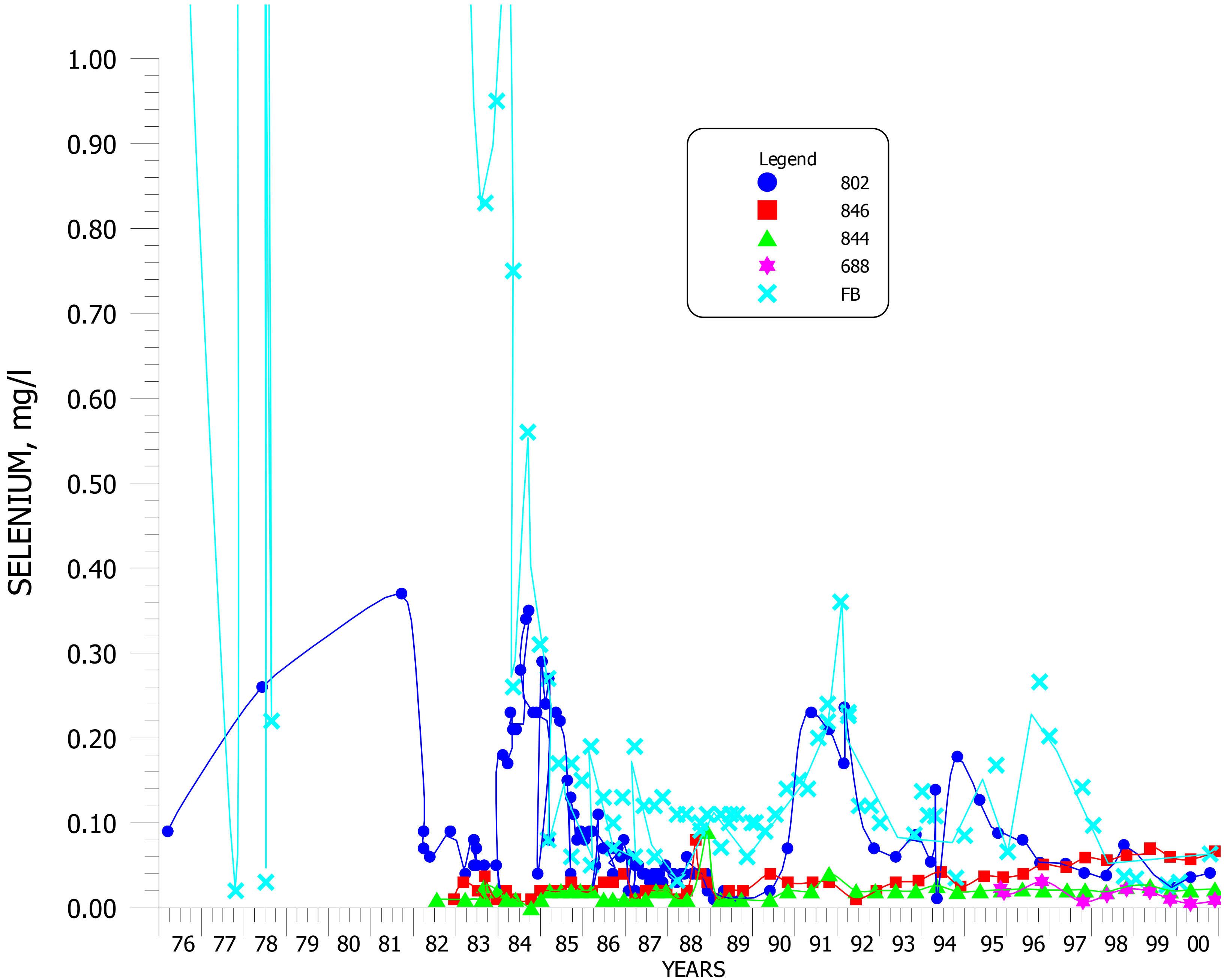
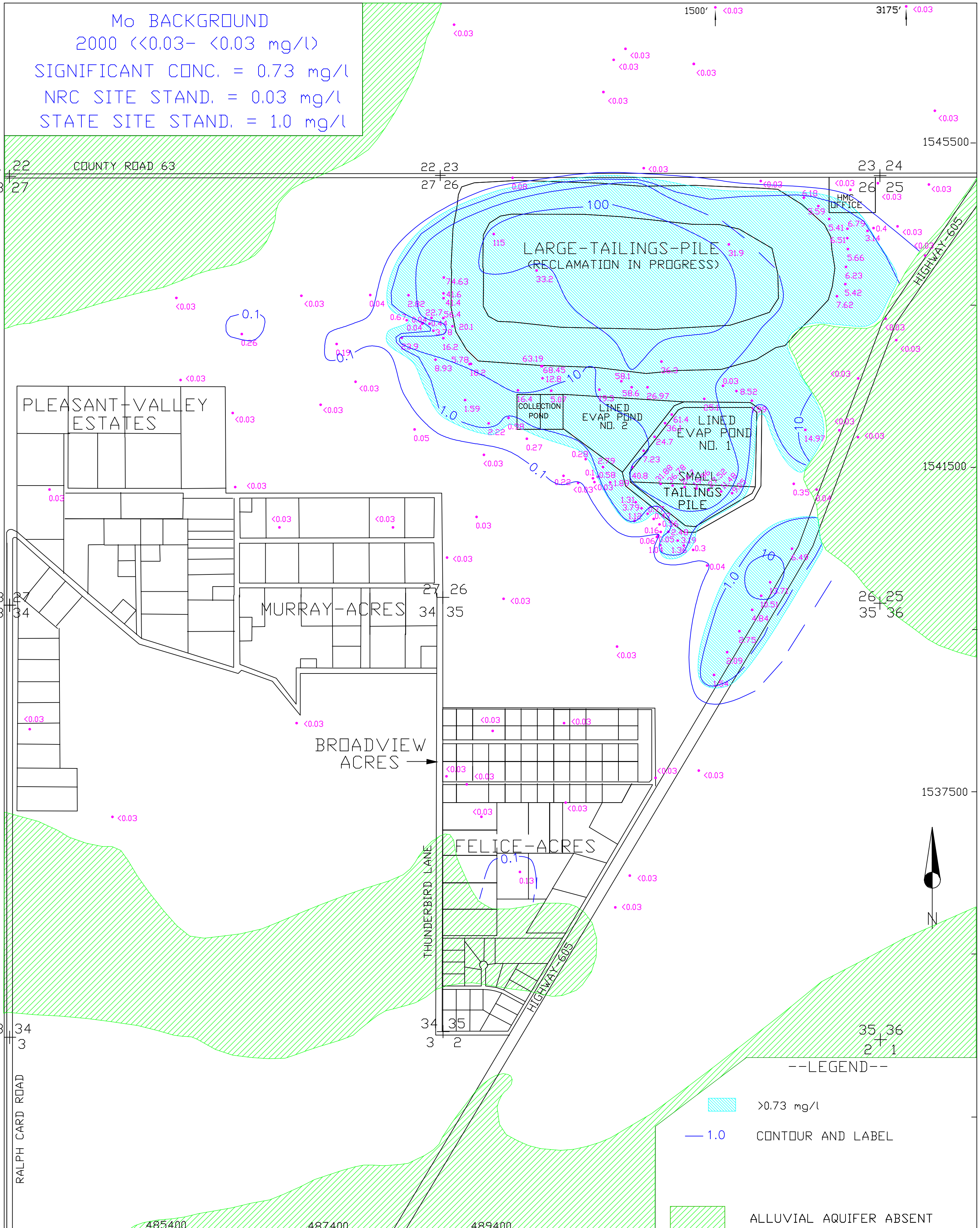


FIGURE 4.3-42. SELENIUM CONCENTRATIONS FOR WELLS 802, 846, 844, 688 AND FB.



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 03/27/01

FIGURE 4.3-43. MOLYBDENUM CONCENTRATIONS FOR THE ALLUVIAL AQUIFER, FALL 2000, mg/l

projects\2001-06
dwgs\2000eqal lju

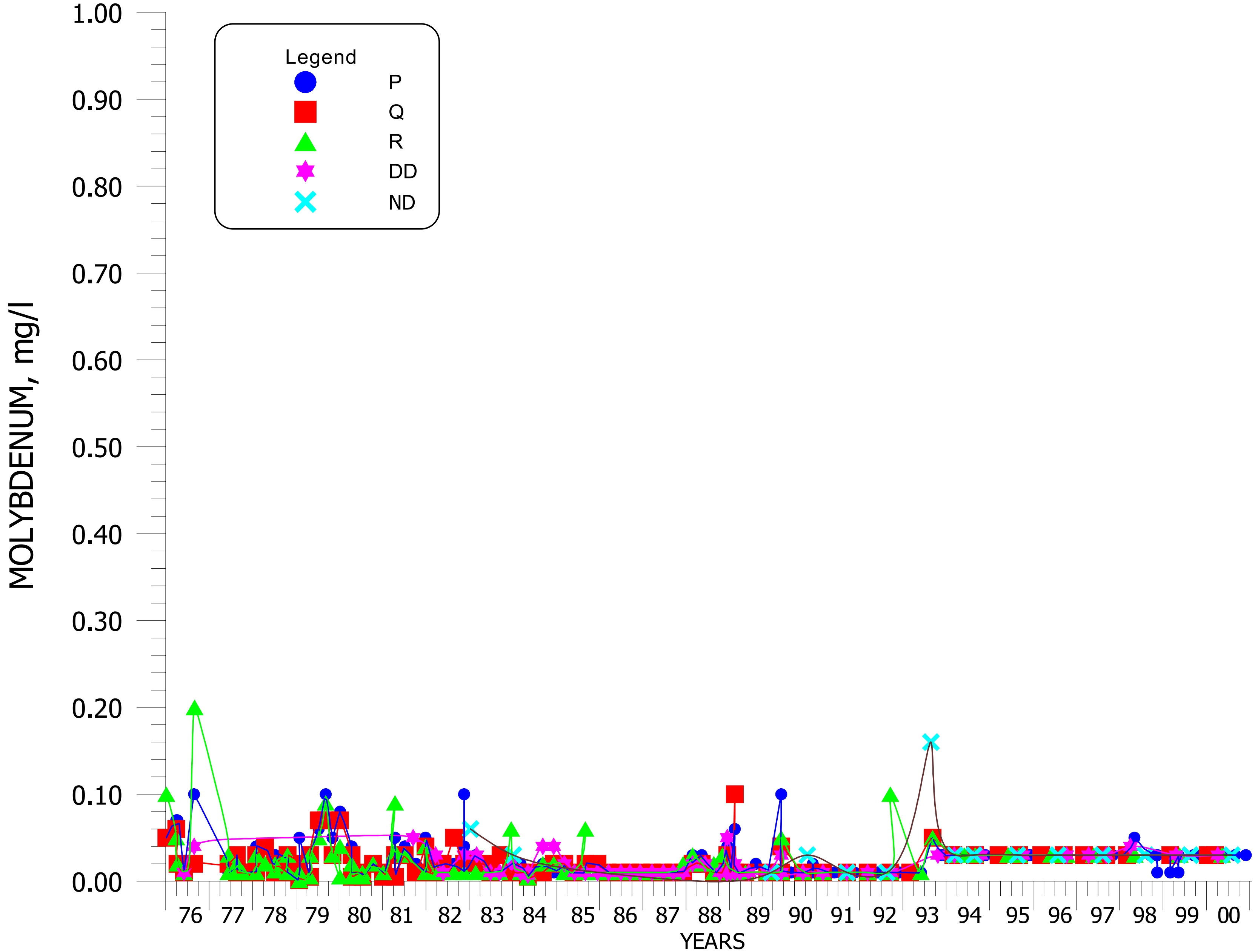


FIGURE 4.3-44. MOLYBDENUM CONCENTRATIONS FOR WELLS P, Q, R, DD AND ND.

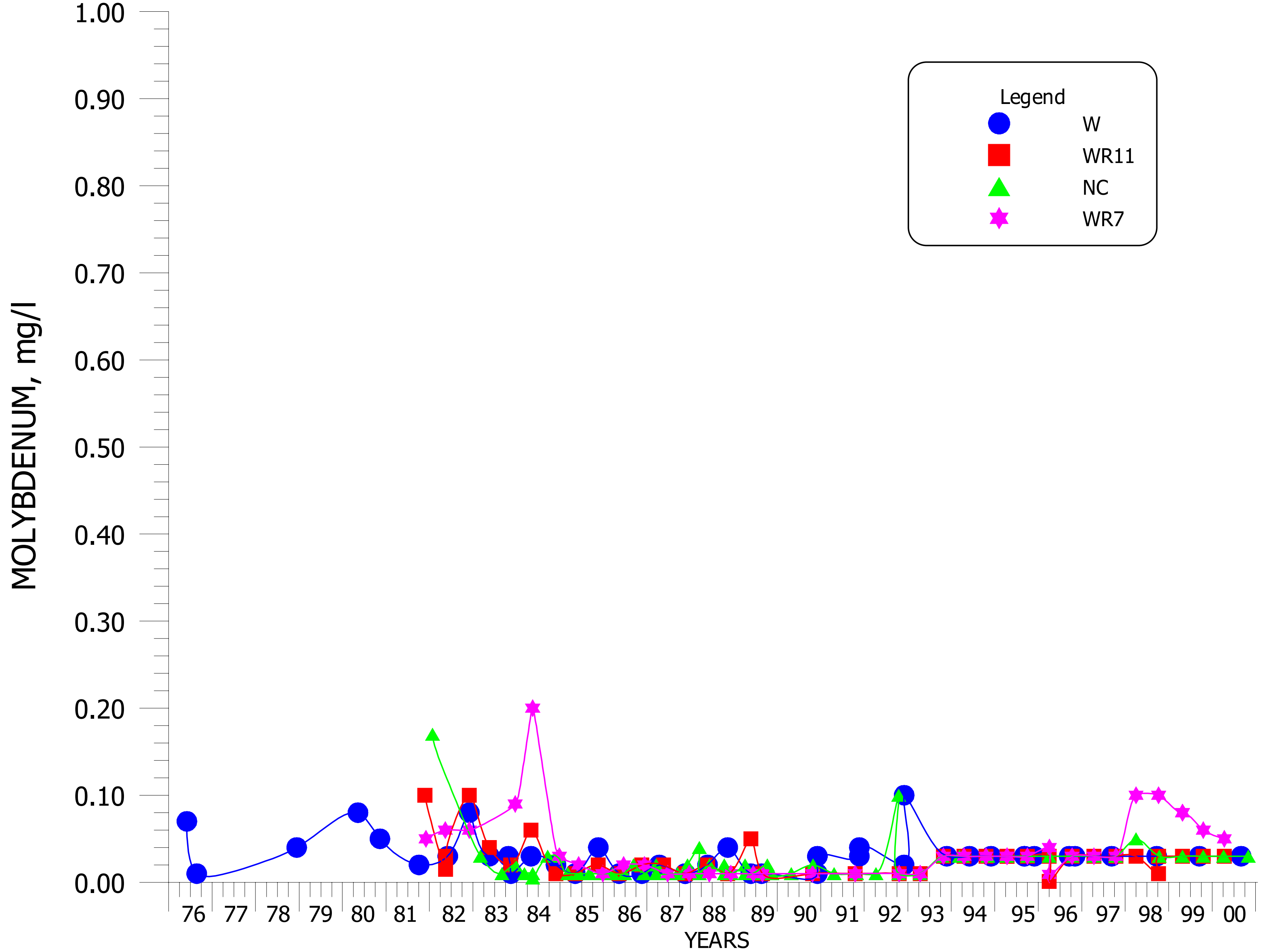


FIGURE 4.3-45. MOLYBDENUM CONCENTRATIONS FOR WELLS W, WR11, NC AND WR7.

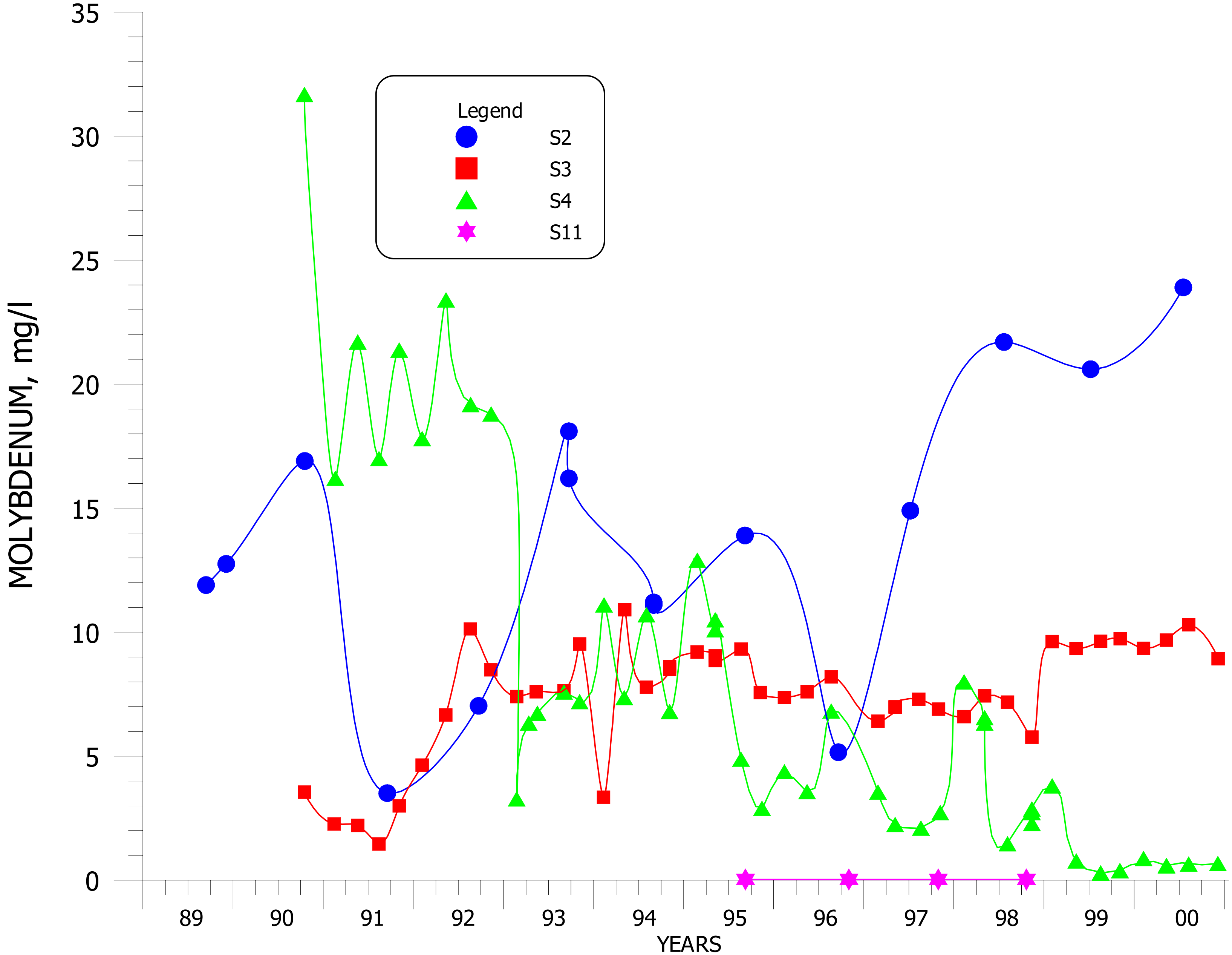


FIGURE 4.3-46. MOLYBDENUM CONCENTRATIONS FOR WELLS S2, S3, S4 AND S11.

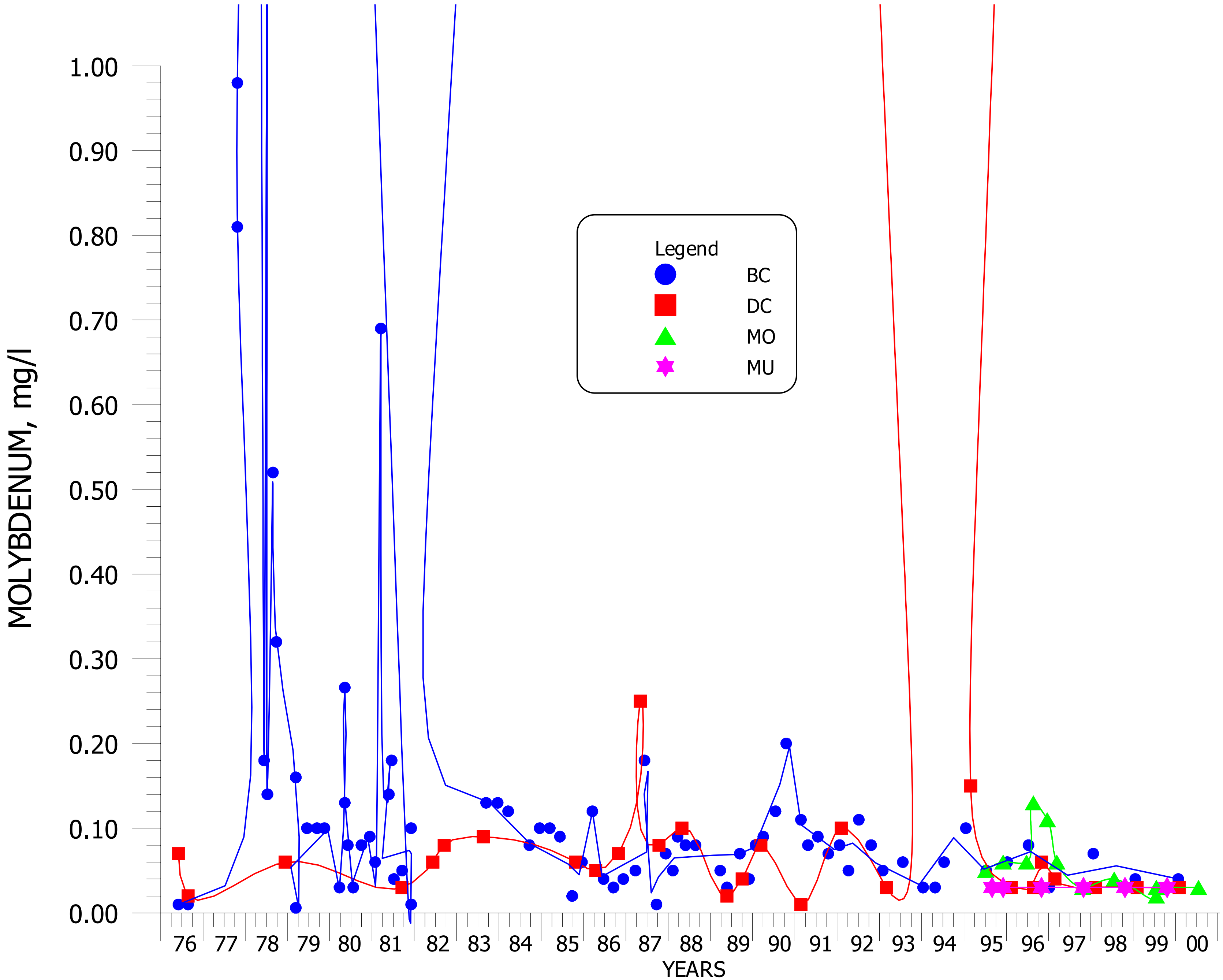


FIGURE 4.3-47. MOLYBDENUM CONCENTRATIONS FOR WELLS BC, DC, MO AND MU.

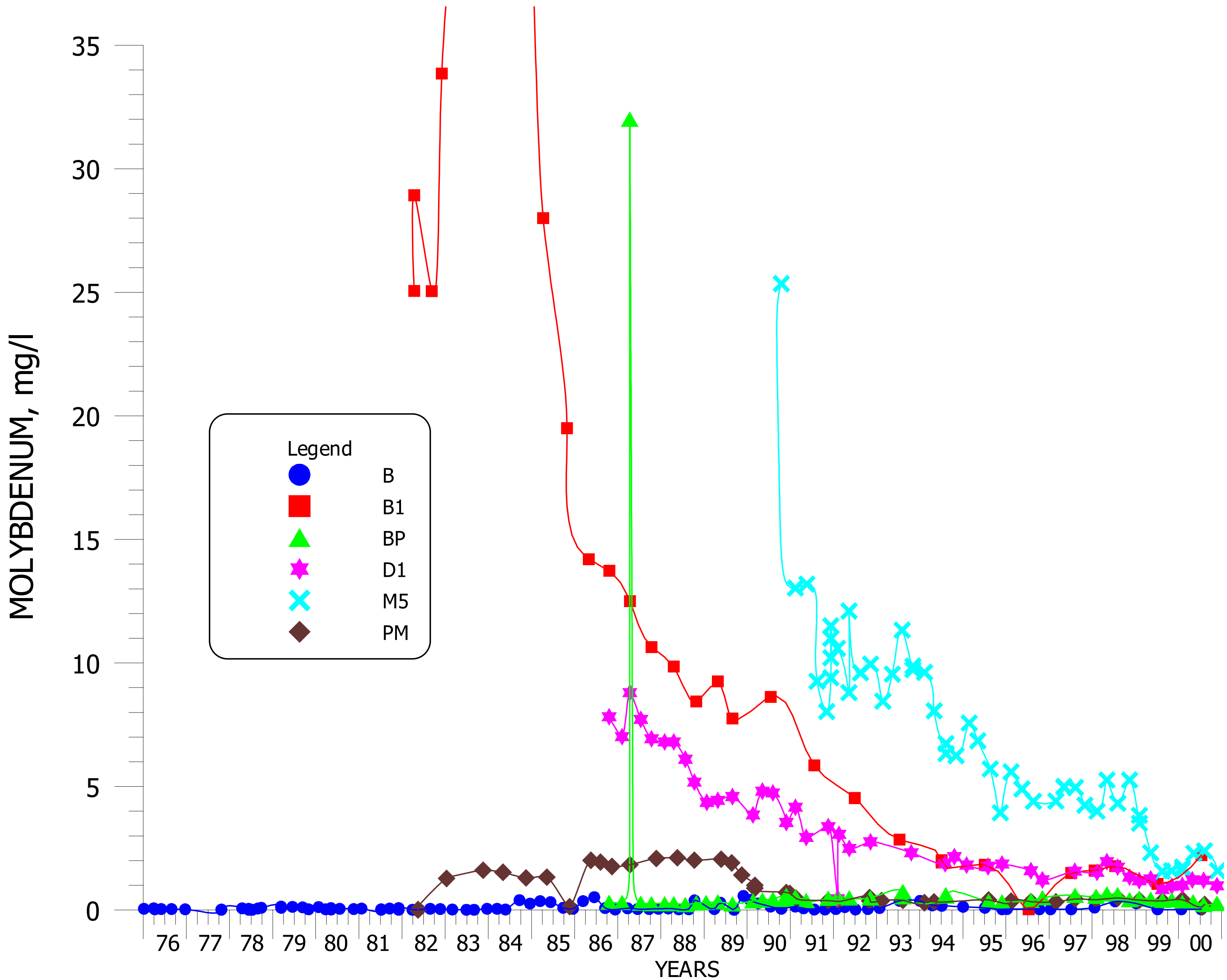


FIGURE 4.3-48. MOLYBDENUM CONCENTRATIONS FOR WELLS B, B1, BP, D1, M5 AND PM.

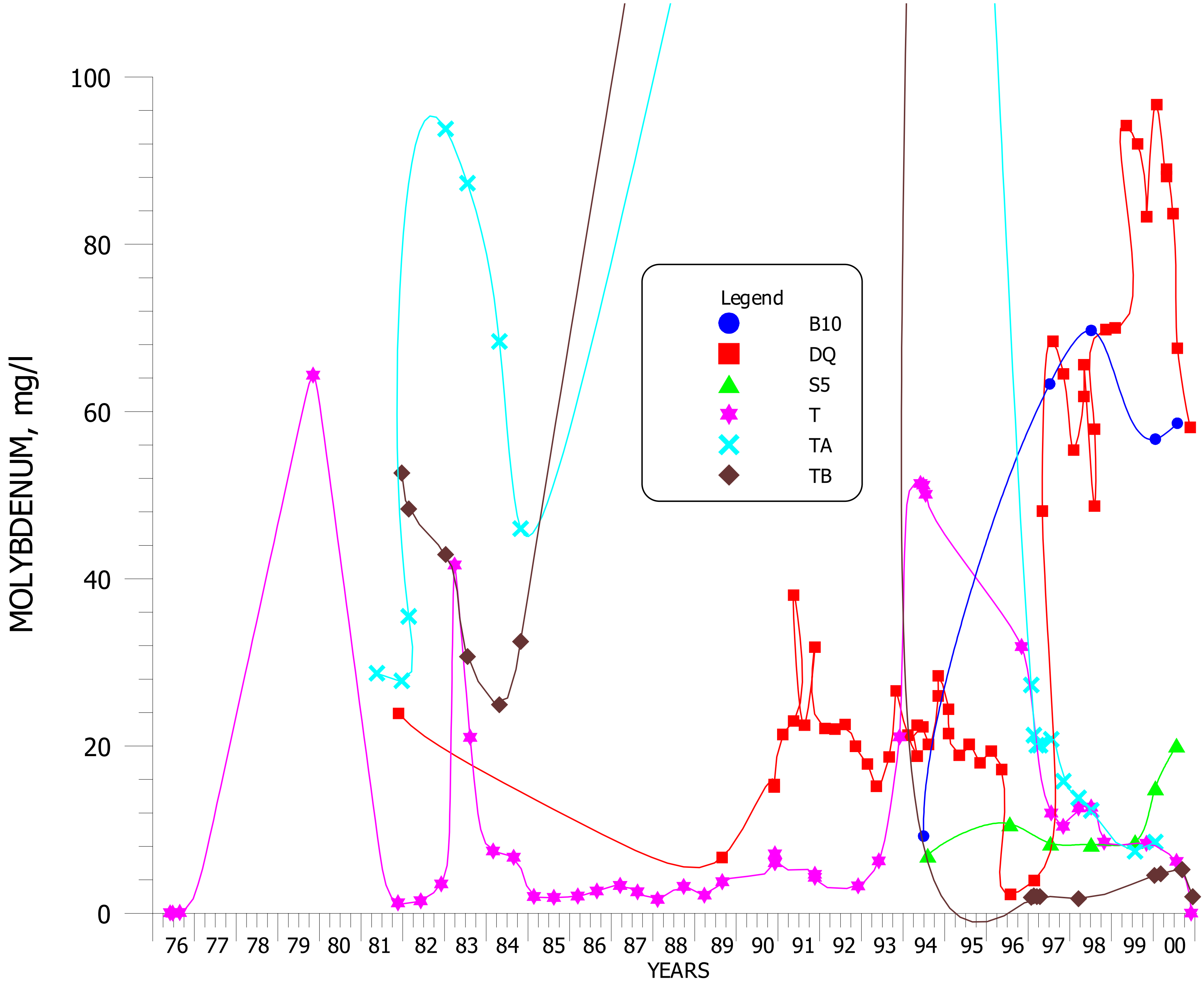


FIGURE 4.3-49. MOLYBDENUM CONCENTRATIONS FOR WELLS B10, DQ, S5, T, TA AND TB.

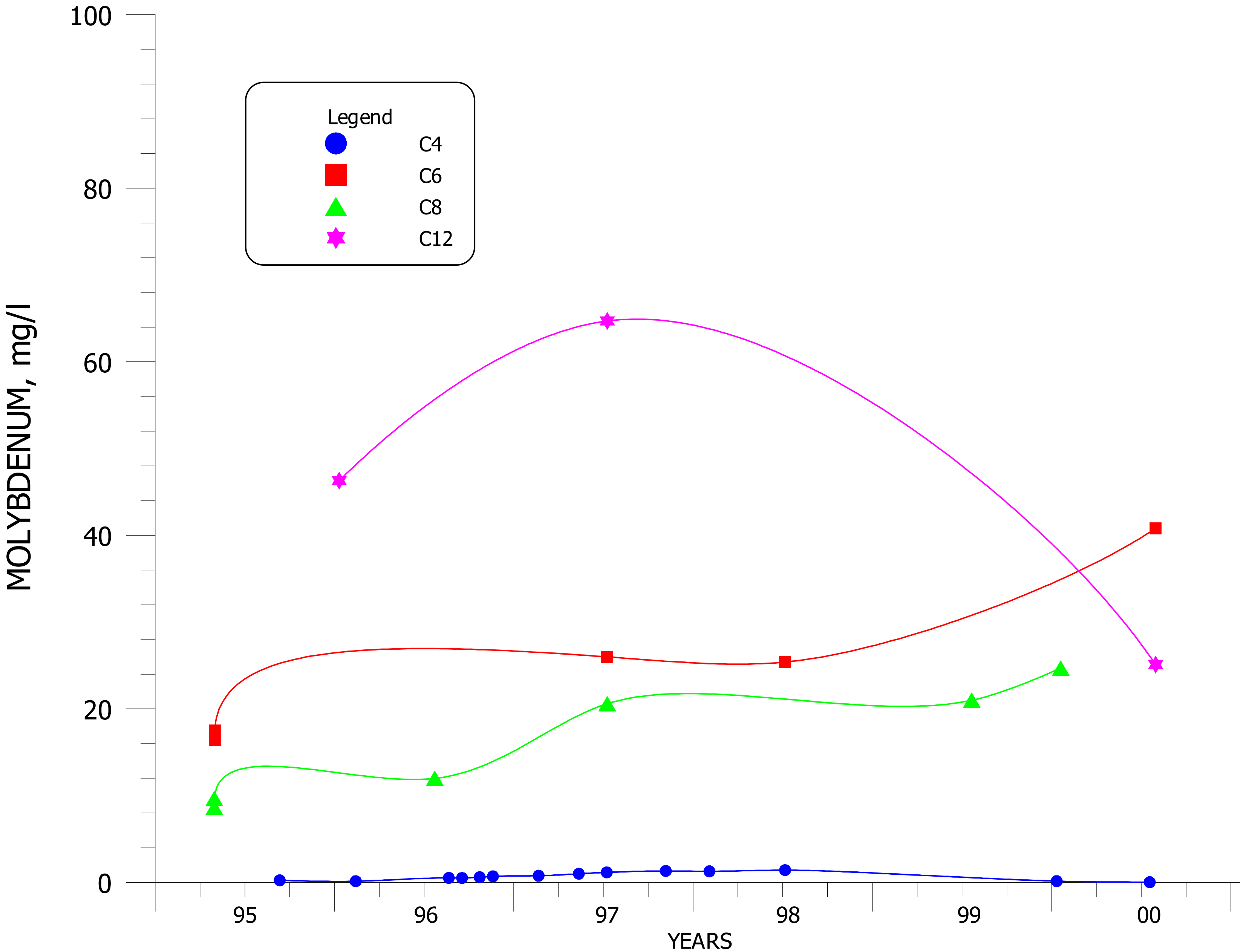


FIGURE 4.3-50. MOLYBDENUM CONCENTRATIONS FOR WELLS C4, C6, C8 AND C12.

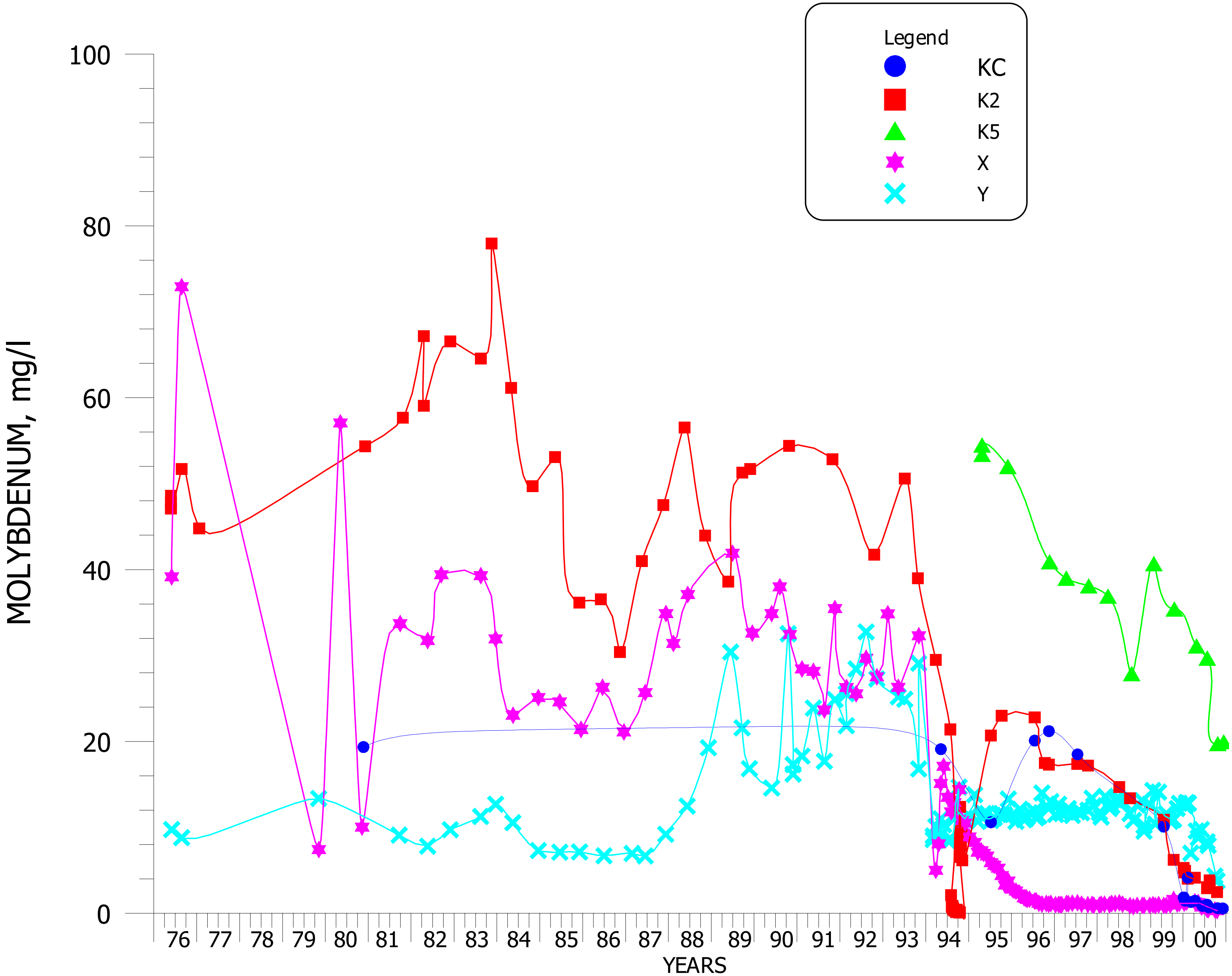


FIGURE 4.3-51. MOLYBDENUM CONCENTRATIONS FOR WELLS KC, K2, K5, X AND Y.

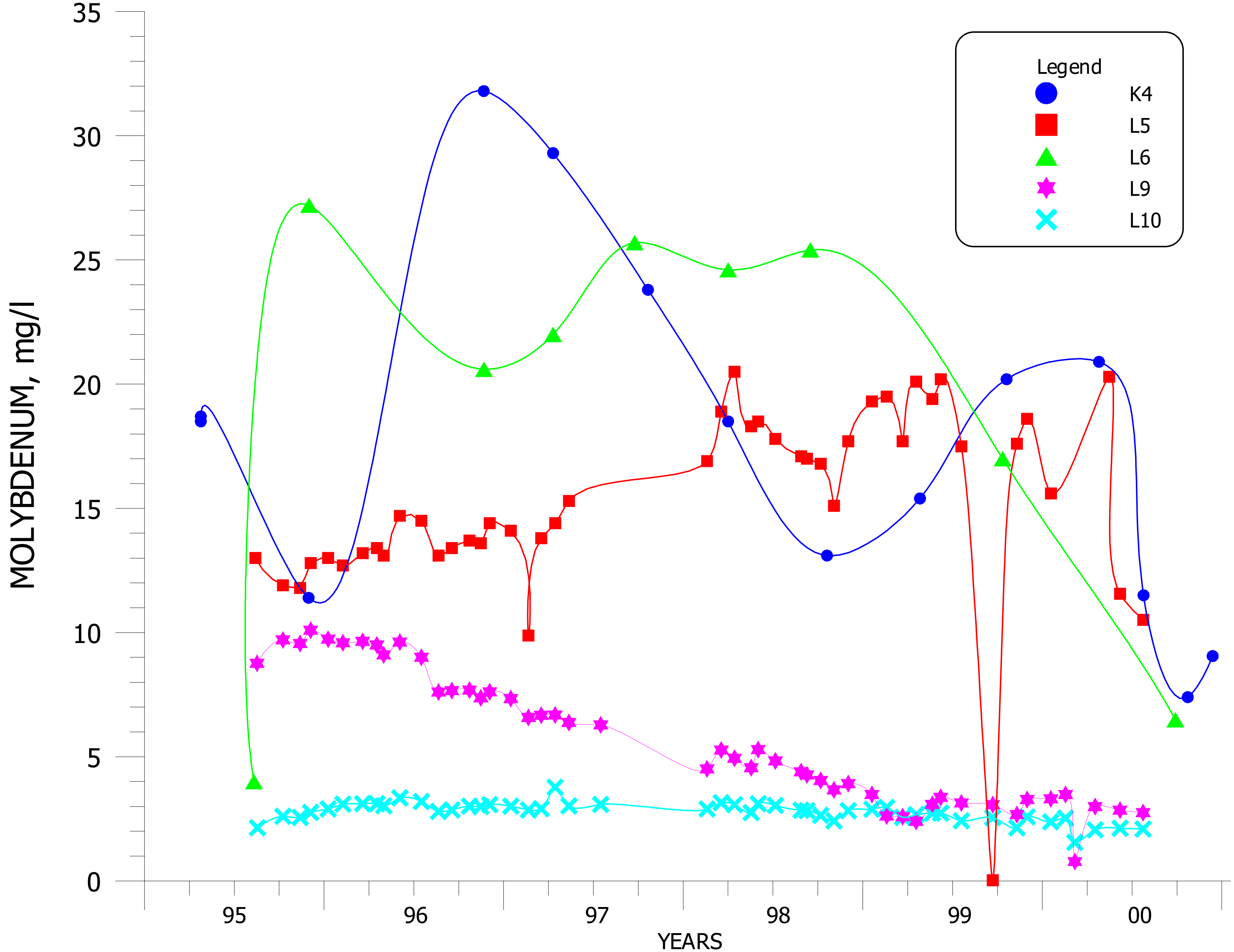


FIGURE 4.3-52. MOLYBDENUM CONCENTRATIONS FOR WELLS K4, L5, L6, L9 AND L10.

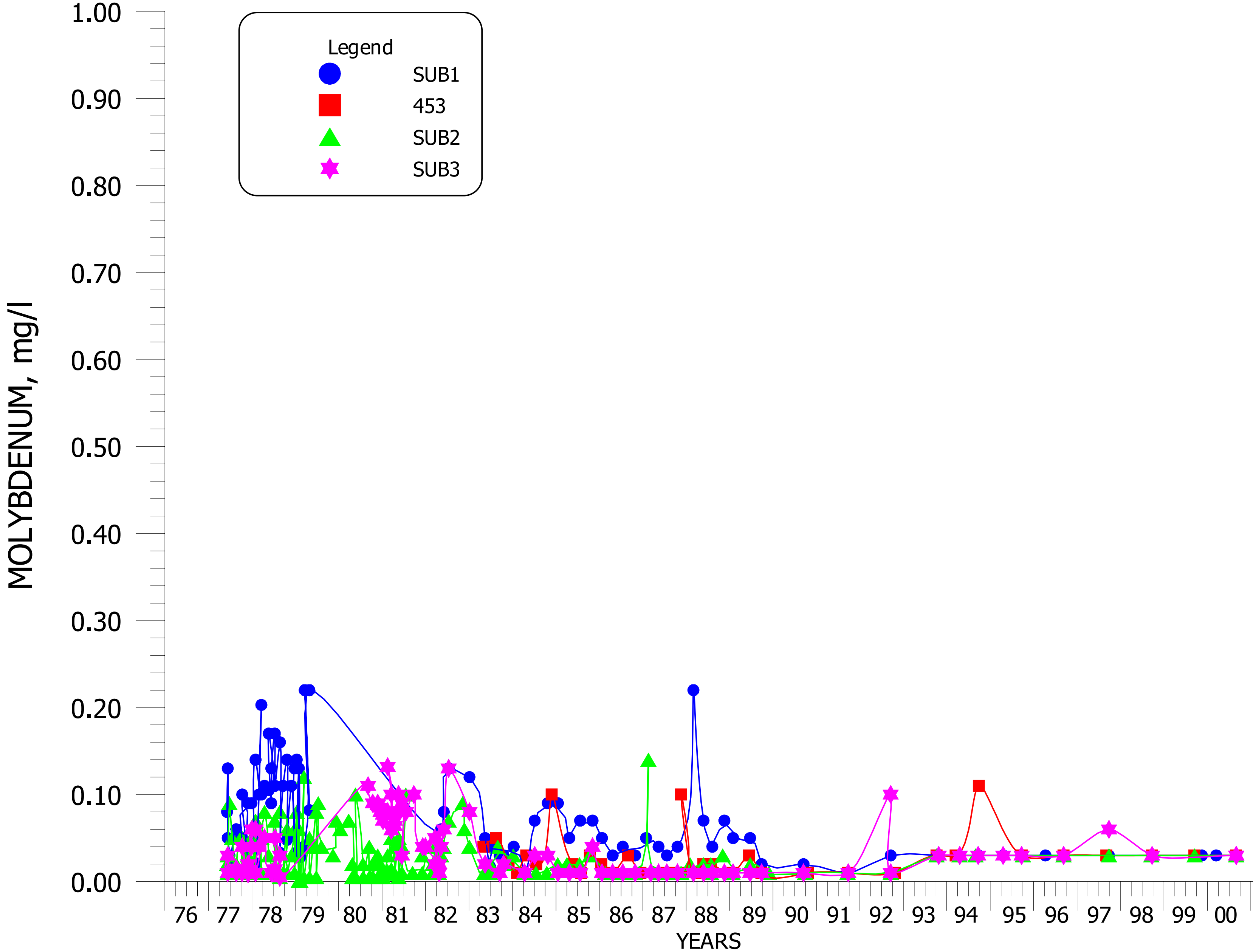


FIGURE 4.3-53. MOLYBDENUM CONCENTRATIONS FOR WELLS SUB1, 453 , SUB2 AND SUB3.

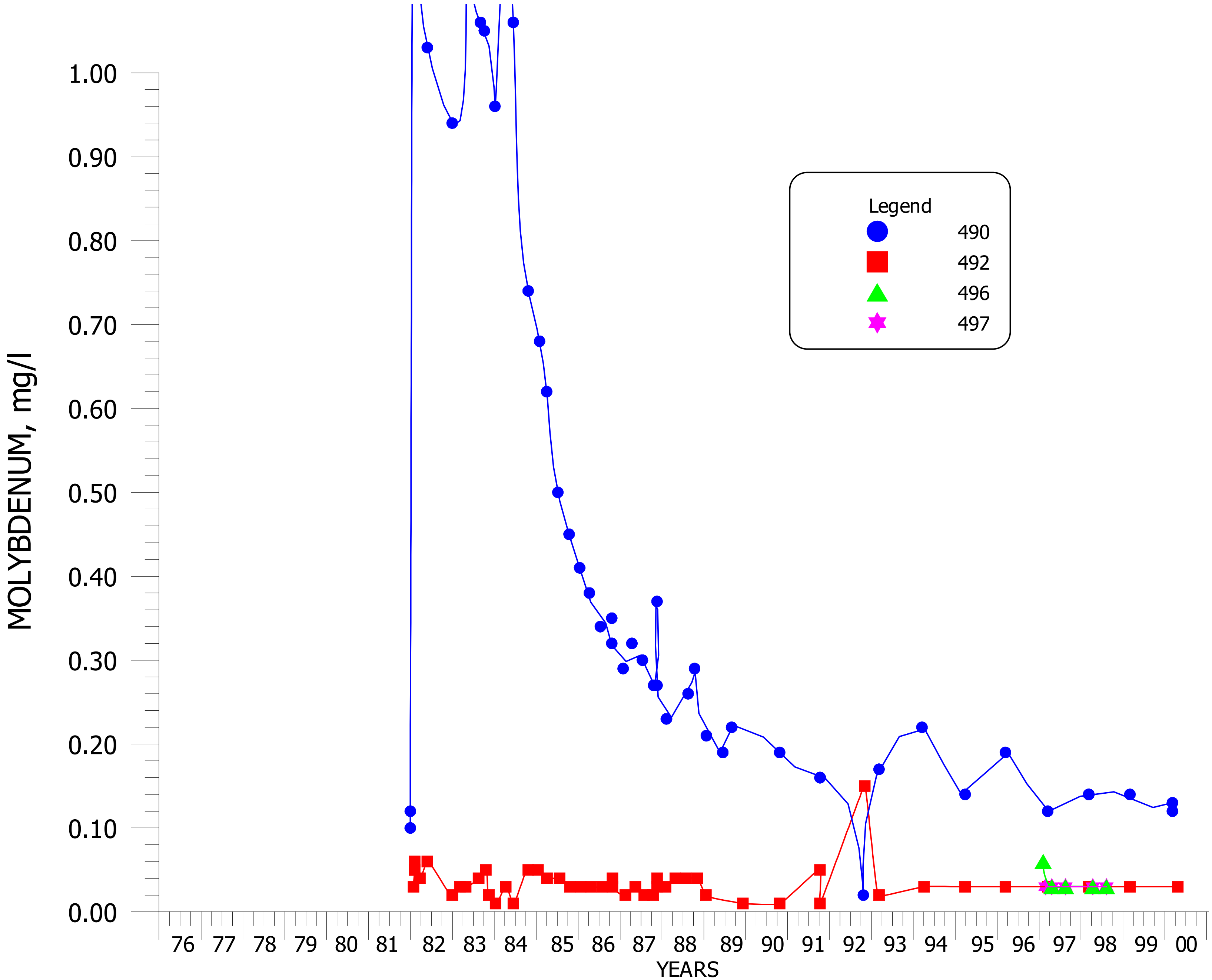


FIGURE 4.3-54. MOLYBDENUM CONCENTRATIONS FOR WELLS 490, 492, 496 AND 497.

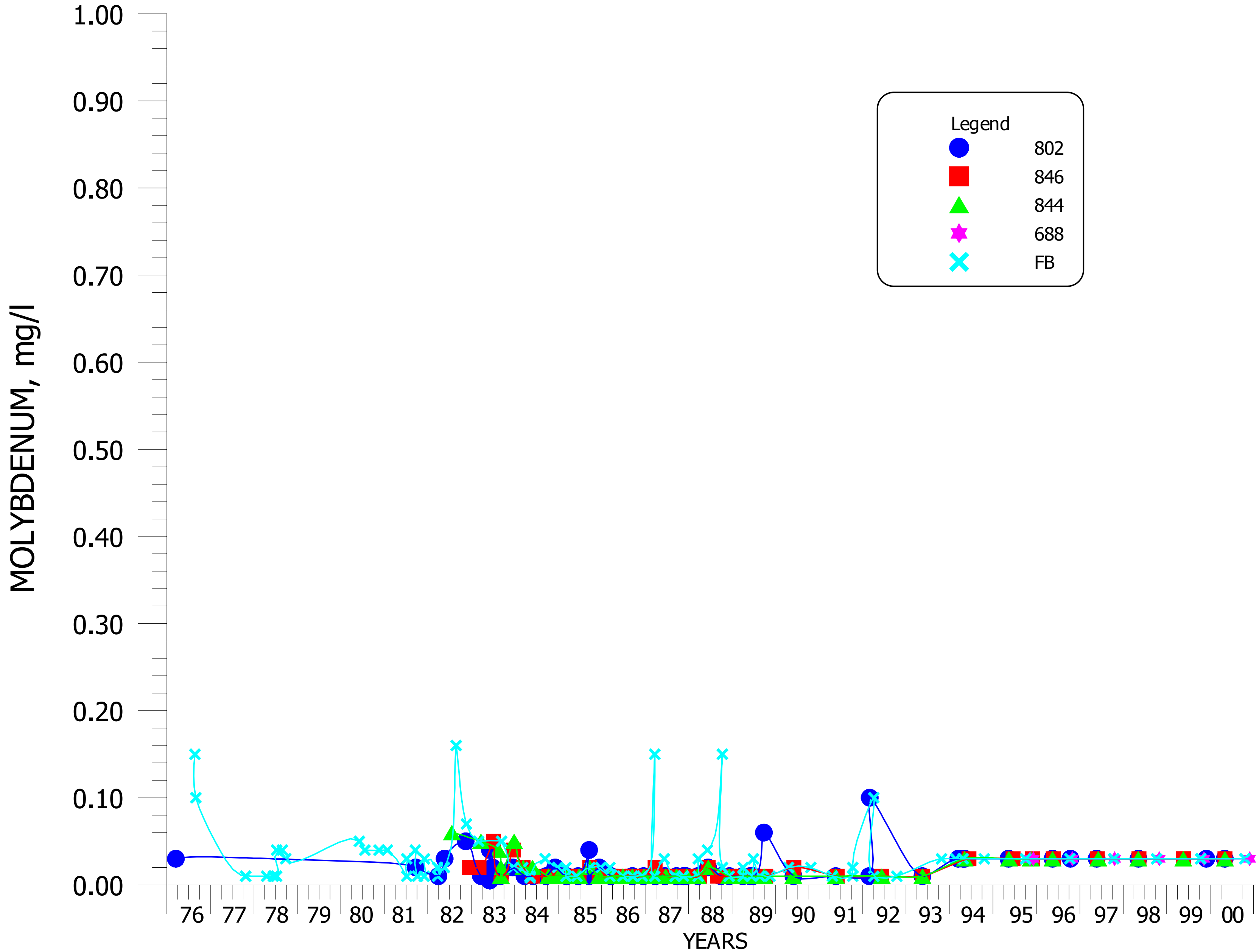
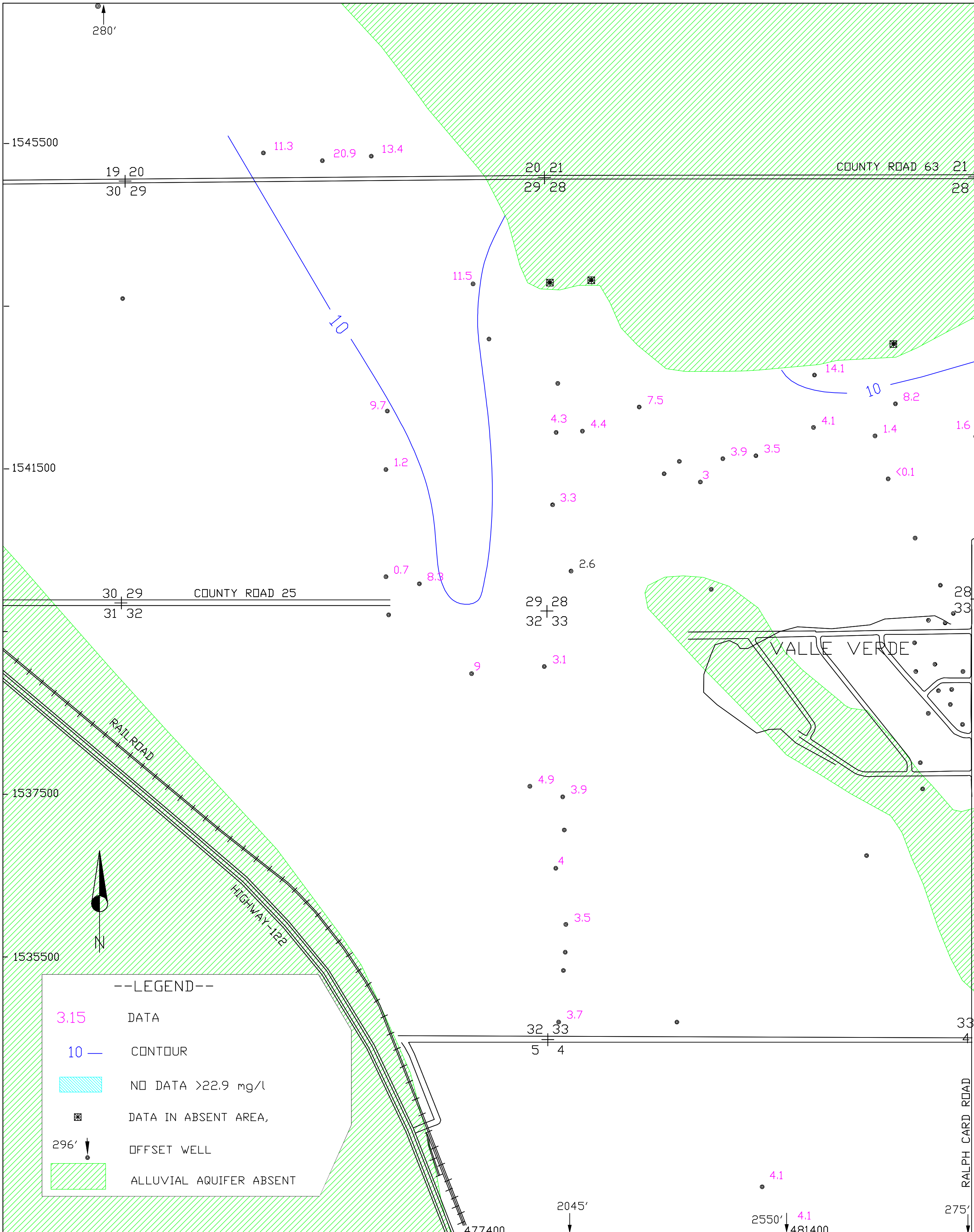


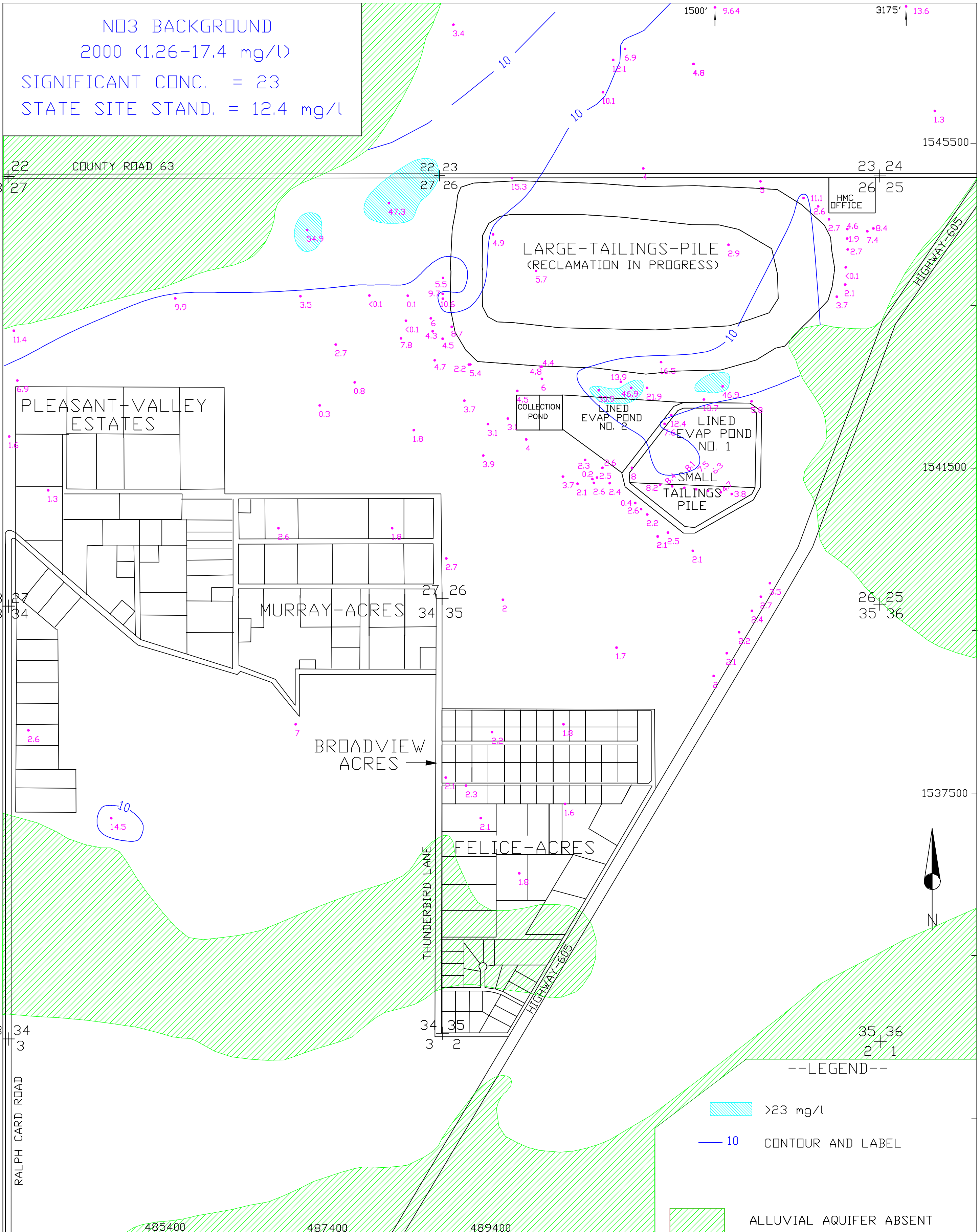
FIGURE 4.3-55. MOLYBDENUM CONCENTRATIONS FOR WELLS 802, 846, 844, 688 AND FB.



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 03/16/01

FIGURE 4.3-56A. NITRATE CONCENTRATIONS FOR THE ALLUVIAL AQUIFER (WEST AREA), FALL 2000, mg/l

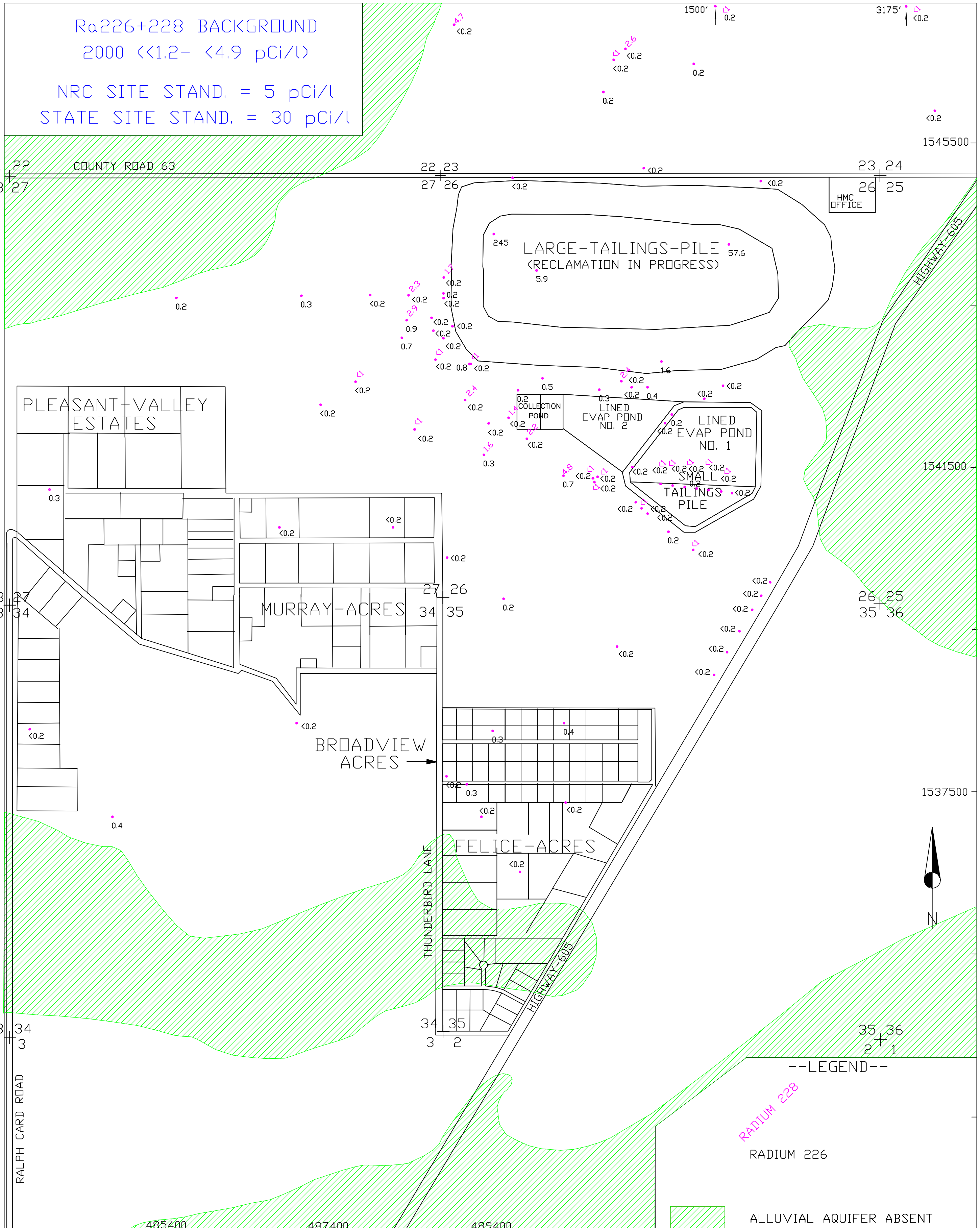
PROJECTS\2001-06\
2000WQAL LJU



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 03/27/01

FIGURE 4.3–56B. NITRATE CONCENTRATIONS FOR THE ALLUVIAL AQUIFER, FALL 2000, mg/l

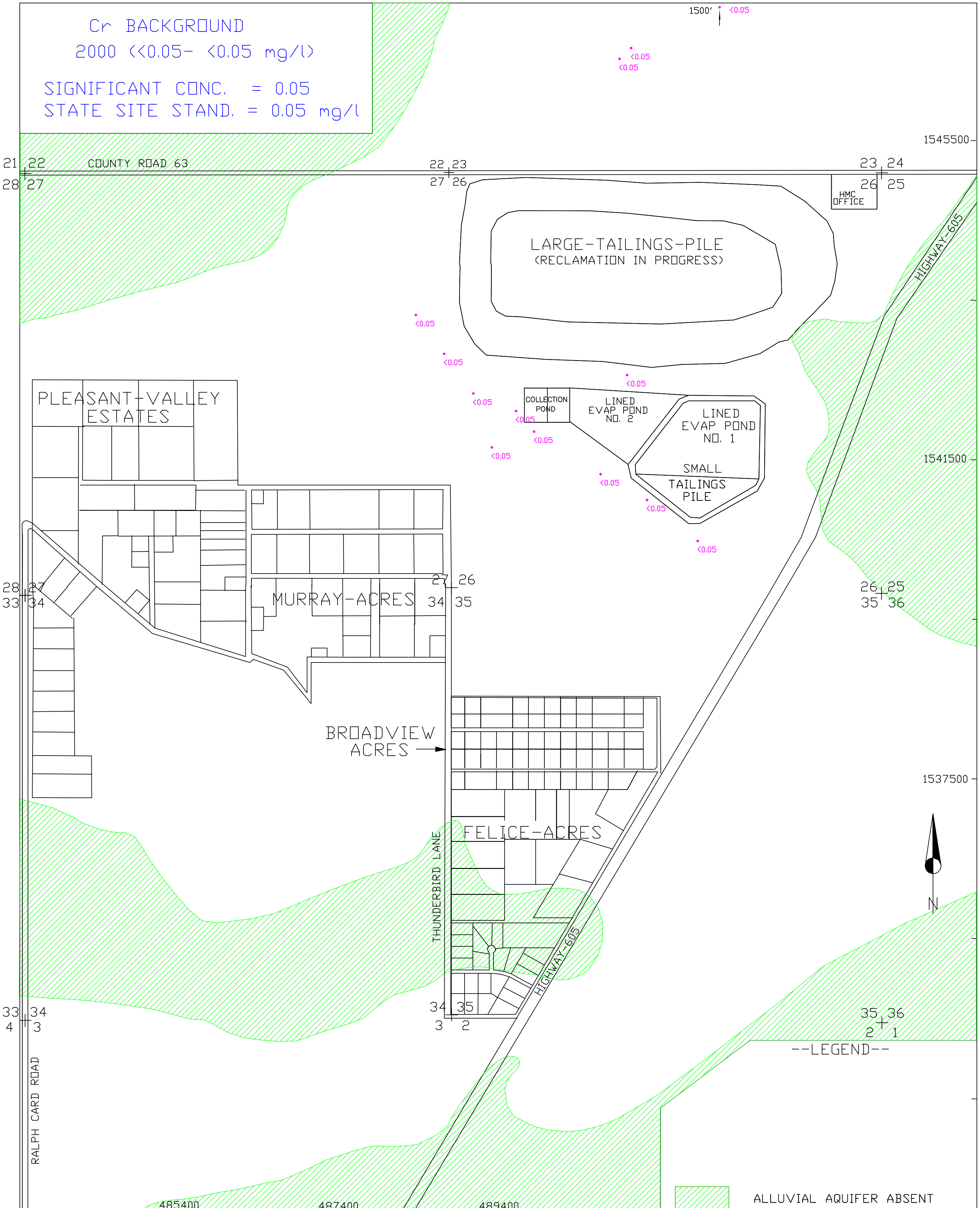
projects\2001-06
dwgs\2000eqal lju



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 03/27/01

FIGURE 4.3-57. RADIUM-226 AND RADIUM-228 CONCENTRATIONS FOR THE ALLUVIAL AQUIFER, FALL 2000, pCi/l

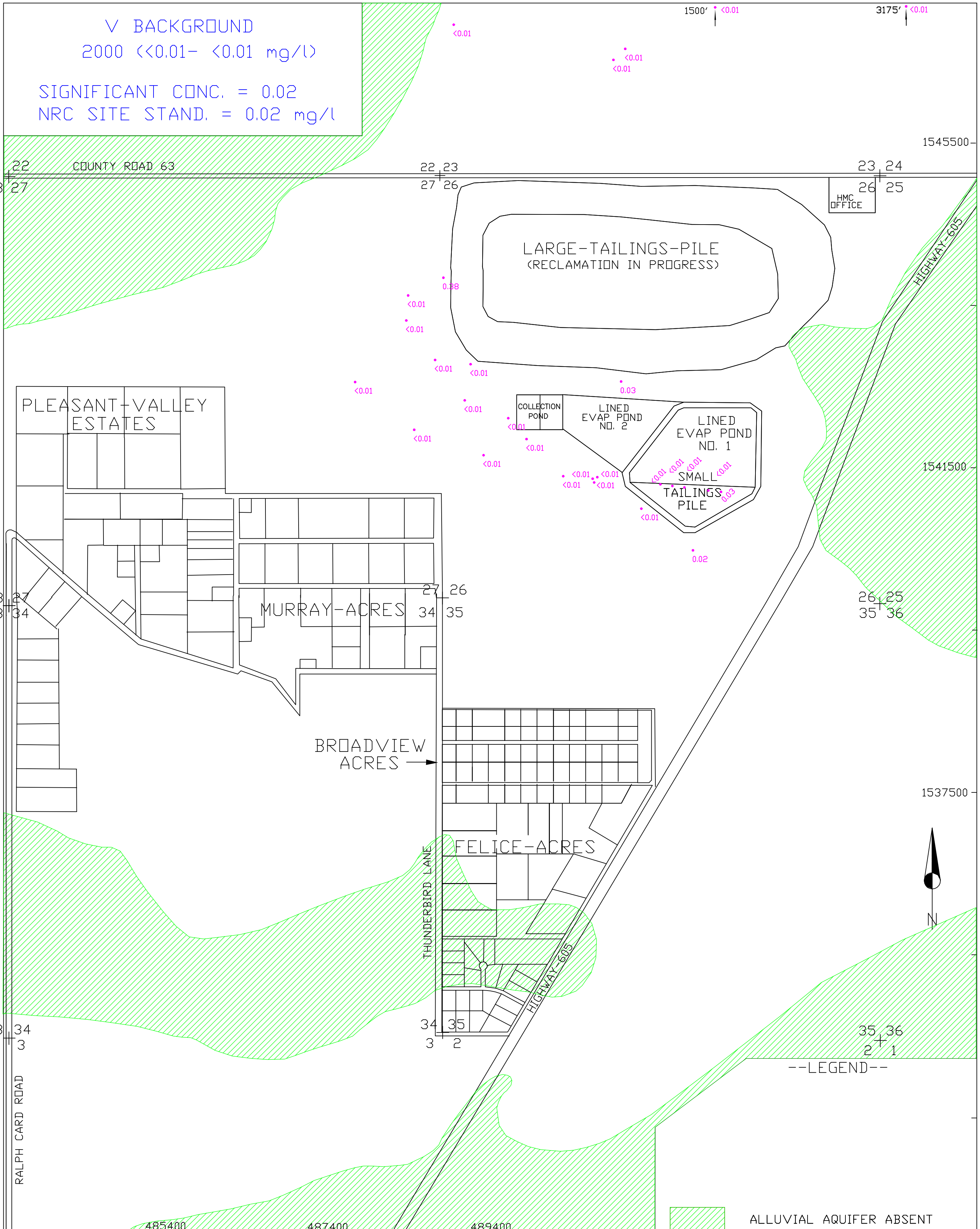
projects\2001-06
dwgs\2000eqal lju



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 03/27/01

FIGURE 4.3-58. CHROMIUM CONCENTRATIONS FOR THE ALLUVIAL AQUIFER, FALL 2000, mg/l

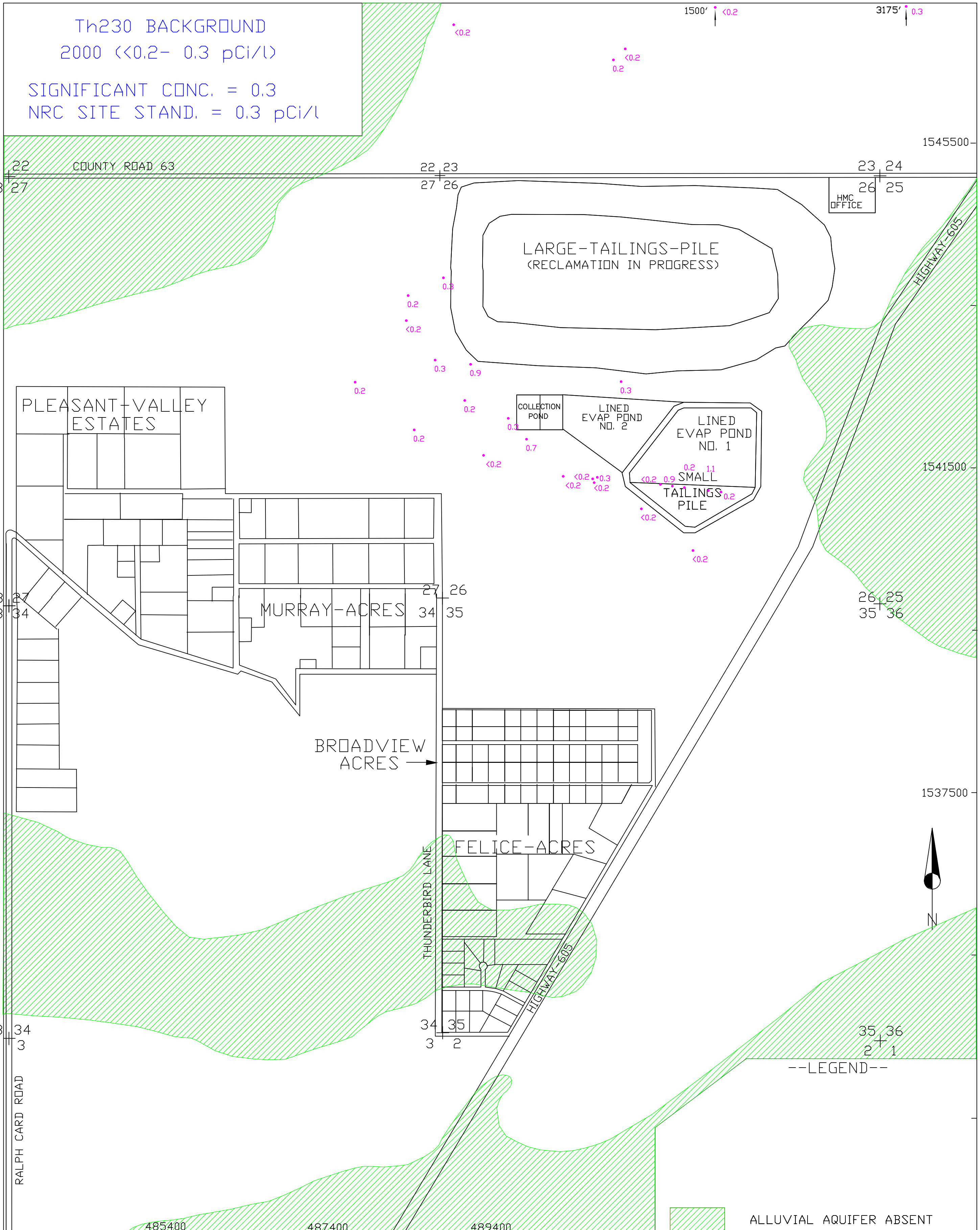
projects\2001-06
dwgs\2000eqal lju



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 03/27/01

FIGURE 4.3-59. VANADIUM CONCENTRATIONS FOR THE ALLUVIAL AQUIFER, FALL 2000, mg/l

projects\2001-06
dwgs\2000eqal lju



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 03/27/01

FIGURE 4.3-60. THORIUM-230 CONCENTRATIONS FOR THE ALLUVIAL AQUIFER, FALL 2000, pCi/l

projects\2001-06 dwgs\2000eqal lju

SECTION 5

TABLE OF CONTENTS

GROUND-WATER MONITORING
FOR HOMESTAKE'S GRANTS PROJECT

FIGURES

SECTION 5

TABLE OF CONTENTS

GROUND-WATER MONITORING
FOR HOMESTAKE'S GRANTS PROJECT

FIGURES
(continued)

SECTION 5

TABLE OF CONTENTS

GROUND-WATER MONITORING
FOR HOMESTAKE'S GRANTS PROJECT

FIGURES
(continued)

TABLES

5.0 UPPER CHINLE AQUIFER MONITORING

5.1 UPPER CHINLE WELL COMPLETION

Chinle aquifer well locations are presented on Figures 5.1-1A and 5.1-1B. The Upper and Middle Chinle aquifers do not exist in the west area. Table 5.1-1 presents basic information for the Chinle wells located on the Homestake property. This table presents well coordinates, well depth, casing diameter, water level, measuring point in feet above land surface and elevation, and depth and elevation to the top of the Chinle aquifers. A "U" follows the elevation of the top of the Upper Chinle aquifer, and an "M" and an "L" have the same meanings for the Middle and Lower Chinle aquifers, respectively. Some of the wells also are used to define the depth to the base of the alluvium, and an "A" is presented following the elevation number to denote that these values are for the base of the alluvium. The casing perforation interval and aquifer unit are also presented in this table.

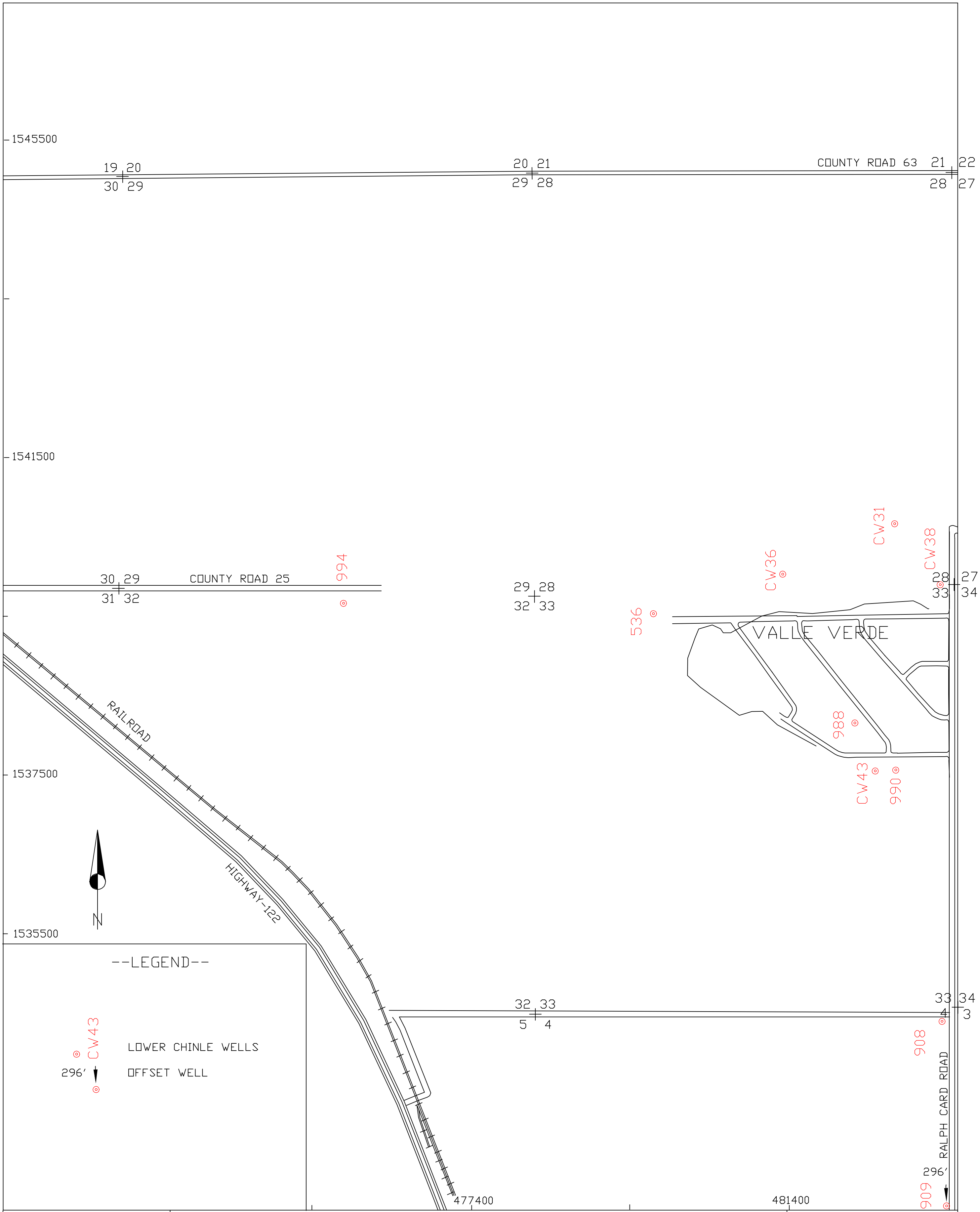
Table 5.1-2 presents basic well data for Chinle wells in Broadview and Felice Acres. Table 5.1-3 presents similar data for Murray Acres and Pleasant Valley Estates Chinle wells. Wells that are not located within the immediate Grants Project property or these four subdivision boundaries are shown on Table 5.1-4 as the regional Chinle wells (see Figure 5.1-1B for inner regional boundary). No additional Upper Chinle wells were drilled in 2000.

The background water quality is the alluvial aquifer upgradient water quality because the alluvium recharges the Chinle aquifers in this area. Therefore, the background data listed in the upward left portions of the water-quality figures is the 2000 background for the alluvial aquifer.

Each of the Upper Chinle wells is plotted on Figure 5.1-2, and the areal extent of the Upper Chinle aquifer at the Grants Project is also shown. Upper Chinle wells CW5, CW13 and CW25 are shown in cyan to note that these are fresh-water injection wells. Upper Chinle well CE2 was pumped as input to the R.O. plant and as a source to test flushing of the tailings in 2000 and is shown in orange. This figure also shows the location of the West and East Faults. Two different patterns have been used to show the limits of the Upper Chinle sandstone where Chinle shale exists above the sandstone

(green and blue, west and east of the East Fault, respectively). Figure 5.1-3 presents a typical geologic cross section to show the relative position of the alluvial and Chinle aquifers (see Figure 5.1-2 for location).

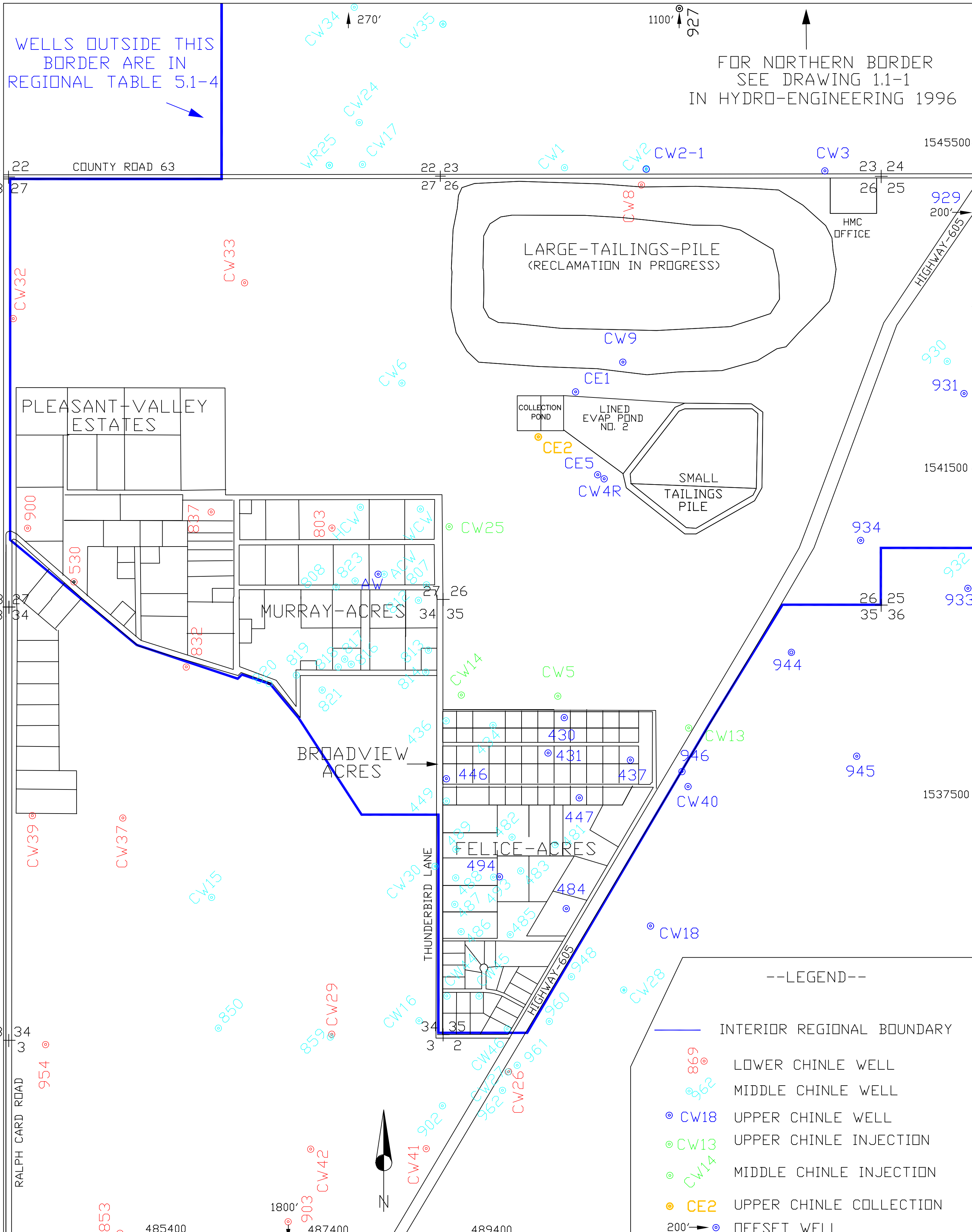
The subcrop of the Upper Chinle sandstone where the alluvium is saturated or unsaturated above the Upper Chinle sandstone is also shown on Figure 5.1-2 with red patterns. The alluvial and Upper Chinle aquifers are in direct contact where the red cross-hatched pattern is shown. The Upper Chinle sandstone is in contact with dry alluvium in the red dotted area. The Upper Chinle aquifer does not exist to the west and south of the subcrop area. The Upper Chinle sandstone, therefore, does not exist west of the West Fault.



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 02/19/2001

FIGURE 5.1-1A. CHINLE AQUIFER WELL LOCATIONS (WEST AREA)

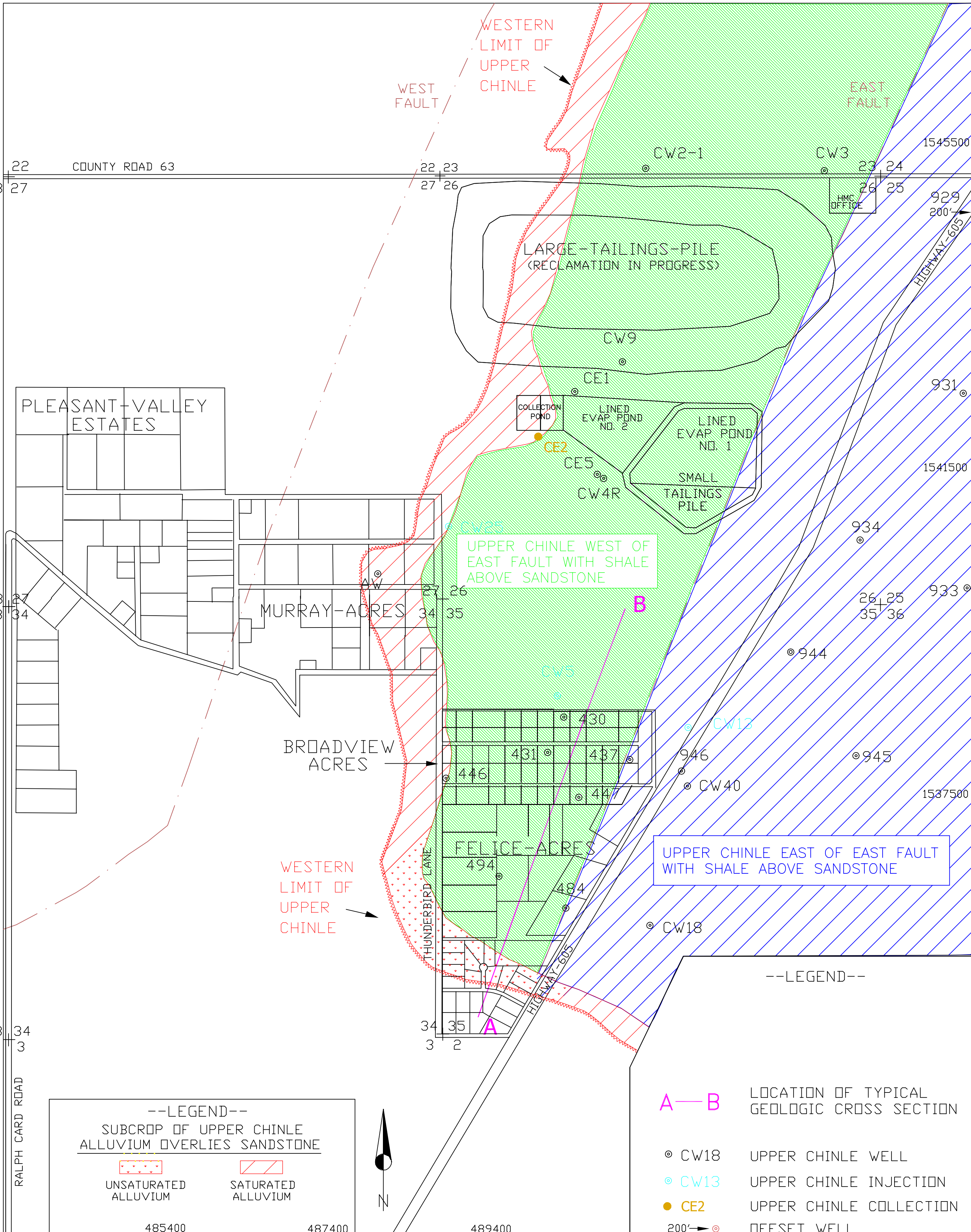
C:\PROJECTS\2001-06\DWGS\BASE16 LJU



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 02/04/2000

FIGURE 5.1-1B. CHINLE AQUIFER WELL LOCATIONS

9506/BASE16



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 02/18/01 lju

FIGURE 5.1-2. LIMITS OF UPPER CHINLE AQUIFER AND WELL LOCATIONS

PROJECTS\2001-06
DWGS\UP1600

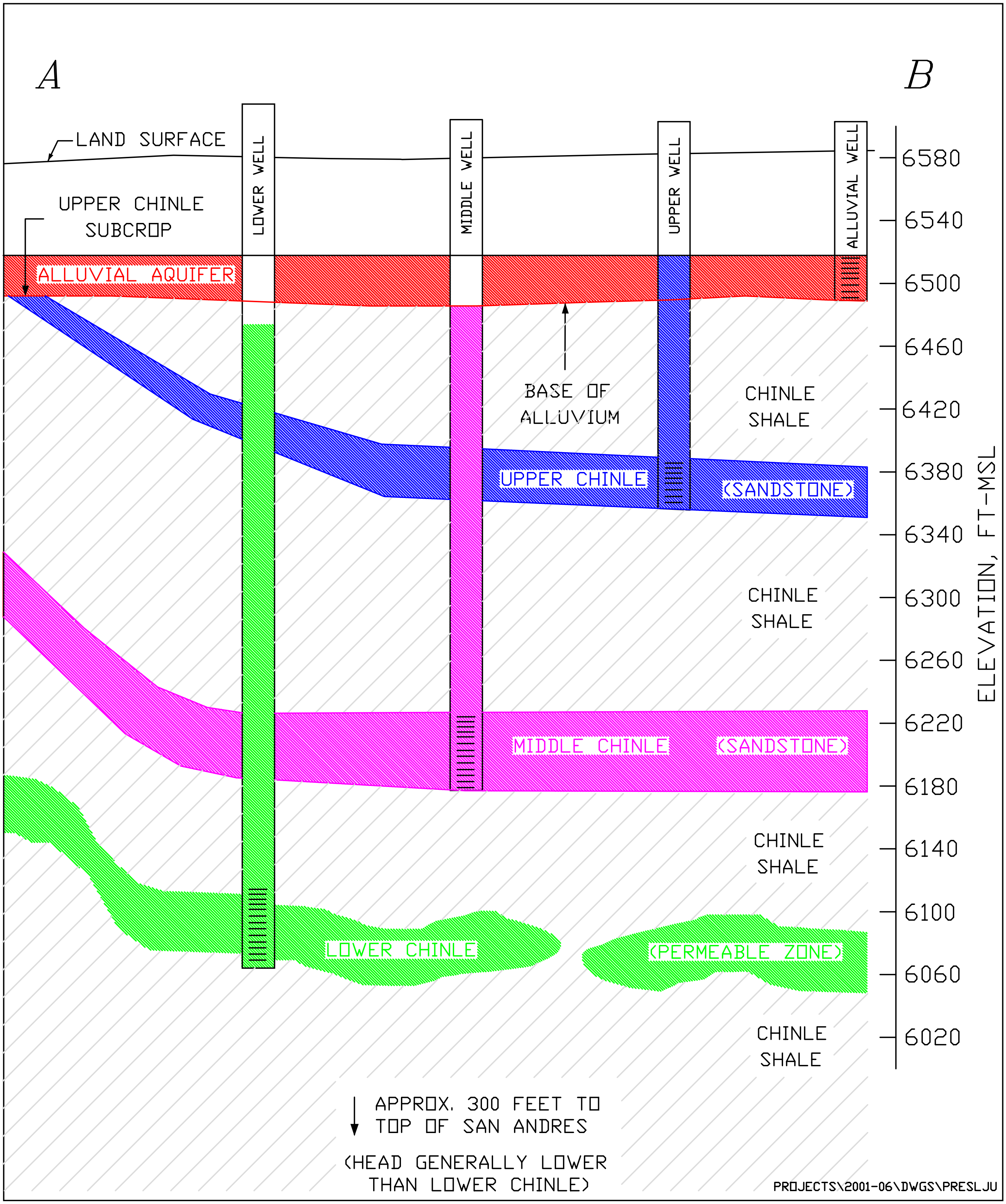


FIGURE 5.1-3. TYPICAL GEOLOGIC CROSS SECTION.

TABLE 5.1-1. BASIC WELL DATA FOR THE CHINLE HOMESTAKE WELLS.

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO AQUIFER (FT-LSD)	ELEV. OF AQUIFER (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	AQUIFER
0930	1542848	494997	410.0	6.0	12/14/2000	102.43	6496.11	0.0	6598.54	30	6569	A -	---
										335	6264	M 330-400	Middle
0931	1542461	495207	366.7	6.0	12/14/2000	57.94	6552.62	0.9	6610.56	339	6271	U -	Upper
0934	1540641	493941	293.0	7.0	12/14/2000	32.40	6553.19	2.0	6585.59	30	6554	A -	---
										282	6302	U 330-400	Upper
CE1	1541923	489979	137.0	5.0	07/19/2000	48.90	6521.29	0.1	6570.19	75	6495	A -	---
										106	6464	U 98-138	Upper
CE2	1542475	490434	119.7	5.0	12/21/2000	63.52	6512.83	1.8	6576.35	74	6501	U 78-118	Upper
										74	6501	A -	---
CE5	1541750	490800	140.0	5.0	12/19/2000	39.44	6529.11	4.0	6568.55	63	6502	A -	---
										103	6462	U 100-140	Upper
CW1	1545235	490295	325.0	5.0	12/14/2000	90.04	6495.18	0.7	6585.22	105	6480	A -	---
										272	6313	M 212-323	Middle
CW2	1545212	491302	355.0	5.0	12/14/2000	90.40	6495.08	1.7	6585.48	85	6499	A -	---
										136	6448	U -	---
										305	6279	M 306-353	Middle
CW2-1	1545212	491302	168.0	5.0	12/14/2000	54.36	6531.12	1.7	6585.48	85	6499	A -	---
										136	6448	U 243-253	Upper
CW3	1545200	493496	235.0	5.0	12/14/2000	59.10	6528.08	0.7	6587.18	70	6516	A -	---
										209	6377	U 210-235	Upper
										348	6238	M -	---
* CW4	1541682	490874	145.0	5.0	09/07/1994	39.06	6531.89	0.8	6570.95	70	6500	A -	---
										112	6458	U 110-145	Upper
CW4R	1541416	490787	138.9	6.0	12/14/2000	39.86	6528.87	1.3	6568.73	61	6506	A -	---
										104	6463	U 102-142	Upper
CW5	1538729	490221	170.0	5.0	12/05/2000	5.00	6564.34	1.6	6569.34	65	6503	A -	---
										137	6431	U 135-170	Upper
CW6	1542588	488301	282.0	4.0	12/14/2000	75.42	6500.22	1.0	6575.64	236	6339	M 246-276	Middle
CW7	1545285	488773	---	---	10/17/1995	60.80	6522.79	0.0	6583.59	---	---	C 120-130	Chinle
CW8	1545009	491238	285.0	6.0	12/05/2000	38.90	6552.93	0.0	6591.83	---	---	C 276-286	Chinle
										85	6507	A -	---
CW9	1542840	491015	180.0	5.0	12/14/2000	66.66	6525.17	0.0	6591.83	---	---	U 130-180	Upper
										80	6512	A -	---
* CW10	1542823	491803	185.0	5.0	11/13/1995	50.03	6537.86	0.0	6587.89	75	6513	A -	---
										167	6421	U 155-185	Upper
CW13	1538349	491827	267.7	6.0	12/05/2000	9.63	6567.07	2.7	6576.70	230	6344	U 225-265	Upper
										378	6196	M -	---
CW14	1538786	488884	360.9	6.0	12/05/2000	8.00	6558.09	2.9	6566.09	56	6507	A -	---
										66	6497	U -	---
										310	6253	M 278-358	Middle

TABLE 5.1-1. BASIC WELL DATA FOR THE CHINLE HOMESTAKE WELLS. (cont'd.)

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO AQUIFER (FT-LSD)	ELEV. OF AQUIFER (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	AQUIFER
CW17	1545279	487771	108.0	5.0	06/19/2000	64.81	6524.51	3.1	6589.32	73	6513	A -	---
										85	6501	M 83-103	Middle
CW24	1545773	487760	121.0	5.0	10/03/2000	57.79	6530.88	3.0	6588.67	61	6525	A -	---
										65	6521	M 78-118	Middle
CW25	1540802	488866	105.0	5.0	12/05/2000	5.00	6562.20	3.0	6567.20	53	6511	A -	---
										53	6511	U 62-102	Upper
CW32	1543413	483523	300.0	6.0	12/14/2000	109.31	6457.97	1.7	6567.28	70	6496	A -	---
										157	6409	L 158-188	Lower
										157	6409	L 218-303	---
CW33	1543814	486347	348.8	6.0	12/14/2000	106.18	6468.71	1.8	6574.89	83	6490	A -	---
										272	6301	L 267-287	Lower
										272	6301	L 307-347	---
CW34	1547827	487707	65.7	6.0	08/27/1996	65.65	6528.75	3.2	6594.40	20	6571	A -	---
										40	6551	M 33-63	Middle
CW35	1547001	488794	120.0	5.0	06/19/2000	59.56	6531.61	1.9	6591.17	63	6526	A -	---
										90	6499	M 93-118	Middle
WR25	1545267	487430	113.3	5.0	10/03/2000	61.10	6525.36	2.8	6586.46	50	6534	A -	---
										71	6513	M 71-111	Middle

NOTE: A = Alluvial Aquifer, Base
U = Upper Chinle Aquifer,Top
M = Middle Chinle Aquifer,Top
L = Lower Chinle Aquifer,Top
* = Abandoned

E = Estimated Depth

TABLE 5.1-2. BASIC WELL DATA FOR THE CHINLE BROADVIEW AND FELICE ACRES WELLS.

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO AQUIFER (FT-LSD)	ELEV. OF AQUIFER (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	AQUIFER
						Broadview							
0430	1538469	490300	145.0	---	---	---	---	0.0	6568.00	---	---	A -	Alluvium
										114	6454	U -	Upper
0431	1538045	490090	130.0	6.0	04/12/1994	35.00	6533.00	0.0	6568.00	60	6508	A 125-130	Alluvium
										118	6450	U 125-130	Upper
0434	1538370	489420	280.0	6.0	---	---	---	0.0	6563.68	75	6489	A -	---
										265	6299	M -	Middle
0436	1538430	488850	295.0	5.0	10/29/1996	71.82	6490.91	0.0	6562.73	90	6473	A -	---
										280	6283	M 280-295	Middle
0437	1537940	491100	340.0	5.0	10/29/1996	63.23	6508.77	1.8	6572.00	90	6480	A -	---
										180	6390	U -	---
										280	6290	M 240-300	Middle
0446	1537720	488850	110.0	6.0	09/08/1983	41.28	6518.72	0.0	6560.00	60	6500	U 60-95	Upper
										60	6500	A 60-95	Alluvium
0447	1537490	490480	142.0	6.0	04/11/1985	41.18	6526.82	0.0	6568.00	---	---	A 120-142	Alluvium
										80	6488	U 120-142	Upper
0449	1537440	488830	267.0	6.0	12/05/1994	63.42	6496.58	0.0	6560.00	---	---	M -	Middle
						Felice Acres							
0481	1538350	490180	320.0	4.0	---	---	---	0.0	6568.00	110	6458	A 270-310	Alluvium
										270	6298	M 270-310	Middle
0482	1536985	489604	260.0	5.0	04/11/1996	35.85	6526.81	0.0	6562.66	80	6483	A 220-260	Alluvium
										210	6353	M 220-260	Middle
0483	1536586	489753	280.0	---	07/24/1996	36.93	6525.73	0.0	6562.66	---	---	M -	Middle
										---	---	A -	Alluvium
0484	1536448	490356	320.0	5.0	12/26/1996	39.43	6524.55	0.0	6563.98	38	6526	A -	---
										129	6435	U -	---
										280	6284	M 220-300	Middle
0485	1535800	489630	260.0	6.0	07/18/1996	70.90	6494.10	0.0	6565.00	35	6530	A -	---
										70	6495	U -	---
										223	6342	M 220-260	Middle
0486	1535800	489024	179.2	4.0	10/15/1996	70.36	6488.04	0.0	6558.40	---	---	M 200-260	Middle
										21	6537	U -	---
										21	6537	A -	---
0487	1536175	488950	260.0	---	07/24/1996	49.20	6511.80	0.0	6561.00	---	---	M -	Middle
0488	1536500	488950	---	---	08/07/1996	78.10	6483.90	0.0	6562.00	---	---	M -	Middle
0489	1536850	488950	---	---	---	---	---	0.0	6562.00	---	---	M -	Middle
0493	1536510	489430	---	5.0	12/14/2000	62.08	6498.20	0.9	6560.28	40	6519	A -	---
										65	6494	U -	---
										236	6323	M 270-300	Middle

TABLE 5.1-2. BASIC WELL DATA FOR THE CHINLE BROADVIEW AND FELICE ACRES WELLS. (cont'd.)

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO AQUIFER (FT-LSD)	ELEV. OF AQUIFER (FT-MSL)		CASING PERFOR-ATIONS (FT-LSD)	AQUIFER
0494	1536510	489500	---	5.0	12/14/2000	33.63	6526.51	0.6	6560.14	40	6520	A	-	---
										65	6495	U	65-85	Upper
CW44	1535048	488891	208.0	6.0	12/14/2000	55.48	6505.26	2.5	6560.74	94	6464	A	-	Alluvium
										130	6428	M	69-208	Middle
CW45	1535036	489494	193.0	5.0	12/14/2000	53.76	6507.55	0.6	6561.31	90	6471	A	-	---
										166	6395	M	163-193	Middle
CW46	1534642	489595	187.3	5.0	12/14/2000	61.69	6500.57	1.5	6562.26	88	6473	A	-	---
										112	6449	M	125-185	Middle

NOTE: A = Alluvial Aquifer, Base
U = Upper Chinle Aquifer,Top
M = Middle Chinle Aquifer,Top
L = Lower Chinle Aquifer,Top
* = Abandoned

E = Estimated Depth

TABLE 5.1-3. BASIC WELL DATA FOR THE CHINLE MURRAY ACRES AND PLEASANT VALLEY WELLS.

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO AQUIFER (FT-LSD)	ELEV. OF AQUIFER (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	AQUIFER
						Murray							
0803	1540800	487430	290.0	6.0	09/19/1983	84.86	6476.14	0.0	6561.00	---	---	C 85-180	Chinle
										85	6476	A 85-180	Alluvium
0807	1540100	488605	287.0	6.0	---	---	---	0.0	6565.00	63	6502	A -	---
										275	6290	M 275-285	Middle
0808	1540080	487490	290.0	5.0	---	---	---	1.6	6561.00	85	6474	A -	---
										255	6304	M 260-290	Middle
0812	1539910	488505	300.0	6.0	---	---	---	0.6	6566.00	68	6497	A -	---
										268	6297	M 264-284	Middle
0813	1539300	488620	280.0	6.0	---	---	---	0.0	6565.00	63	6502	A -	---
										230	6335	M 235-255	Middle
0814	1539030	488590	---	---	---	---	---	0.0	6565.00	---	---	M -	Middle
0816	1539110	487705	255.0	6.0	---	---	---	0.0	6557.00	35	6522	A -	---
										240	6317	M 240-250	Middle
0817	1539190	487590	---	---	07/22/1995	70.34	6486.66	0.0	6557.00	---	---	M -	Middle
0818	1539090	487510	243.0	4.0	---	---	---	0.0	6557.00	62	6495	A -	---
										230	6327	M 223-243	Middle
0819	1539000	487000	222.0	6.0	---	---	---	0.0	6557.00	62	6495	A -	---
										210	6347	M 210-220	Middle
0820	1538890	486660	230.0	---	05/22/1996	81.45	6476.55	0.0	6558.00	---	---	M 125-230	Middle
0821	1538810	487320	260.0	7.0	11/01/1994	35.88	6524.12	0.0	6560.00	---	---	M -	Middle
0823	1540150	487720	265.0	6.0	---	---	---	0.0	6561.00	---	---	M 257-267	Middle
										40	6521	A -	---
ACW	1540235	488070	325.0	6.0	08/16/1996	77.85	6485.95	1.2	6563.80	40	6523	A -	---
										57	6506	U -	---
										264	6299	M 265-325	Middle
AW	1540235	488015	156.0	6.0	01/05/1998	15.00	6548.43	0.1	6563.43	63	6500	A -	Alluvium
										100	6463	U 66-155	Upper
HCW	1541060	487785	295.0	6.0	07/20/2000	75.61	6486.39	1.0	6562.00	82	6479	A -	---
										264	6297	M 264-295	Middle
WCW	1541045	488520	307.0	6.0	12/14/2000	70.13	6497.24	0.8	6567.37	83	6484	A -	---
										254	6313	M 257-307	Middle
						Pleasant Valley							
0530	1540229	484358	490.0	5.0	10/30/1998	95.78	6463.41	1.5	6559.19	265	6293	L -	Lower
0832	1539320	485670	280.0	4.0	---	---	---	0.0	6557.00	85	6472	A -	---
										240	6317	L 238-278	Lower
0837	1540995	485950	200.0	5.0	09/07/1983	59.87	6507.13	0.0	6567.00	80	6487	A -	---
										160	6407	L 160-200	Lower
* 0842	1541650	483980	250.0	---	---	---	---	0.0	6558.00	---	---	L -	Lower

TABLE 5.1-3. BASIC WELL DATA FOR THE CHINLE MURRAY ACRES AND PLEASANT VALLEY WELLS. (cont'd.)

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO AQUIFER (FT-LSD)	ELEV. OF AQUIFER (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	AQUIFER
0900	1540800	483700	172.1	---	07/24/1995	91.41	6468.59	1.5	6560.00	---	---	L -	Lower

NOTE: A = Alluvial Aquifer, Base
U = Upper Chinle Aquifer,Top
M = Middle Chinle Aquifer,Top
L = Lower Chinle Aquifer,Top
* = Abandoned

E = Estimated Depth

TABLE 5.1-4. BASIC WELL DATA FOR THE CHINLE REGIONAL WELLS.

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO AQUIFER (FT-LSD)	ELEV. OF AQUIFER (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	AQUIFER
0536	1539560	479701	160.0	5.0	09/12/2000	144.70	6410.30	-2.0	6555.00	---	---	L -	Lower
0653	1533283	486570	206.0	6.0	09/06/2000	169.00	6375.97	1.3	6544.97	97	6447	A 69-206	Alluvium
										135	6409	L -	Lower
0850	1534652	486044	54.0	5.0	12/26/1996	55.82	6493.33	3.2	6549.15	37	6509	M 29-54	Middle
										37	6509	A -	---
0853	1532124	484824	95.0	5.0	12/14/2000	69.83	6471.55	1.7	6541.38	60	6480	A -	---
										60	6480	L 55-95	Lower
0859	1534549	487426	83.0	5.0	12/14/2000	59.88	6492.88	2.6	6552.76	52	6498	M 50-83	Middle
0901	1531900	492900	270.0	5.0	11/04/1981	46.88	6552.12	0.0	6599.00	40	6559	A -	---
										190	6409	L 240-260	Lower
0902	1533700	488800	150.0	6.0	01/28/1995	52.10	6507.90	0.0	6560.00	72	6488	A -	---
										72	6488	M 78-102	Middle
0903	1530250	486900	281.0	5.0	---	---	---	0.0	6559.00	220	6339	L 120-260	Lower
0904	1531100	487150	200.0	4.0	---	---	---	0.0	6560.00	---	---	L 170-200	Lower
0908	1534430	483325	282.8	5.0	11/03/1998	81.16	6463.21	1.5	6544.37	107	6436	A -	---
										232	6311	L -	Lower
0909	1531900	483400	140.0	4.0	11/19/1982	77.45	6461.45	0.0	6538.90	112	6427	A 80-135	Alluvium
										112	6427	L 80-135	Lower
0927	1548300	491700	---	---	---	---	---	1.0	6595.00	---	---	C -	Chinle
0929	1544684	495585	320.0	5.0	12/14/2000	37.88	6554.69	2.0	6592.57	---	---	U 290-320	Upper
0932	1540434	495401	501.0	6.0	12/17/1997	111.83	6490.28	0.0	6602.11	354	6248	U -	---
										492	6110	M 450-490	Middle
0933	1540050	499730	---	5.0	12/17/1997	52.78	6547.73	0.5	6600.51	---	---	U -	Upper
0937	1542200	481250	182.0	5.0	---	---	---	0.0	6578.00	70	6508	A -	---
										160	6418	L 95-182	Lower
0944	1539280	493091	300.0	5.0	12/17/1997	38.52	6550.09	1.6	6588.61	64	6523	A -	---
										252	6335	U 220-280	Upper
0945	1537986	493900	300.0	---	03/21/1985	92.41	6498.08	0.0	6590.49	---	---	U -	Upper
0946	1537804	491754	260.0	5.0	10/17/1996	37.45	6541.59	0.0	6579.04	220	6359	U 230-260	Upper
0948	1535190	490400	255.0	5.0	---	---	---	0.0	6568.10	200	6368	M 200-255	Middle
0949	1540350	483600	551.0	---	---	---	---	0.0	6562.30	112	6450	A -	---
										155	6407	L 260-290	Lower
										460	6102	S 400-493	San Andres
										460	6102	S 505-551	San Andres
0954	1534390	484260	307.0	5.0	12/27/1994	77.22	6467.78	0.0	6545.00	225	6320	L 285-307	Lower
0960	1534730	490110	305.0	6.0	04/05/1995	67.46	6497.54	0.0	6565.00	280	6285	M 285-305	Middle
0961	1534190	489720	240.0	5.0	04/05/1995	67.40	6497.60	6.9	6565.00	200	6358	M 200-240	Middle
0962	1533880	489530	238.0	6.0	---	---	---	0.0	6560.00	225	6335	M 220-238	Middle

TABLE 5.1-4. BASIC WELL DATA FOR THE CHINLE REGIONAL WELLS. (cont'd.)

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO AQUIFER (FT-LSD)	ELEV. OF AQUIFER (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	AQUIFER
0963	1532700	488900	---	4.0	---	---	---	0.0	6557.00	---	---	L -	Lower
0964	1531500	488000	200.0	6.0	---	---	---	0.0	6560.00	170	6390	L 170-200	Lower
0965	1531550	489100	200.0	4.0	---	---	---	0.0	6575.00	---	---	L 130-200	Lower
0966	1531300	489000	---	---	---	---	---	0.0	6575.00	---	---	L -	Lower
0967	1530500	487600	---	---	---	---	---	0.0	6570.00	---	---	L -	Lower
0968	1529700	488400	---	---	---	---	---	0.0	6630.00	---	---	L -	Lower
0969	1529400	488450	---	---	---	---	---	0.0	6640.00	---	---	L -	Lower
0970	1529100	488500	---	5.0	---	---	---	0.0	6660.00	---	---	L -	Lower
0988	1538140	482200	155.0	5.0	07/18/1996	59.86	6589.14	1.3	6649.00	18	6630	A -	---
										152	6496	L 152-155	Lower
0990	1537600	482750	---	---	---	---	---	0.5	6550.00	---	---	L -	Lower
0994	1539700	476240	144.0	6.0	10/24/2000	86.70	6468.30	0.0	6555.00	---	---	A 95-110	Alluvium
										---	---	L 95-110	Lower
CW15	1536259	485961	134.6	5.0	12/14/2000	55.87	6495.45	2.6	6551.32	50	6499	A -	---
										91	6458	M 73-133	Middle
										311	6238	L -	---
CW16	1534747	488507	---	5.0	12/26/1996	68.02	6490.52	0.0	6558.54	82	6477	A -	---
										82	6477	M 112-152	Middle
CW18	1535924	491378	230.7	5.0	12/14/2000	6.85	6565.80	1.5	6572.65	90	6481	A -	---
										190	6381	U 177-232	Upper
										340	6231	M -	---
CW26	1534116	489593	300.0	5.0	12/14/2000	84.13	6477.30	0.5	6561.43	50	6511	A -	---
										50	6511	M -	---
										231	6330	L 245-285	Lower
CW27	1534109	489600	110.0	5.0	12/14/2000	65.44	6497.44	1.9	6562.88	50	6511	A -	---
										50	6511	M -	Middle
CW28	1535112	491008	370.0	5.0	12/14/2000	70.69	6500.99	1.9	6571.68	90	6480	A -	---
										110	6460	U -	---
										294	6276	M 280-360	Middle
CW29	1534551	487435	290.0	5.0	12/14/2000	75.82	6476.40	1.7	6552.22	52	6499	M -	---
										52	6499	A -	---
										228	6323	L 230-270	Lower
CW30	1536642	488704	251.5	5.0	12/14/2000	60.00	6498.31	2.0	6558.31	35	6521	A -	---
										220	6336	M 219-249	Middle
CW31	1540689	482738	311.0	6.0	12/14/2000	82.31	6477.95	2.0	6560.26	111	6447	A -	---
										254	6304	L 136-156	Lower
										254	6304	L 291-311	---
										254	6304	L 231-271	---
CW36	1540053	481329	179.9	5.0	12/14/2000	73.66	6477.43	2.8	6551.09	96	6452	A -	---
										152	6396	L 155-177	Lower

TABLE 5.1-4. BASIC WELL DATA FOR THE CHINLE REGIONAL WELLS. (cont'd.)

03/28/2001

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO AQUIFER (FT-LSD)	ELEV. OF AQUIFER (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)	AQUIFER
CW37	1537240	484853	150.1	5.0	12/14/2000	60.08	6491.09	1.3	6551.17	55	6495	A -	---
										100	6450	L 100-150	Lower
CW38	1540103	483429	174.8	5.0	11/14/1997	55.18	6500.42	2.1	6555.60	108	6446	A -	---
										130	6424	L 133-173	Lower
CW39	1537260	483754	126.3	5.0	12/14/2000	62.31	6488.40	3.4	6550.71	40	6507	A -	---
										87	6460	L 90-123	Lower
CW40	1537624	491819	264.0	5.0	12/14/2000	11.70	6567.24	2.6	6578.94	75	6501	A -	---
										220	6356	U 224-264	Upper
CW41	1533174	488584	206.0	6.0	12/14/2000	78.60	6476.81	1.5	6555.41	59	6495	A -	---
										138	6416	L 146-206	Lower
CW42	1533169	487177	205.0	6.0	12/14/2000	70.34	6478.44	0.0	6548.78	98	6451	A -	---
										124	6425	L 125-205	Lower
CW43	1537587	482493	104.1	5.0	12/14/2000	65.43	6483.36	2.0	6548.79	57	6490	A -	---
										57	6490	L 81-101	Lower

NOTE: A = Alluvial Aquifer, Base
U = Upper Chinle Aquifer,Top
M = Middle Chinle Aquifer,Top
L = Lower Chinle Aquifer,Top
* = Abandoned

E = Estimated Depth

5.2 UPPER CHINLE WATER LEVELS

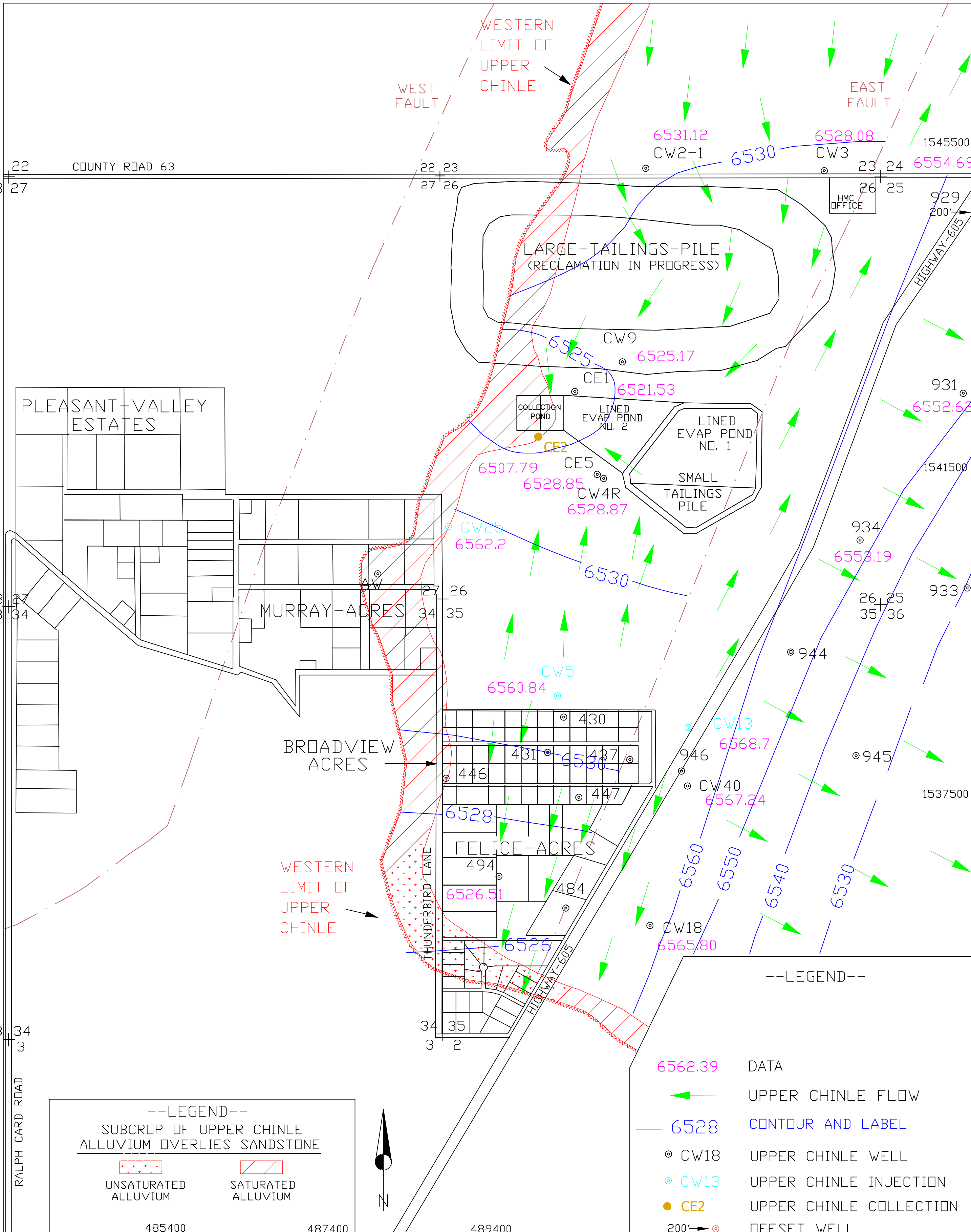
5.2.1 WATER LEVELS - UPPER CHINLE

Water levels in Homestake's Upper, Middle and Lower Chinle aquifer wells are presented in Appendix A. Appendix A contains a table with Homestake, subdivision, and regional Chinle wells. Figure 5.2-1 presents water-level elevation contours of the Upper Chinle aquifer for the Fall of 2000. The green arrows on Figure 5.2-1 show the direction of ground-water flow, which is greatly influenced by the fresh-water injection into the Upper Chinle at wells CW5, CW13 and CW25 and collection from well CE2. Well CW13, an injection well on the east side of the East Fault, is in the high permeability zone of the Upper Chinle aquifer that parallels the East Fault. This high permeability zone exists at least out to 1000 feet east of the East Fault at well CW18. This injection has increased the head along the east side of the East Fault to greater than 6560 ft-msl. The permeability decreases to the east of the East Fault and, therefore, an easterly gradient occurs in the Upper Chinle away from the East Fault. The slow movement to the east is not expected to change the concentrations of uranium, selenium and molybdenum in monitoring well 945 but should eventually result in a change in the conservative constituents of chloride and sulfate due to the injection concentrations. Chloride concentrations are expected to gradually decline to the injection concentration, while the sulfate concentrations are expected to slightly increase to the injection concentration. The green arrows show the direction of ground-water flow in this area.

The injection into Upper Chinle well CW5 causes ground-water flow to the north and south of this area. The flow that moves to the south discharges to the alluvial aquifer in the subcrop area where the alluvium is saturated over the top of the Upper Chinle. Flow in the Upper Chinle also moves north of Broadview Acres to collection well CE2. Injection into Upper Chinle well CW25 was started in 2000, which causes flow from this well back to collection well CE2. The natural flow in the Upper Chinle aquifer west of the East Fault is from the north and ground water continues to flow in this direction toward the large tailings from the north. Well CW3 is upgradient of this site.

The time plots for water level and water quality for the Chinle aquifers present historical data as well as current data. Figure 5.2-2 presents the location of the Upper Chinle wells that are used to monitor water-level changes with time. The color of the well name and symbol is the same on Figure 5.2-2 as on the water-level plots. Figure 5.2-3 presents the water-level elevations plotted versus time for Upper Chinle wells CW3, CW4R, CW5, CE2, 494 and CW25. Water levels in the Upper Chinle have been fairly stable during 2000 except for the changes in collection well CE2 due to pumping and the rise in water level in well CW25 due to fresh-water injection into this well.

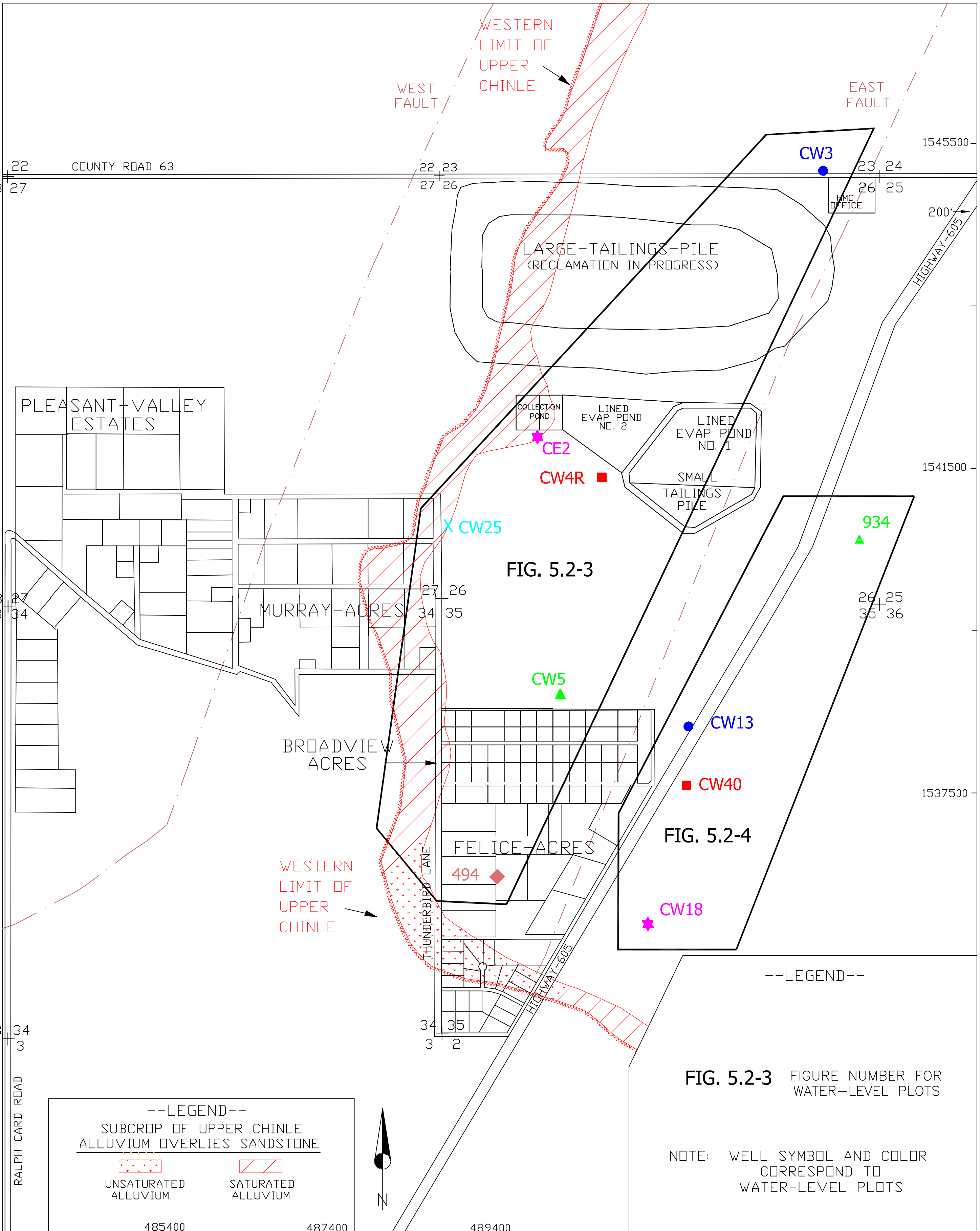
Figure 5.2-4 presents the water-level elevation changes for the Upper Chinle wells east of the East Fault. The large water-level rise in these wells in mid-1996 was due to the injection into well CW13. The water-level elevation in each of these wells in the Upper Chinle is greater than the alluvial head in this area. This prevents the recharge of the Upper Chinle on the east side of the East Fault from the alluvial aquifer. High water levels in the Upper Chinle, east of the East Fault, were maintained in 2000.



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 02/18/01 lju

FIGURE 5.2-1. WATER-LEVEL ELEVATIONS FOR THE UPPER CHINLE AQUIFER, FALL 2000, FT-MSL

PROJECTS\2001-06
DWGS\UP1600



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 02/18/01 lju

FIGURE 5.2-2. LOCATION OF UPPER CHINLE WELLS WITH WATER-LEVEL PLOTS

PROJECTS\2001-06
DWGS\UP1600

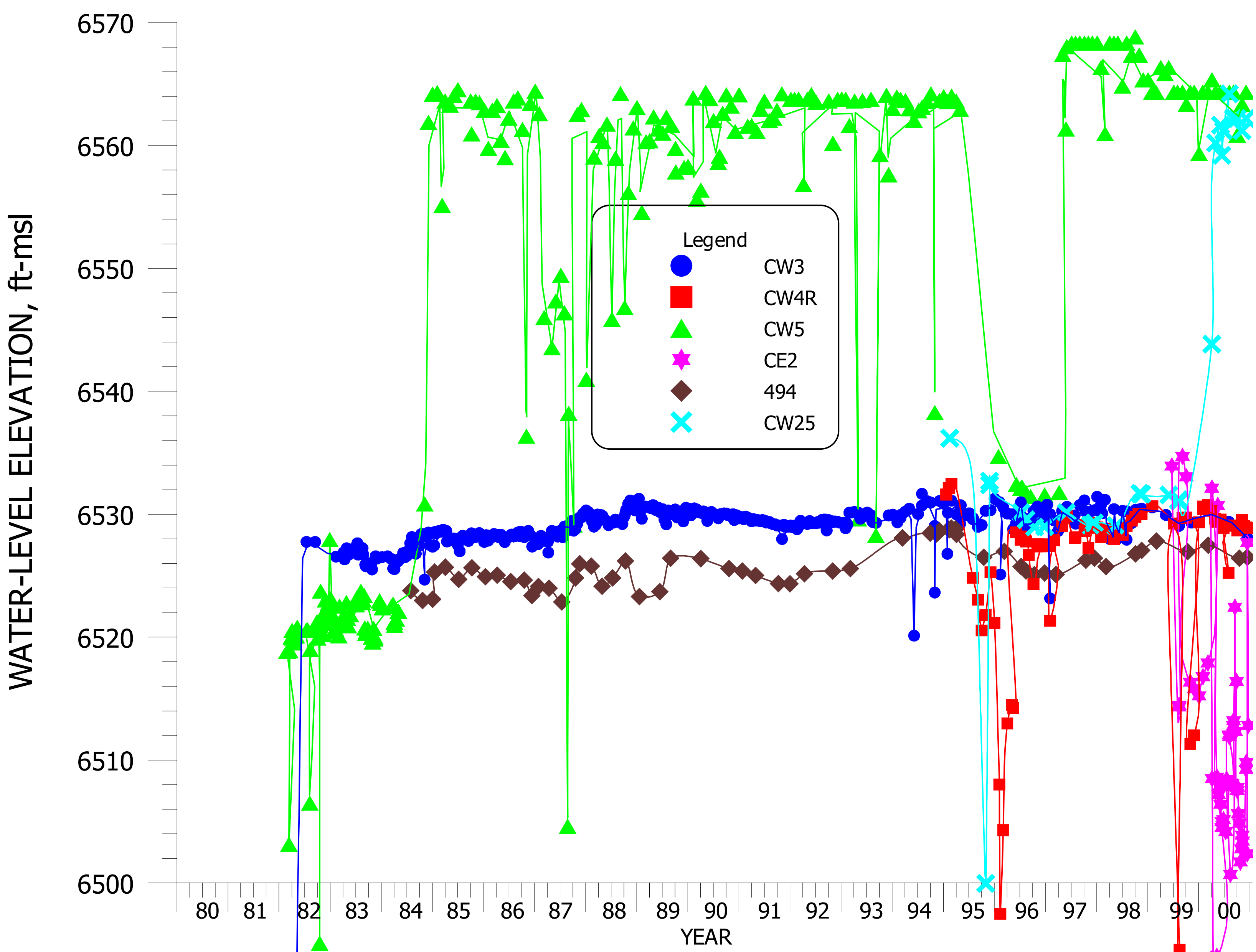


FIGURE 5.2-3. WATER-LEVEL ELEVATION FOR WELLS CW3, CW4R, CW5, CE2, 494 AND CW25.

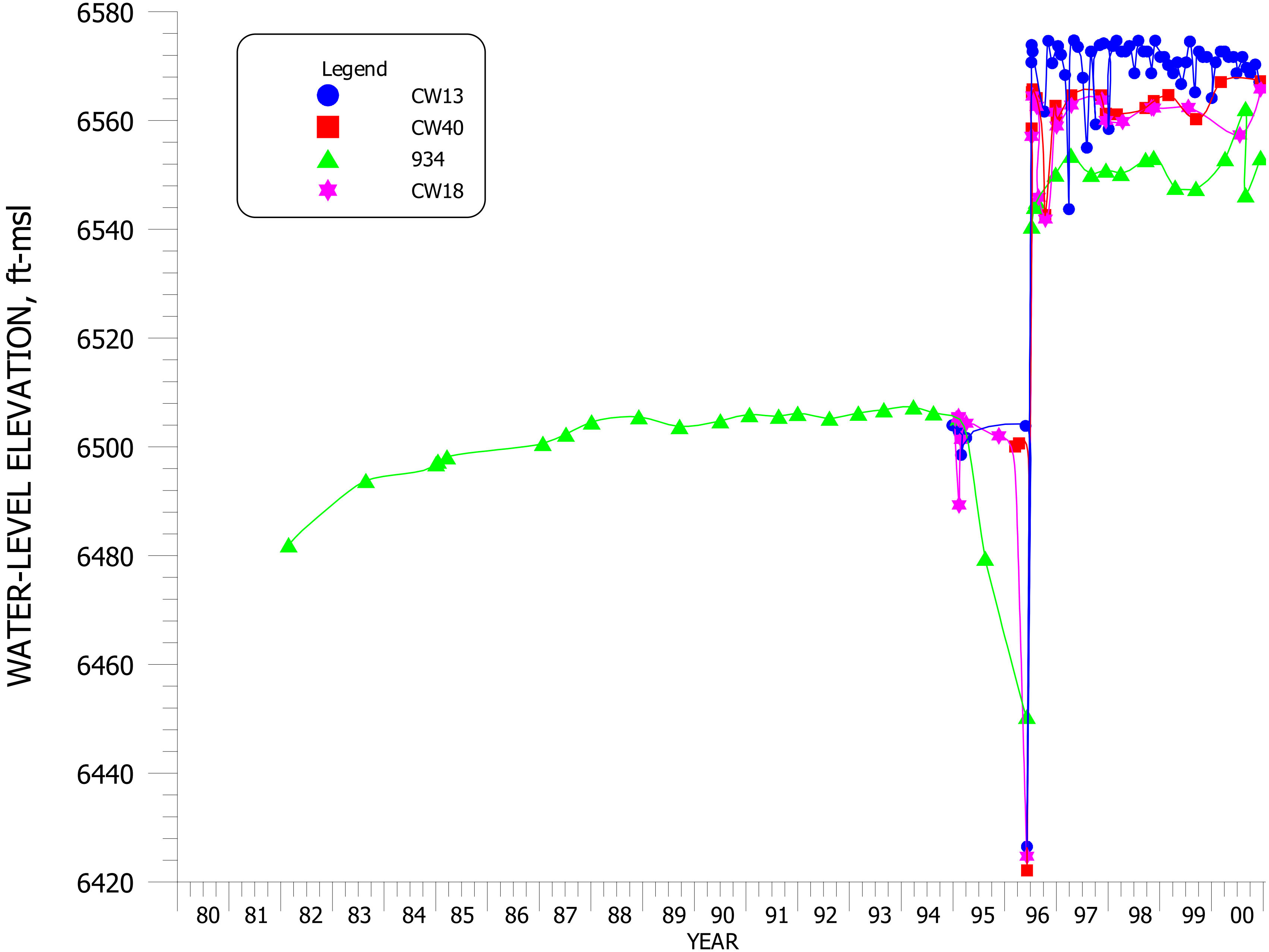


FIGURE 5.2-4. WATER-LEVEL ELEVATION FOR WELLS CW13, CW40, 934 AND CW18.

5.3 UPPER CHINLE WATER QUALITY

The water quality data for 2000 for the Chinle aquifers is presented in Tables B.5-1 and B.5-2 of Appendix B. The basic well data presented in Tables 5.1-1 through 5.1-4 and Figure 5.1-2 show which of the Chinle wells are completed in the Upper Chinle.

The water quality in the Upper Chinle aquifer exceeds background conditions in only a few locations. Sulfate concentrations have been adequately restored in the Upper Chinle aquifer. Selenium concentrations are less than the NRC and State site standards in all Upper Chinle wells in 2000 except for the subcrop area near the large tailings at well CE2. Uranium concentrations exceed background in five wells that are slowly being restored due to the leaching of this constituent during restoration. Only molybdenum concentrations in the Upper Chinle aquifer in the subcrop area near the large tailings exceed the significant concentration.

5.3.1 SULFATE - UPPER CHINLE

Figure 5.3-1 presents the sulfate concentrations for the Upper Chinle aquifer during the Fall of 2000. The Upper Chinle concentrations varied from 554 to 768 mg/l. No values exceeded the range in background concentrations in the Upper Chinle in 2000. Background data is presented for sulfate in 2000 in a box in the upper left corner of Figure 5.3-1. Therefore, sulfate in this aquifer has been adequately restored. Background data is considered to be upgradient alluvial wells because the alluvial aquifer recharges the Upper Chinle in this area.

The location of wells used in the water-quality plots versus time are presented in Figure 5.3-2. The color and symbol of the individual wells are the same as on the various water quality time plots. Sulfate time plot figure numbers are also shown on Figure 5.3-2 for each group. The same color and symbol scheme is used for other constituents also. Figure 5.3-2 shows that Upper Chinle wells CW3, CW4R, CE2, 446 and 494 are grouped together on the water quality time plots.

Figure 5.3-3 presents the sulfate concentrations versus time for the above listed Upper Chinle wells. The sulfate concentrations in each of these wells are below

background, showing restoration of all Upper Chinle wells west of the East Fault (see Figure 5.3-3). Sulfate concentrations in well CE2 near the subcrop area south of the large tailings are slightly higher than the remainder of the Upper Chinle values.

Sulfate concentrations plotted versus time for Upper Chinle wells CW40, 931, 934, 945, CW18 and 929 are presented on Figure 5.3-4 (see Figure 5.3-2 for location of these wells). This plot shows steady sulfate concentrations in Upper Chinle wells for the last four years due to the fresh-water injection into Upper Chinle well CW13 except for well 931, which increased in 2000 to the injection concentration and then declined to near previous values. Sulfate concentrations in well 931 have been slow to respond to the CW13 injection due to it existing in the lower permeability material east of the East Fault.

5.3.2 TOTAL DISSOLVED SOLIDS - UPPER CHINLE

Figure 5.3-5 presents the total dissolved solids (TDS) concentrations for the Upper Chinle aquifer for the Fall of 2000. All concentrations are less than 2000 mg/l, with the exception of an area of the Upper Chinle east of State Highway 605 and a small area near the large tailings. The TDS concentration naturally increased to the east of the East Fault due to the slower movement of ground water in this less transmissive portion of the aquifer. No pattern is shown on Figure 5.3-5 because all of the Upper Chinle TDS concentrations are less than 3060 mg/l, which is the important level of this constituent. No concentration time plots are presented for this constituent because sulfate time concentration plots adequately define the variation of major constituents with time. TDS concentrations in the Upper Chinle aquifer do not require restoration.

5.3.3 CHLORIDE - UPPER CHINLE

The Upper Chinle chloride concentrations for the Fall of 2000 are presented in Figure 5.3-6. The 2000 data shows that all Upper Chinle chloride concentrations are less than the secondary drinking water standard of 250 mg/l, with the exception of well 945, which is in the eastern portion of the Upper Chinle east of the East Fault. The

natural chloride concentration for this area of the Upper Chinle aquifer is significantly higher than the natural level in the more transmissive portion of this aquifer. Chloride concentrations have always been higher in these eastern wells indicating that these are natural levels. These higher chloride concentrations are, therefore, not an indication of seepage contamination. No time concentration plots are presented for chloride because sulfate time plots adequately show the variation in the major constituents at this site. No restoration of chloride is needed in the Upper Chinle aquifer.

5.3.4 URANIUM - UPPER CHINLE

Uranium concentration in the Upper Chinle aquifer is an important parameter for the Upper Chinle. Figure 5.3-7 presents the uranium concentrations in the Upper Chinle aquifer for the Fall of 2000. Only three of the uranium concentrations in the Upper Chinle exceed the 0.43 mg/l concentration. The highest value east of the East Fault for 2000 was observed in well CW18 with a value of 0.07 mg/l. Only five values exceed the 2000 upper limit of uranium background concentrations of 0.19 mg/l (see Figure 3.2-1 or upper left box in Figure 5.3-7). These concentrations should gradually be decreased to below background concentrations with the CE2 collection and the CW5 and CW25 injection.

Uranium concentrations plotted versus time for Upper Chinle wells CW3, CW4R, CE2, 446 and 494 are presented in Figure 5.3-8 (see Figure 5.3-2 for location of these wells). This plot shows that the uranium concentrations in Upper Chinle well CW4R gradually decreased in 2000. The gradual decreasing trend is likely due to the CE2 pumping. Uranium concentrations had increased in 1998 in well 494 but declined the last two years. The uranium concentrations in Upper Chinle collection well CE2 averaged 1.2 mg/l in 2000. All of the other uranium concentrations on this plot are very low.

The uranium concentrations in all of the Upper Chinle wells east of the Highway are very low. Figure 5.3-9 shows the uranium concentration for Upper Chinle wells CW40, 931, 934, 945, CW18 and 929. The low uranium concentration in well CW18 is gradually declining with time. Concentrations in all of these wells are below

the average background concentration and, therefore, do not require any restoration relative to uranium. The 2000 uranium value for well 929 shows that the last value in 1999 was an outlier.

5.3.5 SELENIUM - UPPER CHINLE

Selenium concentrations for the Upper Chinle aquifer are presented in Figure 5.3-10 for the Fall of 2000. This figure shows that all of the selenium concentrations are less than 0.27 mg/l. The 2000 selenium concentration in well CE2 was 0.22 mg/l. The 0.27 mg/l value is based on the upper background level observed in the alluvial aquifer upgradient of the tailings.

Figure 5.3-11 presents the selenium concentration versus time for wells CW3, CW4R, CE2, 446 and 494. The selenium concentrations in the Upper Chinle aquifer in well CW4R increased in 1999 due to its pumping and then gradually declined. The selenium concentration in collection well CE2 was higher and fairly steady in 2000. The selenium concentrations for all of the remaining wells on this plot are low.

Figure 5.3-12 presents the selenium concentrations versus time for Upper Chinle wells CW40, 931, 934, 945, CW18 and 929. This plot shows that the selenium concentrations in 2000 for wells CW40 and CW18 have remained low after their restoration in 1997. These decreases in concentration are due to the fresh-water injection in Upper Chinle well CW13 east of the East Fault.

5.3.6 MOLYBDENUM - UPPER CHINLE

Figure 5.3-13 presents the molybdenum concentrations in the Upper Chinle aquifer during 2000. The molybdenum concentrations near the large tailings are above 0.73 mg/l. Concentrations are above 0.1 mg/l extending outward toward the small tailings and the northeast corner of Murray Acres. A small amount of additional restoration is needed in this area, which should be accomplished with the collection from well CE2.

Figure 5.3-14 presents the molybdenum time concentration plots for Upper Chinle wells between the two faults. This plot shows that the molybdenum

concentrations for 2000 decreased in wells CW4R and 494. The CE2 collection should cause the CW4R concentrations to continue to decline this year. Well CE2 is planned to be part of the collection system for several years. Concentrations in well CE2 show an overall decline over the last two years.

Figure 5.3-15 shows molybdenum concentrations for wells CW40, 931, 934, 945, CW18 and 929. This figure shows small molybdenum concentrations in each of these wells with the exception of one outlier from well 931 in 1998.

5.3.7 NITRATE - UPPER CHINLE

Nitrate concentrations for the Upper Chinle aquifer are presented in Figure 5.3-16 for the Fall of 2000. This figure illustrates that nitrate concentrations in the Upper Chinle are significantly less than the State standard for this site of 12.4 mg/l. Nitrate concentrations are not expected to be significant in the future in the Upper Chinle aquifer due to the very limited extent of elevated concentrations in the alluvial aquifer.

5.3.8 RADIUM-226 AND RADIUM-228 - UPPER CHINLE

Figure 5.3-17 presents the radium-226 (horizontal) and radium-228 (45^{o} angle) concentrations for the Upper Chinle aquifer. All radium concentrations are very low as in past years and less than the site standard of 5 pCi/l in the Upper Chinle aquifer for 2000. This data shows that radium is not an important parameter relative to the Upper Chinle aquifer and supports the removal of these constituents as an NRC site standard.

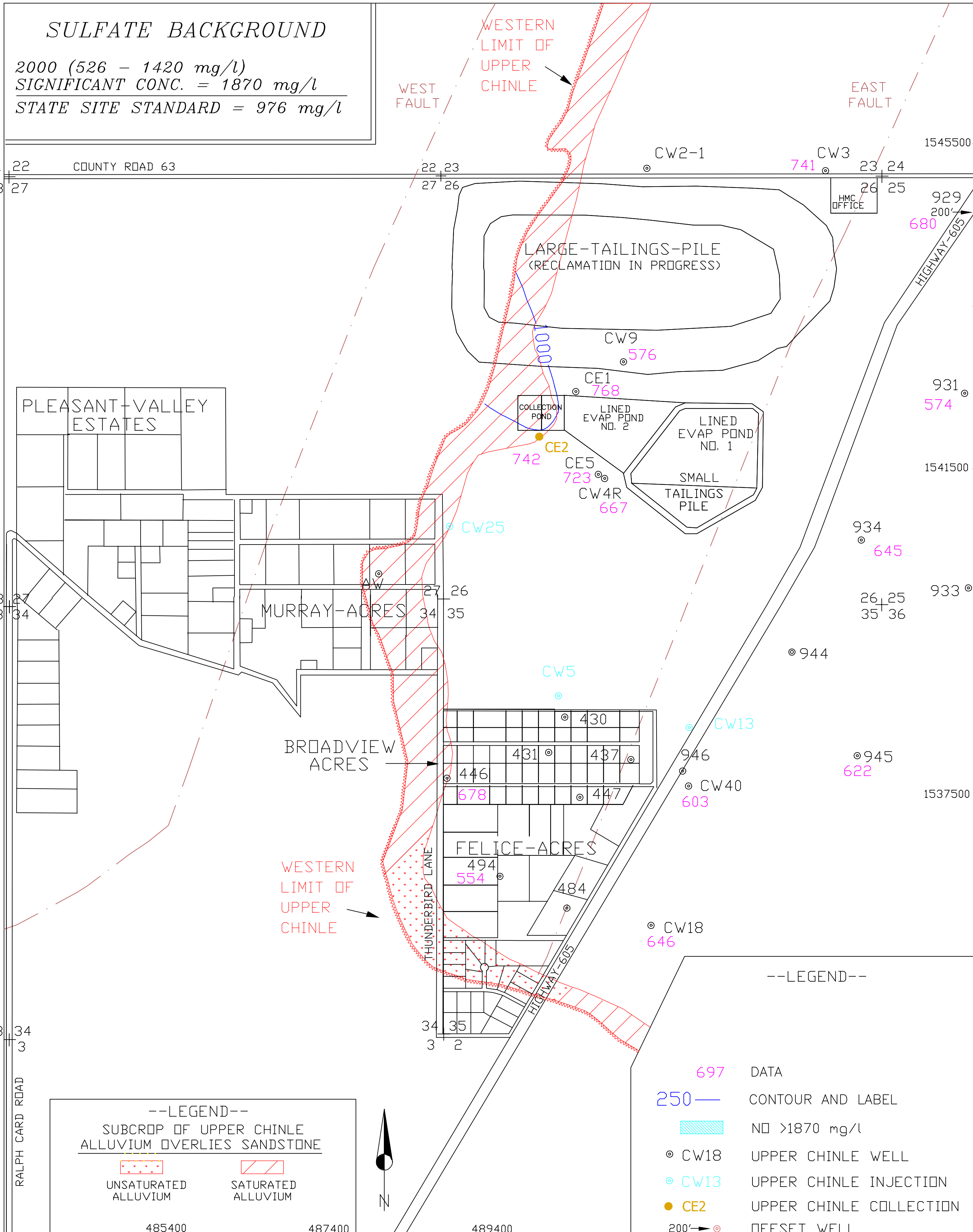
5.3.9 VANADIUM - UPPER CHINLE

Vanadium concentrations for 2000 for the Upper Chinle aquifer were measured only in wells CW4R and CW3. All vanadium concentrations for these wells measured in 2000 in this aquifer are less than the detection level of 0.01 mg/l. Significant concentrations in the Upper Chinle aquifer would not be expected because this constituent has been slightly elevated in the alluvial aquifer only near the tailings.

Vanadium concentrations in the Upper Chinle aquifer have never supported the use of this constituent as a site standard.

5.3.10 THORIUM-230 - UPPER CHINLE

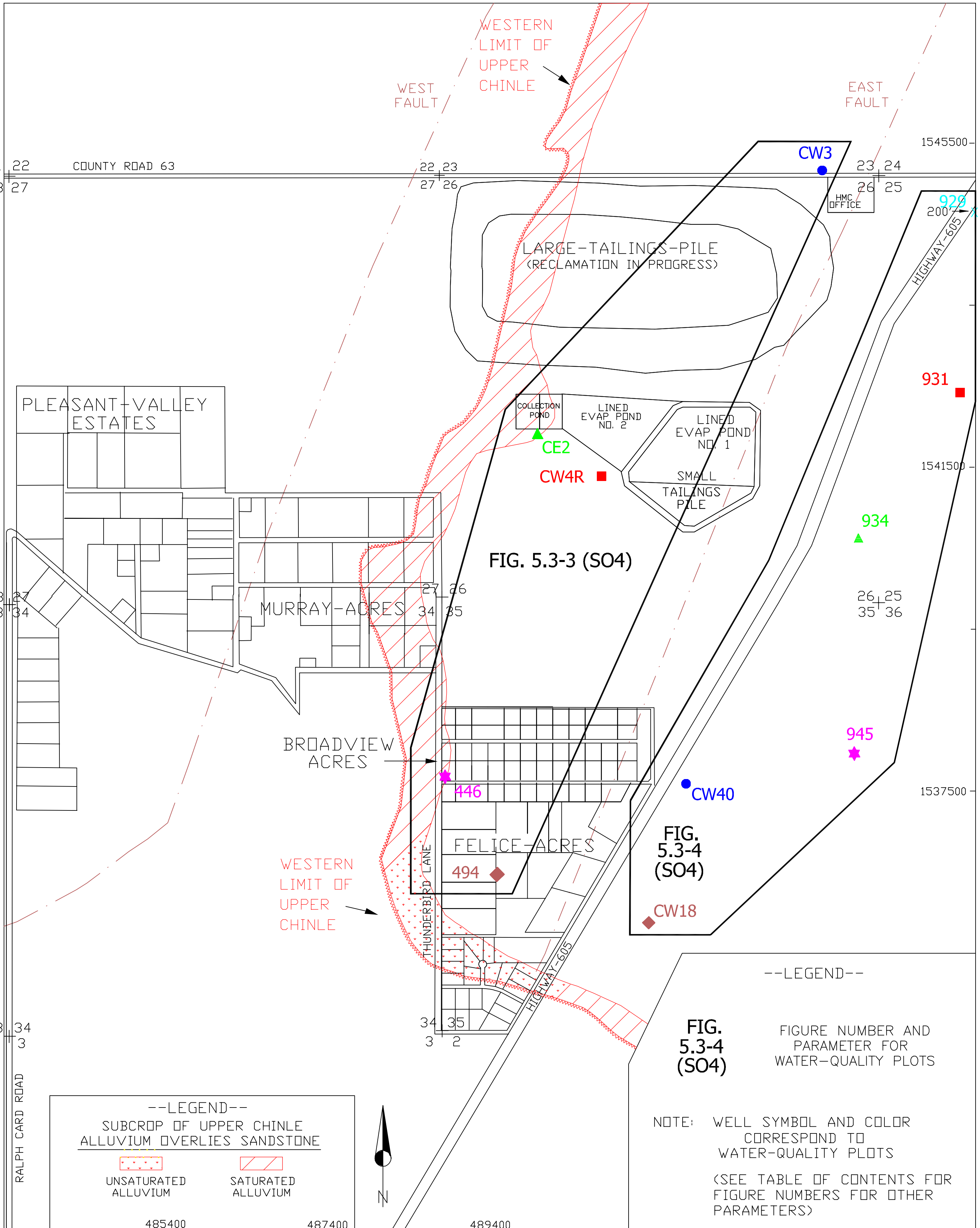
Thorium-230 concentrations in the Upper Chinle during 2000 were all less than 0.2 pCi/l in the Upper Chinle aquifer except for a value of 0.4 pCi/l from well CW3. The split analysis for this well was less than 0.2 pCi/l. Thorium-230 is not expected to be a significant parameter in the Upper Chinle aquifer because it is not significant in the alluvial aquifer. Thorium-230 concentrations have never been significant in the Upper Chinle aquifer and, therefore, should be dropped from the Upper Chinle monitoring list.



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 02/18/01 lju

FIGURE 5.3-1. SULFATE CONCENTRATIONS FOR THE UPPER CHINLE AQUIFER, FALL 2000, mg/l

PROJECTS\2001-06
DWGS\UP1600



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 02/18/01 lju

FIGURE 5.3-2. LOCATION OF UPPER CHINLE WELLS WITH WATER-QUALITY PLOTS

PROJECTS\2001-06
DWGS\UP1600

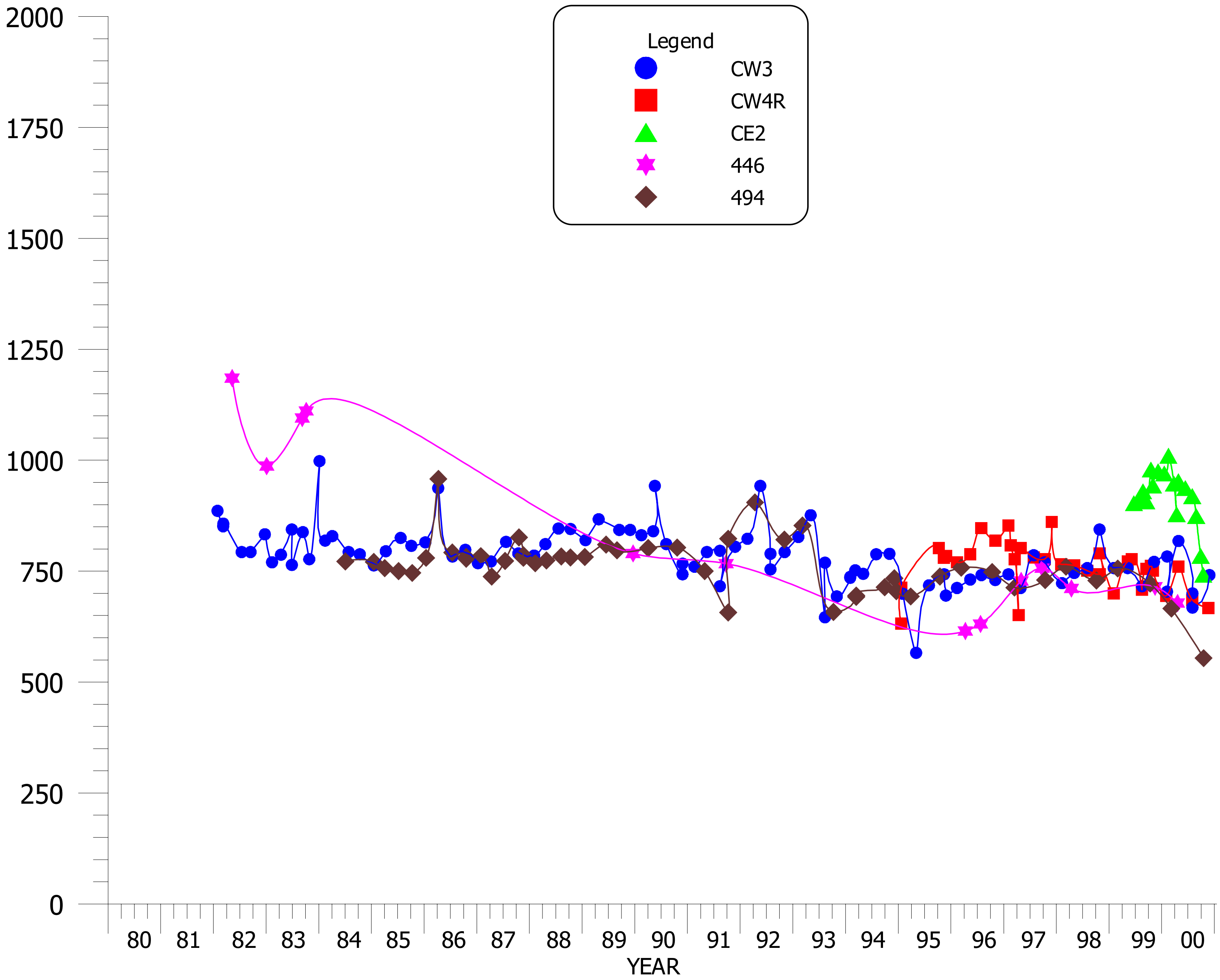


FIGURE 5.3-3. SULFATE CONCENTRATIONS FOR WELLS CW3, CW25, CW4R, CE2, 446 AND 494.

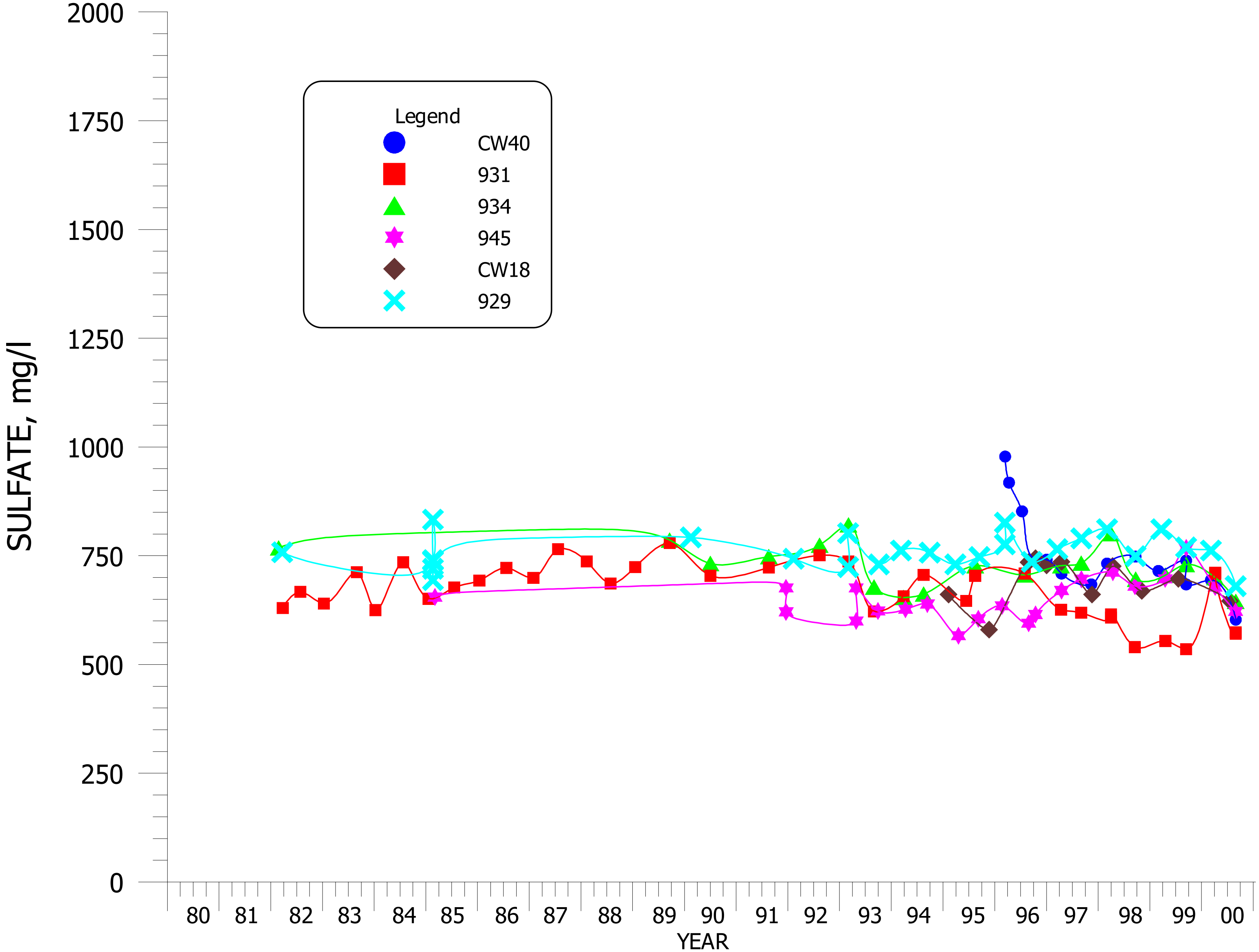
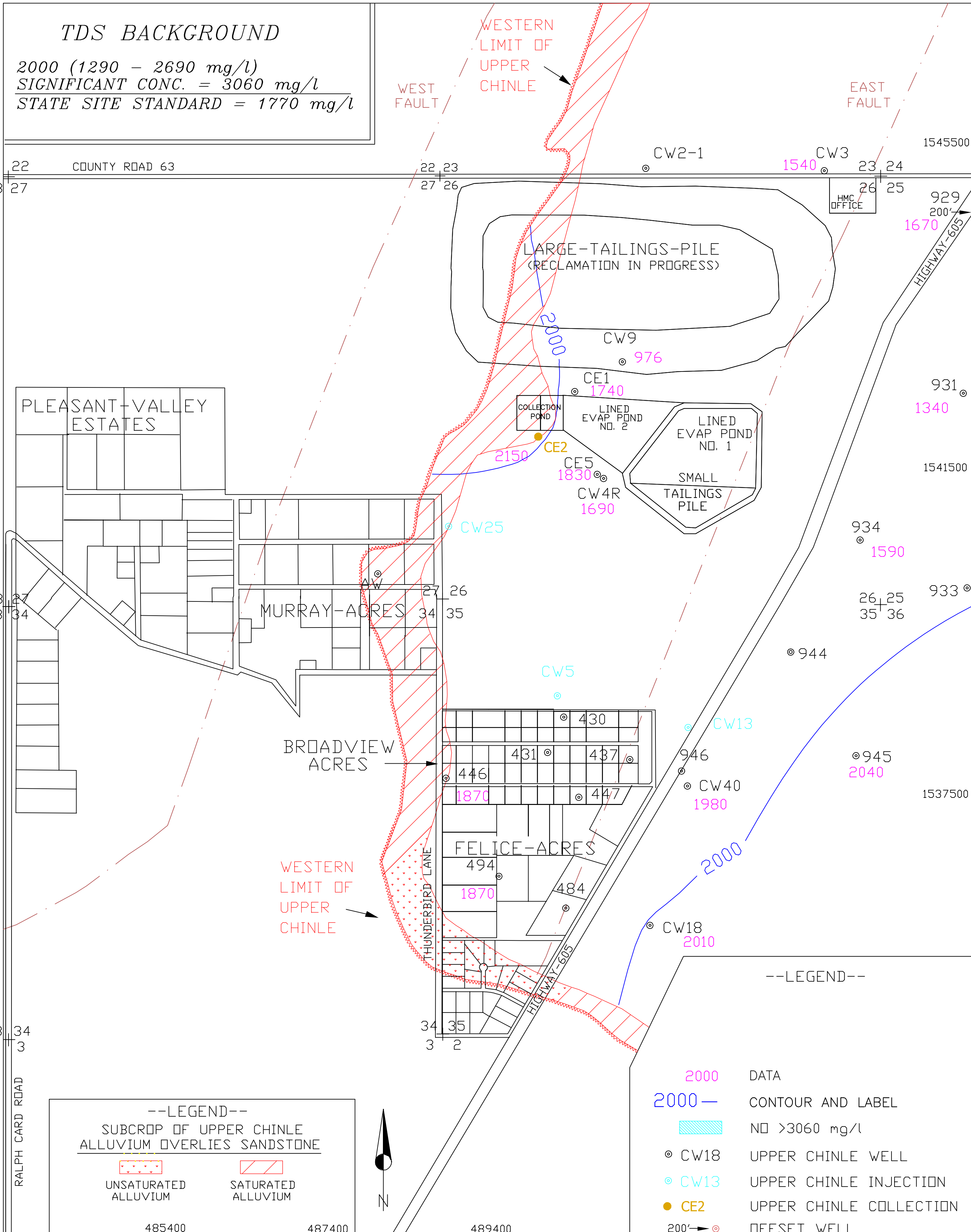


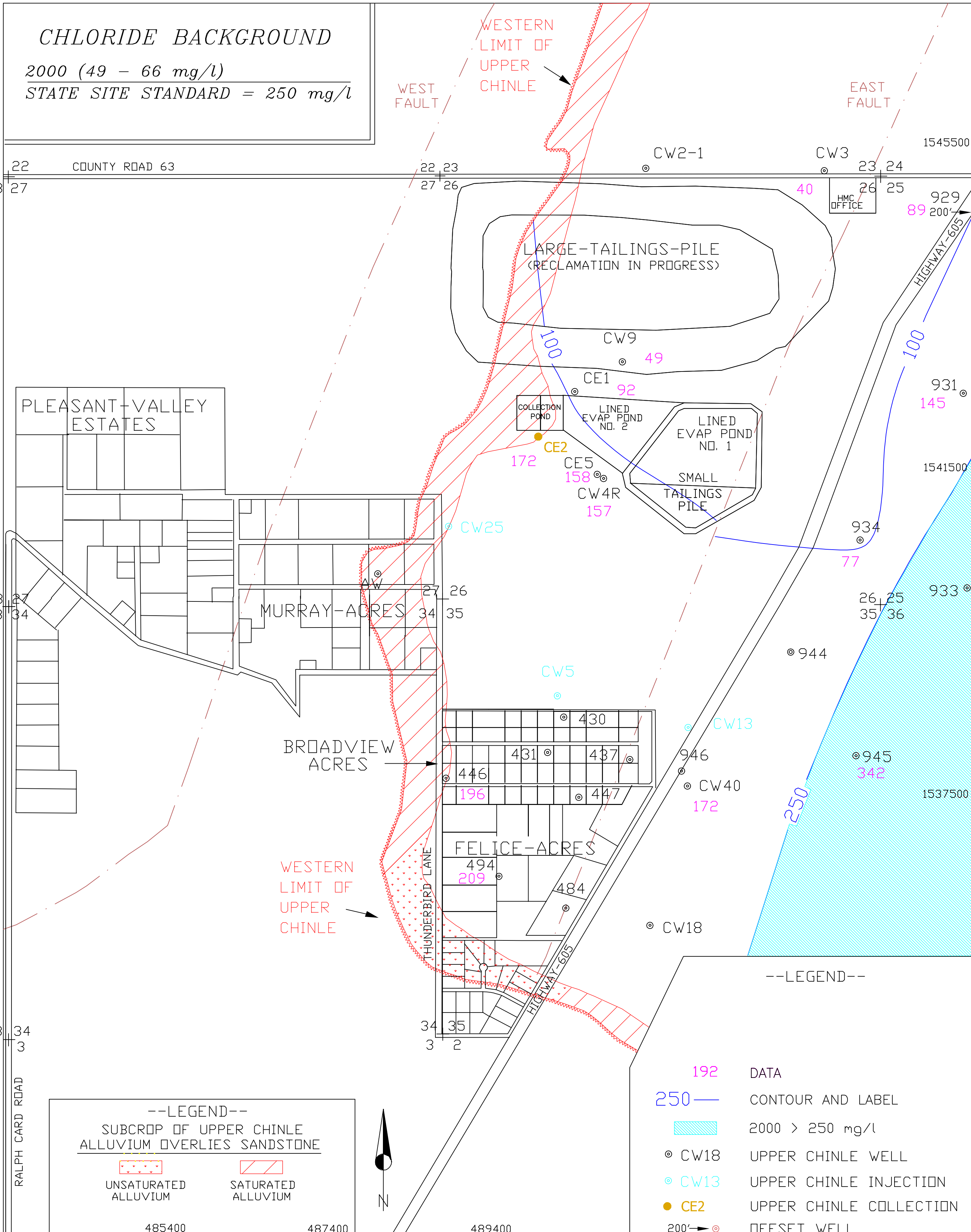
FIGURE 5.3-4. SULFATE CONCENTRATIONS FOR WELLS CW40, 931, 934, 945, CW18 AND 929.



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 02/18/01 lju

FIGURE 5.3-5. TDS CONCENTRATIONS FOR THE UPPER CHINLE AQUIFER, FALL 2000, mg/l

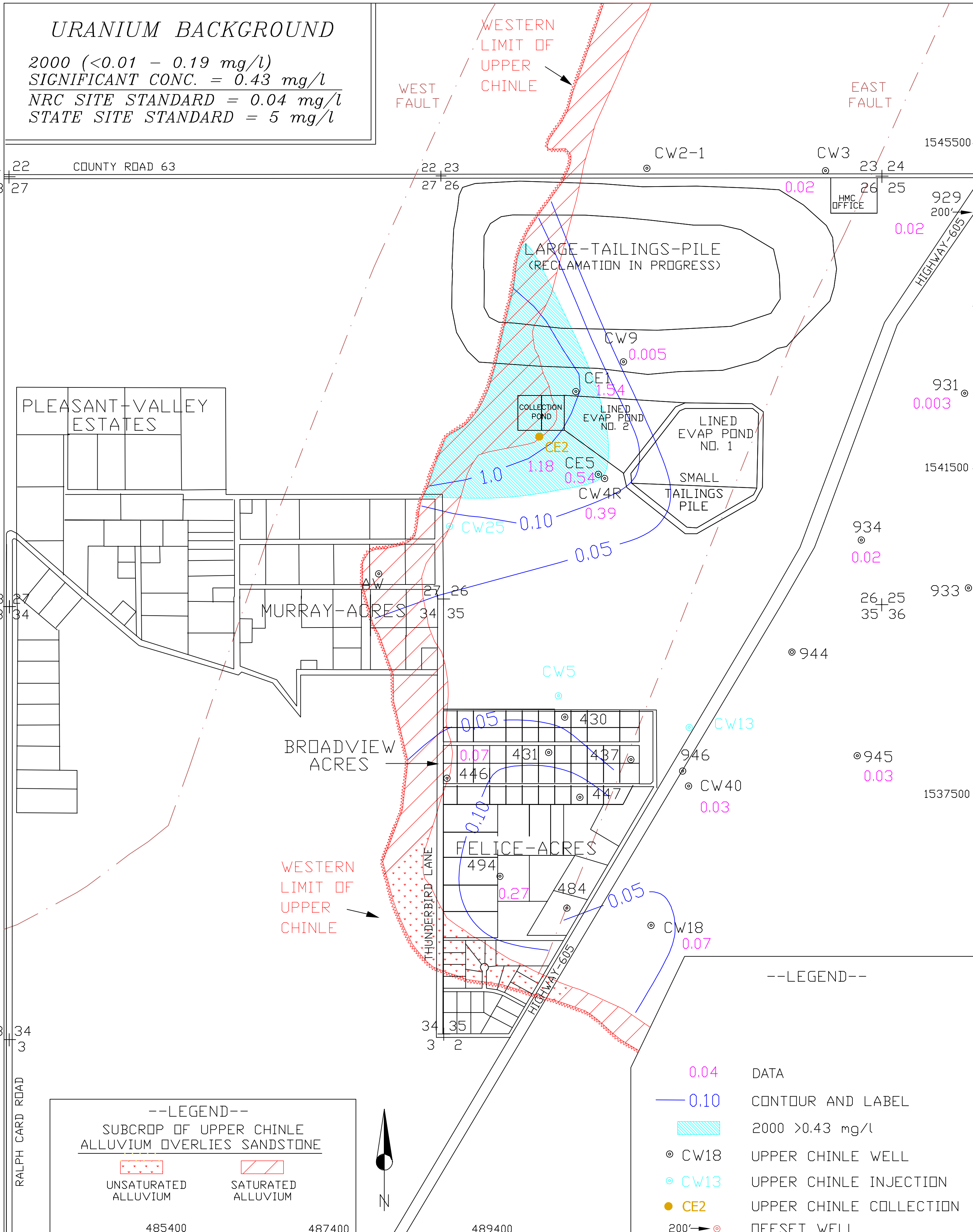
PROJECTS\2001-06
DWGS\UP1600



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 02/18/01 lju

FIGURE 5.3-6. CHLORIDE CONCENTRATIONS FOR THE UPPER CHINLE AQUIFER, FALL 2000, mg/l

PROJECTS\2001-06
DWGS\UP1600



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 02/18/01 lju

FIGURE 5.3-7. URANIUM CONCENTRATIONS FOR THE UPPER CHINLE AQUIFER, FALL 2000, mg/l

PROJECTS\2001-06
DWGS\UP1600

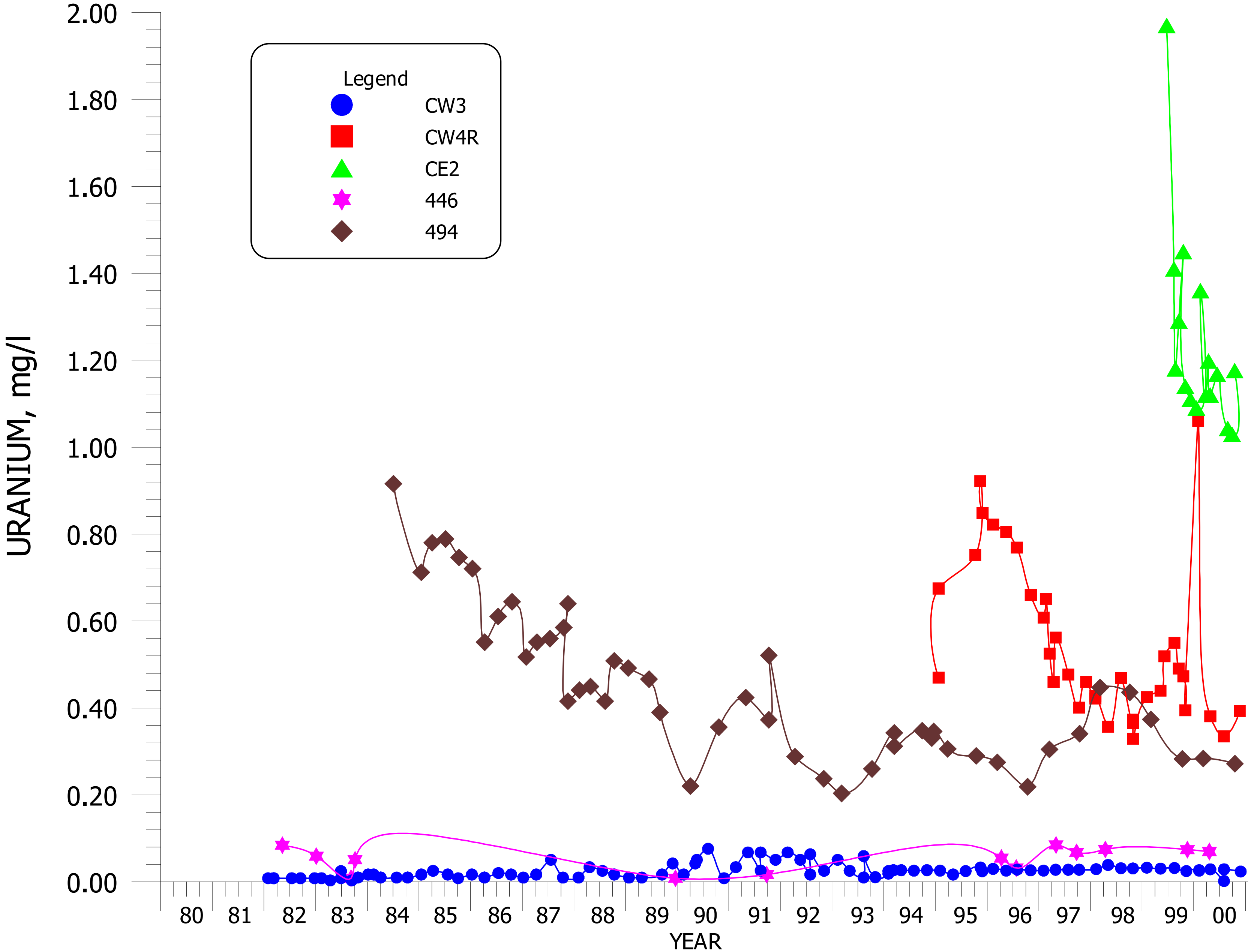


FIGURE 5.3-8. URANIUM CONCENTRATIONS FOR WELLS CW3, CW4R, CE2, 446 AND 494.

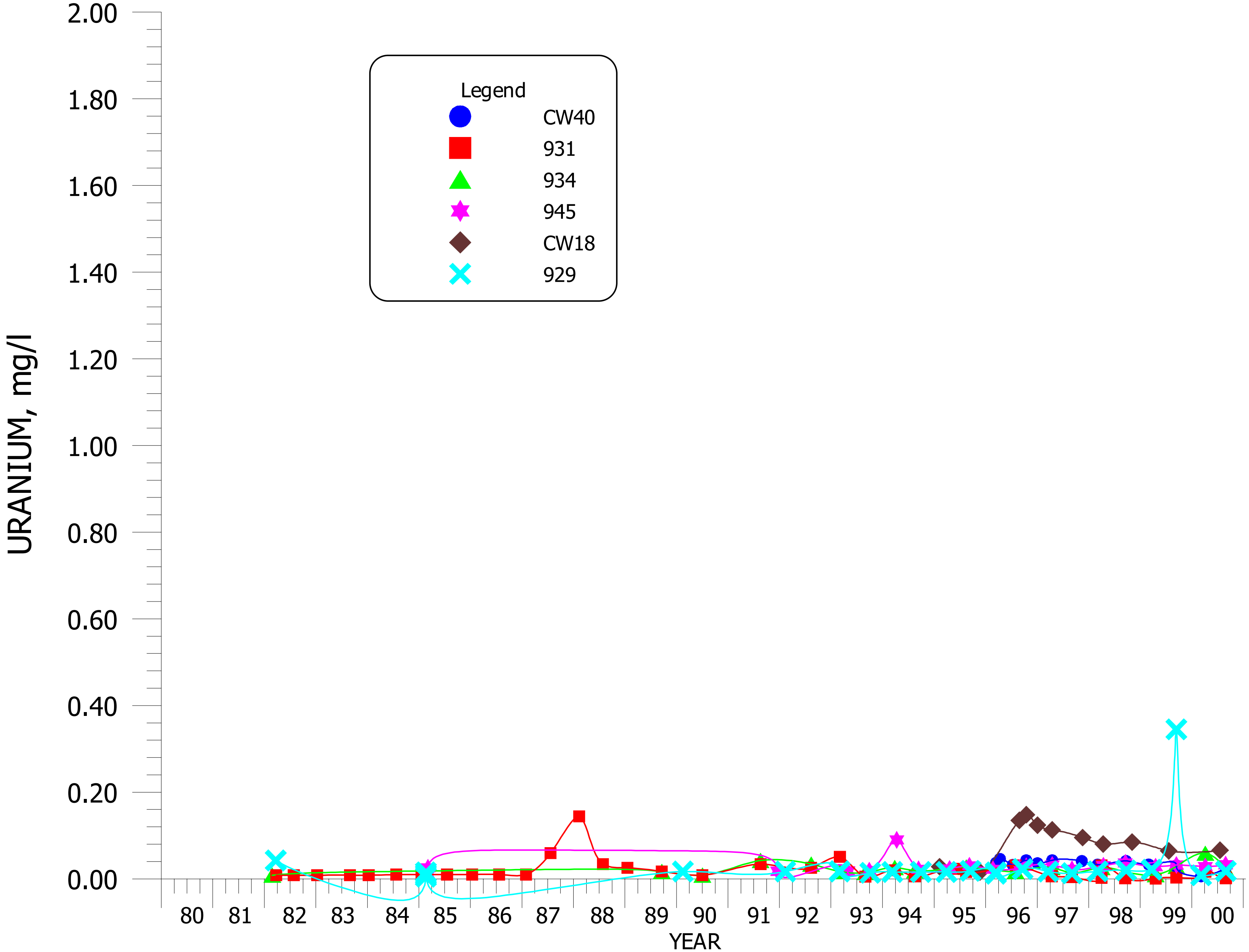
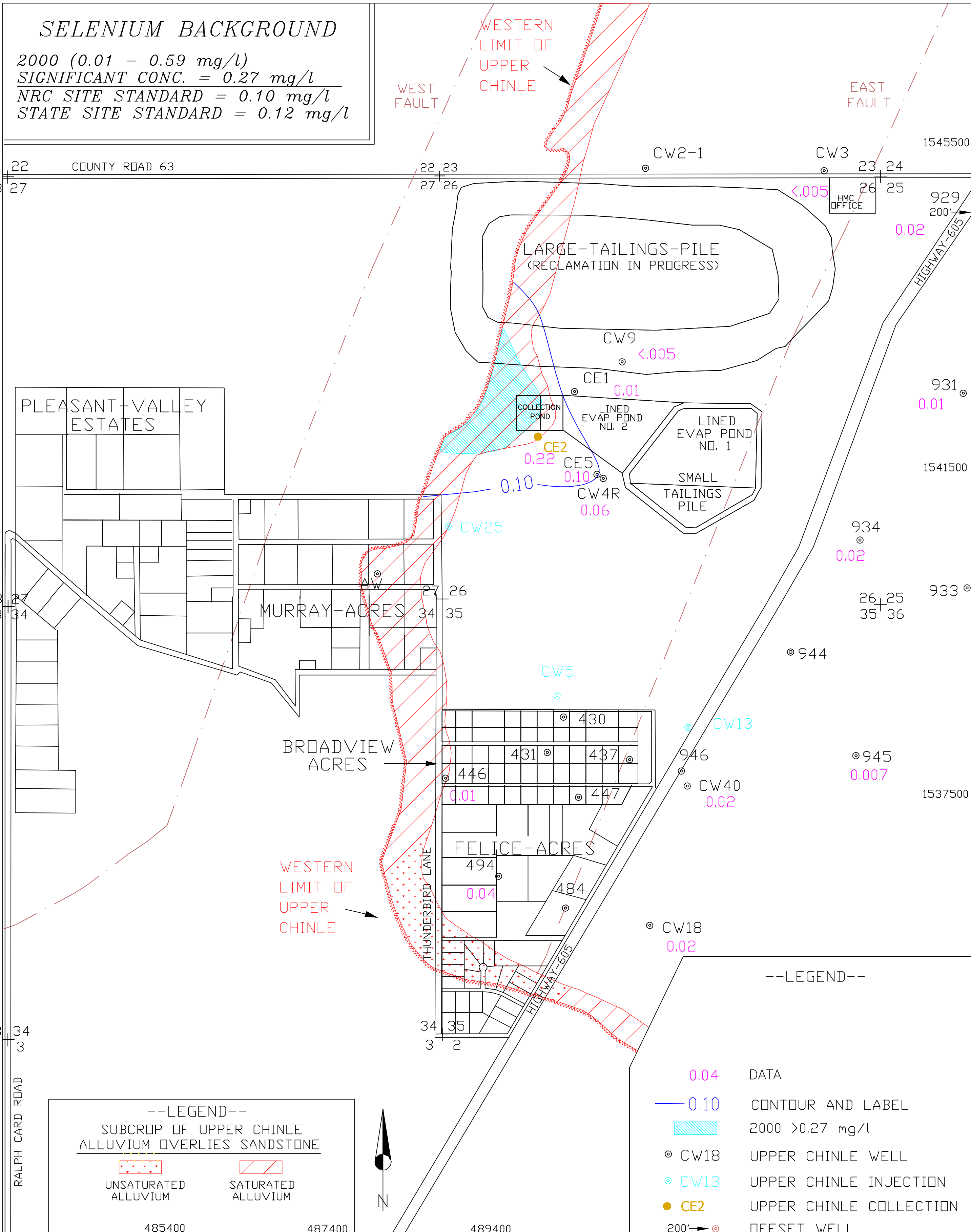


FIGURE 5.3-9. URANIUM CONCENTRATIONS FOR WELLS CW40, 931, 934, 945, CW18 AND 929.



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 02/18/01 lju

FIGURE 5.3-10. SELENIUM CONCENTRATIONS FOR THE UPPER CHINLE AQUIFER, FALL 2000, mg/l

PROJECTS\2001-06
DWGS\UP1600

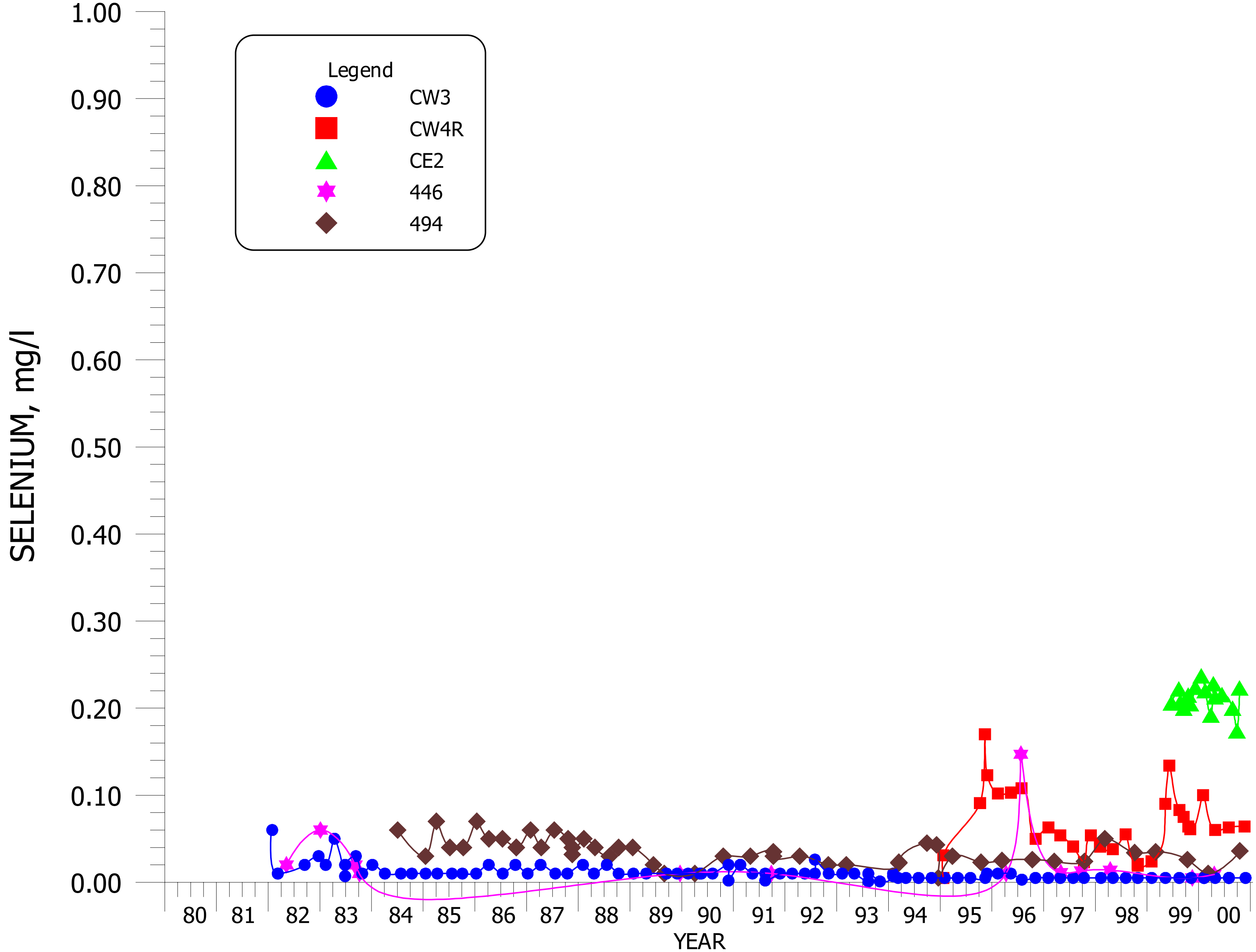


FIGURE 5.3-11. SELENIUM CONCENTRATIONS FOR WELLS CW3, CW4R, CE2, 446 AND 494.

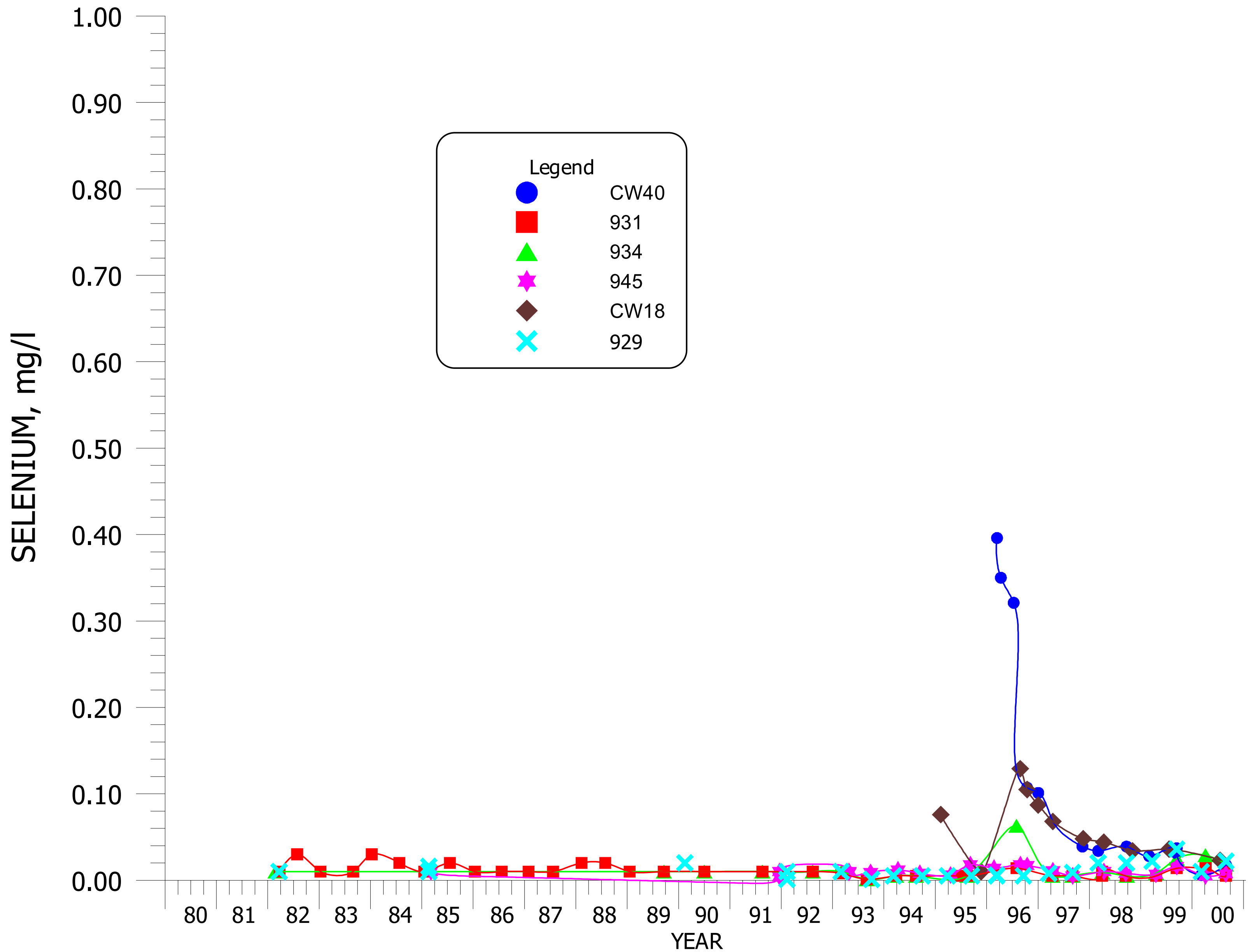
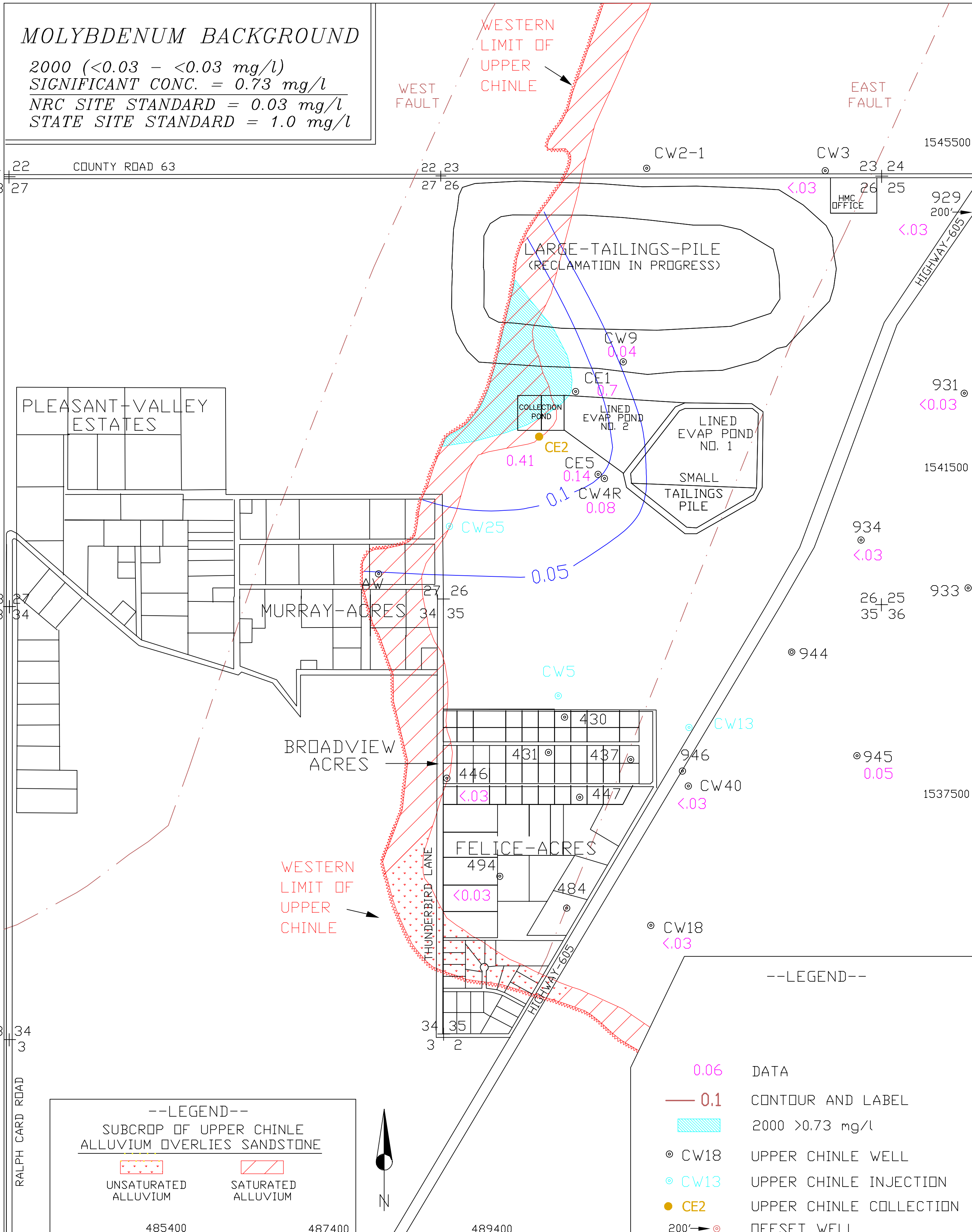


FIGURE 5.3-12. SELENIUM CONCENTRATIONS FOR WELLS CW40, 931, 934, 945, CW18 AND 929.



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 02/18/01 lju

FIGURE 5.3-13. MOLYBDENUM CONCENTRATIONS FOR THE UPPER CHINLE AQUIFER, FALL 2000, mg/l

PROJECTS\2001-06
DWGS\UP1600

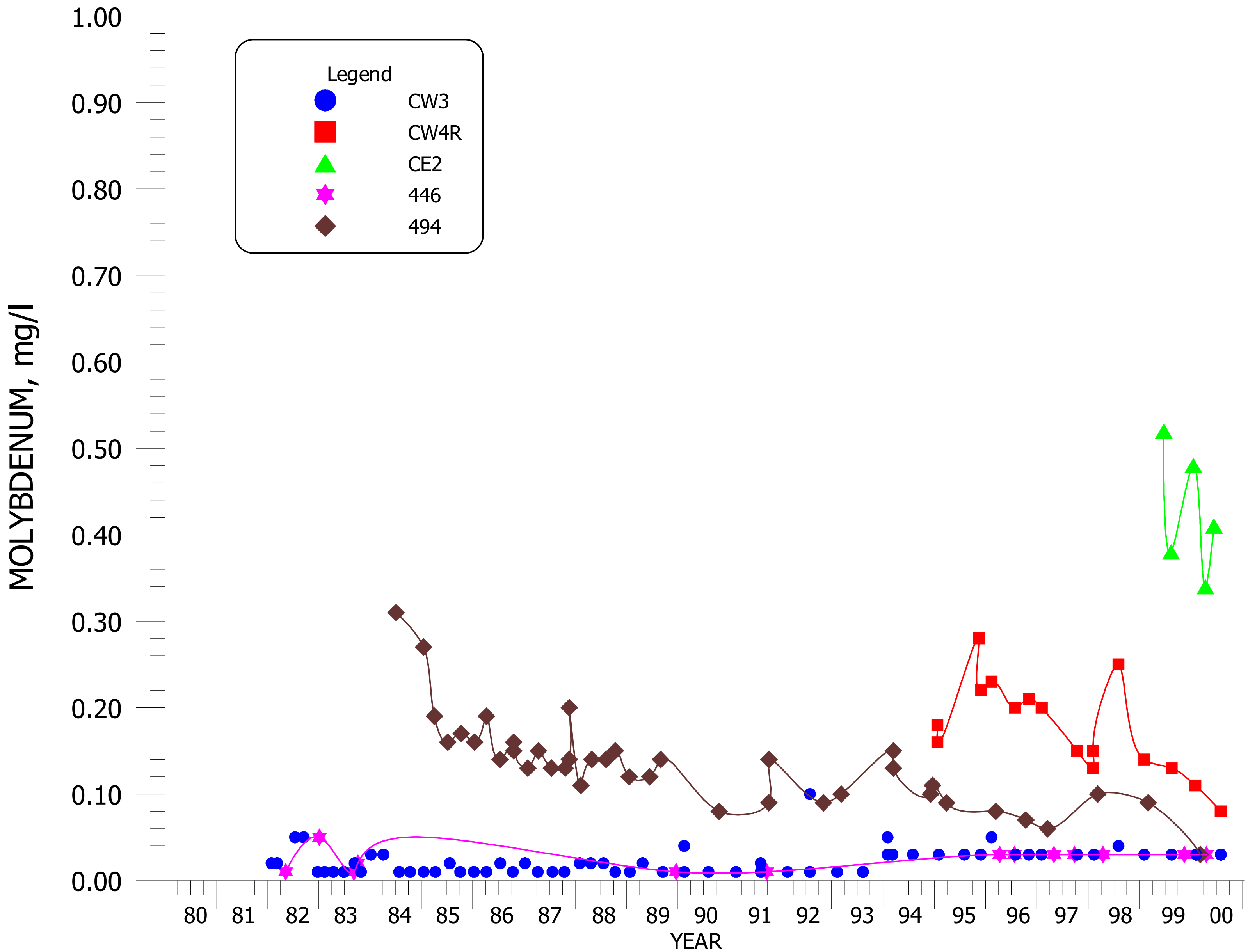


FIGURE 5.3-14. MOLYBDENUM CONCENTRATIONS FOR WELLS CW3, CW4R, CE2, 446 AND 494.

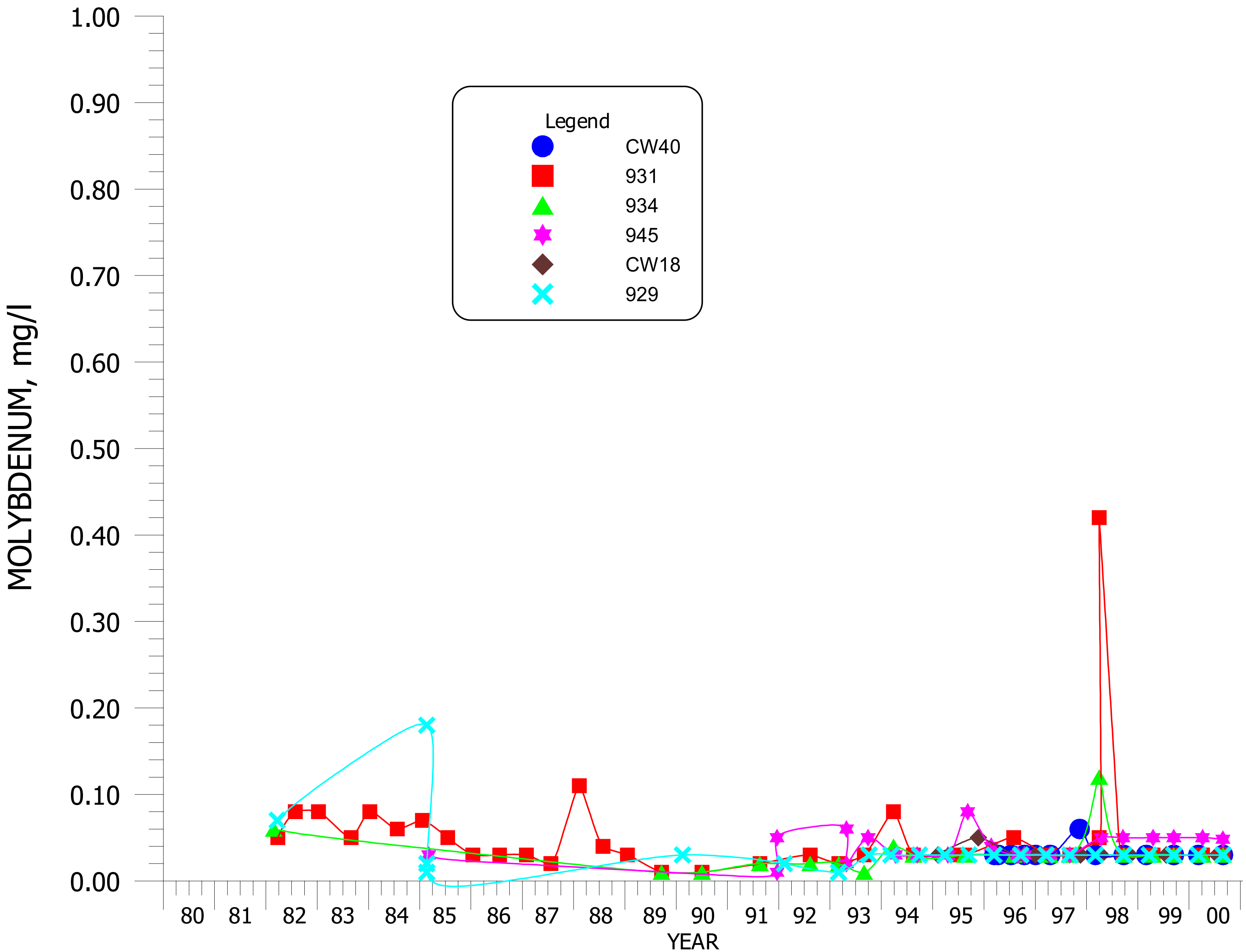
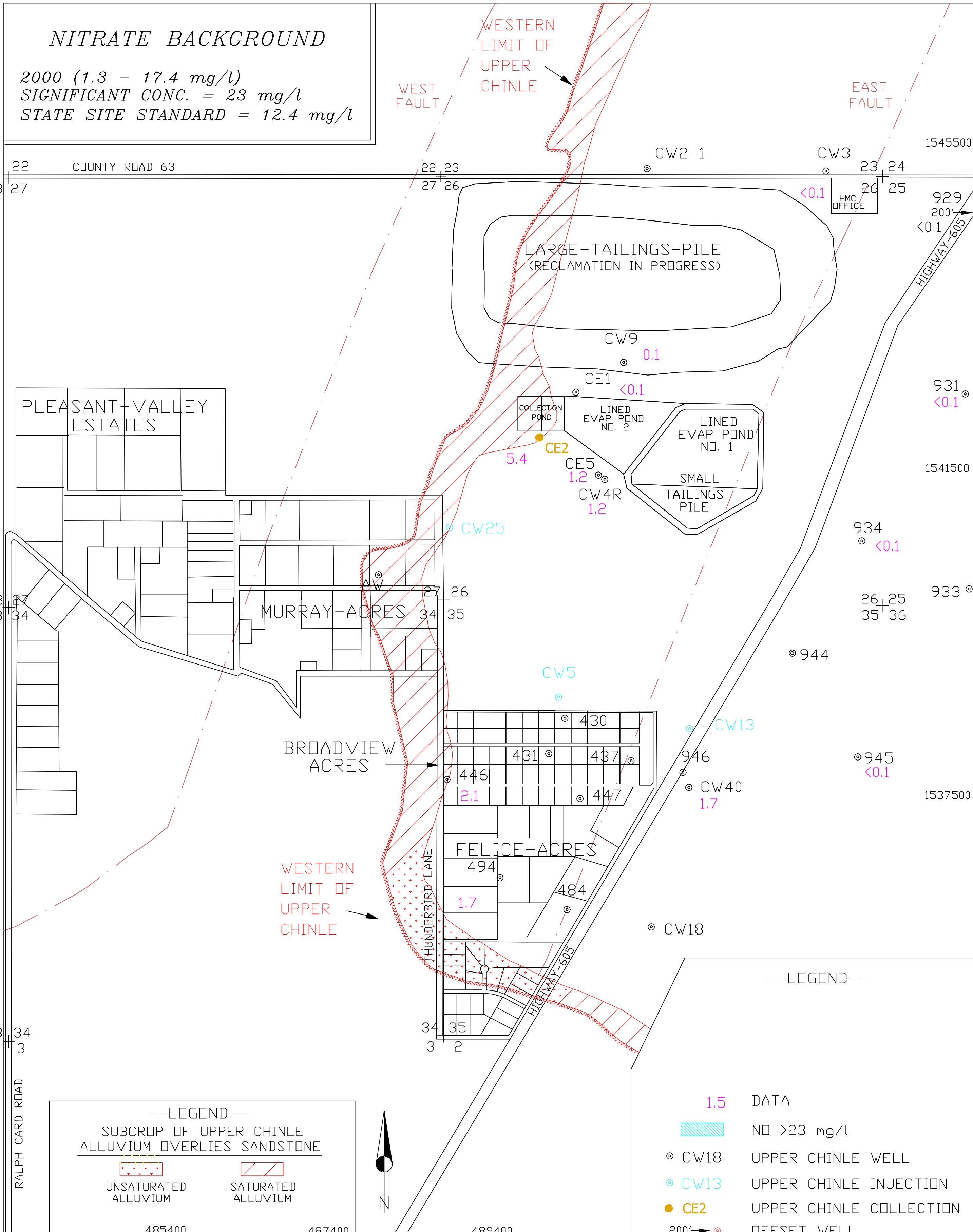


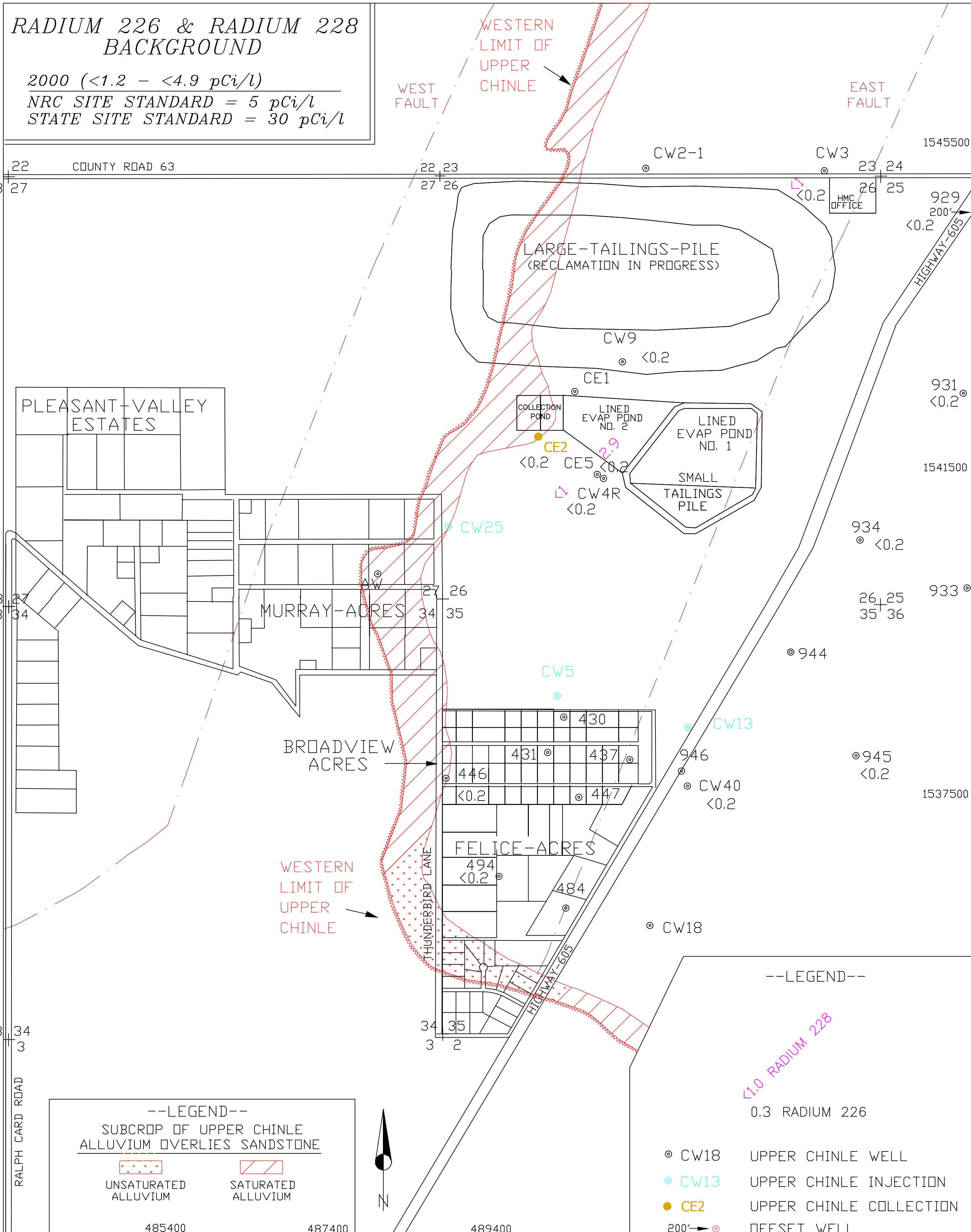
FIGURE 5.3-15. MOLYBDENUM CONCENTRATIONS FOR WELLS CW40, 931, 934, 945, CW18 AND 929.



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 02/18/01 lju

FIGURE 5.3-16. NITRATE CONCENTRATIONS FOR THE UPPER CHINLE AQUIFER, FALL 2000, mg/l

PROJECTS\2001-06
DWGS\UP1600



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 02/18/01 lju

FIGURE 5.3-17. RADIUM-226 AND RADIUM-228 CONCENTRATIONS FOR THE UPPER CHINLE AQUIFER, FALL 2000, pCi/l

PROJECTS\2001-06
DWGS\UP1600

SECTION 6

TABLE OF CONTENTS

GROUND-WATER MONITORING
FOR HOMESTAKE'S GRANTS PROJECT

FIGURES

SECTION 6

TABLE OF CONTENTS

GROUND-WATER MONITORING
FOR HOMESTAKE'S GRANTS PROJECT

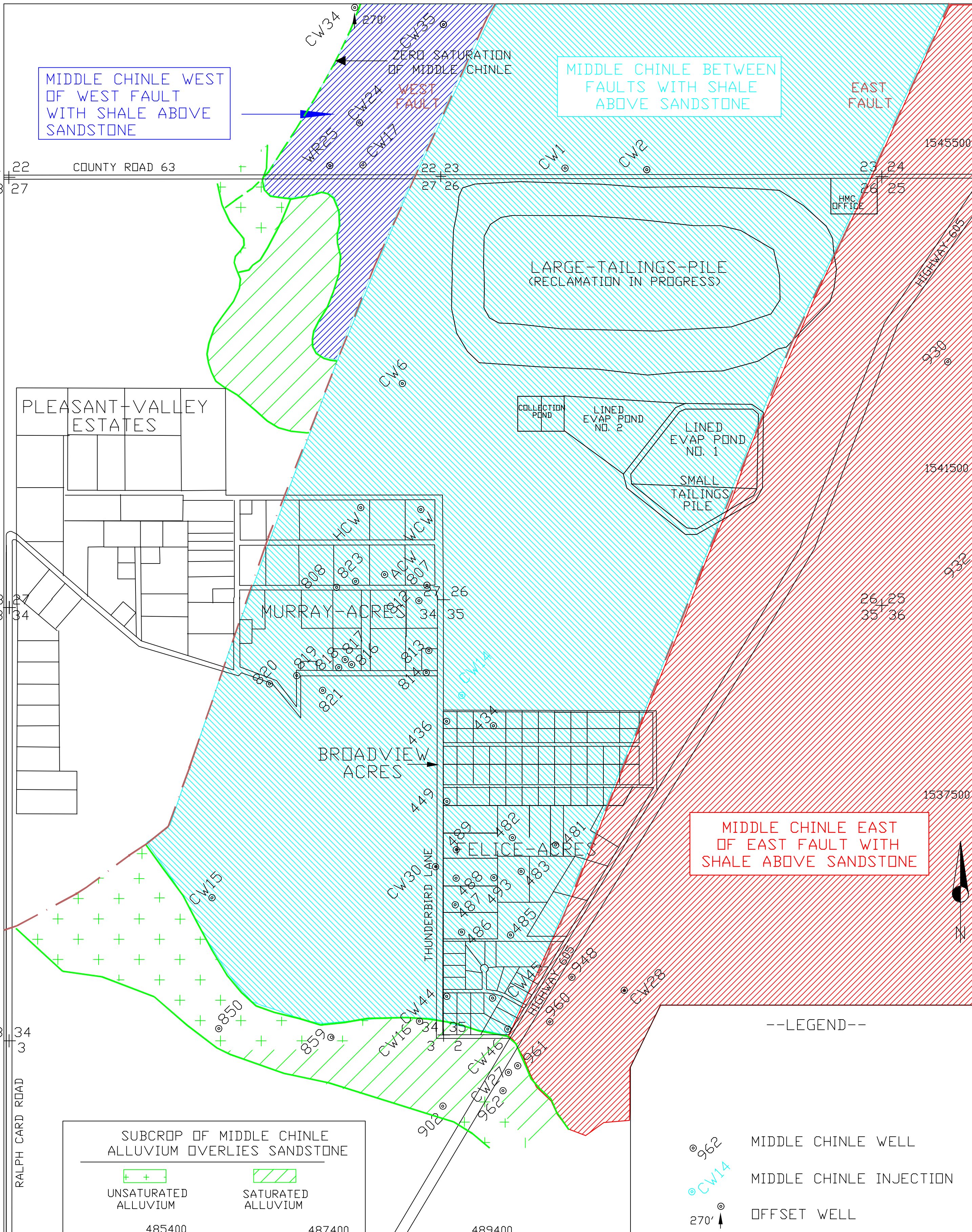
FIGURES
(continued)

6.0 MIDDLE CHINLE AQUIFER MONITORING

6.1 MIDDLE CHINLE WELL COMPLETION AND LOCATION

Basic well data tables for the Middle Chinle wells are presented in the Upper Chinle Section 5.1. Tables 5.1-1 through 5.1-4 present the Chinle basic well data. Figure 6.1-1 shows the locations of the Middle Chinle wells and areas where the Middle Chinle aquifer exists at the Grants Project. The light blue area is where the Middle Chinle aquifer exists between the West and East Faults and has Chinle shale between the top of the Middle Chinle sandstone and the base of the alluvium. The green areas show where the alluvium overlies the Middle Chinle sandstone and produces direct contact between these two units. The area where the alluvium is saturated over the Middle Chinle sandstone is very important with respect to transfer of water between these two aquifers and is shown with the green cross hatch. The area where the Middle Chinle subcrops against alluvium that is not saturated is shown by the green plus (+) pattern.

The Middle Chinle aquifer also exists east of the East Fault in the red pattern area with a subcrop zone on the south side of this area. A limited area (dark blue) of Middle Chinle aquifer exists west of the West Fault. All three of these areas in the Middle Chinle aquifers act as separate ground-water systems with the exception of some contact between the two areas where the East Fault ceases to the south.



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 02/20/01 lju

FIGURE 6.1-1 LIMITS OF MIDDLE CHINLE AQUIFER AND WELL LOCATIONS

PROJECTS\2001-06\DWGS\MID1600.DWG

6.2 MIDDLE CHINLE WATER LEVELS

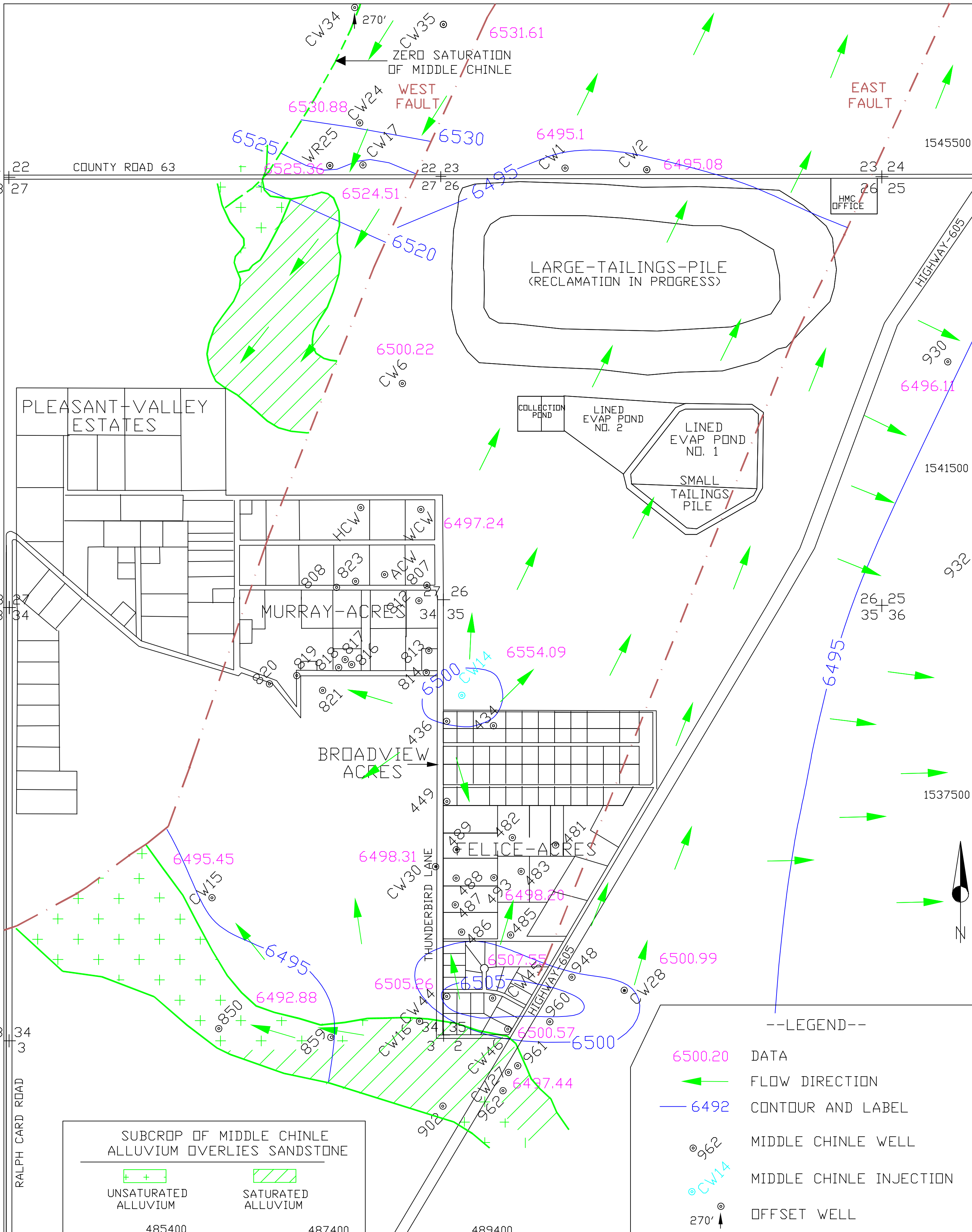
Water levels in Homestake's Upper, Middle and Lower Chinle wells are presented in Appendix A. Fall of 2000 water-level elevations for the Middle Chinle aquifer are presented on Figure 6.2-1. The gradient in the Middle Chinle aquifer is steeper in its subcrop area in the southern portion of Felice Acres near wells CW44, CW45 and CW46. This increase in gradient is due to an influx of water in the area to the Middle Chinle aquifer from the alluvial aquifer. The green arrows show the direction of ground-water flow in the Middle Chinle aquifer. Flow on the east side of the East Fault is mainly to the north near the East Fault, but due to a decrease in the transmissivity in the aquifer to the east, flow moves easterly away from the East Fault.

Ground-water flow west of the West Fault is to the southwest, discharging into the alluvial aquifer. This prevents the alluvial aquifer from affecting the water quality of the Middle Chinle aquifer on the west side of the West Fault. This Middle Chinle water flows from upgradient of the site into the area west of the large tailings. The remainder of the Middle Chinle aquifer is recharged by the alluvial aquifer south of Felice Acres.

A mound of water around well CW14 has been created by the injection of fresh water into this well. This causes the ground-water flow to be to the north and south of well CW14. Flow between the two faults in the Middle Chinle aquifer, north of CW14, continues downgradient of the tailings area. The head in the Middle Chinle aquifer on each side of the two faults is significantly different than the head between the two faults, which shows that the ground water is not readily connected on each side of these faults.

Figure 6.2-2 shows the location of the Middle Chinle wells that are used to present the water-level changes with time. This figure is color and symbol coded with the water-level elevation time plot. Figure 6.2-3 presents the water-level elevation changes versus time in Middle Chinle wells CW2, CW15, CW28, CW45 and 493. Water levels are higher in Middle Chinle well CW45 than to the north in wells 493 and CW2. The pumping of well CW44 in 2000 caused the water level in CW45 to decline.

The water level plots for the Middle Chinle wells west of the West Fault are presented in Figure 6.2-4. This plot shows that the water levels have generally been gradually increasing in the Middle Chinle aquifer west of the West Fault.



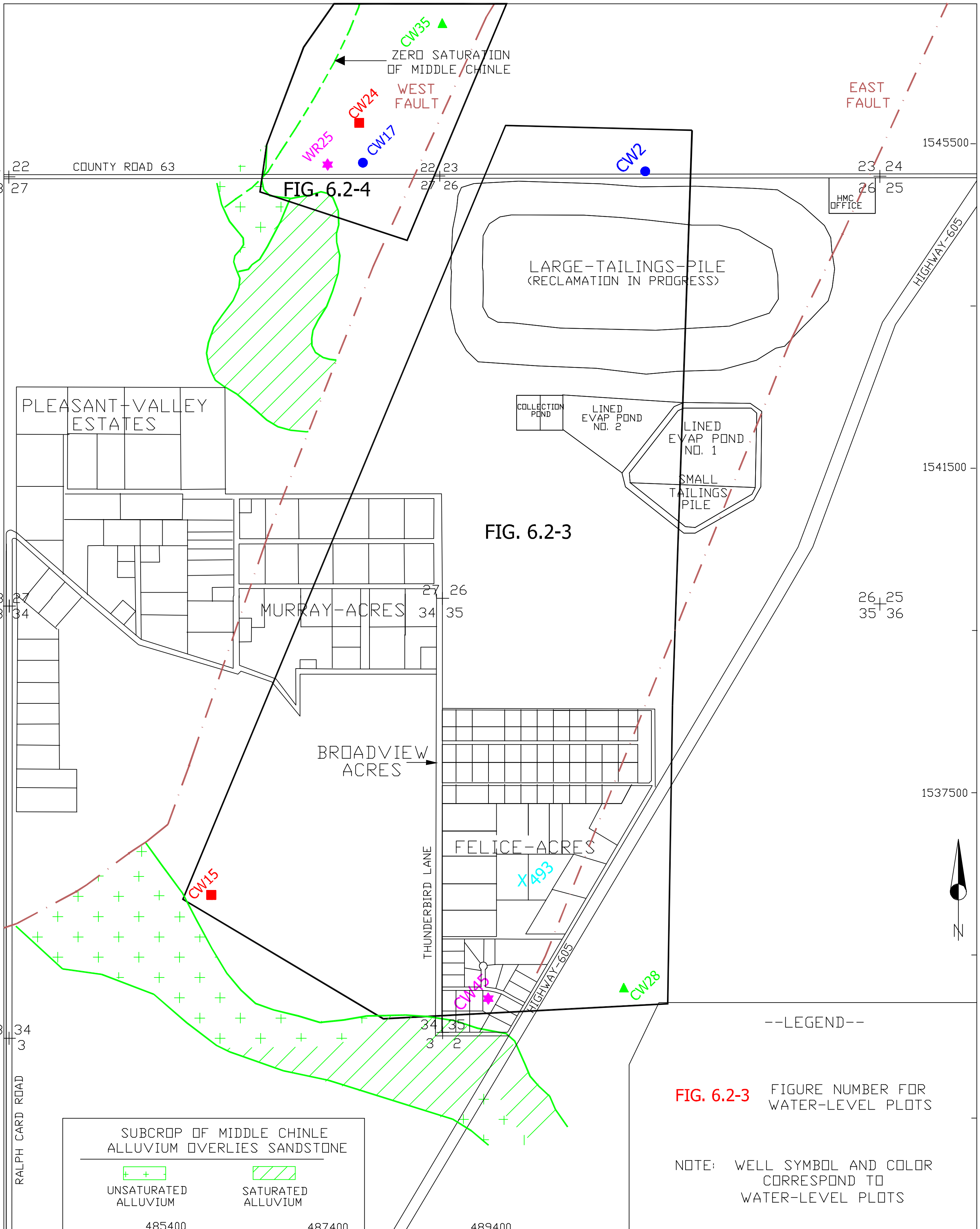
SCALE: 1"=1600'

HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W

DATE: 02/20/01 lju

FIGURE 6.2-1. WATER-LEVEL ELEVATIONS FOR THE MIDDLE CHINLE AQUIFER, FALL 2000, FT-MSL

PROJECTS\2001-06\DWGS\MID1600.DWG



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 02/20/01 lju

FIGURE 6.2-2. LOCATION OF MIDDLE CHINLE WELLS WITH WATER-LEVEL PLOTS

PROJECTS\2001-06\DWGS\MID1600.DWG

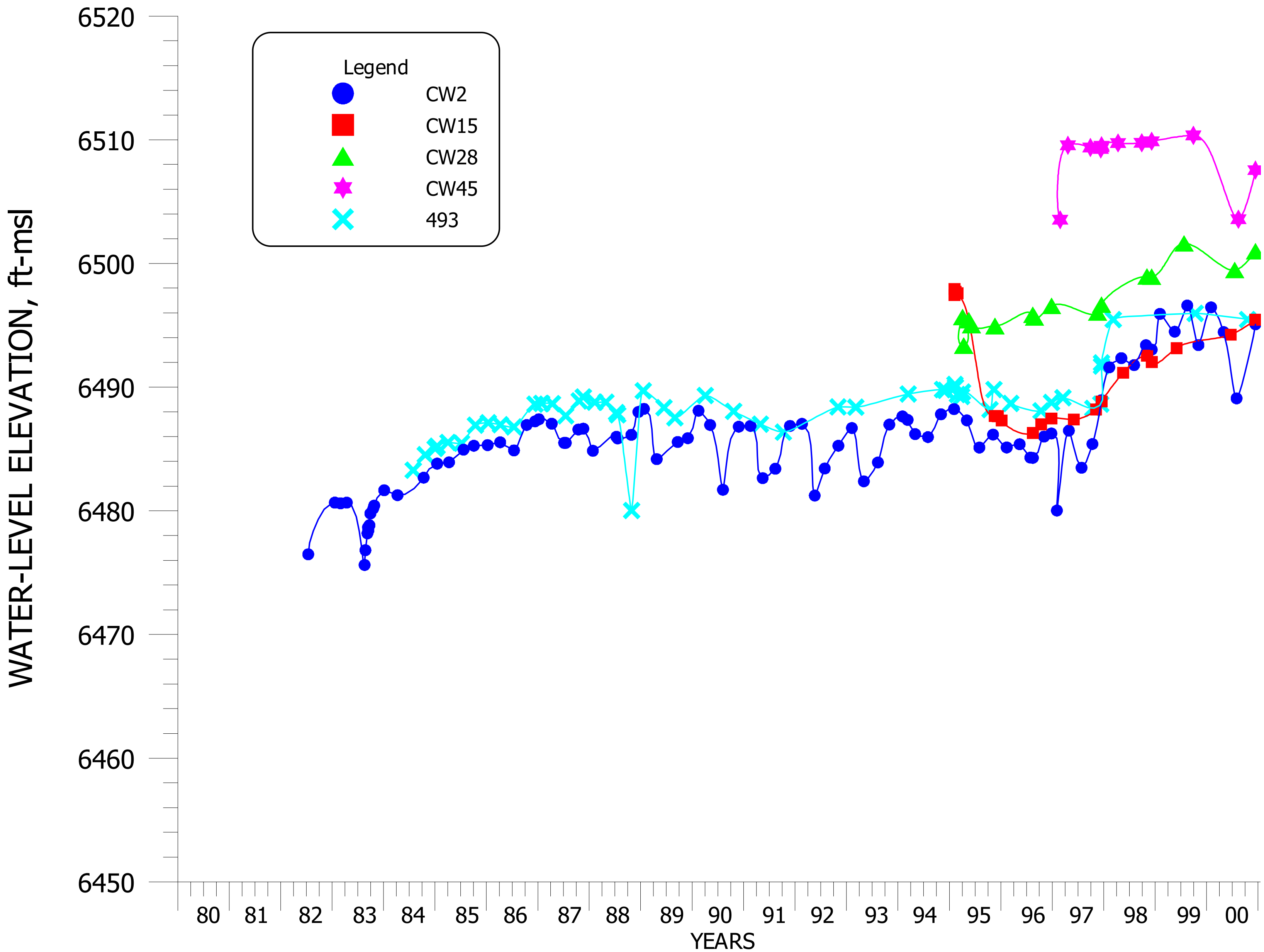


FIGURE 6.2-3. WATER-LEVEL ELEVATION FOR WELLS CW2, CW15, CW28, CW45 AND 493.

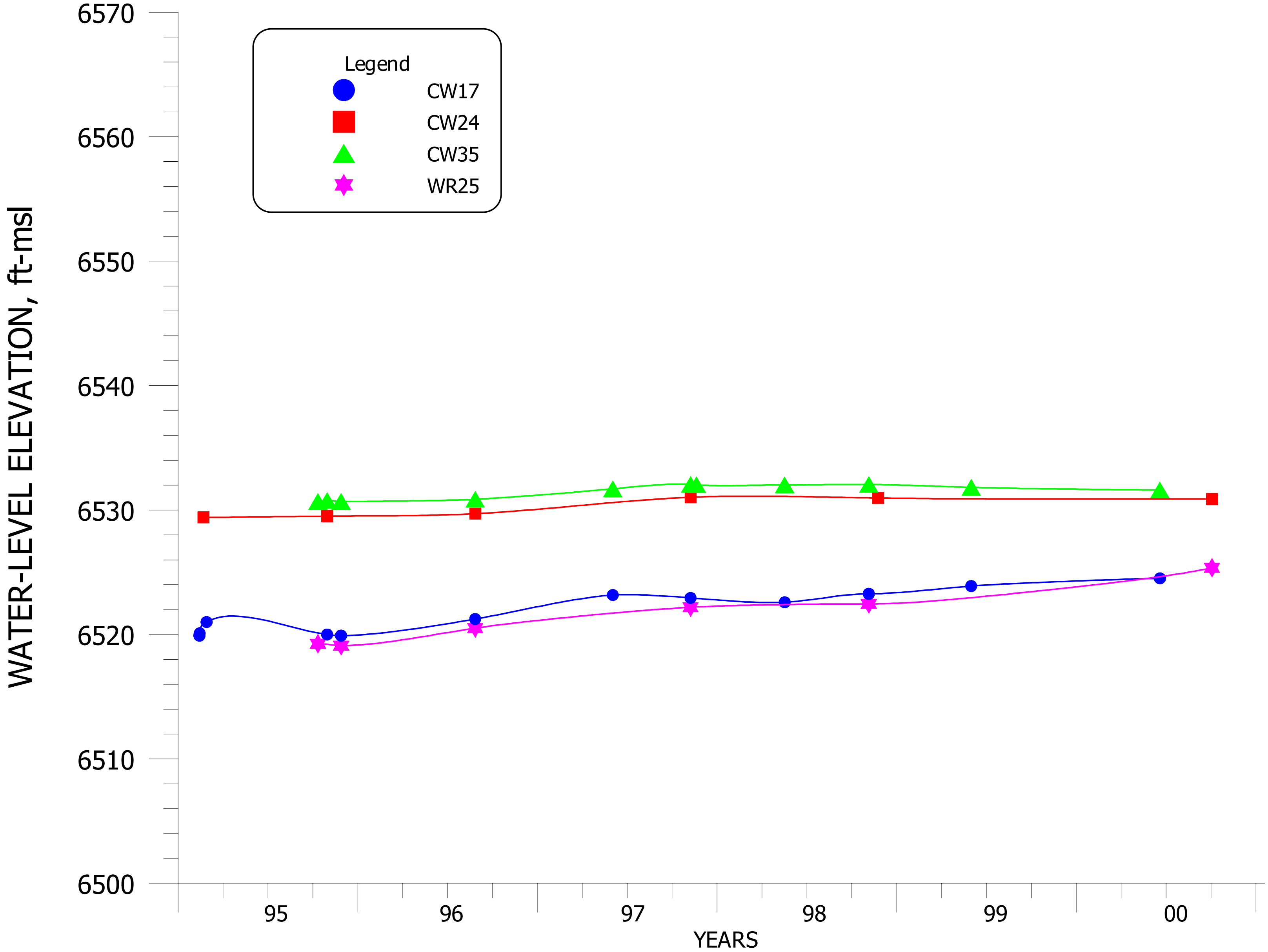


FIGURE 6.2-4. WATER-LEVEL ELEVATION FOR WELLS CW17, CW24, CW35 AND WR25.

6.3 MIDDLE CHINLE WATER QUALITY

The water-quality data for the Middle Chinle aquifer is presented along with all of the other Chinle aquifer wells in Tables B.5-1 and B.5-2 of Appendix B. The Chinle aquifer water-quality results for subdivision wells are also presented in these tables. The basic well data for the Middle Chinle aquifer wells is presented in Tables 5.1-1 through 5.1-4 in the Upper Chinle aquifer monitoring section.

The area of water-quality concern in the Middle Chinle aquifer exists in the western portion of Broadview Acres and Felice Acres. All sulfate concentrations are within the range of background concentrations. Uranium concentrations are above background only in western Felice Acres and just to the west and south of Felice Acres. Selenium concentrations also exceed the background values in western Felice Acres. No significant molybdenum concentrations exist in the Middle Chinle aquifer.

6.3.1 SULFATE - MIDDLE CHINLE

Figure 6.3-1 presents the sulfate concentrations for the Middle Chinle aquifer for the Fall of 2000. This figure shows that the Middle Chinle sulfate concentrations range from 446 mg/l to a high of 1850 mg/l at well CW17. Sulfate background and site standard concentrations are given in a box in the upper left corner of Figure 6.3-1. All sulfate concentrations in the Middle Chinle aquifer are within the upper background level. Sulfate concentrations in well CW17, which is located west of the West Fault, are natural. The sulfates are naturally occurring because the ground-water flow in the Middle Chinle aquifer west of the West Fault is from the north to the southwest. All sulfate concentrations in the Middle Chinle wells are within the natural background range and, therefore, do not indicate any need for restoration based on this parameter.

Figure 6.3-2 shows the locations of the Middle Chinle wells with time concentration plots for the 2000 report. The sulfate figure number is shown in the group area to define the figure number for each group of wells. Two groups of wells for the Middle Chinle aquifer are presented. The colors and symbols on Figure 6.3-2 are the same as those used in the concentration time plots.

Figure 6.3-3 presents the sulfate concentrations for Middle Chinle wells CW2, CW15, CW28, CW44, WCW and 493. The sulfate concentration in Middle Chinle well CW2 was variable in 2000, similar to its historical range. Concentrations in Chinle well CW28 have been fairly steady but lower than the other wells. A decline in sulfate concentrations was also observed in 2000 in well 493.

Figure 6.3-4 presents the sulfate concentration plot for the Middle Chinle wells west of the West Fault. This plot shows that sulfate concentrations have been fairly steady in well CW35 except for a lower 1999 value, while a gradual decreasing trend is being observed in wells CW24 and WR25. These sulfate concentrations are natural because ground water flows from the north to the southwest in the Middle Chinle in this area.

6.3.2 TOTAL DISSOLVED SOLIDS - MIDDLE CHINLE

Total dissolved solids (TDS) and sulfate are used to define changes in major constituents at this site. Figure 6.3-5 presents the TDS concentrations for the Middle Chinle aquifer for the Fall of 2000 and shows that a few values are slightly less than 2000 mg/l near the alluvial subcrop area on the southwest side of Felice Acres.

Background data for 2000 varied from 1290 to 2690 mg/l for TDS. All of the TDS values within the Middle Chinle aquifer are within the background range except the TDS values for wells CW17, CW24 and WR25 west of the West Fault. Middle Chinle concentrations west of the West Fault are natural due to the flow direction in this area. These concentrations would result in a higher upper background range if they were included in the background analyses. No restoration of TDS is needed in the Middle Chinle aquifer.

6.3.3 CHLORIDE - MIDDLE CHINLE

Figure 6.3-6 presents chloride concentrations for the Middle Chinle aquifer for the Fall of 2000. This figure shows that chloride concentrations are relatively low in all of the Middle Chinle wells. Previous measurements have shown that chloride

concentrations east of the East Fault do exceed the secondary drinking water standard of 250 mg/l. A pattern is shown where chloride concentrations in the Middle Chinle aquifer are likely to naturally exceed 250 mg/l east of the East Fault. These concentrations are natural due to the slow movement of ground water in this less transmissive portion of the Middle Chinle aquifer.

6.3.4 URANIUM - MIDDLE CHINLE

Uranium concentration is an important parameter in the Middle Chinle aquifer due to elevated concentrations that exist in the southern and western portions of Felice Acres from recharge to the Middle Chinle aquifer in this area. The saturated alluvial aquifer in this area flows across a subcrop of the Middle Chinle aquifer just south of Felice Acres and alluvial ground water has entered the Middle Chinle aquifer in this area. Figure 6.3-7 presents the uranium concentrations for the Fall of 2000 for the Middle Chinle aquifer. An area of concentrations of greater than 0.43 mg/l exists in the western portion of Felice Acres. Middle Chinle well 434 in Broadview Acres contains a uranium concentration slightly greater than 0.43 mg/l. This concentration is not thought to be connected to the higher concentrations in Felice Acres. Additional evaluation of the concentrations in well 434 is being conducted. Uranium concentrations in the Middle Chinle aquifer, west of the West Fault, naturally exceed 0.1 mg/l. Flow in the Middle Chinle aquifer west of the West Fault moves from the CW35 area to the subcrop area to the south. All other areas of the Middle Chinle aquifer contain small levels of uranium.

Figure 6.3-8 presents the uranium concentration plots versus time for Middle Chinle wells CW2, CW15, CW28, CW44, WCW and 493 (see Figure 6.3-2 for well locations). Uranium concentrations in this plot for 2000 have been less than 0.1 mg/l, except for those from well CW44, which shows an overall decline. This plot shows that Middle Chinle well CW44 contains significant amounts of uranium, which should gradually decline over the next several years. Additional monitoring of well CW44 with time will define this decline.

The uranium concentration plots for the Middle Chinle wells west of the West Fault are presented in Figure 6.3-9. This plot shows that the uranium concentrations in each of the wells has been gradually increasing with time except for fairly steady uranium concentrations in wells CW24 and WR25.

6.3.5 SELENIUM - MIDDLE CHINLE

One well (CW27) in the Middle Chinle south of Felice Acres contained water with selenium concentrations exceeding 0.27 mg/l in 2000 (see Figure 6.3-10). The blue pattern is used to delineate the areas where selenium concentrations are thought to be greater than 0.27 mg/l. The selenium concentration of 0.27 mg/l is the significant concentration for this site. These concentrations are a result of recharge to the Middle Chinle aquifer from the alluvium in the subcrop area just south of Felice Acres. Flow in the Middle Chinle aquifer is toward the north causing concentrations from the subcrop area to move to the north. The highest selenium concentration was observed in well CW27 at 0.37 mg/l, which is located in the subcrop area. Background selenium concentrations for the Fall of 2000 vary from 0.01 to 0.59 mg/l (see note in upper left side of Figure 6.3-10). All of the Middle Chinle aquifer concentrations are within this range.

Selenium concentrations of roughly 0.1 mg/l exist west of the West Fault. These concentrations have to be natural levels in the Middle Chinle aquifer because the flow is from the north in this area. All other concentrations in the Middle Chinle aquifer beyond these two areas are low values.

Selenium concentrations for Middle Chinle wells CW2, CW15, CW28, CW44, WCW and 493 are presented in Figure 6.3-11 for variations with time. This plot shows that the selenium concentrations have varied significantly in well 493 but decreased in 2000 after an overall increase over the previous several years. A continual decrease in the selenium concentrations in well 493 is expected in the next few years. The connection between the alluvial aquifer and the Middle Chinle aquifer south of Felice Acres is the cause for the higher concentrations in well 493. The fresh-water injection into Middle Chinle well CW14 and use of Middle Chinle well CW44 for irrigation should

cause this decrease. Selenium concentrations in wells CW2 and WCW, further to the north, have remained low over the last several years. A small increase in selenium concentrations was observed in well CW44 in 2000.

Figure 6.3-12 presents the selenium concentrations for Middle Chinle wells west of the West Fault. This plot shows that selenium concentrations in upgradient well CW35 gradually increased in 2000 over the previous values and also shows that the 1999 value is an outlier. Concentrations in well CW17 have been steady in 2000, while concentrations in CW24 and WR25 are slightly greater than they were in 1998.

6.3.6 MOLYBDENUM - MIDDLE CHINLE

The molybdenum concentrations in the Middle Chinle aquifer during the Fall of 2000 are presented in Figure 6.3-13. None of the molybdenum concentrations for the Fall of 2000 exceed the detection limit, except for the molybdenum concentration of 0.15 mg/l in well 434. Both of the 2000 values for this well were near this concentration. Additional measurements from this well are needed to determine whether a trend is developing.

Figure 6.3-14 presents the molybdenum concentrations for Middle Chinle wells CW2, CW15, CW28, CW44, WCW and 493. This plot shows that the concentration in each of these wells has been low for the last few years and each of the 2000 values were low as well (see Figure 6.3-2 for location of these wells).

Figure 6.3-15 shows the molybdenum concentrations in Middle Chinle wells west of the West Fault. This plot shows that molybdenum concentrations have not been significant in the Middle Chinle west of the West Fault.

6.3.7 NITRATE - MIDDLE CHINLE

Nitrate concentrations in the Middle Chinle aquifer during 2000 are presented on Figure 6.3-16. The 2000 range in background concentrations is presented in the upper left corner of this figure (1.3 – 17.4 mg/l). Nitrate concentrations in the Middle Chinle aquifer were all less than the State site standard of 12.4 mg/l.

6.3.8 RADIUM-226 AND RADIUM-228 - MIDDLE CHINLE

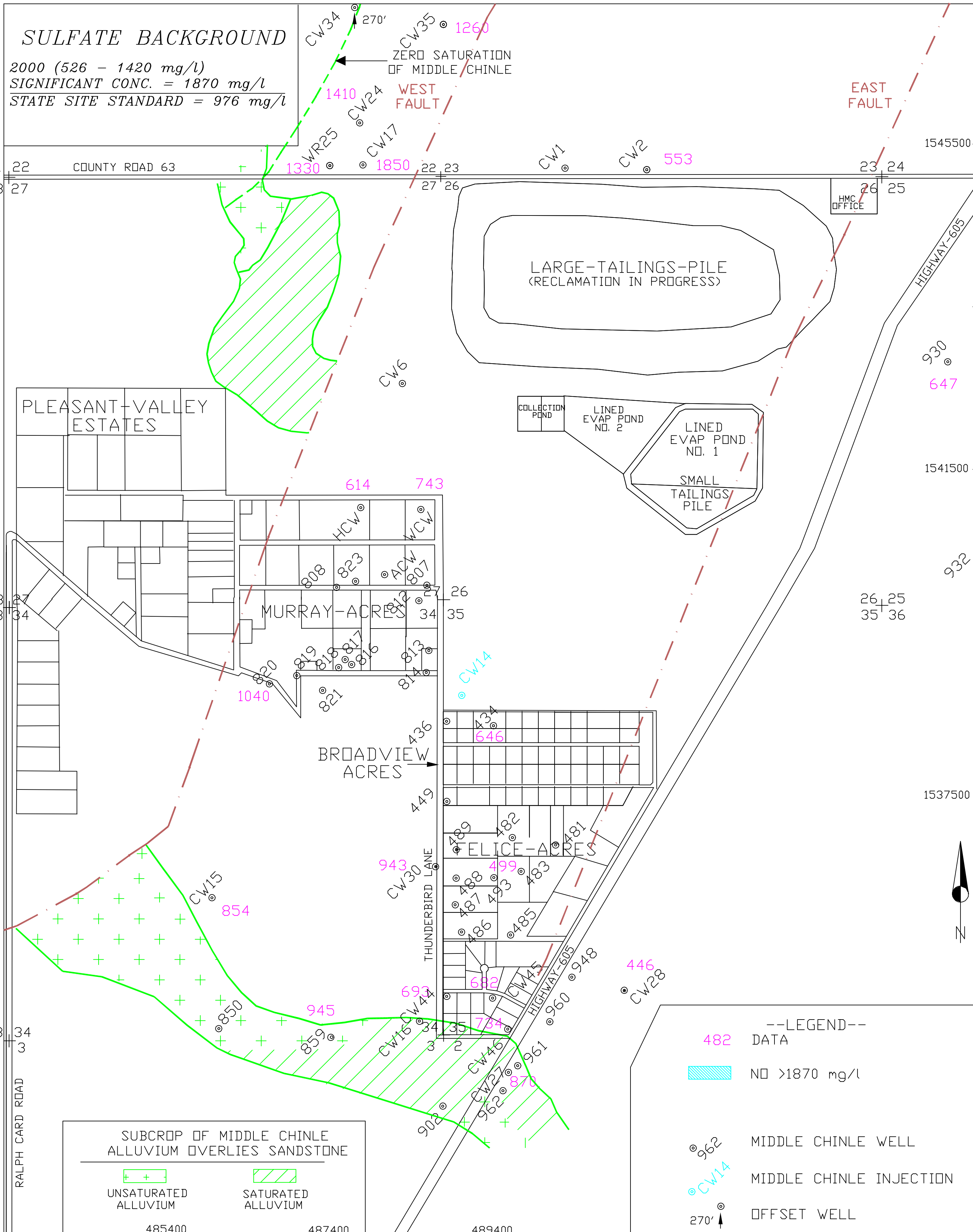
Radium concentrations for the Middle Chinle aquifer for 2000 were measured only in wells CW2 and HCW were less than 1.2 pCi/l. This data, and past Middle Chinle monitoring, shows that these two parameters are not important relative to the restoration of the Middle Chinle aquifer. Radium is not an important parameter for the alluvial aquifer and, therefore, does not have the potential to be important to the Middle Chinle aquifer. Radium should be removed as an NRC site standard.

6.3.9 VANADIUM - MIDDLE CHINLE

Vanadium concentrations for the Middle Chinle aquifer for 2000 were measured only in wells CW2 and HCW and were less than 0.01 mg/l (site standard is 0.02 mg/l). Previous monitoring of vanadium in the Middle Chinle aquifer shows that vanadium is not a significant parameter for this aquifer. Monitoring of vanadium should be dropped because only a few low values previously existed in the alluvial aquifer near the tailings.

6.3.10 THORIUM-230 - MIDDLE CHINLE

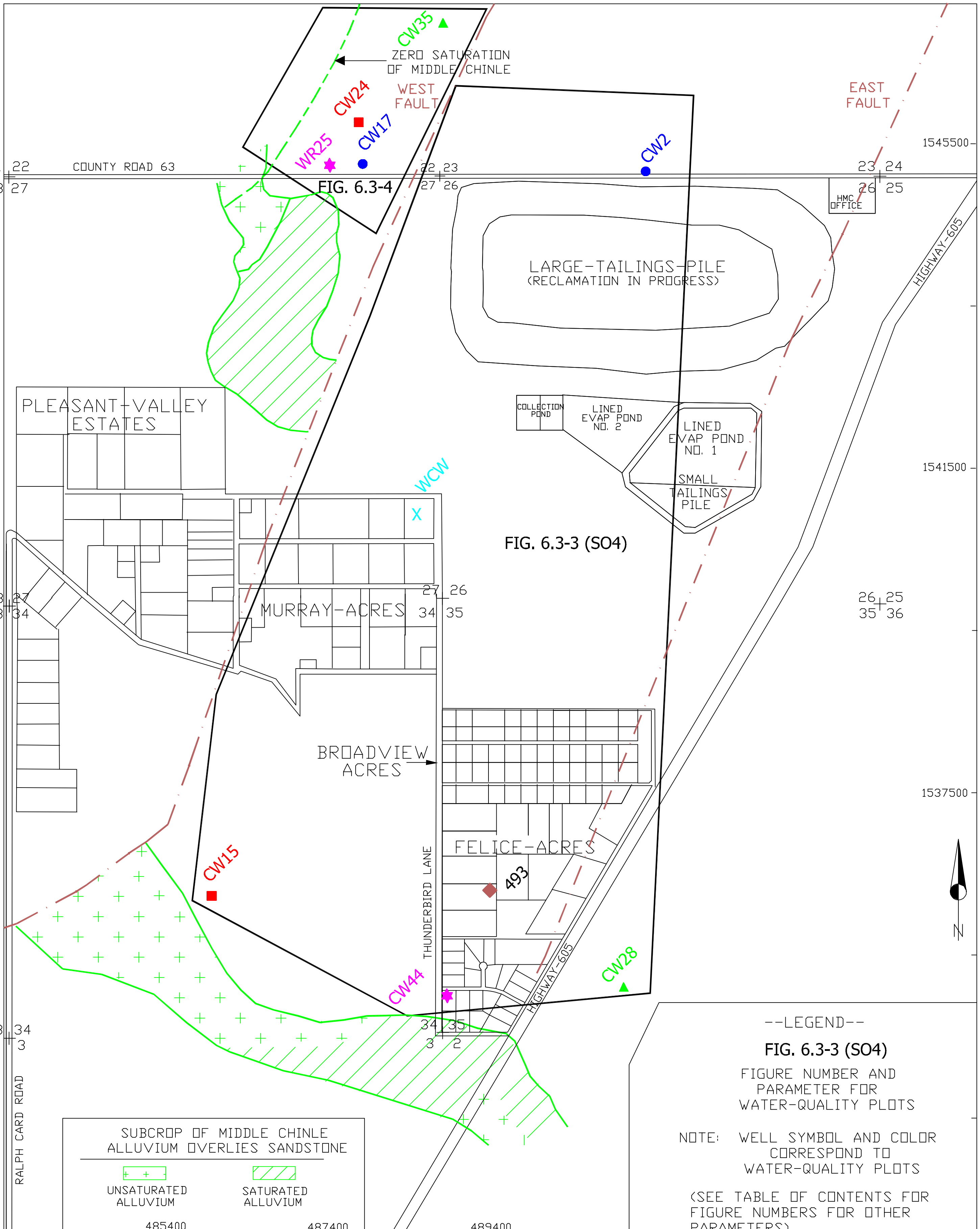
Thorium concentrations during 2000 were measured in the Middle Chinle in well CW2 at less than 0.2 and HCW at 0.4 pCi/l (site standard of 0.3 pCi/l). Thorium-230 concentrations are not significant in the alluvial aquifer. Therefore, the Middle Chinle aquifer does not have the potential for containing significant thorium concentrations from the tailings seepage. Thorium-230 is, therefore, not a significant parameter in the Middle Chinle aquifer and should be dropped from future monitoring in the Middle Chinle aquifer.



SCALE: 1″=1600′ | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 02/20/01 lju

FIGURE 6.3-1. SULFATE CONCENTRATIONS FOR THE MIDDLE CHINLE AQUIFER, FALL 2000, mg/l

PROJECTS\2001-06\DWGS\MID1600.DWG



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 02/20/01 lju

FIGURE 6.3-2. LOCATION OF MIDDLE CHINLE WELLS WITH WATER-QUALITY PLOTS

PROJECTS\2001-06\DWGS\MID1600.DWG

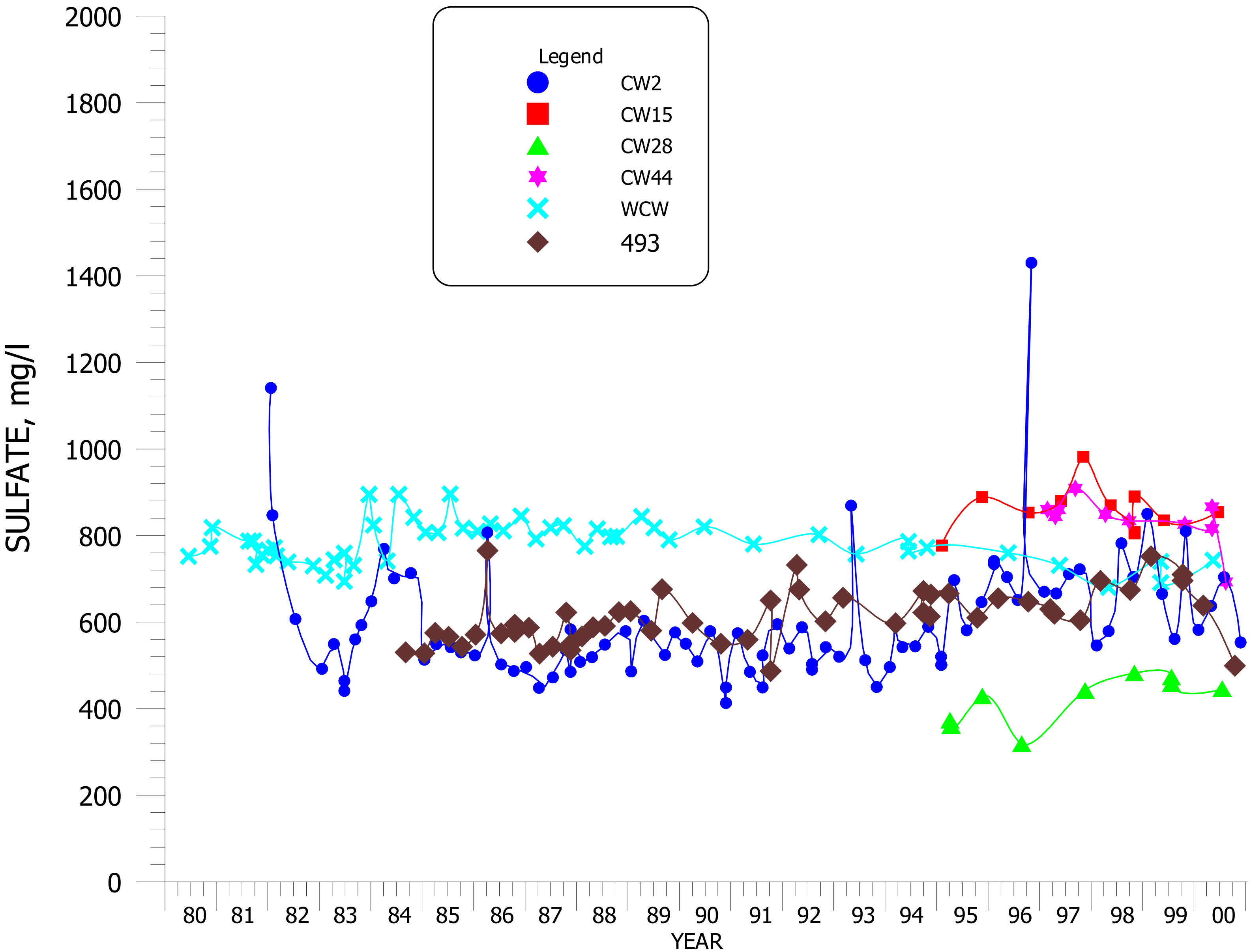


FIGURE 6.3-3. SULFATE CONCENTRATIONS FOR WELLS CW2, CW15, CW28, CW44, WCW AND 493.

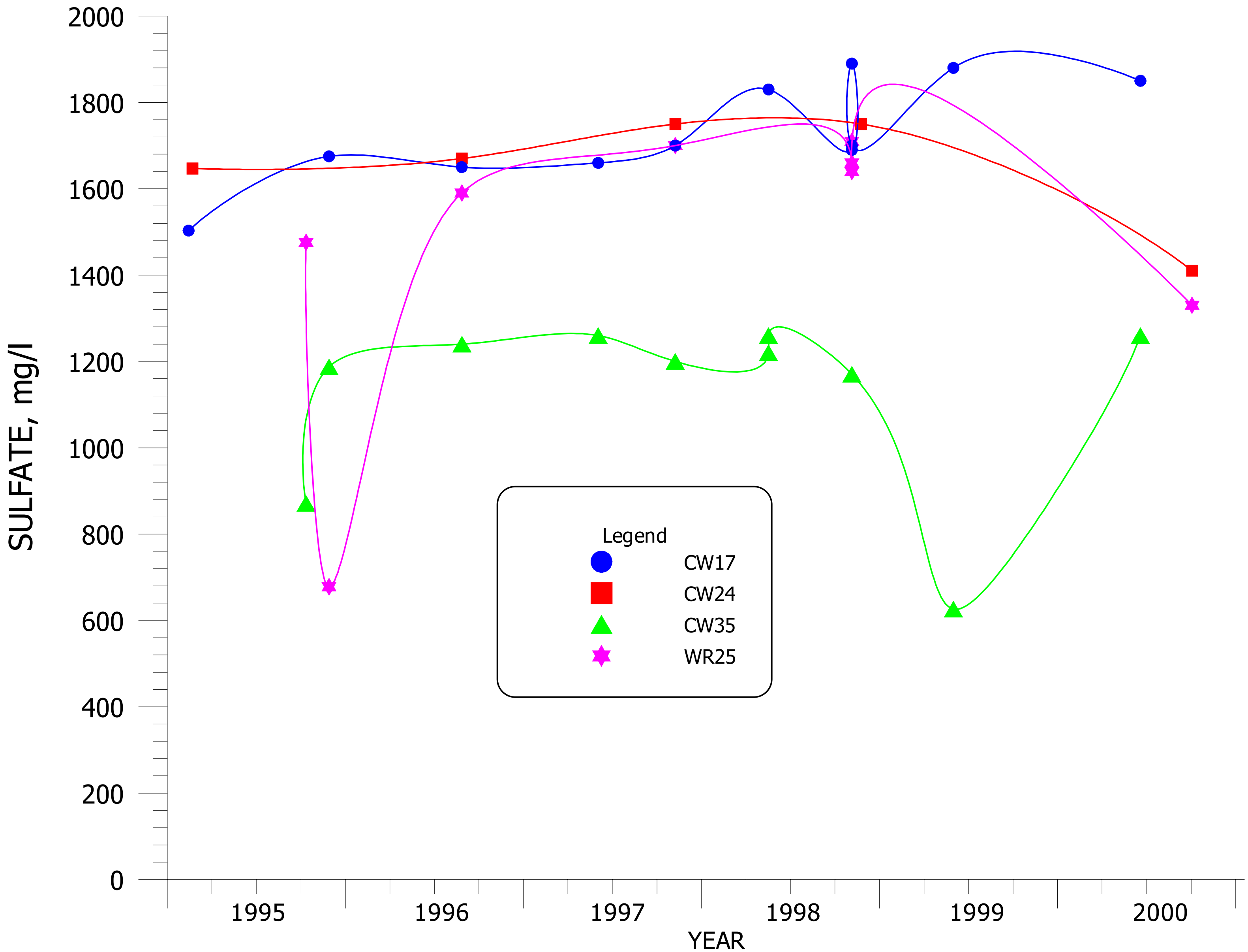
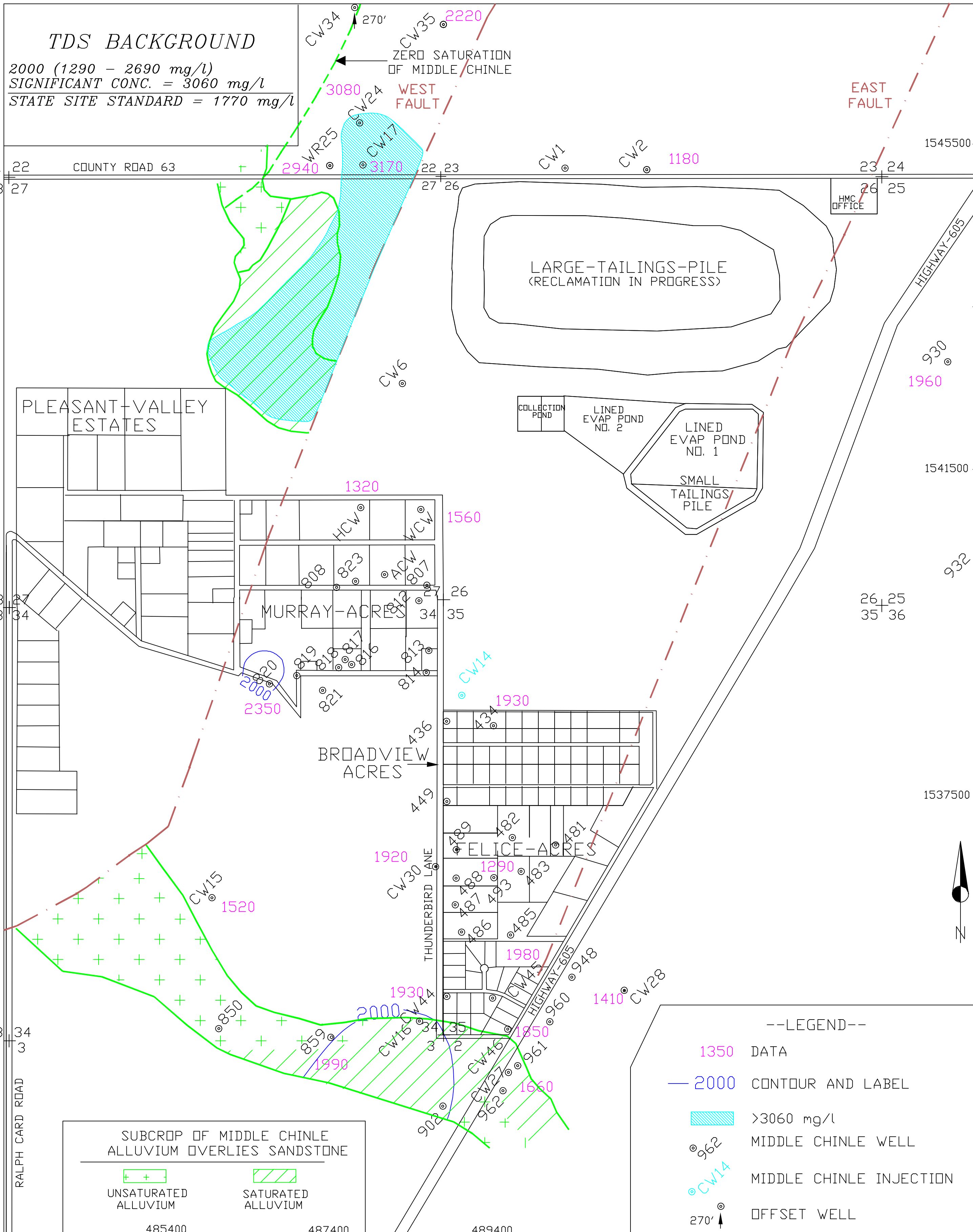


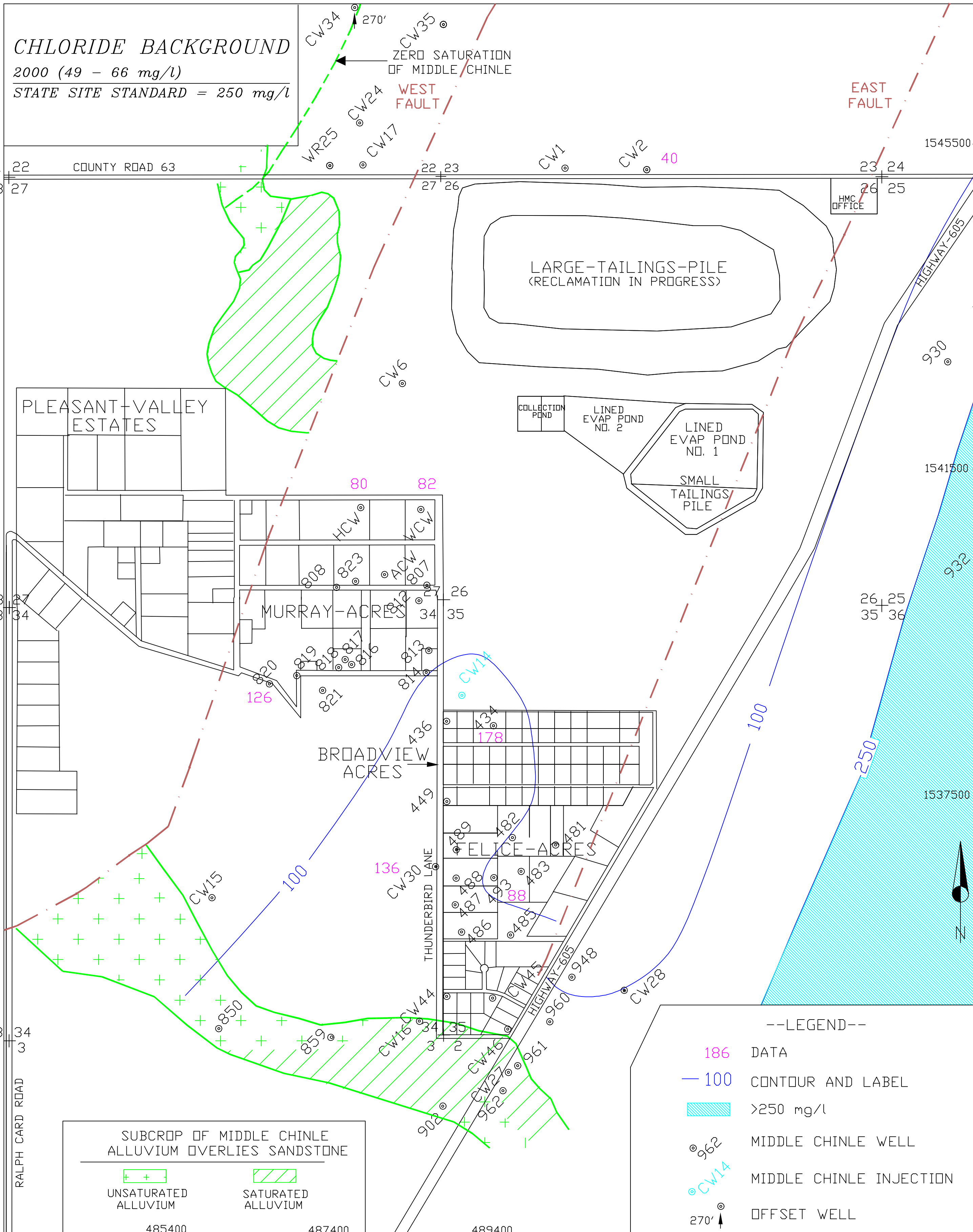
FIGURE 6.3-4. SULFATE CONCENTRATIONS FOR WELLS CW17, CW24, CW35 AND WR25.



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 02/20/01 lju

FIGURE 6.3-5. TDS CONCENTRATIONS FOR THE MIDDLE CHINLE AQUIFER, FALL 2000, mg/l

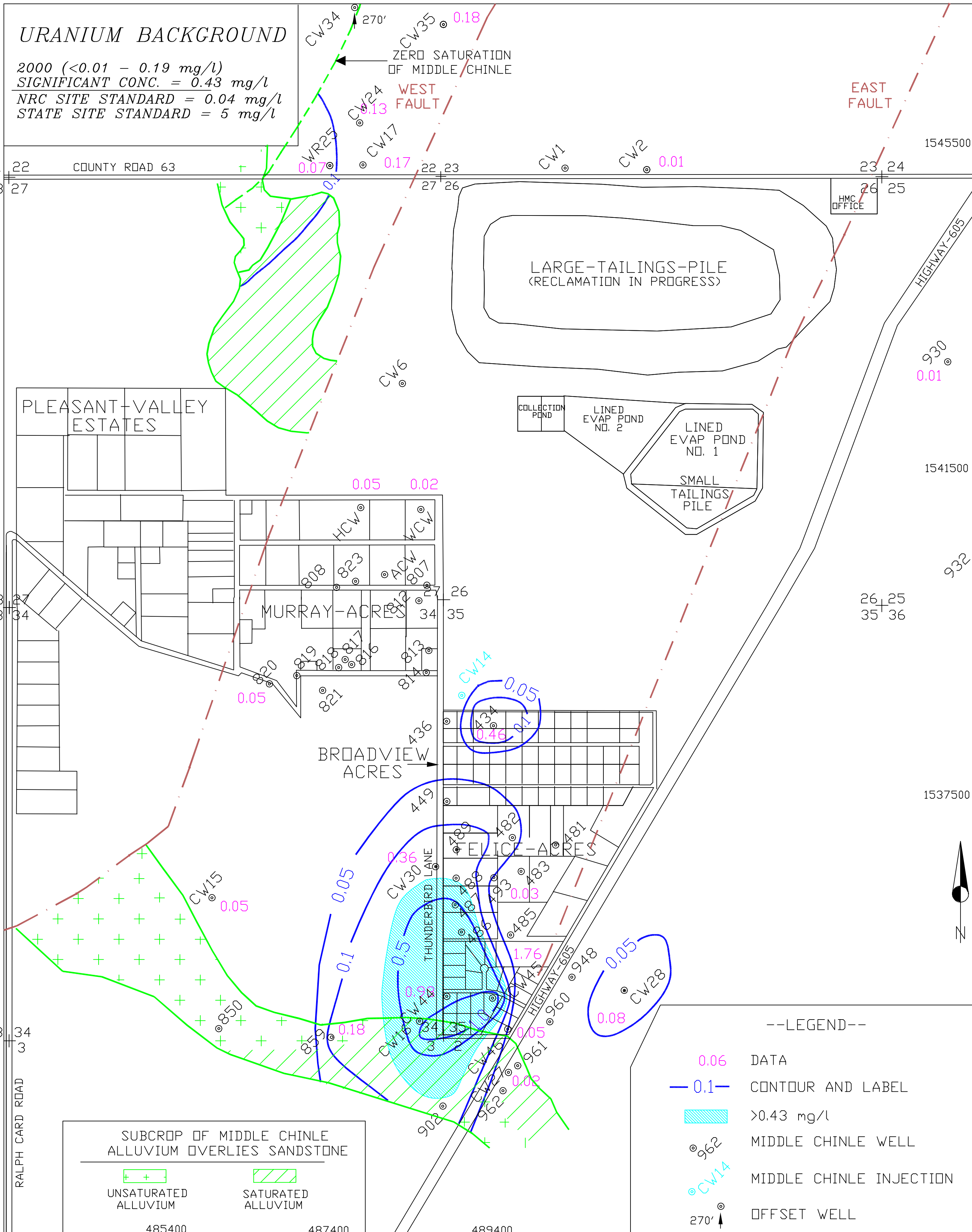
PROJECTS\2001-06\DWGS\MID1600.DWG



SCALE: 1″=1600′	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 02/20/01 lju

FIGURE 6.3-6. CHLORIDE CONCENTRATIONS FOR THE MIDDLE CHINLE AQUIFER, FALL 2000, mg/l

PROJECTS\2001-06\DWGS\MID1600.DWG



SCALE: 1″=1600′ | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 02/20/01 lju

FIGURE 6.3-7. URANIUM CONCENTRATIONS FOR THE MIDDLE CHINLE AQUIFER, FALL 2000, mg/l

PROJECTS\2001-06\DWGS\MID1600.DWG

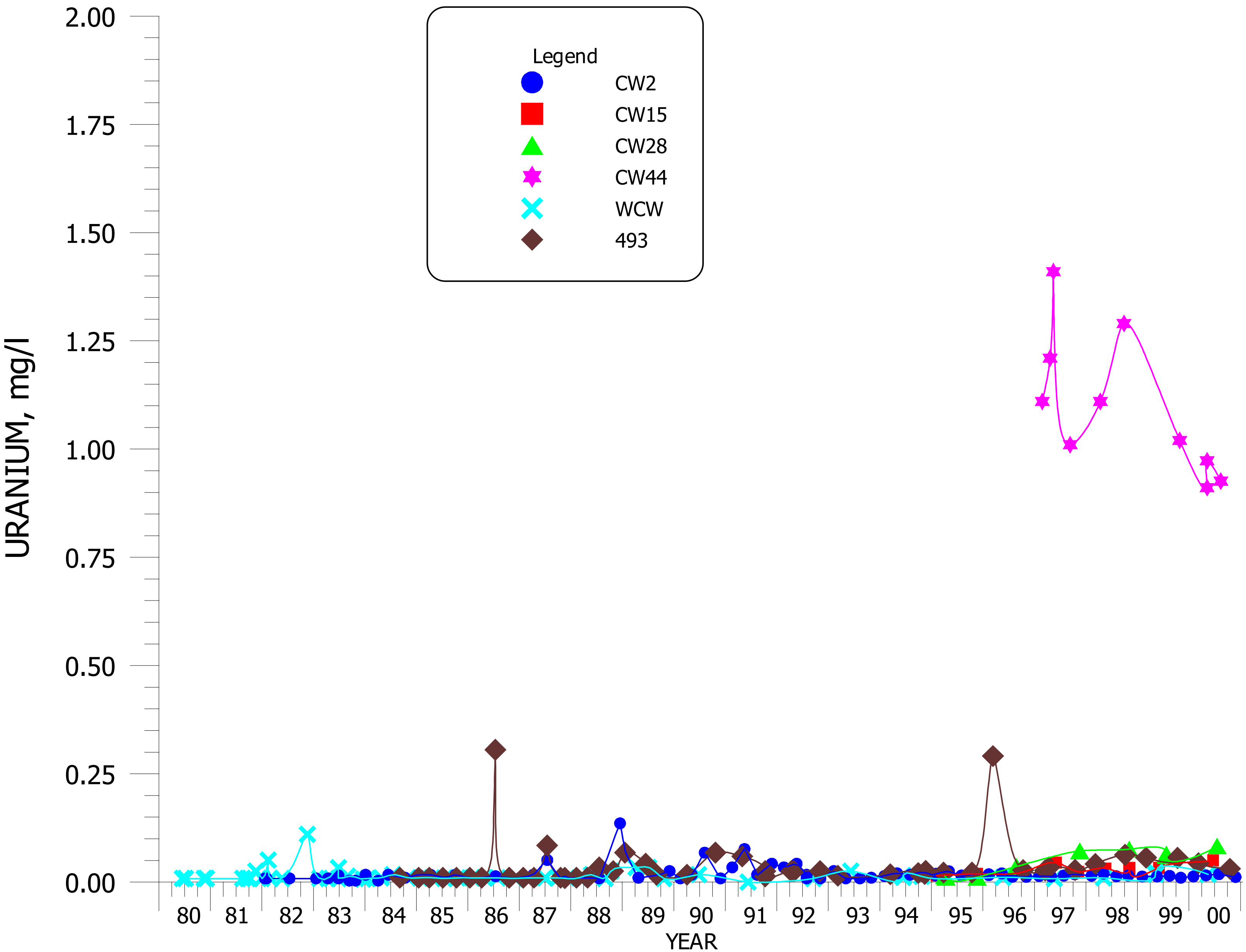


FIGURE 6.3-8. URANIUM CONCENTRATIONS FOR WELLS CW2, CW15, CW28, CW44, WCW AND 493.

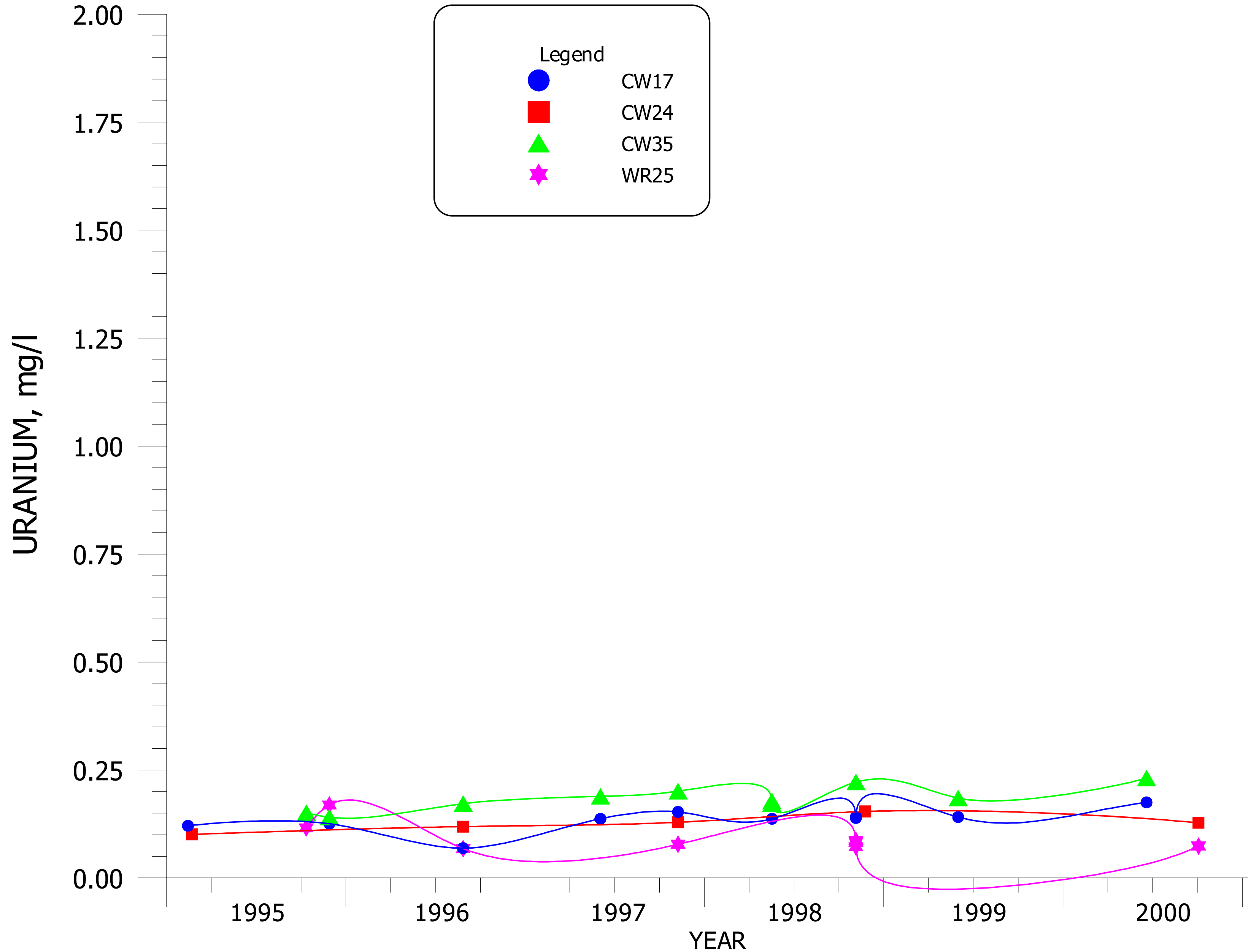
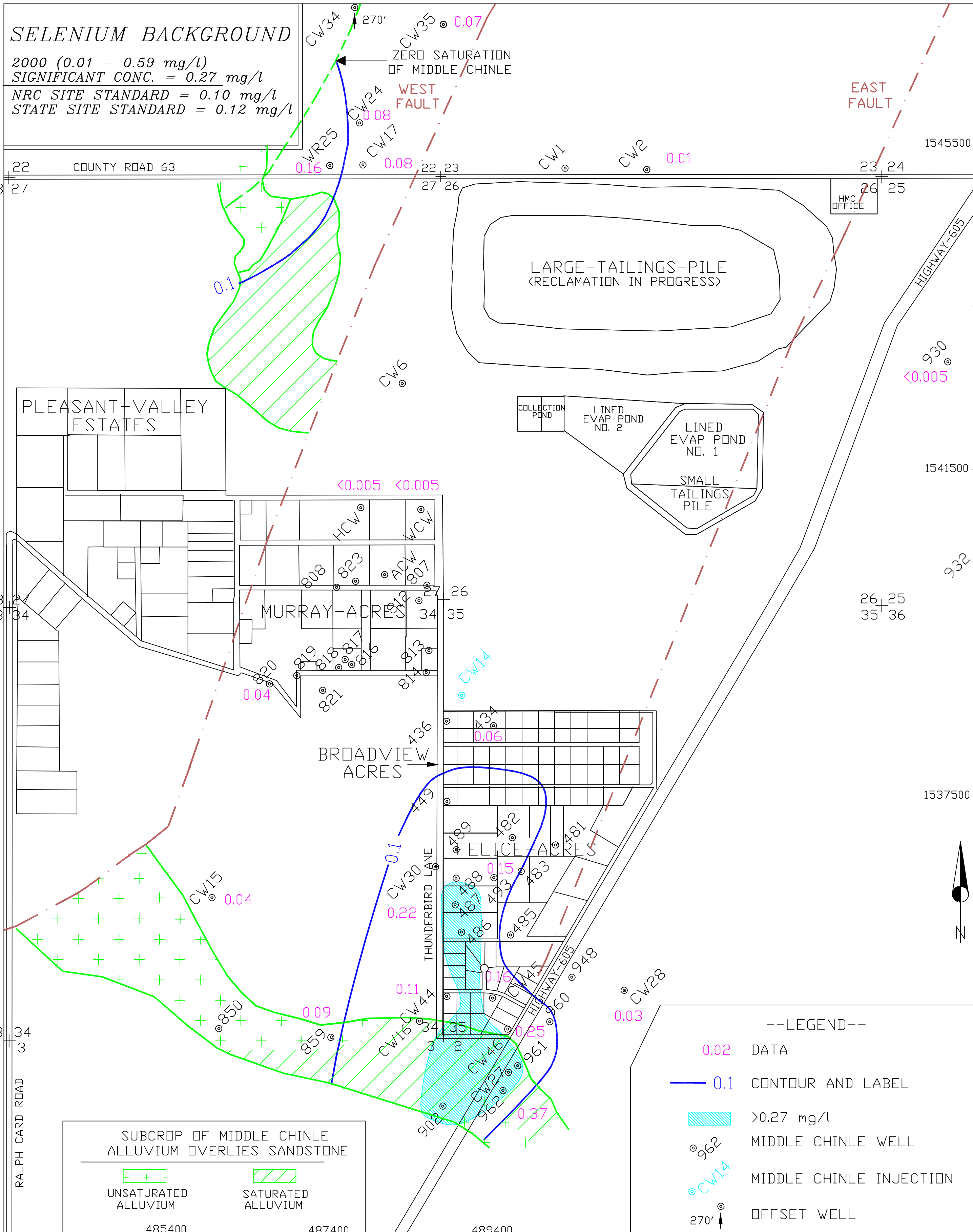


FIGURE 6.3-9. URANIUM CONCENTRATIONS FOR WELLS CW17, CW24, CW35 AND WR25.



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 02/20/01 lju

FIGURE 6.3-10. SELENIUM CONCENTRATIONS FOR THE MIDDLE CHINLE AQUIFER, FALL 2000, mg/l

PROJECTS\2001-06\DWGS\MID1600.DWG

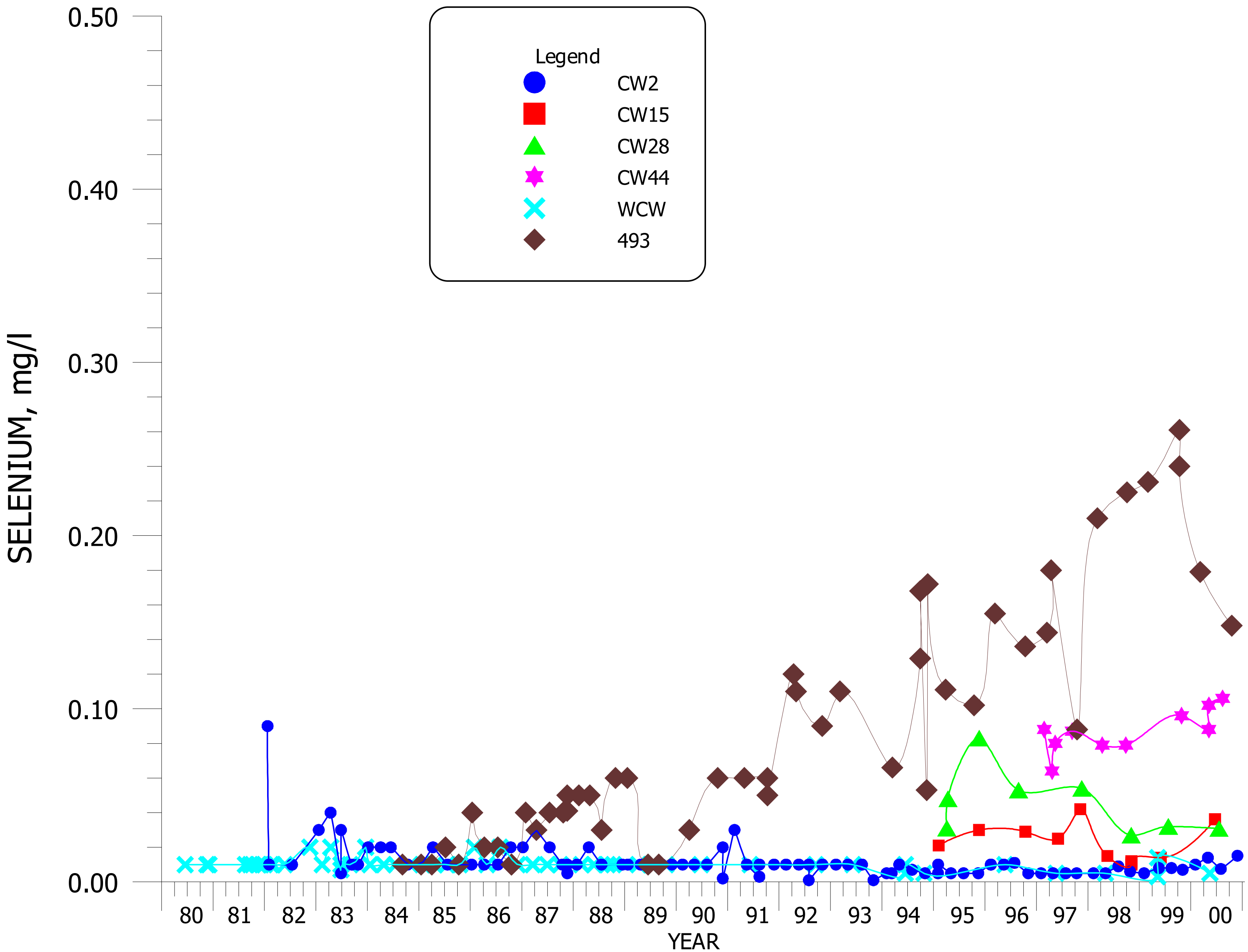


FIGURE 6.3-11. SELENIUM CONCENTRATIONS FOR WELLS CW2, CW15, CW28, CW44, WCW AND 493.

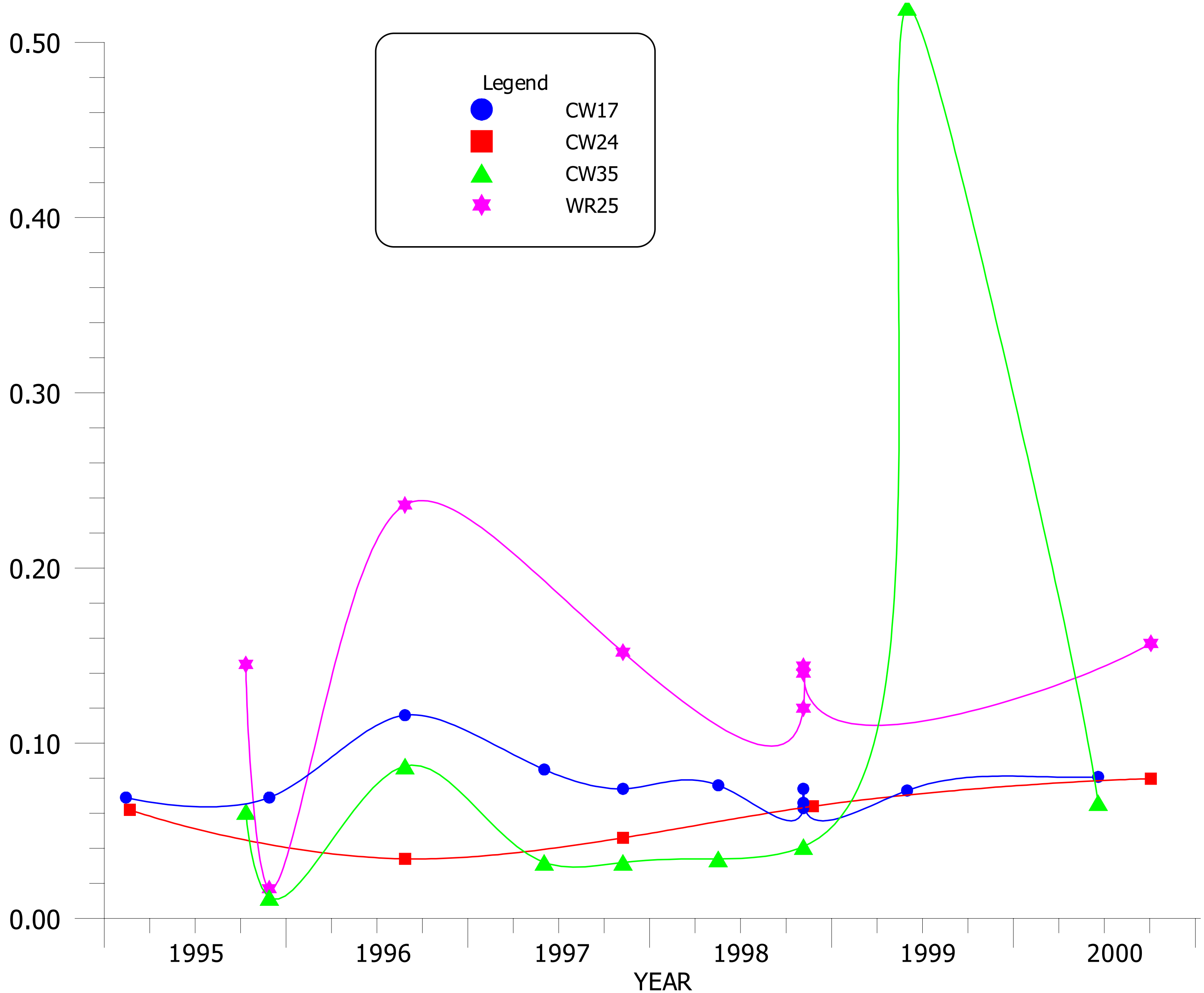
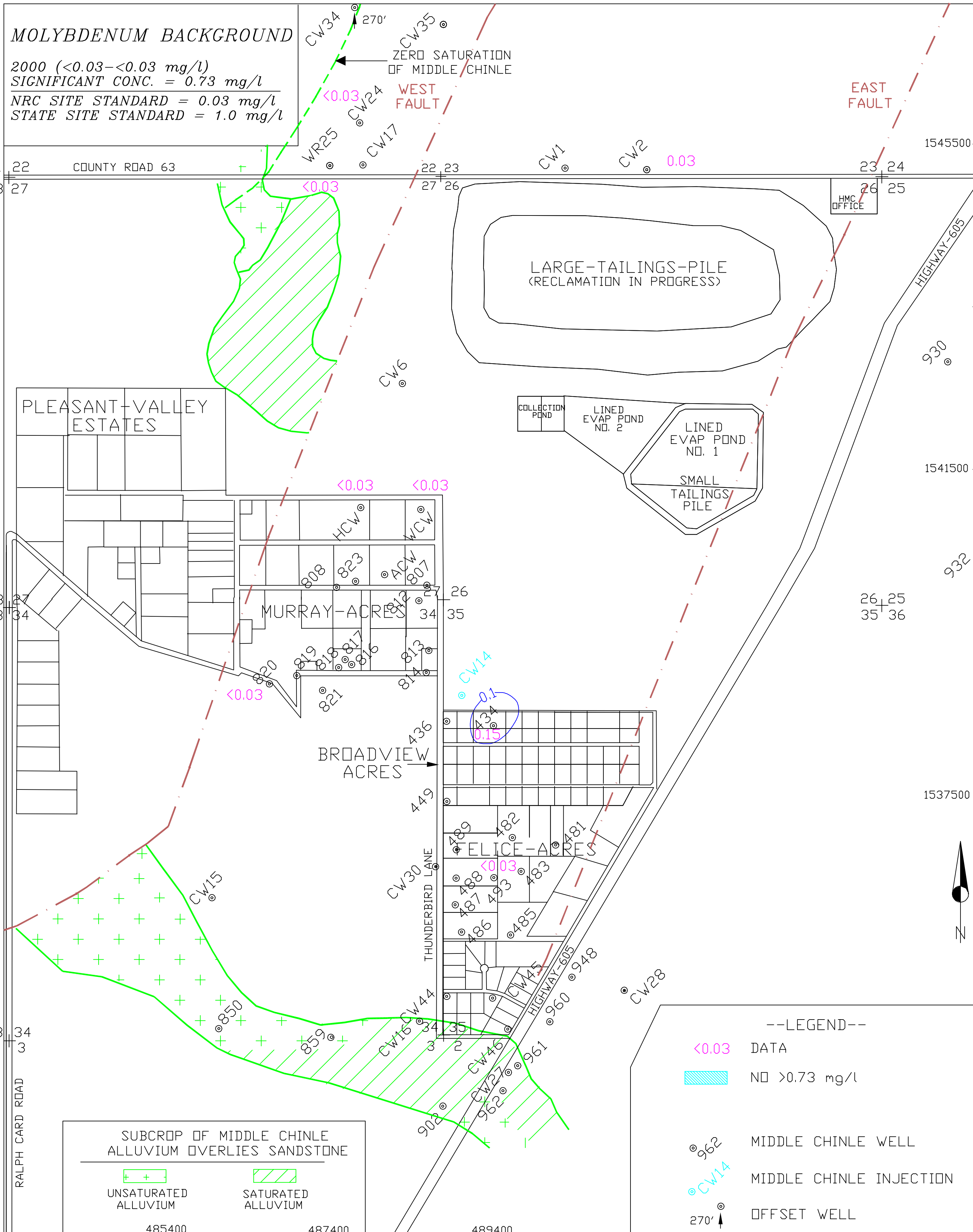


FIGURE 6.3-12. SELENIUM CONCENTRATIONS FOR WELLS CW17, CW24, CW35 AND WR25.



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 02/20/01 lju

FIGURE 6.3-13. MOLYBDENUM CONCENTRATIONS FOR THE MIDDLE CHINLE AQUIFER, FALL 2000, mg/l

PROJECTS\2001-06\DWGS\MID1600.DWG

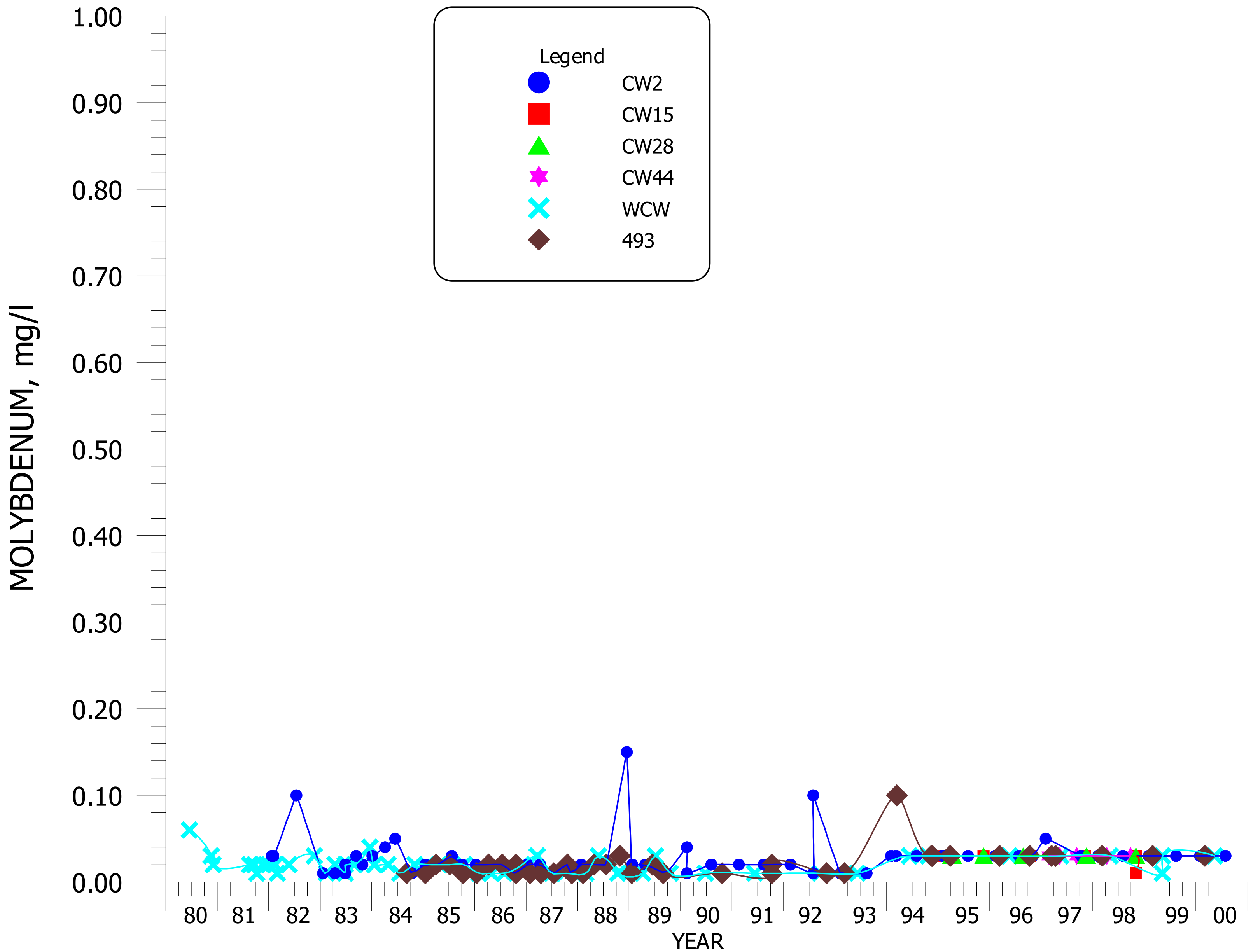


FIGURE 6.3-14. MOLYBDENUM CONCENTRATIONS FOR WELLS CW2, CW15, CW28, CW44, WCW AND 493.

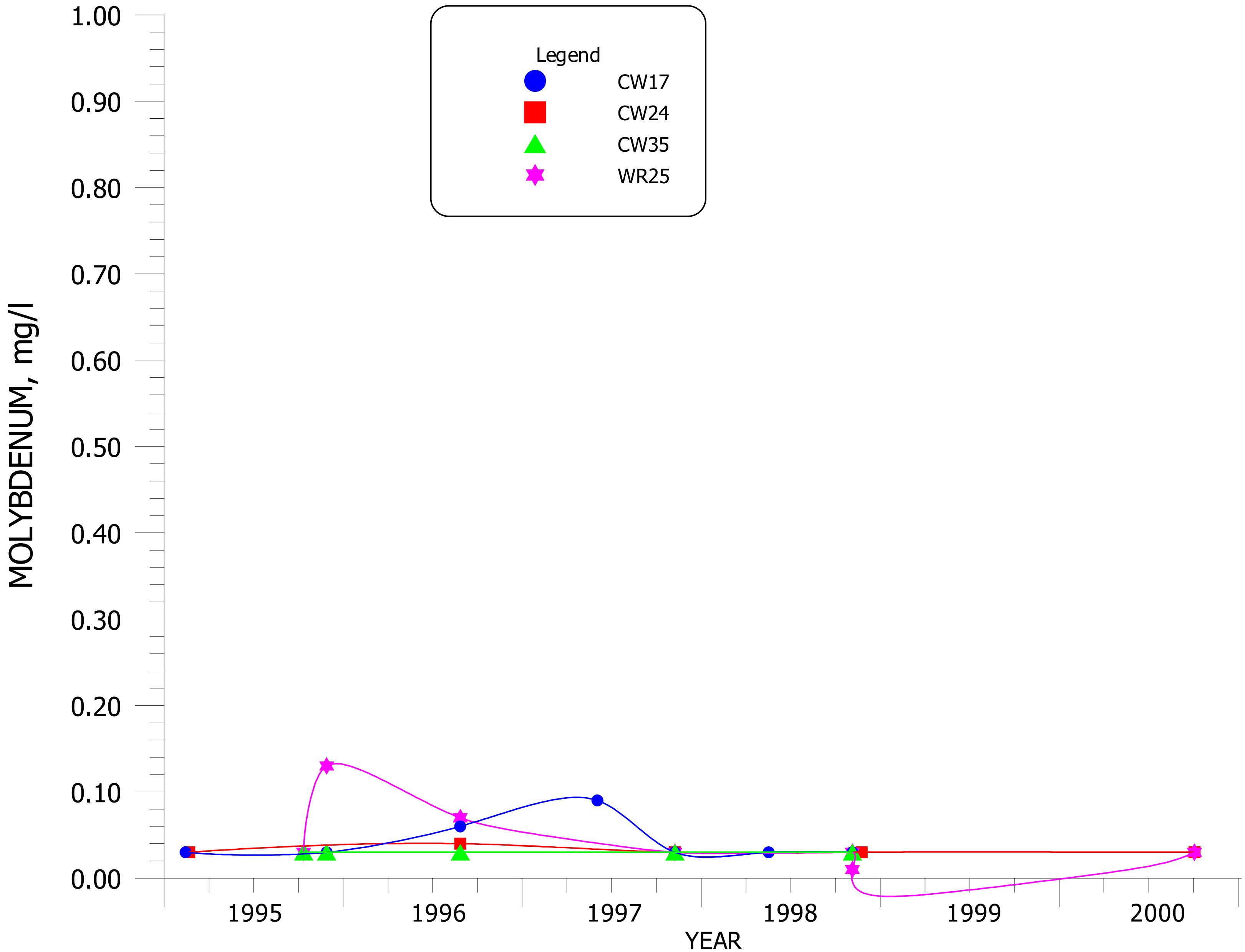
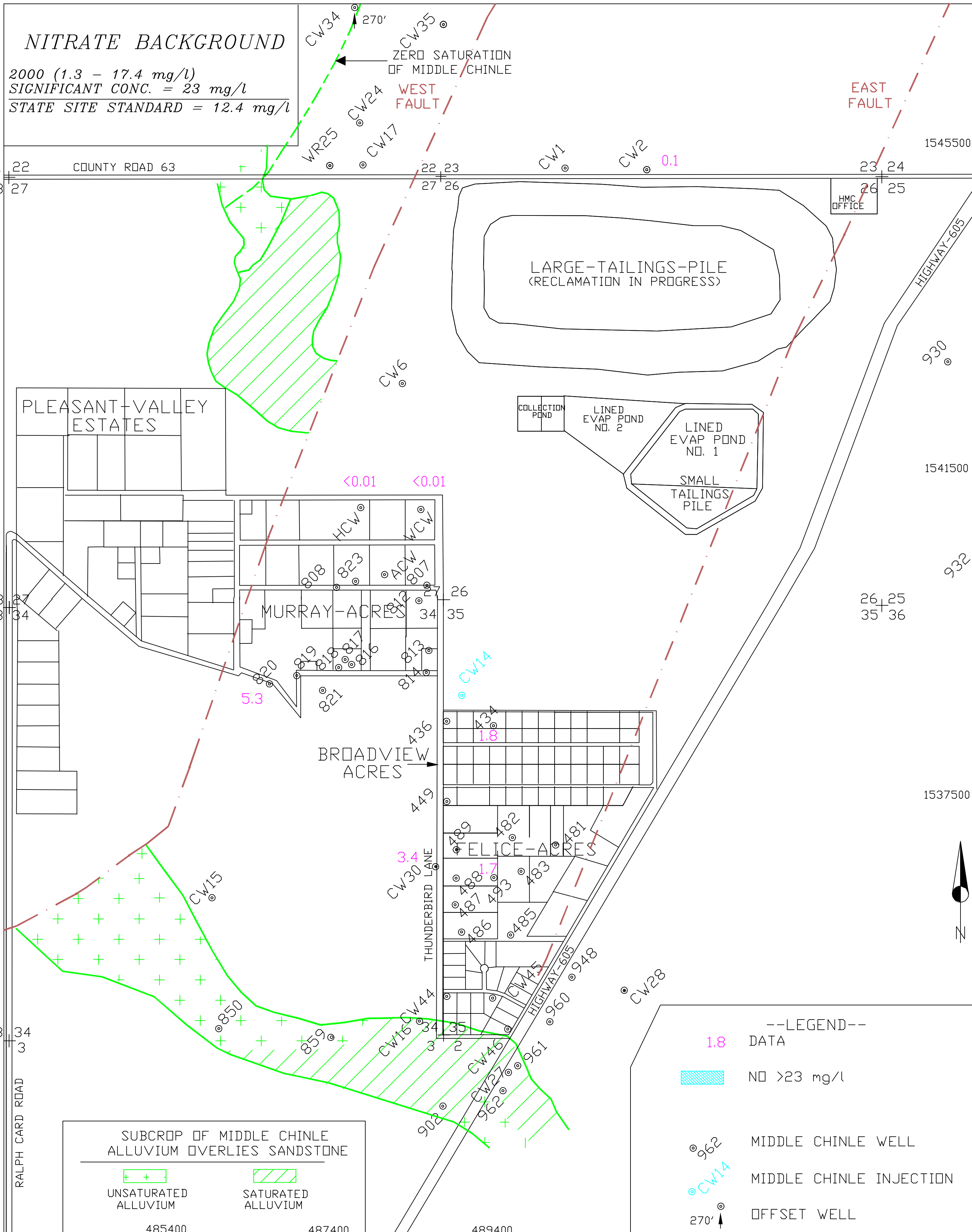


FIGURE 6.3-15. MOLYBDENUM CONCENTRATIONS FOR WELLS CW17, CW24, CW35 AND WR25.



SCALE: 1"=1600′ | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 02/20/01 lju

FIGURE 6.3-16. NITRATE CONCENTRATIONS FOR THE MIDDLE CHINLE AQUIFER, FALL 2000, mg/l

PROJECTS\2001-06\DWGS\MID1600.DWG

SECTION 7

TABLE OF CONTENTS

GROUND-WATER MONITORING
FOR HOMESTAKE'S GRANTS PROJECT

FIGURES

7.0 LOWER CHINLE AQUIFER MONITORING

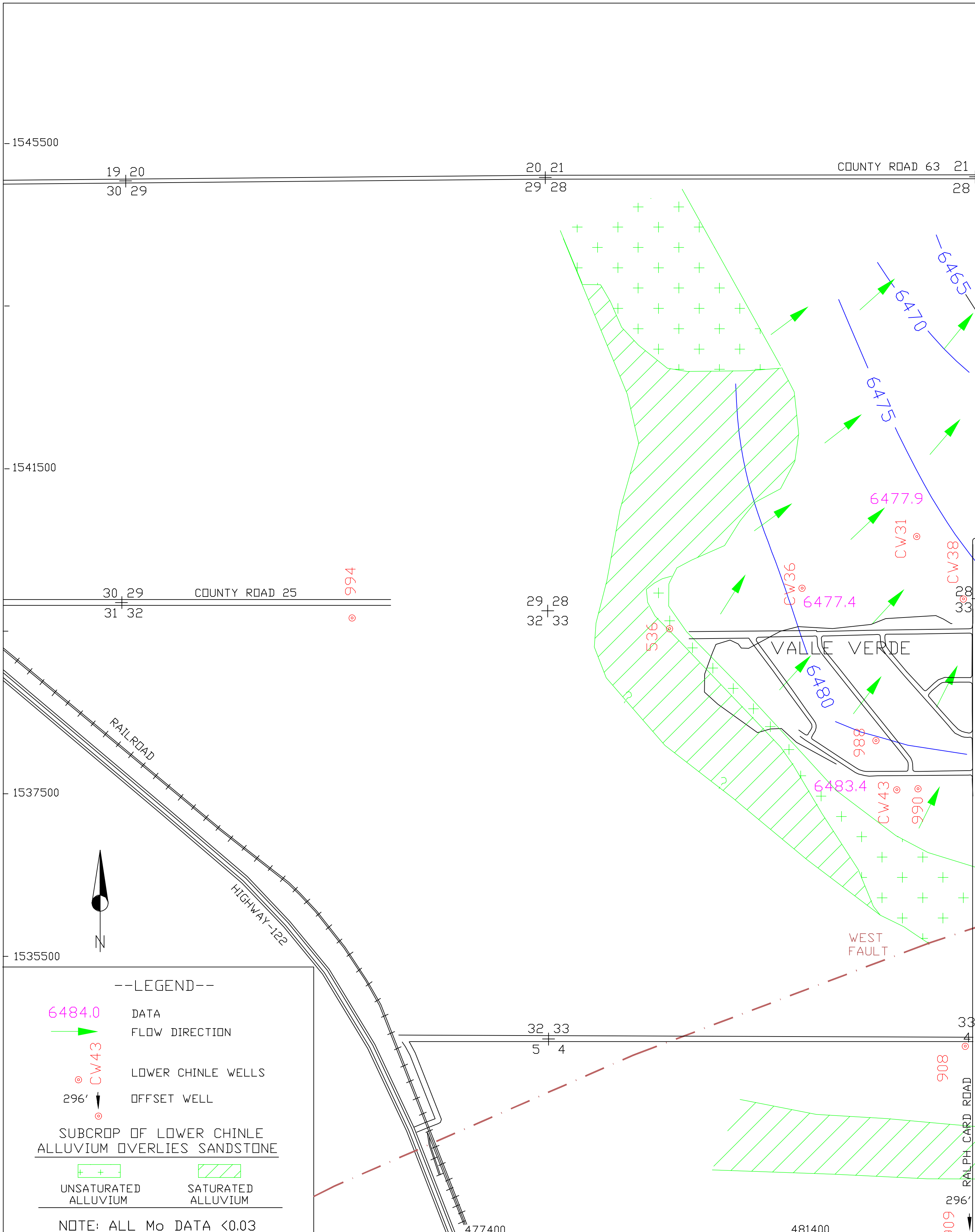
The Lower Chinle aquifer is a permeable zone in the Chinle shale below the Middle Chinle sandstone and above the San Andres aquifer. This aquifer becomes important west and southwest of the Homestake areas where this unit exists at shallower depths. The permeable zone in the Lower Chinle aquifer can vary greatly because the transmitting ability of this aquifer depends on secondary permeability being developed. Tables 5.1-1 through 5.1-4 present the Lower Chinle basic well data along with the other Chinle aquifer wells.

Water-level elevations for the Lower Chinle wells are presented with the remainder of the Chinle wells in Appendix A. Figures 7.0-1A and 7.0-1B present the location of the Lower Chinle wells and the Fall of 2000 water-level elevations. The West and East Faults are shown on Figures 7.0-1A and 7.0-1B. Flow west of the West Fault in the Lower Chinle is mainly to the northeast. Flow between the two faults is to the northwest, indicating that the Lower Chinle water moves across the West Fault. The approximate subcrop areas for the Lower Chinle aquifer are also shown on these two figures.

The Lower Chinle water quality is presented on Figures 7.0-2A and 7.0-2B. These figures present the sulfate, uranium, selenium and TDS concentrations for each of the wells during the Fall of 2000. All molybdenum concentrations in all Lower Chinle wells are less than 0.03 mg/l. The sulfate concentrations are shown in the upper left quadrant by each well in blue. Sulfate concentrations varied from a low of 405 mg/l to a high of 2140 mg/l. A similar range in sulfate concentrations existed in the upgradient water quality in the alluvial aquifer. TDS concentrations varied from 1110 to 3990 mg/l. The TDS concentrations in the Lower Chinle increase substantially downgradient of the subcrop area west of the West Fault. These higher TDS concentrations are thought to be natural and a function of long travel times of the ground water in this shale.

Uranium concentrations are generally low in all of the Lower Chinle wells. A small area around Lower Chinle well CW42, which is located in Section 3, contained an elevated uranium concentration in the Fall of 2000. This concentration is due to the connection with the alluvial aquifer to the west of this well in the subcrop area and

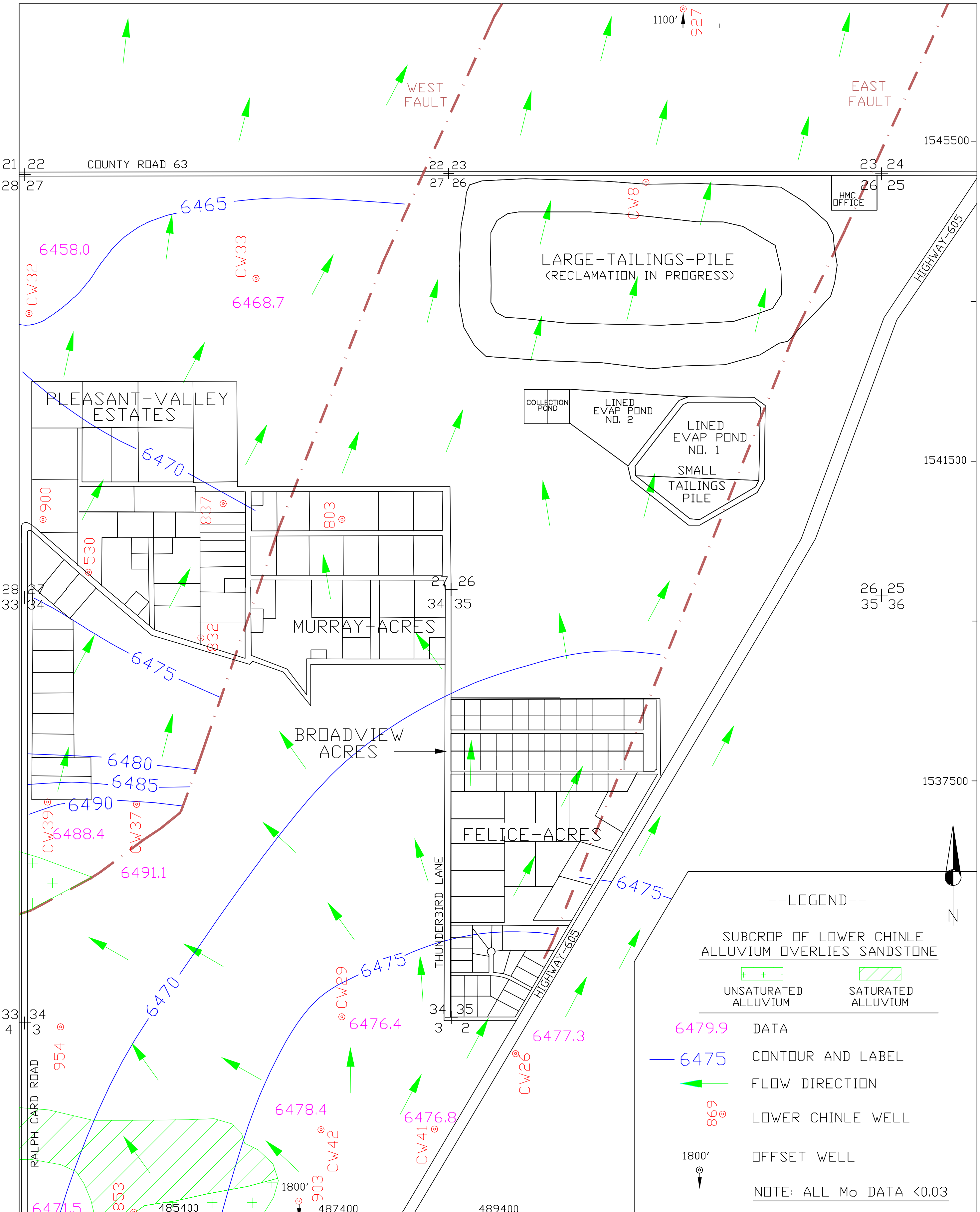
should be reduced as the alluvial aquifer concentrations are reduced in this area. Selenium concentrations in most of the Lower Chinle wells are also low. Some significant selenium concentrations have been observed in wells 853, 909, CW26 and CW42.



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 02/19/2001

FIGURE 7.0-1A. LOCATION OF LOWER CHINLE WELLS AND WATER-LEVEL ELEVATION (WEST AREA), FALL 2000, FT-MSL

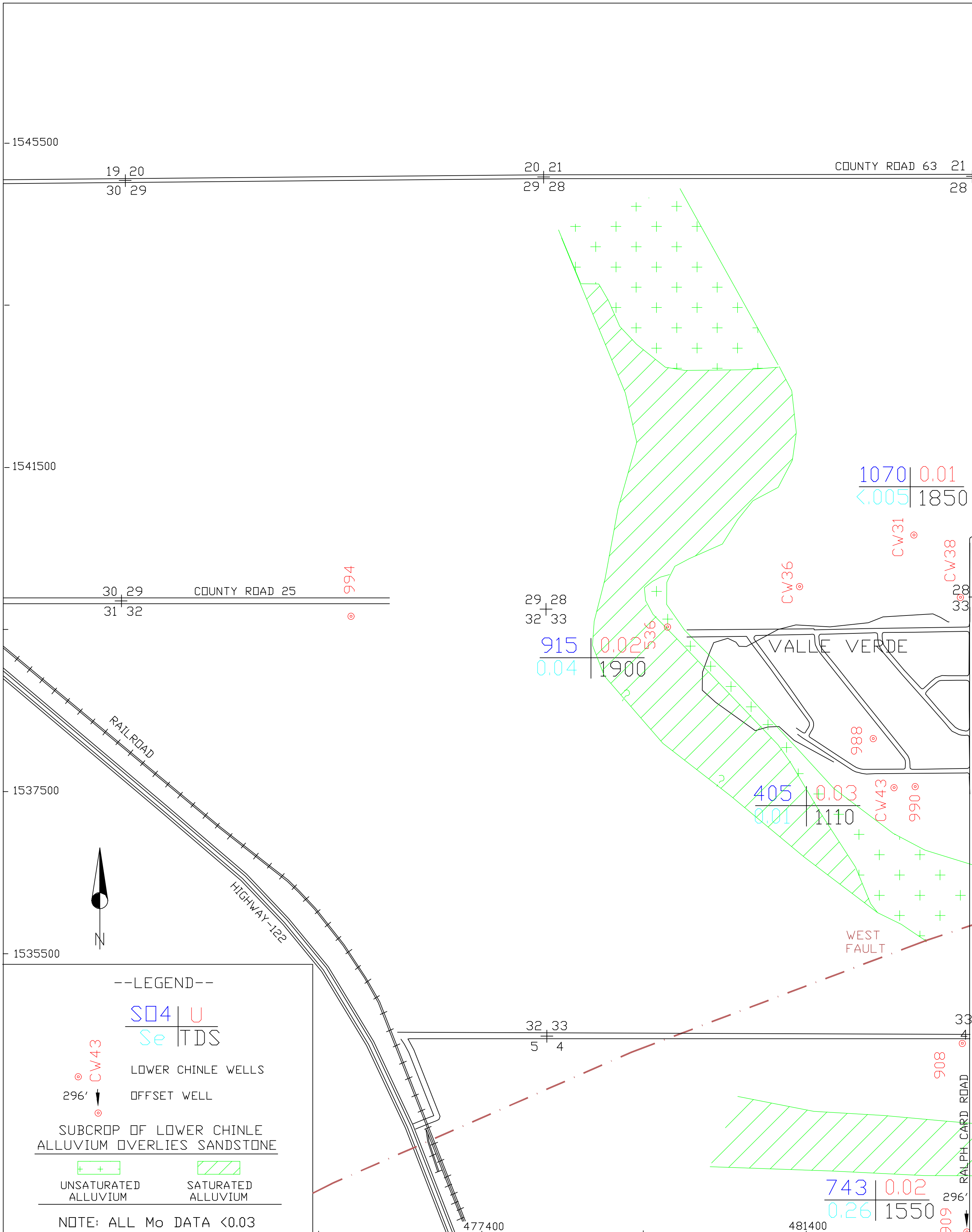
C:\PROJECTS\2001-06\DWGS\LOW1600 LJU



SCALE: 1"=1600' | HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W | DATE: 02/13/01 lju

FIGURE 7.0-1B. LOCATION OF LOWER CHINLE WELLS AND WATER-LEVEL ELEVATION, FALL 2000, FT-MSL

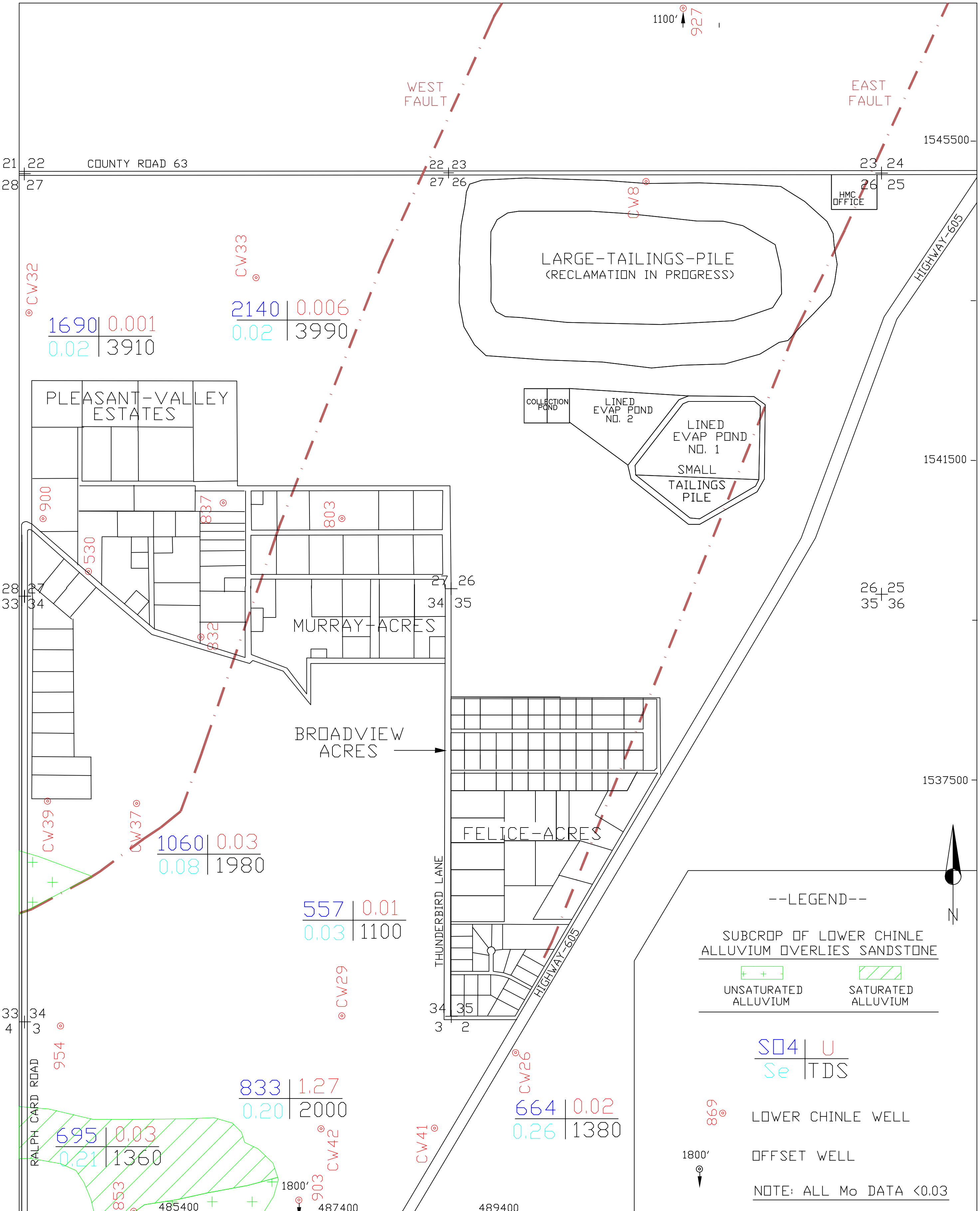
PROJECTS\2000-06\ DWGS\LOW1600



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 02/19/2001

FIGURE 7.0-2A. WATER QUALITY FOR THE LOWER CHINLE AQUIFER (WEST AREA), FALL 2000, mg/l

C:\PROJECTS\2001-06\DWGS\LOW1600 LJU



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 02/13/01 lju

FIGURE 7.0-2B WATER QUALITY FOR THE LOWER CHINLE AQUIFER, FALL 2000, mg/l

PROJECTS\2000-06\DWGS\LOW1600

SECTION 8

TABLE OF CONTENTS

GROUND-WATER MONITORING
FOR HOMESTAKE'S GRANTS PROJECT

FIGURES

TABLES

8.0 SAN ANDRES AQUIFER MONITORING

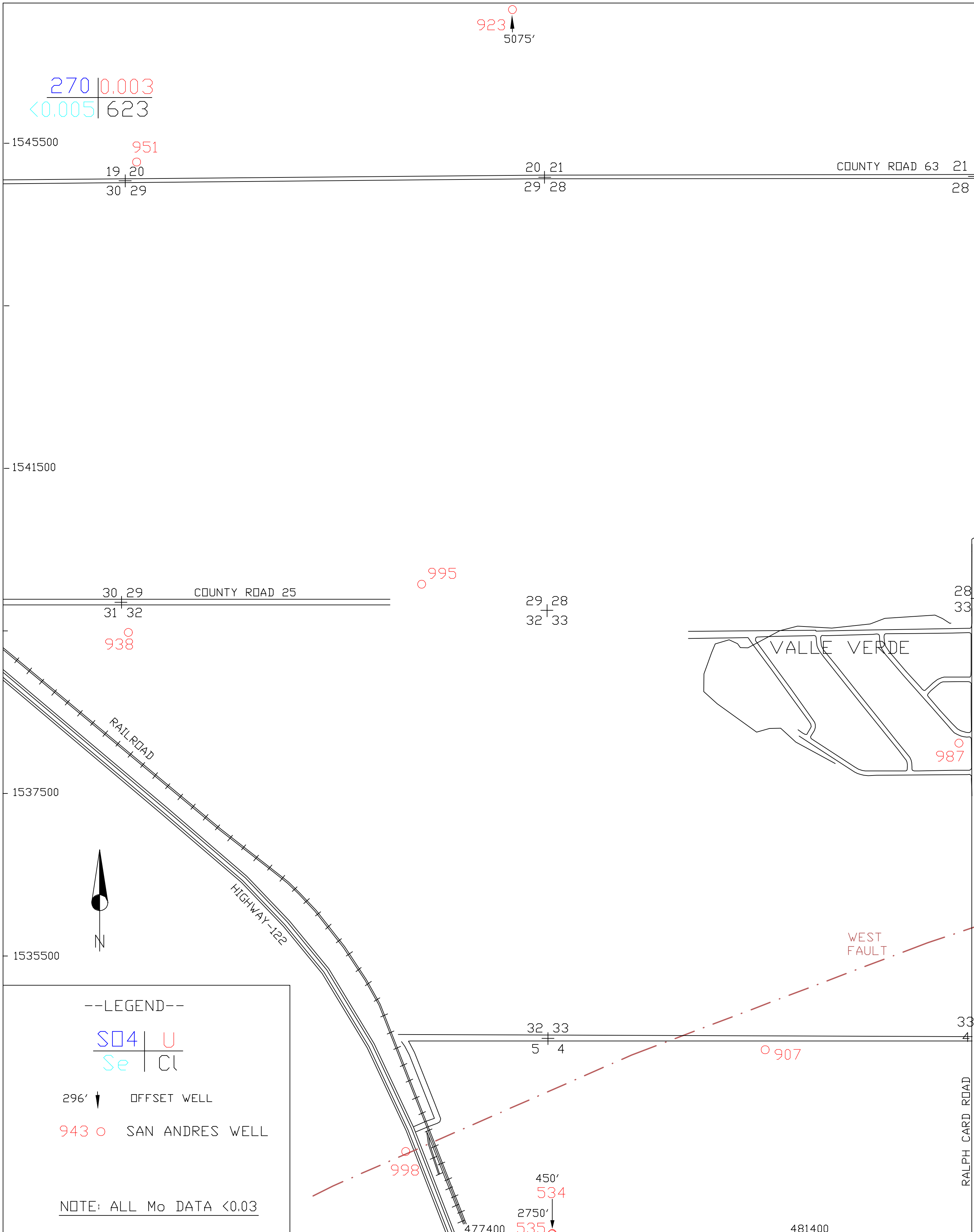
The San Andres aquifer is the most important regional aquifer in this area. The Chinle formation, which exists between the alluvium and the San Andres, is approximately 800 feet thick at the Homestake tailings site and consists of mainly shale with a few sandstone lenses. Therefore, the alluvial aquifer and the San Andres aquifer have a very thick aquitard separating them. The difference between the piezometric heads between the alluvial and San Andres aquifers is in the range of 70 to 80 feet, which indicates that the flow is highly retarded between these two systems. The San Andres and alluvial aquifers are only in direct connection in the western portion of the west area. Figure 8.0-1A presents the west area. Therefore, the San Andres aquifer is not as important to the evaluation of ground-water conditions at this site as the other aquifers. The San Andres aquifer has been used as the source for fresh-water injection into the alluvium and Chinle aquifers at the Grants Project, which has resulted in the San Andres monitoring program.

Table 8.0-1 presents well completion information for the San Andres wells in this area. Homestake has two deep wells, #1 Deep and #2 Deep, which are used to supply the fresh-water injection systems. San Andres well 951 is the fresh-water injection supply that was used to test the Sections 28 and 29 injection system. Figures 8.0-1A and 8.0-1B show the locations of the San Andres wells in this area. Recharge to the San Andres aquifer is mainly west of Figure 8.0-1A and flow in the San Andres is deeper below the land surface as it moves to the east. The water level (see Hydro-Engineering, 1996, for a map) is a very flat piezometric surface with a gradient from the west-northwest to the east-southeast. The gradient in the area indicates that the faults do not significantly affect the ground-water flow in the San Andres aquifer. The faults' displacements are not large enough to completely displace the entire thickness of this aquifer system.

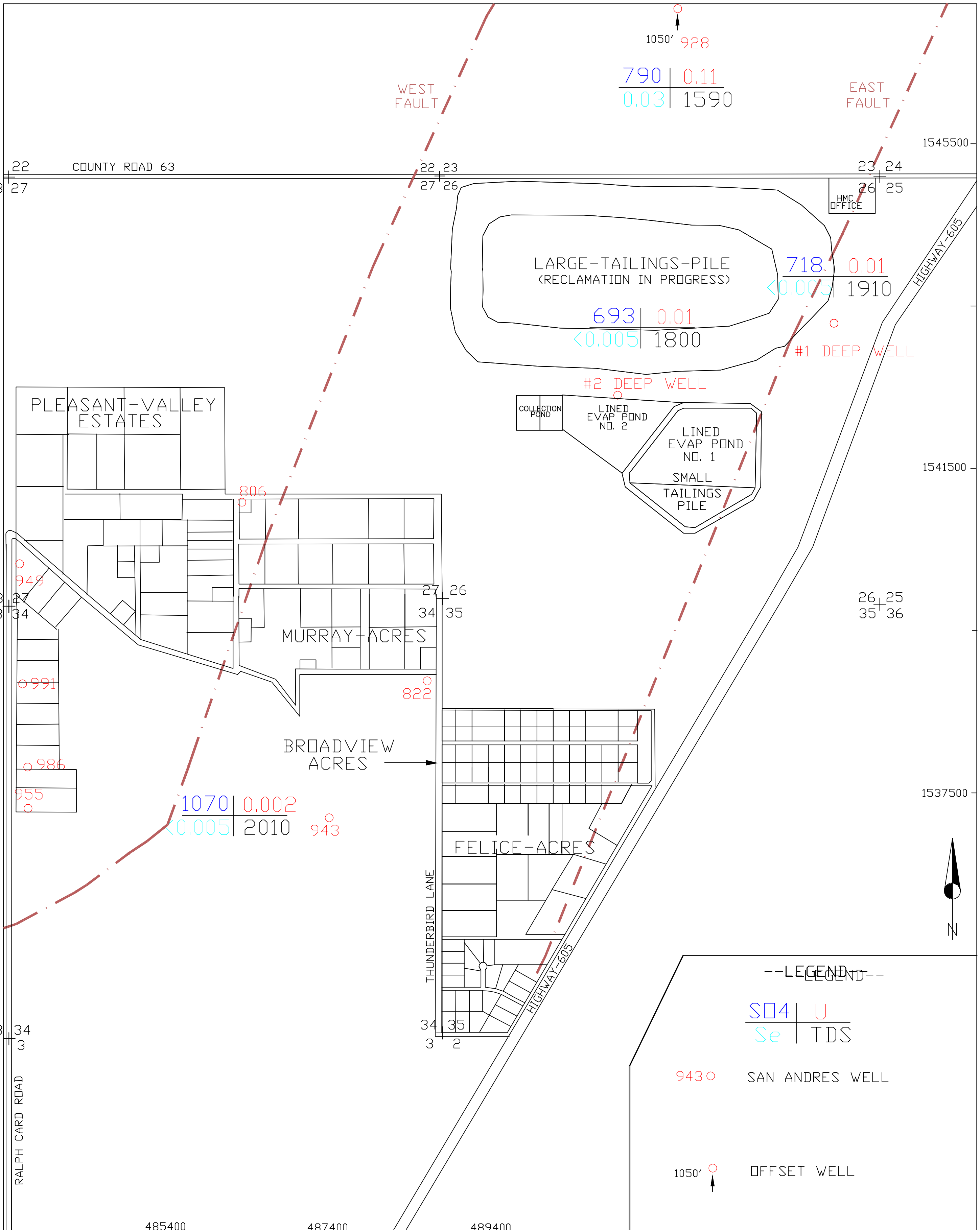
Figures 8.0-1A and 8.0-1B also present the most recent water-quality data for the San Andres aquifer. Tables B.6-1 and B.6-2 in Appendix B present the tabulation of the 2000 water-quality data for the San Andres aquifer. These two figures show the 2000 data for the San Andres aquifer in a manner similar to the data presented on the

Lower Chinle aquifer figures. The sulfate concentrations are presented in the upper left quadrant, while the TDS data is presented in the lower right quadrant. This shows that the sulfate concentrations vary from 270 mg/l to 1070 mg/l in the San Andres aquifer. Sulfate concentrations are typically near 700 mg/l for the two Homestake wells. TDS concentrations have varied from 623 to 2010 mg/l and generally show an increase in a downgradient direction. The higher concentrations of sulfate and TDS to the east are natural and typical of a limestone aquifer due to dissolving of the rock as the water is in contact with the formation longer. This increase from the recharge area to down dip is expected. Uranium concentrations for all of the San Andres wells monitored in 2000 are low with the highest value being 0.11 at well 928. Well 928 typically contains slightly higher uranium concentrations. Selenium concentrations in the San Andres vary from less than 0.005 to 0.03 mg/l with the high also being from well 928. All molybdenum concentrations are less than 0.03 mg/l.

Figure 8.0-2 presents sulfate concentrations with time for Homestake's two deep wells at this site. This data shows that sulfate concentrations in 2000 in the two Homestake deep wells were fairly steady. This plot also shows that the sulfate concentrations for the Sections 28 and 29 test injection supply well, 951, gradually declined in 2000.



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 02/19/2001
FIGURE 8.0-1A.	LOCATION OF SAN ANDRES WELLS AND WATER QUALITY FOR THE SAN ANDRES AQUIFER (WEST AREA), FALL 2000, mg/l	C:\PROJECTS\2001-06\DWGS\SAN1600 LJU page 8.0-3



SCALE: 1"=1600'	HOMESTAKE-MILL-AND-ADJACENT-PROPERTIES GRANTS-NM-TOWNSHIP-11&12-N-RANGE-10-W	DATE: 02/13/01 lju

FIGURE 8.0-1B. LOCATION OF SAN ANDRES WELLS AND WATER QUALITY FOR THE SAN ANDRES AQUIFER, FALL 2000, mg/l

PROJECTS\2000-06\DWG\SAN1600

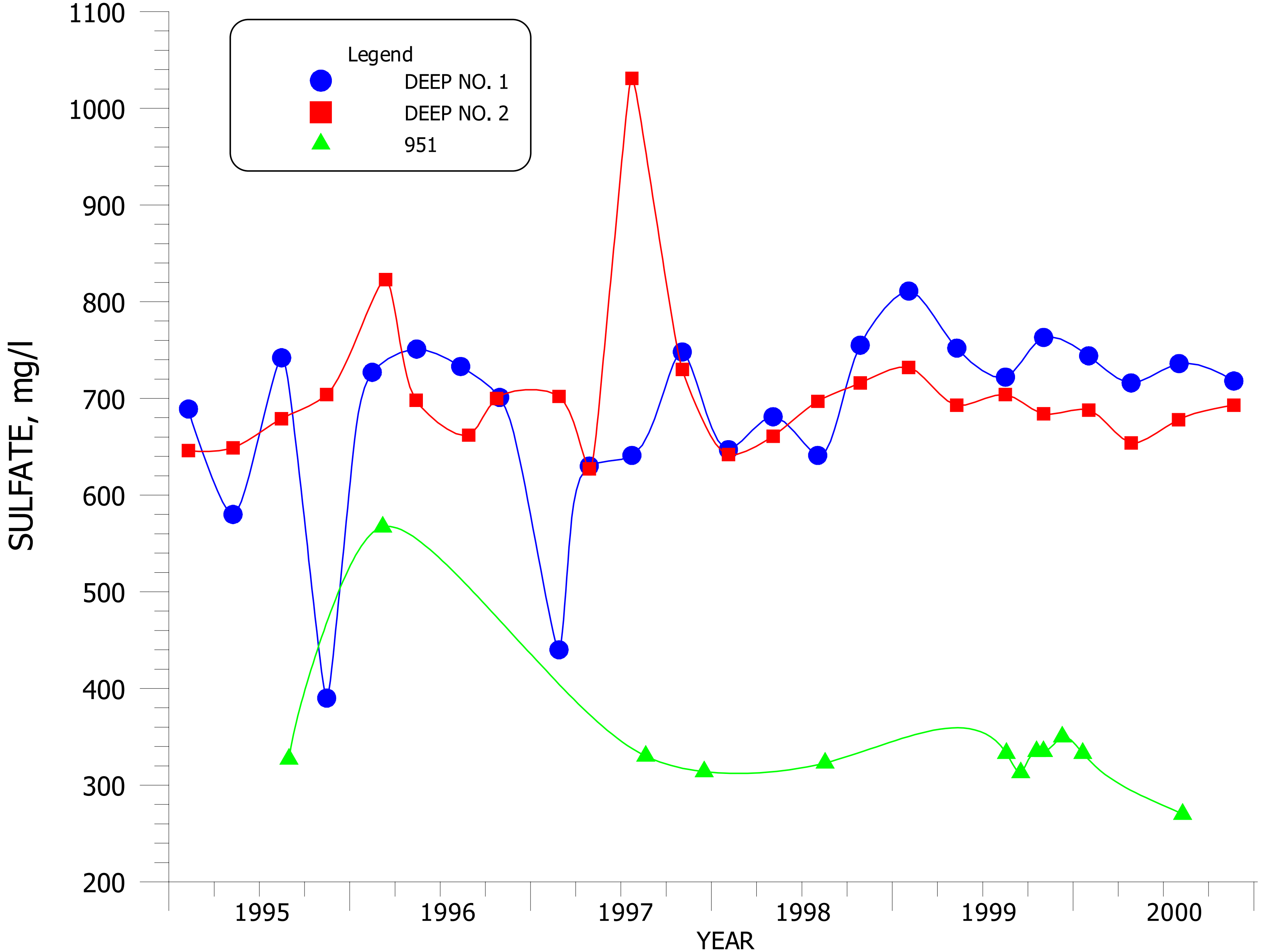


FIGURE 8.0-2. SULFATE CONCENTRATIONS FOR WELLS DEEP NO. 1, DEEP NO. 2 AND 951.

TABLE 8.0-1. BASIC WELL DATA FOR THE SAN ANDRES WELLS.

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO TOP OF SAN ANDRES (FT-LSD)	ELEV. TO TOP OF SAN ANDRES (FT-MSL)		CASING PERFOR-ATIONS (FT-LSD)
#1 Deep	1543307	493633	1000.0	10.0	02/15/1996	80	6503.76	0.0	6583.76	130	6454	A	---
										303	6281	U	---
										433	6151	M	---
										597	5987	L	---
										955	5629	S	919-999
#2 Deep	1542424	490972	870.0	---	02/01/2000	117.599	6458.06	0.0	6575.66	110	6466	A	---
										800	5776	S	-
0534	1534589	476549	1000.0	16.0	---	---	---	0.0	6552.57	---	---	S	-
0535	1530100	478450	198.0	12.0	---	---	---	0.0	6540.00	---	---	S	-
0806	1541120	486320	584.0	16.0	---	---	---	0.0	6567.00	90	6477	A	---
										520	6047	S	-
0822	1538920	488630	980.0	7.0	---	---	---	0.0	6557.00	790	5767	S	790-875
0907	1534250	480800	360.0	16.0	10/06/1994	78	6467.60	0.0	6545.60	123	6423	A	---
										262	6284	S	295-360
0911	1534350	476800	188.0	---	---	---	---	0.0	6552.60	---	---	S	-
0918	---	---	725.0	4.0	---	---	---	0.0	6702.40	620	6082	S	635-655
0919	---	---	628.0	5.0	---	---	---	0.0	6684.00	35	6649	A	---
										356	6328	S	364-571
0923	1552400	487900	330.0	5.0	04/06/1994	6464.97	157.63	0.0	6622.60	60	6563	A	---
										229	6394	S	234-330
0928	1548250	491700	864.0	---	08/09/2000	138.940	6458.66	1.1	6597.60	138	6458	A	---
										801	5795	S	-
0938	1539500	473040	---	---	09/18/1995	96.4400	6472.36	0.0	6568.80	95	6474	A	---
										120	6449	S	-
0943	1537222	487407	978.0	18.0	08/23/2000	60.9300	6494.98	0.0	6555.91	704	5852	S	703-978
0949	1540350	483600	551.0	---	---	---	---	0.0	6562.30	112	6450	A	---
										155	6407	L	---
										460	6102	S	400-493
										460	6102	S	505-551
0951	1545500	483200	275.0	10.0	08/09/2000	115	6458.70	0.9	6573.70	110	6463	A	---
										227	6346	S	241-275
0955	1537300	483700	498.0	5.0	11/03/1995	78.0500	6471.95	0.2	6550.00	40	6510	A	---
										420	6130	S	385-498
0986	1537860	483750	467.0	5.0	11/02/1995	80.75	6569.25	0.8	6650.00	65	6584	A	---
										85	6564	L	---
										415	6234	S	420-467
0987	1538120	483270	500.0	5.0	11/03/1995	54.4799	6595.52	1.0	6650.00	70	6579	A	---
										385	6264	S	425-470
0991	1538880	483630	500.0	---	11/08/1995	84.4100	6566.59	1.4	6651.00	---	---	S	-
0995	1540115	476594	---	---	---	---	---	0.0	6474.00	---	---	S	-

TABLE 8.0-1. BASIC WELL DATA FOR THE SAN ANDRES WELLS. (cont'd.)

WELL NAME	NORTH. COORD.	EAST. COORD.	WELL DEPTH (FT-MP)	CASING DIAM (IN)	WATER LEVEL DATE	WATER LEVEL DEPTH (FT-MP)	WATER LEVEL ELEV. (FT-MSL)	MP ABOVE LSD (FT)	MP ELEV. (FT-MSL)	DEPTH TO TOP OF SAN ANDRES (FT-LSD)	ELEV. TO TOP OF SAN ANDRES (FT-MSL)	CASING PERFOR-ATIONS (FT-LSD)
0998	1533080	476450	145.0	16.0	---	---	---	0.0	6550.00	---	---	S -

NOTE: A = Base of Alluvium
L = Lower Chinle
S = San Andres Aquifer
r = Reported
* = Abandoned

SECTION 9

TABLE OF CONTENTS

GROUND-WATER MONITORING FOR HOMESTAKE'S GRANTS PROJECT

9.0 REFERENCES

Environmental Restoration Group, 1999a, Statistical Evaluation of Alluvial Groundwater Quality Upgradient of the Homestake Site near Grants, NM, Molybdenum, Selenium and Uranium, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Environmental Restoration Group, 1999b, Statistical Evaluation of Alluvial Groundwater Quality Upgradient of the Homestake Site near Grants, NM, Nitrate, Sulfate and Total Dissolved Solids, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hoffman, G.L., 1976, Groundwater Hydrology of the Alluvium, Consulting Report to Homestake Mining Company.

Hoffman, G.L., 1977, Modeling, Design and Specifications of the Collection and Injection Systems, Consulting Report to Homestake Mining Company.

Hydro-Engineering, 1981, Ground-Water Discharge Plan for Homestake's Mill near Milan, New Mexico, DP-200, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1983, Ground-Water Discharge Plan for Homestake's Mill near Milan, New Mexico, DP-200, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1983a, Ground-Water Monitoring for Homestake's Mill Discharge Plan, DP-200, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1983b, Ground-Water Monitoring for Homestake's Mill Discharge Plan, DP-200, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1983c, Ground-Water Monitoring for Homestake's Mill Discharge Plan, DP-200, Fourth Quarter 1983, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1984a, Ground-Water Monitoring for Homestake's Mill Discharge Plan, DP-200, First Quarter 1984, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1984b, Ground-Water Monitoring for Homestake's Mill Discharge Plan, DP-200, Second Quarter 1984, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1984c, Ground-Water Monitoring for Homestake's Mill Discharge Plan, DP-200, Third Quarter 1984, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1985a, Ground-Water Monitoring for Homestake's Mill Discharge Plan, DP-200, Fourth Quarter 1984, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1985b, Ground-Water Monitoring for Homestake's Mill Discharge Plan, DP-200, First Quarter 1985, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1985c, Ground-Water Monitoring for Homestake's Mill Discharge Plan, DP-200, Second Quarter 1985, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1985d, Ground-Water Monitoring for Homestake's Mill Discharge Plan, DP-200, Third Quarter 1985, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1986a, Ground-Water Monitoring for Homestake's Mill Discharge Plan, DP-200, Fourth Quarter 1985, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1986b, Ground-Water Monitoring for Homestake's Mill Discharge Plan, DP-200, First Quarter 1986, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1986c, Ground-Water Monitoring for Homestake's Mill Discharge Plan, DP-200, Second Quarter 1986, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1987a, Ground-Water Monitoring for Homestake's Mill Discharge Plan, DP-200, Third and Fourth Quarters 1986, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1987b, Ground-Water Monitoring for Homestake's Mill Discharge Plan, DP-200, First and Second Quarters 1987, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1988a, Ground-Water Monitoring for Homestake's Mill Discharge Plan, DP-200, Third and Fourth Quarters 1987, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1988b, Ground-Water Monitoring for Homestake's Mill Discharge Plan, DP-200, First and Second Quarters 1988, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1988c, Renewal Ground-Water Discharge Plan, DP-200 for Homestake's Mill Near Milan, New Mexico, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1989, Corrective Action Plan for Homestake's Tailings, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1990, Ground-Water Monitoring for Homestake's Mill Discharge Plan DP-200 and NRC License SUA-1471, 1989, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1991, Ground-Water Monitoring for Homestake's Mill Discharge Plan DP-200 and NRC License SUA-1471, 1990, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1992, Ground-Water Monitoring for Homestake's Mill Discharge Plan DP-200 and NRC License SUA-1471, 1991, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1993a, Ground-Water Monitoring for Homestake's Mill Discharge Plan DP-200 and NRC License SUA-1471, 1992, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1993b, Water Quality Changes in the Alluvial Aquifer Adjacent to the Homestake Tailings, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1994, Ground-Water Monitoring for Homestake’s Mill Discharge Plan DP-200 and NRC License SCA-1471, 1993, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1995, Ground-Water Monitoring for Homestake's Mill Discharge Plan DP-200 and NRC License SUA-1471, 1994, Consulting Report for Homestake Mining Company, Grants, New Mexico.

Hydro-Engineering, 1996. Ground-Water Monitoring for Homestake's Grants Project, NRC License SUA-1471, and Discharge Plan DP-200. Consulting Report for Homestake Mining Company of California.

Hydro-Engineering, L.L.C, 1997. Ground-Water Monitoring for Homestake's Grants Project, NRC License SUA-1471, and Discharge Plan DP-200, 1996. Consulting Report for Homestake Mining Company of California.

Hydro-Engineering, L.L.C., 1998, Ground-Water Monitoring and Performance Review for Homestake's Grants Project, NRC License SUA-1471, and Discharge Plan DP-200, 1997. Consulting Report for Homestake Mining Company of California.

Hydro-Engineering, L.L.C., 1999, Ground-Water Monitoring and Performance Review for Homestake's Grants Project, NRC License SUA-1471, and Discharge Plan DP-200, 1998. Consulting Report for Homestake Mining Company of California.

Hydro-Engineering, L.L.C., 2000a, Ground-Water Monitoring and Performance Review for Homestake's Grants Project, NRC License SUA-1471, and Discharge Plan DP-200, 1999. Consulting Report for Homestake Mining Company of California.

Hydro-Engineering, L.L.C., 2000b, Ground-Water Hydrology at the Grants Reclamation Site, Consulting Report for Homestake Mining Company of California.

APPENDIX A

WATER LEVELS

TABLE OF CONTENTS

GROUND-WATER MONITORING
FOR HOMESTAKE'S GRANTS PROJECT

APPENDIX A

TABLE A.1-1. WATER LEVELS FOR HOMESTAKE'S ALLUVIAL WELLS.

WATER LEVEL ELEVATION (FT-MSL)

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1A		
6/6/2000	1.50	6583.93
6/26/2000	37.28	6548.15
8/7/2000	37.82	6547.61
9/5/2000	37.66	6547.77
10/2/2000	37.93	6547.50
11/6/2000	37.96	6547.47
12/5/2000	38.28	6547.15
1B		
9/28/2000	37.65	6546.77
1C		
9/28/2000	43.26	6544.73
1D		
9/29/2000	29.00	6556.97
1E		
1/12/2000	37.33	6546.98
9/28/2000	8.00	6576.31
1F		
9/28/2000	44.06	6543.32
1G		
9/28/2000	42.24	6544.83
1H		
10/3/2000	30.61	6555.78
1I		
10/3/2000	34.26	6564.09
1J		
10/3/2000	37.48	6547.92
1K		
10/3/2000	35.06	6549.07
1L		
10/3/2000	35.71	6542.90
1M		
10/3/2000	29.31	6546.22
1N		
10/3/2000	29.60	6561.25
1O		
10/3/2000	43.88	6551.06
1P		
10/3/2000	38.14	6547.10
B		
1/3/2000	42.18	6528.72
1/11/2000	42.18	6528.72
1/17/2000	42.27	6528.63
1/24/2000	42.11	6528.79
1/25/2000	42.08	6528.82
1/31/2000	41.94	6528.96
2/7/2000	42.09	6528.81
2/14/2000	41.95	6528.95
2/22/2000	41.84	6529.06
2/28/2000	41.68	6529.22
3/6/2000	41.71	6529.19
3/13/2000	41.78	6529.12
3/20/2000	41.42	6529.48
3/27/2000	41.74	6529.16
4/3/2000	41.91	6528.99
4/6/2000	41.73	6529.17
4/10/2000	41.73	6529.17
4/17/2000	41.89	6529.01
4/24/2000	41.88	6529.02
5/1/2000	41.90	6529.00
5/8/2000	41.79	6529.11
5/15/2000	41.89	6529.01
5/22/2000	41.91	6528.99
5/30/2000	41.84	6529.06
6/6/2000	41.94	6528.96
6/12/2000	42.00	6528.90
6/19/2000	41.98	6528.92
6/26/2000	41.94	6528.96
7/5/2000	41.93	6528.97
7/10/2000	41.85	6529.05
7/11/2000	41.87	6529.03
7/17/2000	41.88	6529.02
7/24/2000	41.90	6529.00
7/31/2000	41.91	6528.99
8/7/2000	41.86	6529.04
8/14/2000	41.76	6529.14
8/21/2000	41.64	6529.26
8/28/2000	41.62	6529.28
9/5/2000	41.70	6529.20
9/11/2000	41.70	6529.20
9/18/2000	41.69	6529.21
9/25/2000	41.74	6529.16
10/2/2000	41.76	6529.14
10/9/2000	41.78	6529.12
10/16/2000	41.72	6529.18
10/19/2000	41.70	6529.20
10/23/2000	41.76	6529.14
10/30/2000	41.79	6529.11
11/6/2000	41.84	6529.06
11/13/2000	42.10	6528.80
11/20/2000	42.23	6528.67
11/27/2000	42.04	6528.86
12/5/2000	42.04	6528.86
12/11/2000	42.08	6528.82
12/18/2000	43.28	6527.62
12/27/2000	42.20	6528.70
B1		
1/3/2000	45.50	6526.15
1/25/2000	45.30	6526.35
1/31/2000	45.24	6526.41
3/6/2000	44.90	6526.75
7/13/2000	45.11	6526.54
B2		
1/3/2000	57.58	6516.67
1/31/2000	57.71	6516.54
3/6/2000	49.59	6524.66
4/3/2000	50.06	6524.19
5/1/2000	50.04	6524.21
6/5/2000	51.10	6523.15
6/26/2000	48.00	6526.25
8/7/2000	49.41	6524.84
9/5/2000	49.66	6524.59
10/2/2000	48.58	6525.67
11/6/2000	49.60	6524.65
12/5/2000	49.78	6524.47
B3		
1/3/2000	63.88	6510.41
1/31/2000	62.83	6511.46
3/6/2000	60.97	6513.32
4/3/2000	57.30	6516.99
5/1/2000	80.43	6493.86
6/5/2000	81.50	6492.79
6/26/2000	48.85	6525.44
8/7/2000	71.35	6502.94
9/5/2000	73.98	6500.31
10/2/2000	48.26	6526.03
11/6/2000	61.18	6513.11
12/5/2000	62.15	6512.14
B4		
1/3/2000	51.48	6523.18
1/31/2000	50.98	6523.68
3/6/2000	50.48	6524.18
4/3/2000	51.81	6522.85
5/1/2000	51.80	6522.86
6/5/2000	51.94	6522.72
6/26/2000	49.11	6525.55
8/7/2000	50.00	6524.66
9/5/2000	55.31	6519.35
10/2/2000	48.30	6526.36
11/6/2000	55.71	6518.95
12/5/2000	59.60	6515.06
B5		
1/3/2000	60.59	6512.87
1/31/2000	59.91	6513.55
3/6/2000	61.58	6511.88
4/3/2000	64.09	6509.37
5/1/2000	76.51	6496.95
6/5/2000	77.70	6495.76
6/26/2000	47.76	6525.70
8/7/2000	48.12	6525.34
9/5/2000	48.92	6524.54
10/2/2000	47.04	6526.42
11/6/2000	56.56	6516.90
12/5/2000	57.23	6516.23
B6		
3/6/2000	54.20	6523.49
4/3/2000	55.35	6522.34
5/1/2000	51.14	6526.55
6/5/2000	50.90	6526.79
6/26/2000	48.24	6529.45
8/7/2000	48.74	6528.95
9/5/2000	48.68	6529.01
10/2/2000	47.24	6530.45
11/6/2000	48.60	6529.09
12/5/2000	48.94	6528.75

* Drawdown Tube Pressure, # Transducer Reading

TABLE A.1-1. WATER LEVELS FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

WATER LEVEL ELEVATION (FT-MSL)

B8

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	53.70	6522.05
1/31/2000	53.24	6522.51
3/6/2000	53.34	6522.41
4/3/2000	58.50	6517.25
5/1/2000	61.38	6514.37
6/5/2000	63.61	6512.14
6/26/2000	50.51	6525.24
8/7/2000	59.00	6516.75
9/5/2000	60.17	6515.58
10/2/2000	48.86	6526.89
11/6/2000	49.18	6526.57
12/5/2000	49.94	6525.81

B9

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	50.02	6526.15
1/31/2000	50.61	6525.56
3/6/2000	50.58	6525.59
4/3/2000	52.02	6524.15
5/1/2000	52.75	6523.42
6/6/2000	52.62	6523.55
6/26/2000	50.83	6525.34
8/7/2000	51.50	6524.67
9/5/2000	52.15	6524.02
10/2/2000	49.10	6527.07
11/6/2000	49.68	6526.49
12/5/2000	50.32	6525.85

B10

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	75.70	6501.07
1/31/2000	59.37	6517.40
3/6/2000	59.67	6517.10
4/3/2000	63.97	6512.80
5/1/2000	76.35	6500.42
6/5/2000	51.83	6524.94
6/26/2000	77.51	6499.26
8/7/2000	73.72	6503.05
9/5/2000	76.10	6500.67
10/2/2000	48.94	6527.83
11/6/2000	63.95	6512.82
12/5/2000	70.46	6506.31

B11

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	58.19	6519.20
1/31/2000	55.91	6521.48
3/6/2000	55.70	6521.69
4/3/2000	60.48	6516.91
5/1/2000	62.27	6515.12
6/5/2000	51.91	6525.48
6/26/2000	51.16	6526.23
8/7/2000	60.64	6516.75
9/5/2000	62.24	6515.15
10/2/2000	48.76	6528.63
10/31/2000	60.05	6517.34
11/6/2000	59.71	6517.68
12/5/2000	61.04	6516.35

BA

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	44.14	6527.44
1/11/2000	44.18	6527.40
1/17/2000	44.20	6527.38
1/24/2000	43.96	6527.62
1/31/2000	43.76	6527.82
2/7/2000	43.82	6527.76
2/14/2000	43.78	6527.80
2/22/2000	43.66	6527.92
2/28/2000	43.45	6528.13
3/6/2000	43.52	6528.06
3/13/2000	43.62	6527.96
3/20/2000	43.35	6528.23
3/27/2000	43.63	6527.95
4/3/2000	43.75	6527.83
4/10/2000	43.75	6527.83
4/17/2000	43.92	6527.66
4/24/2000	43.95	6527.63
5/1/2000	44.02	6527.56
5/8/2000	43.94	6527.64
5/15/2000	43.81	6527.77
5/22/2000	44.09	6527.49
5/30/2000	44.01	6527.57
6/6/2000	44.01	6527.57
6/12/2000	44.03	6527.55
6/19/2000	44.02	6527.56
6/26/2000	43.57	6528.01
7/5/2000	43.85	6527.73
7/10/2000	43.70	6527.88
7/17/2000	43.81	6527.77
7/24/2000	43.83	6527.75
7/31/2000	43.59	6527.99
8/7/2000	43.50	6528.08
8/14/2000	43.48	6528.10
8/21/2000	43.39	6528.19
8/28/2000	43.50	6528.08
9/5/2000	43.52	6528.06
9/11/2000	43.61	6527.97
9/18/2000	43.73	6527.85
9/25/2000	43.61	6527.97
10/2/2000	43.64	6527.94
10/9/2000	43.40	6528.18
10/16/2000	43.31	6528.27
10/23/2000	43.67	6527.91
10/30/2000	43.69	6527.89
11/6/2000	43.74	6527.84
11/13/2000	43.98	6527.60
11/20/2000	44.08	6527.50
11/27/2000	43.89	6527.69
12/5/2000	43.88	6527.70
12/11/2000	43.92	6527.66
12/18/2000	44.21	6527.37
12/27/2000	44.10	6527.48

BB2

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
12/14/2000	48.84	6524.96

BC

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	49.48	6525.13
1/25/2000	49.66	6524.95
1/31/2000	49.67	6524.94
3/6/2000	49.60	6525.01
10/19/2000	47.90	6526.71
12/14/2000	47.20	6527.41

BP

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
2/2/2000	46.10	6526.20
5/2/2000	46.96	6525.34
8/1/2000	46.09	6526.21
11/21/2000	46.14	6526.16
12/14/2000	46.34	6525.96

C1

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
7/19/2000	41.58	6523.54
8/7/2000	48.70	6516.42
9/5/2000	47.56	6517.56
10/2/2000	41.62	6523.50
11/6/2000	40.33	6524.79
12/5/2000	40.50	6524.62

C2

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	55.50	6509.62
1/31/2000	58.16	6506.96
3/6/2000	60.60	6504.52
4/3/2000	47.92	6517.20
5/1/2000	50.62	6514.50
6/5/2000	37.94	6527.18
6/26/2000	37.00	6528.12
7/19/2000	36.85	6528.27
8/7/2000	43.60	6521.52
9/5/2000	37.33	6527.79
10/2/2000	36.72	6528.40
11/6/2000	35.63	6529.49
12/5/2000	36.10	6529.02

C3R

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	41.04	6528.34
1/31/2000	39.64	6529.74
3/6/2000	39.45	6529.93
4/3/2000	40.02	6529.36
5/1/2000	39.98	6529.40
6/5/2000	40.05	6529.33
6/26/2000	37.60	6531.78
7/19/2000	38.13	6531.25
8/7/2000	38.60	6530.78
9/5/2000	38.21	6531.17
10/2/2000	37.99	6531.39
11/6/2000	37.10	6532.28
12/5/2000	37.72	6531.66

C4

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	42.26	6528.64
1/31/2000	42.32	6528.58
3/6/2000	42.05	6528.85
4/3/2000	41.63	6529.27
5/1/2000	41.61	6529.29
6/5/2000	41.45	6529.45
6/26/2000	39.98	6530.92
7/19/2000	39.71	6531.19
8/7/2000	40.50	6530.40
9/5/2000	40.09	6530.81
10/2/2000	39.66	6531.24

C5

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
7/19/2000	38.60	6531.22

* Drawdown Tube Pressure, # Transducer Reading

TABLE A.1-1. WATER LEVELS FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

WATER LEVEL ELEVATION (FT-MSL)

C6

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	56.86	6528.03
6/6/2000	66.75	6518.14
6/26/2000	63.93	6520.96
8/7/2000	58.24	6526.65
9/5/2000	59.22	6525.67
10/2/2000	66.33	6518.56
11/6/2000	62.54	6522.35
12/5/2000	61.52	6523.37

C7

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	64.89	6519.55
1/31/2000	67.63	6516.81
3/6/2000	55.48	6528.96
4/3/2000	55.08	6529.36
5/1/2000	55.41	6529.03
6/6/2000	60.71	6523.73
6/26/2000	68.24	6516.20
8/7/2000	55.31	6529.13
9/5/2000	62.74	6521.70
10/2/2000	55.55	6528.89
11/6/2000	62.88	6521.56
12/5/2000	62.48	6521.96

C8

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	68.45	6516.04
1/31/2000	64.76	6519.73
3/6/2000	77.04	6507.45
4/3/2000	76.95	6507.54
5/1/2000	76.50	6507.99
6/6/2000	70.63	6513.86
6/26/2000	55.87	6528.62
8/7/2000	55.32	6529.17
9/5/2000	55.84	6528.65
10/2/2000	54.84	6529.65
11/6/2000	54.37	6530.12
12/5/2000	53.97	6530.52

C9

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	59.62	6524.93
1/31/2000	59.54	6525.01
3/6/2000	53.42	6531.13
4/3/2000	53.90	6530.65
5/1/2000	54.20	6530.35
6/6/2000	74.42	6510.13
6/26/2000	64.92	6519.63
8/7/2000	64.10	6520.45
9/5/2000	65.68	6518.87
10/2/2000	53.84	6530.71
11/6/2000	64.80	6519.75
12/5/2000	66.26	6518.29

C10

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	51.98	6533.28
6/6/2000	68.41	6516.85
6/26/2000	68.15	6517.11
8/7/2000	59.88	6525.38
9/5/2000	61.84	6523.42
10/2/2000	67.18	6518.08
11/6/2000	67.11	6518.15
12/5/2000	65.98	6519.28

C11

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	42.90	6538.48
1/31/2000	43.04	6538.34
3/6/2000	43.10	6538.28
4/3/2000	42.95	6538.43
5/1/2000	44.14	6537.24
6/6/2000	44.91	6536.47
6/26/2000	44.65	6536.73
8/7/2000	44.30	6537.08
9/5/2000	44.31	6537.07
10/2/2000	43.48	6537.90
11/6/2000	43.30	6538.08
12/5/2000	43.20	6538.18

C12

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	38.50	6542.05
1/31/2000	38.85	6541.70
3/6/2000	39.05	6541.50
4/3/2000	39.60	6540.95
5/1/2000	39.09	6541.46
6/6/2000	45.81	6534.74
6/26/2000	39.49	6541.06
8/7/2000	42.35	6538.20
9/5/2000	40.95	6539.60
10/2/2000	38.74	6541.81
11/6/2000	41.12	6539.43
12/5/2000	41.25	6539.30

C13

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
7/19/2000	39.36	6530.65
8/3/2000	39.90	6530.11
8/10/2000	40.48	6529.53
8/17/2000	40.28	6529.73
8/24/2000	39.89	6530.12
8/31/2000	39.63	6530.38
9/7/2000	39.82	6530.19
9/14/2000	40.42	6529.59
9/21/2000	40.55	6529.46
9/28/2000	39.28	6530.73
10/5/2000	39.25	6530.76
10/12/2000	38.92	6531.09
10/19/2000	38.74	6531.27
10/26/2000	38.40	6531.61
11/2/2000	38.39	6531.62
11/9/2000	38.22	6531.79
11/28/2000	37.82	6532.19

C14

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
7/19/2000	39.42	6530.27
8/3/2000	40.35	6529.34
8/10/2000	40.82	6528.87
8/17/2000	40.52	6529.17
8/24/2000	40.10	6529.59
8/31/2000	39.89	6529.80
9/7/2000	40.20	6529.49
9/14/2000	40.85	6528.84
9/21/2000	40.95	6528.74
9/28/2000	39.62	6530.07
10/5/2000	39.28	6530.41
10/12/2000	38.94	6530.75
10/19/2000	38.78	6530.91
10/26/2000	38.44	6531.25
11/2/2000	38.35	6531.34
11/9/2000	38.29	6531.40
11/28/2000	38.74	6530.95

D1

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	46.98	6523.92
1/31/2000	46.71	6524.19
2/2/2000	46.75	6524.15
3/6/2000	46.27	6524.63
4/27/2000	46.88	6524.02
8/1/2000	46.28	6524.62
11/21/2000	46.68	6524.22
12/14/2000	46.80	6524.10

DAA

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	4.60	6576.00
1/31/2000	1.00	6579.60
3/6/2000	3.00	6577.60
4/3/2000	5.30	6575.30
5/2/2000	6.80	6573.80
6/6/2000	7.30	6573.30
6/26/2000	29.60	6551.00
8/7/2000	14.20	6566.40
9/5/2000	7.20	6573.40
10/2/2000	6.40	6574.20
11/6/2000	1.50	6579.10
12/5/2000	2.00	6578.60

DAB

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	3.50	6576.38
1/31/2000	2.50	6577.38
3/6/2000	3.56	6576.32
4/3/2000	4.56	6575.32
5/2/2000	0.50	6579.38
6/6/2000	2.00	6577.88
6/26/2000	33.00	6546.88
8/7/2000	15.84	6564.04
9/5/2000	12.96	6566.92
10/2/2000	11.20	6568.68
11/6/2000	11.90	6567.98
12/5/2000	0.50	6579.38

DC

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	46.06	6525.25
1/31/2000	46.32	6524.99
2/2/2000	46.42	6524.89
3/6/2000	46.45	6524.86
8/2/2000	47.76	6523.55
12/14/2000	45.30	6526.01

DD

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
4/6/2000	57.96	6534.63

DL

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	5.60	6579.27
1/31/2000	1.50	6583.37
3/6/2000	2.60	6582.27
4/3/2000	3.00	6581.87
5/2/2000	8.05	6576.82
6/6/2000	6.45	6578.42
6/26/2000	30.60	6554.27
8/7/2000	2.60	6582.27
9/5/2000	2.95	6581.92
10/2/2000	1.65	6583.22
11/6/2000	2.50	6582.37
12/5/2000	2.00	6582.87

* Drawdown Tube Pressure, # Transducer Reading

TABLE A.1-1. WATER LEVELS FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

WATER LEVEL ELEVATION (FT-MSL)

DM

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	52.03	6523.05
1/31/2000	51.58	6523.50
3/6/2000	51.55	6523.53
3/9/2000	51.80	6523.28
8/31/2000	50.77	6524.31
12/14/2000	52.00	6523.08

DN

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	51.10	6525.56
1/31/2000	51.10	6525.56
3/6/2000	51.05	6525.61
4/3/2000	51.38	6525.28
5/1/2000	51.50	6525.16
6/6/2000	51.64	6525.02
6/26/2000	51.66	6525.00
8/7/2000	51.51	6525.15
9/5/2000	51.46	6525.20
10/2/2000	51.35	6525.31
11/6/2000	51.06	6525.60
12/5/2000	51.39	6525.27
12/14/2000	51.52	6525.14

DNR

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	51.95	6525.11
1/31/2000	51.91	6525.15
3/6/2000	51.84	6525.22
4/3/2000	52.34	6524.72
5/1/2000	52.41	6524.65
6/6/2000	52.56	6524.50
6/26/2000	51.80	6525.26
8/7/2000	51.80	6525.26
9/5/2000	51.82	6525.24
10/2/2000	51.47	6525.59
11/6/2000	51.48	6525.58
12/5/2000	51.80	6525.26

DO

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	65.87	6524.46
1/31/2000	65.41	6524.92
3/6/2000	65.24	6525.09
4/3/2000	65.91	6524.42
5/1/2000	65.93	6524.40
6/6/2000	66.01	6524.32
6/26/2000	64.48	6525.85
8/7/2000	64.74	6525.59
9/5/2000	66.89	6523.44
10/2/2000	64.71	6525.62
11/6/2000	64.85	6525.48
12/5/2000	65.20	6525.13

DQ

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	51.22	6525.21
1/31/2000	50.71	6525.72
2/2/2000	51.01	6525.42
3/6/2000	50.70	6525.73
4/27/2000	52.80	6523.63
8/1/2000	51.60	6524.83
11/21/2000	50.66	6525.77

DR

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	66.25	6524.58
1/31/2000	65.73	6525.10
3/6/2000	65.59	6525.24
4/3/2000	65.45	6525.38
5/1/2000	66.15	6524.68
6/5/2000	65.98	6524.85
6/26/2000	65.75	6525.08
8/7/2000	65.55	6525.28
9/5/2000	65.81	6525.02
10/2/2000	64.40	6526.43
11/6/2000	66.12	6524.71
12/5/2000	66.05	6524.78

DT

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	61.00	6522.81
1/31/2000	60.45	6523.36
3/6/2000	60.20	6523.61
4/3/2000	60.14	6523.67
5/1/2000	60.24	6523.57
6/5/2000	60.44	6523.37
6/26/2000	59.15	6524.66
8/7/2000	59.41	6524.40
9/5/2000	59.78	6524.03
10/2/2000	59.30	6524.51
11/6/2000	59.93	6523.88
12/5/2000	59.80	6524.01

DV

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	59.70	6525.90
1/31/2000	59.30	6526.30
3/6/2000	58.98	6526.62
4/3/2000	60.65	6524.95
5/1/2000	60.95	6524.65
6/5/2000	61.15	6524.45
6/26/2000	59.48	6526.12
8/7/2000	59.91	6525.69
9/5/2000	60.87	6524.73
10/2/2000	57.95	6527.65
11/6/2000	58.35	6527.25
12/5/2000	58.45	6527.15

DW

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	9.50	6579.16
1/31/2000	8.10	6580.56
3/6/2000	7.85	6580.81
4/3/2000	2.40	6586.26
5/2/2000	6.50	6582.16
6/6/2000	5.95	6582.71
6/26/2000	47.00	6541.66
8/7/2000	2.50	6586.16
9/5/2000	3.20	6585.46
10/2/2000	4.20	6584.46
11/6/2000	2.90	6585.76
12/5/2000	2.50	6586.16

DY

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	4.97	6575.64
1/31/2000	5.10	6575.51
3/6/2000	5.50	6575.11
4/3/2000	5.70	6574.91
5/2/2000	5.95	6574.66
6/6/2000	6.48	6574.13
6/26/2000	10.40	6570.21
8/7/2000	8.60	6572.01
9/5/2000	5.76	6574.85
10/2/2000	4.50	6576.11
11/6/2000	1.50	6579.11
12/5/2000	1.50	6579.11

DZ

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	59.03	6531.50
1/31/2000	59.14	6531.39
3/6/2000	59.18	6531.35
3/9/2000	59.46	6531.07
8/31/2000	60.58	6529.95
12/14/2000	59.92	6530.61

E

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	5.00	6563.94
1/31/2000	4.00	6564.94
3/6/2000	4.00	6564.94
4/3/2000	5.00	6563.94
5/1/2000	4.00	6564.94
6/5/2000	4.00	6564.94
6/26/2000	4.00	6564.94
8/7/2000	5.30	6563.64
9/5/2000	6.00	6562.94
10/2/2000	5.00	6563.94
11/6/2000	4.40	6564.54
12/5/2000	2.00	6566.94

F

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/25/2000	31.61	6533.21
7/13/2000	31.24	6533.58
12/14/2000	34.19	6530.63

FB

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/27/2000	34.28	6531.38
10/19/2000	34.03	6531.63

G

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	4.00	6559.09
1/31/2000	4.00	6559.09
3/6/2000	4.00	6559.09
4/3/2000	4.00	6559.09

GA

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	5.00	6557.79
1/31/2000	4.00	6558.79
3/6/2000	4.00	6558.79
4/3/2000	4.00	6558.79

GB

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	6.00	6556.99
1/31/2000	4.00	6558.99
3/6/2000	4.00	6558.99
4/3/2000	4.00	6558.99

GC

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	4.00	6561.17
1/31/2000	4.00	6561.17
3/6/2000	4.00	6561.17
4/3/2000	4.00	6561.17

* Drawdown Tube Pressure, # Transducer Reading

TABLE A.1-1. WATER LEVELS FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

WATER LEVEL ELEVATION (FT-MSL)

GE

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	6.00	6560.27
1/31/2000	4.00	6562.27
3/6/2000	4.00	6562.27
4/3/2000	4.00	6562.27

GF

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	7.00	6559.01
1/31/2000	4.00	6562.01
3/6/2000	4.00	6562.01
4/3/2000	4.00	6562.01

GG

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	4.00	6559.13
1/31/2000	4.00	6559.13
3/6/2000	4.00	6559.13
4/3/2000	4.00	6559.13

GH

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
6/14/2000	32.04	6530.72
11/29/2000	31.90	6530.86

GI

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	7.00	6558.85
1/31/2000	4.00	6561.85
3/6/2000	4.00	6561.85
4/3/2000	4.00	6561.85

GJ

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	5.00	6561.15
1/31/2000	4.00	6562.15
3/6/2000	4.00	6562.15
4/3/2000	4.00	6562.15

GK

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	6.00	6560.76
1/31/2000	4.00	6562.76
3/6/2000	4.00	6562.76
4/3/2000	4.00	6562.76

GL

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	4.00	6563.15
1/31/2000	4.00	6563.15
3/6/2000	4.00	6563.15
4/3/2000	4.00	6563.15

GM

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	5.00	6562.65
1/31/2000	4.00	6563.65
3/6/2000	4.00	6563.65
4/3/2000	4.00	6563.65

GN

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	4.00	6563.97
1/31/2000	4.00	6563.97
3/6/2000	4.00	6563.97
4/3/2000	4.00	6563.97

GO

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	5.00	6558.00
1/31/2000	4.00	6559.00
3/6/2000	5.00	6558.00
4/3/2000	4.00	6559.00

GP

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	8.00	6556.87
1/31/2000	4.30	6560.57
3/6/2000	4.00	6560.87
4/3/2000	4.00	6560.87
5/1/2000	4.00	6560.87
6/5/2000	6.00	6558.87
6/26/2000	7.00	6557.87
8/7/2000	6.00	6558.87
9/5/2000	5.00	6559.87
10/2/2000	8.00	6556.87
11/6/2000	4.00	6560.87
12/5/2000	5.00	6559.87

GS

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	35.90	6538.41
1/31/2000	39.50	6534.81
3/6/2000	38.30	6536.01
4/3/2000	5.00	6569.31
5/1/2000	6.58	6567.73
6/5/2000	21.00	6553.31
6/26/2000	28.00	6546.31
8/7/2000	23.00	6551.31
9/5/2000	23.48	6550.83
10/2/2000	25.10	6549.21
11/6/2000	35.60	6538.71
12/5/2000	33.00	6541.31

GT

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	6.00	6570.17
1/31/2000	5.00	6571.17
3/6/2000	4.00	6572.17
4/3/2000	6.00	6570.17
5/1/2000	7.00	6569.17
6/5/2000	5.40	6570.77
6/26/2000	6.00	6570.17
8/7/2000	2.00	6574.17
9/5/2000	7.50	6568.67
10/2/2000	13.00	6563.17
11/6/2000	7.44	6568.73
12/5/2000	8.30	6567.87

GU

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	4.00	6571.65
1/31/2000	5.00	6570.65
3/6/2000	4.00	6571.65
4/3/2000	4.00	6571.65
5/1/2000	4.00	6571.65
6/5/2000	4.00	6571.65
6/26/2000	4.00	6571.65
8/7/2000	4.00	6571.65
9/5/2000	5.00	6570.65
10/2/2000	5.00	6570.65
11/6/2000	4.00	6571.65
12/5/2000	5.00	6570.65

GV

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
9/28/2000	49.51	6527.87

I

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/25/2000	32.98	6534.22
7/18/2000	32.90	6534.30

J

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	5.00	6565.19
1/31/2000	4.00	6566.19
3/6/2000	4.00	6566.19
4/3/2000	6.00	6564.19
5/1/2000	5.00	6565.19
6/5/2000	12.00	6558.19
6/26/2000	8.00	6562.19
8/7/2000	6.00	6564.19
9/5/2000	6.60	6563.59
10/2/2000	5.00	6565.19
11/6/2000	4.00	6566.19
12/5/2000	6.00	6564.19

J1

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	21.00	6550.85
1/31/2000	32.00	6539.85
3/6/2000	29.30	6542.55
4/3/2000	27.30	6544.55
5/1/2000	28.00	6543.85
6/5/2000	26.00	6545.85
6/26/2000	19.22	6552.63
8/7/2000	23.74	6548.11
9/5/2000	24.00	6547.85
10/2/2000	28.00	6543.85
11/6/2000	24.00	6547.85
12/5/2000	18.80	6553.05

J2

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	33.00	6537.19
1/31/2000	61.70	6508.49
3/6/2000	28.60	6541.59
4/3/2000	27.55	6542.64
5/1/2000	24.00	6546.19
6/5/2000	28.30	6541.89
6/26/2000	29.10	6541.09
8/7/2000	28.00	6542.19
9/5/2000	27.80	6542.39
10/2/2000	29.00	6541.19
11/6/2000	26.30	6543.89
12/5/2000	26.00	6544.19

J3

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	16.40	6552.74
1/31/2000	63.00	6506.14
3/6/2000	29.80	6539.34
4/3/2000	21.60	6547.54
5/1/2000	28.00	6541.14
6/5/2000	28.00	6541.14
6/26/2000	28.30	6540.84
8/7/2000	28.58	6540.56
9/5/2000	28.60	6540.54
10/2/2000	28.00	6541.14
11/6/2000	26.40	6542.74
12/5/2000	27.40	6541.74

* Drawdown Tube Pressure, # Transducer Reading

TABLE A.1-1. WATER LEVELS FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

WATER LEVEL ELEVATION (FT-MSL)

J4

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	33.60	6535.92
1/31/2000	33.60	6535.92
3/6/2000	32.00	6537.52
4/3/2000	25.40	6544.12
5/1/2000	18.00	6551.52
6/5/2000	26.00	6543.52
6/26/2000	19.00	6550.52
8/7/2000	26.00	6543.52
9/5/2000	28.20	6541.32
10/2/2000	28.00	6541.52
11/6/2000	21.60	6547.92
12/5/2000	18.00	6551.52

J5

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	11.80	6557.99
1/31/2000	25.30	6544.49
3/6/2000	28.30	6541.49
4/3/2000	23.00	6546.79
5/1/2000	6.00	6563.79
6/5/2000	10.66	6559.13
6/26/2000	11.00	6558.79
8/7/2000	5.00	6564.79
9/5/2000	10.00	6559.79
10/2/2000	12.10	6557.69
11/6/2000	12.00	6557.79
12/5/2000	10.55	6559.24

J6

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	12.60	6557.50
1/31/2000	6.50	6563.60
3/6/2000	15.00	6555.10
4/3/2000	12.00	6558.10
5/1/2000	5.00	6565.10
6/5/2000	8.30	6561.80
6/26/2000	9.60	6560.50
8/7/2000	5.00	6565.10
9/5/2000	11.30	6558.80
10/2/2000	16.20	6553.90
11/6/2000	7.10	6563.00
12/5/2000	7.10	6563.00

J7

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	34.00	6536.38
1/31/2000	20.00	6550.38
3/6/2000	24.60	6545.78
4/3/2000	21.20	6549.18
5/1/2000	26.60	6543.78
6/5/2000	27.00	6543.38
6/26/2000	22.08	6548.30
8/7/2000	16.30	6554.08
9/5/2000	17.00	6553.38
10/2/2000	19.33	6551.05
11/6/2000	27.80	6542.58
12/5/2000	19.50	6550.88

J8

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	36.00	6534.79
1/31/2000	28.00	6542.79
3/6/2000	28.70	6542.09
4/3/2000	27.44	6543.35
5/1/2000	21.30	6549.49
6/5/2000	29.00	6541.79
6/26/2000	23.70	6547.09
8/7/2000	22.16	6548.63
9/5/2000	22.00	6548.79
10/2/2000	24.55	6546.24
11/6/2000	22.00	6548.79
12/5/2000	23.30	6547.49

J9

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	28.60	6542.60
1/31/2000	58.00	6513.20
3/6/2000	29.70	6541.50
4/3/2000	23.10	6548.10
5/1/2000	28.00	6543.20
6/5/2000	23.00	6548.20
6/26/2000	23.64	6547.56
8/7/2000	27.83	6543.37
9/5/2000	28.00	6543.20
10/2/2000	28.30	6542.90
11/6/2000	5.00	6566.20
12/5/2000	24.60	6546.60

J10

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	27.00	6543.91
1/31/2000	57.80	6513.11
3/6/2000	29.80	6541.11
4/3/2000	28.80	6542.11
5/1/2000	12.00	6558.91
6/5/2000	19.00	6551.91
6/26/2000	28.40	6542.51
8/7/2000	26.94	6543.97
9/5/2000	26.00	6544.91
10/2/2000	27.80	6543.11
11/6/2000	26.00	6544.91
12/5/2000	18.00	6552.91

J11

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	9.00	6560.86
1/31/2000	57.00	6512.86
3/6/2000	18.00	6551.86
4/3/2000	11.73	6558.13
5/1/2000	5.00	6564.86
6/5/2000	8.00	6561.86
6/26/2000	10.36	6559.50
8/7/2000	10.00	6559.86
9/5/2000	12.10	6557.76
10/2/2000	15.00	6554.86
11/6/2000	12.00	6557.86
12/5/2000	12.00	6557.86

J12

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	10.00	6560.30
1/31/2000	35.30	6535.00
3/6/2000	30.40	6539.90
4/3/2000	11.65	6558.65
5/1/2000	12.60	6557.70
6/5/2000	16.34	6553.96
6/26/2000	13.00	6557.30
8/7/2000	8.34	6561.96
9/5/2000	9.40	6560.90
10/2/2000	10.00	6560.30
11/6/2000	24.00	6546.30
12/5/2000	18.44	6551.86

JC

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	25.80	6542.64
1/31/2000	56.60	6511.84
3/6/2000	22.60	6545.84
4/3/2000	25.54	6542.90
5/1/2000	25.00	6543.44
6/5/2000	28.80	6539.64
6/26/2000	21.00	6547.44
8/7/2000	24.00	6544.44
9/5/2000	26.30	6542.14
10/2/2000	28.60	6539.84
11/6/2000	22.50	6545.94
12/5/2000	22.10	6546.34

K2

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	38.10	6534.11
1/31/2000	36.40	6535.81
2/9/2000	35.60	6536.61
3/6/2000	34.76	6537.45
4/3/2000	36.05	6536.16
4/11/2000	35.66	6536.55
5/1/2000	32.74	6539.47
6/5/2000	32.30	6539.91
6/26/2000	33.74	6538.47
7/24/2000	28.88	6543.33
8/15/2000	28.10	6544.11
10/18/2000	26.73	6545.48

K4

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
4/25/2000	61.34	6540.68
8/7/2000	67.31	6534.71
9/5/2000	71.12	6530.90
10/2/2000	68.28	6533.74
10/23/2000	63.82	6538.20
11/6/2000	62.11	6539.91
12/5/2000	80.59	6521.43

K5

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
4/25/2000	64.18	6537.55
6/26/2000	82.50	6519.23
8/7/2000	82.52	6519.21
9/5/2000	82.55	6519.18
10/2/2000	82.53	6519.20
10/23/2000	83.00	6518.73
11/6/2000	82.69	6519.04
12/5/2000	80.58	6521.15

K6

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/6/2000	32.30	6537.77
1/12/2000	30.21	6539.86
2/9/2000	31.68	6538.39
4/11/2000	31.20	6538.87
5/1/2000	26.60	6543.47
6/5/2000	18.00	6552.07
6/26/2000	12.50	6557.57
8/7/2000	11.00	6559.07
9/5/2000	11.50	6558.57
10/2/2000	6.00	6564.07
11/6/2000	8.00	6562.07
12/5/2000	18.00	6552.07

TABLE A.1-1. WATER LEVELS FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

WATER LEVEL ELEVATION (FT-MSL)

K7

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
4/26/2000	61.28	6540.25
6/26/2000	82.07	6519.46
8/7/2000	79.35	6522.18
9/5/2000	82.14	6519.39
10/2/2000	82.11	6519.42
11/6/2000	65.51	6536.02
12/5/2000	64.58	6536.95

K8

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
4/26/2000	61.60	6538.89
6/26/2000	82.25	6518.24
8/7/2000	82.28	6518.21
9/5/2000	82.28	6518.21
10/2/2000	82.30	6518.19
11/6/2000	82.36	6518.13
12/5/2000	57.46	6543.03

K9

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
4/26/2000	63.91	6536.43
6/26/2000	82.21	6518.13
8/7/2000	78.56	6521.78
9/5/2000	82.28	6518.06
10/2/2000	68.14	6532.20
11/6/2000	75.94	6524.40
12/5/2000	68.96	6531.38

K10

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
4/26/2000	66.08	6534.73
6/26/2000	74.18	6526.63
8/7/2000	83.91	6516.90
9/5/2000	83.94	6516.87
10/2/2000	65.81	6535.00
11/6/2000	83.90	6516.91
12/5/2000	63.94	6536.87

K11

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
4/26/2000	67.48	6533.13
6/26/2000	73.61	6527.00
8/7/2000	79.60	6521.01
9/5/2000	78.82	6521.79
10/2/2000	73.73	6526.88
11/6/2000	72.62	6527.99
12/5/2000	70.90	6529.71

KA

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	45.22	6526.97
1/31/2000	45.01	6527.18
3/6/2000	47.10	6525.09
4/3/2000	46.44	6525.75
5/1/2000	44.78	6527.41
6/5/2000	42.40	6529.79
6/26/2000	36.56	6535.63
8/7/2000	39.70	6532.49
9/5/2000	38.09	6534.10
10/2/2000	37.21	6534.98
11/6/2000	31.38	6540.81
12/5/2000	31.92	6540.27

KB

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	37.72	6533.93
1/31/2000	43.31	6528.34
2/9/2000	47.83	6523.82
3/6/2000	48.80	6522.85
4/3/2000	44.72	6526.93
5/1/2000	43.00	6528.65
6/5/2000	39.40	6532.25
6/26/2000	33.40	6538.25
7/24/2000	32.96	6538.69
8/15/2000	32.28	6539.37

KC

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	66.59	6503.72
1/31/2000	65.20	6505.11
2/9/2000	65.10	6505.21
3/6/2000	65.60	6504.71
3/9/2000	65.30	6505.01
4/3/2000	64.81	6505.50
4/11/2000	65.03	6505.28
5/1/2000	64.60	6505.71
6/5/2000	65.80	6504.51
6/14/2000	63.41	6506.90
6/26/2000	31.65	6538.66
7/24/2000	30.15	6540.16
8/9/2000	29.81	6540.50
10/23/2000	27.63	6542.68
12/6/2000	27.50	6542.81

KD

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	39.98	6530.24
1/31/2000	42.85	6527.37
3/6/2000	42.85	6527.37
4/3/2000	42.36	6527.86
5/1/2000	40.35	6529.87
6/5/2000	38.20	6532.02
6/26/2000	29.21	6541.01
8/15/2000	26.93	6543.29

KE

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	38.30	6533.98
1/31/2000	37.80	6534.48
2/9/2000	37.78	6534.50
3/6/2000	37.20	6535.08
4/3/2000	37.41	6534.87
4/11/2000	36.90	6535.38
5/1/2000	35.20	6537.08
6/5/2000	33.20	6539.08
6/14/2000	32.90	6539.38
6/26/2000	29.44	6542.84
7/24/2000	27.73	6544.55
8/9/2000	27.51	6544.77

KEB

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/6/2000	32.27	6537.46
2/10/2000	31.47	6538.26
3/9/2000	31.31	6538.42
4/11/2000	31.31	6538.42
5/11/2000	27.79	6541.94
6/14/2000	27.26	6542.47
7/25/2000	27.19	6542.54
8/9/2000	26.72	6543.01
9/28/2000	26.90	6542.83
12/5/2000	27.04	6542.69

KF

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	36.70	6533.51
1/6/2000	36.72	6533.49
1/11/2000	36.62	6533.59
1/17/2000	36.61	6533.60
1/24/2000	36.51	6533.70
1/31/2000	36.45	6533.76
2/7/2000	36.48	6533.73
2/10/2000	36.39	6533.82
2/14/2000	36.36	6533.85
2/22/2000	36.27	6533.94
2/28/2000	36.20	6534.01
3/6/2000	36.12	6534.09
3/9/2000	36.08	6534.13
3/13/2000	36.08	6534.13
3/20/2000	35.93	6534.28
3/27/2000	35.93	6534.28
4/3/2000	35.90	6534.31
4/10/2000	35.72	6534.49
4/11/2000	35.76	6534.45
4/17/2000	35.51	6534.70
4/24/2000	35.16	6535.05
5/1/2000	34.91	6535.30
5/8/2000	34.62	6535.59
5/15/2000	34.42	6535.79
5/22/2000	34.24	6535.97
5/30/2000	33.97	6536.24
6/6/2000	33.83	6536.38
6/12/2000	33.83	6536.38
6/19/2000	33.67	6536.54
6/26/2000	33.58	6536.63
6/27/2000	33.61	6536.60
7/5/2000	33.45	6536.76
7/10/2000	33.35	6536.86
7/17/2000	33.23	6536.98
7/24/2000	33.08	6537.13
7/31/2000	32.90	6537.31
8/7/2000	32.71	6537.50
8/9/2000	32.71	6537.50
8/14/2000	32.64	6537.57
8/21/2000	32.33	6537.88
8/28/2000	32.16	6538.05
9/5/2000	31.95	6538.26
9/11/2000	31.88	6538.33
9/18/2000	31.69	6538.52
9/25/2000	31.65	6538.56
10/2/2000	32.00	6538.21
10/9/2000	31.70	6538.51
10/16/2000	31.50	6538.71
10/23/2000	31.24	6538.97
10/30/2000	31.00	6539.21
11/6/2000	30.67	6539.54
11/13/2000	30.51	6539.70
11/20/2000	30.48	6539.73
11/27/2000	30.38	6539.83
12/5/2000	30.33	6539.88
12/11/2000	30.32	6539.89
12/18/2000	30.45	6539.76
12/27/2000	30.20	6540.01

TABLE A.1-1. WATER LEVELS FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

WATER LEVEL ELEVATION (FT-MSL)

KM

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	12.00	6557.77
1/6/2000	8.00	6561.77
1/31/2000	16.80	6552.97
2/9/2000	9.80	6559.97
3/6/2000	23.00	6546.77
4/3/2000	13.10	6556.67
5/1/2000	19.80	6549.97
6/5/2000	17.00	6552.77
6/26/2000	18.00	6551.77
8/7/2000	12.00	6557.77
9/5/2000	12.60	6557.17
10/2/2000	16.46	6553.31
11/6/2000	20.00	6549.77
12/5/2000	19.00	6550.77

KN

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/6/2000	33.20	6536.39
1/27/2000	32.94	6536.65
2/9/2000	32.70	6536.89
3/29/2000	32.45	6537.14
4/11/2000	32.15	6537.44
6/14/2000	28.20	6541.39
7/25/2000	26.92	6542.67
8/15/2000	25.30	6544.29

KZ

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	40.52	6531.20
1/11/2000	40.41	6531.31
1/17/2000	40.35	6531.37
1/24/2000	40.26	6531.46
1/27/2000	40.24	6531.48
1/31/2000	40.20	6531.52
2/7/2000	40.27	6531.45
2/9/2000	40.19	6531.53
2/14/2000	40.23	6531.49
2/22/2000	40.12	6531.60
2/28/2000	40.04	6531.68
3/6/2000	39.96	6531.76
3/13/2000	39.92	6531.80
3/20/2000	39.79	6531.93
3/27/2000	39.73	6531.99
4/3/2000	39.73	6531.99
4/10/2000	39.60	6532.12
4/11/2000	39.66	6532.06
4/17/2000	39.52	6532.20
4/24/2000	39.35	6532.37
5/1/2000	39.17	6532.55
5/8/2000	38.95	6532.77
5/11/2000	38.90	6532.82
5/15/2000	38.78	6532.94
5/22/2000	38.60	6533.12
5/30/2000	38.35	6533.37
6/6/2000	38.21	6533.51
6/12/2000	38.17	6533.55
6/19/2000	37.97	6533.75
6/26/2000	37.86	6533.86
7/5/2000	37.80	6533.92
7/10/2000	37.75	6533.97
7/17/2000	37.68	6534.04
7/24/2000	37.50	6534.22
7/31/2000	37.37	6534.35
8/7/2000	37.19	6534.53
8/9/2000	37.24	6534.48
8/14/2000	37.16	6534.56
8/21/2000	37.08	6534.64
8/28/2000	36.96	6534.76
9/5/2000	36.75	6534.97
9/11/2000	36.70	6535.02
9/18/2000	36.56	6535.16
9/25/2000	36.44	6535.28
10/2/2000	36.34	6535.38
10/9/2000	36.24	6535.48
10/16/2000	36.08	6535.64
10/17/2000	36.00	6535.72
10/23/2000	35.87	6535.85
10/30/2000	35.65	6536.07
11/6/2000	35.40	6536.32
11/13/2000	35.15	6536.57
11/20/2000	35.03	6536.69
11/27/2000	34.80	6536.92
12/5/2000	34.69	6537.03
12/6/2000	34.68	6537.04
12/11/2000	34.59	6537.13
12/18/2000	34.60	6537.12
12/27/2000	34.45	6537.27

L

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	44.70	6530.27
4/12/2000	44.08	6530.89
6/5/2000	49.68	6525.29
6/26/2000	44.05	6530.92
8/7/2000	51.84	6523.13
9/5/2000	51.16	6523.81
10/2/2000	47.92	6527.05
11/6/2000	49.12	6525.85
12/5/2000	49.18	6525.79

L5

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	51.59	6524.48
1/31/2000	52.91	6523.16
3/6/2000	45.72	6530.35
4/3/2000	45.64	6530.43
5/1/2000	45.10	6530.97
6/5/2000	49.11	6526.96
6/26/2000	47.00	6529.07
8/7/2000	51.63	6524.44
9/5/2000	52.20	6523.87
10/2/2000	50.82	6525.25
11/6/2000	50.18	6525.89
12/5/2000	48.46	6527.61

L6

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
9/28/2000	33.86	6540.78

L7

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
4/12/2000	45.44	6531.17
6/5/2000	64.90	6511.71
6/26/2000	45.90	6530.71
8/7/2000	52.94	6523.67
9/5/2000	59.51	6517.10
10/2/2000	56.82	6519.79
11/6/2000	48.12	6528.49
12/5/2000	46.81	6529.80

L8

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	56.44	6520.05
1/31/2000	57.00	6519.49
3/6/2000	60.34	6516.15
4/3/2000	60.29	6516.20
5/1/2000	64.32	6512.17
6/5/2000	71.60	6504.89
6/26/2000	47.03	6529.46
8/7/2000	53.21	6523.28
9/5/2000	56.91	6519.58
10/2/2000	52.61	6523.88
11/6/2000	52.18	6524.31
12/5/2000	45.34	6531.15

L9

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	51.59	6525.64
1/31/2000	52.25	6524.98
3/6/2000	52.84	6524.39
4/3/2000	52.64	6524.59
5/1/2000	52.41	6524.82
6/5/2000	49.70	6527.53
6/26/2000	48.73	6528.50
8/7/2000	50.51	6526.72
9/5/2000	53.03	6524.20
10/2/2000	50.04	6527.19
11/6/2000	49.69	6527.54
12/5/2000	46.61	6530.62

L10

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	51.32	6525.51
1/31/2000	53.79	6523.04
3/6/2000	55.19	6521.64
4/3/2000	56.96	6519.87
5/1/2000	58.04	6518.79
6/5/2000	50.70	6526.13
6/26/2000	46.90	6529.93
8/7/2000	52.21	6524.62
9/5/2000	56.60	6520.23
10/2/2000	51.71	6525.12
11/6/2000	50.21	6526.62
12/5/2000	46.10	6530.73

M3

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	66.90	6509.20
1/31/2000	60.65	6515.45
3/6/2000	60.47	6515.63
5/1/2000	60.52	6515.58

M4

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
4/20/2000	57.28	6520.98
10/31/2000	56.72	6521.54

M5

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	49.91	6525.43
1/31/2000	49.72	6525.62
2/3/2000	49.68	6525.66
3/6/2000	49.44	6525.90
5/10/2000	49.33	6526.01
8/8/2000	49.07	6526.27
11/29/2000	49.46	6525.88
12/14/2000	49.48	6525.86

* Drawdown Tube Pressure, # Transducer Reading

TABLE A.1-1. WATER LEVELS FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

WATER LEVEL ELEVATION (FT-MSL)

M6

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	2.16	6572.88
1/31/2000	2.16	6572.88
3/13/2000	2.07	6572.97
4/3/2000	2.20	6572.84
6/6/2000	2.16	6572.88
6/26/2000	53.95	6521.09
8/7/2000	48.22	6526.82
9/5/2000	2.16	6572.88

M7

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	3.28	6569.57
1/31/2000	3.28	6569.57
3/13/2000	3.71	6569.14
4/3/2000	3.30	6569.55
6/6/2000	3.28	6569.57
6/26/2000	51.96	6520.89
8/7/2000	50.91	6521.94
9/5/2000	3.28	6569.57

M8

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	4.69	6570.54
1/31/2000	4.69	6570.54
3/13/2000	3.62	6571.61
4/3/2000	4.70	6570.53
6/6/2000	4.65	6570.58
6/26/2000	49.08	6526.15
8/7/2000	47.26	6527.97
9/5/2000	33.71	6541.52

M9

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	56.70	6520.11
1/31/2000	29.07	6547.74
3/13/2000	29.93	6546.88
4/3/2000	27.75	6549.06
6/6/2000	32.55	6544.26
6/26/2000	61.31	6515.50
8/7/2000	58.20	6518.61
9/5/2000	37.10	6539.71

M10

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	58.92	6514.44
1/31/2000	53.49	6519.87
3/13/2000	53.61	6519.75
4/3/2000	52.15	6521.21
6/6/2000	53.85	6519.51
6/26/2000	60.23	6513.13
8/7/2000	60.99	6512.37
9/5/2000	52.55	6520.81

M11

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	12.73	6560.49
1/31/2000	7.28	6565.94
3/13/2000	8.33	6564.89
4/3/2000	11.20	6562.02
6/6/2000	35.44	6537.78
6/26/2000	32.75	6540.47
8/7/2000	31.72	6541.50
9/5/2000	48.72	6524.50

M12

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	14.12	6559.39
1/31/2000	3.96	6569.55
3/13/2000	5.10	6568.41
4/3/2000	7.75	6565.76
6/6/2000	19.75	6553.76
6/26/2000	46.90	6526.61
8/7/2000	45.96	6527.55
9/5/2000	31.21	6542.30
10/2/2000	43.90	6529.61
11/6/2000	3.41	6570.10
12/5/2000	3.87	6569.64

M13

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	25.24	6550.92
1/31/2000	22.32	6553.84
3/13/2000	26.09	6550.07
4/3/2000	25.60	6550.56
6/6/2000	38.70	6537.46
6/26/2000	50.03	6526.13
8/7/2000	50.24	6525.92
9/5/2000	25.59	6550.57
11/6/2000	24.29	6551.87
12/5/2000	29.81	6546.35

M14

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	29.26	6547.91
1/31/2000	23.73	6553.44
3/13/2000	24.62	6552.55
4/3/2000	23.40	6553.77
6/6/2000	27.71	6549.46
6/26/2000	51.41	6525.76
8/7/2000	50.97	6526.20
9/5/2000	29.39	6547.78
11/6/2000	28.10	6549.07
12/5/2000	29.42	6547.75

M15

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	3.71	6575.37
1/31/2000	3.71	6575.37
3/13/2000	3.55	6575.53
4/3/2000	3.70	6575.38
6/6/2000	3.71	6575.37
6/26/2000	52.12	6526.96
8/7/2000	53.11	6525.97
9/5/2000	3.71	6575.37
11/6/2000	3.71	6575.37
12/5/2000	3.71	6575.37

MA

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	33.27	6538.95
1/31/2000	21.18	6551.04
3/13/2000	3.23	6568.99
6/6/2000	1.47	6570.75
6/26/2000	35.78	6536.44
8/7/2000	40.92	6531.30
9/5/2000	38.69	6533.53
10/2/2000	39.30	6532.92

MB

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	2.05	6570.01
1/31/2000	2.05	6570.01
3/13/2000	2.00	6570.06
4/3/2000	2.00	6570.06
6/6/2000	2.05	6570.01
6/26/2000	2.05	6570.01
8/7/2000	2.05	6570.01
9/5/2000	2.05	6570.01

MC

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	2.12	6569.94
1/31/2000	2.12	6569.94
3/13/2000	2.10	6569.96
4/3/2000	2.10	6569.96
6/6/2000	2.12	6569.94
6/26/2000	2.12	6569.94
8/7/2000	2.12	6569.94
9/5/2000	2.12	6569.94

MD

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	2.00	6569.46
1/31/2000	2.00	6569.46
3/13/2000	2.38	6569.08
4/3/2000	2.00	6569.46
6/6/2000	2.00	6569.46
6/26/2000	2.00	6569.46
8/7/2000	2.00	6569.46
9/5/2000	2.00	6569.46

ME

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	1.61	6569.31
1/31/2000	1.61	6569.31
3/13/2000	1.20	6569.72
4/3/2000	1.80	6569.12
6/6/2000	1.61	6569.31
6/26/2000	1.61	6569.31
8/7/2000	1.61	6569.31
9/5/2000	1.61	6569.31

MF

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	2.22	6570.06
1/31/2000	2.22	6570.06
3/13/2000	1.65	6570.63
4/3/2000	2.30	6569.98
6/6/2000	2.22	6570.06
6/26/2000	2.22	6570.06
8/7/2000	2.22	6570.06
9/5/2000	2.22	6570.06

MG

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	1.72	6571.36
1/31/2000	1.72	6571.36
3/13/2000	1.20	6571.88
4/3/2000	1.20	6571.88
6/6/2000	1.72	6571.36
6/26/2000	1.72	6571.36
8/7/2000	1.72	6571.36
9/5/2000	1.72	6571.36

MH

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	2.13	6571.79
1/31/2000	2.13	6571.79
3/13/2000	1.57	6572.35
4/3/2000	1.55	6572.37
6/6/2000	2.13	6571.79
6/26/2000	2.13	6571.79
8/7/2000	2.13	6571.79
9/5/2000	2.13	6571.79

* Drawdown Tube Pressure, # Transducer Reading

TABLE A.1-1. WATER LEVELS FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

WATER LEVEL ELEVATION (FT-MSL)

Well	Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
MI	1/3/2000	2.24	6574.03
MI	1/31/2000	2.24	6574.03
MI	3/13/2000	1.65	6574.62
MI	4/3/2000	1.70	6574.57
MI	6/6/2000	2.24	6574.03
MI	6/26/2000	2.24	6574.03
MI	8/7/2000	2.24	6574.03
MI	9/5/2000	2.24	6574.03
MJ	1/3/2000	57.09	6515.85
MJ	1/31/2000	48.60	6524.34
MJ	3/13/2000	46.32	6526.62
MJ	6/6/2000	46.69	6526.25
MJ	6/26/2000	49.97	6522.97
MJ	8/7/2000	2.92	6570.02
MJ	9/5/2000	47.12	6525.82
MK	1/3/2000	7.02	6566.77
MK	1/31/2000	12.31	6561.48
MK	3/13/2000	2.69	6571.10
MK	4/3/2000	7.15	6566.64
MK	6/6/2000	24.35	6549.44
MK	6/26/2000	37.81	6535.98
MK	8/7/2000	22.72	6551.07
MK	9/5/2000	25.62	6548.17
ML	1/3/2000	3.46	6569.24
ML	1/31/2000	3.46	6569.24
ML	3/13/2000	3.45	6569.25
ML	4/3/2000	3.50	6569.20
ML	6/6/2000	3.46	6569.24
ML	6/26/2000	9.12	6563.58
ML	8/7/2000	8.62	6564.08
ML	9/5/2000	3.46	6569.24
MM	1/3/2000	3.48	6573.97
MM	1/31/2000	3.48	6573.97
MM	3/13/2000	3.52	6573.93
MM	4/3/2000	2.92	6574.53
MM	6/6/2000	3.46	6573.99
MM	6/26/2000	19.96	6557.49
MM	8/7/2000	19.90	6557.55
MM	9/5/2000	3.46	6573.99
MO	1/27/2000	59.31	6513.58
MO	7/18/2000	59.28	6513.61
MO	12/14/2000	62.28	6510.61
MQ	11/1/2000	61.70	6512.60
MQ	12/14/2000	62.74	6511.56
MR	11/1/2000	66.04	6500.22
MS	11/1/2000	58.99	6511.68
MT	11/1/2000	66.07	6501.36
MU	11/1/2000	47.26	6526.93
MW	1/3/2000	3.17	6571.74
MW	1/31/2000	3.17	6571.74
MW	3/13/2000	3.24	6571.67
MW	4/3/2000	2.80	6572.11
MW	6/6/2000	3.09	6571.82
MW	6/26/2000	19.30	6555.61
MW	8/7/2000	19.00	6555.91
MW	9/5/2000	3.09	6571.82
MX	11/1/2000	50.18	6518.43
MX	12/14/2000	50.73	6517.88
MY	11/1/2000	56.04	6517.52
MY	12/14/2000	56.60	6516.96
MZ	1/3/2000	24.71	6551.93
MZ	1/31/2000	19.69	6556.95
MZ	3/13/2000	16.94	6559.70
MZ	4/3/2000	16.75	6559.89
MZ	6/6/2000	24.40	6552.24
MZ	6/26/2000	57.91	6518.73
MZ	8/7/2000	19.65	6556.99
MZ	9/5/2000	22.61	6554.03
N	5/16/2000	52.68	6531.29
N	10/31/2000	52.54	6531.43
NC	1/26/2000	52.08	6533.75
NC	4/6/2000	52.45	6533.38
NC	7/18/2000	52.65	6533.18
NC	10/31/2000	52.39	6533.44
ND	8/2/2000	47.67	6545.22
NE5	2/2/2000	78.12	6588.88
NE5	4/5/2000	77.50	6589.50
NE5	8/18/2000	121.41	6545.59
NE5	10/20/2000	150.75	6516.25
NW5	2/2/2000	129.26	6528.32
NW5	4/5/2000	128.50	6529.08
NW5	8/18/2000	128.47	6529.11
O	5/16/2000	48.41	6539.42
O	10/31/2000	48.62	6539.21
P	3/7/2000	53.66	6533.60
P	5/9/2000	54.16	6533.10
P	8/31/2000	51.38	6535.88
P	11/28/2000	53.24	6534.02
P1	1/3/2000	55.50	6536.97
P1	1/26/2000	55.18	6537.29
P1	7/12/2000	55.65	6536.82
P1	11/28/2000	55.75	6536.72
P2	1/3/2000	55.15	6534.64
P2	2/9/2000	46.00	6543.79
P2	3/6/2000	63.76	6526.03
P2	4/3/2000	64.00	6525.79
P2	5/1/2000	64.40	6525.39
P2	5/9/2000	64.70	6525.09
P2	6/6/2000	64.59	6525.20
P2	6/26/2000	55.90	6533.89
P2	8/2/2000	55.27	6534.52
P2	8/7/2000	55.23	6534.56
P2	9/5/2000	55.10	6534.69
P2	10/2/2000	54.93	6534.86
P2	11/6/2000	61.41	6528.38
P2	11/28/2000	61.49	6528.30
P2	12/4/2000	61.41	6528.38
P3	1/3/2000	63.21	6526.74
P3	1/31/2000	62.95	6527.00
P3	3/6/2000	63.16	6526.79
P3	4/3/2000	63.21	6526.74
P3	5/1/2000	63.52	6526.43
P3	6/6/2000	63.54	6526.41
P3	6/26/2000	63.90	6526.05
P3	8/7/2000	62.90	6527.05
P3	9/5/2000	62.05	6527.90
P3	10/2/2000	61.92	6528.03
P3	11/6/2000	61.22	6528.73
P3	12/4/2000	62.41	6527.54
P4	1/3/2000	77.74	6511.78
P4	1/31/2000	77.12	6512.40
P4	3/6/2000	67.40	6522.12
P4	3/7/2000	67.58	6521.94
P4	4/3/2000	68.05	6521.47
P4	5/1/2000	68.25	6521.27
P4	6/6/2000	75.94	6513.58
P4	6/26/2000	76.89	6512.63
P4	8/7/2000	81.00	6508.52
P4	9/5/2000	74.69	6514.83
P4	9/11/2000	74.29	6515.23
P4	10/2/2000	51.51	6538.01
P4	11/6/2000	64.85	6524.67
P4	12/4/2000	81.26	6508.26

TABLE A.1-1. WATER LEVELS FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

WATER LEVEL ELEVATION (FT-MSL)

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
PM		
1/3/2000	39.91	6527.51
1/31/2000	39.44	6527.98
2/3/2000	39.48	6527.94
3/6/2000	38.97	6528.45
5/16/2000	38.81	6528.61
7/19/2000	37.62	6529.80
8/9/2000	38.03	6529.39
12/6/2000	36.38	6531.04
12/14/2000	36.46	6530.96
Q		
1/12/2000	50.21	6543.61
3/14/2000	50.11	6543.71
R		
5/11/2000	43.51	6560.52
S		
1/3/2000	55.60	6525.57
1/31/2000	55.73	6525.44
3/6/2000	55.65	6525.52
5/11/2000	55.47	6525.70
12/6/2000	55.41	6525.76
S1		
1/3/2000	50.48	6524.71
1/11/2000	50.53	6524.66
1/17/2000	50.79	6524.40
1/24/2000	50.89	6524.30
1/31/2000	50.97	6524.22
2/7/2000	51.11	6524.08
2/14/2000	50.98	6524.21
2/22/2000	51.25	6523.94
2/28/2000	51.25	6523.94
3/6/2000	51.32	6523.87
3/13/2000	51.46	6523.73
3/20/2000	51.31	6523.88
3/27/2000	51.39	6523.80
4/3/2000	51.33	6523.86
4/10/2000	51.28	6523.91
4/17/2000	51.34	6523.85
4/24/2000	51.27	6523.92
5/1/2000	51.27	6523.92
5/8/2000	51.23	6523.96
5/15/2000	51.31	6523.88
5/22/2000	51.31	6523.88
5/30/2000	51.22	6523.97
6/6/2000	51.30	6523.89
6/12/2000	51.30	6523.89
6/19/2000	51.41	6523.78
6/26/2000	51.21	6523.98
7/5/2000	51.25	6523.94
7/10/2000	51.25	6523.94
7/17/2000	51.31	6523.88
7/24/2000	51.33	6523.86
7/31/2000	50.96	6524.23
8/7/2000	51.05	6524.14
8/14/2000	51.07	6524.12
8/21/2000	51.11	6524.08
8/28/2000	51.13	6524.06
9/5/2000	51.11	6524.08
9/11/2000	51.39	6523.80
9/18/2000	51.41	6523.78
9/25/2000	51.38	6523.81
10/2/2000	51.10	6524.09
10/9/2000	51.45	6523.74
10/16/2000	51.55	6523.64
10/23/2000	51.62	6523.57
10/30/2000	51.67	6523.52
11/6/2000	51.60	6523.59
11/13/2000	51.68	6523.51
11/20/2000	51.61	6523.58
11/27/2000	51.42	6523.77
12/5/2000	51.44	6523.75
12/11/2000	51.34	6523.85
12/18/2000	51.39	6523.80
12/27/2000	51.38	6523.81
S2		
1/3/2000	49.08	6524.64
1/11/2000	49.11	6524.61
1/17/2000	49.31	6524.41
1/24/2000	49.35	6524.37
1/31/2000	49.38	6524.34
2/7/2000	49.50	6524.22
2/14/2000	49.34	6524.38
2/22/2000	49.39	6524.33
2/28/2000	49.31	6524.41
3/6/2000	49.33	6524.39
3/13/2000	49.44	6524.28
3/20/2000	49.23	6524.49
3/27/2000	49.32	6524.40
4/3/2000	49.30	6524.42
4/10/2000	49.21	6524.51
4/17/2000	49.27	6524.45
4/24/2000	49.21	6524.51
5/1/2000	49.20	6524.52
5/8/2000	49.12	6524.60
5/15/2000	49.17	6524.55
5/22/2000	49.20	6524.52
5/30/2000	49.13	6524.59
6/6/2000	49.16	6524.56
6/12/2000	49.20	6524.52
6/19/2000	49.28	6524.44
6/26/2000	49.13	6524.59
7/5/2000	49.13	6524.59
7/10/2000	49.18	6524.54
7/17/2000	49.16	6524.56
7/18/2000	49.16	6524.56
7/24/2000	49.17	6524.55
7/31/2000	48.93	6524.79
8/7/2000	48.91	6524.81
8/14/2000	48.94	6524.78
8/21/2000	48.94	6524.78
8/28/2000	48.95	6524.77
9/5/2000	48.96	6524.76
9/11/2000	48.94	6524.78
9/18/2000	49.14	6524.58
9/25/2000	49.09	6524.63
10/2/2000	48.76	6524.96
10/9/2000	49.05	6524.67
10/16/2000	49.17	6524.55
10/23/2000	49.19	6524.53
10/30/2000	49.24	6524.48
11/6/2000	49.12	6524.60
11/13/2000	49.06	6524.66
11/20/2000	48.97	6524.75
11/27/2000	48.88	6524.84
12/5/2000	48.89	6524.83
12/11/2000	48.83	6524.89
12/18/2000	48.92	6524.80
12/27/2000	48.88	6524.84
S3		
1/3/2000	50.82	6523.96
1/31/2000	50.99	6523.79
2/8/2000	51.00	6523.78
3/6/2000	50.83	6523.95
5/10/2000	50.50	6524.28
8/8/2000	50.21	6524.57
12/6/2000	50.50	6524.28
12/14/2000	50.51	6524.27
S4		
1/3/2000	50.77	6524.52
1/31/2000	51.20	6524.09
2/8/2000	51.30	6523.99
3/6/2000	51.36	6523.93
5/10/2000	51.15	6524.14
8/9/2000	50.98	6524.31
12/6/2000	51.04	6524.25
S5		
1/3/2000	60.44	6514.25
1/31/2000	60.90	6513.79
3/6/2000	60.64	6514.05
4/3/2000	60.64	6514.05
5/1/2000	60.60	6514.09
6/5/2000	56.40	6518.29
6/26/2000	57.85	6516.84
8/7/2000	59.95	6514.74
9/5/2000	60.04	6514.65
10/2/2000	59.70	6514.99
11/6/2000	60.10	6514.59
12/5/2000	60.21	6514.48
S6		
1/3/2000	55.85	6524.22
S11		
10/31/2000	54.05	6524.34
12/14/2000	53.37	6525.02
S12		
1/6/2000	58.71	6520.29
1/27/2000	60.24	6518.76
2/9/2000	60.48	6518.52
3/17/2000	56.82	6522.18
4/6/2000	56.56	6522.44
5/11/2000	56.58	6522.42
6/14/2000	56.68	6522.32
7/24/2000	56.68	6522.32
8/9/2000	56.38	6522.62
9/11/2000	56.30	6522.70

* Drawdown Tube Pressure, # Transducer Reading

TABLE A.1-1. WATER LEVELS FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

WATER LEVEL ELEVATION (FT-MSL)

SA

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	68.11	6512.20
1/31/2000	68.90	6511.41
3/6/2000	68.52	6511.79
4/3/2000	68.18	6512.13
5/1/2000	68.72	6511.59
6/5/2000	57.95	6522.36
6/26/2000	67.20	6513.11
8/7/2000	67.74	6512.57
9/5/2000	67.64	6512.67
10/2/2000	68.15	6512.16
11/6/2000	67.78	6512.53
12/5/2000	67.24	6513.07

SB

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/31/2000	61.80	6519.29
3/6/2000	61.95	6519.14
4/3/2000	61.04	6520.05
5/1/2000	57.32	6523.77
6/5/2000	51.10	6529.99
6/26/2000	56.95	6524.14
8/7/2000	56.70	6524.39
9/5/2000	57.12	6523.97
10/2/2000	56.60	6524.49
11/6/2000	57.11	6523.98
12/5/2000	57.43	6523.66

SC

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	60.04	6518.76
1/31/2000	62.74	6516.06
3/6/2000	62.80	6516.00
4/3/2000	53.70	6525.10
5/1/2000	58.19	6520.61
6/5/2000	58.50	6520.30
6/26/2000	58.13	6520.67
8/7/2000	57.15	6521.65
9/5/2000	57.14	6521.66
10/2/2000	58.31	6520.49
11/6/2000	56.54	6522.26
12/5/2000	57.11	6521.69

SE

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	54.65	6523.34
1/6/2000	51.90	6526.09
1/31/2000	54.23	6523.76
2/9/2000	52.46	6525.53
3/6/2000	54.80	6523.19
4/3/2000	52.05	6525.94
5/1/2000	52.16	6525.83
6/5/2000	53.40	6524.59
6/26/2000	53.00	6524.99
8/7/2000	54.91	6523.08
9/5/2000	56.32	6521.67

SE4

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/6/2000	52.26	6525.74
2/2/2000	88.95	6489.05
2/9/2000	53.20	6524.80
8/18/2000	89.24	6488.76

SM

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	55.68	6523.06
1/31/2000	55.95	6522.79
3/6/2000	55.86	6522.88
4/3/2000	55.88	6522.86
5/1/2000	55.67	6523.07
6/6/2000	55.62	6523.12
6/26/2000	55.50	6523.24
8/7/2000	55.30	6523.44
9/5/2000	55.39	6523.35
10/2/2000	55.21	6523.53
11/6/2000	55.15	6523.59
12/5/2000	55.21	6523.53

SN

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	55.85	6523.41
1/31/2000	56.36	6522.90
3/6/2000	56.21	6523.05
4/3/2000	55.98	6523.28
5/1/2000	55.78	6523.48
6/6/2000	55.69	6523.57
6/26/2000	55.58	6523.68
8/7/2000	55.35	6523.91
9/5/2000	55.49	6523.77
10/2/2000	55.34	6523.92
11/6/2000	55.56	6523.70
12/5/2000	55.48	6523.78

SO

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	54.97	6523.82
1/11/2000	54.99	6523.80
1/17/2000	55.27	6523.52
1/24/2000	55.40	6523.39
1/31/2000	55.43	6523.36
2/7/2000	55.66	6523.13
2/14/2000	55.45	6523.34
2/22/2000	55.40	6523.39
2/28/2000	55.30	6523.49
3/6/2000	55.32	6523.47
3/13/2000	55.47	6523.32
3/20/2000	55.10	6523.69
3/27/2000	55.30	6523.49
4/3/2000	55.32	6523.47
4/10/2000	55.16	6523.63
4/17/2000	55.25	6523.54
4/24/2000	55.16	6523.63
5/1/2000	55.16	6523.63
5/8/2000	55.06	6523.73
5/11/2000	54.99	6523.80
5/15/2000	55.14	6523.65
5/22/2000	55.14	6523.65
5/30/2000	55.03	6523.76
6/6/2000	55.11	6523.68
6/12/2000	55.16	6523.63
6/19/2000	55.16	6523.63
6/26/2000	55.03	6523.76
7/5/2000	55.08	6523.71
7/10/2000	55.05	6523.74
7/17/2000	55.11	6523.68
7/24/2000	55.14	6523.65
7/31/2000	54.78	6524.01
8/7/2000	54.85	6523.94
8/14/2000	54.87	6523.92
8/21/2000	54.90	6523.89
8/28/2000	54.90	6523.89
9/5/2000	54.93	6523.86
9/11/2000	54.85	6523.94
9/18/2000	55.06	6523.73
9/25/2000	55.08	6523.71
10/2/2000	54.81	6523.98
10/9/2000	55.03	6523.76
10/16/2000	55.15	6523.64
10/23/2000	55.13	6523.66
10/30/2000	55.14	6523.65
11/6/2000	55.00	6523.79
11/13/2000	55.10	6523.69
11/20/2000	55.12	6523.67
11/27/2000	54.96	6523.83
12/5/2000	54.94	6523.85
12/6/2000	54.90	6523.89
12/11/2000	54.84	6523.95
12/18/2000	54.98	6523.81
12/27/2000	54.92	6523.87

* Drawdown Tube Pressure, # Transducer Reading

TABLE A.1-1. WATER LEVELS FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

WATER LEVEL ELEVATION (FT-MSL)

Well	Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
SP	1/3/2000	55.06	6523.60
SP	1/11/2000	55.11	6523.55
SP	1/17/2000	55.51	6523.15
SP	1/24/2000	55.68	6522.98
SP	1/31/2000	55.73	6522.93
SP	2/7/2000	55.92	6522.74
SP	2/14/2000	55.71	6522.95
SP	2/22/2000	55.67	6522.99
SP	2/28/2000	55.58	6523.08
SP	3/6/2000	55.60	6523.06
SP	3/13/2000	55.73	6522.93
SP	3/20/2000	55.38	6523.28
SP	3/27/2000	55.48	6523.18
SP	4/3/2000	55.46	6523.20
SP	4/10/2000	55.35	6523.31
SP	4/17/2000	55.42	6523.24
SP	4/24/2000	55.32	6523.34
SP	5/1/2000	55.32	6523.34
SP	5/8/2000	55.25	6523.41
SP	5/15/2000	55.30	6523.36
SP	5/22/2000	55.31	6523.35
SP	5/30/2000	55.22	6523.44
SP	6/6/2000	55.24	6523.42
SP	6/12/2000	55.30	6523.36
SP	6/19/2000	55.28	6523.38
SP	6/26/2000	55.18	6523.48
SP	7/5/2000	55.27	6523.39
SP	7/10/2000	55.22	6523.44
SP	7/17/2000	55.28	6523.38
SP	7/24/2000	55.31	6523.35
SP	7/31/2000	54.86	6523.80
SP	8/7/2000	55.00	6523.66
SP	8/14/2000	55.60	6523.06
SP	8/21/2000	55.10	6523.56
SP	8/28/2000	55.06	6523.60
SP	9/5/2000	55.12	6523.54
SP	9/11/2000	54.97	6523.69
SP	9/18/2000	55.20	6523.46
SP	9/25/2000	55.20	6523.46
SP	10/2/2000	55.08	6523.58
SP	10/9/2000	55.25	6523.41
SP	10/16/2000	55.38	6523.28
SP	10/23/2000	55.34	6523.32
SP	10/30/2000	55.35	6523.31
SP	11/6/2000	55.23	6523.43
SP	11/13/2000	55.39	6523.27
SP	11/20/2000	55.45	6523.21
SP	11/27/2000	55.24	6523.42
SP	12/5/2000	55.23	6523.43
SP	12/11/2000	55.10	6523.56
SP	12/18/2000	55.20	6523.46
SP	12/27/2000	55.18	6523.48
SQ	1/3/2000	55.56	6523.64
SQ	1/31/2000	56.30	6522.90
SQ	3/6/2000	56.45	6522.75
SQ	4/3/2000	55.64	6523.56
SQ	5/1/2000	55.56	6523.64
SQ	6/5/2000	55.60	6523.60
SQ	6/26/2000	85.00	6494.20
SQ	8/7/2000	54.74	6524.46
SQ	9/5/2000	55.20	6524.00
SQ	10/2/2000	55.09	6524.11
SQ	11/6/2000	55.30	6523.90
SQ	12/5/2000	55.10	6524.10
SS	1/3/2000	55.45	6522.93
SS	1/31/2000	63.75	6514.63
SS	2/9/2000	64.18	6514.20
SS	3/6/2000	63.55	6514.83
SS	4/3/2000	62.78	6515.60
SS	5/1/2000	63.21	6515.17
SS	6/5/2000	63.08	6515.30
SS	6/26/2000	65.90	6512.48
SS	8/7/2000	64.45	6513.93
SS	9/5/2000	64.88	6513.50
SS	10/2/2000	66.45	6511.93
SS	11/6/2000	66.68	6511.70
SS	12/5/2000	66.88	6511.50
ST	1/3/2000	55.65	6523.66
ST	1/31/2000	59.15	6520.16
ST	2/9/2000	59.30	6520.01
ST	3/6/2000	60.05	6519.26
ST	4/3/2000	58.46	6520.85
ST	5/1/2000	58.49	6520.82
ST	6/5/2000	58.60	6520.71
ST	6/26/2000	57.90	6521.41
ST	8/7/2000	57.91	6521.40
ST	9/5/2000	57.90	6521.41
ST	10/2/2000	55.15	6524.16
ST	11/6/2000	58.47	6520.84
ST	12/5/2000	57.62	6521.69
SV	1/27/2000	56.55	6522.70
SV	7/18/2000	55.70	6523.55
SZ	1/3/2000	49.48	6531.99
SZ	1/31/2000	49.46	6532.01
SZ	3/6/2000	49.47	6532.00
SZ	4/3/2000	49.50	6531.97
SZ	5/1/2000	49.51	6531.96
SZ	6/6/2000	49.52	6531.95
SZ	6/19/2000	49.53	6531.94
SZ	6/26/2000	49.55	6531.92
SZ	8/7/2000	49.58	6531.89
SZ	9/5/2000	49.60	6531.87
SZ	10/2/2000	49.64	6531.83
SZ	11/6/2000	49.58	6531.89
SZ	12/5/2000	49.63	6531.84
TA	1/3/2000	38.05	6542.25
TA	1/31/2000	37.70	6542.60
TA	3/6/2000	41.90	6538.40
TA	4/3/2000	35.70	6544.60
TA	5/1/2000	42.70	6537.60
TA	6/5/2000	42.84	6537.46
TA	6/26/2000	36.30	6544.00
TA	8/7/2000	34.50	6545.80
TA	9/5/2000	33.32	6546.98
TA	10/2/2000	33.46	6546.84
TA	11/6/2000	32.69	6547.61
TA	12/5/2000	31.80	6548.50
TB	1/12/2000	36.82	6546.75
TB	3/6/2000	44.24	6539.33
TB	3/7/2000	44.31	6539.26
TB	4/3/2000	42.51	6541.06
TB	5/1/2000	45.51	6538.06
TB	6/5/2000	43.50	6540.07
TB	6/26/2000	37.21	6546.36
TB	8/7/2000	35.84	6547.73
TB	9/5/2000	35.90	6547.67
TB	9/11/2000	34.87	6548.70
TB	10/2/2000	35.62	6547.95
TB	11/6/2000	33.34	6550.23
TB	12/5/2000	32.32	6551.25
W	3/14/2000	45.68	6526.46
W	8/31/2000	45.56	6526.58
W	12/14/2000	46.33	6525.81
WN4	2/2/2000	125.63 *	6537.15
WN4	4/5/2000	130.80	6531.98
WN4	4/5/2000	131.58	6531.20
WN4	4/5/2000	132.88	6529.90
WN4	4/5/2000	133.66	6529.12
WN4	4/5/2000	135.11	6527.67
WN4	4/5/2000	140.43	6522.35
WN4	4/5/2000	146.80	6515.98
WN4	4/5/2000	147.66	6515.12
WN4	4/5/2000	147.66	6515.12
WN4	4/5/2000	147.98	6514.80
WN4	4/5/2000	130.80	6531.98
WN4	8/18/2000	132.14	6530.64
WR1R	1/3/2000	16.87	6551.60
WR1R	1/31/2000	9.28	6559.19
WR1R	3/13/2000	2.98	6565.49
WR1R	4/3/2000	2.90	6565.57
WR1R	6/6/2000	22.18	6546.29
WR1R	6/26/2000	26.07	6542.40
WR1R	9/5/2000	18.26	6550.21
WR1R	10/2/2000	30.15	6538.32
WR1R	11/6/2000	29.71	6538.76
WR1R	12/5/2000	28.62	6539.85
WR2	1/3/2000	2.52	6566.07
WR2	1/31/2000	2.52	6566.07
WR2	3/13/2000	2.50	6566.09
WR2	4/3/2000	2.50	6566.09
WR2	6/6/2000	2.52	6566.07
WR2	6/26/2000	2.52	6566.07
WR2	8/7/2000	2.52	6566.07
WR2	9/5/2000	2.52	6566.07
WR2	10/2/2000	18.31	6550.28
WR2	11/6/2000	2.52	6566.07
WR2	12/5/2000	2.52	6566.07

* Drawdown Tube Pressure, # Transducer Reading

TABLE A.1-1. WATER LEVELS FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

WATER LEVEL ELEVATION (FT-MSL)

WR3

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	32.14	6537.40
1/31/2000	26.04	6543.50
3/13/2000	23.80	6545.74
4/3/2000	45.40	6524.14
6/6/2000	26.88	6542.66
6/26/2000	34.54	6535.00
8/7/2000	25.65	6543.89
9/5/2000	27.12	6542.42
10/2/2000	34.55	6534.99
11/6/2000	33.41	6536.13
12/5/2000	32.96	6536.58

WR4

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	1.94	6570.87
1/31/2000	1.92	6570.89
3/13/2000	1.90	6570.91
4/3/2000	2.00	6570.81
6/6/2000	1.92	6570.89
6/26/2000	1.92	6570.89
8/7/2000	43.13	6529.68
9/5/2000	1.92	6570.89
10/2/2000	1.92	6570.89
11/6/2000	1.94	6570.87
12/5/2000	1.92	6570.89

WR5

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	39.87	6531.36
1/31/2000	33.64	6537.59
3/13/2000	37.21	6534.02
4/3/2000	38.65	6532.58
6/6/2000	39.80	6531.43
6/26/2000	43.62	6527.61
8/7/2000	37.82	6533.41
9/5/2000	36.72	6534.51
10/2/2000	39.02	6532.21
11/6/2000	38.71	6532.52
12/5/2000	38.69	6532.54

WR6

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	3.04	6569.99
1/31/2000	3.04	6569.99
3/13/2000	3.05	6569.98
4/3/2000	3.00	6570.03
6/6/2000	3.04	6569.99
6/26/2000	44.20	6528.83
8/7/2000	32.91	6540.12
9/5/2000	7.80	6565.23
10/2/2000	14.79	6558.24
11/6/2000	3.04	6569.99
12/5/2000	3.04	6569.99

WR7

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/27/2000	45.63	6528.10
4/12/2000	45.27	6528.46
8/7/2000	47.10	6526.63
9/5/2000	23.21	6550.52
10/2/2000	44.52	6529.21
11/6/2000	43.91	6529.82
12/5/2000	38.91	6534.82

WR8

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
4/3/2000	5.90	6566.70
6/6/2000	46.20	6526.40
6/26/2000	46.19	6526.41
8/7/2000	45.43	6527.17
9/5/2000	44.42	6528.18
10/2/2000	45.85	6526.75
11/6/2000	15.89	6556.71
12/5/2000	38.72	6533.88

WR9

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	46.11	6526.94
1/31/2000	45.93	6527.12
2/8/2000	46.03	6527.02
3/6/2000	45.78	6527.27
8/7/2000	13.92	6559.13
9/5/2000	46.71	6526.34
10/2/2000	46.74	6526.31
11/6/2000	47.50	6525.55
12/5/2000	46.82	6526.23

WR10

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
4/3/2000	10.80	6562.39
6/6/2000	35.22	6537.97
6/26/2000	47.85	6525.34
8/7/2000	30.18	6543.01
9/5/2000	46.47	6526.72
10/2/2000	47.65	6525.54
11/6/2000	47.52	6525.67
12/5/2000	48.52	6524.67

WR11

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	48.36	6526.13
1/27/2000	48.27	6526.22
1/31/2000	48.21	6526.28
3/6/2000	48.08	6526.41
4/12/2000	48.00	6526.49
8/7/2000	13.72	6560.77
9/5/2000	44.54	6529.95
10/2/2000	27.88	6546.61
11/6/2000	45.69	6528.80
12/5/2000	48.29	6526.20

WR12

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	2.47	6565.72
1/31/2000	2.47	6565.72
3/13/2000	2.40	6565.79
4/3/2000	2.50	6565.69
6/6/2000	2.47	6565.72
6/26/2000	2.47	6565.72
8/7/2000	25.18	6543.01
9/5/2000	2.47	6565.72
10/2/2000	12.70	6555.49

WR13

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	28.19	6540.98
1/31/2000	21.65	6547.52
3/13/2000	25.20	6543.97
4/3/2000	25.45	6543.72
6/6/2000	28.80	6540.37
6/26/2000	33.80	6535.37
8/7/2000	27.45	6541.72
9/5/2000	23.60	6545.57
10/2/2000	24.21	6544.96
11/6/2000	19.82	6549.35
12/5/2000	18.98	6550.19

WR14

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	26.12	6540.79
1/31/2000	13.07	6553.84
3/13/2000	18.94	6547.97
4/3/2000	12.70	6554.21
6/6/2000	16.52	6550.39
6/26/2000	24.95	6541.96
8/7/2000	16.99	6549.92
9/5/2000	19.41	6547.50
10/2/2000	18.48	6548.43
12/5/2000	17.75	6549.16

WR15

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	25.10	6546.09
1/31/2000	19.87	6551.32
3/13/2000	20.39	6550.80
6/6/2000	15.35	6555.84
6/26/2000	26.98	6544.21
8/7/2000	28.71	6542.48
9/5/2000	12.30	6558.89
10/2/2000	2.20	6568.99

WR16

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/12/2000	46.94	6525.84
10/2/2000	43.54	6529.24
11/6/2000	44.36	6528.42
12/5/2000	44.22	6528.56

WR17

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
10/2/2000	43.91	6529.18
11/6/2000	4.71	6568.38
12/5/2000	4.71	6568.38

WR18

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
10/2/2000	3.67	6569.24
11/6/2000	2.43	6570.48
12/5/2000	2.43	6570.48

WR19

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
10/2/2000	17.72	6557.21
11/6/2000	3.91	6571.02
12/5/2000	3.91	6571.02

WR20

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
10/2/2000	23.81	6550.66
11/6/2000	8.22	6566.25
12/5/2000	8.26	6566.21

WR21

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
10/2/2000	33.42	6542.63
11/6/2000	24.45	6551.60
12/5/2000	24.00	6552.05

WR22

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
10/2/2000	51.34	6526.55
11/6/2000	28.62	6549.27
12/5/2000	35.65	6542.24

TABLE A.1-1. WATER LEVELS FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

WATER LEVEL ELEVATION (FT-MSL)

WR23

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
10/2/2000	48.68	6527.79
11/6/2000	2.54	6573.93
12/5/2000	3.30	6573.17

WR24

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
10/2/2000	47.21	6541.46
11/6/2000	32.11	6556.56
12/5/2000	32.00	6556.67

X

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	37.11	6534.50
2/1/2000	33.68	6537.93
4/11/2000	32.77	6538.84
5/10/2000	29.00	6542.61
7/24/2000	26.94	6544.67
8/2/2000	26.00	6545.61
10/17/2000	25.14	6546.47
12/5/2000	24.00	6547.61

X1

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/24/2000	32.80	6540.74
1/24/2000	32.80	6540.74
1/31/2000	23.40	6550.14
1/31/2000	23.40	6550.14
2/14/2000	30.10	6543.44
3/6/2000	28.80	6544.74
4/3/2000	32.10	6541.44
5/1/2000	22.70	6550.84
6/5/2000	20.00	6553.54
6/26/2000	15.00	6558.54
8/7/2000	12.00	6561.54
9/5/2000	14.00	6559.54
10/2/2000	12.16	6561.38
11/6/2000	8.73	6564.81
12/5/2000	8.45	6565.09

X2

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/24/2000	27.50	6544.43
1/24/2000	27.50	6544.43
1/31/2000	28.20	6543.73
1/31/2000	28.20	6543.73
2/14/2000	31.44	6540.49
3/6/2000	29.40	6542.53
4/3/2000	31.70	6540.23
5/1/2000	24.10	6547.83
6/5/2000	17.00	6554.93
6/26/2000	17.10	6554.83
8/7/2000	10.00	6561.93
9/5/2000	18.00	6553.93
10/2/2000	22.51	6549.42
11/6/2000	9.38	6562.55
12/5/2000	10.13	6561.80

X3

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/24/2000	16.00	6557.28
1/24/2000	16.00	6557.28
1/31/2000	4.60	6568.68
1/31/2000	4.60	6568.68
2/14/2000	32.90	6540.38
3/6/2000	5.00	6568.28
4/3/2000	33.00	6540.28
5/1/2000	6.00	6567.28
6/5/2000	8.00	6565.28
6/26/2000	6.00	6567.28
8/7/2000	8.00	6565.28
9/5/2000	10.00	6563.28
10/2/2000	6.00	6567.28
11/6/2000	3.00	6570.28
12/5/2000	6.00	6567.28

X4

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/24/2000	36.80	6540.14
1/24/2000	36.80	6540.14
1/31/2000	36.74	6540.20
1/31/2000	36.74	6540.20
2/14/2000	36.06	6540.88
3/6/2000	35.60	6541.34
4/3/2000	35.60	6541.34
5/1/2000	33.00	6543.94
6/5/2000	19.00	6557.94
6/26/2000	20.00	6556.94
8/7/2000	26.10	6550.84
9/5/2000	28.20	6548.74
10/2/2000	29.00	6547.94
11/6/2000	23.00	6553.94
12/5/2000	21.70	6555.24

X5

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	33.98	6543.63
1/31/2000	4.50	6573.11
3/6/2000	2.60	6575.01
4/3/2000	3.00	6574.61
5/2/2000	3.65	6573.96
6/5/2000	26.00	6551.61
6/26/2000	19.70	6557.91
8/7/2000	25.48	6552.13
9/5/2000	6.00	6571.61
10/2/2000	8.00	6569.61
11/6/2000	24.00	6553.61
12/5/2000	16.40	6561.21

X6

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	31.45	6547.27
1/31/2000	5.90	6572.82
3/6/2000	4.40	6574.32
4/3/2000	5.00	6573.72
5/2/2000	2.50	6576.22
6/5/2000	22.00	6556.72
6/26/2000	24.22	6554.50
8/7/2000	8.00	6570.72
9/5/2000	12.00	6566.72
10/2/2000	5.00	6573.72
11/6/2000	9.30	6569.42
12/5/2000	9.10	6569.62

X7

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	32.00	6548.43
1/31/2000	4.00	6576.43
3/6/2000	4.00	6576.43
4/3/2000	4.30	6576.13
5/2/2000	4.00	6576.43
6/5/2000	6.00	6574.43
6/26/2000	32.00	6548.43
8/7/2000	5.00	6575.43
9/5/2000	6.00	6574.43
10/2/2000	5.00	6575.43
11/6/2000	6.00	6574.43
12/5/2000	8.60	6571.83

X8

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	3.50	6578.26
1/31/2000	25.60	6556.16
3/6/2000	26.00	6555.76
4/3/2000	31.00	6550.76
5/2/2000	30.00	6551.76
6/5/2000	23.00	6558.76
6/26/2000	20.00	6561.76
8/7/2000	30.94	6550.82
9/5/2000	31.33	6550.43
10/2/2000	23.00	6558.76
11/6/2000	23.10	6558.66
12/5/2000	13.00	6568.76

X9

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	10.50	6572.42
1/31/2000	0.50	6582.42
3/6/2000	5.50	6577.42
4/3/2000	5.90	6577.02
5/2/2000	7.00	6575.92
6/5/2000	25.40	6557.52
6/26/2000	33.00	6549.92
8/7/2000	31.61	6551.31
9/5/2000	29.21	6553.71
10/2/2000	28.53	6554.39
11/6/2000	27.86	6555.06
12/5/2000	27.00	6555.92

X10

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	21.00	6561.43
1/31/2000	32.90	6549.53
3/6/2000	30.10	6552.33
4/3/2000	32.54	6549.89
5/2/2000	35.10	6547.33
6/5/2000	34.00	6548.43
6/26/2000	34.00	6548.43
8/7/2000	30.84	6551.59
9/5/2000	30.00	6552.43
10/2/2000	27.00	6555.43
11/6/2000	26.31	6556.12
12/5/2000	27.00	6555.43

X11

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	11.50	6570.50
1/31/2000	1.50	6580.50
3/6/2000	1.00	6581.00
4/3/2000	1.50	6580.50
5/2/2000	2.00	6580.00
6/6/2000	1.00	6581.00
6/26/2000	1.50	6580.50
8/7/2000	2.10	6579.90
9/5/2000	1.50	6580.50
10/2/2000	1.80	6580.20
11/6/2000	0.50	6581.50
12/5/2000	0.50	6581.50

* Drawdown Tube Pressure, # Transducer Reading

TABLE A.1-1. WATER LEVELS FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

WATER LEVEL ELEVATION (FT-MSL)

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
X12		
1/3/2000	12.00	6571.33
1/31/2000	2.00	6581.33
3/6/2000	2.60	6580.73
4/3/2000	0.50	6582.83
5/2/2000	0.50	6582.83
6/6/2000	0.50	6582.83
6/26/2000	11.20	6572.13
8/7/2000	0.50	6582.83
9/5/2000	0.50	6582.83
10/2/2000	0.50	6582.83
11/6/2000	0.50	6582.83
12/5/2000	0.50	6582.83
X13		
6/6/2000	9.15	6577.79
6/26/2000	37.15	6549.79
8/7/2000	38.43	6548.51
9/5/2000	39.70	6547.24
10/2/2000	39.31	6547.63
11/6/2000	39.26	6547.68
12/5/2000	39.46	6547.48
X14		
6/6/2000	12.50	6573.70
6/26/2000	37.41	6548.79
8/7/2000	38.15	6548.05
9/5/2000	37.90	6548.30
10/2/2000	38.11	6548.09
11/6/2000	38.08	6548.12
12/5/2000	38.33	6547.87
X15		
6/6/2000	7.70	6575.21
6/26/2000	38.30	6544.61
8/7/2000	38.92	6543.99
9/5/2000	38.92	6543.99
10/2/2000	38.11	6544.80
11/6/2000	39.00	6543.91
12/5/2000	39.21	6543.70
X16		
6/6/2000	8.00	6576.79
6/26/2000	37.47	6547.32
8/7/2000	37.41	6547.38
9/5/2000	39.11	6545.68
10/2/2000	39.18	6545.61
11/6/2000	39.21	6545.58
12/5/2000	39.45	6545.34
X17		
6/6/2000	7.23	6578.61
6/26/2000	25.62	6560.22
8/7/2000	32.80	6553.04
9/5/2000	35.52	6550.32
10/2/2000	36.47	6549.37
11/6/2000	36.94	6548.90
12/5/2000	38.52	6547.32
X18		
6/6/2000	20.71	6565.37
6/26/2000	26.89	6559.19
8/7/2000	27.05	6559.03
9/5/2000	27.12	6558.96
10/2/2000	27.21	6558.87
11/6/2000	27.45	6558.63
12/5/2000	27.19	6558.89
X19		
6/6/2000	32.51	6552.69
6/26/2000	29.54	6555.66
8/7/2000	29.40	6555.80
9/5/2000	29.53	6555.67
10/2/2000	29.69	6555.51
11/6/2000	30.50	6554.70
12/5/2000	31.21	6553.99
X20		
6/6/2000	45.52	6540.21
6/26/2000	46.07	6539.66
8/7/2000	46.06	6539.67
9/5/2000	46.13	6539.60
10/2/2000	46.08	6539.65
11/6/2000	45.21	6540.52
12/5/2000	46.31	6539.42
X21		
6/6/2000	5.50	6580.83
6/26/2000	37.18	6549.15
8/7/2000	38.07	6548.26
9/5/2000	5.00	6581.33
10/2/2000	4.92	6581.41
11/6/2000	3.40	6582.93
12/5/2000	38.99	6547.34
X22		
6/6/2000	4.00	6581.70
6/26/2000	37.38	6548.32
8/7/2000	38.00	6547.70
9/5/2000	1.80	6583.90
10/2/2000	11.65	6574.05
11/6/2000	8.60	6577.10
12/5/2000	39.21	6546.49
X23		
6/6/2000	5.00	6580.94
6/26/2000	36.38	6549.56
8/7/2000	38.92	6547.02
9/5/2000	2.00	6583.94
10/2/2000	4.44	6581.50
11/6/2000	2.00	6583.94
12/5/2000	38.96	6546.98
X24		
6/6/2000	2.00	6583.72
6/26/2000	38.37	6547.35
8/7/2000	38.94	6546.78
9/5/2000	3.00	6582.72
10/2/2000	8.41	6577.31
11/6/2000	14.55	6571.17
12/5/2000	39.94	6545.78
X25		
6/6/2000	7.95	6577.68
6/26/2000	38.88	6546.75
8/7/2000	39.11	6546.52
9/5/2000	38.88	6546.75
10/2/2000	39.07	6546.56
11/6/2000	39.26	6546.37
12/5/2000	39.41	6546.22
X26		
6/6/2000	29.11	6558.53
6/26/2000	28.16	6559.48
8/7/2000	28.31	6559.33
9/5/2000	2.00	6585.64
10/2/2000	2.44	6585.20
11/6/2000	2.50	6585.14
12/5/2000	35.34	6552.30
X27		
6/6/2000	45.82	6539.48
6/26/2000	45.84	6539.46
8/7/2000	46.00	6539.30
9/5/2000	22.86	6562.44
10/2/2000	12.14	6573.16
11/6/2000	46.56	6538.74
12/5/2000	46.27	6539.03
X28		
4/26/2000	28.96	6541.00
5/1/2000	15.00	6554.96
6/5/2000	16.00	6553.96
6/26/2000	21.60	6548.36
8/7/2000	16.00	6553.96
9/5/2000	18.00	6551.96
10/2/2000	17.68	6552.28
11/6/2000	18.62	6551.34
12/5/2000	16.80	6553.16
X29		
4/26/2000	27.02	6543.01
5/1/2000	22.00	6548.03
6/5/2000	9.00	6561.03
6/26/2000	14.80	6555.23
8/7/2000	10.00	6560.03
9/5/2000	11.60	6558.43
10/2/2000	10.22	6559.81
11/6/2000	12.10	6557.93
12/5/2000	8.00	6562.03
X30		
4/26/2000	29.96	6542.57
5/1/2000	15.70	6556.83
6/5/2000	12.00	6560.53
6/26/2000	8.00	6564.53
8/7/2000	15.00	6557.53
9/5/2000	18.30	6554.23
10/2/2000	12.00	6560.53
11/6/2000	9.00	6563.53
12/5/2000	8.00	6564.53

WATER LEVEL ELEVATION (FT-MSL)

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
X31		
4/26/2000	32.20	6541.93
5/1/2000	18.00	6556.13
6/5/2000	20.00	6554.13
6/26/2000	18.00	6556.13
8/7/2000	15.51	6558.62
9/5/2000	16.60	6557.53
10/2/2000	18.00	6556.13
11/6/2000	18.88	6555.25
12/5/2000	16.50	6557.63
Y		
1/3/2000	44.45	6528.43
1/31/2000	44.30	6528.58
2/1/2000	44.26	6528.62
3/6/2000	45.05	6527.83
4/3/2000	45.12	6527.76
5/1/2000	44.12	6528.76
5/10/2000	43.42	6529.46
6/5/2000	55.88	6517.00
6/26/2000	37.80	6535.08
7/24/2000	42.18	6530.70
8/2/2000	42.18	6530.70
8/7/2000	41.58	6531.30
9/5/2000	41.70	6531.18
10/2/2000	40.45	6532.43
10/17/2000	40.19	6532.69
11/6/2000	39.61	6533.27
12/5/2000	38.61	6534.27
Z		
1/3/2000	5.00	6564.22
1/31/2000	5.00	6564.22
3/6/2000	5.00	6564.22
4/3/2000	5.00	6564.22
5/1/2000	4.00	6565.22
6/5/2000	5.50	6563.72
6/26/2000	5.00	6564.22
8/7/2000	6.00	6563.22
9/5/2000	6.00	6563.22
10/2/2000	5.00	6564.22
11/6/2000	5.00	6564.22
12/5/2000	5.00	6564.22

TABLE A.1-2. WATER LEVELS FOR THE SUBDIVISION ALLUVIAL WELLS.

WATER-LEVEL ELEVATION (FT-MSL)

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
0453		
3/8/2000	32.73	6535.27
8/30/2000	34.08	6533.92
0490		
3/8/2000	35.08	6527.34
10/18/2000	36.19	6526.23
0496		
5/3/2000	52.96	6509.56
6/5/2000	77.56	6484.96
0497		
8/15/2000	55.68	6506.94
0688		
5/2/2000	58.80	6503.82
11/28/2000	59.36	6503.26
0835		
5/2/2000	49.74	6509.26
0844		
5/3/2000	35.36	6520.77
11/28/2000	33.90	6522.23
0845		
7/25/2000	34.16	6522.89
CW44		
5/3/2000	153.00	6407.74
5/9/2000	134.00	< 6426.74
6/5/2000	148.40	6412.34
8/15/2000	133.60	6427.14
12/14/2000	55.48	6505.26
SUB1		
3/15/2000	32.08	6528.92
8/31/2000	33.15	6527.85
SUB3		
4/20/2000	27.60	6529.47
8/31/2000	28.18	6528.89

* Drawdown Tube Pressure, # Transducer Reading

TABLE A.1-3. WATER LEVELS FOR REGIONAL ALLUVIAL WELLS.

WATER LEVEL ELEVATION (FT-MSL)

Well	Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
0631	5/3/2000	91.35	6449.75
0631	6/5/2000	91.55	6449.55
0631	9/6/2000	101.30	6439.80
0632	5/3/2000	89.55	6451.75
0632	6/5/2000	92.25	6449.05
0632	9/6/2000	99.58	6441.72
0633	1/3/2000	74.07	6483.49
0633	1/11/2000	73.97	6483.59
0633	1/17/2000	74.04	6483.52
0633	1/24/2000	74.07	6483.49
0633	1/31/2000	74.00	6483.56
0633	2/7/2000	74.18	6483.38
0633	2/14/2000	74.13	6483.43
0633	2/22/2000	70.28	6487.28
0633	3/6/2000	74.03	6483.53
0633	4/3/2000	74.71	6482.85
0633	5/2/2000	74.83	6482.73
0634	9/12/2000	71.28	6488.79
0636	2/10/2000	95.00	6478.44
0636	2/10/2000	95.05	6478.39
0637	2/10/2000	97.03	6478.17
0637	2/10/2000	99.21	6475.99
0640	7/20/2000	52.03	6527.94
0641	7/25/2000	50.39	6522.97
0642	7/25/2000	50.92	6520.96
0643	10/31/2000	68.10	6483.23
0644	10/31/2000	68.81	6475.09
0646	10/31/2000	70.77	6472.58
0647	1/24/2000	81.98	6469.93
0647	3/7/2000	81.68	6470.23
0647	5/3/2000	90.90	6461.01
0647	6/5/2000	74.80	6477.11
0647	9/6/2000	106.18	6445.73
0648	1/24/2000	87.29	6460.50
0648	5/3/2000	92.05	6455.74
0648	6/5/2000	95.15	6452.64
0648	9/6/2000	98.79	6449.00
0649	5/3/2000	89.05	6454.24
0649	6/5/2000	91.20	6452.09
0649	9/6/2000	81.92	6461.37
0652	10/31/2000	77.82	6460.33
0653	5/3/2000	63.25	6481.72
0653	5/9/2000	63.33	6481.64
0653	6/5/2000	157.20	6387.77
0653	7/12/2000	65.70	6479.27
0653	9/6/2000	169.00	6375.97
0654	9/7/2000	73.81	6476.69
0655	1/3/2000	74.52	6483.66
0655	1/11/2000	74.40	6483.78
0655	1/17/2000	74.32	6483.86
0655	1/24/2000	74.51	6483.67
0655	1/31/2000	74.47	6483.71
0655	2/7/2000	74.61	6483.57
0655	2/14/2000	74.41	6483.77
0655	2/22/2000	70.67	6487.51
0655	3/6/2000	74.58	6483.60
0655	4/3/2000	75.15	6483.03
0655	5/2/2000	75.15	6483.03
0656	1/3/2000	29.28	6524.79
0656	1/11/2000	29.96	6524.11
0656	1/17/2000	30.71	6523.36
0656	1/24/2000	30.76	6523.31
0656	1/31/2000	31.54	6522.53
0656	2/7/2000	33.83	6520.24
0656	2/14/2000	75.94	6478.13
0656	2/22/2000	20.87	6533.20
0656	3/6/2000	76.26	6477.81
0656	4/3/2000	77.31	6476.76
0656	5/2/2000	77.32	6476.75
0657	5/3/2000	90.82	6460.99
0657	6/5/2000	94.08	6457.73
0658	5/3/2000	100.50	< 6449.68
0658	9/2/2000	101.00	< 6449.18
0659	9/12/2000	70.06	6490.11
0682	1/3/2000	73.58	6480.39
0682	1/11/2000	73.51	6480.46
0682	1/17/2000	73.44	6480.53
0682	1/24/2000	73.36	6480.61
0682	1/31/2000	73.51	6480.46
0682	2/7/2000	73.22	6480.75
0682	2/14/2000	76.46	6477.51
0682	2/22/2000	50.93	6503.04
0682	3/6/2000	76.84	6477.13
0682	4/3/2000	77.88	6476.09
0682	5/2/2000	79.05	6474.92
0683	9/12/2000	84.13	6471.91
0683	10/24/2000	84.41	6471.63
0683	10/30/2000	84.42	6471.62
0684	9/7/2000	82.06	6471.22
0684	10/24/2000	82.28	6471.00
0684	10/30/2000	82.26	6471.02
0685	9/6/2000	88.40	6468.17
0685	10/24/2000	88.04	6468.53
0685	10/30/2000	88.31	6468.26
0685	10/31/2000	88.38	6468.19
0685	11/1/2000	88.43	6468.14
0685	11/2/2000	88.40	6468.17
0686	9/26/2000	103.61	6475.19
0687	9/6/2000	87.70	6468.26
0687	10/24/2000	87.40	6468.56
0687	10/30/2000	87.63	6468.33
0687	10/31/2000	87.69	6468.27
0687	11/1/2000	87.74	6468.22
0687	11/2/2000	87.73	6468.23
0689	7/20/2000	70.26	6471.76
0692	7/20/2000	65.90	6518.92
0846	5/3/2000	44.24	6504.68
0846	11/28/2000	43.84	6505.08
0848	7/20/2000	58.45	6514.04
0851	8/23/2000	72.36	6474.08
0855	8/23/2000	79.03	6462.08

* Drawdown Tube Pressure, # Transducer Reading

TABLE A.1-3. WATER LEVELS FOR REGIONAL ALLUVIAL WELLS. (cont.)

WATER LEVEL ELEVATION (FT-MSL)

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
0861		
8/22/2000	67.21	6492.64
0862		
5/3/2000	57.83	6498.35
6/5/2000	88.09	6468.09
8/22/2000	67.10	6489.08
0863		
5/3/2000	64.46	6492.10
6/5/2000	80.72	6475.84
8/22/2000	67.86	6488.70
8/25/2000	67.80	6488.76
0864		
8/22/2000	66.60	6480.12
0865		
8/22/2000	65.18	6491.60
0866		
8/22/2000	62.63	6495.49
0867		
8/22/2000	64.80	6491.10
0868		
8/23/2000	60.00	6514.74
0869		
5/3/2000	64.68	6479.81
6/5/2000	83.88	6460.61
6/5/2000	78.50	6465.99
8/22/2000	69.06	6475.43
0876		
8/22/2000	67.54	6476.72
0881		
9/27/2000	73.08	6491.96
0882		
9/27/2000	64.66	6496.50
0883		
9/27/2000	59.04	6498.09
0884		
9/27/2000	73.58	6492.52
0885		
9/27/2000	64.34	6500.30
0886		
9/27/2000	68.41	6496.14
0888		
9/26/2000	77.47	6479.86
0890		
9/27/2000	73.70	6484.73
0893		
9/27/2000	68.70	6495.27
0894		
1/3/2000	74.87	6479.42
1/11/2000	74.66	6479.63
1/17/2000	74.91	6479.38
1/24/2000	74.84	6479.45
1/31/2000	74.82	6479.47
2/7/2000	74.86	6479.43
2/14/2000	76.38	6477.91
2/22/2000	74.33	6479.96
3/6/2000	76.60	6477.69
4/3/2000	77.54	6476.75
5/2/2000	77.80	6476.49
9/26/2000	77.60	6476.69
0895		
9/26/2000	80.07	6473.77
0896		
9/26/2000	81.18	6474.43
0899		
9/26/2000	95.30	6475.54
0914		
5/9/2000	40.06	6601.94
0921		
5/9/2000	38.60	6585.40
0922		
5/9/2000	53.00	6568.70
5/10/2000	53.00	6568.70
0935		
9/7/2000	86.43	6471.69
10/24/2000	86.71	6471.41
10/30/2000	86.70	6471.42
0950		
5/9/2000	25.70	6631.30
7/12/2000	25.70	6631.30
0994		
10/24/2000	86.70	6468.30
0996		
9/6/2000	89.50	6463.02
10/24/2000	87.16	6465.36
10/30/2000	89.16	6463.36
10/31/2000	89.31	6463.21
11/1/2000	88.26	6464.26
11/2/2000	87.90	6464.62
11/3/2000	87.76	6464.76

TABLE A.2-1. WATER LEVELS FOR THE CHINLE AQUIFERS.

WATER LEVEL ELEVATION (FT-MSL)

0493

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
3/8/2000	61.24	6499.04
10/18/2000	64.81	6495.47
12/14/2000	62.08	6498.20

0494

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
3/8/2000	32.67	6527.47
10/18/2000	33.73	6526.41
12/14/2000	33.63	6526.51

0536

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
9/12/2000	144.70	6410.30

0653

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
5/3/2000	63.25	6481.72
5/9/2000	63.33	6481.64
6/5/2000	157.20	6387.77
7/12/2000	65.70	6479.27
9/6/2000	169.00	6375.97

0853

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
6/21/2000	68.10	6473.28
6/21/2000	68.10	6473.28
12/14/2000	69.83	6471.55

0859

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
6/21/2000	62.08	6490.68
12/14/2000	59.88	6492.88

0929

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
3/7/2000	37.24	6555.33
8/30/2000	45.16	6547.41
12/14/2000	37.88	6554.69

0930

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
12/14/2000	102.43	6496.11

0931

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
4/6/2000	57.66	6552.90
8/30/2000	64.43	6546.13
12/14/2000	57.94	6552.62

0934

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
4/6/2000	32.56	6553.03
8/30/2000	39.22	6546.37
12/14/2000	32.40	6553.19

0994

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
10/24/2000	86.70	6468.30

CE1

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
3/16/2000	46.31	6523.88
3/16/2000	65.60	6504.59
3/16/2000	74.33	6495.86
3/16/2000	110.32	6459.87
3/16/2000	110.44	6459.75
3/16/2000	110.50	6459.69
3/16/2000	46.31	6523.88
6/14/2000	45.60	6524.59
7/19/2000	48.90	6521.29

CE2

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	61.14	6515.21
1/31/2000	59.56	6516.79
3/6/2000	58.45	6517.90
4/3/2000	44.23	6532.12
4/6/2000	67.86	6508.49
4/13/2000	97.09	6479.26
4/19/2000	82.68	6493.67
4/26/2000	83.34	6493.01
5/1/2000	82.50	6493.85
5/9/2000	82.32	6494.03
5/10/2000	67.75	6508.60
5/16/2000	45.64	6530.71
5/23/2000	69.15	6507.20
6/1/2000	68.43	6507.92
6/5/2000	69.94	6506.41
6/14/2000	71.83	6504.52
6/14/2000	71.34	6505.01
6/21/2000	71.71	6504.64
6/26/2000	71.20	6505.15
7/12/2000	72.15	6504.20
7/18/2000	67.91	6508.44
8/4/2000	64.31	6512.04
8/7/2000	64.45	6511.90
8/15/2000	75.65	6500.70
8/24/2000	68.25	6508.10
8/29/2000	68.52	6507.83
9/5/2000	63.55	6512.80
9/6/2000	63.16	6513.19
9/15/2000	53.91	6522.44
9/20/2000	64.03	6512.32
9/27/2000	59.95	6516.40
10/2/2000	68.81	6507.54
10/4/2000	68.56	6507.79
10/11/2000	70.73	6505.62
10/18/2000	71.49	6504.86
10/25/2000	74.63	6501.72
11/1/2000	73.57	6502.78
11/6/2000	72.45	6503.90
11/9/2000	72.93	6503.42
12/5/2000	67.11	6509.24
12/7/2000	66.54	6509.81
12/14/2000	73.97	6502.38
12/14/2000	48.66	6527.69
12/21/2000	63.52	6512.83

CE5

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
12/14/2000	39.70	6528.85
12/19/2000	39.44	6529.11

CW1

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
12/14/2000	90.04	6495.18

CW2

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
2/2/2000	89.03	6496.45
5/2/2000	91.03	6494.45
8/2/2000	96.39	6489.09
11/28/2000	90.68	6494.80
12/14/2000	90.40	6495.08

CW2-1

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	52.98	6532.50
1/31/2000	52.77	6532.71
2/2/2000	53.76	6531.72
3/6/2000	52.64	6532.84
5/2/2000	54.58	6530.90
11/28/2000	54.40	6531.08
12/14/2000	54.36	6531.12

CW3

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
2/8/2000	56.80	6530.38
4/27/2000	57.48	6529.70
8/2/2000	57.80	6529.38
11/28/2000	57.80	6529.38
12/14/2000	59.10	6528.08

CW4R

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	39.39	6529.34
1/31/2000	38.11	6530.62
2/1/2000	38.31	6530.42
3/6/2000	37.98	6530.75
4/3/2000	38.45	6530.28
4/27/2000	39.08	6529.65
5/1/2000	39.34	6529.39
6/5/2000	39.16	6529.57
6/26/2000	39.85	6528.88
8/1/2000	43.50	6525.23
8/7/2000	39.67	6529.06
9/5/2000	39.65	6529.08
10/2/2000	40.05	6528.68
11/6/2000	39.20	6529.53
11/21/2000	39.68	6529.05
12/5/2000	39.80	6528.93
12/14/2000	39.86	6528.87

CW5

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	10.00	6559.34
1/31/2000	5.00	6564.34
3/6/2000	5.00	6564.34
4/3/2000	4.00	6565.34
5/1/2000	5.00	6564.34
6/5/2000	5.00	6564.34
6/26/2000	5.00	6564.34
8/7/2000	5.00	6564.34
9/5/2000	5.00	6564.34
10/2/2000	8.50	6560.84
11/6/2000	6.00	6563.34
12/5/2000	5.00	6564.34

CW6

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
12/14/2000	75.42	6500.22

CW8

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	44.06	6547.77
1/31/2000	43.58	6548.25
3/6/2000	42.95	6548.88
4/3/2000	42.52	6549.31
5/1/2000	42.06	6549.77
6/6/2000	41.53	6550.30
6/26/2000	47.20	6544.63
8/7/2000	40.51	6551.32
9/5/2000	40.18	6551.65
10/2/2000	39.72	6552.11
11/6/2000	39.26	6552.57
12/5/2000	38.90	6552.93

* Drawdown Tube Pressure, # Transducer Reading

TABLE A.2-1. WATER LEVELS FOR THE CHINLE AQUIFERS. (cont.)

WATER LEVEL ELEVATION (FT-MSL)

CW9

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
8/30/2000	78.66	6513.17
12/14/2000	66.66	6525.17

CW13

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	12.56	6564.14
1/31/2000	6.00	6570.70
3/6/2000	4.00	6572.70
4/3/2000	4.00	6572.70
5/1/2000	5.00	6571.70
6/5/2000	5.00	6571.70
6/26/2000	8.00	6568.70
8/7/2000	5.00	6571.70
9/5/2000	7.00	6569.70
10/2/2000	8.00	6568.70
11/6/2000	6.40	6570.30
12/5/2000	9.63	6567.07

CW14

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
1/3/2000	26.00	6540.09
1/31/2000	8.00	6558.09
3/6/2000	8.00	6558.09
4/3/2000	5.00	6561.09
5/1/2000	8.80	6557.29
6/5/2000	12.10	6553.99
6/26/2000	12.30	6553.79
8/7/2000	5.00	6561.09
9/5/2000	8.00	6558.09
10/2/2000	12.00	6554.09
11/6/2000	5.00	6561.09
12/5/2000	8.00	6558.09

CW15

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
6/21/2000	57.08	6494.24
12/14/2000	55.87	6495.45

CW17

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
6/19/2000	64.81	6524.51

CW18

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
7/20/2000	15.28	6557.37
12/14/2000	6.85	6565.80

CW24

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
10/3/2000	57.79	6530.88

CW25

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
4/3/2000	23.36	6543.84
5/1/2000	7.00	6560.20
6/5/2000	5.55	6561.65
6/14/2000	8.00	6559.20
6/26/2000	6.00	6561.20
8/7/2000	3.00	6564.20
9/5/2000	5.00	6562.20
10/2/2000	5.00	6562.20
11/6/2000	6.00	6561.20
12/5/2000	5.00	6562.20

CW26

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
6/21/2000	83.02	6478.41
12/14/2000	84.13	6477.30

CW27

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
6/21/2000	64.67	6498.21
12/14/2000	65.44	6497.44

CW28

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
7/20/2000	72.22	6499.46
12/14/2000	70.69	6500.99

CW29

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
6/21/2000	74.40	6477.82
12/14/2000	75.82	6476.40

CW30

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
3/16/2000	61.40	6496.91
3/16/2000	86.80	6471.51
3/16/2000	88.80	6469.51
3/16/2000	92.10	6466.21
3/16/2000	93.70	6464.61
3/16/2000	94.85	6463.46
3/16/2000	95.25	6463.06
3/16/2000	96.35	6461.96
3/16/2000	96.70	6461.61
3/16/2000	97.05	6461.26
3/16/2000	98.78	6459.53
3/16/2000	100.11	6458.20
3/16/2000	101.20	6457.11
3/16/2000	102.16	6456.15
3/16/2000	102.36	6455.95
3/16/2000	102.95	6455.36
3/16/2000	103.15	6455.16
3/16/2000	61.40	6496.91
6/21/2000	67.20	6491.11
12/14/2000	60.00	6498.31

CW31

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
6/21/2000	81.92	6478.34
12/14/2000	82.31	6477.95

CW32

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
6/21/2000	108.66	6458.62
12/14/2000	109.31	6457.97

CW33

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
6/21/2000	106.24	6468.65
12/14/2000	106.18	6468.71

CW35

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
6/19/2000	59.56	6531.61

CW36

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
12/14/2000	73.66	6477.43

CW37

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
6/27/2000	60.00	6491.17
12/14/2000	60.08	6491.09

CW39

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
12/14/2000	62.31	6488.40

CW40

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
3/7/2000	11.86	6567.08
8/30/2000	23.40	6555.54
12/14/2000	11.70	6567.24

CW41

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
12/14/2000	78.60	6476.81

CW42

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
8/29/2000	70.06	6478.72
9/6/2000	70.20	6478.58
12/14/2000	70.34	6478.44

CW43

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
8/29/2000	65.14	6483.65
12/14/2000	65.43	6483.36

CW44

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
5/3/2000	153.00	6407.74
5/9/2000	134.00	< 6426.74
6/5/2000	148.40	6412.34
8/15/2000	133.60	6427.14
12/14/2000	55.48	6505.26

CW45

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
8/15/2000	57.73	6503.58
12/14/2000	53.76	6507.55

CW46

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
5/3/2000	60.29	6501.97
8/29/2000	64.23	6498.03
12/14/2000	61.69	6500.57

HCW

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
7/20/2000	75.61	6486.39

WCW

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
12/14/2000	70.13	6497.24

WR25

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
10/3/2000	61.10	6525.36

* Drawdown Tube Pressure, # Transducer Reading

TABLE A.3-1. WATER LEVELS FOR THE SAN ANDRES AQUIFER.

WATER LEVEL ELEVATION (FT-MSL)

Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)	Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)	Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)	Date	Water Level (ft-MP)	Water Level Elevation (ft+MSL)
#2 Deepwell											
2/1/2000	117.60	6458.06									
0928											
8/9/2000	138.94	6458.66									
0943											
8/23/2000	60.93	6494.98									
0951											
1/3/2000	109.88	6463.82									
1/31/2000	110.98	6462.72									
3/6/2000	109.60	6464.10									
4/3/2000	110.25	6463.45									
5/2/2000	110.20	6463.50									
8/9/2000	115.00	6458.70									

* Drawdown Tube Pressure, # Transducer Reading

APPENDIX B

WATER QUALITY

TABLE OF CONTENTS

**GROUND-WATER MONITORING
FOR HOMESTAKE'S GRANTS PROJECT**

APPENDIX B

TABLE B.1-1. WATER QUALITY ANALYSES FOR THE TAILINGS WELLS.

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
CN1	12/14/2000	ENER	---	---	---	---	---	---	1510	12300	28500	* 26030	---
CN2	8/24/2000	ENER	---	---	---	---	---	---	1730	10100	27200	* 29400	---
	9/20/2000	ENER	---	---	---	---	---	---	644	4150	11000	* 13420	---
	10/12/2000	ENER	---	---	---	---	---	---	351	2590	6820	* 8630	---
	11/1/2000	ENER	---	---	---	---	---	---	54.2	1170	1920	* 2620	---
CN3	8/24/2000	ENER	---	---	---	---	---	---	1810	10600	28800	* 31900	---
	9/20/2000	ENER	---	---	---	---	---	---	293	4670	9760	* 12228	---
	10/12/2000	ENER	---	---	---	---	---	---	288	3300	6980	* 8720	---
	11/1/2000	ENER	---	---	---	---	---	---	68.3	1190	2200	* 3000	---
CN7	11/13/2000	ENER	10.5	---	---	---	775	240	153	1670	3980	* 7539	---
CS1	9/29/2000	ENER	---	---	---	---	---	---	931	9150	24400	* 25200	---
	12/14/2000	ENER	2.10	---	---	---	6410	1470	935	9610	24800	* 22580	---
CS2	4/12/2000	ENER	---	---	---	---	---	---	1020	9630	23100	* 23185	---
	4/26/2000	ENER	---	---	---	---	---	---	1140	10500	22300	* 22857	---
	5/3/2000	ENER	---	---	---	---	---	---	1250	10800	22500	* 22240	---
	5/18/2000	ENER	---	---	---	---	---	---	1320	11100	22800	* 26080	---
	6/7/2000	ENER	---	---	---	---	---	---	1200	9720	19700	* 23440	---
	7/12/2000	ENER	---	---	---	---	---	---	807	5960	15400	* 19010	---
	8/15/2000	ENER	---	---	---	---	---	---	621	4310	10700	* 13130	---
	9/29/2000	ENER	---	---	---	---	---	---	278	1560	4280	* 5940	---
	10/27/2000	ENER	---	---	---	---	---	---	266	1430	3480	* 5260	---
	12/14/2000	ENER	---	---	---	---	---	---	280	1230	3290	* 4990	---
CS3	3/16/2000	ENER	202	94.7	46.3	2660	1730	< 1.000	688	4550	10300	* 11128	0.946
	3/23/2000	ENER	---	---	---	---	---	---	682	4830	9620	* 10991	---
	4/12/2000	ENER	---	---	---	---	---	---	291	1800	3710	* 4743	---
	4/26/2000	ENER	---	---	---	---	---	---	---	1080	2310	* 2937	---

* Signifies Specific Conductivity from HMC

TABLE B.1-1. WATER QUALITY ANALYSES FOR THE TAILINGS WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
CS3	5/3/2000	ENER	---	---	---	---	---	---	201	1080	2380	* 3102	---
	5/18/2000	ENER	---	---	---	---	---	---	211	1140	2510	* 3405	---
	6/7/2000	ENER	---	---	---	---	---	---	292	1770	3750	* 5110	---
	6/14/2000	ENER	168	47.6	9.31	686	652	< 1.000	221	1180	3000	* 4100	1.02
	7/12/2000	ENER	---	---	---	---	---	---	188	948	2470	* 3398	---
	8/15/2000	ENER	---	---	---	---	---	---	204	1050	2540	* 3280	---
	9/29/2000	ENER	---	---	---	---	---	---	181	821	2120	* 2750	---
	10/27/2000	ENER	---	---	---	---	---	---	197	1020	2210	* 2970	---
	12/14/2000	ENER	---	---	---	---	---	---	195	942	2210	* 2960	---
CS7	11/13/2000	ENER	1.10	---	---	---	3670	1280	951	6840	17500	* 15750	---
ED1	8/3/2000	ENER	< 1.000	< 1.000	44.1	8500	6920	3320	766	8050	25800	* 27509	0.898
EN2	8/24/2000	ENER	---	---	---	---	---	---	823	7890	26200	* 29700	---
	9/20/2000	ENER	---	---	---	---	---	---	802	8140	26200	* 28500	---
	11/1/2000	ENER	---	---	---	---	---	---	974	9410	26500	* 28400	---
EN4A	9/20/2000	ENER	---	---	---	---	---	---	1700	9750	30900	* 33700	---
	10/12/2000	ENER	---	---	---	---	---	---	1170	6220	19900	* 23400	---
	10/27/2000	ENER	1.30	---	---	---	6430	1920	1500	9720	25100	* 29000	---
	12/14/2000	ENER	---	---	---	---	---	---	1320	8050	21300	* 19720	---
EN4B	9/20/2000	ENER	---	---	---	---	---	---	1330	7990	29600	* 32300	---
	10/12/2000	ENER	---	---	---	---	---	---	715	4000	13100	* 16240	---
	10/27/2000	ENER	< 1.000	---	---	---	3110	1330	700	4620	12500	* 15550	---
	12/14/2000	ENER	---	---	---	---	---	---	391	2700	7100	* 7550	---
EN6	9/20/2000	ENER	---	---	---	---	---	---	85.4	994	2100	* 2540	---
EN7	9/20/2000	ENER	---	---	---	---	---	---	103	1080	2310	* 3040	---
	10/12/2000	HMC	---	---	---	---	---	---	---	---	---	3340	---
NE1	8/24/2000	ENER	---	---	---	---	---	---	1220	8780	26100	* 30700	---

* Signifies Specific Conductivity from HMC

TABLE B.1-1. WATER QUALITY ANALYSES FOR THE TAILINGS WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
NE1	9/29/2000	ENER	---	---	---	---	---	---	1410	9660	26600	* 29300	---
	11/1/2000	ENER	---	---	---	---	---	---	1430	11200	28400	* 32500	---
NE2	8/24/2000	ENER	---	---	---	---	---	---	756	8180	26900	* 30500	---
NE5	4/5/2000	ENER	1.20	< 1.000	59.8	8900	6190	3110	965	9550	27200	* 35780	0.902
	10/20/2000	ENER	2.50	2.20	20.2	3730	2350	1160	447	4230	10800	* 16566	0.917
NE6	8/3/2000	ENER	< 1.000	< 1.000	53.3	9120	5970	4240	763	9310	27800	* 32755	0.876
NW5	4/5/2000	ENER	7.40	13.2	34.1	7000	6420	2620	526	6400	20300	* 30248	0.901
PW1	8/3/2000	ENER	1.61	5.44	47.1	9680	6070	1750	1600	11300	30000	* 33989	0.965
PW2	1/12/2000	ENER	---	---	---	---	---	---	934	9070	24200	* 26936	---
	3/16/2000	ENER	4.10	2.70	58.3	5940	3360	846	1020	7930	18800	* 5253	0.939
	3/23/2000	ENER	---	---	---	---	---	---	436	9080	19400	* 21188	---
	4/12/2000	ENER	---	---	---	---	---	---	948	7070	14400	* 16014	---
	4/26/2000	ENER	---	---	---	---	---	---	824	6120	12100	* 13878	---
	5/3/2000	ENER	---	---	---	---	---	---	675	4870	9810	* 10859	---
	5/18/2000	ENER	---	---	---	---	---	---	446	3090	6520	* 8980	---
	6/7/2000	ENER	---	---	---	---	---	---	536	3360	7300	* 9910	---
	6/14/2000	ENER	13.4	14.9	20.2	2300	1330	70.0	497	3030	7480	* 10060	1.01
	7/12/2000	ENER	---	---	---	---	---	---	687	3780	8430	* 11220	---
	8/15/2000	ENER	---	---	---	---	---	---	550	3310	7740	* 9890	---
	9/29/2000	ENER	---	---	---	---	---	---	525	3070	7290	* 9290	---
	10/27/2000	ENER	---	---	---	---	---	---	618	3950	8090	* 10410	---
	12/14/2000	ENER	---	---	---	---	---	---	566	3370	7110	* 9360	---
WA3	8/3/2000	ENER	3.43	7.48	36.0	8330	7870	3220	504	7740	25300	* 30391	0.884
WB2	8/3/2000	ENER	5.95	19.0	37.9	8460	8640	378	1150	9530	26100	* 32936	0.963
WC1	1/12/2000	ENER	---	---	---	---	---	---	2080	15300	30900	* 32669	---
	4/12/2000	ENER	---	---	---	---	---	---	1350	11000	29600	* 28460	---

* Signifies Specific Conductivity from HMC

TABLE B.1-1. WATER QUALITY ANALYSES FOR THE TAILINGS WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
WC1	5/4/2000	ENER	---	---	---	---	---	---	1070	9150	23200	* 23286	---
	6/16/2000	ENER	---	---	---	---	---	---	834	6390	17800	* 21830	---
	7/12/2000	ENER	---	---	---	---	---	---	534	3840	12300	* 16120	---
	8/15/2000	ENER	---	---	---	---	---	---	506	3810	12300	* 15490	---
	12/14/2000	ENER	---	---	---	---	---	---	406	3060	8710	* 9480	---
WC8	4/12/2000	ENER	---	---	---	---	---	---	1380	9420	26900	* 27597	---
	5/24/2000	ENER	---	---	---	---	---	---	865	5620	15600	* 19540	---
	6/7/2000	ENER	---	---	---	---	---	---	735	4550	12500	* 16350	---
	6/16/2000	ENER	---	---	---	---	---	---	675	4120	11300	* 18384	---
	7/12/2000	ENER	---	---	---	---	---	---	489	2790	12600	* 11550	---
	8/15/2000	ENER	---	---	---	---	---	---	403	2000	5790	* 8060	---
WC15	7/19/2000	ENER	---	---	---	---	---	---	734	4010	13100	* 16995	---
	8/15/2000	ENER	---	---	---	---	---	---	991	4830	16300	* 18840	---
	9/29/2000	ENER	---	---	---	---	---	---	382	1810	5230	* 6810	---
	11/1/2000	ENER	160	---	---	---	681	< 1.000	244	1410	2930	* 4160	---
	12/14/2000	ENER	---	---	---	---	---	---	235	1050	2510	* 3485	---
WE2	8/3/2000	ENER	< 1.000	< 1.000	44.9	9220	7480	3210	1030	8370	27200	* 33363	0.929
WE4	5/3/2000	ENER	---	---	---	---	---	---	1560	8480	19700	* 21062	---
	6/16/2000	ENER	---	---	---	---	---	---	1070	5730	13300	* 15620	---
	7/12/2000	ENER	---	---	---	---	---	---	724	3650	9700	* 11670	---
	8/15/2000	ENER	---	---	---	---	---	---	991	5450	14800	* 17790	---
	10/27/2000	ENER	---	---	---	---	---	---	430	2040	4900	* 6760	---
	12/14/2000	ENER	---	---	---	---	---	---	375	1540	4060	* 4600	---
WE7	1/12/2000	ENER	---	---	---	---	---	---	1740	10900	27100	* 29603	---
	2/15/2000	ENER	3.00	9.00	38.0	9230	5700	3220	1630	9530	29300	---	0.906
	4/12/2000	ENER	---	---	---	---	---	---	1780	11600	30700	* 29187	---
	5/3/2000	ENER	---	---	---	---	---	---	1830	12300	30000	* 29824	---

* Signifies Specific Conductivity from HMC

TABLE B.1-1. WATER QUALITY ANALYSES FOR THE TAILINGS WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
WE7	6/16/2000	ENER	---	---	---	---	---	---	2000	8480	29100	* 32620	---
	8/15/2000	ENER	---	---	---	---	---	---	1140	8030	24700	* 27400	---
	11/13/2000	ENER	1.30	---	---	---	3480	1060	935	5420	14600	* 25530	---
WE8	4/12/2000	ENER	---	---	---	---	---	---	2110	12100	33600	* 33533	---
	5/4/2000	ENER	---	---	---	---	---	---	1970	11600	31400	* 31397	---
	5/24/2000	ENER	---	---	---	---	---	---	1580	9010	25900	* 30060	---
	6/16/2000	ENER	---	---	---	---	---	---	1110	11200	18000	* 22440	---
	7/12/2000	ENER	---	---	---	---	---	---	738	4090	8320	* 20329	---
	8/15/2000	ENER	---	---	---	---	---	---	634	3510	10600	* 12570	---
	12/14/2000	ENER	---	---	---	---	---	---	891	4180	10200	* 9800	---
WE10	5/3/2000	ENER	---	---	---	---	---	---	1040	8030	20500	* 21491	---
	5/24/2000	ENER	---	---	---	---	---	---	934	7000	19500	* 22730	---
	6/7/2000	ENER	---	---	---	---	---	---	848	5980	15600	* 19180	---
	7/12/2000	ENER	---	---	---	---	---	---	773	4550	14700	* 21747	---
WE11	2/15/2000	ENER	452	165	11.8	1860	1370	< 1.000	613	4200	9430	---	0.922
WF4	4/12/2000	ENER	---	---	---	---	---	---	3000	15800	37800	* 36519	---
WN4	4/5/2000	ENER	9.50	25.5	12.1	3430	2410	291	637	4470	10700	* 18585	0.949
WN6	12/14/2000	ENER	---	---	---	---	---	---	1100	7330	16600	* 20147	---
WN7	1/12/2000	ENER	---	---	---	---	---	---	1280	10800	28000	* 30349	---

* Signifies Specific Conductivity from HMC

TABLE B.1-2. WATER QUALITY ANALYSES FOR THE TAILINGS WELLS.

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
CN1	12/14/2000	ENER	---	71.3	84.2	0.116	---	---	---	---	---	---
CN2	8/24/2000	ENER	---	60.0	102	0.344	---	---	---	---	---	---
	9/20/2000	ENER	---	14.0	33.7	0.320	---	---	---	---	---	---
	10/12/2000	ENER	---	10.5	17.8	0.320	---	---	---	---	---	---
	11/1/2000	ENER	---	0.956	0.671	0.277	---	---	---	---	---	---
CN3	8/24/2000	ENER	---	62.5	108	0.525	---	---	---	---	---	---
	9/20/2000	ENER	---	7.00	13.1	13.1	---	---	---	---	---	---
	10/12/2000	ENER	---	7.74	5.57	14.8	---	---	---	---	---	---
	11/1/2000	ENER	---	2.30	1.09	1.32	---	---	---	---	---	---
CN7	11/13/2000	ENER	---	6.79	9.72	0.145	---	---	---	---	---	---
CS1	9/29/2000	ENER	---	25.0	80.9	0.256	---	---	---	---	---	---
	12/14/2000	ENER	---	23.0	85.2	0.600	---	---	---	---	---	---
CS2	4/12/2000	ENER	---	36.1	101	17.6	---	---	---	---	---	---
	4/26/2000	ENER	---	34.1	80.6	22.4	---	---	---	---	---	---
	5/3/2000	ENER	---	35.5	70.9	18.1	---	---	---	---	---	---
	5/18/2000	ENER	---	29.6	63.4	3.54	---	---	---	---	---	---
	6/7/2000	ENER	---	26.9	51.0	1.85	---	---	---	---	---	---
	7/12/2000	ENER	---	14.6	47.2	1.16	---	---	---	---	---	---
	8/15/2000	ENER	---	13.5	36.5	0.848	---	---	---	---	---	---
	9/29/2000	ENER	---	2.68	7.79	2.54	---	---	---	---	---	---
	10/27/2000	ENER	---	1.28	3.70	3.35	---	---	---	---	---	---
	12/14/2000	ENER	---	1.88	4.42	1.24	---	---	---	---	---	---
CS3	3/16/2000	ENER	8.13	29.0	7.22	0.657	16.4	292	1.70	---	< 0.0100	0.200
	3/23/2000	ENER	---	34.2	4.30	0.430	---	---	---	---	---	---
	4/12/2000	ENER	---	16.0	2.16	0.107	---	---	---	---	---	---
	4/26/2000	ENER	---	7.63	1.07	0.0370	---	---	---	---	---	---

TABLE B.1-2. WATER QUALITY ANALYSES FOR THE TAILINGS WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
CS3	5/3/2000	ENER	---	7.61	1.51	0.0570	---	---	---	---	---	---
	5/18/2000	ENER	---	7.24	1.43	0.110	---	---	---	---	---	---
	6/7/2000	ENER	---	7.64	5.24	1.27	---	---	---	---	---	---
	6/14/2000	ENER	8.03	5.34	2.90	0.632	0.460	147	---	---	---	---
	7/12/2000	ENER	---	6.23	1.39	0.262	---	---	---	---	---	---
	8/15/2000	ENER	---	6.12	1.74	0.384	---	---	---	---	---	---
	9/29/2000	ENER	---	5.02	0.570	0.136	---	---	---	---	---	---
	10/27/2000	ENER	---	4.53	0.638	0.593	---	---	---	---	---	---
	12/14/2000	ENER	---	5.61	0.784	0.538	---	---	---	---	---	---
CS7	11/13/2000	ENER	---	21.0	57.4	0.110	---	---	---	---	---	---
ED1	8/3/2000	ENER	9.93	48.0	113	0.191	5.40	216	---	---	---	---
EN2	8/24/2000	ENER	---	56.0	189	0.351	---	---	---	---	---	---
	9/20/2000	ENER	---	31.0	155	0.392	---	---	---	---	---	---
	11/1/2000	ENER	---	50.9	171	0.316	---	---	---	---	---	---
EN4A	9/20/2000	ENER	---	107	135	0.140	---	---	---	---	---	---
	10/12/2000	ENER	---	32.0	57.3	0.0530	---	---	---	---	---	---
	10/27/2000	ENER	---	53.9	79.8	0.0936	---	---	---	---	---	---
	12/14/2000	ENER	---	53.6	68.0	0.0508	---	---	---	---	---	---
EN4B	9/20/2000	ENER	---	34.0	84.0	0.0770	---	---	---	---	---	---
	10/12/2000	ENER	---	14.9	30.5	0.160	---	---	---	---	---	---
	10/27/2000	ENER	---	13.7	30.4	0.0640	---	---	---	---	---	---
	12/14/2000	ENER	---	7.38	17.1	0.0340	---	---	---	---	---	---
EN6	9/20/2000	ENER	---	1.43	1.85	0.0813	---	---	---	---	---	---
EN7	9/20/2000	ENER	---	2.60	3.31	0.444	---	---	---	---	---	---
NE1	8/24/2000	ENER	---	38.1	102	0.173	---	---	---	---	---	---
	9/29/2000	ENER	---	28.0	76.5	0.0560	---	---	---	---	---	---

TABLE B.1-2. WATER QUALITY ANALYSES FOR THE TAILINGS WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
NE1	11/1/2000	ENER	---	36.8	93.4	0.126	---	---	---	---	---	---
NE2	8/24/2000	ENER	---	39.4	135	0.804	---	---	---	---	---	---
NE5	4/5/2000	ENER	9.95	41.0	128	0.300	5.39	285	---	---	---	---
	10/20/2000	ENER	9.94	14.9	31.9	0.377	2.94	57.6	---	---	---	---
NE6	8/3/2000	ENER	10.1	32.0	141	0.199	2.89	154	---	---	---	---
NW5	4/5/2000	ENER	9.86	33.0	115	0.252	4.93	245	---	---	---	---
PW1	8/3/2000	ENER	9.71	30.0	88.8	0.172	5.90	304	---	---	---	---
PW2	1/12/2000	ENER	---	41.0	120	0.136	4.84	---	---	---	---	---
	3/16/2000	ENER	9.65	11.0	60.6	0.481	2.07	66.7	< 1.000	---	0.340	56.2
	3/23/2000	ENER	---	14.2	65.0	0.403	---	---	---	---	---	---
	4/12/2000	ENER	---	15.0	23.5	0.519	---	---	---	---	---	---
	4/26/2000	ENER	---	16.3	27.4	5.44	---	---	---	---	---	---
	5/3/2000	ENER	---	11.3	21.5	4.41	---	---	---	---	---	---
	5/18/2000	ENER	---	7.73	15.0	2.94	---	---	---	---	---	---
	6/7/2000	ENER	---	8.81	17.5	1.52	---	---	---	---	---	---
	6/14/2000	ENER	8.97	11.1	22.2	1.64	0.570	41.6	---	---	---	---
	7/12/2000	ENER	---	21.5	23.6	1.46	---	---	---	---	---	---
	8/15/2000	ENER	---	19.5	26.9	2.62	---	---	---	---	---	---
	9/29/2000	ENER	---	19.0	20.9	3.81	---	---	---	---	---	---
	10/27/2000	ENER	---	19.3	20.4	4.95	---	---	---	---	---	---
	12/14/2000	ENER	---	20.5	20.0	4.52	---	---	---	---	---	---
WA3	8/3/2000	ENER	9.86	37.0	146	0.319	3.12	554	---	---	---	---
WB2	8/3/2000	ENER	8.89	30.0	101	0.154	0.230	328	---	---	---	---
WC1	1/12/2000	ENER	---	65.6	112	0.214	1.48	---	---	---	---	---
	4/12/2000	ENER	---	48.2	107	0.200	---	---	---	---	---	---
	5/4/2000	ENER	---	45.5	69.2	0.279	---	---	---	---	---	---

TABLE B.1-2. WATER QUALITY ANALYSES FOR THE TAILINGS WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
WC1	6/16/2000	ENER	---	41.3	91.9	0.762	---	---	---	---	---	---
	7/12/2000	ENER	---	12.0	42.5	0.432	---	---	---	---	---	---
	8/15/2000	ENER	---	20.2	60.0	0.457	---	---	---	---	---	---
	12/14/2000	ENER	---	12.8	32.4	0.201	---	---	---	---	---	---
WC8	4/12/2000	ENER	---	26.8	93.8	0.111	---	---	---	---	---	---
	5/24/2000	ENER	---	21.6	44.4	0.0870	---	---	---	---	---	---
	6/7/2000	ENER	---	11.9	36.2	0.0730	---	---	---	---	---	---
	6/16/2000	ENER	---	10.1	31.6	0.0688	---	---	---	---	---	---
	7/12/2000	ENER	---	8.57	16.3	0.0960	---	---	---	---	---	---
	8/15/2000	ENER	---	6.22	14.8	0.0510	---	---	---	---	---	---
WC15	7/19/2000	ENER	---	17.5	28.3	0.118	---	---	---	---	---	---
	8/15/2000	ENER	---	21.3	45.0	0.171	---	---	---	---	---	---
	9/29/2000	ENER	---	8.00	8.93	0.331	---	---	---	---	---	---
	11/1/2000	ENER	---	2.22	3.09	0.194	---	---	---	---	---	---
	12/14/2000	ENER	---	1.80	1.83	0.272	---	---	---	---	---	---
WE2	8/3/2000	ENER	9.87	38.0	119	0.394	5.56	338	---	---	---	---
WE4	5/3/2000	ENER	---	21.5	34.4	0.186	---	---	---	---	---	---
	6/16/2000	ENER	---	11.9	27.4	0.0967	---	---	---	---	---	---
	7/12/2000	ENER	---	7.95	16.4	0.0790	---	---	---	---	---	---
	8/15/2000	ENER	---	12.6	38.4	0.119	---	---	---	---	---	---
	10/27/2000	ENER	---	2.28	5.54	0.0480	---	---	---	---	---	---
	12/14/2000	ENER	---	1.89	5.30	0.0410	---	---	---	---	---	---
WE7	1/12/2000	ENER	---	31.6	85.4	0.158	9.96	---	---	---	---	---
	2/15/2000	ENER	10.00	27.0	79.5	0.211	1.08	147	---	---	---	---
	4/12/2000	ENER	---	42.5	106	0.0930	---	---	---	---	---	---
	5/3/2000	ENER	---	48.6	91.9	0.151	---	---	---	---	---	---
	6/16/2000	ENER	---	40.3	135	0.175	---	---	---	---	---	---

TABLE B.1-2. WATER QUALITY ANALYSES FOR THE TAILINGS WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
WE7	8/15/2000	ENER	---	43.0	104	0.132	---	---	---	---	---	---
	11/13/2000	ENER	---	13.0	40.1	0.154	---	---	---	---	---	---
WE8	4/12/2000	ENER	---	47.2	103	0.0700	---	---	---	---	---	---
	5/4/2000	ENER	---	51.2	77.6	0.0700	---	---	---	---	---	---
	5/24/2000	ENER	---	43.5	70.7	0.0665	---	---	---	---	---	---
	6/16/2000	ENER	---	21.6	50.0	0.0566	---	---	---	---	---	---
	7/12/2000	ENER	---	14.7	31.5	0.0430	---	---	---	---	---	---
	8/15/2000	ENER	---	13.2	31.2	0.0520	---	---	---	---	---	---
	12/14/2000	ENER	---	10.2	32.9	0.0788	---	---	---	---	---	---
WE10	5/3/2000	ENER	---	32.9	63.3	0.157	---	---	---	---	---	---
	5/24/2000	ENER	---	31.7	64.4	0.149	---	---	---	---	---	---
	6/7/2000	ENER	---	19.5	49.5	0.126	---	---	---	---	---	---
	7/12/2000	ENER	---	20.0	42.1	0.143	---	---	---	---	---	---
WE11	2/15/2000	ENER	7.82	34.0	3.61	0.260	0.260	5.80	---	---	---	---
WF4	4/12/2000	ENER	---	47.7	150	0.143	---	---	---	---	---	---
WN4	4/5/2000	ENER	9.33	17.0	33.2	0.138	5.71	5.90	---	---	---	---
WN6	12/14/2000	ENER	---	31.2	53.0	2.36	---	---	---	---	---	---
WN7	1/12/2000	ENER	---	44.6	119	0.214	4.31	---	---	---	---	---

TABLE B.2-1. WATER QUALITY ANALYSES FOR THE TOE DRAIN SUMPS.

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
East 1 Sump	8/3/2000	ENER	1.40	6.10	49.4	9090	7170	1610	1470	9810	29900	* 38746	0.953
East 2 Sump	8/3/2000	ENER	10.7	41.8	59.1	8990	5980	642	1440	11800	30100	* 38472	0.977
East Reclaim	8/3/2000	ENER	1.80	6.40	47.8	8420	6830	1460	1300	9030	26900	* 36191	0.955
North 1 Sump	8/3/2000	ENER	2.39	10.1	47.8	8970	6880	1090	1230	10500	29000	* 40798	0.975
South 1 Sump	8/3/2000	ENER	1.60	10.7	48.1	8510	6710	1650	1170	8730	26600	* 36476	0.981
West 1 Sump	8/3/2000	ENER	---	---	---	---	---	---	1010	8170	26200	* 26128	---
West Reclaim	8/3/2000	ENER	3.50	29.7	41.0	9070	7270	1010	1370	10100	28800	* 37107	0.991

* Signifies Specific Conductivity from HMC

TABLE B.2-2. WATER QUALITY ANALYSES FOR THE TOE DRAIN SUMPS.

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
East 1 Sump	8/3/2000	ENER	9.60	92.5	173	0.452	1.05	101	---	---	---	---
East 2 Sump	8/3/2000	ENER	9.28	114	116	0.256	2.52	7.50	---	---	---	---
East Reclaim	8/3/2000	ENER	9.58	37.0	93.7	0.500	1.12	86.1	---	---	---	---
North 1 Sump	8/3/2000	ENER	9.45	44.6	117	0.343	2.33	132	---	---	---	---
South 1 Sump	8/3/2000	ENER	9.64	29.0	100.0	0.400	< 0.100	214	---	---	---	---
West 1 Sump	8/3/2000	ENER	---	59.9	141	0.229	---	---	---	---	---	---
West Reclaim	8/3/2000	ENER	9.39	33.0	87.1	0.205	3.29	27.7	---	---	---	---

TABLE B.3-1. WATER QUALITY ANALYSES FOR THE LINED PONDS.

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
E Coll Pond	1/25/2000	ENER	21.1	162	34.0	5500	2670	353	1070	9300	18000	* 20715	0.911
	4/5/2000	ENER	18.8	247	30.6	7030	2600	611	1310	11400	23800	* 31199	0.972
	7/13/2000	ENER	27.7	390	41.2	8630	3050	131	1570	14100	31300	* 31246	1.05
	10/17/2000	ENER	72.5	158	16.3	3410	1090	18.0	752	5520	12500	* 18459	1.07
Evap Pond 1	1/25/2000	ENER	---	---	---	---	---	---	2280	15100	30600	* 31911	---
	4/5/2000	ENER	22.1	273	56.0	10900	4800	696	1930	16300	36100	* 47333	1.01
	8/2/2000	ENER	7.30	336	81.5	14100	6160	913	3250	20700	48000	* 51133	0.984
	10/17/2000	ENER	---	---	---	---	---	---	2850	20700	54100	* 61113	---
Evap Pond 2	1/25/2000	ENER	---	---	---	---	---	---	1080	8820	15400	* 17762	---
	4/5/2000	ENER	22.9	185	23.6	5290	2170	186	1060	8570	17700	* 27328	0.988
	4/25/2000	ENER	18.6	178	34.7	5540	2350	196	957	9170	19100	---	0.979
	8/2/2000	ENER	14.6	193	32.9	6920	3540	457	1240	10400	26000	* 29814	0.981
	10/17/2000	ENER	---	---	---	---	---	---	1360	11200	28800	* 37175	---
	10/17/2000	ENER	---	---	---	---	---	---	# 1520	# 14100	# 28600	---	---
W Coll Pond	2/2/2000	ENER	23.3	235	26.1	5460	1760	92.7	1030	9800	18200	* 19899	0.976
	5/10/2000	ENER	16.0	337	47.4	8470	3430	321	1440	13600	29800	* 36405	1.02
	8/2/2000	ENER	20.5	348	32.8	7280	2240	68.0	1320	12600	26700	* 30483	1.03
	11/29/2000	ENER	24.0	304	50.4	8680	3720	200	1630	15000	30200	* 48507	0.951

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.3-2. WATER QUALITY ANALYSES FOR THE LINED PONDS.

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
E Coll Pond	1/25/2000	ENER	9.37	31.6	56.3	2.70	20.1	10.4	0.900	< 0.0500	< 0.0100	41.9
	4/5/2000	ENER	9.62	37.3	64.9	3.79	26.5	32.3	---	---	---	---
	7/13/2000	ENER	8.88	94.5	66.8	7.13	31.8	7.60	< 1.000	< 0.0500	< 0.0100	6.20
	10/17/2000	ENER	8.46	28.5	35.6	2.69	12.5	0.800	---	---	---	---
Evap Pond 1	1/25/2000	ENER	---	80.0	100.0	1.57	---	---	---	---	---	---
	4/5/2000	ENER	9.41	71.9	119	1.26	0.690	5.10	1.60	---	0.180	2.60
	8/2/2000	ENER	9.42	78.6	141	2.00	1.09	3.10	< 1.000	< 0.0500	0.310	7.50
	10/17/2000	ENER	---	91.0	151	1.20	---	---	---	---	---	---
Evap Pond 2	1/25/2000	ENER	---	33.2	45.5	2.28	---	---	---	---	---	---
	4/5/2000	ENER	9.18	35.8	54.0	2.21	10.5	1.90	< 1.000	---	0.147	7.40
	4/25/2000	ENER	9.17	31.0	55.0	2.38	11.6	2.50	3.90	---	0.150	12.0
	8/2/2000	ENER	9.36	58.1	86.3	0.880	< 0.100	28.5	< 1.000	---	0.180	102
	10/17/2000	ENER	---	47.0	82.6	1.20	---	---	---	---	---	---
	10/17/2000	ENER	---	# 73.9	# 99.0	# 1.09	---	---	---	---	---	---
W Coll Pond	2/2/2000	ENER	8.97	31.7	52.8	3.78	28.5	6.40	< 1.000	---	0.0900	15.5
	5/10/2000	ENER	9.22	86.0	93.3	7.33	47.5	28.4	---	---	---	---
	8/2/2000	ENER	8.73	63.0	96.1	9.05	47.8	0.900	< 1.000	---	0.190	1.10
	11/29/2000	ENER	8.98	68.2	63.1	6.06	31.8	39.1	2.40	---	0.300	222

Signifies Quality Control Sample

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS.

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
1A	8/15/2000	ENER	---	---	---	---	501	---	---	604	---	---	---
1B	9/28/2000	ENER	---	---	---	---	---	---	---	874	2460	* 4030	---
1C	9/28/2000	ENER	---	---	---	---	---	---	---	619	1680	* 3048	---
1D	9/29/2000	ENER	---	---	---	---	---	---	---	508	1940	* 3390	---
1E	1/12/2000	ENER	---	---	---	---	---	---	169	959	2160	* 3142	---
1F	9/28/2000	ENER	---	---	---	---	---	---	---	1350	3480	* 5297	---
1G	9/28/2000	ENER	---	---	---	---	---	---	---	910	2340	* 4174	---
1H	10/3/2000	ENER	---	---	---	---	---	---	---	406	1490	* 2854	---
1I	10/3/2000	ENER	---	---	---	---	---	---	---	256	1210	* 2287	---
1J	10/3/2000	ENER	---	---	---	---	---	---	---	571	2280	* 4080	---
1K	10/3/2000	ENER	---	---	---	---	---	---	---	2010	5090	* 7785	---
	10/3/2000	ENER	---	---	---	---	---	---	---	# 2130	# 5100	---	---
1L	10/3/2000	ENER	---	---	---	---	---	---	---	556	1850	* 3291	---
1M	10/3/2000	ENER	---	---	---	---	---	---	---	1270	3540	* 5968	---
1N	10/3/2000	ENER	---	---	---	---	---	---	---	1010	2820	* 4231	---
1P	10/3/2000	ENER	---	---	---	---	---	---	---	509	2280	* 3863	---
B	1/25/2000	ENER	368	66.4	6.40	332	313	< 1.000	202	1350	2720	* 3330	0.986
	4/6/2000	ENER	---	---	---	---	---	---	---	1080	2250	* 3778	---
	7/11/2000	ENER	281	60.3	4.10	347	387	< 1.000	185	1020	2270	* 3643	1.04
	10/19/2000	ENER	---	---	---	---	---	---	---	870	2250	* 3786	---
B1	1/25/2000	ENER	---	---	---	---	---	---	---	1120	2330	* 3014	---
	7/13/2000	ENER	214	48.1	3.95	357	515	< 1.000	182	786	2140	* 3622	1.01
B2	5/23/2000	ENER	---	---	---	---	---	---	---	1510	3000	* 3822	---

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
B3	1/20/2000	ENER	---	---	---	---	---	---	---	2530	4960	* 6062	---
	2/25/2000	ENER	---	---	---	---	---	---	---	2690	5230	* 6472	---
	3/24/2000	ENER	---	---	---	---	---	---	---	2640	5210	* 6376	---
	4/26/2000	ENER	---	---	---	---	---	---	---	2690	5360	* 6200	---
	5/23/2000	ENER	---	---	---	---	---	---	---	2660	5350	* 6558	---
	6/13/2000	ENER	---	---	---	---	---	---	---	2730	5520	* 6652	---
	7/31/2000	ENER	264	78.9	5.58	1200	869	< 1.000	370	2340	5370	* 6809	0.981
	8/29/2000	ENER	---	---	---	---	---	---	---	2670	5510	* 6938	---
B4	5/23/2000	ENER	---	---	---	---	---	---	---	2320	4720	* 5889	---
	8/29/2000	ENER	---	---	---	---	---	---	---	1890	4440	* 5667	---
B5	1/20/2000	ENER	---	---	---	---	---	---	---	3000	5790	* 6960	---
	2/25/2000	ENER	---	---	---	---	---	---	---	3160	6010	* 7153	---
	3/24/2000	ENER	---	---	---	---	---	---	---	2970	5680	* 6785	---
	4/26/2000	ENER	---	---	---	---	---	---	---	3120	5920	* 7202	---
	5/23/2000	ENER	---	---	---	---	---	---	---	3200	6230	* 7432	---
	6/13/2000	ENER	---	---	---	---	---	---	---	3090	6200	* 7304	---
B6	3/24/2000	ENER	---	---	---	---	---	---	---	4640	9120	* 10463	---
B8	1/20/2000	ENER	---	---	---	---	---	---	---	7250	13600	* 15379	---
	2/25/2000	ENER	---	---	---	---	---	---	---	7130	13300	* 15326	---
	3/24/2000	ENER	---	---	---	---	---	---	---	6900	13100	* 14862	---
	4/26/2000	ENER	---	---	---	---	---	---	---	6260	11800	* 13708	---
	5/23/2000	ENER	---	---	---	---	---	---	---	5860	11100	* 12954	---
	6/28/2000	ENER	---	---	---	---	---	---	---	5010	11100	* 13099	---
	7/31/2000	ENER	466	210	6.59	2350	1450	< 1.000	747	4790	10700	* 12372	0.988
	8/29/2000	ENER	---	---	---	---	---	---	---	4850	10000	* 11599	---
B10	1/20/2000	ENER	---	---	---	---	---	---	---	7650	14000	* 16390	---
	2/25/2000	ENER	---	---	---	---	---	---	---	7440	14000	* 16408	---

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
B10	3/24/2000	ENER	---	---	---	---	---	---	---	7250	13800	* 16307	---
	4/26/2000	ENER	---	---	---	---	---	---	---	7540	13900	* 16263	---
	5/23/2000	ENER	---	---	---	---	---	---	---	6970	13500	* 16247	---
	6/28/2000	ENER	---	---	---	---	---	---	---	5920	13500	* 16429	---
	7/31/2000	ENER	273	140	9.00	3420	1740	< 1.000	789	5960	13200	* 15482	0.996
	8/29/2000	ENER	---	---	---	---	---	---	---	6330	13000	* 10662	---
B11	1/20/2000	ENER	---	---	---	---	---	---	---	5820	10000	* 11675	---
	2/25/2000	ENER	---	---	---	---	---	---	---	5560	9820	* 11652	---
	3/24/2000	ENER	---	---	---	---	---	---	---	5390	9640	* 11484	---
	4/26/2000	ENER	---	---	---	---	---	---	---	5520	9680	* 11464	---
	5/23/2000	ENER	---	---	---	---	---	---	---	5190	9540	* 11417	---
	6/28/2000	ENER	---	---	---	---	---	---	---	4430	8820	* 10878	---
	7/31/2000	ENER	339	138	11.6	1690	878	< 1.000	398	3970	7950	* 9649	0.943
	8/29/2000	ENER	---	---	---	---	---	---	---	4540	8960	* 15269	---
	10/31/2000	ENER	---	---	---	---	---	---	---	4580	8680	* 13077	---
BC	1/25/2000	ENER	264	72.0	6.80	256	375	< 1.000	80.6	1200	2260	* 2721	0.909
	10/19/2000	ENER	---	---	---	---	---	---	---	942	2210	* 3302	---
BP	2/2/2000	ENER	216	55.1	5.80	339	451	< 1.000	197	948	2240	* 2913	0.923
	5/2/2000	ENER	226	58.1	4.70	366	425	< 1.000	179	1020	2390	* 3953	0.964
	8/1/2000	ENER	200	53.0	3.70	343	492	< 1.000	191	788	2040	* 3517	0.982
	11/21/2000	ENER	226	60.5	4.10	371	439	< 1.000	178	979	2290	* 3872	0.996
	11/21/2000	ENER	# 222	# 59.7	# 4.30	# 367	# 440	# < 1.000	# 177	# 973	# 2310	---	# 0.987
C1	7/19/2000	ENER	---	---	---	---	---	---	220	925	2480	* 4303	---
	10/26/2000	ENER	---	---	---	---	---	---	199	881	2100	---	---
C2	1/19/2000	ENER	---	---	---	---	---	---	---	1720	3360	* 4211	---
	2/17/2000	ENER	---	---	---	---	---	---	---	1650	3280	* 3937	---
	3/27/2000	ENER	---	---	---	---	---	---	---	1490	3090	* 3902	---

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
C2	4/26/2000	ENER	---	---	---	---	---	---	---	1390	2920	* 3353	---
	7/19/2000	ENER	---	---	---	---	---	---	187	659	1990	* 3603	---
C3R	7/19/2000	ENER	---	---	---	---	---	---	184	633	1940	* 3571	---
C4	1/11/2000	ENER	207	55.1	6.40	345	495	< 1.000	216	798	2000	---	0.973
	7/19/2000	ENER	---	---	---	---	---	---	192	722	2010	* 3478	---
C5	7/19/2000	ENER	---	---	---	---	---	---	182	699	2020	* 3632	---
C6	6/22/2000	ENER	---	---	---	---	---	---	---	3120	6590	* 7728	---
	7/31/2000	ENER	606	148	9.99	1070	938	< 1.000	635	3010	6670	* 7857	0.929
	8/28/2000	ENER	---	---	---	---	---	---	---	3050	6640	* 7774	---
	9/28/2000	ENER	---	---	---	---	---	---	---	2470	6630	* 7752	---
	10/16/2000	ENER	---	---	---	---	---	---	---	2280	6670	* 7905	---
C7	1/19/2000	ENER	---	---	---	---	---	---	---	2260	5100	* 6529	---
	6/22/2000	ENER	---	---	---	---	---	---	---	2290	5000	* 6273	---
	8/28/2000	ENER	---	---	---	---	---	---	---	1970	4900	* 6239	---
C8	1/19/2000	ENER	---	---	---	---	---	---	---	2830	6360	* 7912	---
	2/25/2000	ENER	---	---	---	---	---	---	---	2710	6180	* 7809	---
	3/27/2000	ENER	---	---	---	---	---	---	---	2630	6050	* 7404	---
	4/26/2000	ENER	---	---	---	---	---	---	---	2620	5890	* 7404	---
	6/22/2000	ENER	---	---	---	---	---	---	---	2540	5660	* 7235	---
C9	1/19/2000	ENER	---	---	---	---	---	---	---	3900	8450	* 10594	---
	6/22/2000	ENER	---	---	---	---	---	---	---	3680	7610	* 9526	---
	7/31/2000	ENER	432	127	6.98	1460	828	< 1.000	834	3240	7290	* 9051	0.915
	8/28/2000	ENER	---	---	---	---	---	---	---	3230	7110	* 8771	---
C10	6/22/2000	ENER	---	---	---	---	---	---	---	4630	10500	* 12977	---
	7/31/2000	ENER	614	198	8.54	1990	1160	< 1.000	1460	4170	10300	* 12528	0.909
	8/28/2000	ENER	---	---	---	---	---	---	---	4200	10100	* 12196	---

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
C10	9/28/2000	ENER	---	---	---	---	---	---	---	4220	9840	* 11814	---
	10/16/2000	ENER	---	---	---	---	---	---	---	3500	9740	* 11870	---
C12	5/23/2000	ENER	---	---	---	---	---	---	---	4100	7340	* 9021	---
	7/31/2000	ENER	299	95.8	9.24	1430	780	< 1.000	396	3280	6610	* 8248	0.924
	8/28/2000	ENER	---	---	---	---	---	---	---	3160	6190	* 7748	---
C13	7/19/2000	ENER	183	51.9	3.90	350	537	< 1.000	185	682	1990	* 3496	1.02
	8/31/2000	ENER	---	---	---	---	---	---	186	704	2030	---	---
	9/27/2000	ENER	---	---	---	---	---	---	185	684	2060	---	---
	10/12/2000	ENER	---	---	---	---	---	---	212	659	2010	---	---
	10/26/2000	ENER	---	---	---	---	---	---	208	695	2060	---	---
	11/2/2000	ENER	---	---	---	---	---	---	204	753	2000	---	---
	11/9/2000	ENER	---	---	---	---	---	---	208	684	1970	---	---
C14	7/19/2000	ENER	170	45.0	4.70	393	562	< 1.000	195	705	2080	* 3614	0.999
	8/31/2000	ENER	---	---	---	---	---	---	198	823	2260	---	---
	10/12/2000	ENER	---	---	---	---	---	---	220	776	2030	---	---
	10/26/2000	ENER	---	---	---	---	---	---	201	809	2010	---	---
	11/2/2000	ENER	---	---	---	---	---	---	199	897	2050	---	---
	11/9/2000	ENER	---	---	---	---	---	---	206	805	2070	---	---
D1	2/2/2000	ENER	200	45.7	6.10	359	520	< 1.000	208	883	2140	* 2863	0.900
	4/27/2000	ENER	209	49.2	5.40	373	527	< 1.000	205	859	2130	* 3712	0.954
	8/1/2000	ENER	195	48.7	3.80	350	545	< 1.000	191	735	2010	* 3526	0.980
	11/21/2000	ENER	202	49.0	3.80	352	529	< 1.000	180	781	2050	* 3559	0.983
DC	2/2/2000	ENER	330	52.2	4.00	160	212	< 1.000	68.8	1000	2050	* 2384	1.06
	8/2/2000	ENER	---	---	---	---	---	---	---	1350	2720	* 3526	---
DD	4/6/2000	ENER	349	86.8	6.20	312	369	< 1.000	58.5	1420	2740	* 4004	1.03
DM	3/9/2000	ENER	40.8	66.4	6.00	1450	775	13.5	339	2500	5360	* 8875	0.946

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
DM	8/31/2000	ENER	---	---	---	---	---	---	---	2350	5340	* 7609	---
DN	10/19/2000	ENER	---	---	---	---	---	---	1170	8480	17300	---	---
DNR	10/19/2000	ENER	---	---	---	---	---	---	1200	9110	18900	---	---
DQ	2/2/2000	ENER	406	105	17.6	5000	2320	< 1.000	958	9100	17600	* 19283	0.970
	4/27/2000	ENER	349	133	26.2	4400	2260	< 1.000	886	8260	16500	* 23718	0.942
	4/27/2000	ENER	# 364	# 140	# 23.9	# 4630	# 2230	# < 1.000	# 876	# 8330	# 16500	---	# 0.987
	6/22/2000	ENER	221	86.6	11.9	4800	2180	< 1.000	711	7340	15800	---	1.09
	8/1/2000	ENER	259	101	9.40	4060	2080	< 1.000	698	7130	15600	* 22134	0.979
	11/21/2000	ENER	398	181	11.8	4440	2310	< 1.000	778	7620	15400	* 22016	1.04
DR	10/12/2000	ENER	---	---	---	---	---	---	---	5280	13600	* 16150	---
DS	10/12/2000	ENER	---	---	---	---	---	---	---	7610	20200	* 23214	---
DZ	3/9/2000	ENER	18.0	18.4	15.2	3400	2230	46.6	652	4930	11200	* 17413	0.947
	8/31/2000	ENER	---	---	---	---	---	---	---	6100	14900	* 21398	---
F	1/25/2000	ENER	217	53.8	6.10	255	473	< 1.000	193	700	1760	* 2369	0.953
	1/25/2000	ENER	# 199	# 48.8	# 6.00	# 232	# 468	# < 1.000	# 188	# 635	# 1770	---	# 0.922
	7/13/2000	ENER	---	---	---	---	---	---	---	636	1790	* 2720	---
FB	1/27/2000	ENER	---	---	---	---	---	---	---	714	1730	* 2246	---
	10/19/2000	ENER	240	61.7	5.15	262	408	< 1.000	198	786	1790	* 3075	0.997
GV	9/28/2000	ENER	---	---	---	---	---	---	---	588	1800	* 3035	---
I	1/25/2000	ENER	---	---	---	---	---	---	---	665	1810	* 2464	---
	7/18/2000	ENER	200	60.5	6.28	274	545	< 1.000	185	622	1890	* 3153	0.996
J6	1/6/2000	HMC	---	---	---	---	---	---	---	---	---	1591	---
J8	1/6/2000	HMC	---	---	---	---	---	---	---	---	---	92.0	---
K2	1/7/2000	ENER	---	---	---	---	---	---	194	938	2230	* 3189	---
	1/12/2000	ENER	---	---	---	---	---	---	188	932	2210	* 3079	---

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
K2	1/18/2000	ENER	---	---	---	---	---	---	187	911	2190	* 3128	---
	2/9/2000	ENER	---	---	---	---	---	---	173	778	1940	* 2797	---
	3/27/2000	ENER	---	---	---	---	---	---	---	788	1940	* 2810	---
	4/11/2000	ENER	---	---	---	---	---	---	170	790	1910	* 3523	---
	5/16/2000	ENER	---	---	---	---	---	---	---	393	1130	* 2574	---
	6/6/2000	ENER	---	---	---	---	---	---	---	479	1250	* 1865	---
	7/24/2000	ENER	---	---	---	---	---	---	25.2	59.2	454	* 919	---
	8/15/2000	ENER	---	---	---	---	---	---	31.9	75.7	496	* 979	---
	10/18/2000	ENER	38.6	11.8	2.90	155	342	< 1.000	40.1	115	594	* 855	1.06
K4	4/25/2000	ENER	---	---	---	---	---	---	---	3330	6800	* 10429	---
	7/25/2000	ENER	183	47.9	3.62	777	766	< 1.000	310	1330	3350	* 4626	0.958
	8/28/2000	ENER	---	---	---	---	---	---	---	1030	2730	* 3836	---
	9/26/2000	ENER	---	---	---	---	---	---	---	855	2460	* 3496	---
	10/16/2000	ENER	---	---	---	---	---	---	---	797	2310	* 3238	---
	10/23/2000	ENER	---	---	---	---	---	---	---	847	2250	* 3961	---
	12/13/2000	ENER	---	---	---	---	---	---	178	811	2080	* 3785	---
K5	4/25/2000	ENER	---	---	---	---	---	---	---	2690	5190	* 8032	---
	6/28/2000	ENER	---	---	---	---	---	---	---	2730	5860	* 7104	---
	7/25/2000	ENER	396	97.0	7.06	1110	730	< 1.000	519	2700	5800	* 7129	0.920
	8/28/2000	ENER	---	---	---	---	---	---	---	2560	5500	* 6825	---
	9/26/2000	ENER	---	---	---	---	---	---	---	1970	4940	* 6230	---
	10/16/2000	ENER	---	---	---	---	---	---	---	1800	4580	* 5765	---
	10/23/2000	ENER	---	---	---	---	---	---	---	1950	4430	* 7100	---
	12/13/2000	ENER	---	---	---	---	---	---	236	1610	3520	* 5763	---
K6	1/6/2000	ENER	---	---	---	---	---	---	95.5	310	915	* 1388	---
	1/12/2000	ENER	---	---	---	---	---	---	32.7	94.3	440	* 723	---
	2/9/2000	ENER	---	---	---	---	---	---	43.6	50.3	310	* 543	---

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
K6	4/11/2000	ENER	---	---	---	---	---	---	37.6	103	444	* 865	---
K7	4/26/2000	ENER	218	61.0	6.30	836	550	< 1.000	313	1660	3770	* 6130	1.000
	6/28/2000	ENER	---	---	---	---	---	---	---	2410	5270	* 6438	---
	7/25/2000	ENER	212	60.4	5.30	938	816	< 1.000	338	1650	4100	* 5482	0.986
	8/28/2000	ENER	---	---	---	---	---	---	---	1240	3080	* 4176	---
	9/26/2000	ENER	---	---	---	---	---	---	---	929	2640	* 3688	---
	10/16/2000	ENER	---	---	---	---	---	---	---	827	2410	* 3404	---
	12/13/2000	ENER	---	---	---	---	---	---	147	836	2040	* 3707	---
K8	4/26/2000	ENER	190	49.0	6.80	719	523	< 1.000	286	1390	3260	* 5369	0.986
	6/28/2000	ENER	---	---	---	---	---	---	---	1760	3760	* 4973	---
	7/25/2000	ENER	261	65.9	5.20	849	580	< 1.000	368	1720	4120	* 5349	0.996
	8/21/2000	ENER	---	---	---	---	---	---	---	1850	4430	* 5473	---
	9/26/2000	ENER	---	---	---	---	---	---	---	1630	4300	* 5484	---
	10/17/2000	ENER	---	---	---	---	---	---	---	1620	4370	* 5597	---
	12/13/2000	ENER	---	---	---	---	---	---	319	1460	3480	* 5852	---
K9	4/26/2000	ENER	364	87.2	9.90	1370	771	< 1.000	534	2800	5960	* 9283	0.990
	6/28/2000	ENER	---	---	---	---	---	---	---	2840	6070	* 7487	---
	7/25/2000	ENER	422	97.4	7.90	1230	764	< 1.000	544	2780	6330	* 7677	0.965
	8/21/2000	ENER	---	---	---	---	---	---	---	2560	6190	* 7405	---
	9/26/2000	ENER	---	---	---	---	---	---	---	2240	6040	* 7154	---
	10/16/2000	ENER	---	---	---	---	---	---	---	2120	5720	* 7044	---
	12/13/2000	ENER	---	---	---	---	---	---	426	2160	4860	* 7709	---
K10	4/26/2000	ENER	525	144	11.7	1410	998	< 1.000	585	3220	7020	* 10481	0.997
	6/28/2000	ENER	---	---	---	---	---	---	---	3100	6580	* 7858	---
	7/25/2000	ENER	534	117	8.40	1230	858	< 1.000	599	3020	6850	* 8102	0.959
	8/21/2000	ENER	---	---	---	---	---	---	---	2870	6810	* 7791	---
	10/17/2000	ENER	---	---	---	---	---	---	---	2450	6820	* 8068	---

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
K10	12/13/2000	ENER	---	---	---	---	---	---	518	3020	6130	* 9372	---
K11	4/26/2000	ENER	577	127	13.1	1270	892	< 1.000	652	3140	6770	* 10028	0.963
	6/28/2000	ENER	---	---	---	---	---	---	---	3120	6790	* 8232	---
	7/25/2000	ENER	615	128	9.68	1170	869	< 1.000	625	3170	7040	* 8194	0.943
	8/21/2000	ENER	---	---	---	---	---	---	---	2850	6770	* 7892	---
	9/26/2000	ENER	---	---	---	---	---	---	---	2400	6510	* 7618	---
	10/16/2000	ENER	---	---	---	---	---	---	---	2100	6430	* 7614	---
	12/13/2000	ENER	---	---	---	---	---	---	463	2900	5900	* 8826	---
KA	1/18/2000	ENER	---	---	---	---	---	---	209	1070	2440	* 3301	---
	2/17/2000	ENER	---	---	---	---	---	---	---	998	2420	* 3269	---
	3/27/2000	ENER	---	---	---	---	---	---	---	1100	2350	* 3229	---
	4/14/2000	ENER	---	---	---	---	---	---	173	921	2120	* 1848	---
	5/16/2000	ENER	---	---	---	---	---	---	---	710	1660	* 2335	---
	6/6/2000	ENER	---	---	---	---	---	---	---	541	1410	* 2102	---
	7/24/2000	ENER	55.5	14.4	3.06	239	406	< 1.000	52.6	287	971	* 1473	1.02
	8/21/2000	ENER	---	---	---	---	---	---	---	227	810	* 1231	---
	9/28/2000	ENER	---	---	---	---	---	---	---	172	703	* 1099	---
	10/19/2000	ENER	---	---	---	---	---	---	---	316	1140	* 1643	---
	12/13/2000	ENER	---	---	---	---	---	---	85.7	259	864	* 1618	---
KB	2/9/2000	ENER	---	---	---	---	---	---	156	654	1660	* 2393	---
	3/27/2000	ENER	---	---	---	---	---	---	---	515	1410	* 2033	---
	4/14/2000	ENER	---	---	---	---	---	---	90.0	400	1190	* 1790	---
	5/16/2000	ENER	---	---	---	---	---	---	---	208	778	* 1189	---
	6/6/2000	ENER	---	---	---	---	---	---	---	140	627	* 964	---
	7/24/2000	ENER	---	---	---	---	---	---	45.1	120	520	* 1062	---
	8/15/2000	ENER	---	---	---	---	---	---	47.1	152	642	* 1236	---
	12/13/2000	ENER	---	---	---	---	---	---	67.2	213	756	* 1383	---

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
KC	1/7/2000	ENER	---	---	---	---	---	---	138	579	1500	* 2211	---
	1/18/2000	ENER	---	---	---	---	---	---	121	654	1340	* 2172	---
	2/9/2000	ENER	---	---	---	---	---	---	159	762	1880	* 2574	---
	3/9/2000	ENER	---	---	---	---	---	---	72.7	314	998	* 1832	---
	4/11/2000	ENER	---	---	---	---	---	---	63.9	249	859	* 1623	---
	5/16/2000	ENER	---	---	---	---	---	---	---	143	612	* 886	---
	6/6/2000	ENER	---	---	---	---	---	---	---	109	494	* 776	---
	6/14/2000	ENER	---	---	---	---	---	---	35.5	131	545	* 1010	---
	7/24/2000	ENER	---	---	---	---	---	---	47.6	150	591	* 1186	---
	8/9/2000	ENER	---	---	---	---	---	---	56.3	153	606	* 1211	---
	10/23/2000	ENER	---	---	---	---	---	---	60.1	158	579	* 1108	---
	12/6/2000	ENER	---	---	---	---	---	---	70.3	230	794	* 1479	---
KD	1/18/2000	ENER	---	---	---	---	---	---	202	766	1990	* 2884	---
	3/27/2000	ENER	---	---	---	---	---	---	---	788	1950	* 2820	---
	4/14/2000	ENER	---	---	---	---	---	---	173	737	1840	* 2714	---
	5/16/2000	ENER	---	---	---	---	---	---	---	529	1490	* 2092	---
	6/6/2000	ENER	---	---	---	---	---	---	---	668	1740	* 2521	---
	8/15/2000	ENER	---	---	---	---	---	---	60.7	299	1150	* 2226	---
	12/13/2000	ENER	---	---	---	---	---	---	79.1	261	990	* 1940	---
KE	1/18/2000	ENER	---	---	---	---	---	---	147	584	1590	* 2316	---
	2/9/2000	ENER	---	---	---	---	---	---	147	531	1540	* 2237	---
	3/7/2000	ENER	---	---	---	---	---	---	140	560	1530	* 2242	---
	4/11/2000	ENER	---	---	---	---	---	---	133	523	1480	* 2757	---
	5/16/2000	ENER	---	---	---	---	---	---	---	668	1790	* 1629	---
	6/6/2000	ENER	---	---	---	---	---	---	---	318	1070	* 1622	---
	6/14/2000	ENER	---	---	---	---	---	---	71.7	291	1000	* 1899	---
	7/24/2000	ENER	---	---	---	---	---	---	65.4	176	722	* 1433	---

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
KE	8/9/2000	ENER	---	---	---	---	---	---	60.5	188	735	* 1441	---
	12/13/2000	ENER	---	---	---	---	---	---	83.5	245	832	* 1588	---
KEB	1/6/2000	ENER	---	---	---	---	---	---	189	643	1740	* 2495	---
	2/10/2000	ENER	---	---	---	---	---	---	194	643	1850	* 2548	---
	3/9/2000	ENER	---	---	---	---	---	---	194	689	1890	* 3451	---
	4/11/2000	ENER	---	---	---	---	---	---	152	676	1880	* 3451	---
	5/11/2000	ENER	---	---	---	---	---	---	87.9	355	1030	* 2023	---
	6/14/2000	ENER	---	---	---	---	---	---	50.8	212	772	* 1436	---
	7/25/2000	ENER	---	---	---	---	---	---	87.9	269	917	* 1691	---
	8/9/2000	ENER	---	---	---	---	---	---	49.6	202	757	* 1482	---
	9/28/2000	ENER	---	---	---	---	---	---	56.8	233	872	* 1673	---
	12/13/2000	ENER	---	---	---	---	---	---	54.9	167	682	* 1318	---
KF	1/6/2000	ENER	---	---	---	---	---	---	202	747	1920	* 2647	---
	2/10/2000	ENER	---	---	---	---	---	---	196	703	1940	* 2622	---
	3/9/2000	ENER	---	---	---	---	---	---	201	707	1940	* 3470	---
	4/11/2000	ENER	---	---	---	---	---	---	194	697	1900	* 3439	---
	6/27/2000	ENER	---	---	---	---	---	---	163	598	1660	* 3076	---
	8/9/2000	ENER	---	---	---	---	---	---	83.1	317	1110	* 2194	---
KM	1/6/2000	HMC	---	---	---	---	---	---	---	---	---	97.0	---
	2/9/2000	ENER	---	---	---	---	---	---	26.9	69.1	198	* 349	---
KN	1/6/2000	ENER	---	---	---	---	---	---	118	393	1160	* 1542	---
	1/27/2000	ENER	---	---	---	---	---	---	59.5	195	715	* 1030	---
	2/9/2000	ENER	---	---	---	---	---	---	51.4	160	635	* 1000	---
	3/29/2000	ENER	---	---	---	---	---	---	28.0	79.7	418	* 821	---
	4/11/2000	ENER	---	---	---	---	---	---	34.1	95.2	469	* 928	---
	6/14/2000	ENER	---	---	---	---	---	---	48.0	142	585	* 1000	---
	7/25/2000	ENER	---	---	---	---	---	---	20.0	24.1	285	* 599	---

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
KN	8/15/2000	ENER	---	---	---	---	---	---	22.9	54.4	352	* 663	---
KZ	1/27/2000	ENER	---	---	---	---	---	---	255	863	2540	* 3602	---
	2/9/2000	ENER	---	---	---	---	---	---	217	999	2340	* 3224	---
	4/11/2000	ENER	---	---	---	---	---	---	215	998	2310	* 4107	---
	5/11/2000	ENER	---	---	---	---	---	---	208	959	2190	* 3580	---
	8/9/2000	ENER	---	---	---	---	---	---	225	728	2090	* 3669	---
	10/17/2000	ENER	151	40.7	5.60	491	707	< 1.000	196	716	2200	* 3800	1.01
	12/6/2000	ENER	---	---	---	---	---	---	58.1	202	840	* 1561	---
L	4/12/2000	ENER	---	---	---	---	---	---	---	729	1800	* 3109	---
	4/12/2000	ENER	---	---	---	---	---	---	---	# 741	# 1780	---	---
	5/16/2000	ENER	---	---	---	---	---	---	187	740	1780	* 2473	---
	6/7/2000	ENER	---	---	---	---	---	---	187	763	1810	* 2568	---
	7/24/2000	ENER	171	40.7	4.95	342	396	< 1.000	191	716	1800	* 2551	1.00
	9/20/2000	ENER	---	---	---	---	---	---	---	642	1830	* 2573	---
	10/19/2000	ENER	---	---	---	---	---	---	---	617	1830	* 2554	---
L5	1/18/2000	ENER	---	---	---	---	---	---	285	1320	2830	* 3868	---
	5/16/2000	ENER	---	---	---	---	---	---	246	1040	2360	* 3272	---
	6/7/2000	ENER	---	---	---	---	---	---	249	1020	2370	* 3410	---
	7/24/2000	ENER	139	31.8	4.16	571	563	< 1.000	247	906	2360	* 3340	0.983
	8/18/2000	ENER	---	---	---	---	---	---	---	825	2220	* 3167	---
	9/20/2000	ENER	---	---	---	---	---	---	---	658	2020	* 2939	---
	10/19/2000	ENER	---	---	---	---	---	---	---	555	1880	* 2724	---
L6	9/28/2000	ENER	---	---	---	---	---	---	---	785	2120	* 3761	---
L7	4/12/2000	ENER	---	---	---	---	---	---	---	1500	3230	* 5267	---
	5/16/2000	ENER	---	---	---	---	---	---	299	1520	3120	* 3924	---
	6/7/2000	ENER	---	---	---	---	---	---	277	1320	2730	* 3683	---
	7/24/2000	ENER	202	44.2	4.92	531	337	< 1.000	276	1130	2600	* 3517	1.00

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
L7	8/18/2000	ENER	---	---	---	---	---	---	---	1020	2480	* 3354	---
	9/20/2000	ENER	---	---	---	---	---	---	---	925	2430	* 3307	---
	10/19/2000	ENER	---	---	---	---	---	---	---	816	2370	* 3249	---
L8	1/18/2000	ENER	---	---	---	---	---	---	237	962	2310	* 3229	---
	2/17/2000	ENER	---	---	---	---	---	---	235	920	2280	* 3235	---
	3/7/2000	ENER	---	---	---	---	---	---	237	954	2290	* 3270	---
	4/17/2000	ENER	---	---	---	---	---	---	221	911	2190	* 3193	---
	5/16/2000	ENER	---	---	---	---	---	---	213	926	2160	* 3080	---
	6/7/2000	ENER	---	---	---	---	---	---	206	813	2090	* 3093	---
	7/24/2000	ENER	105	24.2	3.95	503	618	< 1.000	192	687	1960	* 2863	0.978
	8/18/2000	ENER	---	---	---	---	---	---	---	634	1870	* 2747	---
	9/20/2000	ENER	---	---	---	---	---	---	---	539	1740	* 2579	---
	10/19/2000	ENER	---	---	---	---	---	---	---	468	1680	* 2489	---
L9	1/18/2000	ENER	---	---	---	---	---	---	216	872	2100	* 2997	---
	2/17/2000	ENER	---	---	---	---	---	---	208	846	2090	* 2972	---
	3/7/2000	ENER	---	---	---	---	---	---	215	858	2120	* 3016	---
	4/17/2000	ENER	---	---	---	---	---	---	208	819	2050	* 2995	---
	5/16/2000	ENER	---	---	---	---	---	---	---	835	2090	* 2959	---
	6/7/2000	ENER	---	---	---	---	---	---	208	818	2040	* 2964	---
	7/24/2000	ENER	143	33.1	4.48	465	590	< 1.000	200	736	2020	* 2884	0.985
	8/18/2000	ENER	---	---	---	---	---	---	---	686	1960	* 2791	---
	9/20/2000	ENER	---	---	---	---	---	---	---	595	1880	* 2744	---
	10/19/2000	ENER	---	---	---	---	---	---	---	521	1810	* 2638	---
L10	1/18/2000	ENER	---	---	---	---	---	---	204	844	1940	* 2726	---
	2/17/2000	ENER	---	---	---	---	---	---	202	818	1970	* 2721	---
	3/7/2000	ENER	---	---	---	---	---	---	201	835	1990	* 2783	---
	4/17/2000	ENER	---	---	---	---	---	---	201	774	1940	* 2749	---

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
L10	5/16/2000	ENER	---	---	---	---	---	---	---	798	1970	* 2711	---
	6/7/2000	ENER	---	---	---	---	---	---	196	789	1920	* 2722	---
	7/24/2000	ENER	166	39.5	4.86	382	520	< 1.000	190	703	1860	* 2647	0.990
	8/18/2000	ENER	---	---	---	---	---	---	---	642	1820	* 2573	---
	9/20/2000	ENER	---	---	---	---	---	---	---	567	1750	* 2512	---
	10/19/2000	ENER	---	---	---	---	---	---	---	483	1660	* 2409	---
M3	1/20/2000	ENER	---	---	---	---	---	---	---	2830	5770	* 7499	---
	2/23/2000	ENER	---	---	---	---	---	---	---	2820	5650	* 7319	---
	3/7/2000	ENER	---	---	---	---	---	---	---	2810	5640	* 7145	---
	4/24/2000	ENER	---	---	---	---	---	---	---	2640	5500	* 7202	---
	4/25/2000	ENER	113	50.5	7.00	1480	1020	< 1.000	315	2630	5570	---	0.925
	5/18/2000	ENER	---	---	---	---	---	---	---	2630	5500	* 7235	---
	6/8/2000	ENER	---	---	---	---	---	---	---	2640	5450	* 7072	---
	7/24/2000	ENER	131	57.2	5.25	1440	1000	< 1.000	372	2420	5320	* 7097	0.958
	8/18/2000	ENER	---	---	---	---	---	---	---	2320	5300	* 6983	---
	10/11/2000	ENER	---	---	---	---	---	---	---	2120	5400	* 7098	---
M4	4/20/2000	ENER	---	---	---	---	---	---	---	903	2160	* 3421	---
	10/31/2000	ENER	115	49.1	4.31	495	595	< 1.000	184	863	2020	* 3773	0.954
M5	2/3/2000	ENER	217	47.1	5.60	311	414	< 1.000	180	912	2210	* 2815	0.919
	2/3/2000	ENER	# 223	# 48.2	# 5.40	# 314	# 414	# < 1.000	# 191	# 901	# 2210	---	# 0.933
	5/10/2000	ENER	218	49.0	3.22	350	469	< 1.000	181	890	2190	* 3701	0.964
	8/8/2000	ENER	217	48.0	4.04	342	509	< 1.000	208	836	2150	* 3611	0.941
	11/29/2000	ENER	241	52.0	4.20	329	481	< 1.000	191	892	2200	* 3731	0.964
MO	1/27/2000	ENER	---	---	---	---	---	---	---	1180	2480	* 3166	---
	1/27/2000	ENER	---	---	---	---	---	---	---	# 1160	# 2480	---	---
	7/18/2000	ENER	299	76.9	7.47	304	493	< 1.000	185	1020	2510	* 3871	1.00
MQ	11/1/2000	ENER	---	---	---	---	---	---	---	1440	2730	* 3979	---

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
MR	11/1/2000	ENER	---	---	---	---	---	---	---	1180	2370	* 3805	---
MS	11/1/2000	ENER	---	---	---	---	---	---	---	810	1890	* 3024	---
MT	11/1/2000	ENER	---	---	---	---	---	---	---	1390	2550	* 3942	---
MU	11/1/2000	ENER	---	---	---	---	---	---	---	2330	4050	* 5684	---
MX	11/1/2000	ENER	---	---	---	---	---	---	---	774	1840	* 2959	---
MY	11/1/2000	ENER	---	---	---	---	---	---	---	773	1800	* 2899	---
N	5/16/2000	ENER	---	---	---	---	---	---	---	1310	2380	* 3475	---
	10/31/2000	ENER	302	83.0	4.69	297	327	< 1.000	60.3	1390	2360	* 3591	0.970
NC	1/26/2000	ENER	---	---	---	---	---	---	---	683	1280	* 1702	---
	4/6/2000	ENER	140	33.1	3.70	191	195	< 1.000	46.9	667	1310	* 2184	0.982
	4/6/2000	ENER	# 152	# 34.9	# 3.20	# 200	# 179	# < 1.000	# 46.7	# 667	# 1310	---	# 1.06
	7/18/2000	ENER	---	---	---	---	---	---	---	632	1300	* 2155	---
	10/31/2000	ENER	151	36.4	3.14	201	196	< 1.000	40.4	755	1260	* 2187	0.963
ND	8/2/2000	ENER	30.6	8.58	< 1.000	381	376	< 1.000	66.9	526	1290	* 2194	0.989
NE5	4/5/2000	ENER	1.20	< 1.000	59.8	8900	6190	3110	965	9550	27200	* 35780	0.902
	10/20/2000	ENER	2.50	2.20	20.2	3730	2350	1160	447	4230	10800	* 16566	0.917
NW5	4/5/2000	ENER	7.40	13.2	34.1	7000	6420	2620	526	6400	20300	* 30248	0.901
O	5/16/2000	ENER	177	39.9	2.37	366	195	< 1.000	140	957	1920	* 3194	1.04
	10/31/2000	ENER	---	---	---	---	---	---	---	971	1890	* 3232	---
P	1/11/2000	ENER	227	48.0	6.30	247	256	< 1.000	51.8	962	1800	---	1.02
	3/7/2000	ENER	216	46.9	5.10	242	249	< 1.000	48.1	916	1820	* 2218	1.03
	3/7/2000	ENER	# 214	# 45.2	# 6.00	# 231	# 250	# < 1.000	# 56.2	# 917	# 1790	---	# 0.992
	5/9/2000	ENER	201	43.6	5.49	228	251	< 1.000	45.4	858	1800	* 2876	1.02
	8/31/2000	ENER	198	42.6	4.90	234	265	< 1.000	45.5	851	1760	* 2827	1.01
	11/28/2000	ENER	214	45.2	4.90	231	256	< 1.000	49.0	910	1790	* 2857	1.00

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
P2	2/9/2000	ENER	250	48.7	7.50	224	234	< 1.000	55.3	1060	1970	* 2413	0.961
	5/9/2000	ENER	254	53.3	6.90	246	245	< 1.000	60.6	1020	2080	* 3235	1.03
	8/2/2000	ENER	260	52.6	5.60	240	236	< 1.000	54.0	1030	2020	* 3113	1.04
	8/2/2000	ENER	# 252	# 50.4	# 5.43	# 240	# 236	# < 1.000	# 46.9	# 1050	# 2050	---	# 1.01
	11/28/2000	ENER	267	54.6	5.90	243	245	< 1.000	62.9	1070	2100	* 3241	1.02
	11/28/2000	ENER	# 272	# 55.5	# 6.20	# 246	# 245	# < 1.000	# 61.0	# 1090	# 2090	---	# 1.02
P3	3/7/2000	ENER	243	48.9	7.40	241	233	< 1.000	60.1	1030	1960	* 2942	0.994
P4	3/7/2000	ENER	186	33.8	4.40	216	189	< 1.000	47.0	803	1500	* 1655	1.02
	3/7/2000	ENER	# 186	# 33.9	# 4.80	# 217	# 186	# < 1.000	# 47.8	# 835	# 1530	---	# 0.992
PM	2/3/2000	ENER	168	44.7	4.90	418	545	< 1.000	198	842	2250	* 3008	0.947
	5/16/2000	ENER	---	---	---	---	---	---	---	824	2060	* 2882	---
	7/19/2000	ENER	---	---	---	---	---	---	183	704	2060	* 3532	---
	8/9/2000	ENER	168	44.0	3.50	380	590	< 1.000	213	715	2000	* 3609	0.935
	12/6/2000	ENER	---	---	---	---	---	---	---	727	1990	* 3587	---
	12/6/2000	ENER	---	---	---	---	---	---	---	# 716	# 1980	---	---
Q	1/12/2000	ENER	290	56.0	8.30	257	231	< 1.000	64.7	1200	2200	* 2526	0.995
	3/14/2000	ENER	272	52.6	6.90	238	234	< 1.000	56.8	1070	2250	* 3343	1.02
R	5/11/2000	ENER	271	47.3	4.10	258	149	< 1.000	59.9	1220	2160	* 3251	0.972
S	5/11/2000	ENER	---	---	---	---	---	---	---	10200	20600	* 28455	---
	12/6/2000	ENER	17.6	65.9	27.0	6310	3780	91.0	1280	9730	21100	* 30599	0.927
S2	7/18/2000	ENER	481	142	11.5	1390	1060	< 1.000	275	3730	6540	* 9286	0.938
S3	2/8/2000	ENER	180	46.7	7.20	738	668	< 1.000	231	1520	3470	* 4452	0.918
	5/10/2000	ENER	178	48.1	5.00	796	665	< 1.000	213	1540	3540	* 5852	0.971
	8/8/2000	ENER	190	50.0	5.30	770	667	< 1.000	262	1540	3530	* 6197	0.937
	12/6/2000	ENER	266	68.9	7.20	814	596	< 1.000	360	1610	3830	* 6321	1.02

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
S4	2/8/2000	ENER	324	73.7	8.00	417	426	< 1.000	180	1570	3340	* 3380	0.906
	5/10/2000	ENER	383	90.6	6.25	520	496	< 1.000	159	1830	3770	* 5502	0.972
	5/10/2000	ENER	# 381	# 89.3	# 6.30	# 510	# 499	# < 1.000	# 161	# 1810	# 3740	---	# 0.965
	8/9/2000	ENER	390	90.8	6.74	487	497	< 1.000	188	1820	3630	* 5444	0.940
	12/6/2000	ENER	419	87.6	7.20	478	476	< 1.000	165	1750	3660	* 5436	1.00
S5	1/20/2000	ENER	---	---	---	---	---	---	---	3050	5720	* 6812	---
	2/23/2000	ENER	---	---	---	---	---	---	---	3020	5690	* 6854	---
	3/7/2000	ENER	---	---	---	---	---	---	---	2810	5750	* 6898	---
	4/24/2000	ENER	---	---	---	---	---	---	---	3140	5970	* 7019	---
	5/18/2000	ENER	---	---	---	---	---	---	---	3150	6150	* 7235	---
	6/8/2000	ENER	---	---	---	---	---	---	---	3170	6150	* 7521	---
	7/24/2000	ENER	363	93.6	9.22	1360	1060	< 1.000	344	2930	6200	* 7591	0.967
	8/18/2000	ENER	---	---	---	---	---	---	---	2980	6280	* 7614	---
	10/11/2000	ENER	---	---	---	---	---	---	---	2580	6290	* 7709	---
S11	10/31/2000	ENER	---	---	---	---	---	---	---	1270	2450	* 3989	---
S12	1/6/2000	ENER	---	---	---	---	---	---	105	646	1460	* 2068	---
	1/27/2000	ENER	---	---	---	---	---	---	105	510	1250	* 1764	---
	2/9/2000	ENER	---	---	---	---	---	---	82.5	438	1070	* 1516	---
	3/17/2000	ENER	---	---	---	---	---	---	32.2	108	459	* 955	---
	4/6/2000	ENER	---	---	---	---	---	---	40.6	129	537	* 1046	---
	5/11/2000	ENER	---	---	---	---	---	---	41.1	132	512	* 1040	---
	6/14/2000	ENER	---	---	---	---	---	---	30.8	95.2	438	* 873	---
	7/24/2000	ENER	---	---	---	---	---	---	39.8	106	495	* 960	---
	8/9/2000	ENER	---	---	---	---	---	---	55.7	141	564	* 1050	---
	9/11/2000	ENER	---	---	---	---	---	---	25.9	77.3	435	* 782	---
SA	1/20/2000	ENER	---	---	---	---	---	---	---	2710	5250	* 6738	---
	2/23/2000	ENER	---	---	---	---	---	---	---	2590	5180	* 6505	---

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
SA	3/24/2000	ENER	---	---	---	---	---	---	---	2550	5190	* 6464	---
	4/24/2000	ENER	---	---	---	---	---	---	---	2640	5100	* 6434	---
	5/18/2000	ENER	---	---	---	---	---	---	---	2490	5110	* 6546	---
	6/8/2000	ENER	---	---	---	---	---	---	---	2640	5030	* 6511	---
	7/24/2000	ENER	179	53.8	6.17	1280	928	< 1.000	332	2260	4990	* 6587	0.966
	8/18/2000	ENER	---	---	---	---	---	---	---	2230	4980	* 6535	---
	10/11/2000	ENER	---	---	---	---	---	---	---	1880	4890	* 6449	---
SB	1/20/2000	ENER	---	---	---	---	---	---	---	6440	12700	* 15102	---
	2/23/2000	ENER	---	---	---	---	---	---	---	5540	10500	* 12927	---
	3/24/2000	ENER	---	---	---	---	---	---	---	5240	10800	* 12932	---
SC	1/19/2000	ENER	---	---	---	---	---	---	---	5480	10900	* 13463	---
	2/23/2000	ENER	---	---	---	---	---	---	---	5580	11100	* 13803	---
	3/24/2000	ENER	---	---	---	---	---	---	---	5560	11100	* 13770	---
	4/24/2000	ENER	---	---	---	---	---	---	---	5660	11000	* 14075	---
	5/18/2000	ENER	---	---	---	---	---	---	---	5550	11000	* 13551	---
	6/8/2000	ENER	---	---	---	---	---	---	---	5580	12600	* 13920	---
	7/24/2000	ENER	65.2	71.5	8.46	3240	2140	32.0	556	5100	11200	* 13729	0.951
	8/18/2000	ENER	---	---	---	---	---	---	---	5060	11200	* 13709	---
	10/11/2000	ENER	---	---	---	---	---	---	---	4470	11200	* 13648	---
SE	1/6/2000	HMC	---	---	---	---	---	---	---	---	---	93.0	---
	2/9/2000	ENER	---	---	---	---	---	---	29.9	80.2	212	* 384	---
SE4	1/6/2000	ENER	---	---	---	---	---	---	70.6	195	667	* 1075	---
	2/9/2000	ENER	---	---	---	---	---	---	17.0	42.9	290	* 500	---
SO	5/11/2000	ENER	---	---	---	---	---	---	---	1870	3360	* 5109	---
	12/6/2000	ENER	202	58.1	6.30	359	288	< 1.000	94.0	1140	2230	* 3626	0.984
SS	1/19/2000	ENER	---	---	---	---	---	---	---	3360	6610	* 8461	---

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
SS	2/9/2000	ENER	---	---	---	---	---	---	353	3130	6400	* 7429	---
	3/24/2000	ENER	---	---	---	---	---	---	---	2380	4900	* 6302	---
	4/24/2000	ENER	---	---	---	---	---	---	---	2530	5070	* 6581	---
	5/18/2000	ENER	---	---	---	---	---	---	---	2530	5220	* 6546	---
	6/8/2000	ENER	---	---	---	---	---	---	---	2630	5350	* 7185	---
	7/24/2000	ENER	141	56.2	6.01	1450	1100	< 1.000	310	2450	5440	* 7188	0.962
	8/16/2000	ENER	---	---	---	---	---	---	---	2300	5370	* 6932	---
	9/28/2000	ENER	---	---	---	---	---	---	---	2450	5820	* 7522	---
	10/11/2000	ENER	---	---	---	---	---	---	---	2320	6040	* 7826	---
ST	1/19/2000	ENER	---	---	---	---	---	---	---	1400	2800	* 3643	---
	2/9/2000	ENER	---	---	---	---	---	---	208	1350	2740	* 3522	---
	3/24/2000	ENER	---	---	---	---	---	---	---	1220	2550	* 3365	---
	4/24/2000	ENER	---	---	---	---	---	---	---	1210	2520	* 3323	---
	5/18/2000	ENER	---	---	---	---	---	---	---	1190	2520	* 3319	---
	6/8/2000	ENER	---	---	---	---	---	---	---	1320	2590	* 3413	---
	7/24/2000	ENER	261	63.8	5.98	500	509	< 1.000	218	1250	2760	* 3622	0.991
	8/16/2000	ENER	---	---	---	---	---	---	---	1190	2750	* 3596	---
	10/11/2000	ENER	---	---	---	---	---	---	---	1070	2890	* 3781	---
SV	1/27/2000	ENER	135	80.0	15.1	2960	1730	22.9	512	5360	10000	* 11172	0.918
	7/18/2000	ENER	---	---	---	---	---	---	---	4600	10500	* 15987	---
	7/18/2000	ENER	---	---	---	---	---	---	---	# 4580	# 10600	---	---
T	5/10/2000	ENER	---	---	---	---	---	---	---	1110	2410	* 4278	---
	6/8/2000	ENER	---	---	---	---	---	---	---	1160	2410	* 3536	---
	7/24/2000	ENER	132	33.3	4.65	507	565	< 1.000	190	888	2130	* 3184	0.950
	8/16/2000	ENER	---	---	---	---	---	---	---	879	2170	* 3218	---
	11/29/2000	ENER	446	85.2	7.30	1070	680	< 1.000	426	2470	5240	* 7974	1.02
TA	1/19/2000	ENER	---	---	---	---	---	---	---	2170	4300	* 5782	---

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
TA	2/23/2000	ENER	---	---	---	---	---	---	---	2020	4100	* 5576	---
	3/24/2000	ENER	---	---	---	---	---	---	---	1950	3950	* 5422	---
	4/24/2000	ENER	---	---	---	---	---	---	---	1950	4000	* 5538	---
	5/18/2000	ENER	---	---	---	---	---	---	---	2070	4230	* 5742	---
	6/8/2000	ENER	---	---	---	---	---	---	---	2020	3990	* 5388	---
TB	1/12/2000	ENER	---	---	---	---	---	---	275	1760	3560	* 4412	---
	2/23/2000	ENER	---	---	---	---	---	---	---	1780	3700	* 4647	---
	3/7/2000	ENER	---	---	---	---	---	---	287	1910	3730	* 4608	---
	4/24/2000	ENER	---	---	---	---	---	---	---	1620	3430	* 4384	---
	9/11/2000	ENER	---	---	---	---	---	---	91.7	490	1470	* 2625	---
	9/11/2000	ENER	---	---	---	---	---	---	# 90.3	# 491	# 1470	---	---
	12/13/2000	ENER	---	---	---	---	---	---	73.3	335	1000	* 1918	---
W	3/14/2000	ENER	---	---	---	---	---	---	---	702	1750	* 3047	---
	8/31/2000	ENER	204	45.9	5.36	232	499	< 1.000	154	587	1730	* 2937	0.976
WN4	4/5/2000	ENER	9.50	25.5	12.1	3430	2410	291	637	4470	10700	* 18585	0.949
WR7	1/27/2000	ENER	---	---	---	---	---	---	---	710	1870	* 2536	---
	4/12/2000	ENER	247	58.0	5.50	265	573	< 1.000	197	634	1900	* 2987	1.02
WR9	2/8/2000	ENER	---	---	---	---	---	---	---	714	1880	* 2493	---
WR11	1/27/2000	ENER	---	---	---	---	---	---	---	679	1520	* 2040	---
	4/12/2000	ENER	179	45.0	4.80	239	351	< 1.000	125	619	1540	* 2582	1.04
WR16	1/12/2000	ENER	---	---	---	---	---	---	127	1270	2310	* 2835	---
X	1/11/2000	ENER	148	43.2	7.10	382	585	< 1.000	190	637	1800	---	0.982
	2/1/2000	ENER	137	37.9	6.30	327	605	< 1.000	170	562	1710	* 2447	0.920
	4/11/2000	ENER	---	---	---	---	---	---	131	473	1410	* 2635	---
	5/10/2000	ENER	83.4	24.2	4.80	234	538	< 1.000	72.5	300	1130	* 2056	0.960
	6/6/2000	ENER	---	---	---	---	---	---	32.7	84.9	477	* 743	---

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
X	7/24/2000	ENER	---	---	---	---	---	---	21.6	45.2	376	* 745	---
	8/2/2000	ENER	43.5	12.4	2.50	78.1	287	< 1.000	28.3	51.1	387	* 760	1.01
	9/28/2000	ENER	---	---	---	---	---	---	46.4	182	716	* 1090	---
	10/17/2000	ENER	128	36.1	3.80	92.4	254	< 1.000	109	277	915	* 1551	1.03
X13	8/15/2000	ENER	---	---	---	---	551	---	---	787	---	---	---
X14	8/15/2000	ENER	---	---	---	---	566	---	---	625	---	---	---
X15	8/15/2000	ENER	---	---	---	---	503	---	---	647	---	---	---
X16	8/15/2000	ENER	---	---	---	---	550	---	---	893	---	---	---
X17	8/15/2000	ENER	---	---	---	---	552	---	---	796	---	---	---
X18	8/15/2000	ENER	---	---	---	---	389	---	---	632	---	---	---
X19	8/15/2000	ENER	---	---	---	---	490	---	---	657	---	---	---
X20	8/15/2000	ENER	---	---	---	---	510	---	---	996	---	---	---
X25	10/9/2000	ENER	---	---	---	---	---	---	256	1190	2710	---	---
	11/2/2000	ENER	---	---	---	---	---	---	226	1390	2720	---	---
	11/9/2000	ENER	---	---	---	---	---	---	234	1190	2680	---	---
Y	1/18/2000	ENER	---	---	---	---	---	---	320	1710	3700	* 4650	---
	2/1/2000	ENER	275	58.2	9.70	790	665	< 1.000	337	1700	3700	* 4686	0.951
	2/17/2000	ENER	---	---	---	---	---	---	313	1660	3640	* 4344	---
	3/7/2000	ENER	---	---	---	---	---	---	298	1640	3560	* 4558	---
	4/24/2000	ENER	---	---	---	---	---	---	263	1500	3230	* 4269	---
	5/10/2000	ENER	184	49.0	8.29	620	635	< 1.000	222	1180	3120	* 5133	0.979
	6/6/2000	ENER	---	---	---	---	---	---	242	1420	2990	* 4019	---
	7/24/2000	ENER	160	41.7	5.82	557	598	< 1.000	193	1010	2410	* 4144	0.986
	8/2/2000	ENER	129	33.8	5.16	501	576	< 1.000	162	850	2180	* 3877	0.981
	9/28/2000	ENER	---	---	---	---	---	---	86.9	488	1410	* 2044	---

* Signifies Specific Conductivity from HMC

TABLE B.4-1. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
Y	10/11/2000	ENER	---	---	---	---	---	---	86.6	445	1230	* 1841	---
	10/17/2000	ENER	53.8	14.8	3.30	303	456	< 1.000	71.0	361	1200	* 2256	1.01

* Signifies Specific Conductivity from HMC

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS.

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
1A	8/15/2000	ENER	---	2.59	5.42	0.538	2.07	---	---	---	---	---
1B	9/28/2000	ENER	---	0.0026	< 0.0300	0.0650	---	---	---	---	---	---
1C	9/28/2000	ENER	---	0.0410	< 0.0300	0.0500	---	---	---	---	---	---
1D	9/29/2000	ENER	---	0.0300	< 0.0300	0.351	---	---	---	---	---	---
1E	1/12/2000	ENER	---	0.220	0.400	0.617	8.39	---	---	---	---	---
1F	9/28/2000	ENER	---	1.03	< 0.0300	0.0610	---	---	---	---	---	---
1G	9/28/2000	ENER	---	0.0510	< 0.0300	0.570	---	---	---	---	---	---
1H	10/3/2000	ENER	---	0.555	< 0.0300	0.855	---	---	---	---	---	---
1I	10/3/2000	ENER	---	0.0168	< 0.0300	0.887	---	---	---	---	---	---
1J	10/3/2000	ENER	---	0.156	< 0.0300	0.358	---	---	---	---	---	---
1K	10/3/2000	ENER	---	13.3	15.1	2.91	---	---	---	---	---	---
	10/3/2000	ENER	---	# 11.9	# 15.0	# 2.99	---	---	---	---	---	---
1L	10/3/2000	ENER	---	0.593	0.0400	0.466	---	---	---	---	---	---
1M	10/3/2000	ENER	---	0.427	0.350	0.863	---	---	---	---	---	---
1N	10/3/2000	ENER	---	0.0790	0.0300	1.000	---	---	---	---	---	---
1P	10/3/2000	ENER	---	0.0310	< 0.0300	0.251	---	---	---	---	---	---
B	1/25/2000	ENER	7.90	0.230	< 0.0300	0.770	5.67	< 0.200	1.30	< 0.0500	< 0.0100	< 0.200
	4/6/2000	ENER	---	0.336	---	0.411	---	---	---	---	---	---
	7/11/2000	ENER	7.97	0.335	< 0.0300	0.433	3.85	0.300	1.60	< 0.0500	< 0.0100	< 0.200
	10/19/2000	ENER	---	0.315	---	0.376	---	---	---	---	---	---
B1	1/25/2000	ENER	---	1.37	---	0.446	---	---	---	---	---	---
	7/13/2000	ENER	7.84	2.10	2.22	0.216	3.14	< 0.200	---	---	---	---
B2	5/23/2000	ENER	---	5.31	---	0.441	---	---	---	---	---	---

Signifies Quality Control Sample

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
B3	1/20/2000	ENER	---	10.9	14.1	0.693	---	---	---	---	---	---
	2/25/2000	ENER	---	12.0	---	0.697	---	---	---	---	---	---
	3/24/2000	ENER	---	12.2	---	0.603	---	---	---	---	---	---
	4/26/2000	ENER	---	13.3	---	0.644	---	---	---	---	---	---
	5/23/2000	ENER	---	13.7	---	0.602	---	---	---	---	---	---
	6/13/2000	ENER	---	12.4	---	0.662	---	---	---	---	---	---
	7/31/2000	ENER	7.86	12.8	16.4	0.583	4.51	< 0.200	---	---	---	---
	8/29/2000	ENER	---	19.6	---	0.930	---	---	---	---	---	---
B4	5/23/2000	ENER	---	9.99	---	0.428	---	---	---	---	---	---
	8/29/2000	ENER	---	12.9	---	0.620	---	---	---	---	---	---
B5	1/20/2000	ENER	---	13.5	5.07	1.73	---	---	---	---	---	---
	2/25/2000	ENER	---	15.2	---	1.56	---	---	---	---	---	---
	3/24/2000	ENER	---	14.1	---	1.34	---	---	---	---	---	---
	4/26/2000	ENER	---	15.6	---	1.44	---	---	---	---	---	---
	5/23/2000	ENER	---	17.5	---	1.59	---	---	---	---	---	---
	6/13/2000	ENER	---	14.9	---	1.56	---	---	---	---	---	---
B6	3/24/2000	ENER	---	33.9	---	1.38	---	---	---	---	---	---
B8	1/20/2000	ENER	---	52.9	26.3	1.72	---	---	---	---	---	---
	2/25/2000	ENER	---	51.0	---	1.61	---	---	---	---	---	---
	3/24/2000	ENER	---	45.7	---	1.53	---	---	---	---	---	---
	4/26/2000	ENER	---	49.3	---	2.21	---	---	---	---	---	---
	5/23/2000	ENER	---	51.6	---	2.79	---	---	---	---	---	---
	6/28/2000	ENER	---	46.4	---	3.22	---	---	---	---	---	---
	7/31/2000	ENER	7.68	38.3	19.3	3.70	30.9	0.300	---	---	---	---
	8/29/2000	ENER	---	55.1	---	4.60	---	---	---	---	---	---
B10	1/20/2000	ENER	---	39.1	56.7	5.27	---	---	---	---	---	---
	2/25/2000	ENER	---	39.1	---	5.54	---	---	---	---	---	---

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
B10	3/24/2000	ENER	---	33.2	---	4.89	---	---	---	---	---	---
	4/26/2000	ENER	---	40.5	---	6.43	---	---	---	---	---	---
	5/23/2000	ENER	---	46.2	---	6.55	---	---	---	---	---	---
	6/28/2000	ENER	---	39.1	---	6.98	---	---	---	---	---	---
	7/31/2000	ENER	7.95	34.0	58.6	5.91	46.9	< 0.200	---	---	---	---
	8/29/2000	ENER	---	59.8	---	9.21	---	---	---	---	---	---
B11	1/20/2000	ENER	---	21.3	30.2	3.46	---	---	---	---	---	---
	2/25/2000	ENER	---	20.6	---	3.70	---	---	---	---	---	---
	3/24/2000	ENER	---	19.0	---	3.58	---	---	---	---	---	---
	4/26/2000	ENER	---	23.0	---	4.81	---	---	---	---	---	---
	5/23/2000	ENER	---	25.9	---	4.69	---	---	---	---	---	---
	6/28/2000	ENER	---	18.8	---	3.11	---	---	---	---	---	---
	7/31/2000	ENER	7.81	18.1	25.3	2.02	21.9	0.400	---	---	---	---
	8/29/2000	ENER	---	22.0	---	4.30	---	---	---	---	---	---
	10/31/2000	ENER	---	20.6	27.0	3.67	---	---	---	---	---	---
BC	1/25/2000	ENER	7.96	0.294	0.0400	< 0.0050	< 0.100	< 0.200	---	---	---	---
	10/19/2000	ENER	---	0.320	---	0.0050	---	---	---	---	---	---
BP	2/2/2000	ENER	8.05	0.369	0.310	0.220	3.46	< 0.200	< 1.000	< 0.0500	< 0.0100	0.200
	5/2/2000	ENER	7.62	1.22	0.330	0.337	3.55	< 0.200	< 1.000	< 0.0500	< 0.0100	< 0.200
	8/1/2000	ENER	7.92	0.956	0.230	0.136	3.07	< 0.200	< 1.000	< 0.0500	< 0.0100	< 0.200
	11/21/2000	ENER	7.88	1.09	0.264	0.335	3.84	< 0.200	2.30	< 0.0500	< 0.0100	0.200
	11/21/2000	ENER	# 7.91	# 1.21	# 0.269	# 0.301	# 4.03	# < 0.200	# 2.20	# < 0.0500	# < 0.0100	# 0.700
C1	7/19/2000	ENER	---	3.73	4.86	0.384	3.24	---	---	---	---	---
	10/26/2000	ENER	---	2.14	2.79	0.205	2.58	---	---	---	---	---
C2	1/19/2000	ENER	---	2.22	1.41	1.64	---	---	---	---	---	---
	2/17/2000	ENER	---	3.05	---	1.35	---	---	---	---	---	---
	3/27/2000	ENER	---	2.60	---	1.26	---	---	---	---	---	---

Signifies Quality Control Sample

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
C2	4/26/2000	ENER	---	2.55	---	0.818	---	---	---	---	---	---
	7/19/2000	ENER	---	1.10	0.284	0.0495	2.25	---	---	---	---	---
C3R	7/19/2000	ENER	---	0.220	< 0.0300	< 0.0050	2.08	---	---	---	---	---
C4	1/11/2000	ENER	8.09	0.576	0.150	0.114	2.74	< 0.200	< 1.000	< 0.0500	< 0.0100	< 0.200
	7/19/2000	ENER	---	0.324	< 0.0300	0.0946	2.56	---	---	---	---	---
C5	7/19/2000	ENER	---	1.87	1.89	0.121	2.35	---	---	---	---	---
C6	6/22/2000	ENER	---	24.6	---	1.03	---	---	---	---	---	---
	7/31/2000	ENER	7.82	19.8	40.8	0.985	7.96	< 0.200	---	---	---	---
	8/28/2000	ENER	---	30.0	---	1.29	---	---	---	---	---	---
	9/28/2000	ENER	---	25.0	---	1.13	---	---	---	---	---	---
	10/16/2000	ENER	---	21.2	---	1.10	---	---	---	---	---	---
C7	1/19/2000	ENER	---	10.8	7.23	2.15	---	---	---	---	---	---
	6/22/2000	ENER	---	8.85	---	1.80	---	---	---	---	---	---
	8/28/2000	ENER	---	9.70	---	1.69	---	---	---	---	---	---
C8	1/19/2000	ENER	---	39.2	24.7	5.42	---	---	---	---	---	---
	2/25/2000	ENER	---	38.6	---	4.83	---	---	---	---	---	---
	3/27/2000	ENER	---	29.1	---	4.79	---	---	---	---	---	---
	4/26/2000	ENER	---	32.9	---	4.18	---	---	---	---	---	---
	6/22/2000	ENER	---	26.5	---	3.94	---	---	---	---	---	---
C9	1/19/2000	ENER	---	39.6	38.1	8.61	---	---	---	---	---	---
	6/22/2000	ENER	---	30.2	---	6.94	---	---	---	---	---	---
	7/31/2000	ENER	7.98	24.0	36.1	5.73	7.56	< 0.200	---	---	---	---
	8/28/2000	ENER	---	32.3	---	6.22	---	---	---	---	---	---
C10	6/22/2000	ENER	---	51.7	---	13.0	---	---	---	---	---	---
	7/31/2000	ENER	7.84	40.9	61.4	11.1	12.4	0.200	---	---	---	---
	8/28/2000	ENER	---	59.8	---	13.4	---	---	---	---	---	---

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
C10	9/28/2000	ENER	---	54.8	---	11.6	---	---	---	---	---	---
	10/16/2000	ENER	---	48.1	---	10.00	---	---	---	---	---	---
C12	5/23/2000	ENER	---	38.0	---	5.47	---	---	---	---	---	---
	7/31/2000	ENER	7.92	22.5	25.1	4.60	13.7	< 0.200	---	---	---	---
	8/28/2000	ENER	---	33.2	---	5.18	---	---	---	---	---	---
C13	7/19/2000	ENER	7.88	0.460	< 0.0300	0.0450	2.05	< 0.200	< 1.000	---	< 0.0100	< 0.200
	8/31/2000	ENER	---	0.592	0.212	0.0630	1.03	---	---	---	---	---
	9/27/2000	ENER	---	0.439	0.242	0.0190	0.110	---	---	---	---	---
	10/12/2000	ENER	---	0.145	0.130	0.0100	< 0.100	---	---	---	---	---
	10/26/2000	ENER	---	0.105	0.363	0.0080	< 0.100	---	---	---	---	---
	11/2/2000	ENER	---	0.0967	0.0999	0.0130	< 0.100	---	---	---	---	---
	11/9/2000	ENER	---	0.131	0.100	0.0180	0.160	---	---	---	---	---
C14	7/19/2000	ENER	7.86	1.53	0.930	0.122	2.14	< 0.200	< 1.000	---	< 0.0100	0.300
	8/31/2000	ENER	---	1.25	0.657	0.300	3.67	---	---	---	---	---
	10/12/2000	ENER	---	0.990	0.620	0.0780	1.44	---	---	---	---	---
	10/26/2000	ENER	---	0.945	0.734	0.101	1.82	---	---	---	---	---
	11/2/2000	ENER	---	1.05	0.628	0.128	2.15	---	---	---	---	---
	11/9/2000	ENER	---	0.970	0.580	0.162	2.52	---	---	---	---	---
D1	2/2/2000	ENER	7.96	1.89	1.000	0.181	3.46	< 0.200	< 1.000	< 0.0500	< 0.0100	< 0.200
	4/27/2000	ENER	7.81	1.83	1.22	0.172	3.29	< 0.200	< 1.000	< 0.0500	< 0.0100	0.200
	8/1/2000	ENER	7.82	1.66	1.20	0.0800	2.38	< 0.200	< 1.000	< 0.0500	< 0.0100	0.200
	11/21/2000	ENER	7.91	1.62	0.980	0.144	3.10	< 0.200	1.40	< 0.0500	< 0.0100	0.300
DC	2/2/2000	ENER	7.89	0.0570	< 0.0300	0.0330	3.45	0.300	---	---	---	---
	8/2/2000	ENER	---	0.0870	---	0.0700	---	---	---	---	---	---
DD	4/6/2000	ENER	7.82	0.165	< 0.0300	0.0100	3.35	< 0.200	4.70	---	< 0.0100	< 0.200
DM	3/9/2000	ENER	8.49	6.90	12.8	2.02	5.98	0.500	---	---	---	---

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
DM	8/31/2000	ENER	---	8.68	---	2.11	---	---	---	---	---	---
DN	10/19/2000	ENER	---	44.1	63.2	1.96	4.78	---	---	---	---	---
DNR	10/19/2000	ENER	---	49.5	68.5	2.43	4.43	---	---	---	---	---
DQ	2/2/2000	ENER	8.06	42.9	96.7	3.47	31.3	0.400	< 1.000	< 0.0500	0.0400	< 0.200
	4/27/2000	ENER	7.99	39.0	88.1	2.37	20.7	0.500	< 1.000	< 0.0500	< 0.0100	1.30
	4/27/2000	ENER	# 7.98	# 38.0	# 89.0	# 2.41	# 20.2	# 0.300	# < 1.000	# < 0.0500	# < 0.0100	# 0.300
	6/22/2000	ENER	8.13	43.8	83.7	1.52	16.2	< 0.200	---	---	---	---
	8/1/2000	ENER	7.70	45.0	67.6	1.37	15.5	0.200	< 1.000	< 0.0500	0.0200	0.400
	11/21/2000	ENER	7.87	63.2	58.1	0.980	13.9	< 0.200	2.40	< 0.0500	0.0300	0.300
DR	10/12/2000	ENER	---	34.9	---	1.75	---	---	---	---	---	---
DS	10/12/2000	ENER	---	47.0	---	1.63	---	---	---	---	---	---
DZ	3/9/2000	ENER	8.57	17.9	36.3	2.83	16.5	1.60	---	---	---	---
	8/31/2000	ENER	---	29.0	---	2.12	---	---	---	---	---	---
F	1/25/2000	ENER	7.93	0.103	< 0.0300	0.0070	1.82	< 0.200	---	---	---	---
	1/25/2000	ENER	# 7.99	0.107	< 0.0300	0.0060	1.96	0.200	---	---	---	---
	7/13/2000	ENER	---	0.122	---	0.0073	---	---	---	---	---	---
FB	1/27/2000	ENER	---	0.187	---	0.0300	---	---	---	---	---	---
	10/19/2000	ENER	7.68	0.130	< 0.0300	0.0633	2.65	< 0.200	---	---	---	---
GV	9/28/2000	ENER	---	0.0380	< 0.0300	0.0140	---	---	---	---	---	---
I	1/25/2000	ENER	---	0.0948	---	0.0110	---	---	---	---	---	---
	7/18/2000	ENER	7.75	0.112	< 0.0300	0.0227	1.72	< 0.200	---	---	---	---
J6	1/6/2000	ENER	---	0.0247	0.0300	0.0250	---	---	---	---	---	---
J8	1/6/2000	ENER	---	0.0256	0.0400	0.0160	---	---	---	---	---	---
K2	1/7/2000	ENER	---	2.87	5.28	0.317	---	---	---	---	---	---
	1/12/2000	ENER	---	2.59	4.75	0.266	2.69	---	---	---	---	---

Signifies Quality Control Sample

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
K2	1/18/2000	ENER	---	2.40	4.95	0.279	---	---	---	---	---	---
	2/9/2000	ENER	---	2.11	4.04	0.199	---	---	---	---	---	---
	3/27/2000	ENER	---	1.93	---	0.188	---	---	---	---	---	---
	4/11/2000	ENER	---	2.15	4.13	0.235	---	---	---	---	---	---
	5/16/2000	ENER	---	0.961	---	0.0798	---	---	---	---	---	---
	6/6/2000	ENER	---	0.953	---	0.111	---	---	---	---	---	---
	7/24/2000	ENER	---	0.358	2.92	0.0220	---	---	---	---	---	---
	8/15/2000	ENER	---	0.600	3.83	0.0490	---	---	---	---	---	---
	10/18/2000	ENER	7.90	0.698	2.48	0.0410	2.51	< 0.200	---	---	---	---
K4	4/25/2000	ENER	---	15.6	20.9	5.08	---	---	---	---	---	---
	7/25/2000	ENER	8.17	5.90	11.5	2.58	3.83	< 0.200	---	---	---	---
	8/28/2000	ENER	---	4.91	---	2.27	---	---	---	---	---	---
	9/26/2000	ENER	---	4.43	---	2.19	---	---	---	---	---	---
	10/16/2000	ENER	---	4.08	---	1.85	---	---	---	---	---	---
	10/23/2000	ENER	---	3.07	7.40	1.64	---	---	---	---	---	---
	12/13/2000	ENER	---	3.70	9.05	1.52	---	---	---	---	---	---
K5	4/25/2000	ENER	---	10.6	31.1	1.50	---	---	---	---	---	---
	6/28/2000	ENER	---	8.52	---	2.85	---	---	---	---	---	---
	7/25/2000	ENER	7.99	10.3	29.7	3.74	7.54	0.200	---	---	---	---
	8/28/2000	ENER	---	9.92	---	4.12	---	---	---	---	---	---
	9/26/2000	ENER	---	8.41	---	3.52	---	---	---	---	---	---
	10/16/2000	ENER	---	7.40	---	2.84	---	---	---	---	---	---
	10/23/2000	ENER	---	6.20	19.7	2.97	---	---	---	---	---	---
	12/13/2000	ENER	---	6.09	20.0	1.94	---	---	---	---	---	---
K6	1/6/2000	ENER	---	0.0597	0.0400	0.0060	---	---	---	---	---	---
	1/12/2000	ENER	---	0.0255	0.0400	< 0.0050	2.13	---	---	---	---	---
	2/9/2000	ENER	---	0.0219	0.0400	< 0.0050	---	---	---	---	---	---

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
K6	4/11/2000	ENER	---	0.0302	0.0500	0.0110	---	---	---	---	---	---
K7	4/26/2000	ENER	7.89	4.67	13.1	2.10	5.71	4.00	< 1.000	---	0.0300	0.200
	6/28/2000	ENER	---	8.90	---	4.15	---	---	---	---	---	---
	7/25/2000	ENER	8.13	9.05	24.3	3.19	4.70	< 0.200	---	---	---	---
	8/28/2000	ENER	---	6.34	---	2.01	---	---	---	---	---	---
	9/26/2000	ENER	---	5.15	---	1.46	---	---	---	---	---	---
	10/16/2000	ENER	---	4.62	---	1.24	---	---	---	---	---	---
	12/13/2000	ENER	---	3.55	11.5	0.998	---	---	---	---	---	---
K8	4/26/2000	ENER	7.86	4.35	14.4	2.48	5.21	2.90	< 1.000	---	< 0.0100	1.10
	6/28/2000	ENER	---	5.56	---	3.47	---	---	---	---	---	---
	7/25/2000	ENER	8.08	7.32	18.9	4.09	6.34	< 0.200	---	---	---	---
	8/21/2000	ENER	---	7.32	---	4.61	---	---	---	---	---	---
	9/26/2000	ENER	---	8.36	---	4.77	---	---	---	---	---	---
	10/17/2000	ENER	---	8.68	---	4.80	---	---	---	---	---	---
	12/13/2000	ENER	---	8.96	27.5	4.08	---	---	---	---	---	---
K9	4/26/2000	ENER	7.82	11.6	32.5	2.12	8.76	2.90	< 1.000	---	< 0.0100	0.200
	6/28/2000	ENER	---	11.0	---	2.52	---	---	---	---	---	---
	7/25/2000	ENER	8.03	13.7	31.5	3.26	8.12	< 0.200	---	---	---	---
	8/21/2000	ENER	---	11.6	---	3.69	---	---	---	---	---	---
	9/26/2000	ENER	---	11.6	---	3.92	---	---	---	---	---	---
	10/16/2000	ENER	---	10.1	---	3.43	---	---	---	---	---	---
	12/13/2000	ENER	---	9.63	24.7	2.52	---	---	---	---	---	---
K10	4/26/2000	ENER	7.78	21.0	49.3	1.61	8.97	1.000	< 1.000	---	< 0.0100	0.900
	6/28/2000	ENER	---	17.8	---	1.94	---	---	---	---	---	---
	7/25/2000	ENER	7.90	20.9	39.6	2.23	8.39	< 0.200	---	---	---	---
	8/21/2000	ENER	---	17.3	---	2.55	---	---	---	---	---	---
	10/17/2000	ENER	---	15.7	---	3.60	---	---	---	---	---	---

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
K10	12/13/2000	ENER	---	16.8	36.8	3.92	---	---	---	---	---	---
K11	4/26/2000	ENER	7.69	19.0	40.2	1.71	8.50	2.10	< 1.000	---	< 0.0100	< 0.200
	6/28/2000	ENER	---	19.2	---	1.68	---	---	---	---	---	---
	7/25/2000	ENER	7.88	22.0	37.5	2.44	8.19	< 0.200	---	---	---	---
	8/21/2000	ENER	---	15.8	---	2.49	---	---	---	---	---	---
	9/26/2000	ENER	---	14.5	---	2.62	---	---	---	---	---	---
	10/16/2000	ENER	---	19.5	---	3.03	---	---	---	---	---	---
	12/13/2000	ENER	---	14.0	31.9	2.04	---	---	---	---	---	---
KA	1/18/2000	ENER	---	2.82	6.59	0.758	---	---	---	---	---	---
	2/17/2000	ENER	---	3.52	---	0.730	---	---	---	---	---	---
	3/27/2000	ENER	---	3.26	---	0.784	---	---	---	---	---	---
	4/14/2000	ENER	---	2.97	6.32	0.726	---	---	---	---	---	---
	5/16/2000	ENER	---	2.16	---	0.407	---	---	---	---	---	---
	6/6/2000	ENER	---	1.52	---	0.311	---	---	---	---	---	---
	7/24/2000	ENER	8.13	0.848	1.92	0.0940	2.22	< 0.200	---	---	---	---
	8/21/2000	ENER	---	0.659	---	0.0600	---	---	---	---	---	---
	9/28/2000	ENER	---	0.537	---	0.0390	---	---	---	---	---	---
	10/19/2000	ENER	---	1.44	---	0.208	---	---	---	---	---	---
	12/13/2000	ENER	---	0.402	0.774	0.0340	---	---	---	---	---	---
KB	2/9/2000	ENER	---	1.19	1.56	0.0730	---	---	---	---	---	---
	3/27/2000	ENER	---	0.967	---	0.0820	---	---	---	---	---	---
	4/14/2000	ENER	---	0.802	1.59	0.0670	---	---	---	---	---	---
	5/16/2000	ENER	---	0.341	---	0.0550	---	---	---	---	---	---
	6/6/2000	ENER	---	0.230	---	0.0261	---	---	---	---	---	---
	7/24/2000	ENER	---	0.147	0.750	0.0120	---	---	---	---	---	---
	8/15/2000	ENER	---	0.218	0.760	0.0130	---	---	---	---	---	---
	12/13/2000	ENER	---	0.203	0.473	0.0300	---	---	---	---	---	---

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
KC	1/7/2000	ENER	---	0.999	1.85	0.128	---	---	---	---	---	---
	1/18/2000	ENER	---	0.664	1.47	0.0760	---	---	---	---	---	---
	2/9/2000	ENER	---	1.82	4.15	0.432	---	---	---	---	---	---
	3/9/2000	ENER	---	0.460	1.32	0.0680	---	---	---	---	---	---
	4/11/2000	ENER	---	0.559	1.46	0.0820	---	---	---	---	---	---
	5/16/2000	ENER	---	0.326	---	0.0382	---	---	---	---	---	---
	6/6/2000	ENER	---	0.262	---	0.0374	---	---	---	---	---	---
	6/14/2000	ENER	---	0.264	0.857	0.0401	---	---	---	---	---	---
	7/24/2000	ENER	---	0.253	1.000	0.0330	---	---	---	---	---	---
	8/9/2000	ENER	---	0.244	0.670	0.0410	---	---	---	---	---	---
	10/23/2000	ENER	---	0.166	0.590	0.0190	---	---	---	---	---	---
	12/6/2000	ENER	---	0.199	0.563	0.0310	---	---	---	---	---	---
KD	1/18/2000	ENER	---	1.61	2.53	0.161	---	---	---	---	---	---
	3/27/2000	ENER	---	1.43	---	0.162	---	---	---	---	---	---
	4/14/2000	ENER	---	1.61	2.54	0.194	---	---	---	---	---	---
	5/16/2000	ENER	---	1.27	---	0.0880	---	---	---	---	---	---
	6/6/2000	ENER	---	1.20	---	0.134	---	---	---	---	---	---
	8/15/2000	ENER	---	0.852	3.14	0.0700	---	---	---	---	---	---
	12/13/2000	ENER	---	0.516	3.19	0.0830	---	---	---	---	---	---
KE	1/18/2000	ENER	---	0.553	1.19	0.0340	---	---	---	---	---	---
	2/9/2000	ENER	---	0.570	1.30	0.0500	---	---	---	---	---	---
	3/7/2000	ENER	---	0.330	0.876	0.0250	---	---	---	---	---	---
	4/11/2000	ENER	---	0.640	1.41	0.0520	---	---	---	---	---	---
	5/16/2000	ENER	---	1.35	---	0.0150	---	---	---	---	---	---
	6/6/2000	ENER	---	0.475	---	0.0343	---	---	---	---	---	---
	6/14/2000	ENER	---	0.423	2.63	0.0301	---	---	---	---	---	---
	7/24/2000	ENER	---	0.236	2.13	0.0140	---	---	---	---	---	---

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
KE	8/9/2000	ENER	---	0.274	1.85	0.0320	---	---	---	---	---	---
	12/13/2000	ENER	---	0.189	1.36	0.0330	---	---	---	---	---	---
KEB	1/6/2000	ENER	---	1.71	2.95	0.0150	---	---	---	---	---	---
	2/10/2000	ENER	---	1.59	2.66	0.0210	---	---	---	---	---	---
	3/9/2000	ENER	---	1.60	2.58	0.0060	---	---	---	---	---	---
	4/11/2000	ENER	---	1.79	2.29	0.0140	---	---	---	---	---	---
	5/11/2000	ENER	---	1.40	3.71	0.0400	---	---	---	---	---	---
	6/14/2000	ENER	---	0.999	3.15	0.0323	---	---	---	---	---	---
	7/25/2000	ENER	---	1.07	2.77	0.0280	---	---	---	---	---	---
	8/9/2000	ENER	---	1.20	2.66	0.0270	---	---	---	---	---	---
	9/28/2000	ENER	---	1.01	1.04	0.0280	---	---	---	---	---	---
	12/13/2000	ENER	---	0.554	1.04	0.0290	---	---	---	---	---	---
KF	1/6/2000	ENER	---	0.500	0.400	0.0270	---	---	---	---	---	---
	2/10/2000	ENER	---	0.411	0.390	0.0160	---	---	---	---	---	---
	3/9/2000	ENER	---	0.344	0.330	< 0.0050	---	---	---	---	---	---
	4/11/2000	ENER	---	0.398	0.320	0.0100	---	---	---	---	---	---
	6/27/2000	ENER	---	0.375	0.561	0.0136	---	---	---	---	---	---
	8/9/2000	ENER	---	0.382	1.12	0.0110	---	---	---	---	---	---
KM	1/6/2000	ENER	---	0.0260	0.0400	0.0190	---	---	---	---	---	---
	2/9/2000	ENER	---	0.0170	0.0600	< 0.0050	---	---	---	---	---	---
KN	1/6/2000	ENER	---	0.0560	0.200	0.0060	---	---	---	---	---	---
	1/27/2000	ENER	---	0.0602	0.260	< 0.0050	---	---	---	---	---	---
	2/9/2000	ENER	---	0.0411	0.190	< 0.0050	---	---	---	---	---	---
	3/29/2000	ENER	---	0.0293	0.208	< 0.0050	---	---	---	---	---	---
	4/11/2000	ENER	---	0.0512	0.150	0.0100	---	---	---	---	---	---
	6/14/2000	ENER	---	0.0451	0.0778	0.0068	---	---	---	---	---	---
	7/25/2000	ENER	---	0.0222	0.0927	0.0147	---	---	---	---	---	---

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
KN	8/15/2000	ENER	---	0.0361	0.160	0.0060	---	---	---	---	---	---
KZ	1/27/2000	ENER	---	2.10	1.10	0.0130	---	---	---	---	---	---
	2/9/2000	ENER	---	1.87	1.69	0.0760	---	---	---	---	---	---
	4/11/2000	ENER	---	1.76	1.34	0.0620	---	---	---	---	---	---
	5/11/2000	ENER	---	1.73	1.65	0.0760	---	---	---	---	---	---
	8/9/2000	ENER	---	0.993	0.660	0.0280	---	---	---	---	---	---
	10/17/2000	ENER	7.71	0.828	0.540	0.0140	0.370	< 0.200	---	---	---	---
	12/6/2000	ENER	---	0.489	1.31	0.0150	---	---	---	---	---	---
L	4/12/2000	ENER	---	1.47	1.01	0.0490	---	---	---	---	---	---
	4/12/2000	ENER	---	# 1.37	# 1.05	# 0.0270	---	---	---	---	---	---
	5/16/2000	ENER	---	1.54	1.16	0.0480	---	---	---	---	---	---
	6/7/2000	ENER	---	1.49	1.32	0.0703	---	---	---	---	---	---
	7/24/2000	ENER	7.84	1.47	1.54	0.0971	1.95	< 0.200	---	---	---	---
	9/20/2000	ENER	---	1.76	---	0.0703	---	---	---	---	---	---
	10/19/2000	ENER	---	1.58	---	0.0849	---	---	---	---	---	---
L5	1/18/2000	ENER	---	5.44	15.6	1.92	---	---	---	---	---	---
	5/16/2000	ENER	---	11.6	20.3	2.12	---	---	---	---	---	---
	6/7/2000	ENER	---	5.41	11.6	0.944	---	---	---	---	---	---
	7/24/2000	ENER	7.85	5.94	10.5	0.917	2.66	< 0.200	---	---	---	---
	8/18/2000	ENER	---	5.25	---	0.746	---	---	---	---	---	---
	9/20/2000	ENER	---	5.14	---	0.690	---	---	---	---	---	---
	10/19/2000	ENER	---	4.45	---	0.540	---	---	---	---	---	---
L6	9/28/2000	ENER	---	3.44	6.49	3.10	---	---	---	---	---	---
L7	4/12/2000	ENER	---	5.74	25.8	7.77	---	---	---	---	---	---
	5/16/2000	ENER	---	4.74	25.3	6.87	---	---	---	---	---	---
	6/7/2000	ENER	---	3.72	17.3	4.60	---	---	---	---	---	---
	7/24/2000	ENER	7.94	3.24	13.7	4.83	3.50	< 0.200	---	---	---	---

Signifies Quality Control Sample

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
L7	8/18/2000	ENER	---	3.21	---	3.98	---	---	---	---	---	---
	9/20/2000	ENER	---	3.36	---	4.00	---	---	---	---	---	---
	10/19/2000	ENER	---	2.92	---	3.25	---	---	---	---	---	---
L8	1/18/2000	ENER	---	4.13	5.92	0.228	---	---	---	---	---	---
	2/17/2000	ENER	---	5.14	5.86	0.218	---	---	---	---	---	---
	3/7/2000	ENER	---	3.26	5.12	0.190	---	---	---	---	---	---
	4/17/2000	ENER	---	4.72	5.23	0.213	---	---	---	---	---	---
	5/16/2000	ENER	---	4.50	6.13	0.242	---	---	---	---	---	---
	6/7/2000	ENER	---	3.59	5.14	0.175	---	---	---	---	---	---
	7/24/2000	ENER	8.02	3.17	4.84	0.232	2.43	< 0.200	---	---	---	---
	8/18/2000	ENER	---	3.07	---	0.198	---	---	---	---	---	---
	9/20/2000	ENER	---	3.03	---	0.210	---	---	---	---	---	---
	10/19/2000	ENER	---	2.44	---	0.246	---	---	---	---	---	---
L9	1/18/2000	ENER	---	2.98	3.31	0.108	---	---	---	---	---	---
	2/17/2000	ENER	---	3.80	3.48	0.102	---	---	---	---	---	---
	3/7/2000	ENER	---	3.19	3.92	0.125	---	---	---	---	---	---
	4/17/2000	ENER	---	3.70	3.00	0.129	---	---	---	---	---	---
	5/16/2000	ENER	---	3.50	---	0.110	---	---	---	---	---	---
	6/7/2000	ENER	---	2.94	2.85	0.102	---	---	---	---	---	---
	7/24/2000	ENER	7.96	2.75	2.75	0.100	2.16	< 0.200	---	---	---	---
	8/18/2000	ENER	---	2.79	---	0.0880	---	---	---	---	---	---
	9/20/2000	ENER	---	2.80	---	0.110	---	---	---	---	---	---
	10/19/2000	ENER	---	2.13	---	0.0982	---	---	---	---	---	---
L10	1/18/2000	ENER	---	1.95	2.38	0.0930	---	---	---	---	---	---
	2/17/2000	ENER	---	2.60	2.53	0.0840	---	---	---	---	---	---
	3/7/2000	ENER	---	2.54	3.10	0.100	---	---	---	---	---	---
	4/17/2000	ENER	---	2.58	2.06	0.0920	---	---	---	---	---	---

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
L10	5/16/2000	ENER	---	2.52	---	0.0660	---	---	---	---	---	---
	6/7/2000	ENER	---	2.17	2.12	0.0706	---	---	---	---	---	---
	7/24/2000	ENER	7.85	2.10	2.09	0.0762	2.05	< 0.200	---	---	---	---
	8/18/2000	ENER	---	2.11	---	0.0620	---	---	---	---	---	---
	9/20/2000	ENER	---	2.23	---	0.0625	---	---	---	---	---	---
	10/19/2000	ENER	---	1.92	---	0.0620	---	---	---	---	---	---
M3	1/20/2000	ENER	---	12.8	18.2	0.802	---	---	---	---	---	---
	2/23/2000	ENER	---	11.9	---	0.761	---	---	---	---	---	---
	3/7/2000	ENER	---	9.56	---	0.539	---	---	---	---	---	---
	4/24/2000	ENER	---	10.9	---	0.793	---	---	---	---	---	---
	4/25/2000	ENER	7.96	10.00	14.9	0.749	5.28	< 0.200	< 1.000	---	< 0.0100	0.900
	5/18/2000	ENER	---	11.5	---	0.789	---	---	---	---	---	---
	6/8/2000	ENER	---	10.9	---	0.747	---	---	---	---	---	---
	7/24/2000	ENER	8.05	15.0	18.2	0.921	5.37	< 0.200	---	---	---	---
	8/18/2000	ENER	---	12.0	---	0.717	---	---	---	---	---	---
	10/11/2000	ENER	---	11.0	---	0.665	---	---	---	---	---	---
M4	4/20/2000	ENER	---	5.03	---	0.238	---	---	---	---	---	---
	10/31/2000	ENER	7.71	4.21	5.78	0.117	2.23	0.800	---	---	---	---
M5	2/3/2000	ENER	7.96	2.39	1.74	0.310	4.03	< 0.200	2.40	< 0.0500	< 0.0100	0.200
	2/3/2000	ENER	# 7.77	# 2.36	# 1.64	# 0.317	# 3.95	# < 0.200	# < 1.000	# < 0.0500	# < 0.0100	# 0.200
	5/10/2000	ENER	7.94	2.70	2.30	0.260	3.29	< 0.200	< 1.000	< 0.0500	< 0.0100	0.300
	8/8/2000	ENER	7.69	3.39	2.39	0.204	3.17	8.80	< 1.000	< 0.0500	< 0.0100	0.200
	11/29/2000	ENER	7.77	2.17	1.59	0.206	3.65	< 0.200	2.40	< 0.0500	< 0.0100	0.200
MO	1/27/2000	ENER	---	0.376	---	0.0720	---	---	---	---	---	---
	1/27/2000	ENER	---	# 0.399	---	# 0.0740	---	---	---	---	---	---
	7/18/2000	ENER	7.97	0.395	< 0.0300	0.0752	9.90	0.200	---	---	---	---
MQ	11/1/2000	ENER	---	0.895	0.260	0.158	---	---	---	---	---	---

Signifies Quality Control Sample

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
MR	11/1/2000	ENER	---	0.612	---	0.102	6.90	---	---	---	---	---
MS	11/1/2000	ENER	---	0.125	< 0.0300	0.0402	---	---	---	---	---	---
MT	11/1/2000	ENER	---	0.394	---	0.172	11.4	---	---	---	---	---
MU	11/1/2000	ENER	---	0.123	---	0.0310	54.9	---	---	---	---	---
MX	11/1/2000	ENER	---	0.0330	< 0.0300	0.0110	---	---	---	---	---	---
MY	11/1/2000	ENER	---	0.0264	< 0.0300	0.0360	---	---	---	---	---	---
N	5/16/2000	ENER	---	0.0919	---	0.0972	---	---	---	---	---	---
	10/31/2000	ENER	7.89	0.0850	0.0800	0.109	15.3	< 0.200	---	---	---	---
NC	1/26/2000	ENER	---	0.0247	---	0.0720	---	---	---	---	---	---
	4/6/2000	ENER	7.74	0.0164	< 0.0300	0.0630	3.66	< 0.200	---	---	---	---
	4/6/2000	ENER	# 8.10	# 0.0130	# < 0.0300	# 0.0560	# < 0.100	# < 0.200	---	---	---	---
	7/18/2000	ENER	---	0.0186	---	0.0661	---	---	---	---	---	---
	10/31/2000	ENER	7.61	0.0150	< 0.0300	0.0735	4.04	< 0.200	---	---	---	---
ND	8/2/2000	ENER	8.29	0.0250	< 0.0300	0.0880	1.26	< 0.200	---	---	---	---
NE5	4/5/2000	ENER	9.95	41.0	128	0.300	5.39	285	---	---	---	---
	10/20/2000	ENER	9.94	14.9	31.9	0.377	2.94	57.6	---	---	---	---
NW5	4/5/2000	ENER	9.86	33.0	115	0.252	4.93	245	---	---	---	---
O	5/16/2000	ENER	7.85	0.0343	< 0.0300	0.228	4.98	< 0.200	---	---	---	---
	10/31/2000	ENER	---	0.0295	---	0.267	---	---	---	---	---	---
P	1/11/2000	ENER	8.07	0.0350	< 0.0300	0.160	9.25	0.500	1.60	< 0.0500	< 0.0100	< 0.200
	3/7/2000	ENER	7.89	0.0109	< 0.0300	0.0430	8.84	0.300	< 1.000	< 0.0500	< 0.0100	< 0.200
	3/7/2000	ENER	# 8.11	# 0.0200	# < 0.0300	# 0.0900	# 8.27	# < 0.200	# < 1.000	# < 0.0500	# < 0.0100	# < 0.200
	5/9/2000	ENER	8.00	0.0522	< 0.0300	0.133	7.77	0.900	< 1.000	< 0.0500	< 0.0100	0.300
	8/31/2000	ENER	7.71	0.0351	< 0.0300	0.0900	5.08	1.000	< 1.000	< 0.0500	< 0.0100	< 0.200
	11/28/2000	ENER	7.71	0.0285	< 0.0300	0.137	6.85	< 0.200	2.60	< 0.0500	< 0.0100	< 0.200

Signifies Quality Control Sample

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
P2	2/9/2000	ENER	7.57	0.0336	< 0.0300	0.205	8.30	0.300	< 1.000	---	< 0.0100	0.200
	5/9/2000	ENER	7.93	0.0319	< 0.0300	0.185	11.0	< 0.200	---	---	---	---
	8/2/2000	ENER	7.87	0.0320	< 0.0300	0.182	9.07	0.400	< 1.000	---	< 0.0100	< 0.200
	8/2/2000	ENER	# 7.74	# 0.0030	# < 0.0300	# 0.0170	# 9.24	# 0.600	# 1.40	---	# < 0.0100	# 0.400
	11/28/2000	ENER	7.71	0.0317	< 0.0300	0.227	12.1	0.300	< 1.000	< 0.0500	< 0.0100	< 0.200
	11/28/2000	ENER	# 7.60	# 0.0309	# < 0.0300	# 0.222	# 12.1	# < 0.200	# < 1.000	# < 0.0500	# < 0.0100	# 0.200
P3	3/7/2000	ENER	7.97	0.0113	< 0.0300	0.0650	10.1	0.200	---	---	---	---
P4	3/7/2000	ENER	7.86	0.0035	< 0.0300	0.0880	4.41	0.200	---	---	---	---
	3/7/2000	ENER	# 7.97	# 0.0069	# < 0.0300	# 0.0310	# 4.75	# 0.200	---	---	---	---
PM	2/3/2000	ENER	7.71	0.340	0.420	0.102	10.8	0.600	< 1.000	---	< 0.0100	0.200
	5/16/2000	ENER	---	0.301	---	0.0483	---	---	---	---	---	---
	7/19/2000	ENER	---	0.359	0.124	0.0638	4.55	---	---	---	---	---
	8/9/2000	ENER	7.84	0.315	0.221	0.0543	3.72	0.700	4.80	---	< 0.0100	< 0.200
	12/6/2000	ENER	---	0.241	---	0.0520	---	---	---	---	---	---
	12/6/2000	ENER	---	# 0.237	---	# 0.0437	---	---	---	---	---	---
Q	1/12/2000	ENER	7.81	0.0560	< 0.0300	0.220	10.2	< 0.200	< 1.000	< 0.0500	< 0.0100	< 0.200
	3/14/2000	ENER	7.63	0.0565	< 0.0300	0.242	9.64	0.200	< 1.000	---	< 0.0100	< 0.200
R	5/11/2000	ENER	7.76	0.0208	< 0.0300	0.429	13.6	< 0.200	< 1.000	---	< 0.0100	0.300
S	5/11/2000	ENER	---	62.1	---	3.34	---	---	---	---	---	---
	12/6/2000	ENER	8.63	49.5	74.6	3.55	5.54	< 0.200	1.70	---	0.380	0.300
S2	7/18/2000	ENER	7.71	25.3	23.9	1.89	7.79	0.700	---	---	---	---
S3	2/8/2000	ENER	7.73	15.0	9.35	0.110	2.30	0.200	2.90	< 0.0500	< 0.0100	0.200
	5/10/2000	ENER	8.10	10.5	9.68	0.100	2.21	< 0.200	< 1.000	< 0.0500	< 0.0100	0.300
	8/8/2000	ENER	7.81	10.5	10.3	0.0912	2.38	0.300	< 1.000	< 0.0500	< 0.0100	< 0.200
	12/6/2000	ENER	7.64	10.7	8.93	0.119	4.67	< 0.200	< 1.000	< 0.0500	< 0.0100	0.300

Signifies Quality Control Sample

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
S4	2/8/2000	ENER	7.53	10.8	0.880	0.147	2.13	1.10	< 1.000	< 0.0500	< 0.0100	< 0.200
	5/10/2000	ENER	7.88	5.38	0.576	0.0863	< 0.100	0.700	< 1.000	< 0.0500	< 0.0100	0.400
	5/10/2000	ENER	# 7.97	# 5.29	# 0.591	# 0.0732	# < 0.100	# 1.000	# 1.60	# < 0.0500	# < 0.0100	# 0.300
	8/9/2000	ENER	7.73	5.83	0.650	0.0800	0.170	1.40	< 1.000	< 0.0500	< 0.0100	< 0.200
	12/6/2000	ENER	7.67	4.13	0.670	0.0417	0.110	0.900	2.90	< 0.0500	< 0.0100	< 0.200
S5	1/20/2000	ENER	---	11.8	15.0	0.468	---	---	---	---	---	---
	2/23/2000	ENER	---	35.6	---	1.59	---	---	---	---	---	---
	3/7/2000	ENER	---	10.1	---	0.440	---	---	---	---	---	---
	4/24/2000	ENER	---	11.0	---	0.542	---	---	---	---	---	---
	5/18/2000	ENER	---	12.0	---	0.519	---	---	---	---	---	---
	6/8/2000	ENER	---	11.9	---	0.539	---	---	---	---	---	---
	7/24/2000	ENER	7.77	15.8	20.1	0.660	8.68	< 0.200	---	---	---	---
	8/18/2000	ENER	---	13.0	---	0.543	---	---	---	---	---	---
	10/11/2000	ENER	---	11.4	---	0.511	---	---	---	---	---	---
S11	10/31/2000	ENER	---	0.0195	---	0.482	47.3	---	---	---	---	---
S12	1/6/2000	ENER	---	1.98	1.38	0.232	---	---	---	---	---	---
	1/27/2000	ENER	---	1.77	1.52	0.202	---	---	---	---	---	---
	2/9/2000	ENER	---	1.04	1.04	0.142	---	---	---	---	---	---
	3/17/2000	ENER	---	0.259	0.480	0.0260	---	---	---	---	---	---
	4/6/2000	ENER	---	0.321	0.484	0.0430	---	---	---	---	---	---
	5/11/2000	ENER	---	0.283	0.390	0.0430	---	---	---	---	---	---
	6/14/2000	ENER	---	0.219	0.434	0.0554	---	---	---	---	---	---
	7/24/2000	ENER	---	0.214	0.421	0.0760	---	---	---	---	---	---
	8/9/2000	ENER	---	0.279	0.340	0.0680	---	---	---	---	---	---
	9/11/2000	ENER	---	0.184	0.440	0.0500	---	---	---	---	---	---
SA	1/20/2000	ENER	---	12.7	17.3	0.646	---	---	---	---	---	---
	2/23/2000	ENER	---	12.2	---	0.625	---	---	---	---	---	---

Signifies Quality Control Sample

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
SA	3/24/2000	ENER	---	13.1	---	0.553	---	---	---	---	---	---
	4/24/2000	ENER	---	12.4	---	0.610	---	---	---	---	---	---
	5/18/2000	ENER	---	11.8	---	0.604	---	---	---	---	---	---
	6/8/2000	ENER	---	11.4	---	0.597	---	---	---	---	---	---
	7/24/2000	ENER	8.15	13.4	16.2	0.630	4.45	< 0.200	---	---	---	---
	8/18/2000	ENER	---	12.3	---	0.553	---	---	---	---	---	---
	10/11/2000	ENER	---	10.4	---	0.513	---	---	---	---	---	---
SB	1/20/2000	ENER	---	30.5	56.4	0.964	---	---	---	---	---	---
	2/23/2000	ENER	---	24.5	---	0.699	---	---	---	---	---	---
	3/24/2000	ENER	---	23.1	---	0.680	---	---	---	---	---	---
SC	1/19/2000	ENER	---	24.6	39.8	1.29	---	---	---	---	---	---
	2/23/2000	ENER	---	28.0	---	1.32	---	---	---	---	---	---
	3/24/2000	ENER	---	25.2	---	1.17	---	---	---	---	---	---
	4/24/2000	ENER	---	28.0	---	1.35	---	---	---	---	---	---
	5/18/2000	ENER	---	25.6	---	1.32	---	---	---	---	---	---
	6/8/2000	ENER	---	25.0	---	1.29	---	---	---	---	---	---
	7/24/2000	ENER	8.42	32.4	41.4	1.53	10.6	< 0.200	---	---	---	---
	8/18/2000	ENER	---	29.4	---	1.34	---	---	---	---	---	---
	10/11/2000	ENER	---	24.5	---	1.32	---	---	---	---	---	---
SE	1/6/2000	ENER	---	0.0270	0.0400	0.0110	---	---	---	---	---	---
	2/9/2000	ENER	---	0.0200	0.0400	< 0.0050	---	---	---	---	---	---
SE4	1/6/2000	ENER	---	0.224	0.0400	< 0.0050	---	---	---	---	---	---
	2/9/2000	ENER	---	0.122	0.0400	0.0230	---	---	---	---	---	---
SO	5/11/2000	ENER	---	12.2	---	0.426	---	---	---	---	---	---
	12/6/2000	ENER	7.66	1.36	2.82	0.0336	< 0.100	< 0.200	2.30	---	< 0.0100	0.200
SS	1/19/2000	ENER	---	16.5	27.2	0.808	---	---	---	---	---	---

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
SS	2/9/2000	ENER	---	17.0	27.4	0.779	---	---	---	---	---	---
	3/24/2000	ENER	---	12.3	---	0.700	---	---	---	---	---	---
	4/24/2000	ENER	---	12.2	---	0.671	---	---	---	---	---	---
	5/18/2000	ENER	---	12.2	---	0.676	---	---	---	---	---	---
	6/8/2000	ENER	---	11.7	---	0.691	---	---	---	---	---	---
	7/24/2000	ENER	8.21	15.0	22.7	0.836	6.02	< 0.200	---	---	---	---
	8/16/2000	ENER	---	12.3	---	0.716	---	---	---	---	---	---
	9/28/2000	ENER	---	14.6	---	0.732	---	---	---	---	---	---
	10/11/2000	ENER	---	12.5	---	0.900	---	---	---	---	---	---
ST	1/19/2000	ENER	---	4.41	3.92	0.435	---	---	---	---	---	---
	2/9/2000	ENER	---	4.44	3.87	0.426	---	---	---	---	---	---
	3/24/2000	ENER	---	4.50	---	0.380	---	---	---	---	---	---
	4/24/2000	ENER	---	4.27	---	0.377	---	---	---	---	---	---
	5/18/2000	ENER	---	3.81	---	0.311	---	---	---	---	---	---
	6/8/2000	ENER	---	3.60	---	0.316	---	---	---	---	---	---
	7/24/2000	ENER	7.94	4.68	3.78	0.364	4.34	< 0.200	---	---	---	---
	8/16/2000	ENER	---	4.81	---	0.336	---	---	---	---	---	---
	10/11/2000	ENER	---	4.68	---	0.313	---	---	---	---	---	---
SV	1/27/2000	ENER	8.37	28.1	41.6	1.02	9.68	< 0.200	---	---	---	---
	7/18/2000	ENER	---	26.5	---	1.07	---	---	---	---	---	---
	7/18/2000	ENER	---	# 25.0	---	# 1.10	---	---	---	---	---	---
T	5/10/2000	ENER	---	3.81	---	0.642	---	---	---	---	---	---
	6/8/2000	ENER	---	3.58	---	0.582	---	---	---	---	---	---
	7/24/2000	ENER	8.02	3.10	6.21	0.597	4.02	< 0.200	---	---	---	---
	8/16/2000	ENER	---	3.24	---	0.771	---	---	---	---	---	---
	11/29/2000	ENER	7.83	14.3	< 0.0300	5.23	46.9	< 0.200	---	---	---	---
TA	1/19/2000	ENER	---	7.84	8.52	3.91	---	---	---	---	---	---

Signifies Quality Control Sample

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
TA	2/23/2000	ENER	---	7.35	---	3.35	---	---	---	---	---	---
	3/24/2000	ENER	---	7.27	---	3.23	---	---	---	---	---	---
	4/24/2000	ENER	---	6.71	---	3.33	---	---	---	---	---	---
	5/18/2000	ENER	---	7.70	---	3.44	---	---	---	---	---	---
	6/8/2000	ENER	---	6.97	---	3.09	---	---	---	---	---	---
TB	1/12/2000	ENER	---	4.14	4.53	1.20	5.79	---	---	---	---	---
	2/23/2000	ENER	---	4.51	---	1.08	---	---	---	---	---	---
	3/7/2000	ENER	---	3.03	4.71	0.555	---	---	---	---	---	---
	4/24/2000	ENER	---	5.39	---	1.000	---	---	---	---	---	---
	9/11/2000	ENER	---	2.53	5.22	0.509	---	---	---	---	---	---
	9/11/2000	ENER	---	# 2.69	# 5.23	# 0.552	---	---	---	---	---	---
	12/13/2000	ENER	---	1.62	1.99	0.372	---	---	---	---	---	---
W	3/14/2000	ENER	---	0.0770	---	< 0.0050	---	---	---	---	---	---
	8/31/2000	ENER	7.85	0.0771	< 0.0300	0.0220	0.310	< 0.200	---	---	---	---
WN4	4/5/2000	ENER	9.33	17.0	33.2	0.138	5.71	5.90	---	---	---	---
WR7	1/27/2000	ENER	---	0.143	---	< 0.0050	---	---	---	---	---	---
	4/12/2000	ENER	7.78	0.140	0.0500	< 0.0050	1.77	< 0.200	< 1.000	---	< 0.0100	0.200
WR9	2/8/2000	ENER	---	0.0840	---	0.0090	---	---	---	---	---	---
WR11	1/27/2000	ENER	---	0.358	---	0.0620	---	---	---	---	---	---
	4/12/2000	ENER	7.83	0.392	< 0.0300	0.0520	0.800	< 0.200	< 1.000	---	< 0.0100	0.200
WR16	1/12/2000	ENER	---	0.252	0.190	0.269	2.71	---	---	---	---	---
X	1/11/2000	ENER	7.75	0.750	1.17	0.0420	1.79	< 0.200	< 1.000	< 0.0500	0.0500	< 0.200
	2/1/2000	ENER	7.96	0.650	1.31	0.0460	1.69	< 0.200	< 1.000	< 0.0500	0.0500	0.200
	4/11/2000	ENER	---	0.497	1.35	0.0520	---	---	---	---	---	---
	5/10/2000	ENER	7.96	0.260	1.27	0.0269	2.07	< 0.200	< 1.000	< 0.0500	0.0371	0.300
	6/6/2000	ENER	---	0.207	0.730	0.0080	---	---	---	---	---	---

Signifies Quality Control Sample

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
X	7/24/2000	ENER	---	0.0644	0.469	0.0083	---	---	---	---	---	---
	8/2/2000	ENER	7.93	0.0644	0.430	0.0060	2.48	< 0.200	< 1.000	< 0.0500	0.0300	< 0.200
	9/28/2000	ENER	---	0.0887	0.380	0.0130	---	---	---	---	---	---
	10/17/2000	ENER	7.85	0.0962	0.300	0.0170	2.07	< 0.200	< 1.000	< 0.0500	0.0175	< 0.200
X13	8/15/2000	ENER	---	3.76	7.62	0.608	3.72	---	---	---	---	---
X14	8/15/2000	ENER	---	2.30	6.23	0.0140	< 0.100	---	---	---	---	---
X15	8/15/2000	ENER	---	2.65	5.66	0.578	2.69	---	---	---	---	---
X16	8/15/2000	ENER	---	3.61	6.79	0.714	4.56	---	---	---	---	---
X17	8/15/2000	ENER	---	3.32	6.51	0.359	1.88	---	---	---	---	---
X18	8/15/2000	ENER	---	2.30	5.41	0.585	2.66	---	---	---	---	---
X19	8/15/2000	ENER	---	2.41	5.59	0.632	2.57	---	---	---	---	---
X20	8/15/2000	ENER	---	3.24	6.18	0.712	11.1	---	---	---	---	---
X25	10/9/2000	ENER	---	8.00	3.74	0.724	8.08	---	---	---	---	---
	11/2/2000	ENER	---	8.64	3.67	0.627	6.59	---	---	---	---	---
	11/9/2000	ENER	---	9.53	3.14	0.746	7.38	---	---	---	---	---
Y	1/18/2000	ENER	---	5.31	12.5	1.76	---	---	---	---	---	---
	2/1/2000	ENER	7.97	5.76	12.9	1.77	4.34	< 0.200	2.40	< 0.0500	0.0100	0.200
	2/17/2000	ENER	---	6.45	12.8	1.53	---	---	---	---	---	---
	3/7/2000	ENER	---	2.73	7.00	0.645	---	---	---	---	---	---
	4/24/2000	ENER	---	4.23	9.59	1.11	---	---	---	---	---	---
	5/10/2000	ENER	7.92	3.77	8.78	0.896	3.12	0.400	< 1.000	< 0.0500	< 0.0100	0.300
	6/6/2000	ENER	---	4.02	9.74	1.01	---	---	---	---	---	---
	7/24/2000	ENER	7.88	3.22	8.34	0.946	3.90	< 0.200	---	---	---	---
	8/2/2000	ENER	7.84	2.69	7.90	0.687	3.14	< 0.200	< 1.000	< 0.0500	< 0.0100	0.200
	9/28/2000	ENER	---	1.70	4.33	0.313	---	---	---	---	---	---

TABLE B.4-2. WATER QUALITY ANALYSES FOR HOMESTAKE'S ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
Y	10/11/2000	ENER	---	1.54	3.75	0.224	---	---	---	---	---	---
	10/17/2000	ENER	8.02	1.52	3.79	0.227	2.55	< 0.200	< 1.000	< 0.0500	0.0100	< 0.200

B.4-3 WATER QUALITY ANALYSES FOR THE SUBDIVISION ALLUVIAL WELLS.

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
0446	4/20/2000	ENER	221	64.2	6.70	282	539	< 1.000	196	678	1870	* 3304	1.01
0453	3/8/2000	ENER	---	---	---	---	---	---	---	699	1860	* 2907	---
	8/30/2000	ENER	198	62.2	9.42	259	547	< 1.000	190	619	1930	* 2984	0.973
0490	3/8/2000	ENER	197	57.7	5.90	244	557	< 1.000	193	629	1880	* 3344	0.915
	3/8/2000	ENER	# 213	# 60.3	# 6.80	# 257	# 558	# < 1.000	# 207	# 645	# 1870	---	# 0.947
	10/18/2000	ENER	---	---	---	---	---	---	---	544	1870	* 3235	---
	10/18/2000	ENER	---	---	---	---	---	---	---	# 576	# 1870	---	---
0492	4/24/2000	ENER	213	58.3	5.40	283	501	< 1.000	182	700	1840	* 3201	0.997
	10/18/2000	ENER	---	---	---	---	---	---	---	561	1830	* 3122	---
0496	8/22/2000	ENER	---	---	---	---	---	---	---	668	1870	* 3085	---
	8/22/2000	ENER	---	---	---	---	---	---	---	# 666	# 1850	---	---
0497	8/15/2000	ENER	---	---	---	---	---	---	---	699	1960	* 3408	---
0688	5/2/2000	ENER	---	---	---	---	---	---	---	795	1830	* 3166	---
	11/28/2000	ENER	222	48.3	5.20	249	479	< 1.000	163	699	1830	* 3094	0.962
0802	5/2/2000	ENER	194	51.6	4.70	277	553	< 1.000	168	617	1870	* 2959	0.978
	10/18/2000	ENER	---	---	---	---	---	---	---	541	1860	* 3305	---
0804	5/2/2000	ENER	197	51.0	5.00	268	274	< 1.000	165	795	1940	* 3303	1.00
0844	5/3/2000	ENER	179	52.6	4.60	428	483	< 1.000	178	931	2430	* 4128	0.989
	11/28/2000	ENER	---	---	---	---	---	---	---	1010	2420	* 4202	---
0845	7/25/2000	ENER	---	---	---	---	---	---	---	724	1600	* 3437	---
CW44	5/9/2000	ENER	---	---	---	---	---	---	---	816	1930	* 2746	---
	5/9/2000	ENER	---	---	---	---	---	---	---	# 866	# 1950	---	---
	8/15/2000	ENER	---	---	---	---	---	---	---	693	1930	* 3333	---
SUB1	3/15/2000	ENER	207	57.6	6.70	241	565	< 1.000	190	611	1880	* 3266	0.940
	8/31/2000	ENER	218	60.4	4.75	269	544	< 1.000	180	690	2010	* 3342	0.975

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

B.4-3 WATER QUALITY ANALYSES FOR THE SUBDIVISION ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
SUB2	4/12/2000	ENER	---	---	---	---	---	---	---	697	1870	* 2904	---
	8/31/2000	ENER	214	61.6	4.64	246	573	< 1.000	189	615	1940	* 2987	0.964
SUB3	4/20/2000	ENER	---	---	---	---	---	---	---	855	2030	* 3261	---
	8/31/2000	ENER	256	71.7	5.10	451	190	< 1.000	127	1480	3000	* 4455	1.02
	8/31/2000	ENER	# 253	# 71.1	# 5.10	# 447	# 199	# < 1.000	# 123	# 1460	# 2990	---	# 1.02

Signifies Quality Control Sample
* Signifies Specific Conductivity from HMC

B.4-4 WATER QUALITY ANALYSES FOR THE SUBDIVISION ALLUVIAL WELLS.

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
0446	4/20/2000	ENER	7.41	0.0700	< 0.0300	0.0090	2.11	< 0.200	---	---	---	---
0453	3/8/2000	ENER	---	0.0136	---	< 0.0050	---	---	---	---	---	---
	8/30/2000	ENER	7.67	0.0200	< 0.0300	0.0100	1.79	0.400	---	---	---	---
0490	3/8/2000	ENER	8.00	0.263	0.120	0.0100	1.51	0.500	---	---	---	---
	3/8/2000	ENER	# 7.91	# 0.306	# 0.130	# 0.0050	# 1.83	# < 0.200	---	---	---	---
	10/18/2000	ENER	---	0.228	---	0.0300	---	---	---	---	---	---
	10/18/2000	ENER	---	# 0.229	---	# 0.0276	---	---	---	---	---	---
0492	4/24/2000	ENER	7.60	0.277	< 0.0300	0.0310	2.13	< 0.200	---	---	---	---
	10/18/2000	ENER	---	0.263	---	0.0385	---	---	---	---	---	---
0496	8/22/2000	ENER	---	0.904	---	0.137	---	---	---	---	---	---
	8/22/2000	ENER	---	# 0.893	---	# 0.121	---	---	---	---	---	---
0497	8/15/2000	ENER	---	0.892	---	0.0690	---	---	---	---	---	---
0688	5/2/2000	ENER	---	0.0492	---	< 0.0050	---	---	---	---	---	---
	11/28/2000	ENER	7.80	0.0440	< 0.0300	0.0090	1.27	0.300	---	---	---	---
0802	5/2/2000	ENER	8.00	1.23	< 0.0300	0.0360	1.77	< 0.200	---	---	---	---
	10/18/2000	ENER	---	1.27	---	0.0410	---	---	---	---	---	---
0804	5/2/2000	ENER	8.05	0.0317	< 0.0300	0.0530	2.58	< 0.200	---	---	---	---
0844	5/3/2000	ENER	7.90	0.0587	< 0.0300	0.0210	6.98	< 0.200	---	---	---	---
	11/28/2000	ENER	---	0.0630	---	0.0220	---	---	---	---	---	---
0845	7/25/2000	ENER	---	0.0790	---	< 0.0050	---	---	---	---	---	---
CW44	5/9/2000	ENER	---	0.911	---	0.0880	---	---	---	---	---	---
	5/9/2000	ENER	---	# 0.973	---	# 0.102	---	---	---	---	---	---
	8/15/2000	ENER	---	0.926	---	0.106	---	---	---	---	---	---
SUB1	3/15/2000	ENER	7.62	0.162	< 0.0300	0.0110	1.79	< 0.200	---	---	---	---
	8/31/2000	ENER	7.69	0.268	< 0.0300	0.0290	2.26	0.300	---	---	---	---

Signifies Quality Control Sample

B.4-4 WATER QUALITY ANALYSES FOR THE SUBDIVISION ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
SUB2	4/12/2000	ENER	---	0.166	---	< 0.0050	---	---	---	---	---	---
	8/31/2000	ENER	7.66	0.165	< 0.0300	< 0.0050	1.59	< 0.200	---	---	---	---
SUB3	4/20/2000	ENER	---	0.0440	---	0.0140	---	---	---	---	---	---
	8/31/2000	ENER	7.71	0.0190	< 0.0300	0.0070	2.24	< 0.200	---	---	---	---
	8/31/2000	ENER	# 7.57	# 0.0199	# < 0.0300	# 0.0140	# 2.22	# 0.300	---	---	---	---

Signifies Quality Control Sample

TABLE B.4-5. WATER QUALITY ANALYSES FOR THE REGIONAL ALLUVIAL WELLS.

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
0531	9/7/2000	ENER	---	---	---	---	---	---	---	737	1830	* 2927	---
0532	3/8/2000	ENER	112	37.0	4.50	49.6	297	< 1.000	57.2	198	661	* 1340	1.03
0631	9/6/2000	ENER	---	---	---	---	---	---	---	720	1520	* 2612	---
0632	9/6/2000	ENER	---	---	---	---	---	---	---	743	1550	* 2446	---
0634	9/12/2000	ENER	---	---	---	---	---	---	---	914	2090	* 3342	---
0636	2/10/2000	ENER	179	55.5	7.40	198	308	< 1.000	225	506	1530	* 2154	1.02
0637	2/10/2000	ENER	165	47.8	7.40	213	338	< 1.000	200	483	1470	* 2052	1.02
0640	7/20/2000	ENER	---	---	---	---	---	---	---	647	1910	* 3225	---
0641	7/25/2000	ENER	---	---	---	---	---	---	---	646	1840	* 3187	---
0642	7/25/2000	ENER	---	---	---	---	---	---	---	646	1830	* 3183	---
0643	10/31/2000	ENER	---	---	---	---	---	---	---	789	1900	* 3308	---
0644	10/31/2000	ENER	---	---	---	---	---	---	---	954	1860	* 3144	---
0646	10/31/2000	ENER	---	---	---	---	---	---	---	914	1760	* 2960	---
0647	3/7/2000	ENER	---	---	---	---	---	---	---	635	1430	* 2456	---
	9/6/2000	ENER	---	---	---	---	---	---	---	612	1470	* 2380	---
0648	1/24/2000	ENER	---	---	---	---	---	---	---	554	1250	* 1680	---
	9/6/2000	ENER	---	---	---	---	---	---	---	538	1270	* 1956	---
0649	9/6/2000	ENER	---	---	---	---	---	---	---	606	1400	* 2210	---
0652	10/31/2000	ENER	---	---	---	---	---	---	---	619	1220	* 2161	---
0653	7/12/2000	ENER	---	---	---	---	---	---	---	776	1920	* 2912	---
	9/6/2000	ENER	---	---	---	---	---	---	---	821	1950	* 3228	---
	9/6/2000	ENER	---	---	---	---	---	---	---	# 809	# 1950	---	---
0654	9/7/2000	ENER	---	---	---	---	---	---	---	841	2120	* 3387	---

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.4-5. WATER QUALITY ANALYSES FOR THE REGIONAL ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
0657	9/6/2000	ENER	---	---	---	---	---	---	---	635	1490	* 1951	---
0658	9/2/2000	ENER	---	---	---	---	---	---	---	597	1310	* 2175	---
0659	9/12/2000	ENER	---	---	---	---	---	---	---	893	2060	* 3352	---
0683	9/12/2000	ENER	---	---	---	---	---	---	---	130	460	* 810	---
0684	9/7/2000	ENER	---	---	---	---	---	---	---	565	1360	* 2231	---
0685	9/6/2000	ENER	---	---	---	---	---	---	---	722	1770	* 2871	---
0686	9/26/2000	ENER	---	---	---	---	---	---	---	566	1590	* 2821	---
0687	9/6/2000	ENER	---	---	---	---	---	---	---	741	1810	* 2926	---
0689	7/20/2000	ENER	---	---	---	---	---	---	---	151	596	* 934	---
0692	7/20/2000	ENER	---	---	---	---	---	---	---	552	1490	* 2684	---
0846	5/3/2000	ENER	276	72.8	6.30	401	361	< 1.000	95.4	1350	2990	* 4382	1.02
	11/28/2000	ENER	---	---	---	---	---	---	---	1490	3030	* 4556	---
0848	7/20/2000	ENER	---	---	---	---	---	---	---	632	1620	* 2800	---
	7/20/2000	ENER	---	---	---	---	---	---	---	# 693	# 1610	---	---
0851	8/23/2000	ENER	---	---	---	---	---	---	---	852	1760	* 2948	---
0855	8/23/2000	ENER	---	---	---	---	---	---	---	725	1640	* 2753	---
0861	8/22/2000	ENER	---	---	---	---	---	---	---	740	1730	* 2975	---
0862	8/22/2000	ENER	---	---	---	---	---	---	---	687	1930	* 3328	---
0863	8/25/2000	ENER	---	---	---	---	---	---	---	789	1960	* 2943	---
0864	8/22/2000	ENER	---	---	---	---	---	---	---	750	1890	* 3227	---
0865	8/22/2000	ENER	---	---	---	---	---	---	---	842	1970	* 3310	---
0866	8/22/2000	ENER	---	---	---	---	---	---	---	716	1970	* 3350	---
	8/22/2000	ENER	---	---	---	---	---	---	---	# 720	# 1960	---	---

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.4-5. WATER QUALITY ANALYSES FOR THE REGIONAL ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
0867	8/22/2000	ENER	---	---	---	---	---	---	---	557	1480	* 2592	---
0868	8/23/2000	ENER	---	---	---	---	---	---	---	634	1700	* 2968	---
0869	8/22/2000	ENER	---	---	---	---	---	---	---	800	1910	* 3227	---
0876	8/22/2000	ENER	---	---	---	---	---	---	---	861	2040	* 3376	---
0881	9/27/2000	ENER	---	---	---	---	---	---	---	675	2090	* 3468	---
0882	9/27/2000	ENER	---	---	---	---	---	---	---	693	1720	* 2732	---
0883	9/27/2000	ENER	---	---	---	---	---	---	---	926	2220	* 3559	---
	9/27/2000	ENER	---	---	---	---	---	---	---	# 968	# 2230	---	---
0884	9/27/2000	ENER	---	---	---	---	---	---	---	954	2540	* 3940	---
0885	9/27/2000	ENER	---	---	---	---	---	---	---	596	1850	* 3134	---
0886	9/27/2000	ENER	---	---	---	---	---	---	---	824	2370	* 3823	---
0888	9/26/2000	ENER	---	---	---	---	---	---	---	1110	2390	* 3789	---
0890	9/27/2000	ENER	---	---	---	---	---	---	---	647	2010	* 3284	---
0893	9/27/2000	ENER	---	---	---	---	---	---	---	592	1880	* 3146	---
0894	9/26/2000	ENER	---	---	---	---	---	---	---	918	2080	* 3375	---
0895	9/26/2000	ENER	---	---	---	---	---	---	---	918	1860	* 2857	---
0896	9/26/2000	ENER	---	---	---	---	---	---	---	972	1910	* 3038	---
0899	9/26/2000	ENER	---	---	---	---	---	---	---	463	1230	* 2185	---
0905	5/2/2000	ENER	153	37.4	4.30	137	304	< 1.000	50.9	490	1130	* 1660	1.01
0909	5/3/2000	ENER	---	---	---	---	---	---	---	811	1540	* 2708	---
	8/15/2000	ENER	---	---	---	---	---	---	---	743	1550	* 2170	---
0910	5/2/2000	ENER	152	40.9	4.50	61.5	351	< 1.000	36.5	324	897	* 1352	1.01
	5/2/2000	ENER	# 154	# 41.4	# 4.40	# 62.5	# 347	# < 1.000	# 37.3	# 330	# 898	---	# 1.02

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.4-5. WATER QUALITY ANALYSES FOR THE REGIONAL ALLUVIAL WELLS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
0914	5/9/2000	ENER	87.7	20.0	2.79	311	27.0	< 1.000	96.1	758	1350	* 2379	1.03
0916	5/3/2000	ENER	4.90	1.20	1.40	121	246	< 1.000	24.8	43.4	365	* 588	0.995
	5/3/2000	ENER	# 4.90	# 1.20	# 1.40	# 121	# 245	# < 1.000	# 28.1	# 44.0	# 360	---	# 0.980
0917	5/3/2000	ENER	75.5	8.30	1.70	101	223	< 1.000	47.4	173	605	* 1074	1.03
0920	5/9/2000	ENER	416	75.0	9.60	233	228	< 1.000	58.7	1380	2690	* 3612	1.09
0921	5/9/2000	ENER	353	62.9	8.71	292	226	< 1.000	65.9	1300	2620	* 3857	1.09
0922	5/10/2000	ENER	3.52	< 1.000	< 1.000	395	360	8.00	60.3	482	1220	* 2367	0.975
0935	9/7/2000	ENER	---	---	---	---	---	---	---	843	2000	* 3241	---
0942	5/2/2000	ENER	158	39.3	4.10	247	451	< 1.000	61.4	639	1520	* 2323	0.978
0947	7/20/2000	ENER	---	---	---	---	---	---	---	593	1810	* 3192	---
0996	9/6/2000	ENER	---	---	---	---	---	---	---	697	1670	* 2725	---
	9/6/2000	ENER	---	---	---	---	---	---	---	# 701	# 1690	---	---
	11/3/2000	ENER	215	58.1	6.10	178	332	< 1.000	103	748	1490	* 2522	0.977
0999	3/8/2000	ENER	132	37.1	4.60	53.7	328	< 1.000	34.5	267	777	* 1407	1.01

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.4-6. WATER QUALITY ANALYSES FOR THE REGIONAL ALLUVIAL WELLS.

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
0531	9/7/2000	ENER	---	0.128	---	0.0390	3.29	---	---	---	---	---
0532	3/8/2000	ENER	7.94	0.0079	< 0.0300	0.0080	5.36	0.300	---	---	---	---
0631	9/6/2000	ENER	---	0.0300	---	0.190	---	---	---	---	---	---
0632	9/6/2000	ENER	---	0.0250	---	0.229	---	---	---	---	---	---
0634	9/12/2000	ENER	---	0.302	---	0.0590	3.91	---	---	---	---	---
0636	2/10/2000	ENER	7.73	0.0779	< 0.0300	0.0100	13.4	< 0.200	---	---	---	---
0637	2/10/2000	ENER	7.73	0.115	< 0.0300	0.0100	11.3	< 0.200	---	---	---	---
0640	7/20/2000	ENER	---	0.0670	< 0.0300	< 0.0050	---	---	---	---	---	---
0641	7/25/2000	ENER	---	0.112	< 0.0300	< 0.0050	---	---	---	---	---	---
0642	7/25/2000	ENER	---	0.534	< 0.0300	< 0.0050	---	---	---	---	---	---
0643	10/31/2000	ENER	---	0.748	---	0.0930	---	---	---	---	---	---
0644	10/31/2000	ENER	---	0.0216	---	0.322	---	---	---	---	---	---
0646	10/31/2000	ENER	---	0.0175	---	0.348	---	---	---	---	---	---
0647	3/7/2000	ENER	---	0.0884	---	0.0510	---	---	---	---	---	---
	9/6/2000	ENER	---	0.0580	---	0.0510	3.98	---	---	---	---	---
0648	1/24/2000	ENER	---	0.0790	---	0.0400	---	---	---	---	---	---
	9/6/2000	ENER	---	0.0540	---	0.0400	3.66	---	---	---	---	---
0649	9/6/2000	ENER	---	0.0530	---	0.0500	---	---	---	---	---	---
0652	10/31/2000	ENER	---	0.0209	---	0.0440	---	---	---	---	---	---
0653	7/12/2000	ENER	---	1.08	---	0.142	---	---	---	---	---	---
	9/6/2000	ENER	---	1.12	---	0.160	---	---	---	---	---	---
	9/6/2000	ENER	---	# 1.09	---	# 0.163	---	---	---	---	---	---
0654	9/7/2000	ENER	---	0.371	---	0.0610	4.39	---	---	---	---	---

Signifies Quality Control Sample

TABLE B.4-6. WATER QUALITY ANALYSES FOR THE REGIONAL ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
0657	9/6/2000	ENER	---	0.0690	---	0.0520	3.89	---	---	---	---	---
0658	9/2/2000	ENER	---	0.0140	---	0.0420	3.53	---	---	---	---	---
0659	9/12/2000	ENER	---	0.275	---	0.0549	3.46	---	---	---	---	---
0683	9/12/2000	ENER	---	0.0030	---	< 0.0050	0.710	---	---	---	---	---
0684	9/7/2000	ENER	---	0.0220	---	0.0400	2.58	---	---	---	---	---
0685	9/6/2000	ENER	---	0.153	---	0.0500	3.07	---	---	---	---	---
0686	9/26/2000	ENER	---	0.108	---	0.0140	20.9	---	---	---	---	---
0687	9/6/2000	ENER	---	0.206	---	0.0740	9.02	---	---	---	---	---
0689	7/20/2000	ENER	---	0.0432	---	< 0.0050	---	---	---	---	---	---
0692	7/20/2000	ENER	---	0.0525	---	0.0134	---	---	---	---	---	---
0846	5/3/2000	ENER	7.86	0.0466	< 0.0300	0.0570	14.5	0.400	---	---	---	---
	11/28/2000	ENER	---	0.0553	---	0.0665	---	---	---	---	---	---
0848	7/20/2000	ENER	---	0.0610	---	0.132	---	---	---	---	---	---
	7/20/2000	ENER	---	# 0.119	---	# 0.154	---	---	---	---	---	---
0851	8/23/2000	ENER	---	0.0800	---	0.154	---	---	---	---	---	---
0855	8/23/2000	ENER	---	0.0290	---	0.330	---	---	---	---	---	---
0861	8/22/2000	ENER	---	0.108	---	0.340	---	---	---	---	---	---
0862	8/22/2000	ENER	---	0.574	---	0.0760	---	---	---	---	---	---
0863	8/25/2000	ENER	---	1.41	---	0.160	---	---	---	---	---	---
0864	8/22/2000	ENER	---	0.762	---	0.160	---	---	---	---	---	---
0865	8/22/2000	ENER	---	0.198	---	0.366	---	---	---	---	---	---
0866	8/22/2000	ENER	---	2.06	---	0.162	---	---	---	---	---	---
	8/22/2000	ENER	---	# 2.09	---	# 0.159	---	---	---	---	---	---

Signifies Quality Control Sample

TABLE B.4-6. WATER QUALITY ANALYSES FOR THE REGIONAL ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
0867	8/22/2000	ENER	---	0.0320	---	0.253	---	---	---	---	---	---
0868	8/23/2000	ENER	---	0.0760	---	0.0900	---	---	---	---	---	---
0869	8/22/2000	ENER	---	0.322	---	0.271	---	---	---	---	---	---
0876	8/22/2000	ENER	---	0.575	---	0.393	---	---	---	---	---	---
0881	9/27/2000	ENER	---	0.341	---	0.0820	4.07	---	---	---	---	---
0882	9/27/2000	ENER	---	0.0200	---	< 0.0050	< 0.100	---	---	---	---	---
0883	9/27/2000	ENER	---	0.0310	---	0.0750	---	---	---	---	---	---
	9/27/2000	ENER	---	# 0.0307	---	# 0.0590	---	---	---	---	---	---
0884	9/27/2000	ENER	---	0.609	---	0.190	14.1	---	---	---	---	---
0885	9/27/2000	ENER	---	0.0920	---	0.0270	1.60	---	---	---	---	---
0886	9/27/2000	ENER	---	0.595	---	0.111	8.22	---	---	---	---	---
0888	9/26/2000	ENER	---	0.609	---	0.129	7.50	---	---	---	---	---
0890	9/27/2000	ENER	---	0.226	---	0.0510	2.95	---	---	---	---	---
0893	9/27/2000	ENER	---	0.104	---	0.0450	1.36	---	---	---	---	---
0894	9/26/2000	ENER	---	0.318	---	0.0600	4.30	---	---	---	---	---
0895	9/26/2000	ENER	---	0.0200	---	0.0150	1.17	---	---	---	---	---
0896	9/26/2000	ENER	---	0.0200	---	0.0910	9.70	---	---	---	---	---
0899	9/26/2000	ENER	---	0.0690	---	0.0300	11.5	---	---	---	---	---
0905	5/2/2000	ENER	7.67	0.0289	< 0.0300	0.0230	4.07	< 0.200	---	---	---	---
0909	5/3/2000	ENER	---	0.0196	---	0.215	---	---	---	---	---	---
	8/15/2000	ENER	---	0.0240	---	0.265	---	---	---	---	---	---
0910	5/2/2000	ENER	7.63	0.0121	< 0.0300	0.0080	4.25	< 0.200	---	---	---	---
	5/2/2000	ENER	# 7.71	# 0.0132	# < 0.0300	# 0.0060	# 4.12	# < 0.200	---	---	---	---

Signifies Quality Control Sample

TABLE B.4-6. WATER QUALITY ANALYSES FOR THE REGIONAL ALLUVIAL WELLS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
0914	5/9/2000	ENER	7.36	0.0054	< 0.0300	0.0085	< 0.100	0.800	---	---	---	---
0916	5/3/2000	ENER	8.24	0.0081	< 0.0300	0.0130	4.71	< 0.200	---	---	---	---
	5/3/2000	ENER	# 7.99	# 0.0079	# < 0.0300	# 0.0180	# 5.10	# < 0.200	---	---	---	---
0917	5/3/2000	ENER	7.96	0.0200	< 0.0300	0.0100	6.80	1.40	---	---	---	---
0920	5/9/2000	ENER	7.88	0.169	< 0.0300	0.425	15.3	0.500	---	---	---	---
0921	5/9/2000	ENER	7.88	0.195	< 0.0300	0.590	17.4	< 0.200	---	---	---	---
0922	5/10/2000	ENER	8.60	0.0168	0.0600	0.0290	1.16	< 0.200	---	---	---	---
0935	9/7/2000	ENER	---	0.340	---	0.0900	8.29	---	---	---	---	---
0942	5/2/2000	ENER	7.56	0.0576	< 0.0300	0.0090	2.58	< 0.200	---	---	---	---
0947	7/20/2000	ENER	---	0.102	---	< 0.0050	---	---	---	---	---	---
0996	9/6/2000	ENER	---	0.172	---	0.0660	5.42	---	---	---	---	---
	9/6/2000	ENER	---	# 0.172	---	# 0.0700	# 5.55	---	---	---	---	---
	11/3/2000	ENER	7.51	0.0795	< 0.0300	0.0769	4.85	< 0.200	< 1.000	---	< 0.0100	< 0.200
0999	3/8/2000	ENER	7.99	0.0096	< 0.0300	0.0080	3.90	< 0.200	---	---	---	---

Signifies Quality Control Sample

TABLE B.5-1. WATER QUALITY ANALYSES FOR THE CHINLE AQUIFERS.

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
0434	4/20/2000	ENER	223	63.0	6.70	286	553	< 1.000	199	693	1900	* 3196	0.993
	8/31/2000	ENER	203	58.0	5.46	271	547	< 1.000	178	646	1930	* 3191	0.977
0446	4/20/2000	ENER	221	64.2	6.70	282	539	< 1.000	196	678	1870	* 3304	1.01
0493	3/8/2000	ENER	8.30	1.70	3.20	432	275	< 1.000	88.3	638	1370	* 2695	0.956
	10/18/2000	ENER	---	---	---	---	---	---	---	499	1290	* 2492	---
0494	3/8/2000	ENER	219	61.2	7.50	262	561	< 1.000	209	666	1890	* 3318	0.950
	10/18/2000	ENER	---	---	---	---	---	---	---	554	1870	* 3239	---
0536	9/12/2000	ENER	174	46.9	8.40	282	284	< 1.000	71.8	915	1900	* 2901	0.971
0653	7/12/2000	ENER	---	---	---	---	---	---	---	776	1920	* 2912	---
	9/6/2000	ENER	---	---	---	---	---	---	---	821	1950	* 3228	---
	9/6/2000	ENER	---	---	---	---	---	---	---	# 809	# 1950	---	---
0820	8/29/2000	ENER	120	30.3	3.47	532	325	< 1.000	126	1040	2350	* 3828	1.04
0853	6/21/2000	ENER	---	---	---	---	---	---	---	695	1360	* 2326	---
	6/21/2000	ENER	---	---	---	---	---	---	---	# 692	# 1370	* 2326	---
0859	6/21/2000	ENER	---	---	---	---	---	---	---	945	1990	* 3399	---
0909	5/3/2000	ENER	---	---	---	---	---	---	---	811	1540	* 2708	---
	8/15/2000	ENER	---	---	---	---	---	---	---	743	1550	* 2170	---
0929	3/7/2000	ENER	7.20	< 1.000	2.90	534	384	5.20	102	762	1670	* 3059	0.942
	8/30/2000	ENER	6.80	< 1.000	1.06	520	395	< 1.000	89.2	680	1670	* 3038	0.995
0930	7/25/2000	ENER	---	---	---	---	---	---	---	647	1960	* 2890	---
	7/25/2000	ENER	---	---	---	---	---	---	---	# 639	# 1570	---	---
0931	4/6/2000	ENER	---	1.10	1.30	---	399	< 1.000	132	711	1750	* 3133	---
	4/6/2000	ENER	7.80	# 1.000	# 1.80	559	# 397	# < 1.000	# 150	# 708	# 1720	---	0.973
	8/30/2000	ENER	2.80	< 1.000	< 1.000	438	164	10.00	144	571	1410	* 2712	1.02
	8/30/2000	ENER	# 2.80	# < 1.000	# < 1.000	# 437	# 172	# 6.00	# 145	# 574	# 1410	---	# 1.01

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.5-1. WATER QUALITY ANALYSES FOR THE CHINLE AQUIFERS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
0934	4/6/2000	ENER	6.70	< 1.000	1.30	519	392	< 1.000	83.3	700	1610	* 2935	0.985
	8/30/2000	ENER	5.50	< 1.000	1.06	493	394	5.30	77.1	645	1580	* 2925	0.982
0945	4/6/2000	ENER	11.3	1.50	1.70	675	392	< 1.000	369	678	2040	* 3197	0.971
	8/29/2000	ENER	10.2	1.40	1.32	644	392	< 1.000	342	622	2040	* 3376	0.987
CE1	3/16/2000	ENER	105	29.3	7.60	341	448	< 1.000	84.8	658	1680	* 2888	0.966
	6/14/2000	ENER	---	---	---	---	---	---	---	758	1640	* 2537	---
	7/19/2000	ENER	---	---	---	---	---	---	92.5	768	1740	* 2986	---
CE2	1/19/2000	ENER	---	---	---	---	---	---	---	970	2150	* 2956	---
	2/17/2000	ENER	---	---	---	---	---	---	---	1010	2170	* 2892	---
	3/27/2000	ENER	---	---	---	---	---	---	---	947	2160	* 2889	---
	4/14/2000	ENER	205	54.1	4.20	364	478	< 1.000	184	878	2100	---	0.977
	4/26/2000	ENER	---	---	---	---	---	---	---	953	2160	* 2714	---
	6/14/2000	ENER	---	---	---	---	---	---	---	937	2120	* 3601	---
	7/31/2000	ENER	221	57.3	3.55	349	467	< 1.000	172	919	2140	* 2912	0.979
	8/28/2000	ENER	---	---	---	---	---	---	---	874	2100	* 2849	---
	9/28/2000	ENER	---	---	---	---	---	---	---	784	2120	* 2845	---
	10/16/2000	ENER	---	---	---	---	---	---	---	742	2150	* 2910	---
CE5	10/11/2000	ENER	---	---	---	---	---	---	190	757	1850	---	---
	12/19/2000	ENER	190	53.3	4.00	286	502	< 1.000	158	723	1830	* 3202	0.951
CW2	2/2/2000	ENER	7.50	1.10	3.20	372	289	4.50	42.5	582	1160	* 1751	0.919
	5/2/2000	ENER	---	---	---	---	---	---	---	637	1240	* 2370	---
	8/2/2000	ENER	12.9	1.84	1.22	434	285	< 1.000	40.0	704	1440	* 2636	0.961
	11/28/2000	ENER	---	---	---	---	---	---	---	553	1180	* 2248	---
CW3	2/8/2000	ENER	14.6	3.00	2.90	472	352	< 1.000	47.3	783	1530	* 2205	0.921
	2/8/2000	ENER	# 13.6	# 2.80	# 2.60	# 470	# 350	# < 1.000	# 46.1	# 704	# 1520	---	# 0.986
	4/27/2000	ENER	---	---	---	---	---	---	---	818	1520	* 2785	---

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.5-1. WATER QUALITY ANALYSES FOR THE CHINLE AQUIFERS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
CW3	8/2/2000	ENER	13.4	2.80	1.30	467	349	< 1.000	40.3	700	1550	* 2769	0.990
	8/2/2000	ENER	# 13.3	# 2.90	# < 1.000	# 461	# 345	# < 1.000	# 46.5	# 668	# 1520	---	# 1.00
	11/28/2000	ENER	---	---	---	---	---	---	---	741	1540	* 2787	---
CW4R	2/1/2000	ENER	177	48.3	5.80	263	467	< 1.000	151	694	1690	* 2291	0.924
	4/27/2000	ENER	---	---	---	---	---	---	---	760	1730	* 3055	---
	8/1/2000	ENER	195	54.2	3.90	279	495	< 1.000	157	685	1790	* 3110	0.985
	11/21/2000	ENER	---	---	---	---	---	---	---	667	1690	* 2968	---
CW9	8/30/2000	ENER	24.3	4.90	1.92	340	174	< 1.000	48.8	576	1230	* 2286	1.01
CW15	6/21/2000	ENER	---	---	---	---	---	---	---	854	1520	* 2888	---
CW17	6/19/2000	ENER	---	---	---	---	---	---	---	1850	3170	* 3469	---
CW18	7/20/2000	ENER	---	---	---	---	---	---	---	646	2010	* 3838	---
CW24	10/3/2000	ENER	---	---	---	---	---	---	---	1410	3080	* 4495	---
CW26	6/21/2000	ENER	---	---	---	---	---	---	---	664	1380	* 2498	---
CW27	6/21/2000	ENER	---	---	---	---	---	---	---	870	1660	* 2705	---
CW28	7/20/2000	ENER	---	---	---	---	---	---	---	446	1410	* 2700	---
CW29	6/21/2000	ENER	---	---	---	---	---	---	---	557	1100	* 2034	---
CW30	3/16/2000	ENER	30.4	7.50	4.00	538	364	< 1.000	136	801	1920	* 3682	0.967
	6/21/2000	ENER	---	---	---	---	---	---	---	943	1920	* 3594	---
CW31	6/21/2000	ENER	---	---	---	---	---	---	---	1070	1850	* 3160	---
CW32	6/21/2000	ENER	---	---	---	---	---	---	---	1690	3910	* 6726	---
CW33	6/21/2000	ENER	---	---	---	---	---	---	---	2140	3990	* 6419	---
CW35	6/19/2000	ENER	---	---	---	---	---	---	---	1260	2220	* 3421	---
CW37	6/27/2000	ENER	---	---	---	---	---	---	---	1060	1980	* 3238	---
	6/27/2000	ENER	---	---	---	---	---	---	---	# 1070	# 1990	---	---

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.5-1. WATER QUALITY ANALYSES FOR THE CHINLE AQUIFERS. (cont.)

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
CW40	3/7/2000	ENER	11.6	1.50	3.60	683	719	10.2	206	694	1930	* 3868	0.942
	8/30/2000	ENER	10.9	1.47	1.32	645	724	< 1.000	172	603	1980	* 3767	0.981
CW42	9/6/2000	ENER	---	---	---	---	---	---	---	833	2000	* 3364	---
CW43	8/29/2000	ENER	---	---	---	---	---	---	---	405	1110	* 1986	---
CW44	5/9/2000	ENER	---	---	---	---	---	---	---	816	1930	* 2746	---
	5/9/2000	ENER	---	---	---	---	---	---	---	# 866	# 1950	---	---
	8/15/2000	ENER	---	---	---	---	---	---	---	693	1930	* 3333	---
CW45	8/15/2000	ENER	---	---	---	---	---	---	---	682	1780	* 3156	---
CW46	8/29/2000	ENER	---	---	---	---	---	---	---	734	1850	* 3024	---
	8/29/2000	ENER	---	---	---	---	---	---	---	# 736	# 1820	---	---
HCW	7/20/2000	ENER	17.1	3.30	1.90	411	285	< 1.000	80.2	614	1320	* 2551	0.965
WCW	5/16/2000	ENER	14.9	3.27	2.44	520	326	< 1.000	82.0	743	1560	* 2933	1.02
WR25	10/3/2000	ENER	---	---	---	---	---	---	---	1330	2940	* 4234	---

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.5-2. WATER QUALITY ANALYSES FOR THE CHINLE AQUIFERS.

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
0434	4/20/2000	ENER	7.54	0.359	0.120	0.0450	1.81	< 0.200	---	---	---	---
	8/31/2000	ENER	7.69	0.458	0.150	0.0590	1.81	< 0.200	---	---	---	---
0446	4/20/2000	ENER	7.41	0.0700	< 0.0300	0.0090	2.11	< 0.200	---	---	---	---
0493	3/8/2000	ENER	8.16	0.0436	< 0.0300	0.179	1.68	0.200	---	---	---	---
	10/18/2000	ENER	---	0.0307	---	0.148	---	---	---	---	---	---
0494	3/8/2000	ENER	7.94	0.284	< 0.0300	0.0100	1.71	< 0.200	---	---	---	---
	10/18/2000	ENER	---	0.272	---	0.0360	---	---	---	---	---	---
0536	9/12/2000	ENER	7.63	0.0182	< 0.0300	0.0390	2.97	< 0.200	< 1.000	---	< 0.0100	< 0.200
0653	7/12/2000	ENER	---	1.08	---	0.142	---	---	---	---	---	---
	9/6/2000	ENER	---	1.12	---	0.160	---	---	---	---	---	---
	9/6/2000	ENER	---	# 1.09	---	# 0.163	---	---	---	---	---	---
0820	8/29/2000	ENER	7.64	0.0530	< 0.0300	0.0453	5.28	< 0.200	---	---	---	---
0853	6/21/2000	ENER	---	0.0334	---	0.231	---	---	---	---	---	---
	6/21/2000	ENER	---	# 0.0291	---	# 0.208	---	---	---	---	---	---
0859	6/21/2000	ENER	---	0.184	---	0.0940	---	---	---	---	---	---
0909	5/3/2000	ENER	---	0.0196	---	0.215	---	---	---	---	---	---
	8/15/2000	ENER	---	0.0240	---	0.265	---	---	---	---	---	---
0929	3/7/2000	ENER	8.38	0.0083	< 0.0300	0.0100	0.120	< 0.200	---	---	---	---
	8/30/2000	ENER	8.16	0.0178	< 0.0300	0.0220	< 0.100	< 0.200	---	---	---	---
0930	7/25/2000	ENER	---	0.0150	---	< 0.0050	---	---	---	---	---	---
	7/25/2000	ENER	---	# 0.0112	---	# < 0.0050	---	---	---	---	---	---
0931	4/6/2000	ENER	8.13	0.0166	< 0.0300	0.0140	< 0.100	< 0.200	---	---	---	---
	4/6/2000	ENER	# 8.19	# 0.0188	# < 0.0300	# 0.0140	# < 0.100	# < 0.200	---	---	---	---
	8/30/2000	ENER	9.04	0.0011	0.0309	< 0.0050	< 0.100	< 0.200	---	---	---	---
	8/30/2000	ENER	# 8.81	# 0.0029	# < 0.0300	# 0.0090	# < 0.100	# < 0.200	---	---	---	---

Signifies Quality Control Sample

TABLE B.5-2. WATER QUALITY ANALYSES FOR THE CHINLE AQUIFERS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
0934	4/6/2000	ENER	8.08	0.0593	< 0.0300	0.0290	3.30	< 0.200	---	---	---	---
	8/30/2000	ENER	8.38	0.0220	< 0.0300	0.0180	< 0.100	< 0.200	---	---	---	---
0945	4/6/2000	ENER	8.28	0.0285	0.0500	< 0.0050	0.100	< 0.200	---	---	---	---
	8/29/2000	ENER	8.04	0.0326	0.0481	0.0074	< 0.100	< 0.200	---	---	---	---
CE1	3/16/2000	ENER	8.19	1.56	1.13	< 0.0050	< 0.100	0.600	---	---	---	---
	6/14/2000	ENER	---	2.00	0.814	< 0.0050	---	---	---	---	---	---
	7/19/2000	ENER	---	1.54	0.700	0.0079	< 0.100	---	---	---	---	---
CE2	1/19/2000	ENER	---	1.09	0.480	0.237	---	---	---	---	---	---
	2/17/2000	ENER	---	1.36	---	0.220	---	---	---	---	---	---
	3/27/2000	ENER	---	1.12	---	0.192	---	---	---	---	---	---
	4/14/2000	ENER	7.86	1.20	0.340	0.228	4.74	< 0.200	< 1.000	---	< 0.0100	0.200
	4/26/2000	ENER	---	1.12	---	0.213	---	---	---	---	---	---
	6/14/2000	ENER	---	1.17	0.410	0.216	---	---	---	---	---	---
	7/31/2000	ENER	7.93	1.20	0.420	0.380	5.40	< 0.200	---	---	---	---
	8/28/2000	ENER	---	1.04	---	0.200	---	---	---	---	---	---
	9/28/2000	ENER	---	1.03	---	0.174	---	---	---	---	---	---
	10/16/2000	ENER	---	1.18	---	0.223	---	---	---	---	---	---
CE5	10/11/2000	ENER	---	0.571	0.160	0.0140	< 0.100	---	---	---	---	---
	12/19/2000	ENER	7.79	0.535	0.140	0.0960	1.18	< 0.200	2.90	---	< 0.0100	0.200
CW2	2/2/2000	ENER	8.44	0.0130	< 0.0300	0.0100	0.160	< 0.200	1.80	---	< 0.0100	0.200
	5/2/2000	ENER	---	0.0154	---	0.0140	---	---	---	---	---	---
	8/2/2000	ENER	8.13	0.0183	0.0301	0.0075	0.120	< 0.200	< 1.000	---	< 0.0100	< 0.200
	11/28/2000	ENER	---	0.0115	---	0.0151	---	---	---	---	---	---
CW3	2/8/2000	ENER	7.90	0.0270	< 0.0300	< 0.0050	0.140	0.100	< 1.000	---	< 0.0100	0.200
	2/8/2000	ENER	# 8.10	# 0.0260	# < 0.0300	# < 0.0050	# < 0.100	# < 0.200	# < 1.000	---	# < 0.0100	# < 0.200
	4/27/2000	ENER	---	0.0290	---	< 0.0050	---	---	---	---	---	---

Signifies Quality Control Sample

TABLE B.5-2. WATER QUALITY ANALYSES FOR THE CHINLE AQUIFERS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
CW3	8/2/2000	ENER	8.04	0.0020	< 0.0300	< 0.0050	< 0.100	< 0.200	< 1.000	---	< 0.0100	0.400
	8/2/2000	ENER	# 8.26	# 0.0289	# < 0.0300	# 0.0050	# < 0.100	# < 0.200	# < 1.000	---	# < 0.0100	# < 0.200
	11/28/2000	ENER	---	0.0240	---	< 0.0050	---	---	---	---	---	---
CW4R	2/1/2000	ENER	7.95	1.06	0.110	0.100	0.820	< 0.200	1.30	---	< 0.0100	0.200
	4/27/2000	ENER	---	0.381	---	0.0600	---	---	---	---	---	---
	8/1/2000	ENER	7.79	0.335	0.0800	0.0630	1.16	< 0.200	< 1.000	---	< 0.0100	0.200
	11/21/2000	ENER	---	0.393	---	0.0640	---	---	---	---	---	---
CW9	8/30/2000	ENER	7.87	0.0051	0.0400	< 0.0050	0.130	< 0.200	---	---	---	---
CW15	6/21/2000	ENER	---	0.0501	---	0.0361	---	---	---	---	---	---
CW17	6/19/2000	ENER	---	0.175	---	0.0808	---	---	---	---	---	---
CW18	7/20/2000	ENER	---	0.0659	< 0.0300	0.0230	---	---	---	---	---	---
CW24	10/3/2000	ENER	---	0.128	< 0.0300	0.0798	---	---	---	---	---	---
CW26	6/21/2000	ENER	---	0.0176	---	0.262	---	---	---	---	---	---
CW27	6/21/2000	ENER	---	0.0200	---	0.368	---	---	---	---	---	---
CW28	7/20/2000	ENER	---	0.0831	---	0.0308	---	---	---	---	---	---
CW29	6/21/2000	ENER	---	0.0101	---	0.0272	---	---	---	---	---	---
CW30	3/16/2000	ENER	8.03	0.476	< 0.0300	0.224	3.44	< 0.200	---	---	---	---
	6/21/2000	ENER	---	0.357	---	0.223	---	---	---	---	---	---
CW31	6/21/2000	ENER	---	0.0079	---	< 0.0050	---	---	---	---	---	---
CW32	6/21/2000	ENER	---	0.0010	---	0.0207	---	---	---	---	---	---
CW33	6/21/2000	ENER	---	0.0058	---	0.0168	---	---	---	---	---	---
CW35	6/19/2000	ENER	---	0.231	---	0.0661	---	---	---	---	---	---
CW37	6/27/2000	ENER	---	0.0294	---	0.0809	---	---	---	---	---	---
	6/27/2000	ENER	---	# 0.0282	---	# 0.0739	---	---	---	---	---	---

Signifies Quality Control Sample

TABLE B.5-2. WATER QUALITY ANALYSES FOR THE CHINLE AQUIFERS. (cont.)

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
CW40	3/7/2000	ENER	8.40	0.0060	< 0.0300	0.0060	1.58	< 0.200	---	---	---	---
	8/30/2000	ENER	8.26	0.0262	< 0.0300	0.0177	1.72	< 0.200	---	---	---	---
CW42	9/6/2000	ENER	---	1.27	---	0.199	---	---	---	---	---	---
CW43	8/29/2000	ENER	---	0.0251	---	0.0140	---	---	---	---	---	---
CW44	5/9/2000	ENER	---	0.911	---	0.0880	---	---	---	---	---	---
	5/9/2000	ENER	---	# 0.973	---	# 0.102	---	---	---	---	---	---
	8/15/2000	ENER	---	0.926	---	0.106	---	---	---	---	---	---
CW45	8/15/2000	ENER	---	1.76	---	0.160	---	---	---	---	---	---
CW46	8/29/2000	ENER	---	0.0504	---	0.247	---	---	---	---	---	---
	8/29/2000	ENER	---	# 0.0479	---	# 0.302	---	---	---	---	---	---
HCW	7/20/2000	ENER	8.10	0.0516	< 0.0300	< 0.0050	< 0.100	< 0.200	< 1.000	---	< 0.0100	0.400
WCW	5/16/2000	ENER	7.85	0.0176	< 0.0300	< 0.0050	< 0.100	< 0.200	---	---	---	---
WR25	10/3/2000	ENER	---	0.0740	< 0.0300	0.157	---	---	---	---	---	---

Signifies Quality Control Sample

TABLE B.6-1. WATER QUALITY ANALYSES FOR THE SAN ANDRES AQUIFER.

Ca THROUGH ION_BAL

Sample Point Name	Date	Lab	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (mg/l)	SO4 (mg/l)	TDS (mg/l)	Cond(calc.) (µmhos/cm)	Ion_B (ratio)
#1 Deepwell	2/1/2000	ENER	---	---	---	---	---	---	---	744	2000	* 2759	---
	4/27/2000	ENER	225	74.2	13.1	302	635	< 1.000	256	716	2030	* 3013	0.946
	8/2/2000	ENER	---	---	---	---	---	---	---	736	1780	* 2850	---
	11/21/2000	ENER	---	---	---	---	---	---	---	718	1910	* 2846	---
#2 Deepwell	2/1/2000	ENER	---	---	---	---	---	---	---	688	1810	* 2480	---
	4/27/2000	ENER	210	69.1	12.1	237	529	< 1.000	218	654	1810	* 2840	0.941
	8/1/2000	ENER	---	---	---	---	---	---	---	678	1920	* 2721	---
	11/21/2000	ENER	---	---	---	---	---	---	---	693	1800	* 2766	---
0806	8/22/2000	ENER	---	---	---	---	---	---	---	498	1480	* 2304	---
0928	8/9/2000	ENER	---	---	---	---	---	---	---	790	1590	* 2844	---
	8/9/2000	ENER	---	---	---	---	---	---	---	# 799	# 1630	---	---
0943	8/23/2000	ENER	---	---	---	---	---	---	---	1070	2010	* 3832	---
0951	1/20/2000	ENER	---	---	---	---	---	---	---	333	824	* 1240	---
	8/9/2000	ENER	---	---	---	---	---	---	---	270	623	* 1226	---

Signifies Quality Control Sample

* Signifies Specific Conductivity from HMC

TABLE B.6-2. WATER QUALITY ANALYSES FOR THE SAN ANDRES AQUIFER.

pH THROUGH Th-230

Sample Point Name	Date	Lab	pH (std. units)	Unat (mg/l)	Mo (mg/l)	Se (mg/l)	NO3 (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Cr (mg/l)	V (mg/l)	Th230 (pCi/l)
#1 Deepwell	4/27/2000	ENER	7.62	0.0101	< 0.0300	< 0.0050	0.410	1.30	---	< 0.0500	---	---
#2 Deepwell	4/27/2000	ENER	7.79	0.0119	< 0.0300	< 0.0050	2.39	0.400	---	< 0.0500	---	---
0806	8/22/2000	ENER	---	0.0180	---	0.0080	---	---	---	---	---	---
0928	8/9/2000	ENER	---	0.106	---	0.0340	---	---	---	---	---	---
	8/9/2000	ENER	---	# 0.0890	---	# 0.0370	---	---	---	---	---	---
0943	8/23/2000	ENER	---	0.0017	---	< 0.0050	---	---	---	---	---	---
0951	1/20/2000	ENER	---	0.0316	< 0.0300	< 0.0050	---	---	---	---	---	---
	8/9/2000	ENER	---	0.0030	---	< 0.0050	---	---	---	---	---	---

Signifies Quality Control Sample