Y-12

**OAK RIDGE
Y-12
PLANT**

MARTIN MARIETTA

**GROUNDWATER QUALITY ASSESSMENT
FOR THE CHESTNUT RIDGE
HYDROGEOLOGIC REGIME
AT THE Y-12 PLANT**

**1991 Groundwater Quality Data
and Calculated Rate
of Contaminant Migration**

February 1992

Prepared by

**HSW ENVIRONMENTAL CONSULTANTS, INC.
Under Purchase Order 77Y-YP507C**

for

**Environmental Management Department
Health, Safety, Environment, and
Accountability Division
Oak Ridge Y-12 Plant
Oak Ridge, Tennessee 37831**

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ACRONYMS

ADB	Ash Disposal Basin
ARAR	Applicable, Relevant, and Appropriate Requirement
BCHR	Bear Creek Hydrogeologic Regime
BCV	Bear Creek Valley
BQR	Blank Qualification Result
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CRHR	Chestnut Ridge Hydrogeologic Regime
CRSDB	Chestnut Ridge Sediment Disposal Basin
CRSP	Chestnut Ridge Security Pits
DOE	U.S. Department of Energy
ECRWP	East Chestnut Ridge Waste Pile
EMD	Environmental Monitoring Database
EP	Extraction Procedure (Toxicity test)
EPA	U.S. Environmental Protection Agency
FFA	Federal Facility Agreement
GWPP	Groundwater Protection Program
GWQAR	Groundwater Quality Assessment Report
H&R	H&R Technical Associates, Inc.
HSEA	Health, Safety, Environment, and Accountability (Division)
K-25	Oak Ridge K-25 Site (formerly the Oak Ridge Gaseous Diffusion Plant)
KHQ	Kerr Hollow Quarry
MCL	Maximum Contaminant Level
NHP	New Hope Pond

ACRONYMS - (cont'd)

NPL	National Priority List
ORNL	Oak Ridge National Laboratory
ORR	Oak Ridge Reservation
PCB	Polychlorinated biphenyl
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RI/FS	Remedial Investigation/Feasibility Study
SOP	Standard Operating Procedure
SWDF	Solid Waste Disposal Facility (non-RCRA)
SWMU	Solid Waste Management Unit (RCRA)
TCLP	Toxicity Characteristic Leaching Procedure
TDEC	Tennessee Department of Environment and Conservation
T/S/D	Treatment, Storage, and Disposal (Unit)
UNCS	United Nuclear Corporation Site
UEFPC	Upper East Fork Poplar Creek
UEFPCHR	Upper East Fork Poplar Creek Hydrogeologic Regime
VOC	Volatile Organic Compound

1.0 INTRODUCTION

This report contains groundwater quality data obtained during the 1991 calendar year at several hazardous and non-hazardous waste-management facilities associated with the U.S. Department of Energy (DOE) Y-12 Plant (Figure 1). These sites are located south of the Y-12 Plant in the Chestnut Ridge Hydrogeologic Regime (CRHR), which is one of three regimes defined for the purposes of groundwater quality monitoring and remediation (Figure 2). The Health, Safety, Environment, and Accountability (HSEA) Division of the Y-12 Plant Environmental Management Department manages the groundwater monitoring activities in each regime as part of the Y-12 Plant Groundwater Protection Program (GWPP).

1.1 Purpose

This report was prepared for informational purposes. Included are the analytical data for groundwater samples collected from selected monitoring wells during 1991 and the results for quality assurance/quality control (QA/QC) samples associated with each groundwater sample. This report also contains summaries of selected data, including ion-charge balances for each groundwater sample, results of volatile organic compound (VOC) analyses validated using the associated QA/QC sample data, trace metal concentrations which exceeded drinking-water standards, and a summary of radiochemical data and associated counting errors.

1.2 Background

Groundwater quality monitoring at the waste-management sites in the CRHR has been in progress since the early 1980s. Between 1986 and 1998 groundwater monitoring under the Resource Conservation and Recovery Act (RCRA) was initiated at three of the sites: the Chestnut Ridge Security Pits (CRSP), the Chestnut Ridge Sediment Disposal Basin (CRSDB), and Kerr Hollow Quarry (KHQ). Monitoring at these sites has been performed in accordance with the RCRA regulations for interim status hazardous waste treatment, storage, and disposal (T/S/D) facilities. Three other sites in the CRHR (the United Nuclear Corporation Site, the Ash

Disposal Basin, and Rogers Quarry) were identified in 1987 as RCRA solid waste management units (SWMUs) (Welch *et al.* 1987). Groundwater quality monitoring in support of RCRA Facility Investigations (RFIs) at these sites was initiated in 1988. Also located in the CRHR are three non-hazardous solid waste disposal facilities (SWDFs): Industrial Landfills II, III, and IV. Groundwater monitoring at these sites is performed as required under the Tennessee Department of Conservation and Environment (TDEC) solid waste processing and disposal regulations.

In November 1989 the Oak Ridge Reservation (ORR) was included on the National Priority List (NPL) for environmental restoration under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). A Federal Facility Agreement (FFA) between the DOE, the U.S. Environmental Protection Agency (EPA), and the TDEC negotiated in response to the NPL listing of the ORR, changed the regulatory status of the hazardous wastes sites in the CRHR from RCRA to CERCLA with RCRA as an applicable, relevant, and appropriate requirement (ARAR) (U.S. Department of Energy 1991). Future groundwater quality monitoring at these sites will be performed in support of a CERCLA remedial investigation/feasibility study (RI/FS) and in accordance with the requirements of the FFA.

Historically, groundwater quality monitoring results for sites in the CRHR have been submitted to the TDEC in site-specific reports. However, the 1991 groundwater quality data obtained at each site is presented in a single groundwater quality assessment report (GWQAR) addressing the entire CRHR (this document). The same reporting convention has been used since 1989 for groundwater quality data for waste-management sites located in the Bear Creek Hydrogeologic Regime (BCHR) and the Upper East Fork Poplar Creek Hydrogeologic Regime (UEFPCHR).

The regime-wide GWQAR is completed in two parts. Part I (this document) contains the groundwater quality data and a calculated rate of contaminant migration. Part II of the GWQAR contains a detailed evaluation of the data and proposed modifications to the monitoring programs, if applicable. Other reporting requirements are presented in site-specific reports. For instance, results of statistical analyses of detection monitoring data for KHQ and the CRSDB for calendar year 1991 are provided in Martin Marietta Energy Systems, Inc. (1992a and 1992b).

2.0 SITE DESCRIPTIONS

The CRHR is south of the Y-12 Plant, and is flanked to the north by Bear Creek Valley (BCV) and to the south by Bethel Valley Road (Figure 2). The regime encompasses the portion of Chestnut Ridge extending from a gap in the ridge located southeast of the eastern end of the Y-12 Plant to a drainage basin on the ridge located southwest of the western end of the Y-12 Plant. The following sections contain brief descriptions of the waste-management sites in the CRHR (Table 1). The locations of these sites are shown on Figure 3.

2.1. Chestnut Ridge Security Pits

Located on the crest of Chestnut Ridge south of the central portion of the Y-12 Plant (Figure 3), the CRSP were operated between 1973 and 1988. When in operation, the site was a series of trenches used for the disposal of classified hazardous and non-hazardous wastes. The disposal trenches were about 8 to 10 feet (ft) wide, 10 to 18 ft deep, and 700 to 800 ft long. Typically, several trenches were opened simultaneously to allow for the segregation of wastes in separate cells. After a trench was filled, it was covered with 6 to 12 inches of soil. Particularly reactive materials were disposed in six auger holes, each about 2 ft in diameter and 10 ft deep, located at the eastern end of the site (Butz and Stoner 1983).

The CRSP contain an estimated 3,950 tons of waste materials. Detailed waste inventories are classified, but an unclassified inventory listed ten major wastes types that included acids, fiberglass, beryllium, biological material, debris, heavy metals, inorganics, organics, thorium, and uranium (Martin Marietta Energy Systems, Inc. 1984).

Disposal of hazardous waste in the CRSP ceased in December 1984 and disposal of nonhazardous waste ceased on November 8, 1988. Closure of the site is described in a TDEC approved RCRA closure plan and involved the construction of a low-permeability engineered cap over the disposal trenches (Martin Marietta Energy Systems, Inc. 1988).

2.2 Chestnut Ridge Sediment Disposal Basin

The CRSDB is southeast of the east end of the Y-12 Plant (Figure 3). Beginning in 1973 the site received soil and sediment that was periodically dredged from New Hope Pond (NHP), a closed surface impoundment at the east end of the Y-12 Plant. Soils and sediments removed from NHP contained polychlorinated biphenyls (PCBs), mercury, and uranium. Results of Extraction Procedure (EP) Toxicity analyses showed that the soils did not exhibit the characteristics of a hazardous waste (Saunders 1983; Kimbrough and McMahon 1988a and 1988b). Between November 1987 and April 1988 the CRSDB also received mercury-contaminated soils from several locations in the Y-12 Plant (pers. comm. D. Borman, February 1992). In 1989 the CRSDB was closed in accordance with a TDEC approved RCRA closure plan.

2.3 Kerr Hollow Quarry

The KHQ is located near the south-central portion of the CRHR (Figure 3) and was a source of stone construction material in the 1940s until it filled with water and was abandoned. From the early 1950s KHQ was used for the disposal of reactive materials from the Y-12 Plant and the Oak Ridge National Laboratory (ORNL). Disposal of these materials at the site ceased in November 1988. The site is currently undergoing clean-closure under RCRA.

2.4 East Chestnut Ridge Waste Pile

The East Chestnut Ridge Waste Pile (ECRWP) is a lined hazardous waste storage facility constructed in 1987 as a storage site for contaminated soils from the Y-12 Plant. The site is located in the western portion of the CRHR near the CRSDB (Figure 3).

2.5 United Nuclear Corporation Site

The United Nuclear Corporation Site (UNCS) lies on the crest of Chestnut Ridge southeast of the west end of the Y-12 Plant (Figure 3). The site was a landfill excavated about 32 ft deep (Smith *et al.* 1983) and received nitrate contaminated low-level radioactive wastes, and contaminated equipment packaged in 55 gallon drums and in boxes. Approximately 30,000 barrels of waste were placed in the site (Grutzeck-1987). Waste disposal at the site ceased in 1984. Groundwater quality data obtained since 1985 do not suggest groundwater contamination at the site (Early 1989).

2.6 Ash Disposal Basin

The Ash Disposal Basin (ADB) is on the southern flank of Chestnut Ridge about one-half mile south of the Y-12 Plant (Figure 3). The basin was created in 1955 by the construction of an earthen dam across a northern tributary of McCoy Branch. Fly-ash slurry from the Y-12 Steam Plant was pumped into the ADB until it was filled in July 1967. Since then, the fly-ash slurry by-passes the ADB through an emergency spillway on the eastern abutment and discharges directly into McCoy Branch, which has been diverted to direct the slurry into Rogers Quarry (King *et al.* 1989). An RFI Plan contains details of the operational history of the ADB (Battelle Columbus Division 1988).

2.7 Rogers Quarry

Rogers Quarry is located in the southwest portion of the CRHR about three miles west of KHQ (Figure 3). The quarry was used from the 1940s through the late 1950s as a source of stone-construction material, and was abandoned in the early 1960s when it filled with water. It currently receives fly-ash slurry from the Y-12 Steam Plant that is discharged into McCoy Branch (King *et al.* 1989).

2.8 Industrial Landfill II

Industrial Landfill II, also known as the Y-12 Plant Centralized Sanitary Landfill II, is a TDEC-permitted SWDF located near the western end of the CRHR (Figure 3). The landfill is used as a disposal site for combustible and decomposable solid waste and construction spoil material from the Y-12 Plant, the Oak Ridge K-25 Site (K-25), ORNL, and DOE prime contractors in Oak Ridge. These wastes include scrap metal, glass, paper products, plastics, wood, organic garbage, textile products, asphalt roofing materials, and special wastes such as asbestos and beryllium oxide. The landfill has been expanded (Figure 3), but the expanded area has not received any wastes.

Groundwater monitoring at the site is performed in accordance with a monitoring plan approved by the TDEC. Monitoring results obtained since 1982 show that groundwater at the site contains low levels of VOCs in the upgradient monitoring well.

2.9 Industrial Landfill III

Industrial Landfill III, also known as the Chestnut Ridge Borrow Area Waste Pile, is located near the eastern end of the CRHR (Figure 3). The site was constructed as a storage facility for soils removed from the Oak Ridge Civic Center properties and the Oak Ridge Sewer Line Beltway. Soils in both areas contained mercury and other metals (and possibly some VOCs) which originated from the Y-12 Plant. Results of EP Toxicity analyses indicated that the soils do not exhibit the toxicity characteristic of a hazardous waste. A soil sampling plan designed to determine if the soils are toxic hazardous wastes based on results of Toxicity Characteristic Leaching Procedure (TCLP) testing was submitted to the TDEC for review in September 1991 (Science Applications International Corporation 1991).

The landfill excavation is approximately 70 ft wide, 10 to 12 ft deep, and 200 ft long. The bottom and walls of the pit are lined with polyvinyl chloride and the bottom is sloped to facilitate drainage. Perimeter channels divert surface runoff and a plastic liner on top of the pile restricts infiltration. Approximately 3,000 cubic yards of soil are now stored at the facility.

Groundwater quality monitoring has been performed since 1986; contaminant releases to the groundwater system have not been detected.

2.10 Industrial Landfill IV

Industrial Landfill IV is a TDEC-permitted SWDF located near the west end of the CRHR (Figure 3) that has been operated since 1989 for disposal of non-hazardous, non-radioactive industrial wastes. Wastes disposed at the site include cardboard, plastics, rubber, scrap metal, wood, paper, and special wastes. Based on current waste volumes, the site is expected to receive approximately 12,000 cubic feet of waste per year. Groundwater quality monitoring has been performed at the site since 1987 and contaminant releases to groundwater have not been detected.

3.0 HYDROGEOLOGIC FRAMEWORK

The following discussion provides a basic overview of the geology and groundwater system in the CRHR. The hydrogeologic system in the CRHR is highly complex and this overview is not comprehensive. A detailed discussion of the hydrogeologic framework for the ORR is provided in Solomon *et al.* (1991).

The hydrogeologic system in the CRHR generally consists of two lithologically distinct units: an upper zone consisting of clay-rich regolith and weathered bedrock (epikarst), and a lower bedrock zone consisting of dolostones and limestones. Generally, the regolith is unsaturated, except during and immediately after significant rainfall, and the water table occurs in the bedrock. Recharge on Chestnut Ridge is via vertical percolation through the regolith and probably includes more direct input via dolines. The discharge route(s) from the ridge has not been completely established, but based on knowledge of flow in similar karst systems and the results of dye-tracer tests in the CRHR (Geraghty & Miller, Inc. 1990; Ketelle and Huff 1984), springs and seeps located along or across strike are the probable discharge points.

3.1 Unconsolidated Zone

With the exception of KHQ and Rogers Quarry, the sites in the CRHR are directly underlain by reddish-brown to yellow-orange residual soil overlying the predominately dolostone formations of the Knox Group. The soils are characteristically slightly acidic, predominantly composed of clays and iron sesquioxides (Jennings 1985), and locally contain abundant chert and rubble-rich zones, especially near the bedrock interface. Some soils of a sandy texture, usually covering karst areas, are also present. The soil is thin or non-existent near karst features such as dolines (sink holes), swallets (sinking streams), and solution pan features (Ketelle and Huff 1984). Depth to bedrock varies throughout the CRHR but is usually less than 100 ft.

Two types of groundwater flow occur in the regolith on Chestnut Ridge: (1) downward percolation through saturated and partially saturated macropores, and under unsaturated conditions in micropores; and (2) shallow transient lateral flow (throughflow). Downward percolation of water through the residuum occurs at a rate that is controlled by the vertical

permeability and the degree of saturation of the soils, and is the postulated recharge mechanism for the underlying bedrock aquifer. Throughflow, or stormflow as described by Moore (1988), on Chestnut Ridge is believed to occur within the uppermost 7 ft of the regolith for relatively short periods during and immediately after heavy rainfall events. Groundwater in the throughflow zone travels at a much higher rate than vertical percolation and usually discharges at nearby springs, seeps, and streams.

The hydraulic conductivity of the deeper residual soils on Chestnut Ridge has been determined from field tests at the UNCS (Mishu 1982) and in areas several miles west of the CRHR (Woodward-Clyde Consultants, Inc. 1984). Little variation was observed with depth, but conductivities determined by field and laboratory tests varied by approximately two orders-of-magnitude for comparable depth intervals. Mean field conductivities ranged from 0.0057 to 0.49 feet per day (ft/day) and mean laboratory conductivities ranged from 2.8×10^{-5} to 9.1×10^{-3} ft/day.

The hydraulic conductivity of the residuum on Chestnut Ridge also varies with the degree of saturation (Luxmoore 1982; Daniels and Broderick 1983). Luxmoore (1982) demonstrated that hydraulic conductivity decreases by approximately one order-of-magnitude with a volumetric water content decrease to 90 percent of saturation, and two orders-of-magnitude with a volumetric water content decrease to 75 percent of saturation. Daniels and Broderick (1983), as summarized in Ketelle and Huff (1984), reported that hydraulic conductivity decreases by roughly one order-of-magnitude relative to maximum when saturation is 90 percent, and three orders-of-magnitude relative to maximum when saturation is 75 percent. Ketelle and Huff (1984) also noted that wide variations in soil permeability occur over short lateral distances. These findings are consistent with observations of permeability variation in residual soils found in other karst areas (Quinlan and Aley 1987).

3.2 Bedrock Zone

The water table in the CRHR usually occurs in bedrock. The predominantly dolostone and limestone bedrock in the CRHR are part of the Knox Group and the Chickamauga Group (Figure 4). The Knox Group forms Chestnut Ridge and consists of 3,000 to 3,500 ft of gray to

blue-gray, thin to thick-bedded cherty dolostone with interbeds of limestone. Almost all of the CRHR is underlain by the Knox Group. The Chickamauga Group disconformably overlies the Knox Group and generally consists of thin to medium-bedded argillaceous limestone and interbedded shale (Geraghty & Miller, Inc. 1989). Only a narrow area along the southern boundary of the CRHR is underlain by the Chickamauga Group and the following discussion relates only to groundwater flow in the Knox Group.

Strike and dip of bedding in the CRHR are generally N55° E and 45° SE, respectively. The Knox Group is pervasively jointed and fractured and contains many karst features. Smith *et al.* (1983) identified a series of sinkholes along the crest of the ridge that show a prominent alignment parallel to strike. This linear trend may be the result of dissolution along a bedding plane or joint set (Ketelle and Huff 1984; Smith *et al.* 1983).

Conceptual groundwater flow patterns of a typical karst aquifer, such as the Knox Group, are illustrated on Figure 5. Two major flow systems are illustrated: diffuse flow and conduit flow. Granular flow in the rock matrix is negligible because a well-consolidated, lithified limestone or dolomite typically has extremely low primary porosity (Smith *et al.* 1976; Jennings 1985).

Results of hydraulic conductivity tests performed in monitoring wells installed in the water producing zones of the Knox Group and findings of dye-tracer tests performed on Chestnut Ridge provide information regarding the rate of groundwater flow in the bedrock. The permeability values obtained from packer tests range from 0.0002 to 3.1 ft/day (King and Haase 1988) and reflect diffuse flow rates. Conduit flow rates in the Knox Group are indicated by dye-tracer test results. Flow rates determined from a tracer test performed by Ketelle and Huff (1984) ranged from about 490 to 1,250 ft/day. Preliminary results of a dye-tracer test performed by Geraghty & Miller, Inc. (1990) indicated flow rates of about 100 to 300 ft/day. Results of both tracer tests are within the range of conduit-flow rates typical in karst terrains (Quinlan and Ewers 1985).

Groundwater elevations in the CRHR are illustrated in Figure 6. Monitoring wells were used for primary control for placement of elevation isopleths, but springs and streams also provided additional control. The water table in the CRHR generally reflects surface topography and radial groundwater flow directions. Radial flow directions are supported by the results of

the Geraghty & Miller, Inc. (1990) dye-tracer test, and have been observed in a karst system elsewhere in a similar topographic location (Quinlan and Ewers 1985).

4.0 1991 ASSESSMENT PROGRAM

The following sections describe the groundwater quality monitoring activities performed in the CRHR during 1991. Included are descriptions of the monitoring-well network, sampling procedures, analytical parameters, and data management.

4.1 Monitoring-Well Network

Locations of the monitoring-wells sampled during 1991 are shown on Figure 7. Data regarding the depth of the screened or open-hole interval and the aquifer zone monitored by each well are summarized in Table 3; Appendix C contains more detailed well construction information.

4.2 Sample Collection and Analysis

Personnel from the K-25 Technical Services Division collected all groundwater samples. Groundwater samples were collected during each quarter of 1991 from monitoring wells at each of the waste-management sites in the CRHR except Rogers Quarry; wells at Rogers Quarry were sampled only during the third and fourth quarters of 1991. To minimize the potential for cross-contamination, the monitoring wells were sampled during each quarterly event in the sequences listed in Appendix D. Each quarterly sequence reflects a protocol of sampling from the least contaminated wells to the most contaminated wells at a site or in a sampling group (a series of monitoring wells grouped for sampling and data-tracking purposes). At sites where no groundwater contamination is evident, upgradient wells were sampled first followed by the downgradient wells. The depth to groundwater in each monitoring well was measured before samples were collected.

Groundwater sampling was performed in accordance with the most recent version of the Standard Operating Procedure (SOP) 8102 approved by the Y-12 Plant GWPP Manager. Descriptions of the field methods and procedures used to collect the groundwater are contained in Environmental Surveillance Procedures Quality Control Program, Martin Marietta Energy

Systems, Inc. (Kimbrough et al. 1987). The EPA (Region IV) and the TDEC have approved these methods and procedures (U.S. Environmental Protection Agency 1988a).

Groundwater samples collected from the monitoring wells at each site in the CRHR were analyzed for a standard suite of parameters and constituents (Table 4). Analytes included: (1) trace metals and major ions (total and dissolved concentrations); (2) VOCs; (3) gross alpha activity and gross beta activity; (4) total suspended solids (TSS), total dissolved solids (TDS), and turbidity; (5) field and laboratory measurements of pH and specific conductance; and (6) field measurements of temperature, dissolved oxygen, and oxidation-reduction potential (REDOX). The K-25 Analytical Chemistry Department performed most of the laboratory analyses of the groundwater samples; selected radiochemical analyses were performed by the ORNL Analytical Chemistry Division.

Groundwater samples collected from wells at some sites in the CRHR were analyzed for other compounds or parameters in addition to the standard suite of analyses (Table 4). Samples collected from monitoring wells at the CRSDB were analyzed for Base, Neutral, and Acid (BNA) extractable organic compounds. Samples collected from wells at Industrial Landfill II were analyzed for additional organic compounds, chemical oxygen demand (COD), and cyanide. Samples from selected wells at Industrial Landfill III and all of the wells at Industrial Landfill IV were analyzed for isotopic uranium.

4.3 Quality Assurance/Quality Control Sampling

The QA/QC samples included laboratory blanks, trip blanks, equipment rinsates, and duplicate groundwater samples. The QA procedures followed by the K-25 Analytical Chemistry Department for the VOC analyses are those associated with the EPA Contract Laboratory Program for the analysis of the Target Compound List of parameters.

Laboratory blank samples were samples of organic-free deionized water that were analyzed along with the groundwater samples. Trip blanks were samples of organic-free deionized water transported unopened in coolers containing groundwater samples for VOC analyses. Equipment rinsates were samples of the organic-free deionized water that was used to decontaminate the groundwater sampling equipment, and were collected after sampling the last

well at a site or in a sampling group. Duplicate groundwater samples were collected at a frequency of at least one per site or sampling group, or one for every ten monitoring wells, whichever was greater.

4.4 Data Management

After completion of each quarterly sampling and analysis event, the K-25 and ORNL laboratories transmitted the field and laboratory data to H&R Technical Associates, Inc. (H&R) for entry into the Y-12 Plant Environmental Monitoring Database (EMD). A series of computer-based procedures were used to verify the data transfer and evaluate the data for errors and questionable or suspect results. A summary of these procedures follows. Detailed descriptions are provided in Mercier and Turner (1990).

H&R used a two-step procedure to verify that the data received from each laboratory matched the backup documentation (laboratory reports and field data sheets). The first step in this procedure depended on how the analytical laboratories transferred the data. If the data were transferred electronically, a computer program verified that the parameter names were correct, correct units were reported, and that the values reported for each parameter were within an expected range or were valid numeric values. If transferred via hardcopy, the data were manually input into the EMD. A double-entry procedure was used to verify the data input; the data were input by one person into one data file and by a second person into a second data file. A computer program then compared the two input data files and identified any discrepancies, which were then accounted for and corrected. The second step of the data verification procedure involved visually checking the data against the laboratory reports and field data sheets for completeness and obvious data outliers. H&R contacted the appropriate laboratory to resolve incomplete data transfers and questions regarding data outliers.

Upon completion of the data verification procedures, a computer program scanned the monitoring data, flagged questionable or suspect data based on pre-defined criteria, and prepared a report for transmittal to the appropriate laboratory. This data evaluation program calculated ion-charge balances for each sample, identified changes in analytical detection limits, validated analytical results for VOCs using the QA/QC sample data and an EPA validation procedure (U.S.

Environmental Protection Agency 1988b), summarized VOC sample holding times, and performed comparisons of (1) calculated specific conductance and field and laboratory conductivity measurements; (2) sample alkalinities (carbonate and bicarbonate) and pH; (3) field replicate measurements; (4) filtered and unfiltered elemental (i.e., trace metal) analyses; and (5) analytical results obtained by Inductively Coupled Plasma (ICP) Spectroscopy with corresponding results obtained by Atomic Adsorption Spectroscopy (AAS). Questionable or suspect data were reported to the appropriate analytical laboratory (Mercier 1991a, 1991b, and 1991c). Errors in the data were corrected, and questionable results unresolved by the appropriate laboratory were flagged.

Appendices E through J contain the groundwater quality data obtained during 1991. Analytical results for each groundwater sample and QA/QC sample are contained in Appendix E and Appendix F, respectively. Ion-charge balances for each groundwater sample are presented in Appendix G. Appendix H contains a summary of the validated analytical results for VOCs. Trace metal results that exceeded Maximum Contaminant Levels (MCLs) are summarized in Appendix I, and radiochemical data are summarized in Appendix J.

5.0 CALCULATED RATE OF CONTAMINANT MIGRATION

The following calculated rates of contaminant migration are based on the assumption that contaminants move with the groundwater unimpeded by various retardation processes. Factors which would reduce transport rates, such as matrix diffusion, degradation, sorption, and chemical precipitation, and factors which may increase transport rates, such as dispersion, were not explicitly considered. Moreover, migration as free product, which may occur independent of the direction and rate of groundwater flow, and vapor-phase transport, a potentially significant mechanism for the introduction of VOCs to the groundwater, also were not considered.

5.1 Unconsolidated Zone

Two methods were used to estimate the vertical migration rate of dissolved compounds in the unconsolidated zone: (1) direct calculation using the modified Darcy equation and (2) the arrival time method. Retardation is not considered in estimates calculated with the modified Darcy equation but is implied in the arrival time method.

Transport of dissolved compounds in groundwater is most commonly estimated using the modified Darcy equation:

$$v = Ki/n$$

where v is the migration rate, K is the saturated hydraulic conductivity, n is the effective porosity, and i is the hydraulic gradient. Moore (1988) reported a geometric mean hydraulic conductivity of about 0.006 ft/day for residuum on Chestnut Ridge based on infiltrometer studies near ORNL (Watson and Luxmoore 1986; Wilson and Luxmoore 1988). Using an effective porosity of 0.0042 (Moore 1989) and a reduction of one to two orders-of-magnitude for hydraulic conductivity under unsaturated conditions, a migration rate of about 5 to 50 feet per year (ft/yr) is calculated. Transport of dissolved compounds can also be estimated based on the recharge rate (q) and the effective porosity (n) (i.e., $v=q/n$). Moore (1988) proposes a recharge rate on the

order of 1 to 3 inches per year. Using an average effective porosity of 0.0042 (Moore 1989), a vertical transport rate of about 20 to 60 ft/yr is calculated.

Another estimate of the contaminant migration rate to the bedrock water table is provided using historical data for monitoring well 1080 (now abandoned). Installed at the CRSP in 1982, VOCs were first detected in the well in 1986. The top of the screened interval for this well was about 160 ft below the land surface. Using this depth and assuming a 13-year travel time (i.e., the period from initial waste disposal at the CRSP in 1973 to detection of the VOCs in 1986), a migration rate of about 12 ft/yr is calculated.

5.2 Bedrock Zone

As previously discussed in Section 3.2, two major types of flow are typical of karst systems: diffuse flow and conduit flow. Rates for diffuse flow may be approximated using the modified Darcy equation, and rates for conduit flow are best determined from dye-tracer tests. In using the Darcy equation for calculating diffuse flow, it is assumed that the flow system can be considered as an equivalent porous media. For systems with large hydraulic conductivity variations, such as karst flow systems, this assumption may not be appropriate. Additionally, although the modified Darcy equation can be used to calculate average flow velocities in fractured rock, the velocities in individual fractures may vary over orders-of-magnitude, depending on fracture aperture and wall roughness (Freeze and Cherry 1979).

Estimates of the hydraulic conductivity of the Knox Group in the CRHR were determined from results of straddle packer tests performed in three core holes in the CRHR; two at the east end of the regime near the CRSDB and one at the west end of the regime near Landfill IV. The tested intervals were in the Copper Ridge Dolomite of the Knox Group and were generally less than 600 ft below the ground surface. Calculated hydraulic conductivities ranged from 0.0002 to 3.1 ft/day (King and Haase 1988) and averaged about 0.6 ft/day.

Hydraulic gradients in strike-parallel and strike-perpendicular directions were determined from the water-table contour map (Figure 6). Strike-parallel gradients ranged from 0.02 to 0.05; strike-perpendicular gradients ranged from 0.06 to 0.09.

Using the average hydraulic conductivity of 0.6 ft/day and an effective porosity of 1 percent (Smith et al. 1976), the Darcy velocity for diffuse flow ranges from about 1 to 3 ft/day for strike-parallel flow and about 3 to 5 ft/day for strike-perpendicular flow. The value used for effective porosity is representative for fractured limestones; however, the actual value may be different by more than an order of magnitude, which would result in an inversely proportional variation in the Darcy velocity.

Results of two dye tracer tests performed in the Knox Group provide estimates of conduit flow rates. In a recent tracer test performed on Chestnut Ridge, flow velocities from 100 to 300 ft/day to springs as far as 10,000 ft from the dye injection point (a monitoring well at the CRSP) were determined (Geraghty & Miller, Inc. 1990). In an earlier tracer study on Chestnut Ridge west of the CRHR, flow rates of about 490 to 1,250 ft/day were determined (Ketelle and Huff 1984).

The wide range of potential contaminant migration rates reported in this section demonstrates the uncertainty in determining a representative rate of solute transport for this groundwater flow system. Long term transport of solutes in dual porosity and/or highly heterogeneous media is a complex physical and chemical process that is not fully explained by calculations using the modified Darcy equation or estimates based on dye tracer studies. It is probable that at various times and under various conditions, migration rates throughout the given range occur; some contaminants move relatively rapidly through the flow system, while other more highly attenuated constituents move much more slowly. Moreover, even highly mobile compounds will diffuse into smaller pores from the large conduits and then, under a reverse concentration gradient, will slowly diffuse back out. Thus, although the actual transport rates may vary over several orders of magnitude, the relatively limited extent of the VOC plume at the CRSP (HSW Environmental Consultants, Inc. 1991) suggests that slower transport rates may dominate and that processes such as matrix diffusion are an important controlling factor.

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APPENDIX A
FIGURES

FIGURE 1
REGIONAL LOCATION
OF THE Y-12 PLANT

FIGURE 2
HYDROGEOLOGIC REGIMES
AT THE Y-12 PLANT

EXPLANATION

— TOPOGRAPHIC CONTOUR
 - - - SURFACE DRAINAGE FEATURE
 * SPRING

FIGURE 3
WASTE-MANAGEMENT SITES
IN THE CHESTNUT RIDGE
HYDROGEOLOGIC REGIME

NAVJAG, Washington, D.C. 1966

EXPLANATION

- 1100 TOPOGRAPHIC CONTOUR (INTERVAL: 20ft)
- SPRING
- SURFACE DRAINAGE FEATURE
- APPROXIMATE LOCATION OF GEOLOGIC CONTACT
- APPROXIMATE STRIKE AND DIP DIRECTIONS

SYSTEM		GROUP (Formation)	MAP SYMBOL	THICKNESS (FT)
ORDOVICIAN	UPPER	CHICKAMAUGA (Undifferentiated)	Och	1500 TO 2000
	MIDDLE	MISSING SECTION (Subaerial Erosion)		
	LOWER	KNOX (Undifferentiated)	Ock	2500 TO 3000
CAMBRIAN	UPPER	CONASAUGA (Maynardville Limestone)	cmn	418 TO 450

FIGURE 4
BEDROCK GEOLOGY IN THE
CHESTNUT RIDGE HYDROGEOLOGIC REGIME

FIGURE 5
FLOW SYSTEMS
IN A KARST AQUIFER

MODIFIED FROM: Guinlan and Ewers, 1985
NOT TO SCALE

EXPLANATION

Bedrock Monitoring Well and Groundwater Elevation
 CW-604 904.2

Water-Level Isopleth (ft) (dashed where inferred)

Surface Drainage Feature

Spring

Inferred Direction of Cont
 Dye Recovery Data
 (Gargathy & Miller, Inc.)

7 (ft msl)
7sl)

ult Flow From
1990)

FIGURE 6
GROUNDWATER ELEVATIONS
IN THE CHESTNUT RIDGE
HYDROGEOLOGIC REGIME,
JANUARY 16-17, 1992

EXPLANATION

GW-512 ■	UNCONSOLIDATED ZONE MONITORING WELL
GW-155 ◆	BEDROCK MONITORING WELL
—	BOUNDARY OF SITE
— 1100 —	TOPOGRAPHIC CONTOUR
- - -	SURFACE DRAINAGE FEATURE
q	SPRING
- · - · -	APPROXIMATE LOCATION OF GEOLOGIC CONTACT
Emn	MAYNARDVILLE LIMESTONE
Oek	KNOX GROUP
Och	CHICKAMAUGA GROUP

FIGURE 7
MONITORING-WELL NETWORK
FOR THE 1991 GROUNDWATER
QUALITY ASSESSMENT PROGRAM

APPENDIX B
TABLES

Table 1. Waste-Management Sites in the Chestnut Ridge Hydrogeologic Regime

Site Name	Historical Regulatory Classification¹
Chestnut Ridge Security Pits	T/S/D Unit
Chestnut Ridge Sediment Disposal Basin	T/S/D Unit
East Chestnut Ridge Waste Pile	T/S/D Unit
Kerr Hollow Quarry	T/S/D Unit
Ash Disposal Basin	SWMU
United Nuclear Corporation Site	SWMU
Rogers Quarry	SWMU
Industrial Landfill II	SWDF
Industrial Landfill III	SWDF
Industrial Landfill IV	SWDF

Notes:

- 1 T/S/D Unit - RCRA regulated land based treatment, storage, or disposal unit.
- SWMU - RCRA Solid Waste Management Unit.
- SWDF - Solid Waste Disposal Facility (non-hazardous waste).

The regulatory classification of the T/S/D Units and SWMUs has been changed to CERLCA operable units.

Table 2. Summary of Field and Laboratory Residuum Permeability Test Results¹

Range of Depths Tested (ft)	Typical Depth(s) of Test (ft)	Mean Field Hydraulic Conductivity (ft/day)	Number of Tests	Mean Laboratory Hydraulic Conductivity (ft/day)	Number of Tests	Ref. ²
5 to 25	10	0.017	21	9.1×10^{-3}	12	(a)
	5 to 25	0.27	6	6.4×10^{-4} ^a	3	(b)
25 to 60	40	0.0057	18	2.8×10^{-4}	3	(a)
	25 to 60	0.43	8	2.8×10^{-5}	7	(b)
59 to 100	70 to 100	NT	NT	1.8×10^{-4}	8	(b)
	60 to 85	0.49	4	NT	NT	(b)

Note:

- 1 Modified from: Ketelle and Huff (1984)
Mishu (1982)
- 2 Reference: (a) Woodward Clyde Consultants (1984)
(b) Mishu (1982)
- 3 NT - Not tested
- a Results are for vertical permeameter tests.

Table 3. Screened and Open Interval Depths, and Aquifer Zones Monitored by the Monitoring Wells Sampled during 1991^a

WELL NO.	LOCATION ¹	AQUIFER ZONE ²	SCREENED OR OPEN ³	MONITORED INTERVAL ⁴
1085	LII	B	S	106.0 - 122.0
1086	LII	B	S	140.0 - 156.0
1087	LII	B	S	129.0 - 145.0
1090	UNCS	B	S	0.0 - 0.0
GW-141 ^b	LIV	B	S	141.0 - 156.0
GW-142	KHQ	B	O	248.5 - 295.0
GW-143	KHQ	B	O	205.0 - 253.0
GW-144	KHQ	B	S	148.0 - 195.0
GW-145	KHQ	B	S	86.0 - 110.0
GW-146	KHQ	B	O	190.0 - 220.0
GW-147	KHQ	B	S	52.0 - 69.0
GW-155	CRSDB	B	S	166.0 - 177.0
GW-156	CRSDB	B	S	146.0 - 157.0
GW-157	CRSDB	B	S	134.0 - 145.0
GW-158	CRSDB	B	O	356.0 - 441.0
GW-159 ^b	CRSDB	B	S	146.0 - 157.0
GW-160 ^b	LIII	B	O	205.0 - 235.0
GW-161 ^b	LIII	B	O	350.0 - 400.0
GW-165	CRDT	B	O	276.0 - 325.0
GW-166	CRDT	B	O	380.0 - 385.0
GW-173	CRSP	B	S	154.0 - 165.0
GW-174	CRSP	B	S	134.0 - 145.0
GW-175	CRSP	B	S	148.3 - 166.7
GW-176	CRSP	B	S	134.0 - 145.0
GW-177	CRSP	B	S	132.0 - 145.0
GW-178 ^b	CRSP	B	S	117.5 - 133.0
GW-179	CRSP	B	S	106.0 - 117.0
GW-180	CRSP	B	S	126.0 - 144.0
GW-181	CRSP	B	O	155.0 - 168.0
GW-184	RQ	B	S	101.5 - 130.0
GW-186	RQ	B	S	142.0 - 171.0
GW-187	RQ	B	S	139.0 - 162.0
GW-188	RQ	B	S	49.0 - 68.0
GW-203 ^b	UNCS	B	S	144.0 - 156.0
GW-205	UNCS	B	S	154.0 - 164.0

Table 3 (cont'd)

WELL NO.	LOCATION ¹	AQUIFER ZONE ²	SCREENED OR OPEN ³	MONITORED INTERVAL ⁴
GW-217 ^b	LIV	B	S	165.2 - 180.0
GW-221	UNCS	B	S	147.0 - 158.0
GW-231	KHQ	B	S	22.8 - 35.0
GW-241	CRSDB	B	S	78.0 - 103.0
GW-292	BCRWP	B	S	172.1 - 186.0
GW-293	BCRWP	B	O	197.0 - 214.0
GW-294	BCRWP	B	S	113.0 - 128.0
GW-295	LIII	B	S	130.4 - 146.0
GW-296	BCRWP	B	S	134.4 - 147.0
GW-297	BCRWP	B	S	107.0 - 120.0
GW-298	LIII	B	S	171.1 - 190.0
GW-299	LIII	B	S	153.0 - 168.0
GW-300	LIII	B	S	132.0 - 147.0
GW-301	LIII	B	S	148.5 - 163.5
GW-302	UNCS	B	S	121.5 - 134.8
GW-303	CRSDB	B	O	300.0 - 321.0
GW-304	CRSDB	B	S	148.5 - 167.0
GW-305 ^b	LIV	B	S	165.3 - 179.6
GW-321	ADB	B	S	84.0 - 98.6
GW-322	CRSP	B	O	128.0 - 193.0
GW-339	UNCS	B	S	101.0 - 114.0
GW-511	CRSP	B	S	140.0 - 153.7
GW-512	ADB	U	S	48.0 - 61.0
GW-513	ADB	B	S	111.0 - 125.3
GW-514	ADB	B	O	174.0 - 195.0
GW-521 ^b	LIV	B	S	123.2 - 136.0
GW-522 ^b	LIV	B	S	183.0 - 195.3
GW-539	LIIX	B	S	136.4 - 156.0
GW-540	LIIX	B	S	158.5 - 171.5
GW-541	LIIX	B	S	86.7 - 104.5
GW-542	LIIX	U	S	59.0 - 76.5
GW-543	LIIX	B	S	76.2 - 93.6
GW-544	LIIX	B	S	91.0 - 109.3
GW-545	LIIX	U	S	55.2 - 67.0
GW-546	LIIX	U	S	66.2 - 84.4
GW-607	CRSP	B	S	138.0 - 151.3
GW-608	CRSP	B	O	148.0 - 220.0

Table 3 (cont'd)

WELL NO.	LOCATION ¹	AQUIFER ZONE ²	SCREENED OR OPEN ³	MONITORED INTERVAL ⁴
GW-609	CRSP	B	S	256.4 - 269.0
GW-610	CRSP	B	S	105.1 - 117.4
GW-611	CRSP	B	S	101.5 - 121.6
GW-612	CRSP	B	O	235.0 - 254.0
GW-709	LII	B	S	68.7 - 80.6

Notes:

- 1 ADB - Ash Disposal Basin
 CRDT - Chestnut Ridge Deer Trap
 CRSDB - Chestnut Ridge Sediment Disposal Basin
 CRSP - Chestnut Ridge Security Pits
 ECRWP - East Chestnut Ridge Waste Pile
 KHQ - Kerr Hollow Quarry
 LII - Industrial Landfill II
 LIII - Industrial Landfill III
 LIV - Industrial Landfill IV
 LIIX - Industrial Landfill II Expansion
 RQ - Rogers Quarry
 UNCS - United Nuclear Corporation Site

- 2 U - Unconsolidated Zone
 B - Bedrock Zone

- 3 S - Screened
 O - Open

- 4 Feet below ground surface.

- a Compiled from: King et al. 1991.

- b Background monitoring well.

Table 4. Analytical Parameters for 1991 Groundwater Quality Monitoring

TRACE METALS¹

ICP ANALYSIS

Aluminum
Antimony
Arsenic
Barium
Beryllium
Boron
Calcium

Cadmium
Chromium
Cobalt
Copper
Iron
Magnesium

Molybdenum
Nickel
Manganese
Potassium
Selenium
Silicon

Silver
Sodium
Strontium
Thorium
Vanadium
Zinc

AAS ANALYSIS

Cadmium

Chromium

Lead

OTHER

Mercury (CVAA) Uranium (Fluor)

VOLATILE ORGANIC COMPOUNDS

Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
2-Butanone
Carbon disulfide
Carbon tetrachloride
Chlorobenzene
Chlorodibromomethane
Chloroethane
Chloroform
Chloromethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethene

1,2-Dichloropropane
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Ethylbenzene
2-Hexanone
4-Methyl-2-pentanone
Methylene chloride
Styrene
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Vinyl acetone
Vinyl chloride
Xylenes

Table 4 (cont'd)

ADDITIONAL ORGANIC COMPOUNDS²

Acrolein
Acrylonitrile
Ethanol
Ethyl methacrylate
Dibromomethane
Dichlorodifluoromethane

Iodomethane
2-Chloroethyl vinyl ether
Trichlorofluoromethane
1,4-Dichloro-2-butene
1,2,3-Trichloropropane

BASE, NEUTRAL, AND ACID EXTRACTABLE ORGANIC COMPOUNDS³

Acenaphthene
Acenaphthylene
Anthracene
Benzo (A) Anthracene
Benzo (A) Pyrene
Benzo (B) Fluoranthene
Benzo (G,H,I) Perylene
Benzo (K) Fluoranthene
Benzoic Acid
Benzyl Alcohol
Bis (2-Chloroethoxy) Methane
Bis (2-Chloroethyl) Ether
Bis (2-Chloroisopropyl) Ether
Bis (2-Ethylhexyl) Phthalate
Butyl Benzyl Phthalate
Chrysene
Dibenzofuran
Dibenzo (A,H) Anthracene
Diethylphthalate
Dimethylphthalate
Di-N-Butylphthalate
Di-N-Octylphthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Ideno(1,2,3-CD) Pyrene
Isophorone
N-Nitrosodi-N-Propylamine
N-Nitrosodiphenylamine
Naphthalene

Nitrobenzene
Pentachlorophenol
Phenol
Phenanthrene
Pyrene
4-Bromophenyl Phenyl Ether
2-Chloronaphthalene
2-Chlorophenol
4-Chlorophenyl Phenyl Ether
4-Chloro-3-Methylphenol
4-Chloroaniline
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4-Dinitrotoluene
2,6-Dinitrotoluene
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
3,3-Dichlorobenzidine
4,6-Dinitro-2-Methylphenol
2-Methylnaphthalene
2-Methylphenol
4-Methylphenol
2-Nitrophenol
2-Nitroaniline
3-Nitroaniline
4-Nitroaniline
4-Nitrophenol
1,2,4-Trichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol

Table 4 (cont'd)

MAJOR IONS

Alkalinity - Carbonate	Chloride	Nitrate (as N)
Alkalinity - Bicarbonate	Fluoride	Sulfate

OTHER REQUIRED PARAMETERS²

Chemical Oxygen Demand (COD)
Cyanide

MISCELLANEOUS PARAMETERS

pH ⁴	Phenols ⁵
Specific Conductance ⁴	Total Organic Carbon (TOC) ⁴
Total Suspended Solids (TSS)	Total Organic Halogen (TOX) ⁴
Total Dissolved Solids (TDS)	Turbidity
Total Petroleum Hydrocarbons (TPH) ⁵	

RADIOLOGICAL PARAMETERS⁶

Gross Alpha Activity
Gross Beta Activity
Isotopic Uranium (U-234, U-235, U-238)

FIELD MEASUREMENTS

pH	Dissolved Oxygen
Specific Conductance	Static Water Level
Temperature	Oxidation Reduction Potential (REDOX)

Notes:

- 1 ICP - Inductively Coupled Plasma Spectroscopy
AAS - Atomic Absorption Spectroscopy
CVAA - Cold Vapor Atomic Absorption
- 2 Analyses performed only for samples from monitoring wells at Landfill II.
- 3 Analyses performed only for samples from monitoring wells at the CRSDP

Table 4 (Cont'd)

Notes (cont'd):

- 4 Four replicate analyses performed for samples from monitoring wells located at Landfill II, Landfill III, Landfill IV, the CRSDB, the ECRWP, and KHQ.
- 5 Analysis performed only if specified by the Y-12 Plant GWPP Manager.
- 6 Gross alpha activity and gross beta activity determined for all wells; isotopic uranium analyses performed for selected wells only.

APPENDIX C

MONITORING-WELL CONSTRUCTION DETAILS

EXPLANATION

LOCATION:

ADB	-	Ash Disposal Basin
CRDT	-	Chestnut Ridge Deer Trap
CRSDB	-	Chestnut Ridge Sediment Disposal Basin
CRSP	-	Chestnut Ridge Security Pits
ECRWP	-	East Chestnut Ridge Waste Pile
KHQ	-	Kerr Hollow Quarry
LII	-	Landfill II
LIIX	-	Landfill II Expansion
LIII	-	Landfill III
LIV	-	Landfill IV
RQ	-	Rogers Quarry
UNCS	-	United Nuclear Corporation Site

CASING MATERIAL:

PVC	-	Polyvinyl chloride
SS	-	Stainless Steel
Steel/gal	-	Galvanized Steel
Black St	-	Black Steel

MONITORED INTERVAL:

Top	-	Depth to top of filter pack or open-hole
Bottom	-	Depth to bottom of filter pack or open-hole
PVC/sl	-	Slotted
PVC/sw/.01	-	Spiral wound, 0.01 inch slot size
SS/sl	-	Slotted
SS/sw/.01	-	Spiral wound, 0.01 inch slot size

NOTES:

Coordinates	-	Y-12 Plant grid system
Elevations	-	Feet above mean sea level
Depths	-	Feet below ground surface
Casing Diameter	-	Outside diameter, in inches
Borehole Diameter	-	Nominal diameter, in inches
Length	-	Feet
.	-	Not Applicable or Not Available

APPENDIX C
Monitoring-Well Construction Details

Well No.	1085	1086	1087	1090	GW-141	GW-142	GW-143	GW-144	GW-145	GW-146
Location	LII	LII	LII	UNCS	LIV	KHQ	KHQ	KHQ	KHQ	KHQ
North Coordinate	26097	26923	25817	28718	28755	24524	24257	24255	24441	24432
East Coordinate	52997	52316	52289	53853	52463	64030	63522	63502	63266	63272
Surface Elevation	1030.73	1092.1	1004.13	1101.58	1183.45	968.29	911.04	910.48	837.29	837
Measuring Point Elevation	1032.38	1097.1	1007.38	1103.88	1186.06	970.35	913.18	913.34	840.04	838.16
BOREHOLE	.	.	.	.	.	.	.	.	.	.
Borehole Depth	122	156	145	96.7	156	250	205	195	110	190
Borehole Diameter	.	.	.	8	10	11	10	11	11	11
Weathered Rock - Depth	.	82	.	.	.	.	.	.	.	.
Fresh Rock - Depth	49	96	57	.	57	.	18	.	.	11
SURFACE CASING	.	.	.	.	.	.	.	.	.	.
Surface Casing Depth	.	.	.	.	65	20	20	40	12	13
Surface Casing Diameter	.	.	.	.	10.75	12.5	10.63	12.5	12.5	12.5
Surface Casing Material	unknown	unknown	unknown	.	Steel/F25	PVC/#40	PVC/#40	PVC/#40	PVC/#40	PVC/#40
WELL CASING	.	.	.	.	.	.	.	.	.	.
Well Casing Depth	122	156	145	.	155.2	248.5	205	190	109	190
Well Casing Diameter	6.5	6.5	6.5	6.5	4.5	6.62	6.62	4.5	4.5	6.62
Well Casing Material	PVC/#40	PVC/#40	PVC/#40	PVC/#40	SS/#304	Steel/F25	Steel/F25	PVC/#40	PVC/#40	Steel/F25
MONITORED INTERVAL	.	.	.	.	.	.	.	.	.	.
Screened or Open	Screen	Screen	Screen	Screen	Screen	Open	Open	Screen	Screen	Open
Top - Depth	106	140	129	.	141	248.5	205	148	86	190
Bottom - Depth	122	156	145	.	156	295	253	195	110	220
Screen Material	PVC/sl	PVC/sl	PVC/sl	PVC/sl	SS/sw/.01	.	.	PVC/sw/.01	PVC/sw/.01	.
Screen Length	15.0	15.0	15.0	.	10.7	.	.	40.0	20.0	.
Open-Hole Length	.	.	.	.	.	46.5	48	.	.	30
Open-Hole Diameter	.	.	.	.	.	6	6	.	.	6

(CONTINUED)

APPENDIX C
Monitoring-Well Construction Details

Well No.	GW-147	GW-155	GW-156	GW-157	GW-158	GW-159	GW-160	GW-161	GW-165	GW-166
Location	KBO	CRSDB	CRSDB	CRSDB	CRSDB	CRSDB	LIII	LIII	CRDT	CRDT
North Coordinate	24731	27722	27626	27477	27069	27764	27803	27805	27807	27835
East Coordinate	63428	64333	64020	63892	63643	63496	62165	62146	44547	44531
Surface Elevation	848.41	1058.88	1046.94	1044.85	981.24	1048.79	1090.66	1090.91	1090.39	1092.01
Measuring Point Elevation	851.62	1060.84	1049.13	1046.96	983.05	1051.15	1093.09	1093.54	1091.37	1093.29
BOREHOLE	.	.	.	.	.	.	.	.	.	.
Borehole Depth	69	177	157	145	356	157	205	350	276	380
Borehole Diameter	10	8.5	8.5	8.5	10	8.5	11	11	10	10
Weathered Rock - Depth	.	.	84	18	87	.	60	65	70	50
Fresh Rock - Depth	6	89	93	94	93	100	.	95.5	116	67
SURFACE CASING	.	.	.	.	.	.	.	.	.	.
Surface Casing Depth	4.6	95	94	103	94	123	112.5	108	119	96
Surface Casing Diameter	10.63	10.75	10.75	10.75	10.75	10.75	12.5	12.5	10.75	10.75
Surface Casing Material	PVC/#40	Steel/F25	Steel/F25	Steel/F25	Steel/F25	Steel/F25	Steel/F25	Steel/F25	Steel/F25	Steel/F25
WELL CASING	.	.	.	.	.	.	.	.	.	.
Well Casing Depth	69	177	157	145	356	157	205	350	276	380
Well Casing Diameter	4.5	4.5	4.5	4.5	6.62	4.5	6.62	6.62	6.62	6.62
Well Casing Material	PVC/#40	PVC/#40	PVC/#40	PVC/#40	Steel/F25	PVC/#40	Steel/F25	Steel/F25	Steel/F25	Steel/F25
MONITORED INTERVAL	.	.	.	.	.	.	.	.	.	.
Screened or Open	Screen	Screen	Screen	Screen	Open	Screen	Open	Open	Open	Open
Top - Depth	52	166	146	134	356	146	205	350	276	380
Bottom - Depth	69	177	157	145	441	157	235	400	325	385
Screen Material	PVC/sw/.01	PVC/sw/.01	PVC/sw/.01	PVC/sw/.01	.	PVC/sw/.01	.	.	.	.
Screen Length	15.0	10.0	10.0	10.0	.	10.0	.	.	.	.
Open-Hole Length	.	.	.	.	85	.	30	50	49	5
Open-Hole Diameter	.	.	.	.	6	.	6	11	6	6

(CONTINUED)

APPENDIX C
Monitoring-Well Construction Details

Well No.	GW-173	GW-174	GW-175	GW-176	GW-177	GW-178	GW-179	GW-180	GW-181	GW-184
Location	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	RQ
North Coordinate	28271	28205	28676	28294	28483	28552	28522	28494	28048	23915
East Coordinate	59472	59215	58686	58450	57497	57808	58569	59220	57736	57475
Surface Elevation	1112.97	1114.06	1081.89	1122.13	1155.52	1141.06	1124.33	1101.43	1090.55	924.65
Measuring Point Elevation	1115	1116.52	1084	1125.27	1157.95	1143.49	1128	1103.97	1093.03	927.63
BOREHOLE	.	.	.	.	.	.	.	.	.	.
Borehole Depth	165	145	166.7	145	145	133	117	144	155	130
Borehole Diameter	10	10	9.5	10	8	10	8	10	9.5	10
Weathered Rock - Depth	73	51	46	.	62	37	.	58	43	.
Fresh Rock - Depth	105	80	98.5	84	98	95	.	90	78	8
SURFACE CASING	.	.	.	.	.	.	.	.	.	.
Surface Casing Depth	73.1	80	61.3	88	82	89	76	90.6	102	8
Surface Casing Diameter	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.63
Surface Casing Material	Steel/F25	Steel/F25	unknown	Steel/F25	Steel/F25	Steel/F25	Steel/F25	Steel/F25	Steel/F25	PVC/#40
WELL CASING	.	.	.	.	.	.	.	.	.	.
Well Casing Depth	165	145	166.7	145	143	132	117	143	155	127.5
Well Casing Diameter	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	6.62	4.5
Well Casing Material	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304	Steel/F25	PVC/#40
MONITORED INTERVAL	.	.	.	.	.	.	.	.	.	.
Screened or Open	Screen	Screen	Screen	Screen	Screen	Screen	Screen	Screen	Open	Screen
Top - Depth	154	134	148.3	134	132	117.5	106	126	155	101.5
Bottom - Depth	165	145	166.7	145	145	133	117	144	168	130
Screen Material	SS/sw/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01	.	PVC/sw/.01
Screen Length	10.0	10.0	15.8	10.0	10.0	10.0	10.0	10.8	.	20.0
Open-Hole Length	.	.	.	.	.	.	.	.	13	.
Open-Hole Diameter	.	.	.	.	.	.	.	.	6	.

(CONTINUED)

APPENDIX C
Monitoring-Well Construction Details

Well No.	GW-186	GW-187	GW-188	GW-203	GW-205	GW-217	GW-221	GW-231	GW-241	GW-292
Location	RQ	RQ	RQ	UNCS	UNCS	LIV	UNCS	KHQ	CRSDB	ECRWP
North Coordinate	23387	23393	23663	28356	28363	28758	28359	24725	27069	28141
East Coordinate	56862	55980	56174	54190	54008	53020	54389	63410	63659	62146
Surface Elevation	828.31	831.59	834.33	1102.34	1101.46	1174.29	1103.36	846.9	980.8	1070.11
Measuring Point Elevation	831.32	834.28	837.09	1105.26	1103.97	1176.86	1106	849.47	982.64	1073
BORESOLE	.	.	.	.	.	.	.	.	.	.
Borehole Depth	171	162	68	156	164	180	158	35	103	186
Borehole Diameter	10	10	10	8.5	10	10	6	11	8.5	10
Weathered Rock - Depth	12	7	13	86	100	55	36	.	67	32
Fresh Rock - Depth	14.5	15	14	93	146	75	90	10.5	94.6	59.5
SURFACE CASING	.	.	.	.	.	.	.	.	.	.
Surface Casing Depth	14.5	7	15	94	154	81.7	92	11	.	51
Surface Casing Diameter	10.63	10.63	10.63	10.75	10.75	10.75	6.63	10.63	.	10.75
Surface Casing Material	PVC/#40	PVC/#40	PVC/#40	Steel/F25	Steel/F25	Steel/F25	Steel/F25	PVC/#40	.	Steel/F25
WELL CASING	.	.	.	.	.	.	.	.	.	.
Well Casing Depth	170	162	67.5	156	164	177.4	158	35	100	184.8
Well Casing Diameter	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Well Casing Material	PVC/#40	PVC/#40	PVC/#40	PVC/#40	PVC/#40	SS/#304	PVC/#40	PVC/#40	SS/#304	SS/#304
MONITORED INTERVAL	.	.	.	.	.	.	.	.	.	.
Screened or Open	Screen	Screen	Screen	Screen	Screen	Screen	Screen	Screen	Screen	Screen
Top - Depth	142	139	49	144	154	165.2	147	22.8	78	172.1
Bottom - Depth	171	162	68	156	164	180	158	35	103	186
Screen Material	PVC/sw/.01	PVC/sw/.01	PVC/sw/.01	PVC/sw/.01	PVC/sw/.01	SS/sw/.01	PVC/sw/.01	PVC/sw/.01	SS/sw/.01	SS/sw/.01
Screen Length	20.0	15.0	15.0	10.0	10.0	10.6	10.0	10.0	21.0	10.7
Open-Hole Length	.	.	.	.	.	.	.	.	.	.
Open-Hole Diameter	.	.	.	.	.	.	.	.	.	.

(CONTINUED)

APPENDIX C
Monitoring-Well Construction Details

Well No.	GW-293	GW-294	GW-295	GW-296	GW-297	GW-298	GW-299	GW-300	GW-301	GW-302
Location	ECRWP	ECRWP	LIII	ECRWP	ECRWP	LIII	LIII	LIII	LIII	UNCS
North Coordinate	28112	27958	27802	27994	27885	27495	27392	27487	27662	28694
East Coordinate	62321	62483	62184	62023	62057	62445	62319	62041	61964	54353
Surface Elevation	1061.7	1081.74	1090.42	1088.29	1038.88	1046.4	1051.33	1070.69	1083.94	1139.59
Measuring Point Elevation	1063.9	1083.57	1092.71	1090.99	1101.3	1049.01	1053.86	1073.12	1086.38	1141.67
BOREHOLE	.	.	.	.	.	.	.	.	.	.
Borehole Depth	197	128	146	147	120	190	168	147	163.5	136
Borehole Diameter	10	10	10	10	10	10	10	10	10	9.5
Weathered Rock - Depth	57	62	62	67	77	65	66	102	94	63
Fresh Rock - Depth	110	87	94	82	94	80	70	106	136	102
SURFACE CASING	.	.	.	.	.	.	.	.	.	.
Surface Casing Depth	57.8	74.5	123	86.5	105.6	83.3	80	115	105	63.8
Surface Casing Diameter	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75
Surface Casing Material	Steel/P25	Steel/P25	Steel/P25	Steel/P25	Steel/P25	Steel/P25	Steel/P25	Steel/P25	Steel/P25	Steel
WELL CASING	.	.	.	.	.	.	.	.	.	.
Well Casing Depth	197	128	146	146.8	120	186	166.6	145.4	161	134.8
Well Casing Diameter	6.62	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Well Casing Material	Steel/P25	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304
MONITORED INTERVAL	.	.	.	.	.	.	.	.	.	.
Screened or Open	Open	Screen	Screen	Screen	Screen	Screen	Screen	Screen	Screen	Screen
Top - Depth	197	113	130.4	134.4	107	171.1	153	132	148.5	121.5
Bottom - Depth	214	128	146	147	120	190	168	147	163.5	134.8
Screen Material	.	SS/sw/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01
Screen Length	.	10.4	10.1	10.5	10.2	10.0	10.8	10.6	10.0	10.3
Open-Hole Length	17	.	.	.	.	.	.	.	.	.
Open-Hole Diameter	6	.	.	.	.	.	.	.	.	.

(CONTINUED)

APPENDIX C
Monitoring-Well Construction Details

Well No.	CM-303	CM-304	CM-305	CM-321	CM-322	CM-339	CM-511	CM-512	CM-513	CM-514
Location	CRSDB	CRSDB	LIV	ADB	CRSP	WICS	CRSP	ADB	ADB	ADB
North Coordinate	28099	27545	28548	26275	28241	28659	28056	27601	27607	27575
East Coordinate	63488	63425	52962	57026	58912	54147	57739	57343	57332	57341
Surface Elevation	1004.44	1042.82	1181.07	923.1	1131.81	1122.18	1090.7	998.99	998.99	998.64
Measuring Point Elevation	1007.16	1045.49	1183.55	925.58	1134.25	1124.59	1093.21	1001.54	1001.41	1001.72
BOREHOLE	-	-	-	-	-	-	-	-	-	-
Borehole Depth	300	167	179.6	90.6	135	114	153.7	61	125.3	174
Borehole Diameter	10	9.75	10	8	10	9.5	9.6	9.5	9.5	9.5
Weathered Rock - Depth	37	35	53	-	49	45	40.5	55	67	44
Fresh Rock - Depth	111	92	84	-	120	91	100	-	97	92
SURFACE CASING	-	-	-	-	-	-	-	-	-	-
Surface Casing Depth	42.8	90	64	22	61	91	100	-	90	105
Surface Casing Diameter	10.75	10.75	10.75	10.75	10.75	10.75	10.75	-	10.75	10.75
Surface Casing Material	Steel/F25	unknown	Steel/F25	Steel/F25	Steel/F25	Steel	unknown	-	unknown	unknown
WELL CASING	-	-	-	-	-	-	-	-	-	-
Well Casing Depth	300	167	179.6	90	120	114	157.7	61	125.3	174
Well Casing Diameter	7	4.5	4.5	4.5	7	4.5	4.5	4.5	4.5	6.62
Well Casing Material	Steel	SS/0304	SS/0304	SS/0304	Steel	SS/sm/.01	SS/0304	SS/0304	SS/0304	Steel/F25
MONITORED INTERVAL	-	-	-	-	-	-	-	-	-	-
Screened or Open	Open	Screen	Screen	Screen	Open	Screen	Screen	Screen	Screen	Open
Top - Depth	300	148.5	165.3	84	120	101	140	48	111	174
Bottom - Depth	321	167	179.6	90.6	193	114	153.7	61	125.3	195
Screen Material	-	SS/sm/.01	SS/sm/.01	SS/sm/.01	-	SS/sm/.01	SS/sm/.01	SS/sm/.01	SS/sm/.01	-
Screen Length	-	10.8	10.7	10.7	-	10.3	10.8	10.8	10.8	-
Open-Hole Length	21	-	-	-	65	-	-	-	-	21
Open-Hole Diameter	6	-	-	-	6	-	-	-	-	6

(TIRED)

APPENDIX C
Monitoring-Well Construction Details

Well No.	GN-521	GN-522	GN-539	GN-540	GN-541	GN-542	GN-543	GN-544	GN-545	GN-546
Location	LIV	LIV	LIX	LIX	LIX	LIX	LIX	LIX	LIX	LIX
North Coordinate	28541	28377	27193	27489	27654	27444	27072	26943	27641	27474
East Coordinate	52840	52612	52278	52371	51730	51642	51450	51828	51729	52366
Surface Elevation	1179.46	1172.04	1090.39	1069.30	1055.79	1049.03	1021.19	1042.53	1055.43	1069.64
Measuring Point Elevation	1182.68	1175.31	1093	1072.12	1058.4	1051.6	1023.8	1044.99	1058.82	1072.21
BOREHOLE	-	-	-	-	-	-	-	-	-	-
Borehole Depth	136	195.5	156	171.5	104.5	76.5	93.6	109.3	67	84.5
Borehole Diameter	9.5	9.5	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25
Weathered Rock - Depth	-	85	-	110	53.5	-	16	47	54.5	74.5
Fresh Rock - Depth	54	130	74	150	69.5	-	37	52.5	-	-
SURFACE CASING	-	-	-	-	-	-	-	-	-	-
Surface Casing Depth	60.5	90	79	150	64.1	-	29.3	54.5	-	-
Surface Casing Diameter	10.75	10.75	10.75	10.75	10.75	-	10.75	10.75	-	-
Surface Casing Material	unknown	unknown	Steel	Steel	Steel	-	Steel	Steel	-	-
WELL CASING	-	-	-	-	-	-	-	-	-	-
Well Casing Depth	135.6	195.3	156	171.5	104.5	76.5	93.6	109.3	67	84.4
Well Casing Diameter	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Well Casing Material	SS/0304	SS/0304	SS/0304	SS/0304	SS/0304	SS/0304	SS/0304	SS/0304	SS/0304	SS/0304
MONITORED INTERVAL	-	-	-	-	-	-	-	-	-	-
Screened or Open	Screen	Screen	Screen	Screen	Screen	Screen	Screen	Screen	Screen	Screen
Top - Depth	123.2	183	136.4	158.5	86.7	50	76.2	91	55.2	66.2
Bottom - Depth	136	195.3	156	171.5	104.5	76.5	93.6	109.3	67	84.4
Screen Material	SS/w/.01	SS/w/.01	SS/sl/.01	SS/sl/.01	SS/sl/.01	SS/sl/.01	SS/sl/.01	SS/sl/.01	SS/sl/.01	SS/sl/.01
Screen Length	10.3	10.4	15.9	10.3	15.7	15.7	15.6	15.9	10.3	15.8
Open-Hole Length	-	-	-	-	-	-	-	-	-	-
Open-Hole Diameter	-	-	-	-	-	-	-	-	-	-

(CONTINUED)

APPENDIX C
Monitoring-Well Construction Details

Well No.	GP-607	GP-608	GP-609	GP-610	GP-611	GP-612	GP-709	GP-711	GP-712
Location	CRIP	CRIP	CRIP	CRIP	CRIP	CRIP	LII	SRP	SRP
Birth Coordinate	27066	27009	20189	20569	20056	20371	25304	27404	27717
East Coordinate	50922	50724	60000	50472	50050	50504	52372	63063	64200
Surface Elevation	1072.06	1071	1109.7	1056.70	1045.43	1120.65	903.04	1005.0	1000.7
Measuring Point Elevation	1075.90	1073.95	1112.11	1059.44	1040.30	1131.03	900.6	1000.2	1004.1
SCREEN	-	-	-	-	-	-	-	-	-
Borehole Depth	151.3	150	209	117.4	121.6	235	-	-	-
Borehole Diameter	9.5	15.5	9.5	9.5	9.5	10.675	-	100.4	100.4
Weathered Rock - Depth	-	113	-	30	30	70	30	10.4	10.4
Fresh Rock - Depth	107	140	107	50	63.0	125	63	95.4	05
SURFACE CASING	-	-	-	-	-	-	-	129.4	96
Surface Casing Depth	-	-	-	-	-	-	-	-	-
Surface Casing Diameter	106.0	-	107	107.1	75	136.9	50	120.9	100.7
Surface Casing Material	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel
WELL CASING	-	-	-	-	-	-	-	-	-
Well Casing Depth	151.3	140	209	117.4	117.3	230.6	70.4	175.4	100.5
Well Casing Diameter	6.5	10.75	6.5	6.5	6.5	7	6.25	6.5	6.5
Well Casing Material	SS/9304	Steel	SS/9304	SS/9304	SS/9304	Steel	0	0	0
SCREENED MATERIAL	-	-	-	-	-	-	-	-	-
Screened or Open	Screen	Open	Screen	Screen	Screen	Open	Screen	Screen	Screen
Top - Depth	130	140	256.4	105.1	101.5	734	60.7	144	170.3
Bottom - Depth	151.3	220	209	117.4	121.6	254	80.6	170.0	100
Screen Material	SS/9304	-	SS/9304	SS/9304	SS/9304	-	-	SS/9304	SS/9304
Screen Length	10.3	-	10.3	10.3	10.0	-	10.0	10.0	10.0
Open-Hole Length	-	72	-	-	-	19	-	-	-
Open-Hole Diameter	-	9.5	-	-	-	6.25	-	-	-

APPENDIX D
MONITORING-WELL SAMPLING SEQUENCE

EXPLANATION

LOCATION:

- ADB** - Ash Disposal Basin
- CRDT** - Chestnut Ridge Deer Trap
- CRSDB** - Chestnut Ridge Sediment Disposal Basin
- CRSP** - Chestnut Ridge Security Pits
- ECRWP** - East Chestnut Ridge Waste Pile
- KHQ** - Kerr Hollow Quarry
- LII** - Landfill II
- LIIX** - Landfill II Expansion
- LIII** - Landfill III
- LIV** - Landfill IV
- RQ** - Rogers Quarry
- UNCS** - United Nuclear Corporation Site

PARAMETERS (See Table 4 for a list of individual analyses):

- STD** - Standard Suite of Analytical Parameters
 - Trace Metals
 - Volatile Organic Compounds
 - Major Ions
 - Gross Alpha Activity and Gross Beta Activity
 - Miscellaneous Parameters
 - Field Measurements
- AOC** - Additional Organic Compounds
- BNA** - Base, Neutral, and Acid Extractable Organic Compounds
- ORP** - Other Required Parameters
- REP** - Four replicate analyses of:
 - pH
 - Specific Conductance
 - Total Organic Carbon (TOC)
 - Total Organic Halogen (TOX)
- U** - Isotopic Uranium (^{234}U , ^{235}U , and ^{238}U)

APPENDIX D
Monitoring-Well Sampling Sequence

WELL NO.	LOCATION	DATE	TIME	PARAMETERS
First Quarter 1991				
GW-305	LIV	01/06/91	10:05	STD, U
GW-217	LIV	01/06/91	12:55	STD, U
GW-141	LIV	01/08/91	11:30	STD, U
GW-521	LIV	01/08/91	14:00	STD, U
GW-522	LIV	01/09/91	12:55	STD, U
GW-205	UNCS	01/12/91	11:38	STD
GW-203	UNCS	01/12/91	15:45	STD, U
GW-221	UNCS	01/13/91	11:30	STD
GW-339	UNCS	01/13/91	14:20	STD
GW-302	UNCS	01/14/91	11:30	STD
1090	UNCS	01/14/91	14:40	STD
GW-178	CRSP	01/15/91	11:10	STD, U
GW-609	CRSP	01/15/91	16:13	STD
GW-608	CRSP	01/28/91	9:47	STD
GW-607	CRSP	01/28/91	14:44	STD
GW-511	CRSP	01/29/91	11:59	STD
GW-181	CRSP	01/29/91	15:05	STD
GW-610	CRSP	01/30/91	12:00	STD
GW-175	CRSP	01/31/91	14:00	STD
GW-611	CRSP	01/31/91	15:06	STD
GW-173	CRSP	02/01/91	12:05	STD
GW-174	CRSP	02/01/91	14:35	STD
GW-177	CRSP	02/02/91	13:30	STD
GW-180	CRSP	02/02/91	15:32	STD
GW-322	CRSP	02/04/91	11:35	STD
GW-176	CRSP	02/04/91	13:35	STD
GW-612	CRSP	02/07/91	14:52	STD
GW-179	CRSP	02/08/91	13:30	STD
GW-296	BCRWP	02/09/91	10:05	STD
GW-294	BCRWP	02/09/91	11:50	STD
GW-292	BCRWP	02/09/91	14:42	STD
GW-293	BCRWP	02/10/91	12:53	STD
GW-295	LIII	02/11/91	13:04	STD
GW-161	LIII	02/12/91	14:30	STD, U
GW-160	LIII	02/13/91	11:53	STD, U
GW-300	LIII	02/13/91	14:25	STD
GW-301	LIII	02/14/91	11:27	STD
GW-299	LIII	02/21/91	11:45	STD
GW-298	LIII	02/21/91	14:45	STD
GW-166	CRDT	02/24/91	13:12	STD
GW-165	CRDT	02/27/91	13:05	STD
GW-159	CRSDB	02/28/91	10:35	STD, REP, BNA, U
GW-304	CRSDB	02/28/91	11:29	STD, REP, BNA
GW-157	CRSDB	02/28/91	12:55	STD, REP, BNA
GW-155	CRSDB	02/28/91	13:15	STD, REP, BNA

APPENDIX D
Monitoring-Well Sampling Sequence

WELL, NO.	LOCATION	DATE	TIME	PARAMETERS
GW-156	CRSDB	02/28/91	14:40	STD, REP, BNA
GW-303	CRSDB	03/01/91	15:41	STD, REP, BNA
GW-241	CRSDB	03/02/91	10:47	STD, REP, BNA
GW-158	CRSDB	03/04/91	11:07	STD, REP, BNA
GW-231	KHQ	03/14/91	13:15	STD, REP, Phenols
GW-147	KHQ	03/14/91	14:30	STD, REP, Phenols
GW-145	KHQ	03/16/91	9:15	STD, REP, Phenols
GW-539	LIIX	03/16/91	10:25	STD, AOC, ORP
GW-146	KHQ	03/16/91	11:55	STD, REP, Phenols
GW-144	KHQ	03/16/91	14:02	STD, REP, Phenols
GW-142	KHQ	03/16/91	14:15	STD, REP, Phenols
GW-540	LIIX	03/16/91	15:45	STD, AOC, ORP
GW-143	KHQ	03/16/91	17:02	STD, REP, Phenols
GW-542	LIIX	03/17/91	9:30	STD, AOC, ORP
GW-541	LIIX	03/17/91	10:49	STD, AOC, ORP
GW-546	LIIX	03/17/91	10:50	STD, AOC, ORP
GW-543	LIIX	03/17/91	11:15	STD, AOC, ORP
GW-544	LIIX	03/17/91	14:23	STD, AOC, ORP
GW-545	LIIX	03/17/91	15:51	STD, AOC, ORP
GW-513	ADB	03/19/91	13:07	STD, REP
GW-512	ADB	03/19/91	15:19	STD, REP
GW-514	ADB	03/20/91	17:47	STD, REP
GW-321	ADB	03/22/91	12:38	STD, REP

Second Quarter 1991

GW-305	LIV	04/03/91	11:07	STD, U
GW-217	LIV	04/03/91	13:41	STD, U
GW-141	LIV	04/04/91	10:47	STD, U
GW-521	LIV	04/04/91	12:15	STD, U
GW-522	LIV	04/04/91	14:50	STD, U
1085	LII	04/08/91	11:35	STD, AOC, ORP
1086	LII	04/08/91	15:11	STD, AOC, ORP
GW-539	LIIX	04/09/91	11:33	STD, AOC, ORP
GW-540	LIIX	04/09/91	14:08	STD, AOC, ORP
GW-541	LIIX	04/10/91	11:45	STD, AOC, ORP
GW-542	LIIX	04/10/91	13:34	STD, AOC, ORP
GW-543	LIIX	04/11/91	9:54	STD, AOC, ORP
GW-544	LIIX	04/11/91	14:33	STD, AOC, ORP
GW-545	LIIX	04/11/91	15:59	STD, AOC, ORP
GW-546	LIIX	04/11/91	17:19	STD, AOC, ORP
GW-205	UNCS	04/12/91	12:27	STD
GW-203	UNCS	04/12/91	14:45	STD, U
GW-221	UNCS	04/13/91	10:47	STD
GW-339	UNCS	04/13/91	12:11	STD
GW-302	UNCS	04/13/91	13:34	STD
1090	UNCS	04/14/91	10:38	STD

APPENDIX D
Monitoring-Well Sampling Sequence

WELL NO.	LOCATION	DATE	TIME	PARAMETERS
GW-178	CRSP	04/22/91	11:55	STD,U
GW-609	CRSP	04/22/91	14:42	STD
GW-608	CRSP	04/29/91	11:30	STD
GW-607	CRSP	04/29/91	14:27	STD
GW-511	CRSP	04/30/91	12:24	STD
GW-181	CRSP	04/30/91	16:10	STD
GW-610	CRSP	05/01/91	10:40	STD
GW-175	CRSP	05/01/91	12:41	STD
GW-611	CRSP	05/01/91	14:32	STD
GW-173	CRSP	05/03/91	10:25	STD
GW-174	CRSP	05/03/91	12:05	STD
GW-177	CRSP	05/03/91	14:10	STD
GW-180	CRSP	05/04/91	8:40	STD
GW-322	CRSP	05/04/91	14:15	STD
GW-176	CRSP	05/04/91	15:30	STD
GW-612	CRSP	05/08/91	13:45	STD
GW-179	CRSP	05/08/91	14:15	STD
GW-296	ECRWP	05/10/91	11:09	STD
GW-294	ECRWP	05/10/91	12:24	STD
GW-292	ECRWP	05/11/91	9:18	STD
GW-293	ECRWP	05/11/91	14:02	STD
GW-295	LIII	05/16/91	10:53	STD
GW-161	LIII	05/17/91	12:00	STD,U
GW-160	LIII	05/24/91	14:26	STD,U
GW-300	LIII	05/30/91	10:05	STD
GW-301	LIII	05/30/91	11:09	STD
GW-299	LIII	05/30/91	14:02	STD
GW-298	LIII	05/31/91	11:42	STD
GW-159	CRSDB	06/01/91	9:32	STD,REP,BNA,U
GW-304	CRSDB	06/01/91	11:05	STD,REP,BNA
GW-155	CRSDB	06/02/91	10:01	STD,REP,BNA
GW-156	CRSDB	06/02/91	12:24	STD,REP,BNA
GW-303	CRSDB	06/04/91	12:30	STD,REP,BNA
GW-165	CRDT	06/07/91	14:10	STD
GW-166	CRDT	06/08/91	9:56	STD
GW-158	CRSDB	06/08/91	17:36	STD,REP,BNA
GW-241	CRSDB	06/10/91	12:00	STD,REP,BNA
GW-142	KHQ	06/13/91	11:55	STD,REP,Phenols
GW-145	KHQ	06/14/91	14:00	STD,REP,Phenols
GW-144	KHQ	06/15/91	11:08	STD,REP,Phenols
GW-146	KHQ	06/15/91	17:30	STD,REP,Phenols
GW-143	KHQ	06/16/91	9:30	STD,REP,Phenols
GW-513	ADB	06/16/91	13:07	STD,REP
GW-512	ADB	06/16/91	14:16	STD,REP
GW-514	ADB	06/17/91	18:24	STD,REP
GW-321	ADB	06/18/91	9:58	STD,REP
GW-709	LII	06/19/91	11:04	STD,AOC,ORP

APPENDIX D
Monitoring-Well Sampling Sequence

WELL NO.	LOCATION	DATE	TIME	PARAMETERS
Third Quarter 1991				
GW-305	LIV	07/15/91	14:36	STD,AOC,ORP
GW-217	LIV	07/16/91	11:07	STD,AOC,ORP
GW-141	LIV	07/17/91	9:12	STD,AOC,ORP
GW-521	LIV	07/17/91	11:31	STD,AOC,ORP
GW-522	LIV	07/17/91	14:33	STD,AOC,ORP
GW-231	KHQ	07/19/91	10:45	STD,REP,Phenols
GW-203	UNCS	07/29/91	11:28	STD
GW-205	UNCS	07/29/91	14:35	STD
GW-221	UNCS	07/30/91	11:11	STD
GW-339	UNCS	07/30/91	13:08	STD
GW-302	UNCS	07/30/91	14:19	STD
1090	UNCS	07/31/91	11:18	STD
GW-142	KHQ	08/03/91	17:00	STD,REP,Phenols
GW-181	CRSP	08/05/91	12:05	STD
GW-511	CRSP	08/05/91	13:10	STD
GW-607	CRSP	08/06/91	11:50	STD
GW-610	CRSP	08/06/91	13:31	STD
GW-173	CRSP	08/06/91	15:10	STD
GW-174	CRSP	08/06/91	17:15	STD
GW-608	CRSP	08/07/91	18:23	STD
GW-177	CRSP	08/08/91	10:20	STD
GW-178	CRSP	08/08/91	12:30	STD
GW-611	CRSP	08/08/91	14:05	STD
GW-175	CRSP	08/08/91	15:31	STD
GW-609	CRSP	08/09/91	11:53	STD
GW-180	CRSP	08/09/91	13:16	STD
GW-176	CRSP	08/09/91	15:00	STD
GW-179	CRSP	08/12/91	13:00	STD
GW-612	CRSP	08/12/91	14:40	STD
GW-322	CRSP	08/13/91	10:20	STD
GW-221	UNCS	08/13/91	13:05	STD
GW-339	UNCS	08/13/91	14:15	STD
GW-302	UNCS	08/13/91	15:27	STD
1090	UNCS	08/13/91	17:48	STD
GW-296	ECRWP	08/15/91	12:15	STD
GW-294	ECRWP	08/15/91	14:08	STD
GW-292	ECRWP	08/16/91	11:30	STD
GW-293	ECRWP	08/19/91	13:35	STD
GW-291	LIII	08/21/91	13:08	STD,AOC,ORP
GW-290	LIII	08/21/91	17:20	STD,AOC,ORP
GW-290	LIII	08/22/91	10:22	STD,AOC,ORP
GW-299	LIII	08/22/91	12:18	STD,AOC,ORP
GW-301	LIII	08/22/91	12:55	STD,AOC,ORP
GW-298	LIII	08/22/91	15:30	STD,AOC,ORP
GW-159	CRSDB	08/23/91	11:55	STD,REP,BNA

APPENDIX D
Monitoring-Well Sampling Sequence

WELL NO.	LOCATION	DATE	TIME	PARAMETERS
GW-304	CRSDB	08/23/91	13:45	STD, REP, BNA
GW-156	CRSDB	08/23/91	15:10	STD, REP, BNA
GW-303	CRSDB	08/24/91	18:00	STD, REP, BNA
GW-241	CRSDB	08/25/91	9:48	STD, REP, BNA
GW-158	CRSDB	08/25/91	18:45	STD, REP, BNA
GW-295	LIII	08/30/91	10:06	STD, AOC, ORP
GW-146	KHQ	09/04/91	9:20	STD, REP, Phenols
GW-231	KHQ	09/04/91	12:30	STD, REP, Phenols
GW-147	KHQ	09/04/91	12:55	STD, REP, Phenols
GW-145	KHQ	09/04/91	15:30	STD, REP, Phenols
GW-144	KHQ	09/05/91	12:23	STD, REP, Phenols
GW-143	KHQ	09/05/91	15:15	STD, REP, Phenols
GW-512	ADB	09/06/91	10:55	STD, TOC, TOX
GW-513	ADB	09/06/91	11:37	STD, TOC, TOX
GW-514	ADB	09/07/91	12:12	STD, TOC, TOX
GW-321	ADB	09/07/91	15:52	STD, TOC, TOX
GW-184	RQ	09/08/91	9:50	STD, BNA
GW-186	RQ	09/08/91	13:30	STD, BNA
GW-187	RQ	09/09/91	11:50	STD, BNA
GW-188	RQ	09/09/91	13:50	STD, BNA
1085	LII	09/10/91	12:15	STD, AOC, ORP
1086	LII	09/10/91	16:15	STD, AOC, ORP
GW-709	LII	09/11/91	10:45	STD, AOC, ORP
GW-539	LIIX	09/12/91	10:56	STD, AOC, ORP
GW-540	LIIX	09/12/91	14:15	STD, AOC, ORP
GW-541	LIIX	09/13/91	10:30	STD, AOC, ORP
GW-542	LIIX	09/14/91	9:40	STD, AOC, ORP
GW-543	LIIX	09/14/91	12:10	STD, AOC, ORP
GW-544	LIIX	09/14/91	14:47	STD, AOC, ORP
GW-545	LIIX	09/15/91	11:00	STD, AOC, ORP
GW-546	LIIX	09/15/91	13:50	STD, AOC, ORP
GW-731	CRSDB	09/27/91	12:00	STD, REP, BNA
GW-732	CRSDB	09/27/91	14:51	STD, REP, BNA

Fourth Quarter 1991

GW-305	LIV	10/01/91	12:35	STD, AOC, ORP
GW-217	LIV	10/01/91	16:00	STD, AOC, ORP
GW-141	LIV	10/02/91	12:30	STD, AOC, ORP
GW-521	LIV	10/03/91	10:55	STD, AOC, ORP
GW-522	LIV	10/03/91	14:10	STD, AOC, ORP
GW-339	UNCS	10/06/91	12:00	STD
GW-302	UNCS	10/06/91	13:45	STD
1090	UNCS	10/06/91	16:05	STD
GW-181	CRSP	10/08/91	12:25	STD
GW-511	CRSP	10/08/91	13:47	STD
GW-607	CRSP	10/08/91	15:07	STD

APPENDIX D
Monitoring-Well Sampling Sequence

WELL NO.	LOCATION	DATE	TIME	PARAMETERS
GW-610	CRSP	10/10/91	16:00	STD
GW-173	CRSP	10/10/91	17:45	STD
GW-174	CRSP	10/11/91	12:20	STD
GW-608	CRSP	10/12/91	16:15	STD
GW-177	CRSP	10/13/91	10:00	STD
GW-178	CRSP	10/13/91	12:00	STD
GW-611	CRSP	10/13/91	14:15	STD
GW-175	CRSP	10/13/91	16:30	STD
GW-609	CRSP	10/14/91	11:30	STD
GW-180	CRSP	10/14/91	13:25	STD
GW-176	CRSP	10/14/91	16:30	STD
GW-179	CRSP	10/17/91	15:30	STD
GW-612	CRSP	10/17/91	16:45	STD
GW-322	CRSP	10/21/91	11:45	STD
GW-296	ECRWP	10/22/91	12:14	STD
GW-294	ECRWP	10/22/91	14:15	STD
GW-292	ECRWP	10/22/91	17:30	STD
GW-293	ECRWP	10/23/91	14:54	STD
GW-161	LIII	10/25/91	15:00	STD,AOC,ORP
GW-160	LIII	10/26/91	14:00	STD,AOC,ORP
GW-300	LIII	10/27/91	10:30	STD,AOC,ORP
GW-301	LIII	10/27/91	12:50	STD,AOC,ORP
GW-299	LIII	10/27/91	14:55	STD,AOC,ORP
GW-298	LIII	10/28/91	11:15	STD,AOC,ORP
GW-159	CRSDB	10/29/91	12:00	STD,REP,BNA
GW-156	CRSDB	10/30/91	10:30	STD,REP,BNA
GW-732	CRSDB	10/30/91	12:30	STD,REP,BNA
GW-731	CRSDB	10/31/91	12:30	STD,REP,BNA
GW-241	CRSDB	10/31/91	14:50	STD,REP,BNA
GW-304	CRSDB	11/02/91	9:45	STD,REP,BNA
GW-303	CRSDB	11/02/91	16:20	STD,REP,BNA
GW-142	KHQ	11/04/91	14:30	STD,REP,Phenols
GW-147	KHQ	11/05/91	11:15	STD,REP,Phenols
GW-231	KHQ	11/05/91	13:00	STD,REP,Phenols
GW-145	KHQ	11/05/91	15:45	STD,REP,Phenols
GW-144	KHQ	11/06/91	14:37	STD,REP,Phenols
GW-143	KHQ	11/07/91	14:00	STD,REP,Phenols
GW-146	KHQ	11/07/91	15:00	STD,REP,Phenols
GW-295	LIII	11/12/91	12:20	STD,AOC,ORP
GW-158	CRSDB	11/14/91	16:30	STD,REP,BNA
GW-513	ADB	11/16/91	11:01	STD,TOC,TOX
GW-512	ADB	11/16/91	12:30	STD,TOC,TOX
GW-514	ADB	11/16/91	12:50	STD,TOC,TOX
GW-321	ADB	11/17/91	16:00	STD,TOC,TOX
GW-184	RQ	11/18/91	10:30	STD,BNA
GW-186	RQ	11/18/91	14:00	STD,BNA
GW-187	RQ	11/19/91	12:02	STD,BNA

APPENDIX D
Monitoring-Well Sampling Sequence

WELL NO.	LOCATION	DATE	TIME	PARAMETERS
GW-188	RQ	11/19/91	14:00	STD,BNA
1085	LII	11/20/91	12:00	STD,AOC,ORP
1086	LII	11/20/91	14:30	STD,AOC,ORP
GW-709	LII	11/21/91	10:30	STD,AOC,ORP
GW-203	UNCS	11/23/91	11:05	STD
GW-205	UNCS	11/23/91	14:30	STD
GW-221	UNCS	11/23/91	16:25	STD
GW-539	LIIX	11/24/91	12:45	STD,AOC,ORP
GW-540	LIIX	11/24/91	15:10	STD,AOC,ORP
GW-541	LIIX	11/25/91	14:00	STD,AOC,ORP
GW-542	LIIX	11/25/91	15:00	STD,AOC,ORP
GW-543	LIIX	11/25/91	16:03	STD,AOC,ORP
GW-544	LIIX	11/26/91	10:55	STD,AOC,ORP
GW-545	LIIX	11/26/91	13:00	STD,AOC,ORP
GW-546	LIIX	11/26/91	16:00	STD,AOC,ORP

APPENDIX E
GROUNDWATER QUALITY DATA

EXPLANATION

LOCATION:

ADB - Ash Disposal Basin
CRDT - Chestnut Ridge Deer Trap
CRSDB - Chestnut Ridge Sediment Disposal Basin
CRSP - Chestnut Ridge Security Pits
ECRWP - East Chestnut Ridge Waste Pile
KHQ - Kerr Hollow Quarry
LII - Landfill II
LIIX - Landfill II Expansion
LIII - Landfill III
LIV - Landfill IV
RQ - Rogers Quarry
UNCS - United Nuclear Corporation Site

ALL DATA:

. - Not Analyzed

VOLATILE ORGANIC COMPOUNDS:

All results in micrograms per Liter (ug/L).

Compound not detected at the following minimum attainable detection limits (ug/L):

G =	5	T =	250
N =	10	F =	300
V =	20	E =	400
Z =	25	W =	500
D =	30	L =	1000
A =	40	P =	2000
M =	50	H =	4000
X =	80	J =	5000
Y =	90	S =	10000
K =	100	U =	20000
B =	130	C =	40000
R =	200		

EXPLANATION (cont'd)

METALS, MAJOR IONS, MISCELLANEOUS, AND RADIOCHEMICAL PARAMETERS:

All analyses are by Inductively Coupled Plasma (ICP) Spectroscopy unless otherwise noted.

Bicarbonate and carbonate alkalinity reported as CaCO_3 .

<	- Compound analyzed but not detected at the given minimum attainable detection limit
mg/L	- milligrams per Liter
AAS	- Atomic Absorption Spectroscopy
CVAA	- Cold Vapor Atomic Absorption
DIS	- Dissolved Concentration (Filtered Sample)
TOT	- Total Concentration (Unfiltered Sample)
Fluor	- Fluorometric
COD	- Chemical Oxygen Demand
DO	- Dissolved Oxygen
TOC	- Total Organic Carbon
TOX	- Total Organic Halogens
TDS	- Total Dissolved Solids
TSS	- Total Suspended Solids
Temp.	- Water Temperature
Sp. Cond.	- Specific Conductance
ppm	- parts per million
umho/cm	- micromhos per centimeter
NTU	- Nephelometric Turbidity Unit
mV	- millivolts
pCi/L	- picoCuries per liter
Bq/L	- Becquerels per liter
CE +/-	- Counting Error (two standard deviations)
11111	- None Found
999999	- Off Scale
888888	- Flowing Artesian Well

TRACE METALS AND MAJOR IONS

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	1085						1086	
	L11						L11	
	04/08/91		09/10/91		11/20/91		04/08/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.044	<0.02	0.48	0.033	1	<0.02	200	0.037
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05
Barium	0.023	0.022	0.027	0.0055	0.03	0.026	0.8	0.015
Beryllium	<0.0003	<0.0003	0.00032	<0.0003	0.00055	<0.0003	0.11	<0.0003
Boron	0.0051	0.0063	0.047	2.1	<0.004	<0.004	<0.04	<0.004
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0073	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.03	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	0.012	<0.01	0.051	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.95	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.13	<0.005
Copper	0.012	<0.004	<0.004	0.004	<0.004	0.0058	0.29	<0.004
Iron	0.055	0.016	0.75	0.032	2	0.064	380	0.041
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	0.011	<0.004	0.26	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0032	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.1	<0.01
Nickel	<0.01	0.013	<0.01	<0.01	<0.01	<0.01	1.9	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.63	<0.05
Silicon	5.2	5	.	.	.	.	180	5
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.06	<0.006
Strontium	0.079	0.079	0.084	0.31	0.085	0.089	0.13	0.026
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2
Uranium (Fluor)	<0.001	<0.001	0.015	<0.001	0.001	0.001	0.008	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.64	<0.005
Zinc	0.019	0.14	0.016	0.0096	0.018	0.0088	2.5	0.0062
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	355	.	359	.	379	.	198	.
Alkalinity-CO3	<1	.	<1	.	<1	.	<1	.
Calcium	100	99	100	1.9	100	110	220	37
Chloride	22	.	14	.	15	.	6	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	27	27	27	0.75	28	28	170	24
Manganese	0.076	0.073	0.11	0.0095	0.26	0.25	13	<0.001
Nitrate-N	<0.2	.	<0.2	.	<0.2	.	0.6	.
Potassium	0.83	0.81	0.7	3	<0.6	0.76	25	2.2
Sodium	9.6	9.8	8.6	230	7.2	7.5	1.6	2.1
Sulfate	6	.	5	.	5	.	3	.

(CONTINUED)

APPENDIX B
Groundwater Quality Data, 1991

Well No. Location Date Sampled	1086				1090			
	L11				UNCB			
	09/10/91		11/20/91		01/16/91		04/14/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	9.4	<0.02	7.4	<0.02	0.089	<0.02	0.021	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.038	0.014	0.42	0.015	0.027	0.026	0.027	0.026
Beryllium	0.0031	<0.0003	0.032	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.022	0.015	<0.004	<0.004	0.016	0.016	0.019	0.015
Cadmium (AAS)	<0.002	<0.002	0.0071	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	0.0035	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	0.056	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	0.012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	0.0068	<0.005	0.016	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	0.017	<0.004	0.06	0.0042	<0.004	<0.004	<0.004	<0.004
Iron	14	0.016	3.9	0.0031	0.14	<0.004	0.014	<0.005
Lead (AAS)	0.0086	<0.004	0.18	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	0.0039	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	0.021	<0.01	0.15	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	.	4.2	4.2	4.2	4.1
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.029	0.021	0.1	0.025	0.024	0.025	0.024	0.024
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	0.006	<0.001	<0.001	<0.001	<0.001	0.001
Vanadium	0.033	<0.005	0.018	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.089	0.0053	0.36	0.006	0.0028	<0.001	0.0072	0.0069
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	178	.	206	.	262	.	264	.
Alkalinity-CO3	<1	.	<1	.	<1	.	<1	.
Calcium	51	36	190	43	32	52	42	41
Chloride	5	.	9	.	23	.	20	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	32	22	110	26	32	33	32	31
Manganese	0.36	<0.001	0.9	<0.001	0.0046	<0.001	<0.001	<0.001
Nitrate-N	0.36	.	0.43	.	1	.	1	.
Potassium	4	1.8	3.5	1.7	0.97	0.92	1	0.76
Sodium	1.5	1.5	1.9	2	11	11	12	12
Sulfate	3	.	4	.	7	.	6	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	1090					GW-141		
	UNCB					LIV		
	07/31/91		08/13/91	10/06/91		01/08/91		04/04/91
	TOT	DIS	TOT	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	<0.02	.	<0.02	<0.02	0.59	0.043	0.34
Antimony	<0.05	<0.05	.	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	.	<0.05	<0.05	<0.05	<0.05	0.064
Barium	0.026	0.026	.	0.025	0.026	0.023	0.021	0.018
Beryllium	<0.0003	<0.0003	.	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.011	<0.004	.	0.012	0.0083	0.032	0.018	0.014
Cadmium (AAS)	<0.002	<0.002	.	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	.	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	.	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	.	<0.01	<0.01	<0.01	0.011	0.013
Cobalt	<0.005	<0.005	.	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	.	<0.004	<0.004	<0.004	<0.004	0.0041
Iron	0.019	<0.005	.	0.011	<0.005	0.4	0.0049	0.67
Lead (AAS)	<0.004	<0.004	.	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	.	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	.	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	.	<0.01	<0.01	<0.01	<0.01	0.011
Selenium	<0.05	<0.05	.	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	4.1	3.6	.	.	.	5.5	4.5	4.3
Silver	<0.006	<0.006	.	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.024	0.024	.	0.023	0.022	0.02	0.019	0.017
Thorium	<0.2	<0.2	.	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	.	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	.	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	<0.002	<0.002	.	0.0034	<0.002	0.02	0.013	0.014
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	.	.	249	256	.	238	.	233
Alkalinity-CO ₃	.	.	<1	<1	.	<1	.	<1
Calcium	53	53	.	61	60	45	44	41
Chloride	.	.	18	6	.	2	.	1.8
Fluoride	.	.	<0.1	<0.1	.	<0.1	.	<0.1
Magnesium	32	32	.	33	32	32	31	27
Manganese	0.0034	<0.001	.	<0.001	<0.001	0.0069	<0.001	0.0024
Nitrate-N	.	.	0.91	0.79	.	<0.2	.	0.73
Potassium	0.8	<0.6	.	0.79	<0.6	0.9	0.77	0.75
Sodium	10	10	.	8.6	8.6	1	0.88	0.9
Sulfate	.	.	6	5	.	3	.	3.43

(CONTINUED)

APPENDIX B
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-141					GW-142		
	LIV					RHQ		
	04/04/91	07/17/91		10/02/91		03/16/91		06/13/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	<0.02	0.43	0.38	<0.02	<0.02	<0.02	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.019	0.02	0.021	0.017	0.016	0.47	0.43	0.43
Beryllium	<0.0003	<0.0003	0.00055	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.013	<0.004	<0.004	0.0097	0.018	0.0079	0.02	0.038
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	0.018	<0.01	<0.01	<0.01	<0.01	0.018	0.014	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	0.0077	<0.004	<0.004	<0.004	<0.004	<0.004	0.017	0.0052
Iron	<0.005	<0.005	0.75	0.52	<0.005	2.5	<0.005	5.9
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	0.013	<0.01	<0.01	0.028	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	4	3	0.46	.	.	1.2	2.5	3
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.018	0.018	0.018	0.015	0.015	0.52	0.52	0.57
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	0.014	0.018	0.02
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0066	0.0041	0.02	0.018	<0.002	<0.002	<0.002	0.008
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	.	241	.	230	.	235	.	227
Alkalinity-CO ₃	.	<1	.	<1	.	<1	.	<1
Calcium	42	59	62	47	46	41	40	36
Chloride	.	2	.	1	.	37.4	.	2
Fluoride	.	<0.1	.	<0.1	.	0.4	.	0.42
Magnesium	27	33	33	29	28	32	30	29
Manganese	<0.001	<0.001	0.012	0.0074	<0.001	0.038	0.02	0.049
Nitrate-N	.	0.62	.	0.46	.	1.9	.	0.37
Potassium	0.69	0.89	0.86	<0.6	<0.6	4.1	3.9	3.5
Sodium	0.6	0.6	0.49	0.78	0.79	1.1	1	0.87
Sulfate	.	2	.	1	.	29.7	.	6

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-142					GW-143		
	KHQ					KHQ		
	06/13/91	08/03/91		11/04/91		03/16/91		06/16/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	0.053	<0.02	<0.02	<0.02	<0.02	<0.02	0.036
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.39	0.41	0.36	0.39	0.4	0.03	0.03	0.046
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.044	0.032	0.051	0.046	0.058	0.73	0.73	0.76
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.047	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	<0.004	0.022	<0.004	<0.004
Iron	<0.005	4	0.01	3.2	2.4	1.3	0.68	0.41
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00025
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.026	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	2.8	.	.	.	.	1.7	1.3	3.7
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.56	0.58	0.57	0.46	0.47	2.4	2.5	3.3
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.021	0.01	0.008	0.004	0.003	0.001	<0.001	0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0051	0.014	0.0051	0.0075	0.0036	0.0052	<0.002	0.0049
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	235	.	227	.	203	.	193
Alkalinity-CO3	.	<1	.	<1	.	<1	.	<1
Calcium	36	49	47	43	45	27	28	30
Chloride	.	1	.	1.3	.	5.9	.	7
Fluoride	.	0.6	.	0.6	.	2.4	.	3.2
Magnesium	29	31	31	30	31	22	22	23
Manganese	0.036	0.07	0.047	0.07	0.072	0.035	0.036	0.011
Nitrate-N	.	<0.2	.	<0.2	.	<0.2	.	<0.2
Potassium	3.5	3.5	3.5	3.2	3.6	17	17	19
Sodium	0.83	0.89	1	1.2	1	26	26	20
Sulfate	.	6	.	6.4	.	34.9	.	41

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-143					GW-144		
	KHQ					KHQ		
	06/16/91	09/05/91		11/07/91		03/16/91		06/15/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.021	<0.02	<0.02	<0.02	<0.02	0.068	0.048	0.052
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.046	0.027	0.026	0.029	0.028	0.047	0.046	0.043
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.00052	<0.0003	<0.0003
Boron	0.74	0.86	0.93	0.89	0.91	0.028	0.044	0.029
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	0.0023	0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	0.0037	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.029	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	0.011	<0.004	<0.004	<0.004	0.0051	0.0085	0.0063	0.0056
Iron	0.18	1.2	0.12	1.2	0.17	0.024	0.018	0.013
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	0.0049	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	0.013	0.013	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	3.7	.	.	.	.	1.3	3.4	3.3
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	3.3	2.4	2.5	2.4	2.4	0.1	0.1	0.098
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.002	0.003	0.002	0.001	<0.001	0.002	0.002	0.004
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.018	0.0043	0.0029	0.0072	0.0033	0.012	0.01	0.019
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	195	.	200	.	152	.	147
Alkalinity-CO3	.	<1	.	<1	.	<1	.	<1
Calcium	30	29	28	29	29	37	37	36
Chloride	.	5	.	5	.	3.3	.	3
Fluoride	.	3	.	2.8	.	<0.1	.	0.2
Magnesium	23	22	22	22	22	14	14	13
Manganese	0.011	0.031	0.028	0.035	0.033	<0.001	0.0018	<0.001
Nitrate-N	.	0.3	.	<0.2	.	1	.	0.93
Potassium	15	15	15	16	17	2.3	2.2	2.1
Sodium	16	24	25	31	34	1.8	1.6	1.4
Sulfate	.	32	.	33	.	9.3	.	9

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-144					GW-145		
	KHQ					KHQ		
	06/15/91	09/05/91		11/06/91		03/16/91		06/14/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.056	0.025	0.05	0.025	<0.02	<0.02	0.023	0.071
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.046	0.049	0.047	0.046	0.043	0.11	0.1	0.098
Beryllium	0.00052	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.06	0.049	0.028	0.028	0.035	0.15	0.24	0.26
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	0.0033	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	0.013	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	0.0066	<0.004	<0.004	<0.004	<0.004	0.011	0.0048	<0.004
Iron	0.0063	0.0098	0.0062	0.006	<0.005	0.15	<0.005	0.062
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00025	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	0.015	0.012	0.017
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	1.1	.	.	.	.	3.5	3.3	3.6
Silver	<0.006	<0.006	<0.006	0.008	<0.006	<0.006	<0.006	<0.006
Strontium	0.11	0.097	0.098	0.096	0.09	6.9	6.8	8.4
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.004	0.007	0.007	0.005	0.005	0.011	0.011	0.012
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0072	0.037	0.0069	0.0045	0.0075	0.0047	0.011	<0.002
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	.	150	.	155	.	231	.	230
Alkalinity-CO ₃	.	<1	.	<1	.	<1	.	<1
Calcium	40	41	43	41	40	39	38	35
Chloride	.	2	.	3	.	9.7	.	9
Fluoride	.	0.2	.	0.2	.	1.8	.	2.05
Magnesium	15	14	15	15	14	34	33	32
Manganese	<0.001	<0.001	<0.001	<0.001	<0.001	0.03	0.019	0.01
Nitrate-N	.	0.7	.	0.43	.	<0.2	.	0.25
Potassium	2.2	1.5	2.1	2.2	1.9	14	12	11
Sodium	1.5	1.5	1.5	1.7	1.6	4.8	4.4	8.5
Sulfate	.	9	.	11	.	29.9	.	35

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-145					GW-146		
	KHQ					KHQ		
	06/14/91	09/04/91		11/05/91		03/16/91		06/15/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	0.16	0.035	0.18	0.022	<0.02	0.068	1.6
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.12	0.11	0.094	0.094	0.094	0.074	0.064	0.4
Beryllium	0.00036	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.00036
Boron	0.24	0.25	0.25	0.22	0.23	0.12	0.54	0.5
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	0.025
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.046
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01
Copper	<0.004	<0.004	<0.004	<0.004	<0.004	0.0056	<0.004	0.011
Iron	<0.005	0.15	<0.005	0.15	0.0055	2.2	0.13	140
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.128
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00024
Molybdenum	0.018	0.015	0.026	0.017	0.016	<0.01	<0.01	<0.01
Nickel	<0.01	0.016	0.017	<0.01	<0.01	0.024	<0.01	0.051
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.89
Silicon	4	.	.	.	.	0.8	3	12
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	9.2	7.7	8.1	6.7	6.7	7.1	7	18
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.011	0.011	0.013	0.015	0.011	<0.001	<0.001	0.013
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	<0.002	0.0066	0.0041	0.012	0.0068	<0.002	0.0044	0.077
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	237	.	225	.	198	.	193
Alkalinity-CO3	.	<1	.	<1	.	<1	.	<1
Calcium	34	42	39	47	39	36	35	230
Chloride	.	9	.	7.1	.	12.4	.	11
Fluoride	.	2.2	.	2.5	.	2.1	.	2.6
Magnesium	31	35	34	36	32	35	34	78
Manganese	0.0011	0.024	<0.001	0.03	0.0071	0.032	0.02	1
Nitrate-N	.	0.25	.	<0.2	.	<0.2	.	<2
Potassium	12	10	11	11	11	17	18	14
Sodium	6.5	6.4	8.7	9.4	8.2	11	11	9.2
Sulfate	.	33	.	33	.	62.4	.	68

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-146					GW-147		
	KHQ					KHQ		
	06/15/91	09/04/91		11/07/91		03/14/91		09/04/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	0.093	<0.02	<0.02	<0.02	1.9	<0.02	0.18
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.055	0.064	0.066	0.066	0.061	0.085	0.071	0.071
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.45	0.55	0.5	0.48	0.49	0.033	0.094	0.036
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	<0.004	0.0067	0.006	<0.004
Iron	0.0079	1.4	<0.005	1.5	0.011	1.8	<0.005	0.18
Lead (AAS)	<0.004	<0.004	<0.004	0.0071	<0.004	0.017	0.0056	<0.004
Mercury (CVAA)	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	0.012	<0.01	<0.01	0.012	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	3	.	.	.	.	6.4	3.8	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	7.5	7.4	7.6	7.2	7.2	1.3	1.2	0.71
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.001	0.001	0.001	<0.001	0.001	0.003	0.003	0.002
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	<0.002	0.0097	<0.002	0.0096	0.016	0.024	0.0021	0.016
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	193	.	196	.	175	.	151
Alkalinity-CO3	.	<1	.	<1	.	<1	.	<1
Calcium	33	41	43	39	39	33	32	31
Chloride	.	10	.	9	.	1	.	1
Fluoride	.	2.7	.	2.7	.	0.5	.	0.3
Magnesium	32	34	36	33	32	20	19	17
Manganese	0.011	0.02	0.019	0.024	0.019	0.28	0.042	0.028
Nitrate-N	.	<0.2	.	<0.2	.	0.4	.	0.94
Potassium	14	17	17	16	16	5.9	4.7	4.9
Sodium	9.1	10	11	13	14	3.4	3.6	3.3
Sulfate	.	63	.	61	.	8	.	4

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-147			GW-155				GW-156
	KHQ			CRSDB				CRSDB
	09/04/91	11/05/91		02/28/91		06/02/91		02/28/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.033	0.083	0.022	1.2	0.033	1.3	0.092	1.8
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	0.058	<0.05	<0.05	<0.05	<0.05
Barium	0.074	0.082	0.082	0.018	0.0085	0.014	0.0086	0.041
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.00032	<0.0003	<0.0003
Boron	0.04	0.028	0.034	0.016	0.017	0.047	0.018	0.045
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	0.013	<0.01	0.014
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.027
Cobalt	<0.005	<0.005	<0.005	<0.0	<0.005	<0.005	<0.005	0.0052
Copper	<0.004	<0.004	<0.004	<0.0	<0.004	0.0052	<0.004	0.01
Iron	<0.005	0.077	<0.005	1.1	0.031	1.6	0.074	3
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	0.035	<0.004	0.021
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	0.014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.03
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	5.5	3.6	5.5	4	5.6
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	1	0.56	0.47	0.01	0.011	0.025	0.012	0.09
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.003	0.002	0.003	<0.001	<0.001	0.001	0.001	0.004
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	0.0079	<0.005	0.0073
Zinc	0.0059	0.0076	0.027	0.021	0.0094	0.072	0.015	0.17
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	.	172	.	146	.	145	.	397
Alkalinity-CO ₃	.	<1	.	<1	.	<1	.	<1
Calcium	30	37	37	28	28	66	30	230
Chloride	.	1.2	.	<1	.	<1	.	2
Fluoride	.	0.2	.	<0.1	.	<0.1	.	<0.1
Magnesium	17	20	20	17	17	44	17	130
Manganese	<0.001	0.027	<0.001	0.02	0.0042	0.12	0.015	0.24
Nitrate-N	.	0.46	.	0.2	.	0.2	.	0.3
Potassium	6.2	2.6	2.4	0.88	0.89	0.92	0.89	6.5
Sodium	4.8	2.4	2.3	0.43	0.95	0.55	0.51	17
Sulfate	.	3.8	.	1	.	1	.	9

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-156							GW-157
	CRSDB							CRSDB
	02/28/91	06/02/91		08/23/91		10/30/91		02/28/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.057	0.085	0.047	0.074	0.027	0.033	<0.02	0.66
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.029	0.029	0.023	0.022	0.022	0.018	0.018	0.018
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.034	0.047	0.026	0.037	0.041	0.024	0.015	0.014
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Iron	0.0076	0.12	0.012	0.047	<0.005	0.038	0.0066	1.5
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.0057
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	0.00025	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	0.016	0.011	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	3.7	6	5.8	.	.	.	.	5.1
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.039	0.041	0.037	0.036	0.036	0.032	0.031	0.023
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.006	0.003	0.004	0.003	0.004	0.003	0.003	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.017	0.037	0.03	0.011	0.027	0.023	0.044	0.02
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	358	.	347	.	361	.	182
Alkalinity-CO3	.	<1	.	<1	.	<1	.	<1
Calcium	72	81	78	69	70	70	69	42
Chloride	.	2	.	2	.	<1	.	2
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	43	44	43	45	45	44	43	27
Manganese	0.0029	0.0045	0.0036	0.0021	<0.001	<0.001	<0.001	0.042
Nitrate-N	.	0.4	.	0.3	.	0.24	.	0.2
Potassium	7.4	8.2	4	4.6	4.2	3.2	3.3	2.3
Sodium	31	7.5	3.8	3.5	3.2	3.1	2.6	2
Sulfate	.	11	.	9	.	10	.	17

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-157	GW-158						
	CRSDB	CRSDB						
	02/28/91	03/04/91		06/08/91		08/25/91		11/14/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.063	0.034	0.024	<0.02	<0.02	<0.02	<0.02	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.015	0.045	0.042	0.042	0.042	0.037	0.034	0.039
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.01	0.014	0.012	<0.004	<0.004	<0.004	<0.004	0.0061
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.0076	<0.004
Iron	<0.005	1.7	0.7	1.7	1.4	5.2	3.3	0.42
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	4.2	2.9	3	3.2	3.2	.	.	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.02	0.026	0.026	0.02	0.019	0.018	0.017	0.024
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	0.001	<0.001	0.001	0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.006	0.008	0.0052	<0.002	<0.002	<0.002	0.021	0.0036
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	.	166	.	161	.	153	.	164
Alkalinity-CO ₃	.	<1	.	<1	.	<1	.	<1
Calcium	37	38	38	32	32	36	32	35
Chloride	.	<1	.	<1	.	<1	.	<1
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	0.1
Magnesium	23	21	22	20	20	23	22	20
Manganese	0.0041	0.058	0.055	0.017	0.017	0.077	0.071	0.0099
Nitrate-N	.	<0.2	.	<0.2	.	<0.2	.	<0.2
Potassium	1.6	1.1	0.94	0.79	<0.6	1.3	1.2	<0.6
Sodium	1.5	0.78	0.63	0.54	0.55	0.51	0.58	0.56
Sulfate	.	9	.	10	.	9	.	10.1

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-158	GW-159						
	CRSDB	CRSDB						
	11/14/91	02/28/91		06/01/91		08/23/91		10/29/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	0.31	0.053	0.15	0.052	1.3	0.025	0.12
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.041	0.023	0.02	0.017	0.015	0.016	0.018	0.013
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	<0.004	0.027	0.014	0.019	0.19	0.024	0.02	0.039
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	0.015	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	0.0047	<0.004	<0.004	<0.004	0.0071	<0.004	<0.004	<0.004
Iron	0.25	0.48	0.01	0.088	0.0092	1	0.012	0.1
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00037	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	3.5	3.7	4.3	4	.	.	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.023	0.054	0.041	0.039	0.025	0.042	0.044	0.029
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	0.002	0.001	0.001	0.001	0.002	0.002	0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0069	0.0082	0.005	0.026	0.017	0.011	0.019	0.096
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	186	.	185	.	180	.	181
Alkalinity-CO3	.	6	.	<1	.	<1	.	<1
Calcium	36	58	35	37	37	45	37	39
Chloride	.	<1	.	1	.	<1	.	<1
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	21	37	23	24	24	29	25	24
Manganese	0.01	0.066	0.017	0.0068	<0.001	0.044	0.011	0.017
Nitrate-N	.	<0.2	.	<0.2	.	0.2	.	0.24
Potassium	<0.6	5.5	5.1	7.9	2.9	3.6	4.5	2
Sodium	0.6	0.94	0.99	1.2	0.96	0.63	0.7	0.73
Sulfate	.	10	.	11	.	8	.	8.2

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-159	GW-160						
	CRSDB	LIII						
	10/29/91	02/13/91		05/24/91		08/21/91		10/26/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.029	5.7	0.034	1.1	0.052	6.1	<0.02	0.36
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.014	0.02	0.0094	0.018	0.0096	0.022	0.0088	0.016
Beryllium	<0.0003	0.00089	<0.0003	<0.0003	<0.0003	0.0013	<0.0003	0.00053
Boron	0.026	0.0064	0.019	0.023	0.024	0.015	0.028	0.0092
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	0.011	<0.01	<0.01	<0.01	0.024	<0.01	<0.01
Chromium	<0.01	0.015	<0.01	<0.01	<0.01	0.017	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	0.0046	0.0078	<0.004	<0.004	<0.004	0.018	<0.004	<0.004
Iron	0.0083	8.7	0.13	2.9	0.094	10	0.046	0.72
Lead (AAS)	<0.004	0.011	<0.004	<0.004	<0.004	0.022	<0.004	0.024
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00023	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	0.012	<0.01	<0.01	0.011	0.04	0.022	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	12	3.9	4.9	3.5	.	.	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.011
Strontium	0.037	0.024	0.023	0.021	0.021	0.023	0.021	0.02
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.002	<0.001	0.001	<0.001	<0.001	0.004	<0.001	<0.001
Vanadium	<0.005	0.022	<0.005	<0.005	<0.005	0.024	<0.005	<0.005
Zinc	0.0075	0.052	<0.002	0.017	0.0079	0.075	0.0093	0.026
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	222	.	217	.	214	.	220
Alkalinity-CO3	.	<1	.	<1	.	<1	.	<1
Calcium	36	43	42	40	40	44	42	49
Chloride	.	5	.	4	.	4	.	4
Fluoride	.	0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	23	29	28	26	26	28	27	27
Manganese	0.0082	0.12	0.0092	0.031	0.016	0.17	0.02	0.14
Nitrate-N	.	0.4	.	0.3	.	0.35	.	0.51
Potassium	3.5	1.7	1	1.2	1	1.8	0.99	1.5
Sodium	1.1	1.8	1.8	1.8	1.6	1.5	1.8	1.8
Sulfate	.	4	.	3	.	3	.	4

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-160	GW-161						
	LIII	LIII						
	10/26/91	02/12/91		05/17/91		08/21/91		10/25/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	0.04	0.027	0.042	0.062	<0.02	<0.02	0.031
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.0093	0.0091	0.0081	0.0088	0.0084	0.0084	0.0076	0.0088
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.035	<0.004	0.0052	0.053	0.013	0.055	0.021	0.021
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	0.0032	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	0.013	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Iron	0.075	3.2	0.021	3.2	0.11	0.42	0.04	0.29
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	0.011	<0.01	<0.01	<0.01	0.019	0.013	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	3.4	3.2	3.2	3.1	.	.	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.019	0.016	0.016	0.017	0.017	0.014	0.014	0.013
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0034	<0.002	<0.002	0.011	0.012	0.01	0.0048	0.0095
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	.	196	.	198	.	190	.	197
Alkalinity-CO ₃	.	<1	.	<1	.	<1	.	<1
Calcium	47	37	37	38	38	37	37	39
Chloride	.	2	.	2	.	2	.	2
Fluoride	.	0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	27	23	23	23	24	23	23	24
Manganese	0.013	0.018	0.013	0.03	0.028	0.0075	0.0078	0.0071
Nitrate-N	.	0.2	.	<0.2	.	<0.2	.	0.23
Potassium	1.3	0.98	0.91	1.6	1.3	1.1	1	0.93
Sodium	1.9	0.81	0.82	1.5	1.2	1.1	0.93	0.87
Sulfate	.	1	.	<1	.	1	.	2

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-161	GW-165				GW-166		
	LIH	CRDT				CRDT		
	10/25/91	02/27/91		06/07/91		02/24/91		06/08/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.033	4.6	0.05	4	<0.02	0.14	0.039	0.092
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	0.053	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.013	0.014	0.012	0.016	0.0068	0.011	0.013	0.012
Beryllium	<0.0003	0.00033	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.019	0.04	0.033	0.066	0.0094	<0.004	0.017	0.029
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	0.0041	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	0.048	0.012	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	0.0082	<0.004	0.0041	0.0092	<0.004
Iron	0.036	9.5	0.14	16	0.035	0.21	0.017	0.48
Lead (AAS)	<0.004	0.0061	<0.004	0.0095	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	0.039	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	0.058	<0.05	<0.05	<0.05	<0.05
Silicon	.	12	3.5	12	3.5	3.5	3.4	2.5
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.02	0.023	0.023	0.02	0.019	0.054	0.052	0.059
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	0.013	<0.005	0.0097	<0.005	<0.005	<0.005	<0.005
Zinc	0.013	0.025	0.017	0.037	0.0041	0.0035	0.0047	0.0059
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	128	.	139	.	122	.	140
Alkalinity-CO3	.	<1	.	<1	.	<1	.	<1
Calcium	59	28	28	31	30	25	24	31
Chloride	.	<1	.	1	.	2	.	18
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	38	14	14	17	16	15	14	17
Manganese	0.013	0.094	0.033	0.096	0.025	0.0051	0.0086	0.017
Nitrate-N	.	<0.2	.	<0.2	.	<0.2	.	<1
Potassium	1.2	1.5	0.69	1.3	0.74	4.7	4.4	3.2
Sodium	1.4	0.98	0.92	0.67	0.63	1.5	1.5	1.2
Sulfate	.	3	.	2	.	3	.	<5

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. " Location Date Sampled	GW-166	GW-173						
	CRDT	CRSP						
	06/08/91	02/01/91		05/03/91		08/06/91		10/10/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.063	0.048	0.055	0.12	<0.02	0.11	<0.02	0.11
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.0098	0.013	0.012	0.01	0.014	0.013	0.016	0.016
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.02	0.031	0.014	<0.004	<0.004	<0.004	<0.004	0.029
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	0.043	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	0.014	0.0062	0.0069	0.006	<0.004	<0.004	<0.004
Iron	0.057	0.051	<0.004	0.34	<0.005	0.2	<0.005	0.22
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	0.039	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	3.4	3.8	3.7	3.8	3.9	3.7	3.6	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.059	0.017	0.016	0.015	0.014	0.015	0.015	0.016
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0033	0.019	0.0018	0.0068	<0.002	<0.002	<0.002	0.018
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	188	.	191	.	184	.	192
Alkalinity-CO3	.	<1	.	<1	.	<1	.	<1
Calcium	31	38	37	32	32	37	38	42
Chloride	.	3	.	3	.	2	.	2
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	17	23	23	24	24	22	22	25
Manganese	0.012	0.0048	0.001	0.0041	<0.001	0.0032	<0.001	0.0035
Nitrate-N	.	<0.2	.	1	.	1.3	.	1.19
Potassium	3.7	1.7	1.5	0.98	1.3	1.3	1.2	1.7
Sodium	1.2	2.9	2.5	1.9	2.1	2.2	2.2	2
Sulfate	.	6	.	6	.	6	.	7

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-173	GW-174						
	CRSP	CRSP						
	10/10/91	02/01/91		05/03/91		08/06/91		10/11/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.02	0.027	<0.02	0.062	<0.02	0.064	0.025	0.022
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.022	0.065	0.065	0.069	0.062	0.051	0.052	0.031
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.021	0.016	0.013	<0.004	<0.004	<0.004	<0.004	0.021
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	0.025	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	0.0055	0.0041	<0.004	0.0057	0.0049	<0.004	<0.004	<0.004
Iron	<0.005	0.055	<0.004	0.061	<0.005	0.034	<0.005	0.028
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	4.7	4.5	3.1	1.9	4.7	4.5	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.018	0.091	0.15	0.1	0.14	0.084	0.14	0.04
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0042	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	0.0041
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	188	.	191	.	187	.	199
Alkalinity-CO3	.	<1	.	<1	.	<1	.	<1
Calcium	41	34	20	31	22	36	27	43
Chloride	.	9	.	10	.	9	.	9
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	24	24	19	25	23	23	21	26
Manganese	0.0035	0.001	0.0021	0.0063	0.0055	<0.001	<0.001	0.0013
Nitrate-N	.	1	.	0.58	.	0.6	.	0.6
Potassium	2	2.8	6.8	3.1	5.4	2.7	4.6	1.4
Sodium	2.5	6	23	5.8	18	6.6	14	2.7
Sulfate	.	4	.	3	.	4	.	4

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-174	GW-175						
	CRSP	CRSP						
	10/11/91	01/31/91		05/01/91		08/08/91		10/13/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)								
Aluminum	<0.02	<0.02	<0.02	0.032	<0.02	0.026	<0.02	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.051	0.043	0.042	0.037	0.034	0.033	0.032	0.034
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.011	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.011
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	0.0031	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	0.014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	0.011	0.043	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Iron	0.007	0.38	<0.004	0.056	<0.005	0.092	<0.005	0.059
Lead (AAS)	<0.004	0.026	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	0.012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	3.3	3.2	3.5	3.5	0.9	<0.03	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.053	0.0081	0.0079	0.013	0.014	0.012	0.012	0.011
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.002	0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0027	<0.001	0.0022	<0.002	<0.002	<0.002	<0.002	0.0048
MAJOR IONS (mg/L)								
Alkalinity-HCO ₃	.	171	.	173	.	185	.	176
Alkalinity-CO ₃	.	<1	.	<1	.	<1	.	<1
Calcium	45	37	33	37	37	39	40	37
Chloride	.	2	.	2	.	2	.	2
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	27	24	21	22	22	23	23	23
Manganese	0.0031	0.0096	<0.001	<0.001	<0.001	0.0021	<0.001	<0.001
Nitrate-N	.	0.3	.	0.3	.	0.25	.	0.28
Potassium	2.1	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Sodium	3.9	<0.02	<0.02	0.75	0.59	0.55	0.55	1.1
Sulfate	.	1	.	1	.	<1	.	1

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-176									
	Location	CRSP	CRSP							
			10/13/91	02/04/91	05/04/91	08/09/91	10/14/91			
Date Sampled	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT		
	METALS (mg/L)									
Aluminum	. 0.023	. 0.027	. 0.02	. 0.02	. 0.02	. 0.03	. 0.02	. 0.25		
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Barium	0.035	0.021	0.016	0.018	0.018	0.016	0.016	0.018		
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003		
Boron	0.018	0.89	0.88	0.63	0.77	0.39	0.38	0.35		
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003		
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
Copper	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004		
Iron	0.027	0.063	<0.004	<0.005	<0.005	0.031	<0.005	0.38		
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004		
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Silicon	. 4.9	4.9	4.8	2.9	4.8	2.6	2.3	. 2.3		
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.0068		
Strontium	0.011	0.023	0.022	0.021	0.021	0.19	0.019	0.021		
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		
Uranium (Fluor)	0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.001		
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
Zinc	0.0074	0.0072	0.006	0.0023	0.0048	0.0024	0.0053	0.017		
MAJOR IONS (mg/L)										
Alkalinity-HCO3	. 279	. 279	. 281	. 281	. 281	. 260	. 260	. 269		
Alkalinity-CO3	. 279	. 279	. 281	. 281	. 281	. 260	. 260	. 269		
Calcium	37	58	49	36	37	54	53	58		
Chloride	. 2	2	. 2	2	. 2	1.9	. 2	2		
Fluoride	. 22	<0.1 33	. 34	<0.1 35	. 34	<0.1 32	. 31	<0.1 34		
Magnesium	22	33	34	35	34	32	31	34		
Manganese	<0.001	0.0015	0.001	<0.001	<0.001	<0.001	<0.001	0.012		
Nitrate-N	. 0.5	0.5	. 0.5	0.5	. 0.5	0.5	. 0.5	0.44		
Potassium	0.61	1.1	1	1.1	1.1	0.95	0.76	1.1		
Sodium	1.4	0.77	0.8	0.74	0.87	0.6	0.6	0.7		
Sulfate	. 1	1	. 2	2	. 2	1.3	. 2	1		

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-176	GW-177						
	CRSP	CRSP						
	10/14/91	02/02/91		05/03/91		08/08/91		10/13/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	0.029	0.044	0.027	0.021	0.022	0.03	0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.016	0.024	0.025	0.023	0.024	0.018	0.016	0.015
Beryllium	<0.0003	<0.0003	0.00033	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.33	0.035	0.014	<0.004	<0.004	<0.004	0.046	0.0093
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	0.006	<0.004	0.0085	<0.004	<0.004
Iron	<0.005	<0.004	<0.004	0.027	<0.005	0.087	0.0063	0.011
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	0.0065	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	0.013	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	4.3	4.2	3.7	4.2	1.9	4.7	.
Silver	0.042	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.02	0.024	0.024	0.023	0.023	0.018	0.027	0.014
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.01	0.0058	0.0023	<0.002	<0.002	<0.002	0.022	0.007
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	213	.	207	.	194	.	203
Alkalinity-CO3	.	<1	.	<1	.	<1	.	<1
Calcium	57	41	40	33	33	42	44	46
Chloride	.	2	.	2	.	2	.	3
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	34	25	25	25	25	24	28	27
Manganese	0.0029	0.0055	0.0025	0.0078	0.0026	0.011	<0.001	<0.001
Nitrate-N	.	<0.2	.	0.27	.	<0.2	.	0.31
Potassium	1.3	6.8	6.2	4.2	4.1	2.8	<0.6	1.7
Sodium	1.5	1.6	1.3	0.92	0.9	0.87	12	1.1
Sulfate	.	7	.	8	.	6	.	7

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-177	GW-178						
	CRSP	CRSP						
	10/13/91	01/15/91		04/22/91		08/08/91		10/13/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	1.1	0.039	0.42	0.027	0.024	0.45	0.031
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.016	0.035	0.018	0.019	0.014	0.017	0.05	0.014
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.0014	<0.0003
Boron	0.016	0.02	0.018	0.017	0.023	0.03	1.3	0.0068
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	0.042	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	0.049	0.0067	0.011	<0.004	<0.004	0.028	<0.004
Iron	<0.005	8.4	0.021	1	0.0095	0.022	3	0.022
Lead (AAS)	<0.004	0.093	<0.004	0.016	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.038	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	5.2	4.2	5.1	4.5	4.6	4.3	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.015	0.045	0.034	0.03	0.026	0.028	0.12	0.022
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.014	<0.005
Zinc	0.0082	0.53	0.064	0.15	0.053	0.038	0.095	0.035
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	221	.	362	.	215	.	220
Alkalinity-CO3	.	<1	.	<1	.	<1	.	<1
Calcium	45	54	40	45	40	45	42	47
Chloride	.	11	.	10	.	7	.	<5
Fluoride	.	0.1	.	0.1	.	<0.1	.	<0.1
Magnesium	27	28	22	25	23	29	13	28
Manganese	<0.001	0.097	0.02	0.038	0.0036	<0.001	0.05	0.0031
Nitrate-N	.	0.5	.	0.5	.	0.42	.	<1
Potassium	1.9	0.89	0.78	0.71	0.6	<0.6	5.3	<0.6
Sodium	1.2	16	16	9.7	9.5	15	130	7.6
Sulfate	.	12	.	9	.	5	.	6

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-178	GW-179						
	CRSP	CRSP						
	10/13/91	02/08/91		05/08/91		08/12/91		10/17/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	2	0.046	0.16	<0.02	0.21	<0.02	0.025
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.014	0.034	0.032	0.029	0.028	0.022	0.023	0.027
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.0075	0.026	0.016	<0.004	0.017	0.013	0.0076	0.023
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	0.0041	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	0.033	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	0.12	<0.004	0.045	0.0095	0.042	0.023	0.032
Iron	<0.005	4.4	0.014	1	<0.005	0.49	0.03	0.11
Lead (AAS)	<0.004	0.025	<0.004	0.0072	<0.004	0.0059	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	6.8	3.3	2.1	4.4	4.2	3.8	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.023	0.046	0.041	0.027	0.024	0.025	0.022	0.023
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	0.001	<0.001	0.001	<0.001	0.001	0.001	<0.001
Vanadium	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.022	0.04	0.0027	0.018	0.0055	0.0092	0.011	0.0093
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	.	309	.	290	.	252	.	265
Alkalinity-CO ₃	.	<1	.	<1	.	<1	.	<1
Calcium	47	110	58	69	57	56	46	56
Chloride	.	2	.	3	.	2	.	2
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	28	62	32	38	31	36	30	35
Manganese	<0.001	0.1	0.004	0.025	0.0061	0.01	0.0034	0.0034
Nitrate-N	.	0.7	.	0.5	.	0.48	.	0.5
Potassium	0.72	4.6	4.3	3.9	4.1	4.2	4.1	4.1
Sodium	7.2	2.5	7	3	2.8	2.5	2.6	2.2
Sulfate	.	4	.	4	.	4	.	4

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-179	GW-180						
	CRSP	CRSP						
	10/17/91	02/02/91		05/04/91		08/09/91		10/14/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	<0.02	0.085
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.027	0.029	0.028	0.029	0.029	0.026	0.025	0.026
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.0095	0.0089	0.013	<0.004	<0.004	<0.004	<0.004	0.007
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	0.012	<0.004	<0.004	<0.004	0.0043	<0.004	<0.004	<0.004
Iron	<0.005	<0.004	<0.004	<0.005	<0.005	0.049	<0.005	0.049
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	5.1	5.1	5.3	2.7	2.7	2.7	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.022	0.018	0.018	0.02	0.02	0.019	0.018	0.019
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.011	0.0077	0.0066	0.005	0.011	0.0086	0.0092	0.015
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	.	300	.	316	.	215	.	276
Alkalinity-CO ₃	.	<1	.	<1	.	<1	.	<1
Calcium	54	58	58	60	64	57	56	57
Chloride	.	2	.	2	.	2	.	2
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	34	37	37	40	40	34	34	35
Manganese	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.019
Nitrate-N	.	0.5	.	0.29	.	0.3	.	0.24
Potassium	4	0.71	0.76	1	1.1	0.77	0.66	1.4
Sodium	2.3	0.71	0.68	0.86	0.74	0.65	0.61	0.86
Sulfate	.	<1	.	<1	.	<1	.	<1

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-180	GW-181						
	CRSP	CRSP						
	10/14/91	01/29/91		04/30/91		08/05/91		10/08/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	0.041	0.027	0.032	<0.02	0.046	0.032	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05
Barium	0.027	0.0078	0.0074	0.0082	0.0076	0.0097	0.016	0.0076
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.0048	0.015	0.033	0.0066	0.0087	0.01	0.019	0.028
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	0.0035	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	0.0057	<0.004	<0.004	0.0059	0.0097	0.0057	<0.004	<0.004
Iron	<0.005	0.15	0.0081	0.12	0.012	0.39	<0.005	0.52
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	4.4	4.1	4.1	4.2	3.9	3.9	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.017	0.018	0.017	0.02	0.021	0.019	0.031	0.02
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.013	0.0034	0.0037	0.0046	0.0059	0.0058	<0.002	0.003
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	167	.	166	.	158	.	162
Alkalinity-CO3	.	<1	.	<1	.	<1	.	<1
Calcium	56	31	31	32	32	31	30	32
Chloride	.	1	.	1	.	1	.	1
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	35	20	20	20	20	19	19	20
Manganese	0.0012	0.0022	0.0028	0.0015	<0.001	0.0018	0.0016	0.0052
Nitrate-N	.	<0.2	.	<0.2	.	<0.2	.	<0.2
Potassium	1.3	1.3	1.3	1.8	1.9	1.6	1.9	1.7
Sodium	0.82	0.62	0.69	0.7	0.84	0.7	2.1	0.76
Sulfate	.	1	.	1	.	2	.	1

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-181	GW-184				GW-186		
Location	CRSP	RQ				RQ		
Date Sampled	10/08/91	09/08/91		11/18/91		09/08/91		11/18/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.033	<0.02	0.029	0.028	<0.02	0.021	<0.02	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.0078	0.028	0.032	0.025	0.026	0.12	0.12	0.13
Beryllium	<0.0003	<0.0003	0.00035	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.023	0.069	0.048	0.041	0.03	0.13	0.13	0.15
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	0.0079	0.02	0.0078	<0.004	<0.004	<0.004
Iron	0.023	0.039	0.068	0.026	<0.005	0.88	0.88	0.82
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00031	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	.	.	.	.	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.02	0.19	0.22	0.2	0.2	1.7	1.7	1.8
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0086	0.0091	0.015	0.013	0.013	0.004	0.0071	0.0044
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	.	202	.	198	.	388	.	388
Alkalinity-CO ₃	.	<1	.	<1	.	<1	.	<1
Calcium	33	88	83	88	92	110	110	120
Chloride	.	1	.	1.5	.	13	.	13.6
Fluoride	.	<0.1	.	<0.1	.	0.1	.	0.1
Magnesium	20	9	9.5	9.8	10	34	34	34
Manganese	0.0031	0.0064	0.015	0.018	0.016	0.16	0.16	0.15
Nitrate-N	.	7.2	.	5.1	.	<0.2	.	<1.1
Potassium	1.9	1.3	1.4	1.9	1.8	2.6	2.8	3.3
Sodium	0.77	1.7	1.7	2.1	2.1	26	25	35
Sulfate	.	27	.	28.8	.	67	.	70.2

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-186	GW-187				GW-188		
Location	RQ	RQ				RQ		
Date Sampled	11/18/91	09/09/91		11/19/91		09/09/91		11/19/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)								
Aluminum	0.02	0.039	0.065	<0.02	<0.02	0.18	<0.02	1.1
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.13	0.2	0.2	0.21	0.21	0.038	0.038	0.052
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	0.00047	<0.0003	<0.0003	<0.0003
Boron	0.16	0.61	0.6	0.64	0.62	0.11	0.14	0.13
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Iron	0.79	0.15	0.14	0.18	0.13	0.19	<0.005	1.3
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	.	.	.	.	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	1.8	0.87	0.85	0.85	0.85	1.8	1	1.8
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	<0.002	0.0083	0.011	0.0024	0.005	0.0092	0.0047	0.013
MAJOR IONS (mg/L)								
Alkalinity-HCO3	.	258	.	261	.	184	.	187
Alkalinity-CO3	.	<1	.	<1	.	<1	.	<1
Calcium	110	51	50	52	49	30	16	31
Chloride	.	43	.	51	.	4	.	3
Fluoride	.	0.6	.	0.6	.	0.6	.	0.6
Magnesium	34	21	20	21	20	25	18	25
Manganese	0.15	0.0028	0.0028	0.0045	0.0045	0.025	<0.001	0.073
Nitrate-N	.	<0.2	.	<0.2	.	<0.2	.	<0.2
Potassium	3.1	3.2	2.6	2.6	3	13	42	8.6
Sodium	35	65	67	68	68	17	34	29
Sulfate	.	26	.	23	.	22	.	26

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-188	GW-203						
	RQ	UNCS						
	11/19/91	01/12/91		04/12/91		07/29/91		11/23/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	4.3	<0.02	0.18	<0.02	4.8	<0.02	0.12
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05
Barium	0.044	0.024	0.0079	0.0066	0.0063	0.016	0.0063	0.0077
Beryllium	<0.0003	0.00097	<0.0003	<0.0003	<0.0003	0.00042	<0.0003	<0.0003
Boron	0.12	0.0062	0.016	<0.004	<0.004	<0.004	0.012	0.0073
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	0.011	<0.01	0.024	0.019	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	0.038	<0.004	<0.004	<0.004	0.0083	0.0072	<0.004
Iron	<0.005	6.3	<0.004	0.26	<0.005	4.2	<0.005	0.23
Lead (AAS)	<0.004	0.0088	<0.004	<0.004	<0.004	0.0093	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	0.014	<0.01	0.017	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	9.7	3.6	3.6	3.3	11	3.4	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	1.8	0.032	0.013	0.01	0.011	0.019	0.011	0.013
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	0.014	<0.005	<0.005	<0.005	0.013	<0.005	<0.005
Zinc	0.0024	0.056	0.0012	<0.002	<0.002	0.036	0.0074	0.022
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	.	133	.	132	.	128	.	126
Alkalinity-CO ₃	.	<1	.	<1	.	<1	.	<1
Calcium	30	43	27	25	26	32	27	33
Chloride	.	1	.	1	.	1	.	1.1
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	24	19	15	15	15	16	15	18
Manganese	0.02	0.18	<0.001	0.0082	<0.001	0.063	<0.001	0.0079
Nitrate-N	.	1	.	1	.	1.1	.	1
Potassium	6.9	2.4	0.84	0.8	0.78	1.8	0.98	0.93
Sodium	24	0.65	0.63	<0.02	<0.02	0.31	0.36	0.53
Sulfate	.	<1	.	<1	.	<1	.	<1

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-203	GW-205						
	UNCS	UNCS						
	11/23/91	01/12/91		04/12/91		07/29/91		11/23/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
	.	.	.	.	.	.	.	.
Aluminum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.0065	0.018	0.02	0.015	0.012	0.012	0.014	0.013
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.015	0.0046	0.0064	<0.004	<0.004	0.0058	0.015	0.012
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	0.012	<0.01	0.015	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	0.059	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Iron	0.0062	0.018	0.026	0.075	<0.005	0.031	<0.005	0.04
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	0.025	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	4.1	3.7	3.6	3.4	3.8	3.7	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.01	0.013	0.015	0.012	0.01	0.012	0.011	0.011
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.022	0.002	<0.001	<0.002	<0.002	0.014	<0.002	0.02
	.	.	.	.	.	.	.	.
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	.	146	.	148	.	142	.	142
Alkalinity-CO ₃	.	<1	.	<1	.	<1	.	<1
Calcium	31	29	30	29	28	31	30	35
Chloride	.	1	.	1	.	1	.	1.7
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	17	17	17	18	17	17	17	19
Manganese	<0.001	0.0037	0.0043	<0.001	<0.001	0.0035	<0.001	<0.001
Nitrate-N	.	<0.2	.	<0.23	.	0.25	.	<0.2
Potassium	1.3	0.73	1.1	0.7	0.74	0.74	0.79	0.82
Sodium	0.63	0.6	0.65	<0.02	<0.02	0.68	0.47	0.56
Sulfate	.	3	.	3	.	4	.	2.5

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-205	GW-217						
	UNCS	LIV						
	11/23/91	01/06/91		04/03/91		07/16/91		10/01/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.028	0.11	0.023	0.14	<0.02	0.25	<0.02	0.17
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.014	0.025	0.023	0.022	0.021	0.027	0.025	0.024
Beryllium	<0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.015	0.039	0.039	0.079	0.012	0.022	0.013	0.015
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	0.0045	0.0071	<0.004	0.0077	0.0047	0.0043	<0.004	0.0055
Iron	0.0092	0.16	0.016	0.21	<0.005	0.61	<0.005	0.31
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	3.1	3.1	3.2	3.2	2.9	3	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.011	0.013	0.012	0.012	0.011	0.014	0.016	0.013
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.013	0.036	0.0028	0.02	0.0063	0.011	<0.002	0.01
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	144	.	144	.	140	.	144
Alkalinity-CO3	.	<1	.	<1	.	<1	.	<1
Calcium	35	28	26	25	25	34	29	29
Chloride	.	1	.	1.7	.	2	.	2
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	19	18	16	15	15	20	17	17
Manganese	<0.001	0.0086	0.0015	0.0013	<0.001	0.025	0.017	0.013
Nitrate-N	.	0.4	.	0.43	.	0.38	.	0.37
Potassium	0.98	3.7	3.8	4.1	3.5	4.2	4.9	3.5
Sodium	0.75	3.3	3.4	5	3.2	4.3	5.1	3.4
Sulfate	.	5	.	8	.	6	.	6

(CONTINUED)

APPENDIX B
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-217	GW-221						
	LIV	UNCS						
	10/01/91	01/13/91		04/13/91		07/30/91		08/13/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	0.031	0.022	<0.02	<0.02	0.033	<0.02	.
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	.
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	.
Barium	0.02	0.0075	0.0072	0.0081	0.0075	0.0071	0.0068	.
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	.
Boron	0.052	<0.004	0.0076	0.019	0.018	0.027	<0.004	.
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	.
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	.
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	.
Chromium	<0.01	<0.01	<0.01	<0.01	0.014	<0.01	<0.01	.
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	.
Copper	<0.004	0.017	<0.004	<0.004	<0.004	<0.004	<0.004	.
Iron	0.0071	0.082	0.0046	0.038	<0.005	0.0081	<0.005	.
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	.
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	.
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	.
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	.
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	.
Silicon	.	4.5	4.2	2.5	3.3	4	0.83	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	.
Strontium	0.013	0.01	0.01	0.011	0.01	0.0097	0.0098	.
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	.
Uranium (Fluor)	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	.
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	.
Zinc	0.0034	0.0014	<0.001	0.004	<0.002	<0.002	0.0046	.
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	139	.	145	.	.	.	140
Alkalinity-CO3	.	<1	.	<1	.	.	.	<1
Calcium	26	29	29	26	26	29	31	.
Chloride	.	1	.	1	.	.	.	<1
Fluoride	.	<0.1	.	<0.1	.	.	.	<0.1
Magnesium	17	17	17	17	17	17	18	.
Manganese	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	.
Nitrate-N	.	1	.	1	.	.	.	1.3
Potassium	3.4	1	0.73	0.97	0.84	1.3	0.85	.
Sodium	4	0.89	0.65	1.8	0.64	0.68	0.58	.
Sulfate	.	<1	.	<1	.	.	.	1

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-221		GW-231					
	UNCS		KHQ					
	11/23/91		03/14/91		07/19/91		09/04/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	<0.02	<0.02	0.039	0.025	0.061	0.033	0.027
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.0072	0.007	0.052	0.052	0.085	0.083	0.093	0.088
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.016	0.0098	<0.004	0.018	<0.004	<0.004	0.024	0.031
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	0.0029	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	0.0076	<0.004	<0.004	0.0058	<0.004	<0.004
Iron	0.024	0.008	0.025	0.0083	<0.005	<0.005	0.0067	<0.005
Lead (AAS)	<0.004	<0.004	0.0043	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	0.021	<0.01	<0.01	<0.01	0.016	0.011
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	1	3	2	3	.	.
Silver	<0.006	<0.006	<0.006	<0.006	0.022	<0.006	<0.006	<0.006
Strontium	0.0095	0.0094	0.032	0.029	0.038	0.038	0.045	0.046
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.01	0.0072	0.012	0.0045	0.0035	0.0076	0.0092	0.0079
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	141	.	108	.	179	.	190	.
Alkalinity-CO ₃	<1	.	<1	.	<1	.	<1	.
Calcium	34	33	25	25	34	34	41	41
Chloride	<1	.	1	.	<1	.	1	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	19	19	13	13	21	20	23	23
Manganese	<0.001	<0.001	0.087	0.0013	0.0071	0.0068	0.015	0.019
Nitrate-N	0.9	.	0.6	.	<0.2	.	<0.2	.
Potassium	<0.6	1.1	1.2	0.93	1.4	1.5	1.9	1.6
Sodium	0.65	0.95	1.1	0.59	0.6	0.6	0.84	0.87
Sulfate	<1	.	4	.	3	.	3	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-231		GW-241					
	KHQ		CRSDB					
	11/05/91		03/02/91		06/10/91		08/25/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	<0.02	0.77	0.074	3.9	0.034	3	0.048
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.092	0.093	0.029	0.018	0.026	0.018	0.034	0.017
Beryllium	<0.0003	<0.0003	0.00048	<0.0003	0.00035	<0.0003	0.00099	<0.0003
Boron	0.026	0.016	0.0065	0.016	<0.004	0.043	0.016	<0.004
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	0.054	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0085	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	0.0069	<0.004	0.013	<0.004
Iron	0.0053	<0.005	0.8	0.049	3.1	0.011	6	0.027
Lead (AAS)	<0.004	<0.004	0.0065	<0.004	0.0052	<0.004	0.02	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	0.039	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	3.2	4.6	10	5.5	.	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.037	0.038	0.022	0.019	0.018	0.017	0.023	0.019
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	0.0089	<0.005	0.013	<0.005
Zinc	0.013	0.0097	0.021	0.0057	0.014	0.0077	0.072	<0.002
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	196	.	148	.	146	.	144	.
Alkalinity-CO3	<1	.	<1	.	<1	.	<1	.
Calcium	42	44	34	29	28	29	41	34
Chloride	1.2	.	<1	.	<1	.	<1	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	0.1	.
Magnesium	22	22	21	18	17	17	23	19
Manganese	0.026	0.023	0.16	0.0027	0.09	0.0061	0.37	0.0016
Nitrate-N	<0.2	.	<0.2	.	<0.2	.	<0.2	.
Potassium	1.9	1.8	2.6	2.4	2.9	2.4	2.9	2.3
Sodium	0.76	0.78	0.96	0.97	0.68	0.82	0.57	0.5
Sulfate	2.9	.	<1	.	<1	.	<1	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-241		GW-292					
	CRSDB		ECRWP					
	10/31/91		02/09/91		05/11/91		08/16/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.94	0.028	0.049	0.034	<0.02	<0.02	<0.02	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.072	0.018	0.11	0.11	0.097	0.1	0.1	0.1
Beryllium	0.0014	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.0045	0.008	0.0085	0.0072	0.0083	<0.004	0.024	0.018
Cadmium (AAS)	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	0.026	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	0.014	0.0041	<0.004	<0.004	0.0063	0.0064	0.0084	0.0055
Iron	0.22	0.011	0.042	0.019	0.023	<0.005	0.045	0.011
Lead (AAS)	0.3	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.013	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	3.6	3.6	3.8	3.8	3.6	3.7
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.024	0.017	0.015	0.014	0.016	0.016	0.016	0.017
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.037	0.0092	<0.002	<0.002	<0.002	<0.002	0.0099	0.015
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	147	.	237	.	241	.	231	.
Alkalinity-CO3	<1	.	<1	.	<1	.	<1	.
Calcium	47	30	43	42	52	49	46	47
Chloride	<1	.	10	.	11	.	10	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	26	17	28	28	29	28	28	29
Manganese	0.17	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nitrate-N	<0.2	.	0.4	.	0.47	.	0.4	.
Potassium	2.7	2.6	0.68	<0.6	1	1.2	0.68	0.67
Sodium	0.69	0.91	4.1	4	4.2	4.1	4	4
Sulfate	1.2	.	3	.	3	.	4	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-292		GW-293					
	ECRWP		ECRWP					
	10/22/91		02/10/91		05/11/91		08/19/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.077	0.025	0.046	0.049	0.029	0.021	0.11	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.11	0.11	0.2	0.19	0.2	0.2	0.18	0.17
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.012	0.03	0.0087	0.024	0.028	0.22	0.0072	0.011
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	0.0049	0.0052	<0.004	<0.004	0.0041	0.0043	0.016	<0.004
Iron	0.014	0.005	4.8	0.045	2.1	0.0082	1.3	0.014
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	3.6	3.4	3.8	3.6	.	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	0.04	<0.006	<0.006
Strontium	0.016	0.016	0.015	0.014	0.016	0.016	0.016	0.016
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.014	0.017	<0.002	<0.002	<0.002	<0.002	0.019	0.0069
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	235	.	266	.	236	.	228	.
Alkalinity-CO3	<1	.	<1	.	<1	.	<1	.
Calcium	48	48	41	41	47	47	50	48
Chloride	9	.	8	.	10	.	9	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	30	30	27	27	27	27	30	29
Manganese	<0.001	<0.001	0.03	0.026	0.024	0.02	0.031	0.02
Nitrate-N	0.38	.	0.4	.	0.48	.	0.32	.
Potassium	0.64	0.93	1.8	1.8	2.1	2.4	1.7	1.7
Sodium	4.4	4.5	2.8	3	2.9	3.3	3.2	3.2
Sulfate	3	.	4	.	4	.	3	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-293		GW-294					
	ECRWP		ECRWP					
	10/23/91		02/09/91		05/10/91		08/15/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.1	<0.02	0.046	0.046	0.025	0.026	0.022	0.036
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.18	0.17	0.012	0.0074	0.009	0.0092	0.0093	0.0091
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.0092	0.017	0.0066	0.02	<0.004	0.015	<0.004	0.041
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.0021	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	0.017	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	0.013	<0.004	0.0041	0.0065	<0.004	<0.004
Iron	2.1	0.029	0.07	0.023	0.036	0.0053	0.068	0.015
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.0042	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00023
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	0.015	0.024	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	2.4	3.8	3.9	4.3	1.7	4.2
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.016	0.016	0.021	0.017	0.018	0.018	0.02	0.02
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.016	0.0063	0.046	<0.002	0.0082	0.014	0.018	0.017
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	233	.	238	.	200	.	199	.
Alkalinity-CO3	<1	.	<1	.	<1	.	<1	.
Calcium	53	49	40	37	34	34	44	41
Chloride	9	.	6	.	5.2	.	5	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	31	29	26	25	24	25	27	26
Manganese	0.039	0.031	0.0041	<0.001	<0.001	<0.001	<0.001	<0.001
Nitrate-N	0.25	.	3	.	2.3	.	2.3	.
Potassium	2.1	2	1	0.79	1	1.1	<0.6	<0.6
Sodium	3.5	3.4	1.8	1.3	1.8	2.1	1.5	1.6
Sulfate	3	.	3	.	2.7	.	3	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. - Location . Date Sampled	GW-294		GW-295					
	ECRWP		LIII					
	10/22/91		02/11/91		05/16/91		08/30/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.04	0.042	1.5	0.054	0.28	0.17	7.5	4.2
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.011	0.0093	0.044	0.038	0.036	0.04	0.045	0.053
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.0013	0.0011
Boron	0.011	0.014	0.056	0.07	0.057	1.4	0.049	0.035
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	0.11	0.01	0.02	<0.01	0.305	0.074
Chromium	<0.01	<0.01	0.04	0.013	0.022	0.022	0.16	0.067
Cobalt	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	0.019	0.026
Copper	0.004	<0.004	0.022	<0.004	<0.004	<0.004	0.068	0.083
Iron	0.031	0.01	3.2	0.0064	0.91	0.067	23	9.9
Lead (AAS)	<0.004	<0.004	0.11	<0.004	0.014	<0.004	0.26	0.302
Mercury (CVAA)	<0.0002	<0.0002	0.00028	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.018	<0.01
Nickel	<0.01	<0.01	0.044	0.025	0.026	0.014	0.47	0.51
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	5.6	3.9	4.2	4.5	.	.
Silver	0.0062	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.02	0.019	0.17	0.16	0.12	0.11	0.096	0.091
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	0.001	0.001	0.001	0.001	0.002	0.002
Vanadium	<0.005	<0.005	0.0093	<0.005	<0.005	<0.005	0.038	0.023
Zinc	0.021	0.011	0.5	0.017	0.056	0.024	0.5	0.64
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	204	.	136	.	140	.	134	.
Alkalinity-CO3	<1	.	<1	.	<1	.	<1	.
Calcium	45	42	65	64	57	56	55	55
Chloride	6	.	92	.	73	.	69	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	27	27	27	27	26	27	28	29
Manganese	0.0017	<0.001	0.39	0.22	0.12	0.021	0.43	0.77
Nitrate-N	2.6	.	0.8	.	0.92	.	0.72	.
Potassium	0.98	0.97	9	9.6	5.7	8.5	8	6.5
Sodium	2	1.7	10	10	6.9	8.6	6.3	5.9
Sulfate	<1	.	44	.	31	.	20	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-295		GW-296					
	LIII		ECRWP					
	11/12/91		02/09/91		05/10/91		08/15/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	24	0.044	0.046	0.057	0.032	<0.02	0.045	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.52	0.036	0.017	0.014	0.0096	0.0096	0.0099	0.0096
Beryllium	0.025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.029	0.036	0.017	0.016	0.028	0.024	0.0055	0.0065
Cadmium (AAS)	0.03	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	0.016	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	4	0.14	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	0.41	<0.01	<0.01	0.029	<0.01	<0.01	<0.01	<0.01
Cobalt	0.23	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	0.29	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.0046
Iron	31	0.064	0.071	0.14	0.045	<0.005	0.019	0.0094
Lead (AAS)	6.4	0.025	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	0.017	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	2.2	0.34	<0.01	0.041	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	3.9	3.9	3.9	3.8	1.7	0.64
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.17	0.076	0.018	0.015	0.015	0.015	0.017	0.017
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	0.052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	2	0.015	<0.002	<0.002	0.0087	0.0061	0.012	0.0097
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	158	.	198	.	209	.	207	.
Alkalinity-CO ₃	<1	.	<1	.	<1	.	<1	.
Calcium	140	51	39	38	34	34	44	44
Chloride	67	.	3	.	3.9	.	2	.
Fluoride	0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	66	29	25	25	24	24	27	27
Manganese	7.8	0.014	<0.001	0.0017	<0.001	<0.001	<0.001	<0.001
Nitrate-N	0.27	.	1	.	0.3	.	0.26	.
Potassium	10	5.9	0.75	0.84	<0.6	0.84	0.95	0.7
Sodium	6.8	6.9	1.7	1.7	2.2	2	1.4	1.6
Sulfate	8	.	1	.	1.2	.	<1	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-296		GW-298					
	ECRWP		LIII					
	10/22/91		02/21/91		05/31/91		08/22/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.1	0.025	0.043	<0.02	0.21	0.061	<0.02	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.0099	0.0097	0.013	0.013	0.016	0.016	0.013	0.012
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.031	0.014	0.017	0.014	1.4	0.024	<0.004	<0.004
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	0.0055	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	0.027	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	0.0085	<0.004	0.0083	<0.004	<0.004	0.01	<0.004	<0.004
Iron	0.12	0.0082	0.11	<0.005	0.35	0.013	0.04	0.0059
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00026	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	0.014	0.013	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	0.012	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	3.3	1.8	4.7	3.8	.	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.015	0.015	0.028	0.025	0.029	0.027	0.026	0.025
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	0.001	0.001	0.002	0.002	0.003	0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0071	0.0075	0.015	0.0046	0.013	0.01	0.0071	<0.002
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	207	.	166	.	162	.	162	.
Alkalinity-CO3	<1	.	<1	.	<1	.	<1	.
Calcium	41	41	37	34	35	34	41	40
Chloride	2	.	<1	.	<1	.	<1	.
Fluoride	<0.1	.	0.1	.	<0.1	.	<0.1	.
Magnesium	26	26	22	20	21	19	23	22
Manganese	0.0026	<0.001	0.0065	<0.001	0.003	0.0012	0.0015	<0.001
Nitrate-N	0.35	.	<0.2	.	<0.2	.	<0.2	.
Potassium	<0.6	0.65	0.79	0.72	0.64	0.83	0.79	<0.6
Sodium	1.4	1.4	0.69	0.81	4.2	2.7	1.3	1.3
Sulfate	1	.	6	.	12	.	6	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-298		GW-299					
	LIII		LIII					
	10/28/91		02/21/91		05/30/91		08/22/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	0.026	<0.02	<0.02	0.025	0.069	<0.02	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.012	0.013	0.0085	0.0081	0.01	0.014	0.0093	0.0089
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.011	0.021	0.016	0.011	0.061	0.034	<0.004	0.0053
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	0.0083	0.0078	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Iron	0.023	0.0058	<0.005	<0.005	0.044	0.025	0.012	0.0059
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00025	0.00029
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	1.7	3.3	3.6	3.7	.	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.024	0.023	0.014	0.014	0.017	0.019	0.015	0.015
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.001	0.001	<0.001	<0.001	0.001	0.001	0.002	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0066	0.011	0.0038	0.0043	0.0091	0.015	<0.002	<0.002
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	165	.	139	.	132	.	132	.
Alkalinity-CO ₃	<1	.	<1	.	<1	.	<1	.
Calcium	36	33	28	27	28	29	33	32
Chloride	<1	.	1	.	1	.	1	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	20	19	17	16	16	16	19	19
Manganese	<0.001	<0.001	<0.001	<0.001	<0.001	0.0054	<0.001	<0.001
Nitrate-N	<0.2	.	<0.2	.	<0.2	.	<0.2	.
Potassium	0.67	<0.6	0.72	0.71	0.71	0.85	0.65	0.79
Sodium	0.7	0.89	0.78	0.72	1.1	1.2	0.83	0.91
Sulfate	5	.	3	.	4	.	4	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-299		GW-300					
	LIII		LIII					
	10/27/91		02/13/91		05/30/91		08/22/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	0.034	0.04	<0.02	0.061	0.19	<0.02	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.0087	0.0089	0.02	0.02	0.023	0.023	0.022	0.022
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.012	0.024	0.016	0.012	0.043	1.5	0.0058	0.019
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	0.011	<0.01	<0.01	0.013	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	0.01	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Iron	0.12	0.014	0.083	0.012	0.058	0.075	<0.005	0.0094
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00021
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	3.2	3.3	3.4	4.3	.	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.015	0.013	0.02	0.021	0.022	0.022	0.021	0.021
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0067	0.009	0.0037	<0.002	0.01	0.012	0.014	0.037
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	139	.	145	.	141	.	144	.
Alkalinity-CO ₃	<1	.	<1	.	<1	.	<1	.
Calcium	31	29	28	28	31	31	33	34
Chloride	<1	.	1	.	<1	.	<1	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	18	16	17	18	18	18	19	20
Manganese	0.0033	<0.001	0.0021	<0.001	<0.001	<0.001	<0.001	<0.001
Nitrate-N	<0.2	.	<0.2	.	<0.2	.	<0.2	.
Potassium	0.83	1.3	0.61	<0.6	0.61	<0.6	0.98	<0.6
Sodium	1.3	0.92	0.5	0.52	0.62	2.4	0.45	0.48
Sulfate	4	.	4	.	4	.	3	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-300		GW-301					
	LIII		LIII					
	10/27/91		02/14/91		05/30/91		08/22/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	<0.02	2.8	0.034	0.67	0.19	2	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.022	0.022	0.028	0.015	0.024	0.022	0.032	0.037
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.0042	0.02	0.0097	0.011	1.3	1.3	0.02	0.0088
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.15	0.014
Chromium	<0.01	<0.01	0.016	<0.01	0.018	0.021	0.19	0.015
Cobalt	<0.005	<0.005	0.0071	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	0.0058	0.0093	<0.004	<0.004	0.0041	0.091	<0.004
Iron	0.019	<0.005	4.6	0.011	0.65	0.063	6.6	<0.005
Lead (AAS)	<0.004	<0.004	0.0087	<0.004	<0.004	<0.004	0.038	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	0.017	<0.01	<0.01	<0.01	0.085	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	7.2	3.4	5.2	4.7	.	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.02	0.02	0.029	0.021	0.025	0.025	0.029	0.022
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001
Vanadium	<0.005	<0.005	0.0087	<0.005	<0.005	<0.005	0.0089	<0.005
Zinc	0.0075	0.004	0.029	0.0043	0.023	0.0091	0.053	0.0039
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	160	.	150	.	135	.	142	.
Alkalinity-CO ₃	<1	.	<1	.	<1	.	<1	.
Calcium	36	32	40	27	28	27	39	33
Chloride	<1	.	<1	.	<1	.	<1	.
Fluoride	<0.1	.	0.1	.	<0.1	.	<0.1	.
Magnesium	20	19	28	18	19	18	23	20
Manganese	<0.001	<0.001	0.14	0.0035	0.017	<0.001	0.13	<0.001
Nitrate-N	<0.2	.	0.4	.	0.4	.	0.33	.
Potassium	0.86	0.64	1.3	0.79	0.78	0.75	1	<0.6
Sodium	0.53	0.69	0.8	1.2	3.6	3.7	0.67	1.1
Sulfate	3	.	3	.	4	.	3	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-301		GW-302					
	LIII		UNCS					
	10/27/91		01/14/91		04/13/91		07/30/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.094	<0.02	0.041	0.028	<0.02	0.031	0.028	0.025
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.016	0.014	0.02	0.019	0.02	0.019	0.019	0.019
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.017	0.0078	0.018	0.014	0.0077	0.0057	0.024	0.014
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	0.028	<0.01	0.044	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	0.0049	<0.004	<0.004	<0.004	<0.004	<0.004
Iron	0.11	0.024	0.061	0.013	0.18	0.008	0.09	0.0065
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	0.011	0.015	0.049	0.036
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	4.3	4.3	3	4.2	4.4	4.2
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.019	0.017	0.018	0.018	0.018	0.018	0.02	0.018
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0055	0.026	0.0027	<0.001	0.0097	0.01	<0.002	<0.002
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	150	.	231	.	235	.	.	.
Alkalinity-CO3	<1	.	<1	.	<1	.	.	.
Calcium	32	31	44	44	43	40	49	48
Chloride	<1	.	23	.	16	.	.	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	.	.
Magnesium	19	18	29	29	28	29	32	28
Manganese	0.0036	<0.001	0.0034	0.0015	<0.001	<0.001	0.0078	0.002
Nitrate-N	0.32	.	1	.	1	.	.	.
Potassium	<0.6	1	0.94	0.94	0.86	0.65	0.91	1.1
Sodium	0.7	0.62	8.3	8.7	7.2	7.9	6.7	6.8
Sulfate	3	.	3	.	3	.	.	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-302			GW-303				
	UNCS			CRSDB				
	08/13/91	10/06/91		03/01/91		06/04/91		08/24/91
	TOT	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	.	0.9	<0.02	0.058	<0.02	0.035	<0.02	<0.02
Antimony	.	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	.	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	.	0.023	0.027	0.02	0.019	0.018	0.018	0.017
Beryllium	.	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	.	0.081	0.044	0.034	0.018	0.023	0.021	0.017
Cadmium (AAS)	.	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	.	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	.	0.032	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	.	0.033	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	.	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	.	0.0056	<0.004	<0.004	<0.004	0.007	0.011	<0.004
Iron	.	2.2	<0.005	0.28	0.21	0.58	0.45	0.3
Lead (AAS)	.	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	.	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00029
Molybdenum	.	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	.	0.16	0.14	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	.	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	3.6	4	4.7	4.9	.
Silver	.	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	.	0.018	0.024	2.9	2.9	2.5	2.5	2.9
Thorium	.	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	.	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	.	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	.	0.016	<0.002	0.0045	0.0044	0.0057	0.0031	0.007
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	232	235	.	160	.	150	.	156
Alkalinity-CO3	<1	<1	.	<1	.	<1	.	<1
Calcium	.	57	56	64	65	37	37	67
Chloride	16	15	.	4	.	4	.	<10
Fluoride	<0.1	<0.1	.	0.7	.	0.72	.	0.8
Magnesium	.	31	31	40	41	39	39	42
Manganese	.	0.076	0.015	0.0075	0.0082	0.0088	0.0089	0.0019
Nitrate-N	1	1.05	.	<0.2	.	<2	.	<2
Potassium	.	1.1	1.2	7.5	7.6	6.8	7.3	6.6
Sodium	.	6.5	7.1	2.2	2.2	1.7	1.8	1.7
Sulfate	3	3	.	178	.	18	.	186

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-303			GW-304				
	CRSDB			CRSDB				
	08/24/91	11/02/91		02/28/91		06/01/91		08/23/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	0.032	<0.02	0.12	0.05	0.47	0.059	0.15
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.017	0.016	0.016	0.016	0.014	0.015	0.014	0.013
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.019	0.062	0.025	0.019	0.02	0.018	0.026	0.14
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.016	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	0.0099	0.0068	<0.004	<0.004	0.011
Iron	0.25	0.24	0.17	0.2	<0.005	0.41	0.025	0.24
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	0.00025	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	<0.0002
Molybdenum	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.014
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.013	0.022
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	4.2	4.1	5.5	4.6	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	2.9	2.7	2.8	0.027	0.027	0.032	0.032	0.027
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	0.001	0.001	0.002	0.001	0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.01	0.012	0.0047	0.026	0.022	0.014	0.0083	0.014
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	162	.	171	.	171	.	170
Alkalinity-CO3	.	<1	.	<1	.	<1	.	<1
Calcium	68	70	73	35	34	38	37	37
Chloride	.	3	.	4	.	3	.	3
Fluoride	.	0.78	.	<0.1	.	<0.1	.	<0.1
Magnesium	42	39	41	24	24	24	24	26
Manganese	0.0019	<0.001	0.001	0.013	0.001	0.026	<0.001	0.015
Nitrate-N	.	<2	.	<0.2	.	<0.2	.	<0.2
Potassium	6.6	5.4	5.8	2	2	1.9	1.8	1.7
Sodium	1.7	1.5	1.6	7	6.6	6.4	5.7	5.2
Sulfate	.	201	.	35	.	32	.	30

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-304			GW-305				
	CRSDB			LIV				
	08/23/91	11/02/91		01/06/91		04/03/91		07/15/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.031	0.1	<0.02	0.057	0.026	<0.02	0.033	0.034
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.011	0.011	0.011	0.01	0.0091	0.0053	0.006	0.012
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.033	0.028	0.012	0.047	0.058	0.02	0.062	0.016
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	0.027	<0.004	<0.004	<0.004	<0.004	0.0096
Iron	0.0055	0.12	<0.005	0.072	<0.004	0.032	<0.005	0.039
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	0.016	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	0.015	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.18
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	3.2	2.6	2	3.5	4.4
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.028	0.018	0.017	0.014	0.016	0.011	0.014	0.022
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.002	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0054	0.0065	0.044	0.0081	0.0011	0.016	0.0038	0.012
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	.	175	.	130	.	129	.	121
Alkalinity-CO ₃	.	<1	.	<1	.	<1	.	<1
Calcium	35	39	38	25	23	24	23	26
Chloride	.	2.6	.	2	.	1.7	.	2
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	26	25	25	15	15	15	15	17
Manganese	<0.001	0.0097	<0.001	0.003	<0.001	<0.001	<0.001	0.025
Nitrate-N	.	<0.2	.	<0.2	.	<0.2	.	<0.2
Potassium	1.8	1.6	1.4	0.82	0.86	<0.6	0.68	0.78
Sodium	5.8	5.1	5.6	3.8	6.4	0.91	2.4	1.6
Sulfate	.	30.5	.	<1	.	<1	.	<1

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-305			GW-321				
	LIV			ADB				
	07/15/91	10/01/91		03/22/91		06/18/91		09/07/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
	.	.	.	.	.	.	.	.
Aluminum	<0.02	0.021	<0.02	0.031	<0.02	0.031	<0.02	0.23
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.014	0.012	0.025	0.054	0.049	0.051	0.05	0.047
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.086	0.0094	0.019	0.052	0.0097	0.035	0.031	0.025
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	0.018	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	0.014	<0.01	0.041	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	0.031	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	0.0047	<0.004	0.0089	<0.004	<0.004	0.0069	<0.004
Iron	<0.005	0.97	0.96	0.058	0.014	0.015	<0.005	0.3
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	0.12	0.29	1.9	0.021	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	3.7	.	.	3.8	3.3	3.8	3.9	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.053	0.034	0.15	0.018	0.016	0.018	0.017	0.018
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	<0.002	0.017	0.038	0.016	0.013	0.018	0.01	0.092
	.	.	.	.	.	.	.	.
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	126	.	120	.	115	.	118
Alkalinity-CO3	.	<1	.	<1	.	2	.	<1
Calcium	25	27	38	25	23	25	25	26
Chloride	.	3	.	<1	.	<1	.	<1
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	15	15	15	14	14	14	14	15
Manganese	0.046	0.11	0.7	0.0035	0.0016	0.0095	0.0061	0.0056
Nitrate-N	.	<0.2	.	0.3	.	0.2	.	0.2
Potassium	0.88	0.82	2.5	0.62	<0.6	<0.6	<0.6	<0.6
Sodium	1.7	2.2	1	0.64	0.47	0.61	0.6	0.51
Sulfate	.	1	.	2	.	2	.	2

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-321			GW-322				
	ADB			CRSP				
	09/07/91	11/17/91		02/04/91		05/04/91		08/13/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	0.031	<0.02	0.16	0.02	0.079	0.023	0.82
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.048	0.055	0.061	0.0092	0.0069	0.013	0.0081	0.01
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.032	0.022	0.012	0.022	0.025	0.31	0.045	0.018
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Iron	0.0071	0.055	<0.005	0.075	<0.005	0.11	0.0062	1.6
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.0043
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	3.7	3.6	3.6	3.5	4.6
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.018	0.018	0.021	0.012	0.011	0.013	0.011	0.014
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.013	0.034	0.026	0.0032	<0.002	0.019	0.015	0.028
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	117	.	164	.	164	.	163
Alkalinity-CO3	.	<1	.	<1	.	<1	.	<1
Calcium	25	27	29	33	31	32	31	44
Chloride	.	<1	.	2	.	2	.	2
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	14	15	15	20	20	24	21	25
Manganese	0.0014	0.013	0.028	0.0063	0.0018	0.014	<0.001	0.032
Nitrate-N	.	<0.2	.	0.5	.	<0.2	.	<0.2
Potassium	<0.6	0.74	1	<0.6	<0.6	<0.6	<0.6	<0.6
Sodium	0.65	0.6	0.66	0.6	0.65	0.99	0.89	0.54
Sulfate	.	2	.	<1	.	1	.	<1

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-322			GW-339				
	CRSP			UNCS				
	08/13/91	10/21/91		01/13/91		04/13/91		07/30/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	3.5	<0.02	0.052	<0.02	<0.02	0.034	<0.03
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.0084	0.02	0.0089	0.023	0.021	0.02	0.02	0.02
Beryllium	<0.0003	0.00092	<0.0003	<0.0003	<0.0003	<0.0003	0.00035	<0.0003
Boron	0.017	0.017	0.02	0.0091	0.045	0.032	0.0073	0.0061
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.021
Chromium	<0.01	<0.01	<0.01	0.013	<0.01	0.023	<0.01	0.021
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	0.011	<0.004	<0.004	<0.004	<0.004	0.0045	0.0064
Iron	<0.005	5.8	<0.005	0.075	0.0069	0.063	0.0086	0.64
Lead (AAS)	<0.004	0.024	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	0.024	0.023	0.028	0.02	0.043
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	3.7	.	.	5.3	5	3.1	4.5	4.2
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.011	0.017	0.012	0.028	0.027	0.023	0.024	0.026
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
Vanadium	<0.005	0.016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0041	0.099	0.0052	0.0019	<0.001	0.0049	0.012	<0.002
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	164	.	250	.	252	.	.
Alkalinity-CO3	.	<1	.	<1	.	<1	.	.
Calcium	34	50	32	52	55	45	41	54
Chloride	.	2	.	20	.	17	.	.
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	.
Magnesium	20	33	19	31	33	29	30	31
Manganese	<0.001	0.11	<0.001	0.0063	0.0062	0.0041	0.0041	0.016
Nitrate-N	.	<0.2	.	0.9	.	0.9	.	.
Potassium	<0.6	1.5	<0.6	1.1	1.2	1.1	0.98	0.95
Sodium	0.57	0.6	0.59	7.5	8	8.2	9.2	8.1
Sulfate	.	1	.	5	.	4	.	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-339				GW-511			
	UNCS				CRSP			
	07/30/91	08/13/91	10/06/91		01/29/91		04/30/91	
	DIS	TOT	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	.	0.052	<0.02	0.041	0.044	0.052	<0.02
Antimony	<0.05	.	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	.	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.018	.	0.021	0.021	0.008	0.0082	0.0076	0.0078
Beryllium	<0.0003	.	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.011	.	0.012	0.013	0.012	0.02	<0.004	0.0094
Cadmium (AAS)	<0.002	.	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	.	<0.003	<0.003	0.0045	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	.	0.011	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	.	<0.01	0.022	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	.	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	.	<0.004	0.0043	<0.004	<0.004	0.0044	0.0094
Iron	<0.005	.	0.29	0.19	0.021	0.0043	0.031	<0.005
Lead (AAS)	<0.004	.	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	.	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	.	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	.	0.015	0.018	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	.	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	4.2	.	.	.	4.6	5.1	4	4
Silver	<0.006	.	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.023	.	0.023	0.022	0.044	0.045	0.042	0.042
Thorium	<0.2	.	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	.	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
Vanadium	<0.005	.	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	<0.002	.	0.0072	0.075	0.0036	0.0028	0.0031	0.0025
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	.	249	243	.	145	.	141	.
Alkalinity-CO ₃	.	<1	<1	.	4	.	<1	.
Calcium	52	.	60	60	26	26	27	27
Chloride	.	9	14	.	3	.	3	.
Fluoride	.	<0.1	<0.1	.	<0.1	.	<0.1	.
Magnesium	31	.	31	31	16	16	16	16
Manganese	<0.001	.	0.0086	0.0064	<0.001	<0.001	<0.001	<0.001
Nitrate-N	.	0.86	0.74	.	<0.2	.	<0.2	.
Potassium	0.89	.	0.96	1.1	4.8	5	5.8	5.2
Sodium	8.8	.	7	7.4	1.6	2	1.6	1.5
Sulfate	.	4	4	.	2	.	2	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-511				GW-512			
	CRSP				ADB			
	08/05/91		10/08/91		03/19/91		06/16/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.061	0.024	<0.02	0.02	0.05	0.067	0.25	0.043
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.0084	0.0075	0.0082	0.0085	0.031	0.027	0.026	0.024
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	0.00034	0.00032	<0.0003	<0.0003
Boron	<0.004	<0.004	0.031	0.023	0.037	0.028	0.023	0.02
Cadmium (AAS)	<0.002	<0.023	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	0.023	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	0.007	<0.004	<0.004	<0.004	<0.004	0.0062	0.0053
Iron	0.032	<0.005	0.016	<0.005	0.11	<0.005	0.23	0.032
Lead (AAS)	<0.004	<0.0045	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.039
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	3.8	3.5	.	.	6	5.9	6.1	5.6
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.045	0.045	0.05	0.051	0.023	0.022	0.024	0.022
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	0.0064	<0.005	<0.005	<0.005
Zinc	<0.002	0.026	0.004	0.0051	0.017	0.006	0.017	0.0094
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	123	.	122	.	173	.	171	.
Alkalinity-CO3	4	.	4	.	<1	.	<1	.
Calcium	25	25	25	25	33	33	32	32
Chloride	3	.	3	.	<1	.	<1	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	0.2	.
Magnesium	15	15	15	15	20	20	19	18
Manganese	<0.001	<0.001	<0.001	<0.001	0.0036	<0.001	0.0045	<0.001
Nitrate-N	<0.2	.	<0.2	.	<0.2	.	<0.2	.
Potassium	5.8	5.1	5.8	8	3.8	4.4	3.3	3.4
Sodium	1.5	1.4	1.7	2.3	0.92	0.91	0.83	0.96
Sulfate	1.8	.	2	.	3	.	2	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-512				GW-513			
	ADB				ADB			
	09/06/91		11/16/91		03/19/91		06/16/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.22	<0.02	0.04	0.55	<0.02	0.026	0.087	0.037
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.024	0.025	0.024	0.033	0.0061	0.0068	0.0081	0.0072
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	0.00033	<0.0003	<0.0003	<0.0003
Boron	<0.004	<0.004	0.016	0.016	0.0083	0.016	0.026	0.018
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	0.012	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	0.0079	<0.004	<0.004	0.0041	<0.004
Iron	0.15	<0.005	0.023	1.6	0.039	<0.005	0.085	0.013
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.018	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	.	4.1	4.2	4.1	4.2
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.021	0.026	0.022	0.026	0.021	0.021	0.02	0.02
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.016	0.011	0.016	0.023	<0.002	<0.002	0.01	0.0061
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	160	.	157	.	174	.	171	.
Alkalinity-CO3	<1	.	<1	.	2	.	<1	.
Calcium	35	38	36	38	33	34	32	32
Chloride	<1	.	<1	.	1	.	1	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	20	21	22	23	20	21	18	18
Manganese	0.0048	0.0033	0.0012	0.024	<0.001	<0.001	<0.001	<0.001
Nitrate-N	<0.2	.	<0.2	.	<0.2	.	<0.2	.
Potassium	3.9	4.1	2.9	3.6	1.4	1.3	1.5	1.6
Sodium	1.1	1.1	1	1.2	0.59	0.59	1	0.92
Sulfate	3	.	3.9	.	2	.	2	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-513				GW-514			
	ADB				ADB			
	09/06/91		11/16/91		03/20/91		06/17/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
MTALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	<0.02	<0.02	<0.02	0.031	<0.02	0.025	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	0.053	<0.05	<0.05
Barium	0.0068	0.007	0.0071	0.0072	0.009	0.0088	0.0067	0.0071
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.068	<0.004	0.016	0.0063	<0.004	0.0067	0.0061	0.025
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	0.0035	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	0.06	0.027	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	0.012	0.0057	<0.004	<0.004
Iron	0.021	<0.005	0.033	<0.005	0.59	0.022	0.27	<0.005
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	0.021	0.013	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	.	2.9	2.7	8	3.6
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.021	0.021	0.02	0.02	0.023	0.023	0.023	0.023
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0082	<0.002	0.0065	0.0042	0.0099	0.008	<0.002	<0.002
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	170	.	165	.	169	.	172	.
Alkalinity-CO3	<1	.	<1	.	6	.	<1	.
Calcium	39	41	36	34	31	31	33	33
Chloride	<1	.	<1	.	1	.	1	.
Fluoride	0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	21	22	21	20	20	20	20	20
Manganese	<0.001	<0.001	0.0018	<0.001	0.0085	0.0077	0.0033	0.0032
Nitrate-N	<0.2	.	<0.2	.	<0.2	.	<0.2	.
Potassium	1.4	1.6	1.3	1.1	1	1.1	0.71	1.2
Sodium	0.98	0.86	1.5	1.9	0.5	0.62	0.34	0.35
Sulfate	2	.	2	.	5	.	4	.

(CONTINUED)

APPENDIX B
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-514				GW-521			
	ADB				LIV			
	09/07/91		11/16/91		01/08/91		04/04/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	<0.02	<0.02	<0.02	0.23	0.053	<0.02	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.0073	0.0072	0.0078	0.0075	0.0088	0.0084	0.0075	0.0067
Beryllium	0.00033	0.00041	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.017	0.034	0.01	<0.004	0.012	0.013	<0.004	<0.004
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.014	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	0.0062	0.0042	0.012	0.007	<0.004	<0.004
Iron	0.3	0.0052	0.25	0.008	0.22	0.026	0.078	<0.005
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	.	4	3.8	3.5	3.5
Silver	<0.006	<0.006	<0.006	0.0075	<0.006	<0.006	<0.006	<0.006
Strontium	0.021	0.021	0.022	0.022	0.01	0.011	0.0099	0.0096
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0055	0.0052	0.022	<0.002	0.027	0.058	0.0038	<0.002
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	174	.	170	.	143	.	144	.
Alkalinity-CO3	<1	.	<1	.	<1	.	<1	.
Calcium	35	36	39	40	27	27	25	25
Chloride	<1	.	<1	.	1	.	1.04	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	22	22	23	23	16	17	17	17
Manganese	0.0051	0.0042	0.0046	0.003	0.0055	<0.001	<0.001	<0.001
Nitrate-N	<0.2	.	<0.2	.	<0.2	.	<0.23	.
Potassium	<0.6	0.73	0.94	0.83	0.71	<0.6	<0.6	<0.6
Sodium	0.48	0.52	0.52	0.43	0.7	0.57	0.4	0.43
Sulfate	4	.	4.2	.	<1	.	<1	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-521				GW-522			
	LIV				LIV			
	07/17/91		10/03/91		01/09/91		04/04/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.022	0.026	<0.02	<0.02	7.5	0.03	1	<0.02
Antimony	<0.05	<0.05	0.41	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.0077	0.0078	0.0075	0.007	0.023	0.0066	0.0098	0.0056
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	0.0067	<0.0003	0.0005	<0.0003
Boron	<0.004	<0.004	0.021	0.0098	0.11	0.043	0.032	0.031
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.029	0.012
Cobalt	<0.005	<0.005	<0.005	<0.005	0.0065	<0.005	<0.005	<0.005
Copper	0.015	<0.004	<0.004	<0.004	0.013	<0.004	<0.004	<0.004
Iron	<0.005	0.031	0.023	0.11	13	<0.004	1.5	<0.005
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	0.024	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	0.012	<0.01	<0.01	<0.01	0.032	<0.01	0.02	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	2.5	2.6	.	.	13	4.1	5.7	3.9
Silver	<0.006	<0.006	<0.006	<0.006	0.015	<0.006	<0.006	<0.006
Strontium	0.01	0.01	0.01	0.01	0.026	0.011	0.011	0.01
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	0.023	<0.005	<0.005	<0.005
Zinc	0.016	0.0024	0.0026	<0.002	0.33	0.0039	0.038	<0.002
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	137	.	144	.	136	.	138	.
Alkalinity-CO3	<1	.	<1	.	<1	.	<1	.
Calcium	27	27	28	28	88	26	28	28
Chloride	<1	.	<1	.	1	.	1.29	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	17	17	17	17	56	15	18	15
Manganese	<0.001	0.0017	<0.001	<0.001	0.32	<0.001	0.033	<0.001
Nitrate-N	<0.2	.	<0.2	.	0.3	.	0.33	.
Potassium	0.72	0.69	0.78	<0.6	1.9	0.76	0.82	<0.6
Sodium	0.3	0.25	0.76	0.57	0.73	0.6	0.45	0.45
Sulfate	2	.	<1	.	<1	.	<1	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-522				GW-539			
	LIV				LIIX			
	07/17/91		10/03/91		03/16/91		04/09/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.64	<0.02	0.19	<0.02	<0.02	<0.02	1.1	0.03
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.0086	0.0071	0.0064	0.006	0.014	0.012	0.013	0.011
Beryllium	0.0006	<0.0003	0.00042	<0.0003	<0.0003	<0.0003	0.00036	<0.0003
Boron	<0.004	<0.004	0.0097	0.036	<0.004	0.022	0	<0.004
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	0.0073	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.00025	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	0.013	0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	0.016	<0.01	0.015	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0067	<0.005
Copper	<0.004	0.0067	<0.004	<0.004	0.012	<0.004	0.01	<0.004
Iron	0.78	<0.005	0.31	0.25	0.17	<0.005	0.7	0.027
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	0.012	0.013	<0.01	<0.01	0.013	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	3.9	3	.	.	3.2	3.9	7.8	4.4
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.012	0.011	0.0097	0.0093	0.036	0.035	0.037	0.027
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.0038	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	0.002	0.004	<0.001	0.002
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.038	0.014	0.016	<0.002	0.0022	<0.002	<0.002	0.059
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	130	.	116	.	140	.	142	.
Alkalinity-CO ₃	2	.	<1	.	4	.	2	.
Calcium	29	26	24	23	29	29	29	29
Chloride	1	.	<1	.	10	.	15	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	17	16	14	14	19	18	20	20
Manganese	0.02	<0.001	0.0073	<0.001	0.011	0.0024	0.0066	<0.001
Nitrate-N	0.37	.	0.3	.	0.3	.	0.4	.
Potassium	1	0.76	0.63	<0.6	2.3	2.4	3.7	2.7
Sodium	0.24	0.26	0.58	0.78	3.8	3.9	19	14
Sulfate	<1	.	<1	.	10	.	18	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-539				GW-540			
	LIIX				LIIX			
	09/12/91		11/24/91		03/16/91		04/09/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.18	<0.02	0.11	<0.02	<0.02	<0.02	1.1	0.041
Antimony	<0.05	<0.05	0.34	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	0.34	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.016	0.018	0.013	0.012	0.0087	0.0088	0.013	0.01
Beryllium	<0.0003	<0.0003	0.00049	<0.0003	<0.0003	<0.0003	0.00036	<0.0003
Boron	0.027	0.025	0.0082	0.0081	<0.004	<0.004	0.0053	<0.004
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	0.0039	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	0.012	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	0.011	<0.01	0.047	<0.01	0.014	<0.01	0.015	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0067	<0.005
Copper	0.0065	<0.004	0.0074	0.0049	0.0073	<0.004	0.01	<0.004
Iron	0.48	<0.005	0.45	<0.005	0.0094	<0.005	0.7	<0.005
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	0.13	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	0.032	<0.01	0.02	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	0.16	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	.	2.7	3.1	7.8	2.9
Silver	<0.006	<0.006	0.1	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.03	0.03	0.029	0.027	0.025	0.025	0.038	0.024
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.002	0.001	<0.001	0.006	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	0.033	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.022	0.004	0.023	0.0079	0.0044	<0.002	0.02	0.0049
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	140	.	137	.	145	.	168	.
Alkalinity-CO ₃	<1	.	<1	.	6	.	<1	.
Calcium	34	34	38	31	33	33	29	32
Chloride	15	.	15.9	.	2	.	2	.
Fluoride	<0.1	.	0.1	.	<0.1	.	<0.1	.
Magnesium	20	20	22	19	20	20	20	19
Manganese	0.0068	<0.001	0.0067	<0.001	0.0016	0.0016	0.0066	0.0019
Nitrate-N	0.59	.	0.3	.	<0.2	.	<0.2	.
Potassium	1.2	1.4	1.5	1.5	1	0.94	3.7	0.68
Sodium	4.8	4.3	3.3	3.8	1.2	1.1	19	0.93
Sulfate	2	.	9.7	.	5	.	4	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-540				GW-541			
	LIIX				LIIX			
	09/12/91		11/24/91		03/17/91		04/10/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.027	<0.02	<0.02	0.022	0.71	0.028	0.055	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.0091	0.01	0.0089	0.0093	0.015	0.0071	0.0076	0.0079
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.018	0.035	0.0089	0.015	<0.004	<0.004	0.023	0.026
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	0.0056	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	0.04	0.023	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	0.0041	0.015	0.026	0.039	<0.004
Iron	0.042	0.023	0.0099	<0.005	0.99	0.067	0.026	<0.005
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	0.005	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	0.015	0.014	0.015	0.015
Nickel	<0.01	<0.01	<0.01	<0.01	0.018	0.014	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	.	5.6	4.5	3.9	3.8
Silver	<0.006	<0.006	0.19	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.023	0.023	0.023	0.023	0.052	0.021	0.021	0.022
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.001	<0.001	<0.001	<0.001	0.004	0.002	0.003	0.003
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.015	0.023	0.011	0.021	0.045	0.047	0.026	0.0044
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	170	.	172	.	101	.	154	.
Alkalinity-CO3	<1	.	<1	.	2	.	<1	.
Calcium	36	36	39	37	50	19	32	29
Chloride	1	.	1.3	.	<1	.	<1	.
Fluoride	<0.1	.	0.1	.	<0.1	.	<0.1	.
Magnesium	20	20	22	22	17	15	19	19
Manganese	<0.001	<0.001	<0.001	<0.001	0.034	0.0037	0.0084	<0.001
Nitrate-N	<0.2	.	<0.2	.	<0.2	.	<0.2	.
Potassium	1.1	0.7	0.86	0.98	1.5	1.9	1.3	1.1
Sodium	1.8	1.9	1.5	1.8	0.6	1.6	0.71	0.76
Sulfate	4	.	4.2	.	17	.	14.2	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-541				GW-542			
	LIIX				LIIX			
	09/13/91		11/25/91		03/17/91		04/10/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.15	0.022	0.15	0.025	0.085	<0.02	0.1	0.037
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.013	0.0099	0.0098	0.01	0.024	0.026	0.021	0.021
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.025	0.032	0.015	0.0074	0.038	<0.004	0.03	0.016
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	0.0049	<0.004	<0.004	<0.004	<0.004
Iron	0.23	<0.005	0.16	0.0065	0.015	<0.005	0.064	<0.005
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	0.00023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	0.038	0.034	0.032	0.044	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	0.018	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	.	3.8	3.8	3.6	3.8
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.025	0.021	0.024	0.022	0.032	0.039	0.033	0.04
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.002	0.002	0.002	0.004	0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.038	0.0066	0.021	0.0052	0.018	0.011	0.017	0.004
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	155	.	154	.	134	.	150	.
Alkalinity-CO3	<1	.	<1	.	<1	.	<1	.
Calcium	43	36	42	36	30	28	33	28
Chloride	<1	.	<1	.	1	.	1.2	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	20	19	21	19	15	13	17	11
Manganese	0.0086	<0.001	0.0061	<0.001	0.003	0.0066	0.0031	0.0016
Nitrate-N	<0.2	.	<0.2	.	0.3	.	0.34	.
Potassium	0.72	1	0.88	1.1	1.8	2.2	2.1	3.1
Sodium	0.56	0.52	0.6	1.1	0.53	0.81	0.9	1.4
Sulfate	13	.	14	.	4	.	4.31	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-542				GW-543			
	LIIX				LIIX			
	09/14/91		11/25/91		03/17/91		04/11/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.18	0.027	0.55	0.027	0.035	0.033	.	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	.	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	0.056	.	<0.05
Barium	0.024	0.022	0.019	0.017	0.0092	0.0097	.	0.01
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	.	<0.0003
Boron	0.013	0.017	0.0081	0.0093	0.04	<0.004	.	<0.004
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	0.0065	.	<0.003
Chromium (AAS)	<0.01	<0.01	0.014	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	0.014	.	0.014
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	.	<0.005
Copper	0.0047	<0.004	<0.004	<0.004	0.0051	0.023	.	<0.004
Iron	0.057	0.018	0.37	<0.005	0.022	0.0061	.	<0.005
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	.	0.013
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	0.015	.	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	.	<0.05
Silicon	.	.	.	.	4	2.8	.	3.6
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	.	<0.006
Strontium	0.038	0.038	0.034	0.032	0.021	0.022	.	0.023
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	.	<0.2
Uranium (Fluor)	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	.	<0.005
Zinc	0.028	0.01	0.057	0.024	0.012	0.028	.	0.0028
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	154	.	154	.	212	.	210	.
Alkalinity-CO ₃	<1	.	<1	.	<1	.	<1	.
Calcium	31	31	41	27	39	38	.	38
Chloride	<1	.	1	.	1	.	1	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	8.4	8.1	18	8.6	24	24	.	25
Manganese	0.0059	0.0042	0.015	0.0049	<0.001	<0.001	.	<0.001
Nitrate-N	<0.2	.	0.34	.	<0.2	.	<0.2	.
Potassium	2.6	2.6	1.7	2	1.8	2.4	.	2.3
Sodium	1.1	1.1	0.73	1.1	1	1.2	.	0.45
Sulfate	3	.	3	.	3	.	2	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-543				GW-544			
	LIIX				LIIX			
	09/14/91		11/25/91		03/17/91		04/11/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.023	<0.02	0.036	<0.02	0.078	<0.02	0.032	0.057
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.012	0.01	0.0082	0.0086	0.013	0.013	0.009	0.0073
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.014	0.022	0.0087	0.039	<0.004	0.006	0.043	0.029
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.033	0.016
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	0.0041	<0.004	0.0049	0.012	0.0047	0.0066	<0.004
Iron	0.043	0.0098	0.036	0.039	0.33	<0.005	0.048	<0.005
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	0.012	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	.	3.7	3.7	3.4	3.7
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.023	0.022	0.021	0.021	0.024	0.024	0.02	0.02
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	0.001	0.002	<0.001	0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0062	<0.005
Zinc	0.017	0.0054	0.011	0.013	0.079	0.012	0.03	0.019
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	208	.	214	.	212	.	209	.
Alkalinity-CO3	<1	.	<1	.	<1	.	<1	.
Calcium	44	45	44	44	44	42	36	38
Chloride	<1	.	1	.	19	.	15	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	25	25	27	26	28	27	25	26
Manganese	<0.001	<0.001	<0.001	<0.001	0.022	0.0014	0.0024	<0.001
Nitrate-N	<0.2	.	<0.2	.	0.5	.	0.5	.
Potassium	2.3	2	1	1.3	1.2	1.4	1.1	1.4
Sodium	1.2	1.1	0.82	1.1	7.5	7.8	6.2	6.8
Sulfate	3	.	3	.	10	.	8	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-544				GW-545			
	LIIX				LIIX			
	09/14/91		11/26/91		03/17/91		04/11/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.042	0.021	0.17	<0.02	2	1.4	0.4	0.23
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.011	0.0095	0.011	0.0094	0.035	0.029	0.012	0.025
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.018	0.026	0.014	0.0064	<0.004	<0.004	0.026	0.035
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	0.0048	<0.003	0.0035
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	0.016	0.018	0.021	0.011
Chromium	<0.01	<0.01	0.015	<0.01	0.01	0.036	0.052	0.048
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	0.0078	0.0069	0.014	<0.004	0.0079	<0.004	0.0073
Iron	0.13	0.018	0.69	0.014	0.083	0.025	0.042	0.013
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	0.012	<0.01	<0.01
Nickel	<0.01	<0.01	0.027	0.026	<0.01	0.017	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	.	4.8	3.6	3.9	3.5
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.02	0.018	0.02	0.019	0.13	0.14	0.071	0.074
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	0.001	0.002	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	0.015	0.016	0.008	<0.005
Zinc	0.027	0.01	0.068	0.017	0.0071	0.002	0.0044	0.016
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	202	.	203	.	34	.	<1	.
Alkalinity-CO ₃	<1	.	<1	.	30	.	20	.
Calcium	47	44	47	43	84	73	30	29
Chloride	12	.	14	.	2	.	2	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	26	26	27	26	7.2	0.25	2	0.56
Manganese	0.0068	<0.001	0.016	0.0019	0.0025	0.0012	<0.001	<0.001
Nitrate-N	0.4	.	0.45	.	0.8	.	0.8	.
Potassium	1.2	1.8	1.1	1.9	18	18	14	14
Sodium	6.1	5.9	6	7.7	5.1	4.6	4	3.8
Sulfate	9	.	8	.	14	.	9	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-545				GW-546			
	LIIX				LIIX			
	09/15/91		11/26/91		03/17/91		04/11/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	4.3	1	1.7	1.5	<0.02	0.028	<0.02	0.045
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.039	0.015	0.02	0.024	0.0057	0.0052	0.026	0.013
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.017	0.014	0.017	0.013	0.0097	0.035	0.036	0.052
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	0.014	0.013	0.019	0.019	<0.01	<0.01	<0.01	<0.01
Chromium	0.03	0.024	0.025	0.023	<0.01	<0.01	0.049	0.057
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	0.015	0.014	0.0061	0.0065	0.0072	0.0041	0.0098	0.0088
Iron	1.5	0.034	0.11	0.0059	0.052	0.015	0.035	0.012
Lead (AAS)	0.0071	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	0.023	0.021	0.039	0.04	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	.	4.3	4.7	4	4.2
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.14	0.11	0.098	0.097	0.018	0.017	0.039	0.024
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	0.021	0.013	0.024	0.025	<0.005	<0.005	0.0051	0.0062
Zinc	0.02	0.019	0.013	0.0078	0.0095	0.0087	0.011	0.014
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	<1	.	<1	.	139	.	132	.
Alkalinity-CO3	30	.	36	.	<1	.	<1	.
Calcium	110	66	62	59	28	27	25	23
Chloride	2	.	2	.	2	.	2	.
Fluoride	0.1	.	0.1	.	<0.1	.	<0.1	.
Magnesium	11	0.083	0.86	0.02	16	15	16	15
Manganese	0.038	<0.001	0.003	<0.001	0.003	<0.001	<0.001	<0.001
Nitrate-N	0.64	.	0.63	.	<0.2	.	<0.2	.
Potassium	21	21	18	19	1.8	1.8	1.4	1.8
Sodium	5.2	5.5	5.4	7	1.9	2.1	2.4	2.6
Sulfate	13	.	18	.	7	.	6	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-546				GW-607			
	LIIX				CRSP			
	09/15/91		11/26/91		01/28/91		04/29/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	5.6	0.042	1.8	<0.02	0.081	0.03	0.083	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.025	0.0097	0.013	0.0086	0.0097	0.0092	0.006	0.0091
Beryllium	0.00067	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.012	0.037	0.0086	0.022	0.01	0.012	<0.004	0.021
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	0.012	<0.01	0.012	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	0.018	0.017	0.01	<0.01	0.034	<0.01	0.079	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	0.016	0.0067	0.012	0.0077	<0.004	<0.004	<0.004	<0.004
Iron	6.6	0.055	1.7	0.0061	0.07	0.018	0.057	<0.005
Lead (AAS)	0.016	<0.004	0.0056	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	0.011	<0.01	0.011	<0.01	0.026	<0.01	0.015	0.011
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	.	1.8	3.8	3.4	3.9
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.035	0.016	0.021	0.018	0.031	0.031	0.024	0.029
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	0.018	<0.005	<0.005	<0.005	<0.005	<0.005	0.0051	<0.005
Zinc	0.09	0.015	0.025	0.0087	0.0045	0.0026	0.0085	0.0021
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	130	.	139	.	130	.	121	.
Alkalinity-CO3	<1	.	<1	.	<1	.	<1	.
Calcium	74	29	34	29	26	26	23	25
Chloride	<0.2	.	2	.	1	.	1	.
Fluoride	<0.1	.	0.1	.	<0.1	.	<0.1	.
Magnesium	41	16	20	16	14	14	13	13
Manganese	0.54	<0.001	0.075	<0.001	0.0024	<0.001	0.0027	<0.001
Nitrate-N	<0.2	.	<0.2	.	<0.2	.	<0.2	.
Potassium	4	2.1	2.9	3.7	2.7	2.8	2.8	3.3
Sodium	2.6	2.4	2.8	4.6	1	0.9	0.89	0.79
Sulfate	6	.	5	.	2	.	2	.

(CONTINUED)

APPENDIX B
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-607				GW-608			
	CRAP				CRAP			
	08/06/91		10/08/91		01/28/91		04/29/91	
	TOT	DIB	TOT	DIB	TOT	DIB	TOT	DIB
MEALS (mg/L)								
Aluminum	0.095	0.03	0.047	0.02	0.02	0.027	0.02	0.022
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.011	0.011	0.01	0.01	0.012	0.01	0.0093	0.0078
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.00031	<0.0003
Boron	<0.004	<0.004	0.013	0.023	0.069	0.03	0.032	0.048
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.071	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.0061
Iron	0.039	<0.005	0.015	<0.005	0.63	0.043	1.7	0.062
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.012
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	3.6	3.6	.	.	2.9	3.1	1	1.1
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.042	0.041	0.039	0.039	0.018	0.018	0.013	0.015
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	<0.002	<0.002	0.0028	<0.002	0.0058	0.0049	0.0088	0.024
MAJOR IONS (mg/L)								
Alkalinity-HCO3	.	.	.	.	.	.	.	.
Alkalinity-CO3	129	.	127	.	147	.	122	.
Calcium	8	.	8	.	<1	.	<1	.
Chloride	28	27	29	29	29	29	16	17
Fluoride	<1	.	<1	.	2	.	2	.
Magnesium	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Manganese	15	15	15	15	18	17	17	18
Nitrate-N	0.0099	<0.001	<0.001	<0.001	0.047	0.042	0.26	0.25
Potassium	<0.2	.	<0.2	.	0.4	.	<0.2	.
Sodium	5.1	5.1	6.6	5.4	1.6	1.5	2.7	3.1
Sulfate	1.6	1.2	1.3	1.1	0.93	0.84	0.82	0.99
	2	.	1	.	2	.	2	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-608				GW-609			
	CRSP				CRSP			
	08/07/91		10/12/91		01/15/91		04/22/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	<0.02	0.023	<0.02	0.033	0.028	0.043	0.038
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.012	0.012	0.013	0.013	0.011	0.011	0.0092	0.0076
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	<0.004	<0.004	0.035	0.022	0.013	0.013	0.012	0.021
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	0.0035	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	0.0041	<0.004	<0.004	<0.004
Iron	0.11	<0.005	0.078	<0.005	0.021	0.0065	0.03	<0.005
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	3.6	3.2	.	.	4.1	4	3.8	3.8
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.013	0.013	0.012	0.012	0.014	0.013	0.013	0.013
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.007	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	<0.002	<0.002	0.0035	0.0059	0.011	0.0093	0.014	0.013
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	145	.	143	.	187	.	191	.
Alkalinity-CO ₃	<1	.	<1	.	<1	.	<1	.
Calcium	30	30	30	30	34	34	35	34
Chloride	1	.	1.3	.	2	.	2	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	18	18	18	18	21	21	21	21
Manganese	0.0016	<0.001	0.0024	0.0016	<0.001	<0.001	<0.001	<0.001
Nitrate-N	0.33	.	0.3	.	0.9	.	0.9	.
Potassium	0.86	0.85	1.6	2.2	1.3	1.1	0.9	0.85
Sodium	0.51	0.52	0.75	0.94	0.67	0.59	0.66	0.65
Sulfate	2	.	2.4	.	2	.	2	.

(CONTINUED)

APPENDIX B
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-609				GW-610			
	CRSP				CRSP			
	08/09/91		10/14/91		01/30/91		05/01/91	
	TOT	DIB	TOT	DIB	TOT	DIB	TOT	DIB
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	0.024	<0.02	<0.02	0.093	<0.02	0.032	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.011	0.011	0.011	0.011	0.079	0.074	0.11	0.11
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	<0.004	<0.004	0.03	<0.004	<0.004	<0.004	<0.004	<0.004
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	0.0022	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	0.0041	<0.004	<0.004	<0.004	<0.004
Iron	0.011	<0.005	0.0085	<0.005	0.19	<0.005	0.04	0.004
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.010	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	1.2	1.7	.	.	4	3.8	4.1	4.1
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.014	0.013	0.014	0.013	0.016	0.015	0.010	0.010
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.016	0.0079	0.011	0.01	0.0036	<0.002	<0.002	<0.002
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	177	.	184	.	188	.	199	.
Alkalinity-CO3	<1	.	<1	.	<1	.	<1	.
Calcium	37	38	39	39	35	34	40	39
Chloride	1.4	.	1	.	2	.	2	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	21	22	23	23	22	22	24	24
Manganese	<0.001	<0.001	0.0017	<0.001	0.011	0.0061	0.0026	0.0015
Nitrate-N	1	.	0.93	.	0.6	.	0.5	.
Potassium	1	1.1	1.1	1.5	<0.6	<0.6	<0.6	<0.6
Sodium	0.66	0.64	0.86	0.89	0.75	0.64	0.72	0.54
Sulfate	1.9	.	2	.	1	.	<1	.

(CONTINUED)

APPENDIX B
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-610				GW-611			
	CRSP				CRSP			
	08/06/91		10/10/91		01/31/91		05/01/91	
	TOT	D18	TOT	D18	TOT	D18	TOT	D18
METALS (mg/L)								
Aluminum	0.02	<0.02	0.027	<0.02	0.27	<0.02	0.11	0.022
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	0.001	<0.05	<0.05
Barium	0.002	0.001	0.006	0.07	0.026	0.024	0.02	0.022
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	<0.004	<0.004	0.033	0.017	<0.004	<0.004	0.04	<0.004
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	0.0045	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	0.014	0.014	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Iron	0.066	<0.005	0.012	<0.005	1.4	0.01	0.17	<0.005
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	0.0074	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	0.021	0.011	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	3.0	3.0	.	.	4.4	4.2	4.3	4.4
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.015	0.015	0.017	0.010	0.021	0.016	0.021	0.021
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Pluor)	0.001	0.001	<0.001	<0.001	0.001	0.001	<0.001	0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	<0.002	<0.002	0.0027	0.0056	0.013	<0.001	<0.002	<0.002
MAJOR IONS (mg/L)								
Alkalinity-HCO3	170	.	107	.	240	.	293	.
Alkalinity-CO3	<1	.	<1	.	<1	.	<1	.
Calcium	36	36	37	39	63	56	51	49
Chloride	2	.	2	.	1	.	1	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	21	21	22	23	33	32	31	31
Manganese	0.0045	0.0035	0.005	0.0046	0.027	<0.001	0.0025	<0.001
Nitrate-N	0.5	.	<0.2	.	3	.	3	.
Potassium	<0.6	<0.6	<0.6	<0.6	0.69	0.61	1	1.4
Sodium	0.70	0.79	0.77	0.60	<0.02	<0.02	1.1	1.4
Sulfate	<1	.	<1	.	2	.	1	.

(CONTINUED)

APPENDIX B
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-011				GW-012			
	CRSP				CRSP			
	08/08/91		10/13/91		02/07/91		05/08/91	
	TOT	DIB	TOT	DIB	TOT	DIB	TOT	DIB
METALS (mg/L)								
Aluminum	0.033	<0.02	0.03	<0.02	0.060	0.072	<0.02	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	0.066	<0.05	<0.05
Barium	0.010	0.010	0.019	0.017	0.018	0.017	0.014	0.014
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	<0.004	<0.004	0.0072	0.008	0.13	0.049	0.15	0.13
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	0.0046	0.0091	<0.004	0.0007	<0.004
Iron	0.044	<0.005	0.046	<0.005	0.16	<0.005	0.33	<0.005
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	0.025	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	1.4	1.5	.	.	3.0	1.2	3.0	3.6
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.016	0.016	0.015	0.016	0.015	0.016	0.015	0.015
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.001	0.001	<0.001	0.001	0.001	0.001	0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	<0.002	<0.002	0.01	0.0002	0.023	0.0053	<0.002	<0.002
MAJOR IONS (mg/L)								
Alkalinity- HCO_3	232	.	231	.	205	.	203	.
Alkalinity- CO_3	41	.	41	.	41	.	41	.
Calcium	51	50	51	51	37	37	33	33
Chloride	3	.	4	.	2	.	2	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	20	20	30	30	25	25	24	24
Manganese	<0.001	<0.001	<0.001	<0.001	0.0066	0.0042	0.016	0.012
Nitrate-N	3	.	2.12	.	0.3	.	0.3	.
Potassium	0.03	0.69	0.00	1.1	1.3	0.04	1	<0.6
Sodium	2	1.6	2.5	1.0	0.05	0.0	0.51	0.5
Sulfate	3	.	4	.	3	.	2	.

(CONTINUED)

APPENDIX B
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-612				GW-709			
	CRSP				LII			
	08/12/91		10/17/91		06/19/91		09/11/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	<0.02	<0.02	<0.02	0.022	0.02	<0.02	0.020
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.011	0.011	0.014	0.014	0.1	0.11	0.033	0.1
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.10	0.16	0.16	0.16	0.0081	0.0089	0.0089	0.034
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	0.013	0.0092	<0.004	<0.004	0.0049	<0.004	<0.004	<0.004
Iron	0.15	0.012	0.091	<0.005	0.019	<0.005	0.12	<0.005
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	0.00022	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	3.9	4	.	.	3.7	3.6	.	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.015	0.015	0.015	0.015	0.052	0.071	0.015	0.049
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.001	0.001	0.001	<0.001	0.002	0.002	0.001	0.002
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0078	0.0031	0.011	0.0038	0.004	<0.002	0.0066	0.0049
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	198	.	206	.	100	.	166	.
Alkalinity-CO ₃	41	.	41	.	4	.	41	.
Calcium	39	39	39	39	10	10	3.9	12
Chloride	2	.	2	.	1	.	1	.
Fluoride	<0.1	.	<0.1	.	0.1	.	<0.1	.
Magnesium	26	26	26	27	16	16	6.1	19
Manganese	0.0052	0.0034	0.0039	0.0026	<0.001	0.001	<0.001	<0.001
Nitrate-N	0.25	.	0.20	.	<0.2	.	<0.2	.
Potassium	0.64	0.66	0.97	0.69	3.3	3.3	0.76	2.5
Sodium	0.42	0.42	0.67	0.78	3.2	3.3	0.65	2.4
Sulfate	2	.	3	.	7	.	4	.

(CONTINUED)

APPENDIX B
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-709		GW-731				GW-732	
	LII		CRSDB				CRSDB	
	11/21/91		09/27/91		10/31/91		09/27/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)								
Aluminum	0.2	0.021	0.96	0.026	0.093	0.076	<0.02	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.26	0.24	0.011	0.009	0.0061	0.0059	0.0073	0.007
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	<0.004	0.0044	0.026	0.033	0.015	0.031	<0.004	0.019
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	0.018	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Iron	0.4	<0.005	1.1	0.0082	0.042	0.012	0.077	0.0086
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	.	.	.	.	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.053	0.047	0.11	0.11	0.05	0.046	0.014	0.016
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.001	0.002	<0.001	<0.001	0.001	0.001	0.001	<0.001
Vanadium	<0.005	<0.005	0.0081	0.007	0.0072	0.0093	<0.005	<0.005
Zinc	0.016	0.003	0.024	0.0061	0.018	0.0063	0.0054	0.0084
MAJOR IONS (mg/L)								
Alkalinity-HCO ₃	164	.	67	.	52	.	136	.
Alkalinity-CO ₃	<1	.	28	.	44	.	<1	.
Calcium	29	23	20	18	18	17	27	26
Chloride	1	.	2.5	.	1.7	.	<1	.
Fluoride	<0.1	.	0.1	.	0.1	.	<0.1	.
Magnesium	21	19	7.7	6.9	8.4	8.1	16	16
Manganese	0.0091	<0.001	0.028	<0.001	0.0053	0.0026	0.0019	0.0013
Nitrate-N	<0.2	.	<0.2	.	<0.2	.	<0.2	.
Potassium	1.2	1.4	22	22	14	14	3.6	4.4
Sodium	0.93	1	8.6	8.5	10	10	1.4	1.6
Sulfate	1	.	17.6	.	14.9	.	2	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-732	
Location	CRSDB	
Date Sampled	10/30/91	
	TOT	DIS
METALS (mg/L)	.	.
Aluminum	0.029	<0.02
Antimony	<0.05	<0.05
Arsenic	<0.05	<0.05
Barium	0.012	0.0071
Beryllium	<0.0003	<0.0003
Boron	0.026	0.011
Cadmium (AAS)	<0.002	<0.002
Cadmium	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01
Chromium	<0.01	<0.01
Cobalt	<0.005	<0.005
Copper	<0.004	<0.004
Iron	0.033	<0.005
Lead (AAS)	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002
Molybdenum	<0.01	<0.01
Nickel	<0.01	<0.01
Selenium	<0.05	<0.05
Silicon	.	.
Silver	<0.006	<0.006
Strontium	0.025	0.013
Thorium	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001
Vanadium	<0.005	<0.005
Zinc	0.0074	0.0062
MAJOR IONS (mg/L)	.	.
Alkalinity-HCO ₃	136	.
Alkalinity-CO ₃	<1	.
Calcium	27	26
Chloride	<1	.
Fluoride	<0.1	.
Magnesium	16	16
Manganese	<0.001	<0.001
Nitrate-N	<0.2	.
Potassium	3.9	4.6
Sodium	1.8	2.1
Sulfate	2	.

VOLATILE ORGANIC COMPOUNDS

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	1085			1086			1090	
	LII			LII			UNCS	
	04/08/91	09/10/91	11/20/91	04/08/91	09/10/91	11/20/91	01/14/91	04/14/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	3	N	N	N	N	N
Chloroform	G	G	G	0.9	1	2	G	3
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	23	22	35	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	2	1	2	G	G	G	G	G
1,2-Dichloroethene	3	2	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	G	1	G	G	2	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	4	2	5	G	G	G	G	G
Toluene	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	12	9	12	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	1	G	1	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	1090			GW-141				GW-142
	UNCS			LIV				KHQ
	07/31/91	08/13/91	10/06/91	01/08/91	04/04/91	07/17/91	10/02/91	03/16/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	.	N	N	N	N	N	N
Benzene	G	.	G	G	G	G	G	G
Bromodichloromethane	G	.	G	G	G	G	G	G
Bromoform	G	.	G	G	G	G	G	G
Bromomethane	N	.	N	N	N	N	N	N
2-Butanone	N	.	N	N	N	N	N	N
Carbon disulfide	G	.	G	G	G	G	G	G
Carbon tetrachloride	G	.	G	G	G	G	G	G
Chlorobenzene	G	.	G	G	G	G	G	G
Chlorodibromomethane	G	.	G	G	G	G	G	G
Chloroethane	N	.	N	N	N	N	N	N
Chloroform	3	.	2	G	G	G	G	G
Chloromethane	N	.	N	N	N	N	N	N
1,1-Dichloroethane	G	.	G	G	G	G	G	G
1,2-Dichloroethane	G	.	G	G	G	G	G	G
1,1-Dichloroethene	G	.	G	G	G	G	G	G
1,2-Dichloroethene	0.9	.	G	G	G	G	G	G
1,2-Dichloropropane	G	.	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	.	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	.	G	G	G	G	G	G
Ethylbenzene	G	.	G	G	G	G	G	G
2-Hexanone	N	.	N	N	N	N	N	N
4-Methyl-2-pentanone	N	.	4	4	N	N	N	N
Methylene chloride	G	.	G	G	G	G	G	G
Styrene	G	.	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	.	G	G	G	G	G	G
Tetrachloroethene	G	.	G	G	G	G	G	0.7
Toluene	G	.	2	G	G	G	G	G
1,1,1-Trichloroethane	G	.	G	G	G	G	G	G
1,1,2-Trichloroethane	G	.	G	G	G	G	G	G
Trichloroethene	G	.	G	G	G	G	G	G
Vinyl acetate	N	.	N	N	N	N	N	N
Vinyl chloride	N	.	N	N	N	N	N	N
Xylenes	G	.	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. • Location • Date Sampled	GW-142			GW-143				GW-144
	KHQ			KHQ				KHQ
	06/13/91	08/03/91	11/04/91	03/16/91	06/16/91	09/05/91	11/07/91	03/16/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	0.7	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	17	G	0.7	G	G	G	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	0.7	0.8	G	G	G	G	G
Toluene	G	G	1	G	G	G	1	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-144			GW-145				GW-146
	KHQ			KHQ				KHQ
	06/15/91	09/05/91	11/06/91	03/16/91	06/14/91	09/04/91	11/05/91	03/16/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	5	2	1	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	2	2	2	G	G	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	G	0.8	G	17	G	0.7	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	1	2	1	G	G	G	G	G
Toluene	G	G	1	G	G	G	1	G
1,1,1-Trichloroethane	0.7	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-146			GW-147			GW-155	
	KHQ			KHQ			CRSDB	
	06/15/91	09/04/91	11/07/91	03/14/91	09/04/91	11/05/91	02/28/91	06/02/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	6	N	N	11	N	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	0.8	G	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	G	0.7	G	G	G	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G
Toluene	G	0.3	1	G	G	1	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-156				GW-157	GW-158		
	CRSDB				CRSDB	CRSDB		
	02/28/91	06/02/91	08/23/91	10/30/91	02/28/91	03/04/91	06/08/91	08/25/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	G	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G
Toluene	G	G	G	2	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX B
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-158	GW-159					GW-160		
	CRSDB	CRSDB					LIII		
	11/14/91	02/28/91	06/01/91	08/23/91	10/29/91	02/13/91	05/24/91	08/21/91	
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.	
Acetone	N	N	15	N	N	N	N	N	
Benzene	G	G	G	G	G	G	G	G	
Bromodichloromethane	G	G	G	G	G	G	G	G	
Bromoform	G	G	G	G	G	G	G	G	
Bromomethane	N	N	N	N	N	N	N	N	
2-Butanone	N	N	N	N	N	N	N	N	
Carbon disulfide	G	G	G	G	G	G	G	G	
Carbon tetrachloride	G	G	G	G	G	G	G	G	
Chlorobenzene	G	G	G	G	G	G	G	G	
Chlorodibromomethane	G	G	G	G	G	G	G	G	
Chloroethane	N	N	N	N	N	N	N	N	
Chloroform	G	G	G	G	G	G	G	G	
Chloromethane	N	N	N	N	N	N	N	N	
1,1-Dichloroethane	G	G	G	G	G	G	G	G	
1,2-Dichloroethane	G	G	G	G	G	G	G	G	
1,1-Dichloroethene	G	G	G	G	G	G	G	G	
1,2-Dichloroethene	G	G	G	G	G	G	G	G	
1,2-Dichloropropane	G	G	G	G	G	G	G	G	
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G	
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G	
Ethylbenzene	G	G	G	G	G	G	G	G	
2-Hexanone	N	N	N	N	N	N	N	N	
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	
Methylene chloride	G	G	G	G	G	G	16	G	
Styrene	G	G	G	G	G	G	G	G	
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G	
Tetrachloroethene	G	G	G	G	G	G	G	G	
Toluene	G	G	G	G	2	G	G	G	
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G	
Trichloroethene	G	G	G	G	G	G	G	G	
Vinyl acetate	N	N	N	N	N	N	N	N	
Vinyl chloride	N	N	N	N	N	N	N	N	
Xylenes	G	G	G	G	G	G	G	G	

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-160	GW-161				GW-165		GW-166
Location	LIII	LIII				CRDT		CRDT
Date Sampled	10/26/91	02/12/91	05/17/91	08/21/91	10/25/91	02/27/91	06/07/91	02/24/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	N
Benzene	G	7	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	2	N	N	N
Methylene chloride	1	G	G	G	0.9	G	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G
Toluene	G	G	G	G	1	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-166	GW-173				GW-174		
Location	CRDT	CRSP				CRSP		
Date Sampled	06/08/91	02/01/91	05/03/91	08/06/91	10/10/91	02/01/91	05/03/91	08/06/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	1	1	1
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	5	3	3
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	G	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	11	12	11	13	39	35	36
Toluene	G	G	G	G	2	G	G	G
1,1,1-Trichloroethane	G	G	0.6	G	G	3	3	3
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	1	1
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX B
Groundwater Quality Data, 1991

Well No.	GW-174	GW-175					GW-176		
Location	CRSP	CRSP					CRSP		
Date Sampled	10/11/91	01/31/91	05/01/91	08/08/91	10/13/91	02/04/91	05/04/91	08/09/91	
VOLATILE ORGANICS (ug/L)									
Acetone	N	N	N	N	N	N	N	N	N
Benzene	G	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	G	G	G
Chloromethane	N	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	69	61	26	
1,2-Dichloroethane	G	G	G	G	G	1	3	G	
1,1-Dichloroethene	G	G	G	3	G	21	24	13	
1,2-Dichloroethene	3	G	G	G	G	G	G	G	
1,2-Dichloropropane	G	G	G	G	G	G	G	G	
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G	
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G	
Ethylbenzene	G	G	G	G	G	G	G	G	
2-Nonanone	N	N	N	N	N	N	N	N	
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	
Methylene chloride	G	G	G	G	G	G	G	G	
Styrene	G	G	G	G	G	G	G	G	
1,1,1,2-Tetrachloroethane	G	G	G	G	G	G	G	G	
Tetrachloroethene	34	23	5	41	26	7	7	6	
Toluene	G	G	G	G	G	G	G	G	
1,1,1-Trichloroethane	2	8	5	11	6	110	150	90	
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G	
Trichloroethene	1	G	G	1	G	G	G	G	
Vinyl acetate	N	N	N	N	N	N	N	N	
Vinyl chloride	N	N	N	N	N	N	N	N	
Xylenes	G	G	G	G	G	G	G	G	

(CONTINUED)

APPENDIX B
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-176	GW-177				GW-178		
	CRBP	CRBP				CRBP		
	10/14/91	02/02/91	05/02/91	08/08/91	10/13/91	01/15/91	04/22/91	08/08/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	3	N	N	N	N	N	N	N
Benzene	0	0	0	0	0	0	0	0
Bromodichloromethane	0	0	0	0	0	0	0	0
Bromoform	0	0	0	0	0	0	0	0
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	0	0	0	0	0	0	0	0
Carbon tetrachloride	0	0	0	0	0	0	0	0
Chlorobenzene	0	0	0	0	0	0	0	0
Chlorodibromomethane	0	0	0	0	0	0	0	0
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	0	0	0	0	0	4	5	3
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	20	7	5	0	11	4	6	6
1,2-Dichloroethane	0	0	0	0	0	0	0	0
1,1-Dichloroethene	12	0	1	2	3	0	2	2
1,2-Dichloroethene	0	0	0	0	0	0	0	0
1,2-Dichloropropane	0	0	0	0	0	0	0	0
cis-1,3-Dichloropropene	0	0	0	0	0	0	0	0
trans-1,3-Dichloropropene	0	0	0	0	0	0	0	0
Ethylbenzene	0	0	0	0	0	0	0	0
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	1	0	0	0	0	0	0	0
Styrene	0	0	0	0	0	0	0	0
1,1,2,2-Tetrachloroethane	0	0	0	0	0	0	0	0
Tetrachloroethene	5	0	0	0	1	0	2	0
Toluene	0	0	0	0	0	0	0	0
1,1,1-Trichloroethane	63	12	10	19	27	23	25	34
1,1,2-Trichloroethane	0	0	0	0	0	0	0	0
Trichloroethene	0	0	0	0	0	0	0	0
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	0	0	0	0	0	0	0	0

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-178	GW-179				GW-180		
	CRSP	CRSP				CRSP		
	10/13/91	02/08/91	05/08/91	08/12/91	10/17/91	02/02/91	05/04/91	08/09/91
VOLATILE ORGANICS (ug/L)								
Acetone	N	V	V	V	N	N	N	N
Benzene	G	N	N	N	G	G	G	G
Bromodichloromethane	G	N	N	N	G	G	G	G
Bromoform	G	N	N	N	G	G	G	G
Bromomethane	N	V	V	V	N	N	N	N
2-Butanone	N	V	V	V	N	N	N	N
Carbon disulfide	G	N	N	N	G	G	G	G
Carbon tetrachloride	G	N	N	N	G	G	G	G
Chlorobenzene	G	N	N	N	G	G	G	G
Chlorodibromomethane	G	N	N	N	G	G	G	G
Chloroethane	N	V	V	V	N	N	N	N
Chloroform	G	N	N	N	G	G	G	G
Chloromethane	N	V	V	V	N	N	N	N
1,1-Dichloroethane	5	89	99	90	75	G	4	5
1,2-Dichloroethane	G	N	N	N	G	G	G	G
1,1-Dichloroethene	2	44	43	31	36	G	G	3
1,2-Dichloroethene	G	N	N	N	G	4	6	G
1,2-Dichloropropane	G	N	N	N	G	G	G	G
cis-1,3-Dichloropropene	G	N	N	N	G	G	G	G
trans-1,3-Dichloropropene	G	N	N	N	G	G	G	G
Ethylbenzene	G	N	N	N	G	G	G	G
2-Hexanone	N	V	V	V	N	N	N	N
4-Methyl-2-pentanone	N	V	V	V	N	N	N	N
Methylene chloride	G	N	N	N	G	G	G	G
Styrene	G	N	N	N	G	G	G	G
1,1,2,2-Tetrachloroethane	G	N	N	N	G	G	G	G
Tetrachloroethene	G	5	4	3	4	61	73	68
Toluene	G	N	N	N	3	G	G	G
1,1,1-Trichloroethane	27	220	230	170	170	2	3	3
1,1,2-Trichloroethane	G	N	N	N	G	G	G	G
Trichloroethene	G	N	N	N	G	1	2	2
Vinyl acetate	N	V	V	V	N	N	N	N
Vinyl chloride	N	V	V	V	N	N	N	N
Xylenes	G	N	N	N	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-180	GW-181				GW-184		GW-186
Location	CRSP	CRSP				RQ		RQ
Date Sampled	10/14/91	01/29/91	04/30/91	08/05/91	10/08/91	09/08/91	11/18/91	09/08/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	N
Benzene	Q	Q	Q	Q	Q	Q	Q	Q
Bromodichloromethane	Q	Q	Q	Q	Q	Q	Q	Q
Bromoform	Q	Q	Q	Q	Q	Q	Q	Q
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	Q	Q	Q	Q	Q	Q	Q	Q
Carbon tetrachloride	Q	Q	Q	Q	Q	Q	Q	Q
Chlorobenzene	Q	Q	Q	Q	Q	Q	Q	Q
Chlorodibromomethane	Q	Q	Q	Q	Q	Q	Q	Q
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	Q	Q	Q	Q	Q	Q	Q	Q
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	2	Q	Q	Q	Q	Q	Q	Q
1,2-Dichloroethane	Q	Q	Q	Q	Q	Q	Q	Q
1,1-Dichloroethene	Q	Q	Q	Q	Q	Q	Q	Q
1,2-Dichloroethene	Q	Q	Q	Q	Q	Q	Q	Q
1,2-Dichloropropane	Q	Q	Q	Q	Q	Q	Q	Q
cis-1,3-Dichloropropene	Q	Q	Q	Q	Q	Q	Q	Q
trans-1,3-D'-chloropropene	Q	Q	Q	Q	Q	Q	Q	Q
Ethylbenzene	Q	Q	Q	Q	Q	Q	Q	Q
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	1	Q	Q	Q	1	Q	1	Q
Styrene	Q	Q	Q	Q	Q	Q	Q	Q
1,1,2,2-Tetrachloroethane	Q	Q	Q	Q	Q	Q	Q	Q
Tetrachloroethene	58	Q	Q	Q	Q	Q	Q	Q
Toluene	Q	Q	Q	Q	Q	0.4	Q	0.9
1,1,1-Trichloroethane	2	Q	Q	Q	Q	Q	Q	Q
1,1,2-Trichloroethane	Q	Q	Q	Q	Q	Q	Q	Q
Trichloroethene	1	Q	Q	Q	Q	Q	Q	Q
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	Q	Q	Q	Q	Q	Q	Q	Q

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-186	GW-187		GW-188		GW-203		
Location	RQ	RQ		RQ		UNCS		
Date Sampled	11/18/91	09/09/91	11/19/91	09/09/91	11/19/91	01/12/91	04/12/91	07/29/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	0.7	G	G	G	16
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethane	G	G	G	G	G	G	G	G
Toluene	G	G	G	0.7	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-203	GW-205				GW-217		
Location	UNCS	UNCS				LIV		
Date Sampled	11/23/91	01/12/91	04/12/91	07/29/91	11/23/91	01/06/91	04/03/91	07/16/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	18
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	0.8	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	1	G	G	15	G	G	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	1	G	G	G	G	G	G
Toluene	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-217	GW-221					GW-231	
	LIV	UNCS					KHQ	
	10/01/91	01/13/91	04/13/91	07/30/91	08/13/91	11/23/91	03/14/91	07/19/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	.	N	N	N
Benzene	G	G	G	G	.	G	G	G
Bromodichloromethane	G	G	G	G	.	G	G	G
Bromoform	G	G	G	G	.	G	G	G
Bromomethane	N	N	N	N	.	N	N	N
2-Butanone	N	N	N	N	.	N	N	N
Carbon disulfide	G	G	G	G	.	G	G	G
Carbon tetrachloride	G	G	G	G	.	G	G	G
Chlorobenzene	G	G	G	G	.	G	G	G
Chlorodibromomethane	G	G	G	G	.	G	G	G
Chloroethane	N	N	N	N	.	N	N	N
Chloroform	G	G	G	G	.	G	G	G
Chloromethane	N	N	N	N	.	N	N	N
1,1-Dichloroethane	G	G	G	G	.	G	G	G
1,2-Dichloroethane	G	G	G	G	.	G	G	G
1,1-Dichloroethene	G	G	G	G	.	G	G	G
1,2-Dichloroethene	G	G	G	G	.	G	G	G
1,2-Dichloropropane	G	G	G	G	.	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	.	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	.	G	G	G
Ethylbenzene	0.6	G	G	G	.	G	G	G
2-Hexanone	N	N	N	N	.	N	N	N
4-Methyl-2-pentanone	N	4	N	N	.	N	N	N
Methylene chloride	G	G	G	G	.	G	G	G
Styrene	G	G	G	G	.	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	.	G	G	G
Tetrachloroethene	G	G	G	G	.	G	G	G
Toluene	4	G	G	G	.	G	G	0.4
1,1,1-Trichloroethane	G	G	G	G	.	G	G	G
1,1,2-Trichloroethane	G	G	G	G	.	G	G	G
Trichloroethene	G	G	G	G	.	G	G	G
Vinyl acetate	N	N	N	N	.	N	N	N
Vinyl chloride	N	N	N	N	.	N	N	N
Xylenes	3	G	G	G	.	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-231		GW-241				GW-292	
	KHQ		CRSDB				ECRNP	
	09/04/91	11/05/91	03/02/91	06/10/91	08/25/91	10/31/91	02/09/91	05/11/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	0.8	G	G	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	0.8	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G
Toluene	G	2	G	G	G	G	1	G
1,1,1-Trichloroethane	G	G	G	2	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	3	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-292		GW-293				GW-294	
	ECRWP		ECRWP				ECRWP	
	08/16/91	10/22/91	02/10/91	05/11/91	08/19/91	10/23/91	02/09/91	05/10/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	71	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	1	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	1	0.4	0.7	0.7	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	1	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	1	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G
Toluene	G	0.9	G	G	G	1	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	0.7	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	1	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-294		GW-295				GW-296	
	ECRWP		LIII				ECRWP	
	08/15/91	10/22/91	02/11/91	05/16/91	08/30/91	11/12/91	02/09/91	05/10/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	18	9	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	0.8	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	5	N	N	N
Methylene chloride	G	G	G	G	G	G	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G
Toluene	G	1	G	G	4	G	0.9	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	0.8	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	3	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-296		GW-298				GW-299	
	ECRWP		LIII				LIII	
	08/15/91	10/22/91	02/21/91	05/31/91	08/22/91	10/28/91	02/21/91	05/30/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	12	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	0.8	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	1	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G
Toluene	G	0.9	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-299		GW-300				GW-301	
	LIII		LIII				LIII	
	08/22/91	10/27/91	02/13/91	05/30/91	08/22/91	10/27/91	02/14/91	05/30/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	0.9	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	1	G	G	G	G	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G
Toluene	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-301		GW-302					GW-303
	LIII		UNCS					CRSDB
	08/22/91	10/27/91	01/14/91	04/13/91	07/30/91	08/13/91	10/06/91	03/01/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	13	N	N	N	.	N	8
Benzene	G	G	G	G	G	.	G	G
Bromodichloromethane	G	G	G	G	G	.	G	G
Bromoform	G	G	G	G	G	.	G	G
Bromomethane	N	N	N	N	N	.	N	N
2-Butanone	N	N	N	N	N	.	N	N
Carbon disulfide	G	G	G	G	G	.	G	G
Carbon tetrachloride	G	G	G	G	G	.	G	G
Chlorobenzene	G	G	G	G	G	.	G	G
Chlorodibromomethane	G	G	G	G	G	.	G	G
Chloroethane	N	N	N	N	N	.	N	N
Chloroform	G	G	G	G	G	.	G	0.8
Chloromethane	N	N	N	N	N	.	N	N
1,1-Dichloroethane	G	G	G	G	G	.	G	G
1,2-Dichloroethane	G	G	G	G	G	.	G	G
1,1-Dichloroethene	G	G	G	G	G	.	G	G
1,2-Dichloroethene	G	G	G	G	G	.	G	G
1,2-Dichloropropane	G	G	G	G	G	.	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	.	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	.	G	G
Ethylbenzene	G	G	G	G	G	.	G	G
2-Hexanone	N	N	N	N	N	.	N	N
4-Methyl-2-pentanone	N	N	N	N	N	.	N	N
Methylene chloride	G	1	G	G	G	.	G	G
Styrene	G	G	G	G	G	.	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	.	G	G
Tetrachloroethene	G	G	G	G	G	.	G	G
Toluene	G	G	G	G	G	.	2	G
1,1,1-Trichloroethane	G	G	G	G	G	.	G	G
1,1,2-Trichloroethane	G	G	G	G	G	.	G	G
Trichloroethene	G	G	G	G	G	.	G	G
Vinyl acetate	N	N	N	N	N	.	N	N
Vinyl chloride	N	N	N	N	N	.	N	N
Xylenes	G	G	G	G	G	.	G	G

(CONTINUED)

APPENDIX B
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-303			GW-304				GW-305
	CRSDB			CRSDB				LIV
	06/04/91	08/24/91	11/02/91	02/28/91	06/01/91	08/23/91	11/02/91	01/06/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	14	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	G	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G
Toluene	G	G	1	G	G	G	1	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX B
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-309			GW-321				GW-322
	LIV			ADU				CRBP
	04/03/91	07/19/91	10/01/91	03/22/91	06/10/91	09/07/91	11/17/91	02/04/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	N
Benzene	G	G	G	G	G	G	G	E
Bromodichloromethane	G	G	G	G	G	G	G	E
Bromoform	G	G	G	G	G	G	G	E
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	E
Carbon tetrachloride	G	G	G	G	G	G	G	E
Chlorobenzene	G	G	G	G	G	G	G	E
Chlorodibromomethane	G	G	G	G	G	G	G	E
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	0.8	G	G	G	G	G	G	E
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	62
1,2-Dichloroethane	G	G	G	G	G	G	G	E
1,1-Dichloroethene	G	G	G	G	G	G	G	130
1,2-Dichloroethene	G	G	G	G	G	G	G	E
1,2-Dichloropropane	G	G	G	G	G	G	G	E
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	E
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	E
Ethylbenzene	G	G	0.5	G	G	G	G	E
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	17	G	G	E
Styrene	G	G	G	G	G	G	G	E
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	E
Tetrachloroethene	G	G	G	G	G	G	G	E
Toluene	G	G	4	G	G	G	G	E
1,1,1-Trichloroethane	G	G	G	G	G	G	G	480
1,1,2-Trichloroethane	G	G	G	G	G	G	G	E
Trichloroethene	G	G	G	G	G	G	G	E
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	E

(CONTINUED)

APPENDIX B
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-322				GW-339			
	CRMP				UMCS			
	08/04/91	08/13/91	10/21/91	01/13/91	04/13/91	07/30/91	08/13/91	10/06/91
VOLATILE ORGANICS (ug/L)								
Acetone	.	.	.	.	.	.	.	.
Benzene	M	A	M	M	M	M	M	M
Bromodichloromethane	E	V	E	G	G	G	.	G
Bromoform	E	V	E	G	G	G	.	G
Bromomethane	M	A	M	M	M	M	.	M
2-Butanone	M	A	M	M	M	M	.	M
Carbon disulfide	E	V	E	G	G	G	.	G
Carbon tetrachloride	E	V	E	G	G	G	.	G
Chlorobenzene	E	V	E	G	G	G	.	G
Chlorodibromomethane	E	V	E	G	G	G	.	G
Chloroethane	M	A	M	M	M	M	.	M
Chloroform	E	V	E	G	G	2	0.9	0.7
Chloromethane	M	A	M	M	M	M	.	M
1,1-Dichloroethane	60	78	64	G	G	G	.	G
1,2-Dichloroethane	E	V	E	G	G	G	.	G
1,1,1-Trichloroethane	110	110	100	G	G	G	.	G
1,2-Dichloroethane	E	V	E	G	G	G	.	G
1,2-Dichloropropane	E	V	E	G	G	G	.	G
cis-1,3-Dichloropropene	E	V	E	G	G	G	.	G
trans-1,3-Dichloropropene	E	V	E	G	G	G	.	G
Ethylbenzene	E	V	E	G	G	G	.	G
2-Hexanone	M	A	M	M	M	M	.	M
4-Methyl-2-pentanone	M	A	M	M	M	M	.	M
Methylene chloride	E	V	E	G	G	G	.	G
Styrene	E	V	E	G	G	G	.	G
1,1,2,2-Tetrachloroethane	E	V	E	G	G	G	.	G
Tetrachloroethane	E	V	E	G	G	G	.	G
Toluene	E	V	E	G	G	G	.	G
1,1,1-Trichloroethane	480	460	370	G	G	G	.	G
1,1,2-Trichloroethane	E	V	E	G	G	G	.	G
Trichloroethane	E	V	E	G	G	G	.	G
Vinyl acetate	M	A	M	M	M	M	.	M
Vinyl chloride	M	A	M	M	M	M	.	M
Xylenes	E	V	E	G	G	G	.	G

(CONTINUED)

APPENDIX B
Groundwater Quality Data, 1991

Well No.	Location	Date Sampled	VOLATILE ORGANICS (ug/L)											
			Acetone	Benzene	Bromochloroethane	Bromoforn	Bromomethane	2-Butanone	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform
GW-511	CRAP	01/29/91	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
GW-512	ADB	09/06/91	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-513				GW-514			
	ADB				ADB			
	03/19/91	06/16/91	09/06/91	11/16/91	03/20/91	06/17/91	09/07/91	11/16/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	N
Benzene	Q	Q	Q	Q	Q	Q	Q	Q
Bromodichloromethane	Q	Q	Q	Q	Q	Q	Q	Q
Bromoform	Q	Q	Q	Q	Q	Q	Q	Q
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	Q	Q	Q	Q	Q	Q	Q	Q
Carbon tetrachloride	Q	Q	Q	Q	Q	Q	Q	Q
Chlorobenzene	Q	Q	Q	Q	Q	Q	Q	Q
Chlorodibromomethane	Q	Q	Q	Q	Q	Q	Q	Q
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	Q	Q	Q	Q	0.9	Q	Q	Q
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	Q	Q	Q	Q	Q	Q	Q	Q
1,2-Dichloroethane	Q	Q	Q	Q	Q	Q	Q	Q
1,1-Dichloroethene	Q	Q	Q	Q	Q	Q	Q	Q
1,2-Dichloroethene	Q	Q	Q	Q	Q	Q	Q	Q
1,2-Dichloropropane	Q	Q	Q	Q	Q	Q	Q	Q
cis-1,3-Dichloropropene	Q	Q	Q	Q	Q	Q	Q	Q
trans-1,3-Dichloropropene	Q	Q	Q	Q	Q	Q	Q	Q
Ethylbenzene	Q	Q	Q	Q	Q	Q	Q	Q
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	Q	Q	Q	1	Q	Q	Q	1
Styrene	Q	Q	Q	Q	Q	Q	Q	Q
1,1,2,2-Tetrachloroethane	Q	Q	Q	Q	Q	Q	Q	Q
Tetrachloroethene	Q	Q	Q	Q	Q	Q	Q	Q
Toluene	Q	Q	Q	Q	Q	Q	Q	Q
1,1,1-Trichloroethane	Q	Q	Q	Q	1	3	1	2
1,1,2-Trichloroethane	Q	Q	Q	Q	Q	Q	Q	Q
Trichloroethene	Q	Q	Q	Q	Q	Q	Q	Q
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	Q	Q	Q	Q	Q	Q	Q	Q

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-521				GW-522			
	LIV				LIV			
	01/08/91	04/04/91	07/17/91	10/03/91	01/09/91	04/04/91	07/17/91	10/03/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	18	N	N	N	15	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	J	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	G	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G
Toluene	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-539				GW-540			
	LIIX				LIIX			
	03/16/91	04/09/91	09/12/91	11/24/91	03/16/91	04/09/91	09/12/91	11/24/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	G	G	1
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G
Toluene	G	G	1	G	G	G	1	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-541				GW-542			
	LIIX				LIIX			
	03/17/91	04/10/91	09/13/91	11/25/91	03/17/91	04/10/91	09/14/91	11/25/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	9	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	0.9	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	1	G	G	G	1
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethane	G	G	G	G	G	G	G	G
Toluene	G	G	1	G	G	G	1	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-543				GW-544			
	LIIX				LIIX			
	03/17/91	04/11/91	09/14/91	11/25/91	03/17/91	04/11/91	09/14/91	11/26/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	9	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	0.7	G	G	G	2	0.8	0.6	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	G	G	1
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G
Toluene	G	G	1	G	G	G	1	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-545				GW-546			
	LIIIX				LIIIX			
	03/17/91	04/11/91	09/15/91	11/26/91	03/17/91	04/11/91	09/15/91	11/26/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	25	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	0.8	G	G	G	0.8	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	1	1	G	0.7	1
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G
Toluene	G	G	2	G	G	G	2	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-607				GW-608			
	CRSP				CRSP			
	01/28/91	04/29/91	08/06/91	10/08/91	01/28/91	04/29/91	08/07/91	10/12/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	9	N	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	3	2	2	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	2	2
1,2-Dichloroethene	G	G	G	G	G	G	G	2
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	2	N	N	N	N
Methylene chloride	G	G	G	1	G	G	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	3	G	5	7
Toluene	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	9	9	9	9
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	9	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-609				GW-610			
	CRSP				CRSP			
	01/15/91	04/22/91	08/09/91	10/14/91	01/30/91	05/01/91	08/06/91	10/10/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	5	3	1	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	21	51	30	12	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	1	G	G	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	14	58	37	15	1	G	G	1
Toluene	G	G	G	G	G	G	G	2
1,1,1-Trichloroethane	1	4	2	0.9	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	2	7	4	2	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-611				GW-612			
	CRSP				CRSP			
	01/31/91	05/01/91	08/08/91	10/13/91	02/07/91	05/08/91	08/12/91	10/17/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	V	V	V
Benzene	G	G	G	G	G	N	N	N
Bromodichloromethane	G	G	G	G	G	N	N	N
Bromoform	G	G	G	G	G	N	N	N
Bromomethane	N	N	N	N	N	V	V	V
2-Butanone	N	N	N	N	N	V	V	V
Carbon disulfide	G	G	G	G	G	N	N	N
Carbon tetrachloride	G	G	G	2	G	N	N	N
Chlorobenzene	G	G	G	G	G	N	N	N
Chlorodibromomethane	G	G	G	G	G	N	N	N
Chloroethane	N	N	N	N	N	V	V	V
Chloroform	G	G	G	G	G	N	N	N
Chloromethane	N	N	N	N	N	V	V	V
1,1-Dichloroethane	1	G	1	2	130	130	120	110
1,2-Dichloroethane	G	G	G	G	4	4	5	3
1,1-Dichloroethene	G	G	G	2	60	57	69	50
1,2-Dichloroethene	G	G	G	G	G	N	N	N
1,2-Dichloropropane	G	G	G	G	G	N	N	N
cis-1,3-Dichloropropene	G	G	G	G	G	N	N	N
trans-1,3-Dichloropropene	G	G	G	G	G	N	N	N
Ethylbenzene	G	G	G	G	G	N	N	N
2-Hexanone	N	N	N	N	N	V	V	V
4-Methyl-2-pentanone	N	N	N	N	N	V	V	7
Methylene chloride	G	G	G	1	G	N	N	N
Styrene	G	G	G	G	G	N	N	N
1,1,2,2-Tetrachloroethane	G	G	G	G	G	N	N	N
Tetrachloroethene	G	G	G	G	12	9	11	11
Toluene	G	G	G	G	1	N	N	6
1,1,1-Trichloroethane	14	10	8	G	240	270	290	220
1,1,2-Trichloroethane	G	G	G	G	G	N	N	N
Trichloroethene	G	G	G	G	G	N	1	N
Vinyl acetate	N	N	N	N	N	V	V	V
Vinyl chloride	N	N	N	N	N	V	V	V
Xylenes	G	G	G	G	3	N	N	N

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-709			GW-731		GW-732	
	LII			CRSDB		CRSDB	
	06/19/91	09/11/91	11/21/91	09/27/91	10/31/91	09/27/91	10/30/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.
Acetone	N	N	N	77	40	N	N
Benzene	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N
Chloroform	1	G	G	G	G	G	G
Chloromethane	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	3
Methylene chloride	16	G	G	G	G	G	G
Styrene	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G
Toluene	G	0.9	G	3	0.8	3	2
1,1,1-Trichloroethane	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G

APPENDIX E
Groundwater Quality Data, 1991

Well No.	1085		1086		GW-141		GW-160		GW-161	GW-217		GW-295
Location	LII		LII		LIV		LIII		LIII	LIV		LIII
Quarter Sampled	Q3	Q4	Q3	Q4	Q3	Q4	Q3	Q4	Q3	Q3	Q4	Q3
Additional Organics (ug/L)	.	.	.	.	.	.	.	.	.	.	.	.
1,2,3-Trichloropropane	G	G	G	G	G	G	G	G	G	G	G	G
1,4-Dichloro-2-butene	V	V	V	V	V	V	V	V	V	V	V	V
2-Chloroethyl vinyl ether	N	N	N	N	N	N	N	N	N	N	N	N
Acrolein	N	N	N	N	N	N	N	N	N	N	N	N
Acrylonitrile	N	N	N	N	N	N	N	N	N	N	N	N
Dibromomethane	G	G	G	G	G	G	G	G	G	G	G	G
Dichlorodifluoromethane	V	V	V	V	V	V	V	V	V	V	V	V
Ethanol	R	R	R	R	L	R	R	R	R	L	R	R
Ethyl methacrylate	N	N	N	N	N	N	N	N	N	N	N	N
Iodomethane	G	G	G	G	G	G	G	G	G	G	G	G
Trichlorofluoromethane	G	G	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-295	GW-298		GW-299		GW-300		GW-301		GW-305		GW-521
Location	LIII	LIII		LIII		LIII		LIII		LIV		LIV
Quarter Sampled	Q4	Q3	Q4	Q3	Q4	Q3	Q4	Q3	Q4	Q3	Q4	Q3
Additional Organics (ug/L)	.	.	.	.	.	.	.	.	.	.	.	.
1,2,3-Trichloropropane	.	.	.	.	.	.	.	.	.	.	.	.
1,4-Dichloro-2-butene	G	G	G	G	G	G	G	G	G	G	G	G
2-Chloroethyl vinyl ether	V	V	V	V	V	V	V	V	V	V	V	V
Acrolein	N	N	N	N	N	N	N	N	N	N	N	N
Acrylonitrile	N	N	N	N	N	N	N	N	N	N	N	N
Dibromomethane	N	N	N	N	N	N	N	N	N	N	N	N
Dichlorodifluoromethane	G	G	G	G	G	G	G	G	G	G	G	G
Ethanol	K	V	R	V	R	V	R	V	R	V	R	V
Ethyl methacrylate	R	R	R	R	R	R	R	R	R	R	R	R
Iodomethane	N	N	N	N	N	N	N	N	N	N	N	N
Trichlorofluoromethane	G	G	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-521		GW-522		GW-539				GW-540				GW-541
	LIV		LIV		LIX				LIX				LIX
	Q4	Q3	Q4	Q3	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Additional Organics (ug/L)	.	.	.	.	.	.	.	.	.	.	.	.	.
1,2,3-Trichloropropane	G	G	G	G	G	G	G	G	G	G	G	G	G
1,4-Dichloro-2-butene	V	V	V	V	V	V	V	V	V	V	V	V	V
2-Chloroethyl vinyl ether	N	N	N	N	N	N	N	N	N	N	N	N	N
Acrolein	N	N	N	N	N	N	N	N	N	N	N	N	N
Acrylonitrile	N	N	N	N	N	N	N	N	N	N	N	N	N
Dibromomethane	G	G	G	G	G	G	G	G	G	G	G	G	G
Dichlorodifluoromethane	V	V	V	V	V	V	V	V	V	V	V	V	V
Ethanol	R	L	R	R	R	C	R	R	R	C	R	R	R
Ethyl methacrylate	N	N	N	N	N	N	N	N	N	N	N	N	N
Iodomethane	G	G	G	G	G	G	G	G	G	G	G	G	G
Trichlorofluoromethane	G	G	G	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Quarter Sampled	GW-541			GW-542				GW-543				GW-544
	LIX			LIX				LIX				LIX
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Additional Organics (ug/L)	.	.	.	.	.	.	.	.	.	.	.	.
1,2,3-Trichloropropane	G	G	G	G	G	G	G	G	G	G	G	G
1,4-Dichloro-2-butene	V	V	V	V	V	V	V	V	V	V	V	V
2-Chloroethyl vinyl ether	N	N	N	N	N	N	N	N	N	N	N	N
Acrolein	N	N	N	N	N	N	N	N	N	N	N	N
Acrylonitrile	N	N	N	N	N	N	N	N	N	N	N	N
Dibromomethane	G	G	G	G	G	G	G	G	G	G	G	G
Dichlorodifluoromethane	V	V	V	V	V	V	V	V	V	V	V	V
Ethanol	C	R	R	R	C	R	R	R	C	R	R	R
Ethyl methacrylate	N	N	N	N	N	N	N	N	N	N	N	N
Iodomethane	G	G	G	G	G	G	G	G	G	G	G	G
Trichlorofluoromethane	G	G	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Groundwater Quality Data, 1991

[illegible]

BASE, NEUTRAL, AND ACID (BNA) EXTRACTABLE ORGANIC COMPOUNDS

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-155		GW-156			GW-157	GW-158	
	CRSDB		CRSDB			CRSDB	CRSDB	
	02/28/91	06/02/91	02/28/91	06/02/91	10/30/91	02/28/91	03/04/91	06/08/91
BNAs (ug/L)	.	.	.	.	.	.	.	.
1,2,4-Trichlorobenzene	N	N	N	N	N	N	N	N
1,2-Dichlorobenzene	N	N	N	N	N	N	N	N
1,3-Dichlorobenzene	N	N	N	N	N	N	N	N
1,4-Dichlorobenzene	N	N	N	N	N	N	N	N
2,4,5-Trichlorophenol	M	M	M	M	M	M	M	M
2,4,6-Trichlorophenol	N	N	N	N	N	N	N	N
2,4-Dichlorophenol	N	N	N	N	N	N	N	N
2,4-Dimethylphenol	N	N	N	N	N	N	N	N
2,4-Dinitrophenol	M	M	M	M	M	M	M	M
2,4-Dinitrotoluene	N	N	N	N	N	N	N	N
2,6-Dinitrotoluene	N	N	N	N	N	N	N	N
2-Chloronaphthalene	N	N	N	N	N	N	N	N
2-Chlorophenol	N	N	N	N	N	N	N	N
2-Methylnaphthalene	N	N	N	N	N	N	N	N
2-Methylphenol	N	N	N	N	N	N	N	N
2-Nitroaniline	M	M	M	M	M	M	M	M
2-Nitrophenol	N	N	N	N	N	N	N	N
3,3-Dichlorobenzidine	V	V	V	V	V	V	V	V
3-Nitroaniline	M	M	M	M	M	M	M	M
4,6-Dinitro-2-methylphenol	M	M	M	M	M	M	M	M
4-Bromophenyl phenyl ether	N	N	N	N	N	N	N	N
4-Chloro-3-methylphenol	N	N	N	N	N	N	N	N
4-Chloroaniline	N	N	N	N	N	N	N	N
4-Chlorophenyl phenyl ether	N	N	N	N	N	N	N	N
4-Methylphenol	N	N	N	N	N	N	N	N
4-Nitroaniline	M	M	M	M	M	M	M	M
4-Nitrophenol	M	M	M	M	M	M	M	M
Acenaphthene	N	N	N	N	N	N	N	N
Acenaphthylene	N	N	N	N	N	N	N	N
Anthracene	N	N	N	N	N	N	N	N
Benzo(a)anthracene	N	N	N	N	N	N	N	N
Benzo(a)pyrene	N	N	N	N	N	N	N	N
Benzo(b)fluoranthene	N	N	N	N	N	N	N	N
Benzo(g,h,i)perylene	N	N	N	N	N	N	N	N
Benzo(k)fluoranthene	N	N	N	N	N	N	N	N
Benzoic acid	M	M	M	M	M	M	M	M
Benzyl alcohol	N	N	N	N	N	N	N	N
bis(2-Chloroethoxy)methane	N	N	N	N	N	N	N	N
bis(2-Chloroethyl)ether	N	N	N	N	N	N	N	N
bis(2-Chloroisopropyl)ether	N	N	N	N	N	N	N	N
bis(2-Ethylhexyl)phthalate	N	N	N	N	0.7	N	N	N

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. • Location • Date Sampled	GW-155		GW-156			GW-157	GW-158	
	CRSDB		CRSDB			CRSDB	CRSDB	
	02/28/91	06/02/91	02/28/91	06/02/91	10/30/91	02/28/91	03/04/91	06/08/91
Butyl benzyl phthalate	N	N	N	N	N	N	N	N
Chrysene	N	N	N	N	N	N	N	N
di-n-Butylphthalate	N	N	N	N	N	N	N	N
di-n-Octylphthalate	N	N	N	N	N	N	N	N
Dibenzo(a,h)anthracene	N	N	N	N	N	N	N	N
Dibenzofuran	N	N	N	N	N	N	N	N
Diethylphthalate	N	N	N	N	N	N	N	N
Dimethylphthalate	N	N	N	N	N	N	N	N
Fluoranthene	N	N	N	N	N	N	N	N
Fluorene	N	N	N	N	N	N	N	N
Hexachlorobenzene	N	N	N	N	N	N	N	N
Hexachlorobutadiene	N	N	N	N	N	N	N	N
Hexachlorocyclopentadiene	N	N	N	N	N	N	N	N
Hexachloroethane	N	N	N	N	N	N	N	N
Indeno(1,2,3-cd)pyrene	N	N	N	N	N	N	N	N
Isophorone	N	N	N	N	N	N	N	N
n-Nitrosodi-n-propylamine	N	N	N	N	N	N	N	N
n-Nitrosodiphenylamine	N	N	N	N	N	N	N	N
Naphthalene	N	N	N	N	N	N	N	N
Nitrobenzene	N	N	N	N	N	N	N	N
Pentachlorophenol	M	M	M	M	M	M	M	M
Phenanthrene	N	N	N	N	N	N	N	N
Phenol	7	N	9	N	N	10	4	N
Pyrene	N	N	N	N	N	N	N	N

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. - Location - Date Sampled	GW-158		GW-159			GW-184		GW-186
	CRSDB		CRSDB			RQ		RQ
	08/25/91	11/14/91	02/28/91	06/01/91	10/29/91	09/08/91	11/18/91	09/08/91
BNAs (ug/L)	.	.	.	.	.	.	.	.
1,2,4-Trichlorobenzene	N	N	N	N	N	N	N	N
1,2-Dichlorobenzene	N	N	N	N	N	N	N	N
1,3-Dichlorobenzene	N	N	N	N	N	N	N	N
1,4-Dichlorobenzene	N	N	N	N	N	N	N	N
2,4,5-Trichlorophenol	M	M	M	M	M	M	M	M
2,4,6-Trichlorophenol	N	N	N	N	N	N	N	N
2,4-Dichlorophenol	N	N	N	N	N	N	N	N
2,4-Dimethylphenol	N	N	N	N	N	N	N	N
2,4-Dinitrophenol	M	M	M	M	M	M	M	M
2,4-Dinitrotoluene	N	N	N	N	N	N	N	N
2,6-Dinitrotoluene	N	N	N	N	N	N	N	N
2-Chloronaphthalene	N	N	N	N	N	N	N	N
2-Chlorophenol	N	N	N	N	N	N	N	N
2-Methylnaphthalene	N	N	N	N	N	N	N	N
2-Methylphenol	N	N	N	N	N	N	N	N
2-Nitroaniline	M	M	M	M	M	M	M	M
2-Nitrophenol	N	N	N	N	N	N	N	N
3,3-Dichlorobenzidine	V	V	V	V	V	V	V	V
3-Nitroaniline	M	M	M	M	M	M	M	M
4,6-Dinitro-2-methylphenol	M	M	M	M	M	M	M	M
4-Bromophenyl phenyl ether	N	N	N	N	N	N	N	N
4-Chloro-3-methylphenol	N	N	N	N	N	N	N	N
4-Chloroaniline	N	N	N	N	N	N	N	N
4-Chlorophenyl phenyl ether	N	N	N	N	N	N	N	N
4-Methylphenol	N	N	N	N	N	N	N	N
4-Nitroaniline	M	M	M	M	M	M	M	M
4-Nitrophenol	M	M	M	M	M	M	M	M
Acenaphthene	N	N	N	N	N	N	N	N
Acenaphthylene	N	N	N	N	N	N	N	N
Anthracene	N	N	N	N	N	N	N	N
Benzo(a)anthracene	N	N	N	N	N	N	N	N
Benzo(a)pyrene	N	N	N	N	N	N	N	N
Benzo(b)fluoranthene	N	N	N	N	N	N	N	N
Benzo(g,h,i)perylene	N	N	N	N	N	N	N	N
Benzo(k)fluoranthene	N	N	N	N	N	N	N	N
Benzoic acid	M	M	M	M	M	M	M	M
Benzyl alcohol	N	N	N	N	N	N	N	N
bis(2-Chloroethoxy)methane	N	N	N	N	N	N	N	N
bis(2-Chloroethyl)ether	N	N	N	N	N	N	N	N
bis(2-Chloroisopropyl)ether	N	N	N	N	N	N	N	N
bis(2-Ethylhexyl)phthalate	N	N	N	N	N	1	N	N

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. • Location • Date Sampled	GW-158		GW-159			GW-184		GW-186
	CRSDB		CRSDB			RQ		RQ
	08/25/91	11/14/91	02/28/91	06/01/91	10/29/91	09/08/91	11/18/91	09/08/91
Butyl benzyl phthalate	N	N	N	N	N	N	N	N
Chrysene	N	N	N	N	N	N	N	N
di-n-Butylphthalate	N	0.6	N	N	N	N	N	N
di-n-Octylphthalate	N	N	N	N	N	1	N	N
Dibenzo(a,h)anthracene	N	N	N	N	N	N	N	N
Dibenzofuran	N	N	N	N	N	N	N	N
Diethylphthalate	N	N	N	N	N	N	N	N
Dimethylphthalate	N	N	N	N	N	N	N	N
Fluoranthene	N	N	N	N	N	N	N	N
Fluorene	N	N	N	N	N	N	N	N
Hexachlorobenzene	N	N	N	N	N	N	N	N
Hexachlorobutadiene	N	N	N	N	N	N	N	N
Hexachlorocyclopentadiene	N	N	N	N	N	N	N	N
Hexachloroethane	N	N	N	N	N	N	N	N
Indeno(1,2,3-cd)pyrene	N	N	N	N	N	N	N	N
Isophorone	N	N	N	N	N	N	N	N
n-Nitrosodi-n-propylamine	N	N	N	N	N	N	N	N
n-Nitrosodiphenylamine	N	N	N	N	N	N	N	N
Naphthalene	N	N	N	N	N	N	N	N
Nitrobenzene	N	N	N	N	N	N	N	N
Pentachlorophenol	M	M	M	M	M	M	M	M
Phenanthrene	N	N	N	N	N	N	N	N
Phenol	N	N	10	N	N	N	N	N
Pyrene	N	N	N	N	N	N	N	N

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-186	GW-187		GW-188		GW-241		
Location	RQ	RQ		RQ		CRSDB		
Date Sampled	11/18/91	09/09/91	11/19/91	09/09/91	11/19/91	03/02/91	06/10/91	08/25/91
BNAs (ug/L)	.	.	.	.	.	.	.	.
1,2,4-Trichlorobenzene	4.9	N	N	N	N	N	N	N
1,2-Dichlorobenzene	N	N	N	N	N	N	N	N
1,3-Dichlorobenzene	N	N	N	N	N	N	N	N
1,4-Dichlorobenzene	N	N	N	N	N	N	N	N
2,4,5-Trichlorophenol	M	M	M	M	M	M	M	M
2,4,6-Trichlorophenol	N	N	N	N	N	N	N	N
2,4-Dichlorophenol	N	N	N	N	N	N	N	N
2,4-Dimethylphenol	N	N	N	N	N	N	N	N
2,4-Dinitrophenol	M	M	M	M	M	M	M	M
2,4-Dinitrotoluene	N	N	N	N	N	N	N	N
2,6-Dinitrotoluene	N	N	N	N	N	N	N	N
2-Chloronaphthalene	N	N	N	N	N	N	N	N
2-Chlorophenol	N	N	N	N	N	N	N	N
2-Methylnaphthalene	N	N	N	N	N	N	N	N
2-Methylphenol	N	N	N	N	N	N	N	N
2-Nitroaniline	M	M	M	M	M	M	M	M
2-Nitrophenol	N	N	N	N	N	N	N	N
3,3-Dichlorobenzidine	V	V	V	V	V	V	V	V
3-Nitroaniline	M	M	M	M	M	M	M	M
4,6-Dinitro-2-methylphenol	M	M	M	M	M	M	M	M
4-Bromophenyl phenyl ether	N	N	N	N	N	N	N	N
4-Chloro-3-methylphenol	N	N	N	N	N	N	N	N
4-Chloroaniline	N	N	N	N	N	N	N	N
4-Chlorophenyl phenyl ether	N	N	N	N	N	N	N	N
4-Methylphenol	N	N	N	N	N	N	N	N
4-Nitroaniline	M	M	M	M	M	M	M	M
4-Nitrophenol	M	M	M	M	M	M	M	M
Acenaphthene	N	N	N	N	N	N	N	N
Acenaphthylene	N	N	N	N	N	N	N	N
Anthracene	N	N	N	N	N	N	N	N
Benzo(a)anthracene	N	N	N	N	N	N	N	N
Benzo(a)pyrene	N	N	N	N	N	N	N	N
Benzo(b)fluoranthene	N	N	N	N	N	N	N	N
Benzo(g,h,i)perylene	N	N	N	N	N	N	N	N
Benzo(k)fluoranthene	N	N	N	N	N	N	N	N
Benzoic acid	M	M	M	M	M	M	M	M
Benzyl alcohol	N	N	N	N	N	N	N	N
bis(2-Chloroethoxy)methane	N	N	N	N	N	N	N	N
bis(2-Chloroethyl)ether	N	N	N	N	N	N	N	N
bis(2-Chloroisopropyl)ether	N	N	N	N	N	N	N	N
bis(2-Ethylhexyl)phthalate	N	N	N	N	N	N	N	N

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-186	GW-187		GW-188		GW-241		
Location	RQ	RQ		RQ		CRSDB		
Date Sampled	11/18/91	09/09/91	11/19/91	09/09/91	11/19/91	03/02/91	06/10/91	08/25/91
Butyl benzyl phthalate	N	N	N	N	N	N	N	N
Chrysene	N	N	N	N	N	N	N	N
di-n-Butylphthalate	N	N	N	N	N	N	N	N
di-n-Octylphthalate	N	N	N	N	N	N	N	N
Dibenzo(a,h)anthracene	N	N	N	N	N	N	N	N
Dibenzofuran	N	N	N	N	N	N	N	N
Diethylphthalate	N	N	N	N	N	N	N	N
Dimethylphthalate	N	N	N	N	N	N	N	N
Fluoranthene	N	N	N	N	N	N	N	N
Fluorene	N	N	N	N	N	N	N	N
Hexachlorobenzene	N	N	N	N	N	N	N	N
Hexachlorobutadiene	N	N	N	N	N	N	N	N
Hexachlorocyclopentadiene	N	N	N	N	N	N	N	N
Hexachloroethane	N	N	N	N	N	N	N	N
Indeno(1,2,3-cd)pyrene	N	N	N	N	N	N	N	N
Isophorone	N	N	N	N	N	N	N	N
n-Nitrosodi-n-propylamine	N	N	N	N	N	N	N	N
n-Nitrosodiphenylamine	N	N	N	N	N	N	N	N
Naphthalene	N	N	N	N	N	N	N	N
Nitrobenzene	N	N	N	N	N	N	N	N
Pentachlorophenol	M	M	M	M	M	M	M	M
Phenanthrene	N	N	N	N	N	N	N	N
Phenol	N	N	N	N	N	5	N	N
Pyrene	N	N	N	N	N	N	N	N

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-241	GW-303					GW-304		
	CRSDB	CRSDB					CRSDB		
	10/31/91	03/01/91	06/04/91	08/24/91	11/02/91	02/28/91	06/01/91	11/02/91	
BNAs (ug/L)	.	.	.	.	.	.	.	.	.
1,2,4-Trichlorobenzene	N	N	N	N	N	N	N	N	N
1,2-Dichlorobenzene	N	N	N	N	N	N	N	N	N
1,3-Dichlorobenzene	N	N	N	N	N	N	N	N	N
1,4-Dichlorobenzene	N	N	N	N	N	N	N	N	N
2,4,5-Trichlorophenol	M	M	M	M	M	M	M	M	M
2,4,6-Trichlorophenol	N	N	N	N	N	N	N	N	N
2,4-Dichlorophenol	N	N	N	N	N	N	N	N	N
2,4-Dimethylphenol	N	N	N	N	N	N	N	N	N
2,4-Dinitrophenol	M	M	M	M	M	M	M	M	M
2,4-Dinitrotoluene	N	N	N	N	N	N	N	N	N
2,6-Dinitrotoluene	N	N	N	N	N	N	N	N	N
2-Chloronaphthalene	N	N	N	N	N	N	N	N	N
2-Chlorophenol	N	N	N	N	N	N	N	N	N
2-Methylnaphthalene	N	N	N	N	N	N	N	N	N
2-Methylphenol	N	N	N	N	N	N	N	N	N
2-Nitroaniline	M	M	M	M	M	M	M	M	M
2-Nitrophenol	N	N	N	N	N	N	N	N	N
3,3-Dichlorobenzidine	V	V	V	V	V	V	V	V	V
3-Nitroaniline	M	M	M	M	M	M	M	M	M
4,6-Dinitro-2-methylphenol	M	M	M	M	M	M	M	M	M
4-Bromophenyl phenyl ether	N	N	N	N	N	N	N	N	N
4-Chloro-3-methylphenol	N	N	N	N	N	N	N	N	N
4-Chloroaniline	N	N	N	N	N	N	N	N	N
4-Chlorophenyl phenyl ether	N	N	N	N	N	N	N	N	N
4-Methylphenol	N	N	N	N	N	N	N	N	N
4-Nitroaniline	M	M	M	M	M	M	M	M	M
4-Nitrophenol	M	M	M	M	M	M	M	M	M
Acenaphthene	N	N	N	N	N	N	N	N	N
Acenaphthylene	N	N	N	N	N	N	N	N	N
Anthracene	N	N	N	N	N	N	N	N	N
Benzo(a)anthracene	N	N	N	N	N	N	N	N	N
Benzo(a)pyrene	N	N	N	N	N	N	N	N	N
Benzo(b)fluoranthene	N	N	N	N	N	N	N	N	N
Benzo(g,h,i)perylene	N	N	N	N	N	N	N	N	N
Benzo(k)fluoranthene	N	N	N	N	N	N	N	N	N
Benzoic acid	M	M	M	M	M	M	M	M	M
Benzyl alcohol	N	N	N	N	N	N	N	N	N
bis(2-Chloroethoxy)methane	N	N	N	N	N	N	N	N	N
bis(2-Chloroethyl)ether	N	N	N	N	N	N	N	N	N
bis(2-Chloroisopropyl)ether	N	N	N	N	N	N	N	N	N
bis(2-Ethylhexyl)phthalate	0.9	N	N	N	1	N	N	N	N

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-241	GW-303				GW-304		
Location	CRSDB	CRSDB				CRSDB		
Date Sampled	10/31/91	03/01/91	06/04/91	08/24/91	11/02/91	02/28/91	06/01/91	11/02/91
Butyl benzyl phthalate	N	N	N	N	N	N	N	N
Chrysene	N	N	N	N	N	N	N	N
di-n-Butylphthalate	N	N	N	N	N	N	N	N
di-n-Octylphthalate	N	N	N	N	N	N	N	N
Dibenzo(a,h)anthracene	N	N	N	N	N	N	N	N
Dibenzofuran	N	N	N	N	N	N	N	N
Diethylphthalate	N	N	N	N	N	N	N	2
Dimethylphthalate	N	N	N	N	N	N	N	N
Fluoranthene	N	N	N	N	N	N	N	N
Fluorene	N	N	N	N	N	N	N	N
Hexachlorobenzene	N	N	N	N	N	N	N	N
Hexachlorobutadiene	N	N	N	N	N	N	N	N
Hexachlorocyclopentadiene	N	N	N	N	N	N	N	N
Hexachloroethane	N	N	N	N	N	N	N	N
Indeno(1,2,3-cd)pyrene	N	N	N	N	N	N	N	N
Isophorone	N	N	N	N	N	N	N	N
n-Nitrosodi-n-propylamine	N	N	N	N	N	N	N	N
n-Nitrosodiphenylamine	N	N	N	N	N	N	N	N
Naphthalene	N	N	N	N	N	N	N	N
Nitrobenzene	N	N	N	N	N	N	N	N
Pentachlorophenol	M	M	M	M	M	M	M	M
Phenanthrene	N	N	N	N	N	N	N	N
Phenol	N	7	N	N	N	9	N	N
Pyrene	N	N	N	N	N	N	N	N

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-731		GW-732	
	CRSDB		CRSDB	
	09/27/91	10/31/91	09/27/91	10/30/91
BNAs (ug/L)	.	.	.	.
1,2,4-Trichlorobenzene	N	N	N	N
1,2-Dichlorobenzene	N	N	N	N
1,3-Dichlorobenzene	N	N	N	N
1,4-Dichlorobenzene	N	N	N	N
2,4,5-Trichlorophenol	M	M	M	M
2,4,6-Trichlorophenol	N	N	N	N
2,4-Dichlorophenol	N	N	N	N
2,4-Dimethylphenol	N	N	N	N
2,4-Dinitrophenol	M	M	M	M
2,4-Dinitrotoluene	N	N	N	N
2,6-Dinitrotoluene	N	N	N	N
2-Chloronaphthalene	N	N	N	N
2-Chlorophenol	N	N	N	N
2-Methylnaphthalene	N	N	N	N
2-Methylphenol	N	N	N	N
2-Nitroaniline	M	M	M	M
2-Nitrophenol	N	N	N	N
3,3-Dichlorobenzidine	V	V	V	V
3-Nitroaniline	M	M	M	M
4,6-Dinitro-2-methylphenol	M	M	M	M
4-Bromophenyl phenyl ether	N	N	N	N
4-Chloro-3-methylphenol	N	N	N	N
4-Chloroaniline	N	N	N	N
4-Chlorophenyl phenyl ether	N	N	N	N
4-Methylphenol	N	N	N	N
4-Nitroaniline	M	M	M	M
4-Nitrophenol	M	M	M	M
Acenaphthene	N	N	N	N
Acenaphthylene	N	N	N	N
Anthracene	N	N	N	N
Benzo(a)anthracene	N	N	N	N
Benzo(a)pyrene	N	N	N	N
Benzo(b)fluoranthene	N	N	N	N
Benzo(g,h,i)perylene	N	N	N	N
Benzo(k)fluoranthene	N	N	N	N
Benzoic acid	M	M	M	M
Benzyl alcohol	N	N	N	N
bis(2-Chloroethoxy)methane	N	N	N	N
bis(2-Chloroethyl)ether	N	N	N	N
bis(2-Chloroisopropyl)ether	N	N	N	N
bis(2-Ethylhexyl)phthalate	N	N	N	N

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-731		GW-732	
	CRSDB		CRSDB	
	09/27/91	10/31/91	09/27/91	10/30/91
Butyl benzyl phthalate	N	N	N	N
Chrysene	N	N	N	N
di-n-Butylphthalate	N	N	N	N
di-n-Octylphthalate	N	N	N	N
Dibenzo(a,h)anthracene	N	N	N	N
Dibenzofuran	N	N	N	N
Diethylphthalate	N	13	N	N
Dimethylphthalate	N	N	N	N
Fluoranthene	N	N	N	N
Fluorene	N	N	N	N
Hexachlorobenzene	N	N	N	N
Hexachlorobutadiene	N	N	N	N
Hexachlorocyclopentadiene	N	N	N	N
Hexachloroethane	N	N	N	N
Indeno(1,2,3-cd)pyrene	N	N	N	N
Isophorone	N	N	N	N
n-Nitrosodi-n-propylamine	N	N	N	N
n-Nitrosodiphenylamine	N	N	N	N
Naphthalene	N	N	N	N
Nitrobenzene	N	N	N	N
Pentachlorophenol	M	M	M	M
Phenanthrene	N	N	N	N
Phenol	N	N	N	N
Pyrene	N	N	N	N

MISCELLANEOUS AND RADIOCHEMICAL PARAMETERS

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	1085			1086			1090	
	LII			LII			UNCS	
	04/08/91	09/10/91	11/20/91	04/08/91	09/10/91	11/20/91	01/14/91	04/14/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	0.7	1.9	1.6	7.5	6.8	4.2	1.2	1.4
pH, Field (pH units)	6.7	6.8	6.8	7.3	7.6	7.6	7.4	7.3
Redox, Field (mV)	138	69	35	250	123	104	254	295
Sp. Cond., Field (umho/cm)	695	629	713	386	319	404	448	466
Temp, Field (degrees C)	15.2	16	16	15.9	19.6	15.2	13.8	15.6
COD (mg/L)	.	<5	<5	.	<5	<5	.	.
Cyanide (mg/L)	.	<0.1	<0.1	.	<0.1	<0.1	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	7	6.9	7.5	7.4	7.5	8.51	7.1	7.6
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	<50	728	768	369	368	424	493	559
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	<1	<1	<1	<1	<1	2	.	.
TOC, 2 (mg/L)	<1	.	.	<1	.	.	.	.
TOC, 3 (mg/L)	<1	.	.	<1	.	.	.	.
TOC, 4 (mg/L)	<1	.	.	<1	.	.	.	.
TOX, 1 (ug/L)	83	55	110	<10	<10	14	.	.
TOX, 2 (ug/L)	81	.	.	<10	.	.	.	.
TOX, 3 (ug/L)	90	.	.	<10	.	.	.	.
TOX, 4 (ug/L)	79	.	.	<10	.	.	.	.
TDS (mg/L)	400	394	442	588	264	548	304	306
TSS (mg/L)	1	15	146	24720	1728	24080	4	2
Turbidity (NTU)	0.65	12	160	13000	1050	10000	4.4	0.25
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	1.51	0.77	4.15	25.14	4.44	3.73	0.53	2.13
Gross Alpha (CE+/-)	1.10	1.10	2.30	3.50	1.70	2.00	1.30	1.60
Gross Beta (pCi/L)	4.17	1.26	2.09	39.09	4.71	2.97	-0.63	4.13
Gross Beta (CE+/-)	3.30	3.30	3.00	4.90	3.50	3.00	3.40	3.40
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	1090			GW-141				GW-142
	UNCS			LIV				KHQ
	07/31/91	08/13/91	10/06/91	01/08/91	04/04/91	07/17/91	10/02/91	03/16/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	0.6	1.1	1.6	6.1	5.7	6	7.4	1.5
pH, Field (pH units)	7.2	7.3	7.5	6.8	6.8	6.9	7.2	7.6
Redox, Field (mV)	206	205	175	341	316	240	186	272
Sp. Cond., Field (umho/cm)	538	470	437	362	458	460	387	396
Temp, Field (degrees C)	16.2	16	14.4	13.2	14.5	14.8	14.8	16
COD (mg/L)	.	.	.	.	.	<5	<5	.
Cyanide (mg/L)	.	.	.	.	.	<0.1	<0.1	.
Phenols (mg/L)	.	.	.	.	.	.	.	<0.03
pH, 1 (pH units)	.	7.9	7.4	6.8	6.9	7.5	7.5	7.1
pH, 2 (pH units)	.	.	.	.	.	.	.	7.1
pH, 3 (pH units)	.	.	.	.	.	.	.	7.1
pH, 4 (pH units)	.	.	.	.	.	.	.	7.1
Sp. Cond., 1 (umho/cm)	.	588	552	405	405	486	446	438
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	438
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	441
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	441
TOC, 1 (mg/L)	.	.	.	1	1	2	1	2
TOC, 2 (mg/L)	.	.	.	1	.	.	.	2
TOC, 3 (mg/L)	.	.	.	1	.	.	.	2
TOC, 4 (mg/L)	.	.	.	<1	.	.	.	2
TOX, 1 (ug/L)	.	.	.	.	.	<10	<10	<10
TOX, 2 (ug/L)	.	.	.	.	.	.	.	<10
TOX, 3 (ug/L)	.	.	.	.	.	.	.	12
TOX, 4 (ug/L)	.	.	.	.	.	.	.	<10
TDS (mg/L)	.	294	266	260	236	254	228	242
TSS (mg/L)	.	5	1	16	4	6	4	11
Turbidity (NTU)	.	4.6	1.2	15	20	20	14	24
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	1.73	.	2.98	1.11	0.50	1.16	6.83	9.64
Gross Alpha (CE+/-)	1.40	.	1.60	1.10	0.90	1.30	2.10	2.30
Gross Beta (pCi/L)	1.19	.	1.23	1.00	4.26	-0.21	19.40	12.52
Gross Beta (CE+/-)	3.50	.	3.00	3.20	3.20	3.00	3.90	3.90
Uranium 234 (pCi/L)	0.00	.	1.37	0.00	-0.46	.	.	.
Uranium 234 (CE+/-)	1.80	.	2.00	1.50	0.90	.	.	.
Uranium 235 (pCi/L)	0.00	.	0.00	0.00	0.00	.	.	.
Uranium 235 (CE+/-)	1.80	.	1.60	1.50	1.60	.	.	.
Uranium 238 (pCi/L)	-0.46	.	-0.46	0.00	0.00	.	.	.
Uranium 238 (CE+/-)	0.90	.	0.91	1.50	1.60	.	.	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-142				GW-143			
	KHQ				KHQ			
	06/13/91	08/03/91	08/10/91	11/04/91	03/16/91	06/16/91	09/05/91	11/07/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	5.9	0.4	.	0.6	0.5	0.4	5.1	2.7
pH, Field (pH units)	7.6	7.8	.	7.7	7.8	7.8	8.3	8
Redox, Field (mV)	144	-141	.	-163	55	203	-24	43
Sp. Cond., Field (umho/cm)	408	435	.	345	452	476	460	396
Temp, Field (degrees C)	17.6	16.3	.	13	15	16.5	18.4	14.9
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	<0.05	<0.05	.	<0.05	<0.03	<0.05	<0.05	<0.05
pH, 1 (pH units)	8	7.9	7.9	7.6	7.1	8	8	7.8
pH, 2 (pH units)	7.9	7.8	7.9	7.5	7.2	8	8	7.8
pH, 3 (pH units)	7.8	7.8	7.9	7.6	7.1	8	8.1	7.8
pH, 4 (pH units)	7.8	7.8	7.9	7.6	7.2	8.2	8	7.8
Sp. Cond., 1 (umho/cm)	405	462	484	451	456	504	484	480
Sp. Cond., 2 (umho/cm)	409	462	477	451	467	.	481	479
Sp. Cond., 3 (umho/cm)	413	462	480	452	467	.	481	479
Sp. Cond., 4 (umho/cm)	413	462	476	451	464	.	481	479
TOC, 1 (mg/L)	1	3	.	6	<1	<1	1	2
TOC, 2 (mg/L)	<1	4	.	1	<1	<1	2	2
TOC, 3 (mg/L)	<1	4	.	56	<1	<1	2	2
TOC, 4 (mg/L)	<1	4	.	2	<1	<1	2	.
TOX, 1 (ug/L)	<10	<10	.	<10	<10	<10	<10	<10
TOX, 2 (ug/L)	<10	<10	.	<10	<10	<10	<10	<10
TOX, 3 (ug/L)	<10	<10	.	<10	<10	<10	<10	53
TOX, 4 (ug/L)	<10	<10	.	<10	<10	<10	<10	<10
TDS (mg/L)	236	246	.	238	280	272	268	266
TSS (mg/L)	6	5	.	5	4	2	<1	10
Turbidity (NTU)	19	25	.	23	16	3.5	8.1	15
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	15.82	5.30	.	3.58	4.26	4.98	3.36	3.89
Gross Alpha (CE+/-)	2.90	1.90	.	2.20	1.60	1.90	1.60	2.40
Gross Beta (pCi/L)	10.31	10.70	.	5.25	18.49	18.55	20.13	14.30
Gross Beta (CE+/-)	3.90	3.70	.	3.10	4.20	4.20	4.00	3.60
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-144					GW-145		
	KHQ					KHQ		
	03/16/91	06/15/91	08/10/91	09/05/91	11/06/91	03/16/91	06/14/91	08/10/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	4.4	2.5	.	2.4	1.5	5.1	16.2	.
pH, Field (pH units)	8.2	7.9	.	8	7.7	7.4	7.8	.
Redox, Field (mV)	227	162	.	58	165	287	127	.
Sp. Cond., Field (umho/cm)	321	298	.	306	372	464	495	.
Temp, Field (degrees C)	15.6	16.1	.	16	14.7	14	18.2	.
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	<0.03	<0.05	.	<0.05	<0.05	<0.03	<0.05	.
pH, 1 (pH units)	6.9	7.2	7.8	7.7	7.9	7	8.1	8
pH, 2 (pH units)	6.9	8	7.8	7.8	7.9	7.1	8.1	8
pH, 3 (pH units)	6.9	8.1	7.8	7.8	7.9	7	8.2	8
pH, 4 (pH units)	6.9	8	7.8	7.8	7.9	7.1	8.1	8
Sp. Cond., 1 (umho/cm)	278	325	.	330	335	501	495	.
Sp. Cond., 2 (umho/cm)	297	324	.	325	333	505	484	.
Sp. Cond., 3 (umho/cm)	304	332	.	331	335	505	491	.
Sp. Cond., 4 (umho/cm)	304	328	.	331	335	508	502	.
TOC, 1 (mg/L)	2	1	.	1	1	<1	2	.
TOC, 2 (mg/L)	2	1	.	1	1	<1	2	.
TOC, 3 (mg/L)	2	1	.	1	1	<1	2	.
TOC, 4 (mg/L)	2	2	.	1	.	2	2	.
TOX, 1 (ug/L)	<10	<10	.	<10	<10	<10	<10	.
TOX, 2 (ug/L)	<10	<10	.	<10	<10	<10	<10	.
TOX, 3 (ug/L)	<10	<10	.	<10	<10	11	<10	.
TOX, 4 (ug/L)	<10	<10	.	<10	<10	<10	<10	.
TDS (mg/L)	190	176	.	176	192	296	296	.
TSS (mg/L)	1	1	.	<1	1	30	178	.
Turbidity (NTU)	0.25	1.2	.	0.25	0.3	16	24	.
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	4.47	1.71	.	5.30	6.86	14.09	12.81	.
Gross Alpha (CE+/-)	1.70	1.50	.	1.90	2.60	2.70	2.60	.
Gross Beta (pCi/L)	3.56	0.62	.	3.03	6.95	21.72	17.38	.
Gross Beta (CE+/-)	3.50	3.30	.	3.10	3.20	4.30	4.20	.
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-145		GW-146				GW-147	
	KHQ		KHQ				KHQ	
	09/04/91	11/05/91	03/16/91	06/15/91	09/04/91	11/07/91	03/14/91	09/04/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	7.8	7.3	1	2.6	3.4	2.8	10.3	10.2
pH, Field (pH units)	7.8	7.8	7.9	7.5	7.6	7.9	7.8	7.5
Redox, Field (mV)	10	164	177	200	-12	30	353	196
Sp. Cond., Field (umho/cm)	500	389	522	534	562	444	330	339
Temp, Field (degrees C)	17.2	13.7	16	18.2	16.7	14.2	11.8	17.5
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	<0.05	<0.05	<0.03	<0.05	<0.05	<0.05	<0.03	<0.05
pH, 1 (pH units)	8	7.8	7.1	8.5	7.9	7.8	7.3	8
pH, 2 (pH units)	8	7.8	7.2	8.1	7.9	7.8	7.3	7.8
pH, 3 (pH units)	7.9	7.8	7.2	8.1	7.9	7.8	7.3	7.9
pH, 4 (pH units)	8	7.8	7.2	8.1	8	7.9	7.3	7.9
Sp. Cond., 1 (umho/cm)	539	535	538	560	560	555	323	321
Sp. Cond., 2 (umho/cm)	538	537	542	.	560	556	338	319
Sp. Cond., 3 (umho/cm)	538	538	542	.	558	559	334	319
Sp. Cond., 4 (umho/cm)	538	535	545	.	557	557	330	320
TOC, 1 (mg/L)	2	1	<1	<1	2	<1	1	1
TOC, 2 (mg/L)	2	2	<1	<1	2	<1	1	1
TOC, 3 (mg/L)	2	1	<1	<1	2	<1	1	2
TOC, 4 (mg/L)	2	.	<1	<1	2	.	2	2
TOX, 1 (ug/L)	22	11	<10	<10	<10	<10	<10	<10
TOX, 2 (ug/L)	<10	<10	<10	<10	<10	<10	<10	13
TOX, 3 (ug/L)	<10	<10	<10	<10	<10	<10	<10	<10
TOX, 4 (ug/L)	<10	<10	<10	<10	11	<10	<10	<10
TDS (mg/L)	294	292	328	310	312	318	248	166
TSS (mg/L)	73	18	10	37	6	3	101	24
Turbidity (NTU)	48	14	18	25	9	13	100	12
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	10.16	14.30	2.90	3.79	2.91	4.67	4.20	2.06
Gross Alpha (CE+/-)	2.40	3.50	1.50	1.80	1.60	2.40	1.60	1.40
Gross Beta (pCi/L)	23.12	17.80	18.61	17.52	18.25	17.30	8.02	7.88
Gross Beta (CE+/-)	4.10	3.80	4.20	4.20	3.90	3.80	3.70	3.40
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-147	GW-155		GW-156				
Location	KHQ	CRSDB		CRSDB				
Date Sampled	11/05/91	02/28/91	06/02/91	02/28/91	06/02/91	08/10/91	08/23/91	10/30/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	13.8	7.3	7.1	7.2	5.7	.	8.2	7.3
pH, Field (pH units)	8	7.8	7.8	7.4	7.4	.	7.2	7
Redox, Field (mV)	190	272	175	313	194	.	180	246
Sp. Cond., Field (umho/cm)	259	272	271	740	677	.	586	624
Temp, Field (degrees C)	12.3	14.4	17.1	14.3	17.6	.	17.4	14.3
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	<0.05	.	.	.	.	.	.	<0.05
pH, 1 (pH units)	7.7	6.9	6.2	7.2	6.7	7.4	7.4	7.9
pH, 2 (pH units)	7.7	6.8	6.2	7.3	6.7	7.4	7.3	7.8
pH, 3 (pH units)	7.7	6.9	6.2	7.3	6.7	7.4	7.3	8.1
pH, 4 (pH units)	7.7	6.9	6.2	7.3	6.7	7.4	7.4	8
Sp. Cond., 1 (umho/cm)	353	256	266	783	655	.	604	673
Sp. Cond., 2 (umho/cm)	362	260	270	764	673	.	595	672
Sp. Cond., 3 (umho/cm)	361	263	270	805	659	.	598	674
Sp. Cond., 4 (umho/cm)	357	267	263	824	670	.	614	676
TOC, 1 (mg/L)	7	<1	<1	2	<1	.	2	4
TOC, 2 (mg/L)	9	<1	<1	2	<1	.	3	2
TOC, 3 (mg/L)	2	<1	<1	2	<1	.	3	53
TOC, 4 (mg/L)	69	<1	<1	2	<1	.	3	2
TOX, 1 (ug/L)	<10	<10	<10	<10	<10	.	<10	<10
TOX, 2 (ug/L)	<10	<10	<10	<10	<10	.	<10	<10
TOX, 3 (ug/L)	<10	11	<10	<10	<10	.	<10	13.9
TOX, 4 (ug/L)	<10	<10	<10	<10	<10	.	<10	<10
TDS (mg/L)	190	166	216	374	344	.	372	364
TSS (mg/L)	6	11	281	30	7	.	6	3
Turbidity (NTU)	2.3	28	170	38	2.4	.	2.7	4.4
.	.	.	.	.	.	.	.	.
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	2.61	1.30	2.78	8.48	4.24	.	1.32	3.84
Gross Alpha (CE+/-)	2.00	1.10	1.60	2.10	1.80	.	1.50	2.00
Gross Beta (pCi/L)	4.38	1.05	7.66	14.85	13.94	.	5.81	8.21
Gross Beta (CE+/-)	3.10	3.10	3.60	3.80	4.00	.	3.50	3.00
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-157	GW-158					GW-159		
Location	CRSDB	CRSDB					CRSDB		
Date Sampled	02/28/91	03/04/91	06/08/91	08/25/91	11/14/91	02/28/91	06/01/91	08/10/91	
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.	.
DO, Field (ppm)	6.8	1.2	0.6	0.2	0.6	6.7	4.9	.	.
pH, Field (pH units)	7.9	7.5	7.5	7.7	7.6	7.8	7.4	.	.
Redox, Field (mV)	295	255	-119	-198	-83	301	189	.	.
Sp. Cond., Field (umho/cm)	368	281	296	295	322	357	359	.	.
Temp, Field (degrees C)	16.1	12.5	16.3	16.3	14.7	12.7	15.7	.	.
COD (mg/L)	.	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	.	<0.05	.	.	.	.
pH, 1 (pH units)	7.4	7.6	6	7.8	8	7.6	6.4	8.1	.
pH, 2 (pH units)	7.4	7.4	6.1	7.9	8	7.5	6.4	8	.
pH, 3 (pH units)	7.5	7.6	6.1	8	8	7.6	6.4	8.1	.
pH, 4 (pH units)	7.4	7.6	6.1	8	8	7.6	6.4	8.1	.
Sp. Cond., 1 (umho/cm)	345	326	284	341	338	349	355	.	.
Sp. Cond., 2 (umho/cm)	356	341	295	342	336	349	359	.	.
Sp. Cond., 3 (umho/cm)	352	349	295	342	335	356	355	.	.
Sp. Cond., 4 (umho/cm)	356	349	298	340	339	352	363	.	.
TOC, 1 (mg/L)	2	<1	<1	1	2	<1	<1	.	.
TOC, 2 (mg/L)	2	<1	<1	<1	<1	<1	<1	.	.
TOC, 3 (mg/L)	2	<1	<1	2	<1	1	<1	.	.
TOC, 4 (mg/L)	2	<1	1	2	<1	1	<1	.	.
TOX, 1 (ug/L)	<10	<10	<10	<10	<10	<10	<10	.	.
TOX, 2 (ug/L)	<10	<10	<10	<10	<10	<10	<10	.	.
TOX, 3 (ug/L)	<10	<10	<10	<10	<10	<10	<10	.	.
TOX, 4 (ug/L)	<10	<10	<10	<10	<10	<10	<10	.	.
TDS (mg/L)	310	252	174	158	180	176	184	.	.
TSS (mg/L)	42	8	6	12	4	43	<1	.	.
Turbidity (NTU)	31	14	23	35	5.7	34	3.5	.	.
.	.	.	.	.	.	.	.	.	.
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	4.46	3.66	3.46	1.95	4.24	3.78	2.87	.	.
Gross Alpha (CE+/-)	1.60	1.50	1.60	1.60	2.20	1.50	1.60	.	.
Gross Beta (pCi/L)	9.68	6.53	5.42	0.97	2.40	11.25	11.61	.	.
Gross Beta (CE+/-)	3.60	3.40	3.50	3.20	3.00	3.60	3.80	.	.
Uranium 234 (pCi/L)	.	.	.	.	.	0.48	0.87	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	1.60	1.20	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	0.48	0.00	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	1.00	1.50	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	0.95	-0.44	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	1.30	1.50	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-159		GW-160				GW-161	
	CRSDB		LIII				LIII	
	08/23/91	10/29/91	02/13/91	05/24/91	08/21/91	10/26/91	02/12/91	05/17/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	8.5	6.2	6.2	6	6.2	5.8	3.3	1.8
pH, Field (pH units)	8	7.9	7.2	7.5	7.4	7.5	7.5	7.6
Redox, Field (mV)	184	132	242	38	6	128	292	-58
Sp. Cond., Field (umho/cm)	330	352	376	413	379	416	351	350
Temp, Field (degrees C)	16.3	17	13.4	17.2	16.6	16	14.4	18.8
COD (mg/L)	.	.	.	.	<5	<5	.	.
Cyanide (mg/L)	.	.	.	.	<0.1	<0.1	.	.
Phenols (mg/L)	.	<0.05	.	.	.	.	.	.
pH, 1 (pH units)	7.9	7.7	7.4	6.5	7.8	7.4	6.8	6.3
pH, 2 (pH units)	7.9	7.7	.	.	.	.	.	.
pH, 3 (pH units)	7.9	7.7	.	.	.	.	.	.
pH, 4 (pH units)	7.9	7.7	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	340	368	339	384	473	434	301	348
Sp. Cond., 2 (umho/cm)	330	368	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	333	369	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	335	368	.	.	.	.	.	.
TOC, 1 (mg/L)	2	1	.	.	1	1	.	.
TOC, 2 (mg/L)	2	33	.	.	.	.	.	.
TOC, 3 (mg/L)	2	4	.	.	.	.	.	.
TOC, 4 (mg/L)	2	1	.	.	.	.	.	.
TOX, 1 (ug/L)	<10	<10	.	.	13	<10	.	.
TOX, 2 (ug/L)	<10	<10	.	.	.	.	.	.
TOX, 3 (ug/L)	<10	<10	.	.	.	.	.	.
TOX, 4 (ug/L)	<10	<10	.	.	.	.	.	.
TDS (mg/L)	206	200	318	242	412	322	192	190
TSS (mg/L)	19	14	78	15	131	100	6	8
Turbidity (NTU)	14	15	200	49	350	315	14	19
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	1.29	2.18	2.24	1.97	2.29	4.71	2.24	0.68
Gross Alpha (CE+/-)	1.50	2.00	1.50	1.40	1.70	2.40	1.50	1.20
Gross Beta (pCi/L)	5.43	5.31	0.68	5.05	4.49	6.48	0.68	1.08
Gross Beta (CE+/-)	3.50	3.00	3.20	3.50	3.40	3.00	3.20	3.30
Uranium 234 (pCi/L)	.	.	0.41	0.41	.	.	0.00	2.04
Uranium 234 (CE+/-)	.	.	0.80	0.80	.	.	1.40	1.80
Uranium 235 (pCi/L)	.	.	0.00	0.00	.	.	0.00	-0.41
Uranium 235 (CE+/-)	.	.	1.40	1.40	.	.	1.40	0.80
Uranium 238 (pCi/L)	.	.	0.82	-0.41	.	.	0.00	0.41
Uranium 238 (CE+/-)	.	.	1.20	1.40	.	.	1.40	0.80

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APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-161		GW-165		GW-166		GW-173	
	LIII		CRDT		CRDT		CRSP	
	08/21/91	10/25/91	02/27/91	06/07/91	02/24/91	06/08/91	02/01/91	05/03/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	5.2	5.6	3.9	3.1	2.7	2.7	8.5	7.3
pH, Field (pH units)	7.5	7.3	7.8	7.7	8.3	7.8	6.9	7.5
Redox, Field (mV)	76	157	270	310	295	236	310	330
Sp. Cond., Field (umho/cm)	331	342	242	245	210	210	328	358
Temp, Field (degrees C)	16.5	15.5	13.1	15.3	13.7	14.1	13.6	15.6
COD (mg/L)	<5	<5	.	.	.	.	.	.
Cyanide (mg/L)	<0.1	<0.1	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	8	7.6	6.8	5.9	6.8	5.9	6.8	6.4
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	409	390	241	255	192	252	343	351
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	2	<1	.	.	.	.	.	.
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	<10	<10	.	.	.	.	.	.
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	192	190	172	192	146	166	200	202
TSS (mg/L)	<1	<1	72	122	1	2	4	4
Turbidity (NTU)	4	3.3	90	100	3.1	4.4	5.8	3.7
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	1.88	2.30	1.17	3.03	0.49	3.01	0.99	0.87
Gross Alpha (CE+/-)	1.60	2.00	1.30	1.60	1.10	1.60	1.20	1.30
Gross Beta (pCi/L)	3.06	1.24	4.31	3.04	5.80	3.93	2.00	2.28
Gross Beta (CE+/-)	3.30	2.70	3.50	3.40	3.60	3.50	3.40	3.40
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-173		GW-174				GW-175	
	CRSP		CRSP				CRSP	
	08/06/91	10/10/91	02/01/91	05/03/91	08/06/91	10/11/91	01/31/91	05/01/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	3.5	7.3	4.4	4.3	1.4	4.9	9.1	9
pH, Field (pH units)	7.7	7.6	8.2	8.1	8.1	7.9	7.6	8.2
Redox, Field (mV)	139	234	237	297	125	200	282	220
Sp. Cond., Field (umho/cm)	349	323	314	360	343	331	315	306
Temp, Field (degrees C)	18	16.3	14.6	16.5	20.5	15.8	11.2	16
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	7.9	7.6	7	6.4	8.2	7.8	7.1	6.3
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	409	392	350	355	422	406	266	301
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	.	.	.	.	.	.	.	.
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	.	.	.	.	.	.	.	.
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	214	204	206	214	240	234	166	180
TSS (mg/L)	7	1	2	10	4	2	1	8
Turbidity (NTU)	5.5	3.9	1.3	2.7	1.2	2.1	2.5	8.9
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	1.80	2.65	4.17	2.17	3.28	3.58	2.84	1.10
Gross Alpha (CE+/-)	1.30	1.40	1.70	1.50	1.50	1.60	1.50	1.40
Gross Beta (pCi/L)	-0.10	4.35	7.80	8.04	4.28	5.69	0.70	2.55
Gross Beta (CE+/-)	3.30	3.50	3.70	3.70	3.50	3.50	3.40	3.50
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-175		GW-176				GW-177	
	CRSP		CRSP				CRSP	
	08/08/91	10/13/91	02/04/91	05/04/91	08/09/91	10/14/91	02/02/91	05/03/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	3.8	10	6	6	5.6	2.8	7.1	2.1
pH, Field (pH units)	7.9	7.9	6.8	6.9	6.9	7	7.4	7.8
Redox, Field (mV)	127	224	344	245	247	277	365	300
Sp. Cond., Field (umho/cm)	312	301	538	488	449	425	424	398
Temp, Field (degrees C)	17	14.1	16.5	15.8	16.6	15.4	15	19.1
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	8.1	7.9	6.7	6.5	7.3	7.3	6.9	6.4
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	386	323	475	484	552	478	346	369
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	.	.	.	.	.	.	.	.
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	.	.	.	.	.	.	.	.
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	194	204	298	284	268	294	218	216
TSS (mg/L)	6	<1	<1	<1	<1	7	<1	3
Turbidity (NTU)	4.9	2.5	1.3	1.1	0.7	13	0.4	0.35
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	2.79	4.39	2.24	2.92	2.02	0.63	2.61	1.31
Gross Alpha (CE+/-)	1.40	1.70	1.40	1.50	1.30	1.80	1.50	1.40
Gross Beta (pCi/L)	2.08	1.20	5.32	1.33	2.81	3.07	10.05	4.37
Gross Beta (CE+/-)	3.40	3.30	3.60	3.50	3.40	2.90	3.80	3.60
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX B
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-177		GW-178				GW-179	
	CRSP		CRSP				CRSP	
	08/08/91	10/13/91	01/15/91	04/22/91	08/08/91	10/13/91	02/08/91	05/08/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	6.7	8.7	7.2	7.6	7.6	7.6	6.5	5
pH, Field (pH units)	7.6	7.4	7.1	7.5	7.4	7.3	7.4	7.2
Redox, Field (mV)	168	233	267	202	176	267	289	160
Sp. Cond., Field (umho/cm)	347	362	449	414	407	406	478	481
Temp, Field (degrees C)	19	13.9	11.5	13.3	18	14.5	12.2	17.3
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	7.9	7.4	7.6	7.5	7.7	7.4	6.9	6.5
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	436	380	486	463	494	419	489	494
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	.	.	.	.	.	.	.	.
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	.	.	.	.	.	.	.	.
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	220	230	292	288	278	288	276	282
TSS (mg/L)	2	<1	9	7	1	<1	233	95
Turbidity (NTU)	3.5	2.4	1300	280	9.6	960	216	3.5
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	1.81	3.56	0.51	0.53	4.52	8.40	3.61	3.67
Gross Alpha (CE+/-)	1.30	1.50	2.80	2.80	4.60	5.30	1.70	1.60
Gross Beta (pCi/L)	4.17	3.55	-1.43	-0.07	-0.61	5.89	11.16	9.25
Gross Beta (CE+/-)	3.50	3.40	7.10	6.20	13.10	13.00	3.80	3.90
Uranium 234 (pCi/L)	.	.	0.44	0.43	.	.	.	.
Uranium 234 (CE+/-)	.	.	0.90	0.90	.	.	.	.
Uranium 235 (pCi/L)	.	.	0.00	0.00	.	.	.	.
Uranium 235 (CE+/-)	.	.	1.50	1.50	.	.	.	.
Uranium 238 (pCi/L)	.	.	0.44	0.00	.	.	.	.
Uranium 238 (CE+/-)	.	.	0.90	1.50	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-179		GW-180				GW-181	
	CRSP		CRSP				CRSP	
	08/12/91	10/17/91	02/02/91	05/04/91	08/09/91	10/14/91	01/29/91	04/30/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	7.6	7.2	5.5	5.7	4.4	5.4	6.2	6.7
pH, Field (pH units)	7.5	7.5	6.9	7.1	7.3	7.3	7.5	7.6
Redox, Field (mV)	192	192	364	321	193	262	294	234
Sp. Cond., Field (umho/cm)	438	467	512	545	499	434	338	292
Temp, Field (degrees C)	16.2	14.7	13.7	14.7	16.2	16.3	13.6	16
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	8.2	7.5	7	6.6	7.5	7.5	6.9	6.3
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	529	479	482	541	588	514	266	287
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	.	.	.	.	.	.	.	.
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	.	.	.	.	.	.	.	.
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	266	294	300	304	296	300	168	162
TSS (mg/L)	124	8	<1	<1	<1	1	1	<1
Turbidity (NTU)	34	24	0.28	0.26	0.25	0.45	1.3	0.6
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	1.70	1.10	1.34	2.55	2.80	2.50	1.22	2.07
Gross Alpha (CE+/-)	1.30	1.90	1.30	1.40	1.40	2.10	1.40	1.50
Gross Beta (pCi/L)	7.43	4.57	-0.55	0.17	0.64	2.66	3.63	2.44
Gross Beta (CE+/-)	3.60	3.00	3.30	3.40	3.30	2.90	3.50	3.50
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-181		GW-184		GW-186		GW-187	
Location	CRSP		RQ		RQ		RQ	
Date Sampled	08/05/91	10/08/91	09/08/91	11/18/91	09/08/91	11/18/91	09/09/91	11/19/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	6.2	6.9	0.6	0.6	1.3	0.5	0.4	0.4
pH, Field (pH units)	7.8	7.7	7.2	7.2	7	7.1	7.6	7.1
Redox, Field (mV)	91	174	156	193	-72	-76	-229	-228
Sp. Cond., Field (umho/cm)	286	251	448	457	880	849	711	686
Temp, Field (degrees C)	15.3	13.8	15.2	14	17	15.1	17.1	15.7
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	8.3	7.9	7.2	8.5	7.1	7.7	7.5	7.92
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	1050	364	528	491	918	897	698	735
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	.	.	.	.	.	.	.	.
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	.	.	.	.	.	.	.	.
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	192	158	308	304	536	536	400	406
TSS (mg/L)	<1	1	<1	1	<1	2	<1	<1
Turbidity (NTU)	2.4	2.4	0.5	0.56	8.4	0.95	14	15
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	1.38	2.26	0.88	0.32	0.63	0.00	2.64	2.33
Gross Alpha (CE+/-)	1.40	1.30	1.20	1.60	1.10	1.80	1.50	2.10
Gross Beta (pCi/L)	1.36	5.22	2.13	-0.42	2.47	1.28	3.72	3.72
Gross Beta (CE+/-)	3.20	3.50	3.30	2.80	3.40	3.00	3.40	3.10
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-188		GW-203				GW-205	
	RQ		UNCS				UNCS	
	09/09/91	11/19/91	01/12/91	04/12/91	07/29/91	11/23/91	01/12/91	04/12/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	3.9	5.8	6.3	6.1	3.9	5	4.4	4.6
pH, Field (pH units)	8.2	8	7.1	7.9	7.8	8	6.6	7.7
Redox, Field (mV)	-112	-113	276	227	243	182	284	225
Sp. Cond., Field (umho/cm)	426	439	204	217	269	250	223	224
Temp, Field (degrees C)	18.8	16.2	11.1	14.6	16.3	14.8	12.8	14.2
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	7.8	8.28	7.1	7.4	8.1	7.7	7	7.5
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	419	438	196	211	268	265	220	258
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	.	.	.	.	1	.	.	.
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	.	.	.	.	.	.	.	.
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	242	252	188	150	186	160	146	156
TSS (mg/L)	2	8	194	5	50	14	1	2
Turbidity (NTU)	3.9	8.7	110	8.3	64	12	1.4	0.8
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	4.11	2.62	1.16	1.28	3.18	1.49	1.24	2.55
Gross Alpha (CE+/-)	1.70	2.00	1.50	1.00	1.60	1.80	1.50	1.30
Gross Beta (pCi/L)	18.49	5.85	0.20	2.34	0.69	6.84	-0.61	-1.02
Gross Beta (CE+/-)	4.20	3.20	3.60	3.20	3.50	2.90	3.60	3.00
Uranium 234 (pCi/L)	.	.	0.43	0.44	0.44	-0.43	.	.
Uranium 234 (CE+/-)	.	.	0.90	1.50	1.20	0.87	.	.
Uranium 235 (pCi/L)	.	.	0.43	-0.44	0.00	-0.87	.	.
Uranium 235 (CE+/-)	.	.	0.90	0.90	1.70	1.20	.	.
Uranium 238 (pCi/L)	.	.	0.00	0.00	-0.44	0.00	.	.
Uranium 238 (CE+/-)	.	.	1.50	1.50	0.90	1.50	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-205		GW-217				GW-221	
	UNCS		LIV				UNCS	
	07/29/91	11/23/91	01/06/91	04/03/91	07/16/91	10/01/91	01/13/91	04/13/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	2.4	3	10.8	8.3	8.2	7.8	7.4	8.4
pH, Field (pH units)	7.7	7.9	8	8.2	8	8.1	7.3	7.8
Redox, Field (mV)	231	169	280	234	213	200	314	335
Sp. Cond., Field (umho/cm)	300	280	267	296	288	258	252	229
Temp, Field (degrees C)	16.6	15.8	13.6	15.8	16.8	17.6	12.7	15.3
COD (mg/L)	.	.	.	.	<5	<5	.	.
Cyanide (mg/L)	.	.	.	.	<0.1	<0.1	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	7.9	7.7	6.9	7.1	8.3	8.1	7	7.1
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	299	299	245	269	308	298	217	269
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	3	.	<1	1	1	<1	.	.
TOC, 2 (mg/L)	.	.	<1	.	.	.	.	.
TOC, 3 (mg/L)	.	.	<1	.	.	.	.	.
TOC, 4 (mg/L)	.	.	<1	.	.	.	.	.
TOX, 1 (ug/L)	.	.	.	.	<10	<10	.	.
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	148	162	166	108	188	168	144	168
TSS (mg/L)	5	2	10	16	32	28	5	<1
Turbidity (NTU)	2	0.43	7.2	4.3	135	19	1.6	0.45
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	2.31	2.28	1.74	2.57	1.09	5.61	0.39	2.86
Gross Alpha (CE+/-)	1.50	2.00	1.30	1.30	1.20	1.90	1.40	1.30
Gross Beta (pCi/L)	-0.92	4.98	5.72	4.71	3.30	15.50	-0.61	4.73
Gross Beta (CE+/-)	3.40	2.80	3.60	3.20	3.30	3.70	3.60	3.40
Uranium 234 (pCi/L)	2.37	0.46	0.44	0.00	.	.	.	.
Uranium 234 (CE+/-)	2.30	1.60	0.90	1.80	.	.	.	.
Uranium 235 (pCi/L)	0.00	-0.91	0.00	0.00	.	.	.	.
Uranium 235 (CE+/-)	1.90	1.30	1.50	1.60	.	.	.	.
Uranium 238 (pCi/L)	-0.48	0.00	0.44	0.00	.	.	.	.
Uranium 238 (CE+/-)	0.90	1.60	0.90	1.60	.	.	.	.

(CONTINUED)

APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-221			GW-231				
	UNCS			KHQ				
	07/30/91	08/13/91	11/23/91	03/14/91	07/19/91	08/10/91	09/04/91	11/05/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	4.6	7.3	6.8	4.6	0.5	.	0.6	0.5
pH, Field (pH units)	7.6	7.7	7.7	7.4	7.2	.	7.3	7.4
Redox, Field (mV)	190	203	184	244	180	.	199	176
Sp. Cond., Field (umho/cm)	279	258	276	205	299	.	367	292
Temp, Field (degrees C)	16.5	17.2	14.9	9.1	15.2	.	16.7	14.9
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	<0.03	<0.05	.	<0.05	<0.05
pH, 1 (pH units)	.	8.1	7.6	6.8	7.8	7.6	7.5	7.3
pH, 2 (pH units)	.	.	.	6.9	7.8	7.6	7.4	7.3
pH, 3 (pH units)	.	.	.	6.9	7.8	7.6	7.4	7.3
pH, 4 (pH units)	.	.	.	6.9	7.8	7.6	7.4	6.8
Sp. Cond., 1 (umho/cm)	.	310	278	211	361	.	378	383
Sp. Cond., 2 (umho/cm)	.	.	.	215	364	.	375	389
Sp. Cond., 3 (umho/cm)	.	.	.	219	361	.	375	390
Sp. Cond., 4 (umho/cm)	.	.	.	215	364	.	376	390
TOC, 1 (mg/L)	.	.	.	<1	1	.	2	2
TOC, 2 (mg/L)	.	.	.	<1	2	.	2	1
TOC, 3 (mg/L)	.	.	.	<1	2	.	2	2
TOC, 4 (mg/L)	.	.	.	<1	2	.	2	.
TOX, 1 (ug/L)	.	.	.	<10	<10	.	<10	<10
TOX, 2 (ug/L)	.	.	.	<10	<10	.	<10	<10
TOX, 3 (ug/L)	.	.	.	<10	<10	.	<10	<10
TOX, 4 (ug/L)	.	.	.	<10	<10	.	13	<10
TDS (mg/L)	.	148	160	144	166	.	198	204
TSS (mg/L)	.	1	<1	<1	<1	.	<1	<1
Turbidity (NTU)	.	0.7	1.4	1.6	0.3	.	0.15	0.5
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	0.04	.	1.19	1.70	1.85	.	1.24	-0.15
Gross Alpha (CE+/-)	1.20	.	1.80	1.30	1.40	.	1.30	1.50
Gross Beta (pCi/L)	0.92	.	7.70	2.13	1.90	.	3.54	-0.77
Gross Beta (CE+/-)	3.10	.	3.00	3.40	3.20	.	3.10	2.80
Uranium 234 (pCi/L)	0.48	.	14.70	.	.	.	.	.
Uranium 234 (CE+/-)	1.00	.	5.20	.	.	.	.	.
Uranium 235 (pCi/L)	0.00	.	1.73	.	.	.	.	.
Uranium 235 (CE+/-)	1.60	.	2.40	.	.	.	.	.
Uranium 238 (pCi/L)	0.48	.	19.50	.	.	.	.	.
Uranium 238 (CE+/-)	1.00	.	5.80	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-241				GW-292			
	CRSDB				ECRWP			
	03/02/91	06/10/91	08/25/91	10/31/91	02/09/91	05/11/91	08/16/91	10/22/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	8.5	6.6	6.9	6.6	6.8	6.9	7.2	4.4
pH, Field (pH units)	7.7	7.8	7.9	7.7	7.6	7.7	7.2	7.3
Redox, Field (mV)	324	186	72	205	319	150	259	206
Sp. Cond., Field (umho/cm)	276	222	248	267	486	450	442	442
Temp, Field (degrees C)	14.5	20	15.6	15.9	14.5	15	16.1	15.4
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	<0.05	.	.	.	.
pH, 1 (pH units)	7.3	5.8	7.9	8.4	6.9	6.4	7.8	7.4
pH, 2 (pH units)	7.2	5.8	8.1	8.4	.	.	.	.
pH, 3 (pH units)	7.3	5.8	7.9	8.3	.	.	.	.
pH, 4 (pH units)	7.2	5.8	8.3	8.4	.	.	.	.
Sp. Cond., 1 (umho/cm)	271	248	308	295	412	444	541	384
Sp. Cond., 2 (umho/cm)	275	255	308	291	.	.	.	.
Sp. Cond., 3 (umho/cm)	275	255	308	292	.	.	.	.
Sp. Cond., 4 (umho/cm)	275	255	308	291	.	.	.	.
TOC, 1 (mg/L)	<1	<1	2	2	.	.	.	.
TOC, 2 (mg/L)	1	<1	2	1	.	.	.	.
TOC, 3 (mg/L)	<1	1	1	2	.	.	.	.
TOC, 4 (mg/L)	<1	<1	2	3	.	.	.	.
TOX, 1 (ug/L)	<10	<10	<10	<10	.	.	.	.
TOX, 2 (ug/L)	<10	<10	<10	<10	.	.	.	.
TOX, 3 (ug/L)	<10	<10	<10	<10	.	.	.	.
TOX, 4 (ug/L)	<10	<10	<10	<10	.	.	.	.
TDS (mg/L)	234	188	276	196	250	254	260	280
TSS (mg/L)	153	30	252	882	<1	1	<1	1
Turbidity (NTU)	102	68	180	1200	0.35	0.45	0.28	0.3
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	1.34	1.61	1.00	11.90	0.99	0.62	1.80	2.48
Gross Alpha (CE+/-)	1.10	1.40	1.40	3.00	1.30	1.40	1.40	1.70
Gross Beta (pCi/L)	4.05	4.21	5.94	13.30	0.10	0.50	1.33	2.40
Gross Beta (CE+/-)	3.30	3.50	3.50	3.20	3.20	3.20	3.20	2.70
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-293				GW-294			
	ECRWP				ECRWP			
	02/10/91	05/11/91	08/19/91	10/23/91	02/09/91	05/10/91	08/15/91	10/22/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	6.4	6.5	5.9	3.6	8.2	7.6	6.2	9.5
pH, Field (pH units)	7.5	7.7	7.3	7.4	7.5	7.5	7.5	7.4
Redox, Field (mV)	307	104	113	138	295	196	209	201
Sp. Cond., Field (umho/cm)	457	417	433	440	389	443	391	406
Temp, Field (degrees C)	14.6	16.2	16.7	15.2	12.5	15.8	15.7	16.6
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	6.9	6.4	8	7.5	6.9	6.3	8.2	7.7
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	416	441	509	428	364	380	463	354
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	.	.	.	.	.	.	.	.
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	.	.	.	.	.	.	.	.
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	244	276	246	274	228	230	230	258
TSS (mg/L)	10	4	11	9	<1	3	4	2
Turbidity (NTU)	50	14	14	25	0.5	0.52	1.6	0.35
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	2.31	1.65	1.63	3.38	2.97	1.00	0.55	1.68
Gross Alpha (CE+/-)	1.50	1.60	1.30	1.80	1.60	1.50	1.10	1.50
Gross Beta (pCi/L)	6.26	2.49	4.21	2.57	5.64	1.47	3.28	1.99
Gross Beta (CE+/-)	3.50	3.30	3.40	2.70	3.50	3.30	3.40	2.70
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-295				GW-296			
	LIII				ECRWP			
	02/11/91	05/16/91	08/30/91	11/12/91	02/09/91	05/10/91	08/15/91	10/22/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	5.6	6	5.8	3.5	5.2	7.3	4.9	8.2
pH, Field (pH units)	7.8	7.8	7.5	6.5	7.4	7.4	7.2	7.3
Redox, Field (mV)	164	130	238	-20	258	179	229	220
Sp. Cond., Field (umho/cm)	545	530	467	511	404	414	378	363
Temp, Field (degrees C)	13.2	19.1	17.7	13.5	13.1	15.3	16.1	15
COD (mg/L)	.	.	74	<5	.	.	.	.
Cyanide (mg/L)	.	.	<0.1	<0.1	.	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	7	6	7.4	6.96	6.9	6.4	8.2	7.6
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	528	541	566	542	350	369	488	319
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	.	.	4	2	.	.	.	.
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	.	.	<10	<10	.	.	.	.
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	330	356	680	284	220	212	222	220
TSS (mg/L)	332	159	24750	3732	<1	1	1	8
Turbidity (NTU)	310	140	16000	225	1	0.58	0.35	3
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	1.34	5.47	34.50	83.40	2.42	0.01	2.74	0.15
Gross Alpha (CE+/-)	1.50	1.90	4.10	8.40	1.50	1.30	1.50	1.20
Gross Beta (pCi/L)	25.85	10.21	142.00	98.90	4.06	-1.20	0.61	0.50
Gross Beta (CE+/-)	4.50	3.80	7.90	6.50	3.40	3.10	3.20	2.60
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-298				GW-299			
	LIII				LIII			
	02/21/91	05/31/91	08/22/91	10/28/91	02/21/91	05/30/91	08/22/91	10/27/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	3	4.4	1.7	1.2	5.9	5.1	4.3	4.3
pH, Field (pH units)	7.8	8	8.2	8	7.6	8.2	8	7.9
Redox, Field (mV)	310	232	122	165	288	208	164	169
Sp. Cond., Field (umho/cm)	259	325	314	282	214	262	238	241
Temp, Field (degrees C)	14.7	18.2	17.2	16.6	13.5	18.2	15.8	15.5
COD (mg/L)	.	.	<5	<5	.	.	<5	<5
Cyanide (mg/L)	.	.	<0.1	<0.1	.	.	<0.1	<0.1
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	7.3	6.3	8.3	7.8	6.9	6.2	8	7.7
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	262	323	353	0.33	237	248	302	276
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	.	.	2	<1	.	.	1	1
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	.	.	<10	<10	.	.	14	<10
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	172	174	168	124	140	132	154	106
TSS (mg/L)	30	12	60	9	<1	3	<1	1
Turbidity (NTU)	19	1	18	4.6	0.46	0.5	0.6	1.2
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	1.43	3.57	1.23	1.21	1.34	1.51	-0.05	0.00
Gross Alpha (CE+/-)	1.50	1.70	1.50	1.80	1.50	1.40	1.30	1.60
Gross Beta (pCi/L)	4.85	4.26	4.11	4.87	2.33	3.84	3.11	2.80
Gross Beta (CE+/-)	3.50	3.40	3.40	2.90	3.30	3.40	3.30	2.80
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-300				GW-301			
	LIII				LIII			
	02/13/91	05/30/91	08/22/91	10/27/91	02/14/91	05/30/91	08/22/91	10/27/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	5.8	6.6	4.8	4.1	7.4	7	8.3	4.3
pH, Field (pH units)	7.3	7.6	7.5	7.4	7.9	8.2	8.2	8.1
Redox, Field (mV)	313	170	191	172	271	230	103	181
Sp. Cond., Field (umho/cm)	248	287	256	270	290	267	277	268
Temp, Field (degrees C)	13.2	17.3	15.2	15.2	13	18.6	19.2	16
COD (mg/L)	.	.	<5	<5	.	.	<5	7
Cyanide (mg/L)	.	.	<0.1	<0.1	.	.	<0.1	<0.1
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	6.9	6.2	7.8	7.4	7	6.2	8.3	7.8
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	227	266	316	313	224	255	309	293
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	.	.	2	2	.	.	2	2
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	.	.	<10	<10	.	.	<10	<10
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	134	134	150	118	188	142	146	90
TSS (mg/L)	<1	1	<1	<1	139	17	74	3
Turbidity (NTU)	0.5	0.6	0.5	0.7	170	18	46	3
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	0.07	1.35	-0.03	3.47	2.33	1.93	-0.02	1.67
Gross Alpha (CE+/-)	1.10	1.30	1.30	2.20	1.60	1.40	1.30	1.90
Gross Beta (pCi/L)	2.34	1.85	-0.04	4.21	4.17	2.55	1.95	3.39
Gross Beta (CE+/-)	3.30	3.30	3.20	2.90	3.40	3.30	3.30	2.80
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-302					GW-303		
	UNCS					CRSDB		
	01/14/91	04/13/91	07/30/91	08/13/91	10/06/91	03/01/91	06/04/91	08/24/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	6	6.1	4	5.1	4.9	0.6	0.5	0.8
pH, Field (pH units)	7.1	7.6	7.4	7.5	7.6	7.9	7.9	7.6
Redox, Field (mV)	298	319	172	143	127	-148	-165	-146
Sp. Cond., Field (umho/cm)	381	407	480	459	408	636	616	595
Temp, Field (degrees C)	13.3	15.6	16.1	16	14.5	14.5	16.3	16.2
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	7	7.6	.	7.6	7.6	7.3	6.1	7.7
pH, 2 (pH units)	.	.	.	.	.	7.3	6.1	7.7
pH, 3 (pH units)	.	.	.	.	.	7.3	6.1	7.7
pH, 4 (pH units)	.	.	.	.	.	7.3	6.1	7.7
Sp. Cond., 1 (umho/cm)	440	484	.	547	548	638	598	614
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	642	605	604
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	642	609	604
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	645	609	612
TOC, 1 (mg/L)	.	.	.	.	.	<1	<1	1
TOC, 2 (mg/L)	.	.	.	.	.	<1	1	1
TOC, 3 (mg/L)	.	.	.	.	.	<1	1	1
TOC, 4 (mg/L)	.	.	.	.	.	1	<1	1
TOX, 1 (ug/L)	.	.	.	.	.	<10	<10	<10
TOX, 2 (ug/L)	.	.	.	.	.	<10	<10	<10
TOX, 3 (ug/L)	.	.	.	.	.	<10	<10	<10
TOX, 4 (ug/L)	.	.	.	.	.	<10	<10	<10
TDS (mg/L)	268	274	.	246	258	440	404	460
TSS (mg/L)	<1	1	.	2	7	<1	3	<1
Turbidity (NTU)	1.5	2.5	.	4	18	4.2	5	7.2
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	-0.62	4.76	0.43	.	1.61	5.40	2.25	4.34
Gross Alpha (CE+/-)	1.20	1.60	1.10	.	1.50	1.70	1.50	1.90
Gross Beta (pCi/L)	-1.35	6.48	0.35	.	3.29	16.33	6.23	9.94
Gross Beta (CE+/-)	3.50	3.50	3.50	.	3.10	3.90	3.60	3.70
Uranium 234 (pCi/L)	.	.	0.87	.	1.42	.	.	.
Uranium 234 (CE+/-)	.	.	1.50	.	2.10	.	.	.
Uranium 235 (pCi/L)	.	.	0.00	.	0.00	.	.	.
Uranium 235 (CE+/-)	.	.	1.70	.	1.60	.	.	.
Uranium 238 (pCi/L)	.	.	-0.43	.	0.47	.	.	.
Uranium 238 (CE+/-)	.	.	0.90	.	1.60	.	.	.

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APPENDIX B
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-303	GW-304				GW-305		
	CRSDB	CRSDB				LIV		
	11/02/91	02/28/91	06/01/91	08/23/91	11/02/91	01/06/91	04/03/91	07/15/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	0.3	7.3	6	8	7.7	8.9	10.3	8.8
pH, Field (pH units)	7.7	8.5	8	8.1	8	8	8.4	7.7
Redox, Field (mV)	-150	255	210	162	164	268	250	222
Sp. Cond., Field (umho/cm)	600	374	396	387	337	249	249	228
Temp, Field (degrees C)	12.8	13.5	16.1	17	12.1	13.3	16.2	18.2
COD (mg/L)	.	.	.	.	.	.	.	<5
Cyanide (mg/L)	.	.	.	.	.	.	.	<0.1
Phenols (mg/L)	<0.05	.	.	.	<0.05	.	.	.
pH, 1 (pH units)	7.3	7.3	6.3	8	7.8	6.8	6.9	8.2
pH, 2 (pH units)	7.4	7.3	6.3	8.1	7.9	.	.	.
pH, 3 (pH units)	7.4	7.3	6.3	8	7.9	.	.	.
pH, 4 (pH units)	7.4	7.3	6.3	8	7.9	.	.	.
Sp. Cond., 1 (umho/cm)	688	386	355	363	411	196	197	264
Sp. Cond., 2 (umho/cm)	685	386	373	367	411	.	.	.
Sp. Cond., 3 (umho/cm)	689	393	377	360	411	.	.	.
Sp. Cond., 4 (umho/cm)	687	393	377	361	411	.	.	.
TOC, 1 (mg/L)	5	3	3	4	<1	<1	1	1
TOC, 2 (mg/L)	1	3	3	4	<1	<1	.	.
TOC, 3 (mg/L)	38	3	3	4	<1	<1	.	.
TOC, 4 (mg/L)	6	3	3	4	<1	<1	.	.
TOX, 1 (ug/L)	<10	<10	<10	<10	<10	.	.	<10
TOX, 2 (ug/L)	<10	<10	<10	14	<10	.	.	.
TOX, 3 (ug/L)	<10	13	<10	11	<10	.	.	.
TOX, 4 (ug/L)	<10	<10	<10	<10	<10	.	.	.
TDS (mg/L)	472	198	202	256	220	192	88	138
TSS (mg/L)	3	4	45	38	67	1	1	2
Turbidity (NTU)	6	12	14	22	24	1.3	0.2	1.8
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	2.38	1.96	1.61	1.76	3.64	0.88	2.11	0.50
Gross Alpha (CE+/-)	2.30	1.20	1.40	1.60	2.20	1.10	1.20	1.10
Gross Beta (pCi/L)	7.13	3.97	5.84	4.35	4.82	0.36	3.41	2.18
Gross Beta (CE+/-)	3.30	3.30	3.50	3.40	3.10	3.30	3.20	3.20
Uranium 234 (pCi/L)	.	.	.	.	.	1.22	0.00	.
Uranium 234 (CE+/-)	.	.	.	.	.	1.40	1.70	.
Uranium 235 (pCi/L)	.	.	.	.	.	0.00	0.00	.
Uranium 235 (CE+/-)	.	.	.	.	.	1.40	1.50	.
Uranium 238 (pCi/L)	.	.	.	.	.	0.81	0.00	.
Uranium 238 (CE+/-)	.	.	.	.	.	1.20	1.50	.

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APPENDIX B
Groundwater Quality Data, 1991

Well No.	GW-305	GW-321				GW-322		
Location	LIV	ADB				CRSP		
Date Sampled	10/01/91	03/22/91	06/18/91	09/07/91	11/17/91	02/04/91	05/04/91	08/13/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	7.8	8.8	6.6	8.5	7.8	7.9	8.2	5.2
pH, Field (pH units)	7.8	7.8	7.9	8.2	7.9	7.6	7.7	7.8
Redox, Field (mV)	195	321	128	135	224	322	336	209
Sp. Cond., Field (umho/cm)	225	233	239	203	240	310	325	285
Temp, Field (degrees C)	18.4	14.5	15.1	16.5	15.8	14.1	16.2	16
COD (mg/L)	<5	.	.	.	.	.	.	.
Cyanide (mg/L)	<0.1	.	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	7.9	6.9	8.2	7.9	7.9	6.8	6.2	8.2
pH, 2 (pH units)	.	.	.	.	7.9	.	.	.
pH, 3 (pH units)	.	.	.	.	8	.	.	.
pH, 4 (pH units)	.	.	.	.	7.9	.	.	.
Sp. Cond., 1 (umho/cm)	262	237	255	241	237	259	287	360
Sp. Cond., 2 (umho/cm)	.	.	.	.	240	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	238	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	240	.	.	.
TOC, 1 (mg/L)	2	<1	<1	<1	2	.	.	.
TOC, 2 (mg/L)	.	<1	<1	.	.	.	.	.
TOC, 3 (mg/L)	.	<1	<1	.	.	.	.	.
TOC, 4 (mg/L)	.	<1	<1	.	.	.	.	.
TOX, 1 (ug/L)	<10	11	<10	10	12	.	.	.
TOX, 2 (ug/L)	.	<10	<10	.	.	.	.	.
TOX, 3 (ug/L)	.	<10	<10	.	.	.	.	.
TOX, 4 (ug/L)	.	<10	<10	.	.	.	.	.
TDS (mg/L)	134	128	148	110	128	190	164	180
TSS (mg/L)	1	1	<1	<1	<1	8	48	49
Turbidity (NTU)	3.7	0.24	0.45	0.7	2.5	15	23	20
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	9.53	3.10	1.73	1.03	1.76	1.21	1.65	2.73
Gross Alpha (CE+/-)	1.90	1.40	1.40	1.30	1.80	1.30	1.30	1.80
Gross Beta (pCi/L)	10.60	4.01	-1.13	5.18	0.90	2.76	-0.20	3.98
Gross Beta (CE+/-)	3.40	3.20	3.30	3.20	2.90	3.50	3.40	3.40
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-322	GW-339					GW-511	
	CRSP	UNCB					CRSP	
	10/21/91	01/13/91	04/13/91	07/30/91	08/13/91	10/06/91	01/29/91	04/30/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	7.3	3	2.8	2.7	2.3	3.9	6	6.5
pH, Field (pH units)	7.8	7.6	7.7	7.9	7.6	7.9	8.2	8.1
Redox, Field (mV)	197	308	314	213	193	217	258	243
Sp. Cond., Field (umho/cm)	296	478	434	514	465	432	288	259
Temp, Field (degrees C)	15.3	12.4	15.7	17.9	16.4	15.7	13.6	14.5
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	7.8	7.3	7.7	.	8.1	7.7	7.1	6.2
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	310	444	505	.	577	522	213	229
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	.	.	.	.	.	.	.	.
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	.	.	.	.	.	.	.	.
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	224	284	272	.	288	260	144	150
TSS (mg/L)	74	2	<1	.	5	<1	1	1
Turbidity (NTU)	150	1.2	0.5	.	3.4	1.1	0.2	0.3
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	4.61	0.50	1.40	1.86	.	0.74	0.53	-0.20
Gross Alpha (CE+/-)	2.10	1.40	1.00	1.40	.	1.30	1.30	1.20
Gross Beta (pCi/L)	4.83	-1.55	2.61	2.90	.	4.00	4.13	4.81
Gross Beta (CE+/-)	2.80	3.50	3.20	3.60	.	3.20	3.50	3.60
Uranium 234 (pCi/L)	.	.	.	0.00	.	0.00	.	.
Uranium 234 (CE+/-)	.	.	.	1.70	.	1.70	.	.
Uranium 235 (pCi/L)	.	.	.	0.00	.	0.44	.	.
Uranium 235 (CE+/-)	.	.	.	1.70	.	0.87	.	.
Uranium 238 (pCi/L)	.	.	.	0.43	.	-0.44	.	.
Uranium 238 (CE+/-)	.	.	.	1.50	.	0.87	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-511		GW-512				GW-513	
	CRBP		ADB				ADB	
	08/05/91	10/08/91	03/19/91	06/16/91	09/06/91	11/16/91	03/19/91	06/16/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	4.9	6.3	6.1	5.1	5.1	5.5	7	4.8
pH, Field (pH units)	8.5	8.6	7	7	7.1	7.2	7.5	7.7
Redox, Field (mV)	81	158	330	192	205	170	314	142
Sp. Cond., Field (umho/cm)	234	211	300	277	282	337	317	286
Temp, Field (degrees C)	16.2	14.6	14.9	16.2	16	15	14.4	16
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	8.4	8.3	6.8	7.5	7.1	7.14	7	8
pH, 2 (pH units)	.	.	.	.	.	7.1	.	.
pH, 3 (pH units)	.	.	.	.	.	7.13	.	.
pH, 4 (pH units)	.	.	.	.	.	7.11	.	.
Sp. Cond., 1 (umho/cm)	280	256	319	344	327	321	319	342
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	317	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	320	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	319	.	.
TOC, 1 (mg/L)	.	.	<1	<1	<1	<1	<1	<1
TOC, 2 (mg/L)	.	.	<1	<1	.	.	<1	<1
TOC, 3 (mg/L)	.	.	<1	<1	.	.	<1	<1
TOC, 4 (mg/L)	.	.	<1	<1	.	.	<1	<1
TOX, 1 (ug/L)	.	.	<10	<10	15	<10	<10	<10
TOX, 2 (ug/L)	.	.	<10	<10	.	.	<10	<10
TOX, 3 (ug/L)	.	.	<10	<10	.	.	<10	<10
TOX, 4 (ug/L)	.	.	<10	<10	.	.	<10	<10
TDS (mg/L)	140	148	184	182	168	182	210	168
TSS (mg/L)	<1	<1	1	2	<1	1	4	<1
Turbidity (NTU)	2.8	0.5	1.9	4	6.2	6.7	1.1	1.8
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	1.78	1.39	0.02	1.80	1.35	2.42	0.14	0.65
Gross Alpha (CE+/-)	1.50	1.20	1.20	1.50	1.30	2.00	1.30	1.30
Gross Beta (pCi/L)	4.22	7.55	6.94	1.96	5.11	2.06	3.85	0.66
Gross Beta (CE+/-)	3.40	3.60	3.50	3.40	3.20	3.00	3.30	3.40
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-513		GW-514				GW-521	
	ADB		ADB				LIV	
	09/06/91	11/16/91	03/20/91	06/17/91	09/07/91	11/16/91	01/08/91	04/04/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	5.1	5.5	3.5	4.1	3.4	4.2	8.4	7.8
pH, Field (pH units)	7.7	7.6	7.6	7.9	8.4	7.6	7.7	7.9
Redox, Field (mV)	120	210	283	103	132	162	298	261
Sp. Cond., Field (umho/cm)	287	327	316	340	314	344	214	268
Temp, Field (degrees C)	16.1	14.8	14.8	15.6	16.3	15.7	12.5	14.7
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	7.7	7.47	6.9	8.2	7.7	7.8	6.9	6.9
pH, 2 (pH units)	.	7.44	.	.	.	7.7	.	.
pH, 3 (pH units)	.	7.68	.	.	.	7.7	.	.
pH, 4 (pH units)	.	7.7	.	.	.	7.7	.	.
Sp. Cond., 1 (umho/cm)	342	332	323	305	352	345	238	236
Sp. Cond., 2 (umho/cm)	.	327	.	.	.	346	.	.
Sp. Cond., 3 (umho/cm)	.	335	.	.	.	346	.	.
Sp. Cond., 4 (umho/cm)	.	330	.	.	.	345	.	.
TOC, 1 (mg/L)	<1	2	<1	<1	1	<1	<1	1
TOC, 2 (mg/L)	.	.	<1	<1	.	.	<1	.
TOC, 3 (mg/L)	.	.	<1	<1	.	.	<1	.
TOC, 4 (mg/L)	.	.	<1	<1	.	.	<1	.
TOX, 1 (ug/L)	16	<10	<10	<10	<10	<10	.	.
TOX, 2 (ug/L)	.	.	<10	<10	.	.	.	.
TOX, 3 (ug/L)	.	.	<10	<10	.	.	.	.
TOX, 4 (ug/L)	.	.	<10	<10	.	.	.	.
TDS (mg/L)	166	184	294	180	170	182	136	150
TSS (mg/L)	<1	2	<1	1	<1	1	1	<1
Turbidity (NTU)	0.75	4	5	2.9	2.5	2.6	4	2.3
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	0.37	0.75	2.59	0.69	0.37	0.75	1.04	0.04
Gross Alpha (CE+/-)	1.20	1.70	1.30	1.30	1.20	1.70	1.10	0.80
Gross Beta (pCi/L)	2.14	1.40	3.64	4.23	2.43	1.15	1.15	3.42
Gross Beta (CE+/-)	3.00	2.90	3.20	3.50	3.00	2.90	3.20	3.20
Uranium 234 (pCi/L)	.	.	.	.	.	.	0.00	-0.42
Uranium 234 (CE+/-)	.	.	.	.	.	.	1.50	0.90
Uranium 235 (pCi/L)	.	.	.	.	.	.	0.43	0.00
Uranium 235 (CE+/-)	.	.	.	.	.	.	0.90	1.40
Uranium 238 (pCi/L)	.	.	.	.	.	.	0.43	0.00
Uranium 238 (CE+/-)	.	.	.	.	.	.	0.90	1.40

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APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-521		GW-522				GW-539	
Location	LIV		LIV				LIIX	
Date Sampled	07/17/91	10/03/91	01/09/91	04/04/91	07/17/91	10/03/91	03/16/91	04/09/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	8.2	8.4	8.1	7.3	7.5	6.8	13.6	10.6
pH, Field (pH units)	7.7	7.8	7.6	7.7	7.6	7.8	8	8.5
Redox, Field (mV)	256	162	298	285	252	169	252	207
Sp. Cond., Field (umho/cm)	255	265	256	270	282	213	300	347
Temp, Field (degrees C)	15.4	15.2	13.6	14.9	16.1	16	12.6	15.4
COD (mg/L)	<5	<5	.	.	<5	<5	<5	<5
Cyanide (mg/L)	<0.1	<0.1	.	.	<0.1	<0.1	<0.1	<0.1
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	8.2	7.9	6.8	6.9	8.1	7.9	7	7.1
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	277	280	210	233	268	231	275	358
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	1	1	<1	1	1	28	4	<1
TOC, 2 (mg/L)	.	.	<1	.	.	.	.	.
TOC, 3 (mg/L)	.	.	<1	.	.	.	.	.
TOC, 4 (mg/L)	.	.	1	.	.	.	.	.
TOX, 1 (ug/L)	<10	<10	.	.	<10	<10	<10	<10
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	102	122	266	142	114	116	182	214
TSS (mg/L)	1	2	539	37	21	14	9	38
Turbidity (NTU)	1.5	0.9	270	32	22	12	3.9	16
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	1.67	1.93	2.40	1.04	0.80	3.64	1.64	2.28
Gross Alpha (CE+/-)	1.30	1.20	1.40	1.00	1.20	1.50	1.60	1.50
Gross Beta (pCi/L)	0.06	-1.44	0.37	1.95	1.28	1.07	3.09	8.82
Gross Beta (CE+/-)	3.10	3.10	3.30	3.10	3.10	3.30	3.50	3.60
Uranium 234 (pCi/L)	.	.	0.83	-0.43	.	.	.	.
Uranium 234 (CE+/-)	.	.	1.20	0.90	.	.	.	.
Uranium 235 (pCi/L)	.	.	0.42	0.00	.	.	.	.
Uranium 235 (CE+/-)	.	.	0.80	1.50	.	.	.	.
Uranium 238 (pCi/L)	.	.	0.42	1.30	.	.	.	.
Uranium 238 (CE+/-)	.	.	0.80	1.50	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-539		GW-540				GW-541	
	LIIX		LIIX				LIIX	
	09/12/91	11/24/91	03/16/91	04/09/91	09/12/91	11/24/91	03/17/91	04/10/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	9.1	9.5	8.5	6.7	5.2	5.2	1	5.9
pH, Field (pH units)	8	7.9	7.7	7.8	7.5	7.6	8.4	8
Redox, Field (mV)	190	214	317	231	163	228	232	171
Sp. Cond., Field (umho/cm)	295	316	326	314	294	319	279	282
Temp, Field (degrees C)	17.1	12.7	14.6	15.6	17.6	13	14.1	18.5
COD (mg/L)	<5	<5	<5	<5	<5	<5	<5	<5
Cyanide (mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	8.3	8.31	7	7.3	7.9	7.85	7.2	7.1
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	308	354	312	792	304	349	215	283
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	<1	<1	<1	<1	1	<1	<1	<1
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	<10	<10	<10	<10	<10	<10	<10	<10
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	184	204	166	228	192	196	58	184
TSS (mg/L)	49	12	<1	1	1	2	88	1
Turbidity (NTU)	3.2	14	0.23	0.45	0.15	0.27	40	0.7
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	1.40	3.09	0.14	2.21	2.34	-0.17	6.78	1.04
Gross Alpha (CE+/-)	1.20	1.90	1.30	1.50	1.40	1.20	2.10	1.30
Gross Beta (pCi/L)	3.77	5.54	3.06	3.24	0.37	2.27	8.09	2.07
Gross Beta (CE+/-)	3.20	2.90	3.20	3.20	3.00	2.70	3.50	3.20
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-541		GW-542				GW-543	
	LIIX		LIIX				LIIX	
	09/13/91	11/25/91	03/17/91	04/10/91	09/14/91	11/25/91	03/17/91	04/11/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	2.1	2.4	6.3	6.8	6.1	5.9	9.2	7.5
pH, Field (pH units)	7.9	7.7	7	8	6.7	6.9	7.4	7.4
Redox, Field (mV)	198	155	329	216	180	224	326	229
Sp. Cond., Field (umho/cm)	303	298	234	237	184	269	401	324
Temp, Field (degrees C)	16.2	12.6	13	21.2	16	12.7	14.1	13.8
COD (mg/L)	<5	<5	<5	<5	<5	<5	<5	<5
Cyanide (mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	8.1	8	6.7	7	7.5	7.91	7	7.5
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	301	329	219	254	281	318	378	365
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	1	<1	<1	<1	<1	<1	<1	<1
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	118	<10	11	<10	20	<10	<10	12
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	172	160	100	158	154	124	162	208
TSS (mg/L)	2	12	<1	3	7	29	<1	<1
Turbidity (NTU)	0.65	3.1	5.1	0.7	0.7	17	1.5	0.8
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	2.79	3.32	2.16	0.04	1.84	1.65	0.59	0.48
Gross Alpha (CE+/-)	1.40	1.90	1.60	1.10	1.30	1.60	1.30	0.80
Gross Beta (pCi/L)	4.24	26.10	4.65	5.63	4.99	3.91	3.56	2.68
Gross Beta (CE+/-)	3.20	3.90	3.30	3.40	3.20	2.80	3.30	3.20
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-543		GW-544				GW-545	
	LIIX		LIIX				LIIX	
	09/14/91	11/25/91	03/17/91	04/11/91	09/14/91	11/26/91	03/17/91	04/11/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	6.7	7.3	9.5	8	4.1	7.4	7.5	7.8
pH, Field (pH units)	7.5	7.6	7.6	7.9	7.7	7.3	11.1	11.5
Redox, Field (mV)	167	236	325	180	204	224	155	40
Sp. Cond., Field (umho/cm)	350	384	457	393	390	406	502	351
Temp, Field (degrees C)	17	12.9	12.8	17.5	17.3	13	13.1	19.6
COD (mg/L)	<5	<5	<5	<5	<5	<5	<5	<5
Cyanide (mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	7.7	7.6	7	7.3	8	7.95	9.9	6.5
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	367	422	453	405	402	448	93	133
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	<1	2	<1	<1	<1	<1	<1	3
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	<10	<10	<10	<10	<10	<10	<10	<10
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	206	182	206	242	228	226	66	98
TSS (mg/L)	1	1	17	<1	9	16	61	24
Turbidity (NTU)	0.71	3.4	14	1.5	4.2	7	25	11
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	0.50	-0.62	1.51	1.66	1.83	1.46	1.52	1.21
Gross Alpha (CE+/-)	1.00	0.99	1.50	1.10	1.30	1.60	1.50	1.00
Gross Beta (pCi/L)	4.54	3.79	3.39	4.38	4.16	1.21	18.99	12.20
Gross Beta (CE+/-)	3.20	2.70	3.30	3.30	3.20	2.60	4.10	3.80
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-545		GW-546				GW-607	
Location	LIIX		LIIX				CRSP	
Date Sampled	09/15/91	11/26/91	03/17/91	04/11/91	09/15/91	11/26/91	01/28/91	04/29/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	5	9.8	3.8	3.3	7.4	9.5	7.8	7.9
pH, Field (pH units)	11.7	11.7	7.4	7.9	8.2	8.2	7.9	7.8
Redox, Field (mV)	2	30	295	215	133	174	308	202
Sp. Cond., Field (umho/cm)	854	747	270	235	263	251	269	217
Temp, Field (degrees C)	19.3	7.8	13.5	15.3	16.7	8	13.6	15
COD (mg/L)	<5	<5	<5	<5	<5	<5	.	.
Cyanide (mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	11.7	11.73	6.8	7	8.1	8.36	6.8	6.8
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	857	765	271	254	253	288	210	219
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	6	<1	4	<1	1	<1	.	.
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	<10	<10	<10	<10	<10	<10	.	.
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	268	186	114	152	246	156	132	118
TSS (mg/L)	45	14	2	<1	235	88	1	<1
Turbidity (NTU)	29	23	2.1	1.6	200	80	3.2	6.5
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	35.30	-0.51	1.85	0.88	6.12	3.62	0.10	1.20
Gross Alpha (CE+/-)	4.10	1.10	1.50	0.90	1.80	2.00	1.30	1.50
Gross Beta (pCi/L)	85.80	15.40	3.65	0.57	11.20	5.81	4.62	6.48
Gross Beta (CE+/-)	6.40	3.40	3.30	3.10	3.60	2.90	3.50	3.50
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-607		GW-608				GW-609	
	CRSP		CRSP				CRSP	
	08/06/91	10/08/91	01/28/91	04/29/91	08/07/91	10/12/91	01/15/91	04/22/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	5.9	7.2	5.6	1	6.4	7.1	6.2	7
pH, Field (pH units)	8.7	8.6	7.4	8	7.7	7.7	7.6	7.7
Redox, Field (mV)	162	139	347	74	175	201	260	203
Sp. Cond., Field (umho/cm)	239	220	306	2.19	261	260	343	332
Temp, Field (degrees C)	16	14.4	13.7	15.6	16.8	17	13.3	14.4
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	8.7	8.5	6.8	6.9	8	7.4	7.1	7
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	338	263	227	219	322	279	294	344
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	.	.	.	.	.	.	.	.
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	.	.	.	.	.	.	.	.
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	162	146	148	134	156	178	190	170
TSS (mg/L)	2	3	<1	3	<1	<1	1	3
Turbidity (NTU)	1.5	1.3	7.3	1.7	0.8	0.79	0.5	0.25
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	4.00	0.94	1.07	0.65	3.56	3.18	2.06	1.69
Gross Alpha (CE+/-)	1.60	1.10	1.40	1.40	1.60	1.50	1.50	1.60
Gross Beta (pCi/L)	5.72	5.12	-0.43	3.91	0.27	6.15	-2.83	0.92
Gross Beta (CE+/-)	3.60	3.50	3.20	3.40	3.30	3.60	3.30	3.10
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-609		GW-610				GW-611	
	CRSP		CRSP				CRSP	
	08/09/91	10/14/91	01/30/91	05/01/91	08/06/91	10/10/91	01/31/91	05/01/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	4.6	7	7.3	6.2	4.8	6.7	11.9	8.1
pH, Field (pH units)	7.8	7.8	7.4	7.7	7.7	7.7	7.8	7.8
Redox, Field (mV)	220	256	288	181	141	232	293	206
Sp. Cond., Field (umho/cm)	325	301	303	322	309	310	478	434
Temp, Field (degrees C)	16.8	14.7	13.1	14.8	17.2	15.8	14.3	17.3
COD (mg/L)	.	.	.	.	.	.	.	.
Cyanide (mg/L)	.	.	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	7.9	7.8	6.9	6.4	7.9	7.7	7.1	6.6
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	386	492	315	351	375	354	433	466
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	.	.	.	.	.	.	.	.
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	.	.	.	.	.	.	.	.
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	190	206	178	210	204	192	252	260
TSS (mg/L)	<1	1	9	3	2	<1	3	10
Turbidity (NTU)	0.22	0.35	3.6	0.5	0.24	0.71	3.1	6.3
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	2.06	1.67	0.99	1.41	1.50	4.48	2.39	1.25
Gross Alpha (CE+/-)	1.30	1.90	1.40	1.40	1.20	1.70	1.50	1.40
Gross Beta (pCi/L)	0.49	3.88	2.17	1.27	-0.10	3.55	1.93	3.13
Gross Beta (CE+/-)	3.30	2.90	3.40	3.40	3.30	3.40	3.40	3.50
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX E
Groundwater Quality Data, 1991

Well No.	GW-611		GW-612				GW-709	
Location	CRSP		CRSP				L11	
Date Sampled	08/08/91	10/13/91	02/07/91	05/08/91	08/12/91	10/17/91	06/19/91	09/11/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	3.8	8.9	9.6	9.6	4.9	9.4	6.4	3.2
pH, Field (pH units)	7.7	7.8	7.6	7.4	7.7	7.6	8.9	8.9
Redox, Field (mV)	104	231	282	148	200	192	174	203
Sp. Cond., Field (umho/cm)	443	431	378	394	368	376	216	213
Temp, Field (degrees C)	18.2	16.4	13	16.5	17.3	14.8	16.7	19.3
COD (mg/L)	.	.	.	.	.	.	.	<8
Cyanide (mg/L)	.	.	.	.	.	.	.	<0.1
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	7.8	7.6	6.9	6.3	8.1	7.7	8.8	8.2
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	513	442	343	388	415	386	247	283
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	.	.	.	.	.	.	41	41
TOC, 2 (mg/L)	.	.	.	.	.	.	41	.
TOC, 3 (mg/L)	.	.	.	.	.	.	1	.
TOC, 4 (mg/L)	.	.	.	.	.	.	41	.
TOX, 1 (ug/L)	.	.	.	.	.	.	410	410
TOX, 2 (ug/L)	.	.	.	.	.	.	410	.
TOX, 3 (ug/L)	.	.	.	.	.	.	410	.
TOX, 4 (ug/L)	.	.	.	.	.	.	410	.
TDS (mg/L)	272	280	240	200	180	220	160	194
TSS (mg/L)	6	3	2	1	1	1	41	1
Turbidity (NTU)	8.9	1.6	1.9	2	2.6	0.65	0.35	0.8
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	1.99	1.78	0.96	2.37	1.98	1.52	1.89	2.42
Gross Alpha (CE+/-)	1.30	1.30	1.30	1.40	1.40	1.90	1.90	1.40
Gross Beta (pCi/L)	-0.28	-0.90	3.46	-0.20	2.48	3.39	0.26	2.69
Gross Beta (CE+/-)	3.30	3.20	3.40	3.40	3.30	2.90	3.40	3.40
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

(CONTINUED)

APPENDIX B
Groundwater Quality Data, 1991

Well No.	GW-709	GW-731		GW-732	
Location	L11	CRSDB		CRSDB	
Date Sampled	11/21/91	09/27/91	10/31/91	09/27/91	10/30/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.
DO, Field (ppm)	9	2.6	2.7	7.3	7.4
pH, Field (pH units)	9	10.1	9.9	8.2	8.3
Redox, Field (mV)	112	12	194	124	220
Sp. Cond., Field (umho/cm)	303	216	211	173	266
Temp, Field (degrees C)	14.2	19.6	19.8	19	14.9
COD (mg/L)	<5	.	.	.	.
Cyanide (mg/L)	<0.1	.	.	.	.
Phenols (mg/L)	.	<0.05	<0.05	<0.05	<0.05
pH, 1 (pH units)	8	9.7	9.6	8.1	8.3
pH, 2 (pH units)	.	9.6	9.2	8	8.2
pH, 3 (pH units)	.	9.7	9.6	8	8.2
pH, 4 (pH units)	.	9.6	9.6	8	8.3
Sp. Cond., 1 (umho/cm)	326	262	233	272	272
Sp. Cond., 2 (umho/cm)	.	261	233	278	272
Sp. Cond., 3 (umho/cm)	.	265	233	278	273
Sp. Cond., 4 (umho/cm)	.	263	233	275	272
TOC, 1 (mg/L)	<1	9	3	<1	2
TOC, 2 (mg/L)	.	3	3	2	1
TOC, 3 (mg/L)	.	2	3	<1	13
TOC, 4 (mg/L)	.	6	2	2	3
TOX, 1 (ug/L)	<10	<10	<10	<10	20
TOX, 2 (ug/L)	.	10	<10	<10	<10
TOX, 3 (ug/L)	.	17	<10	<10	<10
TOX, 4 (ug/L)	.	12	<10	<10	<10
TDS (mg/L)	186	116	150	196	162
TSS (mg/L)	9	63	3	1	5
Turbidity (NTU)	9.2	44	3.9	1.4	2.1
RADIOCHEMICAL PARAMETERS	.	.	.	.	.
Gross Alpha (pCi/L)	25.60	1.17	3.49	0.33	2.54
Gross Alpha (CE+/-)	5.10	1.30	1.00	1.20	1.00
Gross Beta (pCi/L)	20.40	10.10	11.00	4.71	6.10
Gross Beta (CE+/-)	4.00	3.00	3.10	3.10	2.90
Uranium 234 (pCi/L)	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.

APPENDIX F
QA/QC SAMPLE DATA SUMMARIES

EXPLANATION

All results in micrograms per Liter (ug/L).

Compound not detected at the following minimum attainable detection limits (ug/L):

G	=	5	T	=	250
N	=	10	F	=	300
V	=	20	E	=	400
Z	=	25	W	=	500
D	=	30	L	=	1000
A	=	40	P	=	2000
M	=	50	H	=	4000
X	=	80	J	=	5000
Y	=	90	S	=	10000
K	=	100	U	=	20000
B	=	130	C	=	40000
R	=	200			

The following compounds were not detected in any of the laboratory blank, trip blank, or equipment rinse samples at the given minimum attainable detection limit:

<u>Compound</u>	<u>Detection Limit (ug/L)</u>
Benzene	5
Bromomethane	10
Chlorobenzene	5
Chlorodibromomethane	5
Chloroethane	10
1,1-Dichloroethane	5
1,2-Dichloroethane	5
1,1-Dichloroethene	5
cis-1,3-Dichloropropene	5
trans-1,3-Dichloropropene	5
Styrene	5
Vinyl chloride	10

LABORATORY BLANK SAMPLE DATA

APPENDIX F
Laboratory Blank Data Summary, First Quarter 1991

Sample No.	910100-056	910109-127	910110-131	910111-224	910115-056	910117-120	910117-123	910110-001	910118-227	910122-001
Acetone										
Bromoform										
Chloroform										
4-Methyl-2-pentanone										
Methylene chloride										
1,1,2,2-Tetrachloroethane										
Toluene										
1,1,2-Trichloroethane										
Vinyl acetate										
Xylenes										

(CONTINUED)

Sample No.	910122-065	910123-001	910123-042	910124-001	910125-002	910125-051	910125-091	910127-003	910129-003	910129-045
Acetone										
Bromoform										
Chloroform										
4-Methyl-2-pentanone										
Methylene chloride										
1,1,2,2-Tetrachloroethane										
Toluene										
1,1,2-Trichloroethane										
Vinyl acetate										
Xylenes										

(CONTINUED)

APPENDIX F
Laboratory Blank Data Summary, First Quarter 1991

Sample No.	910130-010	910130-130	910131-001	910201-005	910201-030	910204-003	910204-040	910205-001	910206-003	910206-026
Acetone	N	N	N	N	N	N	N	N	N	N
Bromoform	G	G	G	G	G	G	G	G	G	G
Chloroform	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910206-035	910207-001	910207-065	910211-003	910212-001	910212-031	910214-004	910214-065	910214-068	910219-020
Acetone	N	N	N	N	N	N	N	N	N	N
Bromoform	G	G	G	G	G	G	G	3	G	G
Chloroform	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	6	N	5
Methylene chloride	G	G	G	G	0.8	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	3	G	G
Toluene	G	G	G	0.8	1	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	2	G	G
Vinyl acetate	N	N	N	N	N	N	N	N	N	N
Xylenes	G	G	G	2	3	G	G	G	G	G

(CONTINUED)

APPENDIX F
Laboratory Blank Data Summary, First Quarter 1991

Sample No.	910221-003	910221-086	910222-036	910228-010	910228-074	910301-008	910301-183	910304-003	910305-003	910306-003
Acetone	N	N	N	N	16	N	N	N	N	N
Bromoform	G	G	G	G	G	G	G	G	G	G
Chloroform	G	0.8	0.7	G	0.8	G	0.8	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	2	1	G	2	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Vinyl acetate	N	1	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910307-001	910307-059	910308-001	910311-001	910312-001	910312-057	910313-004	910315-054	910318-001	910319-001
Acetone	N	11	N	N	N	N	N	N	N	N
Bromoform	G	G	G	G	G	G	G	G	G	G
Chloroform	G	0.8	G	G	G	0.8	G	0.8	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	1	G	1	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Laboratory Blank Data Summary, First Quarter 1991

[illegible]

(CONTINUED)

[illegible]

APPENDIX F
Laboratory Blank Data Summary, Second Quarter 1991

Sample No.	910405-003	910405-041	910408-001	910409-002	910409-007	910411-003	910412-001	910412-194	910415-001	910415-119
Acetone	N	N	N	N	N	N	N	N	N	N
Chloroform	0.8	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910416-001	910416-109	910417-090	910418-028	910419-001	910419-031	910422-001	910422-149	910422-196	910423-035
Acetone	N	N	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910424-072	910425-043	910426-189	910429-001	910430-001	910430-004	910501-001	910501-008	910503-166	910506-001
Acetone	N	N	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	0.9	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Laboratory Blank Data Summary, Second Quarter 1991

Sample No.	910506-117	910506-118	910507-134	910508-058	910513-053	910514-062	910515-003	910516-017	910517-003	910517-053
Acetone	N	N	N	N	6	N	N	N	23	N
Chloroform	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910519-001	910519-004	910520-098	910521-001	910521-065	910528-039	910528-042	910529-066	910530-029	910531-316
Acetone	N	N	N	N	N	9	N	N	N	N
Chloroform	G	G	G	G	G	0.6	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	15	G	17	17	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	2	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910605-001	910605-078	910610-001	910610-043	910611-088	910612-115	910613-058	910614-276	910619-079	910620-027
Acetone	N	N	N	N	14	N	N	N	N	N
Chloroform	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	4
Methylene chloride	G	G	G	G	G	G	G	G	G	17
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Laboratory Blank Data Summary, Second Quarter 1991

Sample No.	910620-099	910621-238	910622-012	910623-001	910623-005	910624-176	910627-065	910628-240	910629-004	910629-013
Acetone	N	N	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	2	N	N
Methylene chloride	G	G	G	16	G	17	17	16	G	16
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	2	G	G	G	0.8	G	G	G	0.9	G

(CONTINUED)

Sample No.	910703-089	910911-155	910911-156	910911-157	910911-158	910911-159
Acetone	N	N	N	N	9	N
Chloroform	G	G	G	G	G	G
4-Methyl-2-pentanone	3	N	N	N	N	N
Methylene chloride	17	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G

APPENDIX F
Laboratory Blank Data Summary, Third Quarter 1991

Sample No.	910708-060	910709-001	910711-001	910715-121	910716-039	910717-001	910718-001	910719-037	910719-208	910722-008
Acetone	N	N	N	N	N	N	N	11	N	N
Chloroform	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	3	N	N	2	N	N
Methylene chloride	G	G	G	G	15	G	G	16	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	1	1	1	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910723-001	910724-009	910724-051	910726-209	910729-095	910731-071	910802-001	910805-002	910805-067	910807-002
Acetone	N	N	N	N	N	N	N	N	8	N
Chloroform	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	2	2	N	2	N	N	2	N
Methylene chloride	G	G	16	15	16	16	G	G	G	G
Toluene	0.5	0.5	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	1	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F

Laboratory Blank Data Summary, Third Quarter 1991

Sample No.	910807-028	910807-140	910808-190	910809-048	910813-105	910813-116	910814-187	910814-205	910816-001	910816-257
Acetone	N	N	N	6	29	10	11	19	N	N
Chloroform	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	3	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	G	G	1	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910818-009	910821-001	910822-087	910823-184	910824-001	910824-004	910827-087	910828-014	910828-017	910829-001
Acetone	N	N	7	N	N	N	18	N	16	N
Chloroform	G	G	G	G	G	G	G	G	0.6	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	G	0.7	G	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Laboratory Blank Data Summary, Third Quarter 1991

Sample No.	910829-045	910830-007	910831-002	910903-009	910903-005	910904-009	910904-106	910905-001	910906-001	910907-001
Acetone	N	N	N	N	N	N	N	N	N	N
Chloroform	0.6	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	0.7	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	4	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	G	G	G	G	G
Toluene	G	0.6	0.9	4	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N	N	N
Xylenes	G	G	G	4	G	G	G	G	G	G

(CONTINUED)

Sample No.	910909-002	910909-054	910909-118	910910-005	910911-002	910913-009	910913-175	910914-001	910915-022	910916-007
Acetone	N	N	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	2	N	N	N	N	N
Methylene chloride	G	1	G	G	0.5	0.6	G	G	G	G
Toluene	G	G	G	G	0.6	0.8	G	0.6	G	1
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Laboratory Blank Data Summary, Third Quarter 1991

Sample No.	910916-189	910917-003	910918-020	910918-034	910920-002	910922-006	910923-006	910924-036	910925-001	910926-001
Acetone	11	N	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	1	G	G	G	G	G	G
Toluene	G	1	2	1	2	G	G	G	0.7	0.8
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910926-030	910928-001	910928-025	910930-003	911001-002
Acetone	N	N	N	N	N
Chloroform	G	G	G	G	G
Ethylbenzene	G	G	G	G	0.4
4-Methyl-2-pentanone	3	N	3	N	N
Methylene chloride	1	G	0.9	G	G
Toluene	1	1	1	3	3
1,1,1-Trichloroethane	G	G	G	G	G
Vinyl acetate	N	N	N	N	N
Xylenes	G	G	G	G	G

APPENDIX F
Laboratory Blank Data Summary, Fourth Quarter 1991

Sample No.	911002-178	911002-181	911004-001	911005-001	911007-005	911008-043	911009-001	911010-003	911010-120	911011-001
Acetone	N	9	N	N	N	N	N	N	13	N
Bromoform	C	C	C	C	C	C	C	C	C	C
Ethylbenzene	0.6	C	C	C	C	C	C	C	C	C
2-Butanone	N	2	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	4	N	N	N	N	N	N	N	5
Methylene chloride	1	0.8	C	C	C	C	C	C	1	C
1,1,2,2-Tetrachloroethane	C	C	C	C	C	C	C	C	C	C
Toluene	4	1	C	C	C	C	0.8	1	6	1
1,1,2-Trichloroethane	C	C	C	C	C	C	C	C	C	C
Xylenes	3	C	C	C	C	C	C	C	C	C

(CONTINUED)

Sample No.	911011-174	911011-197	911012-001	911014-002	911015-015	911015-125	911016-009	911017-001	911021-002	911022-001
Acetone	N	5	N	N	N	N	N	N	N	N
Bromoform	C	C	C	C	C	C	C	C	C	C
Ethylbenzene	C	C	C	C	C	C	C	C	C	C
2-Butanone	2	N	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	2	N	N	N	N	N	N	5	N
Methylene chloride	C	1	C	C	0.8	1	C	1	C	C
1,1,2,2-Tetrachloroethane	1	C	C	C	C	C	C	C	C	C
Toluene	C	C	2	2	C	C	C	0.6	3	C
1,1,2-Trichloroethane	C	C	C	C	C	C	C	C	C	C
Xylenes	C	C	C	C	C	C	C	C	C	C

(CONTINUED)

APPENDIX F
Laboratory Blank Data Summary, Fourth Quarter 1991

Sample No.	911023-005	911024-001	911027-029	911028-002	911028-036	911029-007	911029-107	911030-001	911031-001	911031-243
Acetone	B	B	B	B	B	B	B	B	B	B
Bromoform	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
2-Hexanone	B	B	B	B	B	B	B	B	B	B
4-Methyl-2-pentanone	B	B	B	B	B	B	B	B	B	B
Methylene chloride	G	1	G	G	1	G	1	G	0.9	1
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G	G	G
Toluene	G	0.5	G	0.9	G	1	G	2	7	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	911064-002	911065-040	911067-000	911068-001	911069-001	911111-002	911112-002	911113-074	911114-001	911115-002
Acetone	B	B	B	B	B	B	B	11	B	B
Bromoform	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
2-Hexanone	B	B	B	B	B	B	B	1	B	B
4-Methyl-2-pentanone	B	B	B	B	B	B	B	2	B	B
Methylene chloride	G	1	1	G	G	1	G	G	G	1
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	1	G	G
Toluene	G	G	1	1	1	1	1	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Laboratory Blank Data Summary, Fourth Quarter 1991

Sample No.	911119-001	911119-006	911121-001	911121-003	911123-004	911125-000	911126-005	911126-111	911202-000	911202-008
Acetone										
Bromoforn										
Ethylbenzene										
2-Hexanone				11						
4-Methyl-2-pentanone				5						
Methylene chloride				1						
1,1,2,2-Tetrachloroethane				4						
Toluene										
1,1,2-Trichloroethane				1						
Xylenes										

(CONTINUED)

Sample No.	911204-011	911206-005	911208-000	911210-007	911213-001	911216-002	911216-008	911217-001	911217-005	911217-007
Acetone										
Bromoforn										
Ethylbenzene										
2-Hexanone										
4-Methyl-2-pentanone										
Methylene chloride										
1,1,2,2-Tetrachloroethane										
Toluene										
1,1,2-Trichloroethane										
Xylenes										

(CONTINUED)

APPENDIX F

Laboratory Blank Data Summary, Fourth Quarter 1991

[illegible]

TRIP BLANK SAMPLE DATA

APPENDIX F
Trip Blank Data Summary, First Quarter 1991

Sample No.	910105-022	910105-025	910105-028	910107-042	910107-048	910109-189	910110-022	910110-025	910110-032	910111-187
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Chloroform	2	G	0.8	0.8	G	G	G	G	G	G
Chloromethane	N	N	N	N	N	N	N	N	N	N
1,2-Dichloroethene	G	G	G	5	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	9	14
Methylene chloride	G	3	G	8	G	G	G	G	G	7
Toluene	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910112-005	910112-008	910112-041	910112-043	910114-111	910114-112	910115-011	910115-012	910115-013	910116-015
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Chloroform	G	G	10	10	11	11	11	11	13	13
Chloromethane	N	N	N	N	N	N	N	N	N	N
1,2-Dichloroethene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	4	N	N	N	N
Methylene chloride	G	G	G	G	G	G	G	G	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Trip Blank Data Summary, First Quarter 1991

Sample No.	910116-020	910116-036	910116-064	910116-069	910116-077	910116-108	910116-159	910119-038	910119-039	910122-021
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	2	2	G
Chloroform	G	13	12	1	11	1	0.7	8	8	G
Chloromethane	N	N	N	N	N	N	N	0.8	N	N
1,2-Dichloroethene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	4	1	G	G	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910123-066	910124-049	910125-011	910126-005	910126-010	910127-049	910127-052	910128-133	910129-010	910129-017
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Chloroform	G	0.3	0.8	2	2	G	G	1	G	G
Chloromethane	N	N	N	N	N	N	N	N	N	N
1,2-Dichloroethene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	2	3	11	4	G	G	G	2	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Trip Blank Data Summary, First Quarter 1991

Sample No.	910129-024	910130-034	910130-061	910130-120	910130-158	910201-010	910201-015	910201-174	910201-259	910201-267
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Chloroform	17	G	1	1	11	5	4	2	5	16
Chloromethane	N	N	N	N	N	N	N	N	N	N
1,2-Dichloroethene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	6	N	N
Methylene chloride	G	G	G	G	G	G	G	G	G	G
Toluene	0.4	0.4	G	G	0.8	G	G	0.8	1	G
Xylenes	G	G	G	G	G	G	G	3	G	G

(CONTINUED)

Sample No.	910203-025	910204-075	910204-078	910204-118	910204-131	910208-006	910208-009	910209-039	910209-046	910209-068
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Chloroform	11	G	4	G	2	16	10	G	G	1
Chloromethane	N	N	N	N	N	N	N	N	N	N
1,2-Dichloroethene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	7	G	G	G	G	G
Toluene	G	G	G	G	G	1	0.8	G	G	0.8
Xylenes	G	G	G	G	G	G	3	G	G	G

(CONTINUED)

APPENDIX F
Trip Blank Data Summary, First Quarter 1991

Sample No.	910210-036	910210-039	910210-046	910211-209	910212-026	910212-111	910213-048	910213-111	910214-127	910215-045
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Chloroform	G	G	G	3	2	2	G	1	2	1
Chloromethane	N	N	N	N	N	N	N	N	N	N
1,2-Dichloroethene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	2	2	G	G	G	G	G
Toluene	1	0.9	G	G	G	G	G	G	G	G
Xylenes	G	3	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910221-016	910221-019	910221-297	910221-303	910224-084	910224-089	910224-096	910225-071	910225-121	910225-167
Acetone	N	N	6	N	10	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Chloroform	1	1	G	G	2	G	2	G	1	2
Chloromethane	N	N	N	N	N	N	N	N	N	N
1,2-Dichloroethene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	2	G	G	8	G	G	5
Toluene	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F

Trip Blank Data Summary, First Quarter 1991

Sample No.	910227-046	910227-101	910227-141	910301-007	910301-158	910301-163	910302-009	910302-012	910302-041	910302-051
Acetone	N	N	N	N	N	N	N	8	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Chloroform	G	0.5	0.8	G	G	G	G	2	1	G
Chloromethane	N	N	N	N	N	N	N	N	N	N
1,2-Dichloroethene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	G	G	3	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910305-012	910306-017	910306-109	910307-006	910307-009	910308-010	910308-062	910309-046	910310-022	910310-027
Acetone	N	N	N	N	N	10	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Chloroform	2	0.7	G	G	2	14	2	2	3	2
Chloromethane	N	N	N	N	N	N	N	N	N	N
1,2-Dichloroethene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	3	G	2	2	G	9	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Trip Blank Data Summary, First Quarter 1991

Sample No.	910310-032	910312-076	910312-079	910314-031	910315-014	910315-017	910316-153	910318-022	910318-025	910319-008
Acetone	N	8	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	7	G	G	G	G	G	G
Chloroform	1	17	3	35	G	4	G	G	6	4
Chloromethane	N	N	N	N	N	N	N	N	N	N
1,2-Dichloroethene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	4	G	G	2	G	G	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910319-011	910319-014	910319-024	910320-013	910320-020	910320-088	910321-009	910321-014	910321-033	910322-022
Acetone	N	N	N	N	N	N	N	11	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Chloroform	0.4	8	4	3	14	2	G	13	19	4
Chloromethane	N	N	N	N	N	N	N	N	N	N
1,2-Dichloroethene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	5	G	G	G	G	G	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F

Trip Blank Data Summary, First Quarter 1991

Sample No.	910323-003	910323-026	910325-012	910325-015	910326-019	910326-078	910327-014	910327-026	910328-024	910328-029
Acetone	N	N	N	N	N	N	N	9	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Chloroform	G	1	2	2	G	2	2	21	22	2
Chloromethane	N	N	N	N	N	N	N	N	N	N
1,2-Dichloroethene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	3	G	G	7	G	G	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910328-032	910330-003
Acetone	N	N
Bromodichloromethane	G	G
Chloroform	22	14
Chloromethane	N	N
1,2-Dichloroethene	G	G
4-Methyl-2-pentanone	N	N
Methylene chloride	G	G
Toluene	G	G
Xylenes	G	G

APPENDIX F
Trip Blank Data Summary, Second Quarter 1991

Sample No.	910403-113	910404-012	910404-075	910405-012	910405-022	910405-029	910408-040	910408-205	910410-114	910410-129
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Chloroform	G	14	G	3	G	G	15	G	1	8
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Methylene chloride	G	G	G	3	G	G	6	G	G	7
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910411-008	910411-019	910411-023	910411-032	910411-035	910411-108	910411-115	910411-147	910411-148	910413-058
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	3	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Chloroform	G	3	0.8	G	2	15	0.8	G	16	15
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Methylene chloride	G	G	2	16	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Trip Blank Data Summary, Second Quarter 1991

Sample No.	910413-064	910413-067	910415-012	910415-019	910416-012	910416-017	910416-025	910416-028	910420-017	910423-012
Acetone	M	M	M	M	M	M	M	M	M	M
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Chloroform	G	3	G	G	2	G	G	10	G	2
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Methylene chloride	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910423-046	910424-025	910425-037	910427-006	910427-009	910427-016	910427-023	910427-028	910430-107	910502-011
Acetone	M	M	M	M	M	M	M	M	M	M
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Chloroform	6	G	12	2	G	2	G	G	7	7
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Methylene chloride	G	G	G	G	G	G	G	G	3	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Trip Blank Data Summary, Second Quarter 1991

Sample No.	910502-014	910502-023	910502-032	910502-080	910503-004	910503-010	910504-035	910504-042	910506-013	910506-023
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Chloroform	5	8	9	8	4	G	G	G	5	2
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Methylene chloride	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910507-024	910508-061	910508-064	910508-075	910509-010	910510-183	910511-010	910511-021	910512-010	910512-015
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Chloroform	G	14	3	2	5	G	5	6	G	2
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Methylene chloride	G	G	2	G	3	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Trip Blank Data Summary, Second Quarter 1991

Sample No.	910512-018	910514-010	910514-015	910514-030	910515-027	910516-032	910517-030	910522-004	910522-015	910522-111
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Chloroform	G	G	1	2	3	5	13	G	4	2
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Methylene chloride	G	G	G	G	G	G	G	G	16	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910522-114	910522-117	910523-205	910524-157	910525-003	910525-000	910525-013	910601-018	910601-025	910601-020
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	0.6	G	G
Chloroform	G	4	3	3	7	5	9	12	4	1
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Methylene chloride	G	G	G	17	17	17	17	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Trip Blank Data Summary, Second Quarter 1991

Sample No.	910601-031	910601-052	910605-007	910605-012	910606-006	910606-011	910606-054	910606-057	910608-005	910608-008
Acetone	N	N	N	N	N	7	N	N	6	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Chloroform	3	5	2	0.7	1	20	2	4	1	0.5
1,2-Dichloropropane	G	G	G	G	G	2	G	G	G	G
Methylene chloride	2	3	2	G	G	G	G	3	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910608-030	910610-008	910610-009	910613-005	910613-014	910614-002	910614-007	910614-091	910615-005	910615-010
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Chloroform	4	G	22	20	27	16	13	19	6	3
1,2-Dichloropropane	G	G	0.8	G	G	G	G	0.8	G	G
Methylene chloride	4	G	G	G	G	G	17	G	17	17
1,1,1-Trichloroethane	G	G	0.8	G	G	2	G	2	G	G

(CONTINUED)

APPENDIX Y
Trip Blank Data Summary, Second Quarter 1991

Sample No.	910617-056	910617-065	910617-074	910617-081	910618-021	910618-024	910618-027	910619-009	910620-009	910620-012
Acetone	10	9	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	0.7	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Chloroform	23	8	1	1	24	21	13	7	4	14
1,2-Dichloropropane	1	G	G	G	1	1	G	G	G	G
Methylene chloride	G	4	G	G	G	G	G	16	16	17
1,1,1-Trichloroethane	3	G	2	0.7	0.8	0.9	0.9	G	G	G

(CONTINUED)

Sample No.	910620-023	910620-040	910620-008	910621-060	910621-065	910621-213	910621-237	910624-011	910624-016	910624-073
Acetone	N	N	N	N	N	N	13	N	N	N
Bromodichloromethane	G	1	G	G	G	G	G	G	1	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Chloroform	16	25	9	2	7	4	4	27	27	26
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Methylene chloride	17	17	16	16	17	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	1	1	G	G	G

(CONTINUED)

APPENDIX F
Trip Blank Data Summary, Second Quarter 1991

Sample No.	910624-078	910624-118	910624-121	910624-126	910625-040	910625-078	910625-136
Acetone	N	N	N	N	N	N	9
Bromodichloromethane	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G
Chloroform	10	23	9	29	14	3	7
1,2-Dichloropropane	G	G	G	G	G	G	G
Methylene chloride	5	2	G	2	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	0.9

APPENDIX F
Trip Blank Data Summary, Third Quarter 1991

Sample No.	910701-095	910709-063	910709-163	910711-065	910712-009	910712-258	910715-018	910715-159	910715-169	910716-044
Acetone	M	M	M	M	M	M	M	M	M	M
Bromodichloromethane	1	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Chloroform	35	9	10	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
2-Hexanone	M	M	M	M	M	M	M	M	M	M
4-Methyl-2-pentanone	M	M	M	M	M	M	M	M	M	M
Methylene chloride	G	3	G	G	15	G	G	18	4	2
Toluene	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	0.9	0.8	0.9	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910717-009	910718-009	910719-095	910719-216	910722-007	910722-069	910723-114	910727-043	910728-003	910730-010
Acetone	M	M	M	M	M	M	M	13	M	M
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Chloroform	G	G	G	G	G	G	G	5	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
2-Hexanone	M	M	M	M	M	M	M	3	M	M
4-Methyl-2-pentanone	M	M	M	M	M	M	M	M	M	M
Methylene chloride	3	G	2	6	16	2	16	15	15	16
Toluene	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Trip Blank Data Summary, Third Quarter 1991

Sample No.	910731-094	910731-101	910731-112	910731-119	910731-141	910802-228	910805-112	910806-103	910806-236	910807-187
Acetone	N	N	N	N	28	N	N	N	N	N
Bromodichloromethane	2	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Chloroform	6	G	G	G	G	0.7	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	6	5	2	0.8	G	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910808-205	910809-013	910810-008	910810-015	910813-011	910813-014	910813-323	910814-014	910814-123	910814-220
Acetone	N	N	N	12	N	N	N	13	10	N
Bromodichloromethane	G	G	G	G	G	G	4	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	10	10	G
Chloroform	G	G	G	G	G	G	35	2	G	2
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	G	G	2	2	5
Toluene	G	G	G	G	G	G	G	1	1	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Trip Blank Data Summary, Third Quarter 1991

Sample No.	910815-285	910817-008	910819-192	910821-118	910822-035	910822-040	910823-154	910823-161	910823-164	910823-177
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	0.9	G	G	G	G
Chloroform	0.7	G	G	G	G	1	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	6	8	G	G	45	6	G	G	1
Toluene	1	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910824-013	910824-016	910825-005	910825-114	910826-024	910827-097	910827-109	910828-009	910828-025	910829-023
Acetone	N	17	N	16	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	1	G	G	G	G
Chloroform	G	G	G	1	G	3	G	4	G	1
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	1	G	120	0.7	5	G	9	G	14
Toluene	G	G	G	G	G	G	G	0.7	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Trip Blank Data Summary, Third Quarter 1991

Sample No.	910829-032	910831-016	910831-021	910901-007	910901-012	910903-029	910903-079	910904-132	910905-008	910905-013
Acetone	N	N	N	N	N	N	N	51	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Chloroform	0.9	1	G	1	0.8	0.8	4	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	0.8	0.8	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	5	5	N	N	N	N	N	N	N
Methylene chloride	40	10	1	2	97	5	6	0.7	2	39
Toluene	0.9	4	4	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Xylenes	G	4	4	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910905-064	910906-275	910906-280	910906-285	910907-010	910907-011	910908-005	910908-012	910908-034	910909-020
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Chloroform	G	G	0.8	G	G	1	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	3	N	N	N	N	N
Methylene chloride	14	1	G	G	3	G	2	4	G	2
Toluene	G	G	G	G	G	G	G	G	G	0.5
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Trip Blank Data Summary, Third Quarter 1991

Sample No.	910909-163	910909-188	910910-031	910911-005	910911-008	910911-113	910912-008	910912-180	910912-183	910914-005
Acetone	N	N	N	N	N	28	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	5	G	G	G	G	G	G	G	G	G
Chloroform	G	1	G	G	G	G	G	0.7	G	G
1,2-Dichloropropane	4	G	G	G	2	G	G	G	1	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	2	N	N	N	N	N	N
Methylene chloride	10	6	26	6	G	7	5	6	G	G
Toluene	G	G	0.8	G	G	0.9	0.9	1	1	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910914-008	910914-013	910914-033	910915-008	910915-017	910915-049	910915-058	910918-107	910919-172	910919-177
Acetone	N	N	N	N	N	N	22	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Chloroform	G	G	G	0.4	G	0.8	G	G	0.4	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	5	10	4	17	9	G	G	6	5	63
Toluene	G	G	1	1	G	2	2	3	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Trip Blank Data Summary, Third Quarter 1991

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APPENDIX F
Trip Blank Data Summary, Fourth Quarter 1991

Sample No.	911001-102	911002-124	911002-196	911002-201	911002-212	911002-220	911004-454	911004-461	911004-468	911005-014
Acetone	N	N	N	N	N	25	N	N	N	25
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	0.7
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	G	0.7	G	2	G	G	G	0.7	1	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	0.6	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	3	N	N	N	N
Methylene chloride	G	20	1	0.6	6	6	17	G	54	20
Toluene	3	4	G	G	G	4	0.4	0.5	0.7	0.8
Xylenes	3	G	G	G	G	3	G	G	G	G

(CONTINUED)

Sample No.	911005-019	911006-013	911006-032	911006-035	911007-008	911007-017	911008-107	911009-011	911009-014	911010-154
Acetone	N	N	27	46	N	N	N	7	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	0.6	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	0.7	0.7	0.9	G	0.7	1	0.5	1	2	2
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	4	15	6	7	2	9	1	2	6	8
Toluene	1	1	2	1	2	2	G	G	G	2
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Trip Blank Data Summary, Fourth Quarter 1991

Sample No.	911011-006	911012-011	911014-024	911014-033	911014-056	911014-146	911015-024	911015-061	911015-115	911016-005
Acetone	N	N	N	N	N	N	2	3	N	37
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	2	2	2	2	2	2	2	2	2	2
1,2-Dichloropropane	G	G	G	G	G	1	G	G	2	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	47	G	9	9	18	2	36	7	2	1
Toluene	2	G	G	G	G	G	G	G	G	0.6
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	911018-016	911018-025	911019-006	911020-005	911020-010	911021-120	911022-149	911023-024	911023-101	911023-172
Acetone	N	N	N	N	N	44	N	N	42	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	3	3	3	G	2	2	2	2	2	0.8
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	5	N	N	N	N	N	N	N	N
Methylene chloride	1	13	2	1	60	17	130	71	11	1
Toluene	3	3	3	G	G	G	G	0.6	1	1
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F

Trip Blank Data Summary, Fourth Quarter 1991

Sample No.	911023-177	911023-182	911024-078	911024-081	911027-007	911027-010	911027-063	911027-066	911028-013	911028-020
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	G	1	0.8	3	1	G	G	2	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	3	N	N	N
Methylene chloride	2	G	2	2	G	1	G	49	1	1
Toluene	G	0.9	G	1	1	1	2	2	1	2
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	911028-091	911029-003	911029-006	911029-148	911030-006	911031-011	911031-029	911031-074	911101-107	911102-024
Acetone	N	N	N	N	N	N	N	N	21	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	0.6	0.7	2	2	G	G	0.7	G	G	3
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	3	N	N	4	N	N	N	N
Methylene chloride	1	1	3	5	1	6	7	2	G	1
Toluene	G	2	2	2	2	2	G	G	0.8	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Trip Blank Data Summary, Fourth Quarter 1991

Sample No.	911103-068	911103-071	911103-074	911103-079	911103-102	911104-009	911105-014	911105-019	911106-003	911106-058
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	0.8	G	G	G	G	G	1	G	1	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	2	2	1	2	2	0.9	0.9	G	0.9	3
Toluene	1	1	G	1	1	1	1	1	1	1
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	911106-088	911106-095	911108-019	911108-022	911108-025	911111-041	911111-060	911112-124	911113-023	911115-086
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	G	G	0.7	0.3	G	G	0.7	2	G	0.6
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	2	3	1	2	G	2	6
Toluene	2	1	2	2	1	1	2	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F

Trip Blank Data Summary, Fourth Quarter 1991

Sample No.	911115-089	911115-393	911118-026	911118-029	911118-034	911118-052	911119-038	911119-039	911120-020	911120-045
Acetone	N	N	N	N	N	N	N	N	N	11
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	G	G	G	G	2	2	G	G	2	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	1
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	3	9	G	5	G	G	2	2	7	2
Toluene	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	911121-030	911121-087	911121-224	911122-095	911122-132	911124-016	911124-023	911125-039	911126-017	911126-029
Acetone	N	N	N	N	11	N	N	N	30	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	2	G	1	2
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	1	2	G	1	G	3	G	3	4	G
1,2-Dichloropropane	G	G	G	G	1	G	G	3	4	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	18	G	4	G	2	6	7	G	5	3
Toluene	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Trip Blank Data Summary, Fourth Quarter 1991

Sample No.	911127-018	911205-059	911206-021	911209-153	911211-044	911211-107	911213-008	911213-013	911215-005	911215-049
Acetone	N	N	N	N	N	N	N	9	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	2	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	G	G	G	2	3	3	2	3	G	2
1,2-Dichloropropane	2	G	G	G	6	7	6	9	1	1
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	16	G	15	23	5	7	14	2	1	1
Toluene	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	911216-080	911217-012	911218-023	911218-069	911220-007	911220-038	911220-106	911222-003	911223-004	911227-063
Acetone	N	N	N	N	N	N	N	N	N	29
Bromodichloromethane	G	G	5	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	2	G
Carbon tetrachloride	G	G	G	0.8	G	G	G	G	G	G
Chloroform	3	0.5	38	45	4	4	G	2	G	2
1,2-Dichloropropane	G	G	G	G	G	G	G	G	1	1
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	2	N	N	N	N	N	N
Methylene chloride	G	G	0.8	G	G	G	G	G	1	26
Toluene	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F

Trip Blank Data Summary, Fourth Quarter 1991

Sample No.	911228-004
Acetone	N
Bromodichloromethane	G
Carbon disulfide	G
Carbon tetrachloride	G
Chloroform	3
1,2-Dichloropropane	2
Ethylbenzene	G
4-Methyl-2-pentanone	N
Methylene chloride	9
Toluene	G
Xylenes	G

EQUIPMENT RINSATE SAMPLE DATA

APPENDIX F
Equipment Rinseate Data Summary, First Quarter 1991

Sample No.	910107-043	910107-060	910108-070	910109-190	910111-170	910112-009	910114-113	910116-021	910116-070	910117-119
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	3	G	G	G	G	G
2-Butanone	N	N	N	N	N	N	N	N	N	N
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	G	G	G	G	18	G	G	G	G	G
4-Methyl-2-pentanone	9	N	N	5	N	N	N	N	N	N
Tetrachloroethene	G	G	G	G	G	G	1	G	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	1	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910125-014	910126-024	910130-035	910201-260	910205-070	910208-021	910210-041	910212-112	910221-290	910222-009
Acetone	N	N	N	N	N	N	N	20	N	13
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
2-Butanone	N	N	N	N	N	N	N	N	N	N
Carbon tetrachloride	G	G	G	G	4	G	G	G	G	G
Chloroform	G	0.5	G	G	G	12	G	G	G	0.9
4-Methyl-2-pentanone	N	N	4	N	N	N	N	N	N	N
Tetrachloroethene	1	G	G	G	G	G	G	G	G	G
Toluene	G	G	0.6	G	G	0.9	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	3	G	G	G	G

(CONTINUED)

APPENDIX F
Equipment Rinseate Data Summary, First Quarter 1991

Sample No.	910225-122	910225-123	910227-104	910227-149	910301-164	910305-013	910305-014	910310-033	910310-034	910314-032
Acetone	N	10	N	N	N	N	N	27	38	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
2-Butanone	N	N	N	N	N	N	N	N	16	N
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	0.8	1	G	G	G	G	G	5	10	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Tetrachloroethene	G	G	G	G	G	G	G	G	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910314-033	910316-012	910320-089	910320-090	910320-091	910321-034	910323-004	910324-017	910325-018	910327-015
Acetone	10	10	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
2-Butanone	N	N	N	N	N	N	N	N	N	N
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	1	0.9	G	G	G	1	G	G	0.9	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Tetrachloroethene	G	G	G	G	G	G	G	G	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F

Equipment Rinsate Data Summary, First Quarter 1991

Sample No.	910327-072	910328-033	910330-004	910403-044
Acetone	N	N	N	N
Bromodichloromethane	G	G	G	G
2-Butanone	N	N	N	N
Carbon tetrachloride	G	G	G	G
Chloroform	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N
Tetrachloroethene	G	G	G	G
Toluene	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G
Xylenes	G	G	G	G

APPENDIX F
Equipment Rinse Data Summary, Second Quarter 1991

Sample No.	910405-013	910408-041	910411-025	910411-036	910413-059	910416-060	910416-061	910416-062	910418-037	910422-152
Acetone	N	N	N	N	N	N	N	N	N	N
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	G	G	G	G	G	G	G	G	G	G
Methylene chloride	G	G	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	1	G	G	G	2	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910427-029	910502-081	910502-082	910508-076	910509-041	910511-022	910512-019	910515-060	910523-206	910523-207
Acetone	N	N	N	N	N	N	N	N	N	N
Carbon tetrachloride	G	G	G	1	G	G	G	G	G	G
Chloroform	G	G	G	G	G	G	G	G	G	G
Methylene chloride	G	G	G	G	G	G	G	G	G	16
Tetrachloroethene	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910601-032	910608-034	910613-078	910614-079	910614-088	910617-082	910617-083	910618-054	910620-041	910620-089
Acetone	N	N	N	N	N	N	N	N	N	N
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	G	G	21	G	G	2	G	G	G	G
Methylene chloride	G	G	G	G	G	G	G	G	16	15
Tetrachloroethene	G	G	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	2	2	0.6	0.6	0.9	G	G

(CONTINUED)

APPENDIX F

Equipment Rinsate Data Summary, Second Quarter 1991

Sample No.	910621-203	910621-204	910624-017	910624-079	910624-081	910625-041	910625-079	910625-080	910627-061
Acetone	N	N	N	N	N	2	N	N	11
Carbon tetrachloride	G	G	G	G	G	G	G	G	G
Chloroform	G	0.9	G	G	G	G	G	19	G
Methylene chloride	G	G	3	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	6	G
1,1,1-Trichloroethane	0.8	0.7	G	G	G	G	G	G	0.8

APPENDIX F
Equipment Rinsate Data Summary, Third Quarter 1991

Sample No.	910712-073	910715-160	910715-170	910718-085	910719-217	910727-044	910801-271	910801-272	910806-104	910813-040
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	G	G	G	1	G	G	1	G	0.7	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	15	16	G	G	G	16	G	0.9	G	G
Tetrachloroethene	G	G	2	G	G	G	G	G	G	G
Toluene	G	G	G	G	0.5	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910814-120	910814-121	910817-009	910819-107	910820-010	910823-171	910823-172	910826-029	910826-045	910827-092
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	6	G	5	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	G	G	G	40	G	40	2	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	G	G	G	0.6	G	G	G
Tetrachloroethene	G	G	G	0.7	G	0.9	G	G	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Equipment Rinse Data Summary, Third Quarter 1991

Sample No.	910829-024	910903-080	910903-081	910903-082	910906-276	910906-277	910908-001	910908-002	910909-015	910909-189
Acetone	N	13	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	2	G	G	G	G	G	G	G
Carbon disulfide	G	G	G	G	G	G	0.8	8	G	G
Carbon tetrachloride	2	G	G	G	G	G	G	G	G	G
Chloroform	G	G	19	2	G	G	G	G	G	G
1,2-Dichloropropane	G	3	G	G	G	G	2	5	4	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N	N	N
Methylene chloride	G	G	1	G	G	G	G	G	G	0.9
Tetrachloroethene	G	G	G	G	G	G	G	G	G	G
Toluene	G	G	G	G	G	G	G	G	0.7	0.8
Trichloroethene	G	G	G	G	G	G	G	G	G	G
Xylenes	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	910911-110	910914-014	910914-030	910916-051	910919-050	910922-011	910923-070	910924-037	910928-007	910928-008
Acetone	N	N	N	N	N	N	N	N	N	N
Bromodichloromethane	G	G	G	G	G	G	G	G	G	G
Carbon disulfide	G	1	2	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G	G	G
Chloroform	G	G	G	G	G	G	0.8	0.5	0.4	G
1,2-Dichloropropane	G	G	G	G	G	G	G	1	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	1
4-Methyl-2-pentanone	N	N	N	N	N	N	N	2	N	N
Methylene chloride	G	G	G	G	G	G	G	0.7	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G	20	G
Toluene	0.9	G	G	2	3	1	0.7	G	3	4
Trichloroethene	G	G	G	G	G	G	G	G	3	G
Xylenes	G	G	G	G	G	G	G	G	G	5

(CONTINUED)

APPENDIX F
Equipment Rinsate Data Summary, Third Quarter 1991

Sample No.	910930-037
Acetone	N
Bromodichloromethane	G
Carbon disulfide	G
Carbon tetrachloride	G
Chloroform	G
1,2-Dichloropropane	G
Ethylbenzene	0.5
4-Methyl-2-pentanone	N
Methylene chloride	0.7
Tetrachloroethene	G
Toluene	3
Trichloroethene	G
Xylenes	G

APPENDIX F
Equipment Rinsate Data Summary, Fourth Quarter 1991

Sample No.	911002-221	911005-020	911005-021	911005-022	911006-041	911007-099	911011-002	911011-003	911021-116	911022-150
Acetone	11	N	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G	G	G
Chloroform	G	G	G	G	G	G	0.2	0.4	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G	G	G
Ethylbenzene	0.5	G	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	2	N	N	N	N
Methylene chloride	G	G	G	G	G	1	0.7	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	0.4	G	G	0.8	G	G	G
Toluene	3	0.9	1	1	0.9	G	2	2	G	G
Trichloroethene	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	911022-221	911022-222	911027-001	911027-002	911028-108	911029-220	911102-021	911112-034	911112-035	911112-036
Acetone	N	N	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	0.8	G	G	G	G	G	G
Chloroform	G	0.7	1	G	0.6	G	G	G	5	G
1,2-Dichloropropane	G	G	G	G	G	G	G	1	G	1
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	2	3	5
Methylene chloride	0.9	1	1	1	1	1	1	G	G	1
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G	G	G
Toluene	0.6	0.6	G	G	G	2	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Equipment Rinse Data Summary, Fourth Quarter 1991

Sample No.	911112-037	911113-083	911115-390	911118-053	911120-024	911121-158	911122-129	911124-051	911124-052	911127-051
Acetone	N	N	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	3	G	G	G	G	G
Chloroform	0.7	0.6	G	G	G	G	1	G	G	1
1,2-Dichloropropane	G	G	G	G	1	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	4	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	4	N	N	N	N	N
Methylene chloride	1	G	2	G	1	G	G	G	G	1
1,1,2,2-Tetrachloroethane	G	G	G	G	2	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G	G	G
Toluene	G	G	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G	G	G

(CONTINUED)

Sample No.	911213-274	911213-275	911213-276	911221-001	911227-060	911228-003
Acetone	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G
Chloroform	2	2	2	2	2	2
1,2-Dichloropropane	2	G	2	G	3	2
Ethylbenzene	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	1
Methylene chloride	G	2	G	G	7	8
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	10	G
Toluene	G	G	G	G	G	G
Trichloroethene	G	G	G	G	1	G

FIELD DUPLICATE SAMPLE DATA

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	1085						1090	
	LII						UNCS	
	04/08/91		09/10/91		11/20/91		01/14/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.042	0.021	0.34	<0.02	0.22	<0.02	0.11	0.022
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.022	0.022	0.025	0.025	0.029	0.027	0.027	0.027
Beryllium	<0.0003	<0.0003	0.00032	<0.0003	0.00093	<0.0003	<0.0003	<0.0003
Boron	0.0047	0.01	0.025	0.038	<0.004	<0.004	0.016	0.017
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.0036	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.018	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	0.021	0.0046	<0.004	0.0069
Iron	0.045	0.014	0.7	0.069	0.31	0.059	0.16	0.013
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	0.01	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	5.2	5.1	.	.	.	.	4.2	4.1
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.079	0.078	0.081	0.083	0.089	0.092	0.024	0.024
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	0.001	<0.001	0.001	0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.011	0.013	0.019	0.0095	0.018	0.0081	0.0028	0.0031
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	349	.	362	.	385	.	263	.
Alkalinity-CO3	<1	.	<1	.	<1	.	<1	.
Calcium	110	100	100	100	110	110	51	52
Chloride	23	.	14	.	15	.	24	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	27	27	26	27	29	30	32	32
Manganese	0.076	0.076	0.11	0.099	0.26	0.23	0.0039	<0.001
Nitrate-N	<0.2	.	<0.2	.	<0.2	.	1	.
Potassium	<0.6	1.4	0.96	<0.6	0.75	0.75	0.9	1
Sodium	9.5	9.4	8.2	8.6	7.4	7.9	11	11
Sulfate	6	.	5	.	5	.	7	.

(CONTINUED)

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No. Location Date Sampled	1090		GW-141		GW-143		GW-144	
	UNCS		LIV		RHO		RHO	
	10/06/91		01/08/91		03/18/91		06/18/91	
	TOT	DIB	TOT	DIB	TOT	DIB	TOT	DIB
METALS (mg/L)								
Aluminum	<0.02	<0.02	0.58	0.034	<0.02	<0.02	0.082	0.068
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.025	0.026	0.022	0.021	0.03	0.032	0.043	0.042
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.019	0.011	1.3	0.021	0.18	0.3	0.064	0.098
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	0.0032	0.0043	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	0.013	<0.01	<0.01	0.043	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	0.0055	<0.004	0.0078	<0.004	<0.004	0.0043
Iron	0.015	<0.005	0.27	0.0053	1.2	0.7	0.012	0.0096
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	0.025	0.035	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	6.6	4.4	0.3	0.43	3.7	3.6
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.023	0.024	0.02	0.019	2.4	2.5	0.1	0.086
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.004	0.004
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0022	<0.002	0.025	0.011	<0.002	<0.002	0.009	0.0068
MAJOR IONS (mg/L)								
Alkalinity-HCO3	.	.	.	.	.	.	.	.
Alkalinity-CO3	256	.	240	.	202	.	149	.
Calcium	<1	.	<1	.	<1	.	<1	.
Chloride	62	53	43	43	27	28	36	35
Fluoride	6	.	2	.	5.6	.	3	.
Magnesium	<0.1	.	<0.1	.	2.5	.	0.2	.
Manganese	33	32	30	30	22	23	13	12
Nitrate-N	<0.001	<0.001	0.0055	<0.001	0.031	0.035	<0.001	<0.001
Potassium	0.77	.	<0.2	.	<0.2	.	0.93	.
Sodium	0.86	1.1	0.89	0.8	17	17	2.1	2.2
Sulfate	8.6	13	2.6	0.94	27	26	1.5	1.7
	5	.	3	.	34.9	.	9	.

(CONTINUED)

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-144				GW-160			
	RMQ				LIII			
	09/09/91		11/06/91		05/24/91		08/21/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.052	0.031	<0.02	0.021	2.1	0.18	6.7	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.046	0.046	0.046	0.047	0.013	0.01	0.022	0.0087
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.0012	<0.0003
Boron	0.022	0.024	0.025	0.026	0.012	1.4	0.036	0.013
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	0.003	<0.003	0.0037	0.0037
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.022	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	0.016	0.016	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	0.0051	<0.004	<0.004	0.016	0.0061
Iron	<0.005	<0.005	0.0067	<0.005	2.4	0.14	11	0.041
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.02	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.025	0.017
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	.	6.9	4.7	.	.
Silver	<0.006	<0.006	<0.006	0.0069	<0.006	<0.006	<0.006	<0.006
Strontium	0.098	0.097	0.096	0.096	0.021	0.022	0.022	0.021
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	0.007	0.007	0.004	0.005	<0.001	<0.001	0.025	0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	0.0069	<0.005	0.026	<0.005
Zinc	0.032	0.0028	0.0042	0.0054	0.02	0.01	0.076	0.01
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	147	.	155	.	214	.	216	.
Alkalinity-CO ₃	<1	.	<1	.	<1	.	<1	.
Calcium	42	42	41	41	41	42	44	42
Chloride	2	.	3	.	4	.	4	.
Fluoride	0.2	.	0.2	.	<0.1	.	<0.1	.
Magnesium	15	15	15	15	26	27	27	26
Manganese	<0.001	<0.001	<0.001	<0.001	0.032	0.016	0.17	0.02
Nitrate-N	0.7	.	0.43	.	0.28	.	0.35	.
Potassium	1.9	2	2	2.6	1.2	1.2	1.8	0.8
Sodium	1.2	1.4	1.7	2	1.6	3.8	1.6	1.4
Sulfate	9	.	11	.	3	.	3	.

(CONTINUED)

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-160		GW-165		GW-175		GW-181	
	LIII		CRDT		CRSP		CRSP	
	10/26/91		02/27/91		05/01/91		08/05/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.28	0.028	2.5	0.033	0.042	0.022	<0.02	0.022
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	0.069	<0.05	<0.05
Barium	0.015	0.009	0.013	0.012	0.045	0.038	0.0073	0.0079
Beryllium	0.00053	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.0048	<0.004	<0.004	0.028	<0.004	<0.004	<0.004	<0.004
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	0.0037	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	0.0041	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Iron	0.84	0.04	9	0.075	0.28	0.006	0.31	<0.005
Lead (AAS)	0.023	<0.004	0.0059	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	7.7	3.4	3.5	3.6	4	0.78
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.019	0.019	0.023	0.023	0.012	0.013	0.02	0.018
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	0.0085	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.02	0.0089	0.03	0.016	<0.002	<0.002	<0.002	0.002
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	220	.	127	.	173	.	156	.
Alkalinity-CO3	<1	.	<1	.	<1	.	<1	.
Calcium	51	46	28	28	35	36	30	33
Chloride	4	.	<1	.	2	.	1	.
Fluoride	<0.1	.	<0.1	.	<0.1	.	<0.1	.
Magnesium	28	26	15	14	21	22	20	20
Manganese	0.16	0.015	0.094	0.033	<0.001	<0.001	0.0026	0.0014
Nitrate-N	0.53	.	<0.2	.	0.3	.	<0.2	.
Potassium	0.83	1.4	1.1	0.78	<0.6	<0.6	1.7	2
Sodium	1.7	1.8	1.1	0.91	1	0.56	0.68	0.62
Sulfate	4	.	3	.	1	.	1	.

(CONTINUED)

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-181		GW-186				GW-217	
	CRSP		RQ				LIV	
	10/08/91		09/08/91		11/18/91		04/03/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	<0.02	<0.02	<0.02	0.026	0.023	0.13	0.038
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.0074	0.0077	0.12	0.12	0.13	0.13	0.025	0.023
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.029	0.013	0.13	0.14	0.15	0.15	0.012	0.015
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	<0.004	0.0091	0.012	<0.004
Iron	1.2	<0.005	0.88	0.88	0.82	0.79	0.23	<0.005
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	.	.	.	3.5	3.3
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.02	0.021	1.7	1.7	1.8	1.8	0.012	0.012
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0063	0.016	0.0043	0.0039	0.0056	0.0033	0.015	0.0049
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	162	.	390	.	392	.	143	.
Alkalinity-CO3	<1	.	<1	.	<1	.	<1	.
Calcium	32	33	110	110	120	110	27	26
Chloride	1	.	12	.	14	.	1.7	.
Fluoride	<0.1	.	0.1	.	0.1	.	<0.1	.
Magnesium	20	20	35	34	34	34	16	15
Manganese	0.0066	0.0035	0.16	0.16	0.15	0.15	0.0062	<0.001
Nitrate-N	<0.2	.	<0.2	.	<1.1	.	0.44	.
Potassium	1.9	1.7	2.9	2.9	3.5	3.1	4.7	3.6
Sodium	0.99	0.73	26	26	35	36	4.7	3.1
Sulfate	1	.	67	.	71	.	7.9	.

(CONTINUED)

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-217		GW-221				GW-241	
	LIV		UNCS				CRSDB	
	07/16/91		04/13/91		07/30/91		08/13/91	03/02/91
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	0.32	<0.02	<0.02	<0.02	0.032	<0.02	.	0.7
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	.	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	.	<0.05
Barium	0.025	0.025	0.0073	0.0091	0.0069	0.0071	.	0.03
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	.	0.00039
Boron	<0.004	<0.004	0.033	0.0045	0.017	0.0061	.	0.012
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	.	<0.002
Cadmium	<0.003	<0.003	<0.003	0.0035	<0.003	<0.003	.	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	.	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	.	<0.01
Cobalt	<0.005	<0.005	<0.005	0.0054	<0.005	<0.005	.	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	.	0.0057
Iron	0.53	0.011	0.022	0.011	0.0097	<0.005	.	0.61
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	.	0.0068
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	.	<0.0002
Molybdenum	<0.01	<0.01	<0.01	0.016	<0.01	<0.01	.	<0.01
Nickel	0.012	<0.01	<0.01	<0.01	<0.01	<0.01	.	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	.	<0.05
Silicon	1.2	1.5	3.2	0.75	4	3.9	.	5.9
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	.	<0.006
Strontium	0.014	0.015	0.0099	0.01	0.0097	0.0096	.	0.021
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	.	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	.	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	.	<0.005
Zinc	0.0069	0.0036	0.0027	<0.002	0.0033	<0.002	.	0.017
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	141	.	144	.	.	.	140	148
Alkalinity-CO3	<1	.	<1	.	.	.	<1	<1
Calcium	30	30	26	27	29	29	.	34
Chloride	2	.	1	.	.	.	<1	<1
Fluoride	<0.1	.	<0.1	.	.	.	<0.1	<0.1
Magnesium	18	18	17	18	17	17	.	21
Manganese	0.015	0.013	<0.001	<0.001	<0.001	<0.001	.	0.11
Nitrate-N	0.43	.	1	.	.	.	1.2	<0.2
Potassium	4.2	4.6	1	1	1	0.96	.	2.5
Sodium	4.2	4.4	1.1	0.81	0.68	0.66	.	0.88
Sulfate	7	.	<1	.	.	.	<1	<1

(CONTINUED)

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-241	GW-292						GW-293
	CRSDB	ECRWP						ECRWP
	03/02/91	02/09/91		05/11/91		08/16/91		10/23/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
	.	.	.	.	.	.	.	.
Aluminum	0.042	0.065	0.053	0.021	0.022	<0.02	<0.02	0.074
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.018	0.11	0.11	0.1	0.1	0.1	0.1	0.18
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.0072	0.013	0.02	<0.004	0.011	0.019	0.019	0.0069
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.0038	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	0.056	0.021	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	0.0068	0.006	0.0066	0.0094	<0.004
Iron	0.012	0.042	0.062	0.013	<0.005	0.08	0.014	1.9
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0023	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	0.013	0.018	<0.01	<0.01	0.011	0.012	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	5.1	3.5	3.8	3.8	3.9	3.5	3.6	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.018	0.014	0.015	0.017	0.016	0.016	0.017	0.016
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0029	<0.002	<0.002	<0.002	0.019	0.017	0.015	0.013
	.	.	.	.	.	.	.	.
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	245	.	243	.	231	.	232
Alkalinity-CO3	.	<1	.	<1	.	<1	.	<1
Calcium	29	42	43	50	49	46	45	50
Chloride	.	11	.	12	.	10	.	9
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	17	28	28	28	28	28	29	30
Manganese	0.0034	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.036
Nitrate-N	.	0.4	.	0.47	.	0.4	.	0.27
Potassium	2.5	<0.6	0.86	1.3	0.98	0.73	0.78	1.7
Sodium	1.1	3.9	4.2	4.2	4.5	4	4.7	3.5
Sulfate	.	3	.	3	.	3	.	4

(CONTINUED)

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-293	GW-299		GW-303				
	ECNWP	LIII		CRSDB				
	10/23/91	02/21/91		06/04/91		08/24/91		11/02/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	<0.02	<0.02	0.024	0.021	<0.02	<0.02	0.025
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.18	0.0085	0.0084	0.018	0.018	0.017	0.016	0.016
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.01	0.0097	<0.004	0.022	0.034	0.021	0.015	0.024
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	0.0075	0.009	0.009	<0.004	<0.004	<0.004
Iron	0.032	0.012	0.03	0.57	0.43	0.28	0.24	0.25
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	0.0002	0.00021	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	0.015	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	2.9	3.3	3	5.3	.	.	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.016	0.015	0.014	2.6	2.4	2.9	2.8	2.8
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0066	0.0037	0.0034	0.0027	0.0023	0.0032	0.0098	0.0058
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	.	138	.	150	.	156	.	162
Alkalinity-CO ₃	.	<1	.	<1	.	<1	.	<1
Calcium	51	28	27	62	36	68	65	76
Chloride	.	1	.	<10	.	3	.	<10
Fluoride	.	<0.1	.	0.72	.	0.9	.	0.8
Magnesium	30	17	17	41	39	41	40	41
Manganese	0.034	<0.001	<0.001	0.0099	0.0087	0.0018	0.0016	0.0012
Nitrate-N	.	<0.2	.	<2	.	<0.2	.	<2
Potassium	1.5	0.81	0.72	7.1	6.6	6.7	6.2	5.4
Sodium	3.4	0.56	0.72	1.7	1.7	1.7	1.6	1.6
Sulfate	.	3	.	181	.	181	.	203

(CONTINUED)

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-303	GW-513				GW-514		
	CRSDB	ADB				ADB		
	11/02/91	03/19/91		06/16/91		09/07/91		11/16/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	0.026	0.03	0.14	0.023	<0.02	0.028	<0.02
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.016	0.014	0.012	0.0074	0.0073	0.0071	0.0078	0.0074
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.018	0.027	0.024	0.018	0.044	0.017	0.033	<0.004
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	0.034	0.026	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	0.0066	0.0066	0.0043	<0.004	<0.004	<0.004	0.0054
Iron	0.16	0.057	0.016	0.076	0.01	0.22	0.011	0.22
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	0.012	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	4.4	4.5	4.1	7.8	.	.	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	2.7	0.025	0.025	0.02	0.02	0.021	0.021	0.022
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0043	0.013	0.013	0.0079	0.0047	0.0058	0.011	0.0023
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO3	.	174	.	171	.	173	.	170
Alkalinity-CO3	.	2	.	<1	.	<1	.	<1
Calcium	70	35	36	32	32	36	37	42
Chloride	.	1	.	1	.	<1	.	<1
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	39	21	22	18	19	22	22	24
Manganese	0.0011	0.0034	<0.001	<0.001	<0.001	0.0053	0.0059	0.0039
Nitrate-N	.	<0.2	.	<0.2	.	0.3	.	<0.2
Potassium	5.8	1.3	1.2	1.4	1.2	0.88	0.98	1.2
Sodium	1.6	0.74	0.83	0.92	0.87	0.46	0.48	0.39
Sulfate	.	2	.	2	.	6	.	4.3

(CONTINUED)

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No.	GW-514	GW-522		GW-539		GW-540		
Location	ADB	LIV		LIIX		LIIX		
Date Sampled	11/16/91	10/03/91		03/16/91		04/09/91		02/12/91
	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
METALS (mg/L)	.	.	.	.	.	.	.	.
Aluminum	<0.02	0.12	<0.02	0.023	<0.02	0.054	0.033	0.021
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.0074	0.0063	0.0057	0.014	0.013	0.0079	0.0081	0.0094
Beryllium	<0.0003	0.00045	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.01	0.01	0.028	<0.004	<0.004	0.0061	0.0065	0.014
Cadmium (AAS)	<0.002	<0.002	<0.002	0.011	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	0.013	0.011	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	0.02	0.018	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	0.024	0.006	<0.004	<0.004	<0.004
Iron	0.0082	0.19	0.011	0.3	0.031	0.018	<0.005	0.026
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	0.015	0.012	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	3.6	2.8	3.6	4.3	.
Silver	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.022	0.0096	0.0093	0.034	0.036	0.023	0.023	0.024
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	0.002	0.004	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.0076	0.015	0.0022	0.015	<0.002	0.0095	0.022	0.025
MAJOR IONS (mg/L)	.	.	.	.	.	.	.	.
Alkalinity-HCO ₃	.	114	.	140	.	168	.	170
Alkalinity-CO ₃	.	<1	.	8	.	<1	.	<1
Calcium	39	24	23	30	29	36	36	38
Chloride	.	<1	.	10	.	2	.	1
Fluoride	.	<0.1	.	<0.1	.	<0.1	.	<0.1
Magnesium	23	14	13	19	19	23	23	21
Manganese	0.0039	0.0076	<0.001	0.014	<0.001	<0.001	<0.001	<0.001
Nitrate-N	.	0.3	.	0.3	.	<0.2	.	<0.2
Potassium	1.2	<0.6	0.65	2.2	2.2	1.3	1.1	1.2
Sodium	0.48	0.57	0.65	3.8	3.8	1.3	1.5	2
Sulfate	.	<1	.	9	.	4	.	4

(CONTINUED)

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-540		GW-608		
	LIIX		CRSP		
	09/12/91	11/24/91	01/28/91		
	DIS	TOT	DIS	TOT	DIS
METALS (mg/L)	.	.	.	.	.
Aluminum	<0.02	<0.02	<0.02	0.033	0.027
Antimony	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	0.0093	0.009	0.0085	0.011	0.012
Beryllium	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Boron	0.031	0.0074	0.013	0.037	0.046
Cadmium (AAS)	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.003	<0.003	<0.003	<0.003	<0.003
Chromium (AAS)	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	<0.004	<0.004	<0.004	<0.004	<0.004
Iron	0.013	0.0077	<0.005	0.63	0.39
Lead (AAS)	<0.004	<0.004	<0.004	<0.004	<0.004
Mercury (CVAA)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	.	.	.	3.6	3.5
Silver	<0.006	<0.006	<0.006	<0.006	<0.006
Strontium	0.023	0.023	0.022	0.017	0.017
Thorium	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium (Fluor)	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.005	<0.005	<0.005	<0.005	<0.005
Zinc	0.014	0.012	0.012	0.0073	0.003
MAJOR IONS (mg/L)	.	.	.	.	.
Alkalinity-HCO ₃	.	172	.	148	.
Alkalinity-CO ₃	.	<1	.	<1	.
Calcium	35	40	35	28	28
Chloride	.	1.3	.	2	.
Fluoride	.	<0.1	.	<0.1	.
Magnesium	20	23	21	17	17
Manganese	<0.001	<0.001	<0.001	0.046	0.04
Nitrate-N	.	<0.2	.	0.4	.
Potassium	1	1.2	1	1.5	1.5
Sodium	2	1.6	1.7	1	1.2
Sulfate	.	4	.	2	.

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No. Location Date Sampled	1085			1090		GW-141	GW-143	GW-144
	LII			UNCS		LIV	KHQ	KHQ
	04/08/91	09/10/91	11/20/91	01/14/91	10/06/91	01/08/91	03/16/91	06/15/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	4
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	3	N	N	N	N	N
Chloroform	G	G	G	G	2	G	G	2
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	23	23	31	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	1	G	2	G	G	G	G	G
1,2-Dichloroethene	3	3	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	G	1	G	G	G	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	4	2	4	G	G	G	G	1
Toluene	G	G	G	G	2	G	G	G
1,1,1-Trichloroethane	13	8	10	G	G	G	G	0.8
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	1	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No.	GW-144		GW-160			GW-165	GW-175	GW-181
Location	KHQ		LIII			CRDT	CRSP	CRSP
Date Sampled	09/05/91	11/06/91	05/24/91	08/21/91	10/26/91	02/27/91	05/01/91	08/05/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	3	1	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	2	2	G	G	G	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	0.8	16	G	0.8	G	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	1	1	G	G	G	G	17	G
Toluene	G	1	G	G	2	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	5	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No.	GW-181	GW-186		GW-217		GW-221		GW-241
Location	CRSP	RQ		LIV		UNCS		CRSDB
Date Sampled	10/08/91	09/08/91	11/18/91	04/03/91	07/16/91	04/13/91	07/30/91	03/02/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	0.8	G	G	G	0.8
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	1	G	G	G	G	G	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G
Toluene	G	G	G	G	G	G	G	G
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-292			GW-293	GW-299	GW-303		
	ECRWP			ECRWP	LIII	CRSDB		
	02/09/91	05/11/91	08/16/91	10/23/91	02/21/91	06/04/91	08/24/91	11/02/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	13	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	0.8	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	3
Methylene chloride	G	G	G	0.9	G	G	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G
Toluene	1	G	G	1	G	G	G	1
1,1,1-Trichloroethane	G	G	G	G	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	3	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-513		GW-514		GW-522	GW-539	GW-540	
	ADB		ADB		LIV	LIIX	LIIX	
	03/19/91	06/16/91	09/07/91	11/16/91	10/03/91	03/16/91	04/09/91	09/12/91
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.	.	.
Acetone	N	N	N	N	N	N	N	N
Benzene	G	G	G	G	G	G	G	G
Bromodichloromethane	G	G	G	G	G	G	G	G
Bromoform	G	G	G	G	G	G	G	G
Bromomethane	N	N	N	N	N	N	N	N
2-Butanone	N	N	N	N	N	N	N	N
Carbon disulfide	G	G	G	G	G	G	G	G
Carbon tetrachloride	G	G	G	G	G	G	G	G
Chlorobenzene	G	G	G	G	G	G	G	G
Chlorodibromomethane	G	G	G	G	G	G	G	G
Chloroethane	N	N	N	N	N	N	N	N
Chloroform	G	G	G	G	G	G	G	G
Chloromethane	N	N	N	N	N	N	N	N
1,1-Dichloroethane	G	G	G	G	G	G	G	G
1,2-Dichloroethane	G	G	G	G	G	G	G	G
1,1-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloroethene	G	G	G	G	G	G	G	G
1,2-Dichloropropane	G	G	G	G	G	G	G	G
cis-1,3-Dichloropropene	G	G	G	G	G	G	G	G
trans-1,3-Dichloropropene	G	G	G	G	G	G	G	G
Ethylbenzene	G	G	G	G	G	G	G	G
2-Hexanone	N	N	N	N	N	N	N	N
4-Methyl-2-pentanone	N	N	N	N	N	N	N	N
Methylene chloride	G	G	G	1	0.4	G	G	G
Styrene	G	G	G	G	G	G	G	G
1,1,2,2-Tetrachloroethane	G	G	G	G	G	G	G	G
Tetrachloroethene	G	G	G	G	G	G	G	G
Toluene	G	G	G	G	0.5	G	G	1
1,1,1-Trichloroethane	G	G	1	2	G	G	G	G
1,1,2-Trichloroethane	G	G	G	G	G	G	G	G
Trichloroethene	G	G	G	G	G	G	G	G
Vinyl acetate	N	N	N	N	N	N	N	N
Vinyl chloride	N	N	N	N	N	N	N	N
Xylenes	G	G	G	G	G	G	G	G

(CONTINUED)

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No.	GW-540	GW-608
Location	LIIX	CRSP
Date Sampled	11/24/91	01/28/91
VOLATILE ORGANICS (ug/L)	.	.
	.	.
Acetone	N	N
Benzene	G	G
Bromodichloromethane	G	G
Bromoform	G	G
Bromomethane	N	N
2-Butanone	N	N
Carbon disulfide	G	G
Carbon tetrachloride	G	G
Chlorobenzene	G	G
Chlorodibromomethane	G	G
Chloroethane	N	N
Chloroform	G	G
Chloromethane	N	N
1,1-Dichloroethane	G	2
1,2-Dichloroethane	G	G
1,1-Dichloroethene	G	G
1,2-Dichloroethene	G	G
1,2-Dichloropropane	G	G
cis-1,3-Dichloropropene	G	G
trans-1,3-Dichloropropene	G	G
Ethylbenzene	G	G
2-Hexanone	N	N
4-Methyl-2-pentanone	N	N
Methylene chloride	G	G
Styrene	G	G
1,1,2,2-Tetrachloroethane	G	G
Tetrachloroethene	G	3
Toluene	G	G
1,1,1-Trichloroethane	G	8
1,1,2-Trichloroethane	G	G
Trichloroethene	G	G
Vinyl acetate	N	N
Vinyl chloride	N	N
Xylenes	G	G

Field Duplicate Groundwater Quality Data, 1991

[illegible]

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-186		GW-241	GW-303		
	RQ		CRSDB	CRSDB		
	09/08/91	11/18/91	03/02/91	06/04/91	08/24/91	11/02/91
BNAs (ug/L)	.	.	.	.	.	.
	.	.	.	.	.	.
1,2,4-Trichlorobenzene	N	0.15	N	N	N	N
1,2-Dichlorobenzene	N	N	N	N	N	N
1,3-Dichlorobenzene	N	N	N	N	N	N
1,4-Dichlorobenzene	N	N	N	N	N	N
2,4,5-Trichlorophenol	M	M	M	M	M	M
2,4,6-Trichlorophenol	N	N	N	N	N	N
2,4-Dichlorophenol	N	N	N	N	N	N
2,4-Dimethylphenol	N	N	N	N	N	N
2,4-Dinitrophenol	M	M	M	M	M	M
2,4-Dinitrotoluene	N	N	N	N	N	N
2,6-Dinitrotoluene	N	N	N	N	N	N
2-Chloronaphthalene	N	N	N	N	N	N
2-Chlorophenol	N	N	N	N	N	N
2-Methylnaphthalene	N	N	N	N	N	N
2-Methylphenol	N	N	N	N	N	N
2-Nitroaniline	M	M	M	M	M	M
2-Nitrophenol	N	N	N	N	N	N
3,3-Dichlorobenzidine	V	V	V	V	V	V
3-Nitroaniline	M	M	M	M	M	M
4,6-Dinitro-2-methylphenol	M	M	M	M	M	M
4-Bromophenyl phenyl ether	N	N	N	N	N	N
4-Chloro-3-methylphenol	N	N	N	N	N	N
4-Chloroaniline	N	N	N	N	N	N
4-Chlorophenyl phenyl ether	N	N	N	N	N	N
4-Methylphenol	N	N	N	N	N	N
4-Nitroaniline	M	M	M	M	M	M
4-Nitrophenol	M	M	M	M	M	M
Acenaphthene	N	N	N	N	N	N
Acenaphthylene	N	N	N	N	N	N
Anthracene	N	N	N	N	N	N
Benzo(a)anthracene	N	N	N	N	N	N
Benzo(a)pyrene	N	N	N	N	N	N
Benzo(b)fluoranthene	N	N	N	N	N	N
Benzo(g,h,i)perylene	N	N	N	N	N	N
Benzo(k)fluoranthene	N	N	N	N	N	N
Benzoic acid	M	M	M	M	M	M
Benzyl alcohol	N	N	N	N	N	N
bis(2-Chloroethoxy)methane	N	N	N	N	N	N
bis(2-Chloroethyl)ether	N	N	N	N	N	N
bis(2-Chloroisopropyl)ether	N	N	N	N	N	N
bis(2-Ethylhexyl)phthalate	N	N	N	N	N	N

(CONTINUED)

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	GW-186		GW-241	GW-303		
	RQ		CRSDB	CRSDB		
	09/08/91	11/18/91	03/02/91	06/04/91	08/24/91	11/02/91
Butyl benzyl phthalate	N	N	N	N	N	N
Chrysene	N	N	N	N	N	N
di-n-Butylphthalate	N	N	N	N	N	N
di-n-Octylphthalate	N	N	N	N	N	N
Dibenzo(a,h)anthracene	N	N	N	N	N	N
Dibenzofuran	N	N	N	N	N	N
Diethylphthalate	N	N	N	N	N	N
Dimethylphthalate	N	N	N	N	N	N
Fluoranthene	N	N	N	N	N	N
Fluorene	N	N	N	N	N	N
Hexachlorobenzene	N	N	N	N	N	N
Hexachlorobutadiene	N	N	N	N	N	N
Hexachlorocyclopentadiene	N	N	N	N	N	N
Hexachloroethane	N	N	N	N	N	N
Indeno(1,2,3-cd)pyrene	N	N	N	N	N	N
Isophorone	N	N	N	N	N	N
n-Nitrosodi-n-propylamine	N	N	N	N	N	N
n-Nitrosodiphenylamine	N	N	N	N	N	N
Naphthalene	N	N	N	N	N	N
Nitrobenzene	N	N	N	N	N	N
Pentachlorophenol	M	M	M	M	M	M
Phenanthrene	N	N	N	N	N	N
Phenol	N	N	7	N	N	N
Pyrene	N	N	N	N	N	N

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No. . Location . Date Sampled	1085			1090		GW-141	GW-143	GW-144
	LII			UNCS		LIV	KHQ	KHQ
	04/08/91	09/10/91	11/20/91	01/14/91	10/06/91	01/08/91	03/16/91	06/15/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	0.8	1.7	1.8	1.2	1.6	6	0.7	2.4
pH, Field (pH units)	6.7	6.8	6.8	7.3	7.5	6.7	7.8	7.9
Redox, Field (mV)	146	61	33	257	174	337	56	161
Sp. Cond., Field (umho/cm)	673	616	706	453	436	368	444	289
Temp, Field (degrees C)	14.9	15.7	15.4	14	14.3	13.2	14.7	16
COD (mg/L)	.	<5	<5	.	.	.	.	.
Cyanide (mg/L)	.	<0.1	<0.1	.	.	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	<0.03	<0.05
pH, 1 (pH units)	7.5	6.9	7.25	7.1	7.4	6.8	7.1	7.6
pH, 2 (pH units)	.	.	.	.	.	.	7.2	8
pH, 3 (pH units)	.	.	.	.	.	.	7.1	8.1
pH, 4 (pH units)	.	.	.	.	.	.	7.2	8.1
Sp. Cond., 1 (umho/cm)	609	735	788	510	538	395	464	333
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	464	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	467	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	467	.
TOC, 1 (mg/L)	<1	<1	1	.	.	1	<1	<1
TOC, 2 (mg/L)	1	.	.	.	.	1	<1	<1
TOC, 3 (mg/L)	<1	.	.	.	.	1	<1	<1
TOC, 4 (mg/L)	<1	.	.	.	.	1	<1	<1
TOX, 1 (ug/L)	86	54	95	.	.	.	<10	<10
TOX, 2 (ug/L)	95	.	.	.	.	.	11	<10
TOX, 3 (ug/L)	79	.	.	.	.	.	13	<10
TOX, 4 (ug/L)	75	.	.	.	.	.	<10	<10
TDS (mg/L)	392	400	456	302	272	258	260	180
TSS (mg/L)	2	14	90	4	<1	15	4	2
Turbidity (NTU)	1.8	10	83	4.2	1.2	14	11	0.5
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	1.65	0.78	-0.16	1.33	3.00	3.71	2.91	1.14
Gross Alpha (CE+/-)	1.10	1.10	1.50	1.40	1.70	1.60	1.50	1.40
Gross Beta (pCi/L)	2.27	1.37	-0.59	-0.42	1.60	4.47	16.91	-2.10
Gross Beta (CE+/-)	3.20	3.30	2.80	3.40	3.00	3.40	4.10	3.10
Uranium 234 (pCi/L)	.	.	.	.	0.43	0.00	.	.
Uranium 234 (CE+/-)	.	.	.	.	1.50	1.40	.	.
Uranium 235 (pCi/L)	.	.	.	.	0.00	0.41	.	.
Uranium 235 (CE+/-)	.	.	.	.	1.50	0.80	.	.
Uranium 238 (pCi/L)	.	.	.	.	0.86	0.41	.	.
Uranium 238 (CE+/-)	.	.	.	.	1.70	0.80	.	.

(CONTINUED)

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No.	GW-144		GW-160			GW-165	GW-175	GW-181
Location	KHO		LIII			CRDT	CRSP	CRSP
Date Sampled	09/05/91	11/06/91	05/24/91	08/21/91	10/26/91	02/27/91	05/01/91	08/05/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	2.2	1.3	5.8	6.2	5.6	3.6	8.8	6.3
pH, Field (pH units)	7.9	7.7	7.3	7.4	7.4	7.8	8.1	7.8
Redox, Field (mV)	65	171	29	8	138	234	208	86
Sp. Cond., Field (umho/cm)	293	371	397	374	400	244	286	278
Temp, Field (degrees C)	16	14.6	17.2	16	15.8	13.1	15.5	15.4
COD (mg/L)	.	.	.	<5	<5	.	.	.
Cyanide (mg/L)	.	.	.	<0.1	<0.1	.	.	.
Phenols (mg/L)	<0.05	<0.05	.	.	.	.	.	.
pH, 1 (pH units)	7.7	7.6	6.5	7.4	7.4	6.8	6.3	8.4
pH, 2 (pH units)	7.9	7.6	.	.	.	.	.	.
pH, 3 (pH units)	7.8	7.6	.	.	.	.	.	.
pH, 4 (pH units)	7.9	7.6	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	330	335	384	411	437	237	297	1510
Sp. Cond., 2 (umho/cm)	326	334	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	328	337	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	328	337	.	.	.	.	.	.
TOC, 1 (mg/L)	1	2	.	1	16	.	.	.
TOC, 2 (mg/L)	1	1	.	.	.	.	.	.
TOC, 3 (mg/L)	1	2	.	.	.	.	.	.
TOC, 4 (mg/L)	1	.	.	.	.	.	.	.
TOX, 1 (ug/L)	35	<10	.	<10	<10	.	.	.
TOX, 2 (ug/L)	14	<10	.	.	.	.	.	.
TOX, 3 (ug/L)	17	<10	.	.	.	.	.	.
TOX, 4 (ug/L)	17	<10	.	.	.	.	.	.
TDS (mg/L)	178	198	234	434	318	182	184	168
TSS (mg/L)	<1	1	16	112	104	67	7	<1
Turbidity (NTU)	0.3	0.4	49	350	325	92	7.5	2.5
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	6.47	8.15	1.40	1.36	2.54	2.58	0.40	-0.60
Gross Alpha (CE+/-)	2.00	2.70	1.30	1.50	2.10	1.50	1.30	1.10
Gross Beta (pCi/L)	7.10	5.84	1.08	3.68	4.08	3.03	3.15	2.75
Gross Beta (CE+/-)	3.30	3.20	3.20	3.40	2.90	3.40	3.50	3.30
Uranium 234 (pCi/L)	.	.	0.00	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	1.40	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	0.00	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	1.40	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	-0.83	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	1.20	.	.	.	.	.

(CONTINUED)

APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No.	GW-181	GW-186		GW-217		GW-221		
Location	CRSP	RQ		LIV		UNCS		
Date Sampled	10/08/91	09/08/91	11/18/91	04/03/91	07/16/91	04/13/91	07/30/91	08/13/91
MISCELLANEOUS PARAMETERS	.	.	.	.	.	.	.	.
DO, Field (ppm)	6.8	0.4	0.6	8.1	9	8.4	4.1	7.4
pH, Field (pH units)	7.7	6.9	7.1	8.1	8	7.8	7.6	7.7
Redox, Field (mV)	170	-63	-75	250	213	334	193	196
Sp. Cond., Field (umho/cm)	254	790	833	288	275	229	272	250
Temp, Field (degrees C)	14.1	16.1	15	15.6	16.5	19.4	16.9	16.4
COD (mg/L)	.	.	.	.	<5	.	.	.
Cyanide (mg/L)	.	.	.	.	<0.1	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	.	.
pH, 1 (pH units)	7.6	7	7.8	7	8.4	7.4	.	8.1
pH, 2 (pH units)	.	.	.	.	.	.	.	.
pH, 3 (pH units)	.	.	.	.	.	.	.	.
pH, 4 (pH units)	.	.	.	.	.	.	.	.
Sp. Cond., 1 (umho/cm)	367	916	895	262	313	251	.	309
Sp. Cond., 2 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.	.	.	.	.
TOC, 1 (mg/L)	.	.	.	1	1	.	.	.
TOC, 2 (mg/L)	.	.	.	.	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.	.	.	.	.
TOX, 1 (ug/L)	.	.	.	.	<10	.	.	.
TOX, 2 (ug/L)	.	.	.	.	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.	.	.	.	.
TDS (mg/L)	168	532	536	124	178	154	.	164
TSS (mg/L)	3	<1	2	7	42	<1	.	<1
Turbidity (NTU)	2.8	7.8	0.99	22	40	0.45	.	0.6
RADIOCHEMICAL PARAMETERS	.	.	.	.	.	.	.	.
Gross Alpha (pCi/L)	1.94	1.78	0.39	3.71	0.08	1.15	1.94	.
Gross Alpha (CE+/-)	1.20	1.30	1.90	1.50	1.00	1.00	1.50	.
Gross Beta (pCi/L)	1.89	2.87	2.14	8.08	4.23	1.25	1.36	.
Gross Beta (CE+/-)	3.30	3.40	3.00	3.40	3.30	3.20	3.20	.
Uranium 234 (pCi/L)	.	.	.	0.00	.	.	0.00	.
Uranium 234 (CE+/-)	.	.	.	1.70	.	.	1.50	.
Uranium 235 (pCi/L)	.	.	.	0.00	.	.	0.00	.
Uranium 235 (CE+/-)	.	.	.	1.40	.	.	1.50	.
Uranium 238 (pCi/L)	.	.	.	0.00	.	.	0.44	.
Uranium 238 (CE+/-)	.	.	.	1.40	.	.	0.90	.

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APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No. Location Date Sampled	GW-241	GW-292			GW-293	GW-299	GW-303
	CNSDB	ECRWP			ECRWP	LIII	CNSDB
	03/02/91	02/09/91	05/11/91	08/16/91	10/23/91	02/21/91	06/04/91 08/24/91
MISCELLANEOUS PARAMETERS							
DO, Field (ppm)	.	.	.	.	.	.	.
pH, Field (pH units)	8.4	6.7	7.1	7.0	3.9	6	0.6 0.9
Redox, Field (mV)	7.7	7.5	7.4	7.2	7	7.6	7.6
Sp. Cond., Field (uaho/cm)	324	315	150	261	142	292	-156
Temp, Field (degrees C)	275	474	421	435	434	217	561
COD (mg/L)	14.5	14.3	14.7	16.2	14.8	13.5	15.7
Cyanide (mg/L)	.	.	.	.	.	.	.
Phenols (mg/L)	.	.	.	.	.	.	.
pH, 1 (pH units)	7.2	6.9	6.4	7.0	7.5	6.9	6.1 7.5
pH, 2 (pH units)	7.2	.	.	.	.	.	6.1 7.6
pH, 3 (pH units)	7.3	.	.	.	.	.	6.1 7.8
pH, 4 (pH units)	7.3	.	.	.	.	.	6.1 7.9
Sp. Cond., 1 (uaho/cm)	271	416	451	520	428	292	609 702
Sp. Cond., 2 (uaho/cm)	275	.	.	.	.	.	613 706
Sp. Cond., 3 (uaho/cm)	275	.	.	.	.	.	616 708
Sp. Cond., 4 (uaho/cm)	275	.	.	.	.	.	616 710
TOC, 1 (mg/L)	1	.	.	.	.	.	<1 1
TOC, 2 (mg/L)	1	.	.	.	.	.	<1 <1
TOC, 3 (mg/L)	1	.	.	.	.	.	<1 2
TOC, 4 (mg/L)	1	.	.	.	.	.	2 1
TOX, 1 (ug/L)	<10	.	.	.	.	.	<10 <10
TOX, 2 (ug/L)	<10	.	.	.	.	.	<10 <10
TOX, 3 (ug/L)	<10	.	.	.	.	.	<10 <10
TOX, 4 (ug/L)	<10	.	.	.	.	.	<10 <10
TDS (mg/L)	278	250	256	266	268	136	400 432
TSS (mg/L)	150	<1	1	<1	9	<1	<1
Turbidity (NTU)	122	0.25	0.3	0.28	25	0.44	4.5 7.9
RADIOCHEMICAL PARAMETERS							
Gross Alpha (pCi/L)	4.62	0.85	2.36	1.51	1.37	-0.74	3.22 3.06
Gross Alpha (CE+/-)	1.60	1.20	1.70	1.30	1.50	1.10	1.60 1.60
Gross Beta (pCi/L)	3.64	2.19	4.47	2.93	5.29	0.65	9.94 6.64
Gross Beta (CE+/-)	3.20	3.30	3.40	3.30	2.90	3.20	3.00 3.50
Uranium 234 (pCi/L)	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.

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APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No.	GW-303	GW-513		GW-514		GW-522	GW-539	GW-540
Location	CRSDB	ADB		ADB		LIV	LIIX	LIIX
Date Sampled	11/02/91	03/19/91	06/16/91	09/07/91	11/16/91	10/03/91	03/16/91	04/09/91
MISCELLANEOUS PARAMETERS								
DO, Field (ppm)	0.5	7.3	4.2	2.9	4.3	7	12.2	6.7
pH, Field (pH units)	7.7	7.5	7.7	8.5	7.6	7.8	8	7.8
Redox, Field (mV)	-152	311	155	132	168	171	249	223
Sp. Cond., Field (umho/cm)	614	315	294	293	333	215	311	313
Temp, Field (degrees C)	13	14.4	16.5	15.7	15.6	15.9	13.2	15.4
COD (mg/L)	.	.	.	.	.	<5	<5	<5
Cyanide (mg/L)	.	.	.	.	.	<0.1	<0.1	<0.1
Phenols (mg/L)	<0.05	.	.	.	.	.	.	.
pH, 1 (pH units)	7.5	7.1	8.1	7.7	7.7	7.9	7	7.2
pH, 2 (pH units)	7.5	.	.	.	7.7	.	.	.
pH, 3 (pH units)	7.5	.	.	.	7.7	.	.	.
pH, 4 (pH units)	7.6	.	.	.	7.7	.	.	.
Sp. Cond., 1 (umho/cm)	686	323	341	354	348	234	300	312
Sp. Cond., 2 (umho/cm)	687	.	.	.	349	.	.	.
Sp. Cond., 3 (umho/cm)	687	.	.	.	347	.	.	.
Sp. Cond., 4 (umho/cm)	688	.	.	.	347	.	.	.
TOC, 1 (mg/L)	32	<1	5	1	<1	3	3	<1
TOC, 2 (mg/L)	5	<1	3	.	.	.	.	.
TOC, 3 (mg/L)	5	<1	3	.	.	.	.	.
TOC, 4 (mg/L)	1	<1	5	.	.	.	.	.
TOX, 1 (ug/L)	<10	<10	<10	<10	14	<10	<10	<10
TOX, 2 (ug/L)	<10	<10	<10	.	.	.	.	.
TOX, 3 (ug/L)	<10	<10	<10	.	.	.	.	.
TOX, 4 (ug/L)	<10	<10	<10	.	.	.	.	.
TDS (mg/L)	666	186	176	170	196	128	162	174
TSS (mg/L)	2	1	<1	<1	1	14	7	<1
Turbidity (NTU)	6.5	1.1	1.4	2.2	2.5	12	2.5	0.25
RADIOCHEMICAL PARAMETERS								
Gross Alpha (pCi/L)	2.94	0.14	0.65	1.22	0.45	1.18	0.96	0.80
Gross Alpha (CE+/-)	2.40	1.30	1.30	1.30	1.60	1.00	1.40	1.20
Gross Beta (pCi/L)	2.73	2.17	3.73	2.64	-0.25	1.48	1.65	4.53
Gross Beta (CE+/-)	3.10	3.20	3.60	3.10	2.80	3.30	3.20	3.30
Uranium 234 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 234 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 235 (CE+/-)	.	.	.	.	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.	.	.	.	.
Uranium 238 (CE+/-)	.	.	.	.	.	.	.	.

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APPENDIX F
Field Duplicate Groundwater Quality Data, 1991

Well No. .	GW-340		GW-608	
	LIIK		CHSP	
	09/12/91	11/24/91	01/28/91	
Date Sampled				
MISCELLANEOUS PARAMETERS				
DO, Field (ppm)	.	.	.	.
pH, Field (pH units)	9.2	9	9.6	9.6
Redox, Field (mV)	7.9	7.6	7.4	7.4
Sp. Cond., Field (umho/cm)	169	204	347	347
Temp, Field (degrees C)	288	327	310	310
COD (mg/L)	16.6	13	13.8	13.8
Cyanide (mg/L)	<5	<5	.	.
Phenole (mg/L)	<0.1	<0.1	.	.
pH, 1 (pH units)	8.1	7.83	6.8	6.8
pH, 2 (pH units)	.	.	.	.
pH, 3 (pH units)	.	.	.	.
pH, 4 (pH units)	.	.	.	.
Sp. Cond., 1 (umho/cm)	303	390	234	234
Sp. Cond., 2 (umho/cm)	.	.	.	.
Sp. Cond., 3 (umho/cm)	.	.	.	.
Sp. Cond., 4 (umho/cm)	.	.	.	.
TOC, 1 (mg/L)	1	<1	.	.
TOC, 2 (mg/L)	.	.	.	.
TOC, 3 (mg/L)	.	.	.	.
TOC, 4 (mg/L)	.	.	.	.
TOX, 1 (ug/L)	<10	<10	.	.
TOX, 2 (ug/L)	.	.	.	.
TOX, 3 (ug/L)	.	.	.	.
TOX, 4 (ug/L)	.	.	.	.
TSS (mg/L)	176	176	194	194
TSS (mg/L)	<1	1	2	2
Turbidity (NTU)	0.2	0.27	6.3	6.3
RADIOCHEMICAL PARAMETERS				
Gross Alpha (pCi/L)	.	.	.	.
Gross Alpha (CS+/-)	3.77	1.04	0.11	0.11
Gross Beta (pCi/L)	1.40	1.40	1.30	1.30
Gross Beta (CS+/-)	6.32	1.97	2.65	2.65
Uranium 234 (pCi/L)	3.30	2.60	3.40	3.40
Uranium 234 (CS+/-)	.	.	.	.
Uranium 235 (pCi/L)	.	.	.	.
Uranium 235 (CS+/-)	.	.	.	.
Uranium 238 (pCi/L)	.	.	.	.
Uranium 238 (CS+/-)	.	.	.	.

APPENDIX G
ION-CHARGE BALANCE CALCULATIONS

EXPLANATION

LOCATION:

ADB - Ash Disposal Basin
CRDT - Chestnut Ridge Deer Trap
CRSDB - Chestnut Ridge Sediment Disposal Basin
CRSP - Chestnut Ridge Security Pits
ECRWP - East Chestnut Ridge Waste Pile
KHQ - Kerr Hollow Quarry
LII - Landfill II
LIIX - Landfill II Expansion
LIII - Landfill III
LIV - Landfill IV
RQ - Rogers Quarry
UNCS - United Nuclear Corporation Site

NOTES:

mg/L - milligrams per Liter
meq/L - milliequivalents per Liter
TDS - Total Dissolved Solids
TSS - Total Suspended Solids

Bicarbonate and carbonate alkalinity (reported as CaCO_3) was converted to HCO_3 and CO_3 as described in Mercier and Turner (1990).

Charge balances were calculated using the following formula:

$$\text{ion-charge balance (\%)} = \left(\frac{\sum \text{cations} - \sum \text{anions}}{\sum \text{cations} + \sum \text{anions}} \right) \times 100$$

APPENDIX G
Ion-Charge Balance Calculations, First Quarter 1991

Well No.	1090	GW-141	GW-142	GW-143	GW-144	GW-145	GW-146	GW-147	GW-155	GW-156	GW-157	GW-158	GW-159
Location	UNCS	LIV	KHQ	KHQ	KHQ	KHQ	KHQ	KHQ	CRSDB	CRSDB	CRSDB	CRSDB	CRSDB
Date Sampled	01/14/91	01/08/91	03/16/91	03/16/91	03/16/91	03/16/91	03/16/91	03/14/91	02/28/91	02/28/91	02/28/91	03/04/91	02/28/91
CATIONS (meq/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium	2.59	2.20	2.00	1.40	1.85	1.90	1.75	1.60	1.40	3.59	1.85	1.90	1.75
Magnesium	2.71	2.55	2.47	1.81	1.15	2.71	2.80	1.56	1.40	3.54	1.89	1.81	1.89
Potassium	0.02	0.02	0.10	0.43	0.06	0.31	0.46	0.12	0.02	0.19	0.04	0.02	0.13
Sodium	0.48	0.04	0.04	1.13	0.07	0.19	0.48	0.16	0.04	1.35	0.07	0.03	0.04
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	5.81	4.80	4.61	4.77	3.12	5.11	5.48	3.44	2.86	8.67	3.84	3.76	3.81
ANIONS (meq/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity-CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
Alkalinity-HCO3	5.24	4.76	4.70	4.06	3.04	4.62	3.96	3.50	2.92	7.93	3.64	3.32	3.72
Chloride	0.65	0.06	1.06	0.17	0.09	0.27	0.35	0.03	0.00	0.06	0.06	0.00	0.00
Fluoride	0.00	0.00	0.02	0.13	0.00	0.09	0.11	0.03	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.07	0.00	0.14	0.00	0.07	0.00	0.00	0.03	0.01	0.02	0.01	0.00	0.00
Sulfate	0.15	0.06	0.62	0.73	0.19	0.62	1.30	0.17	0.02	0.19	0.35	0.19	0.21
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	6.10	4.88	6.53	5.08	3.40	5.61	5.72	3.75	2.95	8.20	4.06	3.51	4.05
CHARGE BALANCE (%)	-2	-1	-17	-3	-4	-5	-2	-4	-2	3	-3	3	-3
TDS (mg/L)	304	260	242	280	190	296	328	248	166	374	310	252	176
TSS (mg/L)	4	16	11	4	1	30	10	101	11	30	42	8	43

(CONTINUED)

APPENDIX G
Ion-Charge Balance Calculations, First Quarter 1991

Well No.	GW-160	GW-161	GW-165	GW-166	GW-173	GW-174	GW-175	GW-176	GW-177	GW-178	GW-179	GW-180	GW-181
Location	LIII	LIII	CRDT	CRDT	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP
Date Sampled	02/13/91	02/12/91	02/27/91	02/24/91	02/01/91	02/01/91	01/31/91	02/04/91	02/02/91	01/15/91	02/08/91	02/02/91	01/29/91
CATIONS (meq/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium	2.10	1.85	1.40	1.20	1.85	1.00	1.65	2.45	2.00	2.00	2.89	2.89	1.55
Magnesium	2.30	1.89	1.15	1.15	1.89	1.56	1.73	2.80	2.06	1.81	2.63	3.04	1.65
Potassium	0.03	0.02	0.02	0.11	0.04	0.17	0.00	0.03	0.16	0.02	0.11	0.02	0.03
Sodium	0.08	0.04	0.04	0.07	0.11	1.00	0.00	0.03	0.06	0.70	0.30	0.03	0.03
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	4.50	3.80	2.61	2.53	3.89	3.74	3.37	5.30	4.27	4.52	5.94	5.99	3.26
ANIONS (meq/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity-CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	4.44	3.92	2.56	2.44	3.76	3.76	3.42	5.58	4.26	4.42	6.17	6.00	3.34
Chloride	0.14	0.06	0.00	0.06	0.08	0.25	0.06	0.06	0.06	0.31	0.06	0.06	0.03
Fluoride	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Nitrate Nitrogen	0.03	0.01	0.00	0.00	0.00	0.07	0.02	0.04	0.00	0.04	0.05	0.04	0.00
Sulfate	0.08	0.02	0.06	0.06	0.12	0.08	0.02	0.02	0.15	0.25	0.08	0.00	0.02
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	4.69	4.01	2.62	2.56	3.97	4.17	3.52	5.69	4.46	5.02	6.36	6.09	3.39
CHARGE BALANCE (%)	-2	-3	-0	-1	-1	-5	-2	-4	-2	-5	-3	-1	-2
TDS (mg/L)	318	192	172	146	200	206	166	298	218	292	276	300	168
TSS (mg/L)	78	6	72	1	4	2	1	-1	-1	9	233	-1	1

(CONTINUED)

APPENDIX C
Ion-Charge Balance Calculations, First Quarter 1991

Well No.	GW-203	GW-205	GW-217	GW-221	GW-231	GW-241	GW-292	GW-293	GW-294	GW-295	GW-296	GW-298	GW-299
Location	UMCS	UMCS	LIV	UMCS	INQ	CRSDB	ECRWP	ECRWP	ECRWP	LIII	ECRWP	LIII	LIII
Date Sampled	01/12/91	01/12/91	01/06/91	01/13/91	03/14/91	03/02/91	02/09/91	02/10/91	02/09/91	02/11/91	02/09/91	02/21/91	02/21/91
CATIONS (meq/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium	1.35	1.50	1.30	1.45	1.25	1.45	2.10	2.05	1.85	3.19	1.90	1.70	1.35
Magnesium	1.23	1.40	1.32	1.40	1.07	1.43	2.30	2.22	2.06	2.22	2.06	1.65	1.32
Potassium	0.02	0.03	0.10	0.02	0.02	0.06	0.00	0.05	0.02	0.25	0.02	0.02	0.02
Sodium	0.03	0.03	0.15	0.03	0.03	0.04	0.17	0.13	0.06	0.43	0.07	0.04	0.03
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	2.63	2.95	2.86	2.89	2.37	3.03	4.57	4.44	3.98	6.10	4.05	3.40	2.71
ANIONS (meq/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity-CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	2.66	2.92	2.88	2.78	2.16	2.96	4.74	5.32	4.76	2.72	3.96	3.32	2.78
Chloride	0.03	0.03	0.03	0.03	0.03	0.00	0.28	0.23	0.17	2.60	0.08	0.00	0.03
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Nitrate Nitrogen	0.07	0.00	0.03	0.07	0.04	0.00	0.03	0.03	0.21	0.06	0.07	0.00	0.00
Sulfate	0.00	0.06	0.10	0.00	0.08	0.00	0.06	0.08	0.06	0.92	0.02	0.12	0.06
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	2.76	3.01	3.04	2.88	2.31	2.96	5.11	5.65	5.20	6.29	4.13	3.45	2.87
CHARGE BALANCE (%)	-2	-1	-3	0	1	1	-6	-12	-13	-2	-1	-1	-3
TDS (mg/L)	188	146	166	144	144	234	250	244	228	330	220	172	140
TSS (mg/L)	194	1	10	5	-1	153	-1	10	-1	332	-1	30	-1

(CONTINUED)

APPENDIX G
Ion-Charge Balance Calculations, First Quarter 1991

Well No.	GW-300	GW-301	GW-302	GW-303	GW-304	GW-305	GW-321	GW-322	GW-339	GW-511	GW-512	GW-513	GW-514
Location	LIII	LIII	UNCS	CRSDB	CRSDB	LIV	ADB	CRSP	UNCS	CRSP	ADB	ADB	ADB
Date Sampled	02/13/91	02/14/91	01/14/91	03/01/91	02/28/91	01/06/91	03/22/91	02/04/91	01/13/91	01/29/91	03/19/91	03/19/91	03/20/91
CATIONS (meq/L)	.	.	.	.	.	.	.	.	.	.	.	.	.
Calcium	1.40	1.35	2.20	3.24	1.70	1.15	1.15	1.55	2.74	1.30	1.65	1.70	1.55
Magnesium	1.48	1.48	2.39	3.37	1.97	1.23	1.15	1.65	2.71	1.32	1.65	1.73	1.65
Potassium	0.00	0.02	0.02	0.19	0.05	0.02	0.00	0.00	0.03	0.13	0.11	0.03	0.03
Sodium	0.02	0.05	0.38	0.10	0.29	0.28	0.02	0.03	0.35	0.09	0.04	0.03	0.03
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	2.90	2.90	4.98	6.91	4.01	2.68	2.32	3.22	5.84	2.83	3.44	3.48	3.25
ANIONS (meq/L)	.	.	.	.	.	.	.	.	.	.	.	.	.
Alkalinity-CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.04	0.12
Alkalinity-HCO3	2.90	3.00	4.62	3.20	3.42	2.60	2.40	3.28	5.00	2.90	3.46	3.48	3.38
Chloride	0.03	0.00	0.65	0.11	0.11	0.06	0.00	0.06	0.56	0.08	0.00	0.03	0.03
Fluoride	0.00	0.01	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.00	0.03	0.07	0.00	0.00	0.00	0.02	0.04	0.06	0.00	0.00	0.00	0.00
Sulfate	0.08	0.06	0.06	3.71	0.73	0.00	0.04	0.00	0.10	0.04	0.06	0.04	0.10
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	3.01	3.09	5.40	7.06	4.26	2.65	2.46	3.37	5.73	3.10	3.52	3.59	3.63
CHARGE BALANCE (%)	-2	-3	-4	-1	-3	1	-3	-2	1	-5	-1	-1	-6
TDS (mg/L)	134	188	268	440	190	152	128	190	284	144	184	210	294
TSS (mg/L)	-1	139	-1	-1	4	1	1	8	2	1	1	4	-1

(CONTINUED)

APPENDIX G
Ion-Charge Balance Calculations, First Quarter 1991

Well No.	GW-521	GW-522	GW-539	GW-540	GW-541	GW-542	GW-543	GW-544	GW-545	GW-546	GW-607	GW-608	GW-609
Location	LIV	LIV	LIIX	LIIX	LIIX	LIIX	LIIX	LIIX	LIIX	LIIX	CRSP	CRSP	CRSP
Date Sampled	01/08/91	01/09/91	03/16/91	03/16/91	03/17/91	03/17/91	03/17/91	03/17/91	03/17/91	03/17/91	01/28/91	01/28/91	01/15/91
CATIONS (meq/L)	.	.	.	.	.	.	.	.	.	.	.	.	.
Calcium	1.35	1.30	1.45	1.65	0.95	1.40	1.90	2.10	3.64	1.35	1.30	1.45	1.70
Magnesium	1.40	1.23	1.48	1.65	1.23	1.07	1.97	2.22	0.02	1.23	1.15	1.40	1.73
Potassium	0.00	0.02	0.06	0.02	0.05	0.06	0.06	0.04	0.46	0.05	0.07	0.04	0.03
Sodium	0.02	0.03	0.17	0.05	0.07	0.04	0.05	0.34	0.20	0.09	0.04	0.04	0.03
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	2.77	2.58	3.16	3.36	2.30	2.56	3.98	4.69	4.32	2.72	2.56	2.92	3.48
ANIONS (meq/L)	.	.	.	.	.	.	.	.	.	.	.	.	.
Alkalinity-CO3	0.00	0.00	0.08	0.12	0.04	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00
Alkalinity-HCO3	2.86	2.72	2.80	2.90	2.02	2.68	4.24	4.24	0.68	2.78	2.60	2.94	3.74
Chloride	0.03	0.03	0.28	0.06	0.00	0.03	0.03	0.54	0.06	0.06	0.03	0.06	0.06
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.00	0.02	0.02	0.00	0.00	0.02	0.00	0.04	0.06	0.00	0.00	0.03	0.06
Sulfate	0.00	0.00	0.21	0.10	0.35	0.08	0.06	0.21	0.29	0.15	0.04	0.04	0.04
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00
Total Anions	2.89	2.77	3.39	3.18	2.41	2.81	4.33	5.02	1.76	2.98	2.67	3.06	3.90
CHARGE BALANCE (%)	-2	-4	-4	3	-2	-5	-4	-3	42	-5	-2	-2	-6
TDS (mg/L)	136	266	182	166	58	100	162	206	66	114	132	148	190
TSS (mg/L)	1	539	9	-1	88	-1	-1	17	61	2	1	-1	1

(CONTINUED)

APPENDIX G
Ion-Charge Balance Calculations, First Quarter 1991

Well No.	GW-610	GW-611	GW-612
Location	CRSP	CRSP	CRSP
Date Sampled	01/30/91	01/31/91	02/07/91
CATIONS (meq/L)	.	.	.
.	.	.	.
Calcium	1.70	2.79	1.85
Magnesium	1.81	2.63	2.06
Potassium	0.00	0.02	0.02
Sodium	0.03	0.00	0.03
Hydrogen Ion	0.00	0.00	0.00
.	.	.	.
Total Cations	3.53	5.44	3.96
.	.	.	.
ANIONS (meq/L)	.	.	.
.	.	.	.
Alkalinity-CO3	0.00	0.00	0.00
Alkalinity-HCO3	3.76	4.92	4.10
Chloride	0.06	0.03	0.06
Fluoride	0.00	0.00	0.00
Nitrate Nitrogen	0.04	0.21	0.02
Sulfate	0.02	0.04	0.06
Hydroxyl Ion	0.00	0.00	0.00
.	.	.	.
Total Anions	3.88	5.20	4.24
.	.	.	.
CHARGE BALANCE (%)	-5	2	-3
.	.	.	.
TDS (mg/L)	178	252	240
TSS (mg/L)	9	3	2

APPENDIX G
Ion-Charge Balance Calculations, Second Quarter 1991

Well No.	1085	1086	1090	GW-141	GW-142	GW-143	GW-144	GW-145	GW-146	GW-155	GW-156	GW-158	GW-159
Location	LII	LII	UMCS	LIV	KHQ	KHQ	KHQ	KHQ	KHQ	CRSDB	CRSDB	CRSDB	CRSDB
Date Sampled	04/08/91	04/08/91	04/14/91	04/04/91	06/13/91	06/16/91	06/15/91	06/14/91	06/15/91	06/02/91	06/02/91	06/08/91	06/01/91
CATIONS (meq/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium	4.94	1.85	2.05	2.10	1.80	1.50	2.00	1.70	1.65	1.50	3.89	1.60	1.85
Magnesium	2.22	1.97	2.55	2.22	2.39	1.89	1.23	2.55	2.63	1.40	3.54	1.65	1.97
Potassium	0.02	0.06	0.02	0.02	0.09	0.38	0.06	0.31	0.36	0.02	0.10	0.00	0.07
Sodium	0.43	0.09	0.52	0.03	0.04	0.70	0.07	0.28	0.40	0.02	0.17	0.02	0.04
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	7.61	3.97	5.14	4.36	4.31	4.47	3.35	4.84	5.03	2.94	7.70	3.27	3.94
ANIONS (meq/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity-CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	7.09	3.96	5.28	4.66	4.54	3.86	2.94	4.60	3.86	2.90	7.15	3.22	3.78
Chloride	0.62	0.17	0.56	0.05	0.06	0.20	0.08	0.25	0.31	0.00	0.06	0.00	0.03
Fluoride	0.00	0.00	0.00	0.00	0.02	0.17	0.01	0.11	0.14	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.00	0.04	0.07	0.05	0.03	0.00	0.07	0.02	0.00	0.01	0.03	0.00	0.00
Sulfate	0.12	0.06	0.12	0.07	0.12	0.85	0.19	0.73	1.42	0.02	0.23	0.21	0.23
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	7.84	4.23	6.04	4.83	4.77	5.08	3.29	5.71	5.72	2.93	7.47	3.43	3.95
CHARGE BALANCE (%)	-1	-3	-8	-5	-5	-6	1	-8	-6	0	2	-2	-0
TDS (mg/L)	400	588	306	236	236	272	176	296	310	216	344	174	184
TSS (mg/L)	1	24720	2	4	6	2	1	178	37	281	7	6	-1

(CONTINUED)

APPENDIX G
Ion-Charge Balance Calculations, Second Quarter 1991

Well No.	GW-160	GW-161	GW-165	GW-166	GW-173	GW-174	GW-175	GW-176	GW-177	GW-178	GW-179	GW-180	GW-181
Location	LIII	LIII	CRDT	CRDT	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP
Date Sampled	05/24/91	05/17/91	06/07/91	06/08/91	05/03/91	05/03/91	05/01/91	05/04/91	05/03/91	04/22/91	05/08/91	05/04/91	04/30/91
CATIONS (mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium	2.00	1.90	1.50	1.55	1.60	1.10	1.05	1.05	1.65	2.00	2.04	3.19	1.60
Magnesium	2.14	1.97	1.32	1.40	1.97	1.09	1.01	2.00	2.06	1.09	2.55	3.29	1.65
Potassium	0.03	0.03	0.02	0.09	0.03	0.14	0.00	0.03	0.10	0.02	0.10	0.03	0.05
Sodium	0.07	0.05	0.03	0.05	0.09	0.70	0.03	0.04	0.04	0.41	0.12	0.03	0.04
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	4.23	3.96	2.86	3.09	3.70	3.91	3.68	4.71	3.85	4.32	5.62	6.54	3.33
ANIONS (mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity-CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	4.34	3.96	2.70	2.80	3.82	3.82	3.46	5.62	4.14	7.23	5.00	6.31	3.32
Chloride	0.11	0.06	0.03	0.51	0.00	0.20	0.06	0.06	0.06	0.20	0.00	0.06	0.03
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Nitrate Nitrogen	0.02	0.00	0.00	0.00	0.07	0.04	0.02	0.04	0.02	0.04	0.04	0.02	0.00
Sulfate	0.06	0.00	0.04	0.00	0.12	0.06	0.02	0.04	0.17	0.19	0.00	0.00	0.02
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	4.53	4.01	2.85	3.31	4.10	4.20	3.56	5.75	4.30	7.74	6.06	6.39	3.37
CHARGE BALANCE (%)	-3	-1	0	-3	-5	-4	2	-10	-6	-20	-3	1	-1
TDS (mg/L)	242	190	192	166	202	214	100	204	216	200	202	304	162
TSS (mg/L)	15	8	122	2	4	10	0	-1	3	7	95	-1	-1

(CONTINUED)

APPENDIX C
Ion-Charge Balance Calculations, Second Quarter 1991

Well No.	CB-203	CB-205	CB-217	CB-221	CB-241	CB-292	CB-293	CB-294	CB-295	CB-296	CB-298	CB-299	CB-300
Location	WICS	WICS	LIV	WICS	CRGB	BCMP	BCMP	BCMP	LIII	BCMP	LIII	LIII	LIII
Date Sampled	04/12/91	04/12/91	04/03/91	04/13/91	06/10/91	05/11/91	05/11/91	05/10/91	05/16/91	05/10/91	05/31/91	05/30/91	05/30/91
CATIONS (meq/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium	1.30	1.40	1.25	1.30	1.45	2.45	2.35	1.70	2.79	1.70	1.70	1.45	1.55
Magnesium	1.23	1.00	1.23	1.40	1.40	2.30	2.22	2.06	2.22	1.97	1.56	1.32	1.40
Potassium	0.02	0.02	0.09	0.02	0.06	0.03	0.06	0.03	0.22	0.02	0.02	0.02	0.00
Sodium	0.00	0.00	0.14	0.03	0.04	0.10	0.14	0.09	0.37	0.09	0.12	0.05	0.10
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	2.55	2.81	2.71	2.75	2.94	4.94	4.77	3.87	5.61	3.70	3.40	2.84	3.13
ANIONS (meq/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity-CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	2.64	2.96	2.00	2.90	2.92	4.82	4.72	4.00	2.00	4.10	3.24	2.64	2.82
Chloride	0.03	0.03	0.05	0.03	0.00	0.31	0.20	0.15	2.06	0.11	0.00	0.03	0.00
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.07	0.00	0.03	0.07	0.00	0.03	0.03	0.16	0.07	0.02	0.00	0.00	0.00
Sulfate	0.00	0.06	0.17	0.00	0.00	0.06	0.00	0.06	0.65	0.02	0.25	0.00	0.00
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	2.74	3.05	3.12	3.00	2.92	5.22	5.12	4.36	5.57	4.33	3.49	2.75	2.90
CHARGE BALANCE (%)	-4	-4	-7	-4	0	-3	-3	-6	0	-7	-1	2	4
TDS (mg/L)	150	156	100	160	100	254	276	230	356	212	174	132	134
TSS (mg/L)	5	2	16	-1	30	1	4	3	150	1	12	3	1

(CONTINUED)

APPENDIX 5
Ion-Charge Balance Calculations, Second Quarter 1991

Well No.	GW-301	GW-302	GW-303	GW-304	GW-305	GW-321	GW-322	GW-330	GW-511	GW-512	GW-513	GW-514	GW-521
Location	LTV	WCS	CHSD	CHSD	LTV	AND	CHSD	WCS	CHSD	AND	AND	AND	LTV
Date Sampled	05/30/91	06/13/91	06/04/91	06/01/91	06/03/91	06/10/91	05/04/91	06/13/91	06/30/91	06/16/91	06/16/91	06/17/91	06/04/91
CATIONS (mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium	1.35	2.00	1.85	1.85	1.15	1.25	1.55	2.05	1.35	1.00	1.00	1.05	1.25
Magnesium	1.00	2.30	3.21	1.97	1.23	1.15	1.73	2.67	1.32	1.00	1.00	1.05	1.00
Potassium	0.02	0.02	0.19	0.05	0.02	0.00	0.00	0.03	0.13	0.00	0.04	0.03	0.00
Sodium	0.16	0.34	0.00	0.25	0.10	0.03	0.04	0.00	0.07	0.04	0.04	0.02	0.02
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	3.01	4.70	5.32	4.12	2.50	2.43	3.31	4.90	2.06	3.21	3.14	3.30	2.66
-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANIONS (mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity-CO3	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	2.70	4.70	3.00	3.42	2.50	2.30	3.20	5.04	2.02	3.42	3.42	3.44	2.00
Chloride	0.00	0.05	0.11	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.03	0.03	0.03
Fluoride	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Nitrate Nitrogen	0.03	0.07	0.00	0.00	0.00	0.01	0.00	0.05	0.00	0.00	0.00	0.00	0.00
Sulfate	0.00	0.06	0.37	0.67	0.00	0.04	0.02	0.00	0.04	0.04	0.04	0.00	0.00
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	2.01	5.20	3.52	4.17	2.63	2.40	3.35	5.06	2.90	3.47	3.49	3.55	2.91
-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHARGE BALANCE (%)	3	-5	20	-1	-2	1	-1	-7	-1	-4	-5	-3	-4
-	-	-	-	-	-	-	-	-	-	-	-	-	-
TDS (mg/L)	142	274	404	202	80	140	144	272	120	102	100	100	120
TDS (mg/L)	17	1	3	65	1	-1	60	-1	1	2	-1	1	-1

(CONTINUED)

APPENDIX C
Ion-Charge Balance Calculations, Second Quarter 1991

Well No.	GP-122	GP-139	GP-140	GP-141	GP-142	GP-143	GP-144	GP-145	GP-146	GP-607	GP-608	GP-609	GP-610
Location	LIV	LIVE	LIVE	LIVE	LIVE	LIVE	LIVE	LIVE	LIVE	CHOP	CHOP	CHOP	CHOP
Date Sampled	04/04/91	04/08/91	04/09/91	04/10/91	04/10/91	04/11/91	04/11/91	04/11/91	04/11/91	04/23/91	04/23/91	04/23/91	03/02/91
CATIONS (mg/L)													
Calcium	1.25	1.45	1.48	1.45	1.48	1.98	1.98	1.45	1.15	1.25	0.85	1.70	1.95
Magnesium	1.23	1.65	1.56	1.56	0.98	2.06	2.16	0.85	1.23	1.67	1.48	1.73	1.97
Potassium	0.00	0.07	0.02	0.01	0.00	0.06	0.06	0.36	0.05	0.00	0.00	0.02	0.00
Sodium	0.02	0.61	0.04	0.01	0.06	0.07	0.38	0.17	0.11	0.03	0.04	0.03	0.02
Sulfuric Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	2.50	3.77	3.22	3.07	2.46	4.03	4.37	2.67	2.54	2.94	2.45	3.47	3.94
ANIONS (mg/L)													
Alkalinity-CO3	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	2.16	2.84	3.16	3.08	3.00	4.28	4.38	0.00	2.64	2.47	2.44	3.27	3.90
Chloride	0.04	0.47	0.06	0.00	0.03	0.03	0.47	0.06	0.06	0.03	0.06	0.06	0.06
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.02	0.03	0.00	0.00	0.03	0.00	0.04	0.00	0.00	0.00	0.00	0.04	0.04
Sulfate	0.00	0.37	0.00	0.38	0.00	0.04	0.17	0.19	0.12	0.04	0.04	0.04	0.00
Spectrolyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	2.02	3.70	3.26	3.37	3.13	4.37	4.88	0.70	2.82	2.49	2.54	3.90	4.07
CHARGE BALANCE (%)	-6	1	-4	-1	-13	-3	-5	48	-5	-1	-2	-7	-7
TDS (mg/L)	142	214	226	184	158	288	342	98	152	118	134	170	218
TDS (mg/L)	37	38	1	1	3	-1	-1	24	-1	-1	3	3	3

(CONTINUED)

APPENDIX C
In-Charge Balance Calculations, Second Quarter 1991

Well No.	GP-611	GP-612	GP-700
Location	CHP	CHP	LJI
Date Sampled	05/01/91	05/03/91	06/19/91
CHARGE (mg/L)	-	-	-
Calcium	2.45	1.45	0.90
Magnesium	2.50	1.97	1.32
Potassium	0.04	0.00	0.00
Sodium	0.05	0.02	0.14
Hydrogen Ion	0.00	0.00	0.00
Total Cations	5.00	3.44	2.44
ANIONS (mg/L)	-	-	-
Alkalinity-CO3	0.00	0.00	0.00
Alkalinity-HCO3	5.05	4.04	2.16
Chloride	0.03	0.06	0.03
Fluoride	0.00	0.00	0.01
Nitrate Nitrogen	0.21	0.02	0.00
Sulfate	0.02	0.04	0.15
Hydroxyl Ion	0.00	0.00	0.01
Total Anions	5.32	4.16	2.42
CHARGE BALANCE (%)	-2	-7	0
TDS (mg/L)	200	200	100
TDS (mg/L)	10	1	-1

APPENDIX C
Ion-Charge Balance Calculations, Third Quarter 1991

Well No.	1005	1006	1090	09-141	09-142	09-143	09-144	09-145	09-146	09-147	09-156	09-158	09-159
Location	LIT	LIT	WCS	LIV	HQ	HQ	HQ	HQ	HQ	HQ	CHSD	CHSD	CHSD
Date Sampled	08/10/91	08/10/91	07/31/91	07/17/91	08/03/91	08/05/91	08/05/91	08/06/91	08/06/91	08/06/91	08/23/91	08/25/91	08/23/91
CATIONS (mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium	0.00	1.00	2.66	3.09	2.35	1.00	2.15	1.95	2.15	1.50	3.40	1.60	1.05
Magnesium	0.06	1.01	2.63	2.71	2.55	1.01	1.23	2.00	2.96	1.40	3.70	1.01	2.06
Potassium	0.00	0.05	0.00	0.02	0.09	0.30	0.05	0.20	0.43	0.16	0.11	0.03	0.12
Sodium	10.00	0.07	0.43	0.02	0.04	1.09	0.07	0.30	0.40	0.21	0.14	0.03	0.03
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Cations	10.06	3.72	5.71	5.05	5.03	4.60	3.50	5.40	6.02	3.26	7.44	3.66	4.05
-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANIONS (mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity-CO3	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	7.17	3.56	-	4.07	4.70	3.90	3.00	4.74	3.06	3.02	6.93	3.06	3.60
Chloride	0.30	0.14	-	0.06	0.03	0.14	0.06	0.25	0.20	0.03	0.06	0.00	0.00
Fluoride	0.00	0.00	-	0.00	0.03	0.16	0.01	0.12	0.14	0.02	0.00	0.00	0.00
Nitrate Nitrogen	0.00	0.03	-	0.04	0.00	0.02	0.05	0.02	0.00	0.07	0.02	0.00	0.01
Sulfate	0.10	0.06	-	0.04	0.12	0.67	0.19	0.69	1.31	0.00	0.19	0.19	0.17
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Anions	7.67	3.79	-	4.96	4.80	4.80	3.30	5.81	5.50	3.21	7.20	3.25	3.70
-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHARGE BALANCE (%)	14	-1	-	0	1	-2	3	-4	6	1	2	3	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-
TDS (mg/L)	394	264	-	254	206	260	176	294	312	166	372	150	206
TSS (mg/L)	15	1720	-	6	5	-1	-1	73	6	24	6	12	19

(CONTINUED)

APPENDIX C
Ion-Charge Balance Calculations, Third Quarter 1991

Well No.	GP-160	GP-161	GP-173	GP-174	GP-175	GP-176	GP-177	GP-178	GP-179	GP-180	GP-181	GP-184	GP-184
Location	LIII	LIII											
Date Sampled	08/21/91	08/21/91	08/06/91	08/06/91	08/08/91	08/09/91	08/08/91	08/08/91	08/12/91	08/09/91	08/05/91	08/08/91	08/08/91
CATIONS (mg/L)													
Calcium	2.10	1.85	1.90	1.35	2.00	2.64	2.20	2.10	2.30	2.79	1.50	4.14	5.49
Magnesium	2.22	1.89	1.81	1.73	1.89	2.55	2.30	1.87	2.47	2.80	1.56	0.78	2.80
Potassium	0.03	0.03	0.03	0.12	0.00	0.02	0.00	0.14	0.10	0.02	0.05	0.04	0.07
Sodium	0.00	0.04	0.10	0.61	0.02	0.03	0.52	5.65	0.11	0.03	0.09	0.07	1.09
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	4.42	3.80	3.83	3.80	3.91	5.24	5.02	8.96	4.90	5.63	3.20	5.03	9.45
ANIONS (mg/L)													
Alkalinity-CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	4.28	3.80	3.68	3.74	3.78	5.20	3.88	4.38	5.04	5.70	3.16	4.04	7.75
Chloride	0.11	0.06	0.06	0.25	0.06	0.05	0.06	0.20	0.06	0.06	0.03	0.03	0.37
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Nitrate Nitrogen	0.02	0.00	0.09	0.04	0.02	0.04	0.00	0.03	0.03	0.02	0.00	0.51	0.00
Sulfate	0.06	0.02	0.12	0.00	0.00	0.03	0.12	0.10	0.00	0.00	0.04	0.56	1.40
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	4.48	3.88	3.95	4.12	3.77	5.31	4.06	4.63	5.21	5.77	3.23	5.14	9.52
CHARGE BALANCE (%)	-1	-1	-2	-4	2	-1	11	32	-2	-1	-0	-1	-0
TDS (mg/L)	412	192	214	240	194	268	220	278	266	296	192	300	536
TSS (mg/L)	131	-1	7	4	6	-1	2	1	124	-1	-1	-1	-1

(CONTINUED)

APPENDIX G
Ion-Charge Balance Calculations, Third Quarter 1991

Well No.	GW-187	GW-188	GW-203	GW-205	GW-217	GW-221	GW-231		GW-241	GW-292	GW-293	GW-294	GW-295
Location	NQ	NQ	UNCS	UNCS	LIV	UNCS	KNO		CHSUS	ECRNP	ECRNP	ECRNP	LIII
Date Sampled	09/09/91	09/09/91	07/29/91	07/29/91	07/16/91	07/30/91	07/19/91	09/04/91	08/25/91	08/16/91	08/19/91	08/15/91	08/30/91
CATIONS (meq/L)													
Calcium	2.50	0.00	1.35	1.50	1.45	1.55	1.70	2.05	1.70	2.35	2.40	2.05	2.74
Magnesium	1.65	1.48	1.23	1.40	1.40	1.48	1.65	1.89	1.56	2.39	2.39	2.14	2.39
Potassium	0.07	1.07	0.03	0.02	0.13	0.02	0.04	0.04	0.06	0.02	0.04	0.00	0.17
Sodium	2.91	1.48	0.02	0.02	0.22	0.03	0.03	0.04	0.02	0.17	0.14	0.07	0.26
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	7.12	4.83	2.62	2.94	3.19	3.07	3.41	4.02	3.34	4.92	4.96	4.25	5.55
ANIONS (meq/L)													
Alkalinity-CO3	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	5.16	3.68	2.56	2.84	2.80	-	3.58	3.80	2.88	4.62	4.56	3.98	2.68
Chloride	1.21	0.11	0.03	0.03	0.06	-	0.00	0.03	0.00	0.28	0.25	0.14	1.95
Fluoride	0.03	0.03	0.00	0.00	0.00	-	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.00	0.00	0.08	0.02	0.03	-	0.00	0.00	0.00	0.03	0.02	0.16	0.05
Sulfate	0.54	0.46	0.00	0.08	0.12	-	0.06	0.06	0.00	0.08	0.06	0.06	0.42
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	6.94	4.28	2.67	2.97	3.01	-	3.64	3.89	2.88	5.01	4.90	4.35	5.09
CHARGE BALANCE (%)	1	6	-1	-1	3	-	-3	2	7	-1	1	-1	4
TDS (mg/L)	400	242	186	148	188	-	166	198	276	260	246	230	680
TSS (mg/L)	-1	2	50	5	32	-	-1	-1	252	-1	11	4	24750

(CONTINUED)

APPENDIX C
Ion-Charge Balance Calculations, Third Quarter 1991

Well No.	GW-296	GW-298	GW-299	GW-300	GW-301	GW-302	GW-303	GW-304	GW-305	GW-321	GW-322	GW-339	GW-511
Location	ECRWP	LIII	LIII	LIII	LIII	UMCS	CRSDB	CRSDB	LIV	ADB	CRSP	UMCS	CRSP
Date Sampled	08/15/91	08/22/91	08/22/91	08/22/91	08/22/91	07/30/91	08/24/91	08/23/91	07/15/91	09/07/91	08/13/91	07/30/91	08/05/91
CATIONS (meq/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium	2.20	2.00	1.60	1.70	1.65	2.40	3.39	1.75	1.25	1.25	1.70	2.59	1.25
Magnesium	2.22	1.81	1.56	1.65	1.65	2.30	3.45	2.14	1.23	1.15	1.65	2.55	1.23
Potassium	0.02	0.00	0.02	0.00	0.00	0.03	0.17	0.05	0.02	0.00	0.00	0.02	0.13
Sodium	0.07	0.06	0.04	0.02	0.05	0.30	0.07	0.25	0.07	0.03	0.02	0.38	0.06
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	4.50	3.86	3.22	3.36	3.34	5.02	7.09	4.18	2.58	2.43	3.37	5.55	2.67
ANIONS (meq/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity-CO3	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00
Alkalinity-HCO3	4.14	3.24	2.64	2.88	2.84	-	3.12	3.40	2.42	2.36	3.26	-	2.46
Chloride	0.06	0.00	0.03	0.00	0.00	-	0.00	0.00	0.06	0.00	0.06	-	0.00
Fluoride	0.00	0.00	0.00	0.00	0.00	-	0.04	0.00	0.00	0.00	0.00	-	0.00
Nitrate Nitrogen	0.02	0.00	0.00	0.00	0.02	-	0.00	0.00	0.00	0.01	0.00	-	0.00
Sulfate	0.00	0.12	0.00	0.06	0.06	-	3.87	0.62	0.00	0.04	0.00	-	0.04
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	4.21	3.36	2.75	2.94	2.93	-	7.03	4.11	2.48	2.41	3.32	-	2.66
CHARGE BALANCE (%)	3	7	8	7	7	-	0	1	2	0	1	-	0
TDS (mg/L)	222	168	154	150	146	-	460	256	138	110	180	-	140
TSS (mg/L)	1	60	-1	-1	74	-	-1	28	2	-1	49	-	-1

(CONTINUED)

APPENDIX C
Ion-Charge Balance Calculations, Third Quarter 1991

Well No.	GW-512	GW-513	GW-514	GW-521	GW-522	GW-539	GW-540	GW-541	GW-542	GW-543	GW-544	GW-545	GW-546
Location	ADB	ADB	ADB	LIV	LIV	LIIX	LIIX	LIIX	LIIX	LIIX	LIIX	LIIX	LIIX
Date Sampled	09/06/91	09/06/91	09/07/91	07/17/91	07/17/91	09/12/91	09/12/91	09/13/91	09/14/91	09/14/91	09/14/91	09/15/91	09/15/91
CATIONS (meq/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium	1.90	2.05	1.80	1.35	1.30	1.70	1.80	1.80	1.55	2.25	2.20	3.29	1.45
Magnesium	1.73	1.81	1.81	1.40	1.32	1.65	1.65	1.56	0.67	2.06	2.14	0.01	1.32
Potassium	0.10	0.04	0.02	0.02	0.02	0.04	0.02	0.03	0.07	0.05	0.05	0.54	0.05
Sodium	0.05	0.04	0.02	0.01	0.01	0.19	0.08	0.02	0.05	0.05	0.26	0.24	0.10
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	3.78	3.93	3.65	2.77	2.64	3.56	3.54	3.41	2.33	4.40	4.64	4.08	2.92
ANIONS (meq/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity-CO3	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00
Alkalinity-HCO3	3.20	3.40	3.48	2.74	2.60	2.80	3.40	3.10	3.08	4.16	4.04	0.00	2.60
Chloride	0.00	0.00	0.00	0.00	0.03	0.42	0.03	0.00	0.00	0.00	0.34	0.06	0.00
Fluoride	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Nitrate Nitrogen	0.00	0.00	0.00	0.00	0.03	0.04	0.00	0.00	0.00	0.00	0.03	0.05	0.00
Sulfate	0.06	0.04	0.08	0.04	0.00	0.04	0.08	0.27	0.06	0.06	0.19	0.27	0.12
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.01	0.00
Total Anions	3.26	3.44	3.56	2.78	2.69	3.31	3.51	3.37	3.14	4.22	4.59	5.99	2.72
CHARGE BALANCE (%)	7	7	1	-0	-1	4	0	1	-15	2	0	-19	3
TDS (mg/L)	168	166	170	102	114	184	192	172	154	206	228	268	246
TSS (mg/L)	-1	-1	-1	1	21	49	1	2	7	1	9	45	235

(CONTINUED)

APPENDIX G
Ion-Charge Balance Calculations, Third Quarter 1991

Well No.	GW-607	GW-608	GW-609	GW-610	GW-611	GW-612	GW-709	GW-731	GW-732
Location	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	LII	CRSDB	CRSDB
Date Sampled	08/06/91	08/07/91	08/09/91	08/06/91	08/08/91	08/12/91	09/11/91	09/27/91	09/27/91
CATIONS (meq/L)	.	.	.	.	.	.	.	.	.
Calcium	1.35	1.50	1.90	1.80	2.50	1.95	0.60	0.90	1.30
Magnesium	1.23	1.48	1.81	1.73	2.30	2.14	1.56	0.57	1.32
Potassium	0.13	0.02	0.03	0.00	0.02	0.02	0.06	0.56	0.11
Sodium	0.05	0.02	0.03	0.03	0.07	0.02	0.10	0.37	0.07
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	2.76	3.02	3.76	3.56	4.89	4.12	2.33	2.40	2.80
ANIONS (meq/L)	.	.	.	.	.	.	.	.	.
Alkalinity-CO3	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.00
Alkalinity-HCO3	2.58	2.90	3.54	3.56	4.64	3.96	3.32	1.34	2.72
Chloride	0.00	0.03	0.04	0.06	0.08	0.06	0.03	0.07	0.00
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Nitrate Nitrogen	0.00	0.02	0.07	0.04	0.21	0.02	0.00	0.00	0.00
Sulfate	0.04	0.04	0.04	0.00	0.06	0.04	0.08	0.37	0.04
Hydroxyl Ion	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00
Total Anions	2.78	2.99	3.69	3.65	5.00	4.07	3.43	2.39	2.76
CHARGE BALANCE (%)	-0	0	1	-1	-1	1	-19	0	1
TDS (mg/L)	162	156	190	204	272	180	154	116	156
TSS (mg/L)	2	-1	-1	2	6	1	1	63	1

APPENDIX G
Ion-Charge Balance Calculations, Fourth Quarter 1991

Well No.	1085	1086	1090	GW-141	GW-142	GW-143	GW-144	GW-145	GW-146	GW-147	GW-156	GW-158	GW-159
Location	LII	LII	UNCS	LIV	KHQ	KHQ	KHQ	KHQ	KHQ	KHQ	CRSDB	CRSDB	CRSDB
Date Sampled	11/20/91	11/20/91	10/06/91	10/02/91	11/04/91	11/07/91	11/06/91	11/05/91	11/07/91	11/05/91	10/30/91	11/14/91	10/29/91
CATIONS (meq/L)	.	.	.	.	.	.	.	.	.	.	.	.	.
Calcium	5.49	2.15	2.99	2.30	2.25	1.45	2.00	1.95	1.95	1.85	3.44	1.80	1.80
Magnesium	2.30	2.14	2.63	2.30	2.55	1.81	1.15	2.63	2.63	1.65	3.54	1.73	1.89
Potassium	0.02	0.04	0.00	0.00	0.09	0.43	0.05	0.28	0.41	0.06	0.08	0.00	0.09
Sodium	0.33	0.09	0.37	0.03	0.04	1.48	0.07	0.36	0.61	0.10	0.11	0.03	0.05
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	8.14	4.41	6.00	4.63	4.93	5.17	3.27	5.22	5.60	3.65	7.18	3.55	3.83
ANIONS (meq/L)	.	.	.	.	.	.	.	.	.	.	.	.	.
Alkalinity-CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	7.57	4.12	5.12	4.60	4.54	4.00	3.10	4.50	3.92	3.44	7.21	3.28	3.62
Chloride	0.42	0.25	0.17	0.03	0.04	0.14	0.08	0.20	0.25	0.03	0.00	0.00	0.00
Fluoride	0.00	0.00	0.00	0.00	0.03	0.15	0.01	0.13	0.14	0.01	0.00	0.01	0.00
Nitrate Nitrogen	0.00	0.03	0.06	0.03	0.00	0.00	0.03	0.00	0.00	0.03	0.02	0.00	0.02
Sulfate	0.10	0.08	0.10	0.02	0.13	0.69	0.23	0.69	1.27	0.08	0.21	0.21	0.17
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	8.10	4.49	5.45	4.68	4.74	4.97	3.45	5.52	5.58	3.59	7.44	3.49	3.81
CHARGE BALANCE (%)	0	-1	5	-0	2	2	-3	-3	0	1	-2	1	0
TDS (mg/L)	442	548	266	228	238	266	192	292	318	190	364	180	200
TSS (mg/L)	146	24080	1	4	5	10	1	18	3	6	3	4	14

(CONTINUED)

APPENDIX G
Ion-Charge Balance Calculations, Fourth Quarter 1991

Well No.	GW-160	GW-161	GW-173	GW-174	GW-175	GW-176	GW-177	GW-178	GW-179	GW-180	GW-181	GW-184	GW-186
Location	LIII	LIII	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	BQ	BQ
Date Sampled	10/26/91	10/25/91	10/10/91	10/11/91	10/13/91	10/14/91	10/13/91	10/13/91	10/17/91	10/14/91	10/08/91	11/18/91	11/18/91
CATIONS (meq/L)	.	.	.	.	.	.	.	.	.	.	.	.	.
Calcium	2.35	2.94	2.05	2.25	1.85	2.84	2.25	2.35	2.69	2.79	1.65	4.59	5.49
Magnesium	2.22	3.13	1.97	2.22	1.81	2.80	2.22	2.30	2.80	2.88	1.65	0.82	2.80
Potassium	0.03	0.03	0.05	0.05	0.02	0.03	0.05	0.02	0.10	0.03	0.05	0.05	0.08
Sodium	0.08	0.06	0.11	0.17	0.06	0.07	0.05	0.31	0.10	0.04	0.03	0.09	1.52
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	4.68	6.16	4.18	4.69	3.73	5.74	4.57	4.98	5.69	5.74	3.37	5.55	9.89
ANIONS (meq/L)	.	.	.	.	.	.	.	.	.	.	.	.	.
Alkalinity-CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	4.40	3.94	3.84	3.98	3.52	5.38	4.06	4.40	5.30	5.52	3.24	3.96	7.75
Chloride	0.11	0.06	0.06	0.25	0.06	0.06	0.08	0.00	0.06	0.06	0.03	0.04	0.38
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Nitrate Nitrogen	0.04	0.02	0.08	0.04	0.02	0.03	0.02	0.00	0.04	0.02	0.00	0.36	0.00
Sulfate	0.08	0.04	0.15	0.08	0.02	0.02	0.15	0.12	0.08	0.00	0.02	0.60	1.46
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	4.63	4.05	4.12	4.36	3.62	5.48	4.31	4.52	5.47	5.59	3.29	4.97	9.61
CHARGE BALANCE (%)	1	21	1	4	2	2	3	5	2	1	1	6	1
TDS (mg/L)	322	190	204	234	204	294	230	289	294	300	158	304	536
TSS (mg/L)	100	-1	1	2	-1	7	-1	-1	8	1	1	1	2

(CONTINUED)

APPENDIX G
Ion-Charge Balance Calculations, Fourth Quarter 1991

Well No.	GW-187	GW-188	GW-203	GW-205	GW-217	GW-221	GW-231	GW-241	GW-292	GW-293	GW-294	GW-295	GW-296
Location	RQ	RQ	UNCS	UNCS	LIV	UNCS	KNQ	CRSDB	ECRWP	ECRWP	ECRWP	LIHI	ECRWP
Date Sampled	11/19/91	11/19/91	11/23/91	11/23/91	10/01/91	11/23/91	11/05/91	10/31/91	10/22/91	10/23/91	10/22/91	11/12/91	10/22/91
CATIONS (meq/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium	2.45	1.50	1.55	1.75	1.30	1.65	2.20	1.50	2.40	2.45	2.10	2.54	2.05
Magnesium	1.65	1.97	1.40	1.56	1.40	1.56	1.81	1.40	2.47	2.39	2.22	2.39	2.14
Potassium	0.08	0.18	0.03	0.03	0.09	0.03	0.05	0.07	0.02	0.05	0.02	0.15	0.02
Sodium	2.96	1.04	0.03	0.03	0.17	0.04	0.03	0.04	0.20	0.15	0.07	0.30	0.06
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	7.13	4.69	3.01	3.37	2.96	3.28	4.09	3.00	5.08	5.03	4.42	5.38	4.26
ANIONS (meq/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity-CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	5.22	3.74	2.52	2.84	2.88	2.82	3.92	2.94	4.70	4.66	4.08	3.16	4.14
Chloride	1.44	0.08	0.03	0.05	0.06	0.00	0.03	0.00	0.25	0.25	0.17	1.89	0.06
Fluoride	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Nitrate Nitrogen	0.00	0.00	0.07	0.00	0.03	0.06	0.00	0.00	0.03	0.02	0.19	0.02	0.02
Sulfate	0.48	0.54	0.00	0.05	0.12	0.00	0.06	0.02	0.06	0.06	0.00	0.17	0.02
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	7.17	4.40	2.62	2.94	3.09	2.88	4.01	2.97	5.04	4.99	4.43	5.24	4.24
CHARGE BALANCE (%)	-0	3	7	7	-2	6	1	1	0	0	-0	1	0
TDS (mg/L)	406	252	160	162	168	160	204	196	280	274	258	284	220
TSS (mg/L)	-1	8	14	2	28	-1	-1	882	1	9	2	3732	8

(CONTINUED)

APPENDIX C
Ion-Charge Balance Calculations, Fourth Quarter 1991

Well No.	GW-298	GW-299	GW-300	GW-301	GW-302	GW-303	GW-304	GW-305	GW-321	GW-322	GW-339	GW-511	GW-512
Location	LIII	LIII	LIII	LIII	UNCS	CRSDB	CRSDB	LIV	ADB	CRSP	UNCS	CRSP	ADB
Date Sampled	10/28/91	10/27/91	10/27/91	10/27/91	10/06/91	11/02/91	11/02/91	10/01/91	11/17/91	10/21/91	10/06/91	10/08/91	11/16/91
CATIONS (meq/L)	.	.	.	.	.	.	.	.	.	.	.	.	.
Calcium	1.65	1.45	1.60	1.55	2.79	3.64	1.90	1.90	1.45	1.60	2.99	1.25	1.90
Magnesium	1.56	1.32	1.56	1.48	2.55	3.37	2.06	1.23	1.23	1.56	2.55	1.23	1.89
Potassium	0.00	0.03	0.02	0.03	0.03	0.15	0.04	0.06	0.03	0.00	0.03	0.20	0.09
Sodium	0.04	0.04	0.03	0.03	0.31	0.07	0.24	0.04	0.03	0.03	0.32	0.10	0.05
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	3.25	2.84	3.21	3.08	5.68	7.23	4.23	3.24	2.74	3.19	5.89	2.79	3.93
ANIONS (meq/L)	.	.	.	.	.	.	.	.	.	.	.	.	.
Alkalinity-CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	3.30	2.78	3.20	3.00	4.70	3.24	3.50	2.52	2.24	3.28	4.06	2.44	3.14
Chloride	0.00	0.00	0.00	0.00	0.42	0.08	0.07	0.08	0.00	0.06	0.39	0.08	0.00
Fluoride	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.00	0.00	0.00	0.02	0.07	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00
Sulfate	0.10	0.08	0.06	0.06	0.06	4.19	0.64	0.02	0.04	0.02	0.00	0.04	0.00
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	3.40	2.86	3.26	3.08	5.26	7.55	4.21	2.62	2.38	3.36	5.39	2.65	3.22
CHARGE BALANCE (%)	-2	-0	-1	-0	4	-2	0	10	7	-3	4	3	10
TDS (mg/L)	124	106	118	90	258	472	220	134	128	224	260	148	182
TSS (mg/L)	9	1	-1	3	7	3	67	1	-1	74	-1	-1	1

(CONTINUED)

APPENDIX C
Ion-Charge Balance Calculations, Fourth Quarter 1991

Well No.	GW-513	GW-514	GW-521	GW-522	GW-539	GW-540	GW-541	GW-542	GW-543	GW-544	GW-545	GW-546	GW-607
Location	ADB	ADB	LIV	LIV	LIIX	LIIX	LIIX	LIIX	LIIX	LIIX	LIIX	LIIX	CRSP
Date Sampled	11/16/91	11/16/91	10/03/91	10/03/91	11/24/91	11/24/91	11/25/91	11/25/91	11/25/91	11/26/91	11/26/91	11/26/91	10/08/91
CATIONS (meq/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium	1.70	2.00	1.40	1.15	1.55	1.85	1.80	1.35	2.20	2.15	2.94	1.45	1.45
Magnesium	1.65	1.89	1.40	1.15	1.56	1.81	1.56	0.71	2.14	2.14	0.80	1.32	1.23
Potassium	0.03	0.02	0.00	0.00	0.04	0.03	0.03	0.05	0.03	0.05	0.49	0.09	0.14
Sodium	0.08	0.02	0.02	0.03	0.17	0.00	0.05	0.05	0.05	0.33	0.30	0.20	0.05
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	3.45	3.93	2.82	2.33	3.31	3.76	3.44	2.15	4.42	4.67	3.74	3.06	2.87
ANIONS (meq/L)	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity-CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.16
Alkalinity-HCO3	3.30	3.40	2.80	2.32	2.74	3.44	3.12	3.00	4.28	4.06	0.00	2.78	2.54
Chloride	0.00	0.00	0.00	0.00	0.45	0.04	0.00	0.03	0.03	0.39	0.06	0.06	0.00
Fluoride	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00
Nitrate Nitrogen	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.02	0.00	0.03	0.04	0.00	0.00
Sulfate	0.04	0.09	0.00	0.00	0.20	0.09	0.29	0.06	0.06	0.17	0.37	0.10	0.02
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.37	0.00	0.00
Total Anions	3.34	3.49	2.80	2.34	3.42	3.57	3.41	3.19	4.37	4.65	6.57	2.95	2.72
CHARGE BALANCE (%)	2	6	-1	-0	-2	3	0	-19	1	0	-28	7	3
TDS (mg/L)	184	182	122	116	204	196	180	124	182	226	186	156	106
TSS (mg/L)	2	1	2	14	12	2	12	29	1	16	14	88	3

(CONTINUED)

APPENDIX G
Ion-Charge Balance Calculations, Fourth Quarter 1991

Well No.	GW-600	GW-609	GW-610	GW-611	GW-612	GW-709	GW-731	GW-732
Location	CRSP	CRSP	CRSP	CRSP	CRSP	LIT	CRS00	CRS00
Date Sampled	10/12/91	10/14/91	10/10/91	10/13/91	10/17/91	11/21/91	10/31/91	10/30/91
CATIONS (meq/L)	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
Calcium	1.50	1.95	1.95	2.54	1.95	1.15	0.85	1.30
Magnesium	1.40	1.89	1.89	2.47	2.22	1.56	0.67	1.32
Potassium	0.06	0.04	0.00	0.03	0.02	0.04	0.36	0.12
Sodium	0.04	0.04	0.03	0.00	0.03	0.04	0.43	0.09
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00
-	-	-	-	-	-	-	-	-
Total Cations	3.07	3.92	3.87	5.12	4.22	2.79	2.31	2.82
-	-	-	-	-	-	-	-	-
ANIONS (meq/L)	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
Alkalinity-CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	2.86	3.60	3.74	4.62	4.12	3.20	1.04	2.72
Chloride	0.04	0.03	0.06	0.11	0.06	0.03	0.05	0.00
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Nitrate Nitrogen	0.02	0.07	0.00	0.15	0.02	0.00	0.00	0.20
Sulfate	0.05	0.04	0.00	0.20	0.06	0.02	0.31	0.04
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
-	-	-	-	-	-	-	-	-
Total Anions	2.97	3.81	3.79	4.96	4.26	3.33	2.32	2.76
-	-	-	-	-	-	-	-	-
CHARGE BALANCE (%)	2	1	1	2	-0	-9	-0	1
-	-	-	-	-	-	-	-	-
TDS (mg/L)	178	206	192	200	220	186	150	142
TSS (mg/L)	-1	1	-1	3	1	9	3	5

APPENDIX H
VALIDATED RESULTS OF VOC ANALYSES

EXPLANATION

LOCATION:

ADB - Ash Disposal Basin
CRDT - Chestnut Ridge Deer Trap
CRSDB - Chestnut Ridge Sediment Disposal Basin
CRSP - Chestnut Ridge Security Pits
BCRWP - East Chestnut Ridge Waste Pile
KHQ - Kerr Hollow Quarry
LII - Landfill II
LIIX - Landfill II Expansion
LIII - Landfill III
LIV - Landfill IV
RQ - Rogers Quarry
UNCS - United Nuclear Corporation Site

NOTES:

FD - Field Duplicate
FP - False Positive
- - Constituent not detected in associated blank samples (Blank Qualification Results) or not reported (Validated VOC Results)

All results in micrograms per Liter (ug/L).

Compound not detected at the following minimum attainable detection limits (ug/L):

G =	5	T =	250
N =	10	F =	300
V =	20	B =	400
Z =	25	W =	500
D =	30	L =	1000
A =	40	P =	2000
M =	50	H =	4000
X =	80	J =	5000
Y =	90	S =	10000
K =	100	U =	20000
B =	130	C =	40000
R =	200		

EXPLANATION cont'd

Results of VOC analyses reported for each groundwater sample were evaluated using results for each associated blank sample to identify false positives (i.e. results that are probable artifacts of the groundwater sampling or analysis procedures). To identify the false positives, the maximum concentration of each VOC detected in the blank samples (Appendix F) is multiplied by a qualification factor to determine the blank qualification result (BQR) for the compound. A factor of 3 is used for most compounds and a factor of 10 is used for the common laboratory reagents methylene chloride, acetone, 2-butanone, and toluene (U.S. Environmental Protection Agency 1988b). If a compound detected in the blank samples is also detected in an associated groundwater sample, the concentration reported for the groundwater sample (Appendix E) is compared to the corresponding BQR. If the concentration of the compound in the groundwater sample is at or below the BQR, the result is considered a false positive and is excluded from the summed VOC concentration determined for the sample.

CORRELATION OF GROUNDWATER SAMPLES TO ASSOCIATED BLANKS

APPENDIX H
Correlation of Groundwater Samples to Associated Blanks
First Quarter 1991

WELL NO.	LOCATION	TYPE	DATE	SAMPLE NO.	TRIP BLANK NO.	LAB BLANK NO.
1090	UNCS		01/14/91	910116-059	910116-064	910123-001
1090	UNCS	FD	01/14/91	910116-060	910116-064	910123-001
GW-141	LIV		01/08/91	910110-027	910110-032	910115-056
GW-141	LIV	FD	01/08/91	910110-028	910110-032	910117-123
GW-142	KHQ		03/16/91	910318-023	910318-025	910322-003
GW-142	KHQ	SP	08/10/91			
GW-143	KHQ		03/16/91	910318-016	910318-022	910322-003
GW-143	KHQ	FD	03/16/91	910318-017	910318-022	910322-003
GW-144	KHQ		03/16/91	910316-151	910316-153	910321-002
GW-144	KHQ	SP	08/10/91			
GW-145	KHQ		03/16/91	910318-014	910318-022	910321-002
GW-145	KHQ	SP	08/10/91			
GW-146	KHQ		03/16/91	910318-015	910318-022	910321-002
GW-147	KHQ		03/14/91	910315-012	910315-014	910320-107
GW-155	CRSDB		02/28/91	910301-001	910301-007	910306-003
GW-156	CRSDB		02/28/91	910301-003	910301-007	910306-003
GW-156	CRSDB	SP	08/10/91			
GW-157	CRSDB		02/28/91	910301-159	910301-163	910306-003
GW-158	CRSDB		03/04/91	910305-010	910305-012	910308-001
GW-159	CRSDB		02/28/91	910301-161	910301-163	910307-001
GW-159	CRSDB	SP	08/10/91			
GW-160	LIII		02/13/91	910213-107	910213-111	910214-068
GW-161	LIII		02/12/91	910213-046	910213-048	910214-065
GW-165	CRDT		02/27/91	910227-099	910227-101	910305-003
GW-165	CRDT	FD	02/27/91	910227-102	910227-101	910305-003
GW-166	CRDT		02/24/91	910224-092	910225-071	910301-008
GW-173	CRSP		02/01/91	910203-021	910203-025	910206-035
GW-174	CRSP		02/01/91	910203-022	910203-025	910206-035
GW-175	CRSP		01/31/91	910201-170	910201-174	910204-040
GW-176	CRSP		02/04/91	910204-115	910204-118	910206-003
GW-177	CRSP		02/02/91	910204-071	910204-075	910206-003
GW-178	CRSP		01/15/91	910116-065	910116-069	910125-002
GW-179	CRSP		02/08/91	910209-044	910209-046	910214-004
GW-180	CRSP		02/02/91	910204-072	910204-075	910207-001
GW-181	CRSP		01/29/91	910130-057	910130-061	910204-003
GW-203	UNCS		01/12/91	910115-004	910115-011	910123-001
GW-205	UNCS		01/12/91	910115-003	910115-011	910123-001
GW-217	LIV		01/06/91	910107-044	910107-048	910111-224
GW-221	UNCS		01/13/91	910115-005	910115-012	910123-001
GW-231	KHQ		03/14/91	910315-015	910315-017	910321-002
GW-231	KHQ	SP	08/10/91			
GW-241	CRSDB		03/02/91	910302-039	910302-041	910307-059
GW-241	CRSDB	FD	03/02/91	910302-042	910302-041	910307-059
GW-292	ECRWP		02/09/91	910210-030	910210-036	910212-001
GW-292	ECRWP	FD	02/09/91	910210-031	910210-036	910212-001

APPENDIX H
Correlation of Groundwater Samples to Associated Blanks
First Quarter 1991

WELL NO.	LOCATION	TYPE	DATE	SAMPLE NO.	TRIP BLANK NO.	LAB BLANK NO.
GW-293	ECRWP		02/10/91	910210-037	910210-039	910212-031
GW-294	ECRWP		02/09/91	910210-029	910210-036	910212-031
GW-295	LIII		02/11/91	910212-024	910212-026	910214-068
GW-296	ECRWP		02/09/91	910210-028	910210-036	910212-001
GW-298	LIII		02/21/91	910221-299	910221-303	910228-010
GW-299	LIII		02/21/91	910221-301	910221-303	910228-074
GW-299	LIII	FD	02/21/91	910221-304	910221-303	910228-074
GW-300	LIII		02/13/91	910213-108	910213-111	910214-068
GW-301	LIII		02/14/91	910214-125	910214-127	910221-086
GW-302	UNCS		01/14/91	910116-058	910116-064	910123-001
GW-303	UNCS		03/01/91	910302-010	910302-012	910307-059
GW-304	CRSDB		02/28/91	910301-005	910301-007	910306-003
GW-305	LIV		01/06/91	910107-045	910107-048	910111-224
GW-321	ADB		03/22/91	910323-001	910323-003	910328-001
GW-322	CRSP		02/04/91	910204-114	910204-118	910207-001
GW-339	UNCS		01/13/91	910115-006	910115-012	910123-001
GW-511	CRSP		01/29/91	910130-059	910130-061	910204-003
GW-512	ADB		03/19/91	910320-082	910320-088	910325-111
GW-513	ADB		03/19/91	910320-083	910320-088	910326-008
GW-513	ADB	FD	03/19/91	910320-084	910320-088	910326-008
GW-514	ADB		03/20/91	910321-031	910321-033	910328-100
GW-521	LIV		01/08/91	910110-026	910110-032	910115-056
GW-539	LIX		03/16/91	910319-002	910319-008	910325-001
GW-539	LIX	FD	03/16/91	910319-003	910319-008	910325-001
GW-540	LIX		03/16/91	910319-004	910319-008	910325-001
GW-541	LIX		03/17/91	910319-009	910319-011	910325-001
GW-542	LIX		03/17/91	910319-016	910319-024	910325-099
GW-543	LIX		03/17/91	910319-017	910319-024	910326-072
GW-544	LIX		03/17/91	910319-019	910319-024	910325-099
GW-545	LIX		03/17/91	910319-018	910319-024	910326-072
GW-546	LIX		03/17/91	910319-012	910319-014	910325-099
GW-607	CRSP		01/28/91	910129-013	910129-017	910130-138
GW-608	CRSP		01/28/91	910129-011	910129-017	910201-038
GW-608	CRSP	FD	01/28/91	910129-012	910129-017	910201-038
GW-609	CRSP		01/15/91	910116-066	910116-069	910125-002
GW-610	CRSP		01/30/91	910130-156	910130-158	910204-003
GW-611	CRSP		01/31/91	910201-171	910201-174	910204-040
GW-612	CRSP		02/07/91	910208-004	910208-006	910211-003

APPENDIX H
Correlation of Groundwater Samples to Associated Blanks
Second Quarter 1991

WELL NO.	LOCATION	TYPE	DATE	SAMPLE NO.	TRIP BLANK NO.	LAB BLANK NO.
1085	LII		04/08/91	910411-109	910411-115	910412-194
1085	LII	FD	04/08/91	910411-111	910411-115	910412-194
1086	LII		04/08/91	910411-113	910411-115	910412-194
1090	UNCS		04/14/91	910416-026	910416-028	910422-149
GW-141	LIV		04/04/91	910405-006	910405-012	910408-001
GW-142	KHQ		06/13/91	910615-006	910615-010	910620-027
GW-143	KHQ		06/16/91	910617-057	910617-065	910621-238
GW-144	KHQ		06/15/91	910617-077	910617-081	910622-012
GW-144	KHQ	FD	06/15/91	910617-079	910617-081	910622-012
GW-145	KHQ		06/14/91	910615-008	910615-010	910620-027
GW-146	KHQ		06/15/91	910617-075	910617-081	910622-012
GW-155	CRSDB		06/02/91	910605-008	910605-012	910610-001
GW-156	CRSDB		06/02/91	910605-009	910605-012	910610-043
GW-158	CRSDB		06/08/91	910610-006	910610-008	910613-058
GW-159	CRSDB		06/01/91	910601-048	910601-052	910605-078
GW-160	LIII		05/24/91	910525-004	910525-008	910530-029
GW-160	LIII	FD	05/24/91	910525-006	910525-008	910530-029
GW-161	LIII		05/17/91	910522-115	910522-117	910531-316
GW-165	CRDT		06/07/91	910608-006	910608-008	910612-115
GW-166	CRDT		06/08/91	910608-026	910608-030	910612-115
GW-173	CRSP		05/03/91	910504-031	910504-035	910508-058
GW-174	CRSP		05/03/91	910504-036	910504-035	910513-053
GW-175	CRSP		05/01/91	910502-015	910502-023	910506-117
GW-175	CRSP	FD	05/01/91	910502-017	910502-023	910506-117
GW-176	CRSP		05/04/91	910506-009	910506-013	910513-053
GW-177	CRSP		05/03/91	910504-033	910504-035	910508-058
GW-178	CRSP		04/22/91	910423-042	910423-046	910424-072
GW-179	CRSP		05/08/91	910508-072	910508-075	910515-003
GW-180	CRSP		05/04/91	910506-008	910506-013	910513-053
GW-181	CRSP		04/30/91	910502-076	910502-080	910507-134
GW-203	UNCS		04/12/91	910413-060	910413-064	910418-028
GW-205	UNCS		04/12/91	910413-062	910413-064	910418-028
GW-217	LIV		04/03/91	910403-114	910403-113	910405-003
GW-217	LIV	FD	04/03/91	910403-116	910403-113	910405-003
GW-221	UNCS		04/13/91	910415-004	910415-012	910418-028
GW-221	UNCS	FD	04/13/91	910415-005	910415-012	910418-028
GW-241	CRSDB		06/10/91	910614-089	910614-091	910619-079
GW-292	ECRWP		05/11/91	910512-004	910512-010	910519-004
GW-292	ECRWP	FD	05/11/91	910512-005	910512-010	910519-004
GW-293	ECRWP		05/11/91	910512-006	910512-010	910519-004
GW-294	ECRWP		05/10/91	910511-006	910511-010	910519-001
GW-295	LIII		05/16/91	910522-112	910522-114	910531-316
GW-296	ECRWP		05/10/91	910511-008	910511-010	910519-001
GW-298	LIII		05/31/91	910601-026	910601-028	910605-078
GW-299	LIII		05/30/91	910601-019	910601-025	910605-001

APPENDIX H
Correlation of Groundwater Samples to Associated Blanks
Second Quarter 1991

WELL NO.	LOCATION	TYPE	DATE	SAMPLE NO.	TRIP BLANK NO.	LAB BLANK NO.
GW-300	LIII		05/30/91	910601-021	910601-025	910605-001
GW-301	LIII		05/30/91	910601-023	910601-025	910605-001
GW-302	UNCS		04/13/91	910415-007	910415-012	910419-001
GW-303	CRSDB		06/04/91	910606-007	910606-011	910611-088
GW-303	CRSDB	FD	06/04/91	910606-009	910606-011	910611-088
GW-304	CRSDB		06/01/91	910601-050	910601-052	910605-078
GW-305	LIV		04/03/91	910403-111	910403-113	910405-003
GW-321	ADB		06/18/91	910620-086	910620-088	910628-240
GW-322	CRSP		05/04/91	910506-007	910506-013	910513-053
GW-339	UNCS		04/13/91	910415-006	910415-012	910418-028
GW-511	CRSP		04/30/91	910502-078	910502-080	910507-134
GW-512	ADB		06/16/91	910617-059	910617-065	910622-012
GW-513	ADB		06/16/91	910617-061	910617-065	910621-238
GW-513	ADB	FD	06/16/91	910617-063	910617-065	910621-238
GW-514	ADB		06/17/91	910618-022	910618-024	910623-005
GW-521	LIV		04/04/91	910405-008	910405-012	910408-001
GW-522	LIV		04/04/91	910405-010	910405-012	910408-001
GW-539	LIIX		04/09/91	910411-030	910411-032	910415-001
GW-540	LIIX		04/09/91	910411-026	910411-032	910415-001
GW-540	LIIX	FD	04/09/91	910411-028	910411-032	910415-001
GW-541	LIIX		04/10/91	910411-004	910411-008	910415-001
GW-542	LIIX		04/10/91	910411-006	910411-008	910415-001
GW-543	LIIX		04/11/91	910413-056	910413-058	910417-090
GW-544	LIIX		04/11/91	910413-054	910413-058	910417-090
GW-545	LIIX		04/11/91	910413-052	910413-058	910417-090
GW-546	LIIX		04/11/91	910413-050	910413-058	910417-090
GW-607	CRSP		04/29/91	910430-103	910430-107	910503-166
GW-608	CRSP		04/29/91	910430-104	910430-107	910506-117
GW-609	CRSP		04/22/91	910423-043	910423-046	910426-189
GW-610	CRSP		05/01/91	910502-021	910502-023	910506-117
GW-611	CRSP		05/01/91	910502-019	910502-023	910506-117
GW-612	CRSP		05/08/91	910508-071	910508-075	910515-003
GW-709	LII		06/19/91	910620-038	910620-040	910628-240

APPENDIX H
Correlation of Groundwater Samples to Associated Blanks
Third Quarter 1991

WELL NO.	LOCATION	TYPE	DATE	SAMPLE NO.	TRIP BLANK NO.	LAB BLANK NO.
1085	LII		09/10/91	910911-014	910911-005	910909-054
1085	LII	FD	09/10/91	910911-016	910911-005	910913-175
1086	LII		09/10/91	910911-003	910911-005	910909-054
1090	UNCS		07/31/91	910731-113	910731-119	910807-002
1090	UNCS		08/13/91	910814-007		
GW-141	LIV		07/17/91	910718-007	910718-009	910722-008
GW-142	KHQ		08/03/91	910904-130	910904-132	910905-001
GW-143	KHQ		09/05/91	910906-267	910906-275	910909-002
GW-144	KHQ		09/05/91	910906-269	910906-275	910909-002
GW-144	KHQ	FD	09/05/91	910906-271	910906-275	910909-002
GW-145	KHQ		09/04/91	910905-058	910905-064	910907-001
GW-146	KHQ		09/04/91	910906-273	910906-275	910909-002
GW-147	KHQ		09/04/91	910905-060	910905-064	910907-001
GW-156	CRSDB		08/23/91	910824-009	910824-013	910827-087
GW-158	CRSDB		08/25/91	910826-020	910826-024	910828-014
GW-159	CRSDB		08/23/91	910824-011	910824-013	910827-087
GW-160	LIII		08/21/91	910822-029	910822-035	910823-184
GW-160	LIII	FD	08/21/91	910822-031	910822-035	910823-184
GW-161	LIII		08/21/91	910822-033	910822-035	910823-184
GW-173	CRSP		08/06/91	910807-192	910807-187	910808-190
GW-174	CRSP		08/06/91	910807-190	910807-187	910808-190
GW-175	CRSP		08/08/91	910809-007	910809-013	910813-116
GW-176	CRSP		08/09/91	910810-002	910810-008	910813-116
GW-177	CRSP		08/08/91	910809-011	910809-013	910813-116
GW-178	CRSP		08/08/91	910809-009	910809-013	910813-116
GW-179	CRSP		08/12/91	910813-007	910813-011	910814-205
GW-180	CRSP		08/09/91	910810-004	910810-008	910813-116
GW-181	CRSP		08/05/91	910805-108	910805-112	910807-028
GW-181	CRSP	FD	08/05/91	910805-110	910805-112	910807-028
GW-184	RQ		09/08/91	910908-032	910908-034	910910-005
GW-186	RQ		09/08/91	910908-028	910908-034	910913-009
GW-186	RQ	FD	09/08/91	910908-030	910908-034	910909-118
GW-187	RQ		09/09/91	910909-184	910909-188	910911-002
GW-188	RQ		09/09/91	910909-186	910909-188	910911-002
GW-203	UNCS		07/29/91	910730-011	910730-010	910731-071
GW-205	UNCS		07/29/91	910730-008	910730-010	910731-071
GW-217	LIV		07/16/91	910717-004	910717-009	910722-008
GW-217	LIV	FD	07/16/91	910717-007	910717-009	910722-008
GW-221	UNCS		07/30/91	910731-137	910731-141	910816-001
GW-221	UNCS	FD	07/30/91	910731-139	910731-141	910816-001
GW-221	UNCS		08/13/91	910814-009		
GW-221	UNCS	FD	08/13/91	910814-010		
GW-231	KHQ		07/19/91	910719-214	910719-216	910724-009
GW-231	KHQ		09/04/91	910905-062	910905-064	910907-001
GW-241	CRSDB		08/25/91	910826-022	910826-024	910828-017

APPENDIX H
Correlation of Groundwater Samples to Associated Blanks
Third Quarter 1991

WELL NO.	LOCATION	TYPE	DATE	SAMPLE NO.	TRIP BLANK NO.	LAB BLANK NO.
GW-292	ECRWP		08/16/91	910817-004	910817-008	910818-009
GW-292	ECRWP	FD	08/16/91	910817-006	910817-008	910818-009
GW-293	ECRWP		08/19/91	910819-193	910819-192	910822-087
GW-294	ECRWP		08/15/91	910815-283	910815-285	910818-009
GW-295	LIII		08/30/91	910831-019	910831-021	910903-009
GW-296	ECRWP		08/15/91	910815-281	910815-285	910818-009
GW-298	LIII		08/22/91	910823-159	910823-161	910824-001
GW-299	LIII		08/22/91	910823-155	910823-161	910824-001
GW-300	LIII		08/22/91	910823-157	910823-161	910824-001
GW-301	LIII		08/22/91	910823-162	910823-164	910824-001
GW-302	UNCS		07/30/91	910731-117	910731-119	910807-002
GW-302	UNCS		08/13/91	910814-006		
GW-303	CRSDB		08/24/91	910825-001	910825-005	910828-014
GW-303	CRSDB	FD	08/24/91	910825-003	910825-005	910828-014
GW-304	CRSDB		08/23/91	910824-007	910824-013	910827-087
GW-305	LIV		07/15/91	910716-042	910716-044	910722-008
GW-321	ADB		09/07/91	910908-006	910908-005	910909-118
GW-322	CRSP		08/13/91	910814-012	910814-014	910814-187
GW-339	UNCS		07/30/91	910731-115	910731-119	910807-002
GW-339	UNCS		08/13/91	910814-008		
GW-511	CRSP		08/05/91	910805-106	910805-112	910807-028
GW-512	ADB		09/06/91	910907-008	910907-010	910909-054
GW-513	ADB		09/06/91	910907-006	910907-010	910909-054
GW-514	ADB		09/07/91	910908-003	910908-005	910909-118
GW-514	ADB	FD	09/07/91	910908-008	910908-005	910909-118
GW-521	LIV		07/17/91	910718-005	910718-009	910722-008
GW-522	LIV		07/17/91	910718-003	910718-009	910722-008
GW-539	LIIX		09/12/91	910912-174	910912-180	910914-001
GW-540	LIIX		09/12/91	910912-176	910912-180	910914-001
GW-540	LIIX	FD	09/12/91	910912-178	910912-180	910914-001
GW-541	LIIX		09/13/91	910914-003	910914-005	910914-001
GW-542	LIIX		09/14/91	910915-006	910915-008	910916-007
GW-543	LIIX		09/14/91	910915-002	910915-008	910916-007
GW-544	LIIX		09/14/91	910915-004	910915-008	910916-007
GW-545	LIIX		09/15/91	910915-047	910915-049	910918-020
GW-546	LIIX		09/15/91	910915-045	910915-049	910918-020
GW-607	CRSP		08/06/91	910807-185	910807-187	910808-190
GW-608	CRSP		08/07/91	910808-203	910808-205	910809-048
GW-609	CRSP		08/09/91	910810-006	910810-008	910813-116
GW-610	CRSP		08/06/91	910807-188	910807-187	910808-190
GW-611	CRSP		08/08/91	910809-005	910809-013	910809-048
GW-612	CRSP		08/12/91	910813-009	910813-011	910814-205
GW-709	LII		09/11/91	910911-111	910911-113	910913-009
GW-731	CRSDB		09/27/91	910928-002	910928-006	910930-003
GW-732	CRSDB		09/27/91	910928-004	910928-006	910930-003

APPENDIX H
Correlation of Groundwater Samples to Associated Blanks
Fourth Quarter 1991

WELL NO.	LOCATION	TYPE	DATE	SAMPLE NO.	TRIP BLANK NO.	LAB BLANK NO.
1085	LII		11/20/91	911121-028	911121-030	911125-054
1085	LII	FD	11/20/91	911121-031	911121-030	911121-053
1086	LII		11/20/91	911121-033	911121-030	911125-054
1090	UNCS		10/06/91	911007-013	911007-017	911011-001
1090	UNCS	FD	10/06/91	911007-015	911007-017	911011-001
GW-141	LIV		10/02/91	911002-194	911002-196	911004-001
GW-142	KHQ		11/04/91	911105-017	911105-019	911108-001
GW-143	KHQ		11/07/91	911108-023	911108-025	911112-001
GW-144	KHQ		11/06/91	911106-093	911106-095	911109-001
GW-144	KHQ	FD	11/06/91	911106-108	911106-095	911109-001
GW-145	KHQ		11/05/91	911106-054	911106-058	911109-001
GW-146	KHQ		11/07/91	911108-026	911106-095	911112-001
GW-147	KHQ		11/05/91	911106-056	911106-058	911109-001
GW-156	CRSDB		10/30/91	911031-012	911031-011	911031-001
GW-158	CRSDB		11/14/91	911115-084	911115-086	911118-002
GW-159	CRSDB		10/29/91	911029-146	911029-148	911030-001
GW-160	LIII		10/26/91	911028-018	911028-020	911029-107
GW-160	LIII	FD	10/26/91	911028-021	911028-020	911030-001
GW-161	LIII		10/25/91	911027-008	911027-010	911029-007
GW-173	CRSP		10/10/91	911011-007	911011-006	911014-002
GW-174	CRSP		10/11/91	911012-009	911012-011	911015-015
GW-175	CRSP		10/13/91	911014-031	911014-033	911015-015
GW-176	CRSP		10/14/91	911015-055	911015-061	911011-174
GW-177	CRSP		10/13/91	911014-025	911014-033	911015-015
GW-178	CRSP		10/13/91	911014-027	911014-033	911015-015
GW-179	CRSP		10/17/91	911018-021	911018-025	911021-002
GW-180	CRSP		10/14/91	911015-057	911015-061	911011-174
GW-181	CRSP		10/08/91	911009-003	911009-011	911010-128
GW-181	CRSP	FD	10/08/91	911009-005	911009-011	911010-128
GW-184	RQ		11/18/91	911119-032	911119-039	911121-001
GW-186	RQ		11/18/91	911119-034	911119-039	911121-001
GW-186	RQ	FD	11/18/91	911119-035	911119-039	911121-001
GW-187	RQ		11/19/91	911120-016	911120-020	911121-001
GW-188	RQ		11/19/91	911120-017	911120-020	911125-059
GW-203	UNCS		11/23/91	911124-014	911124-016	911126-111
GW-205	UNCS		11/23/91	911124-017	911124-016	911126-111
GW-217	LIV		10/01/91	911002-120	911002-124	911002-178
GW-221	UNCS		11/23/91	911124-019	911124-016	911126-111
GW-231	KHQ		11/05/91	911106-059	911106-058	911111-002
GW-241	CRSDB		10/31/91	911101-108	911101-107	911104-002
GW-292	ECRWP		10/22/91	911023-102	911023-101	911027-029
GW-293	ECRWP		10/23/91	911023-175	911023-177	911028-002
GW-293	ECRWP	FD	10/23/91	911023-178	911023-177	911028-002
GW-294	ECRWP		10/22/91	911023-104	911023-101	911027-029
GW-295	LIII		11/12/91	911112-120	911112-124	911114-001

APPENDIX H
Correlation of Groundwater Samples to Associated Blanks
Fourth Quarter 1991

WELL NO.	LOCATION	TYPE	DATE	SAMPLE NO.	TRIP BLANK NO.	LAB BLANK NO.
GW-296	ECRWP		10/22/91	911023-099	911023-101	911027-029
GW-298	LIII		10/28/91	911028-089	911028-091	911029-107
GW-299	LIII		10/27/91	911028-016	911028-013	911029-107
GW-300	LIII		10/27/91	911028-011	911028-013	911029-007
GW-301	LIII		10/27/91	911028-014	911028-013	911029-107
GW-302	UNCS		10/06/91	911007-009	911007-017	911011-001
GW-303	CRSDB		11/02/91	911104-007	911104-009	911108-001
GW-303	CRSDB	FD	11/02/91	911104-010	911104-009	911108-001
GW-304	CRSDB		11/02/91	911103-069	911103-071	911107-008
GW-305	LIV		10/01/91	911002-122	911002-124	911002-178
GW-321	ADB		11/17/91	911118-037	911118-034	911119-096
GW-322	CRSP		10/21/91	911021-118	911021-120	911022-001
GW-339	UNCS		10/06/91	911007-011	911007-017	911011-001
GW-511	CRSP		10/08/91	911009-007	911009-011	911010-128
GW-512	ADB		11/16/91	911118-030	911118-029	911119-096
GW-513	ADB		11/16/91	911118-027	911118-029	911119-001
GW-514	ADB		11/16/91	911118-032	911118-034	911119-096
GW-514	ADB	FD	11/16/91	911118-035	911118-034	911119-096
GW-521	LIV		10/03/91	911004-459	911004-461	911008-043
GW-522	LIV		10/03/91	911004-455	911004-461	911007-005
GW-522	LIV	FD	10/03/91	911004-457	911004-461	911007-005
GW-539	LIIX		11/24/91	911125-037	911125-039	911126-111
GW-540	LIIX		11/24/91	911125-040	911125-039	911202-028
GW-540	LIIX	FD	11/24/91	911125-042	911125-039	911202-028
GW-541	LIIX		11/25/91	911126-015	911126-017	911202-028
GW-542	LIIX		11/25/91	911126-018	911126-017	911202-028
GW-543	LIIX		11/25/91	911126-020	911126-017	911204-011
GW-544	LIIX		11/26/91	911127-016	911127-018	911202-038
GW-545	LIIX		11/26/91	911127-019	911127-018	911202-038
GW-546	LIIX		11/26/91	911127-021	911127-018	911202-038
GW-607	CRSP		10/08/91	911009-009	911009-011	911011-197
GW-608	CRSP		10/12/91	911014-022	911014-024	911015-015
GW-609	CRSP		10/14/91	911015-059	911015-061	911015-125
GW-610	CRSP		10/10/91	911011-004	911011-006	911014-002
GW-611	CRSP		10/13/91	911014-029	911014-033	911015-125
GW-612	CRSP		10/17/91	911018-023	911018-025	911021-002
GW-709	LII		11/21/91	911121-085	911121-087	911125-059
GW-731	CRSDB		10/31/91	911101-105	911101-107	911104-002
GW-732	CRSDB		10/30/91	911031-009	911031-011	911031-001

BLANK QUALIFICATION RESULTS

APPENDIX B
Blank Qualification Results, First Quarter 1991

Well No.	GW-141	GW-142	GW-147	GW-161	GW-173	GW-174	GW-175	GW-176	GW-177	GW-178	GW-179	GW-180
Location	LIV	KHQ	KHQ	LIII	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP
Date Sampled	01/08/91	03/16/91	03/14/91	02/12/91	02/01/91	02/01/91	01/31/91	02/04/91	02/02/91	01/15/91	02/08/91	02/02/91
Acetone	.	.	190	.	.	.	.	.	.	.	.	.
Bromodichloromethane	.	.	.	.	.	.	.	.	.	.	.	.
Bromoform	.	.	.	15	.	.	.	.	.	.	.	.
Chloroform	.	30	4	.	55	55	10	.	.	5	.	.
Chloromethane	.	.	.	.	.	.	.	.	.	.	.	.
1,2-Dichloroethene	.	.	.	.	.	.	.	.	.	.	.	.
4-Methyl-2-pentanone	45	.	.	30	.	.	30	.	.	.	.	.
Methylene chloride	.	.	.	.	.	.	.	.	.	.	.	.
1,1,2,2-Tetrachloroethane	.	.	.	15	.	.	.	.	.	.	.	.
Toluene	.	.	.	.	.	.	8	.	.	.	.	.
1,1,2-Trichloroethane	.	.	.	10	.	.	.	.	.	.	.	.
Vinyl acetate	.	.	.	.	.	.	.	.	.	.	.	.
Xylenes	.	.	.	.	.	.	.	.	.	.	.	.

(CONTINUED)

APPENDIX B
Blank Qualification Results, First Quarter 1991

Well No.	GW-203	GW-205	GW-221	GW-241	GW-292	GW-293	GW-294	GW-296	GW-299	GW-301	GW-303	GW-322
Location	UNCS	UNCS	UNCS	CRSDB	ECRNP	ECRNP	ECRNP	ECRNP	LIII	LIII	CRSDB	CRSP
Date Sampled	01/12/91	01/12/91	01/13/91	03/02/91	02/09/91	02/10/91	02/09/91	02/09/91	02/21/91	02/14/91	03/01/91	02/04/91
Acetone	-	-	-	110	-	-	-	-	160	-	110	-
Bromodichloromethane	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	55	55	55	5	-	-	-	-	4	10	10	-
Chloromethane	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethene	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	20	20	20	-	-	-	-	-	-	-	-	-
Methylene chloride	-	-	-	-	0	-	-	0	20	20	30	-
1,1,2,2-Tetrachloroethane	10	10	10	-	-	-	-	-	-	-	-	-
Toluene	-	-	-	-	10	9	10	10	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl acetate	-	-	-	-	-	-	-	-	-	5	-	-
Xylenes	-	-	-	-	-	-	-	-	-	-	-	-

(CONTINUED)

APPENDIX B
Blank Qualification Results, First Quarter 1991

Well No.	GW-339	GW-511	GW-514	GW-521	GW-542	GW-543	GW-544	GW-545	GW-546	GW-600	GW-609	GW-610
Location	UNCS	CRSP	ADB	LIV	LIX	LIX	LIX	LIX	LIX	CRSP	CRSP	CRSP
Date Sampled	01/13/91	01/29/91	03/20/91	01/08/91	03/17/91	03/17/91	03/17/91	03/17/91	03/17/91	01/28/91	01/15/91	01/30/91
Acetone	.	.	60	.	60	.	60	.	60	.	.	.
Bromodichloromethane	.	.	.	.	.	.	.	.	.	.	.	.
Bromoform	.	.	.	.	.	.	.	.	.	.	.	.
Chloroform	55	5	95	.	20	20	20	20	60	.	5	55
Chloromethane	.	.	.	.	.	.	.	.	.	.	.	.
1,2-Dichloroethene	.	.	.	.	.	.	.	.	.	.	.	.
4-Methyl-2-pentanone	20	.	.	45	.	.	.	.	.	.	.	.
Methylene chloride	.	.	.	.	50	50	50	50	10	.	.	.
1,1,2,2-Tetrachloroethane	10	.	.	.	.	.	.	.	.	.	.	.
Toluene	.	.	.	.	.	.	.	.	.	.	.	0
1,1,2-Trichloroethane	.	.	.	.	.	.	.	.	.	.	.	.
Vinyl acetate	.	.	.	.	.	.	.	.	.	.	.	.
Xylenes	.	.	.	.	.	.	.	.	.	.	.	.

(CONTINUED)

APPENDIX E
Blank Qualification Results, First Quarter 1991

Well No.	CB-611	CB-612
Location	CRSP	CRSP
Date Sampled	01/31/91	02/07/91
Acetone	-	-
Bromodichloroethane	-	-
Bromoform	-	-
Chloroform	10	80
Chloroethane	-	-
1,2-Dichloroethane	-	-
4-Methyl-2-pentanone	30	-
Methylene chloride	-	-
1,1,2,2-Tetrachloroethane	-	-
Toluene	8	10
1,1,2-Trichloroethane	-	-
Vinyl acetate	-	-
Xylenes	-	10

APPENDIX B
Blank Qualification Results, Second Quarter 1991

Well No.	1005	1006	1090	GW-142	GW-143	GW-144	GW-145	GW-146	GW-159	GW-160	GW-173	GW-174
Location	LII	LII	UNCS	KNQ	KNQ	KNQ	KNQ	KNQ	CRS00	LIII	CRSP	CRSP
Date Sampled	04/08/91	04/08/91	04/14/91	04/13/91	04/16/91	04/15/91	04/14/91	04/15/91	04/01/91	05/24/91	05/03/91	05/03/91
Acetone	-	-	-	-	90	-	-	-	-	-	-	60
Bromodichloromethane	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	4	4	50	15	40	5	15	5	25	25	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	-	-	-	20	-	-	20	-	-	-	-	-
Methylene chloride	-	-	-	170	40	-	170	-	30	170	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-	-	-	-	-	-

(CONTINUED)

Well No.	GW-175	GW-176	GW-177	GW-178	GW-179	GW-180	GW-217	GW-241	GW-293	GW-305	GW-321	GW-322
Location	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	LIV	CRS00	BCRMP	LIV	ADW	CRSP
Date Sampled	05/01/91	05/04/91	05/03/91	04/22/91	05/08/91	05/04/91	04/03/91	04/10/91	05/11/91	04/03/91	04/18/91	05/04/91
Acetone	-	60	-	-	-	60	-	-	-	-	-	60
Bromodichloromethane	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	40	25	-	30	10	25	4	95	-	4	45	25
1,2-Dichloropropane	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	-	-	-	-	-	-	-	-	-	-	10	-
Methylene chloride	-	-	-	-	-	-	-	-	-	-	160	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-	-	-	-	-	-

(CONTINUED)

APPENDIX B

Blank Qualification Results, Second Quarter 1991

[illegible]

APPENDIX B
Blank Qualification Results, Third Quarter 1991

Well No.	1085	1086	1090	GW-142	GW-144	GW-146	GW-173	GW-174	GW-175	GW-176	GW-177	GW-178
Location	LII	LII	UNCS	KHQ	KHQ	KHQ	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP
Date Sampled	09/10/91	09/10/91	07/31/91	08/03/91	09/05/91	09/04/91	08/06/91	08/06/91	08/08/91	08/09/91	08/08/91	08/08/91
Acetone	.	.	.	510	.	.	.	.	100	100	100	100
Bromodichloromethane	.	.	.	.	.	.	.	.	.	.	.	.
Carbon disulfide	.	.	.	.	.	.	.	.	.	.	.	.
Chloroform	.	.	.	.	.	.	.	.	.	.	.	.
1,2-Dichloropropane	.	.	.	.	.	.	.	.	.	.	.	.
Ethylbenzene	.	.	.	.	.	.	.	.	.	.	.	.
2-Hexanone	.	.	.	.	.	.	.	.	.	.	.	.
4-Methyl-2-pentanone	10	10	.	.	.	.	.	.	.	.	.	.
Methylene chloride	60	60	60	7	10	18	.	.	.	.	.	.
Toluene	.	.	.	.	.	.	.	.	.	.	.	.
1,1,1-Trichloroethane	.	.	.	.	.	.	.	.	.	.	.	.
Vinyl acetate	.	.	.	.	.	.	.	.	.	.	.	.
Xylenes	.	.	.	.	.	.	.	.	.	.	.	.

(CONTINUED)

APPENDIX E
Blank Qualification Results, Third Quarter 1991

Well No.	GW-179	GW-180	GW-184	GW-186	GW-188	GW-203	GW-205	GW-217	GW-231	GW-293	GW-295	GW-304
Location	CRSP	CRSP	RQ	RQ	RQ	UNCS	UNCS	LIV	KNQ	ECRMP	VIII	CRSDB
Date Sampled	08/12/91	08/09/91	09/08/91	09/08/91	09/09/91	07/29/91	07/29/91	07/16/91	07/19/91	08/19/91	08/30/91	08/23/91
Acetone	190	100	.	.	.	.	.	.	.	70	.	180
Bromodichloromethane	.	.	.	.	.	.	.	.	.	.	.	.
Carbon disulfide	.	.	.	.	.	.	.	.	.	.	.	.
Chloroform	.	.	.	.	5	.	.	.	.	.	.	.
1,2-Dichloropropane	.	.	.	.	.	.	.	.	.	.	.	.
Ethylbenzene	.	.	.	.	.	.	.	.	.	.	4	.
2-Hexanone	.	.	.	.	.	.	.	.	.	.	.	.
4-Methyl-2-pentanone	.	.	.	.	10	10	10	.	.	.	25	.
Methylene chloride	10	.	.	6	60	160	160	30	60	80	10	7
Toluene	.	.	.	8	6	.	.	.	5	.	40	.
1,1,1-Trichloroethane	.	.	.	.	.	.	.	.	.	.	.	.
Vinyl acetate	.	.	.	.	.	.	.	.	.	.	.	.
Xylenes	.	.	.	.	.	.	.	.	.	.	20	.

(CONTINUED)

APPENDIX H
Blank Qualification Results, Third Quarter 1991

Well No.	GW-322	GW-339	GW-514	GW-521	GW-522	GW-539	GW-540	GW-541	GW-542	GW-543	GW-544	GW-545
Location	CRSP	UNCS	ADB	LIV	LIV	LIIX	LIIX	LIIX	LIIX	LIIX	LIIX	LIIX
Date Sampled	08/13/91	07/30/91	09/07/91	07/17/91	07/17/91	09/12/91	09/12/91	09/13/91	09/14/91	09/14/91	09/14/91	09/15/91
Acetone	130	.	.	.	.	.	.	.	.	.	.	.
Bromodichloromethane	.	.	.	.	.	.	.	.	.	.	.	.
Carbon disulfide	50	.	.	.	.	.	.	.	.	.	.	.
Chloroform	10	.	.	.	.	4	4	.	2	2	2	4
1,2-Dichloropropane	.	.	.	.	.	.	.	.	.	.	.	.
Ethylbenzene	.	.	.	.	.	.	.	.	.	.	.	.
2-Hexanone	.	.	.	.	.	.	.	.	.	.	.	.
4-Methyl-2-pentanone	.	.	.	.	.	.	.	.	.	.	.	.
Methylene chloride	20	60	20	.	.	60	60	.	170	170	170	.
Toluene	10	.	.	.	.	10	10	8	10	10	10	20
1,1,1-Trichloroethane	.	.	.	.	.	.	.	.	.	.	.	.
Vinyl acetate	.	.	.	.	.	.	.	.	.	.	.	.
Xylenes	.	.	.	.	.	.	.	.	.	.	.	.

(CONTINUED)

APPENDIX H
Blank Qualification Results, Third Quarter 1991

Well No.	GW-546	GW-608	GW-609	GW-611	GW-612	GW-709	GW-731	GW-732
Location	LIIX	CRSP	CRSP	CRSP	CRSP	LII	CRSDB	CRSDB
Date Sampled	09/15/91	08/07/91	08/09/91	08/08/91	08/12/91	09/11/91	09/27/91	09/27/91
Acetone	.	60	100	60	190	280	.	.
Bromodichloromethane	.	.	.	.	.	.	.	.
Carbon disulfide	.	.	.	.	.	.	.	.
Chloroform	4	.	.	.	.	.	10	10
1,2-Dichloropropane	.	.	.	.	.	.	.	.
Ethylbenzene	.	.	.	.	.	.	.	.
2-Hexanone	.	.	.	.	.	.	.	.
4-Methyl-2-pentanone	.	.	.	.	.	.	.	.
Methylene chloride	.	.	.	.	10	70	.	.
Toluene	20	.	.	.	.	9	30	30
1,1,1-Trichloroethane	.	.	.	.	.	.	.	.
Vinyl acetate	.	.	.	.	.	.	.	.
Xylenes	.	.	.	.	.	.	.	.

APPENDIX H
Blank Qualification Results, Fourth Quarter 1991

Well No.	1085	1086	1090	GW-142	GW-143	GW-144	GW-145	GW-146	GW-147	GW-156	GW-159	GW-160
Site	LII	LII	UNCS	KHQ	KHQ	KHQ	KHQ	KHQ	KHQ	CRSDB	CRSDB	LIII
Date Sampled	11/20/91	11/20/91	10/06/91	11/04/91	11/07/91	11/06/91	11/05/91	11/07/91	11/05/91	10/30/91	10/29/91	10/26/91
Acetone	.	.	.	.	.	.	.	.	.	.	.	.
Bromodichloromethane	.	.	.	.	.	.	.	.	.	.	.	.
Bromoform	.	.	.	.	.	.	.	.	.	.	.	.
Carbon disulfide	.	.	.	.	.	.	.	.	.	.	.	.
Carbon tetrachloride	.	.	.	.	.	.	.	.	.	.	.	.
Chloroform	5	5	5	.	.	.	.	.	.	.	10	.
1,2-Dichloropropane	.	.	.	.	.	.	.	.	.	.	.	.
Ethylbenzene	.	.	.	.	.	.	.	.	.	.	.	.
2-Hexanone	5	5	.	.	.	.	.	.	.	.	.	.
4-Methyl-2-pentanone	.	.	25	.	.	.	.	.	.	20	.	.
Methylene chloride	180	180	90	.	30	.	30	.	30	60	50	10
1,1,2,2-Tetrachloroethane	5	5	.	.	.	.	.	.	.	.	.	.
Toluene	.	.	20	10	10	10	10	10	10	20	20	20
1,1,2-Trichloroethane	.	.	.	.	.	.	.	.	.	.	.	.
Xylenes	.	.	.	.	.	.	.	.	.	.	.	.

(CONTINUED)

APPENDIX H
Blank Qualification Results, Fourth Quarter 1991

Well No.	GW-161	GW-173	GW-174	GW-175	GW-176	GW-177	GW-178	GW-179	GW-180	GW-181	GW-184	GW-203
Site	LIH	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	CRSP	RQ	UNCS
Date Sampled	10/25/91	10/10/91	10/11/91	10/13/91	10/14/91	10/13/91	10/13/91	10/17/91	10/14/91	10/08/91	11/18/91	11/23/91
Acetone	.	.	.	.	30	.	.	.	30	130	.	.
Bromodichloromethane	.	.	.	.	.	.	.	.	.	.	.	.
Bromoform	.	.	.	.	.	.	.	.	.	.	.	.
Carbon disulfide	.	.	.	.	.	.	.	.	.	.	.	.
Carbon tetrachloride	.	.	.	.	.	.	.	.	.	.	.	.
Chloroform	.	10	10	10	10	10	10	15	10	5	.	15
1,2-Dichloropropane	.	.	.	.	.	.	.	.	.	.	.	.
Ethylbenzene	.	.	.	.	.	.	.	.	.	.	.	.
2-Hexanone	.	.	.	.	10	.	.	.	10	.	.	.
4-Methyl-2-pentanone	.	.	.	.	.	.	.	25	.	.	.	.
Methylene chloride	10	470	8	90	70	90	90	130	70	20	20	60
1,1,2,2-Tetrachloroethane	.	.	.	.	5	.	.	.	5	.	.	.
Toluene	10	20	.	.	.	.	.	30	.	.	.	.
1,1,2-Trichloroethane	.	.	.	.	.	.	.	.	.	.	.	.
Xylenes	.	.	.	.	.	.	.	.	.	.	.	.

(CONTINUED)

APPENDIX H
Blank Qualification Results, Fourth Quarter 1991

Well No.	GW-217	GW-231	GW-241	GW-292	GW-293	GW-294	GW-295	GW-296	GW-298	GW-299	GW-301	GW-302
Site	LIV	KHQ	CRSDB	ECRWP	ECRWP	ECRWP	LIII	ECRWP	LIII	LIII	LIII	UNCS
Date Sampled	10/01/91	11/05/91	10/31/91	10/22/91	10/23/91	10/22/91	11/12/91	10/22/91	10/28/91	10/27/91	10/27/91	10/06/91
Acetone	.	.	210	420	.	420	.	420	.	.	.	.
Bromodichloromethane	.	.	.	.	.	.	.	.	.	.	.	.
Bromoform	.	.	.	.	.	.	.	.	.	.	.	.
Carbon disulfide	.	.	.	.	.	.	.	.	.	.	.	.
Carbon tetrachloride	.	.	.	.	.	.	.	.	.	.	.	.
Chloroform	4	.	.	10	.	10	10	10	3	.	.	5
1,2-Dichloropropane	.	.	.	.	.	.	.	.	.	.	.	.
Ethylbenzene	3	.	.	.	.	.	.	.	.	.	.	.
2-Hexanone	.	.	.	.	.	.	.	.	.	.	.	.
4-Methyl-2-pentanone	.	.	.	.	.	.	.	.	.	.	.	25
Methylene chloride	200	30	.	110	20	110	.	110	10	10	10	90
1,1,2,2-Tetrachloroethane	.	.	.	.	.	.	.	.	.	.	.	.
Toluene	40	10	8	10	9	10	.	10	.	10	10	20
1,1,2-Trichloroethane	.	.	.	.	.	.	.	.	.	.	.	.
Xylenes	15	.	.	.	.	.	.	.	.	.	.	.

(CONTINUED)

APPENDIX H
Blank Qualification Results, Fourth Quarter 1991

Well No.	GW-303	GW-304	GW-305	GW-322	GW-339	GW-511	GW-512	GW-513	GW-514	GW-540	GW-541	GW-542
Site	CRSDB	CRSDB	LIV	CRSP	UNCS	CRSP	ADB	ADB	ADB	LIIX	LIIX	LIIX
Date Sampled	11/02/91	11/02/91	10/01/91	10/21/91	10/06/91	10/08/91	11/16/91	11/16/91	11/16/91	11/24/91	11/25/91	11/25/91
Acetone	.	.	.	440	.	130	.	.	.	.	300	300
Bromodichloromethane	.	.	.	.	.	.	.	.	.	.	.	.
Bromoform	.	.	.	.	.	.	.	.	.	.	.	.
Carbon disulfide	.	.	.	.	.	.	.	.	.	.	5	5
Carbon tetrachloride	.	.	.	.	.	.	.	.	.	.	.	.
Chloroform	.	.	4	10	5	5	.	.	10	15	20	20
1,2-Dichloropropane	.	.	.	.	.	.	.	.	.	15	20	20
Ethylbenzene	.	.	3	.	.	.	.	.	.	.	.	.
2-Hexanone	.	.	.	.	.	.	.	.	.	5	5	5
4-Methyl-2-pentanone	.	.	.	.	25	.	.	.	.	10	10	10
Methylene chloride	9	20	200	170	90	20	50	50	10	10	50	50
1,1,2,2-Tetrachloroethane	.	.	.	.	.	.	.	.	.	5	5	5
Toluene	10	10	40	.	20	.	.	.	.	.	.	.
1,1,2-Trichloroethane	.	.	.	.	.	.	.	.	.	.	.	.
Xylenes	.	.	15	.	.	.	.	.	.	.	.	.

(CONTINUED)

APPENDIX H

[illegible]

VALIDATED VOC RESULTS

APPENDIX H
Validated VOC Results
First Quarter 1991

Well No. . Location . Date Sampled	GW-141		GW-142		GW-147		GW-161		GW-173		GW-174	
	LIV		KHQ		KHQ		LIII		CRSP		CRSP	
	01/08/91		03/16/91		03/14/91		02/12/91		02/01/91		02/01/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	FP	.	N	.	N	.	N	.
Benzene	G	.	G	.	G	.	7	100	G	.	G	.
Chloroform	G	.	G	.	FP	.	G	.	G	.	G	.
1,1-Dichloroethane	G	.	G	.	G	.	G	.	G	.	1	2.1
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethene	G	.	G	.	G	.	G	.	G	.	5	10.4
4-Methyl-2-pentanone	FP	.	N	.	N	.	N	.	N	.	N	.
Methylene chloride	G	.	G	.	G	.	G	.	G	.	G	.
Tetrachloroethene	G	.	0.7	100	G	.	G	.	11	100	39	81.3
Toluene	G	.	G	.	G	.	G	.	G	.	G	.
1,1,1-Trichloroethane	G	.	G	.	G	.	G	.	G	.	3	6.3
Trichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Xylenes	G	.	G	.	G	.	G	.	G	.	G	.
.	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	0	.	0.7	100	0	.	7	100	11	100	48	100.1

(CONTINUED)

APPENDIX H
Validated VOC Results
First Quarter 1991

Well No. . Location . Date Sampled	GW-175		GW-176		GW-177		GW-178		GW-179		GW-180	
	CRSP		CRSP		CRSP		CRSP		CRSP		CRSP	
	01/31/91		02/04/91		02/02/91		01/15/91		02/08/91		02/02/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	N	.	V	.	N	.
Benzene	G	.	G	.	G	.	G	.	N	.	G	.
Chloroform	G	.	G	.	G	.	FP	.	N	.	G	.
1,1-Dichloroethane	G	.	65	31.9	7	36.8	4	14.8	89	24.9	G	.
1,2-Dichloroethane	G	.	1	0.5	G	.	G	.	N	.	G	.
1,1-Dichloroethene	G	.	21	10.3	G	.	G	.	44	12.3	G	.
1,2-Dichloroethene	G	.	G	.	G	.	G	.	N	.	4	5.9
4-Methyl-2-pentanone	N	.	N	.	N	.	N	.	V	.	N	.
Methylene chloride	G	.	G	.	G	.	G	.	N	.	G	.
Tetrachloroethene	23	74.2	7	3.4	G	.	G	.	5	1.4	61	89.7
Toluene	G	.	G	.	G	.	G	.	N	.	G	.
1,1,1-Trichloroethane	8	25.8	110	53.9	12	63.2	23	85.2	220	61.5	2	2.9
Trichloroethene	G	.	G	.	G	.	G	.	N	.	1	1.5
Xylenes	G	.	G	.	G	.	G	.	N	.	G	.
	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	31	100	204	100	19	100	27	100	358	100.1	68	100

(CONTINUED)

APPENDIX H
Validated VOC Results
First Quarter 1991

Well No. . Location . Date Sampled	GW-203		GW-205		GW-221		GW-241		GW-292		GW-293	
	UNCS		UNCS		UNCS		CRSDB		ECRWP		ECRWP	
	01/12/91		01/12/91		01/13/91		03/02/91		02/09/91		02/10/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	N	.	N	.	N	.
Benzene	G	.	G	.	G	.	G	.	G	.	G	.
Chloroform	G	.	G	.	G	.	FP	.	G	.	1	100
1,1-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
4-Methyl-2-pentanone	FP	.	N	.	FP	.	N	.	N	.	N	.
Methylene chloride	G	.	G	.	G	.	G	.	G	.	G	.
Tetrachloroethene	G	.	1	100	G	.	G	.	G	.	G	.
Toluene	G	.	G	.	G	.	G	.	FP	.	G	.
1,1,1-Trichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
Trichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Xylenes	G	.	G	.	G	.	G	.	FP	.	G	.
.	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	0	.	1	100	0	.	0	.	0	.	1	100

(CONTINUED)

APPENDIX H
Validated VOC Results
First Quarter 1991

Well No. . Location . Date Sampled	GW-294		GW-296		GW-299		GW-301		GW-303		GW-322	
	ECRWP		ECRWP		LIII		LIII		CRSDB		CRSP	
	02/09/91		02/09/91		02/21/91		02/14/91		03/01/91		02/04/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	71	99	N	.	FP	.	N	.	FP	.	N	.
Benzene	G	.	G	.	G	.	G	.	G	.	Z	.
Chloroform	G	.	G	.	FP	.	FP	.	FP	.	Z	.
1,1-Dichloroethane	G	.	G	.	G	.	G	.	G	.	62	9.1
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	Z	.
1,1-Dichloroethene	G	.	G	.	G	.	G	.	G	.	130	19.1
1,2-Dichloroethene	G	.	G	.	G	.	G	.	G	.	Z	.
4-Methyl-2-pentanone	N	.	N	.	N	.	N	.	N	.	N	.
Methylene chloride	G	.	G	.	G	.	G	.	G	.	Z	.
Tetrachloroethene	G	.	G	.	G	.	G	.	G	.	8	1.2
Toluene	G	.	FP	.	G	.	G	.	G	.	Z	.
1,1,1-Trichloroethane	0.7	1	G	.	G	.	G	.	G	.	480	70.6
Trichloroethene	G	.	G	.	G	.	G	.	G	.	Z	.
Xylenes	G	.	G	.	G	.	G	.	G	.	Z	.
.	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	71.7	100	0	.	0	.	0	.	0	.	680	100

(CONTINUED)

APPENDIX B
Validated VOC Results
First Quarter 1991

Well No. Location Date Sampled	GW-339		GW-511		GW-514		GW-521		GW-542		GW-543	
	UNCS		CRSP		ADB		LIV		LIIX		LIIX	
	01/13/91		01/29/91		03/20/91		01/08/91		03/17/91		03/17/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	N	.	FP	.	N	.
Benzene	G	.	G	.	G	.	G	.	G	.	G	.
Chloroform	G	.	G	.	FP	.	G	.	FP	.	FP	.
1,1-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
4-Methyl-2-pentanone	FP	.	N	.	N	.	FP	.	N	.	N	.
Methylene chloride	G	.	G	.	G	.	G	.	G	.	G	.
Tetrachloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Toluene	G	.	FP	.	G	.	G	.	G	.	G	.
1,1,1-Trichloroethane	G	.	G	.	1	100	G	.	G	.	G	.
Trichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Xylenes	G	.	G	.	G	.	G	.	G	.	G	.
.	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	0	.	0	.	1	100	0	.	0	.	0	.

(CONTINUED)

APPENDIX H
Validated VOC Results
First Quarter 1991

Well No. . Location . Date Sampled	GW-544		GW-545		GW-546		GW-608		GW-609		GW-610	
	LIIX		LIIX		LIIX		CRSP		CRSP		CRSP	
	03/17/91		03/17/91		03/17/91		01/28/91		01/15/91		01/30/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	FP	.	N	.	FP	.	N	.	N	.	N	.
Benzene	G	.	G	.	G	.	G	.	G	.	G	.
Chloroform	FP	.	FP	.	FP	.	G	.	G	.	G	.
1,1-Dichloroethane	G	.	G	.	G	.	3	20	G	.	G	.
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethene	G	.	G	.	G	.	G	.	21	55.3	G	.
4-Methyl-2-pentanone	N	.	N	.	N	.	N	.	N	.	N	.
Methylene chloride	G	.	G	.	FP	.	G	.	G	.	G	.
Tetrachloroethene	G	.	G	.	G	.	3	20	14	36.8	1	100
Toluene	G	.	G	.	G	.	G	.	G	.	G	.
1,1,1-Trichloroethane	G	.	G	.	G	.	9	60	1	2.6	G	.
Trichloroethene	G	.	G	.	G	.	G	.	2	5.3	G	.
Xylenes	G	.	G	.	G	.	G	.	G	.	G	.
.	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	0	.	0	.	0	.	15	100	38	100	1	100

(CONTINUED)

APPENDIX H
Validated VOC Results
First Quarter 1991

Well No. . Location . Date Sampled	GW-611		GW-612	
	CRSP		CRSP	
	01/31/91		02/07/91	
	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.
Benzene	G	.	G	.
Chloroform	G	.	G	.
1,1-Dichloroethane	1	6.7	130	29.1
1,2-Dichloroethane	G	.	4	0.9
1,1-Dichloroethene	G	.	60	13.5
1,2-Dichloroethene	G	.	G	.
4-Methyl-2-pentanone	N	.	N	.
Methylene chloride	G	.	G	.
Tetrachloroethene	G	.	12	2.7
Toluene	G	.	FP	.
1,1,1-Trichloroethane	14	93.3	240	53.8
Trichloroethene	G	.	G	.
Xylenes	G	.	FP	.
.	.	.	.	.
SUMMED VOCS	15	100	446	100

APPENDIX H
Validated VOC Results
Second Quarter 1991

Well No.	1085		1086		1090		GW-142		GW-143		GW-144	
Location	LII		LII		UNCS		KHQ		KHQ		KHQ	
Date Sampled	04/08/91		04/08/91		04/14/91		06/13/91		06/16/91		06/15/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	N	.	N	.	N	.
Bromoform	G	.	G	.	G	.	G	.	G	.	G	.
Carbon tetrachloride	G	.	G	.	G	.	G	.	G	.	5	83.3
Chloroform	G	.	FP	.	FP	.	G	.	FP	.	FP	.
1,1-Dichloroethane	23	51.1	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	2	4.4	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethene	3	6.7	G	.	G	.	G	.	G	.	G	.
Methylene chloride	G	.	G	.	G	.	FP	.	G	.	G	.
1,1,2,2-Tetrachloroethane	G	.	G	.	G	.	G	.	G	.	G	.
Tetrachloroethene	4	8.9	G	.	G	.	G	.	G	.	1	16.7
1,1,1-Trichloroethane	12	26.7	G	.	G	.	G	.	G	.	FP	.
Trichloroethene	1	2.2	G	.	G	.	G	.	G	.	G	.
	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	45	100	0	.	0	.	0	.	0	.	6	100

(CONTINUED)

APPENDIX B
Validated VOC Results
Second Quarter 1991

Well No. . Location . Date Sampled	GW-145		GW-146		GW-159		GW-160		GW-173		GW-174	
	KHQ		KHQ		CRSDB		LIII		CRSP		CRSP	
	06/14/91		06/15/91		06/01/91		05/24/91		05/03/91		05/03/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	6	100	15	100	N	.	N	.	N	.
Bromoform	G	.	G	.	G	.	G	.	G	.	G	.
Carbon tetrachloride	G	.	G	.	G	.	G	.	G	.	G	.
Chloroform	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethane	G	.	G	.	G	.	G	.	G	.	1	2.3
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethene	G	.	G	.	G	.	G	.	G	.	3	7
Methylene chloride	FP	.	G	.	G	.	FP	.	G	.	G	.
1,1,2,2-Tetrachloroethane	G	.	G	.	G	.	G	.	G	.	G	.
Tetrachloroethene	G	.	G	.	G	.	G	.	12	95.2	35	81.4
1,1,1-Trichloroethane	G	.	G	.	G	.	G	.	0.6	4.8	3	7
Trichloroethene	G	.	G	.	G	.	G	.	G	.	1	2.3
.	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	0	.	6	100	15	100	0	.	12.6	100	43	100

(CONTINUED)

APPENDIX H
Validated VOC Results
Second Quarter 1991

Well No. . Location . Date Sampled	GW-175		GW-176		GW-177		GW-178		GW-179		GW-180	
	CRSP		CRSP		CRSP		CRSP		CRSP		CRSP	
	05/01/91		05/04/91		05/03/91		04/22/91		05/08/91		05/04/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	N	.	V	.	N	.
Bromoform	G	.	G	.	G	.	G	.	N	.	G	.
Carbon tetrachloride	G	.	G	.	G	.	G	.	N	.	G	.
Chloroform	G	.	G	.	G	.	FP	.	N	.	G	.
1,1-Dichloroethane	G	.	61	25	5	31.3	6	17.1	99	26.3	4	4.5
1,2-Dichloroethane	G	.	2	0.8	G	.	G	.	N	.	G	.
1,1-Dichloroethene	G	.	24	9.8	1	6.3	2	5.7	43	11.4	G	.
1,2-Dichloroethene	G	.	G	.	G	.	G	.	N	.	6	6.8
Methylene chloride	G	.	G	.	G	.	G	.	N	.	G	.
1,1,2,2-Tetrachloroethane	G	.	G	.	G	.	G	.	N	.	G	.
Tetrachloroethene	5	50	7	2.9	G	.	2	5.7	4	1.1	73	83
1,1,1-Trichloroethane	5	50	150	61.5	10	62.5	25	71.4	230	61.2	3	3.4
Trichloroethene	G	.	G	.	G	.	G	.	N	.	2	2.3
	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	10	100	244	100	16	100.1	35	99.9	376	100	88	100

(CONTINUED)

APPENDIX H
Validated VOC Results
Second Quarter 1991

Well No.	GW-217		GW-241		GW-293		GW-305		GW-321		GW-322	
Location	LIV		CRSDB		ECRWP		LIV		ADB		CRSP	
Date Sampled	04/03/91		06/10/91		05/11/91		04/03/91		06/18/91		05/04/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	N	.	N	.	M	.
Bromoform	G	.	G	.	1	29.4	G	.	G	.	Z	.
Carbon tetrachloride	G	.	G	.	G	.	G	.	G	.	Z	.
Chloroform	FP	.	G	.	0.4	11.8	FP	.	G	.	Z	.
1,1-Dichloroethane	G	.	G	.	G	.	G	.	G	.	60	9.2
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	Z	.
1,1-Dichloroethene	G	.	G	.	G	.	G	.	G	.	110	16.9
1,2-Dichloroethene	G	.	G	.	G	.	G	.	G	.	Z	.
Methylene chloride	G	.	G	.	G	.	G	.	FP	.	Z	.
1,1,2,2-Tetrachloroethane	G	.	G	.	1	29.4	G	.	G	.	Z	.
Tetrachloroethene	G	.	G	.	G	.	G	.	G	.	Z	.
1,1,1-Trichloroethane	G	.	FP	.	G	.	G	.	G	.	480	73.8
Trichloroethene	G	.	G	.	1	29.4	G	.	G	.	Z	.
	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	0	.	0	.	3.4	100	0	.	0	.	650	99.9

(CONTINUED)

APPENDIX H
Validated VOC Results
Second Quarter 1991

Well No.	GW-339		GW-512		GW-514		GW-544		GW-607		GW-608	
Location	UNCS		ADB		ADB		LIIX		CRSP		CRSP	
Date Sampled	04/13/91		06/16/91		06/17/91		04/11/91		04/29/91		04/29/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	N	.	N	.	N	.
Bromoform	G	.	G	.	G	.	G	.	G	.	G	.
Carbon tetrachloride	G	.	G	.	G	.	G	.	G	.	G	.
Chloroform	2	100	G	.	G	.	FP	.	G	.	G	.
1,1-Dichloroethane	G	.	G	.	G	.	G	.	G	.	2	18.2
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Methylene chloride	G	.	G	.	G	.	G	.	G	.	G	.
1,1,2,2-Tetrachloroethane	G	.	G	.	G	.	G	.	G	.	G	.
Tetrachloroethene	G	.	G	.	G	.	G	.	G	.	G	.
1,1,1-Trichloroethane	G	.	0.5	100	FP	.	G	.	G	.	9	81.8
Trichloroethene	G	.	G	.	G	.	G	.	9	100	G	.
	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	2	100	0.5	100	0	.	0	.	9	100	11	100

(CONTINUED)

APPENDIX H
Validated VOC Results
Second Quarter 1991

Well No. . Location . Date Sampled	GW-609		GW-611		GW-612		GW-709	
	CRSP		CRSP		CRSP		LII	
	04/22/91		05/01/91		05/08/91		06/19/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	V	.	N	.
Bromoform	G	.	G	.	N	.	G	.
Carbon tetrachloride	G	.	G	.	N	.	G	.
Chloroform	G	.	G	.	N	.	FP	.
1,1-Dichloroethane	5	4	G	.	130	27.7	G	.
1,2-Dichloroethane	G	.	G	.	4	0.9	G	.
1,1-Dichloroethene	G	.	G	.	57	12.1	G	.
1,2-Dichloroethene	51	40.8	G	.	N	.	G	.
Methylene chloride	G	.	G	.	N	.	FP	.
1,1,2,2-Tetrachloroethane	G	.	G	.	N	.	G	.
Tetrachloroethene	58	46.4	G	.	9	1.9	G	.
1,1,1-Trichloroethane	4	3.2	10	100	270	57.4	G	.
Trichloroethene	7	5.6	G	.	N	.	G	.
	.	.	.	.	.	.	.	.
SUMMED VOCs	125	100	10	100	470	100	0	.

APPENDIX H
Validated VOC Results
Third Quarter 1991

Well No.	1085		1086		1090		GW-142		GW-144		GW-146	
Location	LII		LII		UNCS		KHQ		KHQ		KHQ	
Date Sampled	09/10/91		09/10/91		07/31/91		08/03/91		09/05/91		09/04/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	N	.	N	.	N	.
Carbon tetrachloride	G	.	G	.	G	.	G	.	2	33.3	G	.
Chloroform	G	.	1	100	3	76.9	G	.	2	33.3	G	.
1,1-Dichloroethane	22	61.1	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	1	2.8	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethene	2	5.6	G	.	0.9	23.1	G	.	G	.	G	.
Ethylbenzene	G	.	G	.	G	.	G	.	G	.	G	.
4-Methyl-2-pentanone	N	.	N	.	N	.	N	.	N	.	N	.
Methylene chloride	G	.	G	.	G	.	G	.	G	.	G	.
Tetrachloroethene	2	5.6	G	.	G	.	0.7	100	2	33.3	G	.
Toluene	G	.	G	.	G	.	G	.	G	.	0.3	100
1,1,1-Trichloroethane	9	25	G	.	G	.	G	.	G	.	G	.
Trichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Xylenes	G	.	G	.	G	.	G	.	G	.	G	.
	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	36	100.1	1	100	3.9	100	0.7	100	6	99.9	0.3	100

(CONTINUED)

APPENDIX H
Validated VOC Results
Third Quarter 1991

Well No. . Location . Date Sampled	GW-173		GW-174		GW-175		GW-176		GW-177		GW-178	
	CRSP		CRSP		CRSP		CRSP		CRSP		CRSP	
	08/06/91		08/06/91		08/08/91		08/09/91		08/08/91		08/08/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	N	.	N	.	N	.
Carbon tetrachloride	G	.	G	.	G	.	G	.	G	.	G	.
Chloroform	G	.	G	.	G	.	G	.	G	.	3	6.7
1,1-Dichloroethane	G	.	1	2.3	G	.	25	18.7	8	27.6	6	13.3
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	G	.	G	.	2	3.6	13	9.7	2	6.9	2	4.4
1,2-Dichloroethene	G	.	3	6.8	G	.	G	.	G	.	G	.
Ethylbenzene	G	.	G	.	G	.	G	.	G	.	G	.
4-Methyl-2-pentanone	N	.	N	.	N	.	N	.	N	.	N	.
Methylene chloride	G	.	G	.	G	.	G	.	G	.	G	.
Tetrachloroethene	11	100	36	81.8	41	74.5	6	4.5	G	.	G	.
Toluene	G	.	G	.	G	.	G	.	G	.	G	.
1,1,1-Trichloroethane	G	.	3	6.8	11	20	90	67.2	19	65.5	34	75.6
Trichloroethene	G	.	1	2.3	1	1.8	G	.	G	.	G	.
Xylenes	G	.	G	.	G	.	G	.	G	.	G	.
.	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	11	100	44	100	55	99.9	134	100.1	29	100	45	100

(CONTINUED)

APPENDIX H
Validated VOC Results
Third Quarter 1991

Well No.	GW-179		GW-180		GW-184		GW-186		GW-188		GW-203	
Location	CRSP		CRSP		RQ		RQ		RQ		UNCS	
Date Sampled	08/12/91		08/09/91		09/08/91		09/08/91		09/09/91		07/29/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	V	.	N	.	N	.	N	.	N	.	N	.
Carbon tetrachloride	N	.	G	.	G	.	G	.	G	.	G	.
Chloroform	N	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethane	90	30.6	5	6.2	G	.	G	.	G	.	G	.
1,2-Dichloroethane	N	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	31	10.5	3	3.7	G	.	G	.	G	.	G	.
1,2-Dichloroethene	N	.	G	.	G	.	G	.	G	.	G	.
Ethylbenzene	N	.	G	.	G	.	G	.	G	.	G	.
4-Methyl-2-pentanone	V	.	N	.	N	.	N	.	N	.	N	.
Methylene chloride	N	.	G	.	G	.	G	.	FP	.	FP	.
Tetrachloroethene	3	1	68	84	G	.	G	.	G	.	G	.
Toluene	N	.	G	.	FP	.	FP	.	FP	.	G	.
1,1,1-Trichloroethane	170	57.8	3	3.7	G	.	G	.	G	.	G	.
Trichloroethene	N	.	2	2.5	G	.	G	.	G	.	G	.
Xylenes	N	.	G	.	G	.	G	.	G	.	G	.
	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	294	99.9	81	100.1	0	.	0	.	0	.	0	.

(CONTINUED)

APPENDIX B
Validated VOC Results
Third Quarter 1991

Well No.	GW-205		GW-217		GW-231		GW-293		GW-295		GW-304	
Location	UMCS		LIV		KHQ		ECRWP		LIII		CRSDB	
Date Sampled	07/29/91		07/16/91		07/19/91		08/19/91		08/30/91		08/23/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	18	100	N	.	N	.	18	95.7	FP	.
Carbon tetrachloride	G	.	G	.	G	.	G	.	G	.	G	.
Chloroform	G	.	G	.	G	.	0.7	100	G	.	G	.
1,1-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Ethylbenzene	G	.	G	.	G	.	G	.	FP	.	G	.
4-Methyl-2-pentanone	N	.	N	.	N	.	N	.	FP	.	N	.
Methylene chloride	FP	.	G	.	G	.	G	.	G	.	G	.
Tetrachloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Toluene	G	.	G	.	FP	.	G	.	FP	.	G	.
1,1,1-Trichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
Trichloroethene	G	.	G	.	G	.	G	.	0.8	4.3	G	.
Xylenes	G	.	G	.	G	.	G	.	FP	.	G	.
	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	0	.	18	100	0	.	0.7	100	18.8	100	0	.

(CONTINUED)

APPENDIX H
Validated VOC Results
Third Quarter 1991

Well No.	GW-322		GW-339		GW-514		GW-521		GW-522		GW-539	
Location	CRSP		UNCS		ADB		LIV		LIV		LIIX	
Date Sampled	08/13/91		07/30/91		09/07/91		07/17/91		07/17/91		09/12/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	A	.	N	.	N	.	18	100	15	100	N	.
Carbon tetrachloride	V	.	G	.	G	.	G	.	G	.	G	.
Chloroform	V	.	0.9	100	G	.	G	.	G	.	G	.
1,1-Dichloroethane	78	11.9	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethane	V	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	110	16.8	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethene	V	.	G	.	G	.	G	.	G	.	G	.
Ethylbenzene	V	.	G	.	G	.	G	.	G	.	G	.
4-Methyl-2-pentanone	A	.	N	.	N	.	N	.	N	.	N	.
Methylene chloride	V	.	G	.	G	.	G	.	G	.	G	.
Tetrachloroethene	7	1.1	G	.	G	.	G	.	G	.	G	.
Toluene	V	.	G	.	G	.	G	.	G	.	FP	.
1,1,1-Trichloroethane	460	70.2	G	.	1	100	G	.	G	.	G	.
Trichloroethene	V	.	G	.	G	.	G	.	G	.	G	.
Xylenes	V	.	G	.	G	.	G	.	G	.	G	.
.	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCs	655	100	0.9	100	1	100	18	100	15	100	0	.

(CONTINUED)

APPENDIX H
Validated VOC Results
Third Quarter 1991

Well No. . Location . Date Sampled	GW-540		GW-541		GW-542		GW-543		GW-544		GW-545	
	LIIX		LIIX		LIIX		LIIX		LIIX		LIIX	
	09/12/91		09/13/91		09/14/91		09/14/91		09/14/91		09/15/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	N	.	N	.	N	.
Carbon tetrachloride	G	.	G	.	G	.	G	.	G	.	G	.
Chloroform	G	.	G	.	G	.	G	.	FP	.	G	.
1,1-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Ethylbenzene	G	.	G	.	G	.	G	.	G	.	G	.
4-Methyl-2-pentanone	N	.	N	.	N	.	N	.	N	.	N	.
Methylene chloride	G	.	G	.	G	.	G	.	G	.	G	.
Tetrachloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Toluene	FP	.	FP	.	FP	.	FP	.	FP	.	FP	.
1,1,1-Trichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
Trichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Xylenes	G	.	G	.	G	.	G	.	G	.	G	.
	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	0	.	0	.	0	.	0	.	0	.	0	.

(CONTINUED)

APPENDIX B
Validated VOC Results
Third Quarter 1991

Well No. Location Date Sampled	GW-546		GW-608		GW-609		GW-611		GW-612		GW-709	
	LIIX		CRSP		CRSP		CRSP		CRSP		LII	
	09/15/91		08/07/91		08/09/91		08/08/91		08/12/91		09/11/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	N	.	V	.	N	.
Carbon tetrachloride	G	.	G	.	G	.	G	.	N	.	G	.
Chloroform	G	.	G	.	G	.	G	.	N	.	G	.
1,1-Dichloroethane	G	.	2	11.1	3	3.9	1	11.1	120	24.2	G	.
1,2-Dichloroethane	G	.	G	.	G	.	G	.	5	1	G	.
1,1-Dichloroethene	G	.	2	11.1	G	.	G	.	69	13.9	G	.
1,2-Dichloroethene	G	.	G	.	30	39.5	G	.	N	.	G	.
Ethylbenzene	G	.	G	.	G	.	G	.	N	.	G	.
4-Methyl-2-pentanone	N	.	N	.	N	.	N	.	V	.	N	.
Methylene chloride	0.7	100	G	.	G	.	G	.	N	.	G	.
Tetrachloroethene	G	.	5	27.8	37	48.7	G	.	11	2.2	G	.
Toluene	FP	.	G	.	G	.	G	.	N	.	FP	.
1,1,1-Trichloroethane	G	.	9	50	2	2.6	8	88.9	290	58.5	G	.
Trichloroethene	G	.	G	.	4	5.3	G	.	1	0.2	G	.
Xylenes	G	.	G	.	G	.	G	.	N	.	G	.
	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	0.7	100	18	100	76	100	9	100	496	100	0	.

(CONTINUED)

APPENDIX H
Validated VOC Results
Third Quarter 1991

Well No. . Location . Date Sampled	GW-731		GW-732	
	CRSDB		CRSDB	
	09/27/91		09/27/91	
	ug/L	% sum	ug/L	% sum
Acetone	77	100	N	.
Carbon tetrachloride	G	.	G	.
Chloroform	G	.	G	.
1,1-Dichloroethane	G	.	G	.
1,2-Dichloroethane	G	.	G	.
1,1-Dichloroethene	G	.	G	.
1,2-Dichloroethene	G	.	G	.
Ethylbenzene	G	.	G	.
4-Methyl-2-pentanone	N	.	N	.
Methylene chloride	G	.	G	.
Tetrachloroethene	G	.	G	.
Toluene	FP	.	FP	.
1,1,1-Trichloroethane	G	.	G	.
Trichloroethene	G	.	G	.
Xylenes	G	.	G	.
.	.	.	.	.
SUMMED VOCs	77	100	0	.

APPENDIX H
Validated VOC Results
Fourth Quarter 1991

Well No. . Location . Date Sampled	1085		1086		1090		GW-142		GW-143		GW-144	
	LII		LII		UNCS		KBQ		KBQ		KBQ	
	11/20/91		11/20/91		10/06/91		11/04/91		11/07/91		11/06/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	N	.	N	.	N	.
Carbon tetrachloride	G	.	G	.	G	.	G	.	G	.	1	50
Chloroethane	3	5.2	N	.	N	.	N	.	N	.	N	.
Chloroform	G	.	FP	.	FP	.	G	.	G	.	FP	.
1,1-Dichloroethane	35	60.3	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	2	3.4	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Ethylbenzene	G	.	G	.	G	.	G	.	G	.	G	.
4-Methyl-2-pentanone	N	.	N	.	FP	.	N	.	N	.	N	.
Methylene chloride	FP	.	FP	.	G	.	FP	.	G	.	FP	.
Tetrachloroethene	5	8.6	G	.	G	.	0.8	100	G	.	1	50
Toluene	G	.	G	.	FP	.	FP	.	FP	.	FP	.
1,1,1-Trichloroethane	12	20.7	G	.	G	.	G	.	G	.	G	.
Trichloroethene	1	1.7	G	.	G	.	G	.	G	.	G	.
Xylenes	G	.	G	.	G	.	G	.	G	.	G	.
.	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	58	99.9	0	.	0	.	0.8	100	0	.	2	100

(CONTINUED)

APPENDIX H
Validated VOC Results
Fourth Quarter 1991

Well No. . Location . Date Sampled	GW-145		GW-146		GW-147		GW-156		GW-159		GW-160	
	KHQ		KHQ		KHQ		CRSDB		CRSDB		LIII	
	11/05/91		11/07/91		11/05/91		10/30/91		10/29/91		10/26/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	N	.	N	.	N	.
Carbon tetrachloride	G	.	G	.	G	.	G	.	G	.	G	.
Chloroethane	N	.	N	.	N	.	N	.	N	.	N	.
Chloroform	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Ethylbenzene	G	.	G	.	G	.	G	.	G	.	G	.
4-Methyl-2-pentanone	N	.	N	.	N	.	N	.	N	.	N	.
Methylene chloride	FP	.	FP	.	G	.	G	.	G	.	FP	.
Tetrachloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Toluene	FP	.	FP	.	FP	.	FP	.	FP	.	G	.
1,1,1-Trichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
Trichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Xylenes	G	.	G	.	G	.	G	.	G	.	G	.
	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	0	.	0	.	0	.	0	.	0	.	0	.

(CONTINUED)

APPENDIX H
Validated VOC Results
Fourth Quarter 1991

Well No. . Location . Date Sampled	GW-161		GW-173		GW-174		GW-175		GW-176		GW-177	
	LIII		CRSP		CRSP		CRSP		CRSP		CRSP	
	10/25/91		10/10/91		10/11/91		10/13/91		10/14/91		10/13/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	N	.	FP	.	N	.
Carbon tetrachloride	G	.	G	.	G	.	G	.	G	.	G	.
Chloroethane	N	.	N	.	N	.	N	.	N	.	N	.
Chloroform	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethane	G	.	G	.	G	.	G	.	20	20	11	26.2
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	G	.	G	.	G	.	G	.	12	12	3	7.1
1,2-Dichloroethene	G	.	G	.	3	7.5	G	.	G	.	G	.
Ethylbenzene	G	.	G	.	G	.	G	.	G	.	G	.
4-Methyl-2-pentanone	2	100	N	.	N	.	N	.	N	.	N	.
Methylene chloride	FP	.	G	.	G	.	G	.	FP	.	G	.
Tetrachloroethene	G	.	13	100	34	85	25	80.6	5	5	1	2.4
Toluene	FP	.	FP	.	G	.	G	.	G	.	G	.
1,1,1-Trichloroethane	G	.	G	.	2	5	6	19.4	63	63	27	64.3
Trichloroethene	G	.	G	.	1	2.5	G	.	G	.	G	.
Xylenes	G	.	G	.	G	.	G	.	G	.	G	.
	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	2	100	13	100	40	100	31	100	100	100	42	100

(CONTINUED)

APPENDIX H
Validated VOC Results
Fourth Quarter 1991

Well No. Location Date Sampled	GW-178		GW-179		GW-180		GW-181		GW-184		GW-203	
	CRSP		CRSP		CRSP		CRSP		RQ		UNCS	
	10/13/91		10/17/91		10/14/91		10/08/91		11/18/91		11/23/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	N	.	N	.	N	.
Carbon tetrachloride	G	.	G	.	G	.	G	.	G	.	G	.
Chloroethane	N	.	N	.	N	.	N	.	N	.	N	.
Chloroform	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethane	5	14.7	75	26.3	2	3.2	G	.	G	.	G	.
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	2	5.9	36	12.6	G	.	G	.	G	.	G	.
1,2-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Ethylbenzene	G	.	G	.	G	.	G	.	G	.	G	.
4-Methyl-2-pentanone	N	.	N	.	N	.	N	.	N	.	N	.
Methylene chloride	G	.	G	.	FP	.	FP	.	FP	.	FP	.
Tetrachloroethene	G	.	4	1.4	58	92.1	G	.	G	.	G	.
Toluene	G	.	FP	.	G	.	G	.	G	.	G	.
1,1,1-Trichloroethane	27	79.4	170	59.6	2	3.2	G	.	G	.	G	.
Trichloroethene	G	.	G	.	1	1.6	G	.	G	.	G	.
Xylenes	G	.	G	.	G	.	G	.	G	.	G	.
.	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	34	100	285	99.9	63	100.1	0	.	0	.	0	.

(CONTINUED)

APPENDIX H
Validated VOC Results
Fourth Quarter 1991

Well No. Location Date Sampled	GW-217		GW-231		GW-241		GW-292		GW-293		GW-294	
	LIV		KBQ		CRSDB		ECRWP		ECRWP		ECRWP	
	10/01/91		11/05/91		10/31/91		10/22/91		10/23/91		10/22/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	N	.	N	.	N	.
Carbon tetrachloride	G	.	G	.	G	.	G	.	G	.	G	.
Chloroethane	N	.	N	.	N	.	N	.	N	.	N	.
Chloroform	G	.	G	.	G	.	G	.	0.7	100	G	.
1,1-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Ethylbenzene	FP	.	G	.	G	.	G	.	G	.	G	.
4-Methyl-2-pentanone	N	.	N	.	N	.	N	.	N	.	N	.
Methylene chloride	G	.	G	.	FP	.	G	.	FP	.	G	.
Tetrachloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Toluene	FP	.	FP	.	G	.	FP	.	FP	.	FP	.
1,1,1-Trichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
Trichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Xylenes	FP	.	G	.	G	.	G	.	G	.	G	.
	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	0	.	0	.	0	.	0	.	0.7	100	0	.

(CONTINUED)

APPENDIX H
Validated VOC Results
Fourth Quarter 1991

Well No.	GW-295		GW-296		GW-298		GW-299		GW-301		GW-302	
Location	LIII		SCRWP		LIII		LIII		LIII		UMCS	
Date Sampled	11/12/91		10/22/91		10/28/91		10/27/91		10/27/91		10/06/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	9	100	N	.	N	.	N	.	13	100	N	.
Carbon tetrachloride	G	.	G	.	G	.	G	.	G	.	G	.
Chloroethane	N	.	N	.	N	.	N	.	N	.	N	.
Chloroform	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Ethylbenzene	G	.	G	.	G	.	G	.	G	.	G	.
4-Methyl-2-pentanone	N	.	N	.	N	.	N	.	N	.	N	.
Methylene chloride	G	.	G	.	FP	.	FP	.	FP	.	G	.
Tetrachloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Toluene	G	.	FP	.	G	.	G	.	G	.	FP	.
1,1,1-Trichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
Trichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Xylenes	G	.	G	.	G	.	G	.	G	.	G	.
	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	9	100	0	.	0	.	0	.	13	100	0	.

(CONTINUED)

APPENDIX H
Validated VOC Results
Fourth Quarter 1991

Well No.	GW-303		GW-304		GW-305		GW-322		GW-339		GW-511	
Location	CRSDB		CRSDB		LIV		CRSP		UNCS		CRSP	
Date Sampled	11/02/91		11/02/91		10/01/91		10/21/91		10/06/91		10/08/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	N	.	N	.	N	.
Carbon tetrachloride	G	.	G	.	G	.	Z	.	G	.	G	.
Chloroethane	N	.	N	.	N	.	N	.	N	.	N	.
Chloroform	G	.	G	.	G	.	Z	.	FP	.	G	.
1,1-Dichloroethane	G	.	G	.	G	.	64	11.9	G	.	G	.
1,2-Dichloroethane	G	.	G	.	G	.	Z	.	G	.	G	.
1,1-Dichloroethene	G	.	G	.	G	.	100	18.5	G	.	G	.
1,2-Dichloroethene	G	.	G	.	G	.	Z	.	G	.	G	.
Ethylbenzene	G	.	G	.	FP	.	Z	.	G	.	G	.
4-Methyl-2-pentanone	N	.	N	.	N	.	N	.	N	.	N	.
Methylene chloride	G	.	G	.	G	.	Z	.	G	.	FP	.
Tetrachloroethene	G	.	G	.	G	.	6	1.1	G	.	G	.
Toluene	FP	.	FP	.	FP	.	Z	.	FP	.	G	.
1,1,1-Trichloroethane	G	.	G	.	G	.	370	68.5	G	.	G	.
Trichloroethene	G	.	G	.	G	.	Z	.	G	.	G	.
Xylenes	G	.	G	.	G	.	Z	.	G	.	G	.
	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCs	0	.	0	.	0	.	540	100	0	.	0	.

(CONTINUED)

APPENDIX B
Validated VOC Results
Fourth Quarter 1991

Well No.	GW-512		GW-513		GW-514		GW-540		GW-541		GW-542	
Location	ADB		ADB		ADB		LIIX		LIIX		LIIX	
Date Sampled	11/16/91		11/16/91		11/16/91		11/24/91		11/25/91		11/25/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	N	.	N	.	N	.
Carbon tetrachloride	G	.	G	.	G	.	G	.	G	.	G	.
Chloroethane	N	.	N	.	N	.	N	.	N	.	N	.
Chloroform	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
1,2-Dichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Ethylbenzene	G	.	G	.	G	.	G	.	G	.	G	.
4-Methyl-2-pentanone	N	.	N	.	N	.	N	.	N	.	N	.
Methylene chloride	FP	.	FP	.	FP	.	FP	.	FP	.	FP	.
Tetrachloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Toluene	G	.	G	.	G	.	G	.	G	.	G	.
1,1,1-Trichloroethane	G	.	G	.	2	100	G	.	G	.	G	.
Trichloroethene	G	.	G	.	G	.	G	.	G	.	G	.
Xylenes	G	.	G	.	G	.	G	.	G	.	G	.
	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCs	0	.	0	.	2	100	0	.	0	.	0	.

(CONTINUED)

APPENDIX H
Validated VOC Results
Fourth Quarter 1991

Well No. . Location . Date Sampled	GW-544		GW-545		GW-546		GW-607		GW-608		GW-609	
	LIIX		LIIX		LIIX		CRSP		CRSP		CRSP	
	11/26/91		11/26/91		11/26/91		10/08/91		10/12/91		10/14/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	N	.	FP	.	N	.	N	.
Carbon tetrachloride	G	.	G	.	G	.	G	.	G	.	G	.
Chloroethane	N	.	N	.	N	.	N	.	N	.	N	.
Chloroform	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethane	G	.	G	.	G	.	G	.	G	.	1	3.2
1,2-Dichloroethane	G	.	G	.	G	.	G	.	G	.	G	.
1,1-Dichloroethene	G	.	G	.	G	.	G	.	2	10	G	.
1,2-Dichloroethene	G	.	G	.	G	.	G	.	2	10	12	38.8
Ethylbenzene	G	.	G	.	G	.	G	.	G	.	G	.
4-Methyl-2-pentanone	N	.	N	.	N	.	FP	.	N	.	N	.
Methylene chloride	FP	.	FP	.	FP	.	FP	.	G	.	FP	.
Tetrachloroethene	G	.	G	.	G	.	G	.	7	35	15	48.5
Toluene	G	.	G	.	G	.	G	.	G	.	G	.
1,1,1-Trichloroethane	G	.	G	.	G	.	G	.	9	45	0.9	2.9
Trichloroethene	G	.	G	.	G	.	G	.	G	.	2	6.5
Xylenes	G	.	G	.	G	.	G	.	G	.	G	.
	.	.	.	.	.	.	.	.	.	.	.	.
SUMMED VOCs	0	.	0	.	0	.	0	.	20	100	30.9	99.9

(CONTINUED)

APPENDIX B
Validated VOC Results
Fourth Quarter 1991

Well No. . Location . Date Sampled	GW-610		GW-611		GW-612		GW-731		GW-732	
	CRSP		CRSP		CRSP		CRSDB		CRSDB	
	10/10/91		10/13/91		10/17/91		10/31/91		10/30/91	
	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum	ug/L	% sum
Acetone	N	.	N	.	V	.	FP	.	N	.
Carbon tetrachloride	G	.	2	33.3	N	.	G	.	G	.
Chloroethane	N	.	N	.	V	.	N	.	N	.
Chloroform	G	.	G	.	N	.	G	.	G	.
1,1-Dichloroethane	G	.	2	33.3	110	27.9	G	.	G	.
1,2-Dichloroethane	G	.	G	.	3	0.8	G	.	G	.
1,1-Dichloroethene	G	.	2	33.3	50	12.7	G	.	G	.
1,2-Dichloroethene	G	.	G	.	N	.	G	.	G	.
Ethylbenzene	G	.	G	.	N	.	G	.	G	.
4-Methyl-2-pentanone	N	.	N	.	FP	.	N	.	FP	.
Methylene chloride	G	.	FP	.	N	.	G	.	G	.
Tetrachloroethene	1	100	G	.	11	2.8	G	.	G	.
Toluene	FP	.	G	.	FP	.	FP	.	FP	.
1,1,1-Trichloroethane	G	.	G	.	220	55.8	G	.	G	.
Trichloroethene	G	.	G	.	N	.	G	.	G	.
Xylenes	G	.	G	.	N	.	G	.	G	.
	.	.	.	.	.	.	.	.	.	.
SUMMED VOCS	1	100	6	99.9	394	100	0	.	0	.

APPENDIX I

**TRACE METAL CONCENTRATIONS EXCEEDING
MAXIMUM CONTAMINANT LEVELS**

EXPLANATION

SITE:

ADB - Ash Disposal Basin
CRDT - Chestnut Ridge Deer Trap
CHSDB - Chestnut Ridge Sediment Disposal Basin
CRSP - Chestnut Ridge Security Pits
ECRWP - East Chestnut Ridge Waste Pile
KHQ - Kerr Hollow Quarry
LII - Landfill II
LIIX - Landfill II Expansion
LIII - Landfill III
LIV - Landfill IV
RQ - Rogers Quarry
UNCS - United Nuclear Corporation Site

NOTE:

All results in milligrams per Liter (mg/L).

. - Concentration less than MCL
TOT - Total Concentration (Unfiltered Sample)
DIS - Dissolved Concentration (Filtered Sample)
TSS - Total Suspended Solids

<u>Metal</u>	<u>Maximum Contaminant Level (mg/L)</u>
Barium (ICP)	1.0
Cadmium (AAS)	0.01
Chromium (AAS)	0.05
Lead (AAS)	0.05
Mercury (CVAA)	0.002

Because of inherent analytical interferences, ICP results for arsenic, selenium, and silver were not evaluated with respect to MCLs. Historical AAS results for these metals have shown only isolated and sporadic occurrences where concentrations exceeded MCLs.

APPENDIX I
Trace Metal Concentrations Exceeding
Maximum Contaminant Levels, 1991

Well No.	1086				GW-146		GW-178		GW-241		GW-295			
Location	LII				KHQ		CRSP		CRSDB		LIII			
Date Sampled	04/08/91		11/20/91		06/15/91		01/15/91		10/31/91		02/11/91		08/30/91	
	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
Barium	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cadmium (AAS)	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Chromium (AAS)	0.051	<0.01	0.056	<0.01	.	.	.	.	.	.	0.11	0.01	0.305	0.074
Lead (AAS)	0.26	<0.004	0.18	<0.004	0.128	<0.004	0.093	<0.004	0.3	<0.004	0.11	<0.004	0.26	0.302
Mercury (CVAA)	0.0032	<0.0002	0.0039	<0.0002	.	.	.	.	.	.	.	.	.	.
TSS (mg/L)	24720	.	24080	.	37	.	9	.	882	.	332	.	24750	.

(CONTINUED)

Well No.	GW-295		GW-301	
Location	LIII		LIII	
Date Sampled	11/12/91		08/22/91	
	TOT	DIS	TOT	DIS
Barium	.	.	.	.
Cadmium (AAS)	0.03	<0.002	.	.
Chromium (AAS)	4	0.14	0.15	0.014
Lead (AAS)	6.4	0.025	.	.
Mercury (CVAA)	.	.	.	.
TSS (mg/L)	3732	.	74	.

APPENDIX J
RADIOCHEMICAL DATA SUMMARY

EXPLANATION

LOCATION:

ADB - Ash Disposal Basin
CRDT - Chestnut Ridge Deer Trap
CRSDB - Chestnut Ridge Sediment Disposal Basin
CRSP - Chestnut Ridge Security Pits
ECRWP - East Chestnut Ridge Waste Pile
KHQ - Kerr Hollow Quarry
LII - Landfill II
LIIX - Landfill II Expansion
LIII - Landfill III
LIV - Landfill IV
RQ - Rogers Quarry
UNCS - United Nuclear Corporation Site

NOTE:

pCi/L - picoCuries per Liter
CE(+/-) - Counting Error (two standard deviations)
. - Not analyzed

Mean counting error (e) calculated using the following formula from Evans (1955):

$$e = \sqrt{\frac{E_1^2}{n^2} + \frac{E_2^2}{n^2} + \frac{E_3^2}{n^2} + \dots}$$

where $E_1, E_2, \dots, E_x$ are the individual errors, and n is the number of observations.

**GROSS ALPHA AND GROSS BETA
ACTIVITY DATA SUMMARY**

APPENDIX J
Gross Alpha and Gross Beta Activity Data Summary

Well No. Location	1085		1086		1090		GW-141		GW-142		GW-143		GW-144	
	LII		LII		UNCS		LIV		KHQ		KHQ		KHQ	
	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)
GROSS ALPHA	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	.	.	.	.	0.53	1.30	1.11	1.10	9.64	2.30	4.26	1.60	4.47	1.70
Second Quarter	1.51	1.10	25.14	3.50	2.13	1.60	0.50	0.90	15.82	2.90	4.98	1.90	1.71	1.50
Third Quarter	0.77	1.10	4.44	1.70	1.73	1.40	1.16	1.30	5.30	1.90	3.36	1.60	5.30	1.90
Fourth Quarter	4.15	2.30	3.73	2.00	2.98	1.60	6.83	2.10	3.58	2.20	3.89	2.40	6.86	2.60
Mean	2.14	0.90	11.10	1.50	1.84	0.70	2.40	0.70	8.58	1.20	4.12	1.00	4.58	1.00
GROSS BETA	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	.	.	.	.	-0.63	3.40	1.00	3.20	12.52	3.90	18.49	4.20	3.56	3.50
Second Quarter	4.17	3.30	39.09	4.90	4.13	3.40	4.26	3.20	10.31	3.90	18.55	4.20	0.62	3.30
Third Quarter	1.26	3.30	4.71	3.50	1.19	3.50	-0.21	3.00	10.70	3.70	20.13	4.00	3.03	3.10
Fourth Quarter	2.09	3.00	2.97	3.00	1.23	3.00	19.40	3.90	5.25	3.10	14.30	3.60	6.95	3.20
Mean	2.51	1.80	15.59	2.20	1.48	1.70	6.11	1.70	9.70	1.80	17.87	2.00	3.54	1.60

(CONTINUED)

APPENDIX J
Gross Alpha and Gross Beta Activity Data Summary

Well No. Location	GW-145		GW-146		GW-147		GW-155		GW-156		GW-157		GW-158	
	KHQ		KHQ		KHQ		CRSDB		CRSDB		CRSDB		CRSDB	
	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)
GROSS ALPHA	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	14.09	2.70	2.90	1.50	4.20	1.60	1.30	1.10	8.46	2.10	4.46	1.60	3.66	1.50
Second Quarter	12.81	2.60	3.79	1.80	.	.	2.78	1.60	4.44	1.80	.	.	3.46	1.60
Third Quarter	10.16	2.40	2.91	1.60	2.06	1.40	.	.	1.32	1.50	.	.	1.95	1.60
Fourth Quarter	14.30	3.50	4.67	2.40	2.61	2.00	.	.	3.84	2.00	.	.	4.24	2.20
Mean	12.84	1.40	3.57	0.90	2.96	1.00	2.04	1.00	4.47	0.90	4.46	1.60	3.33	0.90
GROSS BETA	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	21.72	4.30	18.61	4.20	8.02	3.70	1.05	3.10	14.85	3.80	9.68	3.60	6.53	3.40
Second Quarter	17.38	4.20	17.52	4.20	.	.	7.66	3.60	13.94	4.00	.	.	5.42	3.50
Third Quarter	23.12	4.10	18.25	3.90	7.88	3.40	.	.	5.81	3.50	.	.	0.97	3.20
Fourth Quarter	17.80	3.80	17.30	3.80	4.38	3.10	.	.	8.21	3.00	.	.	2.40	3.00
Mean	20.00	2.10	17.92	2.00	6.76	2.00	4.35	2.40	10.70	1.80	9.68	3.60	3.83	1.60

(CONTINUED)

APPENDIX J
Gross Alpha and Gross Beta Activity Data Summary

Well No. Location	GW-159		GW-160		GW-161		GW-165		GW-166		GW-173		GW-174	
	CRSDB		LIII		LIII		CRDT		CRDT		CRSP		CRSP	
	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)
GROSS ALPHA	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	3.78	1.50	2.24	1.50	2.24	1.50	1.17	1.30	0.49	1.10	0.99	1.20	4.17	1.70
Second Quarter	2.87	1.60	1.97	1.40	0.68	1.20	3.03	1.60	3.01	1.60	0.87	1.30	2.17	1.50
Third Quarter	1.29	1.50	2.29	1.70	1.88	1.60	.	.	.	.	1.80	1.30	3.28	1.50
Fourth Quarter	2.18	2.00	4.71	2.40	2.30	2.00	.	.	.	.	2.65	1.40	3.58	1.60
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mean	2.53	0.80	2.80	0.90	1.77	0.80	2.10	1.00	1.75	1.00	1.58	0.70	3.30	0.80
GROSS BETA	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	11.25	3.60	0.68	3.20	0.68	3.20	4.31	3.50	5.80	3.60	2.00	3.40	7.80	3.70
Second Quarter	11.61	3.80	5.05	3.50	1.88	3.30	3.04	3.40	3.93	3.50	2.28	3.40	8.04	3.70
Third Quarter	5.43	3.50	4.49	3.40	3.06	3.30	.	.	.	.	-0.10	3.30	4.28	3.50
Fourth Quarter	5.31	3.00	6.48	3.00	1.24	2.70	.	.	.	.	4.35	3.50	5.69	3.50
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mean	8.40	1.70	4.17	1.60	1.51	1.60	3.67	2.48	4.87	2.50	2.13	1.70	6.45	1.80

(CONTINUED)

APPENDIX J
Gross Alpha and Gross Beta Activity Data Summary

Well No. Location	GW-175		GW-176		GW-177		GW-178		GW-179		GW-180		GW-181	
	CRSP		CRSP		CRSP		CRSP		CRSP		CRSP		CRSP	
	pCi/L	CR(+/-)	pCi/L	CR(+/-)	pCi/L	CR(+/-)	pCi/L	CR(+/-)	pCi/L	CR(+/-)	pCi/L	CR(+/-)	pCi/L	CR(+/-)
GROSS ALPHA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
First Quarter	2.84	1.50	2.24	1.40	2.61	1.50	0.51	2.80	3.61	1.70	1.34	1.30	1.22	1.40
Second Quarter	1.10	1.40	2.92	1.50	1.31	1.40	0.53	2.80	3.67	1.60	2.55	1.40	2.07	1.50
Third Quarter	2.79	1.40	2.02	1.30	1.81	1.30	4.52	4.60	1.70	1.30	2.80	1.40	1.30	1.40
Fourth Quarter	4.39	1.70	0.63	1.80	3.56	1.50	8.40	5.30	1.10	1.90	2.50	2.10	2.26	1.30
Mean	2.78	0.80	1.95	0.80	2.32	0.70	3.49	2.00	2.52	0.80	2.30	0.80	1.73	0.70
GROSS BETA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
First Quarter	0.70	3.40	5.32	3.60	10.05	3.80	-1.43	7.10	11.16	3.00	-0.55	3.30	3.63	3.50
Second Quarter	2.55	3.50	1.33	3.50	4.37	3.60	-0.07	6.20	9.25	3.90	0.17	3.40	2.44	3.50
Third Quarter	2.00	3.40	2.81	3.40	4.17	3.50	-0.61	13.10	7.43	3.60	0.64	3.30	1.36	3.20
Fourth Quarter	1.20	3.30	3.07	2.90	3.55	3.40	5.09	13.00	4.57	3.00	2.66	2.90	5.22	3.50
Mean	1.63	1.70	3.13	1.70	5.53	1.80	0.95	5.20	8.10	1.80	0.73	1.60	3.16	1.70

(CONTINUED)

APPENDIX J
Gross Alpha and Gross Beta Activity Data Summary

Well No. Location	GW-184		GW-186		GW-187		GW-188		GW-203		GW-205		GW-217	
	RQ		RQ		RQ		RQ		UNCS		UNCS		LIV	
	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)
GROSS ALPHA	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	.	.	.	.	.	.	.	.	1.16	1.50	1.24	1.50	1.74	1.30
Second Quarter	.	.	.	.	.	.	.	.	1.28	1.00	2.55	1.30	2.57	1.30
Third Quarter	0.88	1.20	0.63	1.10	2.64	1.50	4.11	1.70	3.10	1.60	2.31	1.50	1.09	1.20
Fourth Quarter	0.32	1.60	0.00	1.80	2.33	2.10	2.62	2.00	1.49	1.80	2.28	2.00	5.61	1.90
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mean	0.60	1.00	0.31	1.10	2.48	1.30	3.36	1.30	1.78	0.80	2.09	0.80	2.75	0.70
GROSS BETA	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	.	.	.	.	.	.	.	.	0.20	3.60	-0.61	3.60	5.72	3.60
Second Quarter	.	.	.	.	.	.	.	.	2.34	3.20	-1.02	3.00	4.71	3.20
Third Quarter	2.13	3.30	2.47	3.40	3.72	3.40	10.49	4.20	0.69	3.50	-0.92	3.40	3.30	3.30
Fourth Quarter	-0.42	2.80	1.28	3.00	3.72	3.10	5.85	3.20	6.84	2.90	4.98	2.00	15.50	3.70
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mean	0.86	2.20	1.87	2.30	3.72	2.30	12.17	2.60	2.52	1.70	0.61	1.60	7.31	1.70

(CONTINUED)

APPENDIX J
Gross Alpha and Gross Beta Activity Data Summary

Well No. Location	GW-221		GW-231		GW-241		GW-292		GW-293		GW-294		GW-295	
	UNCS		KNO		CRSDB		ECRNP		ECRNP		ECRNP		LIII	
	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)
GROSS ALPHA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
First Quarter	0.39	1.40	3.40	2.60	1.34	1.10	0.99	1.30	2.31	1.50	2.97	1.60	1.34	1.50
Second Quarter	2.06	1.30	-	-	1.61	1.40	0.62	1.40	1.65	1.60	1.00	1.50	5.47	1.90
Third Quarter	0.04	1.20	3.09	2.70	1.00	1.40	1.00	1.40	1.63	1.30	0.55	1.10	34.50	4.10
Fourth Quarter	1.19	1.80	-0.31	3.00	11.90	3.00	2.40	1.70	3.30	1.00	1.60	1.50	83.40	5.40
Mean	1.12	0.70	2.06	1.60	3.96	0.90	1.47	0.70	2.24	0.80	1.55	0.70	31.18	2.40
GROSS BETA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
First Quarter	-0.61	3.60	4.26	6.80	4.05	3.30	0.10	3.20	6.26	3.50	5.64	3.50	25.05	4.50
Second Quarter	4.73	3.40	-	-	4.21	3.50	0.50	3.20	2.49	3.30	1.47	3.30	10.21	3.00
Third Quarter	0.92	3.10	5.44	6.30	5.94	3.50	1.33	3.20	4.21	3.40	3.28	3.40	142.00	7.90
Fourth Quarter	7.70	3.00	-1.55	5.60	13.30	3.20	2.40	2.70	2.57	2.70	1.99	2.70	98.90	6.50
Mean	3.18	1.60	2.72	3.60	6.87	1.70	1.00	1.50	3.00	1.60	3.09	1.60	69.24	3.00

(CONTINUED)

APPENDIX J
Gross Alpha and Gross Beta Activity Data Summary

Well No. Location	GW-296		GW-298		GW-299		GW-300		GW-301		GW-302		GW-303	
	ECRWP		LIII		LIII		LIII		LIII		UNCS		CRSDB	
	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)
GROSS ALPHA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
First Quarter	2.42	1.50	1.43	1.50	1.34	1.50	0.07	1.10	2.33	1.60	-0.82	1.20	5.40	1.70
Second Quarter	0.01	1.30	3.57	1.70	1.51	1.40	1.35	1.30	1.93	1.40	4.76	1.60	2.25	1.50
Third Quarter	2.74	1.50	1.23	1.50	-0.05	1.30	-0.03	1.30	-0.02	1.30	0.43	1.10	4.34	1.90
Fourth Quarter	0.15	1.20	1.21	1.80	0.00	1.60	3.47	2.20	1.67	1.90	1.61	1.50	2.38	2.30
Mean	1.33	0.70	1.86	0.80	0.70	0.70	1.21	0.80	1.48	0.80	1.49	0.70	3.59	0.90
GROSS BETA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
First Quarter	4.06	3.40	4.05	3.50	2.33	3.30	2.34	3.30	4.17	3.40	-1.35	3.50	16.33	3.90
Second Quarter	-1.20	3.10	4.26	3.40	3.84	3.40	1.85	3.30	2.55	3.30	6.48	3.50	6.23	3.60
Third Quarter	0.61	3.20	4.11	3.40	3.11	3.30	-0.04	3.20	1.95	3.30	0.35	3.50	9.94	3.70
Fourth Quarter	0.50	2.60	4.87	2.90	2.80	2.80	4.21	2.90	3.39	2.80	3.29	3.10	7.13	3.30
Mean	0.99	1.50	4.52	1.70	3.02	1.60	2.09	1.60	3.01	1.60	2.19	1.70	9.91	1.80

(CONTINUED)

APPENDIX J
Gross Alpha and Gross Beta Activity Data Summary

Well No. Location	GW-304		GW-305		GW-321		GW-322		GW-339		GW-511		GW-512	
	CRSDB		LIV		ADB		CRSP		UMCS		CRSP		ADB	
	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)
GROSS ALPHA	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	1.96	1.20	0.88	1.10	3.10	1.40	1.21	1.30	0.50	1.40	0.53	1.30	0.02	1.20
Second Quarter	1.61	1.40	2.11	1.20	1.73	1.40	1.65	1.30	1.40	1.00	-0.20	1.20	1.80	1.50
Third Quarter	1.76	1.60	0.50	1.10	1.03	1.30	2.73	1.50	1.86	1.40	1.78	1.50	1.35	1.30
Fourth Quarter	3.64	2.20	5.53	1.90	1.76	1.80	4.61	2.10	0.74	1.30	1.39	1.20	2.42	2.00
Mean	2.24	0.80	2.25	0.70	1.90	0.70	2.55	0.80	1.12	0.60	0.87	0.70	1.40	0.80
GROSS BETA	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	3.97	3.30	0.36	3.30	4.01	3.20	2.76	3.50	-1.55	3.50	4.13	3.50	6.94	3.50
Second Quarter	5.84	3.50	3.41	3.20	-1.13	3.30	-0.20	3.40	2.61	3.20	4.81	3.60	1.96	3.40
Third Quarter	4.35	3.40	2.18	3.20	5.18	3.20	3.98	3.40	2.50	3.60	4.22	3.40	5.11	3.20
Fourth Quarter	4.83	3.10	10.60	3.40	0.90	2.90	4.83	2.80	4.00	3.20	7.55	3.60	2.06	3.00
Mean	4.75	1.70	4.14	1.60	2.24	1.60	2.84	1.60	1.89	1.70	5.18	1.80	4.02	1.60

(CONTINUED)

APPENDIX J
Gross Alpha and Gross Beta Activity Data Summary

Well No. Location	GW-513		GW-514		GW-521		GW-522		GW-539		GW-540		GW-541	
	ADB		ADB		LIV		LIV		LIIX		LIIX		LIIX	
	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)
GROSS ALPHA	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	0.14	1.30	2.59	1.30	1.04	1.10	2.40	1.40	1.64	1.60	0.14	1.30	6.78	2.10
Second Quarter	0.65	1.30	0.69	1.30	0.04	0.80	1.04	1.00	2.28	1.50	2.21	1.50	1.04	1.30
Third Quarter	0.37	1.20	0.37	1.20	1.67	1.30	0.80	1.20	1.40	1.20	2.34	1.40	2.79	1.40
Fourth Quarter	0.75	1.70	0.75	1.70	1.93	1.20	3.64	1.50	3.09	1.90	-0.17	1.20	3.32	1.90
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mean	0.48	0.70	1.10	0.70	1.17	0.60	1.97	0.60	2.10	0.80	1.13	0.70	3.48	0.90
GROSS BETA	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	3.85	3.30	3.64	3.20	1.15	3.20	0.37	3.30	3.09	3.50	3.06	3.20	8.09	3.50
Second Quarter	0.66	3.40	4.23	3.50	3.42	3.20	1.95	3.10	8.82	3.60	3.24	3.20	2.07	3.20
Third Quarter	2.14	3.00	2.43	3.00	0.06	3.10	1.28	3.10	3.77	3.20	0.37	3.00	4.24	3.20
Fourth Quarter	1.40	2.90	1.15	2.90	-1.44	3.10	1.07	3.30	5.54	2.90	2.27	2.70	26.10	3.90
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mean	2.01	1.60	2.86	1.60	0.80	1.60	1.17	1.60	5.30	1.70	2.23	1.50	10.12	1.70

(CONTINUED)

APPENDIX J
Gross Alpha and Gross Beta Activity Data Summary

Well No.	GW-542		GW-543		GW-544		GW-545		GW-546		GW-607		GW-608	
Location	LIIX		LIIX		LIIX		LIIX		LIIX		CRSP		CRSP	
	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)
GROSS ALPHA	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	2.16	1.60	0.59	1.30	1.51	1.50	1.52	1.50	1.85	1.50	0.10	1.30	1.07	1.40
Second Quarter	0.04	1.10	0.48	0.80	1.66	1.10	1.21	1.00	0.88	0.90	1.20	1.50	0.65	1.40
Third Quarter	1.84	1.30	0.50	1.00	1.83	1.30	35.30	4.10	6.12	1.80	4.00	1.60	3.56	1.60
Fourth Quarter	1.65	1.60	-0.62	0.99	1.46	1.60	-0.51	1.10	3.62	2.00	0.94	1.10	3.18	1.50
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mean	1.42	0.70	0.24	0.50	1.61	0.70	9.38	1.20	3.12	0.80	1.56	0.70	2.11	0.70
GROSS BETA	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	4.65	3.30	3.56	3.30	3.39	3.30	18.99	4.10	3.65	3.30	4.62	3.50	-0.43	3.20
Second Quarter	5.63	3.40	2.68	3.20	4.38	3.30	12.20	3.80	0.57	3.10	6.48	3.50	3.91	3.40
Third Quarter	4.99	3.20	4.54	3.20	4.16	3.20	85.80	6.40	11.20	3.60	5.72	3.60	0.27	3.30
Fourth Quarter	3.91	2.80	3.79	2.70	1.21	2.60	15.40	3.40	5.81	2.90	5.12	3.50	6.15	3.60
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mean	4.79	1.60	3.64	1.60	3.28	1.60	33.10	2.30	5.31	1.60	5.48	1.80	2.47	1.70

(CONTINUED)

APPENDIX J
Gross Alpha and Gross Beta Activity Data Summary

Well No.	GW-609		GW-610		GW-611		GW-612		GW-709		GW-731		GW-732	
Location	CRSP		CRSP		CRSP		CRSP		LII		CRSDB		CRSDB	
	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)
GROSS ALPHA	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	2.06	1.50	0.99	1.40	2.39	1.50	0.96	1.30	.	.	.	.	.	.
Second Quarter	1.69	1.60	1.41	1.40	1.25	1.40	2.37	1.40	1.89	1.50	.	.	.	.
Third Quarter	2.06	1.30	1.50	1.20	1.99	1.30	1.98	1.40	2.42	1.40	1.17	1.30	0.32	1.20
Fourth Quarter	1.67	1.90	4.48	1.70	1.78	1.30	1.52	1.90	25.60	5.10	3.49	1.80	2.54	1.80
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mean	1.87	0.80	2.09	0.70	1.85	0.70	1.71	0.80	9.97	1.80	2.33	1.10	1.43	1.10
GROSS BETA	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	-2.83	3.30	2.17	3.40	1.93	3.40	3.46	3.40	.	.	.	.	.	.
Second Quarter	0.92	3.10	1.27	3.40	3.13	3.50	-0.20	3.40	0.26	3.40	.	.	.	.
Third Quarter	0.49	3.30	-0.10	3.30	-0.28	3.30	2.48	3.30	2.69	3.40	18.10	3.80	4.71	3.10
Fourth Quarter	3.88	2.90	3.55	3.40	-0.90	3.20	3.39	2.90	20.40	4.00	11.80	3.10	6.10	2.90
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mean	0.62	1.60	1.72	1.70	0.97	1.70	2.28	1.60	7.78	2.10	14.95	2.50	5.40	2.10

**ALPH-EMITTING RADIONUCLIDE
DATA SUMMARY**

APPENDIX J
Alpha-Emitting Radionuclide Data Summary

Well No.	1090		GW-141		GW-159		GW-160		GW-161		GW-178		GW-203	
Location	UNCS		LIV		CRSDB		LIII		LIII		CRSP		UNCS	
	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)
Uranium 234	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	.	.	0.00	1.50	0.48	1.60	0.41	0.80	0.00	1.40	0.44	0.90	0.43	0.90
Second Quarter	.	.	-0.46	0.90	0.87	1.20	0.41	0.80	2.04	1.80	0.43	0.90	0.44	1.50
Third Quarter	0.00	1.80	.	.	.	.	.	.	.	.	.	.	0.44	1.20
Fourth Quarter	1.37	2.00	.	.	.	.	.	.	.	.	.	.	-0.43	0.87
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mean	0.69	1.30	-0.23	0.90	0.68	1.00	0.41	0.60	1.02	1.10	0.43	0.60	0.22	0.60
Uranium 235	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	.	.	0.00	1.50	0.48	1.00	0.00	1.40	0.00	1.40	0.00	1.50	0.43	0.90
Second Quarter	.	.	0.00	1.60	0.00	1.50	0.00	1.40	-0.41	0.80	0.00	1.50	-0.44	0.90
Third Quarter	0.00	1.80	.	.	.	.	.	.	.	.	.	.	0.00	1.70
Fourth Quarter	0.00	1.60	.	.	.	.	.	.	.	.	.	.	-0.87	1.20
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mean	0.00	1.20	0.00	1.10	0.24	0.90	0.00	1.00	-0.20	0.80	0.00	1.10	-0.22	0.60
Uranium 238	.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	.	.	0.00	1.50	0.95	1.30	0.82	1.20	0.00	1.40	0.44	0.90	0.00	1.50
Second Quarter	.	.	0.00	1.60	-0.44	1.50	-0.41	1.40	0.41	0.80	0.00	1.50	0.00	1.50
Third Quarter	-0.46	0.90	.	.	.	.	.	.	.	.	.	.	-0.44	0.90
Fourth Quarter	-0.46	0.91	.	.	.	.	.	.	.	.	.	.	0.00	1.50
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mean	-0.46	0.60	0.00	1.10	0.26	1.00	0.21	0.90	0.20	0.80	0.22	0.90	-0.11	0.70

(CONTINUED)

APPENDIX J
Alpha-Emitting Radionuclide Data Summary

Well No. Location	GW-205		GW-217		GW-221		GW-302		GW-305		GW-339		GW-521	
	UNCS		LIV		UNCS		UNCS		LIV		UNCS		LIV	
	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)	pCi/L	CE(+/-)
Uranium 234	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	.	.	0.44	0.90	.	.	.	.	1.22	1.40	.	.	0.00	1.50
Second Quarter	.	.	0.00	1.80	.	.	.	.	0.00	1.70	.	.	-0.42	0.90
Third Quarter	2.37	2.30	.	.	0.48	1.00	0.87	1.50	.	.	0.00	1.70	.	.
Fourth Quarter	0.46	1.60	.	.	14.70	5.20	1.42	2.10	.	.	0.00	1.70	.	.
Mean	1.41	1.40	0.22	1.00	7.59	2.60	1.14	1.30	0.61	1.10	0.00	1.20	-0.21	0.90
Uranium 235	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	.	.	0.00	1.50	.	.	.	.	0.00	1.40	.	.	0.43	0.90
Second Quarter	.	.	0.00	1.60	.	.	.	.	0.00	1.50	.	.	0.00	1.40
Third Quarter	0.00	1.90	.	.	0.00	1.60	0.00	1.70	.	.	0.00	1.70	.	.
Fourth Quarter	-0.91	1.30	.	.	1.73	2.40	0.00	1.60	.	.	0.44	0.87	.	.
Mean	-0.46	1.20	0.00	1.10	0.86	1.40	0.00	1.20	0.00	1.00	0.22	1.00	0.22	0.80
Uranium 238	.	.	.	.	.	.	.	.	.	.	.	.	.	.
First Quarter	.	.	0.44	0.90	.	.	.	.	0.81	1.20	.	.	0.43	0.90
Second Quarter	.	.	0.00	1.60	.	.	.	.	0.00	1.50	.	.	0.00	1.40
Third Quarter	-0.48	0.90	.	.	0.48	1.00	-0.43	0.90	.	.	0.43	1.50	.	.
Fourth Quarter	0.00	1.60	.	.	19.50	5.80	0.47	1.60	.	.	-0.44	0.87	.	.
Mean	-0.24	0.90	0.22	0.90	9.99	2.90	0.02	0.90	0.40	1.00	-0.00	0.90	0.22	0.80

(CONTINUED)

APPENDIX J
Alpha-Emitting Radionuclide Data Summary

Well No. . Location	GW-522	
	LIV	
	pCi/L	CE(+/-)
Uranium 234	.	.
.	.	.
First Quarter	0.83	1.20
Second Quarter	-0.43	0.90
Third Quarter	.	.
Fourth Quarter	.	.
.	.	.
Mean	0.20	0.80
Uranium 235	.	.
.	.	.
First Quarter	0.42	0.80
Second Quarter	0.00	1.50
Third Quarter	.	.
Fourth Quarter	.	.
.	.	.
Mean	0.21	0.90
Uranium 238	.	.
.	.	.
First Quarter	0.42	0.80
Second Quarter	1.30	1.50
Third Quarter	.	.
Fourth Quarter	.	.
.	.	.
Mean	0.86	0.90

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