PNNL-12023

Groundwater Monitoring for the 100-K Area Fuel-Storage Basins: July 1996 Through April 1998

V. G. Johnson
C. J. Chou
M. J. Hartman
W. D. Webber

October 1998

Prepared for
the U.S. Department of Energy
under Contract DE-AC06-76RLO 1830

Pacific Northwest National Laboratory
Richland, Washington 99352

DISCLAIMER

DISCLAIMER

Summary

This report presents the results of groundwater monitoring and summarizes current interpretations of conditions influencing groundwater quality and flow in the 100-K Area. The interpretations build on previous work, and statistical evaluations of contaminant concentrations were performed for the period July 1996 through April 1998. No new basin leaks are indicated by data from this period.

Tritium from a 1993 leak in the KE Basin has been detected in groundwater and appears to be dissipating. Tritium and strontium-90 from inactive injection wells/drain fields are still evident near the KW and KE Basins. These contaminants have increased as a result of infiltration of surface water or a higher-than-average water table. Inactive condensate cribs near the KW and KE Basins resulted in very high tritium and carbon-14 activities in some wells. Recent tritium decreases are attributed to changes in groundwater-flow direction caused by the higher-than-average river stage in 1996-1998, which caused the contaminant plumes to move away from the monitoring wells.

Results of the groundwater-monitoring program were used to identify and correct factors that may contribute to contaminant increases. For example, some sources of surface-water infiltration have been diverted. Additional work to reduce infiltration through contaminated sediments is planned for fiscal year 1999.

Seismic monitoring was recently initiated in the 100-K Area to provide an early warning of earthquake events that could cause basin leakage. The early warning will alert operators to check water-loss rates and consider the need for immediate action.

Contents

Figures

Tables

1.0 Introduction

1.1 Purpose and Scope

This report is one of a series on the status of groundwater quality in the 100-K Area of the Hanford Site. This report series, initiated in 1994, focuses on groundwater quality in the immediate vicinity of the nuclear fuel-storage basins (KW and KE Basins). Monitoring is required by the *Atomic Energy Act of 1954* and its implementing U.S. Department of Energy Order 5400.1. The purposes of monitoring are to:

- help determine if the basins currently leak
- determine if current use of the basins causes contaminant concentrations in groundwater to exceed applicable regulatory standards
- determine if continued use of the basins may exacerbate future groundwater-cleanup activities

In addition to basin monitoring, groundwater beneath the entire 100-K Area is monitored for the 100-KR-4 Operable Unit and for surveillance monitoring. Results are given in annual reports (e.g., Hartman and Dresel 1998) and operable unit reports (e.g., Peterson et al. 1996). Pacific Northwest National Laboratory[1] manages the Hanford Groundwater Monitoring Project for the U.S. Department of Energy.

The primary purpose of this report is to present the results of data analysis activities prescribed in the site's groundwater-monitoring plan (Johnson et al. 1995). This report also summarizes current interpretations of groundwater quality and groundwater flow, building on the information presented in the previous status reports and other, more recent reports. Data from wells that monitor these basins for the period July 1996 through April 1998 are tabulated in the Appendix. Previous data, and data from other wells that monitor the 100-K Area, are available electronically in the Hanford Environmental Information System.

1.2 Hydrogeology of the 100-K Area

The geology beneath the Hanford Site is composed of unconsolidated sediments of the Hanford and Ringold Formations, which overlie folded and faulted basalts of the Saddle Mountains and Wanapum Basalts.

The 100-K Area is located beside the Columbia River on the northern Hanford Site. The vadose zone beneath the basins is composed of an upper layer of unconsolidated sand and gravel (Hanford formation)

[1] Pacific Northwest National Laboratory is operated by Battelle for the U.S. Department of Energy.

and a lower layer of less-permeable, partially cemented, sandy gravel (Ringold Formation unit E). Large areas of the surface have been excavated to depths of ~10 m, so some of the upper vadose zone consists of backfilled Hanford formation material.

The depth to groundwater is 20 to 25 m. The uppermost aquifer is unconfined and is within the partially cemented sandy gravels of Ringold Formation unit E. The base of the uppermost aquifer is bounded by a fine-grained unit (Ringold Formation paleosols and overbank deposits) ~18 m below the water table.

Groundwater currently flows primarily to the northwest, toward the Columbia River. However, during times of prolonged high-river stage, flow beneath the basins may shift toward the north or northeast. When the reactors were operating and large volumes of cooling water were discharged to the ground, a significant groundwater mound was present beneath the area (Brown 1963). As a result of this mound, the past groundwater-flow direction beneath the basins was toward the southwest (Figure 4-4 in Hartman and Peterson 1992).

Additional information on 100-K Area geology and hydrogeology was presented by Lindberg (1995), Johnson et al. (1995), and Peterson et al. (1996).

1.3 Site Description

The basins are integral parts of the 105-KE and 105-KW reactor buildings. These reactors operated from 1955 until 1971. Beginning in 1975, the KE Basin has been used to store irradiated fuel elements from N Reactor. The KW Basin began receiving N Reactor fuel in 1981. Figures 1.1 and 1.2 show the general layout of the site and features of interest to the groundwater-monitoring program.

The basins are constructed of reinforced concrete and each includes a loading pit, a storage area, and a discharge chute. The basins were constructed over 5-cm-thick asphalt membranes, which were intended as secondary seepage barriers designed to collect leakage and discharge it to a drainage field. In 1979, the systems were modified so any leakage would be returned to the basins (Carpenter 1994). However, the asphalt does not extend beneath the discharge chutes (Figure 1.3) (Hunacek 1996, p. 4-2).

Each basin holds ~4.9 million L of water, which provides a radiation shield and acts as a thermal sink for heat generated by the stored fuel. Some of the nuclear fuel elements currently stored in the KE Basin have damaged cladding and are stored in open canisters, allowing contact of the irradiated fuel elements with basin water. Corrosion of the damaged fuel results in transfer of radionuclides to the basin water. A closed-loop ion-exchange and filtration system was installed in 1979 to remove many of the radionuclides from the basin water; consequently, the current activities of strontium-90, plutonium, and other radionuclides (see Figure 1.3) have declined. Because tritium is contained as part of the water molecule, it cannot be removed by ion exchange and filtration and is present in KE Basin water at an activity of several million picocuries per liter. Water in the KW Basin, where only fully encapsulated fuel is stored, has much lower tritium activity (several hundred thousand picocuries per liter). Spent fuel and sludge will be removed from the basins by 2005.

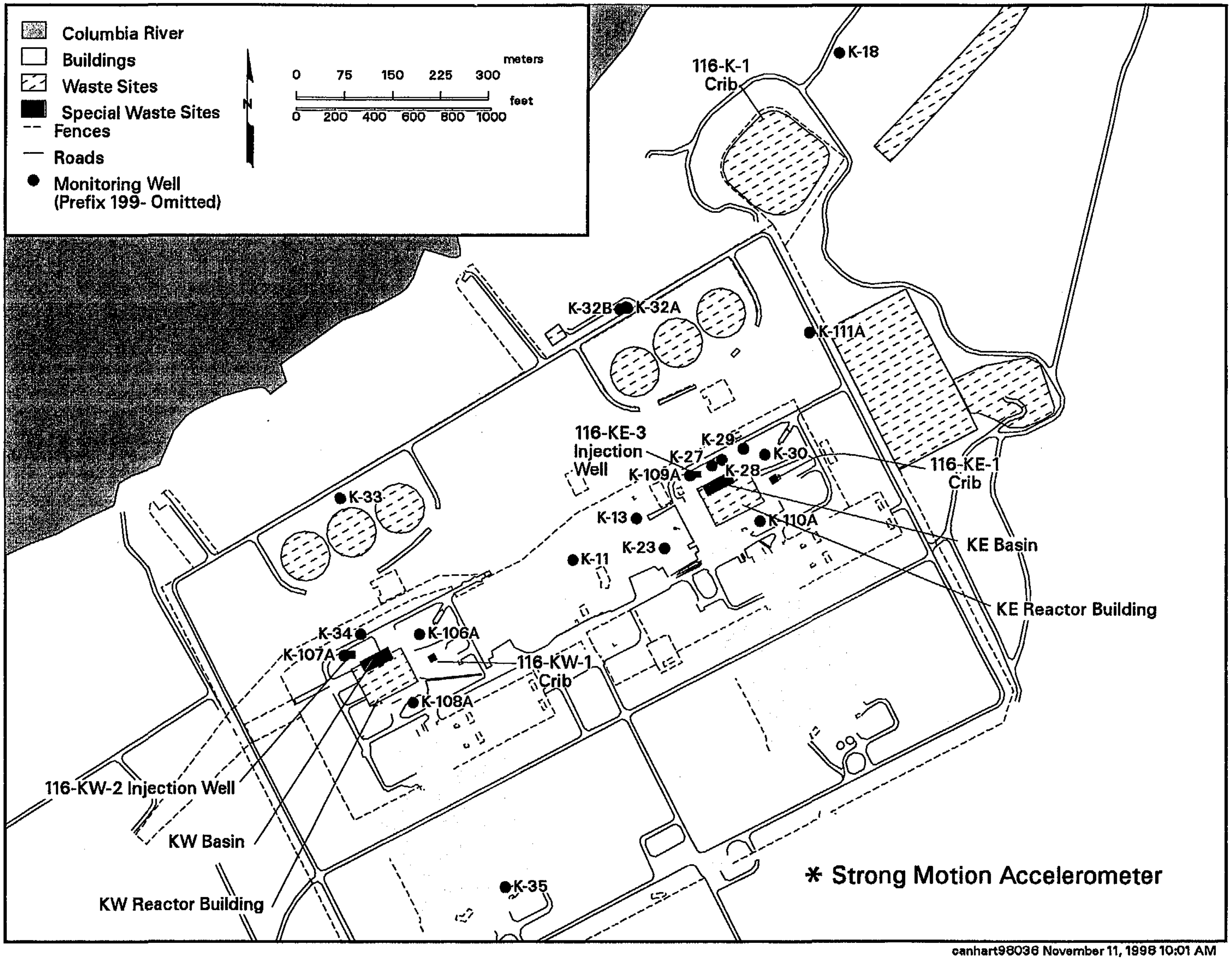


Figure 1.1. Location of KW and KE Basins and Associated Structures

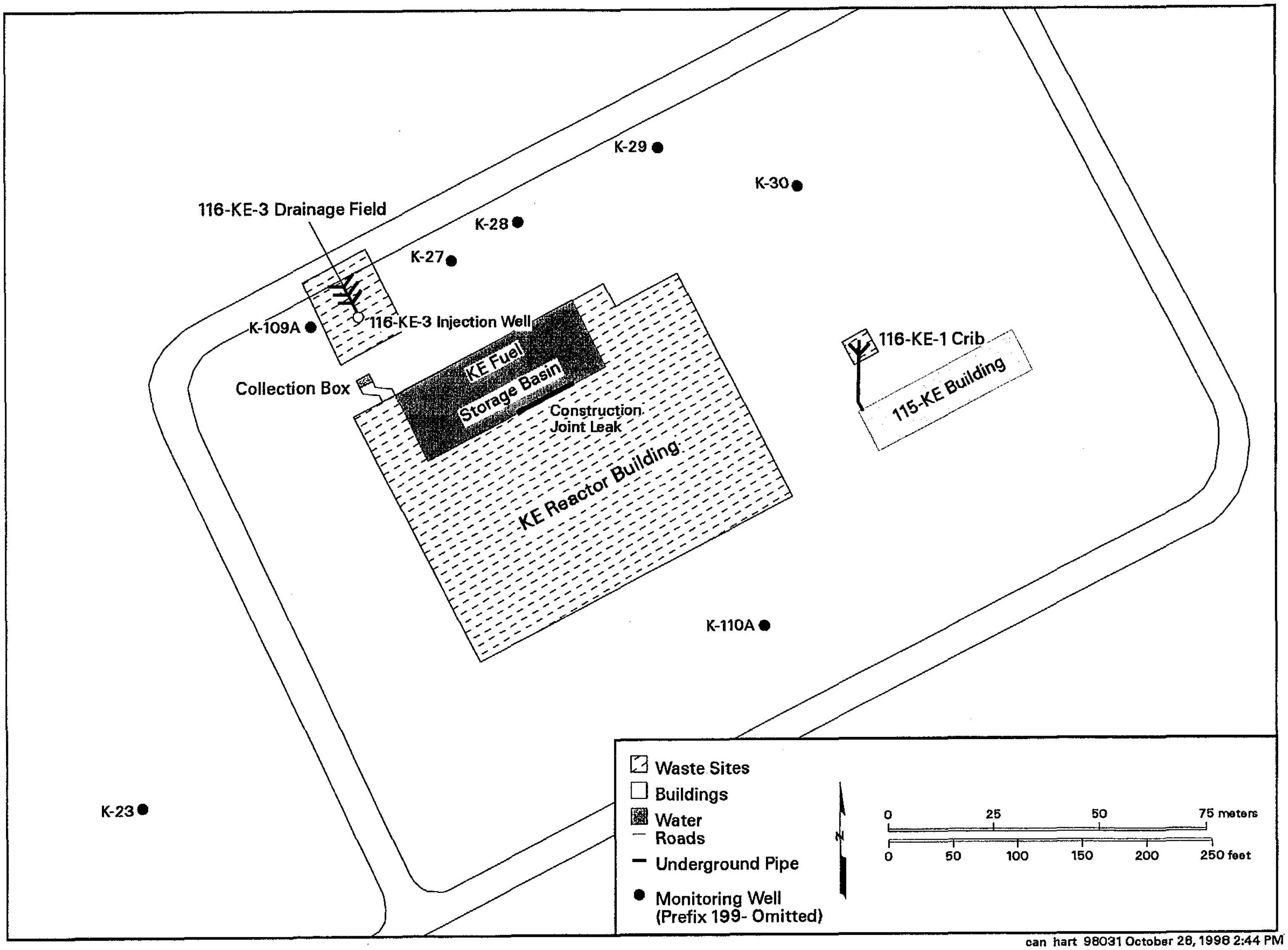


Figure 1.2. Detail of Location of KE Basin and Associated Facilities. Relative locations of KW facilities are virtually identical.

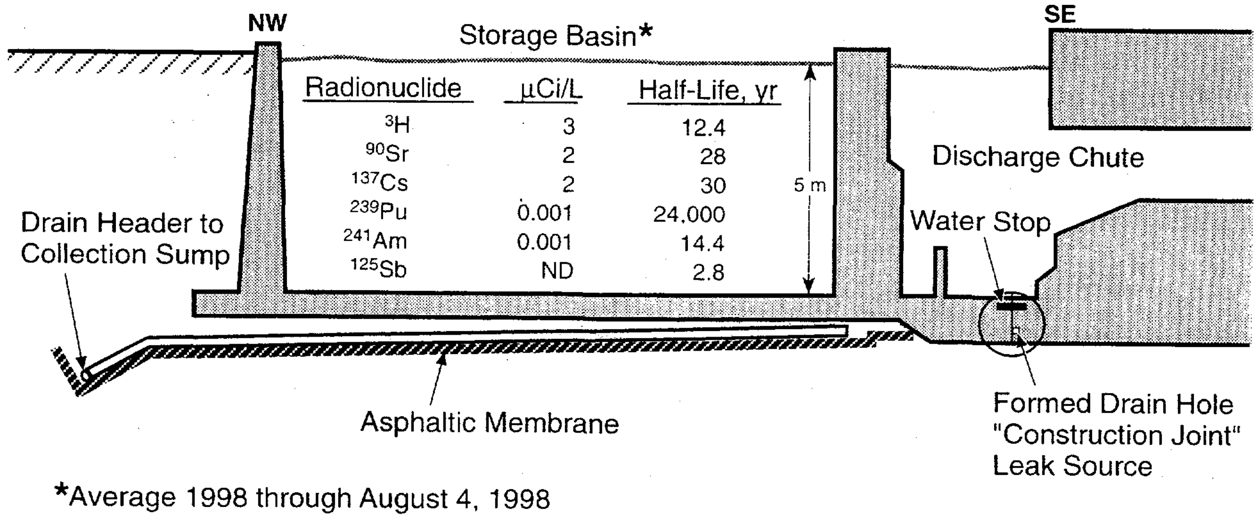


Figure 1.3. Schematic Cross Section of KE Basin

1.3.1 Past Leaks

No groundwater-monitoring wells were in place adjacent to the basins while KW and KE Reactors were operating, so it is not known whether the basins leaked contaminated water to the ground at that time. During leak testing in 1974, a 15-L/min seepage rate was measured (if corrected for evaporation, leakage rate is ~10 L/min). At least 90% of this was thought to be collected by the asphalt leakage-collection system.

As stated above, KE Basin began to be used to store fuel from N Reactor in 1975. In late 1976 to early 1977, the leak volume had increased to ~51 L/min (Carpenter 1994). The increased leakage was believed to be partially caused by reduced basin water temperature, which caused the concrete to contract and minor cracks to expand. Basin water temperature was increased, which reduced the leakage rate to ~30 L/min. During this time, no water was being collected by the asphalt leakage-collection system, and the leak was attributed to a construction joint between the main basin and the fuel-discharge chute, which is not underlain by asphalt. In 1979, the leak was isolated with watertight dams, which reduced leakage to near zero (when corrected for evaporation). No groundwater-monitoring wells were in place at that time to detect the effects of the leak. Four monitoring wells (199-K-27, -28, -29, and -30) were installed adjacent to the KE Basin in 1981. Groundwater data for wells 199-K-28 and -30, which are located downgradient from the KE Basin construction joint leak, indicate that the contaminant plume from the 1976-1979 leak had apparently migrated past these new wells prior to their installation.

In a 1998 electronic mail message to the authors, G. S. Hunacek, DE&S Hanford, Inc., stated that monthly testing detected no more leaks until early 1993. In January 1993, water-balance calculations for the KE Basin indicated a new leak of up to 4 L/min (average rate ~1.5 L/min), which was inferred to be from the discharge chute. The basin water temperature was increased, and by August 1993, water loss was within expected evaporation rates. Peaks in tritium activity in the monitoring wells adjacent to the KE Basin were observed in 1994. Besides tritium, KE Basin water contained significant quantities of strontium-90 and cesium-137 and lesser quantities of plutonium-239 and other short-lived fission products.

In 1978, when KW Basin was being prepared for use to store N Reactor fuel, it was discovered that the basin leaked at ~34 L/min. The locations of the leaks were determined and repaired (Carpenter 1994, p. 5-27). No leaks from KW Basin have been detected since then, and water losses are within the expected evaporation rates (electronic mail message from G. S. Hunacek). Currently, KW Basin water contains a similar suite of radionuclides at the KE Basin but at much lower activities because the fuel stored at KW Basin is fully encapsulated and undamaged. Tritium from KW Basin is detected in down-gradient monitoring wells, indicating that this basin did in fact leak at some time during its use, but no leaks were documented during its period of use to store N Reactor fuel.

The water in both basins contains very low levels of dissolved salts, and thus exhibits low specific conductance.

1.3.2 Other Contaminant Sources

Liquid radioactive and mixed wastes were discharged to the ground in the 100-K Area in various cribs, trenches, and drains, which are no longer used and are regulated as past-practice sites under the *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA). Those that affected groundwater quality near the basins include the following (see Figures 1.1 and 1.2):

- 116-KW-1 and 116-KE-1 condensate cribs - Carbon-14 was discharged to the soil along with tritiated condensate from the inert gas system via these cribs during the reactors' operating period (1955 to 1971). The cribs are located near the basins along the east side of each reactor building. They have been referred to in previous documents as french drains and are also known as the 115-KW and 115-KE condensate cribs. Their official waste site designations are used here to avoid ambiguity.

- 116-KW-2 and 116-KE-3 injection wells/drain fields - These facilities were used to receive effluent from the sub-basin drainage-collection systems from 1955 until 1971. Each facility is located near the northwestern corner of the reactor building and consists of a drain field that contains perforated well casing that extends to below the water table. Discharges contained tritium, strontium-90, and other radionuclides similar to basin water. The facilities are also known as the 105-KW and 105-KE storage basin french drains.

1.4 Conceptual Model Summary

The groundwater-monitoring plan for the basins (Johnson et al. 1995) contains the following conceptual summary of transport and fate of contaminants from the KE Basin. A detailed conceptual model is also described in that plan. Updated interpretations are shown in brackets below.

- The primary leakage of basin water occurs through a 16-m-long construction joint between KE Basin and its discharge chute.

- Large volumes of water lost from the basin in the past (1976-1979) have transported several thousand curies of tritium, mixed fission products, and transuranics to the soil column immediately beneath the basin. Tritium easily moved downward with the basin water to near the top of the water table from where it was transported northwestward to the river at the rate of 0.3 to 0.6 m/d. [During prolonged periods of high-river stage, groundwater flows toward the north or northeast.] Other contaminants of concern (strontium-90, cesium-137, and plutonium-239) migrate much more slowly than tritium because of ion-exchange reactions between the minerals in the soil column and the aquifer.

- Based on solute transport calculations and assumptions, strontium-90, which is the most mobile contaminant of concern after tritium, may have broken through to groundwater during the 1976-1979 leakage event. Because of the distance from the construction joint to the nearest monitoring wells and the slow rate of migration, strontium-90 has not yet reached wells 199-K-27, -28, -29, or -30. However, a newer well located near the northwestern corner of the reactor building (199-K-109A) contains elevated strontium-90 and may indicate that either a preferential pathway exists between the basin construction joint source and the well or the strontium-90 is from some other nearby past-practice source and/or the sub-basin drainage system piping and distribution system. [The current interpretation is that well 199-K-109A detects strontium-90 from the 116-KE-3 injection well/drain field and tritium from the KE Basin and the injection well/drain field.]

- Continued leakage of water from the basin, especially recurrence of a large event, will contribute to potential transfer of the soil column radionuclide inventory to groundwater. Elimination of the leakage source is an important near-term basin project objective. [Elimination of surface infiltration above the contaminated areas is also important to avoid mobilizing contaminants in the vadose zone.]

1.5 Previous Reports

The following recent documents contain information about groundwater quality in the 100-K Area:

- Chou and Johnson (1998), "Balancing CERCLA and Facility Operations: Application of the DQO Process at Hanford's Spent Nuclear Fuel Storage Basins"

- Peterson and Johnson (1998), "100-K Area," in *Hanford Site Groundwater Monitoring for Fiscal Year 1997*

- Johnson et al. (1995), *Groundwater Monitoring and Assessment Plan for the 100-K Area Fuel Storage Basins*

- Johnson and Chou (1995), *Groundwater Monitoring Results for the 100-K Area Fuel Storage Basins: March to December 1994*

- Johnson and Evelo (1995), *Groundwater Monitoring Results for the 100-K Area Fuel Storage Basins: January to June 1995*

- Schmidt et al. (1996), *Westinghouse Hanford Company Operational Environmental Monitoring Annual Report, Calendar Year 1995*

- Peterson et al. (1996), *Conceptual Site Models for Groundwater Contamination at 100-BC-5, 100-KR-4, 100-HR-3, and 100-FR-3 Operable Units*

- Peterson (1994), *Groundwater Monitoring Results for the 100-K Area Fuel Storage Basins: January 1 to March 31 1994*

- Peterson et al. (1998), *Aquifer Sampling Tube Completion Report: 100 Area and Hanford Townsite Shorelines.*

Information on groundwater quality in the 100-K Area also was reported to the public through the news media and to governmental bodies. For example, findings of an evaluation of elevated tritium and strontium-90 in one well at the KE Basin were summarized in a DOE press release provided to the Tri-City Herald in November 1997. In addition, a review of groundwater quality in the 100-K Area was prepared for the General Accounting Office in May 1998 for inclusion in a report of an investigation requested by a U.S. congressman. Background information was also prepared for testimony presented to a subcommittee of the U.S. congress (June 1998). Similar information was provided in response to a request from the State of Washington Department of Ecology (June 1998).

1.6 Outline of This Report

In addition to this introduction, this report gives the results of groundwater monitoring performed at the KW and KE Basins, including a description of the groundwater-flow system and the contaminants found therein. The decisions and actions resulting from the groundwater-monitoring efforts are discussed. Further, a section on seismic monitoring is included. The conclusions from this monitoring are provided, followed by the references cited in the text and an appendix of groundwater chemistry data.

2.0 Results of Groundwater Monitoring

The groundwater-monitoring program for the KW and KE Basins is described by Johnson et al. (1995). At the present time, groundwater chemistry is monitored monthly to quarterly in 11 wells. Water levels are measured quarterly in most of the 100-K Area wells. Hydrogeologic conditions in the 100-K Area and interpretation of water-level data and inferred flow directions are discussed first (Section 2.1) and provides the hydrologic framework for interpretation of groundwater-monitoring results (Section 2.2).

2.1 Groundwater-Flow System

Groundwater flow in the unconfined aquifer beneath the northern part of the Hanford Site is predominantly influenced by groundwater flowing north through gaps between Umtanum Ridge, Gable Butte, and Gable Mountain and discharging to the Columbia River; waste-water discharges at nearby facilities; river-stage fluctuations; and possibly upwelling of underflow from the Wahluke Slope north of the Columbia River. In the past, groundwater mounds formed beneath facilities where waste water was discharged to the ground. Because reactor operations were discontinued prior to 1971, most discharges were curtailed and/or eliminated. Subsequently, the corresponding groundwater mounds have dissipated and are no longer identifiable. Fluctuations in river stage cause groundwater flow beneath the 100-K Area to vary from northwestward during periods of low-river stage to northeastward during periods of high-river stage. However, contaminant plume maps indicate that the net groundwater flow is from south to north (discussed in Section 2.2).

River-stage fluctuations adjacent to the 100-K Area result from seasonal runoff and operations at Priest Rapids Dam. Figure 2.1 is a trend plot that shows the outflow from Priest Rapids Dam from 1990 through 1997. The graphs show that high flows generally occur during May to July and low flows occur during September to November of each year. The highest flows occurred from May through June 1997.

The effects of river stage on groundwater levels in the 100-K Area range from ~2 m along the river to 0.3 m at well 199-K-35, which is ~820 m from the river (Lindberg 1995). Water-level changes in wells 199-K-30, -32A, and -32B, located ~550, 237, and 230 m from the river, respectively, were statistically compared to 100-N Area river-stage fluctuations to determine correlation using daily, weekly, and monthly averages (plus 8-, 24-, and 48-h running averages). Correlations of water-level changes and river-stage elevations were low for daily averages for all three wells. However, weekly and monthly averages for wells 199-K-32A and -32B and the river had a correlation coefficient of ~0.7. This suggests that river-stage events persisting for more than one week affect groundwater-flow rate and direction at wells 199-K-32A and -32B.

Because river-stage-monitoring data are not available for the 100-K Area, hourly stage-data elevations for the 100-K Area were simulated using a hydrodynamic model prepared by M. C. Richmond and

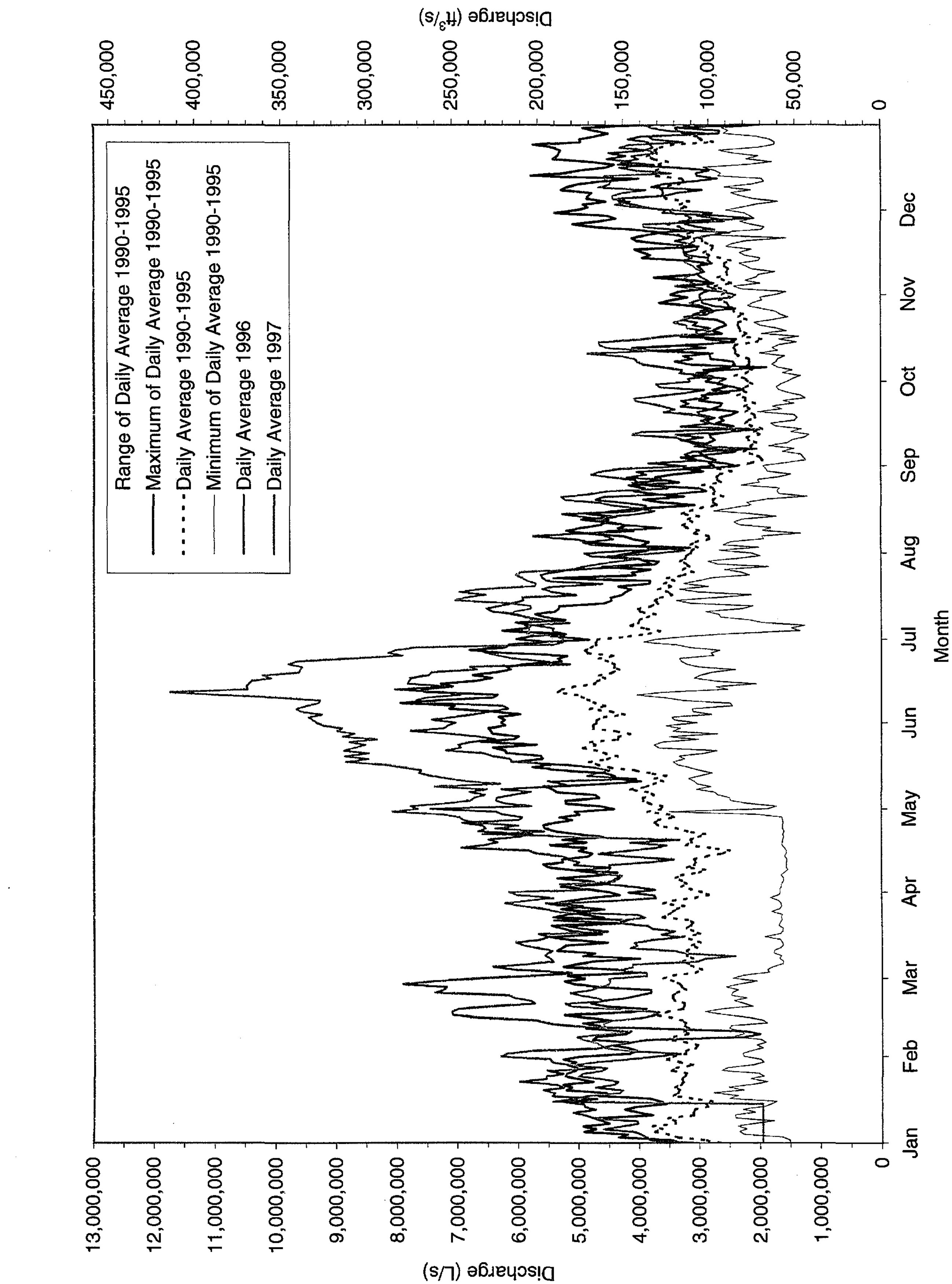


Figure 2.1. Columbia River Outflow from Priest Rapids Dam

W. A. Perkins (Pacific Northwest National Laboratory). Figure 2.2 is a trend plot that shows the correlation of simulated river-stage data for the 100-K Area with daily average river-stage transducer data from the 100-B,C Area (upstream) and 100-N Area (downstream).

During periods of moderate to low river stage (i.e., 1992-1994), groundwater flow in the 100-K Area was primarily from the southeast to northwest toward the river. Figure 2.3 is a water-table map of the 100-K Area and vicinity for October 1994, which was chosen to represent groundwater flow during low-river stage after a period of relatively stable river stage prior to the unseasonably high conditions that persisted from 1995 into 1998. Each year, during the period of high-river stage, groundwater-flow directions near the river shift easterly.

From approximately December 1995 through June 1998, Columbia River flow and stage were unseasonably high. Figure 2.4 is a water-table map of the 100-K Area and vicinity for June 1997, which was chosen to represent groundwater flow during sustained high-river stage. As a result of the sustained, extreme, high-river stage, river water recharged the aquifer and groundwater flow was away from the river as far inland as well 199-K-32A from late April to late June. From mid May to mid June, groundwater flow at well 199-K-30, which is located near the KE Basin, was from the southwest to the northeast.

The high-river stage observed in June 1997 was an extreme event when compared to conditions since 1992 (Figure 2.5). However, historic river-flow data indicate that the high-river stage of June 1997 was not an isolated event and that similar events occur periodically. It follows that the mean, long-term, groundwater-flow directions in the 100-K Area are intermediate between those shown in Figures 2.3 and 2.4.

A summary of aquifer hydraulic properties and associated groundwater-flow velocities in the 100-K Area is presented in Johnson et. al. (1995). Based on estimates of aquifer hydraulic properties and groundwater gradients for June and September 1994, Johnson et. al. (1995) calculated interstitial flow velocities to range between 0.024 to 0.4 m/d at the KW Basin and 0.014 to 0.24 m/d at the KE Basin. These velocities correspond to travel times to the river that range from 3 to 84.9 and 3.4 to 98.4 years, respectively. River stage affects groundwater levels near the river and the corresponding hydraulic gradients and flow velocities. It is reasonable that high-river-stage events may cause groundwater gradients to be temporarily reversed adjacent to the river and shifted easterly beneath the 100-K Area and vicinity, resulting in longer flow paths and travel times to the river.

Water-table contours along the Hanford Reach of the Columbia River indicate that groundwater flow for the unconfined aquifers both on the Hanford Site and the agricultural areas north and east of the Columbia River converges near the river (Figure 2.6). On the northern part of the Hanford Site, water-table elevations range from ~122 m above sea level (North American Vertical Datum of 1929, NAVD29) at the gap between Gable Butte and Gable Mountain to ~120 m above sea level beneath the 100-K Area. North of the Columbia River on the Wahluke Slope, water-table elevations are much higher, ranging up to 250 m above sea level. Elevated water-table elevations and the steep gradient north and east of the Columbia River were described by Newcomer et al. (1992). Drost et al. (1997) discussed the relationship of changes in groundwater levels in Franklin and Benton Counties as they relate to water budgets and

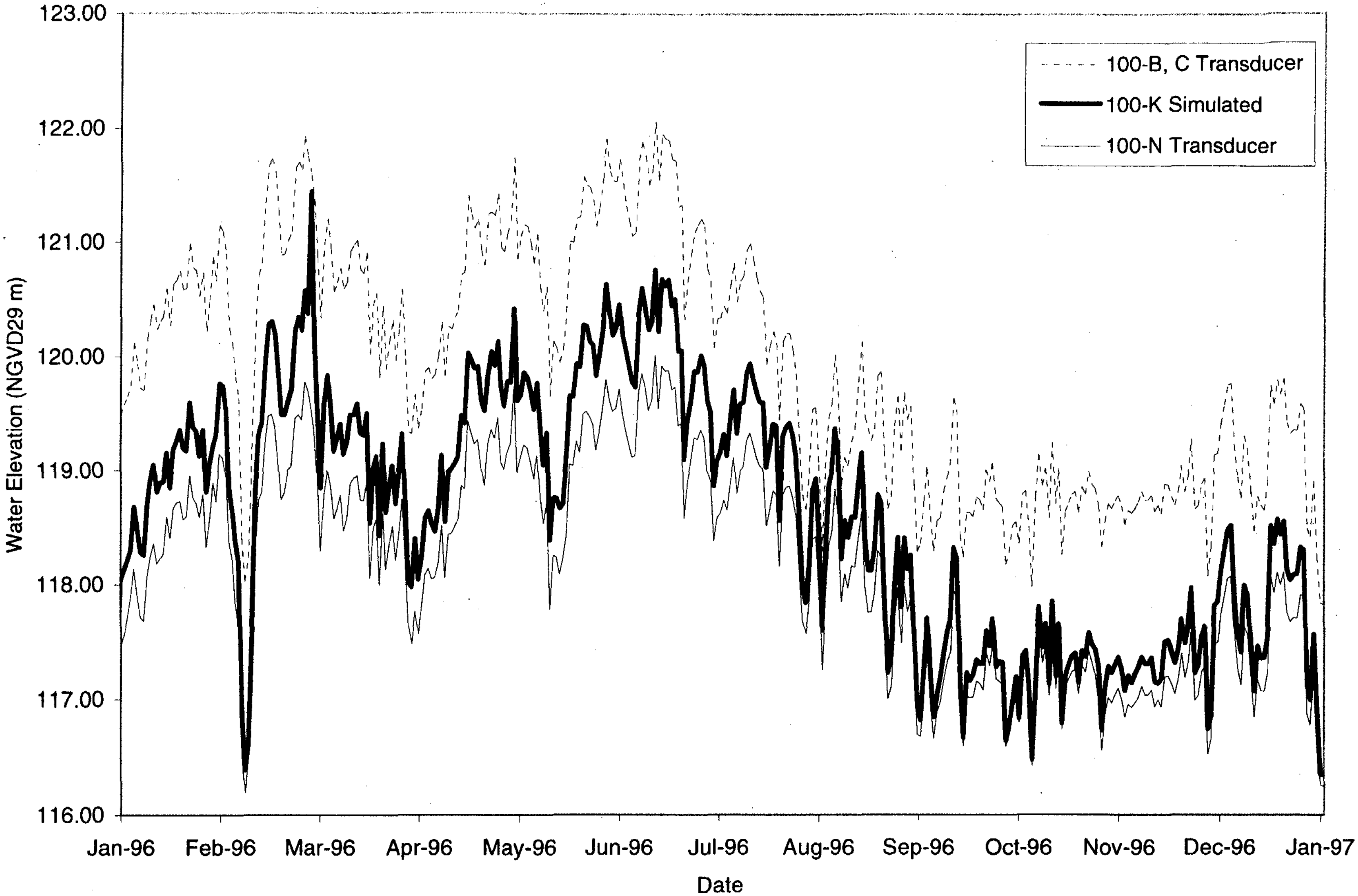


Figure 2.2. Daily Average River Stage at 100-B, 100-K, and 100-N Areas

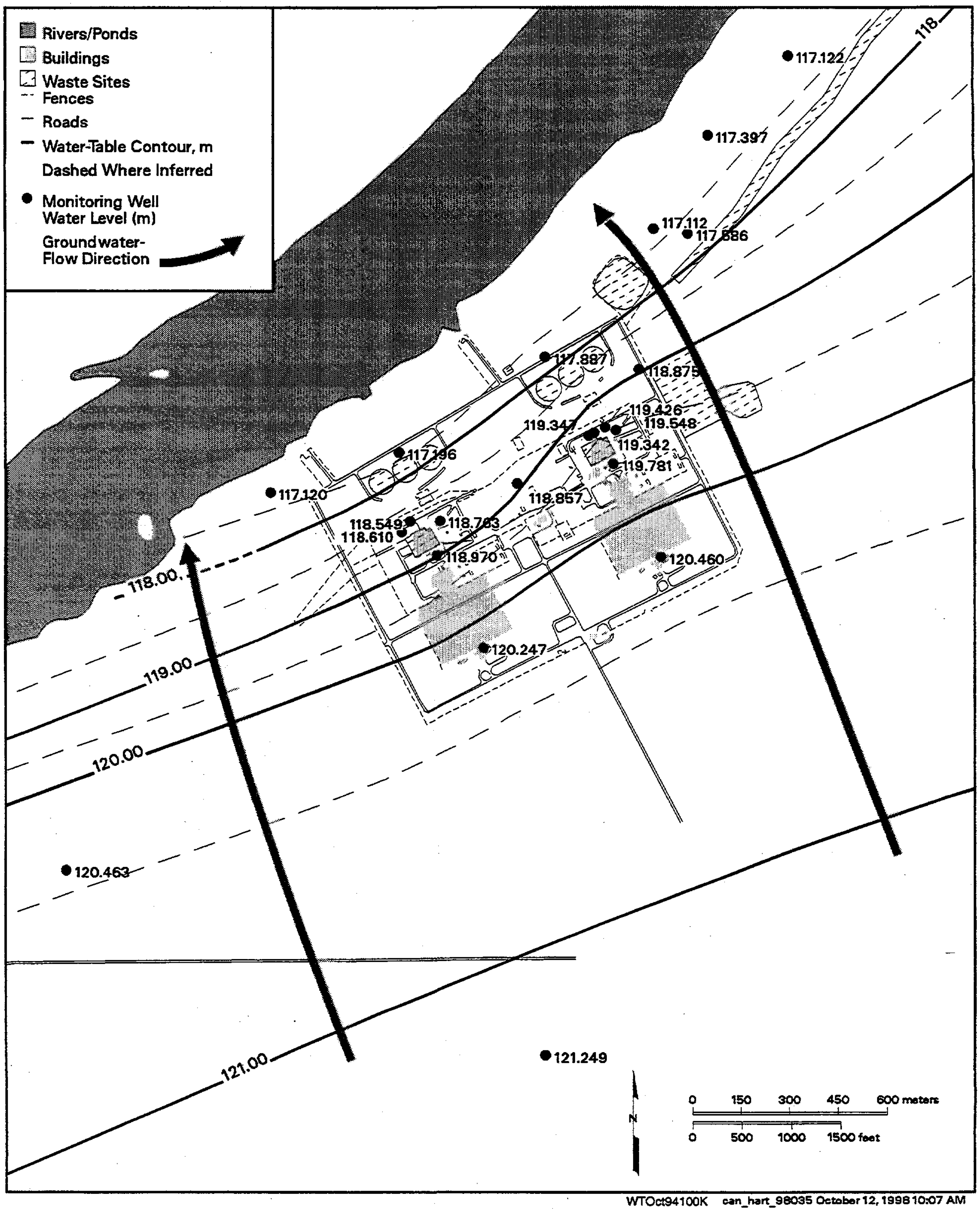
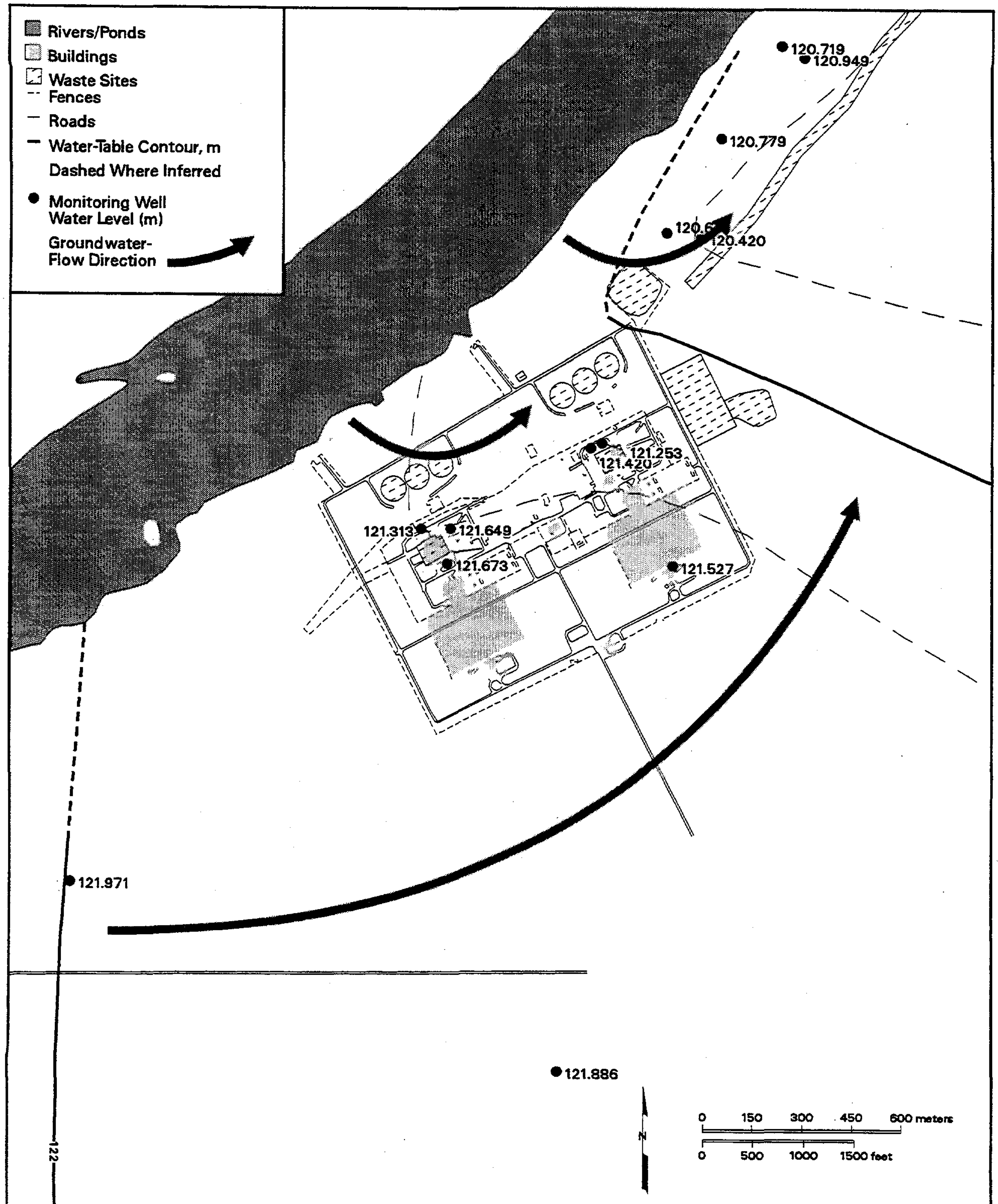


Figure 2.3. 100-K Area Water-Table Map, October 1994



WTJune97100K can_hart_98034 October 12, 1998 9:56 AM

Figure 2.4. 100-K Area Water-Table Map, June 1997 (modified from Hartman and Dresel 1998)

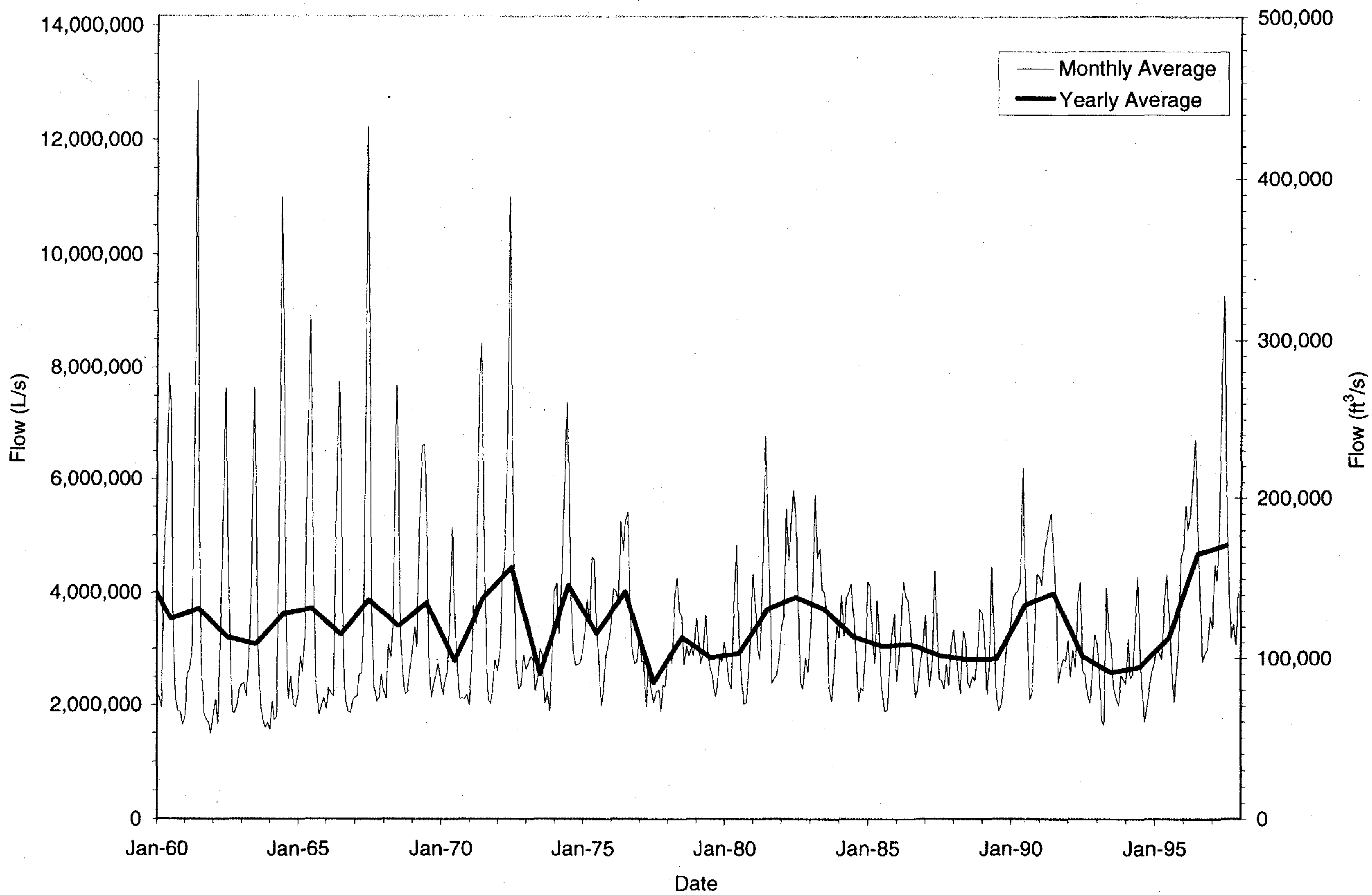


Figure 2.5. Monthly and Yearly Average Flow Below Priest Rapids Dam, 1960-1997

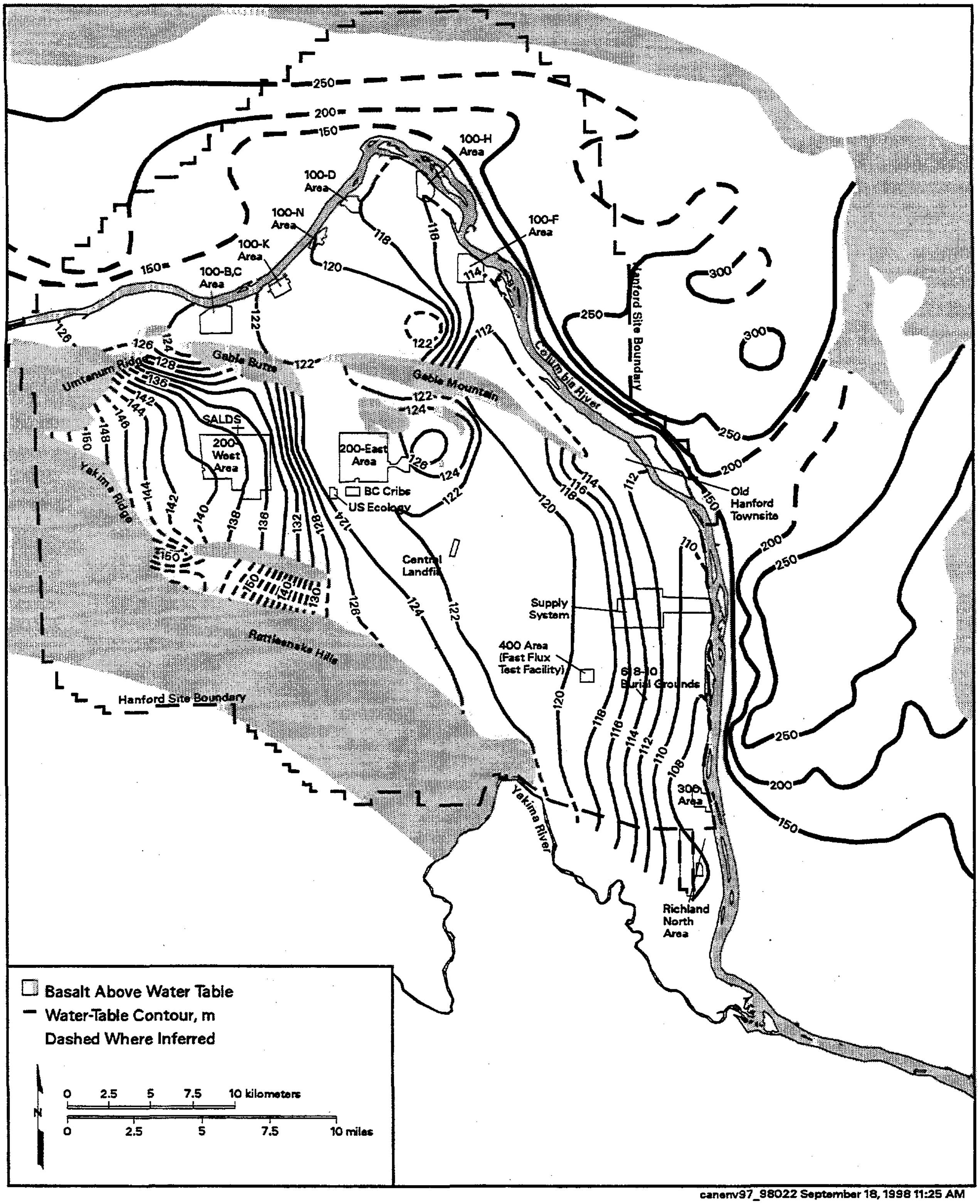


Figure 2.6. Hanford Site and Outlying Areas Water-Table Map, June 1997 (from Hartman and Dresel 1998)

irrigation. Little work has been done to characterize the flux of groundwater from these two regimes into the Columbia River. It is possible that the much greater hydraulic head on the north side of the river causes groundwater flow entering the river to be asymmetrical.

One consequence of the hydraulic head difference noted above is that upward hydraulic gradients, and associated upward groundwater flow, may occur on the south side of the river. A pair of shallow and "deep" monitoring wells in the 100-K Area provide some evidence for this possibility. For example, well 199-K-32A is completed across the water table from ~118.6 to ~121.6 m above NAVD29 in Ringold Formation unit E, and well 199-K-32B is completed deeper, from ~84.7 to ~87.7 m above NAVD29 in Ringold Formation paleosols and overbank deposits (see Figure 1.1 for locations). Water-level fluctuations in both wells correlate with changes in river stage (Figure 2.7). Water-level elevations in well 199-K-32A are intermediate between river stage adjacent to the 100-K Area and the regional water table to the south. Water-level elevations in well 199-K-32B are generally ~2 m higher than in well 199-K-32A, indicating a strong upward gradient in this area. (The wells were surveyed at the same time to the same datum.) Water-level elevations in well 199-K-32B were as high as ~123.3 m above NAVD29 in June 1997. This is higher than the water-table elevation in Gable Gap and higher than the maximum river stage at the 100-K Area during the past 5 years. As suggested above, a possible cause of the high-water levels in well 199-K-32B is upwelling of groundwater from north of the Columbia River.

Little is known regarding the extent and local heterogeneity of the suprabasalt sediments north the Columbia River. It is reasonable that units of the Hanford and Ringold Formations identified on the Hanford Site continue some distance to the north with similar characteristics. The unconfined aquifer in the vicinity of the 100-K Area exists within the Ringold Formation unit E, which may be cemented locally. Coyote Rapids, upstream from the 100-K Area, attests to this greater cementation (Lindberg 1995, p. 35). Variability of cementation, and possibly fracturing or jointing, could result in preferential groundwater-flow paths in the unconfined aquifer beneath the 100-K Area and vicinity. Well 199-K-32B is completed in Ringold Formation paleosols and overbank deposits, which could be continuous beneath the Wahluke Slope, creating a confining unit.

A possible model for vertical groundwater flow north and south of the Columbia River in the vicinity of the 100-K Area is illustrated in Figure 2.8. Based on this model, groundwater recharging on the Wahluke Slope likely flows within permeable horizons in the suprabasalt sediments south toward and beneath the Columbia River. Near the river, vertical gradients are upward, and groundwater from both north and south of the river flow upward. Because hydraulic heads are much greater north of the river, it is likely that the zone of upward flow is skewed toward the Hanford side of the river. This would result in upwelling of groundwater from the Wahluke Slope beneath the Hanford Site. Subsequently, groundwater entering the river from the Hanford Site may contain an offsite component.

The potential for upwelling of underflow from north of the Columbia River along the Hanford Reach may result in mixing of groundwater from the Hanford Site with groundwater from off the site. Subsequently, groundwater samples collected at wells in the 100-K Area and vicinity and groundwater entering the river from the Hanford Site may contain an unknown component of non-Hanford water. Work is being conducted to further evaluate groundwater flow in the supra-basalt sediments near the Columbia River where flow from the Hanford Site and flow from north and east of the Columbia River converge.

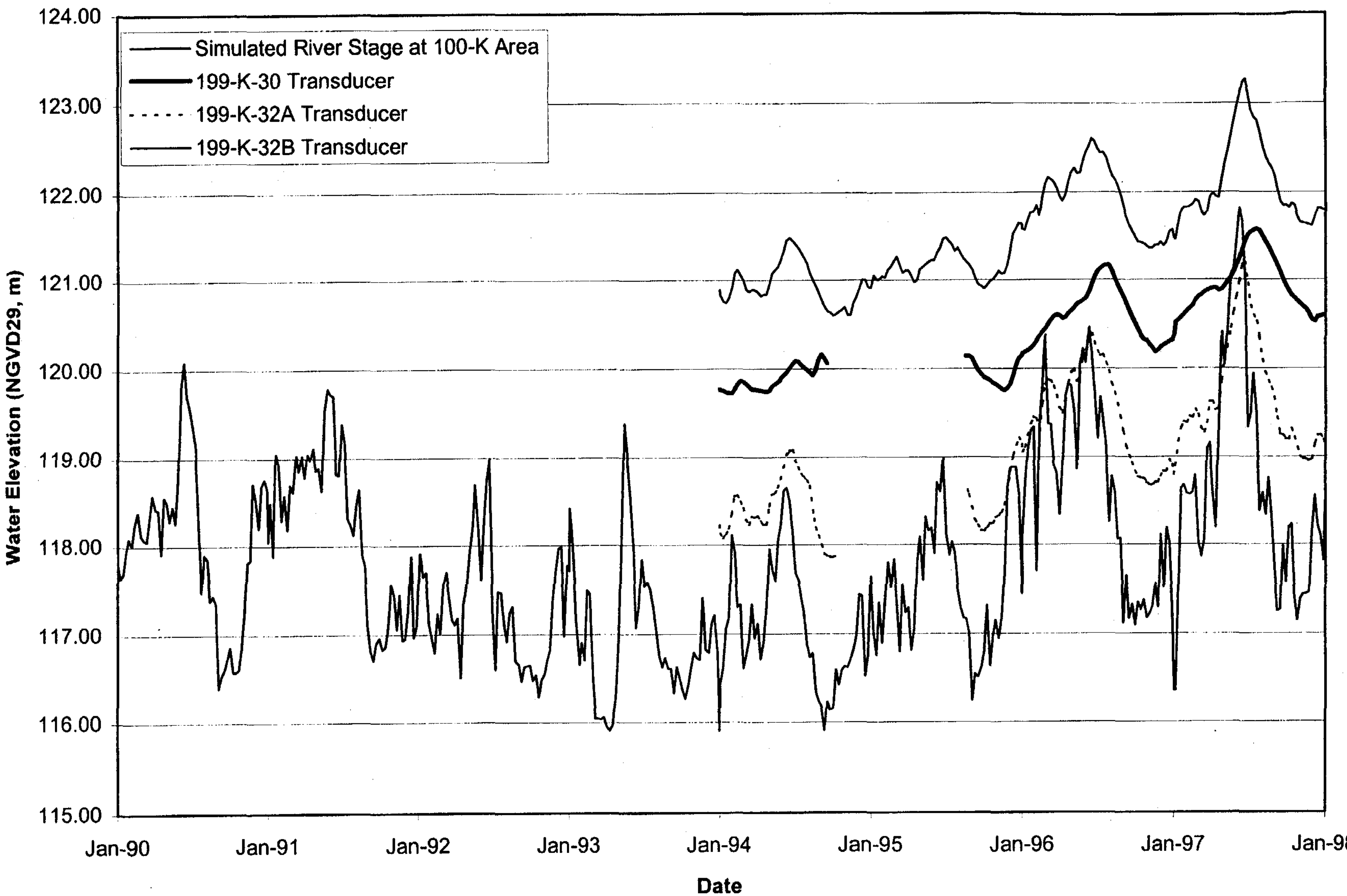


Figure 2.7. 100-K Area Weekly Average Water Levels

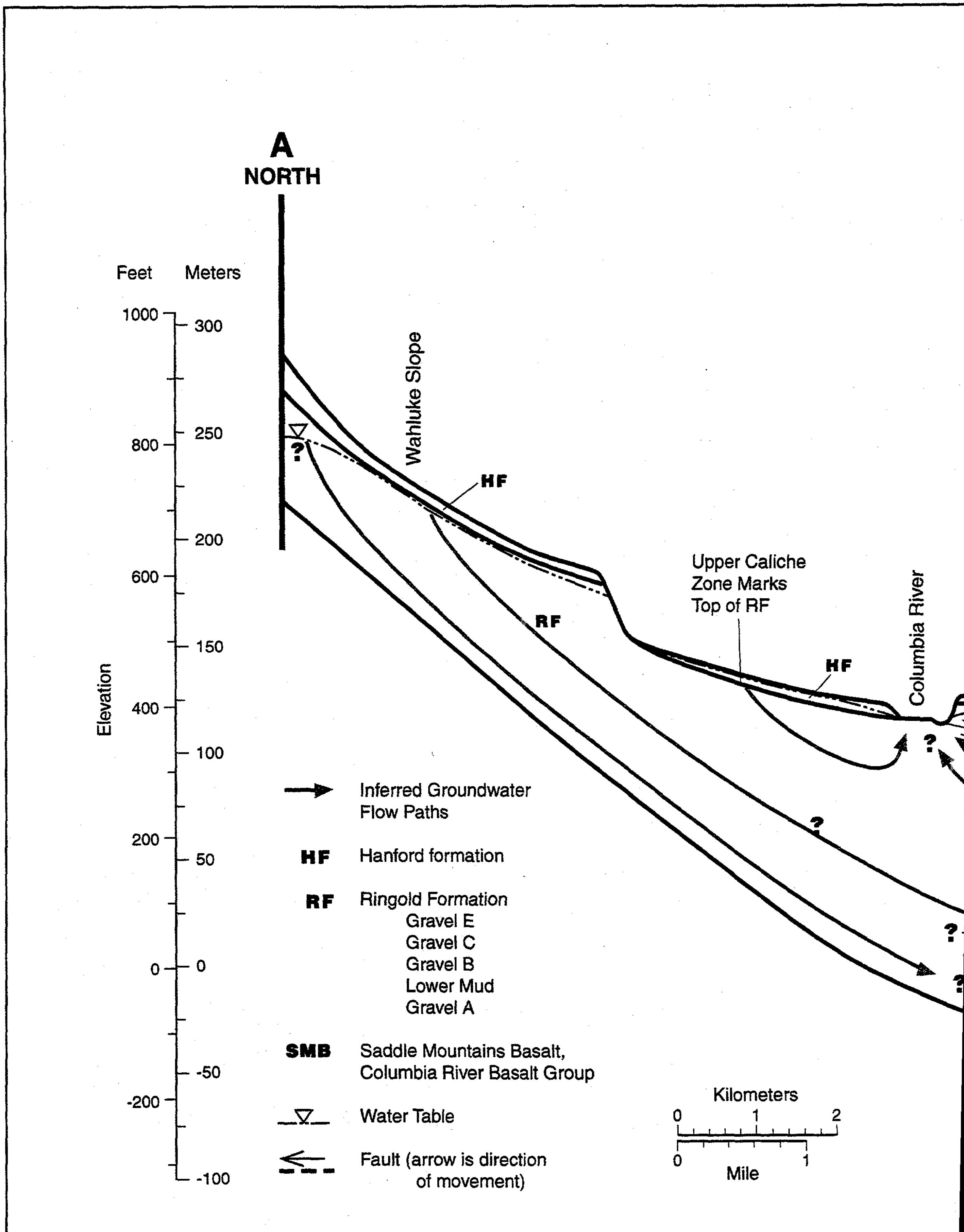
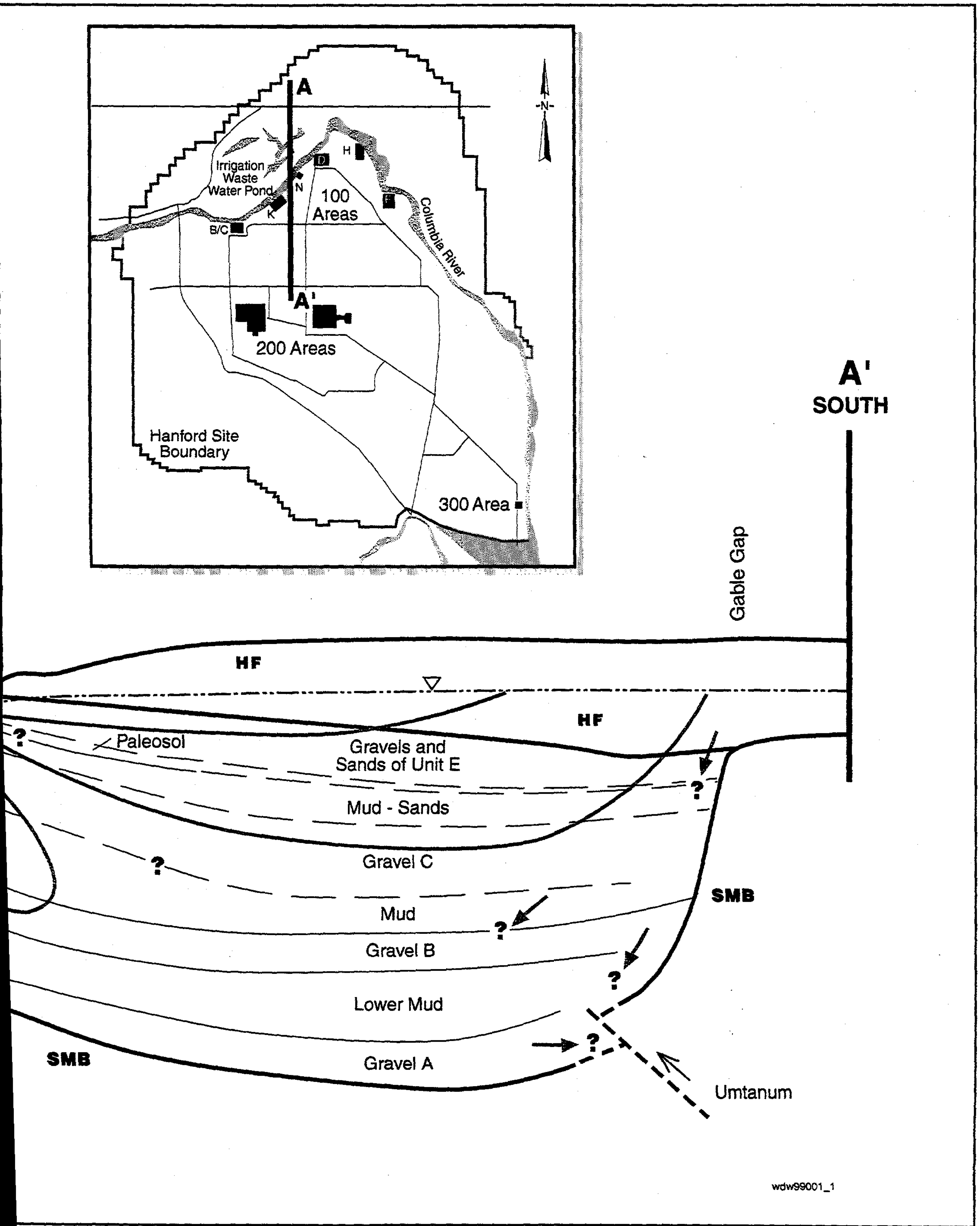


Figure 2.8. Conceptual Model for Groundwater F



North and South of Columbia River Near 100-K Area

2.2 Groundwater Contaminants

Eleven wells around the basins are monitored quarterly for tritium, gross alpha, gross beta, anions, specific conductance, and pH (Table 2.1); one well is also monitored for strontium-90. Four wells are monitored monthly for tritium. Additional constituents (e.g., carbon-14, metals, strontium-90) are monitored for other requirements. Data are publicly available in the Hanford Environmental Information System database. A subset of data from July 1996 through April 1998 are included in the Appendix.

It is important to be able to distinguish between contamination caused by current use of the basins and contamination from past-practice sites located nearby so that appropriate mitigating actions can be taken if needed. The evaluation of a combination of key radionuclides in groundwater, or fingerprinting, is one diagnostic tool that can be used to help identify the source of groundwater contamination. Figure 2.9 and Table 2.2 show the current interpretation of contaminant plumes and sources. Supporting evidence for those interpretations is presented below.

2.2.1 Tritium

Tritium is elevated downgradient of the KW and KE Reactors and related facilities, as shown for fiscal year 1997 in Figure 2.10. The KE plume has higher activities, and levels greater than the 20,000-pCi/L drinking water standard are observed at least 900 m downgradient. The orientation of the tritium plumes indicates that the long-term flow direction is primarily northward.

Tritium in wells 199-K-34 and -27 represents contamination from the KW and KE Basins, respectively (Figure 2.11). Activities in well 199-K-34 are much lower, reflecting the lower activity in KW Basin water. The figure shows tritium activities in well 199-K-27 (immediately downgradient from the KE Basin construction joint), following a documented increase in basin leakage. The pattern observed in well 199-K-27 illustrates the expected history in a downgradient monitoring well during and following a leak event. The relatively long exponential decline is consistent with slow drainage through the vadose zone, following termination of a leak, and subsequent dispersion in groundwater.

Groundwater at well 199-K-109A is believed to reflect influences of both KE Basin (as evident from the presence of antimony-125, which has a 2.8-year half-life, and the 116-KE-3 injection well/drain field (as evident from the presence of strontium-90) (see Table 2.2). A sharp peak in tritium was observed in this well in late 1997 (see Figure 2.11). Leak-rate calculations and other operational data do not indicate a new leak in the KE Basin, and tritium levels returned to normal in early 1998. The short duration of the peak indicates it was probably not related to the 1996-1998 increase in the water table but could have been caused by another source of surface-water infiltration. Disposal of basin drainage to the injection well/drain field in the past may have resulted in a significant inventory of tritium, strontium-90, and other fission products and transuranics above the current water table. The unsealed casing could act as a conduit for infiltration of surface water through the residual vadose zone contamination. Corrective actions deriving from these findings are described in Chapter 3.0.

The source of tritium contamination in well 199-K-30 (Figure 2.12) is believed to be the 116-KE-1 condensate crib rather than the KE Basin for a number of reasons. 1) Well 199-K-30 contains significant

Table 2.1. Groundwater-Sampling Schedule, 1995 and 1998 Revisions[(a)]

Well (199-)	Oct.		Nov.		Dec.		Jan.		Feb.		Mar.		Apr.		May		June		July		Aug.		Sep.	
	95	98	95	98	95	98	95	98	95	98	95	98	95	98	95	98	95	98	95	98	95	98	95	98
K-13	A	--	A	--	A	--	A	--	A	--	A	--	A	--	A	--	A	--	A	--	A	--	A	--
K-18	A	--	A	--	A	--	A	--	A	--	A	--	A	--	A	--	A	--	A	--	A	--	A	--
K-27	X	Y	A	A	A	A	X	Y	A	A	A	A	X	Y*	A	A	A	A	X	Y	A	A	A	A
K-28	X	Y	A	--	A	--	X	Y	A	--	A	--	X	Y*	A	--	A	--	X	Y	A	--	A	--
K-29	X	Y	A	--	A	--	X	Y	A	--	A	--	X	Y*	A	--	A	--	X	Y	A	--	A	--
K-30	X	Y	A	A	A	A	X	Y	A	A	A	A	X	Y*	A	A	A	A	X	Y	A	A	A	A
K-32A	X	Y	A	--	A	--	X	Y	A	--	A	--	X	Y*	A	--	A	--	X	Y	A	--	A	--
K-34	X	Y	A	--	A	--	X	Y	A	--	A	--	X	Y*	A	--	A	--	X	Y	A	--	A	--
K-106A	X	Y	--	A	X	A	--	Y	--	A	--	A	X	Y*	--	A	X	A	--	Y	--	A	--	A
K-107A	X	Y			X			Y					X	Y*			X			Y				
K-108A	X	Y			X			Y					X	Y*			X			Y				
K-109A	X	Y+	A	A+	A	A+	X	Y+	A	A+	A	A+	X	Y*	A	A+	A	A+	X	Y+	A	A+	A	A+
K-110A	X	Y	A		A		X	Y	A		A		X	Y*	A		A		X	Y	A		A	
K-111A	X		A		X								X				X							

Note: Table reflects primarily KW and KE Basins monitoring. Some wells are monitored for other purposes but that schedule is not shown here. For a full list of 100-K Area wells sampled by the Hanford Groundwater Monitoring Project, see Hartman et al. (1998).

A list = tritium screening. No other constituents.
A+ = A list plus gross beta (to track strontium-90).
X list = gross alpha, gross beta, gamma scan, carbon-14, tritium, anions, inductively coupled plasma metals (filtered), specific conductance, pH, turbidity.
Y list = gross alpha, gross beta, tritium, anions, specific conductance, pH.
Y+ = Y list plus strontium-90.
* Also sampled for carbon-14, strontium-90, filtered inductively coupled plasma metals, alkalinity as part of 100-K Area surveillance monitoring.

(a) After Johnson and Chou (1995) and Interim Change Notice (1998) to Johnson and Chou (1995).

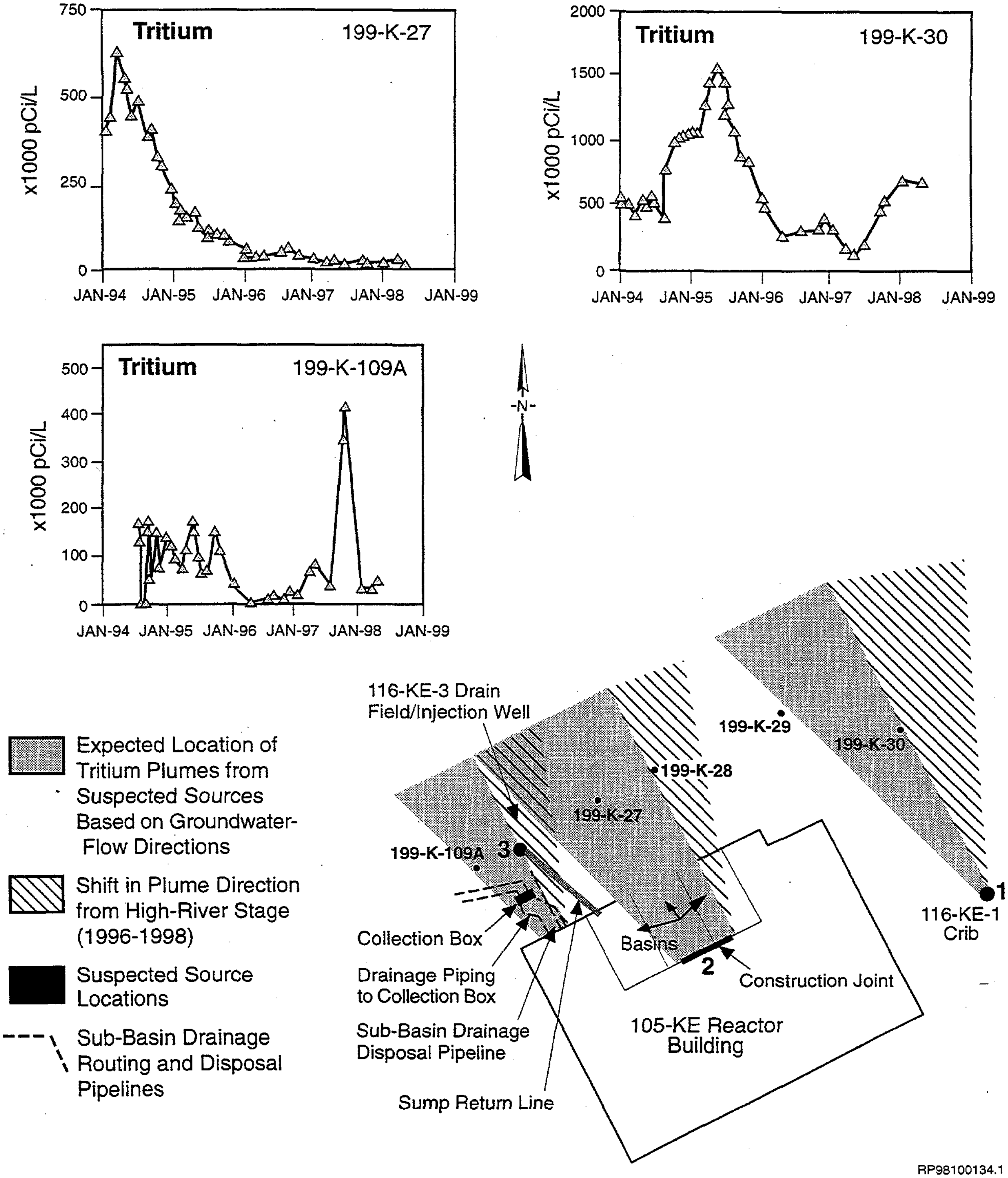


Figure 2.9. Conceptualization of Contaminant Sources and Tritium Plumes in the Vicinity of KE Basin (modified from Chou and Johnson 1998)

Table 2.2. Isotopic Fingerprinting for KE Basin

Well	Constituent of Interest				Source Match[a]	Responsible Program
	^{90}Sr	^{3}H	^{14}C	^{125}Sb		
199-K-109A		√		√	KE Basin	AEA
	√				116-KE-3 injection well/drain field	CERCLA
199-K-27		√	(b)	√	KE Basin	AEA
199-K-28		√	(b)		KE Basin	AEA
199-K-29		√	(b)		KE Basin	AEA
199-K-30		√	√		116-KE-1 crib	CERCLA

(a) For source match, see Figure 2.9.
(b) Carbon-14 detected, but activities are one to two orders of magnitude lower than in well 199-K-30.
AEA = Atomic Energy Act of 1954.
CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act of 1980.

levels of carbon-14, which was present in crib water but not in the basin (see Table 2.2). 2) The location of well 199-K-30 is not in the average flow path from the basins but is in the flow path from the crib. 3) At times, the tritium activity in well 199-K-30 has been as high as in the basin (several million picocuries per liter), which makes a basin source unlikely, given the effects of dilution, dispersion, and radioactive decay. 4) The tritium trend in well 199-K-30 is not similar to the trends in wells directly downgradient of the basin (e.g., 199-K-27) (compare Figures 2.11 and 2.12).

Well 199-K-30 (KE) showed a sharp, high peak in tritium in 1993 and a smaller peak in 1995. Well 199-K-106A (KW) has had tritium data since 1994 and showed a peak in 1995. Although tritium levels have declined from their maxima in both wells, activities remain above the drinking water standard. The decline in tritium in these wells may be partially caused by the shift in groundwater flow to the northeast caused by high-river stage in 1996-1998. Plume maps constructed of annually averaged data for the entire 100-K Area, such as those presented in Dresel et al. (1996) and Figure 2.10 have not changed much since 1995; all show the plumes oriented approximately northward. However, Figure 2.13 shows that several wells near the tritium sources appear to have been influenced by a change in flow directions. Wells 199-K-106A, -109A, and -30 all show high tritium activities until late 1995 when they declined sharply. As shown by the inset hydrograph for well 199-K-30, this is when water levels began to increase. The response in well 199-K-33, farther downgradient from KW Basin, was detected somewhat later.

Another possible explanation for the recent tritium decline is contaminant stratification in the wells or in the aquifer. If the contamination is highest near the top of the aquifer, then raising water levels farther above the pump intakes could result in samples with a larger component of water from deeper in the aquifer and, subsequently, lower tritium activities. However, that mechanism probably would cause tritium to

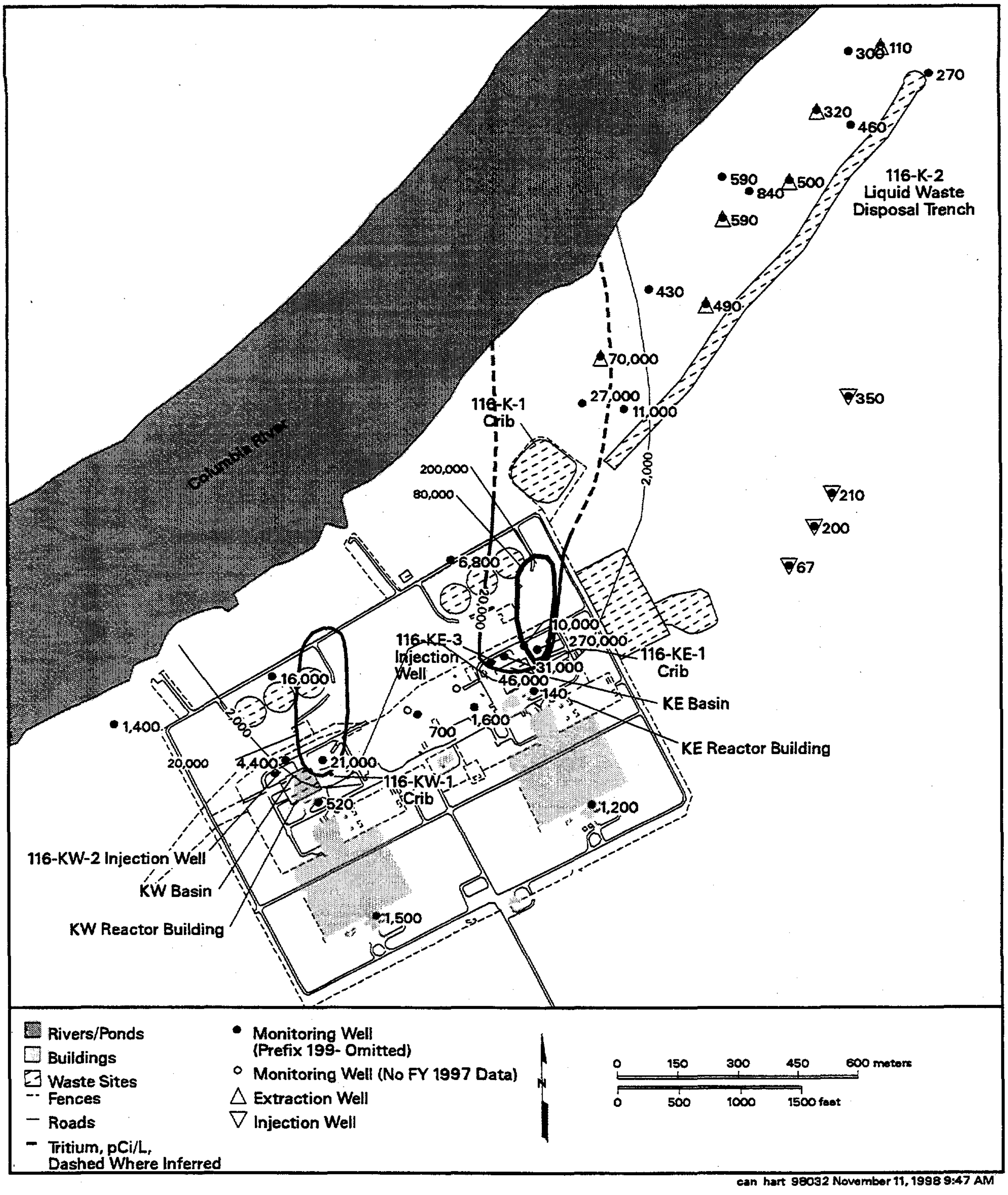
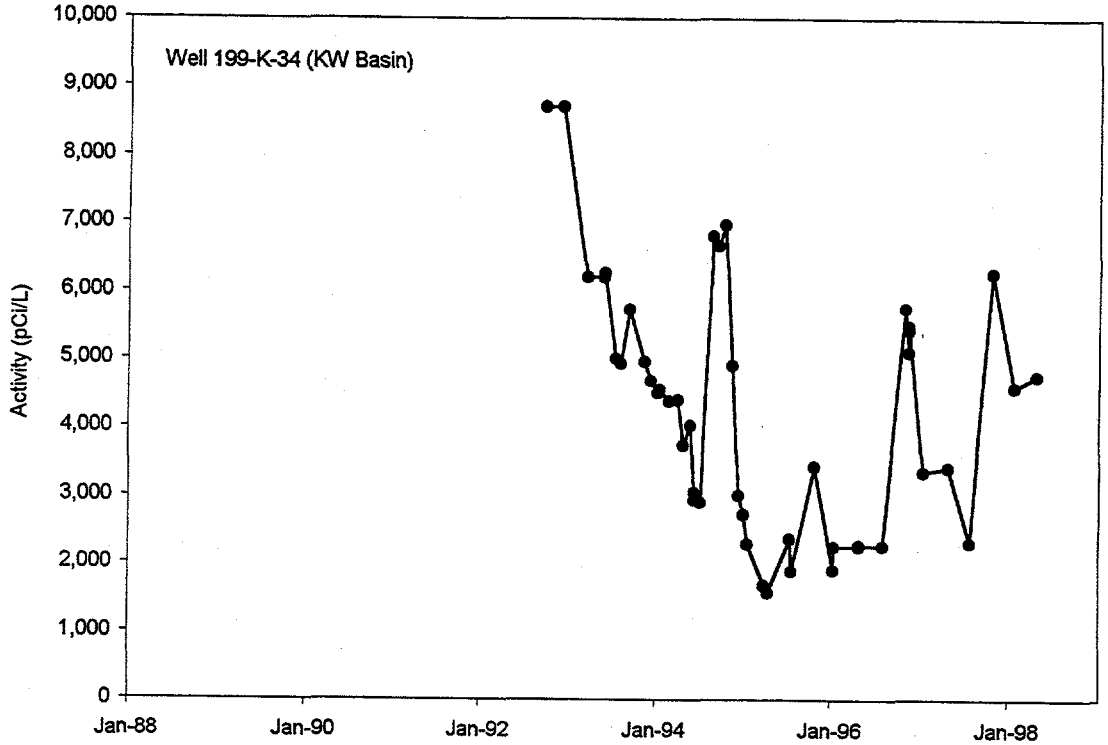


Figure 2.10. Tritium Distribution in the Unconfined Aquifer, 100-K Area, Fiscal Year 1997 (Hartman and Dresel 1998)



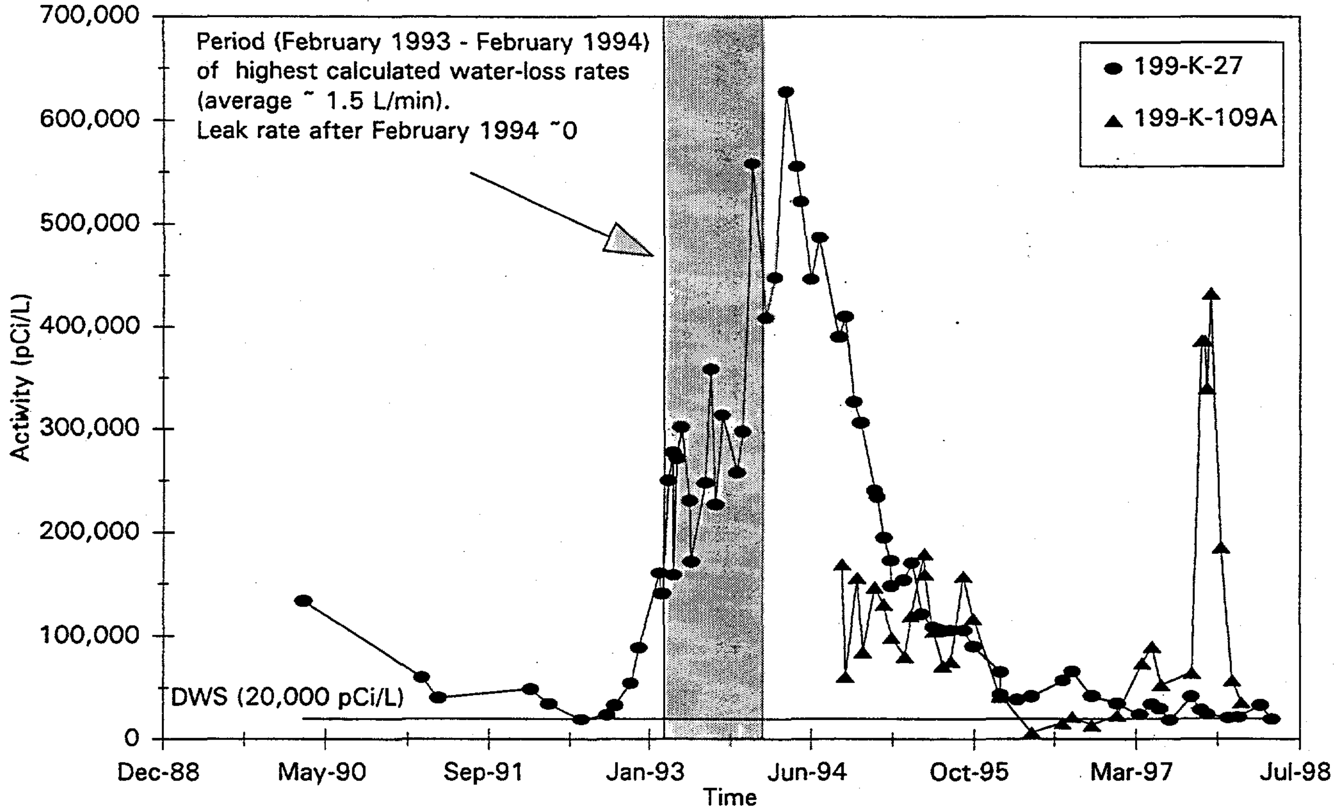
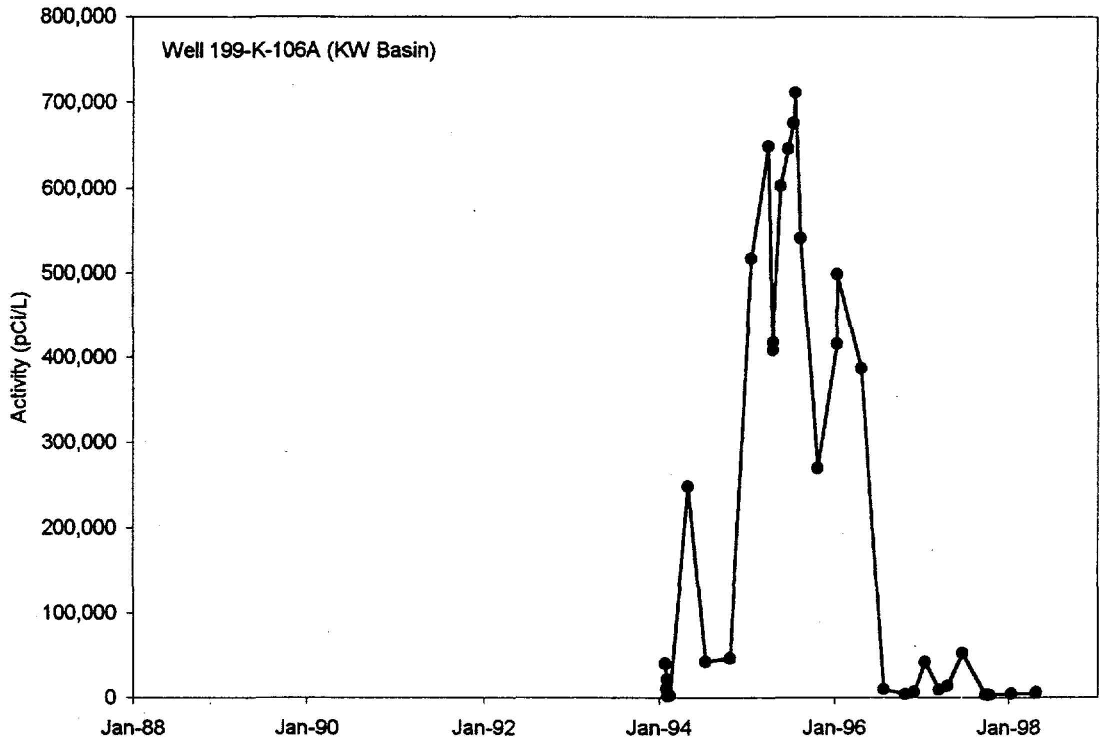


Figure 2.11. Tritium Activity in Wells 199-K-34, 199-K-27, and 199-K-109A



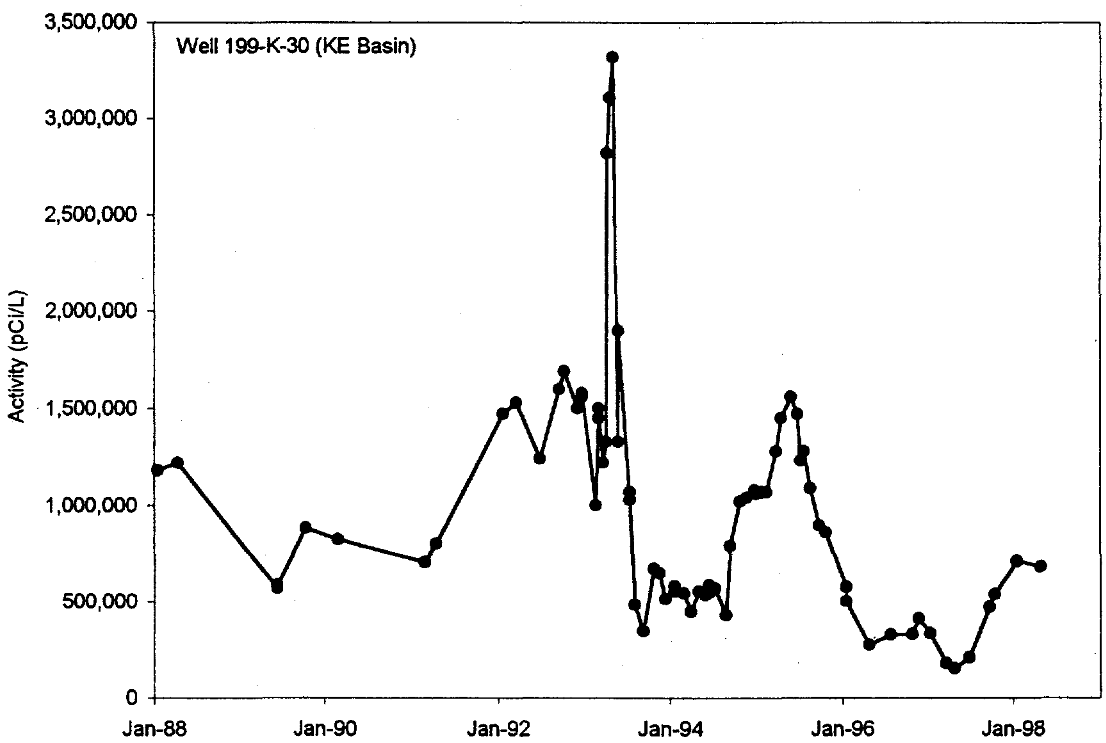


Figure 2.12. Tritium Activity in Wells 199-K-106A and 199-K-30

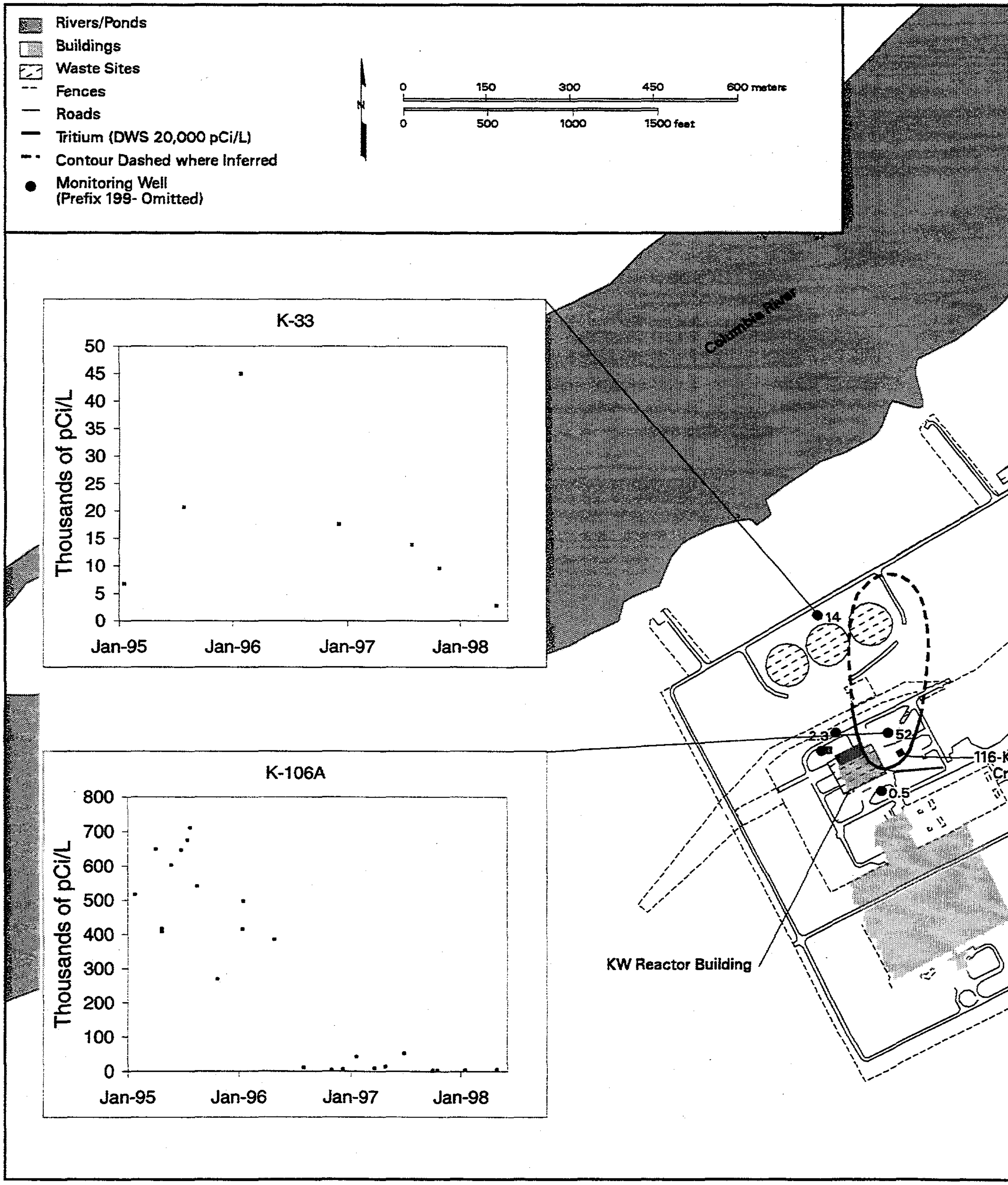
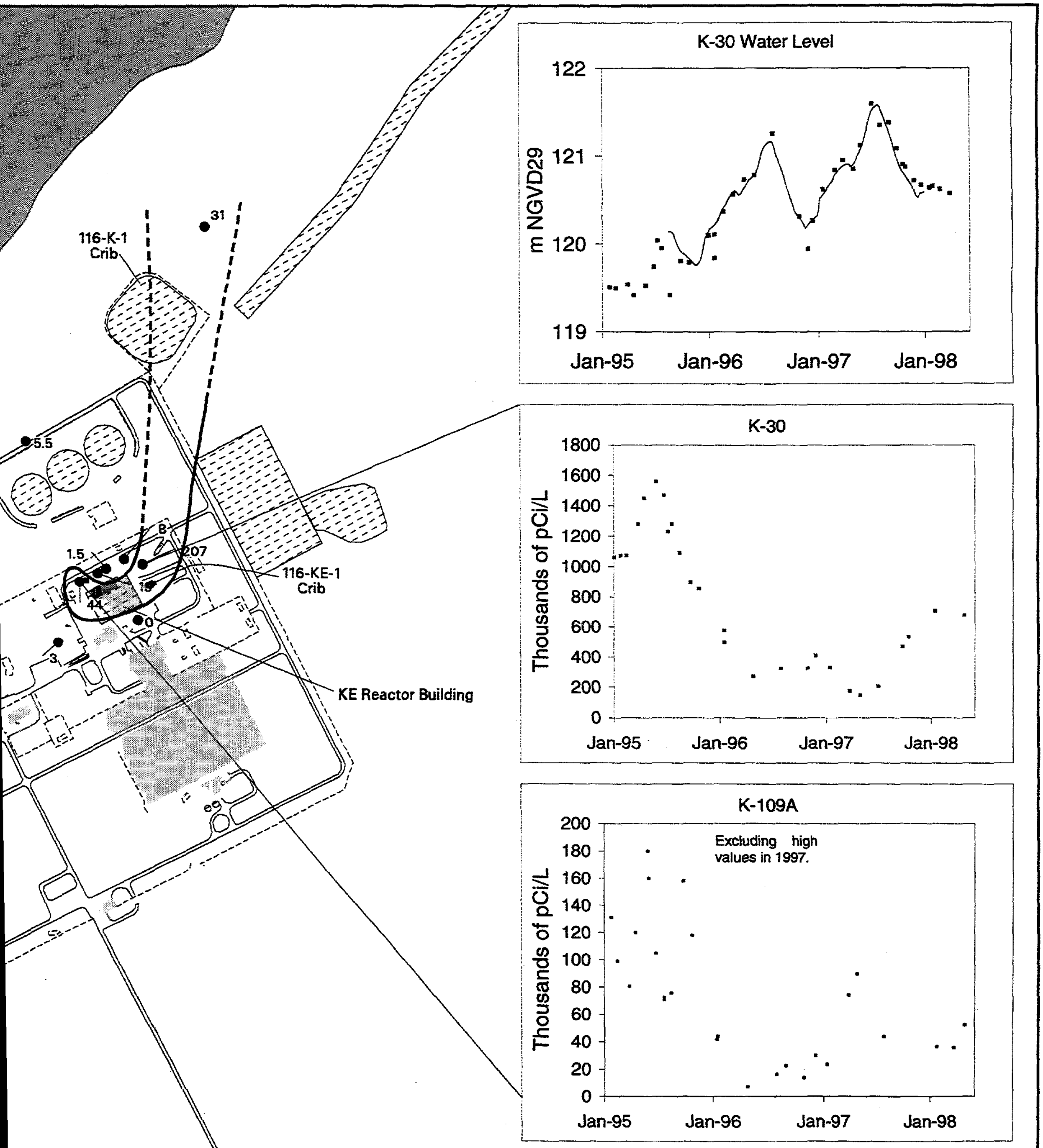


Figure 2.13. Effects of W



can_hart_98030 December 14, 1998 4:45 PM

r-Level Changes on Tritium Activities

vary rapidly with water-level changes. Instead, tritium levels have remained low for long periods of time, which is more consistent with a change in horizontal groundwater flow as described above.

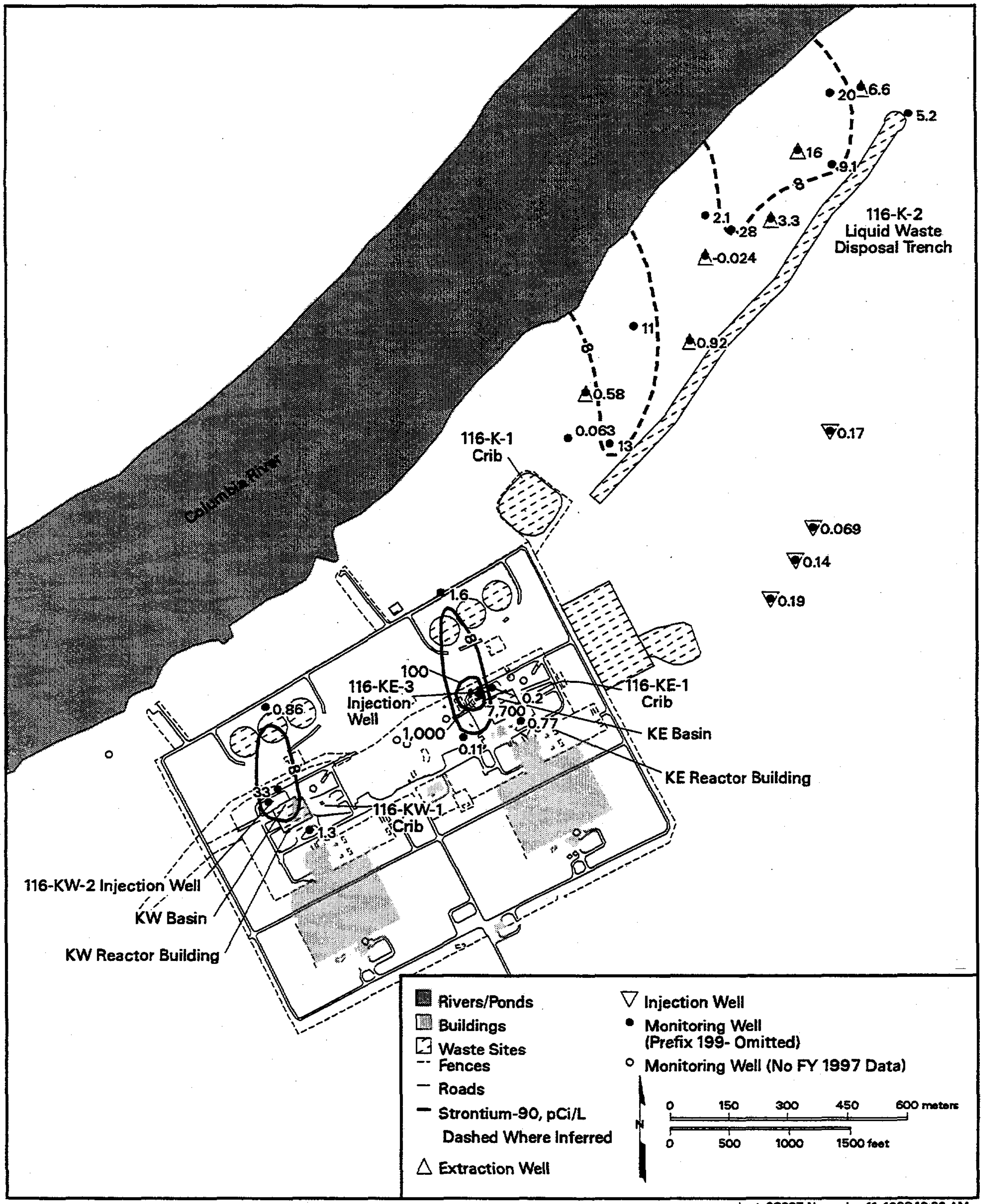
The sources of contaminants at KW Basin are analogous to KE Basin. However, the 116-KW-1 condensate crib appears to be the dominant source of contamination rather than the basins and injection well. The elevated tritium in well 199-K-106A (see Figure 2.12) must be attributed to the 116-KW-1 condensate crib and not the KW Basin because activities in well 199-K-106A are up to ten times higher than in the basin water. Well 199-K-106A and others also contain high activities of carbon-14, consistent with a condensate crib source.

2.2.2 Strontium-90

Strontium-90 exceeds the 8-pCi/L drinking water standard in two plumes originating near the KW and KE Basins (Figure 2.14). The source of strontium-90 in well 199-K-109A is believed to be the 116-KE-3 injection well/drain field, located ~12 m from the well. Although basin water also contains strontium-90, the nearby injection well is a more likely source, considering the following evidence. 1) Calculated travel times for strontium from the northern basin wall and the construction joint to the well are ~30 and ~52 years, respectively (Johnson et al. 1995, p. 3-28). It has been ~20 years since the major leak reached groundwater. 2) Strontium-90 is not detected in other wells closer to the basins. 3) The abrupt and cyclic nature of the strontium-90 in well 199-K-109A (Figure 2.15) is not consistent with a slowly migrating plume with a distant source. 4) A spectral gamma log run when well 199-K-109A was installed showed elevated cesium-137 at 11 m, consistent with the depth of the drain tiles (Schmidt et al. 1996), indicating that contamination from the drain field is present in the vicinity of the well.

The continued presence of strontium-90 in well 199-K-109A long after effluent disposal ceased (1971) indicates that drainage from the vadose zone is still occurring. A 1995 increase in strontium-90 was attributed to a leaking utility line located within ~5 m of the well (Schmidt et al. 1996). The water may have carried strontium from the vadose zone, or perhaps just along the well casing, into the aquifer. However, after the water line was repaired, strontium-90 continued to increase even more sharply, approaching 20,000 pCi/L in 1997 (see Figure 2.15). By early 1998, the activity had declined to ~5,000 pCi/L.. One possible explanation for the 1997 peak is that a higher-than-average water level mobilized strontium-90 that was normally in the vadose zone. Water levels in well 199-K-109A rose over 2 m between 1995 and mid 1997. Another potential explanation is that surface runoff or fire hydrant-testing water infiltrated through the contaminated vadose-zone sediments near the well. These discharges are now directed away from this well and the adjacent waste-disposal site (Peterson and Johnson 1998). Other mitigating actions are planned, as discussed in Section 3.2.

Strontium-90 is elevated above background in wells 199-K-34 and -107A (KW), but activities are two orders of magnitude lower than at KE (see Figure 2.14). It is not known whether the source of strontium is the KW Basin, the 116-KW-2 injection well, or both. The distance that strontium-90 may have traveled in groundwater since 1981 (when N Reactor fuel was first placed in the basin) is ~30 m, based on the contaminant-migration rate for strontium given in Johnson et al. (1995, p. 3-7). Well 199-K-107A is ~30 m from the nearest corner of the KW Basin; the injection well/drain field is closer. The arrival time of strontium-90 at well 199-K-107A is unknown; it was detected the first time the well was sampled in 1995.



can_hart_98037 November 11, 1998 10:39 AM

Figure 2.14. Strontium-90 Distribution in the Unconfined Aquifer, 100-K Area, Fiscal Year 1997 (from Hartman and Dresel 1998)

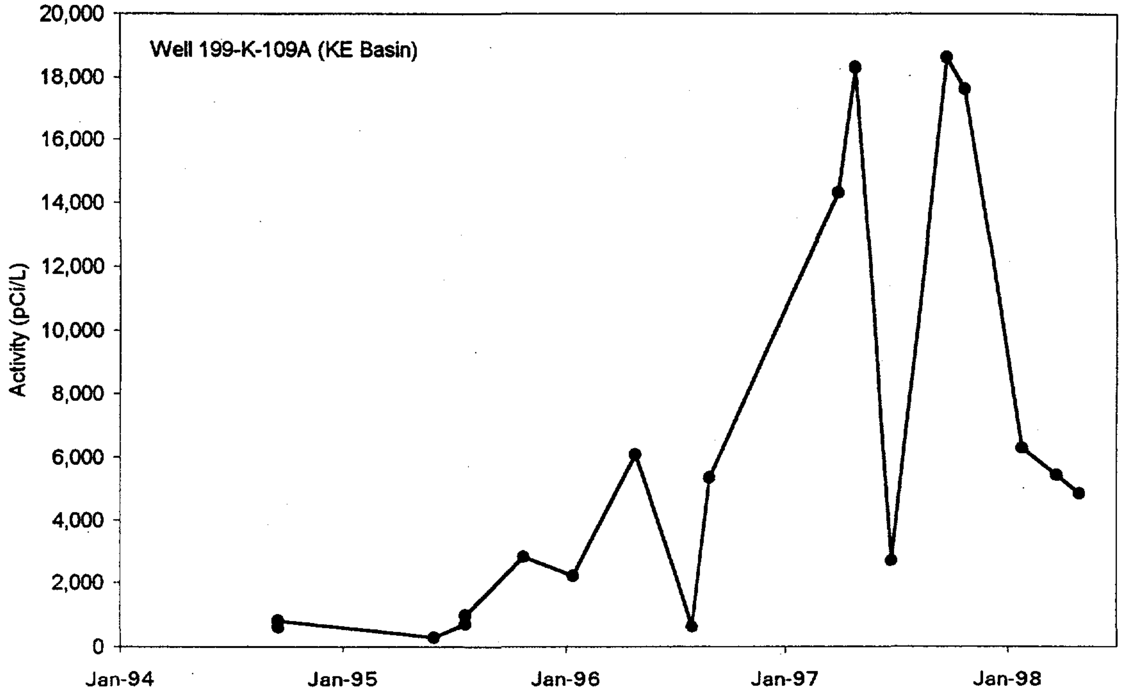


Figure 2.15. Strontium-90 Activity in Well 199-K-109A

Well 199-K-34 is ~40 m from the basin; strontium-90 was detected the first time the well was sampled in 1992. Antimony-125, which might indicate a recent basin source, is not detected in wells 199-K-109A or -34.

2.2.3 Carbon-14

Plumes of carbon-14-contaminated groundwater are associated with KW and KE Reactor facilities (Figure 2.16). As discussed under tritium above, the source of carbon-14 is the 116-KW-1 and 116-KE-1 condensate cribs (basin water did not contain carbon-14). The continued presence of carbon-14 many years after the condensate cribs were closed (1971) indicates long-term drainage from the vadose zone is occurring. Surface-water infiltration could maintain or accelerate this process.

A plot of tritium versus carbon-14 for all of the wells near the basins is shown in Figure 2.17. Most of the wells plot along the axes near the origin, but two wells are distinct, 199-K-106A (KW) and 199-K-30 (KE). The figure shows that tritium levels decreased between 1995, a year of average river stage, and subsequent years with higher-than-average river stage. The range of carbon-14 activities did not change significantly between 1995 and 1996-1998. Carbon-14 may exchange for nonradioactive carbon in carbonate minerals within the aquifer. This exchange process would retard the movement of carbon-14 through the aquifer. Under these conditions, carbon-14 is slower to respond to shifts in groundwater-flow direction than is tritium. As discussed above, the unusual increase in water table during the 1996-1998 period caused a shift in the inferred flow direction from the north-northwest to a more northeasterly direction. Thus, a well that was located downgradient from the suspected condensate crib sources during "normal" hydrologic conditions could be missed by a plume that is shifted (clockwise) away from the well during the high-water period. Carbon-14 would be less likely to exhibit such rapid changes because of its slower rate of movement.

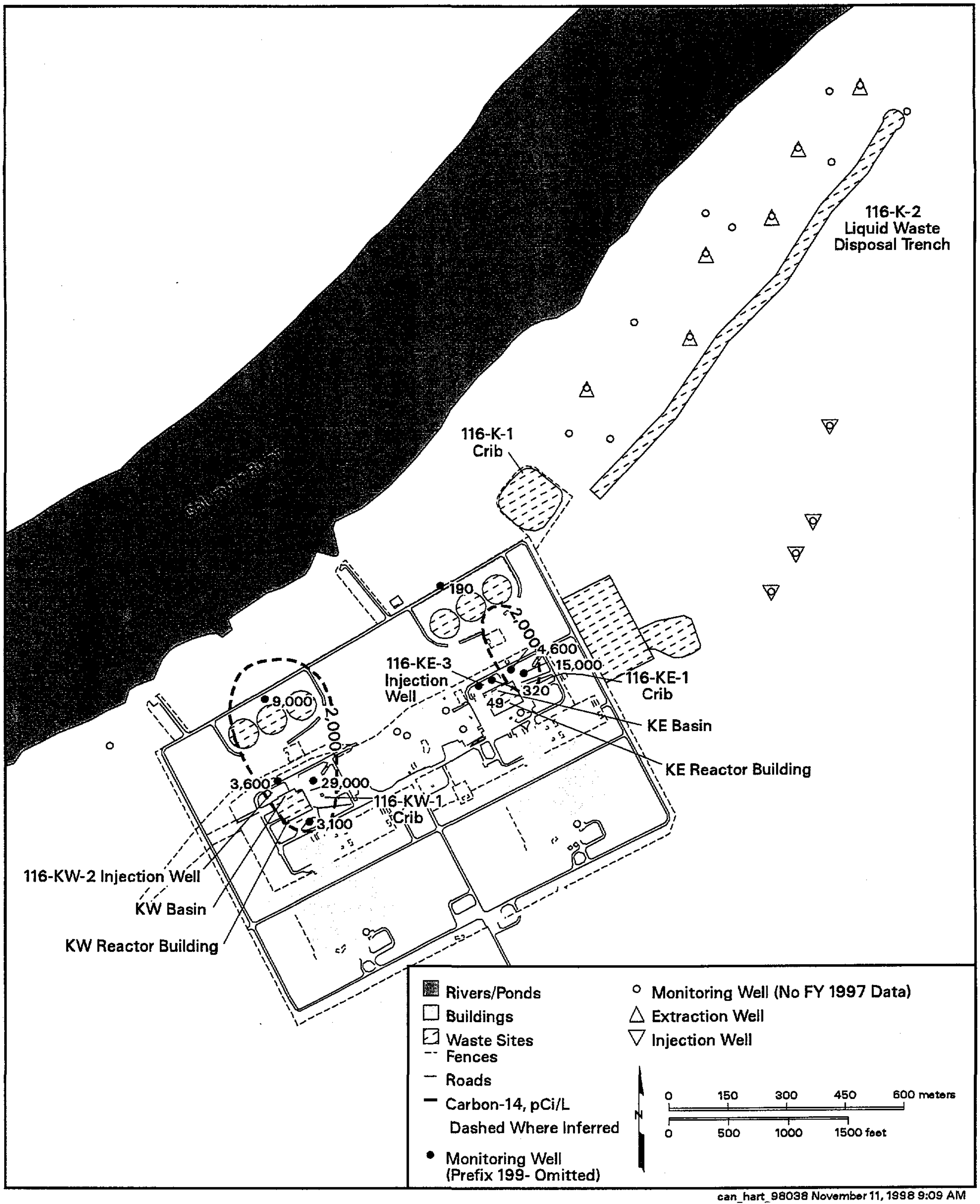


Figure 2.16. Carbon-14 Distribution in the Unconfined Aquifer, 100-K Area, Fiscal Year 1997 (from Hartman and Dresel 1998)

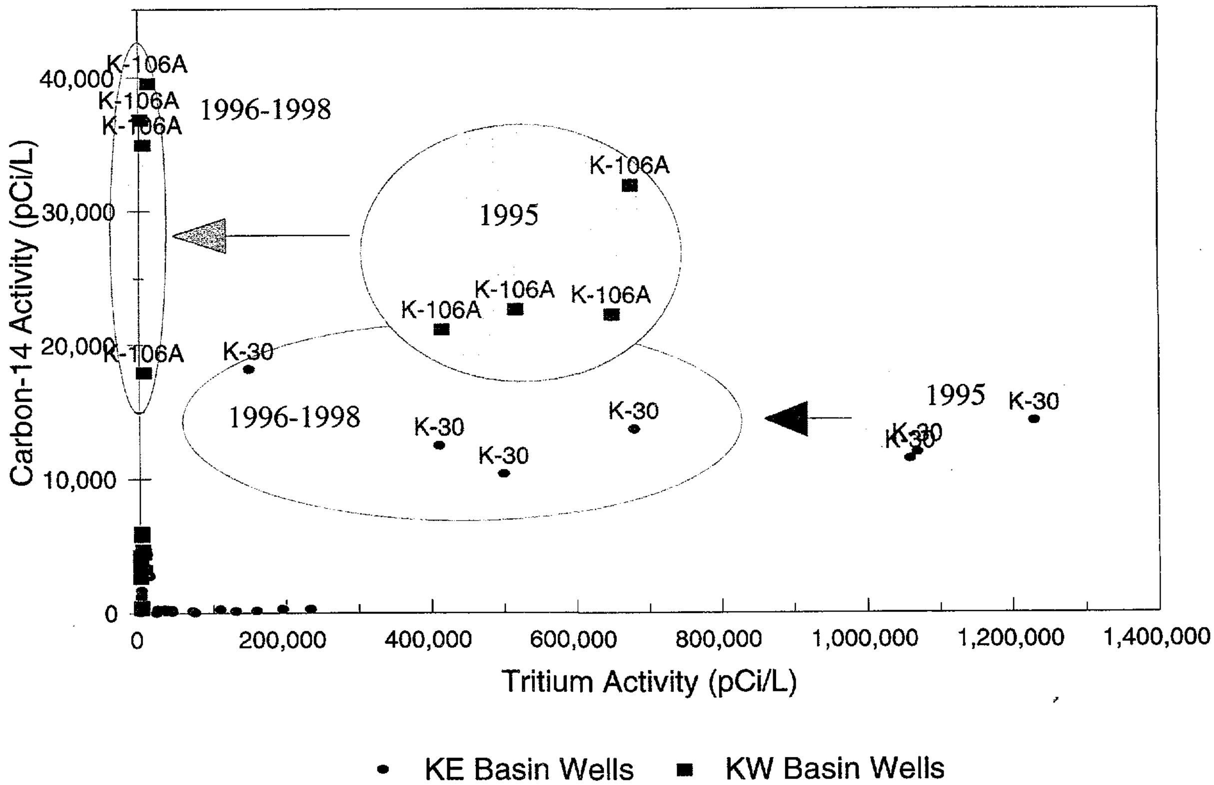


Figure 2.17. Carbon-14 Versus Tritium Activity at the KW and KE Basin Monitoring Wells

2.2.4 Gross Alpha and Gross Beta

These parameters are monitored as indicators of constituents of concern with lower mobility than tritium, such as strontium-90 and plutonium-239. Gross beta activity, which is elevated in the region of the basins, is attributable to strontium-90 and its daughter, yttrium-90 (Johnson and Evelo 1995). Gross alpha activity is not elevated, indicating no significant quantities of plutonium. Gross alpha and beta results are discussed further in Chapter 3.0.

2.2.5 Specific Conductance

Specific conductance is elevated above natural background for the Hanford Site in several wells located downgradient of the basins. The anomaly is most prominent in wells 199-K-106A (KW) and 199-K-28 (KE), with recent specific conductance values between 600 and 700 µS/cm. Wells upgradient of the basins have specific conductance near natural background (330 µS/cm), and basin water has very low specific conductance. The ions contributing to the elevated specific conductance are primarily calcium, chloride, and nitrate. The source of the elevated specific conductance is not known but has been postulated to be infiltration of water containing road salt (primarily calcium chloride) used in the winter on asphalt and concrete surfaces adjacent to many of the monitoring wells (Johnson and Evelo 1995). The elevated nitrate remains unaccounted for, however.

3.0 Decisions and Actions

Waste sources and appropriate response actions are difficult to distinguish in the 100-K Area where several facilities with similar waste characteristics are located within an operable unit. The multiple sources and multiprogram activities required an integrated approach to achieve efficiency and cost savings. The data quality objectives (DQO) process (EPA 1994) was applied in preparation of an integrated groundwater-monitoring and assessment plan (Johnson et al. 1995) to facilitate cost-effective remediation of contaminated sites. The DQO process is a logical, or systematic, approach to environmental decision making. The basic approach and outcome of data-collection and related activities conducted in accordance with the DQO-based monitoring plan are described as follows.

3.1 Approach

The DQO process is flexible and iterative. It helps to answer the following questions. 1) What is the decision to be made? 2) What data are needed to make the decision? 3) How will data be used to support the decision? The process consists of seven basic steps (marked with an asterisk in Figure 3.1) that lead to a scientific and resource-effective sampling and analysis plan. Implementation of the plan involves the steps indicated in the lower half of Figure 3.1 (Chou and Johnson 1998). Three types of decisions and statistical decision rules were identified in the monitoring plan (Johnson et al. 1995):

1. leak-detection decisions - Do tritium results from leak-detection wells (e.g., 199-K-27 and -109A) deviate from established baseline activities? Response actions by the operating contractor and/or environmental restoration contractor might include changes in operating conditions, mitigating actions, or additional investigation.

2. regulatory decisions - Does any constituent in groundwater attributable to current basin operations exceed an applicable standard at the wells within the fence line for the 100-K Area and along the segment of riverbank in front of the 100-K Area? An affirmative response might necessitate source-control measures and/or corrective actions to prevent eventual seepage into the Columbia River at activities above public health-based standards.

3. corrective-action decisions - Do any constituents in basin leak-detection monitoring wells exceed cleanup standards? Will continued operation exacerbate future cleanup activities? An affirmative answer would feed into the environmental restoration program for the purpose of planning appropriate remedial actions for the 100-KR-4 Operable Unit.

Initial statistical evaluation results using data up to August 1996 were presented in Table 6.4.2 in Hartman and Dresel (1997). Updated data-evaluation results and associated responses/actions taken subsequent to August 1996 are presented in the following sections.

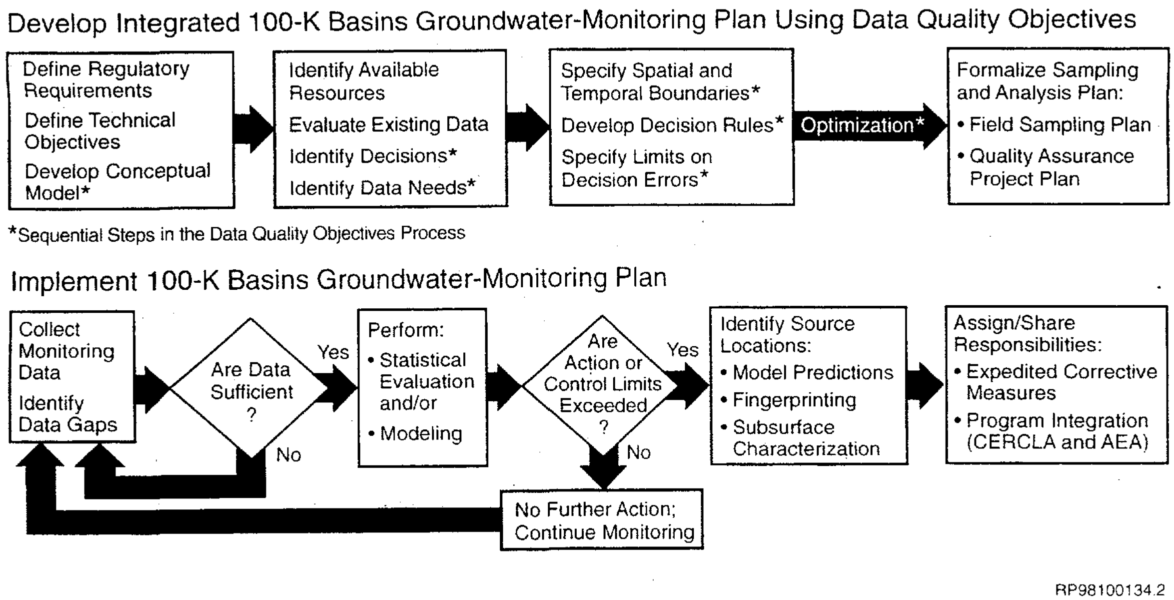


Figure 3.1. Approach

3.2 Leak-Detection Decisions

Because of its relatively high activity in KE Basin water and its high mobility, tritium is the primary constituent of interest in addressing the decision concerning a basin leak. Changes in operating condition (e.g., basin-water temperature) or seismic disturbances could initiate a leak event and cause an increase in tritium activity in the downgradient monitoring wells. The question in this case is

Do tritium results from basin leak-detection wells (e.g., 199-K-109A and -27) deviate from baseline activities?

The above decision is not applicable to wells 199-K-106A (KW) and 199-K-30 (KE) because the sources of tritium contamination in these wells are not attributable to basin operations. As discussed in Section 2.2, both tritium and carbon-14 in these two wells are associated with the 116-KW-1 and 116-KE-1 condensate cribs.

The question being addressed above also applies to other constituents of interest in basin water that could potentially be present in groundwater from basin leakage (strontium-90, cesium-137, and plutonium-239). However, these radioactive constituents are moving slowly and can be detected with nonspecific methods (i.e., the use of gross beta and gross alpha as indicators). When downgradient indicator activities exceed the baseline levels, appropriate isotope-specific analyses are ordered. This approach saves analytical costs without sacrificing critical data for leak-detection-monitoring decisions. In accordance with the monitoring plan (Johnson et al. 1995), therefore, only indicators (tritium, gross beta, and gross alpha) are used for the leak-detection decisions.

As indicated in the Johnson et al. (1995) monitoring plan, one statistical decision-making approach for application at the basins involves first establishing baseline activities. The combined Shewhart-CUSUM control chart, as recommended by the U.S. Environmental Protection Agency (EPA 1989, 1992) and American Society for Testing and Materials (ASTM 1996), is one approach selected for treating the leak-detection data. This method combines the advantages of the Shewhart control chart (sensitive to large and abrupt shifts) with a cumulative sum (CUSUM) control chart (sensitive to small and gradual changes) and allows data from a well to be viewed graphically over time. Examples of statistical decision making, using tritium and gross beta data from well 199-K-109A, are presented in Figures 3.2 and 3.3, respectively. It should be noted that the Shewhart portion of the control chart compares each individual measurement to the control limit (i.e., it does not have a memory of what has occurred in the past). In contrast, the CUSUM portion incorporates all previous values in the computation and the cumulative sum is compared to the control limit. Thus, when a signal of a confirmed exceedance is received, one should search for an assignable cause and correct the condition. The sums should be reset to zero when an assignable cause is detected and corrected.

As illustrated in Figure 3.2, tritium activities in downgradient well 199-K-109A in samples collected on September 25, 1997 exceeded the control limit, suggesting a possible basin leak. After verification sampling (October 7, 1997) confirmed the initial exceedance of the control limit, the cumulative sum curve departed dramatically from baseline, or "in-control," conditions. This prompted an immediate investigation of the possible causes. Basin-water constituents (tritium, strontium-90, antimony-125, and plutonium-239) were analyzed in key wells and in suspect adjacent waste sources (see Appendix for complete listing of results for the October 7, 1997 sampling event) and operational conditions were evaluated. The investigation was conducted as a team effort directed by the U.S. Department of Energy and contractor management associated with the spent nuclear fuel project.

3.2.1 Leak-Investigation Findings

Results of the enhanced groundwater sampling conducted at the leak-detection-monitoring wells at the KE Basin (and at the KW Basin for comparison) indicated that only tritium and strontium-90 (and the corresponding indicator, gross beta) were abnormal in one well (199-K-109A). As discussed in Section 2.2, the elevated constituents are attributable to the 116-KE-3 injection well/drain field for the following reasons. 1) No detectable amount of antimony-125, a mobile co-contaminant indicator for KE Basin water, was found with the tritium in well 199-K-109A. 2) Water-loss calculations for the KE Basin indicated no anomalous increase in basin-water-loss rates. 3) Water samples from holding tanks and sumps associated with the basin water-handling system located near well 199-K-109A did not reveal high contaminant levels and were thus ruled out as possible sources. 4) The response pattern of tritium during the fall 1997 peak in well 199-K-109A was not consistent with a leak event.

During the response-action investigation of the tritium peak in well 199-K-109A, the operating contractor and environmental restoration contractor found that the old piping and sump system connected to the 116-KE-3 injection well was located within 10 m of the monitoring well. The injection well consists of a 20-cm-dia. perforated steel casing that extends from ~3 m above to ~3 m below the current water-table elevation. Historical injection of basin water, containing strontium-90 as well as other fission products and transuranics, may have resulted in a significant inventory of these radionuclides just above

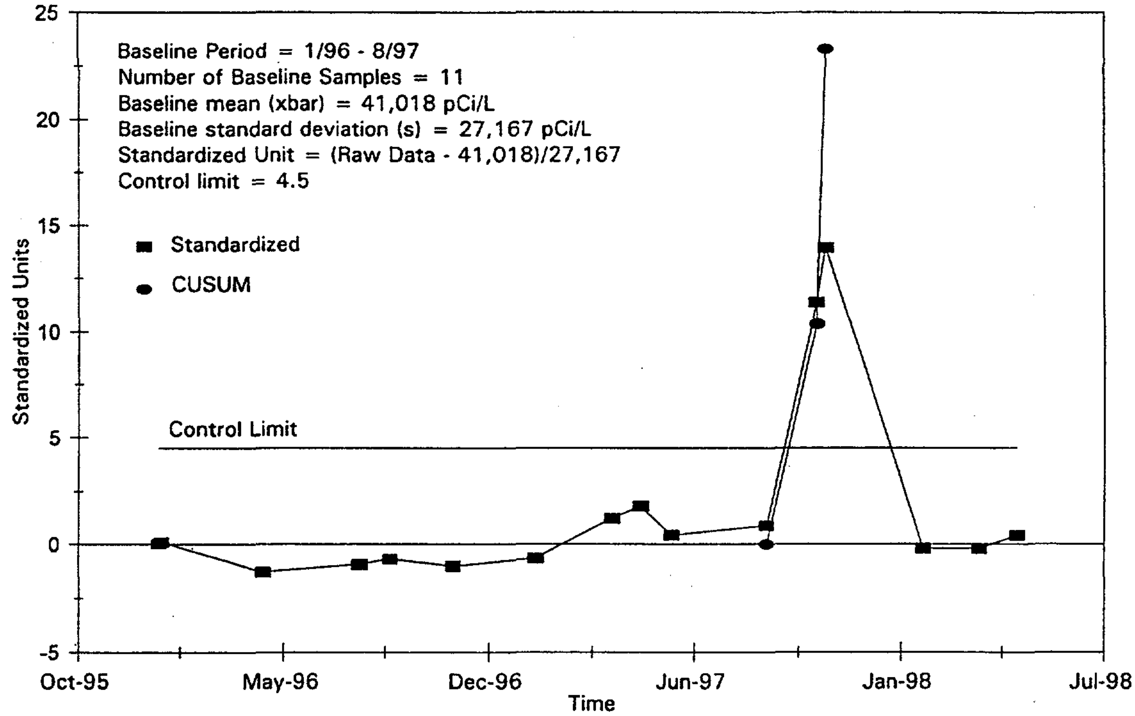


Figure 3.2. Shewhart-CUSUM Control Chart for Tritium in Well 199-K-109A

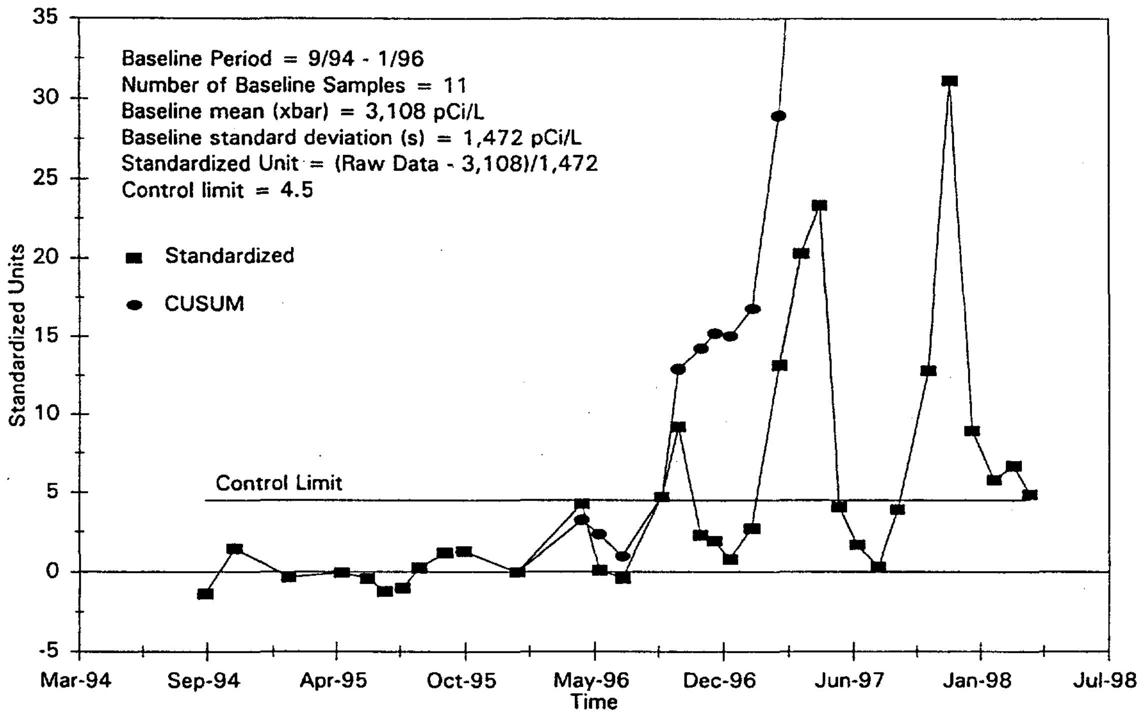


Figure 3.3. Shewhart-CUSUM Control Chart for Gross Beta in Well 199-K-109A

the current water table. The unsealed casing could act as a conduit for infiltration of surface water through this residual vadose-zone source. In collaboration with the environmental restoration program, it was decided that the structure should be isolated. An approach to locate the buried waste line and injection well and to then seal this past-practice disposal system was devised.

3.2.2 Upgradient/Downgradient Comparisons

In addition to tritium, gross alpha and gross beta activity is sampled for quarterly in the upgradient and downgradient wells. The groundwater-monitoring plan (Johnson et al. 1995) specifies that if statistically significant increases over background levels in gross alpha or gross beta occur, appropriate isotopic analyses will be performed. Sample results from each downgradient leak-detection well were compared to the respective upper tolerance limit based on upgradient activities. The results of the comparisons are presented in Figures 3.4 through 3.7. Background activities (denoted by solid lines) in these figures were obtained from Table 6.4.2 in Hartman and Dresel (1997). It should be noted that gross beta for well 199-K-109A is not shown in Figure 3.6 because the very high activities for this well far exceed the scale for this plot (see Figure 3.3 for gross beta history in well 199-K-109A).

During the period of evaluation (August 1996 to April 1998), gross alpha activities (see Figures 3.5 and 3.7) in downgradient wells were similar to the upgradient wells for both basins. Thus, as of April 1998, there is no indication that plutonium and americium migrated through the vadose zone at high-enough levels to cause groundwater exceedances at or above drinking water standards (both 1.2 pCi/L). This inference is supported by the special isotopic analyses on samples collected on October 7, 1997 for the investigation described in Section 3.2.1, for which plutonium-239 and americium-241 were reported at activities below their detection limit of ~0.05 pCi/L[1] (see Appendix).

In contrast to the above, gross beta activities in downgradient well 199-K-109A greatly exceeded the upgradient background well (199-K-110A) at the KE Basin. Gross beta levels in downgradient wells at the KW Basin also exceeded the background activities. In both cases, these exceedances are due to strontium-90 (Johnson and Chou 1995) and are attributed to the past-practice injection wells/drain fields associated with disposal of basin water (see Section 2.2 for more detailed discussion). Background activities for gross beta and gross alpha were updated during the evaluation period and are presented in Table 3.1. The revision is necessary to reflect the most current site conditions. Future sample results should be compared individually with the most recent updated background values.

[1] Preliminary measurements using ultra-low-level analytical methods for plutonium (detection limits at <0.000001 pCi/L) suggested there may be some reactor-produced plutonium at very low activities present in the groundwater near the KE Basin. The highest measurement was 0.000125 pCi/L (DOE 1998).

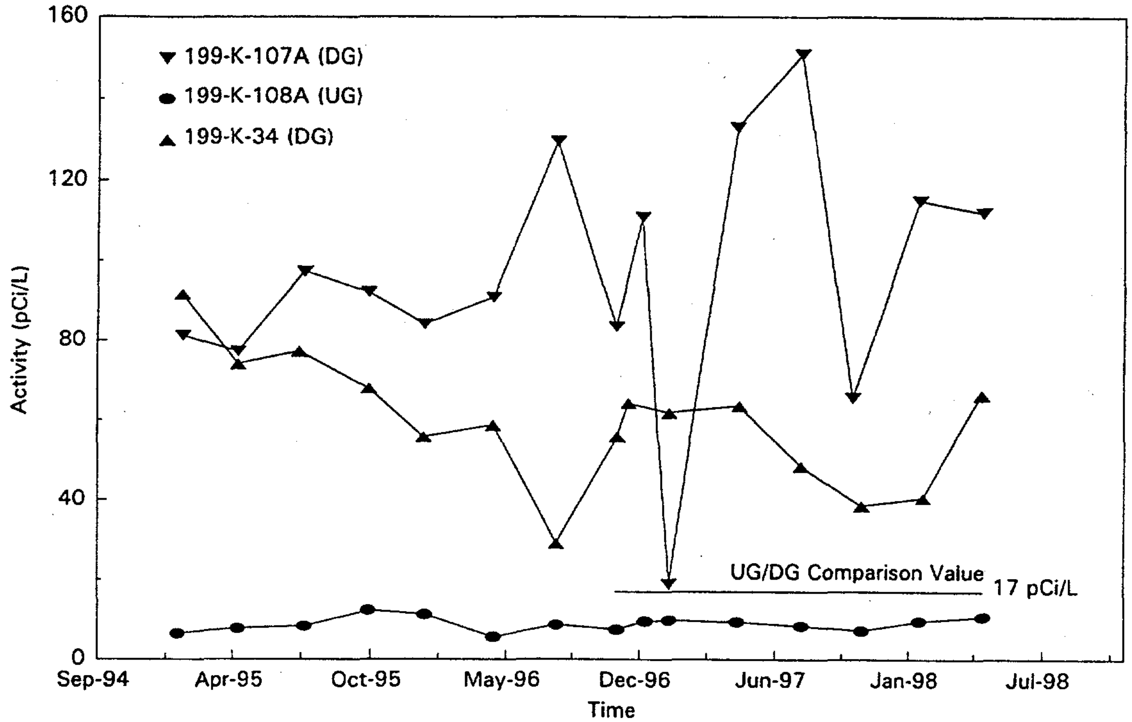


Figure 3.4. Comparison of Gross Beta in KW Basin Wells with Background Activity

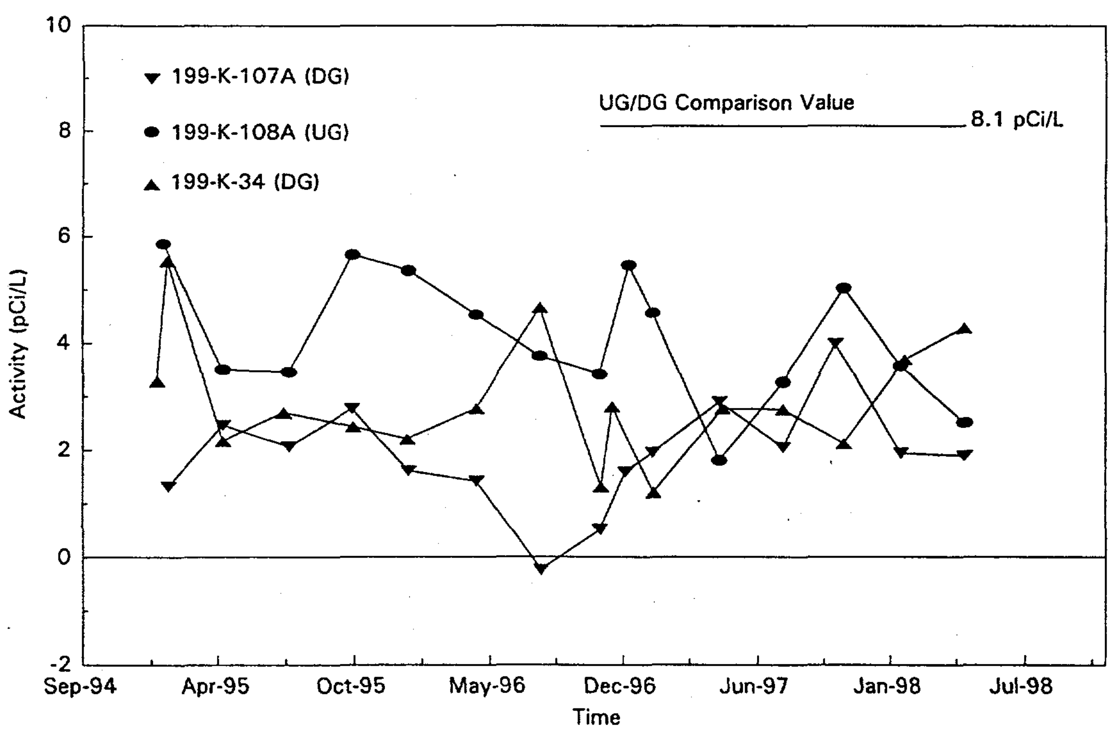


Figure 3.5. Comparison of Gross Alpha in KW Basin Wells with Background Activity

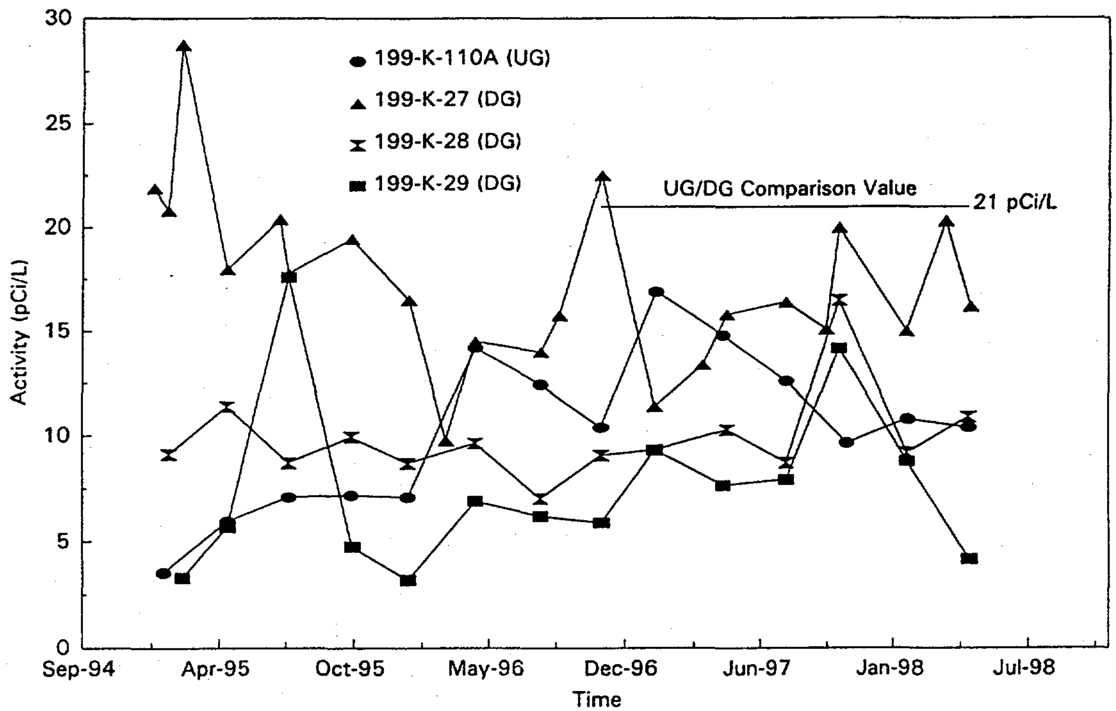


Figure 3.6. Comparison of Gross Beta in KE Basin Wells with Background Activity

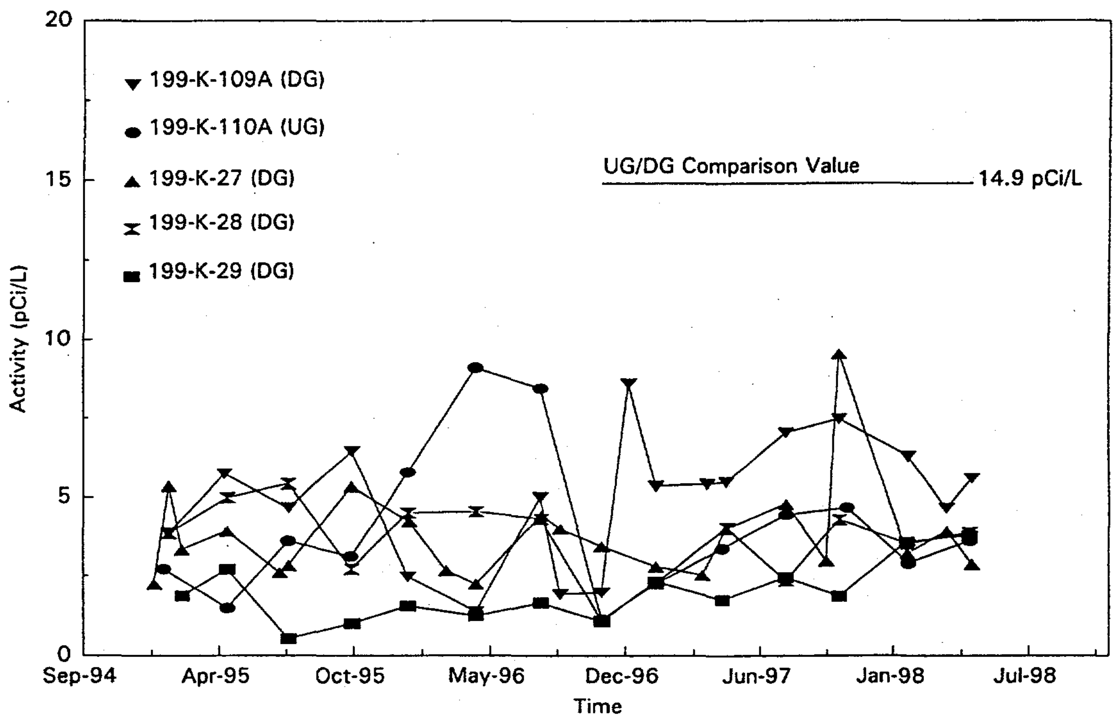


Figure 3.7. Comparison of Gross Alpha in KE Basin Wells with Background Activity

Table 3.1. Summary Statistics and Upper Tolerance Limit (UTL) for Gross Alpha and Gross Beta for KW and KE Basins

Basin	Gross Alpha (pCi/L) (DWS = 15 pCi/L)					Gross Beta (pCi/L) (DWS = 50 pCi/L)				
	n[a]	$\bar{x}$	s	k[b]	$UTL_{95/95}$[c]	n[a]	$\bar{x}$	s	k[b]	$UTL_{95/95}$[c]
KW										
199-K-108A (UG)	8	3.72	1.25	3.188	7.7[d]	8	9.06	1.22	3.188	13.0[d]
199-K-107A (DG)	8	2.11	1.01	3.188	5.3[e]	8	98.76	41.72	3.188	231.8[e]
199-K-34 (DG)	8	2.96	1.25	3.188	10.2[e]	8	54.94	11.05	3.188	90.2[e]
KE										
199-K-110A (UG)	7	3.20	1.23	3.399	7.4[d]	7	12.23	2.70	3.399	21.4[d]
199-K-109A (DG)	10	5.78	1.79	2.911	11.0[e]	NC[f]	NC[f]	NC[f]	NC[f]	NC[f]
199-K-27 (DG)	10	4.02	2.05	2.911	10.0[e]	10	16.61	3.38	2.911	26.5[e]
199-K-28 (DG)	7	3.07	1.17	3.399	7.0[e]	7	10.59	2.71	3.399	19.8[e]
199-K-29 (DG)	7	2.40	0.98	3.399	5.8[e]	7	8.29	3.14	3.399	19.0[e]

(a) Baseline period is October 1996 to April 1998. The assumption of normality of data was tested for each well using Lilliefors test (Conover 1980, pp. 357–361). All data were found to be normal, except for gross alpha from well 199-K-34, which was log-normal.
(b) Values are obtained from Natrella (1966, Table A-7).
(c) Calculated as: $UTL_{95/95} = \bar{x} + k * s$ (normal distribution) or $UTL_{95/95} = \exp(\bar{x} + k * s)$ (log-normal distribution), where the first 95 in the subscript denotes the coverage and the second 95 denotes the confidence level.
(d) Used in leak-detection decisions. Value will be compared with future individual samples collected after April 1998 from each compliance point (downgradient) well. Exceedance, after confirmation sampling, indicates potential impact from the facility.
(e) Used in regulatory compliance decisions. Value will be compared with drinking water standard (DWS) to determine exceedance.
(f) Not calculated because of "out-of-control" signal as indicated by the combined Shewhart-CUSUM chart (see Figure 3.6).

DG = downgradient well; NC = not calculated; UG = upgradient well.

3.3 Regulatory and Corrective-Action Decisions

Regulatory decisions involve comparing groundwater quality data with state and federal drinking water standards (e.g., 20,000 pCi/L for tritium). The specific question to be addressed is

Do any constituents attributable to ***current*** *basin operations exceed an applicable standard?*

Currently, tritium activities in 4 wells (199-K-30, -106A, -109A, and -27) exceed the drinking water standard of 20,000 pCi/L. Tritium levels in wells 199-K-109A and -27 continue to decline but remain slightly above 20,000 pCi/L (see Figure 2.11).

Gross alpha and gross beta were also compared with respective drinking water standards. Results of statistical evaluation for gross alpha and gross beta are presented in Table 3.1 and Figures 3.8 through 3.11, respectively. Gross alpha activities in downgradient wells are below the 15-pCi/L drinking water standard for both basins. Gross beta activities in downgradient well 199-K-109A greatly exceed the 50-pCi/L drinking water standard at the KE Basin. Gross beta in downgradient wells (199-K-107A and -34) at the KW Basin also exceed the drinking water standard. The exceedances are due to strontium-90 and are attributed to the past-practice 116-KE-3 and 116-KW-2 injection well/drain field disposal systems that received basin water overflow and sub-basin drainage (see discussion in Section 2.2 and the Appendix for specific well results).

3.4 Actions

The mingling of contaminant plumes from past-practice sources with more recent operational releases complicates identification of appropriate programs for mitigation actions. Tritium, for example, in the vicinity of the KW and KE Reactor areas can originate from fuel-storage basin leaks as well as from past-practice sources that include 1) 116-KW-1 and 116-KE-1 condensate cribs, which contain residual tritium and carbon-14; and 2) 116-KE-3 injection well/drain field, which received sub-basin drainage (see Figure 2.9). Differentiating among these sources was described in Section 2.2.

Based on the above considerations, circumstantial evidence favored the past-practice source of elevated strontium-90 in well 199-K-109A. Accordingly, the environmental restoration contractor assumed the lead role in exploring interim solutions. The spent nuclear fuels project provided personnel and additional source characterization funding during an initial investigation (see Section 3.2.1). Thus, a balance between near-term groundwater-protection requirements and long-term cleanup schedules was achieved through shared efforts, as indicated in the DQO process (see Figure 3.1). Interim corrective measures (see Section 3.2) were identified by the team responsible for CERCLA cleanup. Surface-water sources (e.g., fire hydrant leakage, fire hydrant-testing water, collection of natural precipitation runoff) near the past-practice injection well/drain field were identified. The spent nuclear fuel project addressed the fire hydrant and surface-water control related to facility operations. For example, a leaking fire hydrant located ~10 m from well 199-K-109A was repaired. Also, water discharged to the ground during hydrant testing is now diverted away from the adjacent injection well/drain field source.

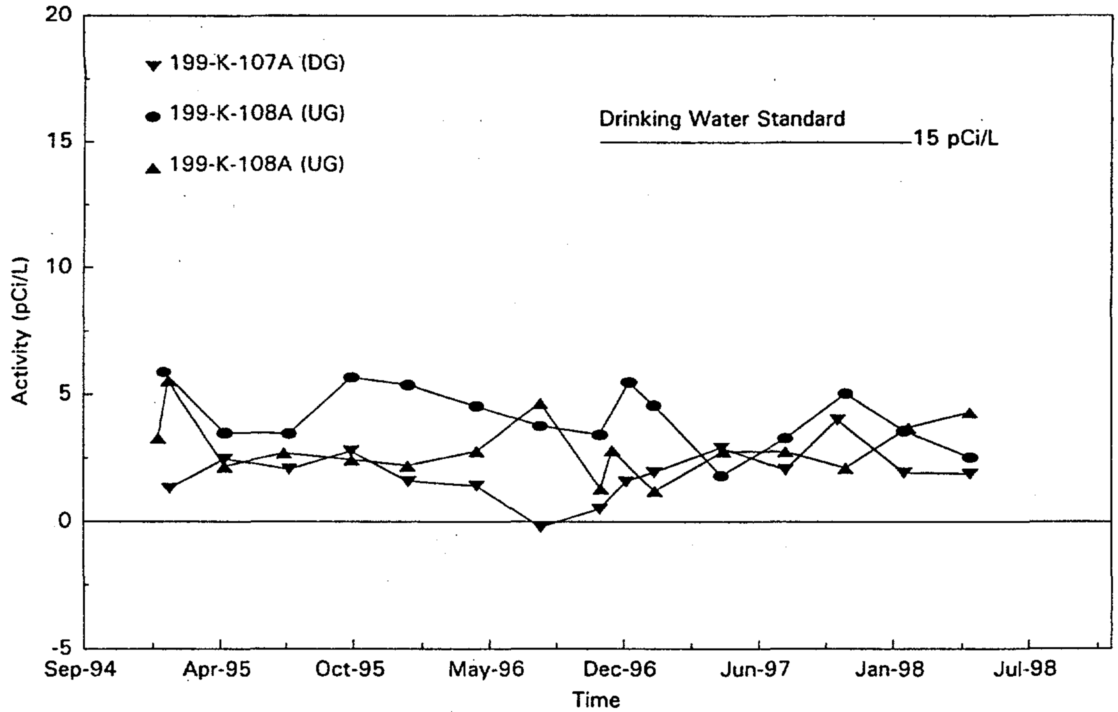


Figure 3.8. Gross Alpha Drinking Water Standard Comparisons in KW Basin Wells

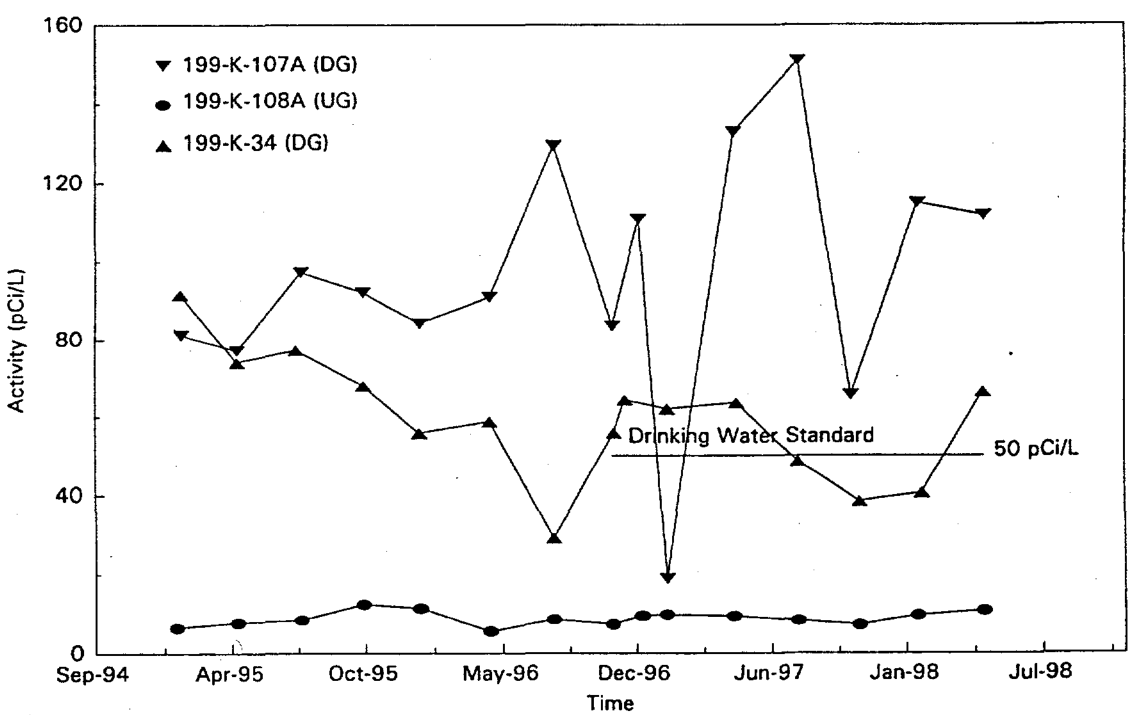


Figure 3.9. Gross Beta Drinking Water Standard Comparisons in KW Basin Wells

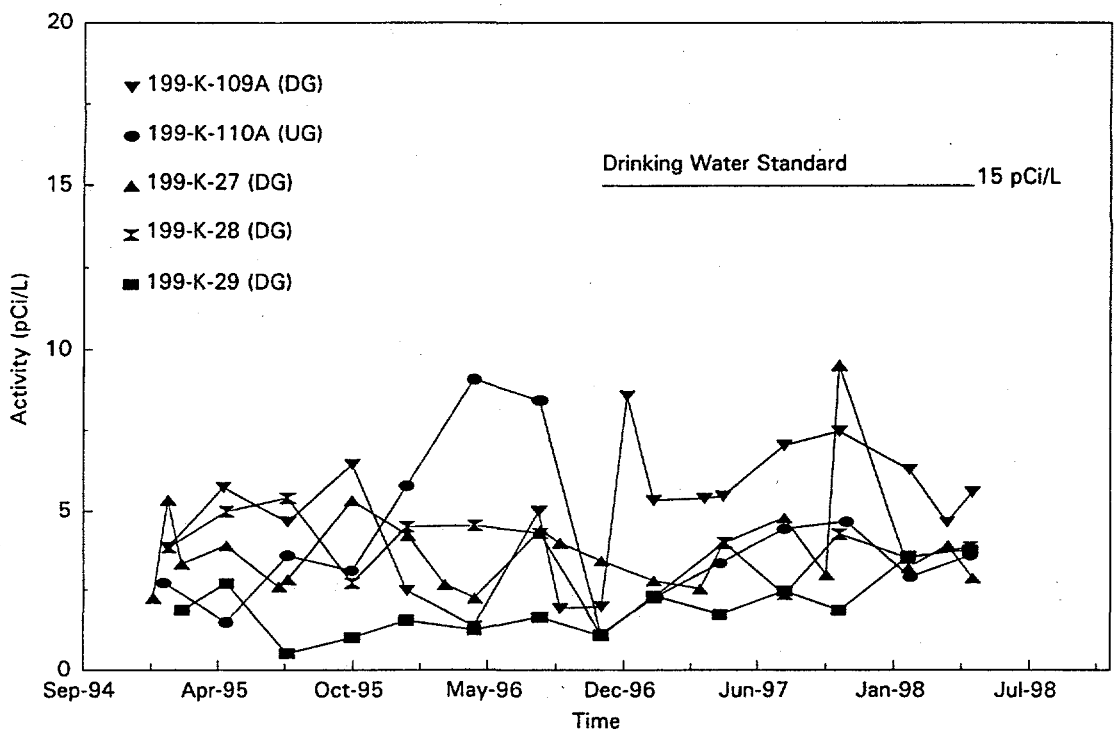


Figure 3.10. Gross Alpha Drinking Water Standard Comparisons in KE Basin Wells

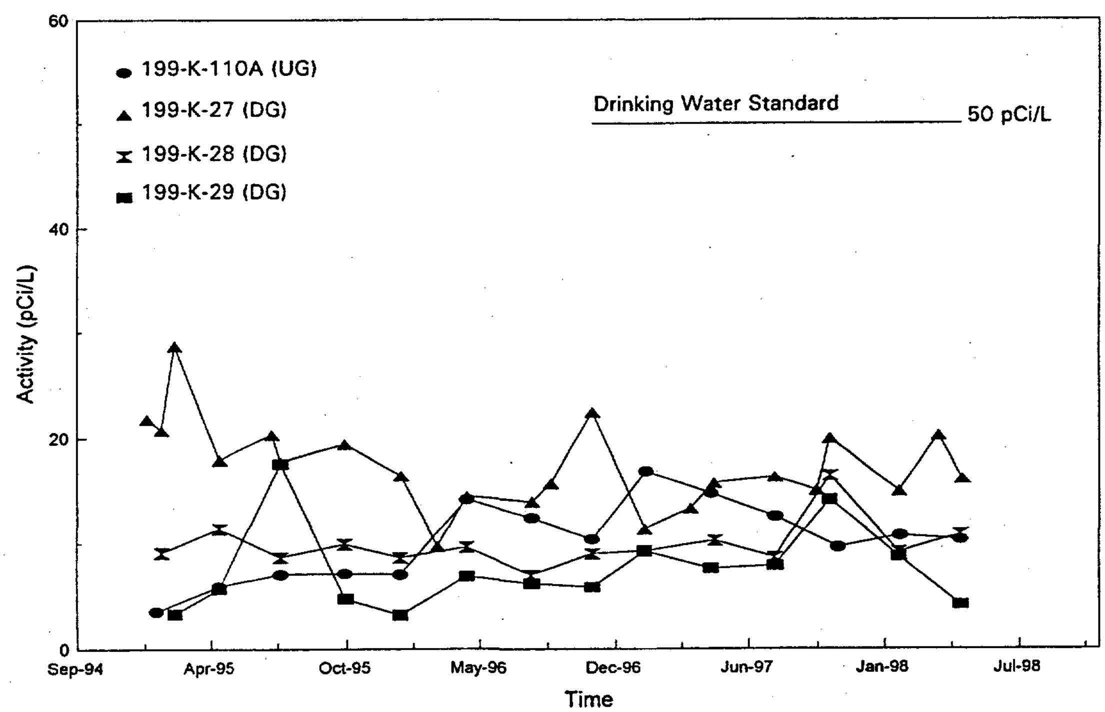


Figure 3.11. Gross Beta Drinking Water Standard Comparisons in KE Basin Wells

An approach and preliminary design for sealing the subsurface piping and injection well/drain field source area was developed by the environmental restoration contractor as part of an existing well-decommissioning project. The proposed approach involves perforating and pressure grouting the injection well and filling associated transfer lines with cement grout. Cement grout sealing of the condensate disposal sites was also proposed. The 116-KE-3 injection well and 116-KE-1 condensate crib were assigned top priority on the well-decommissioning priority list (subject to available funding). In addition, the environmental restoration contractor initiated a limited field investigation of the nature and extent of soil contamination at the injection well/drain field disposal sites to assess the need for early attention to contaminated soil sites prior to the scheduled cleanup near the 100-K Area Reactor.

4.0 Seismic Monitoring

Earthquakes of magnitude 1 to 2 occur several times a year within a 10-km radius of the 100-K Area. Seismic disturbances near the KE Basin could cause seepage to occur from existing sealed joints (e.g., the construction joint). Thus, the Hanford Groundwater Monitoring Project recently sponsored addition of a strong-motion accelerometer (SMA) in the 100-K Area to supplement monitoring at the basins. The accelerometer is part of a larger network maintained and operated by Pacific Northwest National Laboratory, which is described as follows.

The seismic monitoring network consists of two designs of equipment and sites: seismometer sites and SMA sites. Seismometer sites are designed to locate earthquakes on and near the Hanford Site and determine their magnitude and seismic focus location. DOE Order 5480.2 requires that facilities or sites that have structures or components in Performance Category 2 with hazardous material and all Performance Category 3 and 4 facilities shall have instrumentation or other means to detect and record the occurrence and severity of seismic events. To comply with this order, the seismometer sites were complemented with SMAs to record the ground motion at specific sites.

The SMA network consists of five free-field SMA sites and one SMA housed in the 300 Area. There is one free-field SMA located in each of the 200 Areas, one in 100-K Area (see Figure 1.1), one adjacent to the 400 Area, and one in the 300 Area. In the 100-K Area, if the SMA detects motion above a threshold value of 0.02 g, an alarm is transmitted via a pager system to personnel responsible for the seismic stations. Responsible operations personnel are then notified for appropriate action. Follow-up action to a seismic alarm would involve rechecking basin water-loss-rate calculations and a walk-down of the facility to check for other signs of visible damage.

5.0 Conclusions

Groundwater contamination attributable to past-practice sources and declining tritium activities from previous leak events were detected near the basins. Maximum activities of tritium, carbon-14, and strontium-90 occurred at 50, 10, and 2,000 times their respective drinking water standards. A significant portion of the tritium plume between the KE Reactor area and the river can be attributed to KE Basin leaks in the past. Tritium activities in wells near the basin, however, have declined significantly (following corrective actions in 1994) and are now near the 20,000-pCi/L drinking water standard. Infiltration of water from leaking water lines and/or runoff at past-practice disposal sites is the most likely cause of the continuing presence of elevated tritium, carbon-14, and strontium-90 in groundwater in the 100-K Area. Near-term actions (surface-water control) and planning for future actions (e.g., in-place stabilization) were shared by the spent nuclear fuels project and the environmental restoration project.

The primary uncertainties concerning the groundwater-monitoring network involve groundwater-flow direction and sampling depth. For example, significant perturbations in contaminant activities versus time between 1995 and the present are attributed to a shift in groundwater-flow direction as a result of the unusually high water table (caused by a sustained higher-than-normal river stage during 1996 and 1997). The significance of the inferred shift in flow direction during the high-water event is that the number and location of monitoring wells at the basins may not provide adequate spatial coverage during extreme river stages.

The uncertainties in the groundwater-flow direction and contaminant plume distribution cannot be resolved solely by addition of more monitoring wells near the basins. Observations during 1996-1997 suggest that correlation of the magnitude and duration of river discharge and inferred (or measured) groundwater-flow direction may allow prediction of the likely impact on monitoring results. Approaches to supplement groundwater-monitoring networks include the following:

- Seismic monitoring was reestablished in the 100-K Area and serves as an adjunct to the groundwater-monitoring project. The new seismic event recorder will provide an early warning of earthquake events that could initiate basin water leakage. The early warning will alert operations staff to check water-loss rates and consider the need for immediate action.

- Tracking plume distribution and flow direction(s) may be possible using soil-gas vapor monitoring for tritium. Tritiated water vapor above the contaminant plume may leave a soil gas "halo" over the plume. Collection and analysis of soil vapor may thus allow definition of the plume without installation of a large number of new wells. This approach may also help guide installation of any new wells. Field testing downgradient from the KE Basin area is planned for fiscal year 1999.

- Another uncertainty is the activity of tritium in groundwater from the 100-K Area near the point of entry at the river. This deficiency can be eliminated by expanding the coverage of shoreline-sampling tubes. The environmental restoration contractor has successfully demonstrated the use of sampling tubes along a portion of the shoreline near the 100-K Area. Initial results of a limited sampling effort indicate tritium activities well below the drinking water standard.

Groundwater data interpretations are complicated because of variations in groundwater levels that result from seasonal changes in river stage. For example, the current monitoring system uses a fixed depth for the pump intake. As the water level rises and falls, contaminant activities may also vary if there is a significant depth variation in contaminant activity in the aquifer. A multidepth-sampling system at a key location has been proposed to assess the impact of this potential variable on contaminant activities.

Elevated strontium-90 (a maximum activity of nearly 20,000 pCi/L) persists in one well at the northwestern corner of the KE Basin. The cyclic or rapidly changing activities suggest it is a very localized occurrence. Episodic infiltration of surface water into the adjacent 116-KE-3 injection well/ drain field may account for this pattern. Additional downgradient monitoring wells in that area would be needed to determine the areal extent of this occurrence. However, based on the relatively slow migration rate of strontium-90 (a few meters per year; Johnson et al. 1995), the hypothetical plume should be limited to within ~200 m of the facility. One new well has been proposed to address this issue. However, choosing an optimum location for the proposed well will be a challenge because of the uncertainties in flow direction.

6.0 References

American Society for Testing and Materials (ASTM). 1996. *Provisional standard guide for developing appropriate statistical approaches for groundwater detection monitoring programs*. Committee D-18 on Soil and Rock, Designation PS 64-96, West Conshohocken, Pennsylvania.

Atomic Energy Act. 1954. As amended, 42 USC 2021 et seq.

Brown DJ. 1963. *Status of the groundwater beneath Hanford reactor areas: January 1962 to January 1963*. HW-77170, General Electric Company, Hanford Atomic Products Operation, Richland, Washington.

Carpenter RW. 1994. *100-K area technical baseline report*. WHC-SD-EN-TI-239, Westinghouse Hanford Company, Richland, Washington.

Chou CJ, and VG Johnson. 1998. "Balancing CERCLA and facility operations: Application of the DQO process at Hanford's spent nuclear fuel storage basins." In *Annual Proceedings of the Institute of Nuclear Materials Management*, Naples, Florida, July 26-30, 1998.

Comprehensive Environmental Response, Compensation, and Liability Act. 1980. Public Law 96-510, as amended, 42 USC 9601 et seq.

Conover WJ. 1980. *Practical nonparametric statistics*. 2nd ed. John Wiley and Sons, New York.

DOE (See US Department of Energy)

Dresel PE, JT Rieger, WD Webber, PD Thorne, BM Gillespie, SP Luttrell, SK Wurstner, and TL Liikala. 1996. *Hanford Site ground-water monitoring for 1995*. PNNL-11141, Pacific Northwest National Laboratory, Richland, Washington.

Drost BW, SE Cox, and KM Schurr. 1997. *Changes in ground-water levels and ground-water budgets, from predevelopment to 1986, in parts of the Pasco Basin, Washington*. Water-Resources Investigations Report 96-4086, U.S. Geological Survey, Tacoma, Washington.

EPA (See US Environmental Protection Agency)

Hartman MJ, and PE Dresel, eds. 1997. *Hanford Site groundwater monitoring for fiscal year 1996*. PNNL-11470, Pacific Northwest National Laboratory, Richland, Washington.

Hartman MJ, and RE Peterson. 1992. *Hydrologic information summary for the northern Hanford Site*. WHC-SD-EN-TI-023, Westinghouse Hanford Company, Richland, Washington.

Hartman MJ, PE Dresel, JP McDonald, RB Mercer, DR Newcomer, and EC Thornton. 1998. *Integrated monitoring plan for the Hanford groundwater monitoring project.* PNNL-11989, Pacific Northwest National Laboratory, Richland, Washington.

Hunacek GS. 1996. *Facility effluent monitoring plan for K area spent fuel storage basin.* WHC-EP-0497-2, Westinghouse Hanford Company, Richland, Washington.

Interim Change Notice. 1998. *Groundwater monitoring and assessment plan for the 100-K area fuel storage basins.* ICN-WHC-SD-EN-AP-174.1 RO, Pacific Northwest National Laboratory, Richland, Washington.

Johnson VG, and CJ Chou. 1995. *Groundwater monitoring results for the 100-K area fuel storage basins: March to December 1994.* WHC-SD-EN-TI-280, Rev. 1, Westinghouse Hanford Company, Richland, Washington.

Johnson VG, and SD Evelo. 1995. *Groundwater monitoring results for the 100-K area fuel storage basins: January to June 1995.* WHC-SD-EN-TI-280, Rev. 2, Westinghouse Hanford Company, Richland, Washington.

Johnson VG, CJ Chou, and JW Lindberg. 1995. *Groundwater monitoring and assessment plan for the 100-K area fuel storage basins.* WHC-SD-EN-AP-174, Westinghouse Hanford Company, Richland, Washington.

Lindberg JW. 1995. *Hydrogeology of the 100-K area.* WHC-SD-EN-TI-294, Westinghouse Hanford Company, Richland, Washington.

Natrella MG. 1966. *Experimental statistics.* John Wiley and Sons, New York.

Newcomer DR, JP McDonald, and KD Pohlod. 1992. *Water-table elevations on the Hanford Site and outlying areas, 1991.* PNL-8122, Pacific Northwest Laboratory, Richland, Washington.

Peterson RE. 1994. *Groundwater monitoring results for the 100-K area fuel storage basins: January 1 to March 31, 1994.* WHC-SD-EN-TI-280, Rev. 0, Westinghouse Hanford Company, Richland, Washington.

Peterson RE, and VG Johnson. 1998. "100-K Area." In *Hanford Site groundwater monitoring for fiscal year 1997.* PNNL-11793, Pacific Northwest National Laboratory, Richland, Washington.

Peterson RE, RF Raidl, and CW Denslow. 1996. *Conceptual site models for groundwater contamination at 100-BC-5, 100-KR-4, 100-HR-3, and 100-FR-3 operable units.* BHI-00917, Bechtel Hanford, Inc., Richland, Washington.

Peterson, RE, JV Borghese, and DB Erb. 1998. *Aquifer sampling tube completion report: 100 area and Hanford townsite shorelines.* BHI-01153, Bechtel Hanford, Inc., Richland, Washington.

Schmidt JW, JW Fassett, VG Johnson, RM Mitchell, BM Markes, SM McKinney, KJ Moss, and CJ Perkins. 1996. *Westinghouse Hanford Company operational environmental monitoring annual report, calendar year 1995*. WHC-EP-0573-4, Westinghouse Hanford Company, Richland, Washington.

US Department of Energy (DOE). 1998. "Traces of plutonium measured near Hanford's K-Basins." Press release, June 19, 1998. Available URL: http://www.hanford.gov/press/1998/98-062.htm

US Department of Energy (DOE). "General environmental protection program." DOE Order 5400.1.

US Department of Energy (DOE). "Radioactive waste management." DOE Order 5820.2.

US Environmental Protection Agency (EPA). 1989. *Statistical analysis of groundwater monitoring data at RCRA facilities - Interim final guidance*. PB89-151047, Washington, D.C.

US Environmental Protection Agency (EPA). 1992. *Statistical analysis of groundwater monitoring data at RCRA facilities, draft addendum to interim final guidance*. EPA/530-R-93-003, Washington, D.C.

US Environmental Protection Agency (EPA). 1994. *Guidance for the data quality objective process*. QA/G-4, Washington, D.C.

Appendix

Groundwater Chemistry Data, July 1996 Through April 1998

Appendix

Groundwater Chemistry Data, July 1996 Through April 1998

This appendix includes groundwater chemistry data for wells monitoring the 100-K Area fuel-storage basins that were sampled between July 1996 and April 1998. The data were retrieved from the Hanford Environmental Information System.

Data flags and qualifiers that follow the "result" are defined below:

- applicable for all
  - U = not detected; concentration less than the given value
  - L = result below contract-required quantitation limit but above method detection limit
  - D = analysis performed on a diluted sample (result corrected for dilution)
  - J = estimated value
  - H = recommended holding time exceeded before analysis
  - F = data under review
  - R = data rejected following review
  - Y = data considered suspect after review
  - G = data considered good after review
  - Q = data associated with out-of-range quality control data (e.g., field blanks, duplicates).
- applicable for inorganics
  - B = result less than practical quantitation limit (PQL), but greater than or equal to instrument detection limit
  - C = blank contamination shown above PQL
  - E = reported value estimated because of the presence of interference
  - N = spiked sample recovery not within control limits.
- Applicable for organics
  - E = compound concentration exceeded calibration range of the equipment.

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
1,1,1-Trichloroethane	199-K-106A	7/30/96	B0J3Y2	N	.11 U		µg/L
		4/24/97	B0KB80	N	.03 U		µg/L
		9/29/97	B0M101	N	.18 U		µg/L
		4/28/98	B0NCM8	N	.18 U		µg/L
	199-K-108A	4/24/97	B0KB83	N	.04 J		µg/L
		4/28/98	B0NCN0	N	.18 U		µg/L
	199-K-109A	8/28/96	B0J685	N	.11 U		µg/L
		3/31/97	B0K057	N	.08 J		µg/L
		3/24/98	B0N470	N	.18 UH		µg/L
	199-K-27	3/24/97	B0K058	N	.06 J		µg/L
		3/25/98	B0N472	N	.18 U		µg/L
	199-K-34	4/28/97	B0KBB1	N	.11 J		µg/L
		4/27/98	B0NCL8	N	.18 U		µg/L
1,1,2-Trichloroethane	199-K-106A	7/30/96	B0J3Y2	N	.05 U		µg/L
		4/24/97	B0KB80	N	.05 J		µg/L
		9/29/97	B0M101	N	.10 U		µg/L
		4/28/98	B0NCM8	N	.10 U		µg/L
	199-K-108A	4/24/97	B0KB83	N	.04 U		µg/L
		4/28/98	B0NCN0	N	.10 U		µg/L
	199-K-109A	8/28/96	B0J685	N	.05 U		µg/L
		3/31/97	B0K057	N	.04 U		µg/L
		3/24/98	B0N470	N	.10 UH		µg/L
	199-K-27	3/24/97	B0K058	N	.04 U		µg/L
		3/25/98	B0N472	N	.10 U		µg/L
	199-K-34	4/28/97	B0KBB1	N	.04 U		µg/L
		4/27/98	B0NCL8	N	.10 U		µg/L
1,1-Dichloroethane	199-K-106A	7/30/96	B0J3Y2	N	.08 U		µg/L
		4/24/97	B0KB80	N	.02 U		µg/L
		9/29/97	B0M101	N	.20 U		µg/L
		4/28/98	B0NCM8	N	.20 U		µg/L
	199-K-108A	4/24/97	B0KB83	N	.02 U		µg/L
		4/28/98	B0NCN0	N	.20 U		µg/L
	199-K-109A	8/28/96	B0J685	N	.08 U		µg/L
		3/31/97	B0K057	N	.02 U		µg/L
		3/24/98	B0N470	N	.20 UH		µg/L
	199-K-27	3/24/97	B0K058	N	.02 U		µg/L
		3/25/98	B0N472	N	.20 U		µg/L
	199-K-34	4/28/97	B0KBB1	N	.02 U		µg/L
		4/27/98	B0NCL8	N	.20 U		µg/L
1,2-Dichloroethane	199-K-106A	7/30/96	B0J3Y2	N	.09 U		µg/L
		4/24/97	B0KB80	N	.02 U		µg/L
		9/29/97	B0M101	N	.20 U		µg/L
		4/28/98	B0NCM8	N	.14 U		µg/L
	199-K-108A	4/24/97	B0KB83	N	.02 U		µg/L
		4/28/98	B0NCN0	N	.14 U		µg/L
	199-K-109A	8/28/96	B0J685	N	.09 U		µg/L
		3/31/97	B0K057	N	.02 U		µg/L
		3/24/98	B0N470	N	.14 UH		µg/L
	199-K-27	3/24/97	B0K058	N	.02 U		µg/L
		3/25/98	B0N472	N	.14 U		µg/L
	199-K-34	4/28/97	B0KBB1	N	.02 U		µg/L
		4/27/98	B0NCL8	N	.14 U		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
1,4-Dichlorobenzene	199-K-106A	7/30/96	B0J3Y2	N	.11 U		µg/L
		4/24/97	B0KB80	N	.03 U		µg/L
					.03 U		µg/L
		9/29/97	B0M101	N	.18 U		µg/L
		4/28/98	B0NCM8	N	.18 U		µg/L
	199-K-108A	4/24/97	B0KB83	N	.03 U		µg/L
					.03 U		µg/L
		4/28/98	B0NCN0	N	.18 U		µg/L
	199-K-109A	8/28/96	B0J685	N	.11 U		µg/L
		3/31/97	B0K057	N	.03 U		µg/L
					.03 U		µg/L
		3/24/98	B0N470	N	.18 UHQ		µg/L
	199-K-27	3/24/97	B0K058	N	.03 U		µg/L
					.03 U		µg/L
		3/25/98	B0N472	N	.18 U		µg/L
	199-K-34	4/28/97	B0KBB1	N	.03 U		µg/L
					.03 U		µg/L
		4/27/98	B0NCL8	N	.30 BJ		µg/L
1-Butanol	199-K-106A	9/29/97	B0M101	N	2.50 U		µg/L
		4/28/98	B0NCM8	N	2.50 U		µg/L
	199-K-108A	4/28/98	B0NCN0	N	2.50 U		µg/L
	199-K-109A	3/24/98	B0N470	N	2.50 UH		µg/L
	199-K-27	3/25/98	B0N472	N	2.50 U		µg/L
	199-K-34	4/27/98	B0NCL8	N	2.50 U		µg/L
2-Butanone	199-K-106A	9/29/97	B0M101	N	.42 U		µg/L
		4/28/98	B0NCM8	N	.42 U		µg/L
	199-K-108A	4/28/98	B0NCN0	N	.42 U		µg/L
	199-K-109A	3/24/98	B0N470	N	.42 UH		µg/L
	199-K-27	3/25/98	B0N472	N	.42 U		µg/L
	199-K-34	4/27/98	B0NCL8	N	.42 U		µg/L
4-Methyl-2-pentanone	199-K-106A	9/29/97	B0M101	N	.19 U		µg/L
		4/28/98	B0NCM8	N	.20 U		µg/L
	199-K-108A	4/28/98	B0NCN0	N	.20 U		µg/L
	199-K-109A	3/24/98	B0N470	N	.20 UH		µg/L
	199-K-27	3/25/98	B0N472	N	.20 U		µg/L
	199-K-34	4/27/98	B0NCL8	N	.20 U		µg/L
Acetone	199-K-106A	9/29/97	B0M101	N	1.90 U		µg/L
		4/28/98	B0NCM8	N	1.90 U		µg/L
	199-K-108A	4/28/98	B0NCN0	N	1.90 U		µg/L
	199-K-109A	3/24/98	B0N470	N	1.90 UH		µg/L
	199-K-27	3/25/98	B0N472	N	1.90 U		µg/L
	199-K-34	4/27/98	B0NCL8	N	1.90 U		µg/L
Aluminum	199-K-106A	12/05/96	B0JLT0	N	58.50 U		µg/L
			B0JLT1	Y	58.50 U		µg/L
		10/27/97	B0M7M9	N	58.30 U		µg/L
			B0M7N0	Y	58.30 U		µg/L
	199-K-107A	12/05/96	B0JLR6	N	107.00 B		µg/L
			B0JLR7	Y	58.50 U		µg/L
		10/27/97	B0M786	Y	58.30 U		µg/L
			B0M787	N	58.30 U		µg/L
	199-K-108A	12/09/96	B0JLR8	N	37.90 B		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
			B0JLR9	Y	33.60 U		µg/L
		10/27/97	B0M792	Y	58.30 U		µg/L
			B0M793	N	58.30 U		µg/L
	199-K-109A	12/06/96	B0JLS0	N	58.50 U		µg/L
			B0JLS1	Y	58.50 U		µg/L
		10/24/97	B0M7H0	Y	58.30 U		µg/L
			B0M7H1	N	298.00		µg/L
	199-K-110A	4/23/97	B0KB86	Y	24.30 BC		µg/L
			B0KB88	Y	47.00 BC		µg/L
		10/27/97	B0M7C5	Y	58.30 U		µg/L
			B0M7C6	N	58.30 U		µg/L
		4/27/98	B0NCK7	Y	20.60 U		µg/L
	199-K-27	3/24/97	B0K059	Y	30.00 BC		µg/L
		10/27/97	B0M7H3	Y	58.30 U		µg/L
			B0M7H4	N	58.30 U		µg/L
		3/25/98	B0N471	Y	26.20 BC		µg/L
	199-K-30	7/29/96	B0J3W4	Y	19.00 BL	5.13	µg/L
		11/26/96	B0JLP8	N	58.50 U		µg/L
			B0JLP9	Y	58.50 U		µg/L
		10/24/97	B0M7H6	Y	58.30 U		µg/L
			B0M7H7	N	58.30 U		µg/L
	199-K-32A	12/09/96	B0JLQ2	N	82.20 B		µg/L
			B0JLQ3	Y	53.80 B		µg/L
		4/28/97	B0KBB0	Y	60.30 BC		µg/L
		10/29/97	B0M7J2	Y	58.30 U		µg/L
			B0M7J3	N	58.30 U		µg/L
		4/27/98	B0NCL3	Y	20.60 U		µg/L
	199-K-34	11/15/96	B0JLQ8	N	58.50 U		µg/L
			B0JLQ9	Y	58.50 U		µg/L
			B0JLS4	N	58.50 U		µg/L
			B0JLS5	Y	58.50 U		µg/L
			B0JLS8	N	43.10 U		µg/L
			B0JLS9	Y	43.10 U		µg/L
		4/28/97	B0KBB2	Y	55.20 BC		µg/L
		4/27/98	B0NCL7	Y	20.60 U		µg/L
Americium-241	199-K-107A	10/15/97	B0M673	N	-.08 U	.07	pCi/L
	199-K-109A	10/15/97	B0M672	N	.27 U	.62	pCi/L
Antimony	199-K-106A	12/05/96	B0JLT0	N	27.20 U		µg/L
			B0JLT1	Y	27.20 U		µg/L
		10/27/97	B0M7M9	N	36.10 U		µg/L
			B0M7N0	Y	36.10 U		µg/L
	199-K-107A	12/05/96	B0JLR6	N	27.20 U		µg/L
			B0JLR7	Y	27.20 U		µg/L
		10/27/97	B0M786	Y	36.10 U		µg/L
			B0M787	N	36.10 U		µg/L
	199-K-108A	12/09/96	B0JLR8	N	46.10 U		µg/L
			B0JLR9	Y	46.10 U		µg/L
		0/27/97	0M792	Y	36.10 U		µg/L
			M793	N	36.10 U		µg/L
	199-K-109A	12/06/96	B0JLS0	N	27.20 U		µg/L
			JLS1	Y	27.20 U		µg/L
		10/24/97	B0M7H0	Y	36.10 U		µg/L
			B0M7H1	N	36.10 U		µg/L
	199-K-110A	4/23/97	B0KB86	Y	20.20 U		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
			B0KB88	Y	20.20 U		µg/L
		10/27/97	B0M7C5	Y	36.10 U		µg/L
			B0M7C6	N	36.10 U		µg/L
		4/27/98	B0NCK7	Y	45.70 U		µg/L
	199-K-27	3/24/97	B0K059	Y	20.20 U		µg/L
		10/27/97	B0M7H3	Y	36.10 U		µg/L
			B0M7H4	N	36.10 U		µg/L
		3/25/98	B0N471	Y	45.70 U		µg/L
	199-K-30	7/29/96	B0J3W4	Y	43.00 U		µg/L
		11/26/96	B0JLP8	N	27.20 U		µg/L
			B0JLP9	Y	27.20 U		µg/L
		10/24/97	B0M7H6	Y	36.10 U		µg/L
			B0M7H7	N	36.10 U		µg/L
	199-K-32A	12/09/96	B0JLQ2	N	46.10 U		µg/L
			B0JLQ3	Y	46.10 U		µg/L
		4/28/97	B0KBB0	Y	21.90 B		µg/L
		10/29/97	B0M7J2	Y	36.10 U		µg/L
			B0M7J3	N	36.10 U		µg/L
		4/27/98	B0NCL3	Y	45.70 U		µg/L
	199-K-34	11/15/96	B0JLQ8	N	27.20 U		µg/L
			B0JLQ9	Y	27.20 U		µg/L
			B0JLS4	N	27.20 U		µg/L
			B0JLS5	Y	27.20 U		µg/L
			B0JLS8	N	24.80 U		µg/L
			B0JLS9	Y	24.80 U		µg/L
		4/28/97	B0KBB2	Y	20.20		µg/L
		4/27/98	B0NCL7	Y	45.70 U		µg/L
Antimony-125	199-K-106A	4/24/97	B0KB81	N	1.39 U	2.88	pCi/L
		9/29/97	B0M102	N	1.08 U	3.10	pCi/L
		10/15/97	B0M667	N	-.75 U	12.10	pCi/L
		4/28/98	B0NCM8	N	2.69 U	4.92	pCi/L
	199-K-107A	10/15/97	B0M673	N	2.11 U	9.80	pCi/L
	199-K-109A	8/28/96	B0J685	N	12.80	5.02	pCi/L
		3/31/97	B0K070	N	17.80 U	6.42	pCi/L
		10/15/97	B0M672	N	19.90 U	14.10	pCi/L
		3/24/98	B0N470	N	16.80 U	13.40	pCi/L
	199-K-27	8/28/96	B0J693	N	16.10	4.27	pCi/L
		3/24/97	B0K071	N	6.88 U	5.10	pCi/L
		9/26/97	B0M104	N	9.11 U	4.34	pCi/L
		10/15/97	B0M668	N	3.21 U	14.80	pCi/L
		3/25/98	B0N472	N	-3.66 U	11.60	pCi/L
	199-K-28	4/29/97	B0KB94	N	2.79 U	6.83	pCi/L
		10/15/97	B0M669	N	6.14 U	11.20	pCi/L
		4/27/98	B0NCL0	N	-.80 U	5.70	pCi/L
	199-K-29	4/23/97	B0KB96	N	.59 U	2.42	pCi/L
		10/15/97	B0M670	N	1.60 U	12.50	pCi/L
		4/27/98	B0NCL1	N	-.64 U	5.43	pCi/L
	199-K-30	4/29/97	B0KB98	N	-.76 U	5.27	pCi/L
		10/15/97	B0M671	N	.51 U	11.70	pCi/L
		4/27/98	B0NCL2	N	1.64 U	5.21	pCi/L
	199-K-34	4/28/97	B0KBB3	N	.40 U	3.24	pCi/L
		4/27/98	B0NCL8	N	2.94 U	6.41	pCi/L
Arsenic	199-K-34	11/15/96	B0JLS8	N	32.00 U		µg/L
			B0JLS9	Y	32.00 U		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
Barium	199-K-106A	12/05/96	B0JLT0	N	51.80 BE		µg/L
			B0JLT1	Y	52.70 BE		µg/L
		10/27/97	B0M7M9	N	46.50 BE		µg/L
			B0M7N0	Y	46.80 BE		µg/L
	199-K-107A	12/05/96	B0JLR6	N	41.00 BE		µg/L
			B0JLR7	Y	38.90 BE		µg/L
		10/27/97	B0M786	Y	34.00 B		µg/L
			B0M787	N	34.30 B		µg/L
	199-K-108A	12/09/96	B0JLR8	N	37.80 B		µg/L
			B0JLR9	Y	38.10 B		µg/L
		10/27/97	B0M792	Y	36.00 BE		µg/L
			B0M793	N	35.20 BE		µg/L
	199-K-109A	12/06/96	B0JLS0	N	42.00 BE		µg/L
			B0JLS1	Y	41.00 BE		µg/L
		10/24/97	B0M7H0	Y	36.00 BE		µg/L
			B0M7H1	N	37.00 BE		µg/L
	199-K-110A	4/23/97	B0KB86	Y	74.40 E		µg/L
			B0KB88	Y	75.10 E		µg/L
		10/27/97	B0M7C5	Y	75.90 B		µg/L
			B0M7C6	N	80.50 B		µg/L
		4/27/98	B0NCK7	Y	69.20		µg/L
	199-K-27	3/24/97	B0K059	Y	48.40 Q		µg/L
		10/27/97	B0M7H3	Y	31.20 B		µg/L
			B0M7H4	N	35.80 B		µg/L
		3/25/98	B0N471	Y	26.50		µg/L
	199-K-30	7/29/96	B0J3W4	Y	28.00	13.40	µg/L
		11/26/96	B0JLP8	N	41.50 B		µg/L
			B0JLP9	Y	50.80 B		µg/L
		10/24/97	B0M7H6	Y	33.30 BE		µg/L
			B0M7H7	N	30.90 BE		µg/L
	199-K-32A	12/09/96	B0JLQ2	N	28.20 B		µg/L
			B0JLQ3	Y	28.00 B		µg/L
		4/28/97	B0KBB0	Y	24.80 E		µg/L
		10/29/97	B0M7J2	Y	38.00 B		µg/L
			B0M7J3	N	36.90 B		µg/L
		4/27/98	B0NCL3	Y	26.10		µg/L
	199-K-34	11/15/96	B0JLQ8	N	30.20 B		µg/L
			B0JLQ9	Y	29.10 B		µg/L
			B0JLS4	N	30.60 B		µg/L
			B0JLS5	Y	29.40 B		µg/L
			B0JLS8	N	26.70		µg/L
			B0JLS9	Y	22.90		µg/L
		4/28/97	B0KBB2	Y	30.90 E		µg/L
		4/27/98	B0NCL7	Y	26.80		µg/L
Benzene	199-K-106A	7/30/96	B0J3Y2	N	.12 U		µg/L
		4/24/97	B0KB80	N	.03 U		µg/L
		9/29/97	B0M101	N	.17 U		µg/L
		4/28/98	B0NCM8	N	.17 U		µg/L
	199-K-108A	4/24/97	B0KB83	N	.03 U		µg/L
		4/28/98	B0NCN0	N	.17 U		µg/L
	199-K-109A	8/28/96	B0J685	N	.12 U		µg/L
		3/31/97	B0K057	N	.03 U		µg/L
		3/24/98	B0N470	N	.17 UH		µg/L
	199-K-27	3/24/97	B0K058	N	.03 U		µg/L
		3/25/98	B0N472	N	.17 U		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
	199-K-34	4/28/97	B0KBB1	N	.03 U		µg/L
		4/27/98	B0NCL8	N	.17 U		µg/L
Beryllium	199-K-106A	12/05/96	B0JLT0	N	.40 U		µg/L
			B0JLT1	Y	.40 U		µg/L
		10/27/97	B0M7M9	N	.40 U		µg/L
			B0M7N0	Y	.49 B		µg/L
	199-K-107A	12/05/96	B0JLR6	N	.40 U		µg/L
			B0JLR7	Y	.40 U		µg/L
		10/27/97	B0M786	Y	.40 U		µg/L
			B0M787	N	.53 B		µg/L
	199-K-108A	12/09/96	B0JLR8	N	.55 B		µg/L
			B0JLR9	Y	.55 B		µg/L
		10/27/97	B0M792	Y	.40 U		µg/L
			B0M793	N	.40 U		µg/L
	199-K-109A	12/06/96	B0JLS0	N	.40 U		µg/L
			B0JLS1	Y	.40 U		µg/L
		10/24/97	B0M7H0	Y	.40 U		µg/L
			B0M7H1	N	.57 B		µg/L
	199-K-110A	4/23/97	B0KB86	Y	.62 B		µg/L
			B0KB88	Y	.80 B		µg/L
		10/27/97	B0M7C5	Y	.40 U		µg/L
			B0M7C6	N	.59 B		µg/L
		4/27/98	B0NCK7	Y	.60 U		µg/L
	199-K-27	3/24/97	B0K059	Y	.40 U		µg/L
		10/27/97	B0M7H3	Y	.40 U		µg/L
			B0M7H4	N	.60 B		µg/L
		3/25/98	B0N471	Y	.66 B		µg/L
	199-K-30	7/29/96	B0J3W4	Y	.33 BL	.06	µg/L
		11/26/96	B0JLP8	N	.40 U		µg/L
			B0JLP9	Y	.40 U		µg/L
		10/24/97	B0M7H6	Y	.40 U		µg/L
			B0M7H7	N	.40 U		µg/L
	199-K-32A	12/09/96	B0JLQ2	N	.77 B		µg/L
			B0JLQ3	Y	.55 B		µg/L
		4/28/97	B0KBB0	Y	.40 U		µg/L
		10/29/97	B0M7J2	Y	.40 U		µg/L
			B0M7J3	N	.40 U		µg/L
		4/27/98	B0NCL3	Y	.60 U		µg/L
	199-K-34	11/15/96	B0JLQ8	N	.40 U		µg/L
			B0JLQ9	Y	.40 U		µg/L
			B0JLS4	N	.40 U		µg/L
			B0JLS5	Y	.40 U		µg/L
			B0JLS8	N	.20 U		µg/L
			B0JLS9	Y	.20 U		µg/L
		4/28/97	B0KBB2	Y	.40 U		µg/L
		4/27/98	B0NCL7	Y	.60 U		µg/L
Beryllium-7	199-K-106A	7/30/96	B0J3Y2	N	6.90 U	7.22	pCi/L
		4/24/97	B0KB81	N	7.27 U	10.90	pCi/L
		9/29/97	B0M102	N	-4.35 U	10.40	pCi/L
		4/28/98	B0NCM8	N	17.00 U	23.60	pCi/L
	199-K-109A	8/28/96	B0J685	N	10.80	9.60	pCi/L
		3/31/97	B0K070	N	-14.50 U	16.10	pCi/L
		3/24/98	B0N470	N	9.55 U	56.50	pCi/L
	199-K-27	8/28/96	B0J693	N	.32 U	9.14	pCi/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		3/24/97	B0K071	N	-.79 U	12.90	pCi/L
		9/26/97	B0M104	N	-5.69 U	11.00	pCi/L
		3/25/98	B0N472	N	49.20 U	52.10	pCi/L
	199-K-28	4/29/97	B0KB94	N	-14.30 U	23.00	pCi/L
		4/27/98	B0NCL0	N	32.30 U	28.60	pCi/L
	199-K-29	4/23/97	B0KB96	N	8.92 U	9.84	pCi/L
		4/27/98	B0NCL1	N	15.70 U	28.30	pCi/L
	199-K-30	7/29/96	B0J3W3	N	1.84 U	10.10	pCi/L
		4/29/97	B0KB98	N	1.40 U	18.20	pCi/L
		4/27/98	B0NCL2	N	-15.50 U	24.80	pCi/L
	199-K-34	4/28/97	B0KBB3	N	9.61 U	8.07	pCi/L
		4/27/98	B0NCL8	N	16.60 U	22.90	pCi/L
Bromide	199-K-106A	7/30/96	B0J3Y2	N	210.00	25.20	µg/L
		10/29/96	B0JK56	N	.26		mg/L
		1/20/97	B0JTV2	N	.02 U		mg/L
		4/24/97	B0K564	N	.27		mg/L
		10/15/97	B0M667	N	.27		mg/L
	199-K-107A	7/31/96	B0J5V0	N	100.00 L	12.00	µg/L
		10/28/96	B0JK49	N	.15		mg/L
		1/15/97	B0JTT5	N	.02 U		mg/L
		4/24/97	B0K555	N	.16		mg/L
		10/15/97	B0M673	N	.16 B		mg/L
	199-K-108A	7/30/96	B0J5V1	N	110.00 L	13.20	µg/L
		10/28/96	B0JK50	N	.17		mg/L
		1/15/97	B0JTT6	N	.02 U		mg/L
		4/24/97	B0K556	N	.22		mg/L
	199-K-109A	7/29/96	B0J5V8	N	19.00 L	2.28	µg/L
		8/28/96	B0J685	N	60.00 L	7.20	µg/L
		10/28/96	B0JK59	N	.02 U		mg/L
		1/14/97	B0JTV5	N	.02 U		mg/L
		3/31/97	B0K057	N	.19		mg/L
		4/28/97	B0K571	N	.17		mg/L
		10/15/97	B0M672	N	.18 B		mg/L
	199-K-110A	7/30/96	B0J5V2	N	86.00 L	10.30	µg/L
		10/28/96	B0JK51	N	.16		mg/L
		1/16/97	B0JTT7	N	.02 U		mg/L
		4/23/97	B0K557	N	.16		mg/L
			B0K558	N	.16		mg/L
	199-K-27	7/31/96	B0J5V7	N	90.00 L	10.80	µg/L
		8/28/96	B0J693	N	110.00 L	13.20	µg/L
		10/28/96	B0JK57	N	.02 U		mg/L
		1/14/97	B0JTV3	N	.02 U		mg/L
		3/24/97	B0K058	N	.02 U		mg/L
		4/28/97	B0K566	N	.11 B		mg/L
		10/15/97	B0M668	N	.10 B		mg/L
	199-K-28	7/30/96	B0J5V3	N	110.00 L	13.20	µg/L
		10/28/96	B0JK52	N	.02 U		mg/L
		1/14/97	B0JTT8	N	.02 U		mg/L
		4/29/97	B0K559	N	.13 B		mg/L
		10/15/97	B0M669	N	.12 B		mg/L
	199-K-29	7/30/96	B0J5V4	N	86.00 L	10.30	µg/L
		10/28/96	B0JK53	N	.02 U		mg/L
		1/14/97	B0JTT9	N	.02 U		mg/L
		4/23/97	B0K560	N	.13 B		mg/L
		10/15/97	B0M670	N	.13 B		mg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
	199-K-30	7/29/96	B0J3W3	N	190.00	22.80	µg/L
		10/29/96	B0JK58	N	.25		mg/L
		1/15/97	B0JTV4	N	.02 U		mg/L
		4/29/97	B0K568	N	.27		mg/L
		10/15/97	B0M671	N	.22 B		mg/L
	199-K-32A	7/30/96	B0J5V5	N	15.00 UD		µg/L
		10/29/96	B0JK54	N	.19		mg/L
		1/20/97	B0JTV0	N	.02 U		mg/L
		4/28/97	B0K561	N	.01 B		mg/L
	199-K-34	7/30/96	B0J5V6	N	200.00	24.00	µg/L
		10/29/96	B0JK55	N	.25		mg/L
		1/16/97	B0JTV1	N	.02 U		mg/L
		4/28/97	B0K562	N	.15		mg/L
Cadmium	199-K-106A	12/05/96	B0JLT0	N	3.00 U		µg/L
			B0JLT1	Y	3.00 U		µg/L
		10/27/97	B0M7M9	N	3.00 UN		µg/L
			B0M7N0	Y	3.00 UN		µg/L
	199-K-107A	12/05/96	B0JLR6	N	3.00 U		µg/L
			B0JLR7	Y	3.00 U		µg/L
		10/27/97	B0M786	Y	3.00 U		µg/L
			B0M787	N	3.00 U		µg/L
	199-K-108A	12/09/96	B0JLR8	N	3.00 U		µg/L
			B0JLR9	Y	3.00 U		µg/L
		10/27/97	B0M792	Y	3.00 UN		µg/L
			B0M793	N	3.00 UN		µg/L
	199-K-109A	12/06/96	B0JLS0	N	3.00 U		µg/L
			B0JLS1	Y	3.00 U		µg/L
		10/24/97	B0M7H0	Y	3.00 UN		µg/L
			B0M7H1	N	3.00 UN		µg/L
	199-K-110A	4/23/97	B0KB86	Y	3.40 U		µg/L
			B0KB88	Y	3.40 U		µg/L
		10/27/97	B0M7C5	Y	3.00 U		µg/L
			B0M7C6	N	3.00 U		µg/L
		4/27/98	B0NCK7	Y	4.60 U		µg/L
	199-K-27	3/24/97	B0K059	Y	3.40 U		µg/L
		10/27/97	B0M7H3	Y	3.40 B		µg/L
			B0M7H4	N	3.20 B		µg/L
		3/25/98	B0N471	Y	4.60 U		µg/L
	199-K-30	7/29/96	B0J3W4	Y	3.20 U		µg/L
		11/26/96	B0JLP8	N	3.00 U		µg/L
			B0JLP9	Y	3.00 U		µg/L
		10/24/97	B0M7H6	Y	3.00 UN		µg/L
			B0M7H7	N	3.00 UN		µg/L
	199-K-32A	12/09/96	B0JLQ2	N	3.00 U		µg/L
			B0JLQ3	Y	3.00 U		µg/L
		4/28/97	B0KBB0	Y	3.40 U		µg/L
		10/29/97	B0M7J2	Y	3.00 UN		µg/L
			B0M7J3	N	4.60 BN		µg/L
		4/27/98	B0NCL3	Y	4.60 U		µg/L
	199-K-34	11/15/96	B0JLQ8	N	3.00 U		µg/L
			B0JLQ9	Y	3.00 U		µg/L
			B0JLS4	N	3.00 U		µg/L
			B0JLS5	Y	3.00 U		µg/L
			B0JLS8	N	4.00 U		µg/L
			B0JLS9	Y	4.00		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		4/28/97	B0KBB2	Y	3.40 U		µg/L
		4/27/98	B0NCL7	Y	6.40		µg/L
Calcium	199-K-106A	12/05/96	B0JLT0	N	69900.00		µg/L
			B0JLT1	Y	72400.00		µg/L
		10/27/97	B0M7M9	N	72700.00		µg/L
			B0M7N0	Y	74100.00		µg/L
	199-K-107A	12/05/96	B0JLR6	N	47600.00		µg/L
			B0JLR7	Y	47600.00		µg/L
		10/27/97	B0M786	Y	45300.00		µg/L
			B0M787	N	44400.00		µg/L
	199-K-108A	12/09/96	B0JLR8	N	59700.00		µg/L
			B0JLR9	Y	60400.00		µg/L
		10/27/97	B0M792	Y	58500.00		µg/L
			B0M793	N	57300.00		µg/L
	199-K-109A	12/06/96	B0JLS0	N	66200.00		µg/L
			B0JLS1	Y	66100.00		µg/L
		10/24/97	B0M7H0	Y	73400.00		µg/L
			B0M7H1	N	72900.00		µg/L
	199-K-110A	4/23/97	B0KB86	Y	131000.00 C		µg/L
			B0KB88	Y	133000.00 C		µg/L
		10/27/97	B0M7C5	Y	130000.00		µg/L
			B0M7C6	N	130000.00		µg/L
		4/27/98	B0NCK7	Y	131000.00		µg/L
	199-K-27	3/24/97	B0K059	Y	65900.00 CQ		µg/L
		10/27/97	B0M7H3	Y	57500.00		µg/L
			B0M7H4	N	67300.00		µg/L
		3/25/98	B0N471	Y	70700.00 NC		µg/L
	199-K-30	7/29/96	B0J3W4	Y	54000.00	9720.00	µg/L
		11/26/96	B0JLP8	N	55300.00		µg/L
			B0JLP9	Y	55800.00		µg/L
		10/24/97	B0M7H6	Y	60700.00		µg/L
			B0M7H7	N	56100.00		µg/L
	199-K-32A	12/09/96	B0JLQ2	N	47700.00		µg/L
			B0JLQ3	Y	49400.00		µg/L
		4/28/97	B0KBB0	Y	46200.00 CQ		µg/L
		10/29/97	B0M7J2	Y	73500.00		µg/L
			B0M7J3	N	71300.00		µg/L
		4/27/98	B0NCL3	Y	54200.00		µg/L
	199-K-34	11/15/96	B0JLQ8	N	50800.00		µg/L
			B0JLQ9	Y	49700.00		µg/L
			B0JLS4	N	51100.00		µg/L
			B0JLS5	Y	50500.00		µg/L
			B0JLS8	N	52000.00		µg/L
			B0JLS9	Y	46000.00		µg/L
		4/28/97	B0KBB2	Y	56200.00 CQ		µg/L
		4/27/98	B0NCL7	Y	54300.00		µg/L
Carbon disulfide	199-K-106A	9/29/97	B0M101	N	.15 U		µg/L
		4/28/98	B0NCM8	N	.15 U		µg/L
	199-K-108A	4/28/98	B0NCN0	N	.15 U		µg/L
	199-K-109A	3/24/98	B0N470	N	.15 UH		µg/L
	199-K-27	3/25/98	B0N472	N	.15 U		µg/L
	199-K-34	4/27/98	B0NCL8	N	.15 U		µg/L
Carbon tetrachloride	199-K-106A	7/30/96	B0J3Y2	N	.05 U		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		4/24/97	B0KB80	N	.03 U		µg/L
		9/29/97	B0M101	N	.14 U		µg/L
		4/28/98	B0NCM8	N	.14 U		µg/L
	199-K-108A	4/24/97	B0KB83	N	.03 U		µg/L
		4/28/98	B0NCN0	N	.14 U		µg/L
	199-K-109A	8/28/96	B0J685	N	.05 U		µg/L
		3/31/97	B0K057	N	.03 U		µg/L
		3/24/98	B0N470	N	.14 UH		µg/L
	199-K-27	3/24/97	B0K058	N	.03 U		µg/L
		3/25/98	B0N472	N	1.00 J		µg/L
	199-K-34	4/28/97	B0KBB1	N	.03 U		µg/L
		4/27/98	B0NCL8	N	.14 U		µg/L
Carbon-14	199-K-106A	12/05/96	B0JLT0	N	18000.00	827.00	pCi/L
		4/24/97	B0KB80	N	39600.00	1820.00	pCi/L
		9/29/97	B0M101	N	36900.00	1700.00	pCi/L
		10/27/97	B0M7M9	N	30500.00	1400.00	pCi/L
		4/28/98	B0NCM8	N	35000.00	1640.00	pCi/L
	199-K-108A	12/09/96	B0JLR8	N	3470.00	161.00	pCi/L
		4/24/97	B0KB83	N	2780.00	131.00	pCi/L
		10/27/97	B0M793	N	2650.00	125.00	pCi/L
		4/28/98	B0NCN0	N	4160.00	198.00	pCi/L
	199-K-109A	8/28/96	B0J685	N	25.70	3.79	pCi/L
		3/31/97	B0K057	N	48.90 J	7.11	pCi/L
		3/24/98	B0N470	N	145.00 J	11.00	pCi/L
	199-K-27	3/24/97	B0K058	N	320.00	18.80	pCi/L
		3/25/98	B0N472	N	317.00	18.60	pCi/L
	199-K-28	4/29/97	B0KB93	N	1060.00	52.40	pCi/L
		4/27/98	B0NCL0	N	1300.00	63.30	pCi/L
	199-K-29	4/23/97	B0KB95	N	4610.00	215.00	pCi/L
		4/27/98	B0NCL1	N	4440.00	207.00	pCi/L
	199-K-30	11/26/96	B0JLP8	N	12500.00	574.00	pCi/L
		4/29/97	B0KB97	N	18200.00	837.00	pCi/L
		10/24/97	B0M7H7	N	13600.00	625.00	pCi/L
		4/27/98	B0NCL2	N	13700.00	633.00	pCi/L
	199-K-32A	12/09/96	B0JLQ2	N	192.00 J	10.80	pCi/L
		10/29/97	B0M7J3	N	94.50 J	8.82	pCi/L
	199-K-34	11/15/96	B0JLQ8	N	2450.00	114.00	pCi/L
			B0JLS4	N	3180.00	147.00	pCi/L
			B0JLS8	N	4100.00	420.00	pCi/L
		4/28/97	B0KBB1	N	4790.00	223.00	pCi/L
		4/27/98	B0NCL8	N	4510.00	210.00	pCi/L
Cesium-134	199-K-106A	7/30/96	B0J3Y2	N	-.36 U	.99	pCi/L
		4/24/97	B0KB81	N	-1.15 U	1.16	pCi/L
		9/29/97	B0M102	N	.11 U	1.11	pCi/L
		10/15/97	B0M667	N	.25 U	3.85	pCi/L
		4/28/98	B0NCM8	N	.66 U	1.89	pCi/L
	199-K-107A	10/15/97	B0M673	N	-2.48 U	4.24	pCi/L
	199-K-109A	8/28/96	B0J685	N	-.40 U	1.26	pCi/L
		3/31/97	B0K070	N	.93 U	1.81	pCi/L
		10/15/97	B0M672	N	-6.90 U	5.31	pCi/L
		3/24/98	B0N470	N	2.52 U	4.28	pCi/L
	199-K-27	8/28/96	B0J693	N	-.14 U	1.22	pCi/L
		3/24/97	B0K071	N	.71 U	1.72	pCi/L
		9/26/97	B0M104	N	-.06 U	1.28	pCi/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		10/15/97	B0M668	N	-6.36 U	5.25	pCi/L
		3/25/98	B0N472	N	1.99 U	4.51	pCi/L
	199-K-28	4/29/97	B0KB94	N	-.10 U	2.17	pCi/L
		10/15/97	B0M669	N	-2.85 U	4.94	pCi/L
		4/27/98	B0NCL0	N	1.02 U	2.14	pCi/L
	199-K-29	4/23/97	B0KB96	N	-.50 U	1.13	pCi/L
		10/15/97	B0M670	N	-2.51 U	4.90	pCi/L
		4/27/98	B0NCL1	N	-.70 U	2.20	pCi/L
	199-K-30	7/29/96	B0J3W3	N	.62 U	1.01	pCi/L
		4/29/97	B0KB98	N	1.43 U	2.19	pCi/L
		10/15/97	B0M671	N	2.41 U	3.71	pCi/L
		4/27/98	B0NCL2	N	1.30 U	2.01	pCi/L
	199-K-34	4/28/97	B0KBB3	N	.18 U	1.22	pCi/L
		4/27/98	B0NCL8	N	-.17 U	2.69	pCi/L
Cesium-137	199-K-106A	7/30/96	B0J3Y2	N	.62 U	.92	pCi/L
		12/05/96	B0JLT0	N	-.43 U	4.60	pCi/L
		4/24/97	B0KB81	N	-.41 U	1.07	pCi/L
		9/29/97	B0M102	N	-.93 U	1.21	pCi/L
		10/15/97	B0M667	N	-7.76 U	4.77	pCi/L
		10/27/97	B0M7M9	N	.85 U	4.10	pCi/L
		4/28/98	B0NCM8	N	-.44 U	2.64	pCi/L
	199-K-107A	12/05/96	B0JLR6	N	1.00 U	4.86	pCi/L
		10/15/97	B0M673	N	-2.24 U	5.16	pCi/L
		10/27/97	B0M787	N	-6.53 U	5.51	pCi/L
	199-K-108A	12/09/96	B0JLR8	N	.88 U	3.99	pCi/L
		10/27/97	B0M793	N	-1.87 U	4.73	pCi/L
	199-K-109A	8/28/96	B0J685	N	.46 U	1.46	pCi/L
		12/06/96	B0JLS0	N	4.94 U	3.53	pCi/L
		3/31/97	B0K070	N	-1.91 U	1.62	pCi/L
		10/15/97	B0M672	N	-2.53 U	4.85	pCi/L
		10/24/97	B0M7H1	N	-2.12 U	4.71	pCi/L
		3/24/98	B0N470	N	3.60 U	3.54	pCi/L
	199-K-110A	10/27/97	B0M7C6	N	-1.14 U	4.73	pCi/L
	199-K-27	8/28/96	B0J693	N	-.49 U	1.23	pCi/L
		3/24/97	B0K071	N	-.37 U	1.56	pCi/L
		9/26/97	B0M104	N	-.27 U	1.01	pCi/L
		10/15/97	B0M668	N	2.17 U	3.83	pCi/L
		10/27/97	B0M7H4	N	-2.58 U	4.64	pCi/L
		3/25/98	B0N472	N	.88 U	5.45	pCi/L
	199-K-28	4/29/97	B0KB94	N	-1.22 U	1.74	pCi/L
		10/15/97	B0M669	N	3.85 U	4.85	pCi/L
		4/27/98	B0NCL0	N	-2.42 U	2.51	pCi/L
	199-K-29	4/23/97	B0KB96	N	1.54 U	.76	pCi/L
		10/15/97	B0M670	N	1.68 U	4.53	pCi/L
		4/27/98	B0NCL1	N	.31 U	2.22	pCi/L
	199-K-30	7/29/96	B0J3W3	N	-.39 U	.93	pCi/L
		11/26/96	B0JLP8	N	2.00 U	4.15	pCi/L
		4/29/97	B0KB98	N	-1.96 U	2.41	pCi/L
		10/15/97	B0M671	N	-1.12 U	4.43	pCi/L
		10/24/97	B0M7H7	N	1.21 U	4.14	pCi/L
		4/27/98	B0NCL2	N	4.06 U	2.24	pCi/L
	199-K-32A	12/09/96	B0JLQ2	N	0.00 U	4.88	pCi/L
		10/29/97	B0M7J3	N	2.79 U	4.32	pCi/L
	199-K-34	11/15/96	B0JLQ8	N	4.63 U	4.70	pCi/L
			B0JLS4	N	5.05 U	4.74	pCi/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
			B0JLS8	N	U		pCi/L
		4/28/97	B0KBB3	N	.20 U	1.06	pCi/L
		4/27/98	B0NCL8	N	0.00 U	2.18	pCi/L
Chloride	199-K-106A	7/30/96	B0J3Y2	N	21000.00 D	3780.00	µg/L
		10/29/96	B0JK56	N	28.40 D		mg/L
		12/05/96	B0JLT0	N	30.30		mg/L
		1/20/97	B0JTV2	N	26.70 D		mg/L
		4/24/97	B0K564	N	23.50 DQ		mg/L
		7/28/97	B0LBP7	N	25.80 D		mg/L
		10/15/97	B0M667	N	33.80 D		mg/L
		1/22/98	B0MNV0	N	34.40 CD		mg/L
		4/28/98	B0NBC9	N	25.10 D		mg/L
	199-K-107A	7/31/96	B0J5V0	N	6600.00	1190.00	µg/L
		10/28/96	B0JK49	N	6.68 D		mg/L
		12/05/96	B0JLR6	N	7.28		mg/L
		1/15/97	B0JTT5	N	7.44 D		mg/L
		4/24/97	B0K555	N	7.77 DQ		mg/L
		7/28/97	B0LBP9	N	6.82 D		mg/L
		10/15/97	B0M673	N	7.40 CD		mg/L
		1/22/98	B0MNR9	N	7.62 CD		mg/L
		4/28/98	B0NBD0	N	8.26 D		mg/L
	199-K-108A	7/30/96	B0J5V1	N	10000.00 D	1800.00	µg/L
		10/28/96	B0JK50	N	7.55 D		mg/L
		12/09/96	B0JLR8	N	8.00		mg/L
		1/15/97	B0JTT6	N	7.88 D		mg/L
		4/24/97	B0K556	N	7.10 DQ		mg/L
		7/28/97	B0LBR0	N	8.36 D		mg/L
		10/27/97	B0M793	N	7.32		mg/L
		1/22/98	B0MNT0	N	6.36 CD		mg/L
		4/28/98	B0NBD1	N	6.48 D		mg/L
	199-K-109A	7/29/96	B0J5V8	N	11000.00 D	1980.00	µg/L
		8/28/96	B0J685	N	7700.00	1390.00	µg/L
		10/28/96	B0JK59	N	14.90 D		mg/L
		12/06/96	B0JLS0	N	25.00		mg/L
		1/14/97	B0JTV5	N	22.30 D		mg/L
		3/31/97	B0K057	N	12.90 D		mg/L
		4/28/97	B0K571	N	12.80 D		mg/L
		7/28/97	B0LBR1	N	28.60 D		mg/L
		10/15/97	B0M672	N	20.40 CD		mg/L
		1/27/98	B0MNT4	N	30.90 D		mg/L
		3/24/98	B0N470	N	35.50 D		mg/L
		4/30/98	B0NBC1	N	32.50 D		mg/L
	199-K-110A	7/30/96	B0J5V2	N	39000.00 D	7020.00	µg/L
		10/28/96	B0JK51	N	76.80 D		mg/L
		1/16/97	B0JTT7	N	129.00 D		mg/L
		4/23/97	B0K557	N	84.10 D		mg/L
			B0K558	N	82.00 D		mg/L
		7/28/97	B0LBR3	N	54.20 D		mg/L
		10/27/97	B0M7C6	N	52.80		mg/L
		1/28/98	B0MNT1	N	90.30 CD		mg/L
		4/27/98	B0NBD2	N	68.60 D		mg/L
	199-K-27	7/31/96	B0J5V7	N	59000.00 D	10600.00	µg/L
		8/28/96	B0J693	N	61000.00 D	11000.00	µg/L
		10/28/96	B0JK57	N	47.20 D		mg/L
		1/14/97	B0JTV3	N	32.90 D		mg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		3/24/97	B0K058	N	43.60 D		mg/L
		4/28/97	B0K566	N	46.30 D		mg/L
		7/28/97	B0LBR4	N	40.40 D		mg/L
		9/26/97	B0M103	N	33.70 D		mg/L
		10/15/97	B0M668	N	34.70 D		mg/L
		1/26/98	B0MNT6	N	39.60 D		mg/L
		3/25/98	B0N472	N	44.00 D		mg/L
		4/30/98	B0NBC3	N	40.70 D		mg/L
	199-K-28	7/30/96	B0J5V3	N	59000.00 D	10600.00	µg/L
		10/28/96	B0JK52	N	59.20 D		mg/L
		1/14/97	B0JTT8	N	85.60 D		mg/L
		4/29/97	B0K559	N	70.00 D		mg/L
		7/28/97	B0LBR6	N	66.80 D		mg/L
		10/15/97	B0M669	N	67.80 CD		mg/L
		1/26/98	B0MNT2	N	124.00 D		mg/L
		4/27/98	B0NBD3	N	192.00 D		mg/L
	199-K-29	7/30/96	B0J5V4	N	34000.00 D	6120.00	µg/L
		10/28/96	B0JK53	N	39.30 D		mg/L
		1/14/97	B0JTT9	N	45.20 D		mg/L
		4/23/97	B0K560	N	66.00 D		mg/L
		7/28/97	B0LBR7	N	55.00 D		mg/L
		10/15/97	B0M670	N	43.90 CD		mg/L
		1/26/98	B0MNR6	N	50.70 D		mg/L
		4/27/98	B0NBB7	N	35.90 D		mg/L
	199-K-30	7/29/96	B0J3W3	N	6500.00	1170.00	µg/L
		10/29/96	B0JK58	N	5.54 D		mg/L
		11/26/96	B0JLP8	N	5.38		mg/L
		1/15/97	B0JTV4	N	5.16 DH		mg/L
		4/29/97	B0K568	N	7.78 D		mg/L
		7/29/97	B0LBR8	N	9.36 CD		mg/L
		10/15/97	B0M671	N	10.40 CD		mg/L
		1/26/98	B0MNT8	N	12.80 D		mg/L
		4/27/98	B0NBC5	N	8.73 D		mg/L
	199-K-32A	7/30/96	B0J5V5	N	5600.00	1010.00	µg/L
		10/29/96	B0JK54	N	4.08		mg/L
		12/09/96	B0JLQ2	N	3.83		mg/L
		1/20/97	B0JTV0	N	4.61 D		mg/L
		4/28/97	B0K561	N	4.16		mg/L
		7/28/97	B0LBT1	N	4.98 D		mg/L
		10/29/97	B0M7J3	N	3.85		mg/L
		1/28/98	B0MNR7	N	4.02 C		mg/L
		4/27/98	B0NBB8	N	3.90		mg/L
	199-K-34	7/30/96	B0J5V6	N	12000.00 D	2160.00	µg/L
		10/29/96	B0JK55	N	5.37 D		mg/L
		11/15/96	B0JLQ8	N	4.84		mg/L
			B0JLS4	N	4.65		mg/L
			B0JLS8	N	4.32		mg/L
		1/16/97	B0JTV1	N	4.63		mg/L
		4/28/97	B0K562	N	4.84		mg/L
		7/28/97	B0LBT3	N	7.86 D		mg/L
		10/27/97	B0M2W4	N	6.70 D		mg/L
		1/28/98	B0MNR8	N	5.80 CD		mg/L
		4/27/98	B0NBB9	N	5.13 D		mg/L
Chloroform	199-K-106A	7/30/96	B0J3Y2	N	.18 L		µg/L
		4/24/97	B0KB80	N	.20 Q		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		9/29/97	B0M101	N	.17 U		µg/L
		4/28/98	B0NCM8	N	.20 J		µg/L
	199-K-108A	4/24/97	B0KB83	N	.61 Q		µg/L
		4/28/98	B0NCN0	N	.60 J		µg/L
	199-K-109A	8/28/96	B0J685	N	.14 L		µg/L
		3/31/97	B0K057	N	.51		µg/L
		3/24/98	B0N470	N	1.00 JH		µg/L
	199-K-27	3/24/97	B0K058	N	3.40		µg/L
		3/25/98	B0N472	N	2.00 JQ		µg/L
	199-K-34	4/28/97	B0KBB1	N	.82 Q		µg/L
		4/27/98	B0NCL8	N	.50 J		µg/L
Chromium	199-K-106A	12/05/96	B0JLT0	N	4.40 U		µg/L
			B0JLT1	Y	4.40 U		µg/L
		10/27/97	B0M7M9	N	5.70 B		µg/L
			B0M7N0	Y	3.50 U		µg/L
	199-K-107A	12/05/96	B0JLR6	N	197.00		µg/L
			B0JLR7	Y	190.00		µg/L
		10/27/97	B0M786	Y	191.00		µg/L
			B0M787	N	183.00		µg/L
	199-K-108A	12/09/96	B0JLR8	N	160.00		µg/L
			B0JLR9	Y	154.00		µg/L
		10/27/97	B0M792	Y	83.40		µg/L
			B0M793	N	83.90		µg/L
	199-K-109A	12/06/96	B0JLS0	N	30.40		µg/L
			B0JLS1	Y	5.80 B		µg/L
		10/24/97	B0M7H0	Y	14.20		µg/L
			B0M7H1	N	12.90		µg/L
	199-K-110A	4/23/97	B0KB86	Y	3.50 B		µg/L
			B0KB88	Y	5.10 B		µg/L
		10/27/97	B0M7C5	Y	3.50 U		µg/L
			B0M7C6	N	447.00		µg/L
		4/27/98	B0NCK7	Y	4.20 B		µg/L
	199-K-27	3/24/97	B0K059	Y	3.30 B		µg/L
		10/27/97	B0M7H3	Y	3.50 U		µg/L
			B0M7H4	N	3.50 U		µg/L
		3/25/98	B0N471	Y	2.10 U		µg/L
	199-K-30	7/29/96	B0J3W4	Y	7.00 L	2.94	µg/L
		11/26/96	B0JLP8	N	6.20 B		µg/L
			B0JLP9	Y	5.60 B		µg/L
		10/24/97	B0M7H6	Y	7.10 B		µg/L
			B0M7H7	N	6.00 B		µg/L
	199-K-32A	12/09/96	B0JLQ2	N	25.30		µg/L
			B0JLQ3	Y	21.70		µg/L
		4/28/97	B0KBB0	Y	23.00		µg/L
		10/29/97	B0M7J2	Y	35.60		µg/L
			B0M7J3	N	39.50		µg/L
		4/27/98	B0NCL3	Y	39.40		µg/L
	199-K-34	11/15/96	B0JLQ8	N	13.90		µg/L
			B0JLQ9	Y	7.70 B		µg/L
			B0JLS4	N	12.30		µg/L
			B0JLS5	Y	7.10 B		µg/L
			B0JLS8	N	12.60		µg/L
			B0JLS9	Y	10.30		µg/L
		4/28/97	B0KBB2	Y	37.40		µg/L
		4/27/98	B0NCL7	Y	16.80		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
Cobalt	199-K-106A	12/05/96	B0JLT0	N	3.00 U		µg/L
			B0JLT1	Y	3.00 U		µg/L
		10/27/97	B0M7M9	N	4.20 U		µg/L
			B0M7N0	Y	4.20 U		µg/L
	199-K-107A	12/05/96	B0JLR6	N	3.00 U		µg/L
			B0JLR7	Y	3.00 U		µg/L
		10/27/97	B0M786	Y	4.20 U		µg/L
			B0M787	N	4.20 U		µg/L
	199-K-108A	12/09/96	B0JLR8	N	3.80 U		µg/L
			B0JLR9	Y	3.80 U		µg/L
		10/27/97	B0M792	Y	4.20 U		µg/L
			B0M793	N	4.20 U		µg/L
	199-K-109A	12/06/96	B0JLS0	N	3.00 U		µg/L
			B0JLS1	Y	3.00 U		µg/L
		10/24/97	B0M7H0	Y	4.20 U		µg/L
			B0M7H1	N	4.20 U		µg/L
	199-K-110A	4/23/97	B0KB86	Y	2.70 U		µg/L
			B0KB88	Y	2.70 U		µg/L
		10/27/97	B0M7C5	Y	4.20 U		µg/L
			B0M7C6	N	6.60 B		µg/L
		4/27/98	B0NCK7	Y	5.80 B		µg/L
	199-K-27	3/24/97	B0K059	Y	2.70 U		µg/L
		10/27/97	B0M7H3	Y	4.20 U		µg/L
			B0M7H4	N	4.20 U		µg/L
		3/25/98	B0N471	Y	3.80 U		µg/L
	199-K-30	7/29/96	B0J3W4	Y	5.00 U		µg/L
		11/26/96	B0JLP8	N	3.00 U		µg/L
			B0JLP9	Y	3.00 U		µg/L
		10/24/97	B0M7H6	Y	4.20 U		µg/L
			B0M7H7	N	4.20 U		µg/L
	199-K-32A	12/09/96	B0JLQ2	N	3.80 U		µg/L
			B0JLQ3	Y	3.80 U		µg/L
		4/28/97	B0KBB0	Y	2.70 U		µg/L
		10/29/97	B0M7J2	Y	4.20 U		µg/L
			B0M7J3	N	4.20 U		µg/L
		4/27/98	B0NCL3	Y	3.80 U		µg/L
	199-K-34	11/15/96	B0JLQ8	N	3.00 U		µg/L
			B0JLQ9	Y	3.00 U		µg/L
			B0JLS4	N	3.00 U		µg/L
			B0JLS5	Y	3.00 U		µg/L
			B0JLS8	N	5.40 U		µg/L
			B0JLS9	Y	5.40 U		µg/L
		4/28/97	B0KBB2	Y	2.70 U		µg/L
		4/27/98	B0NCL7	Y	3.80 U		µg/L
Cobalt-58	199-K-106A	12/05/96	B0JLT0	N	0.00 U	5.21	pCi/L
	199-K-107A	12/05/96	B0JLR6	N	3.22 U	5.01	pCi/L
	199-K-108A	12/09/96	B0JLR8	N	4.11 U	5.66	pCi/L
	199-K-109A	12/06/96	B0JLS0	N	-5.75 U	5.80	pCi/L
	199-K-30	11/26/96	B0JLP8	N	1.63 U	4.43	pCi/L
	199-K-32A	12/09/96	B0JLQ2	N	1.27 U	4.82	pCi/L
	199-K-34	11/15/96	B0JLQ8	N	.16 U	6.24	pCi/L
			B0JLS4	N	2.30 U	4.95	pCi/L
Cobalt-60	199-K-106A	7/30/96	B0J3Y2	N	-.67 U	1.28	pCi/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		12/05/96	B0JLT0	N	-2.98 U	4.62	pCi/L
		4/24/97	B0KB81	N	.61 U	1.49	pCi/L
		9/29/97	B0M102	N	1.23 U	1.15	pCi/L
		10/15/97	B0M667	N	.30 U	4.64	pCi/L
		10/27/97	B0M7M9	N	-.59 U	5.13	pCi/L
		4/28/98	B0NCM8	N	2.99 U	1.91	pCi/L
	199-K-107A	12/05/96	B0JLR6	N	3.70 U	5.46	pCi/L
		10/15/97	B0M673	N	4.10 U	4.84	pCi/L
		10/27/97	B0M787	N	1.78 U	4.29	pCi/L
	199-K-108A	12/09/96	B0JLR8	N	-1.59 U	4.25	pCi/L
		10/27/97	B0M793	N	.10 U	3.23	pCi/L
	199-K-109A	8/28/96	B0J685	N	.23 U	1.51	pCi/L
		12/06/96	B0JLS0	N	-1.38 U	4.76	pCi/L
		3/31/97	B0K070	N	2.59 U	1.46	pCi/L
		10/15/97	B0M672	N	-1.16 U	4.93	pCi/L
		10/24/97	B0M7H1	N	-.29 U	4.47	pCi/L
		3/24/98	B0N470	N	.80 U	4.90	pCi/L
	199-K-110A	10/27/97	B0M7C6	N	-3.04 U	4.63	pCi/L
	199-K-27	8/28/96	B0J693	N	-.07 U	1.36	pCi/L
		3/24/97	B0K071	N	.30 U	1.00	pCi/L
		9/26/97	B0M104	N	.92 U	1.12	pCi/L
		10/15/97	B0M668	N	-4.36 U	6.11	pCi/L
		10/27/97	B0M7H4	N	2.04 U	3.78	pCi/L
		3/25/98	B0N472	N	-1.46 U	5.04	pCi/L
	199-K-28	4/29/97	B0KB94	N	-.44 U	2.17	pCi/L
		10/15/97	B0M669	N	3.54 U	4.73	pCi/L
		4/27/98	B0NCL0	N	-.59 U	2.03	pCi/L
	199-K-29	4/23/97	B0KB96	N	1.66 U	1.30	pCi/L
		10/15/97	B0M670	N	1.16 U	5.45	pCi/L
		4/27/98	B0NCL1	N	-.15 U	2.28	pCi/L
	199-K-30	7/29/96	B0J3W3	N	-.96 U	1.21	pCi/L
		11/26/96	B0JLP8	N	-2.60 U	6.16	pCi/L
		4/29/97	B0KB98	N	.10 U	2.35	pCi/L
		10/15/97	B0M671	N	3.09 U	4.29	pCi/L
		10/24/97	B0M7H7	N	0.00 U	3.69	pCi/L
		4/27/98	B0NCL2	N	1.26 U	2.08	pCi/L
	199-K-32A	12/09/96	B0JLQ2	N	-.90 U	4.39	pCi/L
		10/29/97	B0M7J3	N	2.75 U	2.47	pCi/L
	199-K-34	11/15/96	B0JLQ8	N	-1.94 U	6.24	pCi/L
			B0JLS4	N	.89 U	5.89	pCi/L
		4/28/97	B0KBB3	N	-.35 U	1.60	pCi/L
		4/27/98	B0NCL8	N	1.47 U	1.32	pCi/L
Conductivity (i.e., specific conductance)	199-K-106A	7/30/96	B0J5V9	N	613.00		umhos/cm
		8/28/96	B0J740	N	627.00		umhos/cm
		9/23/96	B0JBS2	N	604.00		umhos/cm
		10/29/96	B0JK56	N	577.00		umhos/cm
		11/18/96	B0JBV9	N	600.00		umhos/cm
		12/05/96	B0JLT0	N	607.00		umhos/cm
		12/12/96	B0JBW2	N	611.00		umhos/cm
		1/20/97	B0JTV2	N	644.00		umhos/cm
		2/24/97	B0K253	N	615.00		umhos/cm
		4/24/97	B0K564	N	641.00		umhos/cm
		5/23/97	B0L037	N	714.00		umhos/cm
		6/26/97	B0L7C9	N	840.00		umhos/cm
		7/28/97	B0LBP7	N	660.00		umhos/cm

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		8/28/97	B0LKV7	N	647.00		umhos/cm
		9/29/97	B0M0Y7	N	630.00		umhos/cm
		10/15/97	B0M660	N	635.00		umhos/cm
		10/27/97	B0M7M9	N	681.00		umhos/cm
		11/08/97	B0MB42	N	579.00		umhos/cm
		12/23/97	B0MDT8	N	525.00		umhos/cm
		1/16/98	B0MVL1	N	683.00		umhos/cm
		1/22/98	B0MNT9	N	673.00		umhos/cm
		2/20/98	B0N088	N	500.00		umhos/cm
		3/24/98	B0N514	N	652.00		umhos/cm
		4/28/98	B0NBC8	N	649.00		umhos/cm
		5/27/98	B0NMJ1	N	668.00		umhos/cm
		6/29/98	B0NX12	N	632.00		umhos/cm
		7/23/98	B0P6W9	N	406.00		umhos/cm
			B0P7Y6	N	406.00		umhos/cm
	199-K-107A	7/31/96	B0J5V0	N	340.00		umhos/cm
		10/28/96	B0JK49	N	345.00		umhos/cm
		12/05/96	B0JLR6	N	371.00		umhos/cm
		1/15/97	B0JTT5	N	374.00		umhos/cm
		3/20/97	B0K431	N	374.00		umhos/cm
		4/24/97	B0K555	N	380.00		umhos/cm
		6/26/97	B0L7D0	Y	370.00		umhos/cm
		7/28/97	B0LBP9	N	381.00		umhos/cm
		9/29/97	B0M106	Y	366.00		umhos/cm
		10/15/97	B0M666	N	353.00		umhos/cm
		10/27/97	B0M787	N	387.00		umhos/cm
		1/22/98	B0MNR9	N	386.00		umhos/cm
		4/28/98	B0NBD0	N	384.00		umhos/cm
		7/22/98	B0P7Y5	N	371.00		umhos/cm
					371.00		umhos/cm
	199-K-108A	7/30/96	B0J5V1	N	487.00		umhos/cm
		10/28/96	B0JK50	N	470.00		umhos/cm
		12/09/96	B0JLR8	N	473.00		umhos/cm
		1/15/97	B0JTT6	N	478.00		umhos/cm
		3/20/97	B0K432	N	488.00		umhos/cm
		4/24/97	B0K556	N	488.00		umhos/cm
		6/26/97	B0L7D1	Y	492.00		umhos/cm
		7/28/97	B0LBR0	N	481.00		umhos/cm
		9/26/97	B0M107	Y	462.00		umhos/cm
		1/22/98	B0MNT0	N	453.00		umhos/cm
		4/28/98	B0NBD1	N	468.00		umhos/cm
		7/28/98	B0P6X3	Y	447.00		umhos/cm
			B0P7V8	N	447.00		umhos/cm
	199-K-109A	7/29/96	B0J5V8	N	325.00		umhos/cm
		8/28/96	B0J741	N	351.00		umhos/cm
		9/23/96	B0JC31	N	361.00		umhos/cm
		10/28/96	B0JK59	N	363.00		umhos/cm
		11/18/96	B0JMZ7	N	404.00		umhos/cm
		12/06/96	B0JLS0	N	432.00		umhos/cm
		12/11/96	B0JT54	N	468.00		umhos/cm
		1/14/97	B0JTV5	N	474.00		umhos/cm
		2/25/97	B0K256	N	345.00		umhos/cm
		3/31/97	B0K057	N	353.00		umhos/cm
			B0K436	N	357.00		umhos/cm
		4/28/97	B0K571	N	361.00		umhos/cm
		5/28/97	B0L035	N	512.00		umhos/cm

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		6/26/97	B0L7D2	N	514.00		umhos/cm
		7/28/97	B0LBR1	N	508.00		umhos/cm
		8/28/97	B0LKV8	N	407.00		umhos/cm
		9/25/97	B0M1H0	N	480.00		umhos/cm
		10/07/97	B0M5B3	N	478.00		umhos/cm
		10/19/97	B0M665	N	526.00		umhos/cm
		10/24/97	B0M7P6	N	480.00		umhos/cm
		11/18/97	B0MB43	N	479.00		umhos/cm
		12/23/97	B0MDT9	N	583.00		umhos/cm
		1/27/98	B0MVL4	N	430.00		umhos/cm
		2/26/98	B0N082	N	430.00		umhos/cm
		3/24/98	B0N4J6	N	577.00		umhos/cm
		4/30/98	B0N8R1	N	560.00		umhos/cm
			B0NBC0	N	560.00		umhos/cm
		5/27/98	B0NMJ2	N	561.00		umhos/cm
		6/29/98	B0NX13	N	561.00		umhos/cm
		7/23/98	B0P6X2	N	507.00		umhos/cm
			B0P7V9	N	507.00		umhos/cm
	199-K-110A	7/30/96	B0J5V2	N	755.00		umhos/cm
		10/28/96	B0JK51	N	871.00		umhos/cm
		1/16/97	B0JTT7	N	996.00		umhos/cm
		4/23/97	B0K557	N	910.00		umhos/cm
		7/28/97	B0LBR3	N	1004.00		umhos/cm
		10/27/97	B0M7C6	N	748.00		umhos/cm
		1/28/98	B0MNT1	N	642.00		umhos/cm
		4/27/98	B0NBD2	N	847.00		umhos/cm
		7/27/98	B0P7W1	N	741.00		umhos/cm
	199-K-27	7/31/96	B0J5V7	N	555.00		umhos/cm
		8/28/96	B0J739	N	599.00		umhos/cm
		9/23/96	B0JBS1	N	591.00		umhos/cm
		10/28/96	B0JK57	N	533.00		umhos/cm
		11/18/96	B0JBW0	N	532.00		umhos/cm
		12/12/96	B0JBW3	N	500.00		umhos/cm
		1/14/97	B0JTV3	N	458.00		umhos/cm
		2/24/97	B0K254	N	441.00		umhos/cm
		3/24/97	B0K058	N	495.00		umhos/cm
		4/28/97	B0K566	N	580.00		umhos/cm
		5/23/97	B0L034	N	587.00		umhos/cm
		6/24/97	B0L7D3	N	503.00		umhos/cm
		7/28/97	B0LBR4	N	538.00		umhos/cm
		8/28/97	B0LKW0	N	503.00		umhos/cm
		9/26/97	B0M0Y9	N	508.00		umhos/cm
		10/15/97	B0M661	N	499.00		umhos/cm
		10/27/97	B0M7H4	N	504.00		umhos/cm
		11/21/97	B0M9R7	N	271.00		umhos/cm
		12/19/97	B0MDV1	N	478.00		umhos/cm
		1/16/98	B0MVJ7	N	497.00		umhos/cm
		1/26/98	B0MNT5	N	512.00		umhos/cm
		2/20/98	B0N084	N	364.00		umhos/cm
		3/25/98	B0N4J8	N	548.00		umhos/cm
		4/30/98	B0N8P7	N	444.00		umhos/cm
			B0NBC2	N	444.00		umhos/cm
		5/27/98	B0NMJ3	N	457.00		umhos/cm
		6/24/98	B0NX15	N	447.00		umhos/cm
		7/23/98	B0P6X4	N	451.00		umhos/cm
			B0P7W2	N	451.00		umhos/cm

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
	199-K-28	7/30/96	B0J5V3	N	581.00		umhos/cm
		10/28/96	B0JK52	N	580.00		umhos/cm
		1/14/97	B0JTT8	N	671.00		umhos/cm
		4/29/97	B0K559	N	622.00		umhos/cm
		7/28/97	B0LBR6	N	619.00		umhos/cm
		10/15/97	B0M662	N	582.00		umhos/cm
		1/26/98	B0MNT2	N	643.00		umhos/cm
		4/27/98	B0NBD3	N	678.00		umhos/cm
		7/23/98	B0P7W4	N	816.00		umhos/cm
	199-K-29	7/30/96	B0J5V4	N	408.00		umhos/cm
		10/28/96	B0JK53	N	453.00		umhos/cm
		1/14/97	B0JTT9	N	430.00		umhos/cm
		4/23/97	B0K560	N	568.00		umhos/cm
		7/28/97	B0LBR7	N	532.00		umhos/cm
		10/15/97	B0M663	N	468.00		umhos/cm
		1/26/98	B0MNR6	N	549.00		umhos/cm
		4/27/98	B0NBB7	N	378.00		umhos/cm
		7/23/98	B0P7W5	N	595.00		umhos/cm
	199-K-30	7/29/96	B0J5W0	N	435.00		umhos/cm
		8/28/96	B0J738	N	466.00		umhos/cm
		9/23/96	B0JBS0	N	452.00		umhos/cm
		10/29/96	B0JK58	N	429.00		umhos/cm
		11/18/96	B0JBW1	N	456.00		umhos/cm
		11/26/96	B0JLP8	N	454.00		umhos/cm
		12/12/96	B0JBW4	N	458.00		umhos/cm
		1/15/97	B0JTV4	N	419.00		umhos/cm
		2/25/97	B0K255	N	463.00		umhos/cm
		4/29/97	B0K568	N	452.00		umhos/cm
		5/23/97	B0L039	N	456.00		umhos/cm
		7/29/97	B0LBR8	N	445.00		umhos/cm
		8/28/97	B0LKW1	N	416.00		umhos/cm
		9/25/97	B0M100	N	461.00		umhos/cm
		10/15/97	B0M664	N	460.00		umhos/cm
		10/24/97	B0M7H7	N	442.00		umhos/cm
		11/24/97	B0M9R8	N	411.00		umhos/cm
		12/19/97	B0MDV2	N	440.00		umhos/cm
		1/16/98	B0MVJ8	N	489.00		umhos/cm
		1/26/98	B0MNT7	N	491.00		umhos/cm
		2/20/98	B0N085	N	371.00		umhos/cm
		3/25/98	B0N4J9	N	466.00		umhos/cm
		4/27/98	B0NBC4	N	388.00		umhos/cm
		5/27/98	B0NMJ4	N	447.00		umhos/cm
		6/24/98	B0NX16	N	478.00		umhos/cm
		7/23/98	B0P6X5	N	281.00		umhos/cm
			B0P7W7	N	281.00		umhos/cm
	199-K-32A	7/30/96	B0J5V5	N	564.00		umhos/cm
		10/29/96	B0JK54	N	348.00		umhos/cm
		12/09/96	B0JLQ2	N	323.00		umhos/cm
		1/20/97	B0JTV0	N	431.00		umhos/cm
		4/28/97	B0K561	N	328.00		umhos/cm
		7/28/97	B0LBT1	N	501.00		umhos/cm
		1/28/98	B0MNR7	N	351.00		umhos/cm
		4/27/98	B0NBB8	N	345.00		umhos/cm
		7/27/98	B0P7W9	N	370.00		umhos/cm
	199-K-34	7/30/96	B0J5V6	N	464.00		umhos/cm
		10/29/96	B0JK55	N	424.00		umhos/cm

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		11/15/96	B0JLQ8	N	366.00		umhos/cm
		1/16/97	B0JTV1	N	373.00		umhos/cm
		7/28/97	B0LBT3	N	512.00		umhos/cm
		10/27/97	B0M2W4	N	489.00		umhos/cm
		1/28/98	B0MNR8	N	325.00		umhos/cm
		4/27/98	B0NBB9	N	345.00		umhos/cm
		7/23/98	B0P7X0	N	345.00		umhos/cm
Copper	199-K-106A	12/05/96	B0JLT0	N	8.00 U		µg/L
			B0JLT1	Y	12.00 B		µg/L
		10/27/97	B0M7M9	N	3.80 U		µg/L
			B0M7N0	Y	3.80 U		µg/L
	199-K-107A	12/05/96	B0JLR6	N	8.00 U		µg/L
			B0JLR7	Y	14.80 B		µg/L
		10/27/97	B0M786	Y	3.80 U		µg/L
			B0M787	N	3.80 U		µg/L
	199-K-108A	12/09/96	B0JLR8	N	18.80 B		µg/L
			B0JLR9	Y	18.30 B		µg/L
		10/27/97	B0M792	Y	3.80 U		µg/L
			B0M793	N	3.80 U		µg/L
	199-K-109A	12/06/96	B0JLS0	N	15.80 B		µg/L
			B0JLS1	Y	15.80 B		µg/L
		10/24/97	B0M7H0	Y	3.80 U		µg/L
			B0M7H1	N	3.80 U		µg/L
	199-K-110A	4/23/97	B0KB86	Y	7.50 U		µg/L
			B0KB88	Y	7.50 U		µg/L
		10/27/97	B0M7C5	Y	3.90 B		µg/L
			B0M7C6	N	19.20 B		µg/L
		4/27/98	B0NCK7	Y	4.00 B		µg/L
	199-K-27	3/24/97	B0K059	Y	7.50 U		µg/L
		10/27/97	B0M7H3	Y	4.40 B		µg/L
			B0M7H4	N	3.80 U		µg/L
		3/25/98	B0N471	Y	7.50 B		µg/L
	199-K-30	7/29/96	B0J3W4	Y	8.70 U		µg/L
		11/26/96	B0JLP8	N	8.00 U		µg/L
			B0JLP9	Y	8.00 U		µg/L
		10/24/97	B0M7H6	Y	3.80 U		µg/L
			B0M7H7	N	3.80 U		µg/L
	199-K-32A	12/09/96	B0JLQ2	N	13.00 B		µg/L
			B0JLQ3	Y	19.30 B		µg/L
		4/28/97	B0KBB0	Y	7.50 U		µg/L
		10/29/97	B0M7J2	Y	3.80 U		µg/L
			B0M7J3	N	3.80 U		µg/L
		4/27/98	B0NCL3	Y	3.60 U		µg/L
	199-K-34	11/15/96	B0JLQ8	N	8.00 B		µg/L
			B0JLQ9	Y	8.00 U		µg/L
			B0JLS4	N	8.00 U		µg/L
			B0JLS5	Y	8.00 U		µg/L
			B0JLS8	N	6.00 U		µg/L
			B0JLS9	Y	6.00 U		µg/L
		4/28/97	B0KBB2	Y	9.70 B		µg/L
		4/27/98	B0NCL7	Y	3.60 U		µg/L
Dissolved oxygen	199-K-106A	12/05/96	B0JLT0	N	2.43		mg/L
	199-K-107A	12/05/96	B0JLR6	N	2.34		mg/L
	199-K-108A	12/09/96	B0JLR8	N	1.72		mg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
	199-K-109A	12/06/96	B0JLS0	N	1.87		mg/L
	199-K-30	11/26/96	B0JLP8	N	4.53		mg/L
	199-K-32A	12/09/96	B0JLQ2	N	1.52		mg/L
	199-K-34	11/15/96	B0JLQ8	N	4.60		mg/L
Ethyl cyanide	199-K-106A	9/29/97	B0M101	N	.96 U		µg/L
		4/28/98	B0NCM8	N	.96 U		µg/L
	199-K-108A	4/28/98	B0NCN0	N	.96 U		µg/L
	199-K-109A	3/24/98	B0N470	N	.96 UH		µg/L
	199-K-27	3/25/98	B0N472	N	.96 U		µg/L
	199-K-34	4/27/98	B0NCL8	N	.96 U		µg/L
Ethylbenzene	199-K-106A	7/30/96	B0J3Y2	N	.07 U		µg/L
		4/24/97	B0KB80	N	.04 U		µg/L
	199-K-108A	4/24/97	B0KB83	N	.04 U		µg/L
	199-K-109A	8/28/96	B0J685	N	.10 L		µg/L
		3/31/97	B0K057	N	.04 U		µg/L
	199-K-27	3/24/97	B0K058	N	.04 U		µg/L
	199-K-34	4/28/97	B0KBB1	N	.04 U		µg/L
Europium-152	199-K-106A	12/05/96	B0JLT0	N	4.51 U	9.37	pCi/L
		10/15/97	B0M667	N	1.73 U	11.70	pCi/L
		10/27/97	B0M7M9	N	5.16 U	11.60	pCi/L
		4/28/98	B0NCM8	N	3.94 U	5.17	pCi/L
	199-K-107A	12/05/96	B0JLR6	N	-8.26 U	13.10	pCi/L
		10/15/97	B0M673	N	-4.68 U	10.90	pCi/L
		10/27/97	B0M787	N	-7.49 U	12.50	pCi/L
	199-K-108A	12/09/96	B0JLR8	N	-1.03 U	10.90	pCi/L
		10/27/97	B0M793	N	6.88 U	10.60	pCi/L
	199-K-109A	12/06/96	B0JLS0	N	-3.95 U	10.80	pCi/L
		10/15/97	B0M672	N	-10.30 U	15.80	pCi/L
		10/24/97	B0M7H1	N	3.08 U	13.90	pCi/L
		3/24/98	B0N470	N	4.15 U	10.40	pCi/L
	199-K-110A	10/27/97	B0M7C6	N	-3.94 U	9.27	pCi/L
	199-K-27	10/15/97	B0M668	N	2.04 U	12.30	pCi/L
		10/27/97	B0M7H4	N	1.62 U	12.10	pCi/L
		3/25/98	B0N472	N	-6.08 U	11.80	pCi/L
	199-K-28	10/15/97	B0M669	N	5.53 U	11.40	pCi/L
		4/27/98	B0NCL0	N	-2.72 U	5.93	pCi/L
	199-K-29	10/15/97	B0M670	N	8.61 U	13.20	pCi/L
		4/27/98	B0NCL1	N	-4.52 U	6.86	pCi/L
	199-K-30	11/26/96	B0JLP8	N	-13.90 U	10.90	pCi/L
		10/15/97	B0M671	N	-3.82 U	12.40	pCi/L
		10/24/97	B0M7H7	N	-4.78 U	12.00	pCi/L
		4/27/98	B0NCL2	N	4.36 U	4.29	pCi/L
	199-K-32A	12/09/96	B0JLQ2	N	3.47 U	11.20	pCi/L
		10/29/97	B0M7J3	N	-5.42 U	10.20	pCi/L
	199-K-34	11/15/96	B0JLQ8	N	-4.83 U	12.70	pCi/L
			B0JLS4	N	2.05 U	9.97	pCi/L
			B0JLS8	N	U		pCi/L
		4/27/98	B0NCL8	N	.33 U	6.62	pCi/L
Europium-154	199-K-106A	7/30/96	B0J3Y2	N	-4.08 U	4.27	pCi/L
		12/05/96	B0JLT0	N	-4.56 U	14.00	pCi/L
		4/24/97	B0KB81	N	-2.40 U	3.28	pCi/L
		9/29/97	B0M102	N	-1.38 U	3.29	pCi/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		10/15/97	B0M667	N	-4.00 U	11.30	pCi/L
		10/27/97	B0M7M9	N	8.50 U	15.20	pCi/L
		4/28/98	B0NCM8	N	1.48 U	5.14	pCi/L
	199-K-107A	12/05/96	B0JLR6	N	9.47 U	7.79	pCi/L
		10/15/97	B0M673	N	.79 U	16.00	pCi/L
		10/27/97	B0M787	N	1.61 U	10.60	pCi/L
	199-K-108A	12/09/96	B0JLR8	N	-6.98 U	16.50	pCi/L
		10/27/97	B0M793	N	-8.32 U	15.70	pCi/L
	199-K-109A	8/28/96	B0J685	N	-1.04 U	3.75	pCi/L
		12/06/96	B0JLS0	N	5.22 U	14.80	pCi/L
		3/31/97	B0K070	N	-2.98 U	5.89	pCi/L
		10/15/97	B0M672	N	3.15 U	14.80	pCi/L
		10/24/97	B0M7H1	N	-1.06 U	13.00	pCi/L
		3/24/98	B0N470	N	7.03 U	14.40	pCi/L
	199-K-110A	10/27/97	B0M7C6	N	6.45 U	13.20	pCi/L
	199-K-27	8/28/96	B0J693	N	3.44	3.21	pCi/L
		3/24/97	B0K071	N	.27 U	4.20	pCi/L
		9/26/97	B0M104	N	-.68 U	3.01	pCi/L
		10/15/97	B0M668	N	3.16 U	14.80	pCi/L
		10/27/97	B0M7H4	N	0.00 U	11.80	pCi/L
		3/25/98	B0N472	N	5.52 U	10.20	pCi/L
	199-K-28	4/29/97	B0KB94	N	3.60 U	4.94	pCi/L
		10/15/97	B0M669	N	-2.40 U	15.50	pCi/L
		4/27/98	B0NCL0	N	1.98 U	7.67	pCi/L
	199-K-29	4/23/97	B0KB96	N	.87 U	2.53	pCi/L
		10/15/97	B0M670	N	-11.00 U	15.10	pCi/L
		4/27/98	B0NCL1	N	.81 U	7.39	pCi/L
	199-K-30	7/29/96	B0J3W3	N	-2.54 U	3.96	pCi/L
		11/26/96	B0JLP8	N	5.15 U	10.70	pCi/L
		4/29/97	B0KB98	N	1.74 U	5.04	pCi/L
		10/15/97	B0M671	N	17.90 U	10.90	pCi/L
		10/24/97	B0M7H7	N	-8.70 U	8.70	pCi/L
		4/27/98	B0NCL2	N	-3.54 U	8.40	pCi/L
	199-K-32A	12/09/96	B0JLQ2	N	9.67 U	12.90	pCi/L
		10/29/97	B0M7J3	N	-3.70 U	13.40	pCi/L
	199-K-34	11/15/96	B0JLQ8	N	-15.00 U	13.50	pCi/L
			B0JLS4	N	-2.68 U	11.90	pCi/L
			B0JLS8	N	U		pCi/L
		4/28/97	B0KBB3	N	4.67 U	3.53	pCi/L
		4/27/98	B0NCL8	N	5.54 U	4.22	pCi/L
Europium-155	199-K-106A	7/30/96	B0J3Y2	N	-1.36 U	2.15	pCi/L
		12/05/96	B0JLT0	N	10.10 U	10.80	pCi/L
		4/24/97	B0KB81	N	.93 U	2.95	pCi/L
		9/29/97	B0M102	N	-1.13 U	2.52	pCi/L
		10/15/97	B0M667	N	-2.81 U	10.40	pCi/L
		10/27/97	B0M7M9	N	1.10 U	11.30	pCi/L
		4/28/98	B0NCM8	N	1.79 U	5.03	pCi/L
	199-K-107A	12/05/96	B0JLR6	N	-.91 U	7.81	pCi/L
		10/15/97	B0M673	N	-3.19 U	11.80	pCi/L
		10/27/97	B0M787	N	-3.04 U	12.00	pCi/L
	199-K-108A	12/09/96	B0JLR8	N	-3.30 U	9.95	pCi/L
		10/27/97	B0M793	N	8.27 U	6.99	pCi/L
	199-K-109A	8/28/96	B0J685	N	-1.88 U	5.29	pCi/L
		12/06/96	B0JLS0	N	-7.03 U	12.20	pCi/L
		3/31/97	B0K070	N	-1.90 U	9.03	pCi/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		10/15/97	B0M672	N	-6.63 U	22.40	pCi/L
		10/24/97	B0M7H1	N	-2.50 U	24.90	pCi/L
		3/24/98	B0N470	N	11.60 U	12.10	pCi/L
	199-K-110A	10/27/97	B0M7C6	N	-3.28 U	8.82	pCi/L
	199-K-27	8/28/96	B0J693	N	.60 U	2.10	pCi/L
		3/24/97	B0K071	N	-.40 U	3.65	pCi/L
		9/26/97	B0M104	N	.65 U	2.12	pCi/L
		10/15/97	B0M668	N	6.44 U	10.90	pCi/L
		10/27/97	B0M7H4	N	3.09 U	8.72	pCi/L
		3/25/98	B0N472	N	.37 U	8.04	pCi/L
	199-K-28	4/29/97	B0KB94	N	-2.42 U	5.75	pCi/L
		10/15/97	B0M669	N	-4.42 U	10.90	pCi/L
		4/27/98	B0NCL0	N	1.65 U	4.48	pCi/L
	199-K-29	4/23/97	B0KB96	N	-1.72 U	2.33	pCi/L
		10/15/97	B0M670	N	-2.67 U	10.10	pCi/L
		4/27/98	B0NCL1	N	-1.07 U	6.34	pCi/L
	199-K-30	7/29/96	B0J3W3	N	2.12 U	2.24	pCi/L
		11/26/96	B0JLP8	N	-.99 U	8.19	pCi/L
		4/29/97	B0KB98	N	-5.75 U	5.20	pCi/L
		10/15/97	B0M671	N	4.48 U	8.75	pCi/L
		10/24/97	B0M7H7	N	-1.39 U	12.00	pCi/L
		4/27/98	B0NCL2	N	3.38 U	4.02	pCi/L
	199-K-32A	12/09/96	B0JLQ2	N	-1.53 U	10.50	pCi/L
		10/29/97	B0M7J3	N	-7.86 U	8.78	pCi/L
	199-K-34	11/15/96	B0JLQ8	N	1.83 U	10.90	pCi/L
			B0JLS4	N	-1.73 U	9.87	pCi/L
			B0JLS8	N	U		pCi/L
		4/28/97	B0KBB3	N	-.28 U	2.35	pCi/L
		4/27/98	B0NCL8	N	1.10 U	4.86	pCi/L
Fluoride	199-K-106A	7/30/96	B0J3Y2	N	750.00	293.00	µg/L
		10/29/96	B0JK56	N	.28		mg/L
		12/05/96	B0JLT0	N	.25		mg/L
		1/20/97	B0JTV2	N	.23		mg/L
		4/24/97	B0K564	N	.26		mg/L
		7/28/97	B0LBP7	N	.28		mg/L
		10/15/97	B0M667	N	.26		mg/L
		1/22/98	B0MNV0	N	.28		mg/L
		4/28/98	B0NBC9	N	.25		mg/L
	199-K-107A	7/31/96	B0J5V0	N	640.00	250.00	µg/L
		10/28/96	B0JK49	N	.32		mg/L
		12/05/96	B0JLR6	N	.27		mg/L
		1/15/97	B0JTT5	N	.27		mg/L
		4/24/97	B0K555	N	.29		mg/L
		7/28/97	B0LBP9	N	.28		mg/L
		10/15/97	B0M673	N	.27		mg/L
		1/22/98	B0MNR9	N	.30		mg/L
		4/28/98	B0NBD0	N	.27		mg/L
	199-K-108A	7/30/96	B0J5V1	N	710.00	277.00	µg/L
		10/28/96	B0JK50	N	.30		mg/L
		12/09/96	B0JLR8	N	.32		mg/L
		1/15/97	B0JTT6	N	.26		mg/L
		4/24/97	B0K556	N	.28		mg/L
		7/28/97	B0LBR0	N	.32		mg/L
		10/27/97	B0M793	N	.31		mg/L
		1/22/98	B0MNT0	N	.30		mg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		4/28/98	B0NBD1	N	.29		mg/L
	199-K-109A	7/29/96	B0J5V8	N	440.00	172.00	µg/L
		8/28/96	B0J685	N	150.00	58.50	µg/L
		10/28/96	B0JK59	N	.15		mg/L
		12/06/96	B0JLS0	N	.11		mg/L
		1/14/97	B0JTV5	N	.14		mg/L
		3/31/97	B0K057	N	.15		mg/L
		4/28/97	B0K571	N	.14		mg/L
		7/28/97	B0LBR1	N	.12		mg/L
		10/15/97	B0M672	N	.13		mg/L
		1/27/98	B0MNT4	N	.12		mg/L
		3/24/98	B0N470	N	.13		mg/L
		4/30/98	B0NBC1	N	.11		mg/L
	199-K-110A	7/30/96	B0J5V2	N	990.00	386.00	µg/L
		10/28/96	B0JK51	N	.02 U		mg/L
		1/16/97	B0JTT7	N	.02 U		mg/L
		4/23/97	B0K557	N	.12		mg/L
			B0K558	N	.12		mg/L
		7/28/97	B0LBR3	N	.15		mg/L
		10/27/97	B0M7C6	N	.10 U		mg/L
		1/28/98	B0MNT1	N	.14		mg/L
		4/27/98	B0NBD2	N	.13		mg/L
	199-K-27	7/31/96	B0J5V7	N	570.00	222.00	µg/L
		8/28/96	B0J693	N	170.00	66.30	µg/L
		10/28/96	B0JK57	N	.14		mg/L
		1/14/97	B0JTV3	N	.15		mg/L
		3/24/97	B0K058	N	.13		mg/L
		4/28/97	B0K566	N	.14		mg/L
		7/28/97	B0LBR4	N	.14		mg/L
		9/26/97	B0M103	N	.15		mg/L
		10/15/97	B0M668	N	.14		mg/L
		1/26/98	B0MNT6	N	.13		mg/L
		3/25/98	B0N472	N	.14		mg/L
		4/30/98	B0NBC3	N	.14		mg/L
	199-K-28	7/30/96	B0J5V3	N	570.00	222.00	µg/L
		10/28/96	B0JK52	N	.17		mg/L
		1/14/97	B0JTT8	N	.18		mg/L
		4/29/97	B0K559	N	.15		mg/L
		7/28/97	B0LBR6	N	.17		mg/L
		10/15/97	B0M669	N	.17		mg/L
		1/26/98	B0MNT2	N	.16		mg/L
		4/27/98	B0NBD3	N	.14		mg/L
	199-K-29	7/30/96	B0J5V4	N	490.00	191.00	µg/L
		10/28/96	B0JK53	N	.19		mg/L
		1/14/97	B0JTT9	N	.18		mg/L
		4/23/97	B0K560	N	.16		mg/L
		7/28/97	B0LBR7	N	.16		mg/L
		10/15/97	B0M670	N	.16		mg/L
		1/26/98	B0MNR6	N	.15		mg/L
		4/27/98	B0NBB7	N	.17		mg/L
	199-K-30	7/29/96	B0J3W3	N	550.00	214.00	µg/L
		10/29/96	B0JK58	N	.22		mg/L
		11/26/96	B0JLP8	N	.21		mg/L
		1/15/97	B0JTV4	N	.34		mg/L
		4/29/97	B0K568	N	.21		mg/L
		7/29/97	B0LBR8	N	.21		mg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		10/15/97	B0M671	N	.20		mg/L
		1/26/98	B0MNT8	N	.21		mg/L
		4/27/98	B0NBC5	N	.21		mg/L
	199-K-32A	7/30/96	B0J5V5	N	480.00	187.00	µg/L
		10/29/96	B0JK54	N	.02 U		mg/L
		12/09/96	B0JLQ2	N	.10 U		mg/L
		1/20/97	B0JTV0	N	.02 U		mg/L
		4/28/97	B0K561	N	.11		mg/L
		7/28/97	B0LBT1	N	.14		mg/L
		10/29/97	B0M7J3	N	.10 U		mg/L
		1/28/98	B0MNR7	N	.10		mg/L
		4/27/98	B0NBB8	N	.11		mg/L
	199-K-34	7/30/96	B0J5V6	N	540.00	211.00	µg/L
		10/29/96	B0JK55	N	.20		mg/L
		11/15/96	B0JLQ8	N	.20		mg/L
			B0JLS4	N	.20		mg/L
			B0JLS8	N	.50 U		mg/L
		1/16/97	B0JTV1	N	.18		mg/L
		4/28/97	B0K562	N	.19		mg/L
		7/28/97	B0LBT3	N	.23		mg/L
		10/27/97	B0M2W4	N	.21		mg/L
		1/28/98	B0MNR8	N	.18		mg/L
		4/27/98	B0NBB9	N	.20		mg/L
Gross alpha	199-K-106A	7/30/96	B0J5V9	N	6.02	2.59	pCi/L
		10/29/96	B0JK56	N	2.96 J	1.29	pCi/L
		12/05/96	B0JLT0	N	2.40 U	2.22	pCi/L
		1/20/97	B0JTV2	N	4.20	2.10	pCi/L
		4/24/97	B0K564	N	5.14	2.83	pCi/L
		7/28/97	B0LBP7	N	4.31	1.72	pCi/L
		10/15/97	B0M667	N	9.58	3.76	pCi/L
		1/22/98	B0MNV0	N	6.36	1.96	pCi/L
		4/28/98	B0NBC9	N	5.44	2.05	pCi/L
	199-K-107A	7/31/96	B0J5V0	N	-.22	.35	pCi/L
		10/28/96	B0JK49	N	.52 U	.53	pCi/L
		12/05/96	B0JLR6	N	1.60 J	.88	pCi/L
		1/15/97	B0JTT5	N	1.97 J	1.20	pCi/L
		4/24/97	B0K555	N	2.91 J	1.39	pCi/L
		7/28/97	B0LBP9	N	2.06 J	1.27	pCi/L
		10/15/97	B0M673	N	4.00	2.24	pCi/L
		1/22/98	B0MNR9	N	1.95 J	.94	pCi/L
		4/28/98	B0NBD0	N	1.91 J	.98	pCi/L
	199-K-108A	7/30/96	B0J5V1	N	3.76	1.91	pCi/L
		10/28/96	B0JK50	N	3.42	1.28	pCi/L
		12/09/96	B0JLR8	N	5.47	1.74	pCi/L
		1/15/97	B0JTT6	N	4.58	1.55	pCi/L
		4/24/97	B0K556	N	1.82 J	.91	pCi/L
		7/28/97	B0LBR0	N	3.28	1.47	pCi/L
		10/27/97	B0M793	N	5.04	1.73	pCi/L
		1/22/98	B0MNT0	N	3.58	1.45	pCi/L
		4/28/98	B0NBD1	N	2.53 J	1.27	pCi/L
	199-K-109A	7/29/96	B0J5V8	N	5.00	1.98	pCi/L
		8/28/96	B0J685	N	1.93	1.21	pCi/L
		10/28/96	B0JK59	N	1.98 U	2.67	pCi/L
		12/06/96	B0JLS0	N	8.59	3.35	pCi/L
		1/14/97	B0JTV5	N	5.34	1.70	pCi/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		3/31/97	B0K057	N	5.40 U	4.13	pCi/L
		4/28/97	B0K571	N	5.46 U	7.23	pCi/L
		7/28/97	B0LBR1	N	7.05	2.34	pCi/L
		10/15/97	B0M672	N	7.48	3.10	pCi/L
		1/27/98	B0MNT4	N	6.29	3.40	pCi/L
		3/24/98	B0N470	N	4.66	1.22	pCi/L
		4/30/98	B0NBC1	N	5.59	2.04	pCi/L
	199-K-110A	7/30/96	B0J5V2	N	8.43	3.13	pCi/L
		10/28/96	B0JK51	N	1.14 U	.95	pCi/L
		1/16/97	B0JTT7	N	2.27 J	1.13	pCi/L
		4/23/97	B0K557	N	4.40	1.72	pCi/L
			B0K558	N	2.34 J	1.40	pCi/L
		7/28/97	B0LBR3	N	4.44	2.43	pCi/L
		10/27/97	B0M7C6	N	4.67	1.79	pCi/L
		1/28/98	B0MNT1	N	2.92 J	1.52	pCi/L
		4/27/98	B0NBD2	N	3.62	1.78	pCi/L
	199-K-27	7/31/96	B0J5V7	N	4.43	2.01	pCi/L
		8/28/96	B0J693	N	3.99	1.94	pCi/L
		10/28/96	B0JK57	N	3.44	1.28	pCi/L
		1/14/97	B0JTV3	N	2.81 J	1.12	pCi/L
		3/24/97	B0K058	N	2.55 J	1.28	pCi/L
		4/28/97	B0K566	N	3.99	1.46	pCi/L
		7/28/97	B0LBR4	N	4.79	2.03	pCi/L
		9/26/97	B0M103	N	3.00	1.18	pCi/L
		10/15/97	B0M668	N	9.54	3.57	pCi/L
		1/26/98	B0MNT6	N	3.22	1.06	pCi/L
		3/25/98	B0N472	N	3.93	1.44	pCi/L
		4/30/98	B0NBC3	N	2.89 J	1.35	pCi/L
	199-K-28	7/30/96	B0J5V3	N	4.31	2.06	pCi/L
		10/28/96	B0JK52	N	1.11 J	.73	pCi/L
		1/14/97	B0JTT8	N	2.28 J	1.23	pCi/L
		4/29/97	B0K559	N	4.02	1.52	pCi/L
		7/28/97	B0LBR6	N	2.38 J	1.17	pCi/L
		10/15/97	B0M669	N	4.29	2.21	pCi/L
		1/26/98	B0MNT2	N	3.52	1.39	pCi/L
		4/27/98	B0NBD3	N	3.88	2.21	pCi/L
	199-K-29	7/30/96	B0J5V4	N	1.65	1.17	pCi/L
		10/28/96	B0JK53	N	1.07 U	.85	pCi/L
		1/14/97	B0JTT9	N	2.33 J	1.07	pCi/L
		4/23/97	B0K560	N	1.74 U	1.32	pCi/L
		7/28/97	B0LBR7	N	2.47 J	1.30	pCi/L
		10/15/97	B0M670	N	1.86 U	1.74	pCi/L
		1/26/98	B0MNR6	N	3.58	1.25	pCi/L
		4/27/98	B0NBB7	N	3.78	1.40	pCi/L
	199-K-30	7/29/96	B0J5W0	N	2.42	1.46	pCi/L
		10/29/96	B0JK58	N	4.17 U	3.56	pCi/L
		11/26/96	B0JLP8	N	2.14 J	1.00	pCi/L
		1/15/97	B0JTV4	N	2.42 J	1.25	pCi/L
		4/29/97	B0K568	N	3.35	2.02	pCi/L
		7/29/97	B0LBR8	N	3.45	1.82	pCi/L
		10/15/97	B0M671	N	4.69	2.34	pCi/L
		1/26/98	B0MNT8	N	4.00	1.82	pCi/L
		4/27/98	B0NBC5	N	2.47 J	1.11	pCi/L
	199-K-32A	7/30/96	B0J5V5	N	2.05	1.55	pCi/L
		10/29/96	B0JK54	N	1.08 J	.61	pCi/L
		12/09/96	B0JLQ2	N	.02 U	.36	pCi/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		1/20/97	B0JTV0	N	2.34 J	1.31	pCi/L
		4/28/97	B0K561	N	1.75 J	.95	pCi/L
		7/28/97	B0LBT1	N	2.55 J	1.52	pCi/L
		10/29/97	B0M7J3	N	1.29 J	.91	pCi/L
		1/28/98	B0MNR7	N	1.83 J	.90	pCi/L
		4/27/98	B0NBB8	N	.72 U	.59	pCi/L
	199-K-34	7/30/96	B0J5V6	N	4.68	2.04	pCi/L
		10/29/96	B0JK55	N	1.32 J	.72	pCi/L
		11/15/96	B0JLQ8	N	3.12	1.21	pCi/L
			B0JLS4	N	1.94 J	.94	pCi/L
			B0JLS8	N	3.40	1.60	pCi/L
		1/16/97	B0JTV1	N	1.22 U	.95	pCi/L
		4/28/97	B0K562	N	2.78 J	1.37	pCi/L
		7/28/97	B0LBT3	N	2.77 J	.93	pCi/L
		10/27/97	B0M2W4	N	2.14 J	.74	pCi/L
		1/28/98	B0MNR8	N	3.70	1.33	pCi/L
		4/27/98	B0NBB9	N	4.30	1.60	pCi/L
Gross beta	199-K-106A	7/30/96	B0J5V9	N	8.51	2.96	pCi/L
		10/29/96	B0JK56	N	13.10	2.53	pCi/L
		12/05/96	B0JLT0	N	11.00	2.49	pCi/L
		1/20/97	B0JTV2	N	12.50 U	14.20	pCi/L
		4/24/97	B0K564	N	12.50 U	20.00	pCi/L
		7/28/97	B0LBP7	N	10.10	2.82	pCi/L
		10/15/97	B0M667	N	61.50	26.40	pCi/L
		1/22/98	B0MNV0	N	11.60	2.33	pCi/L
		4/28/98	B0NBC9	N	28.60 U	18.10	pCi/L
	199-K-107A	7/31/96	B0J5V0	N	129.63	14.06	pCi/L
		10/28/96	B0JK49	N	83.50	8.67	pCi/L
		12/05/96	B0JLR6	N	111.00	11.10	pCi/L
		1/15/97	B0JTT5	N	19.00	3.75	pCi/L
		4/24/97	B0K555	N	133.00	13.00	pCi/L
		7/28/97	B0LBP9	N	151.00	14.10	pCi/L
		10/15/97	B0M673	N	65.60	10.20	pCi/L
		1/22/98	B0MNR9	N	115.00	11.90	pCi/L
		4/28/98	B0NBD0	N	112.00	10.20	pCi/L
	199-K-108A	7/30/96	B0J5V1	N	8.70	2.97	pCi/L
		10/28/96	B0JK50	N	7.50	2.10	pCi/L
		12/09/96	B0JLR8	N	9.59	2.26	pCi/L
		1/15/97	B0JTT6	N	9.86	2.33	pCi/L
		4/24/97	B0K556	N	9.44	3.16	pCi/L
		7/28/97	B0LBR0	N	8.39	2.29	pCi/L
		10/27/97	B0M793	N	7.28	2.33	pCi/L
		1/22/98	B0MNT0	N	9.60	2.18	pCi/L
		4/28/98	B0NBD1	N	10.80	2.64	pCi/L
	199-K-109A	7/29/96	B0J5V8	N	800.10	75.89	pCi/L
		8/28/96	B0J685	N	10085.00	889.10	pCi/L
		9/23/96	B0JC31	N	16665.00	1526.00	pCi/L
		10/28/96	B0JK59	N	6530.00	587.00	pCi/L
		11/18/96	B0JMZ7	N	6010.00	544.00	pCi/L
		12/06/96	B0JLS0	N	4250.00	380.00	pCi/L
		12/11/96	B0JT54	N	4300.00 Q	378.00	pCi/L
		1/14/97	B0JTV5	N	7130.00	634.00	pCi/L
		2/25/97	B0K256	N	22500.00	1990.00	pCi/L
		3/31/97	B0K057	N	33000.00	2970.00	pCi/L
		4/28/97	B0K571	N	37500.00	3380.00	pCi/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		5/28/97	B0L035	N	9110.00	988.00	pCi/L
		6/26/97	B0L2Y9	N	5600.00	522.00	pCi/L
		7/28/97	B0LBR1	N	3590.00	327.00	pCi/L
		8/28/97	B0LKV9	N	8870.00	694.00	pCi/L
		9/25/97	B0M1H0	N	37800.00	3340.00	pCi/L
		10/15/97	B0M672	N	22600.00	2020.00	pCi/L
		11/18/97	B0MB90	N	49000.00	4530.00	pCi/L
		12/23/97	B0MDV0	N	16300.00	1450.00	pCi/L
		1/27/98	B0MNT4	N	11700.00	1100.00	pCi/L
		2/26/98	B0N083	N	13000.00	1160.00	pCi/L
		3/24/98	B0N4J7	N	10300.00	806.00	pCi/L
		4/30/98	B0NBC1	N	9170.00	833.00	pCi/L
		5/27/98	B0NMV4	N	6930.00	619.00	pCi/L
		6/29/98	B0NX14	N	10900.00	1000.00	pCi/L
	199-K-110A	7/30/96	B0J5V2	N	12.44	3.37	pCi/L
		10/28/96	B0JK51	N	10.40	2.35	pCi/L
		1/16/97	B0JTT7	N	16.90	3.01	pCi/L
		4/23/97	B0K557	N	10.80	2.46	pCi/L
			B0K558	N	18.80	3.07	pCi/L
		7/28/97	B0LBR3	N	12.60	2.81	pCi/L
		10/27/97	B0M7C6	N	9.69	2.06	pCi/L
		1/28/98	B0MNT1	N	10.80	2.44	pCi/L
		4/27/98	B0NBD2	N	10.40	2.38	pCi/L
	199-K-27	7/31/96	B0J5V7	N	14.03	3.58	pCi/L
		8/28/96	B0J693	N	15.77	3.71	pCi/L
		10/28/96	B0JK57	N	22.50	3.38	pCi/L
		1/14/97	B0JTV3	N	11.40	2.41	pCi/L
		3/24/97	B0K058	N	13.40	2.51	pCi/L
		4/28/97	B0K566	N	15.80	2.81	pCi/L
		7/28/97	B0LBR4	N	16.40	2.67	pCi/L
		9/26/97	B0M103	N	15.10	2.58	pCi/L
		10/15/97	B0M668	N	20.00	6.13	pCi/L
		1/26/98	B0MNT6	N	15.00	2.49	pCi/L
		3/25/98	B0N472	N	20.30	3.04	pCi/L
		4/30/98	B0NBC3	N	16.20	2.77	pCi/L
	199-K-28	7/30/96	B0J5V3	N	7.04	2.78	pCi/L
		10/28/96	B0JK52	N	9.08	2.23	pCi/L
		1/14/97	B0JTT8	N	9.35	2.21	pCi/L
		4/29/97	B0K559	N	10.30	2.36	pCi/L
		7/28/97	B0LBR6	N	8.76	2.10	pCi/L
		10/15/97	B0M669	N	16.50	5.65	pCi/L
		1/26/98	B0MNT2	N	9.22	2.02	pCi/L
		4/27/98	B0NBD3	N	10.90 U	8.20	pCi/L
	199-K-29	7/30/96	B0J5V4	N	6.22	2.77	pCi/L
		10/28/96	B0JK53	N	5.90	3.00	pCi/L
		1/14/97	B0JTT9	N	9.32	2.24	pCi/L
		4/23/97	B0K560	N	7.67	3.55	pCi/L
		7/28/97	B0LBR7	N	7.96	2.65	pCi/L
		10/15/97	B0M670	N	14.20	5.06	pCi/L
		1/26/98	B0MNR6	N	8.80	1.98	pCi/L
		4/27/98	B0NBB7	N	4.19 U	2.83	pCi/L
	199-K-30	7/29/96	B0J3W3	N	6.45	2.79	pCi/L
		10/29/96	B0JK58	N	28.30	13.20	pCi/L
		11/26/96	B0JLP8	N	6.21	1.88	pCi/L
		1/15/97	B0JTV4	N	10.90 U	7.34	pCi/L
		4/29/97	B0K568	N	8.37	1.89	pCi/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		7/29/97	B0LBR8	N	-3.45 U	15.10	pCi/L
		10/15/97	B0M671	N	13.60	5.68	pCi/L
		1/26/98	B0MNT8	N	7.59	1.88	pCi/L
		4/27/98	B0NBC5	N	7.66 U	7.58	pCi/L
	199-K-32A	7/30/96	B0J5V5	N	10.48	3.17	pCi/L
		10/29/96	B0JK54	N	12.20	2.40	pCi/L
		12/09/96	B0JLQ2	N	11.80	2.40	pCi/L
		1/20/97	B0JTV0	N	11.40	2.41	pCi/L
		4/28/97	B0K561	N	9.22	2.16	pCi/L
		7/28/97	B0LBT1	N	10.40	2.16	pCi/L
		10/29/97	B0M7J3	N	7.50	1.88	pCi/L
		1/28/98	B0MNR7	N	17.80	2.83	pCi/L
		4/27/98	B0NBB8	N	8.27	2.03	pCi/L
	199-K-34	7/30/96	B0J5V6	N	29.14	4.97	pCi/L
		10/29/96	B0JK55	N	55.90	6.28	pCi/L
		11/15/96	B0JLQ8	N	70.10	7.53	pCi/L
			B0JLS4	N	68.60	7.39	pCi/L
			B0JLS8	N	54.00	8.70	pCi/L
		1/16/97	B0JTV1	N	61.90	7.28	pCi/L
		4/28/97	B0K562	N	63.50	11.00	pCi/L
		7/28/97	B0LBT3	N	48.60	5.55	pCi/L
		10/27/97	B0M2W4	N	38.50	4.74	pCi/L
		1/28/98	B0MNR8	N	40.60	5.75	pCi/L
		4/27/98	B0NBB9	N	66.30	8.39	pCi/L
Hexavalent chromium	199-K-107A	3/20/97	B0K431	N	.17		mg/L
		6/26/97	B0L7D0	Y	.24		mg/L
		9/29/97	B0M106	Y	.18		mg/L
		10/27/97	B0M784	Y	.17		mg/L
		1/22/98	B0MVL2	Y	.17		mg/L
		4/28/98	B0N8R2	Y	.76		mg/L
		7/22/98	B0P6X1	Y	.41		mg/L
	199-K-108A	3/20/97	B0K432	N	.20		mg/L
		6/26/97	B0L7D1	Y	.18		mg/L
		9/26/97	B0M107	Y	.11		mg/L
		10/27/97	B0M791	Y	.07		mg/L
		1/22/98	B0MVL3	Y	.15		mg/L
		4/28/98	B0N8R0	Y	.48		mg/L
		7/28/98	B0P6X3	Y	.27		mg/L
Iodine-129	199-K-109A	8/28/96	B0J685	N	.26	.32	pCi/L
		3/31/97	B0K057	N	-.05 U	.55	pCi/L
		3/24/98	B0N470	N	.09 U	.25	pCi/L
	199-K-27	3/24/97	B0K058	N	.40 U	.48	pCi/L
		3/25/98	B0N472	N	.23 U	.24	pCi/L
Iron	199-K-106A	12/05/96	B0JLT0	N	29.60 BN		µg/L
			B0JLT1	Y	24.70 BN		µg/L
		10/27/97	B0M7M9	N	31.60 B		µg/L
			B0M7N0	Y	31.30 B		µg/L
	199-K-107A	12/05/96	B0JLR6	N	303.00 N		µg/L
			B0JLR7	Y	64.70 BN		µg/L
		10/27/97	B0M786	Y	22.00 B		µg/L
			B0M787	N	65.50 B		µg/L
	199-K-108A	12/09/96	B0JLR8	N	165.00		µg/L
			B0JLR9	Y	68.10 B		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		10/27/97	B0M792	Y	56.20 B		µg/L
			B0M793	N	92.90 B		µg/L
	199-K-109A	12/06/96	B0JLS0	N	191.00 N		µg/L
			B0JLS1	Y	61.50 BN		µg/L
		10/24/97	B0M7H0	Y	40.50 B		µg/L
			B0M7H1	N	44.80 B		µg/L
	199-K-110A	4/23/97	B0KB86	Y	108.00 C		µg/L
			B0KB88	Y	120.00 C		µg/L
		10/27/97	B0M7C5	Y	63.20 B		µg/L
			B0M7C6	N	2500.00		µg/L
		4/27/98	B0NCK7	Y	150.00		µg/L
	199-K-27	3/24/97	B0K059	Y	34.20 CQ		µg/L
		10/27/97	B0M7H3	Y	34.60 B		µg/L
			B0M7H4	N	108.00		µg/L
		3/25/98	B0N471	Y	196.00 C		µg/L
	199-K-30	7/29/96	B0J3W4	Y	13.00 U		µg/L
		11/26/96	B0JLP8	N	54.20 B		µg/L
			B0JLP9	Y	28.40 B		µg/L
		10/24/97	B0M7H6	Y	31.60 B		µg/L
			B0M7H7	N	251.00		µg/L
	199-K-32A	12/09/96	B0JLQ2	N	170.00		µg/L
			B0JLQ3	Y	120.00		µg/L
		4/28/97	B0KBB0	Y	42.60 CQ		µg/L
		10/29/97	B0M7J2	Y	35.20 B		µg/L
			B0M7J3	N	48.70 B		µg/L
		4/27/98	B0NCL3	Y	7.20 B		µg/L
	199-K-34	11/15/96	B0JLQ8	N	57.50 B		µg/L
			B0JLQ9	Y	25.40 B		µg/L
			B0JLS4	N	40.40 B		µg/L
			B0JLS5	Y	42.00 B		µg/L
			B0JLS8	N	34.80		µg/L
			B0JLS9	Y	10.60		µg/L
		4/28/97	B0KBB2	Y	64.00 CQ		µg/L
		4/27/98	B0NCL7	Y	8.10 B		µg/L
Iron-59	199-K-106A	12/05/96	B0JLT0	N	-11.60 U	14.30	pCi/L
	199-K-107A	12/05/96	B0JLR6	N	6.80 U	11.90	pCi/L
	199-K-108A	12/09/96	B0JLR8	N	-11.30 U	14.90	pCi/L
	199-K-109A	12/06/96	B0JLS0	N	-3.79 U	12.60	pCi/L
	199-K-30	11/26/96	B0JLP8	N	4.78 U	10.10	pCi/L
	199-K-32A	12/09/96	B0JLQ2	N	-1.54 U	15.40	pCi/L
	199-K-34	11/15/96	B0JLQ8	N	7.73 U	14.60	pCi/L
			B0JLS4	N	.92 U	15.40	pCi/L
Lead	199-K-34	11/15/96	B0JLS8	N	33.80 U		µg/L
			B0JLS9	Y	33.80 U		µg/L
Magnesium	199-K-106A	12/05/96	B0JLT0	N	17400.00		µg/L
			B0JLT1	Y	17900.00		µg/L
		10/27/97	B0M7M9	N	18000.00		µg/L
			B0M7N0	Y	18200.00		µg/L
	199-K-107A	12/05/96	B0JLR6	N	10200.00		µg/L
			B0JLR7	Y	10100.00		µg/L
		10/27/97	B0M786	Y	9720.00		µg/L
			B0M787	N	9500.00		µg/L
	199-K-108A	12/09/96	B0JLR8	N	13000.00		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
			B0JLR9	Y	13000.00		µg/L
		10/27/97	B0M792	Y	12800.00		µg/L
			B0M793	N	12500.00		µg/L
	199-K-109A	12/06/96	B0JLS0	N	14900.00		µg/L
			B0JLS1	Y	14700.00		µg/L
		10/24/97	B0M7H0	Y	14000.00		µg/L
			B0M7H1	N	14400.00		µg/L
	199-K-110A	4/23/97	B0KB86	Y	22200.00 C		µg/L
			B0KB88	Y	22600.00 C		µg/L
		10/27/97	B0M7C5	Y	22200.00		µg/L
			B0M7C6	N	22100.00		µg/L
		4/27/98	B0NCK7	Y	20700.00		µg/L
	199-K-27	3/24/97	B0K059	Y	14700.00		µg/L
		10/27/97	B0M7H3	Y	12800.00		µg/L
			B0M7H4	N	14900.00		µg/L
		3/25/98	B0N471	Y	15400.00		µg/L
	199-K-30	7/29/96	B0J3W4	Y	12000.00	2520.00	µg/L
		11/26/96	B0JLP8	N	12500.00		µg/L
			B0JLP9	Y	12700.00		µg/L
		10/24/97	B0M7H6	Y	13500.00		µg/L
			B0M7H7	N	12500.00		µg/L
	199-K-32A	12/09/96	B0JLQ2	N	6350.00		µg/L
			B0JLQ3	Y	6610.00		µg/L
		4/28/97	B0KBB0	Y	5840.00 C		µg/L
		10/29/97	B0M7J2	Y	9460.00		µg/L
			B0M7J3	N	9240.00		µg/L
		4/27/98	B0NCL3	Y	7000.00		µg/L
	199-K-34	11/15/96	B0JLQ8	N	9930.00		µg/L
			B0JLQ9	Y	9740.00		µg/L
			B0JLS4	N	10000.00		µg/L
			B0JLS5	Y	9880.00		µg/L
			B0JLS8	N	9950.00		µg/L
			B0JLS9	Y	8810.00		µg/L
		4/28/97	B0KBB2	Y	10800.00 C		µg/L
		4/27/98	B0NCL7	Y	9900.00		µg/L
Manganese	199-K-106A	12/05/96	B0JLT0	N	3.30 B		µg/L
			B0JLT1	Y	5.90 B		µg/L
		10/27/97	B0M7M9	N	2.80 B		µg/L
			B0M7N0	Y	3.10 B		µg/L
	199-K-107A	12/05/96	B0JLR6	N	9.30 B		µg/L
			B0JLR7	Y	4.40 B		µg/L
		10/27/97	B0M786	Y	1.70 B		µg/L
			B0M787	N	3.60 B		µg/L
	199-K-108A	12/09/96	B0JLR8	N	5.80 B		µg/L
			B0JLR9	Y	4.40 B		µg/L
		10/27/97	B0M792	Y	3.60 B		µg/L
			B0M793	N	4.50 B		µg/L
	199-K-109A	12/06/96	B0JLS0	N	7.40 B		µg/L
			B0JLS1	Y	6.70 B		µg/L
		10/24/97	B0M7H0	Y	4.90 B		µg/L
			B0M7H1	N	4.30 B		µg/L
	199-K-110A	4/23/97	B0KB86	Y	28.70		µg/L
			B0KB88	Y	28.30		µg/L
		10/27/97	B0M7C5	Y	23.30		µg/L
			B0M7C6	N	43.20		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		4/27/98	B0NCK7	Y	14.00		µg/L
	199-K-27	3/24/97	B0K059	Y	2.70 B		µg/L
		10/27/97	B0M7H3	Y	3.70 B		µg/L
			B0M7H4	N	5.30 B		µg/L
		3/25/98	B0N471	Y	13.10		µg/L
	199-K-30	7/29/96	B0J3W4	Y	.86 BL	.13	µg/L
		11/26/96	B0JLP8	N	1.40 B		µg/L
			B0JLP9	Y	1.60 B		µg/L
		10/24/97	B0M7H6	Y	3.70 B		µg/L
			B0M7H7	N	5.20 B		µg/L
	199-K-32A	12/09/96	B0JLQ2	N	4.30 B		µg/L
			B0JLQ3	Y	4.30 B		µg/L
		4/28/97	B0KBB0	Y	3.40 B		µg/L
		10/29/97	B0M7J2	Y	3.70 B		µg/L
			B0M7J3	N	3.80 B		µg/L
		4/27/98	B0NCL3	Y	2.00 B		µg/L
	199-K-34	11/15/96	B0JLQ8	N	3.00 B		µg/L
			B0JLQ9	Y	2.40 B		µg/L
			B0JLS4	N	2.50 B		µg/L
			B0JLS5	Y	3.00 B		µg/L
			B0JLS8	N	.80 U		µg/L
			B0JLS9	Y	.80 U		µg/L
		4/28/97	B0KBB2	Y	4.40 B		µg/L
		4/27/98	B0NCL7	Y	2.10 B		µg/L
Mercury	199-K-34	11/15/96	B0JLS8	N	.10 U		µg/L
			B0JLS9	Y	.10 U		µg/L
Methylene chloride	199-K-106A	7/30/96	B0J3Y2	N	.10 U		µg/L
		4/24/97	B0KB80	N	.21 U		µg/L
		9/29/97	B0M101	N	.76 U		µg/L
		4/28/98	B0NCM8	N	1.00 BJ		µg/L
	199-K-108A	4/24/97	B0KB83	N	.21 U		µg/L
		4/28/98	B0NCN0	N	2.00 BJ		µg/L
	199-K-109A	8/28/96	B0J685	N	.10 U		µg/L
		3/31/97	B0K057	N	.21 U		µg/L
		3/24/98	B0N470	N	.30 BJH		µg/L
	199-K-27	3/24/97	B0K058	N	.21 U		µg/L
		3/25/98	B0N472	N	3.00 BJQ		µg/L
	199-K-34	4/28/97	B0KBB1	N	.21 U		µg/L
		4/27/98	B0NCL8	N	1.00 BJQ		µg/L
Nickel	199-K-106A	12/05/96	B0JLT0	N	15.30 B		µg/L
			B0JLT1	Y	21.20 B		µg/L
		10/27/97	B0M7M9	N	21.10 B		µg/L
			B0M7N0	Y	21.10 B		µg/L
	199-K-107A	12/05/96	B0JLR6	N	13.40 U		µg/L
			B0JLR7	Y	13.40 U		µg/L
		10/27/97	B0M786	Y	9.90 U		µg/L
			B0M787	N	10.40 B		µg/L
	199-K-108A	12/09/96	B0JLR8	N	15.60 B		µg/L
			B0JLR9	Y	9.20 U		µg/L
		10/27/97	B0M792	Y	9.90 U		µg/L
			B0M793	N	9.90 U		µg/L
	199-K-109A	12/06/96	B0JLS0	N	13.40 U		µg/L
			B0JLS1	Y	13.40 U		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		10/24/97	B0M7H0	Y	12.90 B		µg/L
			B0M7H1	N	9.90 U		µg/L
	199-K-110A	4/23/97	B0KB86	Y	198.00		µg/L
			B0KB88	Y	194.00		µg/L
		10/27/97	B0M7C5	Y	171.00		µg/L
			B0M7C6	N	210.00		µg/L
		4/27/98	B0NCK7	Y	151.00		µg/L
	199-K-27	3/24/97	B0K059	Y	8.70 U		µg/L
		10/27/97	B0M7H3	Y	9.90 U		µg/L
			B0M7H4	N	9.90 U		µg/L
		3/25/98	B0N471	Y	14.20 U		µg/L
	199-K-30	7/29/96	B0J3W4	Y	8.00 L	1.92	µg/L
		11/26/96	B0JLP8	N	13.40 U		µg/L
			B0JLP9	Y	13.40 U		µg/L
		10/24/97	B0M7H6	Y	9.90 U		µg/L
			B0M7H7	N	9.90 U		µg/L
	199-K-32A	12/09/96	B0JLQ2	N	15.10 B		µg/L
			B0JLQ3	Y	14.30 B		µg/L
		4/28/97	B0KBB0	Y	8.70 U		µg/L
		10/29/97	B0M7J2	Y	9.90 U		µg/L
			B0M7J3	N	9.90 U		µg/L
		4/27/98	B0NCL3	Y	14.20 U		µg/L
	199-K-34	11/15/96	B0JLQ8	N	13.40 U		µg/L
			B0JLQ9	Y	13.40 U		µg/L
			B0JLS4	N	13.40 U		µg/L
			B0JLS5	Y	13.40 U		µg/L
			B0JLS8	N	9.90 U		µg/L
			B0JLS9	Y	9.90 U		µg/L
		4/28/97	B0KBB2	Y	8.70 U		µg/L
		4/27/98	B0NCL7	Y	14.20 U		µg/L
Nitrate	199-K-106A	7/30/96	B0J3Y2	N	84000.00 D	17600.00	µg/L
	199-K-107A	7/31/96	B0J5V0	N	22000.00 D	4620.00	µg/L
	199-K-108A	7/30/96	B0J5V1	N	33000.00 D	6930.00	µg/L
	199-K-109A	7/29/96	B0J5V8	N	7100.00	1490.00	µg/L
		8/28/96	B0J685	N	14000.00 D	2940.00	µg/L
	199-K-110A	7/30/96	B0J5V2	N	5600.00	1180.00	µg/L
	199-K-27	7/31/96	B0J5V7	N	19000.00 D	3990.00	µg/L
		8/28/96	B0J693	N	24000.00 D	5040.00	µg/L
	199-K-28	7/30/96	B0J5V3	N	29000.00 D	6090.00	µg/L
	199-K-29	7/30/96	B0J5V4	N	19000.00 D	3990.00	µg/L
	199-K-30	7/29/96	B0J3W3	N	45000.00 D	9450.00	µg/L
	199-K-32A	7/30/96	B0J5V5	N	96000.00 D	20200.00	µg/L
	199-K-34	7/30/96	B0J5V6	N	59000.00 D	12400.00	µg/L
		11/15/96	B0JLS8	N	40.50 G		mg/L
Nitrite	199-K-106A	7/30/96	B0J3Y2	N	11.00 U		µg/L
	199-K-107A	7/31/96	B0J5V0	N	11.00 U		µg/L
	199-K-108A	7/30/96	B0J5V1	N	11.00 U		µg/L
	199-K-109A	7/29/96	B0J5V8	N	11.00 U		µg/L
		8/28/96	B0J685	N	11.00 U		µg/L
	199-K-110A	7/30/96	B0J5V2	N	11.00 U		µg/L
	199-K-27	7/31/96	B0J5V7	N	11.00 U		µg/L
		8/28/96	B0J693	N	11.00 U		µg/L
	199-K-28	7/30/96	B0J5V3	N	11.00 U		µg/L
	199-K-29	7/30/96	B0J5V4	N	11.00 U		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
	199-K-30	7/29/96	B0J3W3	N	11.00 U		µg/L
	199-K-32A	7/30/96	B0J5V5	N	11.00 U		µg/L
	199-K-34	7/30/96	B0J5V6	N	11.00 U		µg/L
Nitrogen in nitrate	199-K-106A	10/29/96	B0JK56	N	15.70 D		mg/L
		12/05/96	B0JLT0	N	17.30		mg/L
		1/20/97	B0JTV2	N	21.20 D		mg/L
		4/24/97	B0K564	N	21.30 DH		mg/L
		7/28/97	B0LBP7	N	22.40 D		mg/L
		10/15/97	B0M667	N	19.70 D		mg/L
		1/22/98	B0MNV0	N	20.70 D		mg/L
		4/28/98	B0NBC9	N	22.70 D		mg/L
	199-K-107A	10/28/96	B0JK49	N	5.08 DQ		mg/L
		12/05/96	B0JLR6	N	5.62		mg/L
		1/15/97	B0JTT5	N	5.10 DH		mg/L
		4/24/97	B0K555	N	8.30 DH		mg/L
		7/28/97	B0LBP9	N	8.81 D		mg/L
		10/15/97	B0M673	N	5.67 D		mg/L
		1/22/98	B0MNR9	N	7.41 D		mg/L
		4/28/98	B0NBD0	N	6.49 D		mg/L
	199-K-108A	10/28/96	B0JK50	N	7.40 DQ		mg/L
		12/09/96	B0JLR8	N	7.24		mg/L
		1/15/97	B0JTT6	N	8.11 DH		mg/L
		4/24/97	B0K556	N	6.68 DH		mg/L
		7/28/97	B0LBR0	N	7.67 D		mg/L
		10/27/97	B0M793	N	6.67		mg/L
		1/22/98	B0MNT0	N	7.14 D		mg/L
		4/28/98	B0NBD1	N	8.44 D		mg/L
	199-K-109A	10/28/96	B0JK59	N	2.67 DQ		mg/L
		12/06/96	B0JLS0	N	3.14		mg/L
		1/14/97	B0JTV5	N	4.08 D		mg/L
		3/31/97	B0K057	N	4.55 D		mg/L
		4/28/97	B0K571	N	4.81 D		mg/L
		7/28/97	B0LBR1	N	3.07 D		mg/L
		10/15/97	B0M672	N	7.09 D		mg/L
		1/27/98	B0MNT4	N	4.78 D		mg/L
		3/24/98	B0N470	N	4.27 D		mg/L
		4/30/98	B0NBC1	N	3.75 D		mg/L
	199-K-110A	10/28/96	B0JK51	N	3.84 DQ		mg/L
		1/16/97	B0JTT7	N	4.53 DH		mg/L
		4/23/97	B0K557	N	4.58 D		mg/L
			B0K558	N	4.61 D		mg/L
		7/28/97	B0LBR3	N	2.75 D		mg/L
		10/27/97	B0M7C6	N	2.30		mg/L
		1/28/98	B0MNT1	N	3.66 D		mg/L
		4/27/98	B0NBD2	N	3.59 DH		mg/L
	199-K-27	10/28/96	B0JK57	N	5.56 DQ		mg/L
		1/14/97	B0JTV3	N	3.77 D		mg/L
		3/24/97	B0K058	N	3.98 D		mg/L
		4/28/97	B0K566	N	4.78 D		mg/L
		7/28/97	B0LBR4	N	4.88 D		mg/L
		9/26/97	B0M103	N	6.19 D		mg/L
		10/15/97	B0M668	N	5.88 D		mg/L
		1/26/98	B0MNT6	N	4.32 D		mg/L
		3/25/98	B0N472	N	6.74 D		mg/L
		4/30/98	B0NBC3	N	4.36 D		mg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
	199-K-28	10/28/96	B0JK52	N	6.75 DQ		mg/L
		1/14/97	B0JTT8	N	8.26		mg/L
		4/29/97	B0K559	N	8.99 D		mg/L
		7/28/97	B0LBR6	N	7.20 D		mg/L
		10/15/97	B0M669	N	7.27 D		mg/L
		1/26/98	B0MNT2	N	8.86 D		mg/L
		4/27/98	B0NBD3	N	11.20 DH		mg/L
	199-K-29	10/28/96	B0JK53	N	5.83 DQ		mg/L
		1/14/97	B0JTT9	N	5.63 D		mg/L
		4/23/97	B0K560	N	6.75 D		mg/L
		7/28/97	B0LBR7	N	6.22 D		mg/L
		10/15/97	B0M670	N	5.94 D		mg/L
		1/26/98	B0MNR6	N	5.54 D		mg/L
		4/27/98	B0NBB7	N	4.32 DH		mg/L
	199-K-30	10/29/96	B0JK58	N	11.80 D		mg/L
		11/26/96	B0JLP8	N	14.40		mg/L
		1/15/97	B0JTV4	N	9.56 DH		mg/L
		4/29/97	B0K568	N	9.24 D		mg/L
		7/29/97	B0LBR8	N	9.01 D		mg/L
		10/15/97	B0M671	N	10.40 D		mg/L
		1/26/98	B0MNT8	N	12.00 D		mg/L
		4/27/98	B0NBC5	N	12.00 DH		mg/L
	199-K-32A	10/29/96	B0JK54	N	10.40 D		mg/L
		12/09/96	B0JLQ2	N	6.51		mg/L
		1/20/97	B0JTV0	N	6.72 D		mg/L
		4/28/97	B0K561	N	7.01 D		mg/L
		7/28/97	B0LBT1	N	15.90 D		mg/L
		10/29/97	B0M7J3	N	24.40		mg/L
		1/28/98	B0MNR7	N	16.20 D		mg/L
		4/27/98	B0NBB8	N	11.30 DH		mg/L
	199-K-34	10/29/96	B0JK55	N	11.30 D		mg/L
		11/15/96	B0JLQ8	N	10.50		mg/L
			B0JLS4	N	9.90		mg/L
		1/16/97	B0JTV1	N	8.38 DH		mg/L
		4/28/97	B0K562	N	7.67 D		mg/L
		7/28/97	B0LBT3	N	13.90 D		mg/L
		10/27/97	B0M2W4	N	15.20 DH		mg/L
		1/28/98	B0MNR8	N	13.30 D		mg/L
		4/27/98	B0NBB9	N	29.20 H		mg/L
Nitrogen in nitrite	199-K-106A	10/29/96	B0JK56	N	.00 U		mg/L
		1/20/97	B0JTV2	N	.00 U		mg/L
		4/24/97	B0K564	N	.00 UH		mg/L
		7/28/97	B0LBP7	N	.00 U		mg/L
		10/15/97	B0M667	N	.00 U		mg/L
		1/22/98	B0MNV0	N	.00 U		mg/L
		4/28/98	B0NBC9	N	.00 UD		mg/L
	199-K-107A	10/28/96	B0JK49	N	.00 U		mg/L
		1/15/97	B0JTT5	N	.00 UH		mg/L
		4/24/97	B0K555	N	.00 UH		mg/L
		7/28/97	B0LBP9	N	.00 U		mg/L
		10/15/97	B0M673	N	.00 U		mg/L
		1/22/98	B0MNR9	N	.00 U		mg/L
		4/28/98	B0NBD0	N	.00 U		mg/L
	199-K-108A	10/28/96	B0JK50	N	.00 U		mg/L
		1/15/97	B0JTT6	N	.00 UH		mg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		4/24/97	B0K556	N	.00 UH		mg/L
		7/28/97	B0LBR0	N	.00 U		mg/L
		10/27/97	B0M793	N	.02 U		mg/L
		1/22/98	B0MNT0	N	.00 U		mg/L
		4/28/98	B0NBD1	N	.00 U		mg/L
	199-K-109A	10/28/96	B0JK59	N	.00 U		mg/L
		1/14/97	B0JTV5	N	.00 U		mg/L
		3/31/97	B0K057	N	.00 U		mg/L
		4/28/97	B0K571	N	.00 U		mg/L
		7/28/97	B0LBR1	N	.00 U		mg/L
		10/15/97	B0M672	N	.00 U		mg/L
		1/27/98	B0MNT4	N	.00 UD		mg/L
		3/24/98	B0N470	N	.01 UD		mg/L
		4/30/98	B0NBC1	N	.00 UD		mg/L
	199-K-110A	10/28/96	B0JK51	N	.01 UD		mg/L
		1/16/97	B0JTT7	N	.01 UDH		mg/L
		4/23/97	B0K557	N	.02 UD		mg/L
			B0K558	N	.02 UD		mg/L
		7/28/97	B0LBR3	N	.00 U		mg/L
		10/27/97	B0M7C6	N	.02 U		mg/L
		1/28/98	B0MNT1	N	.01 UD		mg/L
		4/27/98	B0NBD2	N	.01 UDH		mg/L
	199-K-27	10/28/96	B0JK57	N	.00 U		mg/L
		1/14/97	B0JTV3	N	.00 U		mg/L
		3/24/97	B0K058	N	.00 U		mg/L
		4/28/97	B0K566	N	.00 U		mg/L
		7/28/97	B0LBR4	N	.00 U		mg/L
		9/26/97	B0M103	N	.05		mg/L
		10/15/97	B0M668	N	.00 U		mg/L
		1/26/98	B0MNT6	N	.00 UD		mg/L
		3/25/98	B0N472	N	.01 UD		mg/L
		4/30/98	B0NBC3	N	.00 U		mg/L
	199-K-28	10/28/96	B0JK52	N	.00 U		mg/L
		1/14/97	B0JTT8	N	.00 UD		mg/L
		4/29/97	B0K559	N	.04 UD		mg/L
		7/28/97	B0LBR6	N	.00 U		mg/L
		10/15/97	B0M669	N	.00 U		mg/L
		1/26/98	B0MNT2	N	.01 UD		mg/L
		4/27/98	B0NBD3	N	.02 UDH		mg/L
	199-K-29	10/28/96	B0JK53	N	.00 U		mg/L
		1/14/97	B0JTT9	N	.00 U		mg/L
		4/23/97	B0K560	N	.02 UD		mg/L
		7/28/97	B0LBR7	N	.00 U		mg/L
		10/15/97	B0M670	N	.00 U		mg/L
		1/26/98	B0MNR6	N	.00 UD		mg/L
		4/27/98	B0NBB7	N	.02 UDH		mg/L
	199-K-30	10/29/96	B0JK58	N	.00 U		mg/L
		1/15/97	B0JTV4	N	.00 UH		mg/L
		4/29/97	B0K568	N	.00 U		mg/L
		7/29/97	B0LBR8	N	.00 U		mg/L
		10/15/97	B0M671	N	.00 U		mg/L
		1/26/98	B0MNT8	N	.00 U		mg/L
		4/27/98	B0NBC5	N	.00 UH		mg/L
	199-K-32A	10/29/96	B0JK54	N	.00 U		mg/L
		1/20/97	B0JTV0	N	.00 U		mg/L
		4/28/97	B0K561	N	.00 U		mg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		7/28/97	B0LBT1	N	.00 U		mg/L
		10/29/97	B0M7J3	N	.02 U		mg/L
		1/28/98	B0MNR7	N	.00 U		mg/L
		4/27/98	B0NBB8	N	.00 UH		mg/L
	199-K-34	10/29/96	B0JK55	N	.00 U		mg/L
		1/16/97	B0JTV1	N	.00 UH		mg/L
		4/28/97	B0K562	N	.00 U		mg/L
		7/28/97	B0LBT3	N	.00 U		mg/L
		10/27/97	B0M2W4	N	.00 UH		mg/L
		1/28/98	B0MNR8	N	.00 U		mg/L
		4/27/98	B0NBB9	N	.00 UH		mg/L
Phosphate	199-K-106A	7/30/96	B0J3Y2	N	83.00 U		µg/L
		10/29/96	B0JK56	N	.04 U		mg/L
		1/20/97	B0JTV2	N	.04 UH		mg/L
		4/24/97	B0K564	N	.09 UH		mg/L
		10/15/97	B0M667	N	.02 U		mg/L
	199-K-107A	7/31/96	B0J5V0	N	83.00 U		µg/L
		10/28/96	B0JK49	N	.04 U		mg/L
		1/15/97	B0JTT5	N	.04 UH		mg/L
		4/24/97	B0K555	N	.09 UH		mg/L
		10/15/97	B0M673	N	.41		mg/L
	199-K-108A	7/30/96	B0J5V1	N	83.00 U		µg/L
		10/28/96	B0JK50	N	.04 U		mg/L
		1/15/97	B0JTT6	N	.04 UH		mg/L
		4/24/97	B0K556	N	.34 BH		mg/L
	199-K-109A	7/29/96	B0J5V8	N	83.00 U		µg/L
		8/28/96	B0J685	N	83.00 U		µg/L
		10/28/96	B0JK59	N	.04 U		mg/L
		1/14/97	B0JTV5	N	.04 U		mg/L
		3/31/97	B0K057	N	.09 U		mg/L
		4/28/97	B0K571	N	.09 U		mg/L
		10/15/97	B0M672	N	.02 U		mg/L
	199-K-110A	7/30/96	B0J5V2	N	83.00 U		µg/L
		10/28/96	B0JK51	N	.04 U		mg/L
		1/16/97	B0JTT7	N	.04 UH		mg/L
		4/23/97	B0K557	N	.09 U		mg/L
			B0K558	N	.09 U		mg/L
	199-K-27	7/31/96	B0J5V7	N	83.00 U		µg/L
		8/28/96	B0J693	N	83.00 U		µg/L
		10/28/96	B0JK57	N	.04 U		mg/L
		1/14/97	B0JTV3	N	.04 U		mg/L
		3/24/97	B0K058	N	.09 U		mg/L
		4/28/97	B0K566	N	.09 U		mg/L
		10/15/97	B0M668	N	.02 U		mg/L
	199-K-28	7/30/96	B0J5V3	N	83.00 U		µg/L
		10/28/96	B0JK52	N	.04 U		mg/L
		1/14/97	B0JTT8	N	.04 U		mg/L
		4/29/97	B0K559	N	.09 U		mg/L
		10/15/97	B0M669	N	.02 U		mg/L
	199-K-29	7/30/96	B0J5V4	N	83.00 U		µg/L
		10/28/96	B0JK53	N	.04 U		mg/L
		1/14/97	B0JTT9	N	.04 U		mg/L
		4/23/97	B0K560	N	.09 U		mg/L
		10/15/97	B0M670	N	.02 U		mg/L
	199-K-30	7/29/96	B0J3W3	N	83.00 U		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		10/29/96	B0JK58	N	.04 U		mg/L
		1/15/97	B0JTV4	N	.04 UH		mg/L
		4/29/97	B0K568	N	.09 U		mg/L
		10/15/97	B0M671	N	.02 U		mg/L
	199-K-32A	7/30/96	B0J5V5	N	83.00 U		µg/L
		10/29/96	B0JK54	N	.04 U		mg/L
		1/20/97	B0JTV0	N	.04 UH		mg/L
		4/28/97	B0K561	N	.09 U		mg/L
	199-K-34	7/30/96	B0J5V6	N	83.00 U		µg/L
		10/29/96	B0JK55	N	.04 U		mg/L
		1/16/97	B0JTV1	N	.04 UH		mg/L
		4/28/97	B0K562	N	.09 U		mg/L
Plutonium-238	199-K-107A	10/15/97	B0M673	N	-.08 U	.09	pCi/L
	199-K-109A	8/28/96	B0J685	N	-.01	.01	pCi/L
		3/31/97	B0K057	N	-.01 U	.02	pCi/L
		10/15/97	B0M672	N	-.09 U	.09	pCi/L
		3/24/98	B0N470	N	-.08 U	.11	pCi/L
	199-K-27	3/24/97	B0K058	N	-.01 U	.01	pCi/L
		3/25/98	B0N472	N	-.00 U	.01	pCi/L
Plutonium-239/240	199-K-107A	10/15/97	B0M673	N	0.00 U	1.97	pCi/L
	199-K-109A	8/28/96	B0J685	N	.00	.01	pCi/L
		3/31/97	B0K057	N	-.02 U	.02	pCi/L
		10/15/97	B0M672	N	.48 U	1.09	pCi/L
		3/24/98	B0N470	N	-.04 U	.08	pCi/L
	199-K-27	3/24/97	B0K058	N	0.00 U	.11	pCi/L
		3/25/98	B0N472	N	.04 U	.10	pCi/L
Potassium	199-K-106A	12/05/96	B0JLT0	N	6210.00		µg/L
			B0JLT1	Y	7750.00		µg/L
		10/27/97	B0M7M9	N	7620.00		µg/L
			B0M7N0	Y	8020.00		µg/L
	199-K-107A	12/05/96	B0JLR6	N	3160.00 B		µg/L
			B0JLR7	Y	4460.00 B		µg/L
		10/27/97	B0M786	Y	3790.00 B		µg/L
			B0M787	N	3060.00 B		µg/L
	199-K-108A	12/09/96	B0JLR8	N	5580.00		µg/L
			B0JLR9	Y	6580.00		µg/L
		10/27/97	B0M792	Y	8300.00		µg/L
			B0M793	N	6170.00		µg/L
	199-K-109A	12/06/96	B0JLS0	N	5020.00		µg/L
			B0JLS1	Y	4170.00 B		µg/L
		10/24/97	B0M7H0	Y	5370.00		µg/L
			B0M7H1	N	3980.00 B		µg/L
	199-K-110A	4/23/97	B0KB86	Y	7280.00		µg/L
			B0KB88	Y	7410.00		µg/L
		10/27/97	B0M7C5	Y	6160.00		µg/L
			B0M7C6	N	6450.00		µg/L
		4/27/98	B0NCK7	Y	7400.00		µg/L
	199-K-27	3/24/97	B0K059	Y	4630.00		µg/L
		10/27/97	B0M7H3	Y	4100.00 B		µg/L
			B0M7H4	N	5060.00		µg/L
		3/25/98	B0N471	Y	5950.00		µg/L
	199-K-30	7/29/96	B0J3W4	Y	6500.00B	1370.00	µg/L
		11/26/96	B0JLP8	N	5350.00		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
			B0JLP9	Y	5020.00		µg/L
		10/24/97	B0M7H6	Y	8310.00		µg/L
			B0M7H7	N	6070.00		µg/L
	199-K-32A	12/09/96	B0JLQ2	N	2650.00 B		µg/L
			B0JLQ3	Y	2540.00 B		µg/L
		4/28/97	B0KBB0	Y	2070.00		µg/L
		10/29/97	B0M7J2	Y	4570.00 B		µg/L
			B0M7J3	N	3880.00 B		µg/L
		4/27/98	B0NCL3	Y	2150.00 U		µg/L
	199-K-34	11/15/96	B0JLQ8	N	1950.00 U		µg/L
			B0JLQ9	Y	2360.00 B		µg/L
			B0JLS4	N	2620.00 B		µg/L
			B0JLS5	Y	2940.00 B		µg/L
			B0JLS8	N	2440.00		µg/L
			B0JLS9	Y	2380.00		µg/L
		4/28/97	B0KBB2	Y	3830.00		µg/L
		4/27/98	B0NCL7	Y	2360.00		µg/L
Potassium-40	199-K-106A	7/30/96	B0J3Y2	N	68.20	24.50	pCi/L
		4/24/97	B0KB81	N	16.50 U	21.80	pCi/L
		9/29/97	B0M102	N	4.96 U	26.40	pCi/L
		4/28/98	B0NCM8	N	134.00 U	49.30	pCi/L
	199-K-109A	8/28/96	B0J685	N	75.70	22.90	pCi/L
		3/31/97	B0K070	N	58.90 U	27.50	pCi/L
		3/24/98	B0N470	N	111.00 U	77.80	pCi/L
	199-K-27	8/28/96	B0J693	N	23.50	18.90	pCi/L
		3/24/97	B0K071	N	49.50 U	24.00	pCi/L
		9/26/97	B0M104	N	20.60 U	24.60	pCi/L
		3/25/98	B0N472	N	240.00 U	78.60	pCi/L
	199-K-28	4/29/97	B0KB94	N	62.20 U	33.60	pCi/L
		4/27/98	B0NCL0	N	132.00 U	41.40	pCi/L
	199-K-29	4/23/97	B0KB96	N	63.80 U	25.10	pCi/L
		4/27/98	B0NCL1	N	44.70 U	30.10	pCi/L
	199-K-30	7/29/96	B0J3W3	N	50.30	21.80	pCi/L
		4/29/97	B0KB98	N	16.40 U	51.70	pCi/L
		4/27/98	B0NCL2	N	43.20 U	41.80	pCi/L
	199-K-34	4/28/97	B0KBB3	N	59.00 U	19.80	pCi/L
		4/27/98	B0NCL8	N	3.48 U	56.60	pCi/L
Ruthenium-106	199-K-106A	4/24/97	B0KB81	N	-.67 U	10.90	pCi/L
		9/29/97	B0M102	N	10.40 U	10.80	pCi/L
		10/15/97	B0M667	N	-17.90 U	39.70	pCi/L
		4/28/98	B0NCM8	N	3.63 U	19.50	pCi/L
	199-K-107A	10/15/97	B0M673	N	16.30 U	35.90	pCi/L
	199-K-109A	8/28/96	B0J685	N	-5.19 U	11.60	pCi/L
		3/31/97	B0K070	N	5.26 U	13.10	pCi/L
		10/15/97	B0M672	N	-9.07 U	38.70	pCi/L
		3/24/98	B0N470	N	14.40 U	36.30	pCi/L
	199-K-27	8/28/96	B0J693	N	4.57 U	10.10	pCi/L
		3/24/97	B0K071	N	4.16 U	14.40	pCi/L
		9/26/97	B0M104	N	.80 U	9.93	pCi/L
		10/15/97	B0M668	N	17.60 U	29.80	pCi/L
		3/25/98	B0N472	N	25.70 U	39.80	pCi/L
	199-K-28	4/29/97	B0KB94	N	1.59 U	21.40	pCi/L
		10/15/97	B0M669	N	2.56 U	39.40	pCi/L
		4/27/98	B0NCL0	N	-15.00 U	21.80	pCi/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
	199-K-29	4/23/97	B0KB96	N	-2.43 U	9.87	pCi/L
		10/15/97	B0M670	N	28.20 U	37.70	pCi/L
		4/27/98	B0NCL1	N	-5.18 U	20.00	pCi/L
	199-K-30	4/29/97	B0KB98	N	0.00 U	19.10	pCi/L
		10/15/97	B0M671	N	3.67 U	40.20	pCi/L
		4/27/98	B0NCL2	N	-3.90 U	23.30	pCi/L
	199-K-34	4/28/97	B0KBB3	N	1.41 U	10.40	pCi/L
		4/27/98	B0NCL8	N	-2.36 U	23.50	pCi/L
Selenium	199-K-34	11/15/96	B0JLS8	N	38.50 U		µg/L
			B0JLS9	Y	38.50 U		µg/L
Silver	199-K-106A	12/05/96	B0JLT0	N	6.60 U		µg/L
			B0JLT1	Y	6.60 U		µg/L
		10/27/97	B0M7M9	N	5.30 U		µg/L
			B0M7N0	Y	5.30 U		µg/L
	199-K-107A	12/05/96	B0JLR6	N	6.60 U		µg/L
			B0JLR7	Y	6.60 U		µg/L
		10/27/97	B0M786	Y	5.30 U		µg/L
			B0M787	N	5.30 U		µg/L
	199-K-108A	12/09/96	B0JLR8	N	4.90 U		µg/L
			B0JLR9	Y	4.90 U		µg/L
		10/27/97	B0M792	Y	5.30 U		µg/L
			B0M793	N	5.30 U		µg/L
	199-K-109A	12/06/96	B0JLS0	N	6.60 U		µg/L
			B0JLS1	Y	6.60 U		µg/L
		10/24/97	B0M7H0	Y	5.30 U		µg/L
			B0M7H1	N	5.30 U		µg/L
	199-K-110A	4/23/97	B0KB86	Y	3.60 U		µg/L
			B0KB88	Y	3.60 U		µg/L
		10/27/97	B0M7C5	Y	5.30 U		µg/L
			B0M7C6	N	5.30 U		µg/L
		4/27/98	B0NCK7	Y	5.10 UN		µg/L
	199-K-27	3/24/97	B0K059	Y	3.60 U		µg/L
		10/27/97	B0M7H3	Y	5.30 U		µg/L
			B0M7H4	N	5.30 U		µg/L
		3/25/98	B0N471	Y	5.10 U		µg/L
	199-K-30	7/29/96	B0J3W4	Y	4.50 U		µg/L
		11/26/96	B0JLP8	N	6.60 U		µg/L
			B0JLP9	Y	6.60 U		µg/L
		10/24/97	B0M7H6	Y	5.30 U		µg/L
			B0M7H7	N	5.30 U		µg/L
	199-K-32A	12/09/96	B0JLQ2	N	4.90 U		µg/L
			B0JLQ3	Y	4.90 U		µg/L
		4/28/97	B0KBB0	Y	3.60 U		µg/L
		10/29/97	B0M7J2	Y	5.30 U		µg/L
			B0M7J3	N	5.30 U		µg/L
		4/27/98	B0NCL3	Y	5.10 UN		µg/L
	199-K-34	11/15/96	B0JLQ8	N	6.60 U		µg/L
			B0JLQ9	Y	6.60 U		µg/L
			B0JLS4	N	6.60 U		µg/L
			B0JLS5	Y	6.60 U		µg/L
			B0JLS8	N	8.90 U		µg/L
			B0JLS9	Y	8.90 U		µg/L
		4/28/97	B0KBB2	Y	3.60 U		µg/L
		4/27/98	B0NCL7	Y	5.10 UN		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
Sodium	199-K-106A	12/05/96	B0JLT0	N	27600.00		µg/L
			B0JLT1	Y	28200.00		µg/L
		10/27/97	B0M7M9	N	27500.00		µg/L
			B0M7N0	Y	27900.00		µg/L
	199-K-107A	12/05/96	B0JLR6	N	17400.00		µg/L
			B0JLR7	Y	17300.00		µg/L
		10/27/97	B0M786	Y	17400.00		µg/L
			B0M787	N	16900.00		µg/L
	199-K-108A	12/09/96	B0JLR8	N	22200.00		µg/L
			B0JLR9	Y	22500.00		µg/L
		10/27/97	B0M792	Y	23100.00		µg/L
			B0M793	N	22100.00		µg/L
	199-K-109A	12/06/96	B0JLS0	N	6080.00		µg/L
			B0JLS1	Y	6380.00		µg/L
		10/24/97	B0M7H0	Y	6870.00		µg/L
			B0M7H1	N	7140.00		µg/L
	199-K-110A	4/23/97	B0KB86	Y	16400.00		µg/L
			B0KB88	Y	16500.00		µg/L
		10/27/97	B0M7C5	Y	18700.00		µg/L
			B0M7C6	N	18600.00		µg/L
		4/27/98	B0NCK7	Y	18100.00		µg/L
	199-K-27	3/24/97	B0K059	Y	7910.00 Q		µg/L
		10/27/97	B0M7H3	Y	7510.00		µg/L
			B0M7H4	N	8790.00		µg/L
		3/25/98	B0N471	Y	11100.00 C		µg/L
	199-K-30	7/29/96	B0J3W4	Y	12000.00 B	3240.00	µg/L
		11/26/96	B0JLP8	N	12000.00		µg/L
			B0JLP9	Y	12500.00		µg/L
		10/24/97	B0M7H6	Y	15200.00		µg/L
			B0M7H7	N	14200.00		µg/L
	199-K-32A	12/09/96	B0JLQ2	N	6940.00		µg/L
			B0JLQ3	Y	6990.00		µg/L
		4/28/97	B0KBB0	Y	10500.00		µg/L
		10/29/97	B0M7J2	Y	8260.00		µg/L
			B0M7J3	N	8040.00		µg/L
		4/27/98	B0NCL3	Y	7440.00		µg/L
	199-K-34	11/15/96	B0JLQ8	N	14300.00		µg/L
			B0JLQ9	Y	13900.00		µg/L
			B0JLS4	N	14500.00		µg/L
			B0JLS5	Y	14400.00		µg/L
			B0JLS8	N	14200.00		µg/L
			B0JLS9	Y	12600.00		µg/L
		4/28/97	B0KBB2	Y	14800.00		µg/L
		4/27/98	B0NCL7	Y	13200.00		µg/L
Strontium (elemental)	199-K-110A	4/23/97	B0KB86	Y	608.00		µg/L
			B0KB88	Y	619.00		µg/L
		4/27/98	B0NCK7	Y	573.00		µg/L
	199-K-27	3/24/97	B0K059	Y	332.00		µg/L
		3/25/98	B0N471	Y	348.00		µg/L
	199-K-30	7/29/96	B0J3W4	Y	270.00		µg/L
	199-K-32A	4/28/97	B0KBB0	Y	222.00		µg/L
		4/27/98	B0NCL3	Y	259.00		µg/L
	199-K-34	4/28/97	B0KBB2	Y	235.00		µg/L
		4/27/98	B0NCL7	Y	218.00		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
Strontium-90	199-K-106A	7/30/96	B0J3Y2	N	.92	.42	pCi/L
	199-K-107A	4/24/97	B0KB82	N	70.10	13.30	pCi/L
		4/28/98	B0NCM9	N	50.20	9.70	pCi/L
	199-K-108A	4/24/97	B0KB83	N	1.30 U	.98	pCi/L
		4/28/98	B0NCN0	N	.01 U	1.45	pCi/L
	199-K-109A	7/29/96	B0J5V8	N	628.42	114.00	pCi/L
		8/28/96	B0J685	N	5324.20	1005.00	pCi/L
		3/31/97	B0K436	N	14300.00	3400.00	pCi/L
		4/28/97	B0K571	N	18300.00	3320.00	pCi/L
		6/26/97	B0L7D2	N	2700.00	472.00	pCi/L
		9/25/97	B0M108	N	18600.00	3510.00	pCi/L
		10/24/97	B0M7H1	N	17600.00	4120.00	pCi/L
		1/27/98	B0MVL4	N	6290.00	1190.00	pCi/L
		3/24/98	B0N470	N	5410.00	982.00	pCi/L
		4/30/98	B0N8R1	N	4830.00	1030.00	pCi/L
	199-K-110A	4/23/97	B0KB85	N	-.06 U	.40	pCi/L
			B0KB87	N	1.61 J	.59	pCi/L
		4/27/98	B0NCK8	N	.00 U	.26	pCi/L
	199-K-27	3/24/97	B0K058	N	.20 U	.25	pCi/L
		3/25/98	B0N472	N	1.71 J	.59	pCi/L
	199-K-32A	4/28/97	B0KB99	N	1.64 J	.51	pCi/L
		4/27/98	B0NCL4	N	2.14	.64	pCi/L
	199-K-34	4/28/97	B0KBB1	N	32.70	6.44	pCi/L
		4/27/98	B0NCL8	N	23.80	4.66	pCi/L
Sulfate	199-K-106A	7/30/96	B0J3Y2	N	61000.00 D	22000.00	µg/L
		10/29/96	B0JK56	N	49.10 D		mg/L
		12/05/96	B0JLT0	N	53.70		mg/L
		1/20/97	B0JTV2	N	57.10 D		mg/L
		4/24/97	B0K564	N	63.60 D		mg/L
		7/28/97	B0LBP7	N	69.40 D		mg/L
		10/15/97	B0M667	N	60.90 D		mg/L
		1/22/98	B0MNV0	N	60.10 D		mg/L
		4/28/98	B0NBC9	N	59.40 D		mg/L
	199-K-107A	7/31/96	B0J5V0	N	34000.00 D	12200.00	µg/L
		10/28/96	B0JK49	N	32.20 D		mg/L
		12/05/96	B0JLR6	N	36.30		mg/L
		1/15/97	B0JTT5	N	32.60 D		mg/L
		4/24/97	B0K555	N	51.50 D		mg/L
		7/28/97	B0LBP9	N	42.80 D		mg/L
		10/15/97	B0M673	N	36.70 D		mg/L
		1/22/98	B0MNR9	N	39.10 D		mg/L
		4/28/98	B0NBD0	N	37.90 D		mg/L
	199-K-108A	7/30/96	B0J5V1	N	48000.00 D	17300.00	µg/L
		10/28/96	B0JK50	N	40.50 D		mg/L
		12/09/96	B0JLR8	N	46.10		mg/L
		1/15/97	B0JTT6	N	44.70 D		mg/L
		4/24/97	B0K556	N	37.90 D		mg/L
		7/28/97	B0LBR0	N	45.70 D		mg/L
		10/27/97	B0M793	N	38.50		mg/L
		1/22/98	B0MNT0	N	35.10 D		mg/L
		4/28/98	B0NBD1	N	50.10 D		mg/L
	199-K-109A	7/29/96	B0J5V8	N	17000.00 D	6120.00	µg/L
		8/28/96	B0J685	N	19000.00 D	6840.00	µg/L
		10/28/96	B0JK59	N	18.80		mg/L
		12/06/96	B0JLS0	N	19.90		mg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		1/14/97	B0JTV5	N	22.30 D		mg/L
		3/31/97	B0K057	N	16.50		mg/L
		4/28/97	B0K571	N	16.80		mg/L
		7/28/97	B0LBR1	N	18.60 D		mg/L
		10/15/97	B0M672	N	24.40 D		mg/L
		1/27/98	B0MNT4	N	21.80 D		mg/L
		3/24/98	B0N470	N	19.20 D		mg/L
		4/30/98	B0NBC1	N	20.00		mg/L
	199-K-110A	7/30/96	B0J5V2	N	23000.00	8280.00	µg/L
		10/28/96	B0JK51	N	19.00 D		mg/L
		1/16/97	B0JTT7	N	24.90 D		mg/L
		4/23/97	B0K557	N	28.50 D		mg/L
			B0K558	N	28.40 D		mg/L
		7/28/97	B0LBR3	N	24.80 D		mg/L
		10/27/97	B0M7C6	N	17.30		mg/L
		1/28/98	B0MNT1	N	19.90		mg/L
		4/27/98	B0NBD2	N	17.50 D		mg/L
	199-K-27	7/31/96	B0J5V7	N	26000.00 D	9360.00	µg/L
		8/28/96	B0J693	N	28000.00 D	10100.00	µg/L
		10/28/96	B0JK57	N	27.60 D		mg/L
		1/14/97	B0JTV3	N	23.70 D		mg/L
		3/24/97	B0K058	N	24.90 D		mg/L
		4/28/97	B0K566	N	28.40 D		mg/L
		7/28/97	B0LBR4	N	27.20 D		mg/L
		9/26/97	B0M103	N	29.30 D		mg/L
		10/15/97	B0M668	N	27.20 D		mg/L
		1/26/98	B0MNT6	N	22.70 D		mg/L
		3/25/98	B0N472	N	25.60 D		mg/L
		4/30/98	B0NBC3	N	22.20 D		mg/L
	199-K-28	7/30/96	B0J5V3	N	23000.00 D	8280.00	µg/L
		10/28/96	B0JK52	N	20.20 D		mg/L
		1/14/97	B0JTT8	N	26.00 D		mg/L
		4/29/97	B0K559	N	29.10 D		mg/L
		7/28/97	B0LBR6	N	23.30 D		mg/L
		10/15/97	B0M669	N	22.60 D		mg/L
		1/26/98	B0MNT2	N	24.30 D		mg/L
		4/27/98	B0NBD3	N	30.70 D		mg/L
	199-K-29	7/30/96	B0J5V4	N	21000.00 D	7560.00	µg/L
		10/28/96	B0JK53	N	23.00 D		mg/L
		1/14/97	B0JTT9	N	21.50 D		mg/L
		4/23/97	B0K560	N	24.40 D		mg/L
		7/28/97	B0LBR7	N	24.10 D		mg/L
		10/15/97	B0M670	N	22.60 D		mg/L
		1/26/98	B0MNR6	N	19.60 D		mg/L
		4/27/98	B0NBB7	N	19.00 D		mg/L
	199-K-30	7/29/96	B0J3W3	N	33000.00 D	11900.00	µg/L
		10/29/96	B0JK58	N	32.00 D		mg/L
		11/26/96	B0JLP8	N	32.50		mg/L
		1/15/97	B0JTV4	N	31.30 DH		mg/L
		4/29/97	B0K568	N	29.10 D		mg/L
		7/29/97	B0LBR8	N	29.80 D		mg/L
		10/15/97	B0M671	N	34.80 D		mg/L
		1/26/98	B0MNT8	N	37.50 D		mg/L
		4/27/98	B0NBC5	N	35.50 D		mg/L
	199-K-32A	7/30/96	B0J5V5	N	100000.00 D	36000.00	µg/L
		10/29/96	B0JK54	N	40.70 D		mg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		12/09/96	B0JLQ2	N	35.90		mg/L
		1/20/97	B0JTV0	N	75.90 D		mg/L
		4/28/97	B0K561	N	38.20 D		mg/L
		7/28/97	B0LBT1	N	86.80 D		mg/L
		10/29/97	B0M7J3	N	57.20		mg/L
		1/28/98	B0MNR7	N	44.80 D		mg/L
		4/27/98	B0NBB8	N	40.20 D		mg/L
	199-K-34	7/30/96	B0J5V6	N	46000.00 D	16600.00	µg/L
		10/29/96	B0JK55	N	32.90 D		mg/L
		11/15/96	B0JLQ8	N	30.60		mg/L
			B0JLS4	N	30.10		mg/L
			B0JLS8	N	29.90		mg/L
		1/16/97	B0JTV1	N	30.10 DH		mg/L
		4/28/97	B0K562	N	29.30 D		mg/L
		7/28/97	B0LBT3	N	51.10 D		mg/L
		10/27/97	B0M2W4	N	40.30 D		mg/L
		1/28/98	B0MNR8	N	34.00 D		mg/L
		4/27/98	B0NBB9	N	8.41 D		mg/L
Technetium-99	199-K-109A	8/28/96	B0J685	N	9.92	3.04	pCi/L
		3/31/97	B0K057	N	6.63 U	43.30	pCi/L
		3/24/98	B0N470	N	28.90	42.50	pCi/L
	199-K-27	3/24/97	B0K058	N	13.90 J	5.29	pCi/L
		3/25/98	B0N472	N	27.40	18.30	pCi/L
	199-K-30	7/29/96	B0J3W3	N	-.36	2.30	pCi/L
Temperature	199-K-106A	7/30/96	B0J5V9	N	16.70		Deg C
		8/28/96	B0J740	N	17.40		Deg C
		9/23/96	B0JBS2	N	16.60		Deg C
		10/29/96	B0JK56	N	16.30		Deg C
		11/18/96	B0JBV9	N	16.10		Deg C
		12/05/96	B0JLT0	N	15.80		Deg C
		12/12/96	B0JBW2	N	16.00		Deg C
		1/20/97	B0JTV2	N	16.40		Deg C
		2/24/97	B0K253	N	16.10		Deg C
		4/24/97	B0K564	N	16.50		Deg C
		5/23/97	B0L037	N	16.30		Deg C
		6/26/97	B0L7C9	N	16.30		Deg C
		7/28/97	B0LBP7	N	16.70		Deg C
		8/28/97	B0LKV7	N	16.50		Deg C
		9/29/97	B0M0Y7	N	16.70		Deg C
		10/15/97	B0M660	N	16.50		Deg C
		10/27/97	B0M7M9	N	16.30		Deg C
		11/08/97	B0MB42	N	16.20		Deg C
		12/23/97	B0MDT8	N	15.10		Deg C
		1/16/98	B0MVL1	N	16.30		Deg C
		1/22/98	B0MNT9	N	16.20		Deg C
		2/20/98	B0N088	N	16.20		Deg C
		3/24/98	B0N514	N	16.40		Deg C
		4/28/98	B0NBC8	N	16.40		Deg C
		5/27/98	B0NMJ1	N	16.30		Deg C
		6/29/98	B0NX12	N	16.70		Deg C
		7/23/98	B0P6W9	N	16.70		Deg C
			B0P7Y6	N	16.70		Deg C
	199-K-107A	7/31/96	B0J5V0	N	16.60		Deg C
		10/28/96	B0JK49	N	16.20		Deg C

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		12/05/96	B0JLR6	N	15.80		Deg C
		1/15/97	B0JTT5	N	15.40		Deg C
		3/20/97	B0K431	N	16.10		Deg C
		4/24/97	B0K555	N	16.40		Deg C
		6/26/97	B0L7D0	Y	16.40		Deg C
		7/28/97	B0LBP9	N	16.80		Deg C
		9/29/97	B0M106	Y	16.60		Deg C
		10/15/97	B0M666	N	16.50		Deg C
		10/27/97	B0M787	N	16.20		Deg C
		1/22/98	B0MNR9	N	16.10		Deg C
		4/28/98	B0NBD0	N	16.30		Deg C
		7/22/98	B0P7Y5	N	16.50		Deg C
	199-K-108A	7/30/96	B0J5V1	N	16.20		Deg C
		10/28/96	B0JK50	N	15.70		Deg C
		12/09/96	B0JLR8	N	15.90		Deg C
		1/15/97	B0JTT6	N	15.20		Deg C
		3/20/97	B0K432	N	15.80		Deg C
		4/24/97	B0K556	N	16.10		Deg C
		6/26/97	B0L7D1	Y	15.70		Deg C
		7/28/97	B0LBR0	N	16.20		Deg C
		9/26/97	B0M107	Y	16.30		Deg C
		1/22/98	B0MNT0	N	15.60		Deg C
		4/28/98	B0NBD1	N	16.00		Deg C
		7/28/98	B0P6X3	Y	16.60		Deg C
			B0P7V8	N	16.60		Deg C
	199-K-109A	7/29/96	B0J5V8	N	16.10		Deg C
		8/28/96	B0J741	N	15.90		Deg C
		9/23/96	B0JC31	N	15.30		Deg C
		10/28/96	B0JK59	N	14.90		Deg C
		11/18/96	B0JMZ7	N	14.90		Deg C
		12/06/96	B0JLS0	N	13.90		Deg C
		12/11/96	B0JT54	N	14.50		Deg C
		1/14/97	B0JTV5	N	14.20		Deg C
		2/25/97	B0K256	N	15.00		Deg C
		3/31/97	B0K057	N	14.70		Deg C
			B0K436	N	14.60		Deg C
		4/28/97	B0K571	N	15.10		Deg C
		5/28/97	B0L035	N	15.20		Deg C
		6/26/97	B0L7D2	N	15.70		Deg C
		7/28/97	B0LBR1	N	16.00		Deg C
		8/28/97	B0LKV8	N	15.60		Deg C
		9/25/97	B0M1H0	N	15.80		Deg C
		10/07/97	B0M5B3	N	15.50		Deg C
		10/19/97	B0M665	N	15.10		Deg C
		10/24/97	B0M7P6	N	15.30		Deg C
		11/18/97	B0MB43	N	14.80		Deg C
		12/23/97	B0MDT9	N	14.60		Deg C
		1/27/98	B0MVL4	N	15.00		Deg C
		2/26/98	B0N082	N	14.70		Deg C
		3/24/98	B0N4J6	N	15.30		Deg C
		4/30/98	B0N8R1	N	15.20		Deg C
			B0NBC0	N	15.20		Deg C
		5/27/98	B0NMJ2	N	15.00		Deg C
		6/29/98	B0NX13	N	15.80		Deg C
		7/23/98	B0P6X2	N	16.70		Deg C
			B0P7V9	N	16.70		Deg C

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
	199-K-110A	7/30/96	B0J5V2	N	16.30		Deg C
		10/28/96	B0JK51	N	16.70		Deg C
		1/16/97	B0JTT7	N	15.20		Deg C
		4/23/97	B0K557	N	16.80		Deg C
		7/28/97	B0LBR3	N	16.80		Deg C
		10/27/97	B0M7C6	N	16.50		Deg C
		1/28/98	B0MNT1	N	16.20		Deg C
		4/27/98	B0NBD2	N	16.40		Deg C
		7/27/98	B0P7W1	N	16.30		Deg C
	199-K-27	7/31/96	B0J5V7	N	16.00		Deg C
		8/28/96	B0J739	N	18.10		Deg C
		9/23/96	B0JBS1	N	16.10		Deg C
		10/28/96	B0JK57	N	16.20		Deg C
		11/18/96	B0JBW0	N	15.50		Deg C
		12/12/96	B0JBW3	N	16.00		Deg C
		1/14/97	B0JTV3	N	15.20		Deg C
		2/24/97	B0K254	N	15.10		Deg C
		3/24/97	B0K058	N	15.50		Deg C
		4/28/97	B0K566	N	16.10		Deg C
		5/23/97	B0L034	N	15.60		Deg C
		6/24/97	B0L7D3	N	15.90		Deg C
		7/28/97	B0LBR4	N	16.10		Deg C
		8/28/97	B0LKW0	N	15.70		Deg C
		9/26/97	B0M0Y9	N	15.80		Deg C
		10/15/97	B0M661	N	15.60		Deg C
		10/27/97	B0M7H4	N	15.50		Deg C
		11/21/97	B0M9R7	N	16.00		Deg C
		12/19/97	B0MDV1	N	15.60		Deg C
		1/16/98	B0MVJ7	N	15.60		Deg C
		1/26/98	B0MNT5	N	15.50		Deg C
		2/20/98	B0N084	N	15.50		Deg C
		3/25/98	B0N4J8	N	16.10		Deg C
		4/30/98	B0N8P7	N	15.70		Deg C
			B0NBC2	N	15.70		Deg C
		5/27/98	B0NMJ3	N	15.60		Deg C
		6/24/98	B0NX15	N	15.70		Deg C
		7/23/98	B0P6X4	N	15.70		Deg C
			B0P7W2	N	15.70		Deg C
	199-K-28	7/30/96	B0J5V3	N	17.90		Deg C
		10/28/96	B0JK52	N	17.10		Deg C
		1/14/97	B0JTT8	N	15.60		Deg C
		4/29/97	B0K559	N	16.10		Deg C
		7/28/97	B0LBR6	N	16.30		Deg C
		10/15/97	B0M662	N	16.20		Deg C
		1/26/98	B0MNT2	N	12.40		Deg C
		4/27/98	B0NBD3	N	15.80		Deg C
		7/23/98	B0P7W4	N	16.70		Deg C
	199-K-29	7/30/96	B0J5V4	N	16.90		Deg C
		10/28/96	B0JK53	N	16.30		Deg C
		1/14/97	B0JTT9	N	15.50		Deg C
		4/23/97	B0K560	N	16.60		Deg C
		7/28/97	B0LBR7	N	16.30		Deg C
		10/15/97	B0M663	N	16.10		Deg C
		1/26/98	B0MNR6	N	15.30		Deg C
		4/27/98	B0NBB7	N	16.00		Deg C
		7/23/98	B0P7W5	N	18.20		Deg C

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
	199-K-30	7/29/96	B0J5W0	N	16.10		Deg C
		8/28/96	B0J738	N	18.90		Deg C
		9/23/96	B0JBS0	N	16.20		Deg C
		10/29/96	B0JK58	N	15.80		Deg C
		11/18/96	B0JBW1	N	15.50		Deg C
		11/26/96	B0JLP8	N	14.50		Deg C
		12/12/96	B0JBW4	N	16.80		Deg C
		1/15/97	B0JTV4	N	16.20		Deg C
		2/25/97	B0K255	N	15.50		Deg C
		4/29/97	B0K568	N	15.80		Deg C
		5/23/97	B0L039	N	15.50		Deg C
		7/29/97	B0LBR8	N	15.80		Deg C
		8/28/97	B0LKW1	N	15.80		Deg C
		9/25/97	B0M100	N	15.80		Deg C
		10/15/97	B0M664	N	15.70		Deg C
		10/24/97	B0M7H7	N	15.60		Deg C
		11/24/97	B0M9R8	N	15.50		Deg C
		12/19/97	B0MDV2	N	15.40		Deg C
		1/16/98	B0MVJ8	N	15.50		Deg C
		1/26/98	B0MNT7	N	15.40		Deg C
		2/20/98	B0N085	N	15.50		Deg C
		3/25/98	B0N4J9	N	15.50		Deg C
		4/27/98	B0NBC4	N	16.70		Deg C
		5/27/98	B0NMJ4	N	15.50		Deg C
		6/24/98	B0NX16	N	16.10		Deg C
		7/23/98	B0P6X5	N	15.70		Deg C
			B0P7W7	N	15.70		Deg C
	199-K-32A	7/30/96	B0J5V5	N	21.00		Deg C
		10/29/96	B0JK54	N	20.50		Deg C
		12/09/96	B0JLQ2	N	20.00		Deg C
		1/20/97	B0JTV0	N	20.00		Deg C
		4/28/97	B0K561	N	20.90		Deg C
		7/28/97	B0LBT1	N	20.70		Deg C
		1/28/98	B0MNR7	N	19.60		Deg C
		4/27/98	B0NBB8	N	20.00		Deg C
		7/27/98	B0P7W9	N	20.30		Deg C
	199-K-34	7/30/96	B0J5V6	N	16.80		Deg C
		10/29/96	B0JK55	N	16.20		Deg C
		11/15/96	B0JLQ8	N	15.20		Deg C
		1/16/97	B0JTV1	N	15.50		Deg C
		7/28/97	B0LBT3	N	17.10		Deg C
		10/27/97	B0M2W4	N	16.10		Deg C
		1/28/98	B0MNR8	N	15.80		Deg C
		4/27/98	B0NBB9	N	16.70		Deg C
		7/23/98	B0P7X0	N	17.30		Deg C
Tetrachloroethene	199-K-106A	7/30/96	B0J3Y2	N	.07 U		µg/L
		4/24/97	B0KB80	N	.07 J		µg/L
		9/29/97	B0M101	N	.18 U		µg/L
		4/28/98	B0NCM8	N	.18 U		µg/L
	199-K-108A	4/24/97	B0KB83	N	.03 U		µg/L
		4/28/98	B0NCN0	N	.18 U		µg/L
	199-K-109A	8/28/96	B0J685	N	.07 U		µg/L
		3/31/97	B0K057	N	.04 J		µg/L
		3/24/98	B0N470	N	.18 UH		µg/L
	199-K-27	3/24/97	B0K058	N	.06 J		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		3/25/98	B0N472	N	.18 U		µg/L
	199-K-34	4/28/97	B0KBB1	N	.03 U		µg/L
		4/27/98	B0NCL8	N	.18 U		µg/L
Thallium	199-K-34	11/15/96	B0JLS8	N	31.00 U		µg/L
			B0JLS9	Y	31.00 U		µg/L
Tin	199-K-30	7/29/96	B0J3W4	Y	17.00 U		µg/L
Toluene	199-K-106A	7/30/96	B0J3Y2	N	.15 U		µg/L
		4/24/97	B0KB80	N	.02 J		µg/L
		9/29/97	B0M101	N	.16 U		µg/L
		4/28/98	B0NCM8	N	.16 U		µg/L
	199-K-108A	4/24/97	B0KB83	N	.02 U		µg/L
		4/28/98	B0NCN0	N	.16 U		µg/L
	199-K-109A	8/28/96	B0J685	N	.15 L		µg/L
		3/31/97	B0K057	N	.02 U		µg/L
		3/24/98	B0N470	N	.16 UH		µg/L
	199-K-27	3/24/97	B0K058	N	.02 U		µg/L
		3/25/98	B0N472	N	.16 U		µg/L
	199-K-34	4/28/97	B0KBB1	N	.02 U		µg/L
		4/27/98	B0NCL8	N	.16 U		µg/L
Total beta radiostrontium	199-K-106A	10/15/97	B0M667	N	1.59 U	1.63	pCi/L
	199-K-107A	10/15/97	B0M673	N	41.70	15.60	pCi/L
	199-K-109A	10/28/96	B0JK59	N	3180.00	947.00	pCi/L
		12/06/96	B0JLS0	N	1720.00	519.00	pCi/L
		1/14/97	B0JTV5	N	1470.00	403.00	pCi/L
		10/15/97	B0M672	N	18200.00	6830.00	pCi/L
		10/24/97	B0M7P5	N	17800.00	6190.00	pCi/L
	199-K-27	10/15/97	B0M668	N	1.43 U	1.44	pCi/L
	199-K-28	10/15/97	B0M669	N	.61 U	1.24	pCi/L
	199-K-29	10/15/97	B0M670	N	.95 U	1.26	pCi/L
	199-K-30	10/15/97	B0M671	N	-.57 U	.91	pCi/L
Trichloroethene	199-K-106A	7/30/96	B0J3Y2	N	27.00		µg/L
		4/24/97	B0KB80	N	18.00 D		µg/L
		9/29/97	B0M101	N	17.00		µg/L
		4/28/98	B0NCM8	N	19.00		µg/L
	199-K-108A	4/24/97	B0KB83	N	2.80		µg/L
		4/28/98	B0NCN0	N	3.00 J		µg/L
	199-K-109A	8/28/96	B0J685	N	.10 U		µg/L
		3/31/97	B0K057	N	.06 J		µg/L
		3/24/98	B0N470	N	.30 JH		µg/L
	199-K-27	3/24/97	B0K058	N	.46		µg/L
		3/25/98	B0N472	N	.40 U		µg/L
	199-K-34	4/28/97	B0KBB1	N	.84		µg/L
		4/27/98	B0NCL8	N	.80 J		µg/L
Tritium	199-K-106A	7/30/96	B0J3Y2	N	9946.30	912.30	pCi/L
		10/29/96	B0JK56	N	3740.00	460.00	pCi/L
		12/05/96	B0JLT0	N	6450.00	654.00	pCi/L
		1/20/97	B0JTV2	N	42400.00	3270.00	pCi/L
		3/20/97	B0K430	N	8730.00	823.00	pCi/L
		4/24/97	B0K564	N	13900.00	1200.00	pCi/L
		6/26/97	B0L7C9	N	52300.00	4010.00	pCi/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		9/29/97	B0M105	N	2940.00	411.00	pCi/L
		10/15/97	B0M667	N	3260.00	443.00	pCi/L
		1/16/98	B0MVL1	N	4200.00	506.00	pCi/L
		4/28/98	B0N8R4	N	5360.00	572.00	pCi/L
			B0N8R5	N	5820.00	606.00	pCi/L
	199-K-107A	7/31/96	B0J5V0	N	1256.90	294.70	pCi/L
		10/28/96	B0JK49	N	1430.00	277.00	pCi/L
		12/05/96	B0JLR6	N	1670.00	310.00	pCi/L
		1/15/97	B0JTT5	N	1800.00	314.00	pCi/L
		4/24/97	B0K555	N	1660.00	321.00	pCi/L
		7/28/97	B0LBP9	N	1380.00	304.00	pCi/L
		10/15/97	B0M673	N	1380.00	311.00	pCi/L
		1/22/98	B0MNR9	N	1010.00	276.00	pCi/L
		4/28/98	B0NBD0	N	1420.00	299.00	pCi/L
	199-K-108A	7/30/96	B0J5V1	N	693.24	257.70	pCi/L
		10/28/96	B0JK50	N	524.00	213.00	pCi/L
		12/09/96	B0JLR8	N	518.00	223.00	pCi/L
		1/15/97	B0JTT6	N	422.00	216.00	pCi/L
		4/24/97	B0K556	N	610.00	250.00	pCi/L
		7/28/97	B0LBR0	N	525.00	246.00	pCi/L
		10/27/97	B0M793	N	326.00 U	233.00	pCi/L
		1/22/98	B0MNT0	N	346.00 J	230.00	pCi/L
		4/28/98	B0NBD1	N	475.00	236.00	pCi/L
	199-K-109A	7/29/96	B0J5V8	N	16308.00	1376.00	pCi/L
		8/28/96	B0J685	N	22510.00	1814.00	pCi/L
		10/28/96	B0JK59	N	13900.00	1180.00	pCi/L
		12/06/96	B0JLS0	N	29800.00	2350.00	pCi/L
		1/14/97	B0JTV5	N	23600.00	1900.00	pCi/L
		3/31/97	B0K057	N	74500.00	5590.00	pCi/L
		4/28/97	B0K571	N	89900.00	6730.00	pCi/L
		7/28/97	B0LBR1	N	44100.00	3400.00	pCi/L
		10/15/97	B0M672	N	350000.00	25700.00	pCi/L
		10/24/97	B0M7P5	N	420000.00	30800.00	pCi/L
		1/27/98	B0MNT4	N	36300.00	2830.00	pCi/L
		3/24/98	B0N470	N	35700.00	2780.00	pCi/L
		4/30/98	B0NBC1	N	52400.00	4000.00	pCi/L
	199-K-110A	7/30/96	B0J5V2	N	257.35	229.30	pCi/L
		10/28/96	B0JK51	N	391.00 J	204.00	pCi/L
		1/16/97	B0JTT7	N	84.60 U	193.00	pCi/L
		4/23/97	B0K557	N	98.50 U	226.00	pCi/L
			B0K558	N	93.30 U	213.00	pCi/L
		7/28/97	B0LBR3	N	28.80 U	212.00	pCi/L
		10/27/97	B0M7C6	N	-104.00 U	219.00	pCi/L
		1/28/98	B0MNT1	N	64.00 U	209.00	pCi/L
		4/27/98	B0NBD2	N	78.40 U	194.00	pCi/L
	199-K-27	7/31/96	B0J5V7	N	57392.00	4365.00	pCi/L
		8/28/96	B0J693	N	66010.00	4981.00	pCi/L
		10/28/96	B0JK57	N	42200.00	3240.00	pCi/L
		1/14/97	B0JTV3	N	35500.00	2760.00	pCi/L
		3/24/97	B0K426	N	24400.00	1960.00	pCi/L
		4/28/97	B0K566	N	34300.00	2690.00	pCi/L
		6/24/97	B0L7D3	N	18800.00	1570.00	pCi/L
		9/26/97	B0M109	N	28000.00	2230.00	pCi/L
		10/15/97	B0M668	N	24300.00	1960.00	pCi/L
		1/16/98	B0MVJ7	N	21800.00	1780.00	pCi/L
		3/25/98	B0N472	N	33600.00	2630.00	pCi/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		4/30/98	B0N8P7	N	19900.00	1620.00	pCi/L
	199-K-28	7/30/96	B0J5V3	N	1557.40	315.90	pCi/L
		10/28/96	B0JK52	N	1650.00	292.00	pCi/L
		1/14/97	B0JTT8	N	1980.00	327.00	pCi/L
		4/29/97	B0K559	N	1950.00	341.00	pCi/L
		7/28/97	B0LBR6	N	1480.00	312.00	pCi/L
		10/15/97	B0M669	N	1360.00	309.00	pCi/L
		1/26/98	B0MNT2	N	1730.00	327.00	pCi/L
		4/27/98	B0NBD3	N	2810.00	388.00	pCi/L
	199-K-29	7/30/96	B0J5V4	N	13287.00	1155.00	pCi/L
		10/28/96	B0JK53	N	11400.00	1000.00	pCi/L
		1/14/97	B0JTT9	N	12800.00	1110.00	pCi/L
		4/23/97	B0K560	N	9000.00	847.00	pCi/L
		7/28/97	B0LBR7	N	7990.00	777.00	pCi/L
		10/15/97	B0M670	N	12600.00	1120.00	pCi/L
		1/26/98	B0MNR6	N	11700.00	1040.00	pCi/L
		4/27/98	B0NBB7	N	9390.00	864.00	pCi/L
	199-K-30	7/29/96	B0J5W0	N	326850.00	23980.00	pCi/L
		10/29/96	B0JK58	N	328000.00	24000.00	pCi/L
		11/26/96	B0JLP8	N	412000.00	30100.00	pCi/L
		1/15/97	B0JTV4	N	332000.00	24300.00	pCi/L
		3/24/97	B0K427	N	178000.00	13100.00	pCi/L
		4/29/97	B0K568	N	151000.00	11200.00	pCi/L
		6/30/97	B0L7D4	N	207000.00	15200.00	pCi/L
		9/25/97	B0M110	N	471000.00	34500.00	pCi/L
		10/15/97	B0M671	N	536000.00	39200.00	pCi/L
		1/16/98	B0MVJ8	N	710000.00	51900.00	pCi/L
			B0MVJ9	N	708000.00	51700.00	pCi/L
		4/27/98	B0N8P9	N	680000.00	49700.00	pCi/L
	199-K-32A	7/30/96	B0J5V5	N	4071.50	493.30	pCi/L
		10/29/96	B0JK54	N	7200.00	710.00	pCi/L
		12/09/96	B0JLQ2	N	6820.00	676.00	pCi/L
		1/20/97	B0JTV0	N	6270.00	637.00	pCi/L
		4/28/97	B0K561	N	8090.00	783.00	pCi/L
		7/28/97	B0LBT1	N	5530.00	600.00	pCi/L
		10/29/97	B0M7J3	N	2910.00	410.00	pCi/L
		1/28/98	B0MNR7	N	4150.00	495.00	pCi/L
		4/27/98	B0NBB8	N	5050.00	550.00	pCi/L
	199-K-34	7/30/96	B0J5V6	N	2269.00	365.20	pCi/L
		10/29/96	B0JK55	N	5750.00	605.00	pCi/L
		11/15/96	B0JLQ8	N	5420.00	569.00	pCi/L
			B0JLS4	N	5490.00	574.00	pCi/L
			B0JLS8	N	5100.00	600.00	pCi/L
		1/16/97	B0JTV1	N	3350.00	425.00	pCi/L
		4/28/97	B0K562	N	3410.00	444.00	pCi/L
		7/28/97	B0LBT3	N	2310.00	370.00	pCi/L
		10/27/97	B0M2W4	N	6270.00	645.00	pCi/L
		1/28/98	B0MNR8	N	4590.00	525.00	pCi/L
		4/27/98	B0NBB9	N	4760.00	528.00	pCi/L
Turbidity	199-K-106A	7/30/96	B0J5V9	N	1.47		NTU
		8/28/96	B0J740	N	1.15		NTU
		9/23/96	B0JBS2	N	1.21		NTU
		10/29/96	B0JK56	N	.72		NTU
		11/18/96	B0JBV9	N	.55		NTU
		12/05/96	B0JLT0	N	1.45		NTU

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		12/12/96	B0JBW2	N	.30		NTU
		1/20/97	B0JTV2	N	.50		NTU
		2/24/97	B0K253	N	.53		NTU
		4/24/97	B0K564	N	.58		NTU
		5/23/97	B0L037	N	.22		NTU
		6/26/97	B0L7C9	N	3.21		NTU
		7/28/97	B0LBP7	N	.80		NTU
		8/28/97	B0LKV7	N	1.24		NTU
		9/29/97	B0M0Y7	N	.81		NTU
		10/15/97	B0M660	N	.55		NTU
		10/27/97	B0M7M9	N	.76		NTU
		11/08/97	B0MB42	N	1.59		NTU
		12/23/97	B0MDT8	N	1.00		NTU
		1/16/98	B0MVL1	N	4.25		NTU
		1/22/98	B0MNT9	N	4.19		NTU
		2/20/98	B0N088	N	.47		NTU
		4/28/98	B0NBC8	N	.51		NTU
		5/27/98	B0NMJ1	N	.84		NTU
		6/29/98	B0NX12	N	.89		NTU
		7/23/98	B0P6W9	N	1.86		NTU
			B0P7Y6	N	1.86		NTU
	199-K-107A	7/31/96	B0J5V0	N	2.41		NTU
		10/28/96	B0JK49	N	2.77		NTU
		12/05/96	B0JLR6	N	3.97		NTU
		1/15/97	B0JTT5	N	4.97		NTU
		3/20/97	B0K431	N	2.77		NTU
		4/24/97	B0K555	N	2.55		NTU
		6/26/97	B0L7D0	Y	1.32		NTU
		7/28/97	B0LBP9	N	4.35		NTU
		9/29/97	B0M106	Y	4.20		NTU
		10/15/97	B0M666	N	1.85		NTU
		10/27/97	B0M787	N	.98		NTU
		1/22/98	B0MNR9	N	1.47		NTU
		4/28/98	B0NBD0	N	1.42		NTU
		7/22/98	B0P7Y5	N	2.50		NTU
					2.50		NTU
	199-K-108A	7/30/96	B0J5V1	N	2.45		NTU
		10/28/96	B0JK50	N	4.93		NTU
		12/09/96	B0JLR8	N	1.61		NTU
		1/15/97	B0JTT6	N	1.65		NTU
		3/20/97	B0K432	N	2.87		NTU
		4/24/97	B0K556	N	2.22		NTU
		6/26/97	B0L7D1	Y	2.37		NTU
		7/28/97	B0LBR0	N	.93		NTU
		9/26/97	B0M107	Y	2.10		NTU
		1/22/98	B0MNT0	N	1.20		NTU
		4/28/98	B0NBD1	N	4.81		NTU
		7/28/98	B0P6X3	Y	1.37		NTU
			B0P7V8	N	1.37		NTU
	199-K-109A	7/29/96	B0J5V8	N	2.79		NTU
		8/28/96	B0J741	N	1.45		NTU
		9/23/96	B0JC31	N	1.44		NTU
		10/28/96	B0JK59	N	3.35		NTU
		11/18/96	B0JMZ7	N	4.26		NTU
		12/06/96	B0JLS0	N	2.82		NTU
		12/11/96	B0JT54	N	2.19		NTU

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		1/14/97	B0JTV5	N	1.66		NTU
		2/25/97	B0K256	N	.90		NTU
		3/31/97	B0K057	N	.90		NTU
			B0K436	N	2.05		NTU
		4/28/97	B0K571	N	.92		NTU
		5/28/97	B0L035	N	.47		NTU
		6/26/97	B0L7D2	N	.52		NTU
		7/28/97	B0LBR1	N	1.40		NTU
		8/28/97	B0LKV8	N	.96		NTU
		9/25/97	B0M1H0	N	1.54		NTU
		10/07/97	B0M5B3	N	8.61		NTU
		10/19/97	B0M665	N	.90		NTU
		10/24/97	B0M7P6	N	.42		NTU
		11/18/97	B0MB43	N	2.22		NTU
		12/23/97	B0MDT9	N	1.55		NTU
		1/27/98	B0MVL4	N	2.31		NTU
		2/26/98	B0N082	N	1.09		NTU
		3/24/98	B0N4J6	N	3.10		NTU
		4/30/98	B0N8R1	N	10.90		NTU
			B0NBC0	N	10.90		NTU
		5/27/98	B0NMJ2	N	21.20		NTU
		6/29/98	B0NX13	N	19.50		NTU
		7/23/98	B0P6X2	N	3.24		NTU
			B0P7V9	N	3.24		NTU
	199-K-110A	7/30/96	B0J5V2	N	6.14		NTU
		10/28/96	B0JK51	N	4.87		NTU
		1/16/97	B0JTT7	N	4.34		NTU
		4/23/97	B0K557	N	5.80		NTU
		7/28/97	B0LBR3	N	8.13		NTU
		10/27/97	B0M7C6	N	27.50		NTU
		1/28/98	B0MNT1	N	4.35		NTU
		4/27/98	B0NBD2	N	16.40		NTU
		7/27/98	B0P7W1	N	12.70		NTU
	199-K-27	7/31/96	B0J5V7	N	2.14		NTU
		8/28/96	B0J739	N	4.00		NTU
		9/23/96	B0JBS1	N	3.63		NTU
		10/28/96	B0JK57	N	.93		NTU
		11/18/96	B0JBW0	N	2.04		NTU
		12/12/96	B0JBW3	N	1.45		NTU
		1/14/97	B0JTV3	N	1.44		NTU
		2/24/97	B0K254	N	3.84		NTU
		3/24/97	B0K058	N	.44		NTU
		4/28/97	B0K566	N	2.41		NTU
		5/23/97	B0L034	N	1.60		NTU
		6/24/97	B0L7D3	N	4.11		NTU
		7/28/97	B0LBR4	N	3.90		NTU
		8/28/97	B0LKW0	N	4.78		NTU
		9/26/97	B0M0Y9	N	2.20		NTU
		10/15/97	B0M661	N	2.04		NTU
		10/27/97	B0M7H4	N	2.34		NTU
		11/21/97	B0M9R7	N	3.16		NTU
		12/19/97	B0MDV1	N	2.93		NTU
		1/16/98	B0MVJ7	N	1.60		NTU
		1/26/98	B0MNT5	N	1.73		NTU
		2/20/98	B0N084	N	.70		NTU
		3/25/98	B0N4J8	N	9.07		NTU

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		4/30/98	B0N8P7	N	4.54		NTU
			B0NBC2	N	4.54		NTU
		5/27/98	B0NMJ3	N	3.57		NTU
		6/24/98	B0NX15	N	1.79		NTU
		7/23/98	B0P6X4	N	3.26		NTU
			B0P7W2	N	3.26		NTU
	199-K-28	7/30/96	B0J5V3	N	8.84		NTU
		10/28/96	B0JK52	N	4.30		NTU
		1/14/97	B0JTT8	N	1.35		NTU
		4/29/97	B0K559	N	4.42		NTU
		7/28/97	B0LBR6	N	4.97		NTU
		10/15/97	B0M662	N	4.01		NTU
		1/26/98	B0MNT2	N	6.41		NTU
		4/27/98	B0NBD3	N	65.10		NTU
		7/23/98	B0P7W4	N	5.34		NTU
	199-K-29	7/30/96	B0J5V4	N	4.98		NTU
		10/28/96	B0JK53	N	4.91		NTU
		1/14/97	B0JTT9	N	3.34		NTU
		4/23/97	B0K560	N	4.70		NTU
		7/28/97	B0LBR7	N	4.93		NTU
		10/15/97	B0M663	N	5.11		NTU
		1/26/98	B0MNR6	N	5.01		NTU
		4/27/98	B0NBB7	N	4.96		NTU
		7/23/98	B0P7W5	N	8.06		NTU
	199-K-30	7/29/96	B0J5W0	N	1.10		NTU
		8/28/96	B0J738	N	.38		NTU
		9/23/96	B0JBS0	N	.54		NTU
		10/29/96	B0JK58	N	4.37		NTU
		11/18/96	B0JBW1	N	1.25		NTU
		11/26/96	B0JLP8	N	.98		NTU
		12/12/96	B0JBW4	N	.24		NTU
		1/15/97	B0JTV4	N	1.15		NTU
		2/25/97	B0K255	N	.38		NTU
		4/29/97	B0K568	N	1.55		NTU
		5/23/97	B0L039	N	.30		NTU
		7/29/97	B0LBR8	N	.44		NTU
		8/28/97	B0LKW1	N	.74		NTU
		9/25/97	B0M100	N	.73		NTU
		10/15/97	B0M664	N	.92		NTU
		10/24/97	B0M7H7	N	.75		NTU
		11/24/97	B0M9R8	N	1.81		NTU
		12/19/97	B0MDV2	N	2.12		NTU
		1/16/98	B0MVJ8	N	1.20		NTU
		1/26/98	B0MNT7	N	.93		NTU
		2/20/98	B0N085	N	.53		NTU
		3/25/98	B0N4J9	N	.91		NTU
		4/27/98	B0NBC4	N	3.79		NTU
		5/27/98	B0NMJ4	N	5.06		NTU
		6/24/98	B0NX16	N	3.28		NTU
		7/23/98	B0P6X5	N	1.34		NTU
			B0P7W7	N	1.34		NTU
	199-K-32A	7/30/96	B0J5V5	N	3.26		NTU
		10/29/96	B0JK54	N	1.61		NTU
		12/09/96	B0JLQ2	N	1.30		NTU
		1/20/97	B0JTV0	N	.78		NTU
		4/28/97	B0K561	N	3.37		NTU

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		7/28/97	B0LBT1	N	2.46		NTU
		1/28/98	B0MNR7	N	1.69		NTU
		4/27/98	B0NBB8	N	2.37		NTU
		7/27/98	B0P7W9	N	4.08		NTU
	199-K-34	7/30/96	B0J5V6	N	2.97		NTU
		10/29/96	B0JK55	N	1.48		NTU
		11/15/96	B0JLQ8	N	.10 U		NTU
					2.36		NTU
			B0JLS4	N	.10 U		NTU
		1/16/97	B0JTV1	N	1.42		NTU
		7/28/97	B0LBT3	N	1.53		NTU
		10/27/97	B0M2W4	N	1.38		NTU
		1/28/98	B0MNR8	N	1.46		NTU
		4/27/98	B0NBB9	N	15.70		NTU
		7/23/98	B0P7X0	N	2.19		NTU
Uranium	199-K-27	3/24/97	B0K058	N	6.12	1.34	µg/L
		3/25/98	B0N472	N	4.68	1.03	µg/L
Uranium-234	199-K-109A	8/28/96	B0J685	N	1.42	.21	pCi/L
		3/31/97	B0K057	N	1.60	.77	pCi/L
		3/24/98	B0N470	N	3.04 U	3.23	pCi/L
	199-K-27	3/24/97	B0K058	N	1.75	.95	pCi/L
		3/25/98	B0N472	N	2.55	.96	pCi/L
Uranium-235	199-K-109A	8/28/96	B0J685	N	.12	.05	pCi/L
		3/31/97	B0K057	N	-.01 U	.02	pCi/L
		3/24/98	B0N470	N	.54 U	1.44	pCi/L
	199-K-27	3/24/97	B0K058	N	.09 U	.21	pCi/L
		3/25/98	B0N472	N	.14 U	.20	pCi/L
Uranium-238	199-K-109A	8/28/96	B0J685	N	1.33	.20	pCi/L
		3/31/97	B0K057	N	1.38	.70	pCi/L
		3/24/98	B0N470	N	4.04	3.55	pCi/L
	199-K-27	3/24/97	B0K058	N	1.46	.85	pCi/L
		3/25/98	B0N472	N	1.92	.81	pCi/L
Vanadium	199-K-106A	12/05/96	B0JLT0	N	20.00 B		µg/L
			B0JLT1	Y	22.20 B		µg/L
		10/27/97	B0M7M9	N	12.30 B		µg/L
			B0M7N0	Y	14.80 B		µg/L
	199-K-107A	12/05/96	B0JLR6	N	16.10 B		µg/L
			B0JLR7	Y	20.60 B		µg/L
		10/27/97	B0M786	Y	10.80 B		µg/L
			B0M787	N	10.70 B		µg/L
	199-K-108A	12/09/96	B0JLR8	N	18.20 B		µg/L
			B0JLR9	Y	21.30 B		µg/L
		10/27/97	B0M792	Y	11.50 B		µg/L
			B0M793	N	11.80 B		µg/L
	199-K-109A	12/06/96	B0JLS0	N	22.10 B		µg/L
			B0JLS1	Y	19.80 B		µg/L
		10/24/97	B0M7H0	Y	12.80 B		µg/L
			B0M7H1	N	12.00 B		µg/L
	199-K-110A	4/23/97	B0KB86	Y	22.40		µg/L
			B0KB88	Y	20.50		µg/L
		10/27/97	B0M7C5	Y	12.60 B		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
			B0M7C6	N	16.80 B		µg/L
		4/27/98	B0NCK7	Y	15.20		µg/L
	199-K-27	3/24/97	B0K059	Y	9.70 B		µg/L
		10/27/97	B0M7H3	Y	10.50 B		µg/L
			B0M7H4	N	14.90 B		µg/L
		3/25/98	B0N471	Y	7.00 B		µg/L
	199-K-30	7/29/96	B0J3W4	Y	13.00	7.80	µg/L
		11/26/96	B0JLP8	N	12.00 B		µg/L
			B0JLP9	Y	11.00 B		µg/L
		10/24/97	B0M7H6	Y	17.80 B		µg/L
			B0M7H7	N	14.90 B		µg/L
	199-K-32A	12/09/96	B0JLQ2	N	8.80 B		µg/L
			B0JLQ3	Y	18.40 B		µg/L
		4/28/97	B0KBB0	Y	5.90 B		µg/L
		10/29/97	B0M7J2	Y	9.40 B		µg/L
			B0M7J3	N	8.80 B		µg/L
		4/27/98	B0NCL3	Y	4.40 U		µg/L
	199-K-34	11/15/96	B0JLQ8	N	4.10 B		µg/L
			B0JLQ9	Y	3.10 U		µg/L
			B0JLS4	N	3.20 B		µg/L
			B0JLS5	Y	3.90 B		µg/L
			B0JLS8	N	4.60 U		µg/L
			B0JLS9	Y	4.60 U		µg/L
		4/28/97	B0KBB2	Y	9.30 B		µg/L
		4/27/98	B0NCL7	Y	4.40 U		µg/L
Vinyl chloride	199-K-106A	7/30/96	B0J3Y2	N	.27 U		µg/L
		4/24/97	B0KB80	N	.29 U		µg/L
		9/29/97	B0M101	N	.68 U		µg/L
		4/28/98	B0NCM8	N	.68 U		µg/L
	199-K-108A	4/24/97	B0KB83	N	.29 U		µg/L
		4/28/98	B0NCN0	N	.68 U		µg/L
	199-K-109A	8/28/96	B0J685	N	.27 U		µg/L
		3/31/97	B0K057	N	.29 U		µg/L
		3/24/98	B0N470	N	.68 UH		µg/L
	199-K-27	3/24/97	B0K058	N	.29 U		µg/L
		3/25/98	B0N472	N	.68 U		µg/L
	199-K-34	4/28/97	B0KBB1	N	.29 U		µg/L
		4/27/98	B0NCL8	N	.68 U		µg/L
Xylenes (total)	199-K-106A	7/30/96	B0J3Y2	N	.16 U		µg/L
		4/24/97	B0KB80	N	.07 U		µg/L
		9/29/97	B0M101	N	.14 U		µg/L
		4/28/98	B0NCM8	N	.14 U		µg/L
	199-K-108A	4/24/97	B0KB83	N	.07 U		µg/L
		4/28/98	B0NCN0	N	.14 U		µg/L
	199-K-109A	8/28/96	B0J685	N	.16 U		µg/L
		3/31/97	B0K057	N	.07 U		µg/L
		3/24/98	B0N470	N	.14 UH		µg/L
	199-K-27	3/24/97	B0K058	N	.07 U		µg/L
		3/25/98	B0N472	N	.14 U		µg/L
	199-K-34	4/28/97	B0KBB1	N	.07 U		µg/L
		4/27/98	B0NCL8	N	.14 U		µg/L
Zinc	199-K-106A	12/05/96	B0JLT0	N	7.80 B		µg/L
			B0JLT1	Y	10.10 B		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		10/27/97	B0M7M9	N	8.40 B		µg/L
			B0M7N0	Y	12.80 B		µg/L
	199-K-107A	12/05/96	B0JLR6	N	13.90 B		µg/L
			B0JLR7	Y	12.80 B		µg/L
		10/27/97	B0M786	Y	4.60 BE		µg/L
			B0M787	N	6.40 BE		µg/L
	199-K-108A	12/09/96	B0JLR8	N	9.90 B		µg/L
			B0JLR9	Y	7.10 B		µg/L
		10/27/97	B0M792	Y	7.80 B		µg/L
			B0M793	N	7.90 B		µg/L
	199-K-109A	12/06/96	B0JLS0	N	10.00 B		µg/L
			B0JLS1	Y	8.30 B		µg/L
		10/24/97	B0M7H0	Y	12.50 B		µg/L
			B0M7H1	N	11.00 B		µg/L
	199-K-110A	4/23/97	B0KB86	Y	14.30		µg/L
			B0KB88	Y	15.70		µg/L
		10/27/97	B0M7C5	Y	5.40 BE		µg/L
			B0M7C6	N	8.60 BE		µg/L
		4/27/98	B0NCK7	Y	5.20 B		µg/L
	199-K-27	3/24/97	B0K059	Y	27.60 Q		µg/L
		10/27/97	B0M7H3	Y	7.50 BE		µg/L
			B0M7H4	N	6.90 BE		µg/L
		3/25/98	B0N471	Y	59.60		µg/L
	199-K-30	7/29/96	B0J3W4	Y	7.70 U		µg/L
		11/26/96	B0JLP8	N	39.40		µg/L
			B0JLP9	Y	50.00		µg/L
		10/24/97	B0M7H6	Y	17.70 B		µg/L
			B0M7H7	N	19.60 B		µg/L
	199-K-32A	12/09/96	B0JLQ2	N	30.40		µg/L
			B0JLQ3	Y	11.50 B		µg/L
		4/28/97	B0KBB0	Y	14.00 Q		µg/L
		10/29/97	B0M7J2	Y	10.80 B		µg/L
			B0M7J3	N	8.40 B		µg/L
		4/27/98	B0NCL3	Y	4.90 B		µg/L
	199-K-34	11/15/96	B0JLQ8	N	11.30 B		µg/L
			B0JLQ9	Y	10.80 B		µg/L
			B0JLS4	N	13.60 B		µg/L
			B0JLS5	Y	7.00 B		µg/L
			B0JLS8	N	3.10		µg/L
			B0JLS9	Y	27.10		µg/L
		4/28/97	B0KBB2	Y	17.80 Q		µg/L
		4/27/98	B0NCL7	Y	6.70 B		µg/L
cis-1,2-Dichloroethylene	199-K-106A	7/30/96	B0J3Y2	N	.12 U		µg/L
		4/24/97	B0KB80	N	.03 J		µg/L
		9/29/97	B0M101	N	.10 U		µg/L
		4/28/98	B0NCM8	N	.10 U		µg/L
	199-K-108A	4/24/97	B0KB83	N	.03 U		µg/L
		4/28/98	B0NCN0	N	.10 U		µg/L
	199-K-109A	8/28/96	B0J685	N	.12 U		µg/L
		3/31/97	B0K057	N	.03 U		µg/L
		3/24/98	B0N470	N	.10 UH		µg/L
	199-K-27	3/24/97	B0K058	N	.03 U		µg/L
		3/25/98	B0N472	N	.10 U		µg/L
	199-K-34	4/28/97	B0KBB1	N	.03 U		µg/L
		4/27/98	B0NCL8	N	.10 U		µg/L

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
pH measurement	199-K-106A	7/30/96	B0J5V9	N	7.71		pH
		8/28/96	B0J740	N	7.80		pH
		9/23/96	B0JBS2	N	7.66		pH
		10/29/96	B0JK56	N	7.83		pH
		11/18/96	B0JBV9	N	7.71		pH
		12/05/96	B0JLT0	N	7.68		pH
		12/12/96	B0JBW2	N	7.69		pH
		1/20/97	B0JTV2	N	7.50		pH
		2/24/97	B0K253	N	7.54		pH
		4/24/97	B0K564	N	7.79		pH
		5/23/97	B0L037	N	7.68		pH
		6/26/97	B0L7C9	N	7.74		pH
		7/28/97	B0LBP7	N	7.79		pH
		8/28/97	B0LKV7	N	7.87		pH
		9/29/97	B0M0Y7	N	7.55		pH
		10/15/97	B0M660	N	7.11		pH
		10/27/97	B0M7M9	N	7.63		pH
		11/08/97	B0MB42	N	7.55		pH
		12/23/97	B0MDT8	N	7.59		pH
		1/16/98	B0MVL1	N	7.59		pH
		1/22/98	B0MNT9	N	7.69		pH
		2/20/98	B0N088	N	7.74		pH
		3/24/98	B0N514	N	8.49		pH
		4/28/98	B0NBC8	N	8.01		pH
		5/27/98	B0NMJ1	N	7.67		pH
		6/29/98	B0NX12	N	7.71		pH
		7/23/98	B0P6W9	N	8.56		pH
			B0P7Y6	N	8.56		pH
	199-K-107A	7/31/96	B0J5V0	N	7.58		pH
		10/28/96	B0JK49	N	7.67		pH
		12/05/96	B0JLR6	N	7.59		pH
		1/15/97	B0JTT5	N	7.62		pH
		3/20/97	B0K431	N	7.54		pH
		4/24/97	B0K555	N	7.69		pH
		6/26/97	B0L7D0	Y	7.78		pH
		7/28/97	B0LBP9	N	7.67		pH
		9/29/97	B0M106	Y	7.58		pH
		10/15/97	B0M666	N	6.97		pH
		10/27/97	B0M787	N	7.43		pH
		1/22/98	B0MNR9	N	7.64		pH
		4/28/98	B0NBD0	N	7.69		pH
		7/22/98	B0P7Y5	N	7.60		pH
					7.60		pH
	199-K-108A	7/30/96	B0J5V1	N	7.65		pH
		10/28/96	B0JK50	N	7.74		pH
		12/09/96	B0JLR8	N	7.83		pH
		1/15/97	B0JTT6	N	7.64		pH
		3/20/97	B0K432	N	7.69		pH
		4/24/97	B0K556	N	7.78		pH
		6/26/97	B0L7D1	Y	7.78		pH
		7/28/97	B0LBR0	N	7.71		pH
		9/26/97	B0M107	Y	7.75		pH
		1/22/98	B0MNT0	N	7.73		pH
		4/28/98	B0NBD1	N	7.77		pH
		7/28/98	B0P6X3	Y	7.51		pH

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
			B0P7V8	N	7.51		pH
	199-K-109A	7/29/96	B0J5V8	N	7.85		pH
		8/28/96	B0J741	N	8.04		pH
		9/23/96	B0JC31	N	7.78		pH
		10/28/96	B0JK59	N	7.77		pH
		11/18/96	B0JMZ7	N	7.82		pH
		12/06/96	B0JLS0	N	7.68		pH
		12/11/96	B0JT54	N	7.74		pH
		1/14/97	B0JTV5	N	7.80		pH
		2/25/97	B0K256	N	7.77		pH
		3/31/97	B0K057	N	7.69		pH
			B0K436	N	7.71		pH
		4/28/97	B0K571	N	7.89		pH
		5/28/97	B0L035	N	7.65		pH
		6/26/97	B0L7D2	N	7.74		pH
		7/28/97	B0LBR1	N	7.81		pH
		8/28/97	B0LKV8	N	7.77		pH
		9/25/97	B0M1H0	N	7.89		pH
		10/07/97	B0M5B3	N	7.71		pH
		10/19/97	B0M665	N	7.79		pH
		10/24/97	B0M7P6	N	7.25		pH
		11/18/97	B0MB43	N	7.77		pH
		12/23/97	B0MDT9	N	7.64		pH
		1/27/98	B0MVL4	N	7.73		pH
		2/26/98	B0N082	N	7.58		pH
		3/24/98	B0N4J6	N	7.74		pH
		4/30/98	B0N8R1	N	7.68		pH
			B0NBC0	N	7.68		pH
		5/27/98	B0NMJ2	N	7.66		pH
		6/29/98	B0NX13	N	7.59		pH
		7/23/98	B0P6X2	N	8.11		pH
			B0P7V9	N	8.11		pH
	199-K-110A	7/30/96	B0J5V2	N	7.02		pH
		10/28/96	B0JK51	N	7.14		pH
		1/16/97	B0JTT7	N	7.00		pH
		4/23/97	B0K557	N	6.70		pH
		7/28/97	B0LBR3	N	6.88		pH
		10/27/97	B0M7C6	N	7.00		pH
		1/28/98	B0MNT1	N	7.00		pH
		4/27/98	B0NBD2	N	7.08		pH
		7/27/98	B0P7W1	N	6.77		pH
	199-K-27	7/31/96	B0J5V7	N	7.67		pH
		8/28/96	B0J739	N	7.71		pH
		9/23/96	B0JBS1	N	7.52		pH
		10/28/96	B0JK57	N	7.68		pH
		11/18/96	B0JBW0	N	7.60		pH
		12/12/96	B0JBW3	N	7.66		pH
		1/14/97	B0JTV3	N	7.39		pH
		2/24/97	B0K254	N	7.51		pH
		3/24/97	B0K058	N	7.70		pH
		4/28/97	B0K566	N	7.59		pH
		5/23/97	B0L034	N	7.52		pH
		6/24/97	B0L7D3	N	7.64		pH
		7/28/97	B0LBR4	N	7.56		pH
		8/28/97	B0LKW0	N	7.54		pH
		9/26/97	B0M0Y9	N	7.70		pH

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		10/15/97	B0M661	N	7.07		pH
		10/27/97	B0M7H4	N	7.44		pH
		11/21/97	B0M9R7	N	8.95		pH
		12/19/97	B0MDV1	N	7.71		pH
		1/16/98	B0MVJ7	N	7.51		pH
		1/26/98	B0MNT5	N	7.49		pH
		2/20/98	B0N084	N	7.79		pH
		3/25/98	B0N4J8	N	7.83		pH
		4/30/98	B0N8P7	N	7.65		pH
			B0NBC2	N	7.65		pH
		5/27/98	B0NMJ3	N	7.71		pH
		6/24/98	B0NX15	N	7.97		pH
		7/23/98	B0P6X4	N	8.06		pH
			B0P7W2	N	8.06		pH
	199-K-28	7/30/96	B0J5V3	N	7.56		pH
		10/28/96	B0JK52	N	7.64		pH
		1/14/97	B0JTT8	N	7.36		pH
		4/29/97	B0K559	N	7.64		pH
		7/28/97	B0LBR6	N	7.60		pH
		10/15/97	B0M662	N	7.08		pH
		1/26/98	B0MNT2	N	7.65		pH
		4/27/98	B0NBD3	N	7.64		pH
		7/23/98	B0P7W4	N	8.14		pH
	199-K-29	7/30/96	B0J5V4	N	7.80		pH
		10/28/96	B0JK53	N	7.88		pH
		1/14/97	B0JTT9	N	7.63		pH
		4/23/97	B0K560	N	7.71		pH
		7/28/97	B0LBR7	N	7.77		pH
		10/15/97	B0M663	N	7.19		pH
		1/26/98	B0MNR6	N	7.85		pH
		4/27/98	B0NBB7	N	7.92		pH
		7/23/98	B0P7W5	N	8.10		pH
	199-K-30	7/29/96	B0J5W0	N	7.86		pH
		8/28/96	B0J738	N	7.99		pH
		9/23/96	B0JBS0	N	7.79		pH
		10/29/96	B0JK58	N	7.86		pH
		11/18/96	B0JBW1	N	7.84		pH
		11/26/96	B0JLP8	N	7.82		pH
		12/12/96	B0JBW4	N	7.94		pH
		1/15/97	B0JTV4	N	7.50		pH
		2/25/97	B0K255	N	7.74		pH
		4/29/97	B0K568	N	7.88		pH
		5/23/97	B0L039	N	7.73		pH
		7/29/97	B0LBR8	N	7.89		pH
		8/28/97	B0LKW1	N	7.71		pH
		9/25/97	B0M100	N	7.88		pH
		10/15/97	B0M664	N	7.23		pH
		10/24/97	B0M7H7	N	7.89		pH
		11/24/97	B0M9R8	N	7.25		pH
		12/19/97	B0MDV2	N	7.63		pH
		1/16/98	B0MVJ8	N	7.58		pH
		1/26/98	B0MNT7	N	7.35		pH
		2/20/98	B0N085	N	7.74		pH
		3/25/98	B0N4J9	N	8.33		pH
		4/27/98	B0NBC4	N	7.92		pH
		5/27/98	B0NMJ4	N	7.48		pH

Constituent Name	Well Number	Collection Date	Sample Number	Filtered (yes/no)	Result	Error	Units
		6/24/98	B0NX16	N	7.79		pH
		7/23/98	B0P6X5	N	8.29		pH
			B0P7W7	N	8.29		pH
	199-K-32A	7/30/96	B0J5V5	N	7.86		pH
		10/29/96	B0JK54	N	8.03		pH
		12/09/96	B0JLQ2	N	8.16		pH
		1/20/97	B0JTV0	N	7.76		pH
		4/28/97	B0K561	N	7.89		pH
		7/28/97	B0LBT1	N	8.11		pH
		1/28/98	B0MNR7	N	8.38		pH
		4/27/98	B0NBB8	N	8.02		pH
		7/27/98	B0P7W9	N	7.55		pH
	199-K-34	7/30/96	B0J5V6	N	7.73		pH
		10/29/96	B0JK55	N	7.79		pH
		11/15/96	B0JLQ8	N	7.53		pH
		1/16/97	B0JTV1	N	7.76		pH
		7/28/97	B0LBT3	N	7.70		pH
		10/27/97	B0M2W4	N	7.65		pH
		1/28/98	B0MNR8	N	7.73		pH
		4/27/98	B0NBB9	N	7.78		pH
		7/23/98	B0P7X0	N	8.49		pH
trans-1,2-Dichloroethylene	199-K-106A	7/30/96	B0J3Y2	N	.13 U		µg/L
		4/24/97	B0KB80	N	.03 U		µg/L
		9/29/97	B0M101	N	.10 U		µg/L
		4/28/98	B0NCM8	N	.13 U		µg/L
	199-K-108A	4/24/97	B0KB83	N	.03 U		µg/L
		4/28/98	B0NCN0	N	.13 U		µg/L
	199-K-109A	8/28/96	B0J685	N	.13 U		µg/L
		3/31/97	B0K057	N	.03 U		µg/L
		3/24/98	B0N470	N	.13 UH		µg/L
	199-K-27	3/24/97	B0K058	N	.03 U		µg/L
		3/25/98	B0N472	N	.13 U		µg/L
	199-K-34	4/28/97	B0KBB1	N	.03 U		µg/L
		4/27/98	B0NCL8	N	.13 U		µg/L

Distribution

No. of Copies

OFFSITE

W. Rigsby
Yakama Indian Nation
Environmental Restoration/Waste Management
1933 Jadwin Ave.
Richland, WA 99352

ONSITE

4 **DOE Richland Operations Office**

M. J. Furman	H0-12
R. D. Hildebrand	H0-12
F. M. Roddy	S7-41
K. M. Thompson	H0-12

3 **Bechtel Hanford, Inc.**

K. R. Fecht	H0-02
B. H. Ford	H0-21
A. J. Knepp	H0-21

3 **CH2M Hill Hanford, Inc.**

J. V. Borghese	H0-19
R. E. Peterson	S4-60
R. F. Raidl	H9-03

No. of Copies

7 **DE&S Hanford, Inc.**

S. P. Burke	X3-76
G. S. Hunacek (5)	X3-79
D. J. Watson	X3-79

MACTEC-ERS

P. T. Day	R3-11

State of Washington Department of Ecology

S. Leja	B5-18

U.S. Environmental Protection Agency

L. E. Gadbois	B5-01

24 **Pacific Northwest National Laboratory**

C. J. Chou	K6-81
P. E. Dresel	K6-96
M. J. Hartman (3)	K6-96
V. G. Johnson (5)	K6-96
J. W. Lindberg	K6-81
S. P. Luttrell	K6-96
S. P. Reidel	K6-81
R. M. Smith	K6-96
W. D. Webber (3)	K6-96
Information Release Office (7)	K1-06