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FINAL

CALENDAR YEAR 1995 GROUNDWATER QUALITY REPORT
FOR THE CHESTNUT RIDGE HYDROGEOLOGIC REGIME,
OAK RIDGE Y-12 PLANT, OAK RIDGE, TENNESSEE

1995 Groundwater Quality Data and Calculated Rate
of Contaminant Migration

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ACRONYMS AND ABBREVIATIONS

ASO	Analytical Services Organization
ARAR	appropriate, relevant, and applicable requirement
BCV	Bear Creek Valley
bgs	below ground surface
CA	Characterization Area
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CY	calendar year
DOE	U.S. Department of Energy
EP	Extraction Procedure (Toxicity test)
EPA	U.S. Environmental Protection Agency
ft	feet
ft/d	feet per day
ft/yr	feet per year
FFA	Federal Facility Agreement
gpm	gallons per minute
GWPP	Groundwater Protection Program
GWQR	groundwater quality report
HSEA	Y-12 Plant Health, Safety, Environment, and Accountability (Organization)
HSWA	Hazardous and Solid Waste Amendments
mg/L	milligrams per liter
ORNL	Oak Ridge National Laboratory
ORR	Oak Ridge Reservation
OU	Operable Unit
PCPA	Post-Closure Permit Application
QA/QC	quality assurance/quality control
RCRA	Resource Conservation and Recovery Act
RI/FS	remedial investigation/feasibility study
RFI	RCRA Facility Investigation
ROD	Record of Decision
SAP	Sampling and Analysis Plan
SESD	Sampling and Environmental Support Department
SWDF	Solid Waste Disposal Facility (non-RCRA)
SWMU	solid waste management unit (RCRA)
TDEC	Tennessee Department of Environment and Conservation
TDS	total dissolved solids
TSD	Treatment, Storage, and Disposal (Unit)
VOC	volatile organic compound

1.0 INTRODUCTION

This annual groundwater quality report (GWQR) contains groundwater quality data obtained during the 1995 calendar year (CY) at several hazardous and nonhazardous waste management facilities associated with the U.S. Department of Energy (DOE) Y-12 Plant located on the DOE Oak Ridge Reservation (ORR) southeast of Oak Ridge, Tennessee (Figure 1). These sites are located south of the Y-12 Plant in the Chestnut Ridge Hydrogeologic Regime (Chestnut Ridge Regime), which is one of three regimes defined for the purposes of groundwater quality monitoring at the Y-12 Plant. The Environmental Management Department of the Y-12 Plant Health, Safety, Environment, and Accountability (HSEA) Organization manages the groundwater monitoring activities in each regime as part of the Y-12 Plant Groundwater Protection Program (GWPP). The U.S. Environmental Protection Agency (EPA) identification number for the Y-12 Plant is TN3 89 009 0001.

The GWQR for the Chestnut Ridge Regime is completed in two-parts: Part 1 (this report) containing the groundwater quality data and Part 2 containing a detailed evaluation of the data. The primary purpose of this report is to serve as a reference containing the groundwater quality data obtained each year under the lead of the Y-12 Plant GWPP. Because it contains information needed to comply with Resource Conservation and Recovery Act (RCRA) interim status assessment monitoring and post-closure reporting requirements, this report is submitted to the Tennessee Department of Environment and Conservation (TDEC) by the RCRA reporting deadline (March 1 of the following CY). Part 2 of the annual groundwater report, to be issued mid-year, will contain a regime-wide evaluation of groundwater quality, present the findings and status of ongoing hydrogeologic studies, describe changes in monitoring priorities, and present planned modifications to the groundwater sampling and analysis activities.

2.0 BACKGROUND INFORMATION

The Chestnut Ridge Regime is located south of the Y-12 Plant, and is flanked to the north by Bear Creek Valley (BCV) and to the south by Bethel Valley. The regime encompasses the portion of Chestnut Ridge extending from Scarboro Road east of the Y-12 Plant to an unnamed drainage basin on the ridge located southwest of the western end of the Y-12 Plant (Figure 2). Groundwater quality monitoring has been conducted at sites within the Chestnut Ridge Regime since the late 1970s. Monitoring programs have evolved in response to changing regulatory requirements and evaluation of monitoring data.

Groundwater quality monitoring during CY 1995 in the Chestnut Ridge Regime was performed at three classes of waste management facilities:

- sites subject to regulation under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA);
- hazardous waste treatment, storage, and disposal (TSD) units subject to regulation under RCRA as well as CERCLA; and
- nonhazardous solid waste disposal facilities (SWDFs).

In addition, groundwater monitoring was conducted as a best management practice at one temporary waste storage facility that does not fall under any of the three regulatory classes. This facility (Chestnut Ridge Borrow Area Waste Pile) is classified as a Study Area for which future characterization and disposition under CERCLA are required. A brief description of each of the sites in the regime, including waste inventories and disposal histories, and a discussion of the regulatory status and groundwater monitoring history of each site are provided in the following sections.

2.1 Regulatory Framework

In 1984, the EPA and the TDEC determined that a number of the waste management units at the Y-12 Plant were either hazardous waste TSD units or solid waste management units (SWMUs) subject to regulation under Section 3004(u) of RCRA (Welch *et al.* 1987). The RCRA TSDs were granted RCRA interim status until operating or post-closure permits were obtained by the DOE. Accordingly interim status assessment monitoring or detection monitoring was initiated beginning in CY 1986. The process to prepare RCRA post-closure permit applications (PCPAs) for these sites was initiated. The DOE began submittal of PCPAs to TDEC in CY 1987. At designated SWMUs, RCRA Facility Investigations (RFIs) were initiated, as required under the

Hazardous and Solid Waste Amendments (HSWA) permit issued for the ORR by the EPA in CY 1986.

In November 1989, the ORR was added to the National Priority List. In January 1992, the DOE, the EPA, and the TDEC negotiated a Federal Facility Agreement (FFA) regarding environmental restoration at the ORR under CERCLA. This agreement superseded the HSWA permit and CERCLA became the primary regulatory driver for several RCRA TSD units and RCRA-regulated SWMUs at the Y-12 Plant. As such, the DOE appealed the applicability of RCRA post-closure care, corrective action, and groundwater monitoring requirements to CERCLA Operable Units (OUs).

In April 1993, the DOE, the TDEC, and Lockheed Martin Energy Systems, Inc. (formerly Martin Marietta Energy Systems, Inc.) signed an Agreed Order for the S-3 Site RCRA post-closure permit, thereby resolving the appeal and formally agreeing to proceed with CERCLA as a lead regulatory program with RCRA as an appropriate, relevant, and applicable requirement (ARAR). Under this agreement, RCRA will be applied as an ARAR to the extent that post-closure maintenance and care of former TSD facilities will be conducted in compliance with the terms of RCRA post-closure permits. Groundwater monitoring is to be integrated with the CERCLA remedial investigation/feasibility study (RI/FS) programs with RCRA corrective action deferred to CERCLA. Groundwater monitoring data reporting will comply with RCRA post-closure permit conditions as well as RI/FS requirements. Per agreement with TDEC, three RCRA post-closure permits will be issued for the Y-12 Plant encompassing each of the hydrogeologic regimes. Specific requirements for interim status sites within each regime will be incorporated into the permits as separate modifications.

Efforts were initiated early in CY 1994 by DOE and Energy Systems to modify the FFA strategy for RI/FS implementation. The FFA originally defined two types of CERCLA OUs for which an RI/FS would be performed: (1) source control OUs comprised of individual or groups of waste management sites, and (2) integrator OUs that encompass groundwater and surface water, independent of the source control OUs that may contribute to the contamination of these media (U.S. Department of Energy 1994a). However, as the RIs for OUs within BCV progressed, it became increasingly evident that separation of source control and integrator OUs was not the most technically feasible approach to implementation of the RI/FS process. An agreement was reached among regulatory agencies and the DOE to proceed, where feasible, with an integrated RI/FS approach. In the integrated approach, source and integrator OUs are addressed concurrently in a Characterization Area (CA) defined by watershed boundaries, and specific sites or locations of highest risk or concern are targeted for focused studies. Additionally, efforts were initiated to develop a conceptual model of groundwater flow and contaminant migration that is tailored to the specific characteristics of the groundwater flow system in BCV.

Because there is no historical evidence of intermingling plumes from Chestnut Ridge Regime sites, no integrating CA has been established. Groundwater and surface water actions are included in the RI/FS for each source OU. Four source OUs are currently listed in the FFA (Table 1): one former RCRA TSD unit (the Chestnut Ridge Security Pits [Security Pits]) and three former RCRA SWMUs (Ash Disposal Basin, United Nuclear Corporation Site, and Rogers Quarry). Two additional former RCRA TSD units (Kerr Hollow Quarry and the Chestnut Ridge Sediment Disposal Basin [Sediment Disposal Basin]) are listed as lower priority study areas because they have remained in interim status detection monitoring since 1986 and no releases of contaminants to the environment have been confirmed.

The RCRA PCPAs for all TSD units in the Chestnut Ridge Regime have been submitted to the TDEC. The post-closure permit for the Sediment Disposal Basin was issued September 18, 1995 and specified continued detection monitoring. The RCRA PCPAs for the Security Pits and the Kerr Hollow Quarry proposed corrective action monitoring and continued detection monitoring, respectively. Kerr Hollow Quarry and the Sediment Disposal Basin will be managed primarily under the terms of the RCRA post-closure permits because they are not OUs. In addition, a CERCLA Record of Decision (ROD) was issued for Kerr Hollow Quarry in September 1995 that defined administrative controls for the site following waste removal actions. As specified under the RCRA post-closure permits, if detection monitoring at these two facilities confirms a future release of contamination, the priority of the site will be re-evaluated under CERCLA and potentially elevated to OU status and an RI/FS initiated.

In addition to CERCLA/RCRA regulated units, five nonhazardous SWDFs (landfills) are currently subject to groundwater monitoring under provisions of TDEC Rule 1200-1-07. Baseline groundwater quality monitoring has been completed for all of these facilities and all are currently under semiannual detection monitoring in accordance with each facility's operating class and permits. Details regarding the monitoring histories for these facilities are included with the facility descriptions.

2.2 CERCLA Operable Units

2.2.1 Chestnut Ridge Security Pits

The 1992 FFA designated the Security Pits as Chestnut Ridge OU 01. The site is also regulated as a TSD under RCRA. An RI work plan for this OU was prepared and was submitted for review by the EPA (Region IV) and the TDEC in CY 1993 (U.S. Department of Energy 1993a). Located on the crest of Chestnut Ridge, south of the central portion of the Y-12 Plant (Figure 3), the Security Pits were operated between 1973 and 1988. When in operation, the site

was a series of trenches used for the disposal of hazardous and nonhazardous 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 operated simultaneously to allow for the segregation of wastes in separate cells. 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 Security Pits contain an estimated 4,639 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. 1989a).

Disposal of hazardous waste in the Security Pits ceased in December 1984 and disposal of nonhazardous waste ceased on November 8, 1988. A low-permeability cap was constructed over the disposal trenches in 1989 in accordance with a RCRA closure plan (Martin Marietta Energy Systems, Inc. 1988a). Also in 1989, a RCRA PCPA for the Security Pits was initially submitted to the TDEC. Pertinent aspects of the PCPA for the Security Pits were modified in response to the April 1993 Agreed Order and a revised PCPA was re-submitted to the TDEC in November 1994 (Martin Marietta Energy Systems, Inc. 1994a).

Groundwater monitoring at the Security Pits began with one well (well 1080) in CY 1982. Additional monitoring wells were installed at the site in CY 1985 and were periodically sampled as part of the Y-12 Plant historical and characterization monitoring programs. The site was granted RCRA interim status in November 1985 and RCRA detection monitoring was initiated in January 1986 (Bailey, personal communication 1989). The detection and characterization monitoring programs confirmed the presence of groundwater contamination at the site. Assessment monitoring in accordance with RCRA regulations for interim status TSD facilities began in January 1988 and has continued to the present. In addition to monitoring in support of the RI, assessment monitoring at the Security Pits will continue pending final administrative disposition of the PCPA for the site, whereupon permit-specified monitoring requirements will be implemented.

2.2.2 Ash Disposal Basin

The Ash Disposal Basin, also known as the Filled Coal Ash Pond, is located 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 Ash Disposal Basin until it was filled in July 1967 (Battelle Columbus Division 1988). Since then, the fly-ash slurry by-passed the Ash Disposal Basin through an emergency spillway on the eastern abutment

and discharged directly into McCoy Branch, which was diverted to direct the slurry into Rogers Quarry (King *et al.* 1989). Ash disposal ceased in July 1993 per agreement with the TDEC.

Groundwater monitoring at the Ash Disposal Basin began in 1986 with the installation of several monitoring wells that were sampled as part of the Y-12 Plant characterization monitoring program. In 1987, the Ash Disposal Basin was identified as a RCRA SWMU (Welch *et al.* 1987), and wells at the site were subsequently sampled for the purposes of a site-specific RFI. In CY 1990, RFI monitoring activities at the site were incorporated into the Security Pits quarterly RCRA assessment monitoring schedule, as recommended in the *Comprehensive Groundwater Monitoring Plan for the Department of Energy Y-12 Plant Oak Ridge, Tennessee* (Geraghty & Miller, Inc. 1990a).

The FFA designated the Ash Disposal Basin as Chestnut Ridge OU2. The RI work plan for this OU (U.S. Department of Energy 1993b) was approved in early 1993 by the EPA and TDEC. Field activities for the RI were completed in June 1993 and included one round of groundwater sampling from wells at the site. An RI report was issued in August 1994 (U.S. Department of Energy 1994b), followed by an FS in January 1995 (U.S. Department of Energy 1995). Preparation of a proposed plan for public review and comment is in progress.

2.2.3 United Nuclear Corporation Site

The United Nuclear Corporation Site (Chestnut Ridge OU3) lies on the crest of Chestnut Ridge southeast of the west end of the Y-12 Plant (Figure 3). The site was excavated to a depth of about 32 ft and was used to landfill 11,000 drums (55-gallon) of sludge fixed in cement, 18,000 drums of contaminated soil, and 288 boxes of contaminated process and demolition materials (U.S. Department of Energy 1993c). The site ceased operations in 1984 (Grutzeck 1987) and was capped and closed in CY 1992 in accordance with an approved CERCLA ROD and a RCRA closure plan (U.S. Department of Energy 1991; Martin Marietta Energy Systems, Inc. 1989b). During site closure (in spring of 1992), approximately 7,000 cubic yards of low-level radiation-contaminated soil and concrete from the Elza Gate Site were placed in the United Nuclear Corporation Site as substitute fill material. The TDEC granted formal approval for the disposal of these materials on January 2, 1992.

Characterization monitoring at the site started in 1985 and continued until 1988, when monitoring in support of an RFI was initiated. In CY 1990, monitoring wells at the site were incorporated into the ongoing quarterly assessment monitoring program for the Security Pits. Semiannual monitoring at the site in accordance with the ROD has continued since closure of the site under the management of the Y-12 Plant Environmental Restoration Surveillance and Maintenance Program (Martin Marietta Energy Systems, Inc. 1992).

2.2.4 Rogers Quarry

Rogers Quarry is located in the southwest portion of the Chestnut Ridge Regime about 3 miles west of Kerr Hollow Quarry (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. Until July 1993, the site received fly-ash slurry from the Y-12 Steam Plant that was discharged into McCoy Branch (King *et al.* 1989); disposal of fly ash in Rogers Quarry ceased per agreement with the TDEC.

Wells were installed at the site in 1985 and sampled as part of the Y-12 Plant characterization monitoring program. Although identified as a RCRA SWMU in 1987 (Welch *et al.* 1987), an RFI was not initiated at Rogers Quarry. Groundwater monitoring since 1987 has continued as a best management practice of the Y-12 Plant GWPP. Monitoring results have not indicated that groundwater contamination is present at the site.

The FFA designated Rogers Quarry as Chestnut Ridge OU4 (Table 1). An RI work plan for this OU was submitted for review by the EPA and TDEC in CY 1993 (U.S. Department of Energy 1993d).

2.3 RCRA Treatment, Storage, or Disposal Facilities

There are three RCRA-regulated hazardous waste TSD facilities in the Chestnut Ridge Regime that are not designated as CERCLA OUs (Table 1): the Sediment Disposal Basin, Kerr Hollow Quarry, and the East Chestnut Ridge Waste Pile. The Sediment Disposal Basin and Kerr Hollow Quarry are closed facilities granted RCRA interim status in 1986. The East Chestnut Ridge Waste Pile is a lined waste pile facility built and operated in accordance with a RCRA operating permit issued by the TDEC in 1987.

2.3.1 Chestnut Ridge Sediment Disposal Basin

The Sediment Disposal Basin 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, a closed surface impoundment located at the east end of the Y-12 Plant. These soils and sediments contained polychlorinated biphenyls, mercury, and uranium. Between November 1987 and April 1988, the Sediment Disposal Basin also received mercury-contaminated soils from several locations in the Y-12 Plant. 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). In 1989, the Sediment Disposal Basin was closed in accordance with a TDEC-approved RCRA closure plan. A revised RCRA PCPA was prepared for the site and submitted to the TDEC in September 1994 (Martin Marietta Energy Systems, Inc. 1994b). A final RCRA post-closure permit was issued by the TDEC on September 18, 1995.

Detection monitoring in accordance with RCRA interim status requirements was conducted at the Sediment Disposal Basin between 1987 and October 1995. No statistical evidence of groundwater contamination has been determined at the site. Upon issuance of the RCRA post-closure permit by TDEC, semiannual post-closure detection monitoring was initiated in accordance with permit provisions. Under post-closure, analyses and statistical evaluations of specific indicator parameters, characteristic of wastes emplaced at the site, will be conducted.

2.3.2 Kerr Hollow Quarry

The Kerr Hollow Quarry is located near the south-central portion of the Chestnut Ridge Regime (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 until November 1988, Kerr Hollow Quarry was used for the disposal of reactive materials from the Y-12 Plant and the Oak Ridge National Laboratory (ORNL).

Between CYs 1990 and 1993, waste materials were removed from the quarry in an effort to obtain certified clean-closure status from the TDEC. These efforts were discontinued in CY 1993 and the site was closed with some of the wastes in place. Because clean closure of the site was not achieved, a RCRA PCPA for the site was prepared and submitted to the TDEC in June 1995. When issued by the TDEC, the post-closure permit for the site is expected to require groundwater monitoring under a RCRA detection monitoring or modified corrective action program.

Detection monitoring in accordance with RCRA interim status requirements has been in progress at the Kerr Hollow Quarry since CY 1988. Required statistical evaluations of the monitoring data have not indicated that groundwater contamination is present at the site. However, estimated low concentrations of tetrachloroethene, carbon tetrachloride, and chloroform have been sporadically detected in samples collected from wells GW-142 and GW-144. All volatile organic compound (VOC) levels have remained below EPA primary drinking water standards and laboratory reporting limits. These VOCs were first detected in samples from the wells in CY 1990. The frequency of occurrence of VOCs increased during CY 1992, then decreased through CY 1993. No VOCs have been detected in well GW-142 since the third quarter of CY 1993. During CY 1994, the only VOC reported for samples from well GW-144 was carbon tetrachloride, detected only in the second quarter sample. In CY 1995, first quarter samples from GW-144 contained low levels of carbon tetrachloride and tetrachloroethene and second quarter samples

contained carbon tetrachloride only. This trend in the VOC detection frequency over time suggests a potential association with corrective action (debris removal and container shredding) at the site that was performed from August 1990 until October 1993. Continued monitoring and trending of these VOC concentrations was proposed in the RCRA PCPA.

Total elemental uranium and/or strontium concentrations reported for unfiltered samples collected from wells GW-142, GW-145, and GW-146 at the site have consistently exceeded concentrations typically reported for other wells in the regime. The lack of associated elevated alpha or beta activity may indicate that the elevated uranium and strontium concentrations reflect natural geochemical variation. Alternately, the elevated concentrations of these metals may reflect potential impacts of waste disposal at the site. Isotopic uranium and strontium analysis conducted in CY 1995 indicates that the elemental uranium and strontium are not radiogenic. Continued isotopic analyses are planned for further evaluation of trends.

2.3.3 East Chestnut Ridge Waste Pile

The East Chestnut Ridge Waste Pile is a lined, hazardous waste management facility constructed in CY 1987 as a storage site for contaminated soils from the Y-12 Plant. The site is located in the eastern portion of the Chestnut Ridge Regime near the Sediment Disposal Basin (Figure 3).

As a lined facility, the East Chestnut Ridge Waste Pile is exempt from groundwater monitoring requirements under RCRA. Nevertheless, groundwater quality monitoring has been performed at the site since CY 1987 as a best management practice of the Y-12 Plant GWPP. Monitoring results have not indicated that groundwater contamination is present at the site.

2.4 Solid Waste Disposal Facilities

There are five permitted nonhazardous waste landfills in the Chestnut Ridge Regime (Table 1): Industrial Landfills II, IV, and V, and Construction/Demolition Landfills VI and VII. These five permitted landfills are classified as either Class II or Class IV facilities, as defined in the most recent (December 1993) *Rules of the Tennessee Department of Environment and Conservation, Division of Solid Waste Management, Chapter 1200-1-7, Solid Waste Processing and Disposal*.

Groundwater monitoring at each of the SWDFs in the Chestnut Ridge Regime is performed in accordance with the requirements for detection monitoring contained in paragraph 1200-1-7-.02(7) of the TDEC solid waste regulations and each facility operating permit. Detection monitoring at some of the permitted SWDFs includes site-specific requirements (i.e., additional

analytical parameters) specified in the operating permit for the site, as requested by the TDEC, or are performed as a best management practice of the Y-12 Plant GWPP.

Detection monitoring was initiated at Industrial Landfill II in CY 1982 and at Industrial Landfill IV in CY 1987. Construction/Demolition Landfills VI and VII and Industrial Landfill V are newly permitted facilities. As required under the TDEC solid waste regulations and permit requirements, quarterly sampling to establish background water quality conditions for detection monitoring purposes was initiated in May 1993 at Construction/Demolition Landfills VI and VII, and Industrial Landfill V. Background monitoring protocols were modified in early 1994 to comply with amendments to TDEC Rule 1200-1-7-.04(7), effective January 1, 1994. All background monitoring was completed and a semiannual detection monitoring program instituted at the end of the first quarter of CY 1995.

2.4.1 Industrial Landfill II

Industrial Landfill II, also known as the Y-12 Plant Centralized Sanitary Landfill II, is a Class II SWDF located near the western end of the Chestnut Ridge Regime (Figure 3). The landfill is used for disposal of combustible and decomposable solid waste and construction spoil material from the Y-12 Plant, the Oak Ridge K-25 Site, 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 is near capacity and partial closure was initiated in CY 1994.

2.4.2 Industrial Landfill IV

Industrial Landfill IV is a Class II SWDF located near the west end of the Chestnut Ridge Regime (Figure 3). This site has been operated since CY 1989 for disposal of nonhazardous, nonradioactive 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.

2.4.3 Construction/Demolition Landfill VI

Construction/Demolition Landfill VI (formerly the Industrial Landfill II Expansion) is a new Class IV SWDF constructed in CY 1993. Located adjacent to Industrial Landfill II (Figure 3), the TDEC issued an operating permit for the site on October 26, 1993. Waste disposal at the site began in April 1994.

2.4.4 Industrial Landfill V and Construction/Demolition Landfill VII

Industrial Landfill V and Construction/Demolition Landfill VII are new Class II and Class IV SWDFs, respectively, located adjacent to each other in the south-central part of the Chestnut Ridge Regime (Figure 3). Both sites are also collectively known as the Steam Plant Ash Disposal Landfill. Permits for each site were issued by the TDEC on April 26, 1993. Construction of Industrial Landfill V was completed in April 1994 and the site is currently in service. Construction of Construction/Demolition Landfill VII was completed December 1994 and the TDEC granted approval to operate the facility in January 1995. Operation of the facility will not commence immediately in consideration of available space in Construction/Demolition Landfill VI.

2.5 Chestnut Ridge Borrow Area Waste Pile

The Chestnut Ridge Borrow Area Waste Pile, also known as the Civic Center Spoil Pile, is located near the eastern end of the Chestnut Ridge Regime (Figure 3). The site was built as a temporary storage area for contaminated 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 organic compounds) believed to have 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. The site is currently listed as a Study Area to be investigated under CERCLA. A soil sampling plan designed to determine if the soils are toxic hazardous wastes based on results of the Toxicity Characteristic Leaching Procedure was submitted to the TDEC for review in September 1992 (Science Applications International Corporation 1992).

The Chestnut Ridge Borrow Area Waste Pile 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 monitoring at the site is conducted as best management practice of the Y-12 Plant GWPP.

3.0 CY 1995 GROUNDWATER PROTECTION PROGRAM

The following sections describe the groundwater sampling activities performed during CY 1995 in the Chestnut Ridge Regime under the lead of the Y-12 Plant GWPP. Included are details regarding the groundwater sampling locations, frequency, and procedures, analytical parameters, quality assurance/quality control (QA/QC) sampling, and data management.

3.1 Sampling Locations

Table 2 provides a detailed listing of CY 1995 monitoring activities by programmatic driver. The table depicts monitoring locations, sampling frequency, and parameters as originally specified in the CY 1995 Sampling and Analysis Plan (SAP) (HSW Environmental Consultants, Inc. 1994). Changes to the SAP during the course of CY 1995 are documented as addenda. Addenda to the SAP are necessary for various reasons, such as changing regulatory requirements at sites or the need to add sites/modify parameters for special projects. Some addenda are issued to document administrative decisions or provide clarification on technical issues. Table 2 provides a summary listing of addenda that modified the CY 1995 monitoring program and the changes specified by each one.

Groundwater monitoring during CY 1995 involved the collection of groundwater samples from 73 monitoring wells and two springs (Table 2). Locations of these sampling points are shown on Figure 4. Data regarding the elevation of the screened or open hole interval for the monitoring wells are summarized in Table 3; detailed well construction information is contained in Appendix C.

Samples were collected to comply with six monitoring programs: (1) RCRA interim status assessment monitoring, (2) RCRA interim status detection monitoring, (3) SWDF detection monitoring, (4) post-closure monitoring in accordance with a CERCLA ROD, (5) RCRA post-closure detection monitoring, and (6) best management practice monitoring. Descriptions of the monitoring well networks used for each program are provided in the following sections.

3.1.1 RCRA Interim Status Assessment Monitoring

Assessment monitoring during CY 1995 involved 10 monitoring wells at the Security Pits (Table 2). Assessment monitoring at the Security Pits has been in progress since CY 1988 and will be discontinued when a RCRA post-closure permit is issued for the site by the TDEC.

3.1.2 RCRA Interim Status Detection Monitoring

Detection monitoring in accordance with the RCRA interim status regulations was performed during CY 1995 at the Sediment Disposal Basin and Kerr Hollow Quarry, and included a total of 15 monitoring wells (Table 2). Four of the eight interim status detection monitoring wells at the Chestnut Ridge Sediment Disposal Basin were dropped during the fourth quarter of CY 1995 upon issuance of the RCRA post-closure permit for the site. As required for interim status detection monitoring, results of selected indicator parameters (e.g., pH and specific conductance) were analyzed to identify any statistically significant changes in groundwater quality. Results of these statistical analyses were submitted to the TDEC in July 1995 (Lockheed Martin Energy Systems, Inc. 1995a and 1995b) and February 1996 (Lockheed Martin Energy Systems, Inc. 1996a and 1996b). The annual RCRA detection monitoring report for these facilities also was submitted in February 1996 (Lockheed Martin Energy Systems, Inc. 1996c).

3.1.3 SWDF Detection/Background Monitoring

As noted in Section 2.4, groundwater monitoring in accordance with the TDEC solid waste management regulations is performed at all of the SWDFs in the regime. In CY 1995, 24 monitoring wells and one spring at the SWDFs were sampled for detection or background monitoring purposes (Table 2).

3.1.4 CERCLA Record of Decision Monitoring

Six monitoring wells were sampled on a semiannual basis in accordance with an approved CERCLA ROD for the United Nuclear Corporation Site. These data are obtained as part of the specified post-closure surveillance and maintenance activities and reported to the Y-12 Plant Environmental Restoration Surveillance and Maintenance Program.

3.1.5 RCRA Post-Closure Detection Monitoring

Detection monitoring was conducted during the fourth quarter of CY 1995 at the Sediment Disposal Basin in accordance with the final RCRA post-closure permit issued September 18, 1995. Four of the previous interim status detection monitoring wells comprise the formal post-closure detection monitoring network (Table 2). Statistical evaluations of indicator parameters were conducted to identify any statistically significant changes in groundwater quality indicative of a release of contamination to groundwater. Results of these evaluations along with other

permit-required data were submitted to the TDEC in February 1996 (Lockheed Martin Energy Systems, Inc. 1996b and 1996c).

3.1.6 Best Management Practice Monitoring

Groundwater samples were collected from 18 monitoring wells and one spring (SCR2.2SP) during CY 1995 as a best management practice of the Y-12 Plant GWPP (Table 2). Best management practice monitoring was performed at five sites where regulation-driven monitoring is not specified. For example, groundwater quality monitoring at the East Chestnut Ridge Waste Pile has been performed since 1987 even though this hazardous waste TSD unit is a lined facility exempt from RCRA groundwater monitoring requirements.

3.2 Sampling Frequency

Groundwater samples were collected during each quarter of CY 1994. First through fourth quarter sampling events were performed January 4 - March 20, April 4 - May 16, July 10 - August 14, and October 6 - November 17, respectively.

As summarized in the following table, 25 of the wells included in the previously described monitoring programs were sampled at a quarterly frequency, and 48 wells and spring CBS-1 were sampled semiannually. Station SCR2.2SP was sampled once during the second quarter.

Site	Sampling Frequency (No. of Wells)	
	Quarterly	Semiannually
Chestnut Ridge Security Pits	10	.
Chestnut Ridge Sediment Disposal Basin	8	.
Kerr Hollow Quarry	7	.
Industrial Landfill II	.	3
Industrial Landfill IV	.	5
Industrial Landfill V	.	5
Construction/Demolition Landfill VI	.	7
Construction/Demolition Landfill VII	.	4
Ash Disposal Basin	.	4
Chestnut Ridge Borrow Area Waste Pile	.	6
East Chestnut Ridge Waste Pile	.	4
Rogers Quarry	.	4
United Nuclear Corporation Site	.	6
Total	25	48

Monitoring wells sampled on a semiannual basis are located at sites for which a quarterly monitoring frequency is not a regulatory, DOE, or best management practice requirement.

Beginning in April 1994, in response to changing requirements, semiannual sampling frequencies for selected wells were phased into the ongoing quarterly monitoring programs. This process continued in CY 1995. Consequently, some wells scheduled for semiannual sampling actually were sampled three times during CY 1995. Semiannual sampling of spring CBS-1 was performed to obtain samples during high and low flow conditions.

3.3 Sample Collection

Groundwater samples were collected by personnel from the Oak Ridge K-25 Site Sampling and Environmental Support Department (SESD). Samples from the spring were collected by personnel from the HSEA Organization. Pre-defined sampling sequences were followed to minimize the potential for cross-contamination (Appendix D). Sampling sequences were constructed to sample 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 present, samples were collected from the farthest upgradient wells first.

Groundwater sampling was performed in accordance with a technical procedure for groundwater sampling (SESD-TP-8204) approved by the Y-12 Plant GWPP Manager. Descriptions of the field methods and procedures used to collect the groundwater samples are contained in *Environmental Surveillance Quality Control Program, Martin Marietta Energy Systems, Inc.* (Martin Marietta Energy Systems, Inc. 1988b). The EPA (Region IV) and the TDEC have approved these methods and procedures (U.S. Environmental Protection Agency and Tennessee Department of Environment and Conservation 1988).

3.4 Quality Assurance/Quality Control Sampling

The QA/QC samples included laboratory blanks, trip blanks, equipment rinsates, field blanks, and duplicate groundwater samples. A total of 165 laboratory blanks, 121 trip blanks, 36 equipment rinsate samples, 4 field blanks, and 34 duplicate samples were analyzed during CY 1995. The total number of each QA/QC sample type analyzed during each quarter fluctuated according to sampling schedules; the ranges are as follows: 22 to 60 laboratory blanks, 20 to 41 trip blanks, 6 to 14 equipment rinsates, 1 field blank, and 5 to 14 duplicate samples.

Laboratory blanks were prepared using deionized water and analyzed along with the groundwater samples. Trip blanks were prepared in the laboratory using deionized water and transported unopened in coolers containing groundwater samples to be analyzed for VOCs. Equipment rinsates were obtained from the deionized water used to decontaminate the groundwater

sampling equipment. Equipment rinsate samples were collected after a sampling team had completed sampling at a site or finished a sampling group (typically no more than 10 wells grouped for sampling and data tracking purposes). If more than one sampling team collected samples at a site or within a sampling group, each team collected an equipment rinsate sample. In addition, if a sampling team used more than one pump at a site or sampling group, an equipment rinsate was collected for each pump. Field blanks were prepared in the field using deionized water and were collected at a frequency of about 10 percent of the sampling groups. Duplicate groundwater samples were collected at a frequency of at least one per sampling group.

3.5 Laboratory Analysis

Groundwater samples collected from each monitoring well and spring were analyzed for the parameters and constituents specified on Table 2. As shown, samples from all of the wells were analyzed for a standard suite of analytes that included:

- principal cations and anions;
- trace metals (a term used to differentiate metals that are typically minor groundwater constituents, such as cobalt and nickel, from metals that are principal ions in groundwater, such as magnesium and sodium);
- VOCs;
- gross alpha activity and gross beta activity;
- total suspended solids, total dissolved solids (TDS), and turbidity;
- field and laboratory determinations of pH and specific conductance; and
- field determinations of temperature, dissolved oxygen, and oxidation-reduction potential.

In addition to the standard suite of analyses, groundwater samples collected from wells at some sites in the Chestnut Ridge Regime were analyzed for other compounds or parameters as required by specific regulations, operating permits, post-closure requirements, or best management practices (Table 2). For example, samples collected from wells at Construction/Demolition Landfill VI were analyzed for additional organic compounds and other required parameters specified by the TDEC solid waste management regulations and operating permit. Samples from other wells, such as those at Kerr Hollow Quarry, were analyzed for isotopic uranium and strontium-89/90 because of elevated elemental uranium and strontium values observed in some wells.

All of the laboratory blanks, trip blanks, field blanks, and equipment rinsate samples were analyzed for the suite of VOCs listed on Table 2. Selected equipment rinsate samples also were analyzed for trace metals (Inductively Coupled Plasma analyses), organic compounds, gross alpha and gross beta activity, and radionuclides. Duplicate groundwater samples were analyzed for the constituents and parameters specified for the well from which the duplicate sample was collected.

Analyses of the groundwater and QA/QC samples were performed by two different laboratories: the K-25 Analytical Services Organization (ASO) and the ORNL ASO. The bulk of the analyses was performed by the K-25 ASO. Only selected radiochemical analyses were performed by the ORNL ASO.

3.6 Data Management

Analytical results obtained by the analytical laboratories were verified and entered into the Y-12 Plant GWPP Groundwater Monitoring Data Base. All monitoring data are subjected to a three-step verification, validation, and evaluation process. Brief descriptions of the data verification/validation/evaluation procedures are as follows; details are provided in the *Y-12 Plant Groundwater Protection Program Groundwater Monitoring Program Data Management Plan* (Martin Marietta Energy Systems, Inc. 1993).

The majority of analytical results obtained from each quarterly sampling event was downloaded directly into the data base from data files provided by the analytical laboratory. A few data required manual input from hardcopy documentation (laboratory reports and field data sheets). For manually input data, a double-entry procedure was followed whereby the hardcopy data were input twice into separate data files. A computer program then compared the two input data files and identified discrepancies, which were then accounted for and corrected.

When all data for each sampling event were in the data base, a computer program then verified that all results were received, the parameter names were correct, correct units were reported, and that the results reported for each parameter were within an expected range or were valid numeric values. As a final step in the data verification process, printouts of the data were visually checked against the laboratory reports and field data sheets for completeness and obvious data outliers. The appropriate laboratory was contacted to resolve incomplete data transfers, discrepancies between electronic and hardcopy versions of the data, and questions regarding data outliers.

Data validation consists of calculating ion-charge balances for each sample, comparisons of sample data to corresponding laboratory and field QA/QC data, and validation of VOCs using EPA validation methods. The tabulation of the results of these data processing steps has historically been presented as informational appendices in the Part 1 GWQRs, but not discussed in detail

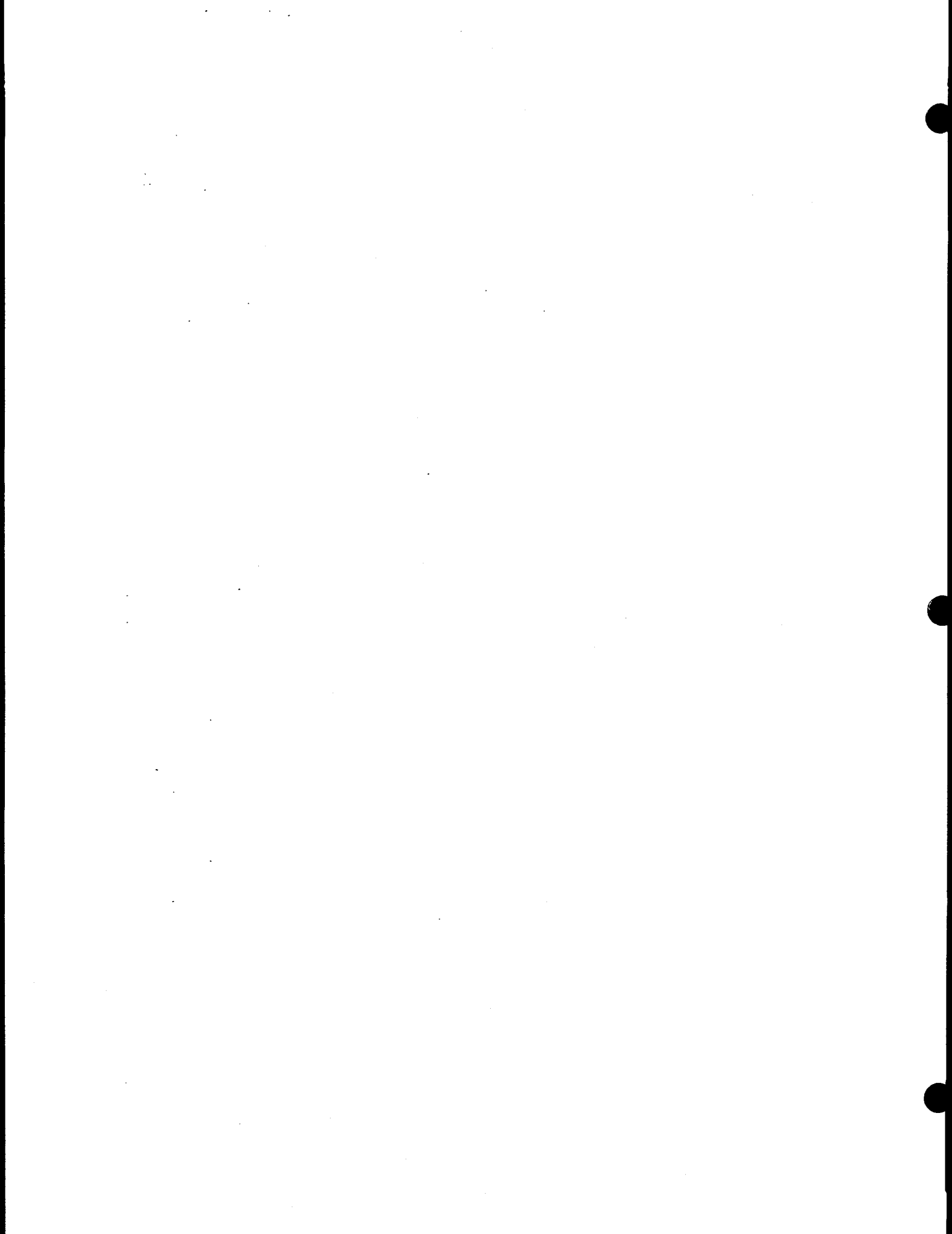
because of time constraints imposed by the March 1 reporting deadline. These results will be evaluated fully in the Part 2 GWQRs issued in mid-year.

Data evaluation consists of trending of environmental data and laboratory performance, redefining plume configurations where required, and detailed review of particular contaminants or sites of concern. The results of data evaluation have historically been presented in the Part 2 GWQRs; the results of evaluation of CY 1995 data will again be presented in these reports.

3.7 Analytical Results

Groundwater quality data obtained during CY 1995 are contained in Appendices E, F, and G. Appendix E contains the analytical results for each groundwater sample and Appendix F contains the results for the field duplicate samples. Radiochemical data are presented in Appendix G. The data presented in these appendices were generated from the following quarterly data sets: first quarter - Q1__95.SD2, second quarter - Q2__95R1.SD2, third quarter - Q3__95R1.SD2, and fourth quarter - Q4__95.SD2 (H&R Technical Associates, Inc. 1995a, 1995b, 1996a, and 1996b). Water level elevations obtained during comprehensive semiannual measurement events are presented in Appendix H, which form the data base for potentiometric surface maps discussed in Section 4.0.

Informational appendices that highlight selected data or present results of data verification and evaluation processes include ion-charge balances (Appendix I), comparison of trace metals to EPA primary drinking water standards (Appendix J), calculation of annual average nitrate concentrations (Appendix K), tabulation of QA/QC data (Appendix L), and results of VOC validation (Appendix M).



4.0 HYDROGEOLOGIC FRAMEWORK

This section contains a general description of the complex hydrogeologic system in the Chestnut Ridge Regime. It provides sufficient descriptive detail needed for RCRA assessment monitoring reporting requirements regarding evaluation of groundwater flow directions. In past GWQRs, the hydrogeologic overview was based primarily on the conceptual framework and associated nomenclature presented in: *Status Report - A Hydrologic Framework for the Oak Ridge Reservation* (Solomon *et al.* 1992). However, the overview for this report has been revised because flow in the Maynardville Limestone, a key component of the groundwater flow system in BCV, is not specifically addressed in Solomon *et al.* (1992), and some components of the ORR hydrogeologic framework (e.g., the stormflow zone) appear to be of lesser hydrologic significance at the Y-12 Plant than indicated for other areas on the ORR. In general, the revised description of the hydrogeologic system incorporates: (1) applicable aspects of the conceptual framework described in Solomon *et al.* (1992), (2) hydrologic characteristics evaluated by Moore (1988 and 1989), and (3) findings of the RI for the BCV CA (Science Applications International Corporation 1995).

4.1 Geology

The geology on the ORR is generally characterized by thrust-faulted sequences of southeast-dipping, clastic (primarily shale and siltstone) and carbonate (limestone and dolostone) strata of Lower Cambrian to Lower Ordovician age. In the Y-12 Plant area, the primarily dolostone strata of the Knox Group form Chestnut Ridge, interbedded limestone and shale formations of the Conasauga Group underlie BCV to the north, and shale and siltstone beds of the Rome Formation form Pine Ridge (Figure 5). Strike and dip of bedding in the Chestnut Ridge Regime is generally N 55°E and 45°SE, respectively (not referenced to Y-12 Plant grid system).

With the exception of Kerr Hollow Quarry and Rogers Quarry, the sites in the Chestnut Ridge Regime are directly underlain by reddish-brown to yellow-orange residuum overlying the Knox Group. The residuum is characteristically slightly acidic, predominantly composed of clays and iron sesquioxides (Jennings 1985), and contains semi-continuous, relict beds of fractured chert and other lithologic inhomogeneities (such as silt bodies) that provide a weakly connected network through which saturated flow can occur (Solomon *et al.* 1992). The residuum 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 Chestnut Ridge Regime, but is usually less than 100 ft.

The Knox Group consists of 2,500 to 3,000 ft of gray to blue-gray, thin- to thick-bedded cherty dolostone with interbeds of limestone (Figure 5). All but the southernmost portion of the Chestnut Ridge Regime is underlain by the Knox Group. The Chickamauga Group overlies the Knox Group disconformably and generally consists of thin- to medium-bedded argillaceous limestone and interbedded shale.

The most pervasive structural features in the Chestnut Ridge Regime are extensional, hybrid, and shear fractures (Solomon *et al.* 1992). Three major joint orientations are evident: one that roughly parallels bedding, one steeply dipping set that parallels geologic strike, and one steeply dipping set oriented perpendicular to strike (Dreier *et al.* 1987). Fracture densities ranging from about 1 to 60 per foot have been observed in rock outcrops near the ORNL (Dreier *et al.* 1987; Sledz and Huff 1981). Most fractures are short, ranging from tenths of inches to a few feet in length (Solomon *et al.* 1992).

Dissolution of carbonates along fractures has produced many karst features in the Chestnut Ridge Regime. 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 result from dissolution along a bedding plane or joint set (Ketelle and Huff 1984; Smith *et al.* 1983).

4.2 Groundwater System

Solomon *et al.* (1992) divide the groundwater system underlying the ORR into two basic hydrogeologic units with fundamentally different hydrologic characteristics: the Knox Aquifer and the ORR Aquitards. In the vicinity of the Y-12 Plant, the Knox Aquifer consists of the Knox Group and the underlying Maynardville Limestone Formation of the Conasauga Group. The remaining formations of the Conasauga Group (collectively referred to in this report as the Conasauga Shales), the underlying Rome Formation, and the Chickamauga Group form the ORR Aquitards.

In general, both the Knox Aquifer and the ORR Aquitards are divided by Solomon *et al.* (1992) into four parts: (1) the stormflow zone, (2) the vadose zone, (3) the groundwater zone and (4) the aquiclude (Figure 6). The divisions are based on the amount of water transmitted by each subsystem (i.e., flux), which decreases with depth. The flow system is vertically gradational with no discrete boundaries separating the subsystems. However, the bulk permeability of the Knox Aquifer is about ten times greater than that of the ORR Aquitards (Solomon *et al.* 1992).

Recharge on Chestnut Ridge is via vertical percolation through the regolith and probably includes more direct input via sinkholes. Annual recharge has been estimated to be about 2.6 inches, and it is possible that a portion of the recharge results from delayed unsaturated flow (Solomon *et al.* 1992). Groundwater discharge pathways from the ridge have not been completely

established, but based on knowledge of flow in similar karst systems and the results of various hydrologic studies in the Chestnut Ridge Regime, springs and seeps located along or across strike are the probable discharge points.

4.2.1 Stormflow Zone

Investigations in Bethel Valley and Melton Valley near ORNL show that groundwater occurs intermittently above the water table in the ORR Aquitards in a shallow "stormflow zone" that extends from ground surface to a depth of about 6 ft (Moore 1989). Channels for lateral flow in the stormflow zone include macropores and mesopores, which are connected voids created by various processes, including biochanneling, cracking, and soil particle aggregation (Moore 1989). The stormflow zone is thicker and more permeable in forested areas than in grassy or brushy areas, and is more permeable near the ground surface than at deeper intervals (Moore 1989). Lateral flow in the stormflow zone is intermittent, creating a perched water table lasting only a few days or weeks after rainfall (Wilson *et al.* 1990). Most groundwater within the stormflow zone is either lost to evapotranspiration or recharge to the water table and the remaining water discharges at nearby seeps, springs, or streams. Detailed studies of the stormflow zone have not been conducted in the Chestnut Ridge Regime. However, as part of the RI/FS in progress for the BCV CA, stormflow tubes installed at six sites (three along the northern flank of Chestnut Ridge) have all showed brief periods of soil saturation in response to rainfall (Science Applications International Corporation 1995). These findings suggest that stormflow also occurs in BCV, although capping of the waste management areas has probably altered the stormflow zone in some areas of the Bear Creek Regime. Additionally, the significance of groundwater flux and contaminant transport in the stormflow zone in BCV is not fully understood, and may not be as great as in Bethel Valley and Melton Valley.

4.2.2 Vadose Zone

The vadose zone occurs between the stormflow zone and the water table. The geometric mean depth to the water table beneath Chestnut Ridge is about 100 ft. Water is added to the vadose zone by percolation from the stormflow zone and is removed by transpiration and recharge to the water table. The vadose zone is unsaturated except in the capillary fringe above the water table and within wetting fronts during periods of vertical percolation from the stormflow zone (Moore 1989). Most recharge through the vadose zone is episodic and occurs along discrete permeable fractures that become saturated, even though surrounding micropores remain unsaturated (Solomon *et al.* 1992).

The hydraulic conductivity of the unsaturated residual soils on Chestnut Ridge has been determined from slug tests in wells located at the United Nuclear Corporation Site (Mishu 1982), and in areas several miles west of the Chestnut Ridge Regime (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/d) and mean laboratory conductivities ranged from 2.8×10^{-5} to 9.1×10^{-3} ft/d. Results of the slug tests are similar to those obtained from infiltrometer tests. Moore (1988) reported a geometric mean hydraulic conductivity of about 0.006 ft/d for residuum on Chestnut Ridge based on results of infiltrometer studies near ORNL reported by Watson and Luxmoore (1986) and Wilson and Luxmoore (1988).

The hydraulic conductivity of the residuum overlying the Knox Group 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% of saturation, and two orders-of-magnitude with a volumetric water content decrease to 75% 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%, and three orders-of-magnitude relative to maximum when saturation is 75%. 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).

4.2.3 Groundwater Zone

Groundwater below the vadose zone occurs within orthogonal sets of permeable, planar fractures that form water-producing zones within an essentially impermeable matrix. Water-producing zones commonly develop within a single layer of rock, and have an average thickness (assuming an average dip of 35°) of 2 ft or less (Dreier *et al.* 1987). Dissolution of carbonates has greatly increased permeability of the water-producing zones in the Knox Group and Maynardville Limestone; enlarged fractures and solution cavities in the Maynardville Limestone yield as much as 200 to 300 gallons per minute (gpm) (Shevenell *et al.* 1993), which is several orders-of-magnitude greater than the typical yield (0.25 gpm) of water-producing zones in the ORR Aquitards (Solomon *et al.* 1992). Additionally, stratiform fractures provide the principal flowpaths in both hydrogeologic units, and groundwater flows primarily in the direction of geologic strike (which may or may not correlate with the maximum hydraulic gradient) toward springs, seeps, and cross-cutting tributary streams (Moore and Toran 1992).

Because the frequency, aperture, and connectivity of permeable fractures decrease with depth, the bulk hydraulic conductivity of the groundwater zone is vertically gradational. Most of the groundwater flux occurs in a highly permeable zone (the water table interval) within the transitional horizon between regolith and unweathered bedrock; lower flux (and longer solute residence times) occurs at successively greater depths in the bedrock. Changes in the geochemistry of the groundwater suggest that active flow in the Conasauga Shales occurs at depths less than 100 ft below ground surface (bgs). Active groundwater flow occurs deeper in the Maynardville Limestone, as indicated by pressure responses to rainfall that are evident in some wells completed at depths of 200 to 400 ft bgs (Science Applications International Corporation 1995). In addition, changes in groundwater geochemistry that occur with depth in the Conasauga Shales are not evident in the Maynardville Limestone; calcium-magnesium bicarbonate groundwater is present in the Maynardville Limestone to depths of 1,000 ft bgs (Dreier *et al.* 1993). Moreover, decreased permeability with depth in the Maynardville Limestone has not been characterized because hydraulic conductivity tests have been performed primarily in shallow (<100 ft bgs) monitoring wells. As noted previously, however, active groundwater flow may occur to depths of at least 400 ft bgs in the Maynardville Limestone.

Similarly, active groundwater flow occurs deeper within the Knox Group than in the Conasauga Shales. Estimates of the hydraulic conductivity of the intermediate interval in the Knox Group are provided by results of straddle packer tests performed in three core holes in the Chestnut Ridge Regime: two at the east end of the regime near the Sediment Disposal Basin and one at the west end of the regime near Industrial 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/d (King and Haase 1988) and averaged about 0.6 ft/d. The upper population represents more permeable water-producing intervals and the lower population represents less permeable matrix intervals.

The hydraulic conductivity of some water-producing intervals in the Knox Group is much greater than indicated by the straddle packer tests owing to an interconnected network of solution cavities and solutionally-enlarged fractures. For instance, groundwater flow rates determined from a tracer test performed by Ketelle and Huff (1984) ranged from about 490 to 1,250 ft/d. Preliminary results of a dye-tracer test performed by Geraghty & Miller, Inc. (1990b) at the Security Pits indicated flow rates of about 100 to 300 ft/d, although findings of the test were not confirmed by a second test performed at the site (Science Applications International Corporation 1993). However, results of the Ketelle and Huff (1984) and the Geraghty & Miller, Inc. (1990b) tracer tests are within the range of conduit-flow rates typical in karst terrains (Quinlan and Ewers 1985).

4.2.4 Aquiclude

The aquiclude is generally marked by the presence of saline water with TDS concentrations of 40,000 to 300,000 milligrams per liter (mg/L) (Solomon *et al.* 1992). Information obtained southeast of the Chestnut Ridge Regime in Melton Valley indicates that the saline water typically occurs at depths of about 600 to 700 ft bgs (Solomon *et al.* 1992). The water in the aquiclude is a sodium-, calcium-, and chloride-rich brine that is chemically similar to brines associated with major sedimentary basins (Solomon *et al.* 1992).

Saline groundwater has not been encountered at depth in the Chestnut Ridge Regime. However, several wells in BCV completed at depths of about 500 to 1,000 ft bgs surface in the Conasauga Shales monitor groundwater with TDS concentrations of several thousand mg/L to several tens of thousand mg/L. This highly mineralized groundwater may represent a mixing or diffusion zone between fresh and saline groundwater, suggesting that the aquiclude may be present at greater depth near the Y-12 Plant than in Melton Valley (Solomon *et al.* 1992).

4.3 Groundwater Flow Directions

Directions of groundwater flow in the Chestnut Ridge Regime were evaluated from static water level measurements obtained in April and October 1995. Water levels were measured in 86 monitoring wells during April 1995 (the seasonally high water table) and in 84 wells in October 1995 (the seasonally low water table). Depth-to-water and water-level elevations for each well are presented in Appendix H. Review of these data shows that the average total water level decline from April to October was 6.4 ft. The largest decreases (between 10 and 27 ft) typically occurred in wells located along the crest of Chestnut Ridge in the western part of the Regime. Additionally, the pattern of water level decrease was the same in all wells such that there were no significant changes in groundwater flow directions (i.e., no significant deviation of horizontal hydraulic gradients).

Groundwater elevations in the Chestnut Ridge Regime are illustrated on Figure 7. Monitoring wells were the primary controls for placement of elevation isopleths, but springs and streams also provided additional control. The water table in the Chestnut Ridge Regime generally reflects surface topography and radial groundwater flow directions; strike-parallel gradients range from 0.01 to 0.05 and strike-normal gradients range from 0.03 to 0.07. The overall trend of groundwater flow in the Chestnut Ridge Regime is easterly, reflecting a general decrease of land surface elevation from west to east. The crest of Chestnut Ridge represents a groundwater divide and the ridge serves as a recharge area. Thus, vertical gradients are downward and flow components to the north and south, away from the crest of the ridge, exist along the length of the

ridge. Principal discharge areas include springs, seeps, and tributaries along the north and south flanks of the ridge. Some discharge directly to Upper East Fork Poplar Creek likely occurs in the northeast portion of the Regime.

Water level hydrographs prepared from measurements made in selected wells at several of the waste management units in the regime are presented on Figure 8. The hydrographs illustrate that water levels fluctuate seasonally and that the fluctuations are generally concurrent and uniform. The hydrographs further illustrate that water levels on the crest of Chestnut Ridge tend to be more responsive to seasonal variations than those near the base of the ridge or within Bethel Valley.

4.4 Rate of Groundwater Flow and Contaminant Migration

The following estimates of groundwater flow and contaminant migration rates are presented to comply with RCRA interim status assessment monitoring requirements. Estimated groundwater flow rates are provided for migration in the residuum and the underlying Knox Group bedrock. Several methods were used to estimate the groundwater flow rates in both residuum and bedrock. Contaminant migration rates are based on the assumption that contaminants move unimpeded by various retardation processes. Factors that would reduce transport rates, such as matrix diffusion, degradation, sorption, and chemical precipitation, and factors that 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.

The wide range of potential contaminant migration rates described in the following sections 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 process that is not fully explained by the methods used for estimating migration rates. It is probable that at various times and under various conditions, migration rates throughout the estimated ranges 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 migration rates may vary over several orders of magnitude, the apparently limited extent of groundwater contamination in the regime suggests that processes such as matrix diffusion and adsorption are important controlling factors in reducing the rate of contaminant migration relative to groundwater flow velocities.

4.4.1 Residuum

Two methods were used to estimate the rate of vertical groundwater flow and contaminant migration through the residuum overlying the Knox Aquifer: the water-balance method, and the arrival time method. The water-balance method is based on the relationship $v = q/n$, where v is the flow rate, q is the annual recharge rate, and n is the effective porosity. The following assumptions were used: an estimated annual recharge of 2.6 inches per year for the Knox Aquifer (Solomon *et al.* 1992); a range of zero to 95% recharge flux through the stormflow zone (Moore 1988); and an effective porosity of 0.0042 (Moore 1989). Under these assumptions, the estimated groundwater flow rates range from 2.6 feet per year (ft/yr) (0.007 ft/d) assuming 95% subsurface runoff to 51.6 ft/yr (0.14 ft/d) assuming zero subsurface runoff.

Historical water quality data for well 1080 (now plugged and abandoned) were used to determine the contaminant migration rate with the arrival time method. Installed at the Security Pits in CY 1982, VOCs were first detected in samples collected from the well in CY 1986. The top of the screened interval for this well was about 160 ft bgs. Using this depth and assuming a 13-year travel time (i.e., the period from initial waste disposal at the Security Pits in CY 1973 to detection of the VOCs in CY 1986), a migration rate of about 12 ft/yr (0.033 ft/d) is calculated. Thus, actual VOC contaminant migration rates appear to be toward the lower end of the estimated range of groundwater flow rates indicating some attenuation in the subsurface.

4.4.2 Bedrock

Two types of groundwater flow are typical of karst systems: diffuse flow and conduit flow. Rates for diffuse flow in the Knox Group were determined using the modified Darcy equation given by $v = Ki/n$, where v is the migration rate, K is the hydraulic conductivity, i is the horizontal hydraulic gradient, and n is the effective porosity. Using the range of hydraulic conductivity test results (0.002 to 3.1 ft/d) reported by King and Haase (1988) for wells completed in the Knox Group, an effective porosity of 0.01 (Smith *et al.* 1976), and the range of strike-normal and strike parallel hydraulic gradients reported in Section 4.3, the Darcy velocity for diffuse flow ranges from about 2 ft/yr to about 22 ft/d for flow perpendicular to strike, and from about 0.7 ft/yr to 16 ft/d for strike-parallel flow. Although the modified Darcy equation can be used to calculate average flow velocities in fractured rock (assuming it is an equivalent porous media), actual velocities in individual fractures may vary over orders-of-magnitude, depending on fracture aperture and wall roughness (Freeze and Cherry 1979). Additionally, the value for effective porosity is representative for fractured limestones, but 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.

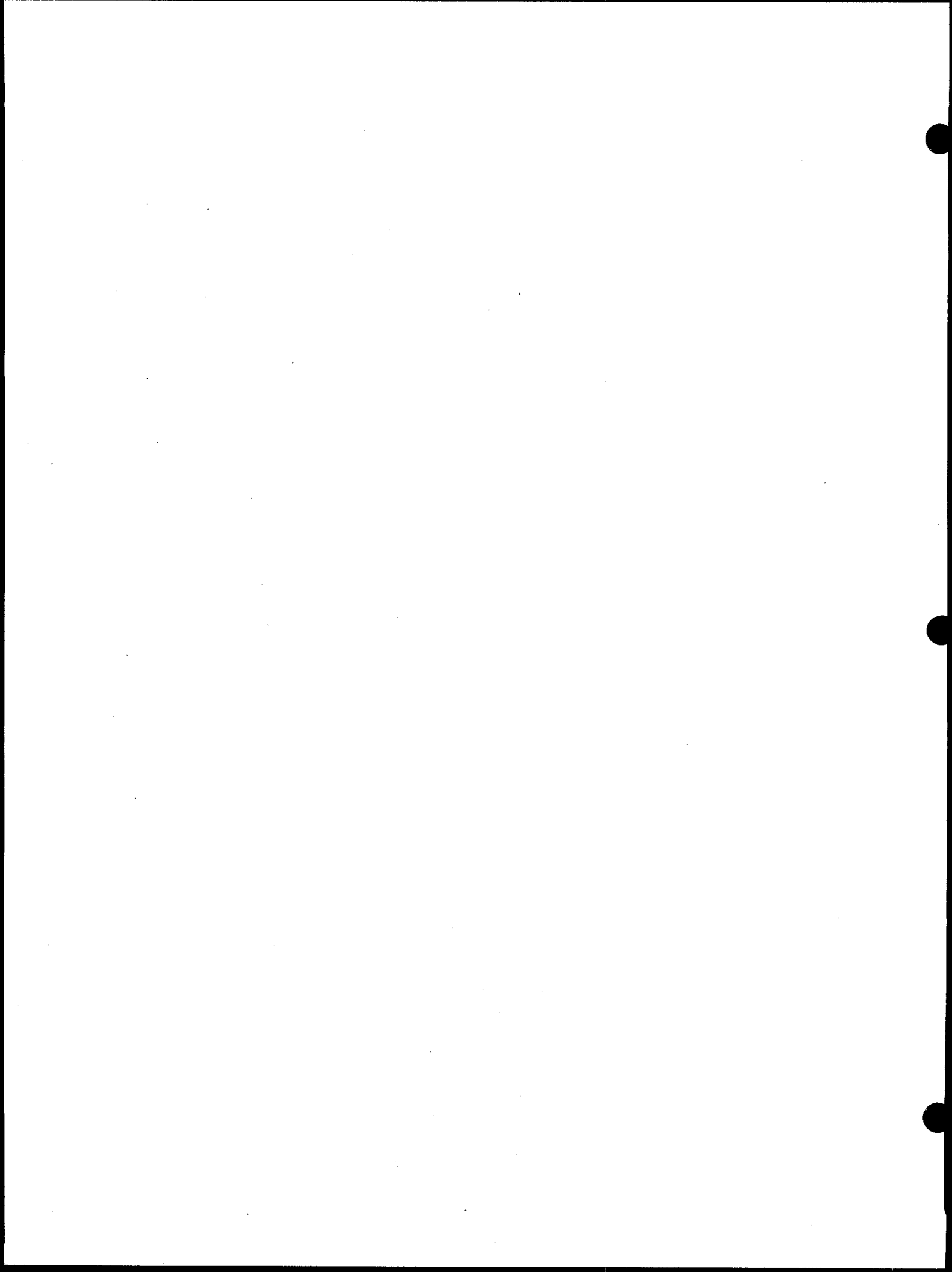
Migration rates for conduit flow were inferred from the results of dye-tracer tests performed on Chestnut Ridge. As noted in Section 4.2.3, results of the Geraghty & Miller, Inc. (1990b) and Ketelle and Huff (1984) dye tracer tests provide estimates of conduit flow rates in the Knox Group. Although not confirmed by a subsequent dye test (Science Applications International Corporation 1993), results of the Geraghty & Miller, Inc. (1990b) tracer test indicated transport velocities of 100 to 300 ft/d. Ketelle and Huff (1984) determined transport rates of about 490 to 1,250 ft/d in their tracer test on Chestnut Ridge west of the Chestnut Ridge Regime.

4.5 Surface Water System

Surface streams in the Chestnut Ridge Regime lie exclusively on the southern flank of Chestnut Ridge. Five primary tributaries exist within the regime boundaries (Figures 4 and 5): two unnamed tributaries located west and east of Industrial Landfill II; the McCoy Branch drainage basin, which contains the Ash Disposal Basin and Rogers Quarry; the Chestnut Branch drainage basin, which contains Industrial Landfill V and Construction/Demolition Landfill VII; and an unnamed drainage basin containing Kerr Hollow Quarry. These streams are largely intermittent above an elevation of 900 ft. Sources of flow to these streams are exclusively runoff, stormflow, and groundwater via baseflow and spring discharge. Baseflow contributions gradually increase along the length of the streams as elevation decreases. Spring discharges represent substantial point contributions to total flow for most of the tributaries. All of the tributaries discharge to Melton Hill Reservoir (Clinch River).

Historical data indicate that McCoy Branch has been the most heavily impacted stream in the Chestnut Ridge Regime because of activities at the Ash Disposal Basin. Contaminants related to the Ash Disposal Basin appear to be restricted only to the stream channel immediately downstream of the site (U.S. Department of Energy 1994b). Data collected as part of best management practice programs at other tributaries have not shown conclusive evidence of contamination from upstream sources. Sporadic elevated concentrations of some constituents, particularly barium, have been observed in discharges at Kerr Hollow Quarry.

Two spring stations were sampled in CY 1995 as part of best management practice monitoring. Station CBS-1, a large spring located along Chestnut Branch (Figure 4), was sampled semiannually. Station SCR2.2SP, located below Industrial Landfill II, was sampled during the second quarter. Surface water discharging from Kerr Hollow Quarry will be sampled semiannually in CY 1996 as part of the CERCLA ROD requirements.



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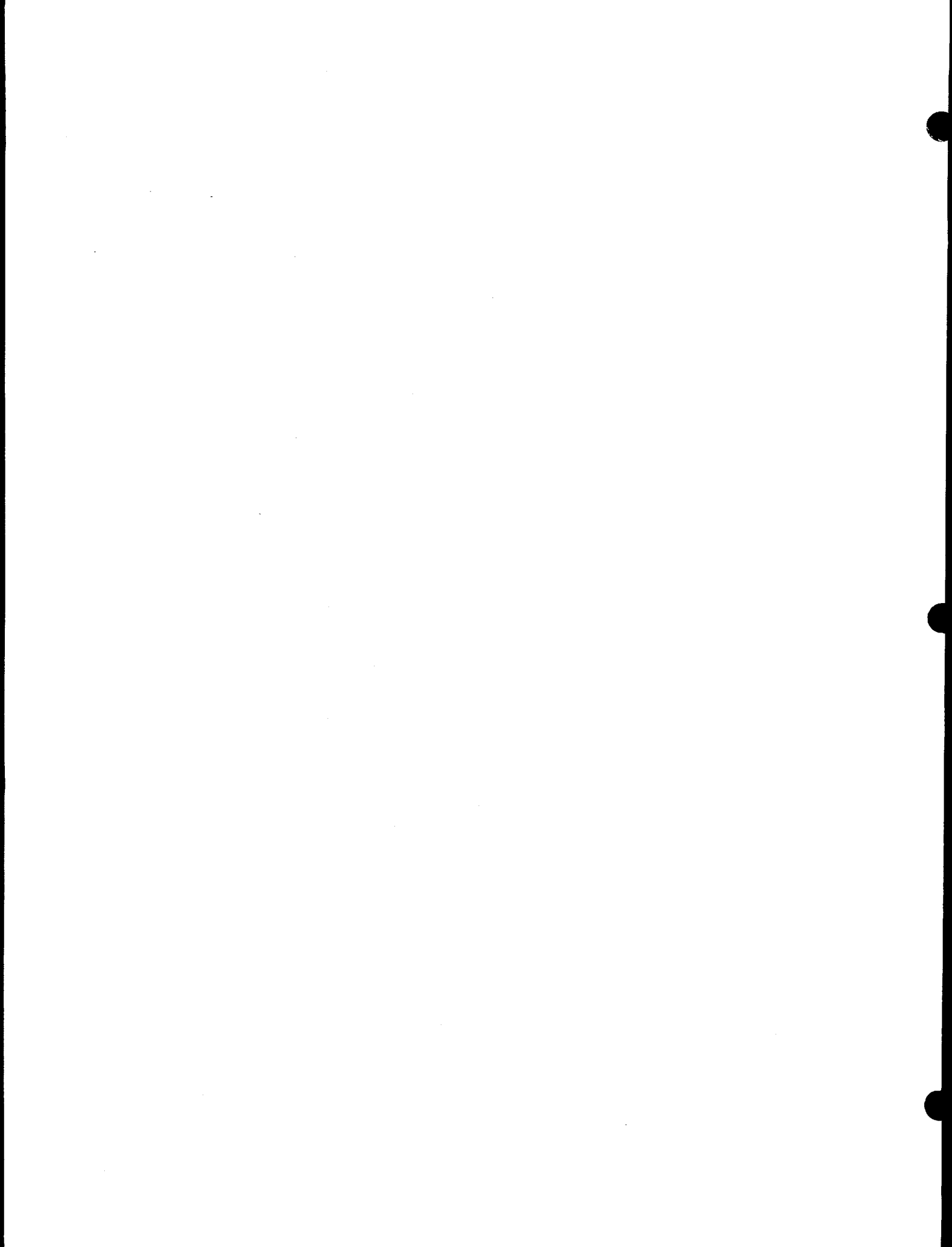
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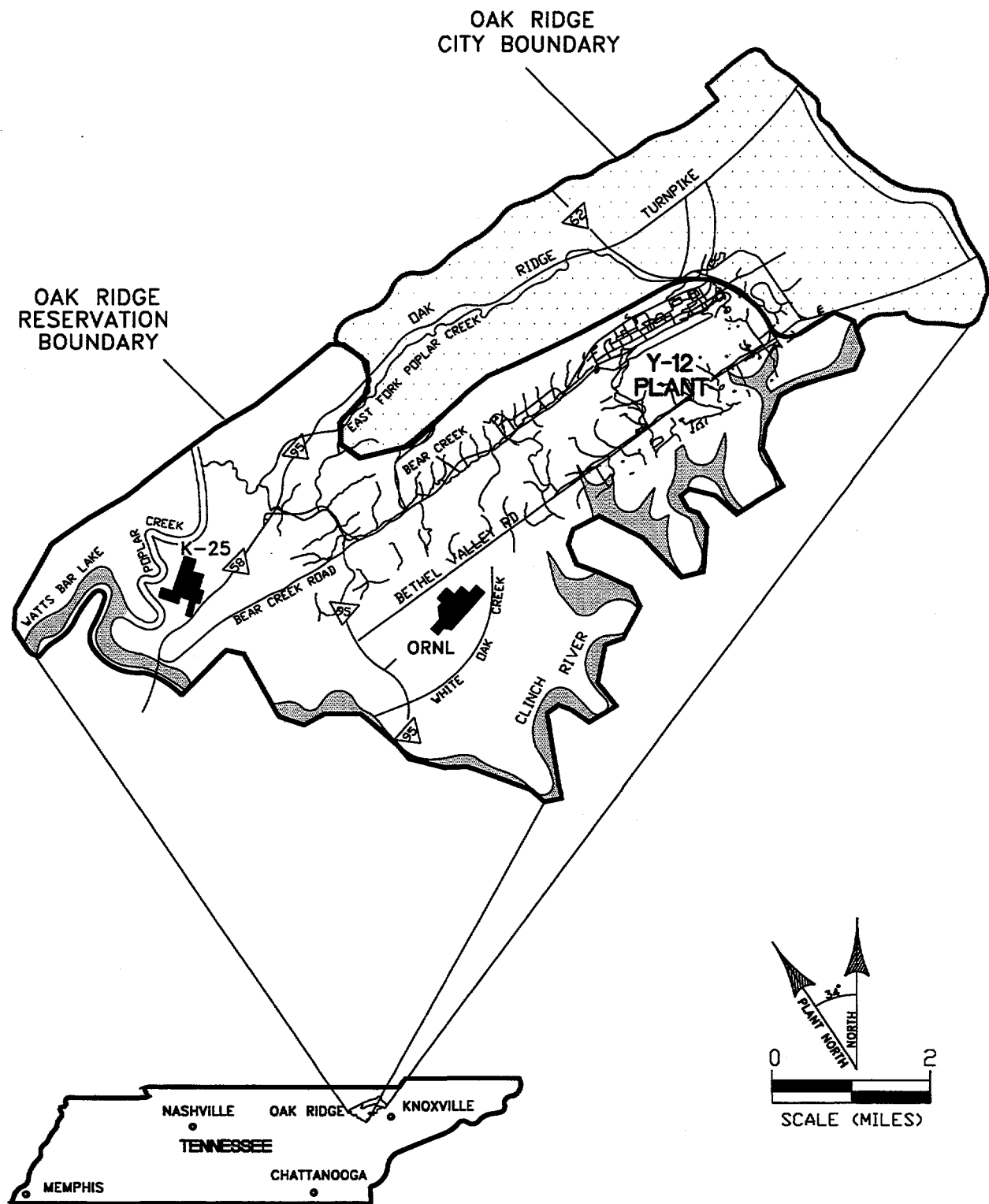
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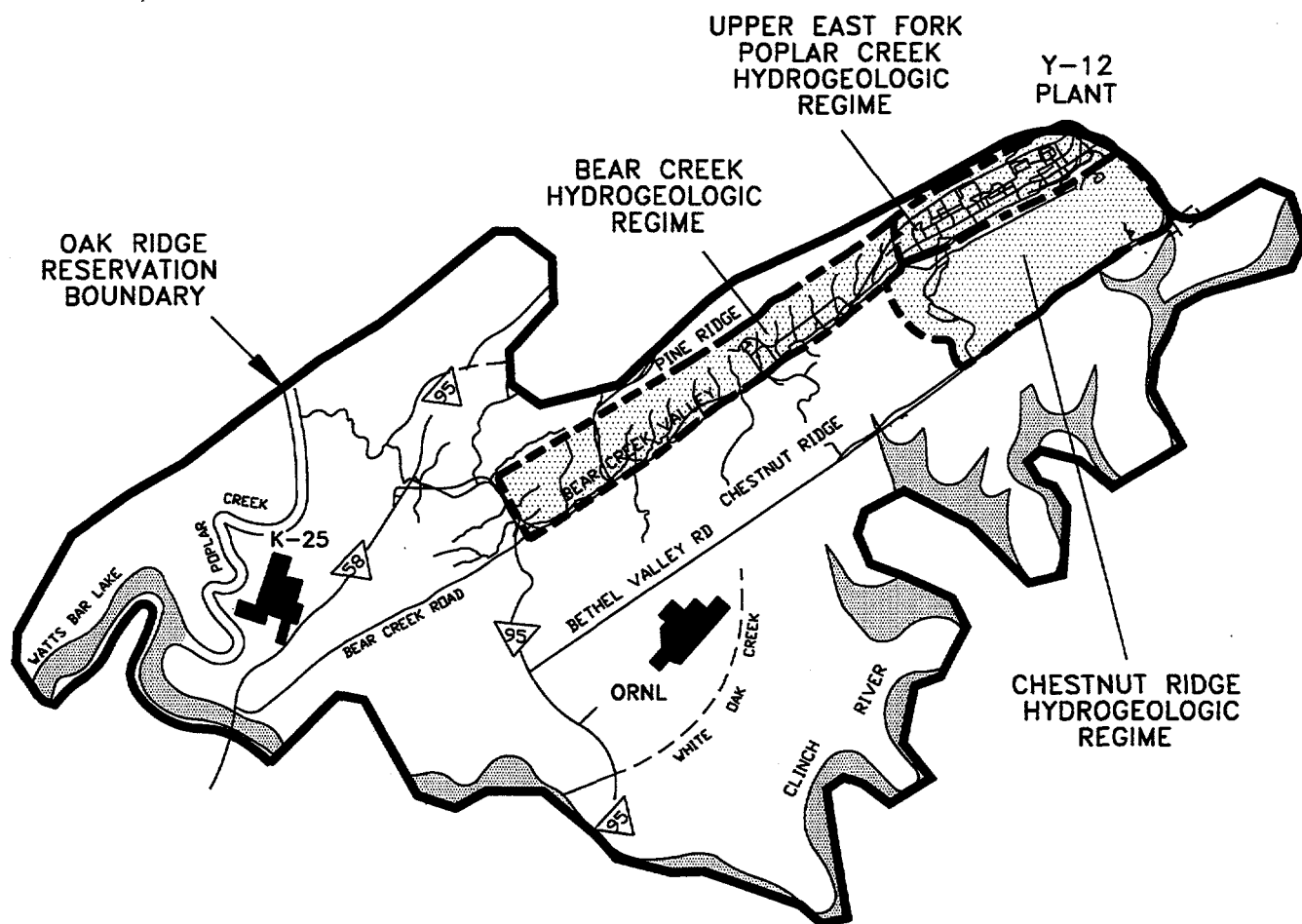
APPENDIX A

FIGURES



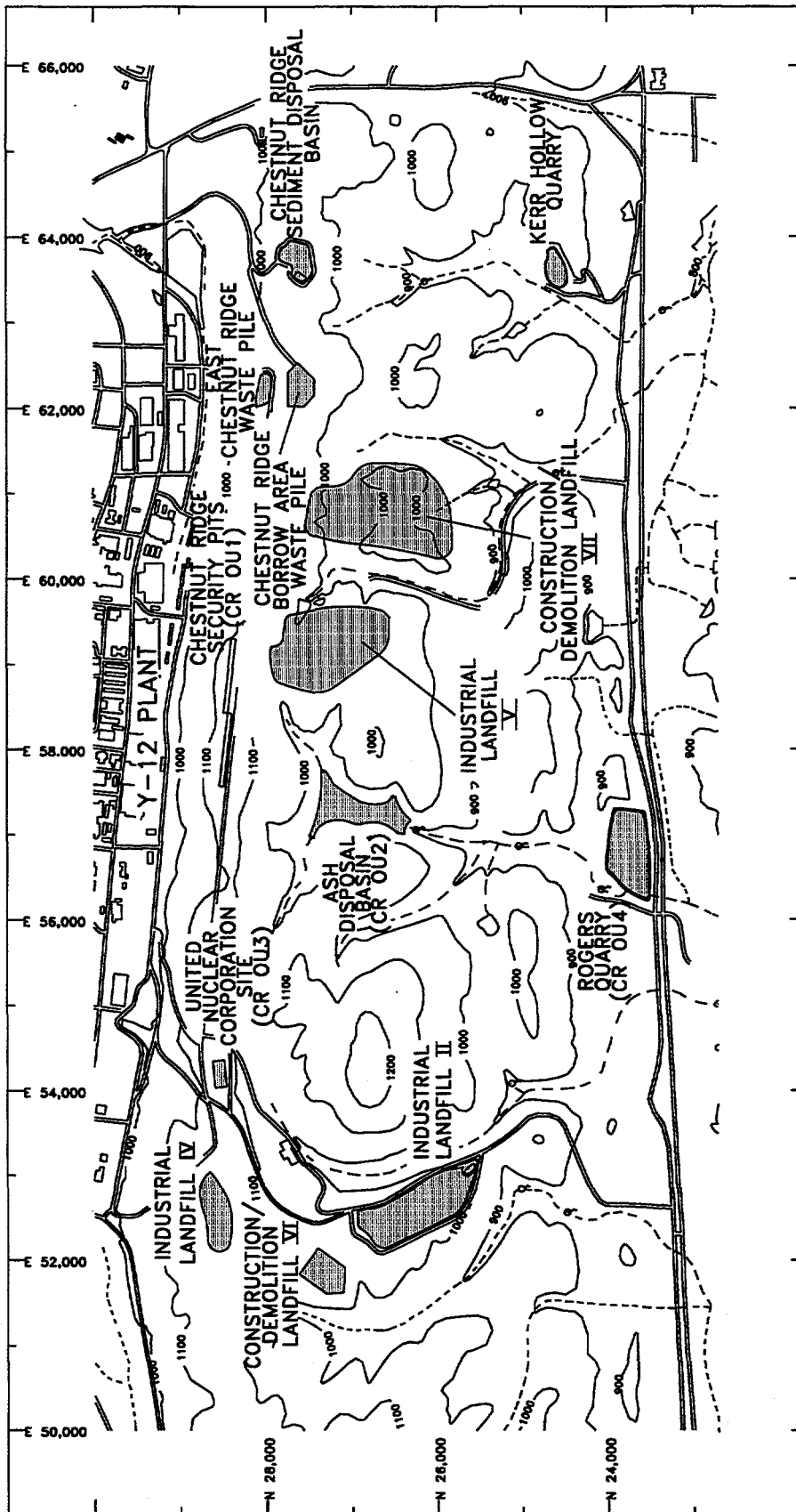


LOCATION:	Y-12 PLANT OAK RIDGE, TN.	FIGURE 1 REGIONAL LOCATION OF THE Y-12 PLANT
DATE:	01/26/1996	
DWG ID.:	C:\ACAD\CR_95\CR_FIG1.DWG	



LOCATION:	Y-12 PLANT OAK RIDGE, TN.
DATE:	01/26/1996
DWG ID.:	C:\ACAD\CR_95\CR_FIG2.DWG

FIGURE 2
HYDROGEOLOGIC REGIMES
AT THE Y-12 PLANT



EXPLANATION

1200 TOPOGRAPHIC CONTOUR

SURFACE DRAINAGE FEATURE

q SPRING

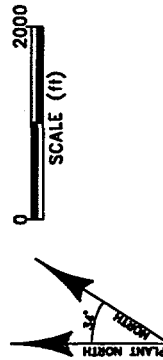
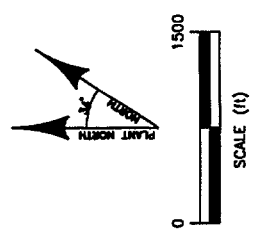
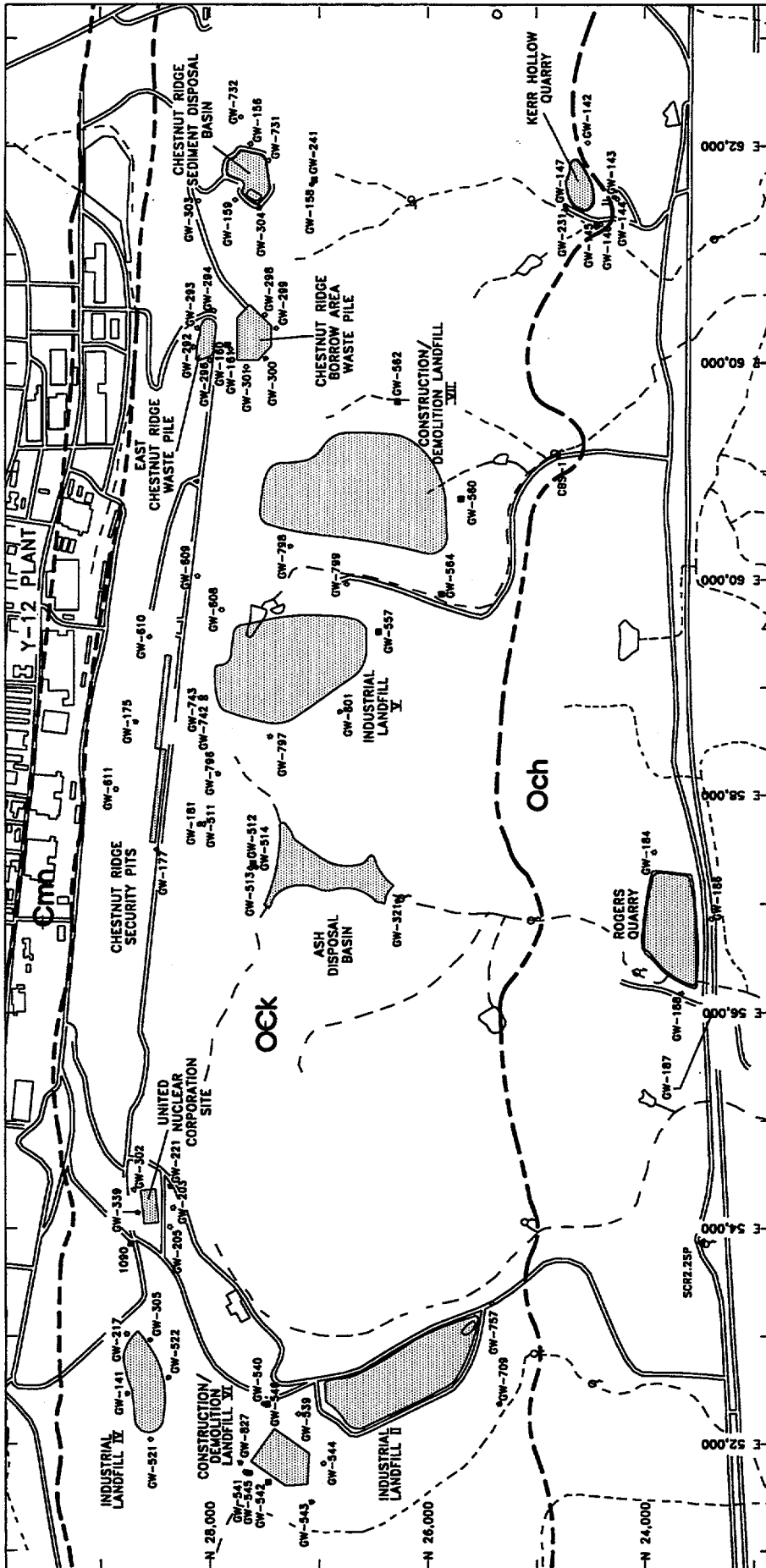


FIGURE 3

WASTE-MANAGEMENT SITES AND CERCLA OPERABLE UNITS IN THE CHESTNUT RIDGE HYDROGEOLOGIC REGIME

LOCATION:	Y-12 PLANT OAK RIDGE, TN.
DATE:	01/26/1996
DWG ID.:	C:\ACAD\CR_95\CR_FIG3.DWG



- EXPLANATION**
- GW-■ — WATER TABLE ZONE MONITORING WELL
 - GW-● — BEDROCK ZONE MONITORING WELL
 - CBS-1▲ — SPRING SAMPLING LOCATION
 - q — SPRING
 - — SURFACE DRAINAGE FEATURE
 - — BOUNDARY OF SITE
 - Och- — SURFACE GEOLOGIC CONTACT

LOCATION: DATE: DWG ID.:	Y-12 PLANT OAK RIDGE, TN.	
	02/16/1996	
	C:\ACAD\CR_95\CR_FIG4.DWG	

FIGURE 4
SAMPLING LOCATIONS FOR GROUNDWATER AND
SURFACE WATER MONITORING DURING 1995

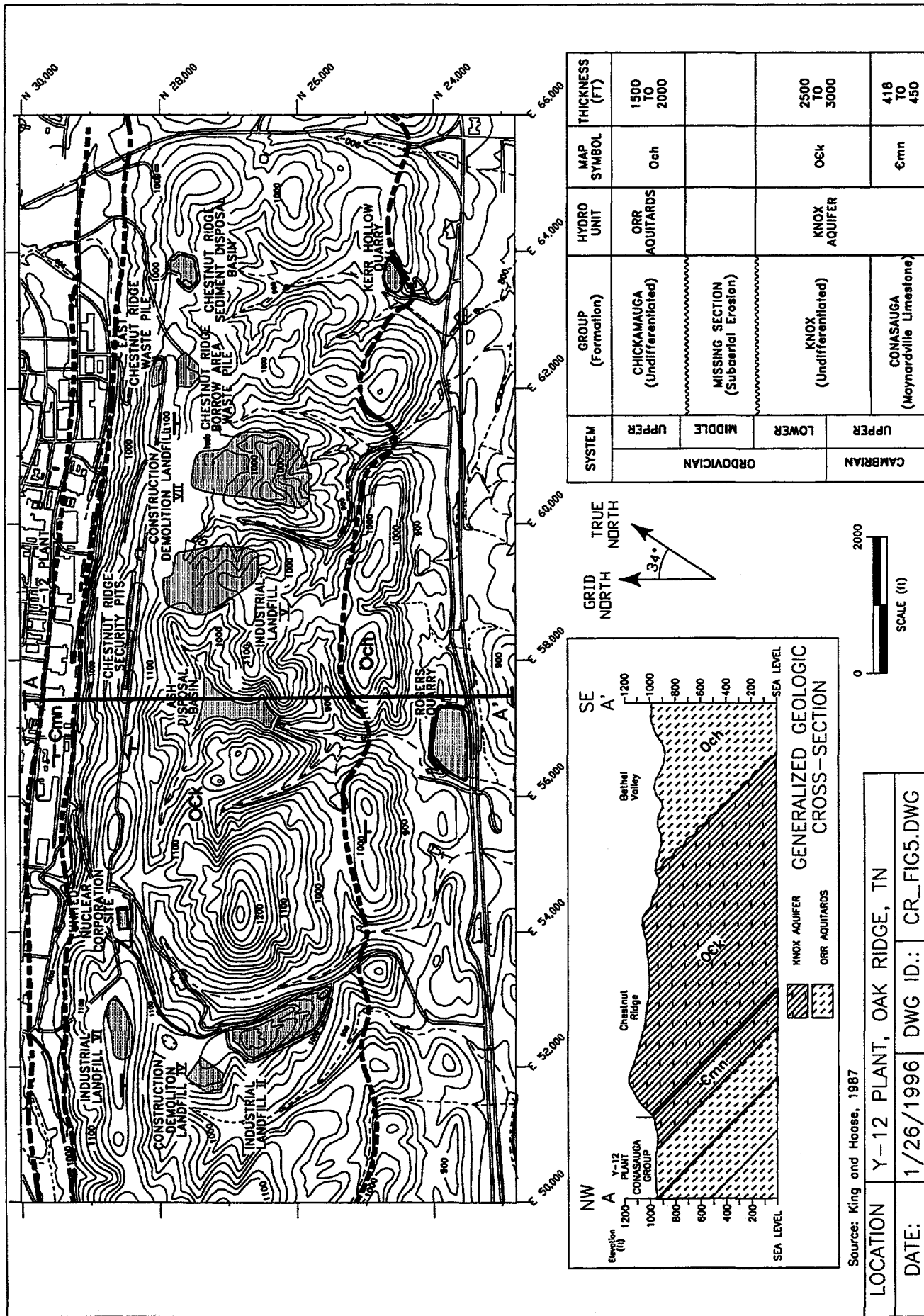
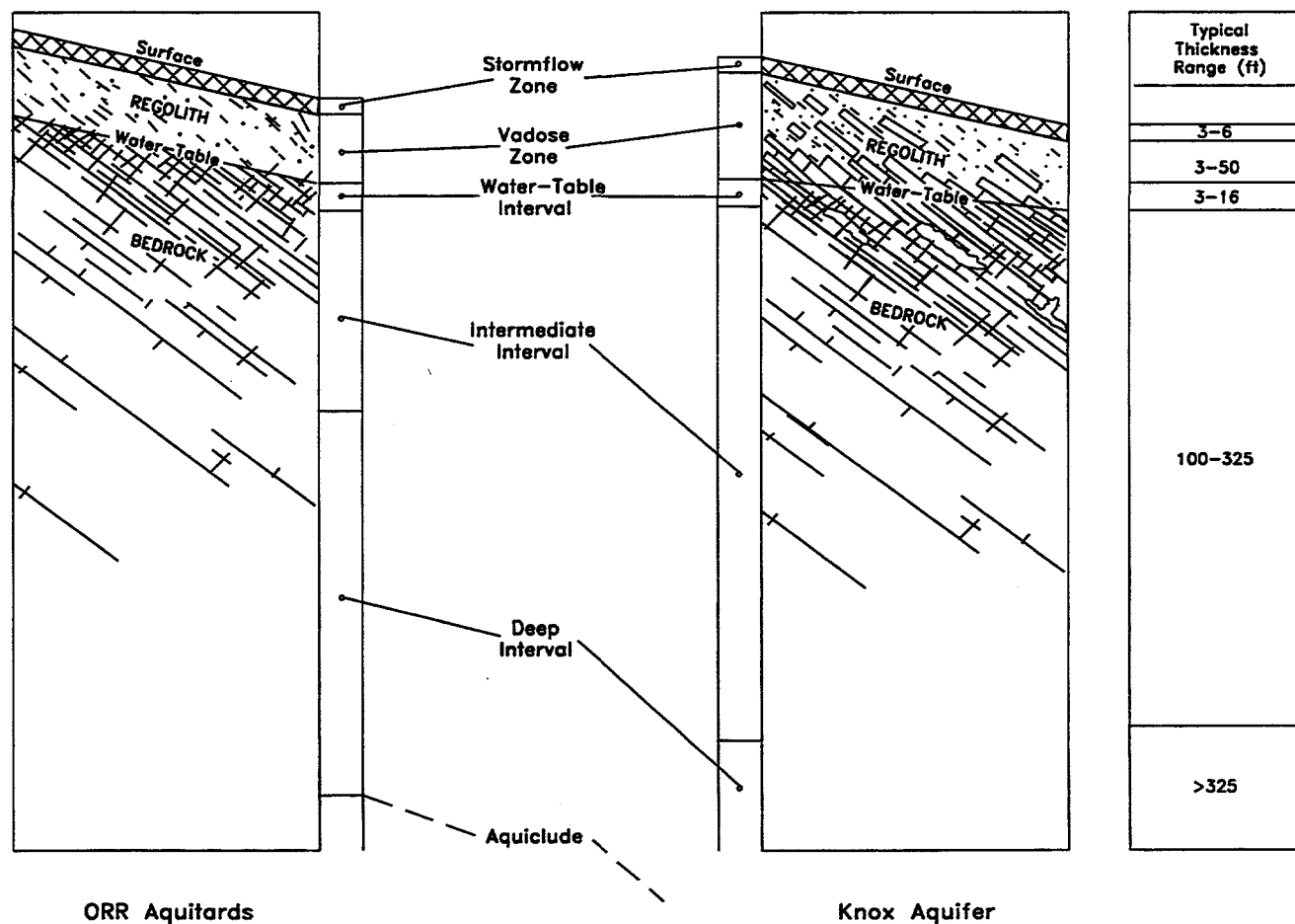
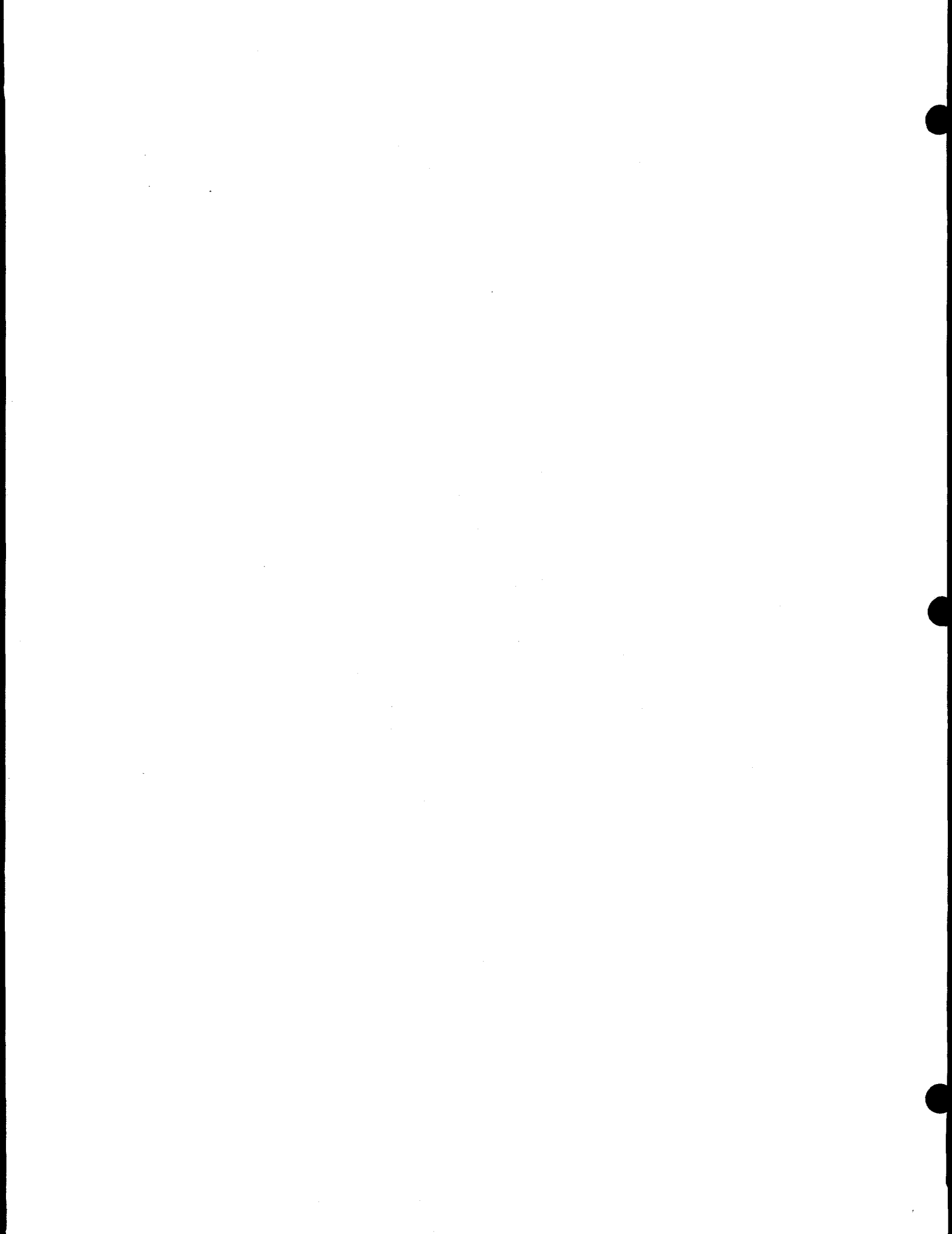


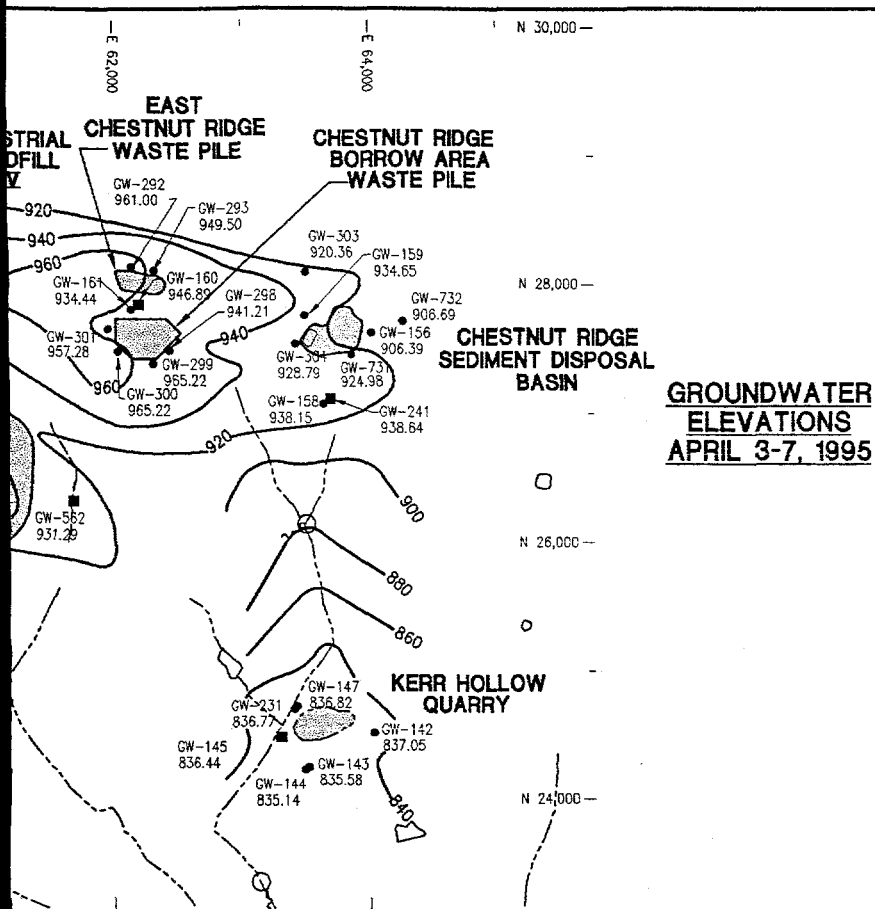
FIGURE 5
TOPOGRAPHY AND BEDROCK GEOLOGY IN THE CHESTNUT RIDGE HYDROGEOLOGIC REGIME

HYDROSTRATIGRAPHIC UNITS
 PROPOSED BY SOLOMON *et al.* (1992)



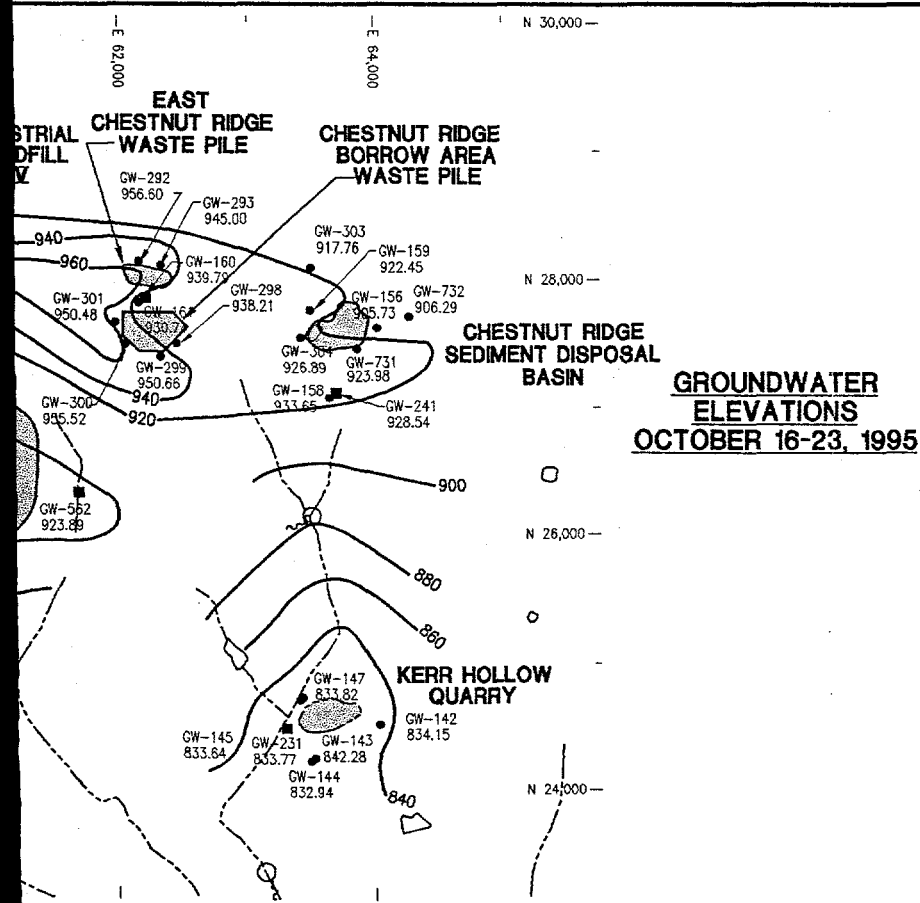
LOCATION:	Y-12 PLANT OAK RIDGE, TN.	FIGURE 6 SCHEMATIC PROFILE OF HYDROSTRATIGRAPHIC UNITS IN THE CHESTNUT RIDGE HYDROGEOLOGIC REGIME
DATE:	01/26/1996	
DWG ID.:	C:\ACAD\CR_95\CR_FIG6.DWG	





LEGEND:

- GW-546 ■ ...WATER TABLE MONITORING WELL
- GW-158 ● BEDROCK MONITORING WELL
- 900 — APPROXIMATE WATER LEVEL
- ISOPLETH (ft msl)
- SURFACE DRAINAGE FEATURE
- SPRING



Y-12 PLANT NORTH

0 500 1000 1500 3000
SCALE: 1" = 1500'

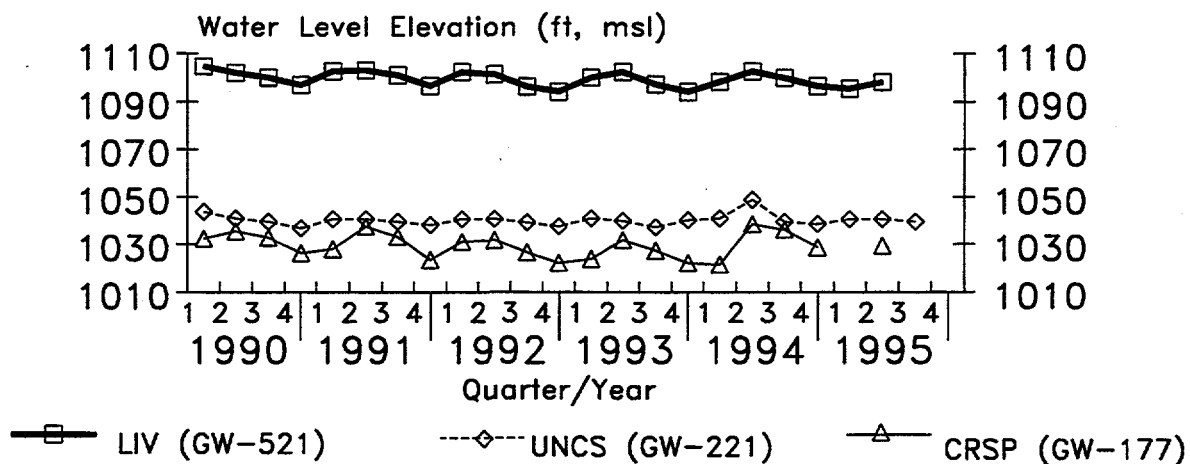
**FIGURE 7
GROUNDWATER ELEVATIONS IN
THE CHESTNUT RIDGE
HYDROGEOLOGIC REGIME**

prepared by
Science Applications
International Corporation
for
LOCKHEED MARTIN

95045/DWGS/309GW	P. HOLM	K. JAGO
DRAWING FILE:	DRAWN BY:	CHECKED BY:
REV. B / 01-30-96	/XREF/GWAPRIL	/XREF/GWOCT
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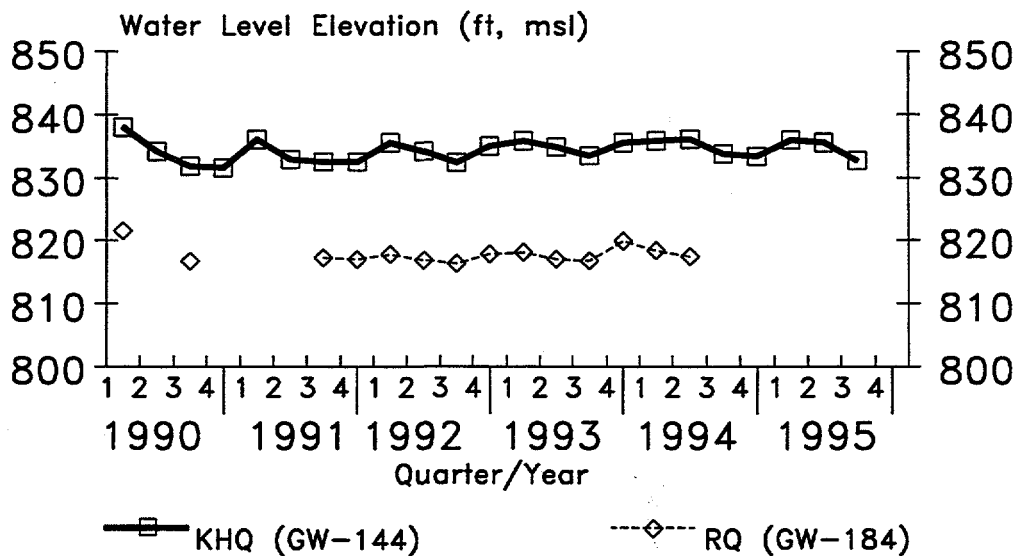
Upgradient Sites

Recharge



Downgradient Sites

Discharge



EXPLANATION

Depth to water measurements obtained during sampling events from one selected groundwater monitoring well at each site were converted to elevations in feet above mean sea level (ft, msl).

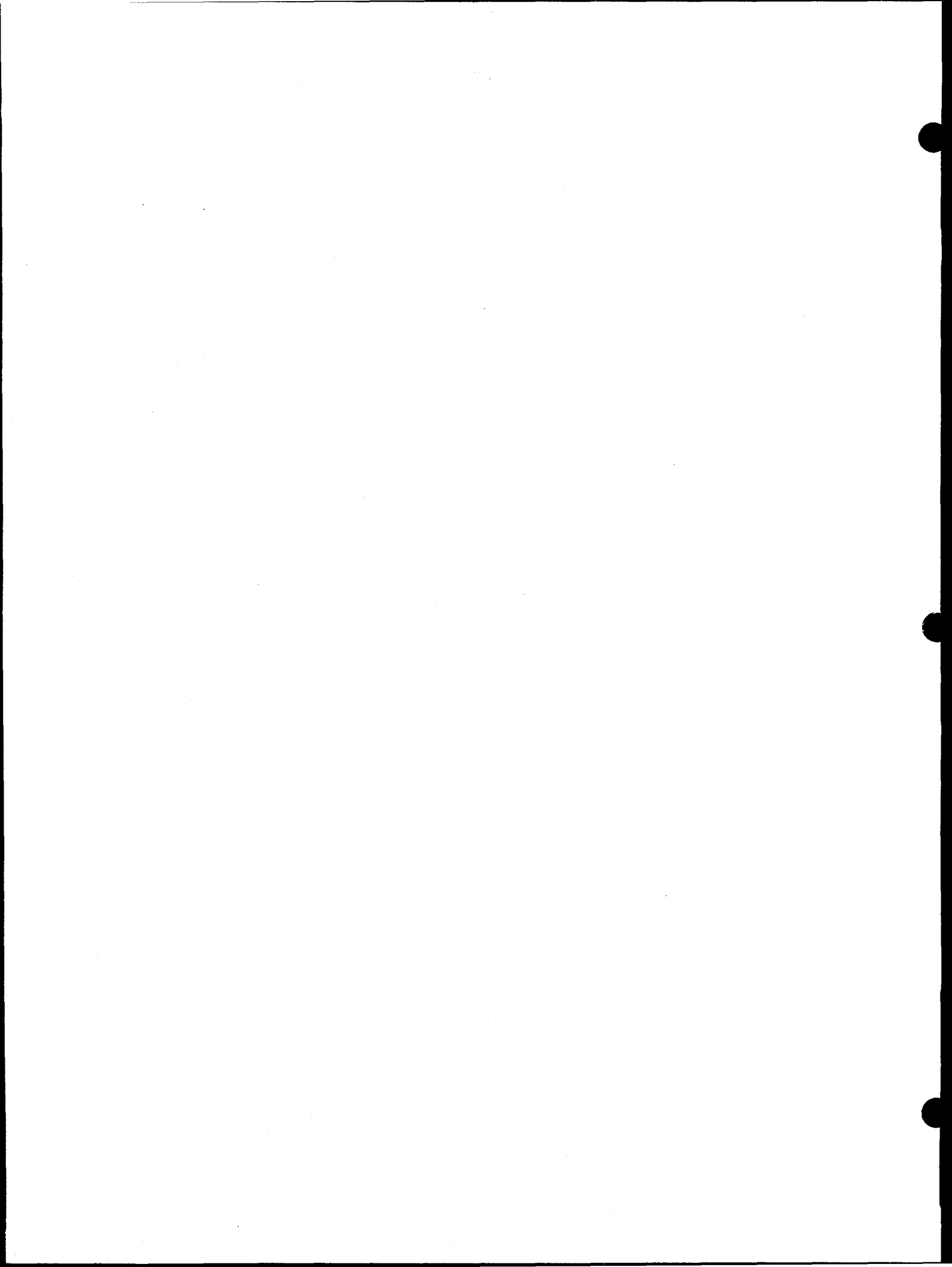
UPGRADIENT SITES

CRSP — Chestnut Ridge Security Pits (GW-177)
LIV — Industrial Landfill IV (GW-521)
UNCS — United Nuclear Corporation Site (GW-221)

DOWNGRADIENT SITES

KHQ — Kerr Hollow Quarry (GW-144)
RQ — Rogers Quarry (GW-184)

LOCATION:	Y-12 PLANT OAK RIDGE, TN.	FIGURE 8 HYDROGRAPHS FOR SELECTED SITES IN THE CHESTNUT RIDGE HYDROGEOLOGIC REGIME
DATE:	02/07/1996	
DWG ID.:	C:\ACAD\CR_95\CR_FIG8.DWG	



APPENDIX B

TABLES

**Table 1. Waste-Management Sites and CERCLA Operable Units
in the Chestnut Ridge Hydrogeologic Regime**

Site	Regulatory Classification	
	Historical ¹	Current ²
Chestnut Ridge Sediment Disposal Basin	TSD Unit	Study Area/TSD Unit
East Chestnut Ridge Waste Pile	TSD Unit	Study Area/TSD Unit
Kerr Hollow Quarry	TSD Unit	Study Area/TSD Unit
Chestnut Ridge Security Pits	TSD Unit	CR OU 01/TSD Unit
Ash Disposal Basin	SWMU	CR OU 02
United Nuclear Corporation Site	SWMU	CR OU 03
Rogers Quarry	SWMU	CR OU 04
Industrial Landfill II	SWDF	SWDF
Industrial Landfill IV	SWDF	SWDF
Industrial Landfill V	N/A	SWDF
Construction/Demolition Landfill VI	N/A	SWDF
Construction/Demolition Landfill VII	N/A	SWDF
Chestnut Ridge Borrow Area Waste Pile	NR	Study Area

Notes:

- 1 Regulatory classification before the 1992 Federal Facility Agreement.

TSD Unit - RCRA-regulated land-based Treatment, Storage, or Disposal Facility.
 SWMU - RCRA-regulated Solid Waste Management Unit
 SWDF - Solid Waste Disposal Facility (non-hazardous waste)
 N/A - Not applicable (new facility)
 NR - Not regulated

- 2 Modified from: *Oak Ridge Reservation Site Management Plan for the Environmental Restoration Program* (U.S. Department of Energy 1994a)

CR OU 01 - Chestnut Ridge Operable Unit 01 (Source Control and Groundwater OU)
 CR OU 02 - Chestnut Ridge Operable Unit 02 (Source Control and Groundwater OU)
 CR OU 03 - Chestnut Ridge Operable Unit 03 (Source Control and Groundwater OU)
 CR OU 04 - Chestnut Ridge Operable Unit 04 (Source Control and Groundwater OU)

Table 2. CY 1995 Monitoring Program Summary

Monitoring Program = Best-Management Practice Monitoring

Sampling Point	Location	Q1	Q2	Q3	Q4	Analytical Parameters	Program Change
GW-160	CRBAWP	*	*		*	LF2	
GW-161	CRBAWP	*	*		*	LF2	
GW-184	RQ	*	*		*	STD	
GW-186	RQ	*	*		*	STD	
GW-187	RQ	*	*		*	STD	
GW-188	RQ	*	*		*	STD	
GW-292	ECRWP	*	*		*	STD	
GW-293	ECRWP	*	*		*	STD	
GW-294	ECRWP	*	*		*	STD	
GW-296	ECRWP	*	*		*	STD	
GW-298	CRBAWP	*	*		*	LF2	
GW-299	CRBAWP	*	*		*	LF2	
GW-300	CRBAWP	*	*		*	LF2	
GW-301	CRBAWP	*	*		*	LF2	
GW-321	ADB	*	*		*	STD, MISC(1)	95-30
GW-512	ADB	*	*		*	STD, MISC(1)	
GW-513	ADB	*	*		*	STD, MISC(1)	
GW-514	ADB	*	*		*	STD, MISC(1)	

Table 2. CY 1995 Monitoring Program Summary (cont'd)

Monitoring Program = CERCLA Record of Decision Monitoring						
Sampling Point	Location	Q1	Q2	Q3	Q4	Analytical Parameters
1090	UNCS	*	*	*	*	STD, RAD(3,5)
GW-203	UNCS	*	*	*	*	STD, RAD(3,5)
GW-205	UNCS	*	*	*	*	STD, RAD(3,5)
GW-221	UNCS	*	*	*	*	STD, RAD(3,5)
GW-302	UNCS	*	*	*	*	STD, RAD(3,5), MET(2)
GW-339	UNCS	*	*	*	*	STD, RAD(3,5)
Monitoring Program = RCRA Assessment Monitoring						
Sampling Point	Location	Q1	Q2	Q3	Q4	Analytical Parameters
GW-175	CRSP	*	*	*	*	STD
GW-177	CRSP	*	*	*	*	STD
GW-181	CRSP	*	*	*	*	STD
GW-511	CRSP	*	*	*	*	STD
GW-608	CRSP	*	*	*	*	STD
GW-609	CRSP	*	*	*	*	STD
GW-610	CRSP	*	*	*	*	STD
GW-611	CRSP	*	*	*	*	STD
GW-742	CRSP	*	*	*	*	STD
GW-743	CRSP	*	*	*	*	STD

Table 2. CY 1995 Monitoring Program Summary (cont'd)

Monitoring Program = RCRA Int. Status Detect. Monitoring						
Sampling Point	Location	Q1	Q2	Q3	Q4	Analytical Parameters
GW-142	KHQ	*	*	*	*	STD, PHEN, REP
GW-143	KHQ	*	*	*	*	STD, PHEN, REP
GW-144	KHQ	*	*	*	*	STD, PHEN, REP
GW-145	KHQ	*	*	*	*	STD, PHEN, REP
GW-146	KHQ	*	*	*	*	STD, PHEN, REP
GW-147	KHQ	*	*	*	*	STD, PHEN, REP
GW-156	CRSDB	*	*	*	*	STD, PHEN, REP
GW-158	CRSDB	*	*	*	*	STD, PHEN, REP
GW-159	CRSDB	*	*	*	*	STD, PHEN, REP
GW-231	KHQ	*	*	*	*	STD, PHEN, REP
GW-241	CRSDB	*	*	*	*	STD, PHEN, REP
GW-303	CRSDB	*	*	*	*	STD, PHEN, REP
GW-304	CRSDB	*	*	*	*	STD, PHEN, REP
GW-731	CRSDB	*	*	*	*	STD, PHEN, REP
GW-732	CRSDB	*	*	*	*	STD, PHEN, REP
						Program Change
						95-03,04
						95-04
						95-03,04
						95-03,04
						95-03,04
						95-04
						95-25
						95-24
						95-25
						95-04
						95-24
						95-24
						95-24
						95-25
						95-25

Table 2. CY 1995 Monitoring Program Summary (cont'd)

Monitoring Program = SWDF Detection Monitoring

Sampling Point	Location	Q1	Q2	Q3	Q4	Analytical Parameters	Program Change
CBS-1	LV		*		*	LF4, TPH	
GW-141	LIV	*		*		LF1	
GW-217	LIV	*		*		LF1	
GW-305	LIV	*		*		LF1	
GW-521	LIV	*		*		LF1, RAD(2,3,4,5)	
GW-522	LIV	*		*		LF1	
GW-539	LII	*		*		LF4	95-14
GW-540	CDLVI		*		*	LF3	
GW-541	CDLVI		*		*	LF3	
GW-542	CDLVI		*		*	LF3	
GW-543	CDLVI		*		*	LF3	
GW-544	CDLVI		*		*	LF3	
GW-545	CDLVI		*		*	LF3	95-02
GW-546	CDLVI		*		*	LF3	
GW-557	LV		*		*	LF4	
GW-560	CDLVII		*		*	LF4, TPH	
GW-562	CDLVII		*		*	LF4, TPH	
GW-564	CDLVII		*		*	LF4, TPH	
GW-709	LII	*		*		LF1	95-14
GW-757	LII	*		*		LF1	95-14

Table 2. CY 1995 Monitoring Program Summary (cont'd)

Monitoring Program = SWDF Detection Monitoring (cont'd)						
Sampling Point	Location	Q1	Q2	Q3	Q4	Analytical Parameters
GW-796	LV		*		*	LF4
GW-797	LV		*		*	LF4
GW-798	CDLVII		*		*	LF4, TPH
GW-799	LV		*		*	LF4
GW-801	LV		*		*	LF4
						Program Change

Table 2. CY 1995 Monitoring Program Summary (cont'd)

Addendum = 95-02					
Sampling Point	Action	Program	Sampling Frequency	Analytical Parameters	Effective Date
GW-545	Drop Sampling Point	SWDF	0	LF3	02/14/95
GW-827	Add Sampling Point	SWDF	S2&4	LF3	02/14/95
Addendum = 95-03					
Sampling Point	Action	Program	Sampling Frequency	Analytical Parameters	Effective Date
GW-142S	Add Sampling Point	DMP	Q1	MET(1), RAD(3)	03/30/95
GW-144S	Add Sampling Point	DMP	Q1	MET(1), RAD(3,7)	03/30/95
GW-145S	Add Sampling Point	DMP	Q1	RAD(3,7)	03/30/95
GW-146S	Add Sampling Point	DMP	Q1	RAD(7)	03/30/95
Addendum = 95-04					
Sampling Point	Action	Program	Sampling Frequency	Analytical Parameters	Effective Date
GW-142	Change Prog.	DMP	Q	STD, PHEN, REP, RAD(3,7)	03/20/95
GW-143	Change Prog.	DMP	Q	STD, PHEN, REP, RAD(3,7)	03/20/95
GW-144	Change Prog.	DMP	Q	STD, PHEN, REP, RAD(3,7)	03/20/95
GW-145	Change Prog.	DMP	Q	STD, PHEN, REP, RAD(3,7)	03/20/95
GW-146	Change Prog.	DMP	Q	STD, PHEN, REP, RAD(3,7)	03/20/95
GW-147	Change Prog.	DMP	Q	STD, PHEN, REP, RAD(3,7)	03/20/95
GW-231	Change Prog.	DMP	Q	STD, PHEN, REP, RAD(3,7)	03/20/95

Table 2. CY 1995 Monitoring Program Summary (cont'd)

Addendum = 95-06					
Sampling Point	Action	Program	Sampling Frequency	Analytical Parameters	Effective Date
SCR2.2SP	Add Sampling Point	BMP	Q1	STD,RAD(2)	03/15/95
Addendum = 95-14					
Sampling Point	Action	Program	Sampling Frequency	Analytical Parameters	Effective Date
GW-539	Change Prog.	SWDF	S134	LF4	07/13/95
GW-709	Change Prog.	SWDF	S134	LF1	07/13/95
GW-757	Change Prog.	SWDF	S134	LF1	07/13/95
Addendum = 95-24					
Sampling Point	Action	Program	Sampling Frequency	Analytical Parameters	Effective Date
GW-158	Drop Sampling Point	DMP	0	STD,PHEN,REP	10/01/95
GW-241	Drop Sampling Point	DMP	0	STD,PHEN,REP	10/01/95
GW-303	Drop Sampling Point	DMP	0	STD,PHEN,REP	10/01/95
GW-304	Drop Sampling Point	DMP	0	STD,PHEN,REP	10/01/95

Table 2. CY 1995 Monitoring Program Summary (cont'd)

Addendum = 95-25						
Sampling Point	Action	Program	Sampling Frequency	Analytical Parameters	Effective Date	
GW-156	Change Prog.	PCDM	Q4, X4	FLD, CHEM, MET(1,2), RAD(1)	10/01/95	
GW-159	Change Prog.	PCDM	Q4, X4	FLD, CHEM, MET(1,2), RAD(1)	10/01/95	
GW-731	Change Prog.	PCDM	Q4, X4	FLD, CHEM, MET(1,2), RAD(1)	10/01/95	
GW-732	Change Prog.	PCDM	Q4, X4	FLD, CHEM, MET(1,2), RAD(1)	10/01/95	
Addendum = 95-26						
Sampling Point	Action	Program	Sampling Frequency	Analytical Parameters	Effective Date	
GW-732S	Add Sampling Point	DMP	Q3	FLD, CHEM, MET(1), RAD(1)	08/14/95	
Addendum = 95-30						
Sampling Point	Action	Program	Sampling Frequency	Analytical Parameters	Effective Date	
GW-321S	Add Sampling Point	CERCLA	Q1	MET(1), Br, Cyanide, RAD(1)	01/10/95	
Addendum = 95-31						
Sampling Point	Action	Program	Sampling Frequency	Analytical Parameters	Effective Date	
GW-295	Add Sampling Point	BMP	Q2	Total U, VOC(1,2), FLD	05/03/95	

Table 2. CY 1995 Monitoring Program Summary (cont'd)

SAMPLING POINT:		EXPLANATION
CBS-1	-	Chestnut Branch Spring 1
GW	-	Monitoring well
S	-	Special event sampling in addition to routine monitoring
SCR2.2SP	-	South Chestnut Ridge Spring, kilometer 2.2
1090	-	1000 series monitoring well
 LOCATION:		
ADB	-	Ash Disposal Basin
CDLVI	-	Construction/Demolition Landfill VI
CDLVII	-	Construction/Demolition Landfill VII
CRBAWP	-	Chestnut Ridge Borrow Area Waste Pile
CRSDB	-	Chestnut Ridge Sediment Disposal Basin
CRSP	-	Chestnut Ridge Security Pits
ECRWP	-	East Chestnut Ridge Waste Pile
KHQ	-	Kerr Hollow Quarry (located in Bethel Valley)
LII	-	Industrial Landfill II
LIV	-	Industrial Landfill IV
LV	-	Industrial Landfill V
RQ	-	Rogers Quarry (located in Bethel Valley)
UNCS	-	United Nuclear Corporation Site
 PROGRAM		
BMP	-	Best-Management Practice Monitoring
DMP	-	RCRA Interim Status Detection Monitoring
PCDM	-	RCRA Post-Closure Detection Monitoring
SWDF	-	Landfill Detection Monitoring
CERCLA	-	CERCLA RI/FS Monitoring
 SAMPLING FREQUENCY:		
Q:		Quarterly sampling
Q1:		Annual sample to be taken in first calendar quarter
Q3:		Annual sample to be taken in third calendar quarter
Q4:		Annual sample to be taken in fourth calendar quarter
S 134:		Samples to be taken in first, third and fourth calendar quarters
S 1&3:		Semiannual samples to be taken in first and third calendar quarters
S 2&4:		Semiannual samples to be taken in second and fourth calendar quarters
0:		No samples to be taken
X4:		Replicate samples to be taken on 4 consecutive days

Table 2. CY 1995 Monitoring Program Summary (cont'd)

EXPLANATION

ANALYTICAL PARAMETERS:

STD:	FLD, CHEM, MET(1), VOC(1), RAD(1)
LF1:	STD, MET(2,3), VOC(2,3), MISC(1,2)
LF2:	STD, MET(2), VOC(2), MISC(1,2)
LF3:	STD, MET(2,3), VOC(3), RAD(3,6), MISC(1,2,3)
LF4:	STD, MET(2,3), VOC(2,3), RAD(3,6), MISC(1,2,3)
Br:	Bromide
CHEM:	Anions: Alkalinities(carbonate & bicarbonate), Chloride IC, Fluoride SIE, Nitrate Nitrogen, Sulfate Other: pH, Specific conductance, Total dissolved solids, Total suspended solids, Turbidity
Cyanide:	Cyanide
FLD:	Field measurements: Depth to water, Dissolved oxygen, pH, Redox, Specific conductance, Temperature
MET(1):	ICP: Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thorium, Vanadium, Zinc Plasma Mass Spectrometry Uranium CVAA Mercury
MET(2):	AAS: Cadmium, Chromium, Lead
MET(3):	Thallium
MISC(1):	Total organic carbon, Total organic halides
MISC(2):	Chemical oxygen demand, Cyanide
MISC(3):	Ammonia
PHEN:	Phenols
RAD(1):	Gross alpha activity, Gross beta activity
RAD(2):	Strontium, 99-Techneium, Tritium
RAD(3):	234-Uranium, 235-Uranium, 238-Uranium
RAD(4):	241-Americium, 129-Iodine, 237-Neptunium, 238-Plutonium, 239-Plutonium
RAD(5):	Radium
RAD(6):	Gamma activity
RAD(7):	Strontium
REP:	4 replicate samples each for pH, Specific conductance, Total organic carbon, Total organic halides
Total U:	Total uranium
TPH:	Total petroleum hydrocarbons

Table 2. CY 1995 Monitoring Program Summary (cont'd)

EXPLANATION

ANALYTICAL PARAMETERS:

VOC(1):

1,1,1-trichloroethane
1,1,2,2-tetrachloroethane
1,1,2-trichloroethane
1,1-dichloroethane
1,1-dichloroethene
1,2-dichloroethane
1,2-dichloroethene
1,2-dichloropropane
2-butanone
2-hexanone
4-methyl-2-pentanone
acetone
benzene
bromodichloromethane
bromoform
bromomethane
carbon disulfide
carbon tetrachloride
chlorobenzene
chlorodibromomethane
chloroethane
chloroform
chloromethane
cis-1,3-dichloropropene
ethylbenzene
methylene chloride
styrene
tetrachloroethene
toluene
trans-1,3-dichloropropene
trichloroethene
vinyl acetate
vinyl chloride
xylenes

Table 2. CY 1995 Monitoring Program Summary (cont'd)

EXPLANATION

ANALYTICAL PARAMETERS:

VOC(2):

acrolein
acrylonitrile
2-chloroethylvinyl ether
dibromomethane
1,4-dichloro-2-butene
dichlorodifluoromethane
ethanol
ethyl methacrylate
iodomethane
trichlorofluoromethane
1,2,3-trichloropropane

VOC(3):

1,1,1,2-tetrachloroethane
1,2-dibromo-3-chloropropane
1,2-dichlorobenzene
1,4-dichlorobenzene
bromochloromethane
cis-1,2-dichloroethene
dibromomethane
trans-1,2-dichloroethene

Table 3. General Construction Information for Monitoring Wells Sampled During 1995

Well No.	Location	Aquifer		Monitored Interval			
		Unit	Formation	Depths (bgs)		Elevations (msl)	
1090	UNCS	AQF	Ock	-	-	-	-
GW-141	LIV	AQF	Ock	141.00	- 156.00	1042.50	- 1027.50
GW-142	KHQ	AQF	Ock	248.50	- 295.00	719.79	- 673.29
GW-143	KHQ	AQF	Ock	205.00	- 253.00	706.04	- 658.04
GW-144	KHQ	AQF	Ock	148.00	- 195.00	762.48	- 715.48
GW-145	KHQ	AQF	Ock	86.00	- 110.00	751.29	- 727.29
GW-146	KHQ	AQF	Ock	190.00	- 220.00	647.00	- 617.00
GW-147	KHQ	AQF	Ock	52.00	- 69.00	796.41	- 779.41
GW-156	CRSDB	AQF	Ock	146.00	- 157.00	900.90	- 889.90
GW-158	CRSDB	AQF	Ock	356.00	- 441.00	625.24	- 540.24
GW-159	CRSDB	AQF	Ock	146.00	- 157.00	902.80	- 891.80
GW-160	CRBAWP	AQF	Ock	205.00	- 235.00	885.70	- 855.70
GW-161	CRBAWP	AQF	Ock	350.00	- 400.00	740.90	- 690.90
GW-175	CRSP	AQF	Ock	148.30	- 166.70	933.60	- 915.20
GW-177	CRSP	AQF	Ock	132.00	- 145.00	1023.50	- 1010.50
GW-181	CRSP	AQF	Ock	155.00	- 168.00	935.60	- 922.60
GW-184	RQ	AQT	Och	101.50	- 130.00	823.15	- 794.65
GW-186	RQ	AQT	Och	142.00	- 171.00	686.31	- 657.31
GW-187	RQ	AQT	Och	139.00	- 162.00	692.59	- 669.59
GW-188	RQ	AQT	Och	49.00	- 68.00	785.33	- 766.33
GW-203	UNCS	AQF	Ock	144.00	- 156.00	958.30	- 946.30
GW-205	UNCS	AQF	Ock	154.00	- 164.00	947.50	- 937.50
GW-217	LIV	AQF	Ock	165.20	- 180.00	1009.10	- 994.30
GW-221	UNCS	AQF	Ock	147.00	- 158.00	956.40	- 945.40
GW-231	KHQ	AQF	Ock	22.80	- 35.00	824.10	- 811.90
GW-241	CRSDB	AQF	Ock	78.00	- 103.00	902.80	- 877.80
GW-292	ECRWP	AQF	Ock	172.10	- 186.00	898.00	- 884.10
GW-293	ECRWP	AQF	Ock	197.00	- 214.00	864.70	- 847.70

Table 3. General Construction Information for Monitoring Wells Sampled During 1995 (Cont'd)

Well No.	Location	<u>Aquifer</u>		<u>Monitored Interval</u>			
		Unit	Formation	Depths (bgs)		Elevations (msl)	
GW-294	ECRWP	AQF	Ock	113.00	- 128.00	968.70	- 953.70
GW-296	ECRWP	AQF	Ock	134.40	- 147.00	953.90	- 941.30
GW-298	CRBAWP	AQF	Ock	171.10	- 190.00	875.30	- 856.40
GW-299	CRBAWP	AQF	Ock	153.00	- 168.00	898.30	- 883.30
GW-300	CRBAWP	AQF	Ock	132.00	- 147.00	938.70	- 923.70
GW-301	CRBAWP	AQF	Ock	148.50	- 163.50	935.40	- 920.40
GW-302	UNCS	AQF	Ock	121.50	- 134.80	1018.10	- 1004.80
GW-303	CRSDB	AQF	Ock	300.00	- 321.00	704.40	- 683.40
GW-304	CRSDB	AQF	Ock	148.50	- 167.00	894.30	- 875.80
GW-305	LIV	AQF	Ock	165.30	- 179.60	1015.80	- 1001.50
GW-321	ADB	AQF	Ock	84.00	- 98.60	839.10	- 824.50
GW-339	UNCS	AQF	Ock	101.00	- 114.00	1021.20	- 1008.20
GW-511	CRSP	AQF	Ock	140.00	- 153.70	950.70	- 937.00
GW-512	ADB	AQF	Ock	48.00	- 61.00	950.99	- 937.99
GW-513	ADB	AQF	Ock	111.00	- 125.30	887.99	- 873.69
GW-514	ADB	AQF	Ock	174.00	- 195.00	824.66	- 803.66
GW-521	LIV	AQF	Ock	123.20	- 136.00	1056.30	- 1043.50
GW-522	LIV	AQF	Ock	183.00	- 195.30	989.00	- 976.70
GW-539	LII	AQF	Ock	136.40	- 156.00	954.00	- 934.40
GW-540	CDL VI	AQF	Ock	158.50	- 171.50	910.90	- 897.90
GW-541	CDL VI	AQF	Ock	86.70	- 104.50	969.10	- 951.30
GW-542	CDL VI	AQF	Ock	59.00	- 76.50	990.00	- 972.50
GW-543	CDL VI	AQF	Ock	76.20	- 93.60	945.00	- 927.60
GW-544	CDL VI	AQF	Ock	91.00	- 109.30	951.50	- 933.20
GW-546	CDL VI	AQF	Ock	66.20	- 84.40	1003.40	- 985.20
GW-557	ILF V	AQF	Ock	112.90	- 138.00	965.70	- 940.60
GW-560	CDL VII	AQF	Ock	45.20	- 69.00	890.97	- 867.17
GW-562	CDL VII	AQF	Ock	36.00	- 60.00	895.86	- 871.86

Table 3. General Construction Information for Monitoring Wells Sampled During 1995 (Cont'd)

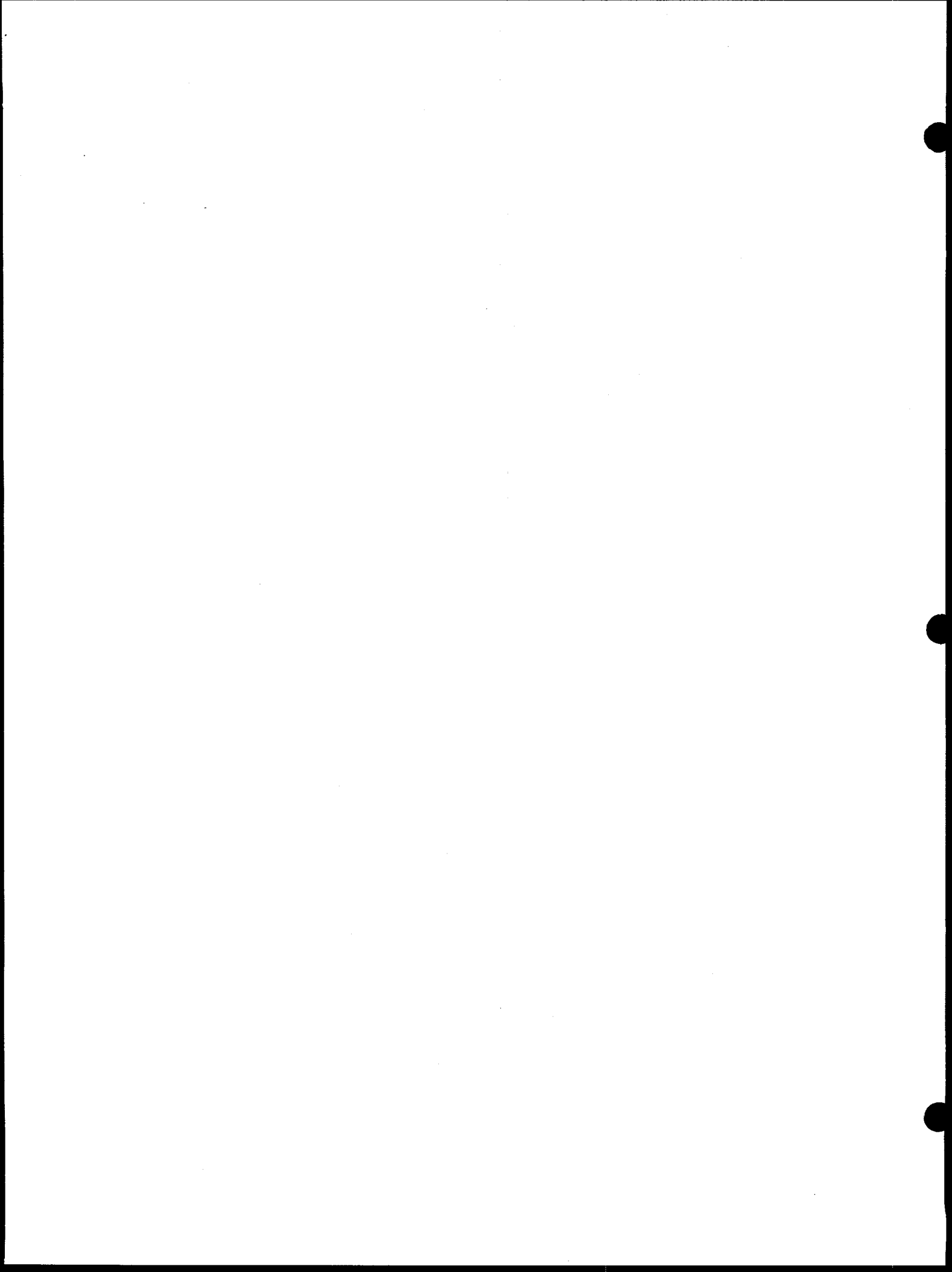
Well No.	Location	<u>Aquifer</u>		<u>Monitored Interval</u>	
		Unit	Formation	Depths (bgs)	Elevations (msl)
GW-564	CDL VII	AQF	Ock	52.00 - 81.00	883.12 - 854.12
GW-608	CRSP	AQF	Ock	148.00 - 220.00	923.00 - 851.00
GW-609	CRSP	AQF	Ock	256.40 - 269.00	853.30 - 840.70
GW-610	CRSP	AQF	Ock	105.10 - 117.40	951.70 - 939.40
GW-611	CRSP	AQF	Ock	101.50 - 121.60	943.90 - 923.80
GW-709	L II	AQF	Ock	68.70 - 80.60	835.14 - 823.24
GW-731	CRSDB	AQF	Ock	164.00 - 178.70	881.80 - 867.10
GW-732	CRSDB	AQF	Ock	178.30 - 190.00	882.40 - 870.70
GW-742	CRSP	AQF	Ock	350.00 - 420.00	747.80 - 677.80
GW-743	CRSP	AQF	Ock	150.10 - 161.10	948.60 - 937.60
GW-757	L II	AQF	Ock	134.00 - 166.70	824.65 - 791.95
GW-796	ILF V	AQF	Ock	122.90 - 136.50	925.90 - 912.30
GW-797	ILF V	AQF	Ock	118.00 - 134.10	938.10 - 922.00
GW-798	CDL VII	AQF	Ock	122.00 - 135.40	880.42 - 867.02
GW-799	ILF V	AQF	Ock	78.70 - 92.00	899.40 - 886.10
GW-801	ILF V	AQF	Ock	175.80 - 188.90	918.02 - 904.92
GW-827	CDL VII	AQF	Ock	122.10 - 134.80	926.03 - 913.33

Footnotes:

ADB	- Ash Disposal Basin
CDL VI	- Construction Demolition Landfill VI
CDL VII	- Construction Demolition Landfill VII
CRBAWP	- Chestnut Ridge Borrow Area Waste Pile
CRSDB	- Chestnut Ridge Sediment Disposal Basin
CRSP	- Chestnut Ridge Security Pits
ECRWP	- East Chestnut Ridge Waste Pile
ILF V	- Industrial Landfill V
KHQ	- Kerr Hollow Quarry
LII	- Landfill II
LIV	- Landfill IV
RQ	- Rogers Quarry
UNCS	- United Nuclear Corporation Site
AQF	- Knox Aquifer
AQT	- ORR Aquatards
Och	- Chickamauga Group
Ock	- Knox Group
bgs	- (feet) below ground surface
msl	- (feet) above mean sea level

APPENDIX C

MONITORING WELL CONSTRUCTION DETAILS



EXPLANATION

LOCATION:

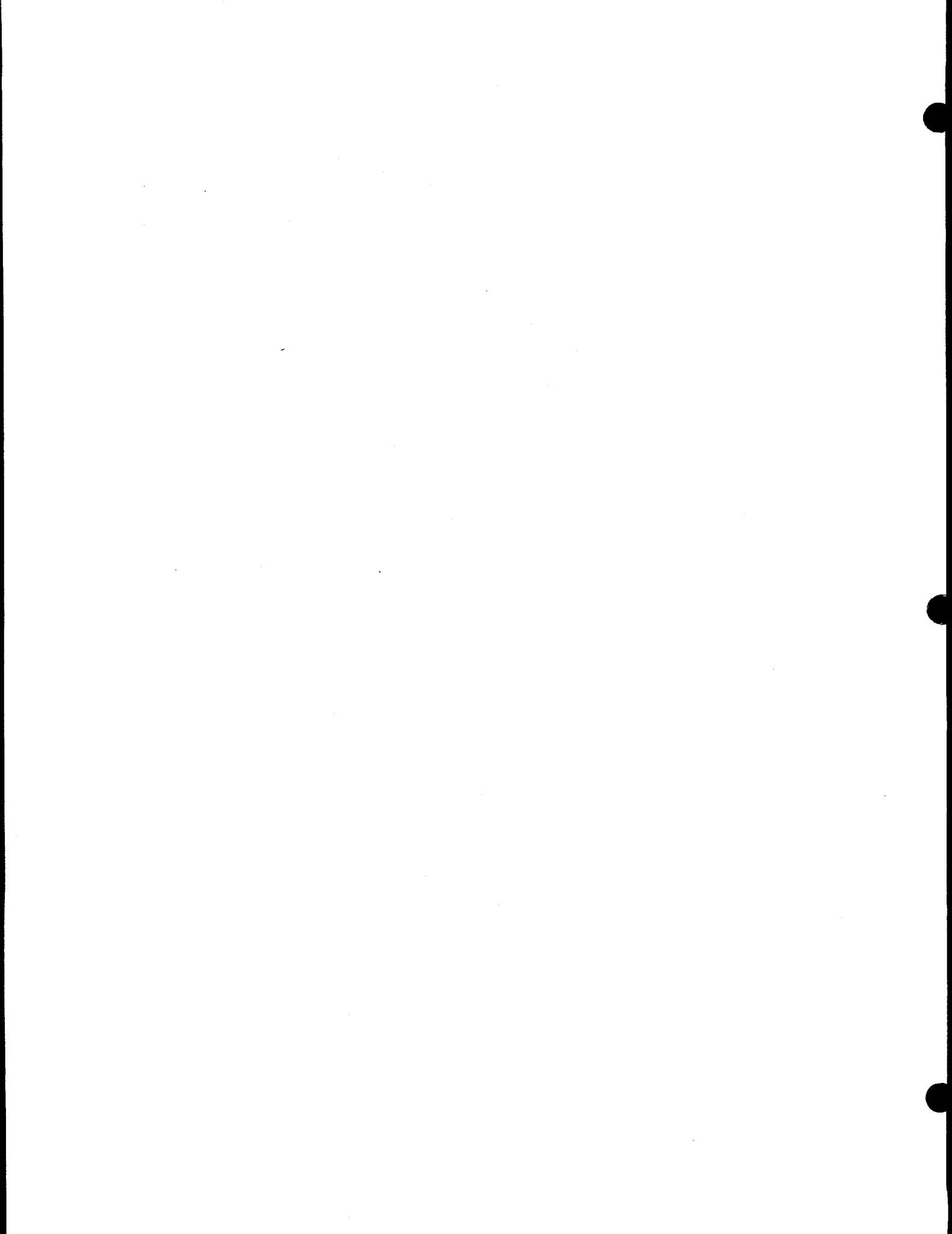
ADB	-	Ash Disposal Basin
CDLVI	-	Construction/Demolition Landfill VI
CDLVII	-	Construction/Demolition Landfill VII
CRBAWP	-	Chestnut Ridge Borrow Area Waste Pile
CRSDB	-	Chestnut Ridge Sediment Disposal Basin
CRSP	-	Chestnut Ridge Security Pits
ECRWP	-	East Chestnut Ridge Waste Pile
KHQ	-	Kerr Hollow Quarry
LII	-	Industrial Landfill II
LIV	-	Industrial Landfill IV
ILFV	-	Industrial Landfill V
RQ	-	Rogers Quarry
UNCS	-	United Nuclear Corporation Site

GENERAL INFORMATION:

Coordinates	-	Y-12 Plant grid system
Elevations	-	Feet above mean sea level
Depths	-	Feet below ground surface
AQF	-	Knox Aquifer
AQT	-	ORR Aquitards
B	-	Bedrock Interval
WB	-	Weathered Bedrock
U	-	Unconsolidated
Ock	-	Knox Group
Och	-	Chickamauga Group
.	-	Not Applicable or not available

CASING:

OD (in)	-	Outside diameter, in inches
Borehole Diameter	-	Nominal diameter, in inches
Conductor Casing Type:		
PVC/#40	-	Polyvinyl chloride, schedule 40
SS/#304	-	Stainless Steel, schedule 304
Steel	-	carbon steel
F-25/J-55	-	American Petroleum Institute Grade



EXPLANATION (cont'd)

MONITORED INTERVAL:

Top	-	Depth to top of filter pack or open-hole
Bottom	-	Depth to bottom of filter pack or open-hole
Screen Material:		
PVC/sl	-	PVC, slotted
PVC/sw/.01	-	PVC, spiral wound, 0.01 inch slot size
SS/sw/.01	-	Stainless steel, spiral wound, 0.01 inch slot size
SS/sl/.01	-	Stainless steel, slotted, 0.01 slot size

Length of screen and open hole interval is in feet.

NOTE:

Data Compiled from *Updated Subsurface Data Base for Bear Creek Valley, Chestnut Ridge, and parts of Bethel Valley on the U.S. Department of Energy Oak Ridge Reservation.* (Jones et al. 1995)

APPENDIX C
Monitoring Well Construction Details

Well No.	1090	GW-141	GW-142	GW-143	GW-144	GW-145	GW-146
Sample Group	CR 2	CR 1	CR 7	CR 7	CR 7	CR 7	CR 7
Location	UNCS	LIV	KHQ	KHQ	KHQ	KHQ	KHQ
GENERAL INFORMATION							
East Coordinate	53853.02	52463.00	64030.00	63522.00	63502.00	63266.00	63272.00
North Coordinate	28718.02	28755.00	24524.00	24257.00	24255.00	24441.00	24432.00
Measuring Pt. Elevation	1103.90	1186.10	970.35	913.18	913.34	840.04	838.16
Ground Elevation	1101.60	1183.50	968.29	911.04	910.48	837.29	837.00
Hydrostratigraphic Unit	AQF	AQF	AQF	AQF	AQF	AQF	AQF
Geologic Formation	Ock	Ock	Ock	Ock	Ock	Ock	Ock
Aquifer Zone	wB	B	B	B	B	wB/B	B
Weathered Rock - Depth	.	.	.	.	.	.	.
Weathered Rock - Elevation	.	.	.	.	.	.	.
Fresh Rock - Depth	.	57.0	.	18.0	.	.	11.0
Fresh Rock - Elevation	.	1129.10	.	895.18	.	.	827.16
Total Depth Drilled	96.70	156.00	295.00	253.00	195.00	110.00	220.00
SURFACE/CONDUCTOR CASING							
Conductor Casing Depth	.	65.00	20.00	20.00	40.00	12.00	13.00
Conductor Casing OD (in)	.	10.75	12.50	10.63	12.50	12.50	12.50
Conductor Casing Type	none	steel/F25	PVC/#40	PVC/#40	PVC/#40	PVC/#40	PVC/#40
WELL CASING							
Borehole Diameter	8.00	10.00	11.00	10.00	11.00	11.00	11.00
Well Casing Depth	.	144.5	248.5	205.0	150.0	88.5	190.0
Well Casing OD (in)	6.50	4.50	6.62	6.62	4.50	4.50	6.62
Well Casing Type	PVC/#40	SS/#304	steel/F25	steel/F25	PVC/#40	PVC/#40	steel/F25
MONITORED INTERVAL							
Top Monitored Interval - Depth	.	141.0	248.5	205.0	148.0	86.0	190.0
Top Monitored Interval - Elevation	.	1042.50	719.79	706.04	762.48	751.29	647.00
Midpoint - Depth	.	148.5	271.8	229.0	171.5	98.0	205.0
Midpoint - Elevation	.	1035.00	696.54	682.04	738.98	739.29	632.00
Bottom Monitored Interval - Depth	.	156.0	295.0	253.0	195.0	110.0	220.0
Bottom Monitored Interval - Elevation	.	1027.50	673.29	658.04	715.48	727.29	617.00
Screen Material	PVC/sl	SS/sw/.01	.	.	PVC/sw/.01	PVC/sw/.01	.
Screen Length	.	10.7	.	.	40.0	20.0	.
Open-Hole Length	.	.	46.5	48.0	.	.	30.0
Open-Hole Diameter	.	.	6.00	6.00	.	.	6.00

APPENDIX C
Monitoring Well Construction Details

Well No.	GW-147	GW-156	GW-158	GW-159	GW-160	GW-161	GW-175
Sample Group	CR 7	CR 6	CR 6	CR 6	CR 5	CR 5	CR 3
Location	KHQ	CRSDB	CRSDB	CRSDB	CRBAWP	CRBAWP	CRSP
GENERAL INFORMATION							
East Coordinate	63428.00	64020.00	63643.00	63496.00	62165.00	62146.00	58686.00
North Coordinate	24731.00	27626.00	27069.00	27764.00	27803.00	27805.00	28676.00
Measuring Pt. Elevation	851.62	1049.10	983.05	1051.20	1093.10	1093.50	1084.00
Ground Elevation	848.41	1046.90	981.24	1048.80	1090.70	1090.90	1081.90
Hydrostratigraphic Unit	AQF	AQF	AQF	AQF	AQF	AQF	AQF
Geologic Formation	Ock	Ock	Ock	Ock	Ock	Ock	Ock
Aquifer Zone	wB	B	B	wB/B	wB	B	B
Weathered Rock - Depth	.	84.0	87.0	.	60.0	65.0	46.0
Weathered Rock - Elevation	.	965.10	896.05	.	1033.10	1028.50	1038.00
Fresh Rock - Depth	6.0	93.0	93.0	100.0	.	95.5	98.5
Fresh Rock - Elevation	845.62	956.10	890.05	951.20	.	998.00	985.50
Total Depth Drilled	69.00	157.00	441.00	157.00	235.00	400.00	166.70
SURFACE/CONDUCTOR CASING							
Conductor Casing Depth	4.60	94.00	94.00	123.00	112.50	108.00	61.30
Conductor Casing OD (in)	10.63	10.75	10.75	10.75	12.50	12.50	10.75
Conductor Casing Type	PVC/#40	steel/F25	steel/F25	steel/F25	steel/F25	steel/F25	unknown
WELL CASING							
Borehole Diameter	10.00	8.50	10.00	8.50	11.00	11.00	9.50
Well Casing Depth	53.1	147.0	356.0	147.0	205.0	350.0	150.6
Well Casing OD (in)	4.50	4.50	6.62	4.50	6.62	6.62	4.50
Well Casing Type	PVC/#40	PVC/#40	steel/F25	PVC/#40	steel/F25	steel/F25	SS/#304
MONITORED INTERVAL							
Top Monitored Interval - Depth	52.0	146.0	356.0	146.0	205.0	350.0	148.3
Top Monitored Interval - Elevation	796.41	900.90	625.24	902.80	885.70	740.90	933.60
Midpoint - Depth	60.5	151.5	398.5	151.5	220.0	375.0	157.5
Midpoint - Elevation	787.91	895.40	582.74	897.30	870.70	715.90	924.40
Bottom Monitored Interval - Depth	69.0	157.0	441.0	157.0	235.0	400.0	166.7
Bottom Monitored Interval - Elevation	779.41	889.90	540.24	891.80	855.70	690.90	915.20
Screen Material	PVC/sw/.01	PVC/sw/.01	.	PVC/sw/.01	.	.	SS/sw/.01
Screen Length	15.0	10.0	.	10.0	.	.	15.8
Open-Hole Length	.	.	85.0	.	30.0	50.0	.
Open-Hole Diameter	.	.	6.00	.	6.00	11.00	.

APPENDIX C
Monitoring Well Construction Details

Well No.	GW-177	GW-181	GW-184	GW-186	GW-187	GW-188	GW-203
Sample Group	CR 3	CR 3	CR 9	CR 9	CR 9	CR 9	CR 2
Location	CRSP	CRSP	RQ	RQ	RQ	RQ	UNCS
GENERAL INFORMATION							
East Coordinate	57497.00	57736.00	57475.00	56862.00	55980.00	56174.00	54190.48
North Coordinate	28483.00	28048.00	23915.00	23387.00	23393.00	23663.00	28355.82
Measuring Pt. Elevation	1158.00	1093.00	927.63	831.32	834.28	837.09	1105.30
Ground Elevation	1155.50	1090.60	924.65	828.31	831.59	834.33	1102.30
Hydrostratigraphic Unit	AQF	AQF	AQT	AQT	AQT	AQT	AQF
Geologic Formation	Ock	Ock	Och	Och	Och	Och	Ock
Aquifer Zone	wB	B	B	B	B	wB	wB/B
Weathered Rock - Depth	62.0	43.0	.	12.0	7.0	13.0	86.0
Weathered Rock - Elevation	1096.00	1050.00	.	819.32	827.28	824.09	1019.30
Fresh Rock - Depth	98.0	78.0	8.0	14.5	15.0	14.0	93.0
Fresh Rock - Elevation	1060.00	1015.00	919.63	816.82	819.28	823.09	1012.30
Total Depth Drilled	145.00	168.00	130.00	171.00	162.00	68.00	156.00
SURFACE/CONDUCTOR CASING							
Conductor Casing Depth	82.00	102.00	8.00	14.50	7.00	15.00	94.00
Conductor Casing OD (in)	10.75	10.75	10.63	10.63	10.63	10.63	10.75
Conductor Casing Type	steel/F25	steel/F25	PVC/#40	PVC/#40	PVC/#40	PVC/#40	steel/F25
WELL CASING							
Borehole Diameter	8.00	9.50	10.00	10.00	10.00	10.00	8.50
Well Casing Depth	133.0	155.0	107.5	150.0	147.0	52.5	146.0
Well Casing OD (in)	4.50	6.62	4.50	4.50	4.50	4.50	4.50
Well Casing Type	PVC/#40	steel/F25	PVC/#40	PVC/#40	PVC/#40	PVC/#40	PVC/#40
MONITORED INTERVAL							
Top Monitored Interval - Depth	132.0	155.0	101.5	142.0	139.0	49.0	144.0
Top Monitored Interval - Elevation	1023.50	935.60	823.15	686.31	692.59	785.33	958.30
Midpoint - Depth	138.5	161.5	115.8	156.5	150.5	58.5	150.0
Midpoint - Elevation	1017.00	929.10	808.90	671.81	681.09	775.83	952.30
Bottom Monitored Interval - Depth	145.0	168.0	130.0	171.0	162.0	68.0	156.0
Bottom Monitored Interval - Elevation	1010.50	922.60	794.65	657.31	669.59	766.33	946.30
Screen Material	PVC/sl	.	PVC/sw/.01	PVC/sw/.01	PVC/sw/.01	PVC/sw/.01	PVC/sw/.01
Screen Length	10.0	.	20.0	20.0	15.0	15.0	10.0
Open-Hole Length	.	13.0	.	.	.	.	.
Open-Hole Diameter	.	6.00	.	.	.	.	.

APPENDIX C
Monitoring Well Construction Details

Well No.	GW-205	GW-217	GW-221	GW-231	GW-241	GW-292	GW-293
Sample Group	CR 2	CR 1	CR 2	CR 7	CR 6	CR 4	CR 4
Location	UNCS	LIV	UNCS	KHQ	CRSDB	ECRWP	ECRWP
GENERAL INFORMATION							
East Coordinate	54008.30	53020.00	54388.57	63410.00	63659.00	62146.00	62321.00
North Coordinate	28362.98	28758.00	28359.44	24725.00	27069.00	28141.00	28112.00
Measuring Pt. Elevation	1104.00	1176.90	1106.00	849.47	982.64	1073.00	1063.90
Ground Elevation	1101.50	1174.30	1103.40	846.90	980.80	1070.10	1061.70
Hydrostratigraphic Unit	AQF	AQF	AQF	AQF	AQF	AQF	AQF
Geologic Formation	Ock	Ock	Ock	Ock	Ock	Ock	Ock
Aquifer Zone	wB	B	wB/B	wB	wB/B	B	B
Weathered Rock - Depth	100.0	55.0	36.0	.	67.0	32.0	57.0
Weathered Rock - Elevation	1004.00	1121.90	1070.00	.	915.64	1041.00	1006.90
Fresh Rock - Depth	146.0	75.0	90.0	10.5	94.6	59.5	110.0
Fresh Rock - Elevation	958.00	1101.90	1016.00	838.97	888.04	1013.50	953.90
Total Depth Drilled	164.00	180.00	158.00	35.00	103.00	186.00	214.00
SURFACE/CONDUCTOR CASING							
Conductor Casing Depth	154.00	81.70	92.00	11.00	.	51.00	57.80
Conductor Casing OD (in)	10.75	10.75	6.63	10.63	.	10.75	10.75
Conductor Casing Type	steel/F25	steel/F25	steel/F25	PVC/#40	none	steel/F25	steel/F25
WELL CASING							
Borehole Diameter	10.00	10.00	6.00	11.00	8.50	10.00	10.00
Well Casing Depth	154.0	166.8	148.0	24.5	79.0	174.1	197.0
Well Casing OD (in)	4.50	4.50	4.50	4.50	4.50	4.50	6.62
Well Casing Type	PVC/#40	SS/#304	PVC/#40	PVC/#40	SS/#304	SS/#304	steel/F25
MONITORED INTERVAL							
Top Monitored Interval - Depth	154.0	165.2	147.0	22.8	78.0	172.1	197.0
Top Monitored Interval - Elevation	947.50	1009.10	956.40	824.10	902.80	898.00	864.70
Midpoint - Depth	159.0	172.6	152.5	28.9	90.5	179.1	205.5
Midpoint - Elevation	942.50	1001.70	950.90	818.00	890.30	891.05	856.20
Bottom Monitored Interval - Depth	164.0	180.0	158.0	35.0	103.0	186.0	214.0
Bottom Monitored Interval - Elevation	937.50	994.30	945.40	811.90	877.80	884.10	847.70
Screen Material	PVC/sw/.01	SS/sw/.01	PVC/sw.01	PVC/sw.01	SS/sw/.01	SS/sw/.01	.
Screen Length	10.0	10.6	10.0	10.0	21.0	10.7	.
Open-Hole Length	.	.	.	.	.	.	17.0
Open-Hole Diameter	.	.	.	.	.	.	6.00

APPENDIX C
Monitoring Well Construction Details

Well No.	GW-294	GW-296	GW-298	GW-299	GW-300	GW-301	GW-302
Sample Group	CR 4	CR 4	CR 5	CR 5	CR 5	CR 5	CR 2
Location	ECRWP	ECRWP	CRBAWP	CRBAWP	CRBAWP	CRBAWP	UNCS
GENERAL INFORMATION							
East Coordinate	62483.00	62023.00	62445.00	62319.00	62041.00	61964.00	54353.40
North Coordinate	27958.00	27994.00	27495.00	27392.00	27487.00	27662.00	28693.55
Measuring Pt. Elevation	1083.60	1091.00	1049.00	1053.90	1073.10	1086.40	1141.70
Ground Elevation	1081.70	1088.30	1046.40	1051.30	1070.70	1083.90	1139.60
Hydrostratigraphic Unit	AQF	AQF	AQF	AQF	AQF	AQF	AQF
Geologic Formation	Ock	Ock	Ock	Ock	Ock	Ock	Ock
Aquifer Zone	B	B	B	B	B	B	B
Weathered Rock - Depth	62.0	67.0	65.0	66.0	102.0	94.0	63.0
Weathered Rock - Elevation	1021.60	1024.00	984.00	987.90	971.10	992.40	1078.70
Fresh Rock - Depth	87.0	82.0	80.0	70.0	106.0	136.0	102.0
Fresh Rock - Elevation	996.60	1009.00	969.00	983.90	967.10	950.40	1039.70
Total Depth Drilled	128.00	147.00	190.00	168.00	147.00	163.50	136.00
SURFACE/CONDUCTOR CASING							
Conductor Casing Depth	74.50	86.50	83.30	80.00	115.00	105.00	63.80
Conductor Casing OD (in)	10.75	10.75	10.75	10.75	10.75	10.75	10.75
Conductor Casing Type	steel/F25	steel/F25	steel/F25	steel/F25	steel/F25	steel/F25	steel
WELL CASING							
Borehole Diameter	10.00	10.00	10.00	10.00	10.00	10.00	9.50
Well Casing Depth	117.6	136.3	176.0	155.8	134.8	151.0	124.5
Well Casing OD (in)	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Well Casing Type	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304
MONITORED INTERVAL							
Top Monitored Interval - Depth	113.0	134.4	171.1	153.0	132.0	148.5	121.5
Top Monitored Interval - Elevation	968.70	953.90	875.30	898.30	938.70	935.40	1018.10
Midpoint - Depth	120.5	140.7	180.6	160.5	139.5	156.0	128.2
Midpoint - Elevation	961.20	947.60	865.85	890.80	931.20	927.90	1011.45
Bottom Monitored Interval - Depth	128.0	147.0	190.0	168.0	147.0	163.5	134.8
Bottom Monitored Interval - Elevation	953.70	941.30	856.40	883.30	923.70	920.40	1004.80
Screen Material	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	10.5	10.0	10.8	10.6	10.0	10.3
Open-Hole Length	.	.	.	.	.	.	.
Open-Hole Diameter	.	.	.	.	.	.	.

APPENDIX C
Monitoring Well Construction Details

Well No.	GW-303	GW-304	GW-305	GW-321	GW-339	GW-511	GW-512
Sample Group	CR 6	CR 6	CR 1	CR 8	CR 2	CR 3	CR 8
Location	CRSDB	CRSDB	LIV	ADB	UNCS	CRSP	ADB
GENERAL INFORMATION							
East Coordinate	63488.00	63425.00	52962.00	57026.00	54146.52	57739.00	57343.00
North Coordinate	28099.00	27545.00	28548.00	26275.00	28658.72	28056.00	27601.00
Measuring Pt. Elevation	1007.20	1045.50	1183.60	925.58	1124.60	1093.20	1001.50
Ground Elevation	1004.40	1042.80	1181.10	923.10	1122.20	1090.70	998.99
Hydrostratigraphic Unit	AQF	AQF	AQF	AQF	AQF	AQF	AQF
Geologic Formation	OCk	OCk	OCk	OCk	OCk	OCk	OCk
Aquifer Zone	B	B	B		B	B	U/wB
Weathered Rock - Depth	37.0	35.0	53.0	.	45.0	40.5	55.0
Weathered Rock - Elevation	970.20	1010.50	1130.60	.	1079.60	1052.70	946.50
Fresh Rock - Depth	111.0	92.0	84.0	.	91.0	100.0	.
Fresh Rock - Elevation	896.20	953.50	1099.60	.	1033.60	993.20	.
Total Depth Drilled	321.00	167.00	179.60	98.60	114.00	153.70	61.00
SURFACE/CONDUCTOR CASING							
Conductor Casing Depth	42.80	90.00	64.00	22.00	91.00	100.00	.
Conductor Casing OD (in)	10.75	10.75	10.75	10.75	10.75	10.75	.
Conductor Casing Type	steel/F25	unknown	steel/F25	steel/F25	steel	unknown	none
WELL CASING							
Borehole Diameter	10.00	9.75	10.00	8.00	9.50	9.60	9.50
Well Casing Depth	300.0	156.5	168.9	87.3	103.7	143.3	50.5
Well Casing OD (in)	7.00	4.50	4.50	4.50	4.50	4.50	4.50
Well Casing Type	steel/	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304
MONITORED INTERVAL							
Top Monitored Interval - Depth	300.0	148.5	165.3	84.0	101.0	140.0	48.0
Top Monitored Interval - Elevation	704.40	894.30	1015.80	839.10	1021.20	950.70	950.99
Midpoint - Depth	310.5	157.8	172.5	91.3	107.5	146.9	54.5
Midpoint - Elevation	693.90	885.05	1008.65	831.80	1014.70	943.85	944.49
Bottom Monitored Interval - Depth	321.0	167.0	179.6	98.6	114.0	153.7	61.0
Bottom Monitored Interval - Elevation	683.40	875.80	1001.50	824.50	1008.20	937.00	937.99
Screen Material	.	SS/sw/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01
Screen Length	.	10.0	10.7	10.7	10.3	10.0	10.0
Open-Hole Length	21.0	.	.	.	.	.	.
Open-Hole Diameter	6.00	.	.	.	.	.	.

APPENDIX C
Monitoring Well Construction Details

Well No.	GW-513	GW-514	GW-521	GW-522	GW-539	GW-540	GW-541
Sample Group	CR 8	CR 8	CR 1	CR 1	CR 10	CR 11	CR 11
Location	ADB	ADB	LIV	LIV	LII	CDL VI	CDL VI
GENERAL INFORMATION							
East Coordinate	57332.00	57341.00	52040.00	52612.00	52278.26	52371.31	51738.09
North Coordinate	27607.00	27575.00	28541.00	28377.00	27192.53	27489.06	27653.53
Measuring Pt. Elevation	1001.40	1001.20	1182.70	1175.30	1093.00	1072.10	1058.40
Ground Elevation	998.99	998.66	1179.50	1172.00	1090.40	1069.40	1055.80
Hydrostratigraphic Unit	AQF	AQF	AQF	AQF	AQF	AQF	AQF
Geologic Formation	OCk	OCk	OCk	OCk	OCk	OCk	OCk
Aquifer Zone	B	B	B	B	B	B	B
Weathered Rock - Depth	67.0	44.0	.	85.0	.	110.0	53.5
Weathered Rock - Elevation	934.40	957.20	.	1090.30	.	962.10	1004.90
Fresh Rock - Depth	97.0	92.0	54.0	130.0	74.0	150.0	69.5
Fresh Rock - Elevation	904.40	909.20	1128.70	1045.30	1019.00	922.10	988.90
Total Depth Drilled	125.30	195.00	136.00	195.50	156.00	171.50	104.50
SURFACE/CONDUCTOR CASING							
Conductor Casing Depth	98.00	105.00	60.50	90.00	79.00	154.00	64.10
Conductor Casing OD (in)	10.75	10.75	10.75	10.75	10.75	10.75	10.75
Conductor Casing Type	unknown	unknown	unknown	unknown	steel	steel	steel
WELL CASING							
Borehole Diameter	9.50	9.50	9.50	9.50	9.25	9.25	9.25
Well Casing Depth	114.8	174.0	124.9	184.6	139.8	161.2	88.8
Well Casing OD (in)	4.50	6.62	4.50	4.50	4.50	4.50	4.50
Well Casing Type	SS/#304	steel/F25	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304
MONITORED INTERVAL							
Top Monitored Interval - Depth	111.0	174.0	123.2	183.0	136.4	158.5	86.7
Top Monitored Interval - Elevation	887.99	824.66	1056.30	989.00	954.00	910.90	969.10
Midpoint - Depth	118.2	184.5	129.6	189.2	146.2	165.0	95.6
Midpoint - Elevation	880.84	814.16	1049.90	982.85	944.20	904.40	960.20
Bottom Monitored Interval - Depth	125.3	195.0	136.0	195.3	156.0	171.5	104.5
Bottom Monitored Interval - Elevation	873.69	803.66	1043.50	976.70	934.40	897.90	951.30
Screen Material	SS/sw/.01	.	SS/sw/.01	SS/sw/.01	SS/sl/.01	SS/sl/.01	SS/sl/.01
Screen Length	10.0	.	10.3	10.4	15.9	10.3	15.7
Open-Hole Length	.	21.0	.	.	.	.	.
Open-Hole Diameter	.	6.00	.	.	.	.	.

APPENDIX C
Monitoring Well Construction Details

Well No.	GW-542	GW-543	GW-544	GW-546	GW-557	GW-560	GW-562
Sample Group	CR 11	CR 11	CR 11	CR 11	CR 12	CR 12	CR 12
Location	CDL VI	CDL VI	CDL VI	CDL VI	ILF V	CDL VII	CDL VII
GENERAL INFORMATION							
East Coordinate	51641.74	51458.48	51819.56	52366.34	59519.59	60743.42	61640.17
North Coordinate	27466.22	27072.06	26963.22	27473.75	26450.11	25692.28	26276.29
Measuring Pt. Elevation	1051.60	1023.80	1045.00	1072.20	1081.20	938.92	934.49
Ground Elevation	1049.00	1021.20	1042.50	1069.60	1078.60	936.17	931.86
Hydrostratigraphic Unit	AQF	AQF	AQF	AQF	AQF	AQF	AQF
Geologic Formation	Ock	Ock	Ock	Ock	Ock	Ock	Ock
Aquifer Zone	U	B	B	U/wB	U/wB	U/wB	U/wB
Weathered Rock - Depth	.	16.0	47.0	74.5	.	.	.
Weathered Rock - Elevation	.	1007.80	998.00	997.70	.	.	.
Fresh Rock - Depth	.	37.0	52.5	.	.	.	52.0
Fresh Rock - Elevation	.	986.80	992.50	.	.	.	882.49
Total Depth Drilled	77.50	94.00	110.00	84.50	139.00	117.00	133.00
SURFACE/CONDUCTOR CASING							
Conductor Casing Depth	.	29.30	54.50	.	85.00	.	.
Conductor Casing OD (in)	.	10.75	10.75	.	10.75	.	.
Conductor Casing Type	none	steel	steel	none	steel	none	none
WELL CASING							
Borehole Diameter	9.25	9.25	9.25	9.25	9.50	9.50	9.50
Well Casing Depth	60.8	78.0	93.4	68.6	115.8	49.0	38.0
Well Casing OD (in)	4.50	4.50	4.50	4.50	4.00	4.00	4.00
Well Casing Type	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304
MONITORED INTERVAL							
Top Monitored Interval - Depth	59.0	76.2	91.0	66.2	112.9	45.2	36.0
Top Monitored Interval - Elevation	990.00	945.00	951.50	1003.40	965.70	890.97	895.86
Midpoint - Depth	67.8	84.9	100.2	75.3	125.5	57.1	48.0
Midpoint - Elevation	981.25	936.30	942.35	994.30	953.15	879.07	883.86
Bottom Monitored Interval - Depth	76.5	93.6	109.3	84.4	138.0	69.0	60.0
Bottom Monitored Interval - Elevation	972.50	927.60	933.20	985.20	940.60	867.17	871.86
Screen Material	SS/sl/.01	SS/sl/.01	SS/sl/.01	SS/sl/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01
Screen Length	15.7	15.6	15.9	15.8	20.0	20.0	20.0
Open-Hole Length	.	.	.	.	.	.	.
Open-Hole Diameter	.	.	.	.	.	.	.

APPENDIX C
Monitoring Well Construction Details

Well No.	GW-564	GW-608	GW-609	GW-610	GW-611	GW-709	GW-731
Sample Group	CR 12	CR 3	CR 3	CR 3	CR 3	CR 10	CR 6
Location	CDL VII	CRSP	CRSP	CRSP	CRSP	L II	CRSDB
GENERAL INFORMATION							
East Coordinate	59865.28	59724.35	60039.73	59471.94	58058.92	52371.88	63863.14
North Coordinate	25872.94	27889.43	28109.43	28549.31	28855.52	25344.08	27463.65
Measuring Pt. Elevation	937.77	1074.00	1112.10	1059.40	1048.40	906.60	1049.20
Ground Elevation	935.12	1071.00	1109.70	1056.80	1045.40	903.84	1045.80
Hydrostratigraphic Unit	AQF	AQF	AQF	AQF	AQF	AQF	AQF
Geologic Formation	Ock	Ock	Ock	Ock	Ock	Ock	Ock
Aquifer Zone	U/wB	wB/B	wB/B	wB/B	wB/B	B	B
Weathered Rock - Depth	.	113.0	.	39.0	30.0	39.0	95.4
Weathered Rock - Elevation	.	961.00	.	1020.40	1018.40	867.60	953.80
Fresh Rock - Depth	72.0	140.0	107.0	50.0	63.8	43.0	129.4
Fresh Rock - Elevation	865.77	934.00	1005.10	1009.40	984.60	863.60	919.80
Total Depth Drilled	88.00	220.00	269.00	117.40	121.60	80.60	180.40
SURFACE/CONDUCTOR CASING							
Conductor Casing Depth	.	.	107.00	107.10	75.00	50.00	122.00
Conductor Casing OD (in)	.	10.75	10.75	10.75	10.75	11.75	11.75
Conductor Casing Type	none	steel	steel/J-55	steel/J-55	steel/J-55	steel/J-55	steel/J-55
WELL CASING							
Borehole Diameter	9.50	15.50	9.50	9.50	9.50	10.60	10.60
Well Casing Depth	55.3	148.0	258.7	107.1	107.0	70.4	165.2
Well Casing OD (in)	4.00	10.75	4.50	4.50	4.50	4.25	4.50
Well Casing Type	SS/#304	steel/J-55	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304
MONITORED INTERVAL							
Top Monitored Interval - Depth	52.0	148.0	256.4	105.1	101.5	68.7	164.0
Top Monitored Interval - Elevation	883.12	923.00	853.30	951.70	943.90	835.14	881.80
Midpoint - Depth	66.5	184.0	262.7	111.3	111.6	74.7	171.4
Midpoint - Elevation	868.62	887.00	847.00	945.55	933.85	829.19	874.45
Bottom Monitored Interval - Depth	81.0	220.0	269.0	117.4	121.6	80.6	178.7
Bottom Monitored Interval - Elevation	854.12	851.00	840.70	939.40	923.80	823.24	867.10
Screen Material	SS/sw/.01	.	SS/sw/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01
Screen Length	20.0	.	10.3	10.3	10.0	10.0	10.0
Open-Hole Length	.	72.0	.	.	.	.	.
Open-Hole Diameter	.	9.50	.	.	.	.	.

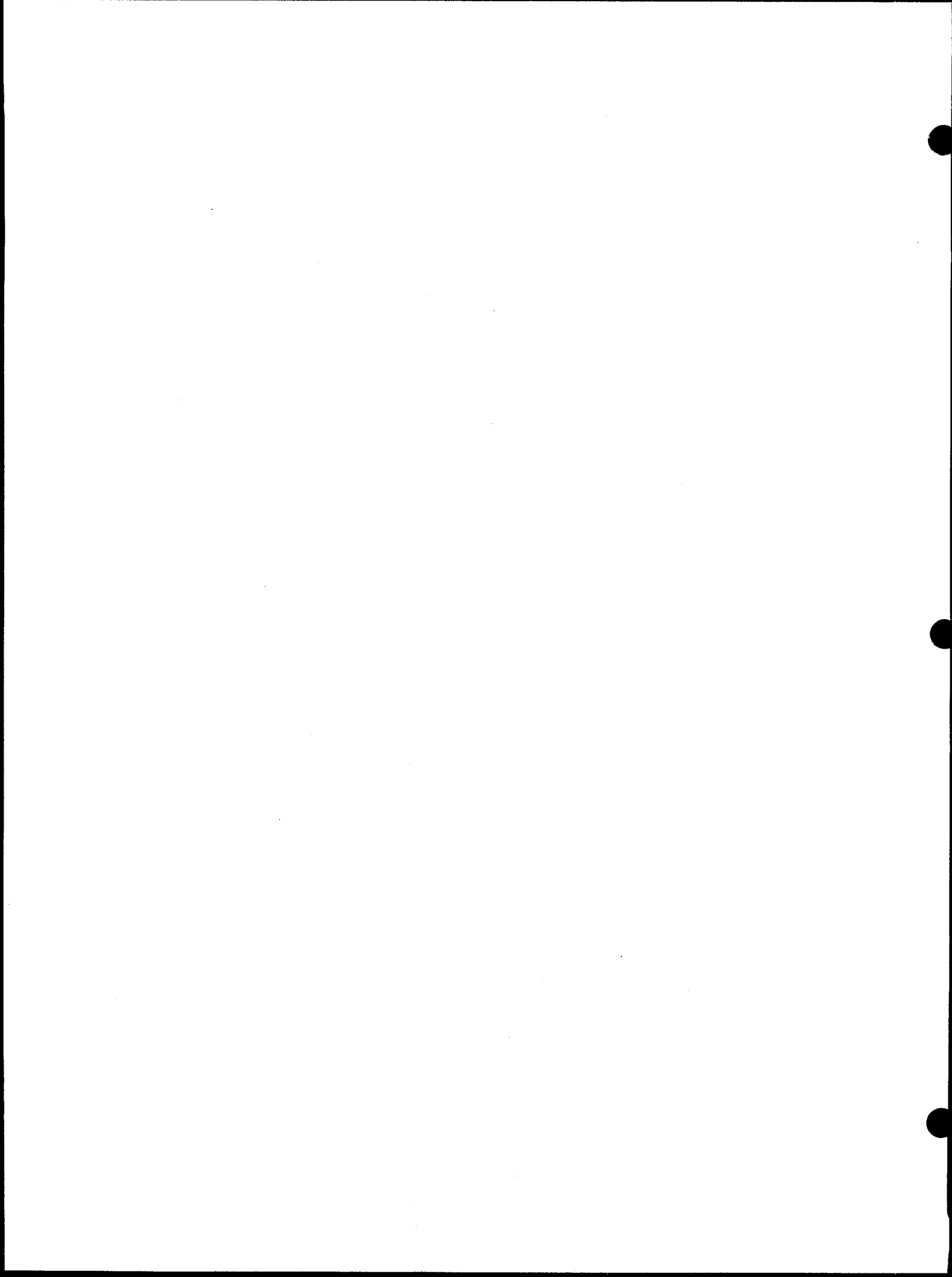
APPENDIX C
Monitoring Well Construction Details

Well No.	GW-732	GW-742	GW-743	GW-757	GW-796	GW-797	GW-798
Sample Group	CR 6	CR 3	CR 3	CR 10	CR 12	CR 12	CR 12
Location	CRSDB	CRSP	CRSP	L II	ILF V	ILF V	CDL VII
GENERAL INFORMATION							
East Coordinate	64267.74	58908.00	58908.00	53302.52	58206.40	58550.40	60309.95
North Coordinate	27716.72	28038.00	28056.00	25409.50	27923.90	27446.60	27264.85
Measuring Pt. Elevation	1064.10	1101.00	1100.40	961.43	1052.40	1059.80	1005.80
Ground Elevation	1060.70	1097.80	1098.70	958.65	1048.80	1056.10	1002.42
Hydrostratigraphic Unit	AQF	AQF	AQF	AQF	AQF	AQF	AQF
Geologic Formation	Ock	Ock	Ock	Ock	Ock	Ock	Ock
Aquifer Zone	B	B	B	B	B	B	B
Weathered Rock - Depth	85.0	68.0	49.0	29.5	102.0	67.1	94.4
Weathered Rock - Elevation	979.10	1033.00	1051.40	931.93	950.40	992.70	911.40
Fresh Rock - Depth	96.0	96.0	87.5	48.0	103.0	89.0	95.8
Fresh Rock - Elevation	968.10	1005.00	1012.90	913.43	949.40	970.80	910.00
Total Depth Drilled	190.60	420.00	161.10	166.50	139.70	134.10	135.50
SURFACE/CONDUCTOR CASING							
Conductor Casing Depth	100.70	92.00	82.90	46.80	107.60	95.02	99.70
Conductor Casing OD (in)	11.75	11.75	11.75	10.75	10.75	10.75	10.75
Conductor Casing Type	steel/J-55	steel/J-55	steel/J-55	steel/J-55	steel/J-55	steel/J-55	steel/J-55
WELL CASING							
Borehole Diameter	10.60	10.60	10.60	9.62	9.50	9.50	9.50
Well Casing Depth	179.3	350.0	150.2	135.5	126.5	123.5	124.5
Well Casing OD (in)	4.50	7.00	4.50	4.50	4.50	4.50	4.50
Well Casing Type	SS/#304	steel/F25	SS/#304	SS/#304	SS/#304	SS/#304	SS/#304
MONITORED INTERVAL							
Top Monitored Interval - Depth	178.3	350.0	150.1	134.0	122.9	118.0	122.0
Top Monitored Interval - Elevation	882.40	747.80	948.60	824.65	925.90	938.10	880.42
Midpoint - Depth	184.2	385.0	155.6	150.4	129.7	126.1	128.7
Midpoint - Elevation	876.55	712.80	943.10	808.30	919.10	930.05	873.72
Bottom Monitored Interval - Depth	190.0	420.0	161.1	166.7	136.5	134.1	135.4
Bottom Monitored Interval - Elevation	870.70	677.80	937.60	791.95	912.30	922.00	867.02
Screen Material	SS/sw/.01	.	SS/sw/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01	SS/sw/.01
Screen Length	10.0	.	10.1	30.0	10.0	10.0	10.0
Open-Hole Length	.	70.0	.	.	.	.	.
Open-Hole Diameter	.	6.25	.	.	.	.	.

APPENDIX C
Monitoring Well Construction Details

Well No.	GW-799	GW-801	GW-827
Sample Group	CR 12	CR 12	CR 11
Location	ILF V	ILF V	CDL VII
GENERAL INFORMATION			
East Coordinate	59961.20	58779.90	51826.32
North Coordinate	26745.50	26807.80	27721.42
Measuring Pt. Elevation	981.09	1096.96	1051.39
Ground Elevation	978.10	1093.82	1048.13
Hydrostratigraphic Unit	AQF	.	AQF
Geologic Formation	Ock	.	Ock
Aquifer Zone	B	B	B
Weathered Rock - Depth	60.8	112.50	.
Weathered Rock - Elevation	920.29	984.46	.
Fresh Rock - Depth	62.8	113.40	40.50
Fresh Rock - Elevation	918.29	983.56	1010.89
Total Depth Drilled	92.00	188.90	135.00
SURFACE/CONDUCTOR CASING			
Conductor Casing Depth	65.00	115.40	43.40
Conductor Casing OD (in)	10.75	10.75	10.75
Conductor Casing Type	steel/J-55	steel/J55	Steel
WELL CASING			
Borehole Diameter	9.50	9.87	9.87
Well Casing Depth	81.0	178.10	124.10
Well Casing OD (in)	4.50	4.50	4.50
Well Casing Type	SS/#304	SS/#304	SS/#304
MONITORED INTERVAL			
Top Monitored Interval - Depth	78.7	175.80	122.10
Top Monitored Interval - Elevation	899.40	918.02	926.03
Midpoint - Depth	85.4	182.35	128.45
Midpoint - Elevation	892.75	911.47	919.68
Bottom Monitored Interval - Depth	92.0	188.90	134.80
Bottom Monitored Interval - Elevation	886.10	904.92	913.33
Screen Material	SS/sw/.01	SS/sw/.01	SS/sw/.01
Screen Length	10.0	10.00	10.00
Open-Hole Length	.	.	.
Open-Hole Diameter	.	.	.

APPENDIX D
SAMPLING SEQUENCES



EXPLANATION

SAMPLING GROUP:

Series of sampling locations grouped for data tracking and accounting purposes.

SAMPLE IDENTITY:

Dupe	-	Field Duplicate Sample
ER	-	Equipment Rinsate Sample
FB	-	Field Blank
GW	-	Groundwater Monitoring Well
CBS-1	-	Chestnut Branch Spring 1
SCR2.2SP	-	South Chestnut Ridge Spring 2.2
1090	-	Historical 1000 - Series Monitoring Well
RS	-	Resample

LOCATION:

ADB	-	Ash Disposal Basin
CDLVI	-	Construction/Demolition Landfill VI
CDLVII	-	Construction/Demolition Landfill VII
CRBAWP	-	Chestnut Ridge Borrow Area Waste Pile
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
LIV	-	Industrial Landfill IV
LV	-	Industrial Landfill V
RQ	-	Rogers Quarry
UNCS	-	United Nuclear Corporation Site

PUMP NUMBER:

Denotes identification number of gas-piston pump used to purge the well and collect nonvolatile samples. If pump number is denoted by a "W", this indicates that the well has a dedicated sampling system (i.e., Well Wizard).

PURGE TIME:

The time (in hours:minutes) that groundwater was purged from the monitoring well before samples were collected. If missing (indicated by a "*"), purging took place over more than one day or purging was not required for a location/sample type (i.e. spring station).

NOTE:

Data compiled from sample tracking data sets (H&R Technical Associates, Inc. 1995a, 1995b, 1996a, 1996b).

APPENDIX D
Sampling Sequence, First Quarter 1995

-----Sampling Group= CR 1 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-217	LIV	11	0:51	01/04/95	12:45
GW-141	LIV	11	1:19	01/09/95	12:24
GW-141 Dupe	LIV	11	1:19	01/09/95	12:24
GW-521	LIV	11	1:01	01/09/95	15:11
GW-522	LIV	11	2:11	01/10/95	12:56
ER CR 1		11	.	01/10/95	14:50
GW-305	LIV	11	0:40	01/10/95	15:00

-----Sampling Group= CR 3 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-181	CRSP	2	.	01/24/95	15:00
GW-511	CRSP	2	1:25	01/24/95	16:40
GW-511 Dupe	CRSP	2	1:25	01/24/95	16:40
GW-742	CRSP	2	1:25	01/27/95	13:45
GW-743	CRSP	2	1:09	01/31/95	11:19
GW-610	CRSP	2	1:14	01/31/95	15:19
GW-608	CRSP	2	.	02/02/95	17:46
GW-177	CRSP	2	0:33	02/13/95	15:10
GW-611	CRSP	2	0:20	02/14/95	11:00
GW-175	CRSP	2	0:59	02/14/95	14:00
ER CR 3		2	.	02/15/95	14:15
GW-609	CRSP	2	2:47	02/15/95	14:22

-----Sampling Group= CR 6 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-159	CRSDB	11	0:36	01/15/95	11:30
GW-304	CRSDB	11	0:45	01/15/95	14:30

APPENDIX D
Sampling Sequence, First Quarter 1995

-----Sampling Group= CR 6 (continued) -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-731	CRSDB	11	0:56	01/17/95	15:10
GW-732	CRSDB	11	0:45	01/18/95	10:30
GW-732 Dupe	CRSDB	11	0:45	01/18/95	10:30
GW-156	CRSDB	11	0:13	01/18/95	12:15
FB CR 6		11	.	01/19/95	.
GW-303	CRSDB	11	.	01/19/95	16:18
ER CR 6		11	.	01/20/95	11:30
ER CR 6		2	.	01/20/95	11:30
GW-241	CRSDB	11	1:05	01/20/95	11:35
GW-158	CRSDB	2	.	01/20/95	11:40

-----Sampling Group= CR 7 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-142	KHQ	7	3:30	01/10/95	13:45
GW-147	KHQ	7	0:48	01/15/95	12:00
GW-231	KHQ	7	0:43	01/15/95	13:03
GW-143	KHQ	7	4:10	01/17/95	17:30
GW-143 Dupe	KHQ	7	4:10	01/17/95	17:30
GW-146	KHQ	7	.	01/17/95	18:00
GW-144	KHQ	7	2:37	01/18/95	11:37
ER CR 7		7	.	01/18/95	13:50
GW-145	KHQ	7	1:00	01/18/95	14:00
GW-142	KHQ	7	2:38	03/20/95	15:20
GW-144	KHQ	7	2:24	03/22/95	14:14
GW-146	KHQ	7	.	03/23/95	14:10
GW-145	KHQ	7	1:03	03/24/95	10:45

APPENDIX D
Sampling Sequence, First Quarter 1995

-----Sampling Group= CR 8 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-321	ADB	W	0:52	01/10/95	10:40

-----Sampling Group= CR 10 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-539	LII	10	0:43	01/04/95	13:15
GW-709	LII	10	0:42	01/09/95	11:40
GW-709 Dupe	LII	10	0:42	01/09/95	11:40
ER CR 10		B	.	01/09/95	14:30
GW-757	LII	10	1:30	01/09/95	14:40

-----Sampling Group= CR 13 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
SCR2.2SP	CRSP	.	.	03/15/95	11:00

APPENDIX D
Sampling Sequence, Second Quarter 1995

-----Sampling Group= CR 2 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-203	UNCS	5	1:45	04/18/95	11:00
GW-205	UNCS	5	1:46	04/18/95	14:26
GW-221	UNCS	5	1:45	04/19/95	11:10
GW-221 Dupe	UNCS	5	1:45	04/19/95	11:10
GW-339	UNCS	5	0:42	04/19/95	14:10
GW-302	UNCS	5	0:47	04/19/95	15:17
ER CR 2		5	.	04/20/95	11:45
1090	UNCS	5	1:41	04/20/95	11:51

-----Sampling Group= CR 3 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-511	CRSP	2	1:30	05/03/95	11:50
GW-181	CRSP	2	.	05/02/95	16:07
GW-742	CRSP	2	.	05/07/95	9:40
GW-743	CRSP	2	0:57	05/07/95	11:02
GW-610	CRSP	2	0:57	05/07/95	13:19
GW-608	CRSP	2	.	05/11/95	12:00
GW-177	CRSP	2	0:33	05/11/95	14:43
GW-611	CRSP	2	0:20	05/15/95	13:20
GW-175	CRSP	2	1:13	05/15/95	16:15
ER CR 3		2	.	05/16/95	12:30
GW-609	CRSP	2	3:03	05/16/95	12:38
GW-609 Dupe	CRSP	2	3:03	05/16/95	12:38

-----Sampling Group= CR 4 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-296	ECRWP	5	0:48	04/22/95	9:48

APPENDIX D
Sampling Sequence, Second Quarter 1995

-----Sampling Group= CR 4 (continued) -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-294	ECRWP	5	0:38	04/22/95	12:00
GW-293	ECRWP	5	5:42	04/23/95	14:42
ER CR 4		.	.	04/24/95	14:00
GW-292	ECRWP	5	1:53	04/24/95	14:08
GW-292 Dupe	ECRWP	5	1:53	04/24/95	14:08

-----REGIME= CR Sampling Group= CR 5 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-161	CRBAWP	B	.	04/20/95	13:52
GW-160	CRBAWP	4	4:30	04/26/95	15:15
GW-301	CRBAWP	4	1:10	04/27/95	12:15
GW-300	CRBAWP	4	0:54	04/27/95	13:59
GW-299	CRBAWP	4	1:48	05/01/95	11:53
GW-299 Dupe	CRBAWP	4	1:48	05/01/95	11:53
ER CR 5		4	.	05/02/95	11:15
GW-298	CRBAWP	4	.	05/02/95	11:20

-----REGIME= CR Sampling Group= CR 6 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-159	CRSDB	2	0:43	04/06/95	18:15
GW-159 Dupe	CRSDB	2	0:43	04/06/95	18:15
GW-304	CRSDB	2	0:50	04/06/95	20:05
GW-731	CRSDB	2	1:27	04/07/95	11:57
GW-732	CRSDB	2	0:58	04/07/95	14:36
GW-156	CRSDB	2	0:13	04/07/95	15:53
GW-303	CRSDB	2	.	04/09/95	12:36

APPENDIX D
Sampling Sequence, Second Quarter 1995

-----Sampling Group= CR 6 (continued) -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
FB CR 6		2	.	04/09/95	14:47
GW-241	CRSDB	2	1:27	04/09/95	14:47
ER CR 6		2	.	04/13/95	10:50
GW-158	CRSDB	2	.	04/13/95	11:00

-----Sampling Group= CR 7 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-142	KHQ	10	2:58	04/20/95	14:30
GW-147	KHQ	10	.	04/21/95	10:30
GW-231	KHQ	10	.	04/21/95	11:50
GW-146	KHQ	10	1:29	04/24/95	10:00
GW-143	KHQ	10	4:50	04/24/95	16:10
GW-144	KHQ	10	2:41	04/25/95	15:26
GW-144 Dupe	KHQ	10	2:41	04/25/95	15:26
ER CR 7		.	.	04/26/95	11:35
GW-145	KHQ	10	.	04/26/95	11:45

-----Sampling Group= CR 8 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-321	ADB	5	1:55	04/25/95	13:00
GW-513	ADB	5	2:36	04/25/95	16:16
GW-512	ADB	5	1:04	04/26/95	10:44
GW-512 Dupe	ADB	5	1:04	04/26/95	10:44
ER CR 8		5	.	04/27/95	.
GW-514	ADB	5	.	04/27/95	14:54

APPENDIX D
Sampling Sequence, Second Quarter 1995

-----Sampling Group= CR 9 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-184	RQ	5	0:31	05/01/95	10:26
GW-188	RQ	5	0:42	05/01/95	14:45
GW-187	RQ	5	3:36	05/02/95	12:51
ER CR 9		5	.	05/03/95	13:25
GW-186	RQ	5	4:00	05/03/95	13:30
GW-186 Dupe	RQ	5	4:00	05/03/95	13:30

-----Sampling Group= CR 11 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-540	CDLVI	10	2:22	04/04/95	15:22
GW-540 Dupe	CDLVI	10	2:22	04/04/95	15:22
GW-546	CDLVI	10	0:12	04/05/95	9:55
GW-541	CDLVI	10	1:02	04/05/95	12:00
GW-827	CDLVI	10	2:27	04/05/95	15:12
GW-542	CDLVI	10	0:15	04/06/95	10:00
GW-543	CDLVI	10	0:50	04/06/95	11:35
ER CR 11		10	.	04/06/95	14:50
GW-544	CDLVI	10	1:12	04/06/95	14:57

-----Sampling Group= CR 12 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-560	CDLVII	7	0:48	04/05/95	10:28
GW-560 Dupe	CDLVII	7	0:48	04/05/95	10:28
GW-562	CDLVII	7	1:06	04/05/95	13:04
GW-564	CDLVII	7	1:05	04/06/95	11:05
GW-557	LV	7	0:36	04/06/95	12:56
GW-799	LV	7	1:39	04/06/95	15:19

APPENDIX D
Sampling Sequence, Second Quarter 1995

-----Sampling Group= CR 12 (continued) -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-798	CDLVII	7	1:42	04/11/95	10:43
GW-797	LV	7	1:05	04/11/95	14:10
GW-796	LV	7	1:33	04/12/95	13:33
ER CR 12		7	.	04/13/95	11:20
GW-801	LV	7	1:54	04/13/95	11:24
CBS-1	LV	.	.	04/17/95	10:02

APPENDIX D
Sampling Sequence, Third Quarter 1995

-----Sampling Group= CR 1 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-217	LIV	10	1:02	07/10/95	12:00
GW-141	LIV	10	1:36	07/10/95	16:06
GW-521	LIV	10	1:20	07/11/95	15:28
GW-522	LIV	10	2:24	07/12/95	11:54
GW-522 Dupe	LIV	10	2:24	07/12/95	11:54
ER CR 1		10	.	07/12/95	14:25
GW-305	LIV	10	0:52	07/12/95	14:30

-----Sampling Group= CR 3 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-181	CRSP	10	3:36	07/28/95	14:06
GW-181 Dupe	CRSP	10	3:36	07/28/95	14:06
GW-511	CRSP	10	1:10	07/29/95	10:00
GW-742	CRSP	2	5:00	07/30/95	13:58
GW-743	CRSP	2	0:48	07/31/95	11:13
GW-608	CRSP	10	3:30	07/31/95	14:15
GW-610	CRSP	2	0:48	07/31/95	14:48
GW-177	CRSP	10	0:32	08/01/95	10:50
GW-175	CRSP	2	1:06	08/01/95	14:30
ER CR 3		10	.	08/01/95	15:25
GW-611	CRSP	10	0:12	08/01/95	15:30
GW-609	CRSP	2	2:39	08/01/95	18:09
ER CR 3	CRSP	2	.	08/01/95	18:30

-----Sampling Group= CR 6 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-159	CRSDB	2	0:45	07/12/95	14:40
GW-304	CRSDB	2	0:50	07/12/95	16:30

APPENDIX D
Sampling Sequence, Third Quarter 1995

-----Sampling Group= CR 6 (continued) -----

Sample Identity		Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-731		CRSDB	2	0:58	07/13/95	12:00
GW-732		CRSDB	2	0:59	07/13/95	13:34
GW-156		CRSDB	2	0:12	07/13/95	15:00
GW-303		CRSDB	2	.	07/16/95	9:30
GW-303	Dupe	CRSDB	2	.	07/16/95	9:30
GW-241		CRSDB	2	1:18	07/16/95	11:43
GW-158		CRSDB	2	8:00	07/16/95	17:45
ER CR 6			2	.	07/18/95	17:40
FB CR 6			2	.	07/18/95	17:45
GW-732	RS	CRSDB	6	0:48	08/14/95	10:58

-----Sampling Group= CR 7 -----

Sample Identity		Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-142		KHQ	8	2:28	07/14/95	11:40
GW-147		KHQ	8	0:28	07/14/95	13:38
GW-231		KHQ	8	0:33	07/15/95	9:23
GW-143		KHQ	8	1:50	07/16/95	12:30
GW-144	Dupe	KHQ	8	2:48	07/16/95	15:38
GW-144		KHQ	8	2:48	07/16/95	15:38
ER CR 7			8	.	07/17/95	12:10
GW-145		KHQ	8	0:55	07/17/95	12:15
GW-146		KHQ	8	3:00	07/17/95	14:00

-----Sampling Group= CR 10 -----

Sample Identity		Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-539		LII	8	0:50	07/10/95	12:55

APPENDIX D
Sampling Sequence, Third Quarter 1995

-----Sampling Group= CR 10 (continued) -----

Sample Identity		Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-709		LII	8	0:40	07/10/95	15:00
GW-709	Dupe	LII	8	0:40	07/10/95	15:00
ER CR 10			8	.	07/11/95	14:50
GW-757		LII	8	1:20	07/11/95	15:00

APPENDIX D
Sampling Sequence, Fourth Quarter 1995

-----Sampling Group= CR 2 -----

Sample Identity		Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-203		UNCS	11	1:28	10/07/95	11:28
GW-205		UNCS	11	1:30	10/07/95	14:00
GW-221		UNCS	11	1:30	10/08/95	11:00
GW-221	Dupe	UNCS	11	1:30	10/08/95	11:00
GW-339		UNCS	11	0:45	10/08/95	14:05
GW-302		UNCS	11	0:36	10/08/95	15:01
ER CR 2			11	.	10/09/95	14:50
1090		UNCS	11	1:46	10/09/95	14:56

-----Sampling Group= CR 3 -----

Sample Identity		Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-181		CRSP	2	3:23	11/05/95	15:53
GW-181	Dupe	CRSP	2	3:23	11/05/95	15:53
GW-511		CRSP	2	1:09	11/07/95	10:49
GW-742		CRSP	2	2:30	11/09/95	13:45
GW-743		CRSP	2	0:47	11/13/95	11:02
GW-610		CRSP	2	1:05	11/13/95	14:45
GW-608		CRSP	2	7:00	11/16/95	11:57
GW-177		CRSP	2	0:33	11/16/95	14:30
GW-611		CRSP	2	0:14	11/17/95	11:10
GW-175		CRSP	2	1:15	11/17/95	14:45
ER CR 3			2	.	11/20/95	12:05
GW-609		CRSP	2	2:42	11/20/95	12:12

-----Sampling Group= CR 4 -----

Sample Identity		Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-296		ECRWP	6	0:40	11/05/95	9:40

APPENDIX D
Sampling Sequence, Fourth Quarter 1995

-----Sampling Group= CR 4 (continued)-----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-294	ECRWP	6	0:26	11/05/95	11:10
GW-293	ECRWP	6	3:24	11/06/95	11:12
ER CR 4		6	.	11/06/95	14:00
GW-292	ECRWP	6	1:37	11/06/95	14:07
GW-292 Dupe	ECRWP	6	1:37	11/06/95	14:07

-----Sampling Group= CR 5 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-161	CRBAWP	6	6:36	10/31/95	15:00
GW-160	CRBAWP	6	4:25	11/02/95	13:55
GW-160 Dupe	CRBAWP	6	4:25	11/02/95	13:55
GW-301	CRBAWP	6	0:22	11/03/95	10:30
GW-300	CRBAWP	6	0:46	11/03/95	12:46
GW-299	CRBAWP	6	1:32	11/03/95	14:52
GW-298	CRBAWP	6	0:50	11/04/95	10:30
ER CR 5		6	.	11/04/95	10:40

-----Sampling Group= CR 6 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-731-1	CRSDB	10	1:04	10/23/95	11:14
GW-159-1	CRSDB	7	0:24	10/23/95	11:30
GW-156-1	CRSDB	10	0:12	10/23/95	13:30
GW-732-1	CRSDB	7	0:52	10/23/95	13:32
GW-732-1 Dupe	CRSDB	7	0:52	10/23/95	13:32
ER CR 6	CRSDB	7	.	10/23/95	15:00
ER CR 6		10	.	10/23/95	15:15

APPENDIX D
Sampling Sequence, Fourth Quarter 1995

-----Sampling Group= CR 6 (continued) -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-159-2	CRSDB	B	.	10/24/95	10:15
GW-732-2	CRSDB	B	.	10/24/95	11:05
GW-732-2 Dupe	CRSDB	B	.	10/24/95	11:05
GW-156-2	CRSDB	B	.	10/24/95	13:15
GW-731-2	CRSDB	B	.	10/24/95	14:05
GW-159-3	CRSDB	B	.	10/25/95	9:15
GW-732-3	CRSDB	B	.	10/25/95	9:45
GW-732-3 Dupe	CRSDB	B	.	10/25/95	9:45
GW-156-3	CRSDB	B	.	10/25/95	10:30
GW-731-3	CRSDB	B	.	10/25/95	11:05
GW-159	CRSDB	B	.	10/26/95	10:25
GW-732	CRSDB	B	.	10/26/95	10:55
GW-732 Dupe	CRSDB	B	.	10/26/95	10:55
GW-156	CRSDB	B	.	10/26/95	13:45
GW-731	CRSDB	B	.	10/26/95	14:20

-----Sampling Group= CR 7 -----

Sample Identity	Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-142	KHQ	2	3:35	11/05/95	14:40
ER CR 7	KHQ	2	.	11/06/95	08:40
GW-147	KHQ	4	0:27	11/06/95	13:20
GW-231	KHQ	4	0:27	11/06/95	13:20
GW-146	KHQ	4	2:28	11/08/95	13:45
GW-143	KHQ	4	2:18	11/09/95	12:05
GW-144	KHQ	4	2:24	11/14/95	11:54
GW-144 Dupe	KHQ	4	2:24	11/14/95	11:54
ER CR 7		4	.	11/15/95	11:20
FB CR 7		.	.	11/15/95	11:30
GW-145	KHQ	4	0:55	11/15/95	11:30

APPENDIX D
Sampling Sequence, Fourth Quarter 1995

-----Sampling Group= CR 8 -----

Sample Identity		Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-321		ADB	8	1:30	10/26/95	14:21
GW-321	Dupe	ADB	8	1:30	10/26/95	14:21
GW-513		ADB	8	2:06	10/31/95	14:11
GW-512		ADB	8	0:44	10/31/95	15:24
ER CR 8			8	.	11/02/95	17:00
GW-514		ADB	8	7:36	11/02/95	17:06

-----Sampling Group= CR 9 -----

Sample Identity		Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-184		RQ	4	0:30	10/31/95	10:28
GW-188		RQ	4	0:37	10/31/95	14:19
GW-187		RQ	4	3:22	11/02/95	12:45
GW-187	Dupe	RQ	4	3:22	11/02/95	12:45
ER CR 9			4	.	11/03/95	11:00
GW-186		RQ	4	1:13	11/03/95	11:08

-----Sampling Group= CR 10 -----

Sample Identity		Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-539		LII	10	0:30	10/06/95	11:05
GW-709		LII	10	0:44	10/06/95	13:42
ER CR 10			10	.	10/06/95	15:50
GW-757		LII	10	1:13	10/06/95	16:00
GW-757	Dupe	LII	10	1:13	10/06/95	16:00

APPENDIX D
Sampling Sequence, Fourth Quarter 1995

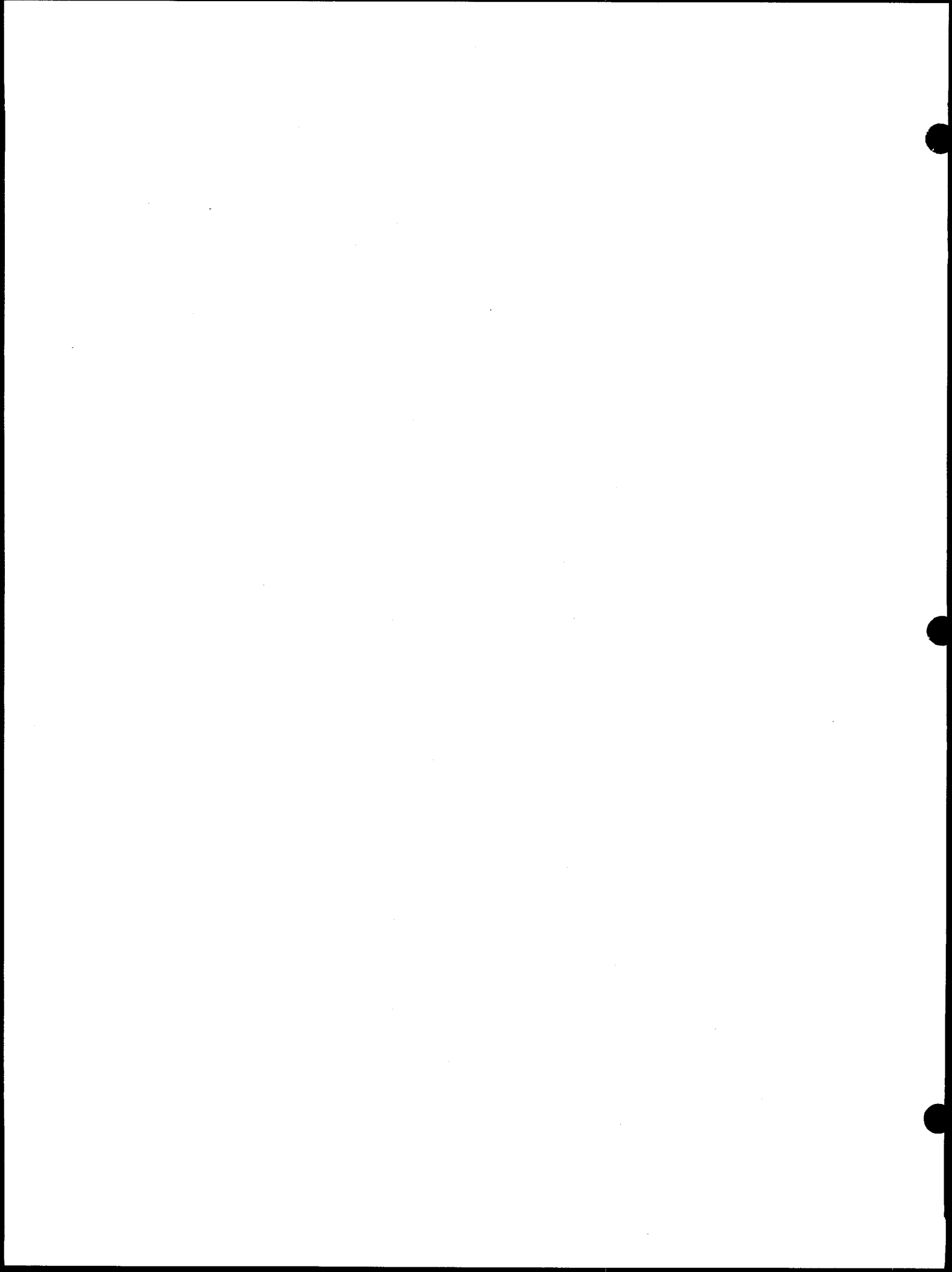
-----Sampling Group= CR 11 -----

Sample Identity		Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-540		CDLVI	8	1:49	10/11/95	11:59
GW-540	Dupe	CDLVI	8	1:49	10/11/95	11:59
GW-546		CDLVI	8	0:02	10/11/95	14:30
GW-541		CDLVI	8	0:25	10/12/95	13:45
GW-827		CDLVI	8	2:54	10/16/95	13:04
GW-542		CDLVI	8	0:55	10/16/95	15:45
GW-543		CDLVI	8	0:40	10/17/95	13:25
ER CR 11			8	.	10/17/95	15:05
GW-544		CDLVI	8	0:55	10/17/95	15:10

-----Sampling Group= CR 12 -----

Sample Identity		Location	Pump No.	Purge Time	Date Sampled	Time Sampled
GW-560		CDLVII	7	0:48	10/06/95	13:10
GW-560	Dupe	CDLVII	7	0:48	10/06/95	13:10
GW-562		CDLVII	7	1:06	10/06/95	14:56
GW-564		CDLVII	7	1:27	10/07/95	10:32
GW-557		LV	7	0:24	10/07/95	11:54
GW-799		LV	7	1:41	10/07/95	14:16
GW-798		CDLVII	7	1:30	10/08/95	10:40
GW-797		LV	7	1:27	10/08/95	12:57
GW-796		LV	7	1:16	10/08/95	14:56
GW-801		LV	7	1:43	10/09/95	12:13
ER CR 12			7	.	10/09/95	12:30
CBS-1		LV	.	.	10/11/95	10:35

APPENDIX E
GROUNDWATER QUALITY DATA



EXPLANATION

SAMPLING POINT:

GW	-	Monitoring Well
CBS-1	-	Chestnut Branch Spring 1
SCR2.2SP	-	South Chestnut Ridge Spring 2.2
1090	-	Historical 1000-Series Monitoring Well

LOCATION:

ADB	-	Ash Disposal Basin
CDL VI	-	Construction/Demolition Landfill VI
CDL VII	-	Construction/Demolition Landfill VII
CRBAWP	-	Chestnut Ridge Borrow Area Waste Pile
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
LIV	-	Industrial Landfill IV
LV	-	Industrial Landfill V
RQ	-	Rogers Quarry
UNCS	-	United Nuclear Corporation Site

ALL DATA:

- Not analyzed or not reported.

ORGANIC COMPOUNDS:

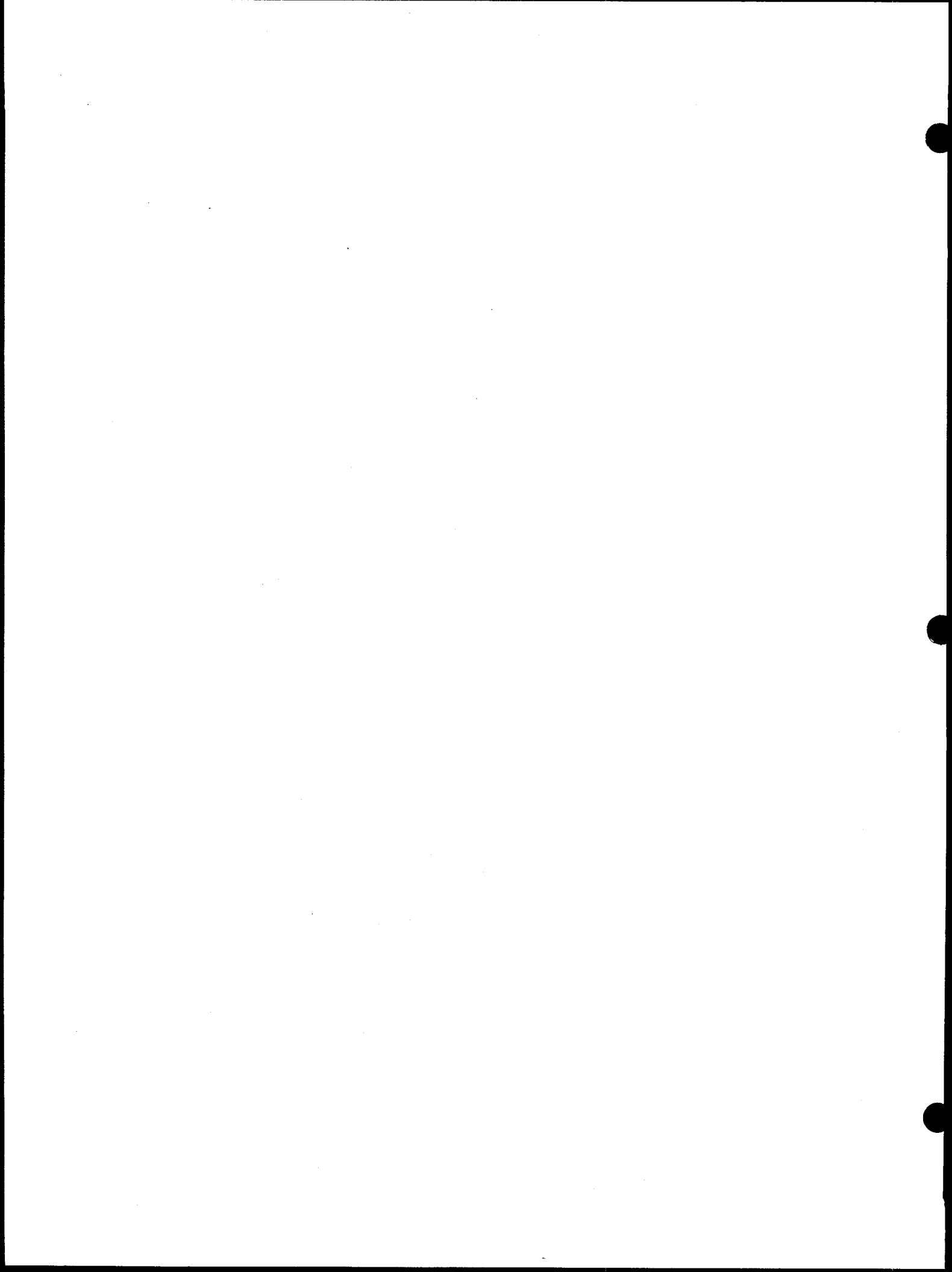
All results in micrograms per liter (ug/L).

METALS, ANIONS, MISCELLANEOUS, AND RADIOCHEMICAL PARAMETERS:

General:

Bicarbonate and carbonate alkalinity reported as CaCO_3 .

<	-	Compound analyzed but not detected at the reported minimum attainable detection limit
DIS	-	Dissolved Concentration (Filtered Sample)
TOT	-	Total Concentration (Unfiltered Sample)
TDS	-	Total Dissolved Solids
TSS	-	Total Suspended Solids
Sp. Cond.	-	Specific Conductance



EXPLANATION (cont'd)

Method:

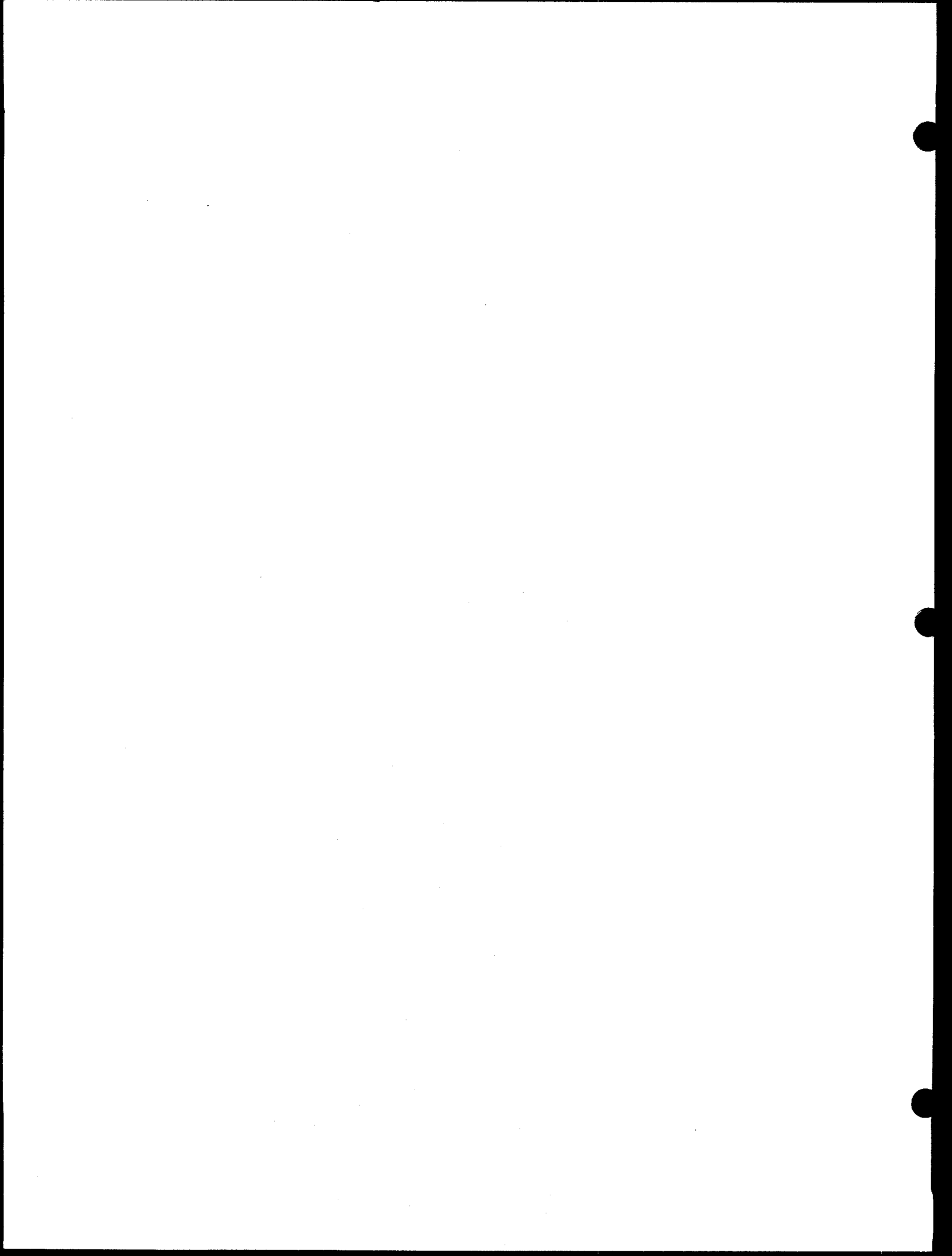
AAS	-	Atomic Absorption Spectroscopy
CVAA	-	Cold Vapor Atomic Absorption
PMS	-	Plasma Mass Spectroscopy
ICAP	-	Inductively Coupled Arc Plasma Spectroscopy

Units:

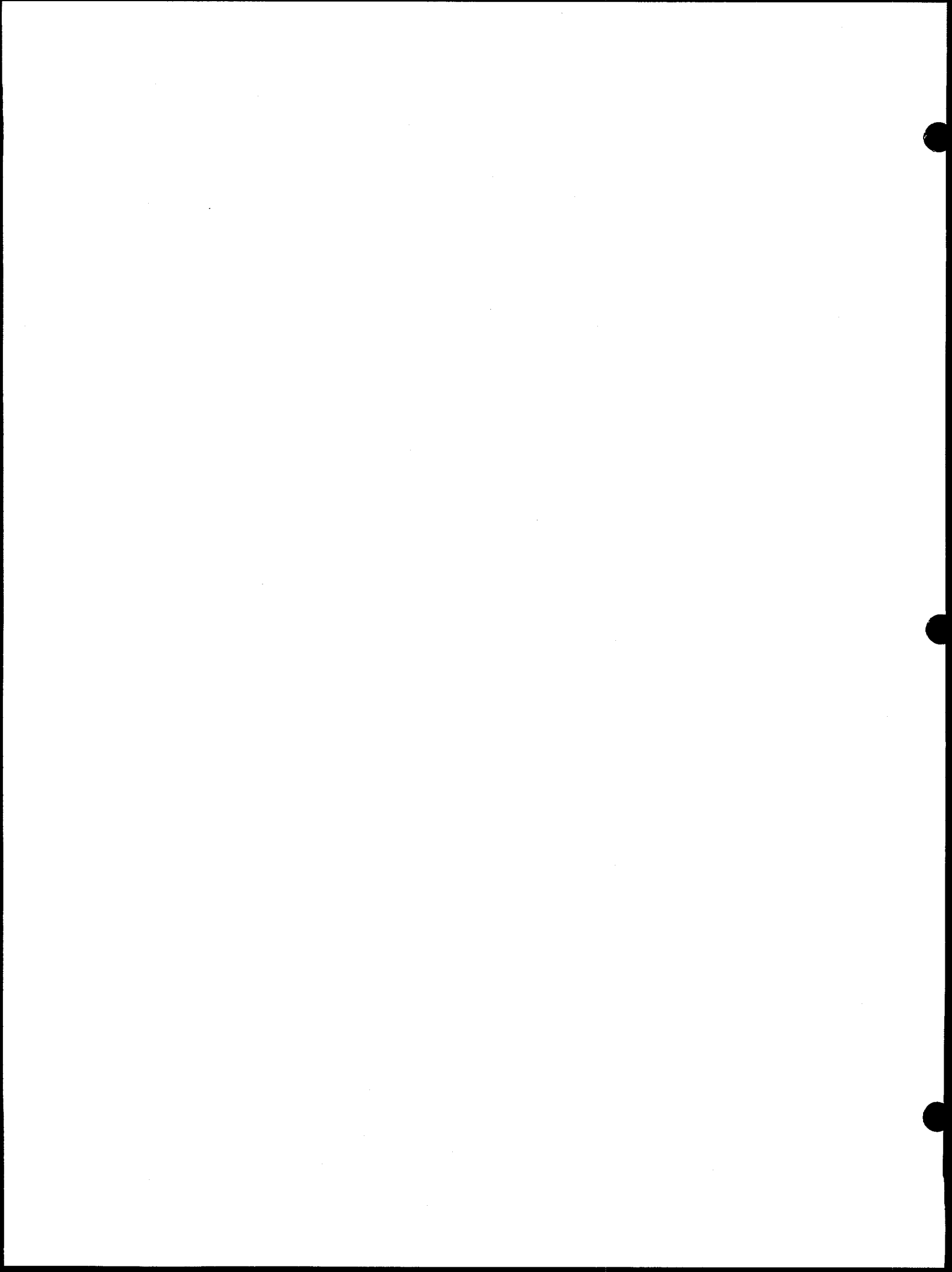
mg/L	-	milligrams per liter
ppm	-	parts per million
μ mhos/cm	-	micromhos per centimeter
NTU	-	Nephelometric Turbidity Unit
mV	-	millivolts
pCi/L	-	picocuries per liter
Bq/L	-	Becquerels per liter
CE+/-	-	counting error (two standard deviations)
FT.-TOC	-	feet below top of casing
DEG. CENT.	-	degrees centigrade
FT. ABOVE MSL	-	feet above mean sea level

EXPLANATION (cont'd)

Analyte Class	Qualifier	Explanation
Radionuclides	J	Estimated value.
	A	Possible detector contamination.
	E	Result of analysis is less than MDA, confidence level is less than 95%.
	F	Result less than background.
	i	Tentatively identified isotope.
	*	Duplicate analysis outside control limits.
	C	Control analysis outside of control limits.
	D	Spike control limits do not apply, sample activity exceeds spike activity.
	N	Spike recovery not within limits.
	H	Daughter of uranium isotopes, reported for comparison purposes only.
	G	Gamma photopeak near MDA, poor curve fit.
Organics	J	Estimated value less than laboratory reporting limit.
	B	Compound also detected in the associated laboratory blank.
	U	Compound not detected.
	D	Compound identified at a secondary dilution factor.
	E	Concentration exceeds calibration range of instrument.
	s	Spike recovery not within limits.
ICP and ICP/MS Metals	d	Dilution required, reporting limits raised accordingly.
AAS Metals	s	Spike recovery not within limits.
	D	Sample contained matrix interferences, reporting limit adjusted.
Conductivity	L	Sample received with expired holding time.
	h	Analysis exceeded holding time.
Alkalinities	h	Analysis exceeded holding time.
Nitrate	h	Analysis exceeded holding time.
Sulfate	d	Dilution required, reporting limits raised accordingly.



APPENDIX E.1
TRACE METALS AND ANIONS



APPENDIX E.1
TRACE METALS AND ANIONS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-141 LIV 01/09/95 TOT	GW-141 LIV 01/09/95 DIS	GW-142 KHQ 01/10/95 TOT	GW-142 KHQ 03/20/95 TOT	GW-142 KHQ 01/10/95 DIS	GW-142 KHQ 03/20/95 DIS	GW-143 KHQ 01/17/95 TOT	GW-143 KHQ 01/17/95 DIS
METALS								
ALUMINUM	2.3	0.022	0.061	<0.02	<0.02	<0.02	0.046	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
BERYLLIUM	0.00074	<0.0003	<0.0003	0.4	0.39	0.38	0.041	0.035
BORON	0.017	0.028	0.1	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
CADMIUM	<0.003	<0.003	<0.003	<0.003	0.11	0.039	0.9	0.87
CADMIUM	<0.002	<0.002	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CALCIUM	48	48	46	43	43	44	31	30
CHROMIUM	<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	0.0067	<0.004	0.0054	<0.004	<0.004	<0.004
IRON	1.9	0.0078	3.6	5.4	0.043	<0.005	3.5	0.15
LEAD	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
MAGNESIUM	30	28	31	28	29	29	29	28
MANGANESE	0.029	<0.001	0.052	0.068	0.042	0.052	0.045	0.038
MERCURY	<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
PHOSPHOROUS	1.2	0.85	3.5	3.9	3.3	4.1	17	16
POTASSIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SELENIUM	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SILICON	1.1	0.96	1	0.98	0.94	1	25	24
SODIUM	0.02	0.019	0.54	0.5	0.51	0.51	2.8	2.7
STRONTIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
THALLIUM	<0.0005 d	<0.0005 d	<0.011	<0.005	<0.005	<0.005	<0.005	<0.005
THORIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
URANIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
VANADIUM	0.044	0.011	<0.002	0.005	<0.002	<0.002	<0.002	<0.002
ZINC	234	234	235	234	234	234	203	203
ANIONS								
ALKALINITY-HCO3	<1	<1	<1	<1	<1	<1	<1	<1
ALKALINITY-CO3	2.4	2.4	2.3	2.3	2.3	2.3	5.9	5.9
CHLORIDE	<0.1	<0.1	0.6	0.6	0.6	0.6	3.7	3.7
FLUORIDE	0.88	0.88	1.2	1.2	1.2	1.2	<0.2	<0.2
NITRATE NITROGEN	2.6	2.6	5.4	5.4	5.4	5.4	34	34
AMMONIA NITROGEN	18	18	8	8	8	8	7	7
SULFATE	55	55	27	27	27	27	22	22
TOTAL SUSPENDED SOLIDS								
TURBIDITY								

APPENDIX E.1
TRACE METALS AND ANIONS, 1ST QUARTER 1995

SAMPLING POINT LOCATION	GW-144 KHQ	GW-144 KHQ	GW-144 KHQ	GW-145 KHQ	GW-145 KHQ	GW-145 KHQ	GW-145 KHQ	GW-146 KHQ	GW-146 KHQ	GW-146 KHQ	GW-146 KHQ
DATE SAMPLED	01/18/95	03/22/95	01/18/95	01/18/95	03/24/95	01/18/95	03/24/95	01/17/95	03/23/95	01/17/95	03/23/95
TYPE	TOT	TOT	DIS	TOT	TOT	DIS	DIS	TOT	TOT	DIS	TOT
METALS											
ALUMINUM	0.4		0.026	0.15	0.74	0.042	<0.02	<0.02		0.04	
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		0.052	
BARIUM	0.054		0.054	0.11	0.16	0.096	0.16	0.056		0.068	
BERYLLIUM	<0.0003		<0.0003	<0.0003	0.0073	<0.0003	0.00046	<0.0003		<0.0003	
BORON	0.035		0.038	0.3	0.26	0.31	0.21	0.48		0.49	
CADMIUM	<0.003		<0.003	<0.003	0.007	<0.003	<0.003	<0.003		<0.003	
CADMIUM											
CALCIUM	39		42	47	46	44	43	37		38	
CHROMIUM	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	
CHROMIUM											
COBALT	<0.005		<0.005	<0.005	0.009	<0.005	<0.005	<0.005		<0.005	
COPPER	0.019		<0.004	0.0042	0.0073	0.0051	<0.004	<0.004		<0.004	
IRON	<0.005		<0.005	0.16	<0.05	<0.005	<0.005	<0.05		0.42	
LEAD	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	
LEAD											
MAGNESIUM	17		17	45	34	42	33	31		38	
MANGANESE	0.0018		<0.001	0.015	0.075	0.0015	0.021	0.015		0.02	
MERCURY	<0.0002		<0.0002	<0.0002		<0.0002		<0.0002		<0.0002	
MOLYBDENUM	<0.01		<0.01	<0.01	0.01	0.011	0.01	<0.01		<0.01	
NICKEL	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	
PHOSPHOROUS											
POTASSIUM	1.4		1.5	13	12	12	11	15		15	
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	0.013	<0.006	<0.006	<0.006		<0.006	
SODIUM	0.98		1.1	6.8	4.8	6.4	4	11		11	
STRONTIUM	0.086		0.087	7.8	7.3	7.5	6.6	6.3		6.9	
THALLIUM											
THORIUM	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	
URANIUM	0.0025		0.0025	0.013		0.012		0.0014		0.0013	
VANADIUM	<0.005		<0.005	<0.005	0.011	<0.005	<0.005	<0.005		<0.005	
ZINC	0.013		0.0023	0.0042	0.0095	0.0039	<0.002	<0.002		0.0033	
ANIONS											
ALKALINITY-HCO3	151			229				197			
ALKALINITY-CO3	<1			<0.1				<1			
CHLORIDE	2.3			8.8				11			
FLUORIDE	0.2			2.9				3			
NITRATE NITROGEN	1.6			0.47				0.66			
AMMONIA NITROGEN											
SULFATE	5.3			36				66			
TOTAL SUSPENDED SOLIDS	<1			6				2			
TURBIDITY	0.1			5.2				6			

APPENDIX E.1
TRACE METALS AND ANIONS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-147 KHQ 01/15/95 TOT	GW-147 KHQ 01/15/95 DIS	GW-156 CRSDB 01/18/95 TOT	GW-156 CRSDB 01/18/95 DIS	GW-158 CRSDB 01/20/95 TOT	GW-158 CRSDB 01/20/95 DIS	GW-159 CRSDB 01/15/95 TOT	GW-159 CRSDB 01/15/95 DIS	GW-175 CRSP 02/14/95 TOT	GW-175 CRSP 02/14/95 DIS
METALS										
ALUMINUM	ICAP (MG/L)	0.052	0.071	<0.02	0.042	0.022	0.37	0.021	0.027	<0.02
ANTIMONY	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BARIUM	ICAP (MG/L)	0.077	0.027	0.029	0.047	0.043	0.012	0.011	0.039	0.036
BERYLLIUM	ICAP (MG/L)	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.00032	<0.0003	<0.0003	<0.0003
BORON	ICAP (MG/L)	0.048	0.088	0.016	0.016	0.017	0.014	0.029	<0.004	0.0054
CADMIUM	ICAP (MG/L)	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	AAS (MG/L)	35	74	73	44	42	45	41	46	48
CALCIUM	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	ICAP (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
CHROMIUM	AAS (MG/L)	0.004	0.011	0.0056	<0.004	<0.004	<0.004	0.019	0.012	0.0091
COBALT	ICAP (MG/L)	0.075	0.15	<0.005	2.2	<0.005	<0.05	0.15	0.76	0.013
COPPER	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IRON	ICAP (MG/L)	19	42	42	22	22	29	27	29	29
LEAD	AAS (MG/L)	0.017	0.016	0.0056	0.0099	0.0058	0.025	0.0029	0.0047	0.002
MANGANESE	ICAP (MG/L)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MERCURY	CVA (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOLYBDENUM	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NICKEL	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
PHOSPHOROUS	ICAP (MG/L)	4.9	3.6	4	0.68	0.77	0.86	0.68	0.73	0.75
POTASSIUM	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SELENIUM	ICAP (MG/L)	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SILVER	ICAP (MG/L)	2.6	2.8	3.3	0.59	0.69	0.54	0.58	1.1	0.98
SODIUM	ICAP (MG/L)	0.83	0.034	0.034	0.027	0.025	0.017	0.016	0.014	0.015
STRONTIUM	ICAP (MG/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THALLIUM	AAS (MG/L)	0.0019	0.0028	0.0029	0.0011	0.0007	<0.001	0.0013	0.00056	0.00056
THORIUM	ICP/MS (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
URANIUM	ICAP (MG/L)	<0.002	0.012	0.012	<0.002	<0.002	0.0041	0.012	0.009	<0.002
VANADIUM	ICAP (MG/L)	172	342	.	175	.	180	.	235	.
ZINC	ICAP (MG/L)	<1	<1	.	<1	.	<1	.	<1	.
ANIONS										
ALKALINITY-HCO3	(MG/L)	2.4	2.8	.	1.2	.	2	.	2.3	.
ALKALINITY-CO3	(MG/L)	0.4	<0.1	.	<0.1	.	<0.1	.	<0.1	.
CHLORIDE	(MG/L)	1.2	0.56	.	<0.2	.	0.72	.	0.68	.
FLUORIDE	(MG/L)	4.3	10	.	10	.	8.6	.	1.5	.
NITRATE NITROGEN	(MG/L)	4	10	.	8	.	6	.	1	.
AMMONIA NITROGEN	(MG/L)	4.5	5.3	.	5	.	1.8	.	2	.
SULFATE	(MG/L)									
TOTAL SUSPENDED SOLIDS	(MG/L)									
TURBIDITY	(NTU)									

APPENDIX E.1
TRACE METALS AND ANIONS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-177 CRSP 02/13/95 TOT	GW-177 CRSP 02/13/95 DIS	GW-181 CRSP 01/24/95 TOT	GW-181 CRSP 01/24/95 DIS	GW-217 LIV 01/04/95 TOT	GW-217 LIV 01/04/95 DIS	GW-231 KHQ 01/15/95 TOT	GW-231 KHQ 01/15/95 DIS	GW-241 CRSDB 01/20/95 TOT	GW-241 CRSDB 01/20/95 DIS
METALS										
ALUMINUM	<0.02	<0.02	0.062	<0.02	0.73	<0.02	0.033	<0.02	0.27	0.036
ANTIMONY	<0.05	<0.05	<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	<0.05	<0.05
BARIUM	0.022	0.022	0.0068	0.007	0.031	0.034	0.08	0.079	0.017	0.016
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	0.00044	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.019	0.0046	0.011	0.016	0.17	0.17	0.055	0.071	0.032	0.02
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CALCIUM	45	45	35	35	32	28	37	36	32	32
CHROMIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM										
COBALT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COPPER	0.0042	<0.004	<0.004	<0.004	0.01	<0.004	<0.004	0.0095	<0.004	<0.004
IRON	0.25	0.013	1.3	0.0052	0.76	0.0072	0.016	<0.005	0.38	<0.005
LEAD	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD										
MAGNESIUM	27	27	21	21	20	18	18	18	18	18
MANGANESE	0.012	0.0075	0.024	0.022	0.025	0.0012	0.003	<0.001	0.012	<0.001
MERCURY	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MOLYBDENUM	<0.01	0.012	<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	<0.01	<0.01
PHOSPHOROUS										
POTASSIUM	2.5	3.1	1.4	1.6	5.4	4.2	0.97	0.99	2.1	2.1
SELENIUM	<0.05	<0.05	<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	<0.006	<0.006
SODIUM	1.5	1.6	0.66	0.74	4.4	5.5	0.86	0.87	0.59	0.62
STRONTIUM	0.019	0.02	0.016	0.016	0.013	0.015	0.033	0.033	0.019	0.019
THALLIUM										
THORIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	0.0018	0.0017	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
VANADIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC	0.093	0.069	<0.002	<0.002	0.018	0.0081	<0.002	<0.002	<0.002	<0.002
ANIONS										
ALKALINITY-HCO3	215		169		151		161		149	
ALKALINITY-CO3	<1		<1		<1		<1		<1	
CHLORIDE	2.7		1.8		2.3		2.8		1.2	
FLUORIDE	<0.1		<0.1		<0.1		<0.1		<0.1	
NITRATE NITROGEN	0.69		0.26		1.1		1		0.36	
AMMONIA NITROGEN										
SULFATE	8.8		1.7		5.2		5.1		1.2	
TOTAL SUSPENDED SOLIDS	2		2		5		1		4	
TURBIDITY	4		7.1		8.9		1.4		5.5	

APPENDIX E-1
TRACE METALS AND ANIONS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-303 CRSDB 01/19/95 TOT	GW-303 CRSDB 01/19/95 DIS	GW-304 CRSDB 01/15/95 TOT	GW-304 CRSDB 01/15/95 DIS	GW-305 LIV 01/10/95 TOT	GW-305 LIV 01/10/95 DIS	GW-321 ADB 01/10/95 TOT	GW-321 ADB 01/10/95 DIS	GW-511 CRSP 01/24/95 TOT	GW-511 CRSP 01/24/95 DIS
METALS										
ALUMINUM	ICAP (MG/L)	0.038	0.13	0.025	0.12	<0.02	<0.02	0.032	0.077	<0.02
ANTIMONY	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BARIIUM	ICAP (MG/L)	0.017	0.012	0.011	0.0077	0.0077	0.054	0.051	0.0087	0.0073
BERYLLIUM	ICAP (MG/L)	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	ICAP (MG/L)	0.026	0.031	0.023	0.017	0.015	0.025	0.072	0.016	<0.004
CADMIUM	ICAP (MG/L)	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CALCIUM	AAS (MG/L)	74	39	38	28	28	27	27	28	26
CHLORINE	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	AAS (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COBALT	ICAP (MG/L)	<0.004	0.0071	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.004
COPPER	ICAP (MG/L)	0.96	0.14	<0.005	0.23	0.0057	0.021	0.0091	0.24	0.018
IRON	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	AAS (MG/L)	40	24	24	17	17	15	15	16	16
MAGNESIUM	ICAP (MG/L)	0.015	0.013	0.0041	0.0079	<0.001	0.017	0.015	0.004	0.0016
MERCURY	CVAA (MG/L)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MOLYBDENUM	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NICKEL	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
PHOSPHOROUS	ICAP (MG/L)	4.3	1.8	1.8	0.88	<0.6	<0.2	<0.2	4.5	4.4
POTASSIUM	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SELENIUM	ICAP (MG/L)	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SILVER	ICAP (MG/L)	1.2	4.7	4.7	3.8	1.4	0.58	0.69	1.6	1.9
SODIUM	ICAP (MG/L)	2.9	0.019	0.018	0.016	0.013	0.018	0.018	0.043	0.045
STRONTIUM	ICAP (MG/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THALLIUM	AAS (MG/L)	<0.0005 d	0.001	0.00088	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
THORIUM	ICP/MS (MG/L)	<0.0005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
URANIUM	ICAP (MG/L)	<0.002	0.0094	<0.002	0.011	<0.002	0.0072	0.003	0.0074	<0.002
VANADIUM	ICAP (MG/L)	166	185	.	133	.	.	.	135	.
ZINC	ICAP (MG/L)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
ANIONS										
ALKALINITY-HCO3	(MG/L)	<1	<1	.	<1	.	.	.	<1	.
ALKALINITY-CO3	(MG/L)	2	2.9	.	2.5	.	1.8	.	3.1	.
CHLORIDE	(MG/L)	0.9	<0.1	.	<0.1	.	.	.	<0.1	.
FLUORIDE	(MG/L)	<0.2	0.58	.	0.68	.	.	.	0.26	.
NITRATE NITROGEN	(MG/L)	172	18	.	3.9	.	1.9	.	1.8	.
AMMONIA NITROGEN	(MG/L)	<1	24	.	5	.	.	.	1	.
SULFATE	(MG/L)	14	2.6	.	3.5	.	.	.	2.5	.
TOTAL SUSPENDED SOLIDS	(MG/L)									
TURBIDITY	(NTU)									

APPENDIX E.1
TRACE METALS AND ANIONS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-521 LIV TOT	GW-521 LIV DIS	GW-522 LIV TOT	GW-522 LIV DIS	GW-539 LIV TOT	GW-539 LIV DIS	GW-608 CRSP TOT	GW-608 CRSP DIS	GW-609 CRSP TOT	GW-609 CRSP DIS
METALS										
ALUMINUM	0.26	0.031	0.15	<0.02	0.2	0.021	<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	<0.05	<0.05
ARSENIC	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BARIUM	0.0097	0.0097	0.0078	0.0071	0.011	0.0092	0.012	0.011	0.012	0.012
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.0068	<0.004	0.047	0.018	0.016	0.012	0.005	<0.004	0.014	0.0063
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CALCIUM	30	30	30	29	40	38	31	31	39	39
CHROMIUM	<0.01	<0.01	<0.01	<0.01	0.049	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	<0.01	<0.01	<0.01	<0.01	0.057	<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	<0.005	<0.005
COPPER	<0.004	<0.004	<0.004	<0.004	0.012	<0.004	<0.004	<0.004	0.0052	0.0053
IRON	0.24	0.011	0.16	0.0061	1.3	0.099	0.16	0.0073	0.046	0.014
LEAD	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
MAGNESIUM	19	19	17	17	22	21	18	18	23	23
MANGANESE	0.0068	<0.001	0.0036	<0.001	0.02	0.0041	0.0027	<0.001	<0.001	<0.001
MERCURY	<0.0002	<0.0002	<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	<0.01	<0.01
NICKEL	<0.01	<0.01	<0.01	<0.01	0.15	0.093	<0.01	<0.01	<0.01	<0.01
PHOSPHORUS	<0.6	<0.6	1.2	0.63	1.4	1.3	1	0.95	1.7	1.7
POTASSIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SELENIUM	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SILICON	0.62	0.65	0.71	0.63	2.6	2.5	0.65	0.64	0.79	0.83
SILVER	0.01	0.01	0.011	0.011	0.023	0.022	0.013	0.013	0.014	0.013
STRONTIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
THALLIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THORIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	0.001	0.0012	0.00076	<0.0005 d	<0.0005 d	<0.0005 d
URANIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
VANADIUM	0.0056	<0.002	0.02	0.004	0.028	0.0048	<0.002	<0.002	0.0055	0.0023
ZINC										
ANIONS										
ALKALINITY-HCO3	152		140		149		153		196	
ALKALINITY-CO3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CHLORIDE	2.3		2.2		21		2.5		1.9	
FLUORIDE	<0.1		<0.1		<0.1		<0.1		<0.1	
NITRATE NITROGEN	0.63		0.81		1		0.77		1.3	
AMMONIA NITROGEN					<0.2					
SULFATE	1.5		<1		7.5		2.6		2.5	
TOTAL SUSPENDED SOLIDS	2		5		78		<1		1	
TURBIDITY	6.7		3.5		34		1.9		0.3	

APPENDIX E.1
TRACE METALS AND ANIONS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-610 CRSP 01/31/95 TOT	GW-610 CRSP 01/31/95 DIS	GW-611 CRSP 02/14/95 TOT	GW-611 CRSP 02/14/95 DIS	GW-709 LII 01/09/95 TOT	GW-709 LII 01/09/95 DIS	GW-731 CRSDB 01/17/95 TOT	GW-731 CRSDB 01/17/95 DIS	GW-732 CRSDB 01/18/95 TOT	GW-732 CRSDB 01/18/95 DIS
METALS										
ALUMINUM	0.029	<0.02	0.037	<0.02	<0.02	<0.02	0.25	<0.02	5.4	<0.02
ANTIMONY	<0.05	<0.05	<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	<0.05	<0.05
BARIIUM	0.1	0.09	0.018	0.016	0.29	0.27	0.0061	0.0035	0.13	0.087
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.039	<0.004	<0.004	0.0058	0.028	0.032	0.024	0.013	0.025	0.015
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	48	43	56	57	38	38	20	17	39	29
CALCIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM										
CHROMIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COBALT	0.0058	0.0046	0.0083	0.0087	<0.004	<0.004	0.011	0.0051	0.021	0.0085
COPPER	0.23	<0.005	0.19	0.0062	0.032	<0.005	0.65	<0.005	4.4	0.0052
IRON	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD										
LEAD	29	26	33	33	20	21	15	12	21	15
MAGNESIUM	0.002	<0.001	0.0061	0.0035	0.0016	0.0014	0.013	<0.001	0.084	0.0018
MANGANESE	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MERCURY	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOLYBDENUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NICKEL	1.2	0.63	0.86	0.99	1.5	1.3	21	23	8	9.7
PHOSPHOROUS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
POTASSIUM	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SELENIUM	1	0.89	1.4	2.3	0.56	0.57	6.1	6.7	8.9	11
SILICON	0.018	0.016	0.019	0.019	0.03	0.031	0.023	0.016	0.32	0.26
SILVER										
SODIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
STRONTIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	0.00067	<0.0005 d	<0.0005 d	<0.0005 d	0.011	<0.0005 d
THALLIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
THORIUM	<0.002	<0.002	0.017	<0.002	0.0087	0.0056	0.011	<0.002	0.027	0.002
URANIUM										
VANADIUM										
ZINC										
ANIONS										
ALKALINITY-HCO3	227	272			177		97		162	
ALKALINITY-CO3	<1	<1			<1		16		1	
CHLORIDE	3	1.8			2.3		1.9		1.4	
FLUORIDE	<0.1	<0.1			<0.1		<0.1		<0.1	
NITRATE NITROGEN	1	3.3			0.58		0.67		0.54	
AMMONIA NITROGEN										
SULFATE	1.3	2.1			1.9		6.1		1.9	
TOTAL SUSPENDED SOLIDS	1	<1			<1		24		820	
TURBIDITY	0.8	0.8			0.9		24		160	

APPENDIX E.1
TRACE METALS AND ANIONS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-742 CRSP 01/27/95 TOT	GW-742 CRSP 01/27/95 DIS	GW-743 CRSP 01/31/95 TOT	GW-743 CRSP 01/31/95 DIS	GW-757 LII 01/09/95 TOT	GW-757 LII 01/09/95 DIS	SCR2-2SP CRSP 03/15/95 TOT	SCR2-2SP CRSP 03/15/95 DIS
METALS								
ALUMINUM	ICAP (MG/L) <0.02	<0.02	0.021	<0.02	0.22	<0.02	0.099	0.02
ANTIMONY	ICAP (MG/L) <0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	ICAP (MG/L) <0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BARUM	ICAP (MG/L) 0.12	0.12	0.012	0.012	0.22	0.2	0.022	0.023
BERYLLIUM	ICAP (MG/L) <0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	ICAP (MG/L) <0.004	0.0046	0.019	0.0058	0.025	0.028	0.016	0.027
CADMIUM	ICAP (MG/L) <0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	AAS (MG/L) 39	38	31	31	35	33	47	48
CALCIUM	ICAP (MG/L) <0.01	<0.01	<0.01	<0.01	0.1	0.055	<0.01	<0.01
CHROMIUM	ICAP (MG/L) AAS (MG/L)				0.12	0.067		
CHROMIUM	ICAP (MG/L) <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COBALT	ICAP (MG/L) <0.004	0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
COPPER	ICAP (MG/L) 6.1	0.0069	0.09	<0.05	0.48	0.01	0.23	0.066
IRON	ICAP (MG/L) <0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	ICAP (MG/L) AAS (MG/L)				<0.004	<0.004		
LEAD	ICAP (MG/L) 22	22	18	18	18	17	6.9	7
MAGNESIUM	ICAP (MG/L) <0.076	0.037	0.0013	<0.001	0.0054	0.0011	0.0082	0.004
MANGANESE	ICAP (MG/L) <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MERCURY	ICAP (MG/L) <0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOLYBDENUM	ICAP (MG/L) <0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NICKEL	ICAP (MG/L) 1.7	1.3	1.5	1	2.2	1.4	0.85	0.68
PHOSPHOROUS	ICAP (MG/L) <0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
POTASSIUM	ICAP (MG/L) <0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SELENIUM	ICAP (MG/L) 0.67	0.71	1.1	0.98	1.8	1.3	2.4	2.5
SILICON	ICAP (MG/L) 0.018	0.017	0.02	0.02	0.78	0.81	0.058	0.061
SILVER	ICAP (MG/L) <0.2	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.2
SODIUM	ICAP (MG/L) <0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.2	<0.2	<0.0005	<0.0005 d
STRONTIUM	ICAP (MG/L) <0.005	<0.005	<0.005	<0.005	0.0047	0.0048	<0.0005	<0.0005
THALLIUM	ICAP (MG/L) <0.002	<0.002	<0.002	<0.002	0.0095	0.018	0.0078	0.01
THORIUM	ICAP (MG/L) 167		143		141		143	
URANIUM	ICAP (MG/L) <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
VANADIUM	ICAP (MG/L) 12		4.6		10		8	
ZINC	ICAP (MG/L) 2		<1		4		<1	
ANIONS								
ALKALINITY-HCO3	(MG/L) <1		<1		<1		<1	
ALKALINITY-CO3	(MG/L) 1.8		2.7		2.4		4.5	
CHLORIDE	(MG/L) <0.1		<0.1		2.1		<0.1	
FLUORIDE	(MG/L) <0.2		1.3		<0.2		2.1	
NITRATE NITROGEN	(MG/L) 12		4.6		10		8	
AMMONIA NITROGEN	(MG/L) 2		<1		4		<1	
SULFATE	(MG/L) 15		1.4		2.3		3.4	
TOTAL SUSPENDED SOLIDS	(MG/L) (NTU)							
TURBIDITY								

APPENDIX E.1
TRACE METALS AND ANIONS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	1090 UNCS TOT	1090 UNCS DIS	CBS-1 LV TOT	CBS-1 LV DIS	GW-142 KHQ TOT	GW-142 KHQ DIS	GW-143 KHQ TOT	GW-143 KHQ DIS	GW-144 KHQ TOT	GW-144 KHQ DIS
METALS										
ALUMINUM	0.17	<0.02	0.084	0.1	<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	<0.05	<0.05
ARSENIC	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BARIIUM	0.024	0.028	0.098	0.098	0.43	0.43	0.028	0.022	0.046	0.046
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.085	0.027	0.016	0.017	0.051	0.041	0.96	0.93	0.028	0.023
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	0.0032	<0.003	<0.003	<0.003	<0.003
CALCIUM	45	55	29	29	44	44	30	29	40	39
CHROMIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COBALT	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
COPPER	0.25	<0.005	0.032	0.068	6.9	1.5	<0.05	<0.05	0.058	0.021
IRON	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	26	31	12	12	31	31	24	23	15	14
MAGNESIUM	0.012	0.0017	0.0016	0.0024	0.059	0.054	0.036	0.027	0.0016	<0.001
MERCURY	<0.0002	<0.0002	<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	<0.01	<0.01
NICKEL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	0.97	1.2	1.2	0.98	3.9	4.1	18	17	1.5	1.9
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	9	11	1.6	1.6	0.97	1	27	27	1.2	1.3
STRONTIUM	0.021	0.026	0.069	0.069	0.55	0.54	2.5	2.3	0.09	0.093
THALLIUM	<0.2	<0.2	<0.01	<0.01	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THORIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	0.01	0.0097	0.0012	0.001	0.002	0.0019
URANIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
VANADIUM	<0.013	0.029	0.0062	0.0059	0.0053	0.0073	0.007	0.0072	0.0034	0.0057
ZINC										
ANIONS										
ALKALINITY-HCO3	267	.	123	.	242	.	207	.	151	.
ALKALINITY-CO3	<1	<1	<1	.	<1	.	<1	.	<1	.
CHLORIDE	23	.	4	.	2.5	.	5.9	.	2.8	.
FLUORIDE	<0.1	.	<0.1	.	0.63	.	3.2	.	0.1	.
NITRATE NITROGEN	1	.	0.68	.	<0.2	.	<0.2	.	2	.
AMMONIA NITROGEN	.	.	<0.2	.	.	.	.	.	.	.
SULFATE	5.4	.	5.8	.	5.7	.	35	.	5.6	.
TOTAL SUSPENDED SOLIDS	3	.	2.5	.	3.8	.	3	.	<1	.
TURBIDITY	3.7	.	2.5	.	34	.	9.9	.	0.4	.

APPENDIX E.1
TRACE METALS AND ANIONS, 2ND QUARTER 1995

SAMPLING POINT LOCATION	GW-145 KHQ 04/26/95 TOT	GW-145 KHQ 04/26/95 DIS	GW-146 KHQ 04/24/95 TOT	GW-146 KHQ 04/24/95 DIS	GW-147 KHQ 04/21/95 TOT	GW-147 KHQ 04/21/95 DIS	GW-156 CRSDB 04/07/95 TOT	GW-156 CRSDB 04/07/95 DIS	GW-158 CRSDB 04/13/95 TOT	GW-158 CRSDB 04/13/95 DIS
METALS										
ALUMINUM	0.066	0.026	<0.02	<0.02	6.3	<0.02	0.13	0.047	0.059	0.045
ANTIMONY	<0.05	<0.05	<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	0.053	<0.05	<0.05	<0.05	<0.05	<0.05
BARIUM	0.094	0.087	0.063	0.048	0.25	0.081	0.046	0.052	0.047	0.046
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	0.0007	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.24	0.25	0.5	0.39	0.082	0.1	0.018	0.018	0.025	0.012
CADMIUM	<0.003	<0.003	<0.003	<0.003	0.0031	<0.003	<0.003	<0.003	<0.003	<0.003
CALCIUM	47	42	40	38	74	33	70	69	36	36
CHROMIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	<0.005	<0.005	<0.005	<0.005	0.0081	<0.005	<0.005	<0.005	<0.005	<0.005
COBALT	<0.004	<0.004	<0.004	<0.004	0.014	<0.004	<0.004	0.0046	<0.004	<0.004
COPPER	0.1	0.0071	0.85	0.0075	13	0.011	0.21	0.011	0.13	0.022
IRON	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	35	34	34	28	26	20	41	41	20	20
MAGNESIUM	0.01	0.0027	0.0085	0.0061	1.7	0.0013	0.0059	0.0022	0.0056	0.0062
MERCURY	<0.0002	<0.0002	<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	<0.01	<0.01
NICKEL	<0.01	<0.01	<0.01	<0.01	0.022	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	13	12	16	12	7	5.5	6.8	7.3	0.85	0.88
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	5.8	5.9	13	11	4.2	4	5.3	5.5	0.58	0.56
STRONTIUM	7.8	7.4	7	4.2	2.6	2	0.044	0.05	0.022	0.022
THALLIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THORIUM	0.012	0.012	0.0016	0.0014	0.003	0.0024	0.0037	0.0037	<0.0005 d	<0.0005 d
URANIUM	<0.005	<0.005	<0.005	<0.005	0.02	<0.005	<0.005	<0.005	<0.005	<0.005
VANADIUM	0.0079	0.0033	0.0072	0.0096	0.11	0.0096	0.016	0.0034	0.0054	0.0046
ZINC										
ANIONS										
ALKALINITY-HCO3	232		198		169		353		175	
ALKALINITY-CO3	<1		<1		<1		<1		<1	
CHLORIDE	9.7		11		2.6		3.2		1.4	
FLUORIDE	2.4		2.8		0.7		<0.1		<0.1	
NITRATE NITROGEN	0.35		0.5		1.1		0.71		<0.2	
AMMONIA NITROGEN										
SULFATE	37		70		5.5		9.1		9.2	
TOTAL SUSPENDED SOLIDS	22		4		18		4		<1	
TURBIDITY	4.2		6.2		17		3.8		1.4	

APPENDIX E.1
TRACE METALS AND ANIONS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-159 CRSDB 04/06/95 TOT	GW-159 CRSDB 04/06/95 DIS	GW-160 CRBAMP 04/26/95 TOT	GW-160 CRBAMP 04/26/95 DIS	GW-161 CRBAMP 04/20/95 TOT	GW-161 CRBAMP 04/20/95 DIS	GW-175 CRSP 05/15/95 TOT	GW-175 CRSP 05/15/95 DIS	GW-177 CRSP 05/11/95 TOT	GW-177 CRSP 05/11/95 DIS
METALS										
ALUMINUM	0.061	0.051	15	<0.02	<0.02	<0.02	0.032	<0.02	0.046	0.021
ANTIMONY	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	<0.05	<0.05	0.052	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BARIUM	0.011	0.011	0.033	0.011	0.011	0.01	0.043	0.042	0.02	0.019
BERYLLIUM	<0.0003	<0.0003	0.0014	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.028	0.0086	0.029	0.012	0.019	0.025	0.0092	0.0096	0.018	0.018
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	38	37	<0.002	<0.002	<0.002	<0.002	49	49	44	45
CALCIUM	<0.01	<0.01	0.014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	<0.005	<0.005	0.016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
CHROMIUM	<0.004	<0.004	0.016	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
COBALT	<0.005	<0.005	15	0.014	0.089	0.0098	0.39	0.02	0.32	0.015
COPPER	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
IRON	<0.05	<0.05	0.031	<0.004	<0.004	<0.004	30	30	26	26
LEAD	23	22	0.27	0.0042	0.0049	0.0046	0.0032	0.001	0.0075	0.0019
MAGNESIUM	0.0011	<0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MANGANESE	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MERCURY	<0.01	<0.01	0.019	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOLYBDENUM	<0.01	<0.01	0.019	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NICKEL	1.5	1.5	3	0.86	0.78	0.76	0.79	1.1	2.4	2.6
POTASSIUM	<0.05	<0.05	<0.006	<0.05	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SELENIUM	<0.006	<0.006	3.1	3.1	0.79	0.8	1	1	1.2	1.2
SILVER	0.64	0.58	0.026	0.024	0.013	0.013	0.016	0.016	0.017	0.017
SODIUM	0.018	0.018	0.026	0.024	0.013	0.013	0.016	0.016	0.017	0.017
STRONTIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THALLIUM	0.0012	0.0011	0.00058	<0.0005 d	<0.0005 d	<0.0005 d	0.00079	0.00074	0.0022	0.0022
THORIUM	<0.005	<0.005	0.036	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
URANIUM	0.0043	0.0051	0.1	<0.002	0.0036	<0.002	0.0079	<0.002	0.048	<0.002
ZINC										
ANIONS										
ALKALINITY-HCO3	195	232	<0.2	<0.2	<0.2	<0.2	226	226	216	216
ALKALINITY-CO3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CHLORIDE	1.8	7.1	7.1	2.7	2.7	2.7	2.1	2.1	1.9	1.9
FLUORIDE	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
NITRATE NITROGEN	0.65	1	1	0.54	0.54	0.54	0.28	0.28	<0.2	<0.2
AMMONIA NITROGEN	8.6	4	4	1.7	1.7	1.7	<1	<1	10	10
SULFATE										
TOTAL SUSPENDED SOLIDS	3	117	117	<1	<1	<1	<1	<1	24	24
TURBIDITY	7.7	260	260	0.7	0.7	0.7	1.4	1.4	4.1	4.1

APPENDIX E.1
TRACE METALS AND ANIONS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-181 CRSP 05/02/95 TOT	GW-181 CRSP 05/02/95 DIS	GW-184 RQ 05/01/95 TOT	GW-184 RQ 05/01/95 DIS	GW-186 RQ 05/03/95 TOT	GW-186 RQ 05/03/95 DIS	GW-187 RQ 05/02/95 TOT	GW-187 RQ 05/02/95 DIS	GW-188 RQ 05/01/95 TOT	GW-188 RQ 05/01/95 DIS
METALS										
ALUMINUM	0.078	0.028	0.069	0.021	0.044	0.04	0.047	0.049	0.073	<0.02
ANTIMONY	<0.05	<0.05	<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	<0.05	<0.05
BARIUM	0.0087	0.0087	0.017	0.018	0.12	0.12	0.27	0.27	0.036	0.035
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.009	0.0092	0.028	0.026	0.14	0.14	0.54	0.54	0.13	0.12
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CALCIUM	34	33	68	67	110	110	48	48	35	34
CHROMIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM										
COBALT	<0.005	<0.005	<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	<0.004	<0.004
IRON	2.2	0.0098	0.073	0.038	0.8	0.79	0.041	0.038	0.13	<0.005
LEAD	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD										
MAGNESIUM	20	19	63	63	32	31	20	20	24	24
MANGANESE	0.01	0.0049	0.0031	<0.001	0.12	0.12	0.0031	0.0033	0.02	0.0089
MERCURY	<0.0002	<0.0002	<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	<0.01	<0.01
NICKEL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	1.6	1.9	1.3	1.4	2.9	3	2	1.8	2.8	2.6
SELENIUM	0.097	0.054	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	0.78	0.79	1.3	1.3	38	38	140	140	19	19
STRONTIUM	0.017	0.016	0.14	0.14	1.7	1.7	0.91	0.92	1.9	1.9
THALLIUM										
THORIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
VANADIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC	0.0032	<0.002	0.0044	0.0029	0.0051	0.0029	0.0041	0.0046	0.005	0.0026
ANIONS										
ALKALINITY-HCO3	172		177		419		319		207	
ALKALINITY-CO3	<1		<1		<1		<1		<1	
CHLORIDE	2		2		16		110		5	
FLUORIDE	<0.1		0.12		0.2		1.1		0.73	
NITRATE NITROGEN	0.4		2.8		<0.2		0.65		0.37	
AMMONIA NITROGEN										
SULFATE	2.1		21		61		24		27	
TOTAL SUSPENDED SOLIDS	3		<1		<1		<1		<1	
TURBIDITY	4.4		1.5		8.4		30		2	

APPENDIX E.1
TRACE METALS AND ANIONS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-203 UNCS 04/18/95 TOT	GW-203 UNCS 04/18/95 DIS	GW-205 UNCS 04/18/95 TOT	GW-205 UNCS 04/18/95 DIS	GW-221 UNCS 04/19/95 TOT	GW-221 UNCS 04/19/95 DIS	GW-231 KHQ 04/21/95 TOT	GW-231 KHQ 04/21/95 DIS	GW-241 CRSDB 04/09/95 TOT	GW-241 CRSDB 04/09/95 DIS
METALS										
ALUMINUM	0.28	<0.02	0.048	<0.02	<0.02	<0.02	<0.02	<0.02	2.5	0.043
ANTIMONY	<0.05	<0.05	<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	<0.05	<0.05
BERYLLIUM	0.0086	0.0078	0.014	0.014	0.0073	0.0073	0.081	0.08	0.022	0.015
BORON	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.0074	0.061	0.0092	0.034	0.053	0.017	0.082	0.015	0.013	0.014
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CALCIUM	30	30	31	31	30	29	38	38	29	28
CHROMIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM										
COBALT	<0.005	<0.005	<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	<0.004	<0.004
IRON	0.47	0.029	0.16	0.094	0.032	<0.005	0.0061	<0.005	2.4	0.0055
LEAD	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD										
MAGNESIUM	17	16	18	18	18	17	20	20	16	15
MANGANESE	0.012	0.0022	0.009	0.0044	0.0015	<0.0002	<0.0002	<0.0002	0.096	<0.0002
MERCURY	<0.0002	<0.0002	<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	<0.01	<0.01
NICKEL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	1.1	0.99	1.4	1.2	0.99	0.99	0.68	0.9	2.9	2.3
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	0.52	0.56	0.72	0.76	0.67	0.61	0.85	0.88	0.85	0.87
STRONTIUM	0.011	0.011	0.012	0.011	0.01	0.01	0.035	0.035	0.02	0.019
THALLIUM										
THORIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	<0.0005 d	<0.0005 d	0.00092	0.00088	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
VANADIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0061	<0.005
ZINC	0.012	0.0086	0.0067	0.007	0.009	0.0082	0.0024	0.0051	0.018	0.0058
ANIONS										
ALKALINITY-HCO3	138		160		151		171		144	
ALKALINITY-CO3	<1		<1		<1		<1		<1	
CHLORIDE	1.9		2.7		1.9		2.6		1.5	
FLUORIDE	<0.1		<0.1		<0.1		<0.1		<0.1	
NITRATE NITROGEN	1.4		6.3		0.9		1.1		<0.2	
AMMONIA NITROGEN										
SULFATE	1.2		6.1		1.6		4.2		1.7	
TOTAL SUSPENDED SOLIDS	5.5		<1		<1		<1		40	
TURBIDITY	7.1		2.8		1		0.1		50	

APPENDIX E.1
TRACE METALS AND ANIONS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-292 ECRMP 04/24/95 TOT	GW-292 ECRMP 04/24/95 DIS	GW-293 ECRMP 04/23/95 TOT	GW-293 ECRMP 04/23/95 DIS	GW-294 ECRMP 04/22/95 TOT	GW-294 ECRMP 04/22/95 DIS	GW-295 CRBAMP 05/03/95 TOT	GW-295 CRBAMP 05/03/95 DIS	GW-296 ECRMP 04/22/95 TOT	GW-296 ECRMP 04/22/95 DIS
METALS										
ALUMINUM	0.042	<0.02	0.034	<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
BERYLLIUM	0.11	0.12	0.2	0.19	0.011	0.011	.	.	0.01	0.01
BORON	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	.	.	<0.0003	<0.0003
CADMIUM	0.027	0.051	0.045	0.062	0.02	0.014	.	.	0.044	0.015
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	.	.	<0.003	<0.003
CALCIUM	49	49	50	48	46	48	.	.	44	43
CHROMIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	.	.	<0.01	<0.01
CHROMIUM							.	.		
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	0.04	<0.005	1.6	0.16	0.013	<0.005	.	.	0.033	<0.005
IRON	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	.	.	<0.05	<0.05
LEAD							.	.		
MAGNESIUM	30	30	31	30	28	29	.	.	27	26
MANGANESE	<0.001	<0.001	0.017	0.015	0.0012	<0.001	.	.	0.0014	<0.001
MERCURY	<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
POTASSIUM	1.4	1.4	2.4	2.1	1.8	1.7	.	.	0.62	0.89
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	.	.	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	.	.	<0.006	<0.006
SODIUM	4.7	4.8	5.1	4.8	4	4.2	.	.	1.8	1.7
STRONTIUM	0.016	0.017	0.017	0.016	0.022	0.023	.	.	0.016	0.015
THALLIUM							.	.		
THORIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	.	.	<0.2	<0.2
URANIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	.	.	<0.0005 d	<0.0005 d
VANADIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	.	.	<0.005	<0.005
ZINC	0.005	<0.002	0.0058	<0.002	0.0022	<0.002	.	.	<0.002	<0.002
ANIONS										
ALKALINITY-HCO3	253	.	246	.	221	.	.	.	220	.
ALKALINITY-CO3	<1	.	<1	.	<1	.	.	.	<1	.
CHLORIDE	8.5	.	10	.	10	.	.	.	3.7	.
FLUORIDE	<0.1	.	<0.1	.	<0.1	.	.	.	<0.1	.
NITRATE NITROGEN	0.67	.	0.58	.	2.7	.	.	.	0.47	.
AMMONIA NITROGEN		.		.		.	.	.		.
SULFATE	3.2	.	3.4	.	3.5	.	.	.	1.2	.
TOTAL SUSPENDED SOLIDS	<1	.	<1	.	<1	.	.	.	1	.
TURBIDITY	0.4	.	8.4	.	0.2	.	.	.	0.6	.

APPENDIX E.1
TRACE METALS AND ANIONS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-298 CRBAMP 05/02/95 TOT	GW-298 CRBAMP 05/02/95 DIS	GW-299 CRBAMP 05/01/95 TOT	GW-299 CRBAMP 05/01/95 DIS	GW-300 CRBAMP 04/27/95 TOT	GW-300 CRBAMP 04/27/95 DIS	GW-301 CRBAMP 04/27/95 TOT	GW-301 CRBAMP 04/27/95 DIS	GW-302 UNCS 04/19/95 TOT	GW-302 UNCS 04/19/95 DIS
METALS										
ALUMINUM	<0.02	0.021	<0.02	<0.02	<0.02	<0.02	0.42	<0.02	<0.02	<0.02
ANTIMONY	<0.05	<0.05	<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	<0.05	<0.05
BARIIUM	0.015	0.015	0.0084	0.0089	0.02	0.02	0.021	0.019	0.024	0.021
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.0094	0.044	0.014	0.067	0.019	0.091	0.0085	0.027	0.023	0.022
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CALCIUM	36	34	29	29	29	30	38	33	53	52
CHROMIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.3	<0.01
CHROMIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.34	<0.01
COBALT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COPPER	<0.004	0.005	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.007	<0.004
IRON	0.076	0.0051	0.017	<0.005	0.014	<0.005	0.71	<0.005	2.9	0.03
LEAD	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
MANGANESE	22	21	17	17	18	18	23	21	31	30
MANGANESE	0.0056	0.0044	0.0024	<0.001	<0.001	<0.001	0.027	<0.001	0.055	0.006
MERCURY	<0.0002	<0.0002	<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	<0.01	<0.01
NICKEL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.17	0.11
POTASSIUM	0.93	0.95	0.78	1	<0.6	<0.6	0.75	<0.6	1.3	1.3
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	1.5	1.5	0.94	1.1	0.54	0.68	0.76	0.77	10	10
STRONTIUM	0.026	0.026	0.015	0.015	0.019	0.019	0.021	0.019	0.02	0.019
THALLIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THORIUM	ICAP (MG/L)	0.0016	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
URANIUM	ICAP (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
VANADIUM	ICAP (MG/L)	0.0068	0.0067	0.0056	0.0056	0.0044	0.0066	<0.002	0.011	0.005
ZINC	ICAP (MG/L)									
ANIONS										
ALKALINITY-HCO3	170	141	<0.2	<0.2	<0.2	<0.2	169	.	245	.
ALKALINITY-CO3	<1	<1	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<1	.	<1	.
CHLORIDE	1.6	1.7	2	.	2	.	2.1	.	26	.
FLUORIDE	0.1	<0.1	<0.1	.	<0.1	.	<0.1	.	<0.1	.
NITRATE NITROGEN	0.42	0.37	0.5	.	0.5	.	0.64	.	1.2	.
AMMONIA NITROGEN	6.7	3.8	3.6	.	3.6	.	2.6	.	4	.
SULFATE	6.7	3.8	3.6	.	3.6	.	2.6	.	4	.
TOTAL SUSPENDED SOLIDS	19	<1	<1	.	<1	.	23	.	2	.
TURBIDITY	90	0.6	1	.	1	.	23	.	18	.

APPENDIX E.1
TRACE METALS AND ANIONS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-303 CRSDB 04/09/95 TOT	GW-303 CRSDB 04/09/95 DIS	GW-304 CRSDB 04/06/95 TOT	GW-304 CRSDB 04/06/95 DIS	GW-321 ADB 04/25/95 TOT	GW-321 ADB 04/25/95 DIS	GW-339 UNCS 04/19/95 TOT	GW-339 UNCS 04/19/95 DIS	GW-511 CRSP 05/03/95 TOT	GW-511 CRSP 05/03/95 DIS
METALS										
ALUMINUM	0.045	0.048	0.18	0.061	<0.02	<0.02	<0.02	<0.02	0.11	<0.02
ANTIMONY	<0.05	<0.05	<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	<0.05	<0.05
BARIUM	0.018	0.017	0.013	0.012	0.053	0.052	0.02	0.021	0.0088	0.0087
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.025	0.035	0.018	0.046	0.014	0.018	0.041	0.021	0.0056	0.0056
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CALCIUM	69	68	36	36	25	25	54	57	30	29
CHROMIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM										
COBALT	<0.005	<0.005	<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	0.0048	0.0064	<0.004	<0.004
IRON	0.87	0.44	0.14	0.0068	0.0088	0.012	0.23	0.023	0.19	<0.005
LEAD	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD										
MAGNESIUM	38	38	22	23	14	14	30	32	17	17
MANGANESE	0.014	0.013	0.011	<0.001	0.0026	0.0023	0.0063	0.0053	0.0067	0.0036
MERCURY	<0.0002	<0.0002	<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	<0.01	<0.01
NICKEL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.059	0.078	<0.01	<0.01
POTASSIUM	4	4.1	2	2	0.71	0.65	1.2	1.4	2.8	2.9
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.064
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	1.1	1.1	4.6	4.7	0.53	0.5	11	11	1.1	1.1
STRONTIUM	3	3	0.019	0.019	0.017	0.017	0.024	0.025	0.033	0.033
THALLIUM										
THORIUM										
URANIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
VANADIUM	<0.0005 d	<0.0005 d	0.00082	0.00078	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
ZINC	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC	0.008	0.011	0.011	0.0077	0.0057	0.0031	0.012	0.04	0.002	<0.002
ANIONS										
ALKALINITY-HCO3	186		191		126		265		150	
ALKALINITY-CO3	<1		<1		<1		<1		<1	
CHLORIDE	2.1		2.7		1.9		27		2.5	
FLUORIDE	1		<0.1		<0.1		<0.1		<0.1	
NITRATE NITROGEN	<0.2		0.54		0.45		1.1		0.22	
AMMONIA NITROGEN										
SULFATE	160		19		2.1		5.3		1.8	
TOTAL SUSPENDED SOLIDS	<1		6.5		<1		<1		2.5	
TURBIDITY	13		2.8		0.1		0.4		4.7	

APPENDIX E.1
TRACE METALS AND ANIONS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-512 ADB 04/26/95 TOT	GW-512 ADB 04/26/95 DIS	GW-513 ADB 04/25/95 TOT	GW-513 ADB 04/25/95 DIS	GW-514 ADB 04/27/95 TOT	GW-514 ADB 04/27/95 DIS	GW-540 CDLVI 04/04/95 TOT	GW-540 CDLVI 04/04/95 DIS	GW-541 CDLVI 04/05/95 TOT	GW-541 CDLVI 04/05/95 DIS
METALS										
ALUMINUM	ICAP (NG/L)	0.14	0.022	0.091	<0.02	<0.02	0.026	<0.02	0.062	<0.02
ANTIMONY	ICAP (NG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	ICAP (NG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BARIIUM	ICAP (NG/L)	0.022	0.0076	0.0073	0.0068	0.0064	0.011	0.0099	0.0081	0.0074
BERYLLIUM	ICAP (NG/L)	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	ICAP (NG/L)	0.018	0.011	0.0096	0.022	0.019	0.022	0.036	0.011	0.0092
CADMIUM	ICAP (NG/L)	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	AAS (NG/L)	30	36	35	37	35	42	41	44	38
CALCIUM	ICAP (NG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	ICAP (NG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
CHROMIUM	AAS (NG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COBALT	ICAP (NG/L)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
COPPER	ICAP (NG/L)	0.19	0.053	0.0056	0.7	0.02	0.019	<0.005	0.044	0.022
IRON	ICAP (NG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	ICAP (NG/L)	17	21	21	21	20	<0.004	<0.004	<0.004	<0.004
LEAD	AAS (NG/L)	18	21	21	21	20	24	23	23	20
MANGANESE	ICAP (NG/L)	0.0041	0.0013	<0.001	0.0056	0.0046	<0.001	0.0017	0.0023	0.0014
MERCURY	CVAA (NG/L)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MOLYBDENUM	ICAP (NG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	0.038
NICKEL	ICAP (NG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	ICAP (NG/L)	3.8	1.8	1.8	1.2	1.3	1	0.94	0.04	0.85
SELENIUM	ICAP (NG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	ICAP (NG/L)	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	ICAP (NG/L)	0.75	0.76	0.77	0.37	0.38	2.3	2.3	0.58	0.53
STRONTIUM	ICAP (NG/L)	0.02	0.02	0.02	0.02	0.02	0.029	0.028	0.027	0.026
THALLIUM	AAS (NG/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.01	<0.01	<0.01	<0.01
THORIUM	ICAP (NG/L)	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
URANIUM	ICP/MS (NG/L)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0024	0.0025
VANADIUM	ICAP (NG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC	ICAP (NG/L)	0.013	0.0034	0.0034	0.002	<0.002	0.008	0.0028	0.0098	0.005
ANIONS										
ALKALINITY-HCO3	(NG/L)	163	180	.	183	.	199	.	188	.
ALKALINITY-CO3	(NG/L)	<1	<1	.	<1	.	<1	.	<1	.
CHLORIDE	(NG/L)	1.9	2.1	.	2.2	.	2.4	.	1.9	.
FLUORIDE	(NG/L)	<0.1	<0.1	.	<0.1	.	<0.1	.	<0.1	.
NITRATE NITROGEN	(NG/L)	<0.2	0.33	.	0.41	.	0.39	.	<0.2	.
AMMONIA NITROGEN	(NG/L)	3	2.8	.	4.4	.	4.2	.	<0.2	.
SULFATE	(NG/L)	3	2.8	.	4.4	.	4.2	.	12	.
TOTAL SUSPENDED SOLIDS	(MG/L)	<1	<1	.	<1	.	1	.	3	.
TURBIDITY	(NTU)	4.9	1.3	.	3.5	.	0.2	.	0.5	.

APPENDIX E.1
TRACE METALS AND ANIONS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-542 CDLVI 04/06/95 TOT	GW-542 CDLVI 04/06/95 DIS	GW-543 CDLVI 04/06/95 TOT	GW-543 CDLVI 04/06/95 DIS	GW-544 CDLVI 04/06/95 TOT	GW-544 CDLVI 04/06/95 DIS	GW-546 CDLVI 04/05/95 TOT	GW-546 CDLVI 04/05/95 DIS	GW-557 LV 04/06/95 TOT	GW-557 LV 04/06/95 DIS
METALS										
ALUMINUM	0.19	<0.02	0.078	0.041	0.076	0.039	2.8	0.025	0.12	0.031
ANTHONY	<0.05	<0.05	<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	<0.05	<0.05
BARIUM	0.015	0.018	0.0094	0.0098	0.012	0.011	0.012	0.0042	0.012	0.012
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.025	0.018	0.023	0.014	0.012	0.013	0.019	0.035	0.024	0.053
BROMINE	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CALCIUM	29	40	50	51	50	48	36	33	37	37
CHROMIUM	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	<0.01	<0.01	<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	<0.005	<0.005
COPPER	<0.004	0.0067	<0.004	<0.004	<0.004	0.0056	0.009	<0.004	<0.004	<0.004
IRON	0.11	<0.005	0.093	<0.005	0.16	0.01	3.2	0.037	0.2	<0.005
LEAD	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.0044	<0.004	<0.004	<0.004
MAGNESIUM	13	22	28	29	28	27	21	19	22	22
MANGANESE	0.0065	0.0025	<0.001	<0.001	0.0034	<0.001	0.17	0.0045	0.0046	<0.001
MERCURY	<0.0002	<0.0002	<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	<0.01	<0.01
NICKEL	<0.01	<0.01	<0.01	<0.01	0.012	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	2.1	1.6	0.67	0.73	1.5	1.4	2.4	1.8	1.4	1.6
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	1.6	1	0.96	0.95	4.9	5.1	2.1	2.2	0.59	0.72
STRONTIUM	0.031	0.03	0.026	0.026	0.025	0.023	0.023	0.021	0.017	0.017
THALLIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
THORIUM	<0.2	<0.2	<0.2	<0.2	<0.018	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	0.0011	0.0011	0.00051	<0.0005 d	<0.0005 d	<0.0005 d
VANADIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0084	<0.005	<0.005	<0.005
ZINC	0.03	0.0069	0.01	0.0039	0.026	0.0062	0.03	0.0029	0.0087	0.0066
ANIONS										
ALKALINITY-HCO3	185	.	240	.	217	.	145	.	169	.
ALKALINITY-CO3	<1	.	<1	.	<1	.	<1	.	<1	.
CHLORIDE	2.4	.	3.3	.	10	.	2.4	.	2	.
FLUORIDE	<0.1	.	<0.1	.	<0.1	.	<0.1	.	<0.1	.
NITRATE NITROGEN	0.68	.	0.57	.	0.84	.	0.39	.	1.1	.
AMMONIA NITROGEN	<0.2	.	<0.2	.	<0.2	.	<0.2	.	<0.2	.
SULFATE	7	.	3.5	.	8.6	.	4.1	.	1.7	.
TOTAL SUSPENDED SOLIDS	1	.	<1	.	1.5	.	62	.	5	.
TURBIDITY	1.3	.	2	.	2	.	152	.	4.4	.

APPENDIX E.1
TRACE METALS AND ANIONS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-560 CDLVI 04/05/95 TOT	GW-560 CDLVI 04/05/95 DIS	GW-562 CDLVI 04/05/95 TOT	GW-562 CDLVI 04/05/95 DIS	GW-564 CDLVI 04/06/95 TOT	GW-564 CDLVI 04/06/95 DIS	GW-608 CRSP 05/11/95 TOT	GW-608 CRSP 05/11/95 DIS	GW-609 CRSP 05/16/95 TOT	GW-609 CRSP 05/16/95 DIS
METALS										
ALUMINUM	ICAP (NG/L)	0.023	0.062	0.39	0.027	0.053	0.033	0.21	<0.02	<0.02
ANTIMONY	ICAP (NG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	ICAP (NG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BARIUM	ICAP (NG/L)	0.25	0.24	0.011	0.012	0.014	0.013	0.013	0.012	0.012
BERYLLIUM	ICAP (NG/L)	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	ICAP (NG/L)	0.033	0.041	0.014	0.039	0.039	0.015	0.015	0.01	<0.004
CADMIUM	ICAP (NG/L)	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	AAS (NG/L)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CALCIUM	ICAP (NG/L)	39	38	35	40	36	31	31	41	41
CHROMIUM	ICAP (NG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	AAS (NG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
COBALT	ICAP (NG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COPPER	ICAP (NG/L)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
IRON	ICAP (NG/L)	<0.005	0.01	0.34	<0.005	0.14	<0.005	0.0059	0.069	0.093
LEAD	ICAP (NG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	AAS (NG/L)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
MAGNESIUM	ICAP (NG/L)	16	15	21	24	17	17	17	23	23
MANGANESE	ICAP (NG/L)	0.0019	0.0038	0.01	0.0016	0.0016	0.0016	0.0016	<0.0012	0.0012
MERCURY	CVAA (NG/L)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MOLYBDENUM	ICAP (NG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NICKEL	ICAP (NG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	ICAP (NG/L)	1.5	1.7	<0.6	<0.6	1.4	1.3	1.5	1.4	1.1
SELENIUM	ICAP (NG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	ICAP (NG/L)	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	ICAP (NG/L)	0.59	0.76	0.7	0.82	0.7	0.55	0.78	0.83	0.76
STRONTIUM	ICAP (NG/L)	0.027	0.03	0.018	0.02	0.021	0.019	0.014	0.014	0.013
THALLIUM	AAS (NG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
THORIUM	ICAP (NG/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	ICP/MS (NG/L)	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
VANADIUM	ICAP (NG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC	ICAP (NG/L)	0.019	0.023	0.0081	0.0074	0.016	0.014	<0.002	0.0049	<0.002
ANIONS										
ALKALINITY-HCO3	(NG/L)	147	184	<1	.	140	.	149	203	.
ALKALINITY-CO3	(NG/L)	<1	<1	2.3	.	<1	.	<1	<1	.
CHLORIDE	(NG/L)	1.8	2.3	<0.1	.	1.8	.	2.1	1.5	.
FLUORIDE	(NG/L)	<0.1	<0.1	<0.1	.	<0.1	.	<0.1	<0.1	.
NITRATE NITROGEN	(NG/L)	0.39	0.58	0.58	.	0.68	.	0.48	1.1	.
AMMONIA NITROGEN	(NG/L)	<0.2	<0.2	<0.2	.	<0.2	.	2.3	2.2	.
SULFATE	(NG/L)	2.1	2	2	.	1.6	.	2.3	2.2	.
TOTAL SUSPENDED SOLIDS	(MG/L)	<1	4	9.5	.	<1	.	3	<1	.
TURBIDITY	(NTU)	0.3	9.5	9.5	.	1	.	5.5	0.6	.

APPENDIX E.1
TRACE METALS AND ANIONS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-610 CRSP 05/07/95 TOT	GW-610 CRSP 05/07/95 DIS	GW-611 CRSP 05/15/95 TOT	GW-611 CRSP 05/15/95 DIS	GW-731 CRSDB 04/07/95 TOT	GW-731 CRSDB 04/07/95 DIS	GW-732 CRSDB 04/07/95 TOT	GW-732 CRSDB 04/07/95 DIS	GW-742 CRSP 05/07/95 TOT	GW-742 CRSP 05/07/95 DIS
METALS										
ALUMINUM	0.027	<0.02	0.043	<0.02	0.08	0.024	14	0.55	<0.02	<0.02
ANTIMONY	<0.05	<0.05	<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	<0.05	<0.05
BARIUM	0.11	0.11	0.022	0.021	0.006	0.0058	0.14	0.085	0.12	0.12
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.0014	<0.0003	<0.0003	<0.0003
BORON	0.0068	0.01	0.006	0.0052	0.013	0.023	0.034	0.028	0.0056	<0.004
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CALCIUM	47	48	57	57	17	17	33	25	39	38
CHROMIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM										
COBALT	<0.005	<0.005	<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	0.009	<0.004	0.013	0.0041	<0.004	<0.004
IRON	0.13	0.016	0.26	0.016	0.18	<0.005	7.5	0.33	0.27	0.04
LEAD	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MAGNESIUM	27	28	32	32	13	13	19	13	21	21
MANGANESE	<0.001	<0.001	0.0043	0.0022	0.0024	<0.001	0.1	0.0056	0.021	0.02
MERCURY	<0.0002	<0.0002	<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	<0.01	<0.01
NICKEL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	<0.6	0.94	2.3	2.6	12	11	8.2	8.8	0.8	1.2
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.071	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	1	1.1	1.9	2.1	3.9	3.7	10	12	0.7	0.74
STRONTIUM	0.017	0.017	0.019	0.019	0.022	0.021	0.34	0.25	0.016	0.016
THALLIUM										
THORIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	0.016	0.0014	0.00054	<0.0005 d
VANADIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC	<0.002	<0.002	0.0048	0.0033	0.0085	0.01	0.074	0.012	<0.002	<0.002
ANIONS										
ALKALINITY-HCO3	227		282		101		157		175	
ALKALINITY-CO3	<1		<1		18		<1		<1	
CHLORIDE	2.9		1.4		1.8		1.6		1.5	
FLUORIDE	<0.1		<0.1		0.15		<0.1		<0.1	
NITRATE NITROGEN	0.81		3.3		0.65		0.68		<0.2	
AMMONIA NITROGEN										
SULFATE	<1		1.5		6		2.9		13	
TOTAL SUSPENDED SOLIDS	1		<1		<1		1152		<1	
TURBIDITY	1.6		1.2		2.7		300		2.4	

APPENDIX E.1
TRACE METALS AND ANIONS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-743 CRSP 05/07/95 TOT	GW-743 CRSP 05/07/95 DIS	GW-796 LV 04/12/95 TOT	GW-796 LV 04/12/95 DIS	GW-797 LV 04/11/95 TOT	GW-797 LV 04/11/95 DIS	GW-798 CDLVII 04/11/95 TOT	GW-798 CDLVII 04/11/95 DIS	GW-799 LV 04/06/95 TOT	GW-799 LV 04/06/95 DIS
METALS										
ALUMINUM	<0.02	<0.02	0.095	0.045	0.089	0.096	0.041	0.039	0.22	0.028
ANTIMONY	<0.05	<0.05	<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	<0.05	<0.05
BARIUM	0.012	0.012	0.013	0.012	0.0084	0.0086	0.009	0.01	0.0066	0.0051
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.021	0.02	0.027	0.018	0.056	0.12	0.036	0.038	0.075	0.044
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	<0.003	<0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CALCIUM	31	31	22	20	34	34	26	28	27	27
CHROMIUM	<0.01	<0.01	<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	<0.01	<0.01
COBALT	<0.005	<0.005	<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	0.0047	<0.004	<0.004	<0.004	<0.004
IRON	0.13	<0.005	0.051	<0.005	0.076	0.061	0.058	<0.005	0.16	0.19
LEAD	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	<0.05	<0.05	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
MAGNESIUM	18	18	15	14	20	20	15	17	16	16
MANGANESE	0.0011	<0.001	0.0019	<0.001	0.0035	0.0092	0.0027	<0.001	0.0041	0.0016
MERCURY	<0.0002	<0.0002	<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	<0.01	<0.01
NICKEL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	1.2	1.4	2.7	2.7	1.2	1.2	1.3	1.5	1	0.91
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	1.1	1.1	1.3	1.2	0.6	0.8	0.57	0.65	0.79	0.72
STRONTIUM	0.019	0.019	0.052	0.046	0.02	0.02	0.015	0.016	0.015	0.014
THALLIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
THORIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
VANADIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC	<0.002	<0.002	0.0061	0.003	0.0073	0.01	0.0054	0.0038	0.016	0.0047
ANIONS										
ALKALINITY-HCO3	145	114	<1	.	159	.	128	.	129	.
ALKALINITY-CO3	<1	<1	<1	.	<1	.	<1	.	<1	.
CHLORIDE	2.2	2	1.8	.	1.8	.	3.1	.	1.8	.
FLUORIDE	<0.1	<0.1	<0.1	.	<0.1	.	<0.1	.	<0.1	.
NITRATE NITROGEN	0.81	0.52	0.56	.	0.56	.	1	.	1.1	.
AMMONIA NITROGEN	<0.2	<0.2	<0.2	.	<0.2	.	<0.2	.	<0.2	.
SULFATE	3.2	2.1	1.7	.	1.7	.	2.7	.	1.6	.
TOTAL SUSPENDED SOLIDS	1	1	1.5	.	1.5	.	<1	.	<1	.
TURBIDITY	1	1	2.5	.	2.5	.	0.8	.	3.2	.

APPENDIX E.1
TRACE METALS AND ANIONS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-801 LV 04/13/95 TOT	GW-801 LV 04/13/95 DIS	GW-827 CDLVI 04/05/95 TOT	GW-827 CDLVI 04/05/95 DIS
METALS				
ALUMINUM	0.075	0.036	0.028	0.026
ANTIMONY	<0.05	<0.05	<0.05	<0.05
ARSENIC	<0.05	<0.05	<0.05	<0.05
BARIUM	0.0022	0.0022	0.0084	0.0081
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.017	0.028	0.015	0.012
CADMIUM	<0.003	<0.003	<0.003	<0.003
CADMIUM	<0.002	<0.002	<0.002	<0.002
CALCIUM	29	29	30	30
CHROMIUM	<0.01	<0.01	<0.01	<0.01
CHROMIUM	<0.01	<0.01	<0.01	<0.01
COBALT	<0.005	<0.005	<0.005	<0.005
COPPER	<0.004	<0.004	0.0045	<0.004
IRON	0.077	0.013	0.05	<0.005
LEAD	<0.05	<0.05	<0.05	<0.05
LEAD	<0.004	<0.004	<0.004	<0.004
MAGNESIUM	17	17	17	17
MANGANESE	<0.001	<0.001	0.01	0.0093
MERCURY	<0.0002	<0.0002	<0.0002	<0.0002
MOLYBDENUM	<0.01	<0.01	<0.01	<0.01
NICKEL	<0.01	<0.01	<0.01	<0.01
POTASSIUM	1.6	1.2	1.4	1.3
SELENIUM	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006
SODIUM	0.77	0.74	0.68	0.7
STRONTIUM	0.016	0.016	0.017	0.018
THALLIUM	<0.01	<0.01	<0.01	<0.01
THORIUM	<0.2	<0.2	<0.2	<0.2
URANIUM	<0.0005 d	<0.0005 d	0.00055	<0.0005 d
VANADIUM	<0.005	<0.005	<0.005	<0.005
ZINC	0.0068	0.0036	0.0069	0.0039
ANIONS				
ALKALINITY-HCO3	143	.	147	.
ALKALINITY-CO3	<1	.	<1	.
CHLORIDE	2.9	.	1.6	.
FLUORIDE	<0.1	.	<0.1	.
NITRATE NITROGEN	0.32	.	0.33	.
AMMONIA NITROGEN	<0.2	.	<0.2	.
SULFATE	3	.	2.1	.
TOTAL SUSPENDED SOLIDS	<1	.	<1	.
TURBIDITY	2.5	.	0.8	.

APPENDIX E.1
TRACE METALS AND ANIONS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-141 LIV 07/10/95 DIS	GW-141 LIV 07/10/95 TOT	GW-142 KHQ 07/14/95 DIS	GW-142 KHQ 07/14/95 TOT	GW-143 KHQ 07/16/95 DIS	GW-143 KHQ 07/16/95 TOT	GW-144 KHQ 07/16/95 DIS	GW-144 KHQ 07/16/95 TOT	GW-145 KHQ 07/17/95 DIS	GW-145 KHQ 07/17/95 TOT
METALS										
ALUMINUM	0.028	1.7	0.028	<0.02	0.023	<0.02	<0.02	0.033	<0.02	0.064
ANTIMONY	<0.05	<0.05	<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	<0.05	<0.05
BARIUM	0.018	0.02	0.43	0.44	0.03	0.028	0.047	0.053	0.091	0.095
BERYLLIUM	<0.0003	0.00032	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.024	0.012	0.049	0.045	1	0.91	0.034	0.032	0.25	0.26
CADMIUM	<0.003	0.0032	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CALCIUM	48	47	45	44	32	29	39	46	45	46
CHROMIUM	<0.01	<0.01	<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	<0.01	<0.01
COBALT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COPPER	<0.004	0.0075	0.012	<0.004	0.0054	0.0049	<0.004	0.0067	0.0051	0.0072
IRON	0.13	1.4	<0.005	2.3	0.17	0.65	<0.005	0.21	0.0057	0.13
LEAD	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
LITHIUM	<0.004	<0.004	0.024	0.024	0.32	0.3	0.034	0.039	0.1	0.11
MAGNESIUM	31	30	31	30	25	23	15	17	36	37
MANGANESE	0.0013	0.02	0.034	0.033	0.019	0.017	<0.001	0.001	0.0019	0.0075
MERCURY	<0.0002	<0.0002	<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	<0.01	<0.01
NICKEL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	<0.6	0.85	4.4	3.9	19	18	1.5	2	13	14
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.0061	<0.006	<0.006
SODIUM	0.89	0.94	1.1	1	29	26	1.3	1.5	5.5	5.9
STRONTIUM	0.016	0.016	0.5	0.49	2.6	2.4	0.091	0.1	7.4	7.6
THALLIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
THORIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	<0.0005 d	<0.0005 d	0.0096	0.0095	0.0017	0.0017	0.0019	<0.0005 d	0.012	<0.0005 d
VANADIUM	<0.005	0.0059	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC	0.0042	0.025	<0.002	<0.002	0.0039	<0.002	<0.002	<0.002	<0.002	<0.002
ANIONS										
ALKALINITY-HCO3	(MG/L)	232	(MG/L)	236	(MG/L)	204	(MG/L)	155	(MG/L)	227
ALKALINITY-CO3	(MG/L)	<1	(MG/L)	<1	(MG/L)	<1	(MG/L)	<1	(MG/L)	<1
CHLORIDE	(MG/L)	2.4	(MG/L)	2.3	(MG/L)	5.9	(MG/L)	2.5	(MG/L)	9.7
FLUORIDE	(MG/L)	<0.1	(MG/L)	0.58	(MG/L)	2.7	(MG/L)	0.11	(MG/L)	2.2
NITRATE NITROGEN	(MG/L)	0.67	(MG/L)	0.52	(MG/L)	<0.2	(MG/L)	2.2	(MG/L)	0.95
AMMONIA NITROGEN	(MG/L)	.	(MG/L)	.	(MG/L)	.	(MG/L)	.	(MG/L)	.
SULFATE	(MG/L)	2	(MG/L)	5.7	(MG/L)	35	(MG/L)	5.2	(MG/L)	37
TOTAL SUSPENDED SOLIDS	(MG/L)	4.5	(MG/L)	9	(MG/L)	<1	(MG/L)	<1	(MG/L)	2.5
TURBIDITY	(NTU)	30	(NTU)	40	(NTU)	3.6	(NTU)	0.25	(NTU)	6

APPENDIX E.1
TRACE METALS AND ANIONS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-146 KHQ 07/17/95 DIS	GW-146 KHQ 07/17/95 TOT	GW-147 KHQ 07/14/95 DIS	GW-147 KHQ 07/14/95 TOT	GW-156 CRSDB 07/13/95 DIS	GW-156 CRSDB 07/13/95 TOT	GW-158 CRSDB 07/18/95 DIS	GW-158 CRSDB 07/18/95 TOT	GW-159 CRSDB 07/12/95 DIS	GW-159 CRSDB 07/12/95 TOT
METALS										
ALUMINUM	<0.02	<0.02	<0.02	0.14	0.026	0.061	<0.02	<0.02	<0.02	0.025
ANTIMONY	<0.05	<0.05	<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	<0.05	<0.05
BARIUM	0.067	0.069	0.089	0.095	0.039	0.037	0.049	0.05	0.013	0.012
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.5	0.46	0.035	0.041	0.04	0.043	0.05	0.014	0.027	0.012
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CALCIUM	42	40	34	34	72	72	39	39	39	40
CHROMIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM										
COBALT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COPPER	0.0059	<0.004	0.0059	<0.004	<0.004	<0.004	<0.004	<0.004	0.0053	<0.004
IRON	0.042	0.99	0.13	0.28	0.006	0.45	0.45	0.61	<0.005	0.083
LEAD	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD										
LITHIUM	0.24	0.24	0.018	0.018	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
MAGNESIUM	35	35	19	19	43	43	22	22	23	24
MANGANESE	0.018	0.019	0.001	0.044	0.0022	0.0039	0.008	0.0078	0.0014	0.0019
MERCURY	<0.0002	<0.0002	<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	<0.01	<0.01
NICKEL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	18	17	6.4	6.7	4.6	4.7	0.86	0.92	2.6	2.3
SELENIUM	<0.05	0.056	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	0.0063	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	14	13	3.1	3.1	3.2	3.3	0.65	0.61	0.83	0.69
STRONTIUM	7.4	7.4	0.55	0.53	0.035	0.034	0.023	0.024	0.028	0.023
THALLIUM										
THORIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	0.0014	0.0013	0.0014	0.0015	0.0019	0.0019	<0.0005 d	<0.0005 d	0.0011	0.0011
VANADIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC	0.0047	<0.002	<0.002	<0.002	0.0061	0.031	0.0045	0.0043	0.01	0.013
ANIONS										
ALKALINITY-HCO3		196		158		342		172		188
ALKALINITY-CO3		<1		<1		<1		<1		<1
CHLORIDE		12		2.4		2.8		1.7		1.9
FLUORIDE		2.7		0.21		<0.1		<0.1		<0.1
NITRATE NITROGEN		0.97		1.6		0.62		<0.2		0.49
AMMONIA NITROGEN										
SULFATE		67		4.1		6.8		9.5		7.8
TOTAL SUSPENDED SOLIDS		5		3		1.5		<1		1
TURBIDITY		7.6		3.9		1.5		5.7		0.45

APPENDIX E.1
TRACE METALS AND ANIONS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-175 CRSP 08/01/95 DIS	GW-175 CRSP 08/01/95 TOT	GW-177 CRSP 08/01/95 DIS	GW-177 CRSP 08/01/95 TOT	GW-181 CRSP 07/28/95 DIS	GW-181 CRSP 07/28/95 TOT	GW-217 LIV 07/10/95 DIS	GW-217 LIV 07/10/95 TOT	GW-231 KHQ 07/15/95 DIS	GW-231 KHQ 07/15/95 TOT
METALS										
ALUMINUM	0.028	0.05	<0.02	0.04	<0.02	0.028	0.058	0.12	<0.02	<0.02
ANTIMONY	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	<0.05	<0.05	<0.05	0.069	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BARIIUM	0.044	0.045	0.016	0.016	0.016	0.0078	0.027	0.028	0.097	0.087
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.013	0.01	0.0072	0.0055	<0.004	<0.004	0.19	0.19	0.036	0.026
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.0036	0.0033	<0.003	<0.003
CADMIUM	48	50	44	43	32	33	30	31	46	41
CALCIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM										
CHROMIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COBALT	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.0075	0.011	<0.004	0.024
COPPER	<0.005	0.46	<0.005	0.048	<0.005	0.75	0.009	0.17	<0.005	<0.005
IRON	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD										
LEAD										
LITHIUM										
LITHIUM	29	30	28	27	21	21	19	20	23	21
MANGANESE	<0.001	0.005	<0.001	0.0017	0.0018	0.0048	0.0045	0.0085	<0.001	<0.001
MANGANESE	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MERCURY	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOLYBDENUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NICKEL	0.62	0.65	2.1	2.3	1.3	1.6	3.7	3.9	1.6	0.73
POTASSIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SELENIUM	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SILVER	0.015	0.015	0.016	0.016	0.017	0.017	0.014	0.015	0.043	0.039
SODIUM										
STRONTIUM										
THALLIUM										
THORIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	0.00059	0.00056	0.002	0.0019	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
VANADIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC	<0.002	0.0067	0.045	0.047	<0.002	0.0024	0.012	0.021	<0.002	0.0047
ANIONS										
ALKALINITY-HCO3		230		216		168		156		185
ALKALINITY-CO3		<1		<1		<1		<1		<1
CHLORIDE		2.6		2.9		2.1		2.4		2.3
FLUORIDE		<0.1		<0.1		<0.1		<0.1		<0.1
NITRATE NITROGEN		0.63		0.49		<0.2		0.59		1.4
AMMONIA NITROGEN										
SULFATE		1.2		8.3		1.6		6.9		3.5
TOTAL SUSPENDED SOLIDS		<1		<1		<1		27		<1
TURBIDITY		3.4		4.5		1.8		5.1		0.25

APPENDIX E.1
TRACE METALS AND ANIONS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-241 CRSDB 07/16/95 DIS	GW-241 CRSDB 07/16/95 TOT	GW-303 CRSDB 07/16/95 DIS	GW-303 CRSDB 07/16/95 TOT	GW-304 CRSDB 07/12/95 DIS	GW-304 CRSDB 07/12/95 TOT	GW-305 LIV 07/12/95 DIS	GW-305 LIV 07/12/95 TOT	GW-511 CRSP 07/29/95 DIS	GW-511 CRSP 07/29/95 TOT
METALS										
ALUMINUM	<0.02	0.19	0.042	0.038	0.031	0.084	<0.02	0.071	<0.02	0.078
ANTIMONY	<0.05	<0.05	<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	<0.05	<0.05
BARIUM	0.015	0.016	0.018	0.019	0.0095	0.011	0.011	0.012	0.0082	0.0089
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.024	0.045	0.03	0.032	0.049	0.062	0.068	0.0094	0.0083	0.0046
CADMIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.0031	<0.0003	<0.0003	<0.0003
CALCIUM	32	32	80	79	39	40	<0.002	<0.002	27	28
CHROMIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM										
COBALT	<0.005	<0.005	<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	0.0047	<0.004	<0.004	<0.004
IRON	<0.005	0.3	0.46	0.61	<0.005	0.49	0.016	0.54	0.067	0.083
LEAD	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.072	<0.05
LEAD										
LITHIUM	<0.004	<0.004	0.018	0.019	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
MAGNESIUM	18	18	42	42	25	25	18	19	18	18
MANGANESE	<0.001	0.0097	0.015	0.015	0.0014	0.0066	0.025	0.057	0.0043	0.0064
MERCURY	<0.0002	<0.0002	<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	<0.01	<0.01
NICKEL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.035	0.06	<0.01	<0.01
POTASSIUM	2.2	2.3	4.3	4.1	2.4	2	0.97	1	3.1	3
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	0.62	0.75	1.2	1.3	5	4.7	2	1.7	1	0.98
STRONTIUM	0.02	0.02	3.5	3.4	0.022	0.022	0.031	0.037	0.034	0.034
THALLIUM							<0.01	<0.01		
THORIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	0.0012	0.0011	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
VANADIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0056
ZINC	0.0024	0.0043	0.0049	0.005	0.0052	0.013	0.0031	0.0064	0.0033	0.0032
ANIONS										
ALKALINITY-HCO3		152		181		187		137		143
ALKALINITY-CO3		<1		<1		<1		<1		<1
CHLORIDE		1.5		2		2.8		2.7		2.7
FLUORIDE		<0.1		0.94		<0.1		<0.1		<0.1
NITRATE NITROGEN		0.88		<0.2		0.46		0.44		0.28
NITROGEN										
AMMONIA NITROGEN		1.1		160		20		1.4		1.8
SULFATE										
TOTAL SUSPENDED SOLIDS		1		<1		10		2		<1
TURBIDITY		5		9.8		4.7		3.9		0.7

APPENDIX E.1
TRACE METALS AND ANIONS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-521 LIV 07/11/95 DIS	GW-521 LIV 07/11/95 TOT	GW-522 LIV 07/12/95 DIS	GW-522 LIV 07/12/95 TOT	GW-539 LIV 07/10/95 DIS	GW-539 LIV 07/10/95 TOT	GW-608 CRSP 07/31/95 DIS	GW-608 CRSP 07/31/95 TOT	GW-609 CRSP 08/01/95 DIS	GW-609 CRSP 08/01/95 TOT
METALS										
ALUMINUM	ICAP (MG/L)	0.089	<0.02	0.44	0.023	0.053	<0.02	0.043	<0.02	<0.02
ANTIMONY	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.064	<0.05	<0.05
ARSENIC	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BARIUM	ICAP (MG/L)	0.0072	0.0058	0.0066	0.0086	0.0086	0.012	0.012	0.013	0.013
BERYLLIUM	ICAP (MG/L)	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	ICAP (MG/L)	0.019	0.021	0.046	0.017	0.0071	0.0076	0.011	0.011	0.011
CADMIUM	ICAP (MG/L)	<0.003	<0.003	<0.003	0.0033	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	AAS (MG/L)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CALCIUM	ICAP (MG/L)	30	26	29	36	36	30	29	43	43
CHROMIUM	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	0.19	<0.01	<0.01	<0.01	<0.01
CHROMIUM	AAS (MG/L)	<0.01	<0.01	<0.01	<0.01	0.19	<0.01	<0.01	<0.01	<0.01
COPPER	ICAP (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COPPER	ICAP (MG/L)	0.0042	0.004	0.004	0.0052	0.0083	<0.004	<0.004	<0.004	<0.004
IRON	ICAP (MG/L)	0.14	0.016	0.51	0.009	1	<0.005	0.21	<0.005	0.044
IRON	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	AAS (MG/L)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
LEAD	ICAP (MG/L)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
LITHIUM	ICAP (MG/L)	20	16	19	22	22	18	18	26	26
MAGNESIUM	ICAP (MG/L)	<0.001	<0.001	0.011	0.0049	0.013	0.0023	0.0048	<0.001	<0.001
MANGANESE	ICAP (MG/L)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MERCURY	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOLYBDENUM	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NICKEL	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	ICAP (MG/L)	<0.6	<0.6	1.1	1.5	<0.6	2.3	1.4	0.95	1.1
SELENIUM	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	0.069	<0.05	<0.05	<0.05
SILVER	ICAP (MG/L)	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	ICAP (MG/L)	0.84	0.68	0.73	3.8	3.9	0.83	0.63	0.77	0.74
STRONTIUM	ICAP (MG/L)	0.01	0.0096	0.011	0.02	0.02	0.014	0.013	0.015	0.016
THALLIUM	AAS (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
THORIUM	ICAP (MG/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	ICP/MS (MG/L)	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	0.00055	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
VANADIUM	ICAP (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC	ICAP (MG/L)	0.0058	<0.002	0.014	0.003	0.0029	0.004	0.0039	<0.002	0.0061
ANIONS										
ALKALINITY-HCO3	(MG/L)	151		126	150	150		145		197
ALKALINITY-CO3	(MG/L)	<1		<1	<1	<1		<1		<1
CHLORIDE	(MG/L)	1.9		2	20	20		2.5		2.2
FLUORIDE	(MG/L)	<0.1		<0.1	<0.1	<0.1		<0.1		<0.1
NITRATE NITROGEN	(MG/L)	0.56		0.58	0.69	0.69		0.67		1.3
AMMONIA NITROGEN	(MG/L)				<0.2	<0.2		2.7		2.4
SULFATE	(MG/L)	<1		<1	11	11				
TOTAL SUSPENDED SOLIDS	(MG/L)	<1		17	6	6		<1		<1
TURBIDITY	(NTU)	2.9		9.2	3.6	3.6		2.2		0.1

APPENDIX E.1
TRACE METALS AND ANIONS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-610 CRSP 07/31/95 DIS	GW-610 CRSP 07/31/95 TOT	GW-611 CRSP 08/01/95 DIS	GW-611 CRSP 08/01/95 TOT	GW-709 LII 07/10/95 DIS	GW-709 LII 07/10/95 TOT	GW-731 CRSDB 07/13/95 DIS	GW-731 CRSDB 07/13/95 TOT
METALS								
ALUMINUM	ICAP (MG/L)	0.025	0.023	0.051	<0.02	<0.02	<0.02	<0.02
ANTIMONY	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	ICAP (MG/L)	<0.05	<0.05	<0.05	0.055	0.055	<0.05	<0.05
BARIUM	ICAP (MG/L)	0.11	0.016	0.016	0.26	0.26	0.0039	0.0026
BERYLLIUM	ICAP (MG/L)	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	ICAP (MG/L)	0.011	<0.004	0.0093	0.014	0.014	0.058	0.071
CADMIUM	ICAP (MG/L)	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CALCIUM	AAS (MG/L)	43	55	55	<0.002	<0.002	15	16
CHROMIUM	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	AAS (MG/L)	1	1	1	<0.01	<0.01	1	1
COBALT	ICAP (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COPPER	ICAP (MG/L)	<0.004	<0.004	<0.004	0.019	<0.004	<0.004	<0.004
IRON	ICAP (MG/L)	<0.005	<0.005	0.16	0.012	0.085	<0.005	0.058
LEAD	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	AAS (MG/L)	1	1	1	<0.004	<0.004	1	1
LITHIUM	ICAP (MG/L)	<0.004	<0.004	<0.004	<0.004	<0.004	0.024	0.022
MAGNESIUM	ICAP (MG/L)	27	34	34	21	21	19	19
MANGANESE	ICAP (MG/L)	<0.001	<0.001	0.0027	0.002	0.0024	<0.001	<0.001
MERCURY	CVAA (MG/L)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MOLYBDENUM	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NICKEL	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	ICAP (MG/L)	<0.6	<0.6	1	<0.6	0.77	23	22
SELENIUM	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	ICAP (MG/L)	<0.006	<0.006	0.007	<0.006	<0.006	<0.006	<0.006
SODIUM	ICAP (MG/L)	0.86	1.9	1.9	0.66	0.65	5.1	4.9
STRONTIUM	ICAP (MG/L)	0.017	0.018	0.018	0.029	0.029	0.011	0.012
THALLIUM	AAS (MG/L)	1	1	1	<0.01	<0.01	1	1
THORIUM	ICAP (MG/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	ICP/MS (MG/L)	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
VANADIUM	ICAP (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC	ICAP (MG/L)	<0.002	0.003	0.015	0.0061	0.0027	0.0065	0.0067
ANIONS								
ALKALINITY-HCO3	(MG/L)	221	221	266	171	171	102	102
ALKALINITY-CO3	(MG/L)	<1	<1	<1	<1	<1	38	38
CHLORIDE	(MG/L)	2.8	2.8	2.2	2.2	2.2	1.9	1.9
FLUORIDE	(MG/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
NITRATE NITROGEN	(MG/L)	0.85	0.85	3.2	0.43	0.43	0.57	0.57
AMMONIA NITROGEN	(MG/L)	1	1	2.6	1.6	1.6	4.9	4.9
SULFATE	(MG/L)	<1	<1	2.6	1.6	1.6	4.9	4.9
TOTAL SUSPENDED SOLIDS	(MG/L)	1	1	1.5	1	1	2	2
TURBIDITY	(NTU)	0.5	0.5	15	0.4	0.4	0.35	0.35

APPENDIX E.1
TRACE METALS AND ANIONS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-732 CRSD8 07/13/95 DLS	GW-732 CRSD8 07/13/95 TOT	GW-732 CRSD8 08/14/95 DLS	GW-732 CRSD8 08/14/95 TOT	GW-742 CRSP 07/30/95 DLS	GW-742 CRSP 07/30/95 TOT	GW-743 CRSP 07/31/95 DLS	GW-743 CRSP 07/31/95 TOT	GW-757 LII 07/11/95 DLS	GW-757 LII 07/11/95 TOT
METALS										
ALUMINUM	0.04	1.8	<0.02	<0.02	0.022	<0.02	<0.02	0.033	<0.02	0.069
ANTIMONY	<0.05	<0.05	<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	0.083	<0.05	<0.05	<0.05	<0.05	<0.05
BARIIUM	0.036	0.072	0.0087	0.0087	0.095	0.1	0.012	0.012	0.21	0.21
BERYLLIUM	<0.0003	0.00037	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.075	0.027	0.01	0.012	<0.004	0.0044	0.0089	0.015	0.015	0.0094
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CALCIUM	21	39	29	30	35	36	30	30	30	31
CHROMIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.061	0.066
CHROMIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.061	0.063
COBALT	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.005	<0.005
COPPER	0.007	2.3	<0.005	0.13	0.091	1.5	<0.005	0.19	0.062	0.076
IRON	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.017	0.2
LEAD	0.019	0.02	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
LITHIUM	14	17	18	19	21	21	19	19	0.0047	<0.004
MAGNESIUM	0.0058	0.0086	<0.001	0.0018	0.075	0.082	<0.001	0.002	0.0013	0.0028
MANGANESE	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MERCURY	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOLYBDENUM	<0.01	<0.01	<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	<0.01	<0.01
POTASSIUM	11	11	1.8	0.9	1.1	1.1	0.94	0.72	2.6	2.2
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	7.9	8.2	0.93	0.79	0.65	0.64	0.95	0.94	2.6	2.6
STRONTIUM	0.14	0.24	0.014	0.016	0.019	0.017	0.02	0.02	0.74	0.76
THALLIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.01	<0.01
THORIUM	<0.0005 d	0.002	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.2	<0.2
URANIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0039	0.004
VANADIUM	0.0065	0.022	0.0086	0.16	<0.002	0.0039	<0.002	<0.002	<0.005	<0.005
ZINC									0.0032	<0.002
ANIONS										
ALKALINITY-HCO3	29	29	156	169	169	169	149	149	141	141
ALKALINITY-CO3	76	76	<1	<1	1	1	1	1	<1	<1
CHLORIDE	1.8	1.8	1.5	1.7	1.7	1.7	2.2	2.2	2.4	2.4
FLUORIDE	<0.1	<0.1	<0.1	<0.1	1	<0.2	0.8	0.8	1.8	1.8
NITRATE NITROGEN	0.69	0.69	1	<0.2	13	13	3.3	3.3	0.32	0.32
AMMONIA NITROGEN	4.8	4.8	1.8	1.8	13	13	3.3	3.3	11	11
SULFATE										
TOTAL SUSPENDED SOLIDS	1065	1065	<1	<1	13	13	<1	<1	<1	<1
TURBIDITY	280	280	2.8	2.8	13	13	1	1	1.7	1.7

APPENDIX E-1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	1090 UNCS 10/09/95 DIS	1090 UNCS 10/09/95 TOT	CBS-1 LV 10/11/95 DIS	CBS-1 LV 10/11/95 TOT	GW-142 KHQ 11/05/95 DIS	GW-142 KHQ 11/05/95 TOT	GW-143 KHQ 11/09/95 DIS	GW-143 KHQ 11/09/95 TOT	GW-144 KHQ 11/14/95 DIS	GW-144 KHQ 11/14/95 TOT
METALS										
ALUMINUM	0.028	<0.02	<0.02	0.095	0.032	0.034	0.053	0.038	0.05	0.032
ANTIMONY	<0.05	<0.05	0.064	<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	<0.05	<0.05
BARIUM	0.027	0.027	0.12	0.12	0.4	0.39	0.023	0.023	0.048	0.048
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.15	0.033	0.035	0.026	0.045	0.039	0.94	0.86	0.022	0.024
CADMIUM	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CALCIUM	53	52	36	36	40	39	28	28	41	42
CHROMIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM										
COBALT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COPPER	<0.004	<0.004	0.005	0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
IRON	<0.005	0.031	0.011	0.057	1	2.7	0.033	3	<0.005	0.025
LEAD	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD										
LITHIUM	<0.004	<0.004	<0.004	<0.004	0.025	0.025	0.29	0.28	0.034	0.033
MAGNESIUM	32	32	12	12	30	30	23	23	16	16
MANGANESE	<0.001	0.0012	0.0026	0.0045	0.054	0.05	0.024	0.025	<0.001	<0.001
MERCURY	<0.0002	<0.0002	<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	<0.01	<0.01
NICKEL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	1.1	1.4	1.7	1.5	3.9	3.3	17	17	1.4	1.2
SELENIUM	0.096	<0.05	0.064	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.0062	0.028	<0.006
SODIUM	11	10	2.5	2.2	1	1	26	25	1.2	1.1
STRONTIUM	0.024	0.023	0.098	0.098	0.49	0.49	2.4	2.3	0.087	0.088
THALLIUM			<0.01	<0.01						
THORIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	0.0044	0.0018	0.002	0.0022	0.0022	0.0023
VANADIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC	0.0082	<0.002	0.018	0.014	0.011	0.024	0.0066	0.015	0.0066	<0.002
ANIONS										
ALKALINITY-HCO3		254		126		234		210		165
ALKALINITY-CO3		<1		<1		<1		<1		<1
CHLORIDE		20		5.35		1.91		5.22		2.47
FLUORIDE		<0.1		0.12		0.57		3		<0.1
NITRATE NITROGEN		0.87		0.64		<0.2		<0.2		2.46
AMMONIA NITROGEN				<0.2						
SULFATE		4		12.8		5.21		30.4		5.02
TOTAL SUSPENDED SOLIDS		<1		4		5		<1		<1
TURBIDITY		0.35		10		35		7.8		0.3

APPENDIX E.1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-145 KHQ 11/15/95 DIS	GW-145 KHQ 11/15/95 TOT	GW-146 KHQ 11/08/95 DIS	GW-146 KHQ 11/08/95 TOT	GW-147 KHQ 11/06/95 DIS	GW-147 KHQ 11/06/95 TOT
METALS						
ALUMINUM	ICAP (MG/L)	0.035	0.081	0.061	0.027	0.35
ANTIMONY	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05
BARIUM	ICAP (MG/L)	0.079	0.09	0.064	0.071	0.087
BERYLLIUM	ICAP (MG/L)	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	ICAP (MG/L)	0.29	0.45	0.45	0.49	0.04
CADMIUM	ICAP (MG/L)	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	AAS (MG/L)	.	43	36	.	33
CALCIUM	ICAP (MG/L)	42	<0.01	<0.01	33	33
CHROMIUM	ICAP (MG/L)	<0.01	.	.	<0.01	<0.01
CHROMIUM	AAS (MG/L)	.	.	.	.	.
COBALT	ICAP (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005
COPPER	ICAP (MG/L)	<0.004	<0.004	0.0044	<0.004	<0.004
IRON	ICAP (MG/L)	<0.005	0.055	0.96	0.1	0.64
IRON	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	AAS (MG/L)	.	.	.	.	.
LITHIUM	ICAP (MG/L)	0.093	0.1	0.21	0.23	0.013
MAGNESIUM	ICAP (MG/L)	35	36	32	35	19
MANGANESE	ICAP (MG/L)	0.0025	0.0065	0.024	0.026	0.045
MERCURY	CVA (MG/L)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MOLYBDENUM	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01
NICKEL	ICAP (MG/L)	11	12	15	16	3.3
POTASSIUM	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	0.057
SELENIUM	ICAP (MG/L)	<0.006	0.4	<0.006	<0.006	<0.006
SILVER	ICAP (MG/L)	5.8	6.6	12	13	3.6
SODIUM	ICAP (MG/L)	7	7.6	6.5	7.2	0.45
STRONTIUM	AAS (MG/L)	.	.	.	.	.
THALLIUM	ICAP (MG/L)	<0.2	<0.2	<0.2	<0.2	<0.2
THORIUM	ICAP (MG/L)	0.013	0.012	0.0011	0.00089	0.0016
URANIUM	ICAP (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005
VANADIUM	ICAP (MG/L)	0.012	0.008	0.41	0.01	0.017
ZINC	ICAP (MG/L)	.	.	.	.	.
ANIONS						
ALKALINITY-HCO3	(MG/L)	.	235	.	209	164
ALKALINITY-CO3	(MG/L)	.	<1	.	<1	<1
CHLORIDE	(MG/L)	.	8.36	.	11.5	2.05
FLUORIDE	(MG/L)	.	2.5	.	2.6	0.19
NITRATE NITROGEN	(MG/L)	.	0.384	.	<0.2	1.34
AMMONIA NITROGEN	(MG/L)	.	.	.	.	.
SULFATE	(MG/L)	.	38.4	.	65.1	3.6
TOTAL SUSPENDED SOLIDS	(MG/L)	.	17	.	<1	1.5
TURBIDITY	(NTU)	.	20	.	.	3.2

APPENDIX E.1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION	GW-156 CRSDB 10/23/95	GW-156 CRSDB 10/23/95	GW-156 CRSDB 10/24/95	GW-156 CRSDB 10/24/95	GW-156 CRSDB 10/25/95	GW-156 CRSDB 10/26/95
DATE SAMPLED	DIS	TOT	DIS	TOT	DIS	TOT
TYPE						
METALS						
ALUMINUM	0.3	0.5	0.064	0.065	0.023	0.055
ANTIMONY	<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
BARIUM	0.018	0.02	0.016	0.017	0.018	0.02
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.026	0.03	0.036	0.065	0.033	0.023
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CALCIUM	70	80	69	68	66	65
CHROMIUM	<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
COBALT	<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
IRON	<0.005	0.59	<0.005	<0.005	0.0083	0.18
LEAD	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
LITHIUM	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
MAGNESIUM	43	49	42	42	42	42
MANGANESE	0.0099	0.029	<0.001	0.0029	<0.001	0.0037
MERCURY	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MOLYBDENUM	<0.01	0.012	<0.01	<0.01	<0.01	<0.01
NICKEL	<0.01	0.021	<0.01	<0.01	<0.01	<0.01
POTASSIUM	3.6	4.6	3.2	3.4	4.7	5.2
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	2.6	3.9	1.8	1.8	2.1	2.1
STRONTIUM	0.032	0.034	0.029	0.029	0.027	0.032
THALLIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THORIUM	0.0018	0.0027	0.0015	0.0014	0.0015	0.0014
URANIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
VANADIUM	0.0068	0.025	0.0093	0.018	0.014	0.015
ZINC						
ANIONS						
ALKALINITY-HCO3		342		334		339
ALKALINITY-CO3		<1		<1		1
CHLORIDE		2.66		2.24		2.25
FLUORIDE		<0.1		<0.1		<0.1
NITRATE NITROGEN		0.4		0.4		0.446
AMMONIA NITROGEN						
SULFATE		7.33		3.69		4.11
TOTAL SUSPENDED SOLIDS		16		<1		5
TURBIDITY		21		2.2		3.1

APPENDIX E.1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-159 CRSDB 10/23/95 DIS	GW-159 CRSDB 10/24/95 DIS	GW-159 CRSDB 10/24/95 TOT	GW-159 CRSDB 10/25/95 DIS	GW-159 CRSDB 10/25/95 TOT	GW-159 CRSDB 10/26/95 DIS	GW-159 CRSDB 10/26/95 TOT
METALS							
ALUMINUM	ICAP (NG/L)	0.032	0.024	1.1	<0.02	<0.02	0.039
ANTIMONY	ICAP (NG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	ICAP (NG/L)	0.011	0.011	0.012	0.0098	0.011	0.013
BARIUM	ICAP (NG/L)	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BERYLLIUM	ICAP (NG/L)	0.021	0.019	0.09	0.0044	0.013	0.0049
BORON	ICAP (NG/L)	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	ICAP (NG/L)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CADMIUM	AAS (NG/L)	42	40	50	38	37	37
CALCIUM	ICAP (NG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	ICAP (NG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	AAS (NG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COBALT	ICAP (NG/L)	<0.004	<0.004	0.0044	<0.004	<0.004	<0.004
COPPER	ICAP (NG/L)	0.072	0.005	0.48	<0.005	<0.005	0.092
IRON	ICAP (NG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	ICAP (NG/L)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
LEAD	AAS (NG/L)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
LITHIUM	ICAP (NG/L)	25	25	29	24	25	25
MAGNESIUM	ICAP (NG/L)	0.0067	0.0017	0.023	<0.001	<0.001	0.0034
MANGANESE	ICAP (NG/L)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MERCURY	CVAA (NG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOLYBDENUM	ICAP (NG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NICKEL	ICAP (NG/L)	1.1	1.8	1	2	1.7	2.1
POTASSIUM	ICAP (NG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SELENIUM	ICAP (NG/L)	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SILVER	ICAP (NG/L)	0.63	0.88	0.71	0.76	0.7	0.72
SODIUM	ICAP (NG/L)	0.019	0.02	0.029	0.017	0.02	0.02
STRONTIUM	ICAP (NG/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THALLIUM	AAS (NG/L)	0.0014	0.0013	0.0012	0.0011	0.0011	0.0011
THORIUM	ICP/MS (NG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
URANIUM	ICAP (NG/L)	0.0069	0.021	0.01	0.0044	<0.002	0.017
VANADIUM	ICAP (NG/L)	184	189	189	192	190	190
ZINC	ICAP (NG/L)	<1	<1	<1	1	<1	<1
ANIONS							
ALKALINITY-HCO3	(NG/L)	1.36	2.16	2.16	1.53	1.54	1.54
ALKALINITY-CO3	(NG/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
CHLORIDE	(NG/L)	0.42	0.36	0.36	0.402	0.435	0.435
FLUORIDE	(NG/L)	6.66	8.5	8.5	8.3	8.6	8.6
NITRATE NITROGEN	(MG/L)	13	1696	1696	2.5	2.9	2.9
AMMONIA NITROGEN	(MG/L)	19	41	41	2.9	3	3
SULFATE	(MG/L)						
TOTAL SUSPENDED SOLIDS	(MG/L)						
TURBIDITY	(NTU)						

APPENDIX E.1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-160 CRBAMP 11/02/95 DIS	GW-160 CRBAMP 11/02/95 TOT	GW-161 CRBAMP 10/31/95 DIS	GW-161 CRBAMP 10/31/95 TOT	GW-175 CRSP 11/17/95 DIS	GW-175 CRSP 11/17/95 TOT	GW-177 CRSP 11/16/95 DIS	GW-177 CRSP 11/16/95 TOT	GW-181 CRSP 11/05/95 TOT	GW-181 CRSP 11/05/95 DIS
METALS										
ALUMINUM	0.084	74	<0.02	<0.02	0.1	0.2	0.025	0.11	0.064	0.044
ANTIMONY	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	<0.05	0.45	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BARIUM	0.01	0.22	0.0075	0.0082	0.056	0.013	0.017	0.018	0.012	0.011
BERYLLIUM	<0.0003	0.027	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.0049	0.0072	0.013	<0.004	0.013	0.043	0.014	0.035	0.0088	0.05
CADMIUM	<0.003	0.0082	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CALCIUM	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CHROMIUM	0.45	92	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CHROMIUM	<0.01	0.14	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
COBALT	<0.01	0.31	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
COBALT	<0.05	0.054	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
COPPER	<0.004	0.28	<0.004	<0.004	0.045	0.004	0.0047	0.012	0.005	<0.004
IRON	0.18	220	0.023	0.52	0.022	0.5	0.008	0.72	5.1	0.02
IRON	<0.05	0.52	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	<0.004	0.55	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
LEAD	<0.004	0.068	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
LITHIUM	0.0054	59	0.013	0.014	0.0017	0.014	<0.001	0.0041	0.023	0.0087
MANGANESE	<0.0002	4.6	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MERCURY	<0.01	0.0016	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOLYBDENUM	<0.01	0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NICKEL	1.2	7.2	1.3	1.6	<0.6	0.92	2.9	2.1	2	1.6
POTASSIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SELENIUM	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SILVER	2.5	2.7	1.3	1.4	2.4	0.68	1.7	1.7	0.71	0.77
SODIUM	0.022	0.04	0.011	0.011	0.014	0.017	0.017	0.018	0.016	0.016
STRONTIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THALLIUM	<0.0005 d	0.0048	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
THORIUM	<0.005	0.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
URANIUM	0.0067	1.6	0.0062	0.0045	0.092	0.008	0.003	0.076	0.01	0.0093
ZINC										
ANIONS										
ALKALINITY-HCO3		218		191		217		229	178	
ALKALINITY-CO3		<1		<1		<1		<1	<1	
CHLORIDE		5.31		2.39		2.48		2.98	1.78	
FLUORIDE		<0.1		<0.1		<0.1		<0.1	<0.1	
NITRATE NITROGEN		0.795		0.34		0.763		0.847	0.27	
AMMONIA NITROGEN										
SULFATE		3.8		1.36		<1		6.8	1.23	
TOTAL SUSPENDED SOLIDS		5365		<1		2		12	10	
TURBIDITY		7600		5.3		4.1		5.2	15	

APPENDIX E-1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-184 RQ 10/31/95 DIS	GW-184 RQ 10/31/95 TOT	GW-186 RQ 11/03/95 DIS	GW-186 RQ 11/03/95 TOT	GW-187 RQ 11/02/95 DIS	GW-187 RQ 11/02/95 TOT	GW-188 RQ 10/31/95 DIS	GW-188 RQ 10/31/95 TOT	GW-203 UNCS 10/07/95 DIS	GW-203 UNCS 10/07/95 TOT
METALS										
ALUMINUM	<0.02	<0.02	0.028	<0.02	<0.02	0.022	<0.02	2	<0.02	0.12
ANTIMONY	<0.05	<0.05	<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	<0.05	<0.05
BARIUM	0.021	0.021	0.13	0.13	0.29	0.3	0.027	0.037	0.0067	0.0069
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.029	0.031	0.2	0.14	0.6	0.57	0.12	0.13	0.018	0.029
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	76	75	110	110	48	49	35	34	27	28
CALCIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
CHROMIUM	0.0049	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.0043	<0.004	<0.004
COBALT	0.0068	0.14	0.67	0.7	0.41	0.52	0.017	2.3	0.28	0.17
COPPER	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IRON	<0.004	<0.004	0.029	0.028	0.2	0.2	0.019	0.025	<0.004	<0.004
LEAD	7.9	7.8	34	33	22	22	26	25	16	17
LITHIUM	0.0012	0.014	0.12	0.12	0.0037	0.006	0.041	0.23	0.0079	0.0035
MAGNESIUM	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MANGANESE	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MERCURY	<0.01	0.023	<0.01	<0.01	<0.01	0.024	<0.01	<0.01	0.079	<0.01
MOLYBDENUM	2.3	1.3	3.2	3.2	1.5	2.4	2.8	4.6	0.83	<0.6
NICKEL	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
POTASSIUM	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SELENIUM	1.9	1.7	40	40	140	140	22	27	0.57	0.53
SILVER	0.18	0.17	1.7	1.7	0.97	0.98	1.9	1.7	0.0098	0.01
SODIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
STRONTIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
THALLIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
THORIUM	0.0064	0.0041	0.014	0.01	0.007	0.0059	0.0046	0.03	0.0024	0.0023
URANIUM										
VANADIUM										
ZINC										
ANIONS										
ALKALINITY-HCO3	179	411				324		208		137
ALKALINITY-CO3	<1	<1				<1		<1		<1
CHLORIDE	2.06	16				105		4.89		1.6
FLUORIDE	<0.1	0.13				0.99		0.68		<0.1
NITRATE NITROGEN	5.87	<0.2				<0.2		0.28		1.2
AMMONIA NITROGEN										
SULFATE	21	54.9				24.2		26.4		<1
TOTAL SUSPENDED SOLIDS										
TURBIDITY	1.5	4				<1		34		3
	2.4	0.8				95		74		3.6

APPENDIX E.1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GM-205 UNCS 10/07/95 DIS	GM-205 UNCS 10/07/95 TOT	GM-221 UNCS 10/08/95 DIS	GM-221 UNCS 10/08/95 TOT	GM-231 KHQ 11/06/95 DIS	GM-231 KHQ 11/06/95 TOT	GM-292 ECRWP 11/06/95 DIS	GM-292 ECRWP 11/06/95 TOT	GM-293 ECRWP 11/06/95 DIS	GM-293 ECRWP 11/06/95 TOT
METALS										
ALUMINUM	ICAP (MG/L)	<0.02	<0.02	0.021	0.03	0.029	<0.02	<0.02	0.029	0.026
ANTIMONY	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BARIUM	ICAP (MG/L)	0.011	0.0078	0.0076	0.11	0.11	0.12	0.11	0.19	0.19
BERYLLIUM	ICAP (MG/L)	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	ICAP (MG/L)	0.074	0.024	0.022	0.013	0.019	0.042	0.022	0.055	0.031
CADMIUM	ICAP (MG/L)	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CALCIUM	AAS (MG/L)	23	29	30	45	46	53	51	56	54
CHROMIUM	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	AAS (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COBALT	ICAP (MG/L)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
COPPER	ICAP (MG/L)	<0.005	<0.005	0.14	0.0099	0.018	<0.005	<0.005	<0.005	0.79
IRON	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	AAS (MG/L)	0.012	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
LITHIUM	ICAP (MG/L)	19	18	19	24	24	33	32	34	33
MAGNESIUM	ICAP (MG/L)	0.0031	<0.001	0.003	0.0025	0.0023	<0.001	<0.001	0.026	0.026
MANGANESE	ICAP (MG/L)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MERCURY	CVAA (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOLYBDENUM	ICAP (MG/L)	<0.01	<0.01	0.026	0.026	<0.01	<0.01	<0.01	<0.01	<0.01
NICKEL	ICAP (MG/L)	9.8	1.4	0.84	0.64	1	0.79	0.79	1.3	1.4
POTASSIUM	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SELENIUM	ICAP (MG/L)	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SILVER	ICAP (MG/L)	2.1	0.65	0.61	1	1	4.7	4.5	5.7	5.5
SODIUM	ICAP (MG/L)	0.0081	0.0097	0.0097	0.043	0.043	0.018	0.018	0.02	0.02
STRONTIUM	ICAP (MG/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THALLIUM	AAS (MG/L)	0.00057	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
THORIUM	ICAP (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
URANIUM	ICP/MS (MG/L)	0.0048	0.0069	0.0057	0.0046	0.0095	0.01	0.01	0.013	0.008
ZINC	ICAP (MG/L)	145	152	152	211	211	250	250	257	257
ANIONS										
ALKALINITY-HCO3	(MG/L)	<1	<1	<1	<1	<1	<1	<1	<1	<1
ALKALINITY-CO3	(MG/L)	2.4	1.6	1.6	2.52	2.52	7.36	7.36	10.9	10.9
CHLORIDE	(MG/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
FLUORIDE	(MG/L)	0.46	0.75	0.75	0.76	0.76	0.9	0.9	0.86	0.86
NITRATE NITROGEN	(MG/L)	2.9	1.3	1.3	6.26	6.26	2.86	2.86	3.28	3.28
NITROGEN	(MG/L)	4	<1	<1	1	1	<1	<1	3.5	3.5
SULFATE	(MG/L)	2	1.1	1.1	0.5	0.5	0.5	0.5	8.8	8.8
TOTAL SUSPENDED SOLIDS	(MG/L)									
TURBIDITY	(NTU)									

APPENDIX E.1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-294 ECRUP 11/05/95 DIS	GW-294 ECRUP 11/05/95 TOT	GW-296 ECRUP 11/05/95 DIS	GW-296 ECRUP 11/05/95 TOT	GW-298 CRBAMP 11/04/95 DIS	GW-298 CRBAMP 11/04/95 TOT	GW-299 CRBAMP 11/03/95 DIS	GW-299 CRBAMP 11/03/95 TOT	GW-300 CRBAMP 11/03/95 DIS	GW-300 CRBAMP 11/03/95 TOT
METALS										
ALUMINUM	0.027	0.049	<0.02	0.078	<0.02	0.037	<0.02	<0.02	<0.02	0.055
ANTIMONY	<0.05	<0.05	<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	<0.05	<0.05
BARIIUM	0.01	0.01	0.01	0.011	0.014	0.014	0.0078	0.0082	0.017	0.017
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.028	0.023	0.027	0.034	0.0074	0.01	0.0059	0.021	0.028	0.025
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	49	49	45	45	33	36	28	28	26	26
CALCIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	31	30	28	28	22	22	17	17	16	16
CHROMIUM	0.0013	0.0025	<0.001	0.0014	<0.001	0.004	<0.001	0.0029	<0.001	0.0026
COBALT	<0.005	<0.005	<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	<0.004	<0.004
IRON	<0.005	0.12	<0.005	0.061	<0.005	0.37	0.0057	0.14	0.017	0.79
LEAD	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	31	30	28	28	22	22	17	17	16	16
LITHIUM	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
MAGNESIUM	0.0013	0.0025	<0.001	0.0014	<0.001	0.004	<0.001	0.0029	<0.001	0.0026
MANGANESE	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MERCURY	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOLYBDENUM	<0.01	<0.01	<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	<0.01	<0.01
POTASSIUM	0.75	1	0.67	0.68	1.2	0.8	0.79	<0.6	<0.6	<0.6
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	3	3.4	1.3	1.3	1.8	1.5	0.8	0.81	0.6	0.59
STRONTIUM	0.023	0.023	0.017	0.017	0.025	0.024	0.014	0.014	0.017	0.016
THALLIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THORIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	0.0018	0.0014	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
URANIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
VANADIUM	0.0056	0.021	0.0079	0.012	0.0026	0.007	0.0036	0.0042	0.0067	0.0062
ZINC										
ANIONS										
ALKALINITY-HCO3	226	226	222	222	170	170	141	141	125	125
ALKALINITY-CO3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CHLORIDE	10.2	10.2	2.69	2.69	1.19	1.19	1.56	1.56	1.59	1.59
FLUORIDE	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
NITRATE NITROGEN	2.7	2.7	0.8	0.8	<0.2	<0.2	0.227	0.227	0.254	0.254
AMMONIA NITROGEN	3.27	3.27	1.42	1.42	8.37	8.37	2.87	2.87	4.58	4.58
SULFATE										
TOTAL SUSPENDED SOLIDS	<1	<1	1	1	13	13	<1	<1	<1	<1
TURBIDITY	0.7	0.7	2	2	16	16	1.1	1.1	7.5	7.5

APPENDIX E.1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-301 CRBWP 11/03/95 DIS	GW-302 UNCS 10/08/95 DIS	GW-302 UNCS 10/08/95 TOT	GW-321 ADB 10/26/95 DIS	GW-321 ADB 10/26/95 TOT	GW-339 UNCS 10/08/95 DIS	GW-339 UNCS 10/08/95 TOT	GW-511 CRSP 11/07/95 DIS	GW-511 CRSP 11/07/95 TOT
METALS									
ALUMINUM	ICAP (MG/L)	1.3	0.35	<0.02	0.064	<0.02	<0.02	0.05	0.086
ANTIMONY	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BARIUM	ICAP (MG/L)	0.017	0.024	0.053	0.053	0.021	0.023	0.0093	0.0096
BERYLLIUM	ICAP (MG/L)	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	ICAP (MG/L)	0.015	0.037	0.027	0.11	0.0094	0.018	0.018	0.078
CADMIUM	ICAP (MG/L)	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	AAS (MG/L)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CALCIUM	ICAP (MG/L)	33	51	26	26	56	57	28	28
CHROMIUM	ICAP (MG/L)	<0.01	0.26	<0.01	<0.01	<0.01	0.068	<0.01	<0.01
CHROMIUM	AAS (MG/L)	<0.01	0.23	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
COBALT	ICAP (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COPPER	ICAP (MG/L)	<0.004	0.0094	<0.004	<0.004	<0.004	0.01	<0.004	<0.004
IRON	ICAP (MG/L)	<0.005	4.9	<0.005	0.01	<0.005	2.3	0.0088	0.073
LEAD	ICAP (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
LEAD	AAS (MG/L)	0.0062	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
LITHIUM	ICAP (MG/L)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
MAGNESIUM	ICAP (MG/L)	22	33	15	15	34	35	17	17
MANGANESE	ICAP (MG/L)	<0.001	0.091	0.0044	0.0035	0.0095	0.056	0.005	0.0057
MERCURY	CVAA (MG/L)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MOLYBDENUM	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NICKEL	ICAP (MG/L)	<0.01	0.36	<0.01	<0.01	0.099	0.43	<0.01	0.013
POTASSIUM	ICAP (MG/L)	0.95	0.8	0.75	<0.6	1.1	0.95	3.3	3.9
SELENIUM	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	0.063	<0.05	<0.05	<0.05
SILVER	ICAP (MG/L)	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	ICAP (MG/L)	0.79	9.5	0.64	0.8	12	12	1.1	1.3
STRONTIUM	ICAP (MG/L)	0.018	0.019	0.017	0.017	0.024	0.025	0.039	0.039
THALLIUM	AAS (MG/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THORIUM	ICAP (MG/L)	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
URANIUM	ICP/MS (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
VANADIUM	ICAP (MG/L)	0.02	0.018	0.0083	0.0083	<0.002	0.0041	0.011	0.0093
ZINC	ICAP (MG/L)	0.0088	0.0088	0.0088	0.0088	0.0088	0.0088	0.0088	0.0088
ANIONS									
ALKALINITY-HCO3	(MG/L)	176	242	.	127	.	263	.	142
ALKALINITY-CO3	(MG/L)	<1	<1	.	<1	.	<1	.	<1
CHLORIDE	(MG/L)	1.49	20	.	1.47	.	23	.	2.5
FLUORIDE	(MG/L)	<0.1	<0.1	.	<0.1	.	<0.1	.	<0.1
NITRATE NITROGEN	(MG/L)	0.404	1.1	.	0.424	.	0.89	.	0.28
AMMONIA NITROGEN	(MG/L)	.	3.2	.	2.21	.	4.3	.	1.44
SULFATE	(MG/L)	2.29	9.2	.	0.25	.	7.2	.	0.5
TOTAL SUSPENDED SOLIDS	(MG/L)	7	2	.	<1	.	2.5	.	<1
TURBIDITY	(NTU)	10.2	9.2	.	0.25	.	7.2	.	0.5

APPENDIX E.1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-512 ADB 10/31/95 DIS	GW-512 ADB 10/31/95 TOT	GW-513 ADB 10/31/95 DIS	GW-513 ADB 10/31/95 TOT	GW-514 ADB 11/02/95 DIS	GW-514 ADB 11/02/95 TOT	GW-539 LII 10/06/95 DIS	GW-539 LII 10/06/95 TOT	GW-540 CDLVI 10/11/95 DIS	GW-540 CDLVI 10/11/95 TOT
METALS										
ALUMINUM	<0.02	0.32	<0.02	<0.02	0.098	<0.02	<0.02	0.067	0.057	<0.02
ANTIMONY	<0.05	<0.05	<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	<0.05	<0.05
BARIIUM	0.022	0.024	0.0085	0.0078	0.0069	0.0073	0.011	0.011	0.01	0.01
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.015	0.098	0.0062	0.0044	0.0074	0.0075	0.018	0.017	0.019	0.087
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	31	31	36	36	35	36	36	36	39	39
CALCIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.021	<0.01	<0.01
CHROMIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.025	<0.01	<0.01
CHROMIUM	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.005	<0.005
COBALT	0.021	0.36	0.011	0.041	0.067	1.3	0.055	0.38	<0.004	<0.004
COPPER	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IRON	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
LEAD	19	19	22	22	22	23	22	22	24	24
LEAD	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
LITHIUM	0.0019	0.0089	<0.0002	0.0017	0.0051	0.0066	0.0029	0.009	0.0014	0.0011
MANGANESE	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MERCURY	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOLYBDENUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.075	0.15	<0.01	<0.01
NICKEL	4.2	4.6	1.8	1.9	1.4	1.1	1.8	1.1	1.4	<0.6
POTASSIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.091	<0.05
SELENIUM	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SILVER	1.1	1.2	0.93	0.82	0.52	0.54	2.4	2.9	3	2.5
SODIUM	0.021	0.021	0.021	0.021	0.02	0.02	0.019	0.02	0.027	0.027
STRONTIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THALLIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
THORIUM	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
URANIUM	0.013	0.015	0.011	0.0066	0.0042	<0.002	0.0038	0.012	0.0057	0.0085
VANADIUM										
ZINC										
ANIONS										
ALKALINITY-HCO3		157		180		179		152		196
ALKALINITY-CO3		<1		<1		<1		<1		<1
CHLORIDE		1.37		1.33		1.58		18		1.82
FLUORIDE		<0.1		<0.1		<0.1		<0.1		<0.1
NITRATE NITROGEN		<0.2		0.26		<0.2		0.42		0.41
AMMONIA NITROGEN								<0.2		<0.2
SULFATE		3.63		1.6		4.06		7		4.25
TOTAL SUSPENDED SOLIDS		5		3.5		2		9		<1
TURBIDITY		7.7		1.9		8.6		12		0.15

APPENDIX E.1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION	DATE SAMPLED	TYPE	GM-541 CDLVI	GM-541 DIS	GM-542 CDLVI	GM-542 DIS	GM-542 TOT	GM-543 CDLVI	GM-543 DIS	GM-543 TOT	GM-544 CDLVI	GM-544 DIS	GM-544 TOT	GM-546 CDLVI	GM-546 DIS	GM-546 TOT
METALS																
ALUMINUM		ICAP (MG/L)	0.028		0.076	<0.02	0.15	<0.02	0.059	<0.02	0.072	<0.02	0.072	0.024		4.5
ANTIMONY		ICAP (MG/L)	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05
ARSENIC		ICAP (MG/L)	<0.05		<0.05	<0.05	<0.05	<0.05	0.066	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05
BARIUM		ICAP (MG/L)	0.0069		0.0074	0.013	0.013	0.0088	0.0095	0.013	0.0098	0.0096	0.0098	0.0062		0.016
BERYLLIUM		ICAP (MG/L)	<0.0003		<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003		0.00044
BORON		ICAP (MG/L)	0.024		0.013	0.0092	0.024	0.013	0.029	0.013	0.013	0.023	0.013	0.028		0.027
CADMIUM		ICAP (MG/L)	<0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003		<0.003
CADMIUM		AAS (MG/L)	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002
CALCIUM		ICAP (MG/L)	37		39	28	27	47	48	45	45	45	45	28		42
CHROMIUM		ICAP (MG/L)	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		0.013
CHROMIUM		AAS (MG/L)	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		0.012
COBALT		ICAP (MG/L)	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005
COPPER		ICAP (MG/L)	<0.004		<0.004	<0.004	<0.004	<0.004	0.0098	<0.004	<0.004	<0.004	<0.004	<0.004		0.012
IRON		ICAP (MG/L)	<0.005		0.044	<0.005	0.083	<0.005	0.05	<0.005	0.097	<0.005	0.097	0.024		4.4
LEAD		ICAP (MG/L)	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05
LEAD		AAS (MG/L)	<0.004		<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004		0.0086
LITHIUM		ICAP (MG/L)	<0.004		<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004		0.0046
MAGNESIUM		ICAP (MG/L)	21		21	16	16	29	29	28	28	28	28	19		30
MANGANESE		ICAP (MG/L)	0.0025		0.0056	0.0021	0.0052	<0.001	<0.001	<0.001	0.0044	<0.001	0.0044	0.0067		0.18
MERCURY		CVAA (MG/L)	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
MOLYBDENUM		ICAP (MG/L)	0.021		0.026	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01
NICKEL		ICAP (MG/L)	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01
POTASSIUM		ICAP (MG/L)	0.73		1.1	1.7	1.5	1	1.3	1.2	1.7	1.2	1.7	1.9		3
SELENIUM		ICAP (MG/L)	0.054		0.072	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09		<0.05
SILVER		ICAP (MG/L)	<0.006		<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006		<0.006
SODIUM		ICAP (MG/L)	0.62		0.63	0.95	0.91	1.1	1.1	5	5	5	5	2		2
STRONTIUM		ICAP (MG/L)	0.024		0.024	0.02	0.02	0.024	0.024	0.022	0.022	0.022	0.022	0.022		0.031
THALLIUM		AAS (MG/L)	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01
THORIUM		ICAP (MG/L)	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2
URANIUM		ICP/MS (MG/L)	0.0022		0.0021	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	0.0013	0.0016	0.0013	<0.0005 d		<0.0005 d
VANADIUM		ICAP (MG/L)	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		0.0098
ZINC		ICAP (MG/L)	0.0035		0.012	0.023	0.032	<0.002	0.015	0.017	0.013	0.017	0.013	0.0098		0.028
ANIONS																
ALKALINITY-HCO3		(MG/L)			169		135		236		214		214			125
ALKALINITY-CO3		(MG/L)			<1		<1		<1		<1		<1			<1
CHLORIDE		(MG/L)			1.52		1.86		3.01		9.03		9.03			1.8
FLUORIDE		(MG/L)			<0.1		<0.1		<0.1		<0.1		<0.1			<0.1
NITRATE NITROGEN		(MG/L)			<0.2 h		0.65		0.373		0.797		0.797			0.39
AMMONIA NITROGEN		(MG/L)			<0.2		<0.2		<0.2		<0.2		<0.2			<0.2
SULFATE		(MG/L)			11.8		3.19		3.1		7.68		7.68			2.55
TOTAL SUSPENDED SOLIDS		(MG/L)			<1		4		<1		<1		<1			194
TURBIDITY		(NTU)			1.3		2.6		3.1		1.7		1.7			160

APPENDIX E.1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-557 LV 10/07/95 DIS	GW-557 LV 10/07/95 TOT	GW-560 CDLVI 10/06/95 DIS	GW-560 CDLVI 10/06/95 TOT	GW-562 CDLVI 10/06/95 DIS	GW-562 CDLVI 10/06/95 TOT	GW-564 CDLVI 10/07/95 DIS	GW-564 CDLVI 10/07/95 TOT	GW-608 CRSP 11/16/95 DIS	GW-608 CRSP 11/16/95 TOT
METALS										
ALUMINUM	ICAP (MG/L)	0.066	<0.02	0.033	<0.02	0.37	0.025	0.024	0.077	0.22
ANTIMONY	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	ICAP (MG/L)	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BARIUM	ICAP (MG/L)	0.012	0.23	0.23	0.23	0.013	0.017	0.017	0.012	0.059
BERYLLIUM	ICAP (MG/L)	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	ICAP (MG/L)	0.012	<0.004	0.0097	0.011	0.0058	0.013	0.0078	0.015	0.047
CADMIUM	ICAP (MG/L)	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	AAS (MG/L)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CALCIUM	ICAP (MG/L)	36	36	36	36	38	28	29	33	45
CHROMIUM	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	AAS (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
COBALT	ICAP (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COPPER	ICAP (MG/L)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
IRON	ICAP (MG/L)	<0.005	<0.005	0.077	0.4	<0.005	<0.005	0.028	<0.005	0.098
LEAD	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	AAS (MG/L)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
LITHIUM	ICAP (MG/L)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
MAGNESIUM	ICAP (MG/L)	20	15	15	15	22	12	12	20	29
MANGANESE	ICAP (MG/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.006	0.0036
MERCURY	CVA (MG/L)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MOLYBDENUM	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NICKEL	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	ICAP (MG/L)	0.71	0.99	1.1	1.1	0.83	1.6	0.78	0.92	<0.6
SELENIUM	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	ICAP (MG/L)	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	ICAP (MG/L)	0.65	0.6	0.6	0.6	0.96	1.2	1.2	0.63	2.3
STRONTIUM	ICAP (MG/L)	0.016	0.023	0.023	0.023	0.019	0.028	0.029	0.015	0.016
THALLIUM	AAS (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
THORIUM	ICAP (MG/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	ICP/MS (MG/L)	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
VANADIUM	ICAP (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC	ICAP (MG/L)	0.0079	0.014	0.045	0.045	0.016	0.019	0.017	0.0052	0.018
ANIONS										
ALKALINITY-HCO3	(MG/L)	168	.	150	150	181	.	116	.	155
ALKALINITY-CO3	(MG/L)	<1	.	<1	<1	<1	.	<1	.	<1
CHLORIDE	(MG/L)	1.6	.	1.5	1.5	1.9	.	2.6	.	2.51
FLUORIDE	(MG/L)	<0.1	.	<0.1	<0.1	<0.1	.	<0.1	.	<0.1
NITRATE NITROGEN	(MG/L)	1	.	0.32	0.32	0.52	.	0.81	.	1.08
AMMONIA NITROGEN	(MG/L)	<0.2	.	<0.2	<0.2	<0.2	.	<0.2	.	<0.2
SULFATE	(MG/L)	1.4	.	1.9	1.9	1.8	.	4.7	.	2.39
TOTAL SUSPENDED SOLIDS	(MG/L)	3	.	<1	<1	5	.	1.5	.	5
TURBIDITY	(NTU)	1.8	.	1.3	1.3	8.9	.	1.4	.	5.1

APPENDIX E.1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-609 CRSP 11/20/95 DIS	GW-609 CRSP 11/20/95 TOT	GW-610 CRSP 11/13/95 DIS	GW-610 CRSP 11/13/95 TOT	GW-611 CRSP 11/17/95 DIS	GW-611 CRSP 11/17/95 TOT	GW-709 LII 10/06/95 DIS	GW-709 LII 10/06/95 TOT
METALS								
ALUMINUM	ICAP (MG/L)	0.054	0.077	0.07	0.037	0.11	0.1	0.25
ANTIMONY	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	0.055	<0.05
BARIUM	ICAP (MG/L)	0.012	0.084	0.086	0.016	0.017	0.4	0.32
BERYLLIUM	ICAP (MG/L)	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	ICAP (MG/L)	0.025	0.031	0.02	0.026	0.016	0.022	0.022
CADMIUM	ICAP (MG/L)	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CALCIUM	AAS (MG/L)	.	.	.	.	.	<0.002	<0.002
CHROMIUM	ICAP (MG/L)	38	45	45	56	56	29	35
CHROMIUM	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
COBALT	ICAP (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COPPER	ICAP (MG/L)	<0.004	0.0058	<0.004	0.0066	0.0066	<0.004	<0.004
IRON	ICAP (MG/L)	<0.005	0.014	0.043	0.0072	0.44	0.0054	0.8
LEAD	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LITHIUM	AAS (MG/L)	.	.	.	.	.	<0.004	<0.004
MAGNESIUM	ICAP (MG/L)	<0.004	<0.004	<0.004	0.0042	0.0042	<0.004	<0.004
MANGANESE	ICAP (MG/L)	24	28	28	34	34	23	22
MERCURY	ICAP (MG/L)	<0.001	0.0035	0.0033	0.0096	0.0096	<0.001	0.0059
MOLYBDENUM	ICAP (MG/L)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
NICKEL	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
SELENIUM	ICAP (MG/L)	1.3	1.1	1.2	1.1	1.1	1.1	1.2
SILVER	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.083
SODIUM	ICAP (MG/L)	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
STRONTIUM	ICAP (MG/L)	0.8	0.97	1.1	5.9	5.9	0.64	0.63
THALLIUM	ICAP (MG/L)	0.014	0.017	0.017	0.019	0.019	0.038	0.034
THORIUM	AAS (MG/L)	.	.	.	.	.	<0.01	<0.01
URANIUM	ICAP (MG/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
VANADIUM	ICP/MS (MG/L)	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	0.0007	0.00051
ZINC	ICAP (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ANIONS								
ALKALINITY-HCO3	(MG/L)	202	202	227	263	263	.	176
ALKALINITY-CO3	(MG/L)	<1	<1	<1	<1	<1	.	<1
CHLORIDE	(MG/L)	2.06	2.06	2.92	2.7	2.7	.	1.8
FLUORIDE	(MG/L)	<0.1	<0.1	<0.1	<0.1	<0.1	.	<0.1
NITRATE NITROGEN	(MG/L)	1.17	1.17	0.91	3.44	3.44	.	0.33
AMMONIA NITROGEN	(MG/L)	.	.	.	.	.	.	.
SULFATE	(MG/L)	2.02	2.02	<1	5.7	5.7	.	2.1
TOTAL SUSPENDED SOLIDS	(MG/L)	<1	<1	1	6	6	.	48
TURBIDITY	(NTU)	0.3	0.3	0.3	6.9	6.9	.	25

APPENDIX E.1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-731 CRSDB 10/23/95 DIS	GW-731 CRSDB 10/23/95 TOT	GW-731 CRSDB 10/24/95 DIS	GW-731 CRSDB 10/24/95 TOT	GW-731 CRSDB 10/25/95 DIS	GW-731 CRSDB 10/25/95 TOT	GW-731 CRSDB 10/26/95 DIS	GW-731 CRSDB 10/26/95 TOT
METALS								
ALUMINUM	0.071	0.36	0.073	0.15	<0.02	0.35	<0.02	0.11
ANTIMONY	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	0.0062	0.0074	0.0053	0.0084	0.0048	0.012	0.0041	0.008
BARIIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BERYLLIUM	0.0023	0.0023	0.046	0.003	0.012	0.011	0.017	0.0073
BORON	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CALCIUM	21	22	14	17	12	15	9.4	17
CHROMIUM	<0.01	0.013	<0.01	<0.01	<0.01	0.019	<0.01	<0.01
CHROMIUM	<0.01	<0.01	<0.01	<0.01	<0.01	0.019	<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	0.0066	<0.004	0.024	0.016	0.0068
IRON	0.011	0.65	<0.005	0.46	<0.005	2	<0.005	0.71
LEAD	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	<0.004	<0.004	<0.004	<0.004	<0.004	0.0051	<0.004	<0.004
LITHIUM	<0.004	<0.004	0.0084	0.009	0.01	0.02	0.016	0.014
MAGNESIUM	15	15	13	14	13	15	13	14
MANGANESE	0.0022	0.019	<0.001	0.0059	<0.001	0.039	<0.001	0.015
MERCURY	<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
POTASSIUM	5.5	5.5	12	11	14	18	16	14
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	2.7	2.6	4	3.9	4.4	4.9	4.5	4.1
STRONTIUM	0.027	0.029	0.022	0.029	0.016	0.027	0.013	0.021
THALLIUM	.	.	.	.	.	.	.	.
THORIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
VANADIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC	0.0059	0.017	0.0082	0.012	0.0064	0.025	0.22	0.014
ANIONS								
ALKALINITY-HCO3	.	112	.	92	.	81	.	84
ALKALINITY-CO3	.	<1	.	10	.	20	.	16
CHLORIDE	.	1.26	.	1.21	.	1.56	.	1.48
FLUORIDE	.	<0.1	.	<0.1	.	<0.1	.	<0.1
NITRATE NITROGEN	.	0.36	.	0.37	.	0.376	.	0.418
AMMONIA NITROGEN	.	.	.	.	.	.	.	.
SULFATE	.	4.88	.	5.28	.	5.45	.	5.68
TOTAL SUSPENDED SOLIDS	.	4.5	.	3	.	9	.	11
TURBIDITY	.	13	.	7	.	33	.	5.2

APPENDIX E.1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-732 CRSDB 10/23/95 DIS	GW-732 CRSDB 10/23/95 TOT	GW-732 CRSDB 10/24/95 DIS	GW-732 CRSDB 10/24/95 TOT	GW-732 CRSDB 10/25/95 DIS	GW-732 CRSDB 10/25/95 TOT	GW-732 CRSDB 10/26/95 DIS	GW-732 CRSDB 10/26/95 TOT	GW-742 CRSP 11/09/95 DIS	GW-742 CRSP 11/09/95 TOT
METALS										
ALUMINUM	ICAP (MG/L) <0.02	0.027	0.048	0.15	0.037	0.26	0.045	0.083	0.031	0.043
ANTIMONY	ICAP (MG/L) <0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	ICAP (MG/L) <0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BARIUM	ICAP (MG/L) 0.011	<0.0003	0.052	0.11	0.026	0.079	0.018	0.05	0.1	0.12
BERYLLIUM	ICAP (MG/L) <0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	ICAP (MG/L) 0.024	0.02	0.021	0.031	0.054	0.0093	0.015	0.017	0.011	0.043
CADMIUM	ICAP (MG/L) <0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	ICAP (MG/L) <0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CALCIUM	ICAP (MG/L) 31	32	7.5	19	8.3	20	7	15	36	37
CHROMIUM	ICAP (MG/L) <0.01	<0.01	0.017	0.024	0.021	0.034	0.018	0.022	<0.01	<0.01
CHROMIUM	AAS (MG/L) <0.01	<0.01	0.015	0.02	0.015	0.038	0.015	0.022	<0.01	<0.01
COBALT	ICAP (MG/L) <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COPPER	ICAP (MG/L) <0.004	<0.004	0.0045	0.028	<0.004	0.041	<0.004	0.021	0.0062	0.0065
COPPER	ICAP (MG/L) <0.005	<0.005	<0.005	0.8	<0.005	5	<0.005	2.8	0.033	1.4
IRON	ICAP (MG/L) <0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	ICAP (MG/L) <0.004	<0.004	<0.004	<0.004	<0.004	0.013	<0.004	0.0062	<0.004	<0.004
LEAD	AAS (MG/L) <0.004	<0.004	0.062	0.062	0.044	0.04	0.038	0.03	<0.004	<0.004
LITHIUM	ICAP (MG/L) 19	19	1.2	3	9.1	9.4	11	15	22	22
MANGANESE	ICAP (MG/L) <0.001	0.004	<0.001	0.011	<0.001	0.057	<0.001	0.033	0.079	0.085
MERCURY	ICAP (MG/L) <0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MOLYBDENUM	ICAP (MG/L) <0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NICKEL	ICAP (MG/L) <0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	ICAP (MG/L) 1.6	1.7	33	32	24	23	22	18	1.2	1.8
SELENIUM	ICAP (MG/L) <0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	ICAP (MG/L) <0.006	<0.006	<0.006	<0.006	0.0069	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	ICAP (MG/L) 0.99	0.98	8.6	9.3	6.9	6.4	5.9	5.1	0.77	0.81
STRONTIUM	ICAP (MG/L) 0.021	0.03	0.18	0.32	0.12	0.21	0.083	0.13	0.018	0.018
THALLIUM	AAS (MG/L) <0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THORIUM	ICAP (MG/L) <0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
URANIUM	ICAP (MG/L) <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
VANADIUM	ICAP (MG/L) 0.0038	0.0032	0.0021	0.01	0.0069	0.036	0.011	0.021	0.0033	0.0056
ZINC	ICAP (MG/L) 149	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
ANIONS										
ALKALINITY-HCO3	(MG/L) .	149	.	<1	.	<1	.	<1	.	170
ALKALINITY-CO3	(MG/L) .	<1	.	146	.	148	.	120	.	<1
CHLORIDE	(MG/L) .	1.14	.	1.19	.	1.57	.	1.43	.	1.41
FLUORIDE	(MG/L) .	<0.1	.	<0.1	.	<0.1	.	<0.1	.	<0.1
NITRATE NITROGEN	(MG/L) .	0.34	.	0.43	.	0.512	.	0.485	.	<0.2
AMMONIA NITROGEN	(MG/L) .	1.65	.	3.46	.	4.03	.	3.36	.	12.4
SULFATE	(MG/L) .	.	.	.	.	.	.	.	.	.
TOTAL SUSPENDED SOLIDS	(MG/L) .	2.5	.	30	.	32	.	41	.	<1
TURBIDITY	(NTU) .	1.4	.	19	.	28	.	38	.	10

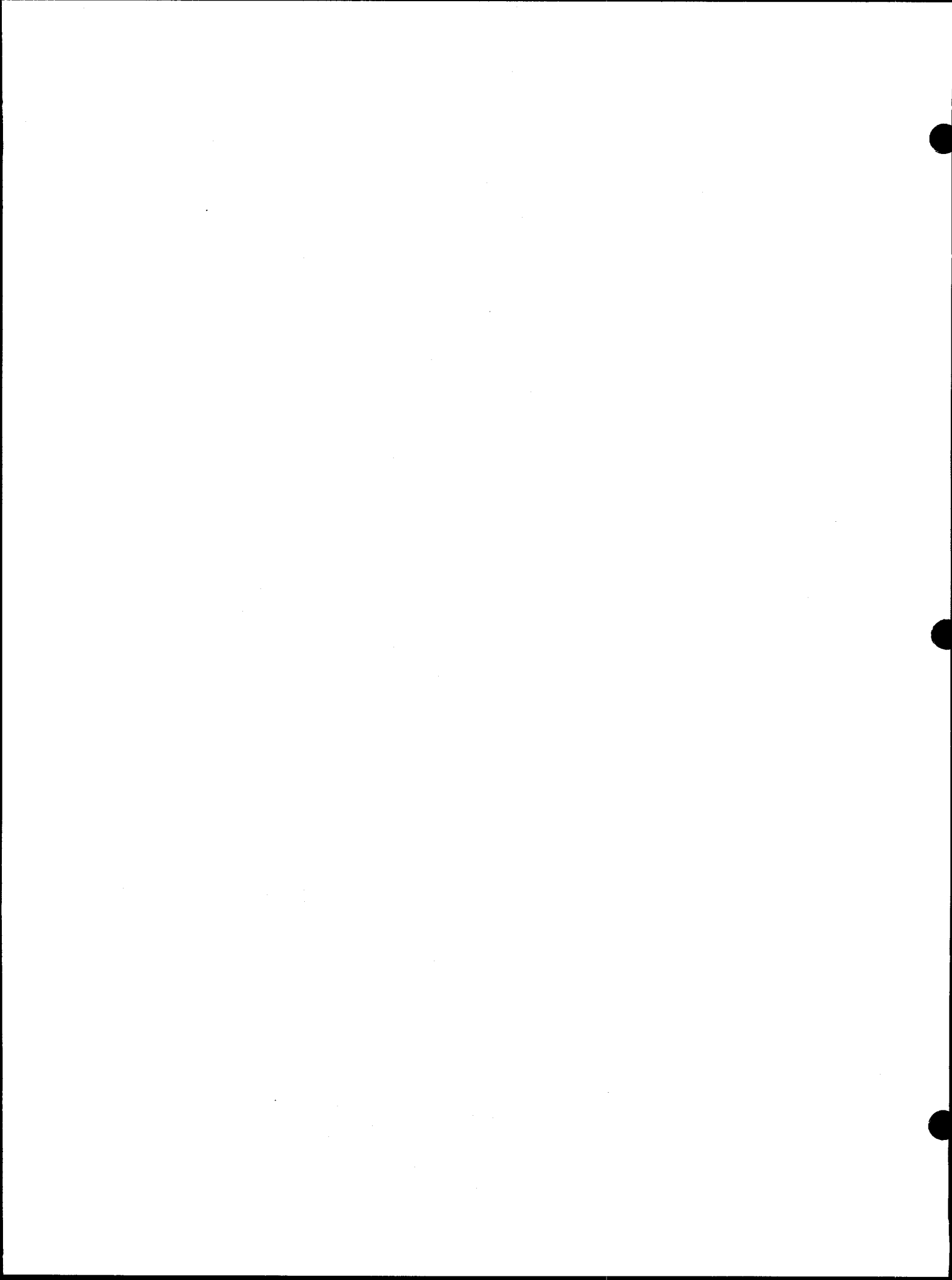
APPENDIX E-1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-743 CRSP 11/13/95 DIS	GW-743 CRSP 11/13/95 TOT	GW-757 LII 10/06/95 DIS	GW-757 LII 10/06/95 TOT	GW-796 LV 10/08/95 DIS	GW-796 LV 10/08/95 TOT	GW-797 LV 10/08/95 DIS	GW-797 LV 10/08/95 TOT	GW-798 CDLVI 10/08/95 DIS	GW-798 CDLVI 10/08/95 TOT
METALS										
ALUMINUM	0.051	0.07	0.038	0.24	<0.02	0.074	<0.02	0.075	<0.02	0.053
ANTIMONY	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.11
ARSENIC	<0.05	<0.05	0.083	0.079	0.073	0.079	0.057	0.05	0.08	0.084
BARUM	0.012	0.012	0.26	0.25	0.012	0.015	0.0068	0.0073	0.009	0.0096
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.018	0.017	0.026	0.028	0.029	0.01	<0.004	0.0044	0.0053	0.0063
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	31	30	33	32	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CALCIUM	<0.01	<0.01	0.034	0.033	<0.01	<0.01	<0.01	<0.01	<0.01	28
CHROMIUM	<0.01	<0.01	0.038	0.036	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COBALT	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
COPPER	0.012	0.11	0.76	0.41	<0.005	0.091	<0.005	0.068	<0.005	0.042
IRON	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
LITHIUM	19	18	20	19	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
MANGANESE	0.0024	0.0018	0.003	0.0029	<0.001	0.0025	<0.001	0.0018	<0.001	0.0019
MERCURY	<0.0002	<0.0002	<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	<0.01	<0.01
NICKEL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	1.7	1.4	1.8	1.9	2.9	3.2	0.81	2.2	1.7	1.9
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	1.2	1.1	5	4.5	1	1	1.2	1.3	0.71	0.72
STRONTIUM	0.02	0.019	0.66	0.65	0.027	0.039	0.019	0.02	0.015	0.016
THALLIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THORIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
URANIUM	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
VANADIUM	0.016	0.012	0.0067	0.0073	0.004	0.0039	<0.002	<0.002	<0.002	<0.002
ZINC										
ANIONS										
ALKALINITY-HCO3		146		163		118		151		133
ALKALINITY-CO3		<1		<1		<1		<1		<1
CHLORIDE		2.24		2.3		1.7		1.5		1.3
FLUORIDE		<0.1		1.48		<0.1		<0.1		<0.1
NITRATE NITROGEN		1.05		0.24		0.32		0.39		0.8
AMMONIA NITROGEN		3.82		9.8		<0.2		<0.2		<0.2
SULFATE						1.3		2.4		2.5
TOTAL SUSPENDED SOLIDS		<1		4		3		1		<1
TURBIDITY		0.65		4.9		4.3		1.7		0.65

APPENDIX E.1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-799 LV 10/07/95 DIS	GW-799 LV 10/07/95 TOT	GW-801 LV 10/09/95 DIS	GW-801 LV 10/09/95 TOT	GW-827 CDLVI 10/16/95 DIS	GW-827 CDLVI 10/16/95 TOT
METALS						
ALUMINUM	0.02	0.38	<0.02	0.13	0.021	0.03
ANTIMONY	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	0.055	0.073	0.12	<0.05	<0.05	<0.05
BARIIUM	0.0053	0.0062	0.0022	0.0031	0.0078	0.0083
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.028	0.024	0.0088	0.0048	0.014	0.012
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CALCIUM	27	28	29	31	29	29
CHROMIUM	<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
COBALT	<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
IRON	<0.005	0.46	<0.005	0.11	<0.005	0.037
LEAD	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
LITHIUM	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
MAGNESIUM	15	16	17	18	17	17
MANGANESE	<0.001	0.014	<0.001	0.0015	<0.001	0.0025
MERCURY	<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
NICKEL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	0.78	0.98	0.68	1.3	1	0.61
SELENIUM	<0.05	0.067	<0.05	<0.05	<0.05	0.09
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	0.93	0.9	0.68	0.59	0.83	0.78
STRONTIUM	0.014	0.015	0.015	0.016	0.016	0.016
THALLIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
THORIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	0.00051	0.00056
VANADIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC	0.0028	0.007	<0.002	0.0052	0.0042	0.0031
ANIONS						
ALKALINITY-HCO3	.	132	.	145	.	144
ALKALINITY-CO3	.	<1	.	<1	.	<1
CHLORIDE	.	1.4	.	1.7	.	1.37
FLUORIDE	.	0.11	.	<0.1	.	<0.1
NITRATE NITROGEN	.	0.96	.	0.34	.	0.4
AMMONIA NITROGEN	.	<0.2	.	<0.2	.	<0.2
SULFATE	.	1.4	.	2.6	.	1.92
TOTAL SUSPENDED SOLIDS	.	11	.	<1	.	<1
TURBIDITY	.	14	.	3.7	.	0.8

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS



APPENDIX E.2
SUMMARY OF VOCs DETECTED IN GROUNDWATER AND SURFACE WATER SAMPLES

Total Samples 39
Samples without VOCs 29
Samples with VOCs 10

COMPOUND	FIRST QUARTER
ACETONE (UG/L)	5
BENZENE (UG/L)	0
BROMODICHLOROMETHANE (UG/L)	0
BROMOFORM (UG/L)	0
BROMOMETHANE (UG/L)	0
2-BUTANONE (UG/L)	6
CARBON DISULFIDE (UG/L)	0
CARBON TETRACHLORIDE (UG/L)	1
CHLOROBENZENE (UG/L)	0
CHLORODIBROMOMETHANE (UG/L)	0
CHLOROETHANE (UG/L)	0
CHLOROFORM (UG/L)	0
CHLOROMETHANE (UG/L)	0
1,1-DICHLOROETHANE (UG/L)	2
1,2-DICHLOROETHANE (UG/L)	0
1,1-DICHLOROETHENE (UG/L)	3
1,2-DICHLOROETHENE (UG/L)	1
TRANS-1,2-DICHLOROETHENE (UG/L)	0
1,2-DICHLOROPROPANE (UG/L)	0
CIS-1,3-DICHLOROPROPENE (UG/L)	0
TRANS-1,3-DICHLOROPROPENE (UG/L)	0
ETHYLBENZENE (UG/L)	0
2-HEXANONE (UG/L)	0
4-METHYL-2-PENTANONE (UG/L)	0
METHYLENE CHLORIDE (UG/L)	0
STYRENE (UG/L)	0
1,1,2,2-TETRACHLOROETHANE (UG/L)	0
TETRACHLOROETHENE (UG/L)	4
TOLUENE (UG/L)	4
1,1,1-TRICHLOROETHANE (UG/L)	5
1,1,2-TRICHLOROETHANE (UG/L)	0
TRICHLOROETHENE (UG/L)	2
VINYL ACETATE (UG/L)	0
VINYL CHLORIDE (UG/L)	0
XYLENES (UG/L)	0

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-141 LIV 01/09/95	GW-142 KHQ 01/10/95	GW-142 KHQ 03/20/95	GW-143 KHQ 01/17/95	GW-144 KHQ 01/18/95	GW-144 KHQ 03/22/95	GW-145 KHQ 01/18/95	GW-145 KHQ 03/24/95	GW-146 KHQ 01/17/95	GW-146 KHQ 03/23/95
ACETONE	10U	10U	.	10U	8 JB	.	10U	.	10U	.
BENZENE	10U	10U	.	10U	10U	.	10U	.	10U	.
BROMODICHLOROMETHANE	10U	10U	.	10U	10U	.	10U	.	10U	.
BROMOFORM	10U	10U	.	10U	10U	.	10U	.	10U	.
BROMOMETHANE	10U	10U	.	10U	10U	.	10U	.	10U	.
2-BUTANONE	10U	10U	.	10U	9 JB	.	5 JB	.	10U	.
CARBON DISULFIDE	10U	10U	.	10U	10U	.	10U	.	10U	.
CARBON TETRACHLORIDE	10U	10U	.	10U	3 J	.	10U	.	10U	.
CHLOROBENZENE	10U	10U	.	10U	10U	.	10U	.	10U	.
CHLORODIBROMOMETHANE	10U	10U	.	10U	10U	.	10U	.	10U	.
CHLOROETHANE	10U	10U	.	10U	10U	.	10U	.	10U	.
CHLOROFORM	10U	10U	.	10U	10U	.	10U	.	10U	.
CHLOROMETHANE	10U	10U	.	10U	10U	.	10U	.	10U	.
1,1-DICHLOROETHANE	10U	10U	.	10U	10U	.	10U	.	10U	.
1,2-DICHLOROETHANE	10U	10U	.	10U	10U	.	10U	.	10U	.
1,1-DICHLOROETHENE	10U	10U	.	10U	10U	.	10U	.	10U	.
1,2-DICHLOROETHENE	10U	10U	.	10U	10U	.	10U	.	10U	.
TRANS-1,2-DICHLOROETHENE	10U	10U	.	10U	10U	.	10U	.	10U	.
1,2-DICHLOROPROPANE	10U	10U	.	10U	10U	.	10U	.	10U	.
CIS-1,3-DICHLOROPROPENE	10U	10U	.	10U	10U	.	10U	.	10U	.
TRANS-1,3-DICHLOROPROPENE	10U	10U	.	10U	10U	.	10U	.	10U	.
ETHYLBENZENE	10U	10U	.	10U	10U	.	10U	.	10U	.
2-HEXANONE	10U	10U	.	10U	10U	.	10U	.	10U	.
4-METHYL-2-PENTANONE	10U	10U	.	10U	10U	.	10U	.	10U	.
METHYLENE CHLORIDE	10U	10U	.	10U	10U	.	10U	.	10U	.
STYRENE	10U	10U	.	10U	10U	.	10U	.	10U	.
1,1,2,2-TETRACHLOROETHANE	10U	10U	.	10U	10U	.	10U	.	10U	.
TETRACHLOROETHENE	10U	10U	.	10U	1 J	.	10U	.	10U	.
TOLUENE	10U	10U	.	10U	6 JB	.	6 JB	.	10U	.
1,1,1-TRICHLOROETHANE	10U	10U	.	10U	10U	.	10U	.	10U	.
1,1,2-TRICHLOROETHANE	10U	10U	.	10U	10U	.	10U	.	10U	.
TRICHLOROETHENE	10U	10U	.	10U	10U	.	10U	.	10U	.
VINYL ACETATE	10U	10U	.	10U	10U	.	10U	.	10U	.
VINYL CHLORIDE	10U	10U	.	10U	10U	.	10U	.	10U	.
XYLENES	10U	10U	.	10U	10U	.	10U	.	10U	.

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-147 KHQ 01/15/95	GW-156 CRSDB 01/18/95	GW-158 CRSDB 01/20/95	GW-159 CRSDB 01/15/95	GW-175 CRSP 02/14/95	GW-177 CRSP 02/13/95	GW-181 CRSP 01/24/95	GW-217 LIV 01/04/95	GW-231 KHQ 01/15/95	GW-241 CRSDB 01/20/95
ACETONE (UG/L)	10U	10U	10U	10U	10	10U	8 JB 10U	10U	10U	10U
BENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE (UG/L)	10U	10U	10U	10U	10U	10U	8 JB 10U	10U	10U	10U
CARBON DISULFIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROIBROMOMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	13	10U	10U	10U	10U
1,1-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	2 J	10U	10U	10U	10U
1,2-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
ETHYLBENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
STYRENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE (UG/L)	10U	10U	10U	10U	10U	10U	8 JB 10U	10U	10U	10U
1,1,1-TRICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	16	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL ACETATE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
XYLENES (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-303 CRSDB 01/19/95	GW-304 CRSDB 01/15/95	GW-305 LIV 01/10/95	GW-321 ADB 01/10/95	GW-511 CRSP 01/24/95	GW-521 LIV 01/09/95	GW-522 LIV 01/10/95	GW-539 LIV 01/04/95	GW-608 CRSP 02/02/95	GW-609 CRSP 02/15/95
ACETONE	10U	10U	10U	.	5 JB	10U	10U	10U	10U	7 J
BENZENE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
BROMOFORM	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
BROMOMETHANE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
2-BUTANONE	10U	10U	10U	.	10 B	10U	10U	10U	10U	10
CARBON DISULFIDE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
CHLOROBENZENE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
CHLOROETHANE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
CHLOROFORM	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
CHLOROMETHANE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE	10U	10U	10U	.	10U	10U	10U	10U	10U	13
TRANS-1,2-DICHLOROETHENE	10U	10U	10U	.	10U	10U	10U	10U	10U	.
1,2-DICHLOROPROPANE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
ETHYLBENZENE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
2-HEXANONE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
STYRENE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE	10U	10U	10U	.	10U	10U	10U	10U	10U	13
TOLUENE	10U	10U	10U	.	7 JB	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE	10U	10U	10U	.	10U	10U	10U	10U	10U	1 J
TRICHLOROETHENE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
VINYL ACETATE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE	10U	10U	10U	.	10U	10U	10U	10U	10U	10U
XYLENES	10U	10U	10U	.	10U	10U	10U	10U	10U	10U

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-610 CRSP 01/31/95	GW-611 CRSP 02/14/95	GW-709 LII 01/09/95	GW-731 CRSDB 01/17/95	GW-732 CRSDB 01/18/95	GW-742 CRSP 01/27/95	GW-743 CRSP 01/31/95	GW-757 LII 01/09/95	SCR2.2SP CRSP 03/15/95
ACETONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
BENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE (UG/L)	10U	10 B	10U	10U	10U	10U	10U	10U	10U
CARBON DISULFIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE (UG/L)	10U	1 J	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE (UG/L)	10U	1 J	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
ETHYLBENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
STYRENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE (UG/L)	10U	5 J	10U	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL ACETATE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
XYLENES (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U

APPENDIX E.2
SUMMARY OF VOCs DETECTED IN GROUNDWATER AND SURFACE WATER SAMPLES

Total Samples 67
Samples without VOCs 50
Samples with VOCs 17

COMPOUND	SECOND QUARTER
ACETONE	5
BENZENE	0
BROMODICHLOROMETHANE	0
BROMOFORM	0
BROMOMETHANE	0
2-BUTANONE	0
CARBON DISULFIDE	0
CARBON TETRACHLORIDE	1
CHLOROBENZENE	0
CHLORODIBROMOMETHANE	0
CHLOROETHANE	0
CHLOROFORM	1
CHLOROMETHANE	0
1,1-DICHLOROETHANE	1
1,2-DICHLOROETHANE	0
1,1-DICHLOROETHENE	1
1,2-DICHLOROETHENE	1
TRANS-1,2-DICHLOROETHENE	0
1,2-DICHLOROPROPANE	0
CIS-1,3-DICHLOROPROPENE	0
TRANS-1,3-DICHLOROPROPENE	0
ETHYLBENZENE	0
2-HEXANONE	0
4-METHYL-2-PENTANONE	0
METHYLENE CHLORIDE	6
STYRENE	0
1,1,2,2-TETRACHLOROETHANE	0
TETRACHLOROETHENE	2
TOLUENE	0
1,1,1-TRICHLOROETHANE	4
1,1,2-TRICHLOROETHANE	0
TRICHLOROETHENE	1
VINYL ACETATE	0
VINYL CHLORIDE	0
XYLENES	0

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	UNCS 1090 04/20/95	CBS-1 LV 04/17/95	GW-142 KHQ 04/20/95	GW-143 KHQ 04/24/95	GW-144 KHQ 04/25/95	GW-145 KHQ 04/26/95	GW-146 KHQ 04/24/95	GW-147 KHQ 04/21/95	GW-156 CRSDB 04/07/95	GW-158 CRSDB 04/13/95
ACETONE	10U	10U	10U	10U	10U	10U	4 JB	10U	10U	10U
BENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON DISULFIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
ETHYLBENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
STYRENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL ACETATE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
XYLENES	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-159 CRSDB 04/06/95	GW-160 CRBAMP 04/26/95	GW-161 CRBAMP 04/20/95	GW-175 CRSP 05/15/95	GW-177 CRSP 05/11/95	GW-181 CRSP 05/02/95	GW-184 RQ 05/01/95	GW-186 RQ 05/03/95	GW-187 RQ 05/02/95	GW-188 RQ 05/01/95
ACETONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON DISULFIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
ETHYLBENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
STYRENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL ACETATE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
XYLENES	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-203 UNCS 04/18/95	GW-205 UNCS 04/18/95	GW-221 UNCS 04/19/95	GW-231 KHQ 04/21/95	GW-241 CRSDB 04/09/95	GW-292 ECRWP 04/24/95	GW-293 ECRWP 04/23/95	GW-294 ECRWP 04/22/95	GW-295 CRBAWP 05/03/95	GW-296 ECRWP 04/22/95
ACETONE (UG/L)	11 B	10U	10U	10U	10U	10U	10U	15 B	10U	10U
BENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON DISULFIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
ETHYLBENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
STYRENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL ACETATE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
XYLENES (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GM-298 CRBAMP 05/02/95	GM-299 CRBAMP 05/01/95	GM-300 CRBAMP 04/27/95	GM-301 CRBAMP 04/27/95	GM-302 UNCS 04/19/95	GM-303 CRSDB 04/09/95	GM-304 CRSDB 04/06/95	GM-321 ADB 04/25/95	GM-339 UNCS 04/19/95	GM-511 CRSP 05/03/95
ACETONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	2 J
BENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON DISULFIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
ETHYLBENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
STYRENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL ACETATE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
XYLENES	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-512 ADB 04/26/95	GW-513 ADB 04/25/95	GW-514 ADB 04/27/95	GW-540 CDLVI 04/04/95	GW-541 CDLVI 04/05/95	GW-542 CDLVI 04/06/95	GW-543 CDLVI 04/06/95	GW-544 CDLVI 04/06/95	GW-546 CDLVI 04/05/95	GW-557 LV 04/06/95
ACETONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON DISULFIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
ETHYLBENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
STYRENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL ACETATE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
XYLENES (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GH-560 CDLVII 04/05/95	GH-562 CDLVII 04/05/95	GH-564 CDLVII 04/06/95	GH-608 CRSP 05/11/95	GH-609 CRSP 05/16/95	GH-610 CRSP 05/07/95	GH-611 CRSP 05/15/95	GH-731 CRSDB 04/07/95	GH-732 CRSDB 04/07/95	GH-742 CRSP 05/07/95
ACETONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON DISULFIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE	10U	10U	10U	10U	13	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
ETHYLBENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE	10U	10U	3 JB	10U	10U	10U	10U	10U	10U	10U
STYRENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE	10U	10U	10U	10U	19	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE	10U	10U	10U	10U	2 J	10U	10U	10U	10U	10U
VINYL ACETATE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
XYLENES	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-743 CRSP 05/07/95	GW-796 LV 04/12/95	GW-797 LV 04/11/95	GW-798 CDLVI 04/11/95	GW-799 LV 04/06/95	GW-801 LV 04/13/95	GW-827 CDLVI 04/05/95
ACETONE	10U	10U	21	10U	10U	10U	10U
BENZENE	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U
BROMOFORM	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE	10U	10U	10U	10U	10U	10U	10U
CARBON DISULFIDE	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U
ETHYLBENZENE	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE	10U	10U	10U	10U	10U	10U	10U
STYRENE	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE	10U	10U	10U	10U	10U	10U	10U
TOLUENE	10U	10U	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U
VINYL ACETATE	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE	10U	10U	10U	10U	10U	10U	10U
XYLENES	10U	10U	10U	10U	10U	10U	10U

APPENDIX E.2
SUMMARY OF VOCs DETECTED IN GROUNDWATER AND SURFACE WATER SAMPLES

Total Samples 34
Samples without VOCs 27
Samples with VOCs 7

COMPOUND	THIRD QUARTER
ACETONE	0
BENZENE	0
BROMODICHLOROMETHANE	0
BROMOFORM	0
BROMOMETHANE	0
2-BUTANONE	0
CARBON DISULFIDE	0
CARBON TETRACHLORIDE	0
CHLOROBENZENE	0
CHLORODIBROMOMETHANE	0
CHLOROETHANE	0
CHLOROFORM	0
CHLOROMETHANE	0
1,1-DICHLOROETHANE	2
1,2-DICHLOROETHANE	0
1,1-DICHLOROETHENE	2
1,2-DICHLOROETHENE	1
TRANS-1,2-DICHLOROETHENE	0
1,2-DICHLOROPROPANE	0
CIS-1,3-DICHLOROPROPENE	0
TRANS-1,3-DICHLOROPROPENE	0
ETHYLBENZENE	0
2-HEXANONE	0
4-METHYL-2-PENTANONE	0
METHYLENE CHLORIDE	0
STYRENE	0
1,1,2,2-TETRACHLOROETHANE	0
TETRACHLOROETHENE	4
TOLUENE	0
1,1,1-TRICHLOROETHANE	5
1,1,2-TRICHLOROETHANE	0
TRICHLOROETHENE	1
VINYL ACETATE	0
VINYL CHLORIDE	0
XYLENES	0

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-141 LIV 07/10/95	GW-142 KHQ 07/14/95	GW-143 KHQ 07/16/95	GW-144 KHQ 07/16/95	GW-145 KHQ 07/17/95	GW-146 KHQ 07/17/95	GW-147 KHQ 07/14/95	GW-156 CRSDB 07/13/95	GW-158 CRSDB 07/18/95	GW-159 CRSDB 07/12/95
ACETONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON DISULFIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
ETHYLBENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
STYRENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL ACETATE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
XYLENES	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-175 CRSP 08/01/95	GW-177 CRSP 08/01/95	GW-181 CRSP 07/28/95	GW-217 LIV 07/10/95	GW-231 KHQ 07/15/95	GW-241 CRSDB 07/16/95	GW-303 CRSDB 07/16/95	GW-304 CRSDB 07/12/95	GW-305 LIV 07/12/95	GW-511 CRSP 07/29/95
ACETONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON DISULFIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE	10U	11	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE	10U	3 J	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
ETHYLBENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
STYRENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE	21	10U	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE	5 J	17	10U	10U	10U	10U	10U	10U	6 J	10U
1,1,2-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL ACETATE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
XYLENES	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-521 LIV 07/11/95	GW-522 LIV 07/12/95	GW-539 LII 07/10/95	GW-608 CRSP 07/31/95	GW-609 CRSP 08/01/95	GW-610 CRSP 07/31/95	GW-611 CRSP 08/01/95	GW-709 LII 07/10/95	GW-731 CRSDB 07/13/95
ACETONE	10U	10U	10U	10U	10U	10U	10U	10U	10U
BENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON DISULFIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE	10U	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U	10U
ETHYLBENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U
STYRENE	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL ACETATE	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U
XYLENES	10U	10U	10U	10U	10U	10U	10U	10U	10U

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-732 CRSDB 07/13/95	GW-732 CRSDB 08/14/95	GW-742 CRSP 07/30/95	GW-743 CRSP 07/31/95	GW-757 LII 07/11/95
ACETONE	10U (UG/L)	.	10U	10U	10U
BENZENE	10U (UG/L)	.	10U	10U	10U
BROMODICHLOROMETHANE	10U (UG/L)	.	10U	10U	10U
BROMOFORM	10U (UG/L)	.	10U	10U	10U
BROMOMETHANE	10U (UG/L)	.	10U	10U	10U
2-BUTANONE	10U (UG/L)	.	10U	10U	10U
CARBON DISULFIDE	10U (UG/L)	.	10U	10U	10U
CARBON TETRACHLORIDE	10U (UG/L)	.	10U	10U	10U
CHLOROBENZENE	10U (UG/L)	.	10U	10U	10U
CHLORODIBROMOMETHANE	10U (UG/L)	.	10U	10U	10U
CHLOROETHANE	10U (UG/L)	.	10U	10U	10U
CHLOROFORM	10U (UG/L)	.	10U	10U	10U
CHLOROMETHANE	10U (UG/L)	.	10U	10U	10U
1,1-DICHLOROETHANE	10U (UG/L)	.	10U	10U	10U
1,2-DICHLOROETHANE	10U (UG/L)	.	10U	10U	10U
1,1-DICHLOROETHENE	10U (UG/L)	.	10U	10U	10U
1,2-DICHLOROETHENE	10U (UG/L)	.	10U	10U	10U
TRANS-1,2-DICHLOROETHENE	10U (UG/L)	.	10U	10U	10U
1,2-DICHLOROPROPANE	10U (UG/L)	.	10U	10U	10U
CIS-1,3-DICHLOROPROPENE	10U (UG/L)	.	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE	10U (UG/L)	.	10U	10U	10U
ETHYLBENZENE	10U (UG/L)	.	10U	10U	10U
2-HEXANONE	10U (UG/L)	.	10U	10U	10U
4-METHYL-2-PENTANONE	10U (UG/L)	.	10U	10U	10U
METHYLENE CHLORIDE	10U (UG/L)	.	10U	10U	10U
STYRENE	10U (UG/L)	.	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE	10U (UG/L)	.	10U	10U	10U
TETRACHLOROETHENE	10U (UG/L)	.	10U	10U	10U
TOLUENE	10U (UG/L)	.	10U	10U	10U
1,1,1-TRICHLOROETHANE	10U (UG/L)	.	10U	10U	10U
1,1,2-TRICHLOROETHANE	10U (UG/L)	.	10U	10U	10U
TRICHLOROETHENE	10U (UG/L)	.	10U	10U	10U
VINYL ACETATE	10U (UG/L)	.	10U	10U	10U
VINYL CHLORIDE	10U (UG/L)	.	10U	10U	10U
XYLENES	10U (UG/L)	.	10U	10U	10U

APPENDIX E.2
SUMMARY OF VOCs DETECTED IN GROUNDWATER AND SURFACE WATER SAMPLES

Total Samples 77
Samples without VOCs 59
Samples with VOCs 18

COMPOUND	FOURTH QUARTER
ACETONE (UG/L)	1
BENZENE (UG/L)	0
BROMODICHLOROMETHANE (UG/L)	0
BROMOFORM (UG/L)	0
BROMOMETHANE (UG/L)	0
2-BUTANONE (UG/L)	8
CARBON DISULFIDE (UG/L)	0
CARBON TETRACHLORIDE (UG/L)	3
CHLOROBENZENE (UG/L)	0
CHLORODIBROMOMETHANE (UG/L)	0
CHLOROETHANE (UG/L)	0
CHLOROFORM (UG/L)	0
CHLOROMETHANE (UG/L)	0
1,1-DICHLOROETHANE (UG/L)	2
1,2-DICHLOROETHANE (UG/L)	0
1,1-DICHLOROETHENE (UG/L)	2
1,2-DICHLOROETHENE (UG/L)	1
TRANS-1,2-DICHLOROETHENE (UG/L)	0
1,2-DICHLOROPROPANE (UG/L)	0
CIS-1,3-DICHLOROPROPENE (UG/L)	0
TRANS-1,3-DICHLOROPROPENE (UG/L)	0
ETHYLBENZENE (UG/L)	5
2-HEXANONE (UG/L)	0
4-METHYL-2-PENTANONE (UG/L)	0
METHYLENE CHLORIDE (UG/L)	2
STYRENE (UG/L)	0
1,1,2,2-TETRACHLOROETHANE (UG/L)	0
TETRACHLOROETHENE (UG/L)	3
TOLUENE (UG/L)	0
1,1,1-TRICHLOROETHANE (UG/L)	5
1,1,2-TRICHLOROETHANE (UG/L)	0
TRICHLOROETHENE (UG/L)	1
VINYL ACETATE (UG/L)	0
VINYL CHLORIDE (UG/L)	0
XYLENES (UG/L)	5

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	1090 UNCS 10/09/95	CBS-1 LV 10/11/95	GW-142 KHQ 11/05/95	GW-143 KHQ 11/09/95	GW-144 KHQ 11/14/95	GW-145 KHQ 11/15/95	GW-146 KHQ 11/08/95	GW-147 KHQ 11/06/95
ACETONE	10U	10U	10U	10U	10U	10U	10U	10U
BENZENE	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE	8 JB	10U	10U	10U	10U	10U	10U	10U
CARBON DISULFIDE	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE	10U	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U
ETHYLBENZENE	4 JB	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE	1 J	10U	10U	10U	10U	10U	10U	10U
STYRENE	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U
VINYL ACETATE	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U
XYLENES	14 B	10U	10U	10U	10U	10U	10U	10U

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-156 CRSDB 10/23/95	GW-156 CRSDB 10/24/95	GW-156 CRSDB 10/25/95	GW-156 CRSDB 10/26/95	GW-159 CRSDB 10/23/95	GW-159 CRSDB 10/24/95	GW-159 CRSDB 10/25/95	GW-159 CRSDB 10/26/95	GW-160 CRBAMP 11/02/95	GW-161 CRBAMP 10/31/95
ACETONE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
BENZENE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
BROMODICHLOROMETHANE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
BROMOFORM (UG/L)	.	.	.	.	.	.	.	.	10U	10U
BROMOMETHANE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
2-BUTANONE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
CARBON DISULFIDE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
CARBON TETRACHLORIDE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
CHLOROBENZENE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
CHLORODIBROMOMETHANE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
CHLOROETHANE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
CHLOROFORM (UG/L)	.	.	.	.	.	.	.	.	10U	10U
CHLOROMETHANE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
1,1-DICHLOROETHANE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
1,2-DICHLOROETHANE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
1,1-DICHLOROETHENE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
1,2-DICHLOROETHENE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
TRANS-1,2-DICHLOROETHENE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
1,2-DICHLOROPROPANE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
CIS-1,3-DICHLOROPROPENE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
TRANS-1,3-DICHLOROPROPENE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
ETHYLBENZENE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
2-HEXANONE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
4-METHYL-2-PENTANONE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
METHYLENE CHLORIDE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
STYRENE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
1,1,2,2-TETRACHLOROETHANE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
TETRACHLOROETHENE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
TOLUENE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
1,1,1-TRICHLOROETHANE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
1,1,2-TRICHLOROETHANE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
TRICHLOROETHENE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
VINYL ACETATE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
VINYL CHLORIDE (UG/L)	.	.	.	.	.	.	.	.	10U	10U
XYLENES (UG/L)	.	.	.	.	.	.	.	.	10U	10U

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-175 CRSP 11/17/95	GW-177 CRSP 11/16/95	GW-181 CRSP 11/05/95	GW-184 RQ 10/31/95	GW-186 RQ 11/03/95	GW-187 RQ 11/02/95	GW-188 RQ 10/31/95	GW-203 UNCS 10/07/95	GW-205 UNCS 10/07/95	GW-221 UNCS 10/08/95
ACETONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	9 JB
CARBON DISULFIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE	10U	2 J	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE	10U	17	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE	10U	3 J	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	3 JB
ETHYLBENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
STYRENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE	15	10U	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE	4 J	20	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL ACETATE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
XYLENES	10U	10U	10U	10U	10U	10U	10U	10U	10U	12 B

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-231 KHQ 11/06/95	GW-292 ECRWP 11/06/95	GW-293 ECRWP 11/06/95	GW-294 ECRWP 11/05/95	GW-296 ECRWP 11/05/95	GW-298 CRBAMP 11/04/95	GW-299 CRBAMP 11/03/95	GW-300 CRBAMP 11/03/95	GW-301 CRBAMP 11/03/95	GW-302 UNCS 10/08/95
ACETONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE (UG/L)	10 ^J	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON DISULFIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
ETHYLBENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
STYRENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL ACETATE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
XYLENES (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	11 B

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-321 ADB 10/26/95	GW-339 UNCS 10/08/95	GW-511 CRSP 11/07/95	GW-512 ADB 10/31/95	GW-513 ADB 10/31/95	GW-514 ADB 11/02/95	GW-539 LII 10/06/95	GW-540 CDLVI 10/11/95	GW-541 CDLVI 10/12/95	GW-542 CDLVI 10/16/95
ACETONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON DISULFIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
ETHYLBENZENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
STYRENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL ACETATE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
XYLENES	10U	11 B	10U	10U	10U	10U	10U	10U	10U	10U

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-543 CDLVI 10/17/95	GW-544 CDLVI 10/17/95	GW-546 CDLVI 10/11/95	GW-557 LV 10/07/95	GW-560 CDLVI 10/06/95	GW-562 CDLVI 10/06/95	GW-564 CDLVI 10/07/95	GW-608 CRSP 11/16/95	GW-609 CRSP 11/20/95	GW-610 CRSP 11/13/95
ACETONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON DISULFIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
ETHYLBENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
STYRENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL ACETATE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U
XYLENES (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-611 CRSP 11/17/95	GW-709 LII 10/06/95	GW-731 CRSDB 10/23/95	GW-731 CRSDB 10/24/95	GW-731 CRSDB 10/25/95	GW-732 CRSDB 10/26/95	GW-732 CRSDB 10/23/95	GW-732 CRSDB 10/24/95	GW-732 CRSDB 10/25/95	GW-732 CRSDB 10/26/95
ACETONE	10U	10U								
BENZENE	10U	10U								
BROMODICHLOROMETHANE	10U	10U								
BROMOFORM	10U	10U								
BROMOMETHANE	10U	10U								
2-BUTANONE	10U	8 JB								
CARBON DISULFIDE	10U	10U								
CARBON TETRACHLORIDE	1 J	10U								
CHLOROBENZENE	10U	10U								
CHLORODIBROMOMETHANE	10U	10U								
CHLOROETHANE	10U	10U								
CHLOROFORM	10U	10U								
CHLOROMETHANE	10U	10U								
1,1-DICHLOROETHANE	2 J	10U								
1,2-DICHLOROETHANE	10U	10U								
1,1-DICHLOROETHENE	10U	10U								
1,2-DICHLOROETHENE	2 J	10U								
TRANS-1,2-DICHLOROETHENE	10U	10U								
1,2-DICHLOROPROPANE	10U	10U								
CIS-1,3-DICHLOROPROPENE	10U	10U								
TRANS-1,3-DICHLOROPROPENE	10U	10U								
ETHYLBENZENE	10U	10U								
2-HEXANONE	10U	10U								
4-METHYL-2-PENTANONE	10U	10U								
METHYLENE CHLORIDE	10U	10U								
STYRENE	10U	10U								
1,1,2,2-TETRACHLOROETHANE	10U	10U								
TETRACHLOROETHENE	10U	10U								
TOLUENE	10U	10U								
1,1,1-TRICHLOROETHANE	12	10U								
1,1,2-TRICHLOROETHANE	10U	10U								
TRICHLOROETHENE	10U	10U								
VINYL ACETATE	10U	10U								
VINYL CHLORIDE	10U	10U								
XYLENES	10U	10U								

APPENDIX E.2
VOLATILE ORGANIC COMPOUNDS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-742 CRSP 11/09/95	GW-743 CRSP 11/13/95	GW-757 LII 10/06/95	GW-796 LV 10/08/95	GW-797 LV 10/08/95	GW-798 CDLVI 10/08/95	GW-799 LV 10/07/95	GW-801 LV 10/09/95	GW-827 CDLVI 10/16/95
ACETONE (UG/L)	10U	8 J 10U	10U	10U	10U	10U	10U	10U	10U
BENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE (UG/L)	10U	10U	9 JB 10U	9 JB 10U	10U	10U	10U	10U	10U
CARBON DISULFIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
ETHYLBENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
STYRENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL ACETATE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
XYLENES (UG/L)	10U	10U	10U	11 B 10U	10U	10U	10U	10U	10U

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-141 LIV 01/09/95	GW-142 KHQ 01/10/95	GW-142 KHQ 03/20/95	GW-143 KHQ 01/17/95	GW-144 KHQ 01/18/95	GW-144 KHQ 03/22/95	GW-145 KHQ 01/18/95	GW-145 KHQ 03/24/95	GW-146 KHQ 01/17/95	GW-146 KHQ 03/23/95
ACROLEIN	50U	.	.	.	.	.	.	.	.	.
ACRYLONITRILE	50U	.	.	.	.	.	.	.	.	.
BROMOCHLOROMETHANE	10U	.	.	.	.	.	.	.	.	.
2-CHLOROETHYL VINYL ETHER	10U	.	.	.	.	.	.	.	.	.
DIBROMOMETHANE	5U	.	.	.	.	.	.	.	.	.
1,2-DIBROMO-3-CHLOROPROPANE	10U	.	.	.	.	.	.	.	.	.
1,2-DICHLOROBENZENE	10U	.	.	.	.	.	.	.	.	.
1,4-DICHLOROBENZENE	10U	.	.	.	.	.	.	.	.	.
DICHLORODIFLUOROMETHANE	5U	.	.	.	.	.	.	.	.	.
CIS-1,2-DICHLOROETHENE	10U	.	.	.	.	.	.	.	.	.
1,4-DICHLORO-2-BUTENE	5U	.	.	.	.	.	.	.	.	.
ETHANOL	780 JB	.	.	.	.	.	.	.	.	.
ETHYL METHACRYLATE	5U	.	.	.	.	.	.	.	.	.
IODOMETHANE	5U	.	.	.	.	.	.	.	.	.
1,1,1,2-TETRACHLOROETHANE	10U	.	.	.	.	.	.	.	.	.
TRICHLOROFLUOROMETHANE	5U	.	.	.	.	.	.	.	.	.
1,2,3-TRICHLOROPROPANE	5U	.	.	.	.	.	.	.	.	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-147 KHQ 01/15/95	GW-156 CRSDB 01/18/95	GW-158 CRSDB 01/20/95	GW-159 CRSDB 01/15/95	GW-175 CRSP 02/14/95	GW-177 CRSP 02/13/95	GW-181 CRSP 01/24/95	GW-217 LIV 01/04/95	GW-231 KHQ 01/15/95	GW-241 CRSDB 01/20/95
ACROLEIN (UG/L)	.	.	.	.	.	.	.	50U	.	.
ACRYLONITRILE (UG/L)	.	.	.	.	.	.	.	50U	.	.
BROMOCHLOROMETHANE (UG/L)	.	.	.	.	.	.	.	10U	.	.
2-CHLOROETHYL VINYL ETHER (UG/L)	.	.	.	.	.	.	.	10U	.	.
DIBROMOMETHANE (UG/L)	.	.	.	.	.	.	.	5U	.	.
1,2-DIBROMO-3-CHLOROPROPANE (UG/L)	.	.	.	.	.	.	.	10U	.	.
1,2-DICHLOROBENZENE (UG/L)	.	.	.	.	.	.	.	10U	.	.
1,4-DICHLOROBENZENE (UG/L)	.	.	.	.	.	.	.	10U	.	.
DICHLORODIFLUOROMETHANE (UG/L)	.	.	.	.	.	.	.	5U	.	.
CIS-1,2-DICHLOROETHENE (UG/L)	.	.	.	.	.	.	.	10U	.	.
1,4-DICHLORO-2-BUTENE (UG/L)	.	.	.	.	.	.	.	5U	.	.
ETHANOL (UG/L)	.	.	.	.	.	.	.	5U	.	.
ETHYL METHACRYLATE (UG/L)	.	.	.	.	.	.	.	940 JB	.	.
IODOMETHANE (UG/L)	.	.	.	.	.	.	.	5U	.	.
1,1,1,2-TETRACHLOROETHANE (UG/L)	.	.	.	.	.	.	.	5U	.	.
TRICHLOROFLUOROMETHANE (UG/L)	.	.	.	.	.	.	.	10U	.	.
1,2,3-TRICHLOROPROPANE (UG/L)	.	.	.	.	.	.	.	5U	.	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-303 CRSDB 01/19/95	GW-304 CRSDB 01/15/95	GW-305 LIV 01/10/95	GW-321 ADB 01/10/95	GW-511 CRSP 01/24/95	GW-521 LIV 01/09/95	GW-522 LIV 01/10/95	GW-539 LII 01/04/95	GW-608 CRSP 02/02/95	GW-609 CRSP 02/15/95
ACROLEIN	.	.	50U	.	.	50U	50U	50U	.	.
ACRYLONITRILE	.	.	50U	.	.	50U	50U	50U	.	.
BROMOCHLOROMETHANE	.	.	10U	.	.	10U	10U	10U	.	.
2-CHLOROETHYL VINYL ETHER	.	.	10U	.	.	10U	10U	10U	.	.
DIBROMOMETHANE	.	.	5U	.	.	5U	5U	5U	.	.
1,2-DIBROMO-3-CHLOROPROPANE	.	.	10U	.	.	10U	10U	10U	.	.
1,2-DICHLOROBENZENE	.	.	10U	.	.	10U	10U	10U	.	.
1,4-DICHLOROBENZENE	.	.	10U	.	.	10U	10U	10U	.	.
DICHLORODIFLUOROMETHANE	.	.	5U	.	.	5U	5U	5U	.	.
CIS-1,2-DICHLOROETHENE	.	.	10U	.	.	10U	10U	10U	.	.
1,4-DICHLORO-2-BUTENE	.	.	5U	.	.	5U	5U	5U	.	.
ETHANOL	.	.	5U	.	.	5U	5U	5U	.	.
ETHYL METHACRYLATE	.	.	940 JB	.	.	1000 JB	820 JB	970 JB	.	.
IODOMETHANE	.	.	5U	.	.	5U	5U	5U	.	.
1,1,1,2-TETRACHLOROETHANE	.	.	5U	.	.	5U	5U	5U	.	.
TRICHLOROFLUOROMETHANE	.	.	10U	.	.	10U	10U	10U	.	.
1,2,3-TRICHLOROPROPANE	.	.	5U	.	.	5U	5U	5U	.	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-610 CRSP 01/31/95	GW-611 CRSP 02/14/95	GW-709 LII 01/09/95	GW-731 CRSDB 01/17/95	GW-732 CRSDB 01/18/95	GW-742 CRSP 01/27/95	GW-743 CRSP 01/31/95	GW-757 LII 01/09/95	SCR2.2SP CRSP 03/15/95
ACROLEIN	(UG/L)	.	50U	.	.	.	.	50U	.
ACRYLONITRILE	(UG/L)	.	50U	.	.	.	.	50U	.
BROMOCHLOROMETHANE	(UG/L)	.	10U	.	.	.	.	10U	.
2-CHLOROETHYL VINYL ETHER	(UG/L)	.	10U	.	.	.	.	10U	.
DIBROMOMETHANE	(UG/L)	.	5U	.	.	.	.	5U	.
1,2-DIBROMO-3-CHLOROPROPANE	(UG/L)	.	10U	.	.	.	.	10U	.
1,2-DICHLOROBENZENE	(UG/L)	.	10U	.	.	.	.	10U	.
1,4-DICHLOROBENZENE	(UG/L)	.	10U	.	.	.	.	10U	.
DICHLORODIFLUOROMETHANE	(UG/L)	.	5U	.	.	.	.	5U	.
CIS-1,2-DICHLOROETHENE	(UG/L)	.	10U	.	.	.	.	10U	.
1,4-DICHLORO-2-BUTENE	(UG/L)	.	5U	.	.	.	.	5U	.
ETHANOL	(UG/L)	.	470 JB	.	.	.	.	750 JB	.
ETHYL METHACRYLATE	(UG/L)	.	5U	.	.	.	.	5U	.
IODOMETHANE	(UG/L)	.	5U	.	.	.	.	5U	.
1,1,1,2-TETRACHLOROETHANE	(UG/L)	.	10U	.	.	.	.	10U	.
TRICHLOROFLUOROMETHANE	(UG/L)	.	5U	.	.	.	.	5U	.
1,2,3-TRICHLOROPROPANE	(UG/L)	.	5U	.	.	.	.	5U	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	1090 UNCS 04/20/95	CBS-1 LV 04/17/95	GW-142 KHQ 04/20/95	GW-143 KHQ 04/24/95	GW-144 KHQ 04/25/95	GW-145 KHQ 04/26/95	GW-146 KHQ 04/24/95	GW-147 KHQ 04/21/95	GW-156 CRSDB 04/07/95	GW-158 CRSDB 04/13/95
ACROLEIN (UG/L)	.	50U	.	.	.	.	.	.	.	.
ACRYLONITRILE (UG/L)	.	50U	.	.	.	.	.	.	.	.
BROMOCHLOROMETHANE (UG/L)	.	10U	.	.	.	.	.	.	.	.
2-CHLOROETHYL VINYL ETHER (UG/L)	.	10U	.	.	.	.	.	.	.	.
DIBROMOMETHANE (UG/L)	.	5U	.	.	.	.	.	.	.	.
1,2-DIBROMO-3-CHLOROPROPANE (UG/L)	.	10U	.	.	.	.	.	.	.	.
1,2-DICHLOROBENZENE (UG/L)	.	10U	.	.	.	.	.	.	.	.
1,4-DICHLOROBENZENE (UG/L)	.	10U	.	.	.	.	.	.	.	.
DICHLORO DI FLUOROMETHANE (UG/L)	.	5U	.	.	.	.	.	.	.	.
CIS-1,2-DICHLOROETHENE (UG/L)	.	10U	.	.	.	.	.	.	.	.
1,4-DICHLORO-2-BUTENE (UG/L)	.	5U	.	.	.	.	.	.	.	.
ETHANOL (UG/L)	.	10000U	.	.	.	.	.	.	.	.
ETHYL METHACRYLATE (UG/L)	.	5U	.	.	.	.	.	.	.	.
IODOMETHANE (UG/L)	.	5U	.	.	.	.	.	.	.	.
1,1,1,2-TETRACHLOROETHANE (UG/L)	.	10U	.	.	.	.	.	.	.	.
TRICHLOROFLUOROMETHANE (UG/L)	.	5U	.	.	.	.	.	.	.	.
1,2,3-TRICHLOROPROPANE (UG/L)	.	5U	.	.	.	.	.	.	.	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-159 CRSDB 04/06/95	GW-160 CRBAMP 04/26/95	GW-161 CRBAMP 04/20/95	GW-175 CRSP 05/15/95	GW-177 CRSP 05/11/95	GW-181 CRSP 05/02/95	GW-184 RQ 05/01/95	GW-186 RQ 05/03/95	GW-187 RQ 05/02/95	GW-188 RQ 05/01/95
ACROLEIN (UG/L)	.	50U	50U	.	.	.	.	.	.	.
ACRYLONITRILE (UG/L)	.	50U	50U	.	.	.	.	.	.	.
BROMOCHLOROMETHANE (UG/L)	.	.	.	.	.	.	.	.	.	.
2-CHLOROETHYL VINYL ETHER (UG/L)	.	10U	10U	.	.	.	.	.	.	.
DIBROMOMETHANE (UG/L)	.	5U	5U	.	.	.	.	.	.	.
1,2-DIBROMO-3-CHLOROPROPANE (UG/L)	.	.	.	.	.	.	.	.	.	.
1,2-DICHLOROBENZENE (UG/L)	.	.	.	.	.	.	.	.	.	.
1,4-DICHLOROBENZENE (UG/L)	.	5U	5U	.	.	.	.	.	.	.
DICHLORODIFLUOROMETHANE (UG/L)	.	.	.	.	.	.	.	.	.	.
CIS-1,2-DICHLOROETHENE (UG/L)	.	5U	5U	.	.	.	.	.	.	.
1,4-DICHLORO-2-BUTENE (UG/L)	.	5U	5U	.	.	.	.	.	.	.
ETHANOL (UG/L)	.	520 JB	840 JB	.	.	.	.	.	.	.
ETHYL METHACRYLATE (UG/L)	.	5U	5U	.	.	.	.	.	.	.
IODOMETHANE (UG/L)	.	5U	5U	.	.	.	.	.	.	.
1,1,1,2-TETRACHLOROETHANE (UG/L)	.	5U	5U	.	.	.	.	.	.	.
TRICHLOROFLUOROMETHANE (UG/L)	.	5U	5U	.	.	.	.	.	.	.
1,2,3-TRICHLOROPROPANE (UG/L)	.	5U	5U	.	.	.	.	.	.	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-203 UNCS 04/18/95	GW-205 UNCS 04/18/95	GW-221 UNCS 04/19/95	GW-231 KHQ 04/21/95	GW-241 CRSDB 04/09/95	GW-292 ECRWP 04/24/95	GW-293 ECRWP 04/23/95	GW-294 ECRWP 04/22/95	GW-295 CRBAMP 05/03/95	GW-296 ECRWP 04/22/95
ACROLEIN (UG/L)	.	.	.	.	.	.	.	.	50U	.
ACRYLONITRILE (UG/L)	.	.	.	.	.	.	.	.	50U	.
BROMOCHLOROMETHANE (UG/L)	.	.	.	.	.	.	.	.	.	.
2-CHLOROETHYL VINYL ETHER (UG/L)	.	.	.	.	.	.	.	.	10U	.
DIBROMOMETHANE (UG/L)	.	.	.	.	.	.	.	.	5U	.
1,2-DIBROMO-3-CHLOROPROPANE (UG/L)	.	.	.	.	.	.	.	.	.	.
1,2-DICHLOROBENZENE (UG/L)	.	.	.	.	.	.	.	.	.	.
1,4-DICHLOROBENZENE (UG/L)	.	.	.	.	.	.	.	.	.	.
DICHLORODIFLUOROMETHANE (UG/L)	.	.	.	.	.	.	.	.	5U	.
CIS-1,2-DICHLOROETHENE (UG/L)	.	.	.	.	.	.	.	.	.	.
1,4-DICHLORO-2-BUTENE (UG/L)	.	.	.	.	.	.	.	.	5U	.
ETHANOL (UG/L)	.	.	.	.	.	.	.	.	660 JB	.
ETHYL METHACRYLATE (UG/L)	.	.	.	.	.	.	.	.	5U	.
IODOMETHANE (UG/L)	.	.	.	.	.	.	.	.	5U	.
1,1,1,2-TETRACHLOROETHANE (UG/L)	.	.	.	.	.	.	.	.	.	.
TRICHLOROFLUOROMETHANE (UG/L)	.	.	.	.	.	.	.	.	.	.
1,2,3-TRICHLOROPROPANE (UG/L)	.	.	.	.	.	.	.	.	5U	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GM-298 CRBWP 05/02/95	GM-299 CRBWP 05/01/95	GM-300 CRBWP 04/27/95	GM-301 CRBWP 04/27/95	GM-302 UNCS 04/19/95	GM-303 CRSDB 04/09/95	GM-304 CRSDB 04/06/95	GM-321 ADB 04/25/95	GM-339 UNCS 04/19/95	GM-511 CRSP 05/03/95
ACROLEIN (UG/L)	50U	50U	50U	50U	.	.	.	.	.	.
ACRYLONITRILE (UG/L)	50U	50U	50U	50U	.	.	.	.	.	.
BROMOCHLOROMETHANE (UG/L)	.	.	.	.	.	.	.	.	.	.
2-CHLOROETHYL VINYL ETHER (UG/L)	10U	10U	10U	10U	.	.	.	.	.	.
DIBROMOMETHANE (UG/L)	5U	5U	5U	5U	.	.	.	.	.	.
1,2-DIBROMO-3-CHLOROPROPANE (UG/L)	.	.	.	.	.	.	.	.	.	.
1,2-DICHLOROBENZENE (UG/L)	.	.	.	.	.	.	.	.	.	.
1,4-DICHLOROBENZENE (UG/L)	5U	5U	5U	5U	.	.	.	.	.	.
DICHLORO DI FLUOROMETHANE (UG/L)	5U	5U	5U	5U	.	.	.	.	.	.
CIS-1,2-DICHLOROETHENE (UG/L)	5U	5U	5U	5U	.	.	.	.	.	.
1,4-DICHLORO-2-BUTENE (UG/L)	730 JB	830 JB	560 JB	550 JB	.	.	.	.	.	.
ETHANOL (UG/L)	5U	5U	5U	5U	.	.	.	.	.	.
ETHYL METHACRYLATE (UG/L)	5U	5U	5U	5U	.	.	.	.	.	.
IODOMETHANE (UG/L)	5U	5U	5U	5U	.	.	.	.	.	.
1,1,1,2-TETRACHLOROETHANE (UG/L)	5U	5U	5U	5U	.	.	.	.	.	.
TRICHLOROFLUOROMETHANE (UG/L)	5U	5U	5U	5U	.	.	.	.	.	.
1,2,3-TRICHLOROPROPANE (UG/L)	5U	5U	5U	5U	.	.	.	.	.	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-512 ADB 04/26/95	GW-513 ADB 04/25/95	GW-514 ADB 04/27/95	GW-540 CDLVI 04/04/95	GW-541 CDLVI 04/05/95	GW-542 CDLVI 04/06/95	GW-543 CDLVI 04/06/95	GW-544 CDLVI 04/06/95	GW-546 CDLVI 04/05/95	GW-557 LV 04/06/95
ACROLEIN (UG/L)	.	.	.	.	.	.	.	.	.	50U
ACRYLONITRILE (UG/L)	.	.	.	10U	10U	10U	10U	10U	10U	50U
BROMOCHLOROMETHANE (UG/L)	.	.	.	10U	10U	10U	10U	10U	10U	10U
2-CHLOROETHYL VINYL ETHER (UG/L)	.	.	.	10U	10U	10U	10U	10U	10U	5U
DIBROMOMETHANE (UG/L)	.	.	.	10U	10U	10U	10U	10U	10U	10U
1,2-DIBROMO-3-CHLOROPROPANE (UG/L)	.	.	.	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROBENZENE (UG/L)	.	.	.	10U	10U	10U	10U	10U	10U	10U
1,4-DICHLOROBENZENE (UG/L)	.	.	.	10U	10U	10U	10U	10U	10U	5U
DICHLORODIFLUOROMETHANE (UG/L)	.	.	.	10U	10U	10U	10U	10U	10U	10U
CIS-1,2-DICHLOROETHENE (UG/L)	.	.	.	.	.	.	.	.	.	5U
1,4-DICHLORO-2-BUTENE (UG/L)	.	.	.	.	.	.	.	.	.	620 JB
ETHANOL (UG/L)	.	.	.	.	.	.	.	.	.	5U
ETHYL METHACRYLATE (UG/L)	.	.	.	.	.	.	.	.	.	5U
IODOMETHANE (UG/L)	.	.	.	10U	10U	10U	10U	10U	10U	10U
1,1,1,2-TETRACHLOROETHANE (UG/L)	.	.	.	.	.	.	.	.	.	5U
TRICHLOROFLUOROMETHANE (UG/L)	.	.	.	.	.	.	.	.	.	10U
1,2,3-TRICHLOROPROPANE (UG/L)	.	.	.	.	.	.	.	.	.	5U

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-560 CDLVII 04/05/95	GW-562 CDLVII 04/05/95	GW-564 CDLVII 04/06/95	GW-608 CRSP 05/11/95	GW-609 CRSP 05/16/95	GW-610 CRSP 05/07/95	GW-611 CRSP 05/15/95	GW-731 CRSDB 04/07/95	GW-732 CRSDB 04/07/95	GW-742 CRSP 05/07/95
ACROLEIN	50U	50U	50U	.	.	.	.	.	.	.
ACRYLONITRILE	50U	50U	50U	.	.	.	.	.	.	.
BROMOCHLOROMETHANE	10U	10U	10U	.	.	.	.	.	.	.
2-CHLOROETHYL VINYL ETHER	10U	10U	10U	.	.	.	.	.	.	.
DIBROMOMETHANE	5U	5U	5U	.	.	.	.	.	.	.
1,2-DIBROMO-3-CHLOROPROPANE	10U	10U	10U	.	.	.	.	.	.	.
1,2-DICHLOROBENZENE	10U	10U	10U	.	.	.	.	.	.	.
1,4-DICHLOROBENZENE	10U	10U	10U	.	.	.	.	.	.	.
DICHLOROETHYLENE	5U	5U	5U	.	.	.	.	.	.	.
CIS-1,2-DICHLOROETHENE	10U	10U	10U	.	.	.	.	.	.	.
1,4-DICHLORO-2-BUTENE	5U	5U	5U	.	.	.	.	.	.	.
ETHANOL	700 JB	360 JB	560 JB	.	.	.	.	.	.	.
ETHYL METHACRYLATE	5U	5U	5U	.	.	.	.	.	.	.
Iodomethane	5U	5U	5U	.	.	.	.	.	.	.
1,1,1,2-TETRACHLOROETHANE	10U	10U	10U	.	.	.	.	.	.	.
TRICHLOROFLUOROMETHANE	5U	5U	5U	.	.	.	.	.	.	.
1,2,3-TRICHLOROPROPANE	5U	5U	5U	.	.	.	.	.	.	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-743 CRSP 05/07/95	GW-796 LV 04/12/95	GW-797 LV 04/11/95	GW-798 CDLVI 04/11/95	GW-799 LV 04/06/95	GW-801 LV 04/13/95	GW-827 CDLVI 04/05/95
ACROLEIN	.	50U	50U	50U	50U	50U	.
ACRYLONITRILE	.	50U	50U	50U	50U	50U	.
BROMOCHLOROMETHANE	.	10U	10U	10U	10U	10U	10U
2-CHLOROETHYL VINYL ETHER	.	10U	10U	10U	10U	10U	.
DIBROMOMETHANE	.	5U	5U	5U	5U	5U	10U
1,2-DIBROMO-3-CHLOROPROPANE	.	10U	10U	10U	10U	10U	10U
1,2-DICHLOROBENZENE	.	10U	10U	10U	10U	10U	10U
1,4-DICHLOROBENZENE	.	10U	10U	10U	10U	10U	10U
DICHLOROFLUOROMETHANE	.	5U	5U	5U	5U	5U	.
CIS-1,2-DICHLOROETHENE	.	10U	10U	10U	10U	10U	10U
1,4-DICHLORO-2-BUTENE	.	5U	5U	5U	5U	5U	.
ETHANOL	.	10000U	10000U	10000U	610 JB	10000U	.
ETHYL METHACRYLATE	.	5U	5U	5U	5U	5U	.
IODOMETHANE	.	5U	5U	5U	5U	5U	.
1,1,1,2-TETRACHLOROETHANE	.	10U	10U	10U	10U	10U	10U
TRICHLOROFLUOROMETHANE	.	5U	5U	5U	5U	5U	.
1,2,3-TRICHLOROPROPANE	.	5U	5U	5U	5U	5U	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-141 LIV 07/10/95	GW-142 KHQ 07/14/95	GW-143 KHQ 07/16/95	GW-144 KHQ 07/16/95	GW-145 KHQ 07/17/95	GW-146 KHQ 07/17/95	GW-147 KHQ 07/14/95	GW-156 CRSDB 07/13/95	GW-158 CRSDB 07/18/95	GW-159 CRSDB 07/12/95
ACROLEIN	50U	.	.	.	.	.	.	.	.	.
ACRYLONITRILE	50U	.	.	.	.	.	.	.	.	.
BROMOCHLOROMETHANE	10U	.	.	.	.	.	.	.	.	.
2-CHLOROETHYL VINYL ETHER	10U	.	.	.	.	.	.	.	.	.
DIBROMOMETHANE	5U	.	.	.	.	.	.	.	.	.
1,2-DIBROMO-3-CHLOROPROPANE	10U	.	.	.	.	.	.	.	.	.
1,2-DICHLOROBENZENE	10U	.	.	.	.	.	.	.	.	.
1,4-DICHLOROBENZENE	10U	.	.	.	.	.	.	.	.	.
DICHLORO-DIFLUOROMETHANE	5U	.	.	.	.	.	.	.	.	.
CIS-1,2-DICHLOROETHENE	10U	.	.	.	.	.	.	.	.	.
1,4-DICHLORO-2-BUTENE	5U	.	.	.	.	.	.	.	.	.
ETHANOL	10000U	.	.	.	.	.	.	.	.	.
ETHYL METHACRYLATE	5U	.	.	.	.	.	.	.	.	.
IODOMETHANE	5U	.	.	.	.	.	.	.	.	.
1,1,2-TETRACHLOROETHANE	10U	.	.	.	.	.	.	.	.	.
TRICHLOROFLUOROMETHANE	5U	.	.	.	.	.	.	.	.	.
1,2,3-TRICHLOROPROPANE	5U	.	.	.	.	.	.	.	.	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-175 CRSP 08/01/95	GW-177 CRSP 08/01/95	GW-181 CRSP 07/28/95	GW-217 LIV 07/10/95	GW-231 KHQ 07/15/95	GW-241 CRSDB 07/16/95	GW-303 CRSDB 07/16/95	GW-304 CRSDB 07/12/95	GW-305 LIV 07/12/95	GW-511 CRSP 07/29/95
ACROLEIN (UG/L)	.	.	.	50U	.	.	.	.	50U	.
ACRYLONITRILE (UG/L)	.	.	.	50U	.	.	.	.	50U	.
BROMOCHLOROMETHANE (UG/L)	.	.	.	10U	.	.	.	.	10U	.
2-CHLOROETHYL VINYL ETHER (UG/L)	.	.	.	10U	.	.	.	.	10U	.
DIBROMOMETHANE (UG/L)	.	.	.	5U	.	.	.	.	5U	.
1,2-DIBROMO-3-CHLOROPROPANE (UG/L)	.	.	.	10U	.	.	.	.	10U	.
1,2-DICHLOROBENZENE (UG/L)	.	.	.	10U	.	.	.	.	10U	.
1,4-DICHLOROBENZENE (UG/L)	.	.	.	10U	.	.	.	.	10U	.
DICHLORODIFLUOROMETHANE (UG/L)	.	.	.	5U	.	.	.	.	5U	.
CIS-1,2-DICHLOROETHENE (UG/L)	.	.	.	10U	.	.	.	.	10U	.
1,4-DICHLORO-2-BUTENE (UG/L)	.	.	.	5U	.	.	.	.	5U	.
ETHANOL (UG/L)	.	.	.	10000U	.	.	.	.	10000U	.
ETHYL METHACRYLATE (UG/L)	.	.	.	5U	.	.	.	.	5U	.
IODOMETHANE (UG/L)	.	.	.	5U	.	.	.	.	5U	.
1,1,1,2-TETRACHLOROETHANE (UG/L)	.	.	.	10U	.	.	.	.	10U	.
TRICHLOROFLUOROMETHANE (UG/L)	.	.	.	5U	.	.	.	.	5U	.
1,2,3-TRICHLOROPROPANE (UG/L)	.	.	.	5U	.	.	.	.	5U	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-521 LIV 07/11/95	GW-522 LIV 07/12/95	GW-539 LII 07/10/95	GW-608 CRSP 07/31/95	GW-609 CRSP 08/01/95	GW-610 CRSP 07/31/95	GW-611 CRSP 08/01/95	GW-709 LII 07/10/95	GW-731 CRSDB 07/13/95
ACROLEIN (UG/L)	50U	50U	50U	.	.	.	.	50U	.
ACRYLONITRILE (UG/L)	50U	50U	50U	.	.	.	.	50U	.
BROMOCHLOROMETHANE (UG/L)	10U	10U	10U	.	.	.	.	10U	.
2-CHLOROETHYL VINYL ETHER (UG/L)	10U	10U	10U	.	.	.	.	10U	.
DIBROMOMETHANE (UG/L)	5U	5U	5U	.	.	.	.	5U	.
1,2-DIBROMO-3-CHLOROPROPANE (UG/L)	10U	10U	10U	.	.	.	.	10U	.
1,2-DICHLOROBENZENE (UG/L)	10U	10U	10U	.	.	.	.	10U	.
1,4-DICHLOROBENZENE (UG/L)	10U	10U	10U	.	.	.	.	10U	.
DICHLORODIFLUOROMETHANE (UG/L)	5U	5U	5U	.	.	.	.	5U	.
CIS-1,2-DICHLOROETHENE (UG/L)	10U	10U	10U	.	.	.	.	10U	.
1,4-DICHLORO-2-BUTENE (UG/L)	5U	5U	5U	.	.	.	.	5U	.
ETHANOL (UG/L)	10000U	10000U	10000U	.	.	.	.	10000U	.
ETHYL METHACRYLATE (UG/L)	5U	5U	5U	.	.	.	.	5U	.
IODOMETHANE (UG/L)	5U	5U	5U	.	.	.	.	5U	.
1,1,1,2-TETRACHLOROETHANE (UG/L)	10U	10U	10U	.	.	.	.	10U	.
TRICHLOROFLUOROMETHANE (UG/L)	5U	5U	5U	.	.	.	.	5U	.
1,2,3-TRICHLOROPROPANE (UG/L)	5U	5U	5U	.	.	.	.	5U	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-732 CRSDB 07/13/95	GW-732 CRSDB 08/14/95	GW-742 CRSP 07/30/95	GW-743 CRSP 07/31/95	GW-757 LII 07/11/95
ACROLEIN (UG/L)	.	.	.	.	50U
ACRYLONITRILE (UG/L)	.	.	.	.	50U
BROMOCHLOROMETHANE (UG/L)	.	.	.	.	10U
2-CHLOROETHYL VINYL ETHER (UG/L)	.	.	.	.	10U
DIBROMOMETHANE (UG/L)	.	.	.	.	10U
1,2-DIBROMO-3-CHLOROPROPANE (UG/L)	.	.	.	.	10U
1,2-DICHLOROBENZENE (UG/L)	.	.	.	.	10U
1,4-DICHLOROBENZENE (UG/L)	.	.	.	.	10U
DICHLOROETHYLENE (UG/L)	.	.	.	.	5U
CIS-1,2-DICHLOROETHYLENE (UG/L)	.	.	.	.	10U
1,4-DICHLORO-2-BUTENE (UG/L)	.	.	.	.	5U
ETHANOL (UG/L)	.	.	.	.	10000U
ETHYL METHACRYLATE (UG/L)	.	.	.	.	5U
IODOMETHANE (UG/L)	.	.	.	.	5U
1,1,1,2-TETRACHLOROETHANE (UG/L)	.	.	.	.	10U
TRICHLOROFLUOROMETHANE (UG/L)	.	.	.	.	5U
1,2,3-TRICHLOROPROPANE (UG/L)	.	.	.	.	5U

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	1090 UNCS 10/09/95	CBS-1 LV 10/11/95	GM-142 KHQ 11/05/95	GM-143 KHQ 11/09/95	GM-144 KHQ 11/14/95	GM-145 KHQ 11/15/95	GM-146 KHQ 11/08/95	GM-147 KHQ 11/06/95
ACROLEIN	(UG/L)	50U	.	.	.	.	.	.
ACRYLONITRILE	(UG/L)	50U	.	.	.	.	.	.
BROMOCHLOROMETHANE	(UG/L)	10U	.	.	.	.	.	.
2-CHLOROETHYL VINYL ETHER	(UG/L)	10U	.	.	.	.	.	.
DIBROMOMETHANE	(UG/L)	10U	.	.	.	.	.	.
1,2-DIBROMO-3-CHLOROPROPANE	(UG/L)	10U	.	.	.	.	.	.
1,2-DICHLOROBENZENE	(UG/L)	10U	.	.	.	.	.	.
1,4-DICHLOROBENZENE	(UG/L)	10U	.	.	.	.	.	.
DICHLORODIFLUOROMETHANE	(UG/L)	5U	.	.	.	.	.	.
CIS-1,2-DICHLOROETHENE	(UG/L)	10U	.	.	.	.	.	.
1,4-DICHLORO-2-BUTENE	(UG/L)	5U	.	.	.	.	.	.
ETHANOL	(UG/L)	10000U	.	.	.	.	.	.
ETHYL METHACRYLATE	(UG/L)	5U	.	.	.	.	.	.
IODOMETHANE	(UG/L)	5U	.	.	.	.	.	.
1,1,1,2-TETRACHLOROETHANE	(UG/L)	10U	.	.	.	.	.	.
TRICHLOROFUOROMETHANE	(UG/L)	5U	.	.	.	.	.	.
1,2,3-TRICHLOROPROPANE	(UG/L)	5U	.	.	.	.	.	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-156 CRSDB 10/23/95	GW-156 CRSDB 10/24/95	GW-156 CRSDB 10/25/95	GW-156 CRSDB 10/26/95	GW-159 CRSDB 10/23/95	GW-159 CRSDB 10/24/95	GW-159 CRSDB 10/25/95	GW-159 CRSDB 10/26/95	GW-160 CRBAHP 11/02/95	GW-161 CRBAHP 10/31/95
ACROLEIN (UG/L)	.	.	.	.	.	.	.	.	50U	50U
ACRYLONITRILE (UG/L)	.	.	.	.	.	.	.	.	50U	50U
BROMOCHLOROMETHANE (UG/L)	.	.	.	.	.	.	.	.	.	.
2-CHLOROETHYL VINYL ETHER (UG/L)	.	.	.	.	.	.	.	.	10U	10U
DIBROMOMETHANE (UG/L)	.	.	.	.	.	.	.	.	5U	5U
1,2-DIBROMO-3-CHLOROPROPANE (UG/L)	.	.	.	.	.	.	.	.	.	.
1,2-DICHLOROBENZENE (UG/L)	.	.	.	.	.	.	.	.	.	.
1,4-DICHLOROBENZENE (UG/L)	.	.	.	.	.	.	.	.	.	.
DICHLORODIFLUOROMETHANE (UG/L)	.	.	.	.	.	.	.	.	5U	5U
CIS-1,2-DICHLOROETHENE (UG/L)	.	.	.	.	.	.	.	.	.	.
1,4-DICHLORO-2-BUTENE (UG/L)	.	.	.	.	.	.	.	.	5U	5U
ETHANOL (UG/L)	.	.	.	.	.	.	.	.	10000U	10000U
ETHYL METHACRYLATE (UG/L)	.	.	.	.	.	.	.	.	5U	5U
IODOMETHANE (UG/L)	.	.	.	.	.	.	.	.	5U	5U
1,1,1,2-TETRACHLOROETHANE (UG/L)	.	.	.	.	.	.	.	.	5U	5U
TRICHLOROFLUOROMETHANE (UG/L)	.	.	.	.	.	.	.	.	5U	5U
1,2,3-TRICHLOROPROPANE (UG/L)	.	.	.	.	.	.	.	.	5U	5U

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-175 CRSP 11/17/95	GW-177 CRSP 11/16/95	GW-181 CRSP 11/05/95	GW-184 RQ 10/31/95	GW-186 RQ 11/03/95	GW-187 RQ 11/02/95	GW-188 RQ 10/31/95	GW-203 UNCS 10/07/95	GW-205 UNCS 10/07/95	GW-221 UNCS 10/08/95
ACROLEIN	(UG/L)	.	.	.	.	.	.	.	.	.
ACRYLONITRILE	(UG/L)	.	.	.	.	.	.	.	.	.
BROMOCHLOROMETHANE	(UG/L)	.	.	.	.	.	.	.	.	.
2-CHLOROETHYL VINYL ETHER	(UG/L)	.	.	.	.	.	.	.	.	.
DIBROMOMETHANE	(UG/L)	.	.	.	.	.	.	.	.	.
1,2-DIBROMO-3-CHLOROPROPANE	(UG/L)	.	.	.	.	.	.	.	.	.
1,2-DICHLOROBENZENE	(UG/L)	.	.	.	.	.	.	.	.	.
1,4-DICHLOROBENZENE	(UG/L)	.	.	.	.	.	.	.	.	.
DICHLORO DI FLUOROMETHANE	(UG/L)	.	.	.	.	.	.	.	.	.
CIS-1,2-DICHLOROETHENE	(UG/L)	.	.	.	.	.	.	.	.	.
1,4-DICHLORO-2-BUTENE	(UG/L)	.	.	.	.	.	.	.	.	.
ETHANOL	(UG/L)	.	.	.	.	.	.	.	.	.
ETHYL METHACRYLATE	(UG/L)	.	.	.	.	.	.	.	.	.
IODOMETHANE	(UG/L)	.	.	.	.	.	.	.	.	.
1,1,1,2-TETRACHLOROETHANE	(UG/L)	.	.	.	.	.	.	.	.	.
TRICHLOROFLUOROMETHANE	(UG/L)	.	.	.	.	.	.	.	.	.
1,2,3-TRICHLOROPROPANE	(UG/L)	.	.	.	.	.	.	.	.	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-231 KHQ 11/06/95	GW-292 ECRUP 11/06/95	GW-293 ECRUP 11/06/95	GW-294 ECRUP 11/05/95	GW-296 ECRUP 11/05/95	GW-298 CRBAP 11/04/95	GW-299 CRBAP 11/03/95	GW-300 CRBAP 11/03/95	GW-301 CRBAP 11/03/95	GW-302 UNCS 10/08/95
ACROLEIN (UG/L)	.	.	.	.	.	50U	50U	50U	50U	.
ACRYLONITRILE (UG/L)	.	.	.	.	.	50U	50U	50U	50U	.
BROMOCHLOROMETHANE (UG/L)	.	.	.	.	.	10U	10U	10U	10U	.
2-CHLOROETHYL VINYL ETHER (UG/L)	.	.	.	.	.	5U	5U	5U	5U	.
DIBROMOMETHANE (UG/L)	.	.	.	.	.	.	.	.	.	.
1,2-DIBROMO-3-CHLOROPROPANE (UG/L)	.	.	.	.	.	.	.	.	.	.
1,2-DICHLOROBENZENE (UG/L)	.	.	.	.	.	.	.	.	.	.
1,4-DICHLOROBENZENE (UG/L)	.	.	.	.	.	.	.	.	.	.
DICHLORODIFLUOROMETHANE (UG/L)	.	.	.	.	.	5U	5U	5U	5U	.
CIS-1,2-DICHLOROETHENE (UG/L)	.	.	.	.	.	.	.	.	.	.
1,4-DICHLORO-2-BUTENE (UG/L)	.	.	.	.	.	5U	5U	5U	5U	.
ETHANOL (UG/L)	.	.	.	.	.	10000U	10000U	10000U	10000U	.
ETHYL METHACRYLATE (UG/L)	.	.	.	.	.	5U	5U	5U	5U	.
IODOMETHANE (UG/L)	.	.	.	.	.	5U	5U	5U	5U	.
1,1,1,2-TETRACHLOROETHANE (UG/L)	.	.	.	.	.	5U	5U	5U	5U	.
TRICHLOROFLUOROMETHANE (UG/L)	.	.	.	.	.	5U	5U	5U	5U	.
1,2,3-TRICHLOROPROPANE (UG/L)	.	.	.	.	.	5U	5U	5U	5U	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 4TH QUARTER 1995

SAMPLING POINT LOCATION	DATE SAMPLED	GW-321 ADB	GW-339 UNCS	GW-511 CRSP	GW-512 ADB	GW-513 ADB	GW-514 ADB	GW-539 LII	GW-540 CDLVI	GW-541 CDLVI	GW-542 CDLVI
		10/26/95	10/08/95	11/07/95	10/31/95	10/31/95	11/02/95	10/06/95	10/11/95	10/12/95	10/16/95
ACROLEIN	(UG/L)	.	.	.	.	.	.	50U	.	.	.
ACRYLONITRILE	(UG/L)	.	.	.	.	.	.	50U	10U	10U	10U
BROMOCHLOROMETHANE	(UG/L)	.	.	.	.	.	.	10U	.	.	.
2-CHLOROETHYL VINYL ETHER	(UG/L)	.	.	.	.	.	.	5U	10U	10U	10U
DIBROMOMETHANE	(UG/L)	.	.	.	.	.	.	10U	10U	10U	10U
1,2-DIBROMO-3-CHLOROPROPANE	(UG/L)	.	.	.	.	.	.	10U	10U	10U	10U
1,2-DICHLOROBENZENE	(UG/L)	.	.	.	.	.	.	5U	10U	10U	10U
1,4-DICHLOROBENZENE	(UG/L)	.	.	.	.	.	.	10U	10U	10U	10U
DICHLORODIFLUOROMETHANE	(UG/L)	.	.	.	.	.	.	5U	10U	10U	10U
CIS-1,2-DICHLOROETHENE	(UG/L)	.	.	.	.	.	.	10U	10U	10U	10U
1,4-DICHLORO-2-BUTENE	(UG/L)	.	.	.	.	.	.	5U	10U	10U	10U
ETHANOL	(UG/L)	.	.	.	.	.	.	10000U	.	.	.
ETHYL METHACRYLATE	(UG/L)	.	.	.	.	.	.	5U	.	.	.
IODOMETHANE	(UG/L)	.	.	.	.	.	.	5U	.	.	.
1,1,1,2-TETRACHLOROETHANE	(UG/L)	.	.	.	.	.	.	10U	10U	10U	10U
TRICHLOROFLUOROMETHANE	(UG/L)	.	.	.	.	.	.	5U	.	.	.
1,2,3-TRICHLOROPROPANE	(UG/L)	.	.	.	.	.	.	5U	.	.	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 4TH QUARTER 1995

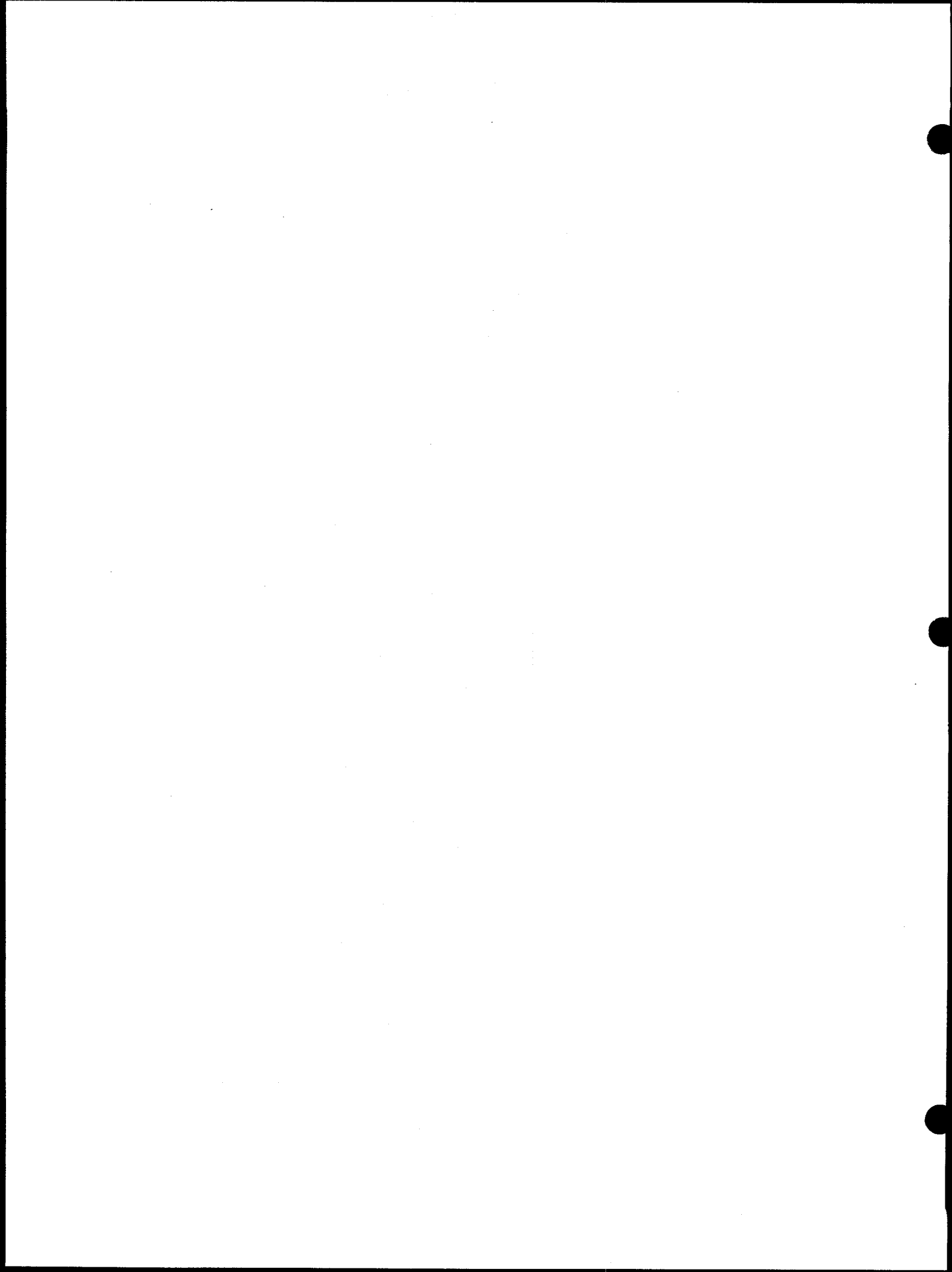
SAMPLING POINT LOCATION DATE SAMPLED	GW-543 CDLVI 10/17/95	GW-544 CDLVI 10/17/95	GW-546 CDLVI 10/11/95	GW-557 LV 10/07/95	GW-560 CDLVI 10/06/95	GW-562 CDLVI 10/06/95	GW-564 CDLVI 10/07/95	GW-608 CRSP 11/16/95	GW-609 CRSP 11/20/95	GW-610 CRSP 11/13/95
ACROLEIN (UG/L)	.	.	.	50U	50U	50U	50U	.	.	.
ACRYLONITRILE (UG/L)	10U	10U	10U	50U	50U	50U	50U	.	.	.
BROMOCHLOROMETHANE (UG/L)	.	.	10U	10U	10U	10U	10U	.	.	.
2-CHLOROETHYL VINYL ETHER (UG/L)	10U	10U	10U	10U	10U	10U	10U	.	.	.
DIBROMOMETHANE (UG/L)	10U	10U	10U	5U	5U	5U	5U	.	.	.
1,2-DIBROMO-3-CHLOROPROPANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	.	.	.
1,2-DICHLOROBENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	.	.	.
1,4-DICHLOROBENZENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	.	.	.
DICHLORODIFLUOROMETHANE (UG/L)	.	.	.	5U	5U	5U	5U	.	.	.
CIS-1,2-DICHLOROETHENE (UG/L)	10U	10U	10U	10U	10U	10U	10U	.	.	.
1,4-DICHLORO-2-BUTENE (UG/L)	.	.	.	5U	5U	5U	5U	.	.	.
ETHANOL (UG/L)	.	.	.	10000U	10000U	10000U	10000U	.	.	.
ETHYL METHACRYLATE (UG/L)	.	.	.	5U	5U	5U	5U	.	.	.
IODOMETHANE (UG/L)	.	.	.	5U	5U	5U	5U	.	.	.
1,1,1,2-TETRACHLOROETHANE (UG/L)	10U	10U	10U	10U	10U	10U	10U	.	.	.
TRICHLOROFLUOROMETHANE (UG/L)	.	.	.	5U	5U	5U	5U	.	.	.
1,2,3-TRICHLOROPROPANE (UG/L)	.	.	.	5U	5U	5U	5U	.	.	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-611 CRSP 11/17/95	GW-709 LII 10/06/95	GW-731 CRSDB 10/23/95	GW-731 CRSDB 10/24/95	GW-731 CRSDB 10/25/95	GW-731 CRSDB 10/26/95	GW-732 CRSDB 10/23/95	GW-732 CRSDB 10/24/95	GW-732 CRSDB 10/25/95	GW-732 CRSDB 10/26/95
ACROLEIN (UG/L)	.	50U	.	.	.	.	.	.	.	.
ACRYLONITRILE (UG/L)	.	50U	.	.	.	.	.	.	.	.
BROMOCHLOROMETHANE (UG/L)	.	10U	.	.	.	.	.	.	.	.
2-CHLOROETHYL VINYL ETHER (UG/L)	.	10U	.	.	.	.	.	.	.	.
DIBROMOMETHANE (UG/L)	.	5U	.	.	.	.	.	.	.	.
1,2-DIBROMO-3-CHLOROPROPANE (UG/L)	.	10U	.	.	.	.	.	.	.	.
1,2-DICHLOROBENZENE (UG/L)	.	10U	.	.	.	.	.	.	.	.
1,4-DICHLOROBENZENE (UG/L)	.	10U	.	.	.	.	.	.	.	.
DICHLORODIFLUOROMETHANE (UG/L)	.	5U	.	.	.	.	.	.	.	.
CIS-1,2-DICHLOROETHENE (UG/L)	.	10U	.	.	.	.	.	.	.	.
1,4-DICHLORO-2-BUTENE (UG/L)	.	5U	.	.	.	.	.	.	.	.
ETHANOL (UG/L)	.	10000U	.	.	.	.	.	.	.	.
ETHYL METHACRYLATE (UG/L)	.	5U	.	.	.	.	.	.	.	.
IODOMETHANE (UG/L)	.	5U	.	.	.	.	.	.	.	.
1,1,1,2-TETRACHLOROETHANE (UG/L)	.	10U	.	.	.	.	.	.	.	.
TRICHLOROFLUOROMETHANE (UG/L)	.	5U	.	.	.	.	.	.	.	.
1,2,3-TRICHLOROPROPANE (UG/L)	.	5U	.	.	.	.	.	.	.	.

APPENDIX E.3
ADDITIONAL ORGANIC COMPOUNDS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-742 CRSP 11/09/95	GW-743 CRSP 11/13/95	GW-757 LII 10/06/95	GW-796 LV 10/08/95	GW-797 LV 10/08/95	GW-798 CDLVI 10/08/95	GW-799 LV 10/07/95	GW-801 LV 10/09/95	GW-827 CDLVI 10/16/95
ACROLEIN (UG/L)	.	.	50U	50U	50U	50U	50U	50U	.
ACRYLONITRILE (UG/L)	.	.	50U	50U	50U	50U	50U	50U	.
BROMOCHLOROMETHANE (UG/L)	.	.	10U	10U	10U	10U	10U	10U	10U
2-CHLOROETHYL VINYL ETHER (UG/L)	.	.	10U	10U	10U	10U	10U	10U	10U
DIBROMOMETHANE (UG/L)	.	.	5U	5U	5U	5U	5U	5U	10U
1,2-DIBROMO-3-CHLOROPROPANE (UG/L)	.	.	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROBENZENE (UG/L)	.	.	10U	10U	10U	10U	10U	10U	10U
1,4-DICHLOROBENZENE (UG/L)	.	.	10U	10U	10U	10U	10U	10U	10U
DICHLORODIFLUOROMETHANE (UG/L)	.	.	5U	5U	5U	5U	5U	5U	10U
CIS-1,2-DICHLOROETHENE (UG/L)	.	.	10U	10U	10U	10U	10U	10U	.
1,4-DICHLORO-2-BUTENE (UG/L)	.	.	5U	5U	5U	5U	5U	5U	.
ETHANOL (UG/L)	.	.	10000U	10000U	10000U	10000U	10000U	10000U	.
ETHYL METHACRYLATE (UG/L)	.	.	5U	5U	5U	5U	5U	5U	.
IODOMETHANE (UG/L)	.	.	5U	5U	5U	5U	5U	5U	.
1,1,1,2-TETRACHLOROETHANE (UG/L)	.	.	10U	10U	10U	10U	10U	10U	10U
TRICHLOROFLUOROMETHANE (UG/L)	.	.	5U	5U	5U	5U	5U	5U	.
1,2,3-TRICHLOROPROPANE (UG/L)	.	.	5U	5U	5U	5U	5U	5U	.



APPENDIX E.4

**FIELD MEASUREMENTS
AND MISCELLANEOUS PARAMETERS**

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-141 LIV 01/09/95	GW-142 KHQ 01/10/95	GW-142 KHQ 03/20/95	GW-142 KHQ 01/17/95	GW-144 KHQ 01/18/95	GW-144 KHQ 03/22/95	GW-145 KHQ 01/18/95	GW-145 KHQ 03/24/95	GW-146 KHQ 01/17/95	GW-146 KHQ 03/23/95
FIELD MEASUREMENTS										
STATIC WATER LEVEL (FT. BELOW TOC)	-94.6	-133.7	-132.72	-76.5	-77.36	-77.78	-2.47	-3.17	-96.35	-113.39
WATER LEVEL ELEV. (FT. ABOVE MSL)	1091.5	836.65	837.63	836.68	835.98	835.56	837.57	836.87	741.81	724.77
WATER TEMP, FIELD MMT (DEG. CENT.)	14.7	13.8	15.6	14	14.2	16.1	14.3	16.4	13.8	15.3
PH, FIELD MMT. (PH UNITS)	7.3	7.8	8.1	8.1	8	8	8	8.1	8.1	7.9
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	414	325	484	401	266	328	476	512	460	573
DISSOLVED OXYGEN, FIELD MMT. (PPM)	6.5	0.5	0.8	5.8	10.9	5.5	9.5	7.1	8.8	0.8
REDOX, FIELD MMT. (MV)	166	108	23	22.6	122	139	170	207	43	-39
MISCELLANEOUS PARAMETERS										
BROMIDE (MG/L)	<5	.	.	.	.	.	.	.	.	.
CHEMICAL OXYGEN DEMAND (MG/L)	<0.1	.	.	.	.	.	.	.	.	.
CYANIDE (MG/L)	.	.	.	.	.	.	.	.	.	.
PHENOLS (MG/L)	7.4	<0.05	.	<0.05	<0.05	.	<0.05	.	<0.05	.
PH, REP. 2 (PH UNITS)	.	7.9	.	8.1	8	.	8.1	.	8.2	.
PH, REP. 3 (PH UNITS)	.	7.9	.	8.1	8	.	8	.	8.2	.
PH, REP. 4 (PH UNITS)	.	7.9	.	8.1	8	.	8	.	8.2	.
CONDUCTIVITY, REP. 2 (UMHOS/CM)	448	446	.	484	318	.	529	.	560	.
CONDUCTIVITY, REP. 3 (UMHOS/CM)	.	447	.	488	318	.	532	.	561	.
CONDUCTIVITY, REP. 4 (UMHOS/CM)	.	446	.	488	319	.	531	.	563	.
TOTAL ORGANIC CARBON (MG/L)	1.4	446	.	487	319	.	532	.	563	.
TOTAL ORGANIC CARBON, REP 2 (MG/L)	.	6	.	2.2	2.8	.	1.1	.	<1	.
TOTAL ORGANIC CARBON, REP 3 (MG/L)	.	6	.	1.3	1.2	.	1.8	.	<1	.
TOTAL ORGANIC CARBON, REP 4 (MG/L)	.	6	.	1.3	2.6	.	3.1	.	<1	.
TOTAL ORGANIC HALIDE (UG/L)	<10	6	.	1.3	<1	.	4.1	.	<10	.
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	.	<10	.	21.21	<10	.	11.4	.	<10	.
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	.	<10	.	<10	<10	.	<10	.	<10	.
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	.	<10	.	14.82	<10	.	<10	.	<10	.
DISSOLVED SOLIDS (MG/L)	240	180	.	16.31	<10	.	20.2	.	<10	.
TOTAL SUSPENDED SOLIDS (MG/L)	18	8	.	196	104	.	226	.	268	.
TURBIDITY (NTU)	55	27	.	7	<1	.	6	.	2	.
				22	0.1	.	5.2	.	6	.

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-147 KHQ 01/15/95	GW-156 CRSDB 01/18/95	GW-158 CRSDB 01/20/95	GW-159 CRSDB 01/15/95	GW-175 CRSP 02/14/95	GW-177 CRSP 02/13/95	GW-181 CRSP 01/24/95	GW-217 LIV 01/04/95	GW-231 KHQ 01/15/95	GW-241 CRSDB 01/20/95
FIELD MEASUREMENTS										
STATIC WATER LEVEL (FT. BELOW TOC)	-13.28	-139.89	-47.45	-118.25	-117.55	-117.27	-106.77	-112.8	-10.35	-45.1
WATER LEVEL ELEV. (FT. ABOVE MSL)	838.34	909.21	935.6	932.95	966.45	1040.73	986.23	1064.1	839.12	937.54
WATER TEMP, FIELD MMT (DEG. CENT.)	14	13	13.3	13	10.1	11.1	12.7	11.4	14.5	12.4
PH, FIELD MMT. (PH UNITS)	7.8	7.5	7.4	7.4	7.6	8.2	7.9	8	7.2	7.8
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	313	590	409	379	363	340	283	275	295	287
DISSOLVED OXYGEN, FIELD MMT. (PPM)	17	8.4	4.3	10.2	9.7	8	9.7	10.7	7.8	8.2
REDOX, FIELD MMT. (MV)	140	208	177	204	167	175.1	159.9	200	114	186
MISCELLANEOUS PARAMETERS										
BROMIDE (MG/L)	.	.	.	.	.	.	.	.	.	.
CHEMICAL OXYGEN DEMAND (MG/L)	.	.	.	.	.	.	.	.	.	.
CYANIDE (MG/L)	.	.	.	.	.	.	.	.	.	.
PHENOLS (MG/L)	<0.05	<0.05	<0.05	<0.05	8	8.2	8.1	<0.1	<0.05	<0.05
PH (PH UNITS)	8.1	7.7	7.9	8	8	8.2	8.1	8.2	7.6	7.9
PH, REP. 2 (PH UNITS)	8.1	7.6	7.9	8	.	.	.	.	7.5	7.9
PH, REP. 3 (PH UNITS)	8.1	7.7	7.9	8	.	.	.	.	7.5	7.9
PH, REP. 4 (PH UNITS)	8.1	7.6	7.9	8	.	.	.	.	7.5	7.9
CONDUCTIVITY (UMHOS/CM)	339	643	347	374	442	427	322	306	328	283
CONDUCTIVITY, REP. 2 (UMHOS/CM)	346	643	346	375	.	.	.	.	329	283
CONDUCTIVITY, REP. 3 (UMHOS/CM)	345	643	347	373	.	.	.	.	327	283
CONDUCTIVITY, REP. 4 (UMHOS/CM)	348	644	354	373	.	.	.	.	327	283
TOTAL ORGANIC CARBON (MG/L)	11	2.7	1.2	14	.	.	.	3	3.1	7.6
TOTAL ORGANIC CARBON, REP 2 (MG/L)	3.1	6.8	2.5	21	.	.	.	.	3.1	3.4
TOTAL ORGANIC CARBON, REP 3 (MG/L)	3.1	7	3.6	3	.	.	.	.	1.6	1.4
TOTAL ORGANIC CARBON, REP 4 (MG/L)	<1	2	3.5	1	.	.	.	.	1	3.5
TOTAL ORGANIC HALIDE (UG/L)	<10	<10	<10	<10	.	.	.	<10	<10	<10
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	<10	<10	<10	<10	.	.	.	.	<10	<10
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	<10	<10	<10	<10	.	.	.	.	<10	<10
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	<10	<10	<10	<10	.	.	.	.	<10	<10
DISSOLVED SOLIDS (MG/L)	164	266	108	180	214	260	164	108	146	138
TOTAL SUSPENDED SOLIDS (MG/L)	4	10	8	6	1	2	2	5	1	4
TURBIDITY (NTU)	4.5	5.3	5	1.8	2	4	7.1	8.9	1.4	5.5

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-303 CRSDB 01/19/95	GW-304 CRSDB 01/15/95	GW-305 LIV 01/10/95	GW-321 ADB 01/10/95	GW-511 CRSP 01/24/95	GW-521 LIV 01/09/95	GW-522 LIV 01/10/95	GW-539 LTI 01/04/95	GW-608 CRSP 02/02/95	GW-609 CRSP 02/15/95
FIELD MEASUREMENTS										
STATIC WATER LEVEL (FT. BELOW TOC)	-82.53	-117.2	-123.16	-21.05	-108.43	-87.4	-96.32	-106	-126.4	-167.23
WATER LEVEL ELEV. (FT. ABOVE MSL)	924.67	928.3	1060.44	904.53	984.77	1095.3	1078.98	987	947.6	944.87
WATER TEMP. FIELD MMT (DEG. CENT.)	13	13.7	14.1	9.5	11	13.7	14	10	13.8	13.4
PH, FIELD MMT. (PH UNITS)	7.7	7.7	8.2	8.5	8.5	8	7.7	7.8	7.8	7.7
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	604	394	222	162	222	270	253	325	297	345
DISSOLVED OXYGEN, FIELD MMT. (PPM)	1.7	11.4	9.3	8.9	12	8	8.8	6.5	8.9	5.9
REDOX, FIELD MMT. (MV)	-132	236	162	173	152	174	203	123	187	179
MISCELLANEOUS PARAMETERS										
BROMIDE (MG/L)	.	.	.	<1	.	.	.	.	.	.
CHEMICAL OXYGEN DEMAND (MG/L)	.	.	.	.	.	.	.	.	.	.
CYANIDE (MG/L)	.	.	.	.	.	.	.	.	.	.
PHENOLS (MG/L)	<0.05	<0.05	<0.1	<0.1	.	.	.	.	.	.
PH (PH UNITS)	8.1	8.1	8.3	.	8.3	8	8	8.2	7.9	8
PH, REP. 2 (PH UNITS)	8.1	8.2	.	.	.	.	.	.	.	.
PH, REP. 3 (PH UNITS)	8.1	8.2	.	.	.	.	.	.	.	.
PH, REP. 4 (PH UNITS)	8.1	8.2	.	.	.	.	.	.	.	.
CONDUCTIVITY (UMHOS/CM)	641	386	269	.	265	295	274	368	298	378
CONDUCTIVITY, REP. 2 (UMHOS/CM)	626	388	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 3 (UMHOS/CM)	642	392	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 4 (UMHOS/CM)	642	389	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON (MG/L)	1.3	2.4	3	.	.	12	3	<1	.	.
TOTAL ORGANIC CARBON, REP 2 (MG/L)	1.8	18	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 3 (MG/L)	1.8	14	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 4 (MG/L)	2.8	5.9	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE (UG/L)	<10	<10	<10	.	.	<10	<10	<10	.	.
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	<10	<10	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	<10	<10	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	<10	<10	.	.	.	.	.	.	.	.
DISSOLVED SOLIDS (MG/L)	420	222	128	.	132	118	100	40	178	212
TOTAL SUSPENDED SOLIDS (MG/L)	<1	24	5	.	1	2	5	78	<1	1
TURBIDITY (NTU)	14	2.6	3.5	.	2.5	6.7	3.5	34	1.9	0.3

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-610 CRSP 01/31/95	GW-611 CRSP 02/14/95	GW-709 LII 01/09/95	GW-731 CRSDB 01/17/95	GW-732 CRSDB 01/18/95	GW-742 CRSP 01/27/95	GW-743 CRSP 01/31/95	GW-757 LII 01/09/95	SCR2.2SP CRSP 03/15/95
FIELD MEASUREMENTS									
STATIC WATER LEVEL (FT. BELOW TOC)	-78.9	-98.87	-28.74	-124.4	-155.95	-128.25	-124.3	-83.77	.
WATER LEVEL ELEV. (FT. ABOVE MSL)	980.5	949.53	877.86	924.8	908.15	972.75	976.1	877.66	.
WATER TEMP, FIELD MMT (DEG. CENT.)	13.2	11	12.5	13.6	13.5	11.5	13.3	14.3	11
PH, FIELD MMT. (PH UNITS)	7.7	7.4	8.1	10.1	8	8.1	8	8.2	6.7
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	382	418	290	261	307	299	258	277	570
DISSOLVED OXYGEN, FIELD MMT. (PPM)	7	10.1	6.8	5.8	7.4	9.2	8.6	6.4	6.9
REDOX, FIELD MMT. (MV)	139	172	175	159	180	104	165	119	.
MISCELLANEOUS PARAMETERS									
BROMIDE (MG/L)	.	.	<5	.	.	.	.	<5	.
CHEMICAL OXYGEN DEMAND (MG/L)	.	.	<0.1	.	.	.	.	<0.1	.
CYANIDE (MG/L)	.	.	.	.	.	.	.	.	.
PHENOLS (MG/L)	7.8	7.7	8	<0.05	<0.05	7.6	7.9	8.2	7.9
PH, REP. 2 (PH UNITS)	.	.	.	9	8.1	.	.	.	.
PH, REP. 3 (PH UNITS)	.	.	.	9	8.1	.	.	.	.
PH, REP. 4 (PH UNITS)	.	.	.	9.1	8.1	.	.	.	.
CONDUCTIVITY (UMHOS/CM)	433	540	335	231	318	345	294	295	316
CONDUCTIVITY, REP. 2 (UMHOS/CM)	.	.	.	234	316	.	.	.	.
CONDUCTIVITY, REP. 3 (UMHOS/CM)	.	.	.	237	317	.	.	.	.
CONDUCTIVITY, REP. 4 (UMHOS/CM)	.	.	.	239	316	.	.	.	.
TOTAL ORGANIC CARBON (MG/L)	.	.	6	<1	1.6	.	.	1.8	.
TOTAL ORGANIC CARBON, REP 2 (MG/L)	.	.	.	2.1	1.4	.	.	.	.
TOTAL ORGANIC CARBON, REP 3 (MG/L)	.	.	.	2.1	3.3	.	.	.	.
TOTAL ORGANIC CARBON, REP 4 (MG/L)	.	.	.	2.1	2.4	.	.	.	.
TOTAL ORGANIC HALIDE (UG/L)	.	.	<10	<10	<10	.	.	<10	.
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	.	.	.	<10	<10	.	.	.	.
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	.	.	.	<10	<10	.	.	.	.
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	.	.	.	<10	<10	.	.	.	.
DISSOLVED SOLIDS (MG/L)	210	274	150	98	166	188	186	140	224
TOTAL SUSPENDED SOLIDS (MG/L)	1	<1	<1	24	820	2	<1	4	<1
TURBIDITY (NTU)	0.8	0.8	0.9	24	160	15	1.4	2.3	3.4

FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 2ND QUARTER 1995

APPENDIX E.4

SAMPLING POINT LOCATION DATE SAMPLED	1090 UNCS 04/20/95	CBS-1 LV 04/17/95	GW-142 KHQ 04/20/95	GW-143 KHQ 04/24/95	GW-144 KHQ 04/25/95	GW-145 KHQ 04/26/95	GW-146 KHQ 04/24/95	GW-147 KHQ 04/21/95	GW-156 CRSDB 04/07/95	GW-158 CRSDB 04/13/95
FIELD MEASUREMENTS										
STATIC WATER LEVEL (FT. BELOW TOC)	-63.97	.	-133.33	-78.35	-78.65	-4.44	-154.75	-15.85	-142.72	-45.51
WATER LEVEL ELEV. (FT. ABOVE MSL)	1039.93	.	837.02	834.83	834.69	835.6	683.41	835.77	906.38	937.54
WATER TEMP, FIELD MMT (DEG. CENT.)	16.2	12.9	15.8	14.2	15.2	16	13.4	15.2	17	15
PH, FIELD MMT. (PH UNITS)	7.5	7.3	7.8	8.2	7.9	8	8.2	8.2	7.4	8
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	568	190	443	481	317	516	488	308	735	321
DISSOLVED OXYGEN, FIELD MMT. (PPM)	1.7	8.1	1.4	3.7	3.9	4.9	6.1	8	5.3	1.6
REDOX, FIELD MMT. (MV)	124	.	-41	-19	166	152	133	143	205	137
MISCELLANEOUS PARAMETERS										
CHEMICAL OXYGEN DEMAND (MG/L)	.	<5	.	.	.	.	.	.	.	.
CYANIDE (MG/L)	.	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
PHENOLS (MG/L)	7.7	7.3	7.9	8.1	7.9	8	8.1	8.1	7.5	7.8
PH (PH UNITS)	.	.	7.9	8.1	7.9	8	8.1	8	7.4	7.8
PH, REP. 2 (PH UNITS)	.	.	7.9	8.1	7.9	8	8.1	8.1	7.5	7.8
PH, REP. 3 (PH UNITS)	.	.	7.9	8.1	7.9	8	8.1	8.1	7.6	7.8
PH, REP. 4 (PH UNITS)	.	254	441	474	301	512	553	329	619	333
CONDUCTIVITY (UMHOS/CM)	561	.	442	475	296	510	553	329	630	334
CONDUCTIVITY, REP. 2 (UMHOS/CM)	.	.	441	475	301	512	552	343	621	333
CONDUCTIVITY, REP. 3 (UMHOS/CM)	.	.	441	475	301	512	544	331	621	334
CONDUCTIVITY, REP. 4 (UMHOS/CM)	.	<1	1.3	3	3.9	2.7	1	2.6	13	2.3
TOTAL ORGANIC CARBON (MG/L)	.	.	3.7	3	3	4.5	5	3.2	16	2.8
TOTAL ORGANIC CARBON, REP 2 (MG/L)	.	.	6.7	3	2.5	7.3	5	3	19	4.6
TOTAL ORGANIC CARBON, REP 3 (MG/L)	.	.	4.1	4.5	3.5	4.1	4.9	2.8	22	2.2
TOTAL ORGANIC CARBON, REP 4 (MG/L)	.	<10	<10	<10	<10	<10	<10	<10	<10	<10
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	.	.	<10	17	<10	<10	<10	<10	<10	<10
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	.	.	<10	<10	<10	<10	<10	<10	<10	<10
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	.	.	<10	<10	<10	<10	<10	<10	<10	<10
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	.	.	<10	<10	<10	<10	<10	<10	<10	<10
TPH DIESEL RANGE X10-LAB (MG/L)	.	.	268	278	166	276	342	202	380	190
DISSOLVED SOLIDS (MG/L)	322	152	3.8	3	<1	22	4	18	4	<1
TOTAL SUSPENDED SOLIDS (MG/L)	3	2.5	34	9.9	0.4	4.2	6.2	17	3.8	1.4
TURBIDITY (NTU)	3.7	2.5	.	.	.	.	.	.	.	.

APPENDIX E.4 FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-159 CRSDB 04/06/95	GW-160 CRBAMP 04/26/95	GW-161 CRBAMP 04/20/95	GW-175 CRSP 05/15/95	GW-177 CRSP 05/11/95	GW-181 CRSP 05/02/95	GW-184 RQ 05/01/95	GW-186 RQ 05/03/95	GW-187 RQ 05/02/95	GW-188 RQ 05/01/95
FIELD MEASUREMENTS										
STATIC WATER LEVEL (FT. BELOW TOC)	-116.52	-148	-160.1	-119.36	-117.15	-106.15	-110.23	-14.2	-18.25	-20.4
WATER LEVEL ELEV. (FT. ABOVE MSL)	934.68	945.1	933.4	964.64	1040.85	986.85	817.4	817.12	816.03	816.69
WATER TEMP, FIELD MMT (DEG. CENT.)	14.9	15.2	15.8	16.7	17.9	14	14	16.5	15.4	15.4
PH, FIELD MMT. (PH UNITS)	7.8	7.4	7.6	8.2	7.9	7.9	7.7	7.1	7.6	8.1
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	370	458	376	418	465	316	394	894	958	447
DISSOLVED OXYGEN, FIELD MMT. (PPM)	3.2	7.5	3	8.3	7	16.8	2.6	0.4	0.6	4.7
REDOX, FIELD MMT. (MV)	132	116	154	147	132	117	168	-76	-290	-104
MISCELLANEOUS PARAMETERS										
CHEMICAL OXYGEN DEMAND (MG/L)	-	<5	<5	-	-	-	-	-	-	-
CYANIDE (MG/L)	-	<0.1	<0.1	-	-	-	-	-	-	-
PHENOLS (MG/L)	0.05	7.8	7.7	8	7.7	8	7.7	7.7	8.2	8
PH, REP. 2 (PH UNITS)	7.9	-	-	-	-	-	-	-	-	-
PH, REP. 3 (PH UNITS)	7.9	-	-	-	-	-	-	-	-	-
PH, REP. 4 (PH UNITS)	8	-	-	-	-	-	-	-	-	-
CONDUCTIVITY (UMHOS/CM)	369	437	373	399	403	309	387	854	944	435
CONDUCTIVITY, REP. 2 (UMHOS/CM)	370	-	-	-	-	-	-	-	-	-
CONDUCTIVITY, REP. 3 (UMHOS/CM)	372	-	-	-	-	-	-	-	-	-
CONDUCTIVITY, REP. 4 (UMHOS/CM)	378	-	-	-	-	-	-	-	-	-
TOTAL ORGANIC CARBON (MG/L)	<1	4.6	<1	-	-	-	-	-	-	-
TOTAL ORGANIC CARBON, REP 2 (MG/L)	<1	-	-	-	-	-	-	-	-	-
TOTAL ORGANIC CARBON, REP 3 (MG/L)	<1	-	-	-	-	-	-	-	-	-
TOTAL ORGANIC CARBON, REP 4 (MG/L)	<1	-	-	-	-	-	-	-	-	-
TOTAL ORGANIC HALIDE (UG/L)	<10	<10	<10	-	-	-	-	-	-	-
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	<10	-	-	-	-	-	-	-	-	-
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	<10	-	-	-	-	-	-	-	-	-
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	<10	-	-	-	-	-	-	-	-	-
TPH DIESEL RANGE X10-LAB (MG/L)	-	-	-	-	-	-	-	-	-	-
DISSOLVED SOLIDS (MG/L)	226	402	226	278	234	188	252	538	576	276
TOTAL SUSPENDED SOLIDS (MG/L)	3	117	<1	<1	24	3	<1	<1	<1	<1
TURBIDITY (NTU)	7.7	260	0.7	1.4	4.1	4.4	1.5	8.4	30	2

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-203 UNCS 04/18/95	GW-205 UNCS 04/18/95	GW-221 UNCS 04/19/95	GW-231 KHQ 04/21/95	GW-241 CRSDB 04/09/95	GW-292 ECRWP 04/24/95	GW-293 ECRWP 04/23/95	GW-294 ECRWP 04/22/95	GW-295 CRBAMP 05/03/95	GW-296 ECRWP 04/22/95
FIELD MEASUREMENTS										
STATIC WATER LEVEL (FT. BELOW TOC)	-75.1	-74.45	-76.68	-13.55	-45	-112.75	-115.2	-97.75	-143.2	-117.75
WATER LEVEL ELEV. (FT. ABOVE MSL)	1030.2	1029.55	1029.32	835.92	937.64	960.25	948.7	985.85	949.51	973.25
WATER TEMP, FIELD MMT (DEG. CENT.)	16	16.5	17	13.9	16.3	13.4	13.8	16	14.9	14.6
PH, FIELD MMT. (PH UNITS)	8.1	8	8	7.7	7.7	7.5	7.8	7.9	8.4	7.8
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	257	316	268	280	253	530	451	438	836	280
DISSOLVED OXYGEN, FIELD MMT. (PPM)	5.5	3.4	6.9	2.1	6.3	6.9	5.6	8.4	3	7.9
REDOX, FIELD MMT. (MV)	147	120	157	190	90	203	150	206	-116	202
MISCELLANEOUS PARAMETERS										
CHEMICAL OXYGEN DEMAND (MG/L)	.	.	.	.	.	.	.	.	.	.
CYANIDE (MG/L)	.	.	.	.	.	.	.	.	.	.
PHENOLS (MG/L)	8	8.1	7.9	<0.05	<0.05	7.6	7.8	7.8	.	7.7
PH, REP. 2 (PH UNITS)	.	.	.	7.6	7.8	.	.	.	.	.
PH, REP. 3 (PH UNITS)	.	.	.	7.6	7.8	.	.	.	.	.
PH, REP. 4 (PH UNITS)	.	.	.	7.6	7.9	.	.	.	.	.
CONDUCTIVITY, REP. 2 (UMHOS/CM)	267	289	285	329	266	481	480	459	.	404
CONDUCTIVITY, REP. 3 (UMHOS/CM)	.	.	.	330	266	.	.	.	.	.
CONDUCTIVITY, REP. 4 (UMHOS/CM)	.	.	.	330	266	.	.	.	.	.
TOTAL ORGANIC CARBON (MG/L)	.	.	.	331	265	.	.	.	.	.
TOTAL ORGANIC CARBON, REP. 2 (MG/L)	.	.	.	1.2	2	.	.	.	.	.
TOTAL ORGANIC CARBON, REP. 3 (MG/L)	.	.	.	2.9	1.7	.	.	.	.	.
TOTAL ORGANIC CARBON, REP. 4 (MG/L)	.	.	.	2.4	1.9	.	.	.	.	.
TOTAL ORGANIC HALIDE (UG/L)	.	.	.	2.9	3.8	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP. 2 (UG/L)	.	.	.	<10	<10	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP. 3 (UG/L)	.	.	.	<10	<10	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP. 4 (UG/L)	.	.	.	<10	<10	.	.	.	.	.
TPH DIESEL RANGE X10-LAB (MG/L)	.	.	.	<10	<10	.	.	.	.	.
DISSOLVED SOLIDS (MG/L)	154	150	162	322	160	270	276	254	.	226
TOTAL SUSPENDED SOLIDS (MG/L)	5.5	<1	<1	<1	40	<1	<1	<1	.	1
TURBIDITY (NTU)	7.1	2.8	1	0.1	50	0.4	8.4	0.2	.	0.6

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-298 CRBAMP 05/02/95	GW-299 CRBAMP 05/01/95	GW-300 CRBAMP 04/27/95	GW-301 CRBAMP 04/27/95	GW-302 UNCS 04/19/95	GW-303 CRSDB 04/09/95	GW-304 CRSDB 04/06/95	GW-321 ADB 04/25/95	GW-339 UNCS 04/19/95	GW-511 CRSP 05/03/95
FIELD MEASUREMENTS										
STATIC WATER LEVEL (FT. BELOW TOC)	-109.3	-97.15	-110.12	-132.65	-100.92	-86.92	-117.24	-18.15	-74.35	-105.78
WATER LEVEL ELEV. (FT. ABOVE MSL)	939.7	956.75	962.98	953.75	1040.78	920.28	928.26	907.43	1050.25	987.42
WATER TEMP, FIELD MMT (DEG. CENT.)	13.4	14.4	14.5	17.9	16.4	15.8	14.8	14.5	16.6	14.3
PH, FIELD MMT. (PH UNITS)	8	7.9	7.4	8.1	7.6	7.7	8.1	8.1	7.4	8.2
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	316	256	304	342	502	694	370	282	588	313
DISSOLVED OXYGEN, FIELD MMT. (PPM)	2.7	5.2	5.3	9.5	4.9	0.5	3.8	8.6	3.2	19.8
REDOX, FIELD MMT. (MV)	179	67	233	155	112	-121	158	159	120	157
MISCELLANEOUS PARAMETERS										
CHEMICAL OXYGEN DEMAND (MG/L)	<5	8.9	<5	<5						
CYANIDE (MG/L)	<0.1	<0.1	<0.1	<0.1						
PHENOLS (MG/L)						0.05	<0.05			
PH (PH UNITS)	8.2	8	7.9	8	7.5	7.8	8.1	8.1	7.5	8.2
PH, REP. 2 (PH UNITS)						7.8	8.1			
PH, REP. 3 (PH UNITS)						7.8	8.1			
PH, REP. 4 (PH UNITS)						7.8	8.1			
CONDUCTIVITY (UMHOS/CM)	313	261	269	309	528	648	385	232	562	273
CONDUCTIVITY, REP. 2 (UMHOS/CM)						647	385			
CONDUCTIVITY, REP. 3 (UMHOS/CM)						649	384			
CONDUCTIVITY, REP. 4 (UMHOS/CM)						3	2.2	1.8		
TOTAL ORGANIC CARBON (MG/L)	2	<1	2.7	2.3		<1	2.7			
TOTAL ORGANIC CARBON, REP 2 (MG/L)						1.4	2.6			
TOTAL ORGANIC CARBON, REP 3 (MG/L)						2.5	2.6			
TOTAL ORGANIC CARBON, REP 4 (MG/L)						<10	<10	<10		
TOTAL ORGANIC HALIDE (UG/L)	<10	<10	<10	<10		<10	<10			
TOTAL ORGANIC HALIDE, REP 2 (UG/L)						<10	<10			
TOTAL ORGANIC HALIDE, REP 3 (UG/L)						<10	<10			
TOTAL ORGANIC HALIDE, REP 4 (UG/L)						<10	<10			
TPH DIESEL RANGE X10-LAB (MG/L)										
DISSOLVED SOLIDS (MG/L)	180	270	166	192	186	444	222	140	326	168
TOTAL SUSPENDED SOLIDS (MG/L)	19	<1	<1	23	2	<1	6.5	<1	<1	2.5
TURBIDITY (NTU)	90	0.6	1	23	18	13	2.8	0.1	0.4	4.7

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-512 ADB 04/26/95	GW-513 ADB 04/25/95	GW-514 ADB 04/27/95	GW-540 CDLVI 04/04/95	GW-541 CDLVI 04/05/95	GW-542 CDLVI 04/06/95	GW-543 CDLVI 04/06/95	GW-544 CDLVI 04/06/95	GW-546 CDLVI 04/05/95	GW-557 LV 04/06/95
FIELD MEASUREMENTS										
STATIC WATER LEVEL (FT. BELOW TOC)	-21.8	-21.8	-21.18	-79.35	-65.15	-69.37	-63.35	-63.86	-79.3	-109
WATER LEVEL ELEV. (FT. ABOVE MSL)	979.7	979.6	980.02	992.75	993.25	982.23	960.45	981.14	992.9	972.2
WATER TEMP, FIELD MNT (DEG. CENT.)	14.8	16	15.8	15.2	14.8	14.3	14.7	15.8	12	15
PH, FIELD MNT. (PH UNITS)	7.2	7.8	7.8	7.7	8.1	7	7.4	8	8.4	7.9
CONDUCTIVITY, FIELD MNT (UMHOS/CM)	290	343	362	374	331	278	417	450	270	316
DISSOLVED OXYGEN, FIELD MNT. (PPM)	5.4	5.7	3.6	3.9	2.1	4.8	5.5	4.7	5.7	0.8
REDOX, FIELD MNT. (MV)	220	165	132	148	132	174	143	180	165	176
MISCELLANEOUS PARAMETERS										
CHEMICAL OXYGEN DEMAND (MG/L)	.	.	.	<5	<5	<5	<5	<5	<5	<5
CYANIDE (MG/L)	.	.	.	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PHENOLS (MG/L)	7.5	8	7.9	7.8	7.8	7.4	7.7	8	8.1	7.9
PH, REP. 2 (PH UNITS)	.	.	.	.	.	.	.	.	.	.
PH, REP. 3 (PH UNITS)	.	.	.	.	.	.	.	.	.	.
PH, REP. 4 (PH UNITS)	.	.	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 2 (UMHOS/CM)	300	323	334	366	358	355	441	444	280	320
CONDUCTIVITY, REP. 3 (UMHOS/CM)	.	.	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 4 (UMHOS/CM)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON (MG/L)	3.4	4.7	3.1	<1	<1	3.4	3	<1	2.4	2
TOTAL ORGANIC CARBON, REP 2 (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 3 (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 4 (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE (UG/L)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	.	.	.	.	.	.	.	.	.	.
TPH DIESEL RANGE X10-LAB (MG/L)	.	.	.	.	.	.	.	.	.	.
DISSOLVED SOLIDS (MG/L)	180	176	190	204	200	208	252	262	172	190
TOTAL SUSPENDED SOLIDS (MG/L)	<1	<1	<1	1	3	1	<1	1.5	62	5
TURBIDITY (NTU)	4.9	1.3	3.5	0.2	0.5	1.3	2	2	152	4.4

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-560 CDLVI1 04/05/95	GW-562 CDLVI1 04/05/95	GW-564 CDLVI1 04/06/95	GW-608 CRSP 05/11/95	GW-609 CRSP 05/16/95	GW-610 CRSP 05/07/95	GW-611 CRSP 05/15/95	GW-731 CRSDB 04/07/95	GW-732 CRSDB 04/07/95	GW-742 CRSP 05/07/95
FIELD MEASUREMENTS										
STATIC WATER LEVEL (FT. BELOW TOC)	-28.79	-3.46	-10.02	-131.1	-166.87	-82.43	-98.78	-124.37	-157.45	-138.88
WATER LEVEL ELEV. (FT. ABOVE MSL)	910.13	931.03	927.75	942.9	945.23	976.97	949.62	924.83	906.65	962.12
WATER TEMP, FIELD MMT (DEG. CENT.)	13.2	13.8	14.6	15.8	16.2	15.1	19	15.8	16.3	14.2
PH, FIELD MMT. (PH UNITS)	7.6	8	7.7	8.1	7.7	7.7	7.8	9.1	8.4	7.7
CONDUCTIVITY, FIELD MMT (UMHOS/CN)	276	339	263	291	436	399	560	244	314	336
DISSOLVED OXYGEN, FIELD MMT. (PPM)	8.5	6.1	12	8	5.9	5.8	9.1	3.8	5.5	1.5
REDOX, FIELD MMT. (MV)	164	152	164	96	151	137	137	135	118	160
MISCELLANEOUS PARAMETERS										
CHEMICAL OXYGEN DEMAND (MG/L)	<5	<5	14	.	.	.	.	.	.	.
CYANIDE (MG/L)	<0.1	<0.1	<0.1	.	.	.	.	<0.05	<0.05	.
PHENOLS (MG/L)	7.8	7.8	7.7	8	7.8	7.7	7.6	9	8.3	8
PH, REP. 2 (PH UNITS)	.	.	.	.	.	.	.	9	8.3	.
PH, REP. 3 (PH UNITS)	.	.	.	.	.	.	.	9	8.3	.
PH, REP. 4 (PH UNITS)	.	.	.	.	.	.	.	9	8.3	.
CONDUCTIVITY, REP. 2 (UMHOS/CN)	277	340	267	279	367	409	508	230	298	339
CONDUCTIVITY, REP. 3 (UMHOS/CN)	.	.	.	.	.	.	.	233	298	.
CONDUCTIVITY, REP. 4 (UMHOS/CN)	.	.	.	.	.	.	.	234	299	.
TOTAL ORGANIC CARBON (MG/L)	1.3	1.8	1.5	.	.	.	.	230	299	.
TOTAL ORGANIC CARBON, REP 2 (MG/L)	.	.	.	.	.	.	.	<1	3.1	.
TOTAL ORGANIC CARBON, REP 3 (MG/L)	.	.	.	.	.	.	.	1.6	7.5	.
TOTAL ORGANIC CARBON, REP 4 (MG/L)	.	.	.	.	.	.	.	1.1	1.9	.
TOTAL ORGANIC HALIDE (UG/L)	<10	<10	<10	.	.	.	.	1.5	2.4	.
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	.	.	.	.	.	.	.	<10	<10	.
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	.	.	.	.	.	.	.	<10	<10	.
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	.	.	.	.	.	.	.	<10	<10	.
TPH DIESEL RANGE X10-LAB (MG/L)	0.0137	0.0081	0.0716	.	.	.	.	<10	<10	.
DISSOLVED SOLIDS (MG/L)	140	194	174	176	216	242	332	148	208	198
TOTAL SUSPENDED SOLIDS (MG/L)	<1	4	<1	3	<1	1	<1	<1	1152	<1
TURBIDITY (NTU)	0.3	9.5	1	5.5	0.6	1.6	1.2	2.7	300	2.4

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-743 CRSP 05/07/95	GW-796 LV 04/12/95	GW-797 LV 04/11/95	GW-798 CDLVI 04/11/95	GW-799 LV 04/06/95	GW-801 LV 04/13/95	GW-827 CDLVI 04/05/95
FIELD MEASUREMENTS							
STATIC WATER LEVEL (FT. BELOW TOC)	-124.2	-71.15	-65.73	-74.7	-8.98	-103.45	-39.85
WATER LEVEL ELEV. (FT. ABOVE MSL)	976.2	981.25	994.07	931.1	972.11	993.51	1011.54
WATER TEMP, FIELD MMT (DEG. CENT.)	14.8	14.1	19.3	15.4	15.3	13.7	14.1
PH, FIELD MMT.	7.9	8.8	8.3	8.1	8.1	8.2	7.9
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	244	212	293	245	242	267	276
DISSOLVED OXYGEN, FIELD MMT. (PPM)	6.8	7.9	2.7	3.8	0	5.9	3.1
REDOX, FIELD MMT. (MV)	158	176	150	180	160	178	204
MISCELLANEOUS PARAMETERS							
CHEMICAL OXYGEN DEMAND (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)	8	8.6	8	7.8	7.9	8	7.9
PH, REP. 2 (PH UNITS)	.	.	.	.	.	.	.
PH, REP. 3 (PH UNITS)	.	.	.	.	.	.	.
PH, REP. 4 (PH UNITS)	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 2 (UMHOS/CM)	276	215	293	248	250	272	274
CONDUCTIVITY, REP. 3 (UMHOS/CM)	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 4 (UMHOS/CM)	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON (MG/L)	.	1.2	<1	2	1.4	2	2.3
TOTAL ORGANIC CARBON, REP 2 (MG/L)	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 3 (MG/L)	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 4 (MG/L)	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE (UG/L)	.	<10	<10	<10	<10	<10	<10
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	.	.	.	.	.	.	.
TPH DIESEL RANGE X10-LAB (MG/L)	.	.	.	0.0584	.	.	.
DISSOLVED SOLIDS (MG/L)	168	144	184	164	164	160	160
TOTAL SUSPENDED SOLIDS (MG/L)	1	1	1.5	<1	<1	<1	<1
TURBIDITY (NTU)	1	1.5	2.5	0.8	3.2	2.5	0.8

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-141 LIV 07/10/95	GW-142 KHQ 07/14/95	GW-143 KHQ 07/16/95	GW-144 KHQ 07/16/95	GW-145 KHQ 07/17/95	GW-146 KHQ 07/17/95	GW-147 KHQ 07/14/95	GW-156 CRSDB 07/13/95	GW-158 CRSDB 07/18/95	GW-159 CRSDB 07/12/95
FIELD MEASUREMENTS										
STATIC WATER LEVEL (FT. BELOW TOC)	-95.75	-136.52	-80.13	-80.68	-6.53	-97.8	-17.9	-143.14	-47.63	-117.66
WATER LEVEL ELEV. (FT. ABOVE MSL)	1090.35	833.83	833.05	832.66	833.51	740.36	833.72	905.96	935.42	933.54
WATER TEMP, FIELD MMT (DEG. CENT.)	16.3	17.1	17.2	17.2	18.1	17	16.4	18.8	17.8	18.1
PH, FIELD MMT.	7.2	7.2	8.2	8.1	7.9	8	7.8	7.3	7.6	7.5
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	429	443	482	323	509	519	302	578	307	343
DISSOLVED OXYGEN, FIELD MMT. (PPM)	6.9	1.8	1.5	3.2	4.7	2.1	8.5	9.2	0.5	5.3
REDOX, FIELD MMT. (MV)	148	127	181	179	146	155	172	210	-109	140
MISCELLANEOUS PARAMETERS										
CHEMICAL OXYGEN DEMAND (MG/L)	<5									
CYANIDE (MG/L)	<0.1									
PHENOLS (MG/L)										
PH, REP. 2 (PH UNITS)	7.4	7.9	7.9	7.8	7.8	7.9	8.1	7.4	<0.05	<0.05
PH, REP. 3 (PH UNITS)		7.8	7.9	7.8	7.8	8	8.1	7.5	7.7	7.8
PH, REP. 4 (PH UNITS)		7.7	7.9	7.8	7.8	8	8.1	7.6	7.7	7.9
CONDUCTIVITY, REP. 2 (UMHOS/CM)	432	437	475	313	523	560	313	616	331	366
CONDUCTIVITY, REP. 3 (UMHOS/CM)		440	475	313	525	564	314	619	331	369
CONDUCTIVITY, REP. 4 (UMHOS/CM)		438	475	313	525	555	313	619	332	371
TOTAL ORGANIC CARBON (MG/L)	1.9	5.7	2.9	<1	5.2	1.2	2.8	5	2.2	<1
TOTAL ORGANIC CARBON, REP 2 (MG/L)		2.9	2.7	<1	4.7	1.4	2.4	4.3	<1	3.1
TOTAL ORGANIC CARBON, REP 3 (MG/L)		3.5	3.7	<1	3.5	<1	3.1	4.2	2.6	2.9
TOTAL ORGANIC CARBON, REP 4 (MG/L)		1.1	<1	<1	2.7	1.1	<1	1	3.3	1.2
TOTAL ORGANIC HALIDE (UG/L)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
TOTAL ORGANIC HALIDE, REP 2 (UG/L)		<10	<10	<10	<10	<10	<10	<10	<10	<10
TOTAL ORGANIC HALIDE, REP 3 (UG/L)		<10	<10	<10	<10	<10	<10	<10	<10	<10
TOTAL ORGANIC HALIDE, REP 4 (UG/L)		<10	<10	<10	<10	<10	<10	<10	<10	<10
DISSOLVED SOLIDS (MG/L)	250	208	286	186	310	344	192	358	210	222
TOTAL SUSPENDED SOLIDS (MG/L)	4.5	9	<1	<1	2.5	5	3	1.5	<1	1
TURBIDITY (NTU)	30	40	3.6	0.25	6	7.6	3.9	1.5	5.7	0.45

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GM-175 CRSP 08/01/95	GM-177 CRSP 08/01/95	GM-181 CRSP 07/28/95	GM-217 LIV 07/10/95	GM-231 KHQ 07/15/95	GM-241 CRSDB 07/16/95	GM-303 CRSDB 07/16/95	GM-304 CRSDB 07/12/95	GM-305 LIV 07/12/95	GM-511 CRSP 07/29/95
FIELD MEASUREMENTS										
STATIC WATER LEVEL (FT. BELOW TOC)	-123.75	-118.4	-110.2	-114.37	-15.8	-50.55	-88.37	-118.04	-125.33	-112.9
WATER LEVEL ELEV. (FT. ABOVE MSL)	960.25	1039.6	982.8	1062.53	833.67	932.09	918.83	927.46	1058.27	980.3
WATER TEMP, FIELD MMT (DEG. CENT.)	17.3	18	16.6	16.7	14.8	16.5	15.5	17.3	17.8	15.4
PH, FIELD MMT. (PH UNITS)	7.7	7.7	7.7	8.2	7.5	7.7	7.6	8	8.1	8.1
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	376	428	322	284	351	260	613	342	243	257
DISSOLVED OXYGEN, FIELD MMT. (PPM)	8.4	2.2	5.2	10.2	1.1	6	1	5.2	8.7	7.5
REDOX, FIELD MMT. (MV)	172	124	94	140	160	39	-185	153	119	123
MISCELLANEOUS PARAMETERS										
CHEMICAL OXYGEN DEMAND (MG/L)	.	.	.	<5	.	.	.	.	<5	.
CYANIDE (MG/L)	.	.	.	<0.1	<0.05	<0.05	<0.05	<0.05	<0.1	.
PHENOLS (MG/L)	7.8	7.9	7.72	8.2	7.7	7.9	7.8	8.1	8.1	8.2
PH, REP. 2 (PH UNITS)	.	.	.	.	7.5	7.9	7.7	8.1	.	.
PH, REP. 3 (PH UNITS)	.	.	.	.	7.5	7.8	7.7	8.1	.	.
PH, REP. 4 (PH UNITS)	.	.	.	.	7.8	7.8	7.7	8.2	.	.
CONDUCTIVITY (UMHOS/CM)	411	408	320	306	353	280	647 L	390	266	266
CONDUCTIVITY, REP. 2 (UMHOS/CM)	.	.	.	.	352	280	649 L	390	.	.
CONDUCTIVITY, REP. 3 (UMHOS/CM)	.	.	.	.	352	280	648 L	387	.	.
CONDUCTIVITY, REP. 4 (UMHOS/CM)	.	.	.	.	356	280	650 L	383	.	.
TOTAL ORGANIC CARBON (MG/L)	.	.	.	2.7	3.8	1.5	<1	1.7	1.8	.
TOTAL ORGANIC CARBON, REP 2 (MG/L)	.	.	.	.	4.1	1.4	1.1	1.9	.	.
TOTAL ORGANIC CARBON, REP 3 (MG/L)	.	.	.	.	3.3	1.4	3.5	5.6	.	.
TOTAL ORGANIC CARBON, REP 4 (MG/L)	.	.	.	.	1.3	3	5.4	3.6	.	.
TOTAL ORGANIC HALIDE (UG/L)	.	.	.	<10	<10	<10	<10	<10	<10	.
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	.	.	.	.	<10	<10	<10	<10	.	.
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	.	.	.	.	<10	<10	<10	<10	.	.
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	.	.	.	.	<10	<10	<10	<10	.	.
DISSOLVED SOLIDS (MG/L)	234	272	190	176	194	178	470	226	138	166
TOTAL SUSPENDED SOLIDS (MG/L)	<1	<1	<1	27	<1	1	<1	10	2	<1
TURBIDITY (NTU)	3.4	4.5	1.8	5.1	0.25	5	9.8	4.7	3.9	0.7

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-521 LIV 07/11/95	GW-522 LIV 07/12/95	GW-539 LII 07/10/95	GW-608 CRSP 07/31/95	GW-609 CRSP 08/01/95	GW-610 CRSP 07/31/95	GW-611 CRSP 08/01/95	GW-709 LII 07/10/95	GW-731 CRSDB 07/13/95
FIELD MEASUREMENTS									
STATIC WATER LEVEL (FT. BELOW TOC)	-84.5	-101.35	-106.06	-137.75	-172.32	-91	-107.02	-29.77	-124.56
WATER LEVEL ELEV. (FT. ABOVE MSL)	1098.2	1073.95	986.94	936.25	939.78	968.4	941.38	876.83	924.64
WATER TEMP, FIELD MMT (DEG. CENT.)	16.7	17.3	16.3	16.9	16.2	17	17.4	17.1	18
PH, FIELD MMT. (PH UNITS)	7.8	7.9	8	7.7	7.6	7.5	7.4	8	9.4
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	267	336	275	296	344	364	483	236	246
DISSOLVED OXYGEN, FIELD MMT. (PPM)	8.3	8.4	6.6	2.6	6.1	6.2	2.3	5.1	4
REDOX, FIELD MMT. (MV)	135	109	223	140	145	122	160	180	124
MISCELLANEOUS PARAMETERS									
CHEMICAL OXYGEN DEMAND (MG/L)	<5	<5	<5					<5	
CYANIDE (MG/L)	<0.1	<0.1	<0.1					<0.1	<0.05
PHENOLS (MG/L)				8	7.8	7.9	7.8	8	9.4
PH (PH UNITS)	8.1	7.9	8.2						9.3
PH, REP. 2 (PH UNITS)									9.2
PH, REP. 3 (PH UNITS)									9.3
PH, REP. 4 (PH UNITS)									280
CONDUCTIVITY (UMHOS/CM)	283	242	365	278	371	402	511	325	271
CONDUCTIVITY, REP. 2 (UMHOS/CM)									265
CONDUCTIVITY, REP. 3 (UMHOS/CM)									268
CONDUCTIVITY, REP. 4 (UMHOS/CM)									1.2
TOTAL ORGANIC CARBON (MG/L)	2.1	2.2	3					3.2	1.2
TOTAL ORGANIC CARBON, REP 2 (MG/L)									1.1
TOTAL ORGANIC CARBON, REP 3 (MG/L)									<10
TOTAL ORGANIC CARBON, REP 4 (MG/L)									<10
TOTAL ORGANIC HALIDE (UG/L)	<10	<10	<10					<10	<10
TOTAL ORGANIC HALIDE, REP 2 (UG/L)									<10
TOTAL ORGANIC HALIDE, REP 3 (UG/L)									<10
TOTAL ORGANIC HALIDE, REP 4 (UG/L)									182
DISSOLVED SOLIDS (MG/L)	176	146	220	132	212	228	226	200	2
TOTAL SUSPENDED SOLIDS (MG/L)	<1	17	6	<1	<1	1	1.5	1	2
TURBIDITY (NTU)	2.9	9.2	3.6	2.2	0.1	0.5	15	0.4	0.35

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-732 CRSDB 07/13/95	GW-732 CRSDB 08/14/95	GW-742 CRSP 07/30/95	GW-743 CRSP 07/31/95	GW-757 LII 07/11/95
FIELD MEASUREMENTS					
STATIC WATER LEVEL (FT. BELOW TOC)	-156.55	-157.7	-135.9	-133	-84.65
WATER LEVEL ELEV. (FT. ABOVE MSL)	907.55	906.4	965.1	967.4	876.78
WATER TEMP, FIELD MMT (DEG. CENT.)	16.6	16	18.6	17	17.1
PH, FIELD MMT. (PH UNITS)	9.6	7.9	8	7.6	8.4
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	224	293	355	261	263
DISSOLVED OXYGEN, FIELD MMT. (PPM)	5.6	6.8	1.2	7.1	5.4
REDOX, FIELD MMT. (MV)	109	168	-53	175	144
MISCELLANEOUS PARAMETERS					
CHEMICAL OXYGEN DEMAND (MG/L)	.	.	.	.	6.4
CYANIDE (MG/L)	.	.	.	.	<0.1
PHENOLS (MG/L)	<0.05	8.2	8.2	7.8	8.4
PH, REP. 2 (PH UNITS)	10	8.2	.	.	.
PH, REP. 3 (PH UNITS)	10	8	.	.	.
PH, REP. 4 (PH UNITS)	10	8	.	.	.
CONDUCTIVITY (UMHOS/CM)	232	279	327	285	294
CONDUCTIVITY, REP. 2 (UMHOS/CM)	232	280	.	.	.
CONDUCTIVITY, REP. 3 (UMHOS/CM)	235	277	.	.	.
CONDUCTIVITY, REP. 4 (UMHOS/CM)	231	279	.	.	.
TOTAL ORGANIC CARBON (MG/L)	1.8	.	.	.	2.4
TOTAL ORGANIC CARBON, REP 2 (MG/L)	1.5	.	.	.	.
TOTAL ORGANIC CARBON, REP 3 (MG/L)	2.2	.	.	.	.
TOTAL ORGANIC CARBON, REP 4 (MG/L)	2.4	.	.	.	.
TOTAL ORGANIC HALIDE (UG/L)	<10	.	.	.	<10
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	<10	.	.	.	.
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	<10	.	.	.	.
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	<10	.	.	.	.
DISSOLVED SOLIDS (MG/L)	330	154	198	152	164
TOTAL SUSPENDED SOLIDS (MG/L)	1065	<1	<1	<1	<1
TURBIDITY (NTU)	280	2.8	13	1	1.7

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	1090 UNCS 10/09/95	CBS-1 LV 10/11/95	GW-142 KHQ 11/05/95	GW-143 KHQ 11/09/95	GW-144 KHQ 11/14/95	GW-145 KHQ 11/15/95	GW-146 KHQ 11/08/95	GW-147 KHQ 11/06/95
FIELD MEASUREMENTS								
STATIC WATER LEVEL (FT. BELOW TOC)	-59.7	.	-135.45	-78.35	-77.32	-3.1	-71.87	-16.57
WATER LEVEL ELEV. (FT. ABOVE MSL)	1044.2	.	834.9	834.83	836.02	836.94	766.29	835.05
WATER TEMP, FIELD MMT (DEG. CENT.)	16.2	15.8	11.7	14	11.4	12.8	13.1	13.3
PH, FIELD MMT. (PH UNITS)	7.2	6.4	8.1	8.2	7.8	8.1	7.9	8.2
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	491	695	448	482	407	514	556	303
DISSOLVED OXYGEN, FIELD MMT. (PPM)	1.5	4.8	2.1	1.1	4.8	8.7	1.7	13.8
REDOX, FIELD MMT. (MV)	146	203	-60	137	173	187	237	160
MISCELLANEOUS PARAMETERS								
CHEMICAL OXYGEN DEMAND (MG/L)	7.7	7.7	.	.	.	.	.	.
CYANIDE (MG/L)	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
PHENOLS (MG/L)	.	.	7.9	7.95	7.69	7.84	8.03	8.11
PH, REP. 2 (PH UNITS)	7.5	7	7.9	7.98	7.76	7.9	8.04	8.12
PH, REP. 3 (PH UNITS)	.	.	7.92	7.99	7.79	7.9	8.05	8.12
PH, REP. 4 (PH UNITS)	.	.	7.91	8	7.77	8.02	8.05	8.14
CONDUCTIVITY (UMHOS/CM)	536	286	429	470	332	523	556	319
CONDUCTIVITY, REP. 2 (UMHOS/CM)	.	.	428	470	332	523	556	318
CONDUCTIVITY, REP. 3 (UMHOS/CM)	.	.	428	471	332	521	557	319
CONDUCTIVITY, REP. 4 (UMHOS/CM)	.	.	428	471	332	523	558	318
TOTAL ORGANIC CARBON (MG/L)	.	3.1	5.3	2.8	<1	2.4	3.5	1.1
TOTAL ORGANIC CARBON, REP 2 (MG/L)	.	.	<1	1.7	<1	<1	<1	1.9
TOTAL ORGANIC CARBON, REP 3 (MG/L)	.	.	6.1	<1	<1	<1	<1	2
TOTAL ORGANIC CARBON, REP 4 (MG/L)	.	.	5.8	<1	<1	2.1	<1	1.8
TOTAL ORGANIC HALIDE (UG/L)	.	<10	<10	<10	<10	<10	<10	<10
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	.	.	<10	<10	<10	<10	<10	<10
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	.	.	<10	<10	<10	<10	<10	<10
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	.	.	<10	<10	<10	<10	<10	<10
TPH DIESEL RANGE X10-LAB (MG/L)	.	0.1	<10	<10	<10	<10	<10	<10
DISSOLVED SOLIDS (MG/L)	286	160	226	266	186	164	310	168
TOTAL SUSPENDED SOLIDS (MG/L)	<1	4	5	<1	<1	17	<1	1.5
TURBIDITY (NTU)	0.35	10	35	7.8	0.3	20	9.6	3.2

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-156 CRSDB 10/23/95	GW-156 CRSDB 10/24/95	GW-156 CRSDB 10/25/95	GW-156 CRSDB 10/26/95	GW-159 CRSDB 10/23/95	GW-159 CRSDB 10/24/95	GW-159 CRSDB 10/25/95	GW-159 CRSDB 10/26/95	GW-160 CRBAMP 11/02/95	GW-161 CRBAMP 10/31/95
FIELD MEASUREMENTS										
STATIC WATER LEVEL (FT. BELOW TOC)	-143.42	-143.6	-143.45	-143.45	-123.55	-143.8	-138.95	-134.75	-150.35	-162.7
WATER LEVEL ELEV. (FT. ABOVE MSL)	905.68	905.5	905.65	905.65	927.65	907.4	912.25	916.45	942.75	930.8
WATER TEMP, FIELD MMT (DEG. CENT.)	15	14.4	14	15	14.4	14.5	13.5	13.9	15.3	14.3
PH, FIELD MMT. (PH UNITS)	7.5	7.3	7.4	7.3	8	7.8	8	7.8	7.5	7.9
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	606	559	550	560	340	342	744	492	408	352
DISSOLVED OXYGEN, FIELD MMT. (PPM)	6.3	5.2	5.5	5.2	5.9	6.8	7.4	6.6	6.3	3.3
REDOX, FIELD MMT. (MV)	186	158	158	198	148	112	163	119	95	167
MISCELLANEOUS PARAMETERS										
CHEMICAL OXYGEN DEMAND (MG/L)	.	.	.	.	.	.	.	.	<5	6.4
CYANIDE (MG/L)	.	.	.	.	.	.	.	.	<0.1	<0.1
PHENOLS (MG/L)	.	.	.	.	.	.	.	.	.	.
PH	7.4	7.4	7.56	7.4	7.9	7.8	7.8	7.87	7.46	7.94
PH, REP. 2 (PH UNITS)	.	.	.	.	.	.	.	.	.	.
PH, REP. 3 (PH UNITS)	.	.	.	.	.	.	.	.	.	.
PH, REP. 4 (PH UNITS)	.	.	.	.	.	.	.	.	.	.
CONDUCTIVITY (UMHOS/CM)	623	595	599	603	354	351	359	362	418	355
CONDUCTIVITY, REP. 2 (UMHOS/CM)	.	.	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 3 (UMHOS/CM)	.	.	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 4 (UMHOS/CM)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 2 (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 3 (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 4 (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE (UG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	.	.	.	.	.	.	.	.	.	.
TPH DIESEL RANGE X10-LAB (MG/L)	.	.	.	.	.	.	.	.	.	.
DISSOLVED SOLIDS (MG/L)	384	366	336	350	176	224	216	186	730	198
TOTAL SUSPENDED SOLIDS (MG/L)	16	<1	4	5	13	1696	2.5	1	5365	<1
TURBIDITY (NTU)	21	2.2	0.95	3.1	19	41	2.9	3	7600	5.3

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-175 CRSP 11/17/95	GW-177 CRSP 11/16/95	GW-181 CRSP 11/05/95	GW-184 RQ 10/31/95	GW-186 RQ 11/03/95	GW-187 RQ 11/02/95	GW-188 RQ 10/31/95	GW-203 UNCS 10/07/95	GW-205 UNCS 10/07/95	GW-221 UNCS 10/08/95
FIELD MEASUREMENTS										
STATIC WATER LEVEL (FT. BELOW TOC)	-122.75	-117.8	-113.12	-109.74	-14.26	-19.55	-20.45	-83.15	-81.7	-84.9
WATER LEVEL ELEV. (FT. ABOVE MSL)	961.25	1040.2	979.88	817.89	817.06	814.73	816.64	1022.15	1022.3	1021.1
WATER TEMP, FIELD MMT (DEG. CENT.)	13.3	10.8	13.8	13.6	13.8	16.2	15.5	15.9	16	15
PH, FIELD MMT. (PH UNITS)	7.8	7.9	8	7.5	7.1	7.6	8	7.8	8.1	7.7
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	370	414	309	414	860	964	436	247	262	282
DISSOLVED OXYGEN, FIELD MMT. (PPM)	9.5	12.1	4.8	4.5	1.2	0.8	7.5	0.5	0.4	2.3
REDOX, FIELD MMT. (MV)	163	175	89	171	-40	-279	-24	107	116	134
MISCELLANEOUS PARAMETERS										
CHEMICAL OXYGEN DEMAND (MG/L)	.	.	.	.	.	.	.	.	.	.
CYANIDE (MG/L)	.	.	.	.	.	.	.	.	.	.
PHENOLS (MG/L)	.	.	.	.	.	.	.	.	.	.
PH	7.79	7.86	7.82	7.52	7.18	7.76	8.05	8	8.3	7.9
PH, REP. 2 (PH UNITS)	.	.	.	.	.	.	.	.	.	.
PH, REP. 3 (PH UNITS)	.	.	.	.	.	.	.	.	.	.
PH, REP. 4 (PH UNITS)	.	.	.	.	.	.	.	.	.	.
CONDUCTIVITY (UMHOS/CM)	395	421	319	424	870	1000	458	260	276	284
CONDUCTIVITY, REP. 2 (UMHOS/CM)	.	.	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 3 (UMHOS/CM)	.	.	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 4 (UMHOS/CM)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 2 (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 3 (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 4 (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE (UG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	.	.	.	.	.	.	.	.	.	.
TPH DIESEL RANGE X10-LAB (MG/L)	.	.	.	.	.	.	.	.	.	.
DISSOLVED SOLIDS (MG/L)	190	120	144	250	532	592	324	140	162	142
TOTAL SUSPENDED SOLIDS (MG/L)	2	12	10	1.5	4	<1	34	3	4	<1
TURBIDITY (NTU)	4.1	5.2	15	2.4	0.8	95	74	3.6	2	1.1

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-231 KHQ 11/06/95	GW-292 ECRUP 11/06/95	GW-293 ECRUP 11/06/95	GW-294 ECRUP 11/05/95	GW-296 ECRUP 11/05/95	GW-298 CRBAMP 11/04/95	GW-299 CRBAMP 11/03/95	GW-300 CRBAMP 11/03/95	GW-301 CRBAMP 11/03/95	GW-302 UNCS 10/08/95
FIELD MEASUREMENTS										
STATIC WATER LEVEL (FT. BELOW TOC)	-14.35	-118.1	-118.3	-99.2	-119.35	-109	-103	-116	-136.15	-108
WATER LEVEL ELEV. (FT. ABOVE MSL)	835.12	954.9	945.6	984.4	971.65	940	950.9	957.1	950.25	1033.7
WATER TEMP, FIELD MMT (DEG. CENT.)	14.6	13.6	13.7	11.2	11.2	14	13.6	13	12.8	16
PH, FIELD MMT. (PH UNITS)	7.4	7.4	7.5	7.5	7.5	8	7.4	7.3	8.1	7.2
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	384	447	468	423	378	302	271	238	313	468
DISSOLVED OXYGEN, FIELD MMT. (PPM)	0.4	6.4	3.9	8.3	7.4	3.1	4.7	5.1	8.4	3.7
REDOX, FIELD MMT. (MV)	189	242	203	239	229	188	119	181	136	57
MISCELLANEOUS PARAMETERS										
CHEMICAL OXYGEN DEMAND (MG/L)	.	.	.	.	.	<5	<5	<5	<5	.
CYANIDE (MG/L)	.	.	.	.	.	<0.1	<0.1	<0.1	<0.1	.
PHENOLS (MG/L)	<0.05	7.52	7.61	7.92	7.72	8.18	7.95	7.52	8.04	7.6
PH, REP. 2 (PH UNITS)	7.34	.	.	.	.	.	.	.	.	.
PH, REP. 3 (PH UNITS)	7.32	.	.	.	.	.	.	.	.	.
PH, REP. 4 (PH UNITS)	7.36	.	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 2 (UMHOS/CM)	399	481	496	459	406	322	266	245	325	515
CONDUCTIVITY, REP. 3 (UMHOS/CM)	401	.	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 4 (UMHOS/CM)	400	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON (MG/L)	1.4	.	.	.	.	2.2	<1	4.2	1.7	.
TOTAL ORGANIC CARBON, REP 2 (MG/L)	1.6	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 3 (MG/L)	1.9	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 4 (MG/L)	3.5	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE (UG/L)	<10	.	.	.	.	<10	<10	<10	<10	.
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	<10	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	<10	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	<10	.	.	.	.	.	.	.	.	.
TPH DIESEL RANGE X10-LAB (MG/L)	242	228	166	252	184	172	86	144	168	278
DISSOLVED SOLIDS (MG/L)	1	<1	3.5	<1	1	13	<1	<1	7	2
TOTAL SUSPENDED SOLIDS (MG/L)	0.5	0.5	8.8	0.7	2	16	1.1	7.5	10.2	9.2
TURBIDITY (NTU)										

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-321 ADB 10/26/95	GW-339 UNCS 10/08/95	GW-511 CRSP 11/07/95	GW-512 ADB 10/31/95	GW-513 ADB 10/31/95	GW-514 ADB 11/02/95	GW-539 LII 10/06/95	GW-540 CDLVI 10/11/95	GW-541 CDLVI 10/12/95	GW-542 CDLVI 10/16/95
FIELD MEASUREMENTS										
STATIC WATER LEVEL (FT. BELOW TOC)	-22.67	-80.25	-114.35	-30.34	-30.82	-31.92	-109.32	-84.9	-65.72	-70.45
WATER LEVEL ELEV. (FT. ABOVE MSL)	902.91	1044.35	978.85	971.16	970.58	969.28	983.68	987.2	992.68	981.15
WATER TEMP, FIELD MMT (DEG. CENT.)	14.8	16	13.7	14.5	14.5	15.1	18	14.8	15.5	15.3
PH, FIELD MMT. (PH UNITS)	7.9	7.2	8.1	7.3	7.7	7.7	8	7.6	7.7	6.8
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	229	499	257	281	288	438	336	331	287	264
DISSOLVED OXYGEN, FIELD MMT. (PPM)	6.4	3.2	5.6	4.1	5.2	4.1	0.7	4.3	0.6	5.4
REDOX, FIELD MMT. (MV)	143	18	174	183	157	89	62	97	110	92
MISCELLANEOUS PARAMETERS										
CHEMICAL OXYGEN DEMAND (MG/L)	.	.	.	.	.	.	<5	<5	<5	<5
CYANIDE (MG/L)	.	.	.	.	.	.	<0.1	<0.1	<0.1	<0.1
PHENOLS (MG/L)	.	.	.	.	.	.	.	.	.	.
PH (PH UNITS)	8.09	7.8	8.21	7.52	7.92	7.85	8	7.9	8	7.19
PH, REP. 2 (PH UNITS)	.	.	.	.	.	.	.	.	.	.
PH, REP. 3 (PH UNITS)	.	.	.	.	.	.	.	.	.	.
PH, REP. 4 (PH UNITS)	.	.	.	.	.	.	.	.	.	.
CONDUCTIVITY (UMHOS/CM)	239	558	263	297	329	330	357	367	328	256
CONDUCTIVITY, REP. 2 (UMHOS/CM)	.	.	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 3 (UMHOS/CM)	.	.	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 4 (UMHOS/CM)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON (MG/L)	3.4	.	.	1.4	1.6	1	1.6	2.2	<1	2.2
TOTAL ORGANIC CARBON, REP 2 (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 3 (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 4 (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE (UG/L)	<10	.	.	<10	<10	<10	<10	<10	<10	<10
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	.	.	.	.	.	.	.	.	.	.
TPH DIESEL RANGE (MG/L)	166	142	162	214	208	142	202	232	240	36
DISSOLVED SOLIDS (MG/L)	<1	2.5	<1	5	3.5	2	9	<1	<1	4
TOTAL SUSPENDED SOLIDS (MG/L)	0.25	7.2	0.5	7.7	1.9	8.6	12	0.15	1.3	2.6
TURBIDITY (NTU)	.	.	.	.	.	.	.	.	.	.

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 4TH QUARTER 1995

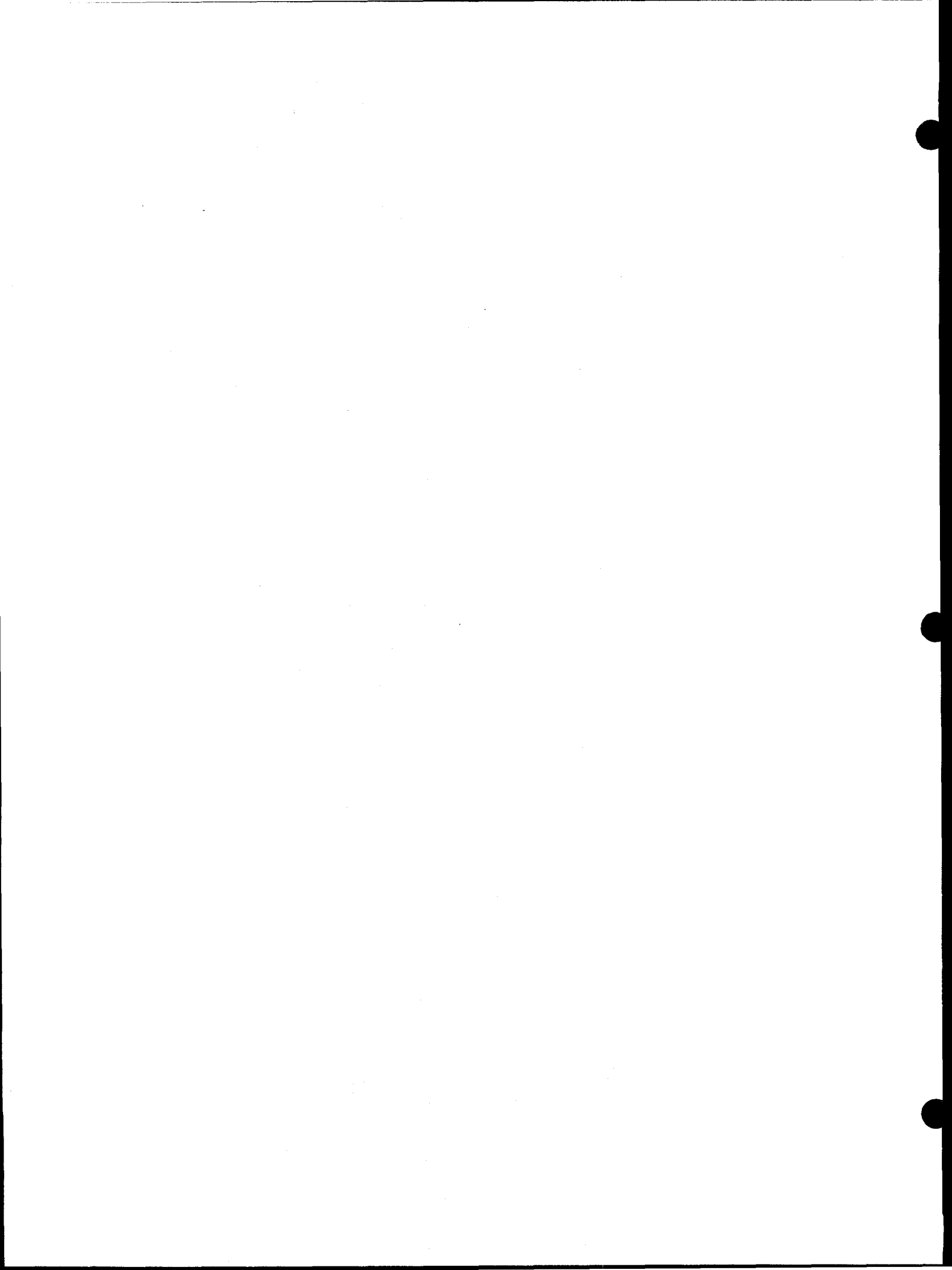
SAMPLING POINT LOCATION DATE SAMPLED	GW-543 CDLVI 10/17/95	GW-544 CDLVI 10/17/95	GW-546 CDLVI 10/11/95	GW-557 LV 10/07/95	GW-560 CDLVI 10/06/95	GW-562 CDLVI 10/06/95	GW-564 CDLVI 10/07/95	GW-608 CRSP 11/16/95	GW-609 CRSP 11/20/95	GW-610 CRSP 11/13/95
FIELD MEASUREMENTS										
STATIC WATER LEVEL (FT. BELOW TOC)	-63.94	-67.1	-84.7	-122.56	-36.25	-10.25	-11.32	-132.95	-169.85	-80.83
WATER LEVEL ELEV. (FT. ABOVE MSL)	959.86	977.9	987.5	958.94	902.67	924.24	926.45	941.05	942.25	978.57
WATER TEMP, FIELD MMT (DEG. CENT.)	15.8	15	18.4	14.8	15	15.2	14.8	13	14.4	13.2
PH, FIELD MMT. (PH UNITS)	7.2	7.8	8.4	7.6	7.5	7.6	6.7	8	7.9	6.5
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	398	501	208	294	258	306	274	178	362	400
DISSOLVED OXYGEN, FIELD MMT. (PPM)	5.8	3.6	1.9	7.8	7.2	5.9	6.6	8.5	5.8	7.7
REDOX, FIELD MMT. (MV)	90	124	112	167	378	200	209	297	159	163
MISCELLANEOUS PARAMETERS										
CHEMICAL OXYGEN DEMAND (MG/L)	6.1	<5	<5	<5	7.3	7	<5	.	.	.
CYANIDE (MG/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	.	.	.
PHENOLS (MG/L)	7.8	7.9	8.4	7.9	8.1	8.1	7.2	7.86	7.79	7.8
PH, REP. 2 (PH UNITS)	.	.	.	.	.	.	.	.	.	.
PH, REP. 3 (PH UNITS)	.	.	.	.	.	.	.	.	.	.
PH, REP. 4 (PH UNITS)	.	.	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 2 (UMHOS/CM)	429	435	252	313	285	339	237	291	370	413
CONDUCTIVITY, REP. 3 (UMHOS/CM)	.	.	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 4 (UMHOS/CM)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON (MG/L)	2.7	2.5	2.2	2.4	3.2	1.7	<1	.	.	.
TOTAL ORGANIC CARBON, REP 2 (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 3 (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 4 (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE (UG/L)	<10	<10	<10	<10	<10	<10	<10	.	.	.
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	.	.	.	.	.	.	.	.	.	.
TPH DIESEL RANGE X10-LAB (MG/L)	.	.	.	.	0.1	0.1	0.1	.	.	.
DISSOLVED SOLIDS (MG/L)	256	178	176	158	152	194	128	148	202	92
TOTAL SUSPENDED SOLIDS (MG/L)	<1	<1	194	3	<1	5	1.5	5	<1	1
TURBIDITY (NTU)	3.1	1.7	160	1.8	1.3	8.9	1.4	5.1	0.3	0.3

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-611 CRSP 11/17/95	GW-709 LTI 10/06/95	GW-731 CRSDB 10/23/95	GW-731 CRSDB 10/24/95	GW-731 CRSDB 10/25/95	GW-731 CRSDB 10/26/95	GW-732 CRSDB 10/23/95	GW-732 CRSDB 10/24/95	GW-732 CRSDB 10/25/95	GW-732 CRSDB 10/26/95
FIELD MEASUREMENTS										
STATIC WATER LEVEL (FT. BELOW TOC)	-103.93	-28.63	-125.21	-124.15	-123.3	-125.15	-157.8	-157.7	-157.75	-157.6
WATER LEVEL ELEV. (FT. ABOVE MSL)	944.47	877.97	923.99	925.05	925.9	924.05	906.3	906.4	906.35	906.5
WATER TEMP, FIELD MMT (DEG. CENT.)	11.5	15.6	14.1	14.5	13.9	15	14.2	14.3	13.5	14
PH, FIELD MMT. (PH UNITS)	7.7	8.2	8.7	9.6	9.3	9.4	8.1	11.4	10.6	11.2
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	528	290	222	228	219	215	261	327	250	274
DISSOLVED OXYGEN, FIELD MMT. (PPM)	11	0.7	4.9	4.4	4.7	4.4	5.7	5.2	6	6.1
REDOX, FIELD MMT. (MV)	163	114	166	178	149	155	143	307	127	124
MISCELLANEOUS PARAMETERS										
CHEMICAL OXYGEN DEMAND (MG/L)	.	<5	.	.	.	.	.	.	.	.
CYANIDE (MG/L)	.	<0.1	.	.	.	.	.	.	.	.
PHENOLS (MG/L)	.	.	.	.	.	.	.	.	.	.
PH, REP. 2 (PH UNITS)	7.53	8.2	8.7	9	9	9.2	8.1	11.5	11.2	10.2
PH, REP. 3 (PH UNITS)	.	.	.	.	.	.	.	.	.	.
PH, REP. 4 (PH UNITS)	.	.	.	.	.	.	.	.	.	.
CONDUCTIVITY (UMHOS/CM)	498	332	220	208	212	205	278	496	363	214
CONDUCTIVITY, REP. 2 (UMHOS/CM)	.	.	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 3 (UMHOS/CM)	.	.	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 4 (UMHOS/CM)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON (MG/L)	.	1.2	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 2 (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 3 (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 4 (MG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE (UG/L)	.	<10	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	.	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	.	.	.	.	.	.	.	.	.	.
TPH DIESEL RANGE X10-LAB (MG/L)	.	.	.	.	.	.	.	.	.	.
DISSOLVED SOLIDS (MG/L)	286	172	150	146	142	136	164	160	130	138
TOTAL SUSPENDED SOLIDS (MG/L)	6	48	4.5	3	9	11	2.5	30	32	41
TURBIDITY (NTU)	6.9	25	13	7	33	5.2	1.4	19	28	38

APPENDIX E.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-742 CRSP 11/09/95	GW-743 CRSP 11/13/95	GW-757 LII 10/06/95	GW-796 LV 10/08/95	GW-797 LV 10/08/95	GW-798 CDLVI 10/08/95	GW-799 LV 10/07/95	GW-801 LV 10/09/95	GW-827 CDLVI 10/16/95
FIELD MEASUREMENTS									
STATIC WATER LEVEL (FT. BELOW TOC)	-136.72	-133.78	-83.4	-83.76	-70.37	-83.91	-16.66	-112.51	-44.56
WATER LEVEL ELEV. (FT. ABOVE MSL)	964.28	966.62	878.03	968.64	989.43	921.89	964.43	984.45	1006.83
WATER TEMP, FIELD MMT (DEG. CENT.)	13.8	13.8	16.2	14.7	15.2	15.2	14.7	14.1	14.1
PH, FIELD MMT. (PH UNITS)	8	7.8	8.3	7.8	7.8	7.4	7.7	7.8	7.9
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	365	301	311	200	266	239	227	253	285
DISSOLVED OXYGEN, FIELD MMT. (PPM)	2.5	8.4	0.5	9.1	8.2	7.5	8.3	7.5	4.2
REDOX, FIELD MMT. (MV)	-27	192	145	285	240	223	214	194	179
MISCELLANEOUS PARAMETERS									
CHEMICAL OXYGEN DEMAND (MG/L)	.	.	<5	<5	<5	<5	<5	<5	<5
CYANIDE (MG/L)	.	.	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PHENOLS (MG/L)	.	.	.	.	.	.	.	.	.
PH, REP. 2 (PH UNITS)	7.92	7.96	8.3	8.6	8.2	7.9	8	8	8.03
PH, REP. 3 (PH UNITS)	.	.	.	.	.	.	.	.	.
PH, REP. 4 (PH UNITS)	.	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 2 (UMHOS/CM)	328	281	335	216	281	250	247	270	272
CONDUCTIVITY, REP. 3 (UMHOS/CM)	.	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 4 (UMHOS/CM)	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON (MG/L)	.	.	3	1.2	1.6	<1	<1	1.4	<1
TOTAL ORGANIC CARBON, REP 2 (MG/L)	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 3 (MG/L)	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 4 (MG/L)	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE (UG/L)	.	.	<10	<10	<10	<10	<10	<10	<10
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	.	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	.	.	.	.	.	.	.	.	.
TPH DIESEL RANGE X10-LAB (MG/L)	.	.	.	.	.	.	.	.	.
DISSOLVED SOLIDS (MG/L)	190	106	200	140	300	0.1	134	150	180
TOTAL SUSPENDED SOLIDS (MG/L)	<1	<1	4	3	1	124	11	<1	<1
TURBIDITY (NTU)	10	0.65	4.9	4.3	1.7	0.65	14	3.7	0.8



APPENDIX E.5
RADIONUCLIDES

APPENDIX E.5
RADIONUCLIDES, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-141 LIV 01/09/95	GW-142 KHQ 01/10/95	GW-142 KHQ 03/20/95	GW-143 KHQ 01/17/95	GW-144 KHQ 01/18/95	GW-144 KHQ 03/22/95	GW-145 KHQ 01/18/95	GW-145 KHQ 03/24/95	GW-146 KHQ 01/17/95	GW-146 KHQ 03/23/95
GROSS ALPHA (PCI/L)	-0.00528	6.08		3.86	3.23		14.1		3.23	
COUNTING ERROR	1.3	2.5		1.8	1.6		3.5		1.6	
GROSS BETA (PCI/L)	-0.0887	5.35		18.2	5.45		16.7		14	
COUNTING ERROR	2.5	2.9		3.7	2.6		3.6		3.3	
RADIONUCLIDES										
241-AMERICIUM (PCI/L)										
COUNTING ERROR										
137-CESIUM (PCI/L)										
COUNTING ERROR										
129-IODINE (BQ/L)										
COUNTING ERROR										
237-NEPTUNIUM (PCI/L)										
COUNTING ERROR										
238-PLUTONIUM (PCI/L)										
COUNTING ERROR										
239-PLUTONIUM (PCI/L)										
COUNTING ERROR										
PROTACTINIUM (PCI/L)										
COUNTING ERROR										
RADIUM (BQ/L)										
COUNTING ERROR										
STRONTIUM (PCI/L)										
COUNTING ERROR										
99-TECHNETIUM (PCI/L)										
COUNTING ERROR										
231+234-THORIUM (PCI/L)										
COUNTING ERROR										
231+234-THORIUM (BQ/L)										
TRITIUM (TRITIUM)										
COUNTING ERROR										
234-URANIUM (PCI/L)			1.04 *							
COUNTING ERROR			0.52							
235-URANIUM (PCI/L)			5.94 E							
COUNTING ERROR			44							
238-URANIUM (PCI/L)			0.909							
COUNTING ERROR			0.49							
(238-URANIUM)										
(241-AMERICIUM)										
(137-CESIUM)										
X10-LAB (BQ/L)										
(129-IODINE)										
(237-NEPTUNIUM)										
(238-PLUTONIUM)										
(239-PLUTONIUM)										
(PROTACTINIUM)										
X10-LAB (BQ/L)										
(RADIUM)										
(STRONTIUM)										
(99-TECHNETIUM)										
(231+234-THORIUM)										
X10-LAB (BQ/L)										
(TRITIUM)										
(234-URANIUM)										
(235-URANIUM)										
(238-URANIUM)										
(238-URANIUM)										

APPENDIX E.5
RADIONUCLIDES, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-147 KHQ 01/15/95	GW-156 CRSDB 01/18/95	GW-158 CRSDB 01/20/95	GW-159 CRSDB 01/15/95	GW-175 CRSP 02/14/95	GW-177 CRSP 02/13/95	GW-181 CRSP 01/24/95	GW-217 LIV 01/04/95	GW-231 KHQ 01/15/95	GW-241 CRSDB 01/20/95
GROSS ALPHA	2.47	1.4	2.01	2.35	1.33	3.22	0.644	0.803	1.13	0.64
COUNTING ERROR	1.4	1.4	1.5	1.6	1.4	1.9	1.1	0.86	0.98	1.1
GROSS BETA	5.6	2.27	3.39	1.4	-1.04	2.34	2.2	6.04	1.14	4.49
COUNTING ERROR	2.6	2.4	2.5	2.4	2.5	2.7	2.4	2.7	2.3	2.6
RADIONUCLIDES										
241-AMERICIUM										
COUNTING ERROR										
137-CESIUM										
COUNTING ERROR										
129-IODINE										
COUNTING ERROR										
237-NEPTUNIUM										
COUNTING ERROR										
238-PLUTONIUM										
COUNTING ERROR										
239-PLUTONIUM										
COUNTING ERROR										
PROTACTINIUM										
COUNTING ERROR										
RADIUM										
COUNTING ERROR										
STRONTIUM										
COUNTING ERROR										
99-TECHNETIUM										
COUNTING ERROR										
231+234-THORIUM										
COUNTING ERROR										
TRITIUM										
COUNTING ERROR										
234-URANIUM										
COUNTING ERROR										
235-URANIUM										
COUNTING ERROR										
238-URANIUM										
COUNTING ERROR										

APPENDIX E.5
RADIONUCLIDES, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-303 CRSDB 01/19/95	GW-304 CRSDB 01/15/95	GW-305 LIV 01/10/95	GW-321 ADB 01/10/95	GW-511 CRSP 01/24/95	GW-521 LIV 01/09/95	GW-522 LIV 01/10/95	GW-539 LII 01/04/95	GW-608 CRSP 02/02/95	GW-609 CRSP 02/15/95
GROSS ALPHA (PCI/L)	2.14	1.33	0.158	0.155	0.631	-0.00578	-0.167	2.86	-0.51	0.505
COUNTING ERROR	1.4	1.3	1.3	1.2	1.1	1	1.2	1.5	1.3	1.2
GROSS BETA (PCI/L)	4.83	2.52	0.234	-1.99	3.92	2.62	-0.986	3.59	2.08	-1.67
COUNTING ERROR	2.5	2.5	2.6	2.5	2.6	2.5	2.5	2.6	2.6	2.5
RADIONUCLIDES										
241-AMERICIUM (PCI/L)						0.739				
COUNTING ERROR						2.1				
137-CESIUM (PCI/L)								-0.702 F		
COUNTING ERROR								5.5		
129-IODINE (129-IODINE)						0.1				
COUNTING ERROR						1				
237-NEPTUNIUM (PCI/L)						0.418				
COUNTING ERROR						0.48				
238-PLUTONIUM (PCI/L)						-0.133				
COUNTING ERROR						0.7				
239-PLUTONIUM (PCI/L)						0				
COUNTING ERROR						0.46				
PROTACTINIUM (PCI/L)								-166 HF		
COUNTING ERROR								920		
RADIUM (RADIUM)										
COUNTING ERROR										
STRONTIUM (PCI/L)						0.029				
COUNTING ERROR						0.03				
99-TECHNETIUM (PCI/L)						-24				
COUNTING ERROR						17.8				
231+234-THORIUM (PCI/L)						37				
COUNTING ERROR								-60.9 HF		
TRITIUM (TRITIUM)						5		66		
COUNTING ERROR						24				
234-URANIUM (PCI/L)						0.111				
COUNTING ERROR						0.67		0		
235-URANIUM (PCI/L)						18.2 E		0.74		
COUNTING ERROR						91		3.46 E		
238-URANIUM (PCI/L)						-0.223		7.1		
COUNTING ERROR						0.55		0.526		
								0.53		

APPENDIX E-5

**SAMPLING POINT
LOCATION
DATE SAMPLED**

APPENDIX E.5
RADIONUCLIDES, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	1090 UNCS 04/20/95	CBS-1 LV 04/17/95	GW-142 KHQ 04/20/95	GW-143 KHQ 04/24/95	GW-144 KHQ 04/25/95	GW-145 KHQ 04/26/95	GW-146 KHQ 04/24/95	GW-147 KHQ 04/21/95	GW-156 CRSDB 04/07/95	GW-158 CRSDB 04/13/95
GROSS ALPHA (GROSS ALPHA)	2.57	-0.165	6.34	4.39	2.29	9.93	4.51	1.54	2.98	2.62
COUNTING ERROR	1.7	0.98	2.4	2.2	1.5	3	2.2	1.4	2.4	2.5
GROSS BETA (PCI/L)	3.29	0.165	10.2	15.7	4.59	14.7	16.1	5.17	9.86	3.65
COUNTING ERROR	2.5	2.5	3.1	3.5	2.7	3.5	3.6	2.7	3.4	3.1
RADIONUCLIDES										
137-CESIUM (PCI/L)	.	4.61 E	.	.	.	.	.	.	.	.
COUNTING ERROR	.	15	.	.	89.4 i	.	.	.	.	.
40-POTASSIUM (PCI/L)	.	.	.	.	110	.	71 i	.	.	.
COUNTING ERROR	.	.	.	.	.	.	85	.	.	.
PROTACTINIUM (PCI/L)	.	1670 HE	.	.	.	.	.	.	.	.
COUNTING ERROR	.	2200	.	.	.	.	.	.	.	.
RADIUM (PROTACTINIUM)	0.028	.	.	.	.	.	.	.	.	.
COUNTING ERROR	0.029	.	.	.	.	.	.	.	.	.
STRONTIUM (RADIUM)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
231+234-THORIUM (PCI/L)	.	-215 HG	-2.86	3.24	7.43	0.897	3.89	-2.06	.	.
COUNTING ERROR	.	180	5.7	5.9	6.3	5.6	5.9	5.8	.	.
234-URANIUM (PCI/L)	0.565	0.308	4.4	0.828	1.01 *	8.07	1.63	1.96	.	.
COUNTING ERROR	0.39	0.36	0.95	0.59	0.64	2	0.84	0.63	.	.
235-URANIUM (PCI/L)	-0.985 F	-4.57 F	5.04 E	3.15 E	-5.21 F	0.116 E	-1.03 F	3.97 E	.	.
COUNTING ERROR	13	20	7.3	13	13	13	7.4	7.2	.	.
238-URANIUM (PCI/L)	0	0	3.05	0.104	0.704	5.7	0.762	0.636	.	.
COUNTING ERROR	0.2	0.41	0.78	0.21	0.53	1.6	0.58	0.35	.	.

APPENDIX E.5
RADIONUCLIDES, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-159 CRSDB 04/06/95	GW-160 CRBAMP 04/26/95	GW-161 CRBAMP 04/20/95	GW-175 CRSP 05/15/95	GW-177 CRSP 05/11/95	GW-181 CRSP 05/02/95	GW-184 RQ 05/01/95	GW-186 RQ 05/03/95	GW-187 RQ 05/02/95	GW-188 RQ 05/01/95
GROSS ALPHA	(PCI/L)	6.73	1.66	-0.361	4.72	1.74	-0.324	-1.91	-1.44	0
COUNTING ERROR	(GROSS ALPHA)	4.8	2.3	1.1	2.4	2	2	2.4	2.8	2.2
GROSS BETA	(PCI/L)	12.9	0.743	1.74	4.16	3.67	1.77	-0.0908	0.0917	6.57
COUNTING ERROR	(GROSS BETA)	6.6	2.9	2.5	2.8	2.8	3	3	3	3.3
RADIONUCLIDES										
137-CESIUM	(PCI/L)	.	.	.	.	.	.	.	.	.
COUNTING ERROR	(137-CESIUM)	.	.	.	.	.	.	.	.	.
40-POTASSIUM	(PCI/L)	.	.	.	.	.	.	.	.	.
COUNTING ERROR	(40-POTASSIUM)	.	.	.	.	.	.	.	.	.
PROTACTINIUM	(PCI/L)	.	.	.	.	.	.	.	.	.
COUNTING ERROR	(PROTACTINIUM)	.	.	.	.	.	.	.	.	.
RADIUM	X10-LAB (Bq/L)	.	.	.	.	.	.	.	.	.
COUNTING ERROR	(RADIUM)	.	.	.	.	.	.	.	.	.
STRONTIUM	(PCI/L)	.	.	.	.	.	.	.	.	.
COUNTING ERROR	(STRONTIUM)	.	.	.	.	.	.	.	.	.
231+234-THORIUM	(PCI/L)	.	.	.	.	.	.	.	.	.
COUNTING ERROR	(231+234-THORIUM)	.	.	.	.	.	.	.	.	.
234-URANIUM	(PCI/L)	.	.	.	.	.	.	.	.	.
COUNTING ERROR	(234-URANIUM)	.	.	.	.	.	.	.	.	.
235-URANIUM	(PCI/L)	.	.	.	.	.	.	.	.	.
COUNTING ERROR	(235-URANIUM)	.	.	.	.	.	.	.	.	.
238-URANIUM	(PCI/L)	.	.	.	.	.	.	.	.	.
COUNTING ERROR	(238-URANIUM)	.	.	.	.	.	.	.	.	.

APPENDIX E.5
RADIONUCLIDES, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-203 UNCS 04/18/95	GW-205 UNCS 04/18/95	GW-221 UNCS 04/19/95	GW-231 KHQ 04/21/95	GW-241 CRSDB 04/09/95	GW-292 ECRWP 04/24/95	GW-293 ECRWP 04/23/95	GW-294 ECRWP 04/22/95	GW-295 CRBAUP 05/03/95	GW-296 ECRWP 04/22/95
GROSS ALPHA (PCI/L)	0.989	1.16	0.981	1.01	2.58	2.82	1.66	-0.306	.	2.44
COUNTING ERROR	1.2	1.3	1.2	1.3	2	2.3	2.1	2.1	.	2.4
GROSS BETA (PCI/L)	3.86	2.73	1.04	3.28	5.56	-0.531	2.66	1.16	.	-1.57
COUNTING ERROR	2.6	2.5	2.4	2.5	3.1	2.9	3.1	3	.	2.8
RADIONUCLIDES										
137-CESIUM (PCI/L)	5.3	.	.	.	.	.	.	.	.	.
COUNTING ERROR	5	.	.	.	.	.	.	.	.	.
40-POTASSIUM (PCI/L)	.	85.9 i	.	85.9 i	.	.	.	.	.	.
COUNTING ERROR	.	110	.	110	.	.	.	.	.	.
PROTACTINIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
RADIUM X10-LAB (BQ/L)	0.041	0.009	0.012	.	.	.	.	.	.	.
COUNTING ERROR	0.034	0.026	0.023	.	.	.	.	.	.	.
STRONTIUM (PCI/L)	.	.	.	0.722	.	.	.	.	.	.
COUNTING ERROR	.	.	.	6.1	.	.	.	.	.	.
231+234-THORIUM (PCI/L)	.	76.5	.	.	.	.	.	.	.	.
COUNTING ERROR	.	66	.	.	.	.	.	.	.	.
234-URANIUM (PCI/L)	0.333	0.953	0.465	0.256	.	.	.	.	.	.
COUNTING ERROR	0.31	0.49	0.32	0.27	.	.	.	.	.	.
235-URANIUM (PCI/L)	2.58 E	0.0579 E	6.82 E	8.94 E	.	.	.	.	.	.
COUNTING ERROR	7.2	13	13	13	.	.	.	.	.	.
238-URANIUM (PCI/L)	0 *	0.168	0.186	0	.	.	.	.	.	.
COUNTING ERROR	0.19	0.19	0.19	0.18	.	.	.	.	.	.

APPENDIX E.5
RADIONUCLIDES, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-298 CRBAMP 05/02/95	GW-299 CRBAMP 05/01/95	GW-300 CRBAMP 04/27/95	GW-301 CRBAMP 04/27/95	GW-302 UNCS 04/19/95	GW-303 CRSDB 04/09/95	GW-304 CRSDB 04/06/95	GW-321 ADB 04/25/95	GW-339 UNCS 04/19/95	GW-511 CRSP 05/03/95
GROSS ALPHA	(PCI/L)									
COUNTING ERROR	(GROSS ALPHA)	-0.29 C	0.915	2.83	1.64	0.198	1.28	-0.604	1.3	6.81 N
GROSS BETA	(PCI/L)	2.2	1.8	2.2	1.5	2	1.8	1.6	1.5	2.6
COUNTING ERROR	(GROSS BETA)	2.23 C	2.72	1.23	2.74	3.34	2.12	4.81	2.03	2.78
		2.6	3.1	3	2.4	3	2.9	3.2	2.4	2.7
RADIONUCLIDES										
137-CESIUM	(PCI/L)									
COUNTING ERROR	(137-CESIUM)									
40-POTASSIUM	(PCI/L)									
COUNTING ERROR	(40-POTASSIUM)									
PROTACTINIUM	(PCI/L)									
COUNTING ERROR	(PROTACTINIUM)									
RADIUM	X10-LAB (Bq/L)				0.009				0.004	
COUNTING ERROR	(RADIUM)				0.021				0.002	
STRONTIUM	(PCI/L)									
COUNTING ERROR	(STRONTIUM)									
231+234-THORIUM	(PCI/L)									
COUNTING ERROR	(231+234-THORIUM)									
234-URANIUM	(PCI/L)				0.399				0.355	
COUNTING ERROR	(234-URANIUM)				0.32				0.3	
235-URANIUM	(PCI/L)				-1.53 F				-1.27 F	
COUNTING ERROR	(235-URANIUM)				7.2				13	
238-URANIUM	(PCI/L)				0.0499				0.101	
COUNTING ERROR	(238-URANIUM)				0.1				0.14	

APPENDIX E.5
RADIONUCLIDES, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-512 ADB 04/26/95	GW-513 ADB 04/25/95	GW-514 ADB 04/27/95	GW-540 CDLVI 04/04/95	GW-541 CDLVI 04/05/95	GW-542 CDLVI 04/06/95	GW-543 CDLVI 04/06/95	GW-544 CDLVI 04/06/95	GW-546 CDLVI 04/05/95	GW-557 LV 04/06/95
GROSS ALPHA (PCI/L)	1.11	0	1.55	0	2.61	1.18	0.919	2.47	4.96	0.149
COUNTING ERROR (GROSS ALPHA)	2	1.8	2	1.6	2.4	1.6	1.6	1.9	3.2	1.4
GROSS BETA (PCI/L)	3.08	0.79	0.176	1.2	1.37	1.19	-0.0859	1.38	11.1	-1.11
COUNTING ERROR (GROSS BETA)	3.1	2.9	2.9	2.8	3	2.8	2.8	2.8	3.6	2.7
RADIONUCLIDES										
137-CESIUM (PCI/L)	.	.	.	1.67 E	2.11 E	6.01 E	2.86 E	3.81 E	-9.02 F	0.54 E
COUNTING ERROR (137-CESIUM)	.	.	.	5	5.1	15	5.1	15	16	5.2
40-POTASSIUM (PCI/L)	.	.	.	.	.	.	117	.	.	.
COUNTING ERROR (40-POTASSIUM)	.	.	.	.	.	.	69	.	.	.
PROTACTINIUM (PCI/L)	.	.	.	1200 Hi	-66.5 HF	-1170 HF	814 HE	-875 HF	250 HE	482 HE
COUNTING ERROR (PROTACTINIUM)	.	.	.	910	940	2600	940	2500	2400	900
RADIUM X10-LAB (BQ/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR (RADIUM)	.	.	.	.	.	.	.	.	.	.
STRONTIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR (STRONTIUM)	.	.	.	.	.	.	.	.	.	.
231+234-THORIUM (PCI/L)	.	.	.	-4.66 HF	35.4 HE	-92 HF	-29.1 HF	116 HE	22.3 HE	-24.8 HF
COUNTING ERROR (231+234-THORIUM)	.	.	.	65	64	170	66	140	160	65
234-URANIUM (PCI/L)	.	.	.	0.322	0.658	0.135	0.313	0.607	0.325	0.493
COUNTING ERROR (234-URANIUM)	.	.	.	0.3	0.62	0.27	0.33	0.45	0.48	0.42
235-URANIUM (PCI/L)	.	.	.	4.17 E	2.94 E	-0.246 F	3.06 E	-4.59 F	-20.5 G	3.4 E
COUNTING ERROR (235-URANIUM)	.	.	.	7.3	7.2	19	7.3	19	20	7.2
238-URANIUM (PCI/L)	.	.	.	0.161	0.219	0	0	0.607	0	0
COUNTING ERROR (238-URANIUM)	.	.	.	0.19	0.31	0.23	0.22	0.4	0.37	0.24

APPENDIX E.5
RADIONUCLIDES, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-560 CDLVII 04/05/95	GW-562 CDLVII 04/05/95	GW-564 CDLVII 04/06/95	GW-608 CRSP 05/11/95	GW-609 CRSP 05/16/95	GW-610 CRSP 05/07/95	GW-611 CRSP 05/15/95	GW-731 CRSDB 04/07/95	GW-732 CRSDB 04/07/95	GW-742 CRSP 05/07/95
GROSS ALPHA (PCI/L)	0.611	-0.152	0.442	2.98	0.872	0.619	1.81	0.615	91	6.34
COUNTING ERROR	2.1	2	1.5	2.1	1.5	2	1.7	1.6	28	2.6
GROSS BETA (PCI/L)	0.258	-1.12	0.939	1.27	1.49	1.37	3.14	9.47	59.8	2.15
COUNTING ERROR	3	2.9	2.8	2.6	2.5	2.6	2.6	3.3	31	2.7
RADIONUCLIDES										
137-CESUM (PCI/L)	7.82 E	3.78 E	13.6 E	.	.	.	.	.	.	.
COUNTING ERROR	15	5.2	14	.	.	.	.	.	.	.
40-POTASSIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
PROTACTINIUM (PCI/L)	208 HE	-598 HF	-333 HF	.	.	.	.	.	.	.
COUNTING ERROR	2400	920	2300	.	.	.	.	.	.	.
RADIUM X10-LAB (Bq/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
STRONTIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
231+234-THORIUM (PCI/L)	30.1 HE	-49.5 HF	-21.5 HF	.	.	.	.	.	.	.
COUNTING ERROR	160	65	160	.	.	.	.	.	.	.
234-URANIUM (PCI/L)	0.116	0.216	0	.	.	.	.	.	.	.
COUNTING ERROR	0.4	0.43	0.19	.	.	.	.	.	.	.
235-URANIUM (PCI/L)	5.27 E	2.14 E	-4.64 F	.	.	.	.	.	.	.
COUNTING ERROR	19	7.2	19	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	0.116	0.108	0.0684	.	.	.	.	.	.	.
COUNTING ERROR	0.23	0.22	0.14	.	.	.	.	.	.	.

APPENDIX E.5
RADIONUCLIDES, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-743 CRSP 05/07/95	GW-796 LV 04/12/95	GW-797 LV 04/11/95	GW-798 CDLVI 04/11/95	GW-799 LV 04/06/95	GW-801 LV 04/13/95	GW-827 CDLVI 04/05/95
GROSS ALPHA (GROSS ALPHA)	3.84	0.32	-0.166	0.324	0.882	0.164	0.449
COUNTING ERROR	2.3	1.1	0.99	1.1	1.6	1.1	2.1
GROSS BETA (GROSS BETA)	4.06	1.85	1.59	1.17	1.28	1.51	-0.428
COUNTING ERROR	2.8	2.6	2.6	2.5	2.8	2.5	2.9
RADIONUCLIDES							
137-CESIUM (137-CESIUM)	.	6.81 E 15	1.78 E 5.2	9.22 E 15	-0.864 F 4.9	-1.24 F 5.3	-6.22 F 16
COUNTING ERROR	.	.	.	.	.	.	.
40-POTASSIUM (40-POTASSIUM)	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.
PROTACTINIUM (PROTACTINIUM)	.	-375 HF 2600	1100 Hi 840	-500 HF 2500	-16.6 HF 840	449 HE 930	208 HE 2500
COUNTING ERROR	.	.	.	.	.	.	.
RADIUM (RADIUM)	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.
STRONTIUM (STRONTIUM)	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.
231+234-THORIUM (231+234-THORIUM)	.	-91.3 HF 170	2.77 HE 67	151 H 140	-52.9 HF 65	-41.1 HF 69	151 H 140
COUNTING ERROR	.	1.06	0.441	0.231	0.225	0.639	0.113
234-URANIUM (234-URANIUM)	.	0.8	0.44	0.33	0.33	0.52	0.39
COUNTING ERROR	.	1.97 E 19	1 E	-1.69 F 19	1.45 E 7.3	-5.23 F 7.3	-4.6 F 19
235-URANIUM (235-URANIUM)	.	19	7.3	19	7.3	7.3	19
COUNTING ERROR	.	-0.303	-0.221	-0.231	0.0749	-0.213	0.226
238-URANIUM (238-URANIUM)	.	0.68	0.49	0.52	0.15	0.48	0.32
COUNTING ERROR	.	.	.	.	.	.	.

APPENDIX E.5
RADIONUCLIDES, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-141 LIV 07/10/95	GW-142 KHQ 07/14/95	GW-143 KHQ 07/16/95	GW-144 KHQ 07/16/95	GW-145 KHQ 07/17/95	GW-146 KHQ 07/17/95	GW-147 KHQ 07/14/95	GW-156 CRSDB 07/13/95	GW-158 CRSDB 07/18/95	GW-159 CRSDB 07/12/95
GROSS ALPHA (PCI/L)	0	6.62	3.17	1.78	9.71	1.81	2.36	3.13	1.85	0.942
COUNTING ERROR	1.7	1.9	1.5	1.2	2.3	1.3	1.3	1.4	1.1	0.93
GROSS BETA (PCI/L)	-0.353	8.44	13.7	2.09	16.3	15.9	4.51	4.85	1.49	0.201
COUNTING ERROR	2.8	2.2	2.6	1.7	2.8	2.8	1.9	2.1	1.9	1.9
RADIONUCLIDES										
241-AMERICIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
137-CESIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
129-IODINE (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
237-NEPTUNIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-PLUTONIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
239-PLUTONIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
40-POTASSIUM (PCI/L)	.	96.4	.	.	.	.	.	.	.	.
COUNTING ERROR	.	64	.	.	.	.	.	.	.	.
PROTACTINIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
RADIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
STRONTIUM (PCI/L)	.	10.3	39.8	7.71	24.2	3.4	16.5	.	.	.
COUNTING ERROR	.	11	14	10	26	9.7	11	.	.	.
99-TECHNETIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
231+234-THORIUM (PCI/L)	.	95.8 H	65.1 H	.	.	.	86 H	.	.	.
COUNTING ERROR	.	60	47	.	.	.	54	.	.	.
TRITIUM (TRITIUM)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
234-URANIUM (PCI/L)	.	2.35	1.47	1.05	6.31	1.3	0.892	.	.	.
COUNTING ERROR	.	0.77	0.63	0.51	1.3	0.58	0.48	.	.	.
235-URANIUM (PCI/L)	.	1.86 E	9.19	2.01 E	0.54 E	10.1	4.83 E	.	.	.
COUNTING ERROR	.	7.2	6.4	7.2	7.1	7.5	5.8	.	.	.
238-URANIUM (PCI/L)	.	1.65	0.468	0.987	2.75	0.454	0.51	.	.	.
COUNTING ERROR	.	0.65	0.35	0.49	0.86	0.34	0.36	.	.	.

APPENDIX E.5
RADIONUCLIDES, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-175 CRSP 08/01/95	GW-177 CRSP 08/01/95	GW-181 CRSP 07/28/95	GW-217 LIV 07/10/95	GW-231 KHQ 07/15/95	GW-241 CRSDB 07/16/95	GW-303 CRSDB 07/16/95	GW-304 CRSDB 07/12/95	GW-305 LIV 07/12/95	GW-511 CRSP 07/29/95
GROSS ALPHA (PCI/L)	1.33	1.49	-0.169	0.791	0.0761	1.49	1.65	1.63	0.621	-0.326
COUNTING ERROR	1.7	1.7	1.3	1.8	0.88	1	1.2	1.1	1.7	1.2
GROSS BETA (PCI/L)	-0.0986	1.56	0.549	1.85	0.23	0.828	2.94	0.489	4.3	0.313
COUNTING ERROR	2.4	2.5	2.5	3	1.6	1.9	1.9	1.9	3.1	2.5
RADIONUCLIDES										
241-AMERICIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
137-CESIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
129-IODINE (BQ/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
237-NEPTUNIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-PLUTONIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
239-PLUTONIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
40-POTASSIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
PROTACTINIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
RADIUM (BQ/L)	.	.	.	.	.	.	.	.	.	.
X10-LAB (RADIUM) (PCI/L)	.	.	.	.	.	.	.	.	.	.
STRONTIUM (STRONTIUM)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
99-TECHNETIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
231+234-THORIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
TRITIUM (BQ/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
234-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
235-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
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238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.								

APPENDIX E.5
RADIONUCLIDES, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-521 LIV 07/11/95	GW-522 LIV 07/12/95	GW-539 LII 07/10/95	GW-608 CRSP 07/31/95	GW-609 CRSP 08/01/95	GW-610 CRSP 07/31/95	GW-611 CRSP 08/01/95	GW-709 LII 07/10/95	GW-731 CRSDB 07/13/95
GROSS ALPHA	0.774	0.313	0.302	1.27	0.486	0.66	0.857	1.62	0.0847
COUNTING ERROR	1.7	1.7	2	1.6	1.5	1.6	1.7	1.2	0.75
GROSS BETA	1.23	0	3.17	-1.86	0.94	1.25	1.64	8.34	14.6
COUNTING ERROR	2.9	2.9	3	2.4	2.5	2.5	2.5	3	2.8
RADIONUCLIDES									
241-AMERICIUM	0.767 J								
COUNTING ERROR	0.82								
137-CESIUM									
COUNTING ERROR			-8.46 F						
129-IODINE	0.1		13						
COUNTING ERROR	1.9								
237-NEPTUNIUM	0.0751								
COUNTING ERROR	0.21								
238-PLUTONIUM	0.409								
COUNTING ERROR	0.52								
239-PLUTONIUM	0.0818								
COUNTING ERROR	0.23								
40-POTASSIUM									
COUNTING ERROR									
PROTACTINIUM									
COUNTING ERROR			625 HE						
RADIUM	0.015		1100						
COUNTING ERROR	0.044								
STRONTIUM	14.5								
COUNTING ERROR	12								
99-TECHNETIUM	2.17								
COUNTING ERROR									
231+234-THORIUM			92.2 H						
COUNTING ERROR			56						
TRITIUM	-9								
COUNTING ERROR	21								
234-URANIUM	0.239		0.297 *						
COUNTING ERROR	0.34		0.27						
235-URANIUM	6.34 E		-0.95 F						
COUNTING ERROR	12		7.3						
238-URANIUM	0		0 *						
COUNTING ERROR	0.41		0.21						

APPENDIX E.5
RADIONUCLIDES, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-732 CRSDB 07/13/95	GW-732 CRSDB 08/14/95	GW-742 CRSP 07/30/95	GW-743 CRSP 07/31/95	GW-757 LII 07/11/95
GROSS ALPHA	6.48	0.65	4.58	-0.165	6.39
COUNTING ERROR	1.8	1.3	2.2	1.3	2.2
GROSS BETA	11.7	2.83	-0.0412	0.0707	7.98
COUNTING ERROR	2.6	2.6	2.5	2.4	3
RADIONUCLIDES					
241-AMERICIUM					
COUNTING ERROR					
137-CESIUM					
COUNTING ERROR					
129-IODINE					
COUNTING ERROR					
237-NEPTUNIUM					
COUNTING ERROR					
238-PLUTONIUM					
COUNTING ERROR					
239-PLUTONIUM					
COUNTING ERROR					
40-POTASSIUM					
COUNTING ERROR					
PROTACTINIUM					
COUNTING ERROR					
RADIUM					
COUNTING ERROR					
STRONTIUM					
COUNTING ERROR					
99-TECHNETIUM					
COUNTING ERROR					
231+234-THORIUM					
COUNTING ERROR					
TRITIUM					
COUNTING ERROR					
234-URANIUM					
COUNTING ERROR					
235-URANIUM					
COUNTING ERROR					
238-URANIUM					
COUNTING ERROR					

APPENDIX E.5
RADIONUCLIDES, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	1090 UNCS 10/09/95	CBS-1 LV 10/11/95	GW-142 KHQ 11/05/95	GW-143 KHQ 11/09/95	GW-144 KHQ 11/14/95	GW-145 KHQ 11/15/95	GW-146 KHQ 11/08/95	GW-147 KHQ 11/06/95
GROSS ALPHA (GROSS ALPHA)	0.513	2.61	2	2.69	2.53	13	0.345	0.477
COUNTING ERROR	1.7	19	1.9	2.2	1.8	3.2	1.7	1.6
GROSS BETA (PCI/L)	-0.488	11	5.67	14.2	5.3	21.1	16.8	3.81
COUNTING ERROR	2.3	33	2.9	3.5	3	3.8	3.8	2.7
RADIONUCLIDES								
137-CESIUM (PCI/L)	.	-12.8 G	.	.	.	.	.	.
COUNTING ERROR	.	12	.	.	.	.	.	.
40-POTASSIUM (PCI/L)	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.
PROTACTINIUM (PCI/L)	.	541 HE	.	.	.	.	.	.
COUNTING ERROR	.	980	.	.	.	.	.	.
RADIUM (PROTACTINIUM)	0.042	.	.	.	.	.	.	.
X10-LAB (BQ/L)	0.04	.	.	.	.	.	.	.
COUNTING ERROR	.	.	32.7	-2.7	2.4	7.65	0.92	15.8
STRONTIUM (PCI/L)	.	.	9.2	6.1	6.6	7.1	6.5	7.9
231+234-THORIUM (PCI/L)	.	57.7 H	.	.	.	.	.	.
COUNTING ERROR	.	57	.	.	.	.	.	.
234-URANIUM (PCI/L)	0.294	0.604	1.55	1.56	1.98	7.01	1.61	2.05
COUNTING ERROR	0.25	0.54	0.8	1	0.65	1.2	0.88	1.1
235-URANIUM (PCI/L)	-4.08 F	4.18 E	3.44 E	3.99 E	6.48 E	1.64 E	5.15 E	5.41 E
COUNTING ERROR	7.4	7.4	8	7.5	8.2	8.2	8	7.5
238-URANIUM (PCI/L)	0.0268	0.363	0.361	1.4	0.858	3.73	0.298	0.495
COUNTING ERROR	0.076	0.42	0.39	0.96	0.43	0.89	0.38	0.53

APPENDIX E.5
RADIONUCLIDES, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-156 CRSDB 10/23/95	GW-156 CRSDB 10/24/95	GW-156 CRSDB 10/25/95	GW-156 CRSDB 10/26/95	GW-159 CRSDB 10/23/95	GW-159 CRSDB 10/24/95	GW-159 CRSDB 10/25/95	GW-159 CRSDB 10/26/95	GW-160 CRBAMP 11/02/95	GH-161 CRBAMP 10/31/95
GROSS ALPHA (PCI/L)	2.27	2.8	0.522	1.62	1.88	1.78	1.14	-1.18	39.4	-0.00594
COUNTING ERROR	1.6	1.7	1.8	2.3	1.4	1.4	1.8	1.6	7.4	1.5
GROSS BETA (PCI/L)	4.32	3.13	5.88	6.52	2.29	2.83	1.17	13.1	34.2	2.33
COUNTING ERROR	2.7	2.6	2.7	3	2.5	2.6	2.4	3.6	5.4	2.7
RADIONUCLIDES										
137-CESIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
40-POTASSIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
PROTACTINIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
RADIUM X10-LAB (BQ/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
STRONTIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
231+234-THORIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
234-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
235-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.

APPENDIX E.5
RADIONUCLIDES, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-175 CRSP 11/17/95	GW-177 CRSP 11/16/95	GW-181 CRSP 11/05/95	GW-184 RQ 10/31/95	GW-186 RQ 11/03/95	GW-187 RQ 11/02/95	GW-188 RQ 10/31/95	GW-203 UNCS 10/07/95	GW-205 UNCS 10/07/95	GW-221 UNCS 10/08/95
GROSS ALPHA (GROSS ALPHA)	-0.51	1.9	0	-0.629	2.33	3.26	0.961	-0.324	-0.655	-1.14
COUNTING ERROR	1.3	1.9	1.7	1.7	2.6	3.2	2	1.4	1.3	1.2
GROSS BETA (GROSS BETA)	0.163	2.22	0.858	1.38	1.15	2.35	4.67	0.311	5.09	2.31
COUNTING ERROR	2.6	2.7	2.9	3	3	3.2	3.2	2.3	2.7	2.5
RADIONUCLIDES										
137-CESIUM (137-CESIUM)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
40-POTASSIUM (40-POTASSIUM)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
PROTACTINIUM (PROTACTINIUM)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
RADIUM X10-LAB (Bq/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	0.007	0.014	0.099
STRONTIUM (STRONTIUM)	.	.	.	.	.	.	.	0.03	0.031	0.062
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
231+234-THORIUM (231+234-THORIUM)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
234-URANIUM (234-URANIUM)	.	.	.	.	.	.	.	0.383	0.687	0.263
COUNTING ERROR	.	.	.	.	.	.	.	0.27	0.38	0.24
235-URANIUM (235-URANIUM)	.	.	.	.	.	.	.	-1.51 F	1.87 E	2.94 E
COUNTING ERROR	.	.	.	.	.	.	.	8.2	8.2	7.5
238-URANIUM (238-URANIUM)	.	.	.	.	.	.	.	0	0.106	0.105
COUNTING ERROR	.	.	.	.	.	.	.	0.17	0.15	0.15

APPENDIX E.5
RADIONUCLIDES, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-231 KHQ 11/06/95	GW-292 ECRUP 11/06/95	GW-293 ECRUP 11/06/95	GW-294 ECRUP 11/05/95	GW-296 ECRUP 11/05/95	GW-298 CRBAMP 11/04/95	GW-299 CRBAMP 11/03/95	GW-300 CRBAMP 11/03/95	GW-301 CRBAMP 11/03/95	GW-302 UNCS 10/08/95
GROSS ALPHA (PCI/L)	0.822	0.516	2.61	0.325	0.338	0.853	-0.816	0.477	1.72	-0.354
COUNTING ERROR	1.7	1	1.6	0.94	0.97	1.8	1.3	1.6	2	1.5
GROSS BETA (PCI/L)	0.697	0.308	1.4	-0.164	-0.163	1.73	0.482	1.3	1.8	-0.00906
COUNTING ERROR	2.5	2.4	2.4	2.3	2.3	2.6	2.6	2.7	2.6	2.3
RADIONUCLIDES										
137-CESIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
40-POTASSIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
PROTACTINIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
RADIUM (PROTACTINIUM)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
STRONTIUM (PCI/L)	-0.221	.	.	.	.	.	.	.	.	0.049
COUNTING ERROR	6.3	.	.	.	.	.	.	.	.	0.038
231+234-THORIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
234-URANIUM (PCI/L)	1.01	.	.	.	.	.	.	.	.	0.505
COUNTING ERROR	0.71	.	.	.	.	.	.	.	.	0.32
235-URANIUM (PCI/L)	5.97 E	.	.	.	.	.	.	.	.	6.04 E
COUNTING ERROR	7.6	.	.	.	.	.	.	.	.	8.7
238-URANIUM (PCI/L)	0	.	.	.	.	.	.	.	.	0.202
COUNTING ERROR	0.44	.	.	.	.	.	.	.	.	0.2

APPENDIX E.5
RADIONUCLIDES, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-321 ADB 10/26/95	GW-339 UNCS 10/08/95	GW-511 CRSP 11/07/95	GW-512 ADB 10/31/95	GW-513 ADB 10/31/95	GW-514 ADB 11/02/95	GW-539 L11 10/06/95	GW-540 CDLV1 10/11/95	GW-541 CDLV1 10/12/95	GW-542 CDLV1 10/16/95
GROSS ALPHA (PCI/L)	-0.318	-0.36	1.19	1.14	0.481	0.318	-0.334	-2.65	3.81	-1.45
COUNTING ERROR (GROSS ALPHA)	1.5	1.5	1.9	1.2	0.98	0.92	1.4	4.5	5.2	4.5
GROSS BETA (PCI/L)	0.871	0.934	0.599	4.52	1.19	2.38	1.74	-11.3	3.07	-8.35
COUNTING ERROR (GROSS BETA)	2.4	2.3	2.9	2.7	2.4	2.5	2.4	6.6	7.3	6.7
RADIONUCLIDES										
137-CESIUM (PCI/L)	.	.	.	.	.	.	1.29 E	0 F	-2.11 F	16.5
COUNTING ERROR (137-CESIUM)	.	.	.	.	.	.	6.5	8.7	16	10
40-POTASSIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR (40-POTASSIUM)	.	.	.	.	.	.	.	.	.	.
PROTACTINIUM (PCI/L)	.	.	.	.	.	.	750 HE	-590 HF	1490 Hi	1560 Hi
COUNTING ERROR (PROTACTINIUM)	.	.	.	.	.	.	1100	1700	1300	1400
RADIUM X10-LAB (Bq/L)	.	0.071	.	.	.	.	.	.	.	.
COUNTING ERROR X10-LAB (RADIUM)	.	0.045	.	.	.	.	.	.	.	.
STRONTIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR (STRONTIUM)	.	.	.	.	.	.	.	.	.	.
231+234-THORIUM (PCI/L)	.	.	.	.	.	.	-30.6 HF	-142 HG	76 H	67.6 HE
COUNTING ERROR (231+234-THORIUM)	.	.	.	.	.	.	68	88	74	76
234-URANIUM (PCI/L)	.	0.418	.	.	.	.	0.476 *	0.425	0.0536	0.382
COUNTING ERROR (234-URANIUM)	.	0.3	.	.	.	.	0.32	0.43	0.15	0.41
235-URANIUM (PCI/L)	.	6.94 E	.	.	.	.	7.15 E	1.19 E	-1.71 F	2.09 E
COUNTING ERROR (235-URANIUM)	.	8.1	.	.	.	.	8.1	10	9.4	9.3
238-URANIUM (PCI/L)	.	0.0522	.	.	.	.	0.211	0.0532	0.375	0
COUNTING ERROR (238-URANIUM)	.	0.1	.	.	.	.	0.21	0.15	0.4	0.38

APPENDIX E.5
RADIONUCLIDES, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-543 CDLVI 10/17/95	GW-544 CDLVI 10/17/95	GW-546 CDLVI 10/11/95	GW-557 LV 10/07/95	GW-560 CDLVI 10/06/95	GW-562 CDLVI 10/06/95	GW-564 CDLVI 10/07/95	GW-608 CRSP 11/16/95	GW-609 CRSP 11/20/95	GW-610 CRSP 11/13/95
GROSS ALPHA COUNTING ERROR	(PCI/L) -3.83	6.22	0.871	0.658	0.994	50.1	0.641	0.329	-0.00078	-0.00071
GROSS BETA COUNTING ERROR	(GROSS ALPHA) 4.3	4	4.8	0.94	1.1	0.89	0.91	1.5	1.4	1.4
	(PCI/L) -13	-10.8	1.02	-1.54	0.473	-0.568	-1.32	1.5	1.16	0.0777
	(GROSS BETA) 6.5	6.6	7.2	2.5	2.6	2.5	2.5	2.7	2.7	2.6
RADIONUCLIDES										
137-CESIUM COUNTING ERROR	(PCI/L) 12.3	-4.17 F 9.3	-4.57 F 9	-8.28 F 13	-0.585 F 13	-7.43 F 12	-3.1 F 13	.	.	.
40-POTASSIUM COUNTING ERROR	(PCI/L) .	.	69 i 110	.	.	.	.	.	.	.
PROTACTINIUM COUNTING ERROR	(PCI/L) 1250 HE 1600	2280 Hi 1500	777 HE 1500	1090 Hi 1000	-24 HF 1100	325 HE 960	132 HE 1000	.	.	.
RADIUM COUNTING ERROR	(PROTACTINIUM) X10-LAB (BQ/L)	.	.	.	.	.	.	.	.	.
STRONTIUM COUNTING ERROR	(RADIUM) X10-LAB (RADIUM) (STRONTIUM)	.	.	.	.	.	.	.	.	.
231+234-THORIUM COUNTING ERROR	(PCI/L) 156 H 73	-13.5 HF 86	-34.5 HF 86	64.1 H 57	108 H 57	47.2 HE 58	105 H 50	.	.	.
234-URANIUM COUNTING ERROR	(PCI/L) 0.0543	0.223	0	0.289	0.267 *	0.187	0.162	.	.	.
235-URANIUM COUNTING ERROR	(PCI/L) 9.69 E	-1.12 F 10	2.2 E 10	-3.23 F 7.4	0.57 E 7.5	7.11 E 8.3	0.285 E 7.4	.	.	.
238-URANIUM COUNTING ERROR	(PCI/L) 0.217	0.111	0.212	0	0.0534	0.0535	0	.	.	.
	(238-URANIUM)	0.31	0.3	0.2	0.11	0.11	0.19	.	.	.

APPENDIX E.5
RADIONUCLIDES, 4TH QUARTER 1995

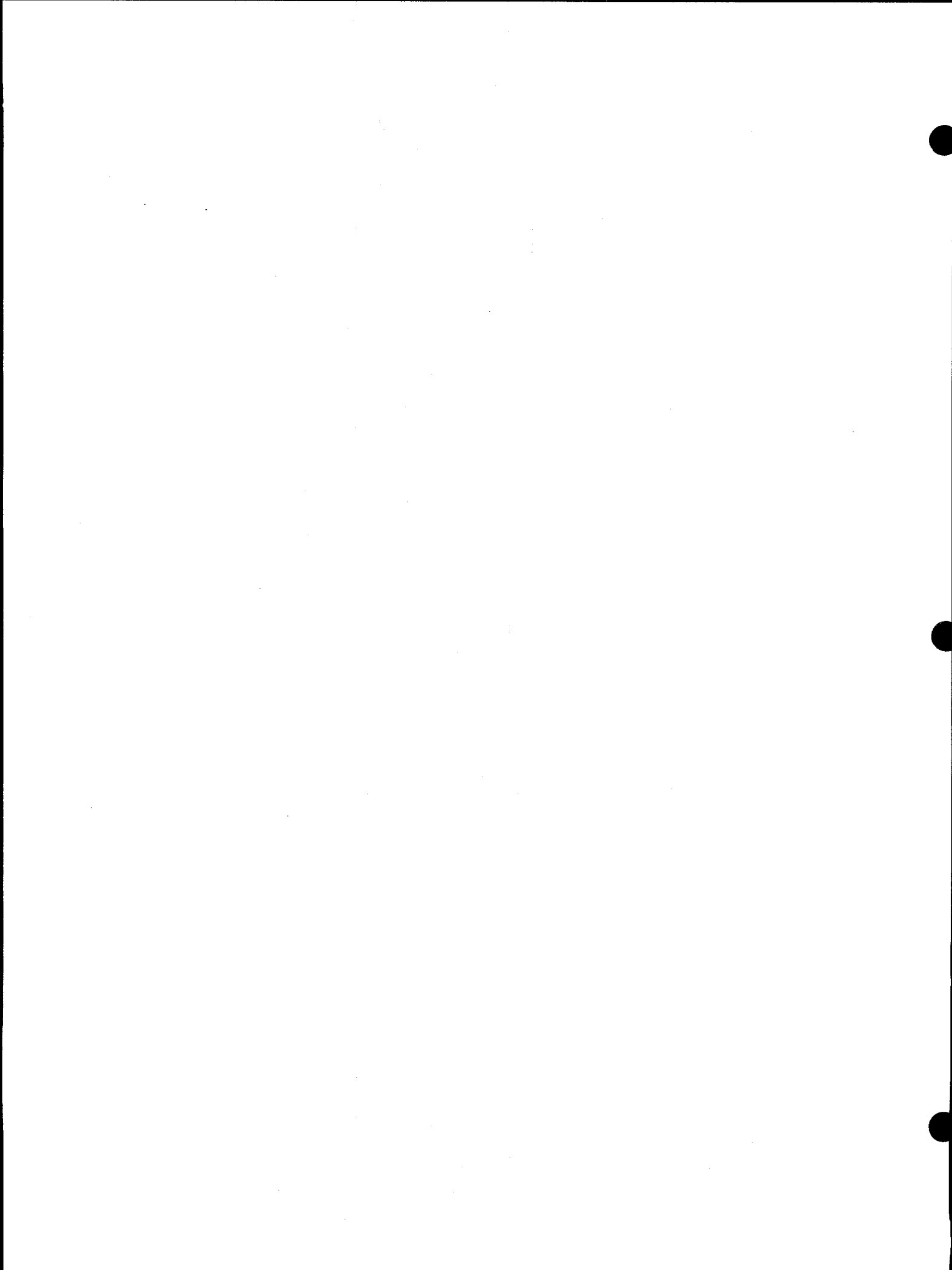
SAMPLING POINT LOCATION DATE SAMPLED	GW-611 CRSP 11/17/95	GW-709 LII 10/06/95	GW-731 CRSDB 10/23/95	GW-731 CRSDB 10/24/95	GW-731 CRSDB 10/25/95	GW-731 CRSDB 10/26/95	GW-732 CRSDB 10/23/95	GW-732 CRSDB 10/24/95	GW-732 CRSDB 10/25/95	GW-732 CRSDB 10/26/95
GROSS ALPHA (PCI/L)	0.887	5.75	0.321	2.65	-0.343	-0.174	1.51	2.76	-0.517	-1.03
COUNTING ERROR	1.7	16	0.93	1.6	1.5	1.8	1.3	1.7	1.5	1.7
GROSS BETA (PCI/L)	0.156	11.3 C	3.65	11.4	12.5	2.39	2.31	28.4	25.1	17.5
COUNTING ERROR	2.6	28	2.7	3.3	3.3	2.7	2.6	4.8	4.4	3.9
RADIONUCLIDES										
137-CESIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
40-POTASSIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
PROTACTINIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
RADIUM X10-LAB (Bq/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
STRONTIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
231+234-THORIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
234-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
235-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
238-URANIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.

APPENDIX E.5
RADIONUCLIDES, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED		GW-742 CRSP 11/09/95	GW-743 CRSP 11/13/95	GW-757 LII 10/06/95	GW-796 LV 10/08/95	GW-797 LV 10/08/95	GW-798 CDLVI 10/08/95	GW-799 LV 10/07/95	GW-801 LV 10/09/95	GW-827 CDLVI 10/16/95
GROSS ALPHA COUNTING ERROR	(PCI/L)	5.01	0.823	7.17	0.482	1.66	1.13	0.814	0.159	-2.05
GROSS BETA COUNTING ERROR	(GROSS ALPHA)	2.4	1.6	16	0.86	1.3	1.1	0.99	0.73	4.5
	(PCI/L)	4.72	13.4 *	9.57 C	-1.97	0.709	1.13	-0.497	-0.979	-9.21
	(GROSS BETA)	3.1	3.6	28	2.5	2.6	2.7	2.6	2.5	6.7
RADIONUCLIDES										
137-CESIUM COUNTING ERROR	(PCI/L)	.	.	.	-16.4 G	0.322 E	-11.1 F	-6.97 F	-16.8 G	-2.18 F
40-POTASSIUM COUNTING ERROR	(137-CESIUM)	.	.	.	12	13	13	13	13	8.6
PROTACTINIUM COUNTING ERROR	(PCI/L)	.	.	.	.	.	.	.	.	.
RADIUM COUNTING ERROR	(40-POTASSIUM)	.	.	.	.	.	.	.	.	.
STRONTIUM COUNTING ERROR	(PCI/L)	.	.	.	938 HE	577 HE	553 HE	-240 HF	950 HE	911 HE
231+234-THORIUM COUNTING ERROR	(PROTACTINIUM)	.	.	.	1100	1000	1100	1000	1000	1300
234-URANIUM COUNTING ERROR	X10-LAB (Bq/L)	.	.	.	.	.	.	.	.	.
235-URANIUM COUNTING ERROR	X10-LAB (RADIUM)	.	.	.	.	.	.	.	.	.
238-URANIUM COUNTING ERROR	(PCI/L)	.	.	.	.	.	.	.	.	.
	(STRONTIUM)	.	.	.	.	.	.	.	.	.
	(PCI/L)	.	.	.	79.6 H	71.6 H	51.4 HE	57 HE	69.7 H	-43.7 HF
	(231+234-THORIUM)	.	.	.	55	52	56	57	57	86
	(PCI/L)	.	.	.	0.556	0.195	0.397	0.155	0.443	0
	(234-URANIUM)	.	.	.	0.35	0.21	0.28	0.18	0.32	0.36
	(PCI/L)	.	.	.	-0.475 F	3.04 E	3.8 E	3.8 E	4.94 E	0.036 E
	(235-URANIUM)	.	.	.	7.4	7.5	7.6	7.5	7.6	10
	(PCI/L)	.	.	.	0.111	0.251	0.0248	0	0.0885	0.313
	(238-URANIUM)	.	.	.	0.16	0.24	0.07	0.18	0.14	0.36



APPENDIX F
FIELD DUPLICATE DATA



EXPLANATION

SAMPLING POINT:

GW	-	Monitoring Well
CBS-1	-	Chestnut Branch Spring 1
SCR2.2SP	-	South Chestnut Ridge Spring 2.2
1090	-	Historical 1000-Series Monitoring Well

LOCATION:

ADB	-	Ash Disposal Basin
CDL VI	-	Construction/Demolition Landfill VI
CDL VII	-	Construction/Demolition Landfill VII
CRBAWP	-	Chestnut Ridge Borrow Area Waste Pile
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
LIV	-	Industrial Landfill IV
LV	-	Industrial Landfill V
RQ	-	Rogers Quarry
UNCS	-	United Nuclear Corporation Site

ALL DATA:

.	-	Not analyzed or not reported.

ORGANIC COMPOUNDS:

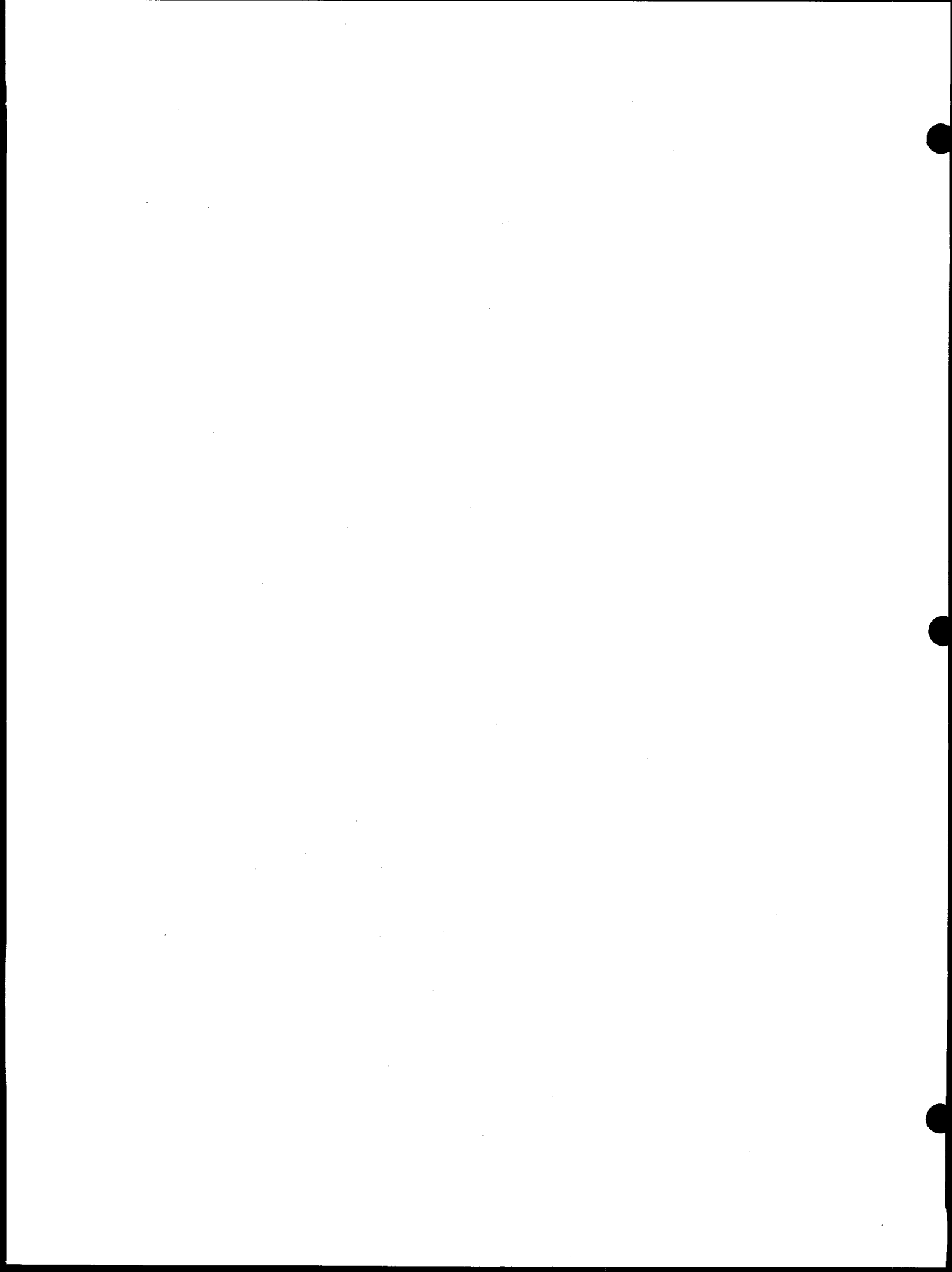
All results in micrograms per liter (ug/L).

METALS, ANIONS, MISCELLANEOUS, AND RADIOCHEMICAL PARAMETERS:

General:

Bicarbonate and carbonate alkalinity reported as CaCO_3 .

<	-	Compound analyzed but not detected at the reported minimum attainable detection limit
DIS	-	Dissolved Concentration (Filtered Sample)
TOT	-	Total Concentration (Unfiltered Sample)
TDS	-	Total Dissolved Solids
TSS	-	Total Suspended Solids
Sp. Cond.	-	Specific Conductance



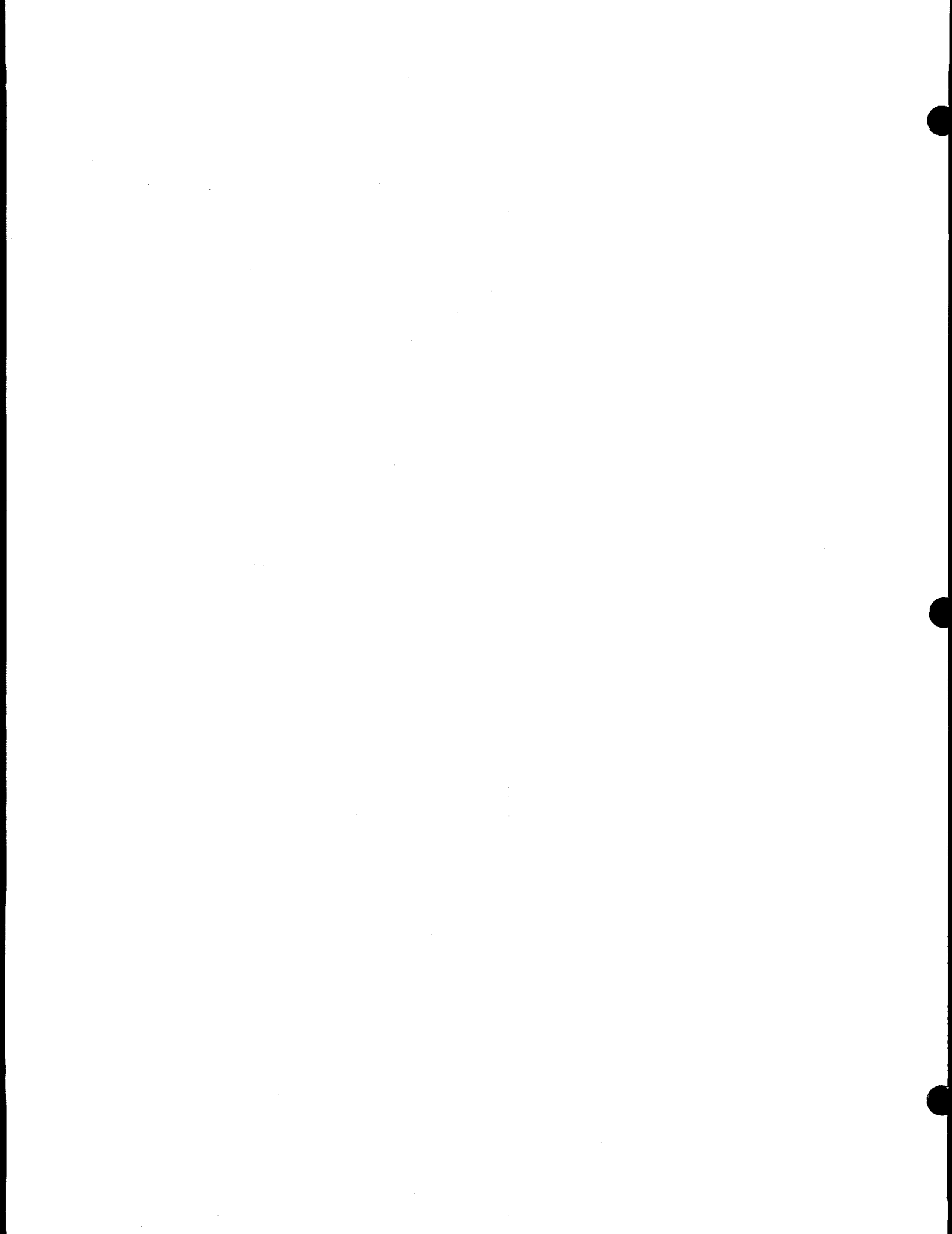
EXPLANATION (cont'd)

Method:

AAS	-	Atomic Absorption Spectroscopy
CVAA	-	Cold Vapor Atomic Absorption
PMS	-	Plasma Mass Spectroscopy
ICAP	-	Inductively Coupled Arc Plasma Spectroscopy

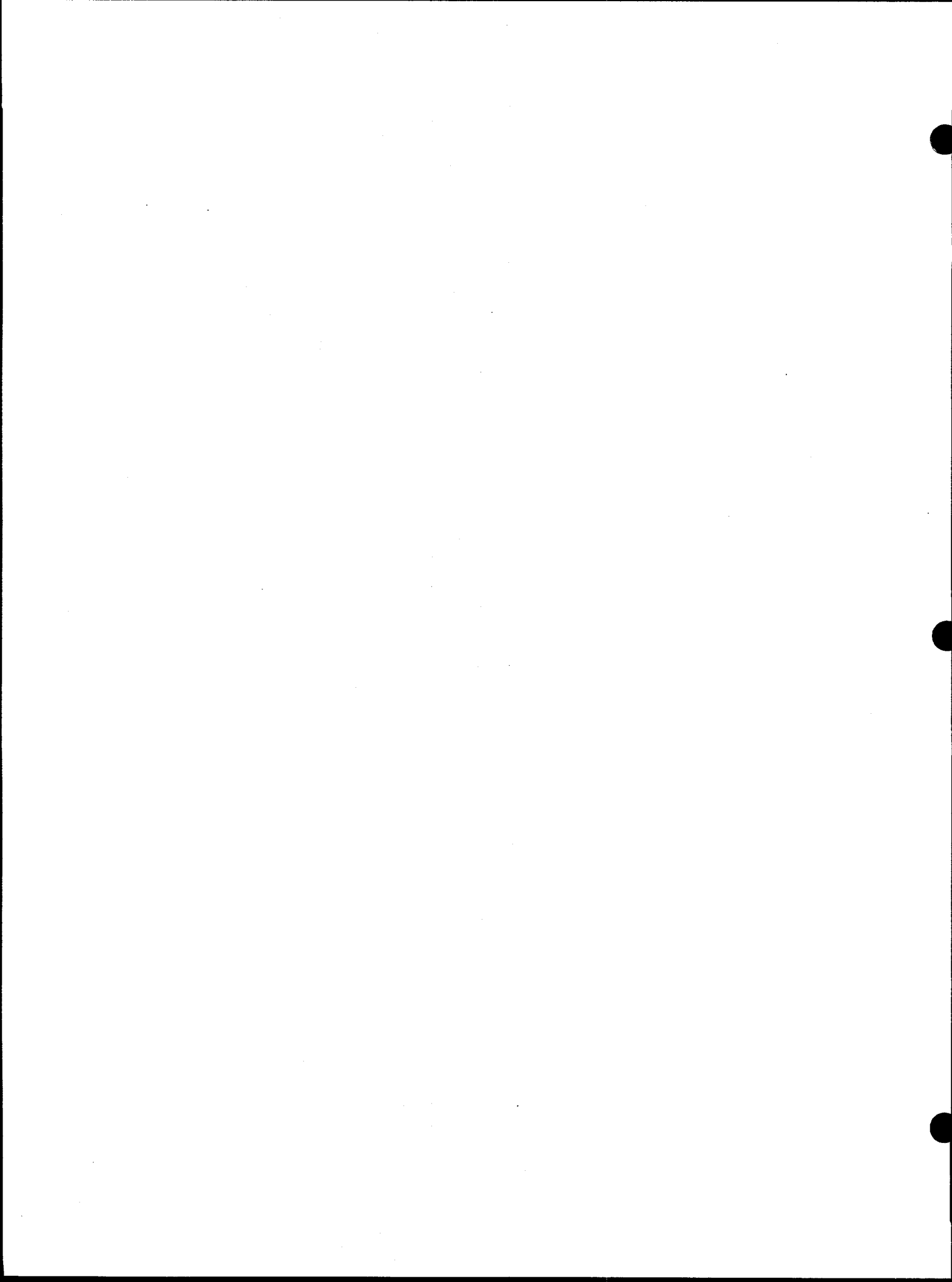
Units:

mg/L	-	milligrams per liter
ppm	-	parts per million
μ mhos/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)
FT.-TOC	-	feet below top of casing
DEG. CENT.	-	degrees centigrade
FT. ABOVE MSL	-	feet above mean sea level

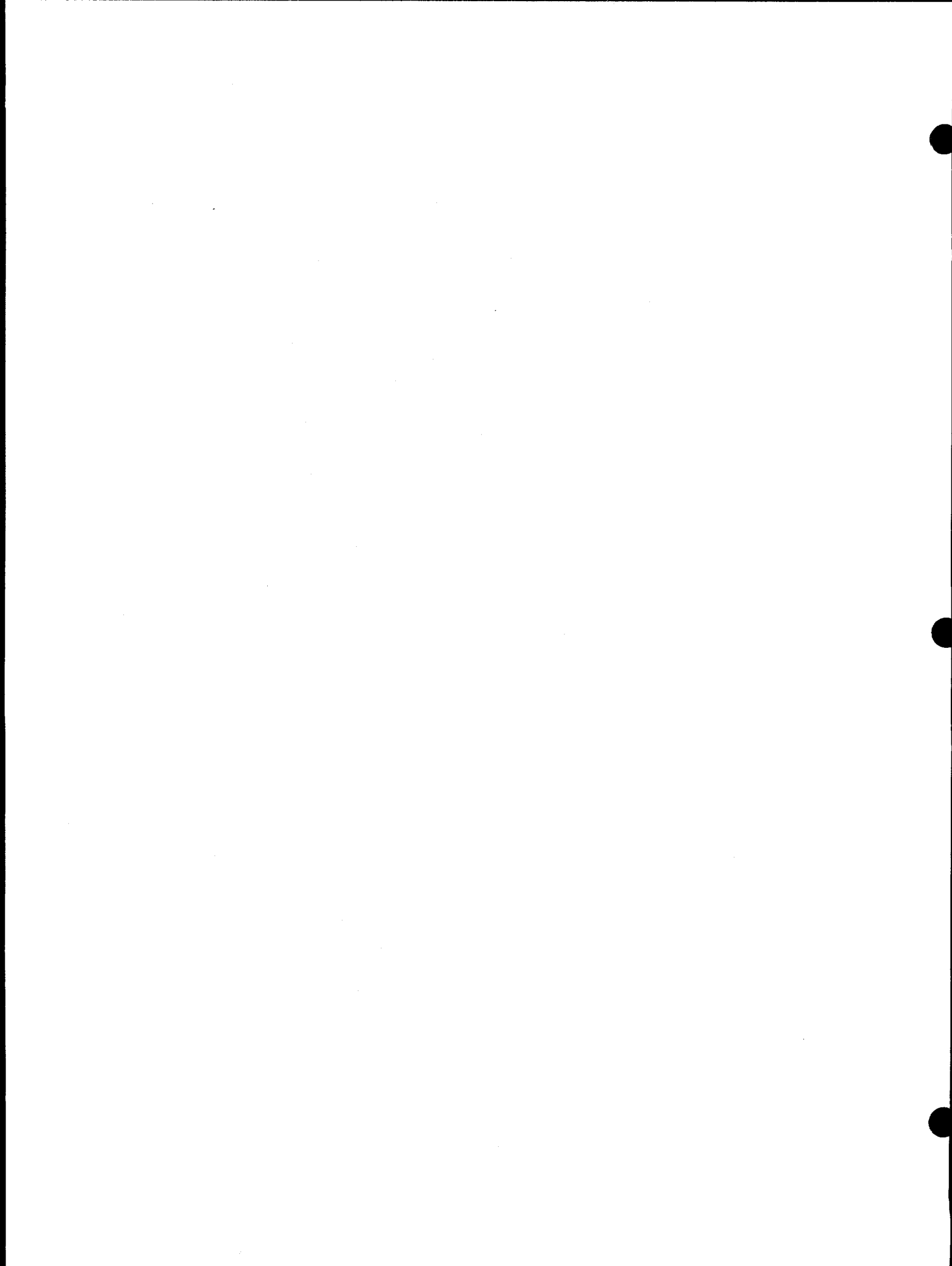


EXPLANATION (cont'd)

Analyte Class	Qualifier	Explanation
Radionuclides	J	Estimated value.
	A	Possible detector contamination.
	E	Result of analysis is less than MDA, confidence level is less than 95%.
	F	Result less than background.
	i	Tentatively identified isotope.
	*	Duplicate analysis outside control limits.
	C	Control analysis outside of control limits.
	D	Spike control limits do not apply, sample activity exceeds spike activity.
	N	Spike recovery not within limits.
	H	Daughter of uranium isotopes, reported for comparison purposes only.
	G	Gamma photopeak near MDA, poor curve fit.
Organics	J	Estimated value less than laboratory reporting limit.
	B	Compound also detected in the associated laboratory blank.
	U	Compound not detected.
	D	Compound identified at a secondary dilution factor.
	E	Concentration exceeds calibration range of instrument.
	s	Spike recovery not within limits.
ICP and ICP/MS Metals	d	Dilution required, reporting limits raised accordingly.
AAS Metals	s	Spike recovery not within limits.
	D	Sample contained matrix interferences, reporting limit adjusted.
Conductivity	L	Sample received with expired holding time.
	h	Analysis exceeded holding time.
Alkalinities	h	Analysis exceeded holding time.
Nitrate	h	Analysis exceeded holding time.
Sulfate	d	Dilution required, reporting limits raised accordingly.



APPENDIX F.1
TRACE METALS AND ANIONS



APPENDIX F.1
TRACE METALS AND ANIONS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-141 LIV 01/09/95 TOT	GW-141 LIV 01/09/95 DIS	GW-143 KHQ 01/17/95 TOT	GW-143 KHQ 01/17/95 DIS	GW-511 CRSP 01/24/95 TOT	GW-511 CRSP 01/24/95 DIS	GW-709 LII 01/09/95 TOT	GW-709 LII 01/09/95 DIS	GW-732 CRSD8 01/18/95 TOT	GW-732 CRSD8 01/18/95 DIS
METALS										
ALUMINUM	1.6	0.024	0.07	0.048	0.066	<0.02	0.032	<0.02	4.9	<0.02
ANTIMONY	<0.05	<0.05	<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	<0.05	<0.05
BARIUM	0.022	0.02	0.043	0.035	0.008	0.0074	0.27	0.26	0.12	0.085
BERYLLIUM	0.00073	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.01	0.011	0.98	0.88	0.021	<0.004	0.022	0.011	0.025	0.015
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CALCIUM	48	49	33	30	27	26	38	38	41	28
CHROMIUM	<0.01	<0.01	<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	<0.01	<0.01
COBALT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COPPER	0.0042	<0.004	0.0075	<0.004	<0.004	<0.004	<0.004	<0.004	0.0046	0.0051
IRON	1.6	<0.005	3.9	0.15	0.15	<0.005	0.028	0.081	4	<0.005
IRON	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
LEAD	28	29	31	28	16	16	21	20	22	14
MAGNESIUM	0.026	<0.001	0.05	0.039	0.0029	0.0015	0.0019	0.0017	0.076	0.0026
MANGANESE	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MERCURY	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOLYBDENUM	<0.01	<0.01	<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	<0.01	<0.01
NICKEL	1.4	1.1	18	16	4.5	4.4	1.1	1.4	7.8	9.7
POTASSIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SELENIUM	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SILICON	0.94	0.95	26	24	1.6	1.9	0.56	0.54	8.1	13
SILVER	0.019	0.02	3	2.7	0.043	0.045	0.03	0.03	0.3	0.27
STRONTIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
THALLIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
THORIUM	0.006	<0.006	0.0011	0.0011	<0.0005	<0.0005	<0.0005	<0.0005	0.0096	0.00079
URANIUM	0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
VANADIUM	0.036	<0.002	0.008	<0.002	<0.002	<0.002	0.0048	0.0059	0.024	<0.002
ZINC	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
ANIONS										
ALKALINITY-HCO3	239	204	134	134	134	134	178	161	161	161
ALKALINITY-CO3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CHLORIDE	2.4	5.9	3.1	3.1	3.1	3.1	2.3	2.3	1.5	1.5
FLUORIDE	<0.1	3.6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
NITRATE NITROGEN	0.87	1.7	0.26	0.26	0.26	0.26	0.59	0.59	0.56	0.56
AMMONIA NITROGEN	2.6	35	1.8	1.8	1.8	1.8	1.9	1.9	2	2
SULFATE	12	5	1	1	1	1	<1	<1	1040	1040
TOTAL SUSPENDED SOLIDS	50	23	2.6	2.6	2.6	2.6	0.5	0.5	280	280
TURBIDITY										

APPENDIX F.1
TRACE METALS AND ANIONS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-144 KHQ TOT	GW-144 KHQ DIS	GW-159 CRSDB TOT	GW-159 CRSDB DIS	GW-186 RQ TOT	GW-186 RQ DIS	GW-221 UNCS TOT	GW-221 UNCS DIS	GW-292 ECRWP TOT	GW-292 ECRWP DIS
METALS										
ALUMINUM	ICAP (MG/L)	<0.02	0.13	0.19	0.054	0.045	0.031	<0.02	<0.02	<0.02
ANTIMONY	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BARIUM	ICAP (MG/L)	0.047	0.011	0.012	0.12	0.12	0.0078	0.0074	0.11	0.12
BERYLLIUM	ICAP (MG/L)	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	ICAP (MG/L)	0.037	0.017	0.022	0.14	0.14	0.056	0.014	0.041	0.11
CADMIUM	ICAP (MG/L)	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CALCIUM	AAS (MG/L)	40	38	40	110	110	31	31	49	51
CHROMIUM	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	AAS (MG/L)									
COBALT	ICAP (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COPPER	ICAP (MG/L)	<0.004	<0.004	0.005	<0.004	<0.004	<0.004	<0.004	0.0046	0.008
IRON	ICAP (MG/L)	0.017	0.17	0.21	0.79	0.79	0.056	0.0072	0.051	0.0063
LEAD	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	AAS (MG/L)	15	23	24	32	32	18	18	30	31
MAGNESIUM	ICAP (MG/L)	<0.001	0.0056	0.0089	0.12	0.12	0.0012	<0.001	<0.001	<0.001
MANGANESE	ICAP (MG/L)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MERCURY	CVA (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOLYBDENUM	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NICKEL	ICAP (MG/L)	2.2	1.8	2	2.9	2.8	1	1	1.2	1.4
POTASSIUM	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.052
SELENIUM	ICAP (MG/L)	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SILVER	ICAP (MG/L)	1.3	0.59	0.62	37	37	0.66	0.6	4.8	5
SODIUM	ICAP (MG/L)	0.093	0.019	0.02	1.6	1.6	0.01	0.01	0.017	0.017
STRONTIUM	ICAP (MG/L)									
THALLIUM	AAS (MG/L)									
THORIUM	ICAP (MG/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	ICP/MS (MG/L)	0.002	0.0013	0.0012	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
VANADIUM	ICAP (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC	ICAP (MG/L)	0.006	0.013	0.012	0.0024	0.0024	0.01	0.0059	0.0039	<0.002
ANIONS										
ALKALINITY-HCO3	(MG/L)	151	194		418		153		253	
ALKALINITY-CO3	(MG/L)	<1	<1		<1		<1		<1	
CHLORIDE	(MG/L)	2.8	2.2		16		1.9		8.1	
FLUORIDE	(MG/L)	0.1	<0.1		0.2		<0.1		<0.1	
NITRATE NITROGEN	(MG/L)	2	0.66		<0.2		0.91		0.66	
AMMONIA NITROGEN	(MG/L)									
SULFATE	(MG/L)	5.6	9.5		60		1.6		3.2	
TOTAL SUSPENDED SOLIDS	(MG/L)	<1	17		1.5		<1		<1	
TURBIDITY	(NTU)	0.4	4.6		8.4		1		0.4	

APPENDIX F.1
TRACE METALS AND ANIONS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-299 CRBAP 05/01/95 TOT	GW-512 ADB 04/26/95 TOT	GW-512 ADB 04/26/95 DIS	GW-540 CDLVI 04/04/95 TOT	GW-540 CDLVI 04/04/95 DIS	GW-560 CDLVI 04/05/95 TOT	GW-560 CDLVI 04/05/95 DIS	GW-609 CRSP 05/16/95 TOT	GW-609 CRSP 05/16/95 DIS
METALS									
ALUMINUM	<0.02	0.56	<0.02	<0.02	<0.02	0.024	<0.02	<0.02	<0.02
ANTIMONY	<0.05	<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	<0.05
BARIIUM	0.0086	0.022	0.022	0.0097	0.01	0.24	0.23	0.012	0.011
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.0094	0.014	0.017	0.035	0.021	0.037	0.02	0.0092	0.0068
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CALCIUM	29	30	31	41	42	37	36	41	40
CHROMIUM	<0.01	<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	<0.01
COBALT	<0.005	<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	<0.004
IRON	0.04	0.17	0.006	0.01	<0.005	<0.005	<0.005	0.075	0.0076
IRON	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
MAGNESIUM	17	17	18	23	24	15	15	23	23
MANGANESE	0.0023	0.0054	<0.001	0.0011	<0.001	0.0016	0.0024	<0.001	<0.001
MERCURY	<0.0002	<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	<0.01
NICKEL	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
POTASSIUM	1	3.8	3.8	0.85	0.85	1.4	1.7	1.2	0.9
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	0.97	0.84	0.81	2.2	2.3	0.54	0.67	0.76	0.74
STRONTIUM	0.015	0.02	0.02	<0.01	<0.01	0.025	0.027	0.013	0.013
THALLIUM	.	.	.	<0.01	<0.01	<0.01	<0.01	.	.
THORIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
URANIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
VANADIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
ZINC	0.0025	0.022	0.0024	0.0042	0.0036	0.018	0.017	0.0064	<0.002
ANIONS									
ALKALINITY-HCO3	142	163	.	198	.	148	.	205	.
ALKALINITY-CO3	<1	<1	.	<1	.	<1	.	<1	.
CHLORIDE	1.6	1.9	.	2.4	.	1.9	.	1.5	.
FLUORIDE	<0.1	<0.1	.	<0.1	.	<0.1	.	<0.1	.
NITRATE NITROGEN	0.37	<0.2	.	0.38	.	0.39	.	1.1	.
AMMONIA NITROGEN	3.7	3.1	.	<0.2	.	<0.2	.	2.2	.
SULFATE	.	.	.	4.2	.	2.1	.	.	.
TOTAL SUSPENDED SOLIDS	<1	2.5	.	<1	.	<1	.	<1	.
TURBIDITY	0.5	4.5	.	0.2	.	0.3	.	0.4	.

APPENDIX F.1
TRACE METALS AND ANIONS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-144 KHQ 07/16/95 DIS	GW-144 KHQ 07/16/95 TOT	GW-181 CRSP 07/28/95 DIS	GW-181 CRSP 07/28/95 TOT	GW-303 CRSDB 07/16/95 DIS	GW-303 CRSDB 07/16/95 TOT	GW-522 LIV 07/12/95 DIS	GW-522 LIV 07/12/95 TOT	GW-709 LIV 07/10/95 DIS	GW-709 LIV 07/10/95 TOT
METALS										
ALUMINUM	0.035	0.025	<0.02	0.026	0.031	0.026	<0.02	0.51	<0.02	0.062
ANTIMONY	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	<0.05	<0.05	0.085	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BARIUM	0.046	0.048	0.0072	0.0062	0.018	0.019	0.0056	0.0063	0.25	0.26
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.031	0.022	0.012	0.0046	0.018	0.022	0.019	0.02	0.0085	0.018
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.0034	<0.003	0.0038
CALCIUM	40	41	32	29	79	80	<0.002	<0.002	<0.002	<0.002
CHROMIUM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
COBALT	0.0044	<0.004	<0.004	<0.004	<0.004	<0.004	0.0041	0.012	0.013	0.025
COPPER	<0.005	0.2	0.0074	0.58	0.48	0.61	0.062	0.51	0.0058	0.13
IRON	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	15	15	21	18	42	42	<0.004	<0.004	<0.004	<0.004
MAGNESIUM	<0.001	<0.001	0.0016	0.0032	0.015	0.015	<0.001	0.012	0.0016	0.0034
MANGANESE	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
MERCURY	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOLYBDENUM	<0.01	<0.01	<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	<0.01	<0.01
POTASSIUM	2.1	2.1	1.6	1	4	4.3	1.3	<0.6	0.85	1.3
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	1.3	1.3	0.68	0.53	1.2	1.3	0.68	0.65	0.66	0.64
STRONTIUM	0.088	0.091	0.017	0.015	3.4	3.5	0.0097	0.011	0.029	0.029
THALLIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THORIUM	0.002	0.0021	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
URANIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
VANADIUM	<0.002	<0.002	0.0029	0.0066	0.0045	0.0082	<0.002	0.02	<0.002	0.011
ZINC										
ANIONS										
ALKALINITY-HCO3		152		167		181		129		173
ALKALINITY-CO3		<1		<1		<1		12		<1
CHLORIDE		2.5		2.1		2.1		2.1		2.2
FLUORIDE		0.11		<0.1		0.98		<0.1		<0.1
NITRATE NITROGEN		2.3		<0.2		<0.2		0.59		0.42
AMMONIA NITROGEN										
SULFATE		5.2		1.6		160		<1		1.4
TOTAL SUSPENDED SOLIDS		<1		<1		<1		20		1
TURBIDITY		0.3		2.1		9.6		9.5		0.1

APPENDIX F.1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-144 KHQ 11/14/95 DIS	GW-144 KHQ 11/14/95 TOT	GW-160 CRBAHP 11/02/95 DIS	GW-160 CRBAHP 11/02/95 TOT	GW-181 CRSP 11/05/95 DIS	GW-181 CRSP 11/05/95 TOT	GW-187 RQ 11/02/95 DIS	GW-187 RQ 11/02/95 TOT	GW-221 UNCS 10/08/95 DIS	GW-221 UNCS 10/08/95 TOT
METALS										
ALUMINUM	0.025	0.022	<0.02	91	<0.02	0.1	<0.02	0.056	<0.02	<0.02
ANTIMONY	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	<0.05	<0.05	<0.05	0.53	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
BARIUM	0.047	0.046	0.0088	0.24	0.01	0.014	0.28	0.29	0.008	0.0076
BERYLLIUM	<0.0003	<0.0003	<0.0003	0.03	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.042	0.11	0.011	0.009	0.023	0.023	0.56	0.64	0.024	0.024
CADMIUM	<0.003	<0.003	<0.003	0.0066	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CALCIUM	41	40	44	100	33	35	47	48	30	30
CHROMIUM	<0.01	<0.01	<0.01	0.16	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	<0.005	<0.005	<0.005	0.33	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COBALT	<0.004	<0.004	<0.004	0.056	<0.004	0.007	<0.004	<0.004	<0.004	<0.004
COPPER	0.51	0.026	0.0088	0.31	0.013	5.6	0.039	0.59	<0.005	0.075
IRON	<0.05	<0.05	<0.05	0.54	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	16	15	27	0.63	21	22	21	22	19	19
MAGNESIUM	0.0025	<0.001	<0.001	5.1	0.0073	0.024	0.0038	0.0053	<0.001	0.0013
MANGANESE	<0.0002	<0.0002	<0.0002	0.0017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MERCURY	<0.01	<0.01	<0.01	0.053	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOLYBDENUM	<0.01	<0.01	<0.01	0.28	<0.01	<0.01	<0.01	0.015	<0.01	<0.01
NICKEL	1.8	1.6	1.1	8.3	1.2	2.2	2.4	2.5	1.3	1.5
POTASSIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SELENIUM	<0.006	0.04	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SILVER	1.2	1.4	2.5	2.6	0.73	0.76	140	140	0.62	0.66
SODIUM	0.089	0.087	0.021	0.045	0.015	0.017	0.94	0.97	0.0099	0.0098
STRONTIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THORIUM	0.0024	0.0022	<0.0005 d	0.0055	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
URANIUM	<0.005	<0.005	<0.005	1.7	<0.005	0.0056	<0.005	<0.005	<0.005	<0.005
VANADIUM	0.0086	0.0044	0.0061	0.045	0.0057	0.0091	0.0029	0.0066	0.0036	0.13
ZINC										
ANIONS										
ALKALINITY-HCO3		164		216		178		326		151
ALKALINITY-CO3		<1		<1		<1		<1		<1
CHLORIDE		2.49		5.18		1.78		113		1.5
FLUORIDE		<0.1		<0.1		<0.1		1		<0.1
NITRATE NITROGEN		2.5		0.648		0.27		<0.2		0.72
AMMONIA NITROGEN		5.51		4.13		1.18		24.5		1.3
SULFATE										
TOTAL SUSPENDED SOLIDS		<1		5600		7		<1		<1
TURBIDITY		0.8		9700		24		92.5		0.7

APPENDIX F.1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION	DATE SAMPLED TYPE	GW-292 ECRUP 11/06/95 DIS	GW-321 ADB 10/26/95 DIS	GW-321 ADB 10/26/95 TOT	GW-540 CDLVI 10/11/95 DIS	GW-540 CDLVI 10/11/95 TOT	GW-560 CDLVI 10/06/95 DIS	GW-560 CDLVI 10/06/95 TOT
METALS								
ALUMINUM	ICAP (MG/L)	<0.02	0.03	<0.02	<0.02	0.033	0.027	0.038
ANTIMONY	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ARSENIC	ICAP (MG/L)	<0.05	<0.05	<0.05	0.077	<0.05	<0.05	0.051
BARIUM	ICAP (MG/L)	0.12	0.053	0.054	0.0099	0.0099	0.23	0.23
BERYLLIUM	ICAP (MG/L)	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	ICAP (MG/L)	0.032	0.071	0.012	0.0078	0.011	0.0078	0.023
CADMIUM	ICAP (MG/L)	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	AAS (MG/L)	51	26	26	<0.002	<0.002	<0.002	<0.002
CALCIUM	ICAP (MG/L)	<0.01	<0.01	<0.01	39	40	36	36
CHROMIUM	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
CHROMIUM	AAS (MG/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COBALT	ICAP (MG/L)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
COPPER	ICAP (MG/L)	<0.005	0.01	0.011	<0.005	0.025	<0.005	0.017
IRON	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	ICAP (MG/L)	32	15	15	<0.004	<0.004	<0.004	<0.004
MAGNESIUM	ICAP (MG/L)	<0.001	0.004	0.004	0.0011	0.0016	<0.001	<0.001
MANGANESE	ICAP (MG/L)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MERCURY	CVA (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOLYBDENUM	ICAP (MG/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
NICKEL	ICAP (MG/L)	0.67	0.82	0.82	1.1	0.61	1.3	1.2
POTASSIUM	ICAP (MG/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SELENIUM	ICAP (MG/L)	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SILVER	ICAP (MG/L)	4.6	0.7	0.67	2.8	2.4	0.61	0.6
SODIUM	ICAP (MG/L)	0.018	0.017	0.017	0.026	0.026	0.023	0.023
STRONTIUM	ICAP (MG/L)	<0.2	<0.2	<0.2	<0.01	<0.01	<0.01	<0.01
THALLIUM	ICAP (MG/L)	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
THORIUM	ICP/MS (MG/L)	<0.005	<0.005	<0.005	0.0053	<0.005	<0.005	<0.005
URANIUM	ICAP (MG/L)	0.0078	0.0067	0.0069	0.0053	0.0068	0.015	0.018
VANADIUM	ICAP (MG/L)							
ZINC	ICAP (MG/L)							
ANIONS								
ALKALINITY-HCO3	(MG/L)	253	127	127		199		150
ALKALINITY-CO3	(MG/L)	<1	<1	<1		<1		<1
CHLORIDE	(MG/L)	7.4	1.46	1.46		1.86		1.5
FLUORIDE	(MG/L)	<0.1	<0.1	<0.1		<0.1		<0.1
NITRATE NITROGEN	(MG/L)	0.9	0.426	0.426		0.41		0.32
AMMONIA NITROGEN	(MG/L)	2.83	2.21	2.21		<0.2		<0.2
SULFATE	(MG/L)					4.23		1.8
TOTAL SUSPENDED SOLIDS	(MG/L)	<1	<1	<1		<1		<1
TURBIDITY	(NTU)	0.55	0.25	0.25		0.35		0.35

APPENDIX F.1
TRACE METALS AND ANIONS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED TYPE	GW-732 CRSDB 10/23/95 DIS	GW-732 CRSDB 10/23/95 TOT	GW-732 CRSDB 10/24/95 DIS	GW-732 CRSDB 10/24/95 TOT	GW-732 CRSDB 10/25/95 DIS	GW-732 CRSDB 10/25/95 TOT	GW-732 CRSDB 10/26/95 DIS	GW-732 CRSDB 10/26/95 TOT	GW-757 LII 10/06/95 DIS	GW-757 LII 10/06/95 TOT
METALS										
ALUMINUM	<0.02	0.035	0.042	0.15	<0.02	0.19	<0.02	0.051	0.037	0.16
ANTIMONY	<0.05	<0.05	<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	<0.05	<0.05
BARIUM	0.011	0.015	0.056	0.1	0.065	0.097	0.034	0.026	0.26	0.24
BERYLLIUM	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
BORON	0.011	0.012	0.014	0.011	0.02	0.024	0.011	<0.004	0.035	0.019
CADMIUM	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
CADMIUM	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
CALCIUM	32	34	8	18	9.6	20	8.2	14	33	33
CHROMIUM	<0.01	<0.01	0.017	0.024	0.03	0.071	0.023	<0.01	0.033	0.034
CHROMIUM	<0.01	<0.01	0.016	0.02	0.024	0.047	0.021	0.014	0.038	0.04
COPPER	<0.005	<0.005	<0.005	<0.005	0.0051	<0.005	<0.005	<0.005	<0.005	<0.005
COPPER	<0.004	<0.004	<0.004	0.011	0.0062	0.053	<0.004	0.0053	<0.004	<0.004
IRON	<0.005	<0.005	<0.005	0.94	<0.005	6.3	0.0079	0.98	0.12	0.23
IRON	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
LEAD	<0.004	<0.004	<0.004	<0.004	<0.004	0.013	<0.004	<0.004	<0.004	<0.004
MAGNESIUM	19	20	1.2	2.6	1.7	8.2	4.8	22	20	19
MANGANESE	<0.001	<0.001	<0.001	0.013	<0.001	0.073	<0.001	0.012	0.001	0.0018
MERCURY	<0.0002	<0.0002	<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	<0.01	<0.01
NICKEL	<0.01	<0.01	<0.01	<0.01	<0.01	0.026	<0.01	<0.01	<0.01	<0.01
POTASSIUM	1.2	1.6	33	34	34	28	28	8.4	2.7	1.9
SELENIUM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SILVER	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
SODIUM	0.93	0.97	8.7	9.4	9.4	7.8	7.4	2.9	5.1	4.9
STRONTIUM	0.019	0.029	0.19	0.31	0.22	0.26	0.13	0.052	0.65	0.74
THALLIUM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
THORIUM	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d	<0.0005 d
URANIUM	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
VANADIUM	0.0042	0.0078	0.0074	0.012	0.015	0.042	0.062	0.0072	0.0042	0.0038
ZINC										
ANIONS										
ALKALINITY-HCO3		152		<1		95		<1		155
ALKALINITY-CO3		<1		146		32		102		<1
CHLORIDE		1.09		1.22		1.39		1.47		2.1
FLUORIDE		<0.1		<0.1		<0.1		<0.1		1.65
NITRATE NITROGEN		0.34		0.44		0.413		0.524		0.23
AMMONIA NITROGEN										
SULFATE		1.68		3.35		2.68		3.86		10
TOTAL SUSPENDED SOLIDS		1		14		701		34		6
TURBIDITY		1.1		16		39		48		6.2

APPENDIX F.2
VOLATILE ORGANIC COMPOUNDS

APPENDIX F.2
SUMMARY OF VOCs DETECTED IN GROUNDWATER AND SURFACE WATER SAMPLES

Total Samples 5
Samples without VOCs 3
Samples with VOCs 2

COMPOUND	FIRST QUARTER
ACETONE (UG/L)	1
BENZENE (UG/L)	0
BROMODICHLOROMETHANE (UG/L)	0
BROMOFORM (UG/L)	0
BROMOMETHANE (UG/L)	0
2-BUTANONE (UG/L)	1
CARBON DISULFIDE (UG/L)	0
CARBON TETRACHLORIDE (UG/L)	0
CHLOROBENZENE (UG/L)	0
CHLORODIBROMOMETHANE (UG/L)	0
CHLOROETHANE (UG/L)	0
CHLOROFORM (UG/L)	0
CHLOROMETHANE (UG/L)	0
1,1-DICHLOROETHANE (UG/L)	0
1,2-DICHLOROETHANE (UG/L)	0
1,1-DICHLOROETHENE (UG/L)	0
1,2-DICHLOROETHENE (UG/L)	0
TRANS-1,2-DICHLOROETHENE (UG/L)	0
1,2-DICHLOROPROPANE (UG/L)	0
CIS-1,3-DICHLOROPROPENE (UG/L)	0
TRANS-1,3-DICHLOROPROPENE (UG/L)	0
ETHYLBENZENE (UG/L)	0
2-HEXANONE (UG/L)	0
4-METHYL-2-PENTANONE (UG/L)	0
METHYLENE CHLORIDE (UG/L)	0
STYRENE (UG/L)	0
1,1,2,2-TETRACHLOROETHANE (UG/L)	0
TETRACHLOROETHENE (UG/L)	0
TOLUENE (UG/L)	2
1,1,1-TRICHLOROETHANE (UG/L)	0
1,1,2-TRICHLOROETHANE (UG/L)	0
TRICHLOROETHENE (UG/L)	0
VINYL ACETATE (UG/L)	0
VINYL CHLORIDE (UG/L)	0
XYLENES (UG/L)	0

APPENDIX F.2
VOLATILE ORGANIC COMPOUNDS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-141 LIV 01/09/95	GW-143 KHQ 01/17/95	GW-511 CRSP 01/24/95	GW-709 LII 01/09/95	GW-732 CRSDB 01/18/95
ACETONE	10U	10U	3 JB	10U	10U
BENZENE	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE	10U	10U	10U	10U	10U
BROMOFORM	10U	10U	10U	10U	10U
BROMOMETHANE	10U	10U	10U	10U	10U
2-BUTANONE	10U	10U	6 JB	10U	10U
CARBON DISULFIDE	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE	10U	10U	10U	10U	10U
CHLOROBENZENE	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE	10U	10U	10U	10U	10U
CHLOROETHANE	10U	10U	10U	10U	10U
CHLOROFORM	10U	10U	10U	10U	10U
CHLOROMETHANE	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U
ETHYLBENZENE	10U	10U	10U	10U	10U
2-HEXANONE	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE	10U	10U	10U	10U	10U
METHYLENE CHLORIDE	10U	10U	10U	10U	10U
STYRENE	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE	10U	10U	10U	10U	10U
TETRACHLOROETHENE	10U	6 JB	7 JB	10U	10U
TOLUENE	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE	10U	10U	10U	10U	10U
TRICHLOROETHENE	10U	10U	10U	10U	10U
VINYL ACETATE	10U	10U	10U	10U	10U
VINYL CHLORIDE	10U	10U	10U	10U	10U
XYLENES	10U	10U	10U	10U	10U

APPENDIX F.2
SUMMARY OF VOCs DETECTED IN GROUNDWATER AND SURFACE WATER SAMPLES

Total Samples 10
Samples without VOCs 8
Samples with VOCs 2

COMPOUND	SECOND QUARTER
ACETONE	1
BENZENE	0
BROMODICHLOROMETHANE	0
BROMOFORM	0
BROMOMETHANE	0
2-BUTANONE	0
CARBON DISULFIDE	0
CARBON TETRACHLORIDE	1
CHLOROBENZENE	0
CHLORODIBROMOMETHANE	0
CHLOROETHANE	0
CHLOROFORM	1
CHLOROMETHANE	0
1,1-DICHLOROETHANE	0
1,2-DICHLOROETHANE	0
1,1-DICHLOROETHENE	0
1,2-DICHLOROETHENE	1
TRANS-1,2-DICHLOROETHENE	0
1,2-DICHLOROPROPANE	0
CIS-1,3-DICHLOROPROPENE	0
TRANS-1,3-DICHLOROPROPENE	0
ETHYLBENZENE	0
2-HEXANONE	0
4-METHYL-2-PENTANONE	0
METHYLENE CHLORIDE	0
STYRENE	0
1,1,2,2-TETRACHLOROETHANE	0
TETRACHLOROETHENE	1
TOLUENE	0
1,1,1-TRICHLOROETHANE	0
1,1,2-TRICHLOROETHANE	0
TRICHLOROETHENE	1
VINYL ACETATE	0
VINYL CHLORIDE	0
XYLENES	0

APPENDIX F.2
VOLATILE ORGANIC COMPOUNDS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-144 KHQ 04/25/95	GW-159 CRSDB 04/06/95	GW-186 RQ 05/03/95	GW-221 UNCS 04/19/95	GW-292 ECRWP 04/24/95	GW-299 CRBAMP 05/01/95	GW-512 ADB 04/26/95	GW-540 CDLV1 04/04/95	GW-560 CDLV11 04/05/95	GW-609 CRSP 05/16/95
ACETONE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
BENZENE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON DISULFIDE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	14
1,2-DICHLOROPROPANE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
ETHYLBENZENE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
STYRENE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	19
TETRACHLOROETHENE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	2 J
VINYL ACETATE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U
XYLENES	(UG/L)	10U	10U	10U	10U	10U	10U	10U	10U	10U

APPENDIX F.2
SUMMARY OF VOCs DETECTED IN GROUNDWATER AND SURFACE WATER SAMPLES

Total Samples 5
Samples without VOCs 5
Samples with VOCs 0

COMPOUND	THIRD QUARTER
ACETONE	0
BENZENE	0
BROMODICHLOROMETHANE	0
BROMOFORM	0
BROMOMETHANE	0
2-BUTANONE	0
CARBON DISULFIDE	0
CARBON TETRACHLORIDE	0
CHLOROBENZENE	0
CHLORODIBROMOMETHANE	0
CHLOROETHANE	0
CHLOROFORM	0
CHLOROMETHANE	0
1,1-DICHLOROETHANE	0
1,2-DICHLOROETHANE	0
1,1-DICHLOROETHENE	0
1,2-DICHLOROETHENE	0
TRANS-1,2-DICHLOROETHENE	0
1,2-DICHLOROPROPANE	0
CIS-1,3-DICHLOROPROPENE	0
TRANS-1,3-DICHLOROPROPENE	0
ETHYLBENZENE	0
2-HEXANONE	0
4-METHYL-2-PENTANONE	0
METHYLENE CHLORIDE	0
STYRENE	0
1,1,2,2-TETRACHLOROETHANE	0
TETRACHLOROETHENE	0
TOLUENE	0
1,1,1-TRICHLOROETHANE	0
1,1,2-TRICHLOROETHANE	0
TRICHLOROETHENE	0
VINYL ACETATE	0
VINYL CHLORIDE	0
XYLENES	0

APPENDIX F.2
VOLATILE ORGANIC COMPOUNDS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-144 KHQ 07/16/95	GW-181 CRSP 07/28/95	GW-303 CRSDB 07/16/95	GW-522 LIV 07/12/95	GW-709 LII 07/10/95
ACETONE	10U	10U	10U	10U	10U
BENZENE	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE	10U	10U	10U	10U	10U
BROMOFORM	10U	10U	10U	10U	10U
BROMOMETHANE	10U	10U	10U	10U	10U
2-BUTANONE	10U	10U	10U	10U	10U
CARBON DISULFIDE	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE	10U	10U	10U	10U	10U
CHLOROBENZENE	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE	10U	10U	10U	10U	10U
CHLOROETHANE	10U	10U	10U	10U	10U
CHLOROFORM	10U	10U	10U	10U	10U
CHLOROMETHANE	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE	10U	10U	10U	10U	10U
ETHYLBENZENE	10U	10U	10U	10U	10U
2-HEXANONE	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE	10U	10U	10U	10U	10U
METHYLENE CHLORIDE	10U	10U	10U	10U	10U
STYRENE	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE	10U	10U	10U	10U	10U
TETRACHLOROETHENE	10U	10U	10U	10U	10U
TOLUENE	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE	10U	10U	10U	10U	10U
TRICHLOROETHENE	10U	10U	10U	10U	10U
VINYL ACETATE	10U	10U	10U	10U	10U
VINYL CHLORIDE	10U	10U	10U	10U	10U
XYLENES	10U	10U	10U	10U	10U

APPENDIX F.2
SUMMARY OF VOCs DETECTED IN GROUNDWATER AND SURFACE WATER SAMPLES

Total Samples 14
Samples without VOCs 10
Samples with VOCs 4

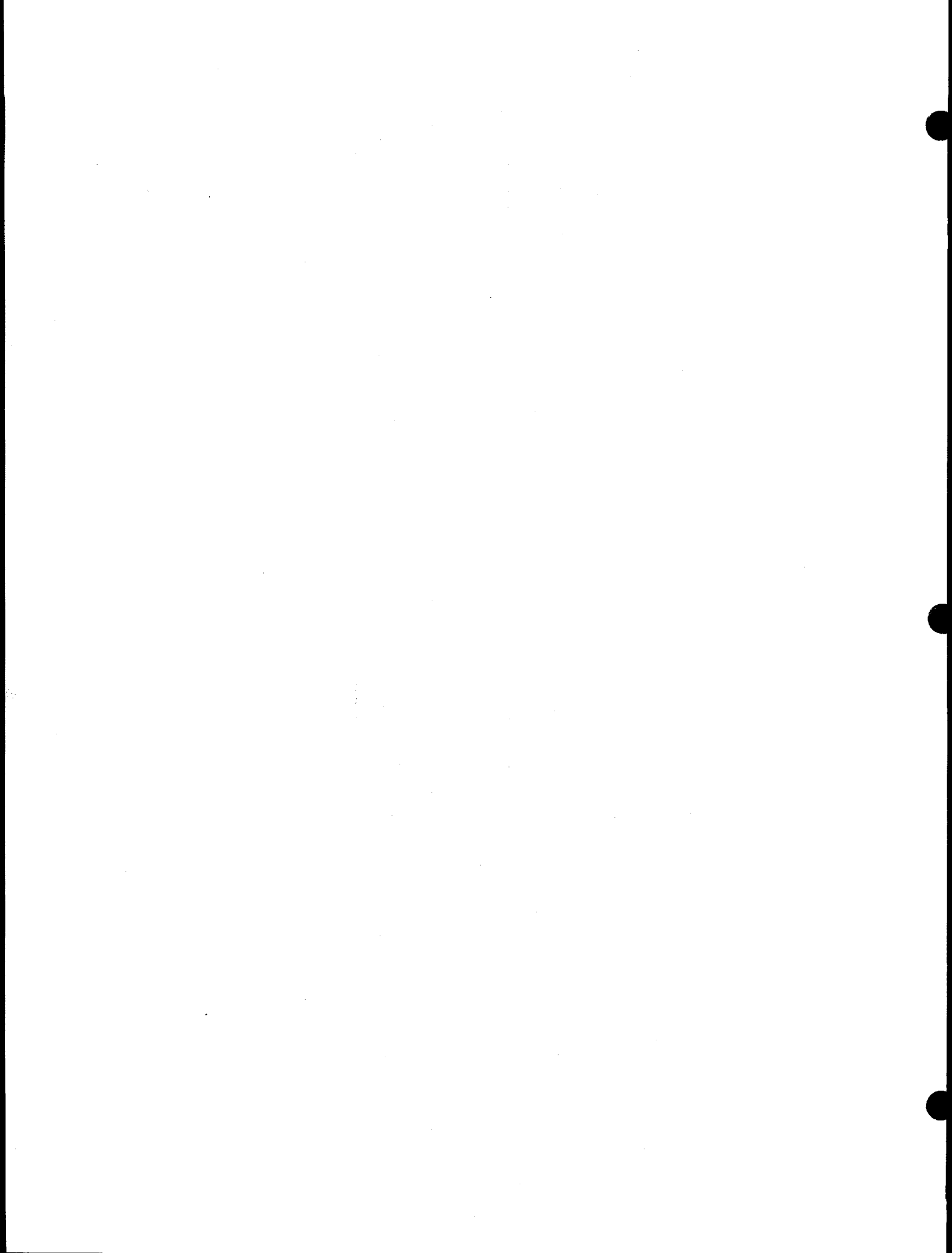
COMPOUND	FOURTH QUARTER
ACETONE (UG/L)	0
BENZENE (UG/L)	0
BROMODICHLOROMETHANE (UG/L)	0
BROMOFORM (UG/L)	0
BROMOMETHANE (UG/L)	0
2-BUTANONE (UG/L)	3
CARBON DISULFIDE (UG/L)	0
CARBON TETRACHLORIDE (UG/L)	1
CHLOROBENZENE (UG/L)	0
CHLORODIBROMOMETHANE (UG/L)	0
CHLOROETHANE (UG/L)	0
CHLOROFORM (UG/L)	0
CHLOROMETHANE (UG/L)	0
1,1-DICHLOROETHANE (UG/L)	0
1,2-DICHLOROETHANE (UG/L)	0
1,1-DICHLOROETHENE (UG/L)	0
1,2-DICHLOROETHENE (UG/L)	0
TRANS-1,2-DICHLOROETHENE (UG/L)	0
1,2-DICHLOROPROPANE (UG/L)	0
CIS-1,3-DICHLOROPROPENE (UG/L)	0
TRANS-1,3-DICHLOROPROPENE (UG/L)	0
ETHYLBENZENE (UG/L)	1
2-HEXANONE (UG/L)	0
4-METHYL-2-PENTANONE (UG/L)	0
METHYLENE CHLORIDE (UG/L)	1
STYRENE (UG/L)	0
1,1,2,2-TETRACHLOROETHANE (UG/L)	0
TETRACHLOROETHENE (UG/L)	0
TOLUENE (UG/L)	0
1,1,1-TRICHLOROETHANE (UG/L)	0
1,1,2-TRICHLOROETHANE (UG/L)	0
TRICHLOROETHENE (UG/L)	0
VINYL ACETATE (UG/L)	0
VINYL CHLORIDE (UG/L)	0
XYLENES (UG/L)	1

APPENDIX F.2
VOLATILE ORGANIC COMPOUNDS, 4TH QUARTER 1995

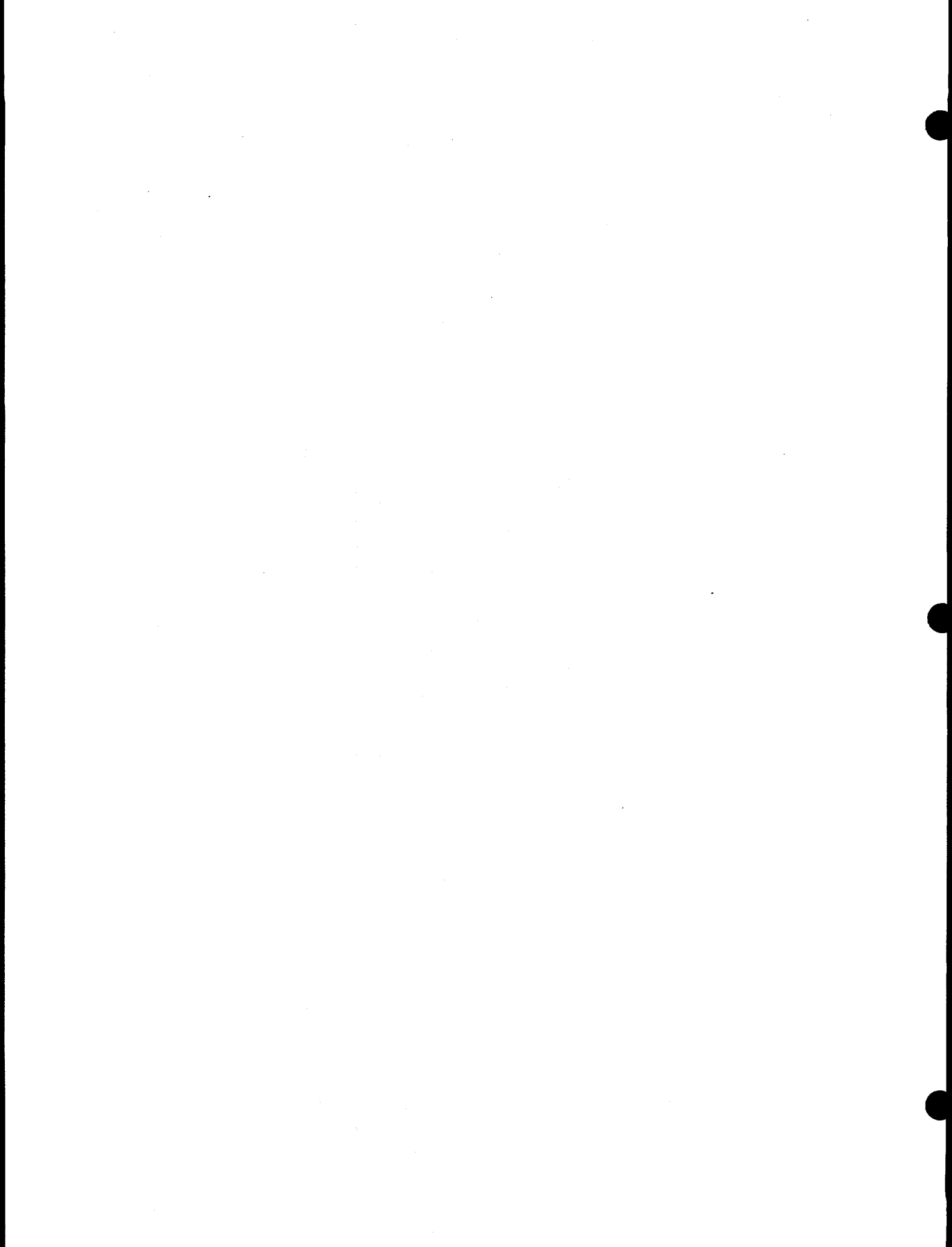
SAMPLING POINT LOCATION DATE SAMPLED	GW-144 KHQ 11/14/95	GW-160 CRBAMP 11/02/95	GW-181 CRSP 11/05/95	GW-187 RQ 11/02/95	GW-221 UNCS 10/08/95	GW-292 ECRMP 11/06/95	GW-321 ADB 10/26/95	GW-540 CDLVI 10/11/95	GW-560 CDLVI 10/06/95
ACETONE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
BENZENE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
BROMODICHLOROMETHANE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
BROMOFORM	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
BROMOMETHANE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
2-BUTANONE	10U (UG/L)	10U	10U	10U	10 B	10U	10U	10U	9 JB
CARBON DISULFIDE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
CARBON TETRACHLORIDE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROBENZENE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
CHLORODIBROMOMETHANE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROETHANE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROFORM	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
CHLOROMETHANE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHANE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHANE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
1,1-DICHLOROETHENE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROETHENE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,2-DICHLOROETHENE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
1,2-DICHLOROPROPANE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
CIS-1,3-DICHLOROPROPENE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
TRANS-1,3-DICHLOROPROPENE	10U (UG/L)	10U	10U	10U	4 JB	10U	10U	10U	10U
ETHYLBENZENE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
2-HEXANONE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
4-METHYL-2-PENTANONE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
METHYLENE CHLORIDE	10U (UG/L)	10U	10U	10U	1 J	10U	10U	10U	10U
STYRENE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2,2-TETRACHLOROETHANE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
TETRACHLOROETHENE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
TOLUENE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-TRICHLOROETHANE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
1,1,2-TRICHLOROETHANE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
TRICHLOROETHENE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
VINYL ACETATE	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U
VINYL CHLORIDE	10U (UG/L)	10U	10U	10U	12 B	10U	10U	10U	10U
XYLENES	10U (UG/L)	10U	10U	10U	10U	10U	10U	10U	10U

APPENDIX F.2
VOLATILE ORGANIC COMPOUNDS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GM-732 CRSDB 10/23/95	GM-732 CRSDB 10/24/95	GM-732 CRSDB 10/25/95	GM-732 CRSDB 10/26/95	GM-757 LII 10/06/95
ACETONE	(UG/L)	.	.	.	10U
BENZENE	(UG/L)	.	.	.	10U
BROMODICHLOROMETHANE	(UG/L)	.	.	.	10U
BROMOFORM	(UG/L)	.	.	.	10U
BROMOMETHANE	(UG/L)	.	.	.	10U
2-BUTANONE	(UG/L)	.	.	.	8 JB
CARBON DISULFIDE	(UG/L)	.	.	.	10U
CARBON TETRACHLORIDE	(UG/L)	.	.	.	10U
CHLOROBENZENE	(UG/L)	.	.	.	10U
CHLORODIBROMOMETHANE	(UG/L)	.	.	.	10U
CHLOROETHANE	(UG/L)	.	.	.	10U
CHLOROFORM	(UG/L)	.	.	.	10U
CHLOROMETHANE	(UG/L)	.	.	.	10U
1,1-DICHLOROETHANE	(UG/L)	.	.	.	10U
1,2-DICHLOROETHANE	(UG/L)	.	.	.	10U
1,1-DICHLOROETHENE	(UG/L)	.	.	.	10U
1,2-DICHLOROETHENE	(UG/L)	.	.	.	10U
TRANS-1,2-DICHLOROETHENE	(UG/L)	.	.	.	10U
1,2-DICHLOROPROPANE	(UG/L)	.	.	.	10U
CIS-1,3-DICHLOROPROPENE	(UG/L)	.	.	.	10U
TRANS-1,3-DICHLOROPROPENE	(UG/L)	.	.	.	10U
ETHYLBENZENE	(UG/L)	.	.	.	10U
2-HEXANONE	(UG/L)	.	.	.	10U
4-METHYL-2-PENTANONE	(UG/L)	.	.	.	10U
METHYLENE CHLORIDE	(UG/L)	.	.	.	10U
STYRENE	(UG/L)	.	.	.	10U
1,1,2,2-TETRACHLOROETHANE	(UG/L)	.	.	.	10U
TETRACHLOROETHENE	(UG/L)	.	.	.	10U
TOLUENE	(UG/L)	.	.	.	10U
1,1,1-TRICHLOROETHANE	(UG/L)	.	.	.	10U
1,1,2-TRICHLOROETHANE	(UG/L)	.	.	.	10U
TRICHLOROETHENE	(UG/L)	.	.	.	10U
VINYL ACETATE	(UG/L)	.	.	.	10U
VINYL CHLORIDE	(UG/L)	.	.	.	10U
XYLENES	(UG/L)	.	.	.	10U



APPENDIX F.3
ADDITIONAL ORGANICS



APPENDIX F.3
ADDITIONAL ORGANIC COMPOUNDS, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-141 LIV 01/09/95	GW-143 KHQ 01/17/95	GW-511 CRSP 01/24/95	GW-709 LII 01/09/95	GW-732 CRSDB 01/18/95
ACROLEIN	50U (UG/L)	.	.	50U	.
ACRYLONITRILE	50U (UG/L)	.	.	50U	.
BROMOCHLOROMETHANE	10U (UG/L)	.	.	10U	.
2-CHLOROETHYL VINYL ETHER	10U (UG/L)	.	.	10U	.
DIBROMOMETHANE	5U (UG/L)	.	.	5U	.
1,2-DIBROMO-3-CHLOROPROPANE	10U (UG/L)	.	.	10U	.
1,2-DICHLOROBENZENE	10U (UG/L)	.	.	10U	.
1,4-DICHLOROBENZENE	10U (UG/L)	.	.	10U	.
DICHLORODIFLUOROMETHANE	5U (UG/L)	.	.	5U	.
CIS-1,2-DICHLOROETHENE	10U (UG/L)	.	.	10U	.
1,4-DICHLORO-2-BUTENE	5U (UG/L)	.	.	5U	.
ETHANOL	710 JB (UG/L)	.	.	880 JB	.
ETHYL METHACRYLATE	5U (UG/L)	.	.	5U	.
Iodomethane	5U (UG/L)	.	.	5U	.
1,1,1,2-TETRACHLOROETHANE	10U (UG/L)	.	.	10U	.
TRICHLOROFLUOROMETHANE	5U (UG/L)	.	.	5U	.
1,2,3-TRICHLOROPROPANE	5U (UG/L)	.	.	5U	.

APPENDIX F.3
ADDITIONAL ORGANIC COMPOUNDS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GM-144 KHQ 04/25/95	GM-159 CRSDB 04/06/95	GM-186 RQ 05/03/95	GM-221 UNCS 04/19/95	GM-292 ECRWP 04/24/95	GM-299 CRBAMP 05/01/95	GM-512 ADB 04/26/95	GM-540 CDLVI 04/04/95	GM-560 CDLVI 04/05/95	GM-609 CRSP 05/16/95
ACROLEIN	(UG/L)	.	.	.	.	50U	.	.	50U	.
ACRYLONITRILE	(UG/L)	.	.	.	.	50U	.	.	50U	.
BROMOCHLOROMETHANE	(UG/L)	.	.	.	.	.	.	10U	10U	.
2-CHLOROETHYL VINYL ETHER	(UG/L)	.	.	.	.	10U	.	.	10U	.
DIBROMOMETHANE	(UG/L)	.	.	.	.	5U	.	10U	5U	.
1,2-DIBROMO-3-CHLOROPROPANE	(UG/L)	.	.	.	.	.	.	10U	10U	.
1,2-DICHLOROBENZENE	(UG/L)	.	.	.	.	.	.	10U	10U	.
1,4-DICHLOROBENZENE	(UG/L)	.	.	.	.	.	.	10U	10U	.
DICHLORO(1)FLUOROMETHANE	(UG/L)	.	.	.	.	5U	.	10U	10U	.
CIS-1,2-DICHLOROETHENE	(UG/L)	.	.	.	.	5U	.	10U	5U	.
1,4-DICHLORO-2-BUTENE	(UG/L)	.	.	.	.	5U	.	10U	5U	.
ETHANOL	(UG/L)	.	.	.	.	850 JB	.	.	480 JB	.
ETHYL METHACRYLATE	(UG/L)	.	.	.	.	5U	.	.	5U	.
IODOMETHANE	(UG/L)	.	.	.	.	5U	.	.	5U	.
1,1,1,2-TETRACHLOROETHANE	(UG/L)	.	.	.	.	5U	.	10U	10U	.
TRICHLOROFLUOROMETHANE	(UG/L)	.	.	.	.	5U	.	.	5U	.
1,2,3-TRICHLOROPROPANE	(UG/L)	.	.	.	.	5U	.	.	5U	.

APPENDIX F.3
ADDITIONAL ORGANIC COMPOUNDS, 3RD QUARTER 1995

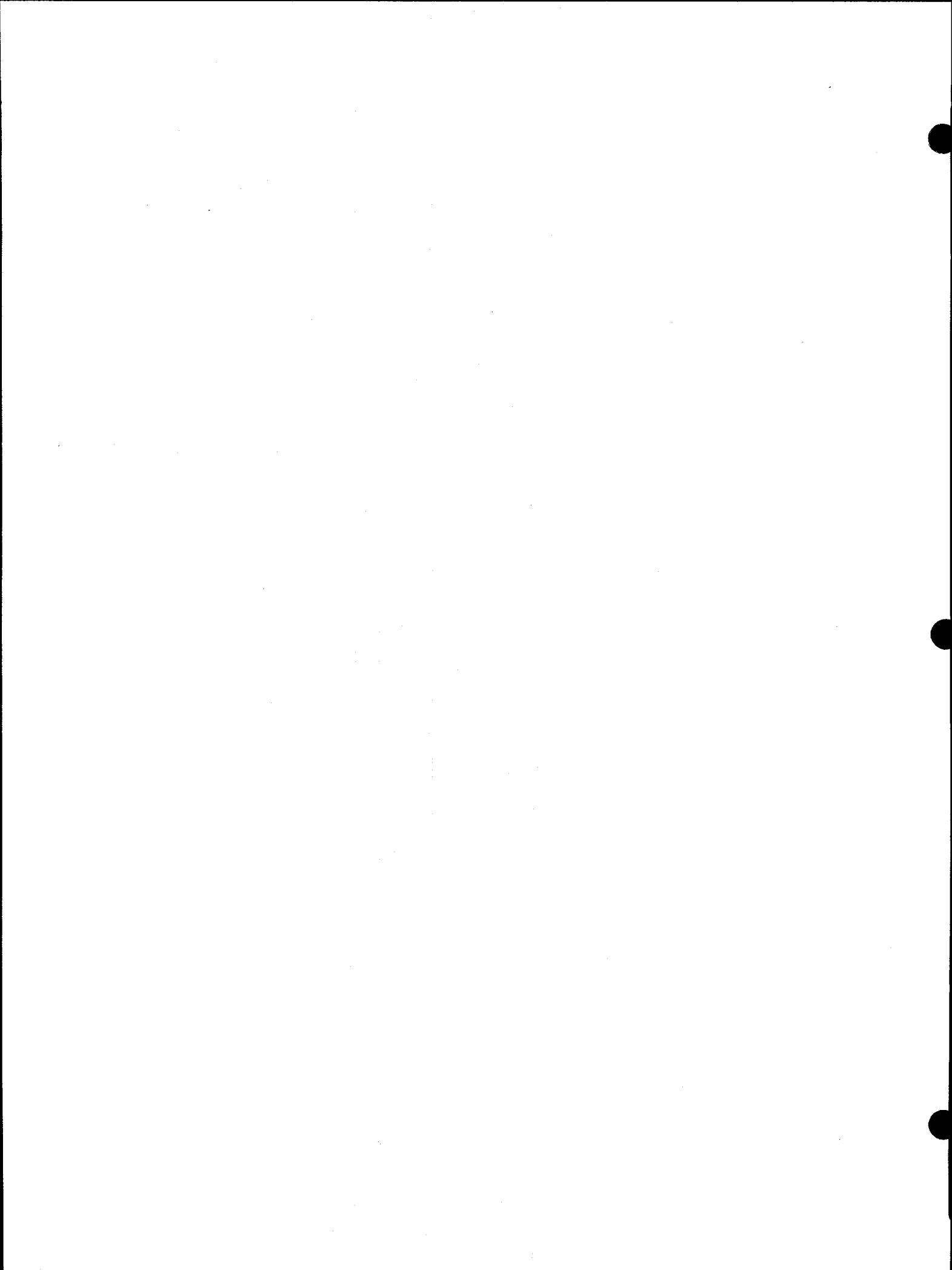
SAMPLING POINT LOCATION DATE SAMPLED	GW-144 KHQ 07/16/95	GW-181 CRSP 07/28/95	GW-303 CRSDB 07/16/95	GW-522 LIV 07/12/95	GW-709 LII 07/10/95
ACROLEIN	(UG/L)	.	.	50U	50U
ACRYLONITRILE	(UG/L)	.	.	50U	50U
BROMOCHLOROMETHANE	(UG/L)	.	.	10U	10U
2-CHLOROETHYL VINYL ETHER	(UG/L)	.	.	10U	10U
DIBROMOMETHANE	(UG/L)	.	.	5U	5U
1,2-DIBROMO-3-CHLOROPROPANE	(UG/L)	.	.	10U	10U
1,2-DICHLOROBENZENE	(UG/L)	.	.	10U	10U
1,4-DICHLOROBENZENE	(UG/L)	.	.	10U	10U
DICHLORODIFLUOROMETHANE	(UG/L)	.	.	5U	5U
CIS-1,2-DICHLOROETHENE	(UG/L)	.	.	10U	10U
1,4-DICHLORO-2-BUTENE	(UG/L)	.	.	5U	5U
ETHANOL	(UG/L)	.	.	10000U	10000U
ETHYL METHACRYLATE	(UG/L)	.	.	5U	5U
Iodomethane	(UG/L)	.	.	5U	5U
1,1,1,2-TETRACHLOROETHANE	(UG/L)	.	.	10U	10U
TRICHLOROFLUOROMETHANE	(UG/L)	.	.	5U	5U
1,2,3-TRICHLOROPROPANE	(UG/L)	.	.	5U	5U

APPENDIX F.3
ADDITIONAL ORGANIC COMPOUNDS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-144 KHQ 11/14/95	GW-160 CRBAP 11/02/95	GW-181 CRSP 11/05/95	GW-187 RQ 11/02/95	GW-221 UNCS 10/08/95	GW-292 ECRMP 11/06/95	GW-321 AD8 10/26/95	GW-540 CDLVI 10/11/95	GW-560 CDLVII 10/06/95
ACROLEIN (UG/L)	.	50U	.	.	.	.	.	.	50U
ACRYLONITRILE (UG/L)	.	50U	.	.	.	.	.	.	50U
BROMOCHLOROMETHANE (UG/L)	.	.	.	.	.	.	.	10U	10U
2-CHLOROETHYL VINYL ETHER (UG/L)	.	10U	.	.	.	.	.	.	10U
DIBROMOMETHANE (UG/L)	.	5U	.	.	.	.	.	10U	5U
1,2-DIBROMO-3-CHLOROPROPANE (UG/L)	.	.	.	.	.	.	.	10U	10U
1,2-DICHLOROBENZENE (UG/L)	.	.	.	.	.	.	.	10U	10U
1,4-DICHLOROBENZENE (UG/L)	.	.	.	.	.	.	.	10U	10U
DICHLORODIFLUOROMETHANE (UG/L)	.	5U	.	.	.	.	.	10U	5U
CIS-1,2-DICHLOROETHENE (UG/L)	.	.	.	.	.	.	.	.	10U
1,4-DICHLORO-2-BUTENE (UG/L)	.	5U	.	.	.	.	.	10U	10U
ETHANOL (UG/L)	.	10000U	.	.	.	.	.	.	5U
ETHYL METHACRYLATE (UG/L)	.	.	.	.	.	.	.	.	10000U
IODOMETHANE (UG/L)	.	5U	.	.	.	.	.	.	5U
1,1,2-TETRACHLOROETHANE (UG/L)	.	5U	.	.	.	.	.	.	5U
TRICHLOROFLUOROMETHANE (UG/L)	.	5U	.	.	.	.	.	10U	10U
1,2,3-TRICHLOROPROPANE (UG/L)	.	5U	.	.	.	.	.	.	5U

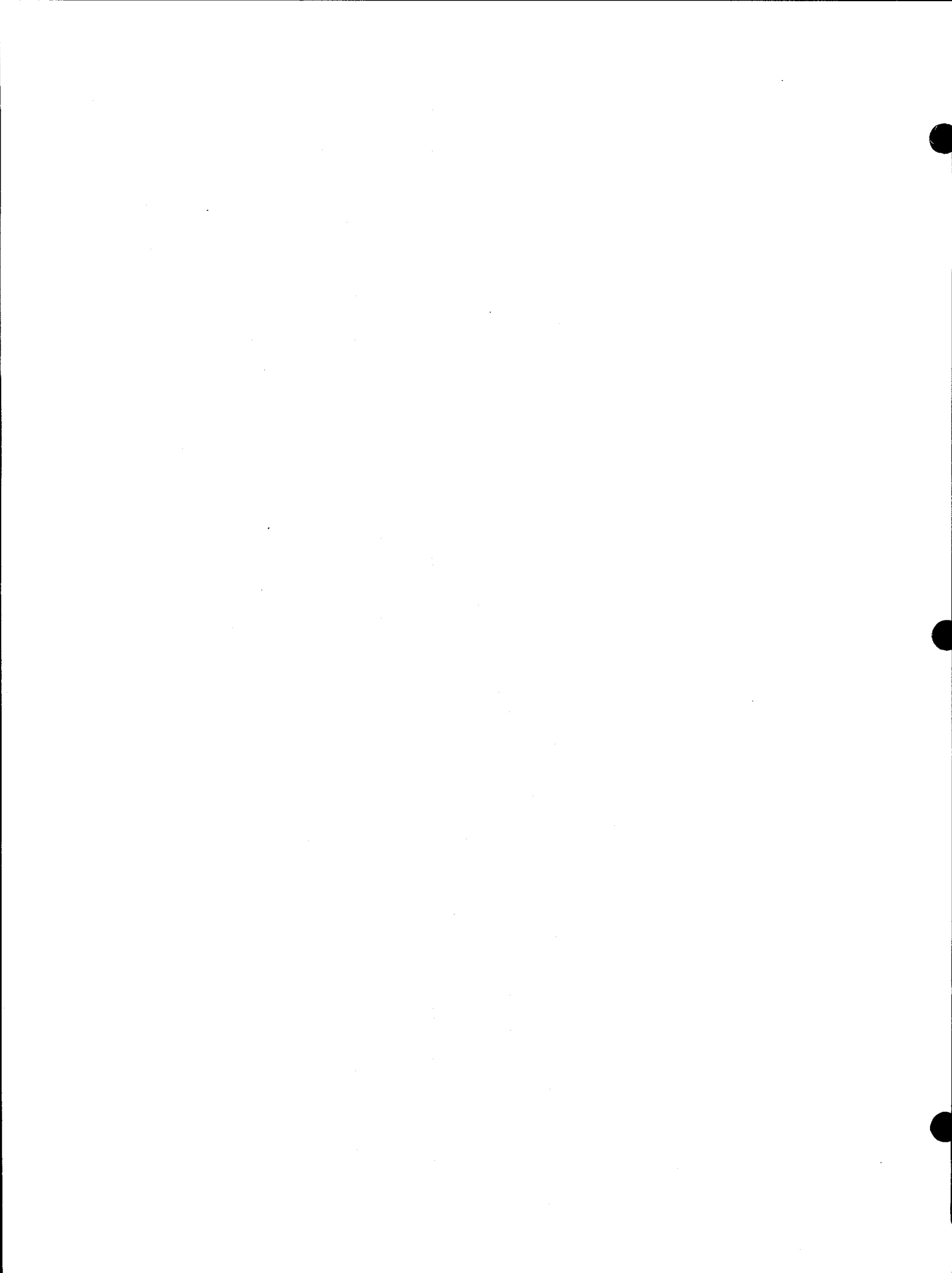
APPENDIX F.3
ADDITIONAL ORGANIC COMPOUNDS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-732 CRSDB 10/23/95	GW-732 CRSDB 10/24/95	GW-732 CRSDB 10/25/95	GW-732 CRSDB 10/26/95	GW-757 LII 10/06/95
ACROLEIN	(UG/L)	.	.	.	50U
ACRYLONITRILE	(UG/L)	.	.	.	50U
BROMOCHLOROMETHANE	(UG/L)	.	.	.	10U
2-CHLOROETHYL VINYL ETHER	(UG/L)	.	.	.	10U
DIBROMOMETHANE	(UG/L)	.	.	.	5U
1,2-DIBROMO-3-CHLOROPROPANE	(UG/L)	.	.	.	10U
1,2-DICHLOROBENZENE	(UG/L)	.	.	.	10U
1,4-DICHLOROBENZENE	(UG/L)	.	.	.	10U
DICHLORO DI FLUOROMETHANE	(UG/L)	.	.	.	5U
CIS-1,2-DICHLOROETHENE	(UG/L)	.	.	.	10U
1,4-DICHLORO-2-BUTENE	(UG/L)	.	.	.	5U
ETHANOL	(UG/L)	.	.	.	10000U
ETHYL METHACRYLATE	(UG/L)	.	.	.	5U
IODOMETHANE	(UG/L)	.	.	.	5U
1,1,1,2-TETRACHLOROETHANE	(UG/L)	.	.	.	10U
TRICHLOROFLUOROMETHANE	(UG/L)	.	.	.	5U
1,2,3-TRICHLOROPROPANE	(UG/L)	.	.	.	5U



APPENDIX F.4

**FIELD MEASUREMENTS
AND MISCELLANEOUS PARAMETERS**



APPENDIX F.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 1ST QUARTER 1995

SAMPLING POINT LOCATION	GM-141 LIV	GM-143 KHQ	GM-511 CRSP	GM-709 LII	GM-732 CRSDB
DATE SAMPLED	01/09/95	01/17/95	01/24/95	01/09/95	01/18/95

FIELD MEASUREMENTS

STATIC WATER LEVEL (FT. BELOW TOC)	.	.	.	.	.
WATER LEVEL ELEV. (FT. ABOVE MSL)	14.7	14	11	12.4	13.5
WATER TEMP, FIELD MMT (DEG. CENT.)	7.3	8.1	8.5	8	8.1
PH, FIELD MMT. (PH UNITS)	4.17	4.00	2.19	292	306
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	6.6	4.9	11.9	6.8	7.4
DISSOLVED OXYGEN, FIELD MMT. (PPH)	168	24.1	151	177	184
REDOX, FIELD MMT. (MV)					

MISCELLANEOUS PARAMETERS

BROMIDE (MG/L)	<5	.	.	<5	.
CHEMICAL OXYGEN DEMAND (MG/L)	<0.1	.	.	<0.1	.
CYANIDE (MG/L)	7.4	<0.05	8.3	8	<0.05
PHENOLS (MG/L)		8.2			8.1
PH, REP. 2 (PH UNITS)		8.2			8.2
PH, REP. 3 (PH UNITS)		8.2			8.1
PH, REP. 4 (PH UNITS)	448	486	265	335	318
CONDUCTIVITY (UMHOS/CM)		490			319
CONDUCTIVITY, REP. 2 (UMHOS/CM)		485			318
CONDUCTIVITY, REP. 3 (UMHOS/CM)		490			2.9
CONDUCTIVITY, REP. 4 (UMHOS/CM)	<1	3.2		35	1.5
TOTAL ORGANIC CARBON (MG/L)		3			2.4
TOTAL ORGANIC CARBON, REP 2 (MG/L)		<1			1.7
TOTAL ORGANIC CARBON, REP 3 (MG/L)		1			<10
TOTAL ORGANIC CARBON, REP 4 (MG/L)	<10	<10		<10	<10
TOTAL ORGANIC HALIDE (UG/L)		13.28			<10
TOTAL ORGANIC HALIDE, REP 2 (UG/L)		<10			<10
TOTAL ORGANIC HALIDE, REP 3 (UG/L)		<10			<10
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	234	234	146	112	158
DISSOLVED SOLIDS (MG/L)	12	5	1	<1	1040
TOTAL SUSPENDED SOLIDS (MG/L)	50	23	2.6	0.5	280
TURBIDITY (NTU)					

APPENDIX F.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-144 KIQ 04/25/95	GW-159 CRSDB 04/06/95	GW-186 RQ 05/03/95	GW-221 UNCS 04/19/95	GW-292 ECRWP 04/24/95	GW-299 CRAMP 05/01/95	GW-512 ADB 04/26/95	GW-540 CDLVI 04/04/95	GW-560 CDLVI 04/05/95	GW-609 CRSP 05/16/95
FIELD MEASUREMENTS										
STATIC WATER LEVEL (FT. BELOW TOC)	-78.65	-116.52	-14.2	-76.68	-112.75	-97.15	-21.8	-79.35	-28.79	-166.87
WATER LEVEL ELEV. (FT. ABOVE MSL)	834.69	934.68	817.12	1029.32	960.25	956.75	979.7	992.75	910.13	945.23
WATER TEMP, FIELD MMT (DEG. CENT.)	15.1	14.9	15.6	16.9	13.4	14.4	14.8	15.3	13.3	16.2
PH, FIELD MMT. (PH UNITS)	7.9	7.8	7.1	8	7.5	7.9	7.2	7.7	7.6	7.7
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	310	360	839	249	481	258	287	378	274	440
DISSOLVED OXYGEN, FIELD MMT. (PPM)	3.9	3.3	0.4	6.9	6.8	5.2	5.4	4	8.7	5.8
REDOX, FIELD MMT. (MV)	167	128	-82	159	195	61	216	152	164	151
MISCELLANEOUS PARAMETERS										
CHEMICAL OXYGEN DEMAND (NG/L)										
CYANIDE (NG/L)										
PHENOLS (NG/L)	<0.05	<0.05								
PH (PH UNITS)	7.9	8	7.7	7.9	7.6	8	7.5	7.8	7.8	
PH, REP. 2 (PH UNITS)	7.9	7.9								
PH, REP. 3 (PH UNITS)	7.9	8.1								
PH, REP. 4 (PH UNITS)	7.9	8								
CONDUCTIVITY (UMHOS/CM)	301	380	856	285	484	262	297	367	276	368
CONDUCTIVITY, REP. 2 (UMHOS/CM)	299	372								
CONDUCTIVITY, REP. 3 (UMHOS/CM)	301	375								
CONDUCTIVITY, REP. 4 (UMHOS/CM)	301	379								
TOTAL ORGANIC CARBON (NG/L)	3.8	2.2				<1	1.1	1.9	1.7	
TOTAL ORGANIC CARBON, REP 2 (NG/L)	4	2.2								
TOTAL ORGANIC CARBON, REP 3 (NG/L)	2.6	1.2								
TOTAL ORGANIC CARBON, REP 4 (NG/L)	2.3	2.6								
TOTAL ORGANIC HALIDE (UG/L)	<10	<10				<10	<10	<10	<10	
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	<10	<10								
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	<10	<10								
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	<10	<10								
TPH DIESEL RANGE X10-LAB (NG/L)										
DISSOLVED SOLIDS (NG/L)	162	222	540	176	278	188	186	200	158	216
TOTAL SUSPENDED SOLIDS (NG/L)	<1	17	1.5	<1	<1	<1	2.5	<1	<1	<1
TURBIDITY (NTU)	0.4	4.6	8.4	1	0.4	0.5	4.5	0.2	0.3	0.4

APPENDIX F.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 3RD QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-144 KHQ 07/16/95	GW-181 CRSP 07/28/95	GW-303 CRSDB 07/16/95	GW-522 LIV 07/12/95	GW-709 LII 07/10/95
FIELD MEASUREMENTS					
STATIC WATER LEVEL (FT. BELOW TOC)	-80.68	-110.2	-88.37	-101.35	-29.77
WATER LEVEL ELEV. (FT. ABOVE MSL)	832.66	982.8	918.83	1073.95	876.83
WATER TEMP, FIELD MMT (DEG. CENT.)	17	15.8	15.6	16.7	17
PH, FIELD MMT. (PH UNITS)	8	7.7	7.6	7.8	8
CONDUCTIVITY, FIELD MMT (UMHOS/CN)	306	307	615	329	235
DISSOLVED OXYGEN, FIELD MMT. (PPM)	3.3	6.9	1	8.5	5.3
REDOX, FIELD MMT. (MV)	188	90	-188	116	173
MISCELLANEOUS PARAMETERS					
CHEMICAL OXYGEN DEMAND (MG/L)	.	.	.	<5	<5
CYANIDE (MG/L)	.	.	.	<0.1	<0.1
PHENOLS (MG/L)	<0.05	7.62	<0.05	8	8
PH (PH UNITS)	7.8	.	7.7	.	.
PH, REP. 2 (PH UNITS)	7.8	.	7.7	.	.
PH, REP. 3 (PH UNITS)	7.8	.	7.7	.	.
PH, REP. 4 (PH UNITS)	7.8	.	7.7	.	.
CONDUCTIVITY (UMHOS/CN)	313	320	649 L	241	330
CONDUCTIVITY, REP. 2 (UMHOS/CN)	312	.	649 L	.	.
CONDUCTIVITY, REP. 3 (UMHOS/CN)	313	.	649 L	.	.
CONDUCTIVITY, REP. 4 (UMHOS/CN)	313	.	649 L	.	.
TOTAL ORGANIC CARBON (MG/L)	1.8	.	4.2	1.9	1
TOTAL ORGANIC CARBON, REP 2 (MG/L)	<1	.	3.5	.	.
TOTAL ORGANIC CARBON, REP 3 (MG/L)	1.2	.	3.1	.	.
TOTAL ORGANIC CARBON, REP 4 (MG/L)	<1	.	3.3	.	.
TOTAL ORGANIC HALIDE (UG/L)	<10	.	<10	<10	<10
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	<10	.	<10	.	.
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	<10	.	<10	.	.
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	<10	.	<10	.	.
DISSOLVED SOLIDS (MG/L)	190	196	474	162	202
TOTAL SUSPENDED SOLIDS (MG/L)	<1	<1	<1	20	1
TURBIDITY (NTU)	0.3	2.1	9.6	9.5	0.1

APPENDIX F.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-144 KHQ 11/14/95	GW-160 CRBAMP 11/02/95	GW-181 CRSP 11/05/95	GW-187 RQ 11/02/95	GW-221 UNCS 10/08/95	GW-292 ECRWP 11/06/95	GW-321 ADB 10/26/95	GW-540 CDLVI 10/11/95	GW-560 CDLVII 10/06/95
FIELD MEASUREMENTS									
STATIC WATER LEVEL (FT. BELOW TOC)	-77.32	-150.35	-113.12	-19.55	-84.9	-118.1	-22.67	-84.9	-36.25
WATER LEVEL ELEV. (FT. ABOVE MSL)	836.02	942.75	979.88	814.73	1021.1	954.9	902.91	987.2	902.67
WATER TEMP, FIELD MMT (DEG. CENT.)	11.6	15.2	13.8	16.1	15.1	13.6	14.8	14.8	15.1
PH, FIELD MMT.	7.7	7.6	8	7.6	7.6	7.4	7.9	7.6	7.5
CONDUCTIVITY, FIELD MMT (UMHOS/CM)	346	412	323	973	267	444	228	332	255
DISSOLVED OXYGEN, FIELD MMT. (PPH)	5.1	6.3	4.9	0.5	2.1	6.5	6.3	4.3	7.2
REDOX, FIELD MMT. (MV)	179	101	90	-275	135	234	140	99	365
MISCELLANEOUS PARAMETERS									
CHEMICAL OXYGEN DEMAND (MG/L)	.	<5	.	.	.	.	.	<5	8.3
CYANIDE (MG/L)	.	<0.1	.	.	.	.	.	<0.1	<0.1
PHENOLS (MG/L)	<0.05	7.5	7.83	7.76	8	7.53	8.05	8	8
PH, REP. 2 (PH UNITS)	7.75	.	.	.	.	.	.	.	.
PH, REP. 3 (PH UNITS)	7.76	.	.	.	.	.	.	.	.
PH, REP. 4 (PH UNITS)	7.84	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 2 (UMHOS/CM)	332	415	319	1000	284	481	240	367	284
CONDUCTIVITY, REP. 3 (UMHOS/CM)	332	.	.	.	.	.	.	.	.
CONDUCTIVITY, REP. 4 (UMHOS/CM)	332	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON (MG/L)	<1	4.2	.	.	.	.	1.7	2.3	3
TOTAL ORGANIC CARBON, REP 2 (MG/L)	<1	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 3 (MG/L)	<1	.	.	.	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 4 (MG/L)	<1	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE (UG/L)	<10	<10	.	.	.	.	<10	<10	<10
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	<10	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	<10	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	<10	.	.	.	.	.	.	.	.
TOTAL ORGANIC HALIDE, X10-LAB (MG/L)	.	.	.	.	.	.	.	.	.
TPH DIESEL RANGE (MG/L)	178	640	202	576	152	260	146	240	0.1
DISSOLVED SOLIDS (MG/L)	<1	5600	7	<1	<1	<1	<1	<1	154
TOTAL SUSPENDED SOLIDS (MG/L)	0.8	9700	24	92.5	0.7	0.55	0.25	0.35	<1
TURBIDITY (NTU)									0.35

APPENDIX F.4
FIELD MEASUREMENTS AND MISCELLANEOUS PARAMETERS, 4TH QUARTER 1995

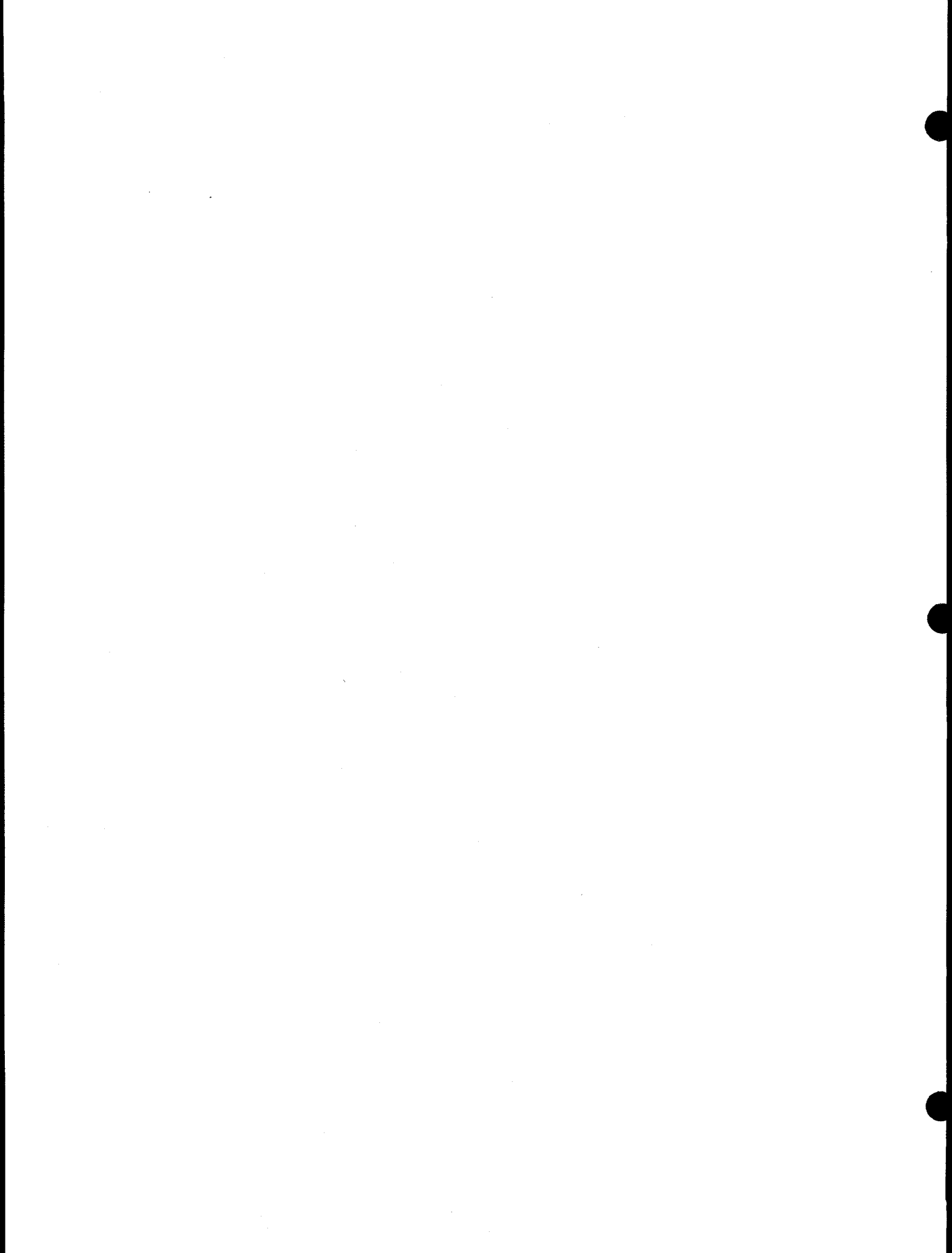
SAMPLING POINT LOCATION DATE SAMPLED	GW-732 CRSDB 10/23/95	GW-732 CRSDB 10/24/95	GW-732 CRSDB 10/25/95	GW-732 CRSDB 10/26/95	GW-757 L11 10/06/95

FIELD MEASUREMENTS

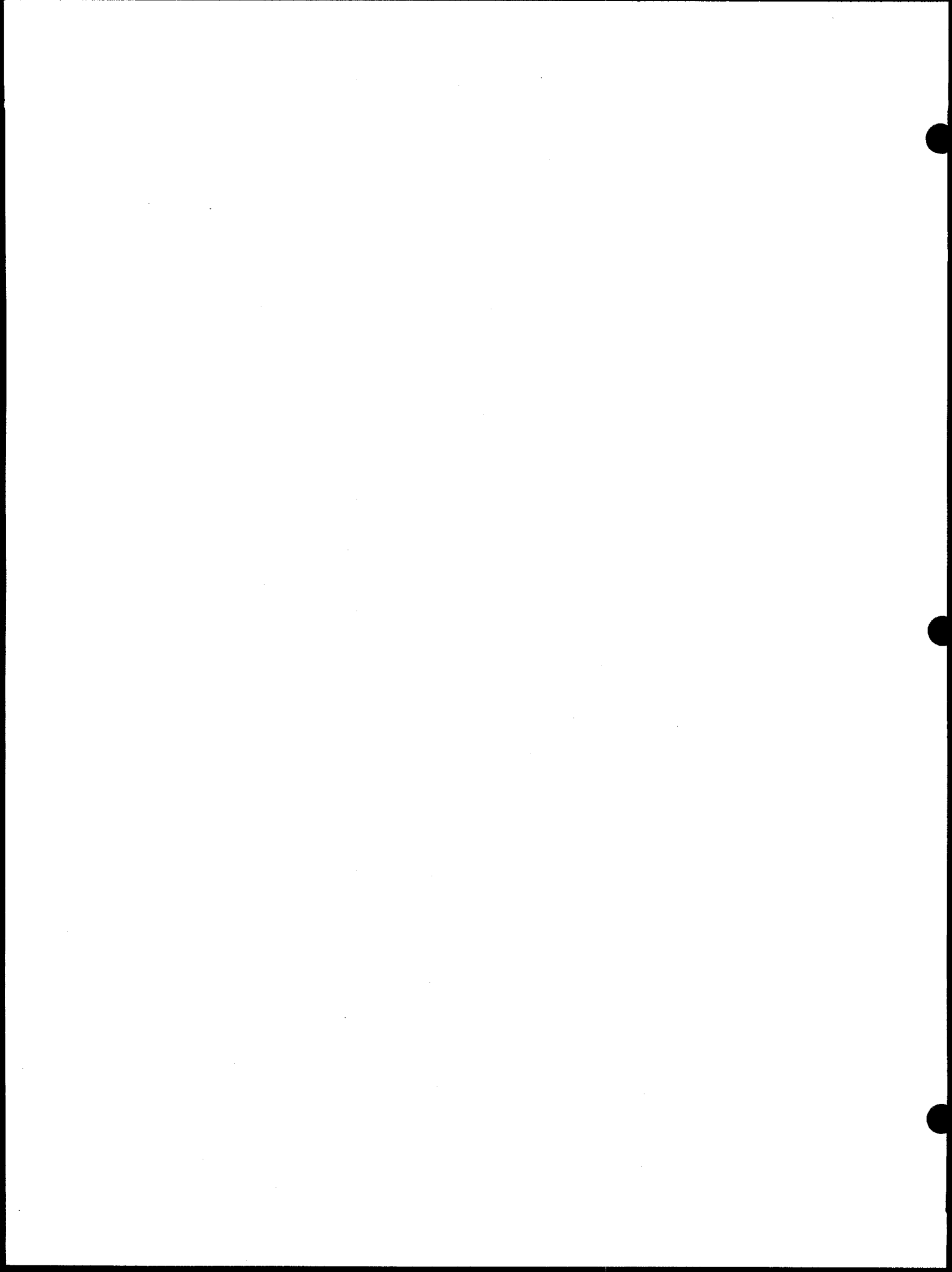
STATIC WATER LEVEL (FT. BELOW TOC)	-157.8	-157.7	-157.75	-157.6	-83.4
WATER LEVEL ELEV. (FT. ABOVE MSL)	906.3	906.4	906.35	906.5	878.03
WATER TEMP, FIELD MMT (DEG. CENT.)	14.2	14.3	13.6	14	16.1
PH, FIELD MMT. (PH UNITS)	7.9	11.5	11	11.2	8.2
CONDUCTIVITY, FIELD MMT (UMHOS/CN)	262	336	243	276	306
DISSOLVED OXYGEN, FIELD MMT. (PPM)	5.8	5.3	6.8	5.5	0.6
REDOX, FIELD MMT. (MV)	144	312	114	99	156

MISCELLANEOUS PARAMETERS

CHEMICAL OXYGEN DEMAND (MG/L)	.	.	.	.	<5
CYANIDE (MG/L)	.	.	.	.	<0.1
PHENOLS (MG/L)	.	.	.	.	.
PH (PH UNITS)	8	11.3	10.4	10.8	8.3
PH, REP. 2 (PH UNITS)	.	.	.	.	.
PH, REP. 3 (PH UNITS)	.	.	.	.	.
PH, REP. 4 (PH UNITS)	.	.	.	.	.
CONDUCTIVITY (UMHOS/CN)	278	423	225	236	314
CONDUCTIVITY, REP. 2 (UMHOS/CN)	.	.	.	.	.
CONDUCTIVITY, REP. 3 (UMHOS/CN)	.	.	.	.	.
CONDUCTIVITY, REP. 4 (UMHOS/CN)	.	.	.	.	.
TOTAL ORGANIC CARBON (MG/L)	.	.	.	.	1.6
TOTAL ORGANIC CARBON, REP 2 (MG/L)	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 3 (MG/L)	.	.	.	.	.
TOTAL ORGANIC CARBON, REP 4 (MG/L)	.	.	.	.	.
TOTAL ORGANIC HALIDE (UG/L)	.	.	.	.	<10
TOTAL ORGANIC HALIDE, REP 2 (UG/L)	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 3 (UG/L)	.	.	.	.	.
TOTAL ORGANIC HALIDE, REP 4 (UG/L)	.	.	.	.	.
TPH DIESEL RANGE X10-LAB (MG/L)	.	.	.	.	.
DISSOLVED SOLIDS (MG/L)	178	74	74	128	180
TOTAL SUSPENDED SOLIDS (MG/L)	1	14	701	34	6
TURBIDITY (NTU)	1.1	16	39	48	6.2



APPENDIX F.5
RADIONUCLIDES



APPENDIX F.5
RADIONUCLIDES, 1ST QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-141 LIV 01/09/95	GW-143 KHQ 01/17/95	GW-511 CRSP 01/24/95	GW-709 LII 01/09/95	GW-732 CRSDB 01/18/95
GROSS ALPHA (GROSS ALPHA) (PCI/L)	-0.00488 1.3	2.47 1.4	0.792 1.2	0.331 1.3	29.1 5.4
GROSS BETA (GROSS BETA) (PCI/L)	-0.882 2.5	18 3.7	3.76 2.5	-0.0121 2.6	29.2 4.8
RADIONUCLIDES					
241-AMERICIUM COUNTING ERROR	.	.	.	.	.
137-CESIUM COUNTING ERROR	.	.	.	.	.
129-IODINE COUNTING ERROR	.	.	.	.	.
237-NEPTUNIUM COUNTING ERROR	.	.	.	.	.
238-PLUTONIUM COUNTING ERROR	.	.	.	.	.
239-PLUTONIUM COUNTING ERROR	.	.	.	.	.
PROTACTINIUM COUNTING ERROR	.	.	.	.	.
RADIUM COUNTING ERROR	.	.	.	.	.
STRONTIUM COUNTING ERROR	.	.	.	.	.
99-TECHNETIUM COUNTING ERROR	.	.	.	.	.
231+234-THORIUM COUNTING ERROR	.	.	.	.	.
TRITIUM COUNTING ERROR	.	.	.	.	.
234-URANIUM COUNTING ERROR	.	.	.	.	.
235-URANIUM COUNTING ERROR	.	.	.	.	.
238-URANIUM COUNTING ERROR	.	.	.	.	.

APPENDIX F.5
RADIONUCLIDES, 2ND QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-144 KHQ 04/25/95	GW-159 CRSDB 04/06/95	GW-186 RQ 05/03/95	GW-221 UNCS 04/19/95	GW-292 ECRMP 04/24/95	GW-299 CRBAMP 05/01/95	GW-512 ADB 04/26/95	GW-540 CDLVI 04/04/95	GW-560 CDLVI1 04/05/95	GW-609 CRSP 05/16/95
GROSS ALPHA (PCI/L)	1.68	0.649	-2.7	0.324	1.68	-0.427 C	-0.155	0	2.99	0.532
COUNTING ERROR	1.4	1.7	3	1	2.1	2.1	1.7	1.5	2.4	1.4
GROSS BETA (PCI/L)	3.07	2.74	1.11	3.23	2.48	5.65 C	-0.263	0.0858	1.45	3.23
COUNTING ERROR	2.5	2.9	3.1	2.5	3.1	2.8	2.9	2.7	3	2.6
RADIONUCLIDES										
137-CESIUM (PCI/L)	.	.	.	.	.	.	.	9.82 E	-1.46 F	.
COUNTING ERROR	.	.	.	.	.	.	.	14	5.3	.
40-POTASSIUM (PCI/L)	.	.	.	.	.	.	.	.	.	.
COUNTING ERROR	.	.	.	.	.	.	.	.	.	.
PROTACTINIUM (PCI/L)	.	.	.	.	.	.	.	583 HE	781 HE	.
COUNTING ERROR	.	.	.	.	.	.	.	2400	900	.
RADIUM (PCI/L)	.	.	.	0.005	.	.	.	.	.	.
COUNTING ERROR	.	.	.	0.02	.	.	.	.	.	.
STRONTIUM (PCI/L)	3.49	.	.	.	.	.	.	.	.	.
COUNTING ERROR	5.9	.	.	.	.	.	.	.	.	.
231+234-THORIUM (PCI/L)	.	.	.	.	.	.	.	62 HE	-31.4 HF	.
COUNTING ERROR	.	.	.	.	.	.	.	160	65	.
234-URANIUM (PCI/L)	1.98	.	.	0.222	.	.	.	0	0	.
COUNTING ERROR	0.96	.	.	0.27	.	.	.	0.14	0.32	.
235-URANIUM (PCI/L)	0.96 E	.	.	1.66 E	.	.	.	-8.52 F	0.48 E	.
COUNTING ERROR	7.2	.	.	7.3	.	.	.	19	7.1	.
238-URANIUM (PCI/L)	0.584	.	.	0	.	.	.	0.0971	0	.
COUNTING ERROR	0.52	.	.	0.19	.	.	.	0.14	0.39	.

APPENDIX F.5
RADIONUCLIDES, 3RD QUARTER 1995

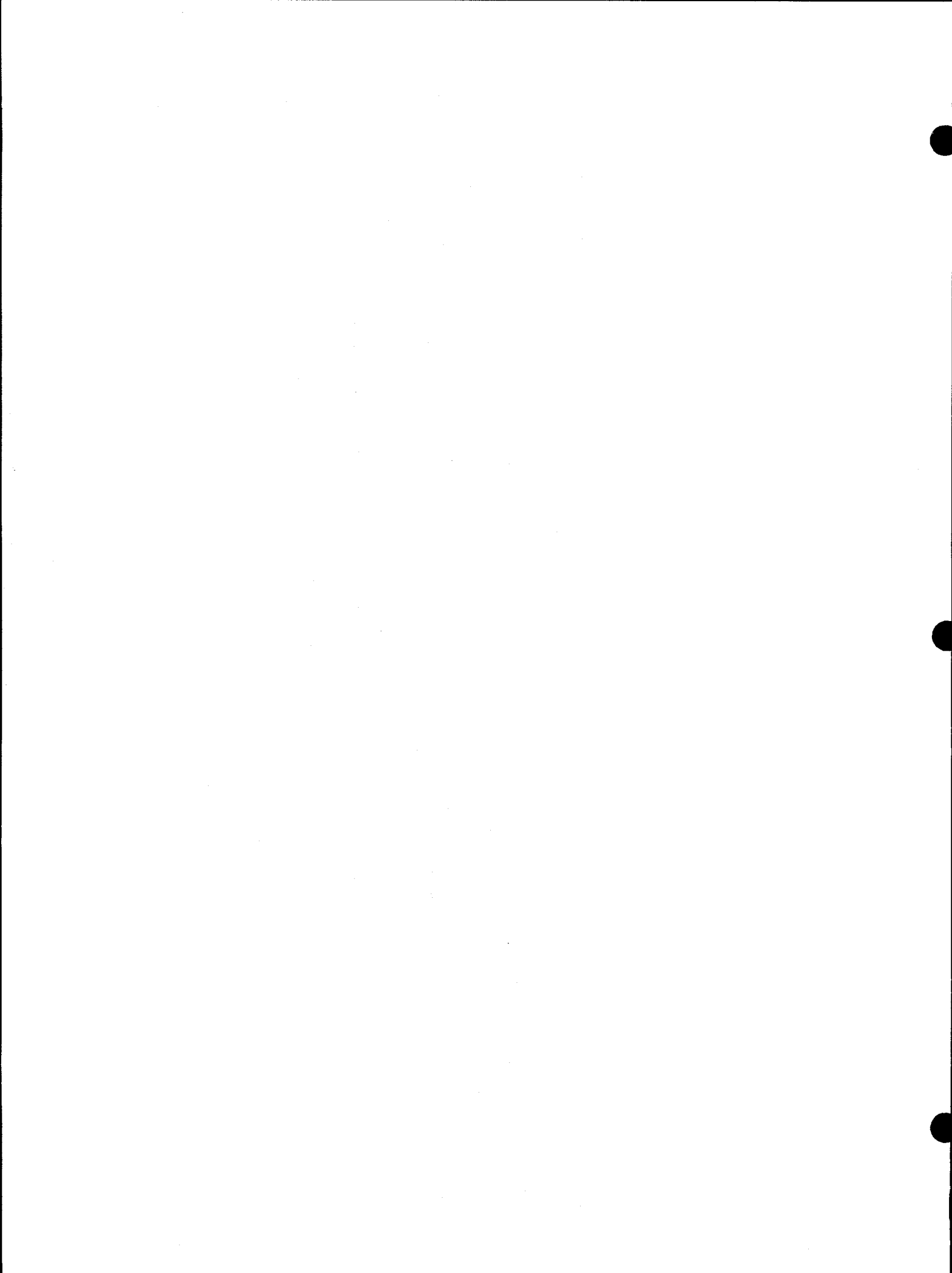
SAMPLING POINT LOCATION DATE SAMPLED	GW-144 KHQ 07/16/95	GW-181 CRSP 07/28/95	GW-303 CRSDB 07/16/95	GW-522 LIV 07/12/95	GW-709 LII 07/10/95
GROSS ALPHA	1.62	-0.00702	2.35	3.13	1.47
COUNTING ERROR	1.1	1.3	1.3	2.1	1.2
GROSS BETA	2.53	1.27	5	6.15	5.95
COUNTING ERROR	1.8	2.6	2.1	3.2	2.8
RADIONUCLIDES					
241-AMERICIUM					
COUNTING ERROR					
137-CESIUM					
COUNTING ERROR					
129-IODINE					
COUNTING ERROR					
237-NEPTUNIUM					
COUNTING ERROR					
238-PLUTONIUM					
COUNTING ERROR					
239-PLUTONIUM					
COUNTING ERROR					
40-POTASSIUM					
COUNTING ERROR					
PROTACTINIUM					
COUNTING ERROR					
RADIUM					
COUNTING ERROR					
STRONTIUM					
COUNTING ERROR					
99-TECHNETIUM					
COUNTING ERROR					
231+234-THORIUM					
COUNTING ERROR					
TRITIUM					
COUNTING ERROR					
234-URANIUM					
COUNTING ERROR					
235-URANIUM					
COUNTING ERROR					
238-URANIUM					
COUNTING ERROR					

APPENDIX F.5
RADIONUCLIDES, 4TH QUARTER 1995

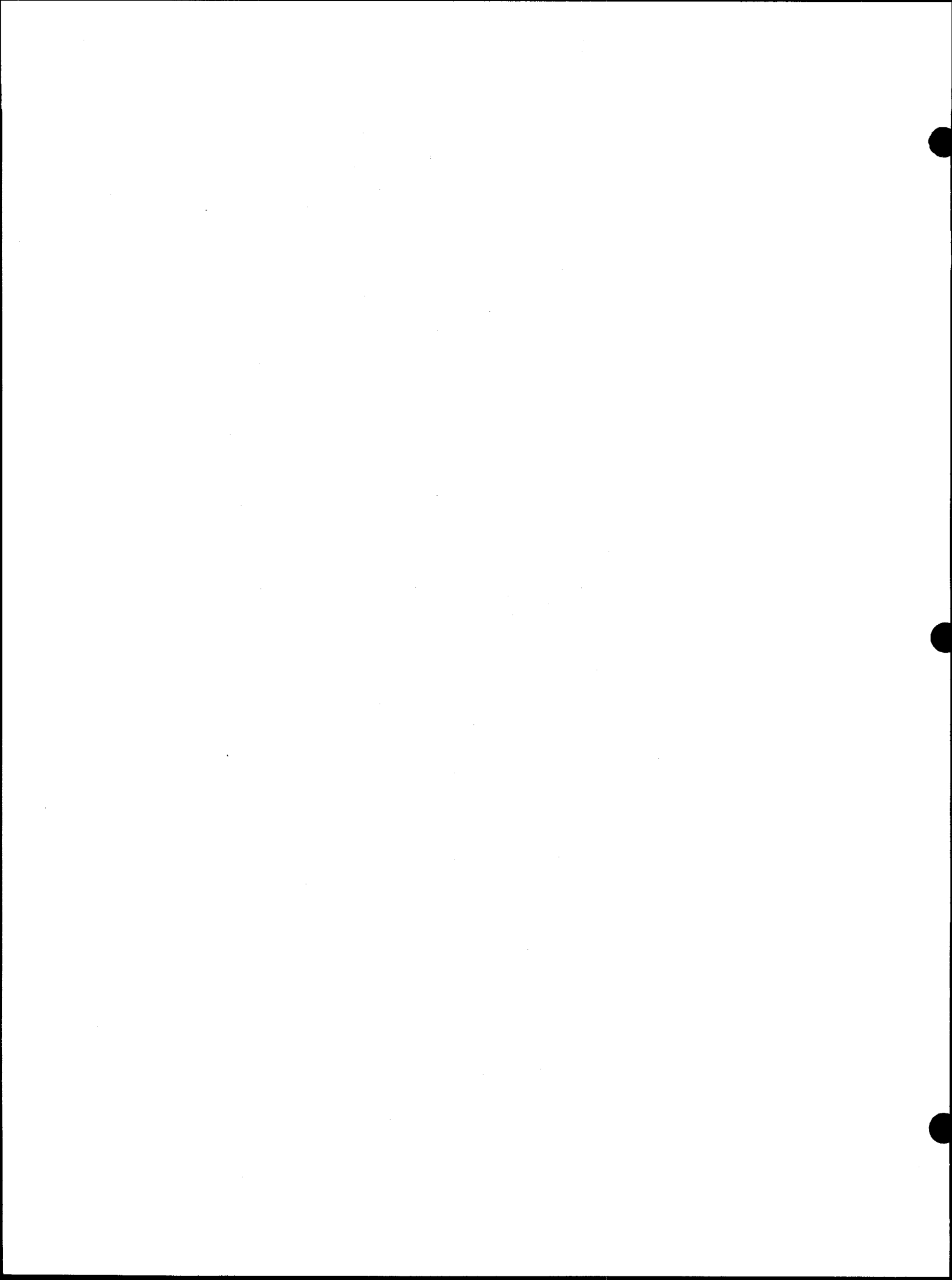
SAMPLING POINT LOCATION DATE SAMPLED	GW-144 KHQ 11/14/95	GW-160 CRBAMP 11/02/95	GW-181 CRSP 11/05/95	GW-187 RQ 11/02/95	GW-221 UNCS 10/08/95	GW-292 ECRMP 11/06/95	GW-321 ADB 10/26/95	GW-540 CDLVI 10/11/95	GW-560 CDLVI 10/06/95
GROSS ALPHA (PCI/L)	3.52	46.2	0.901	0.67	-0.49	1.38	-1.47	-1.47	0.489
COUNTING ERROR (GROSS ALPHA)	2	8.2	1.9	2.6	1.3	1.3	1.5	4.6	0.87
GROSS BETA (PCI/L)	1.98	45	0.428	4.68	1.03	-0.643	-2.37	-5.63	-0.818
COUNTING ERROR (GROSS BETA)	2.8	6.4	2.9	3.3	2.4	2.3	2.5	6.9	2.5
RADIONUCLIDES									
137-CESIUM (PCI/L)	.	.	.	.	.	.	.	-5.1 G 15	-2.81 F 13
COUNTING ERROR (137-CESIUM)	.	.	.	.	.	.	.	.	.
40-POTASSIUM (PCI/L)	.	.	.	.	.	.	.	.	.
COUNTING ERROR (40-POTASSIUM)	.	.	.	.	.	.	.	1270 HE 1400	-108 HF 1000
PROTACTINIUM (PCI/L)	.	.	.	.	.	.	.	.	.
COUNTING ERROR (PROTACTINIUM)	.	.	.	.	.	.	.	.	.
RADIUM X10-LAB (BQ/L)	.	.	.	.	0.3	.	.	.	.
COUNTING ERROR X10-LAB (RADIUM)	.	.	.	.	0.034	.	.	.	.
STRONTIUM (PCI/L)	5.6	.	.	.	.	.	.	.	.
COUNTING ERROR (STRONTIUM)	6.9	.	.	.	.	.	.	.	.
231+234-THORIUM (PCI/L)	79.8	.	.	.	.	.	.	42.2 HE 76	29.6 HE 57
COUNTING ERROR (231+234-THORIUM)	52	.	.	.	.	.	.	0	0.131
234-URANIUM (PCI/L)	2.39	.	.	.	0.456	.	.	0.38	0.17
COUNTING ERROR (234-URANIUM)	0.72	.	.	.	0.3	.	.	-2.47 F	0.285 E
235-URANIUM (PCI/L)	5.31 E	.	.	.	-0.864 F	.	.	9.4	7.5
COUNTING ERROR (235-URANIUM)	6.5	.	.	.	8.3	.	.	0	0
238-URANIUM (PCI/L)	0.753	.	.	.	0	.	.	0	0
COUNTING ERROR (238-URANIUM)	0.4	.	.	.	0.18	.	.	0.38	0.18

APPENDIX F.5
RADIONUCLIDES, 4TH QUARTER 1995

SAMPLING POINT LOCATION DATE SAMPLED	GW-732 CRSDB 10/23/95	GW-732 CRSDB 10/24/95	GW-732 CRSDB 10/25/95	GW-732 CRSDB 10/26/95	GW-757 LII 10/06/95
GROSS ALPHA	(PCI/L)	0.841	0.479	-0.665	4.29
COUNTING ERROR	(GROSS ALPHA)	1.1	1.7	1.7	15
GROSS BETA	(PCI/L)	27.2	23.5	7.45	-6.09 c
COUNTING ERROR	(GROSS BETA)	4.7	4.3	3.1	27
RADIONUCLIDES					
137-CESIUM	(PCI/L)	.	.	.	.
COUNTING ERROR	(137-CESIUM)	.	.	.	.
40-POTASSIUM	(PCI/L)	.	.	.	.
COUNTING ERROR	(40-POTASSIUM)	.	.	.	.
PROTACTINIUM	(PCI/L)	.	.	.	.
COUNTING ERROR	(PROTACTINIUM)	.	.	.	.
RADIUM	X10-LAB (Bq/L)	.	.	.	.
COUNTING ERROR	X10-LAB (RADIUM)	.	.	.	.
STRONTIUM	(PCI/L)	.	.	.	.
COUNTING ERROR	(STRONTIUM)	.	.	.	.
231+234-THORIUM	(PCI/L)	.	.	.	.
COUNTING ERROR	(231+234-THORIUM)	.	.	.	.
234-URANIUM	(PCI/L)	.	.	.	.
COUNTING ERROR	(234-URANIUM)	.	.	.	.
235-URANIUM	(PCI/L)	.	.	.	.
COUNTING ERROR	(235-URANIUM)	.	.	.	.
238-URANIUM	(PCI/L)	.	.	.	.
COUNTING ERROR	(238-URANIUM)	.	.	.	.



APPENDIX G
RADIOLOGICAL CHEMISTRY DATA SUMMARY



EXPLANATION

SAMPLING POINT:

GW	-	Monitoring Well
CBS-1	-	Chestnut Branch Spring 1
SCR2.2SP	-	South Chestnut Ridge Spring 2.2
1090	-	Historical 1000-Series Monitoring Well

LOCATION:

ADB	-	Ash Disposal Basin
CDL VI	-	Construction/Demolition Landfill VI
CDL VII	-	Construction/Demolition Landfill VII
CRBAWP	-	Chestnut Ridge Borrow Area Waste Pile
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
LIV	-	Industrial Landfill IV
LV	-	Industrial Landfill V
RQ	-	Rogers Quarry
UNCS	-	United Nuclear Corporation Site

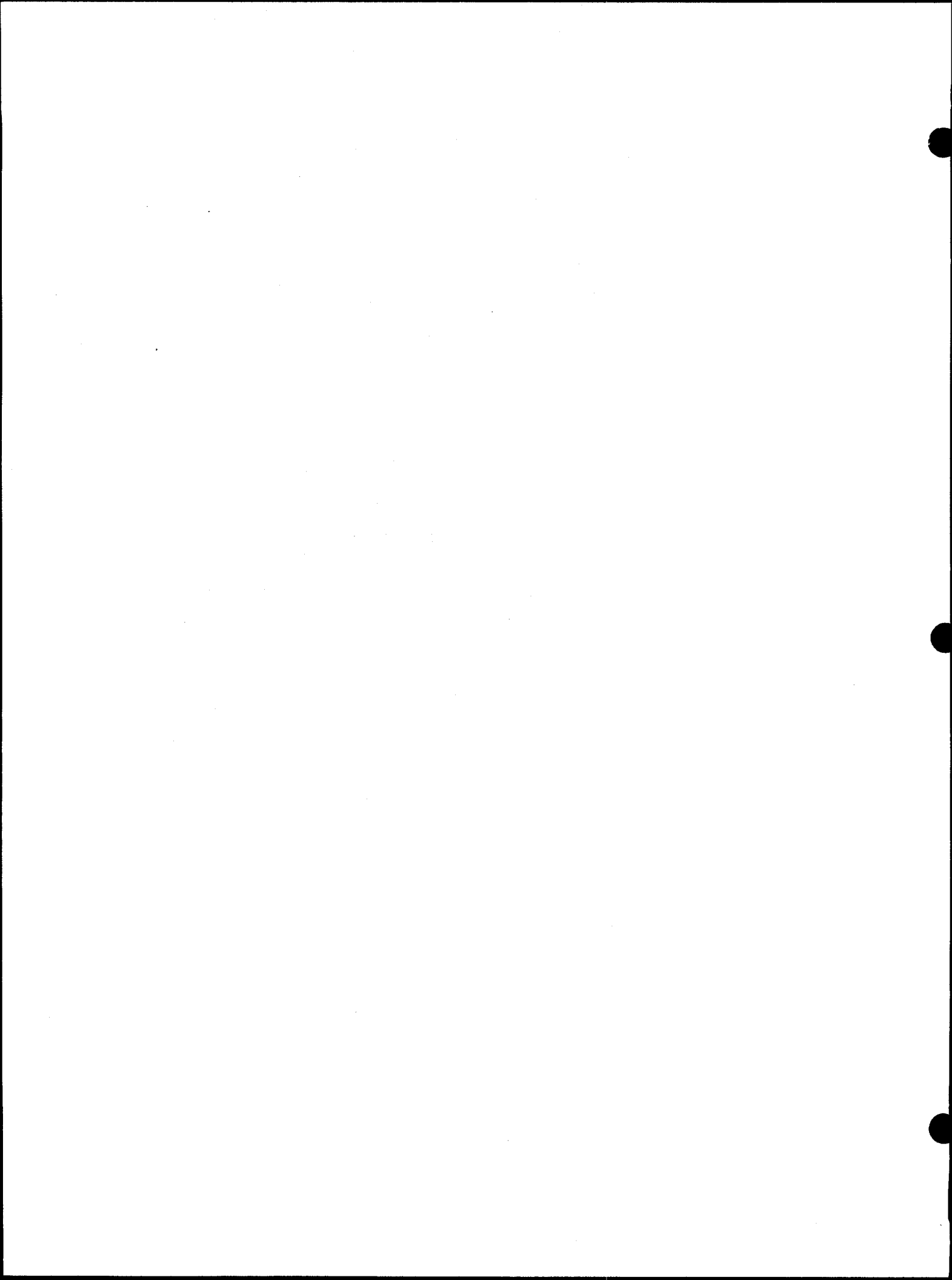
NOTES:

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

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.



APPENDIX G
Gross Alpha & Gross Beta Activity Data Summary, 1995

Sampling Point Type	1090 PCI/L	CE +/-	CBS-1 PCI/L	CE +/-	GW-141 PCI/L	CE +/-	GW-142 PCI/L	CE +/-	GW-143 PCI/L	CE +/-
GROSS ALPHA MEAN ACTIVITY	1.54	1.20	1.22	9.51	-0.00	1.07	5.26	1.10	3.53	0.97
First Quarter	.	.	.	.	-0.00528	1.3	6.08	2.5	3.86	1.8
Second Quarter	2.57	1.7	-0.165	0.98	.	.	6.34	2.4	4.39	2.2
Third Quarter	.	.	.	.	0	1.7	6.62	1.9	3.17	1.5
Fourth Quarter	0.513	1.7	2.61	19	.	.	2	1.9	2.69	2.2
GROSS BETA MEAN ACTIVITY	1.40	1.70	5.58	16.55	-0.22	1.88	7.42	1.40	15.45	1.68
First Quarter	.	.	.	.	-0.0887	2.5	5.35	2.9	18.2	3.7
Second Quarter	3.29	2.5	0.165	2.5	.	.	10.2	3.1	15.7	3.5
Third Quarter	.	.	.	.	-0.353	2.8	8.44	2.2	13.7	2.6
Fourth Quarter	-0.488	2.3	11	33	.	.	5.67	2.9	14.2	3.5

APPENDIX G
Gross Alpha & Gross Beta Activity Data Summary, 1995

Sampling Point Type	GW-144 PCI/L	CE +/-	GW-145 PCI/L	CE +/-	GW-146 PCI/L	CE +/-	GW-147 PCI/L	CE +/-	GW-156 PCI/L	CE +/-
GROSS ALPHA MEAN ACTIVITY	2.46	0.77	11.69	1.52	2.47	0.87	1.71	0.71	2.28	0.97
First Quarter	3.23	1.6	14.1	3.5	3.23	1.6	2.47	1.4	1.4	1.4
Second Quarter	2.29	1.5	9.93	3	4.51	2.2	1.54	1.4	2.98	2.4
Third Quarter	1.78	1.2	9.71	2.3	1.81	1.3	2.36	1.3	3.13	1.4
Fourth Quarter	2.53	1.8	13	3.2	0.345	1.7	0.477	1.6	1.62	2.3
GROSS BETA MEAN ACTIVITY	4.36	1.27	17.20	1.72	15.70	1.70	4.77	1.25	5.88	1.39
First Quarter	5.45	2.6	16.7	3.6	14	3.3	5.6	2.6	2.27	2.4
Second Quarter	4.59	2.7	14.7	3.5	16.1	3.6	5.17	2.7	9.86	3.4
Third Quarter	2.09	1.7	16.3	2.8	15.9	2.8	4.51	1.9	4.85	2.1
Fourth Quarter	5.3	3	21.1	3.8	16.8	3.8	3.81	2.7	6.52	3

APPENDIX G
Gross Alpha & Gross Beta Activity Data Summary, 1995

Sampling Point Type	GW-158 PCI/L	CE +/-	GW-159 PCI/L	CE +/-	GW-160 PCI/L	CE +/-	GW-161 PCI/L	CE +/-	GW-175 PCI/L	CE +/-
GROSS ALPHA MEAN ACTIVITY	2.16	1.04	1.96	0.87	23.07	4.41	0.83	1.37	0.45	0.70
First Quarter	2.01	1.5	2.35	1.6	.	.	.	.	1.33	1.4
Second Quarter	2.62	2.5	5.71	2.5	6.73	4.8	1.66	2.3	-0.361	1.1
Third Quarter	1.85	1.1	0.942	0.93	.	.	-0.00594	1.5	1.33	1.7
Fourth Quarter	.	.	-1.18	1.6	39.4	7.4	.	.	-0.51	1.3
GROSS BETA MEAN ACTIVITY	2.84	1.47	4.62	1.40	23.55	4.26	1.54	1.98	0.19	1.25
First Quarter	3.39	2.5	1.4	2.4	.	.	.	.	-1.04	2.5
Second Quarter	3.65	3.1	3.79	3	12.9	6.6	0.743	2.9	1.74	2.5
Third Quarter	1.49	1.9	0.201	1.9	.	.	.	.	-0.0986	2.4
Fourth Quarter	.	.	13.1	3.6	34.2	5.4	2.33	2.7	0.163	2.6

APPENDIX G
Gross Alpha & Gross Beta Activity Data Summary, 1995

Sampling Point Type	GW-177 PCI/L	CE +/-	GW-181 PCI/L	CE +/-	GW-184 PCI/L	CE +/-	GW-186 PCI/L	CE +/-	GW-187 PCI/L	CE +/-
GROSS ALPHA MEAN ACTIVITY	2.83	1.00	0.55	0.78	-0.48	1.31	0.21	1.77	0.91	2.13
First Quarter	3.22	1.9	0.644	1.1	.	.	.	.	.	.
Second Quarter	4.72	2.4	1.74	2	-0.324	2	-1.91	2.4	-1.44	2.8
Third Quarter	1.49	1.7	-0.169	1.3	.	.	.	.	.	.
Fourth Quarter	1.9	1.9	0	1.7	-0.629	1.7	2.33	2.6	3.26	3.2
GROSS BETA MEAN ACTIVITY	2.57	1.34	1.82	1.33	1.58	2.12	0.53	2.12	1.22	2.19
First Quarter	2.34	2.7	2.2	2.4	.	.	.	.	.	.
Second Quarter	4.16	2.8	3.67	2.8	1.77	3	-0.0908	3	0.0917	3
Third Quarter	1.56	2.5	0.549	2.5	.	.	.	.	.	.
Fourth Quarter	2.22	2.7	0.858	2.9	1.38	3	1.15	3	2.35	3.2

APPENDIX G
Gross Alpha & Gross Beta Activity Data Summary, 1995

Sampling Point Type	GW-188 PCI/L	CE +/-	GW-203 PCI/L	CE +/-	GW-205 PCI/L	CE +/-	GW-217 PCI/L	CE +/-	GW-221 PCI/L	CE +/-
GROSS ALPHA MEAN ACTIVITY	0.48	1.49	0.33	0.92	0.25	0.92	0.80	1.00	-0.08	0.85
First Quarter	0	2.2	0.989	1.2	1.16	1.3	0.803	0.86	0.981	1.2
Second Quarter	0.961	2	-0.324	1.4	-0.655	1.3	0.791	1.8	-1.14	1.2
Third Quarter										
Fourth Quarter										
GROSS BETA MEAN ACTIVITY	5.62	2.30	2.09	1.74	3.91	1.84	3.95	2.02	1.68	1.73
First Quarter	6.57	3.3	3.86	2.6	2.73	2.5	6.04	2.7	1.04	2.4
Second Quarter	4.67	3.2	0.311	2.3	5.09	2.7	1.85	3	2.31	2.5
Third Quarter										
Fourth Quarter										

APPENDIX G
Gross Alpha & Gross Beta Activity Data Summary, 1995

Sampling Point Type	GW-231 PCI/L	CE +/-	GW-241 PCI/L	CE +/-	GW-292 PCI/L	CE +/-	GW-293 PCI/L	CE +/-	GW-294 PCI/L	CE +/-
GROSS ALPHA MEAN ACTIVITY	0.76	0.63	1.57	0.83	1.67	1.25	2.14	1.32	0.01	1.15
First Quarter	1.13	0.98	0.64	1.1	.	.	.	.	.	.
Second Quarter	1.01	1.3	2.58	2	2.82	2.3	1.66	2.1	-0.306	2.1
Third Quarter	0.0761	0.88	1.49	1	.	.	.	.	.	.
Fourth Quarter	0.822	1.7	.	.	0.516	1	2.61	1.6	0.325	0.94
GROSS BETA MEAN ACTIVITY	1.34	1.13	3.63	1.49	-0.11	1.88	2.03	1.96	0.50	1.89
First Quarter	1.14	2.3	4.49	2.6	.	.	.	.	.	.
Second Quarter	3.28	2.5	5.56	3.1	-0.531	2.9	2.66	3.1	1.16	3
Third Quarter	0.23	1.6	0.828	1.9	.	.	.	.	.	.
Fourth Quarter	0.697	2.5	.	.	0.308	2.4	1.4	2.4	-0.164	2.3

APPENDIX G
Gross Alpha & Gross Beta Activity Data Summary, 1995

Sampling Point Type	GW-296 PCI/L	CE +/-	GW-298 PCI/L	CE +/-	GW-299 PCI/L	CE +/-	GW-300 PCI/L	CE +/-	GW-301 PCI/L	CE +/-
GROSS ALPHA MEAN ACTIVITY	1.39	1.29	0.28	1.42	-0.41	1.23	0.70	1.20	2.28	1.49
First Quarter	.	.	.	.	0	.	.	.	.	.
Second Quarter	2.44	2.4	-0.29	2.2	.	2.1	0.915	1.8	2.83	2.2
Third Quarter	.	.	.	.	.	.	.	.	.	.
Fourth Quarter	0.338	0.97	0.853	1.8	-0.816	1.3	0.477	1.6	1.72	2
GROSS BETA MEAN ACTIVITY	-0.87	1.81	1.98	1.84	2.54	1.91	2.01	2.06	1.52	1.98
First Quarter	.	.	.	.	.	.	.	.	.	.
Second Quarter	-1.57	2.8	2.23	2.6	4.6	2.8	2.72	3.1	1.23	3
Third Quarter	.	.	.	.	.	.	.	.	.	.
Fourth Quarter	-0.163	2.3	1.73	2.6	0.482	2.6	1.3	2.7	1.8	2.6

APPENDIX G
Gross Alpha & Gross Beta Activity Data Summary, 1995

Sampling Point Type	GW-302 PCI/L	CE +/-	GW-303 PCI/L	CE +/-	GW-304 PCI/L	CE +/-	GW-305 PCI/L	CE +/-	GW-321 PCI/L	CE +/-
GROSS ALPHA MEAN ACTIVITY	0.64	1.06	1.33	0.91	1.41	0.83	0.39	1.07	-0.26	0.83
First Quarter	.	.	2.14	1.4	1.33	1.3	0.158	1.3	0.155	1.2
Second Quarter	1.64	1.5	0.198	2	1.28	1.8	.	.	-0.604	1.6
Third Quarter	.	.	1.65	1.2	1.63	1.1	0.621	1.7	.	.
Fourth Quarter	-0.354	1.5	.	.	.	.	.	.	-0.318	1.5
GROSS BETA MEAN ACTIVITY	1.37	1.66	3.70	1.45	1.71	1.42	2.27	2.02	1.23	1.57
First Quarter	.	.	4.83	2.5	2.52	2.5	0.234	2.6	-1.99	2.5
Second Quarter	2.74	2.4	3.34	3	2.12	2.9	.	.	4.81	3.2
Third Quarter	.	.	2.94	1.9	0.489	1.9	4.3	3.1	.	.
Fourth Quarter	-0.00906	2.3	.	.	.	.	.	.	0.871	2.4

APPENDIX G
Gross Alpha & Gross Beta Activity Data Summary, 1995

Sampling Point Type	GW-339 PCI/L	CE +/-	GW-511 PCI/L	CE +/-	GW-512 PCI/L	CE +/-	GW-513 PCI/L	CE +/-	GW-514 PCI/L	CE +/-
GROSS ALPHA MEAN ACTIVITY	0.47	1.06	2.08	0.90	1.13	1.17	0.24	1.02	0.93	1.10
First Quarter	.	.	0.631	1.1	1.1	.	0	.	.	.
Second Quarter	1.3	1.5	6.81	2.6	1.11	2	.	1.8	1.55	2
Third Quarter	.	.	-0.326	1.2	.	.	.	.	.	.
Fourth Quarter	-0.36	1.5	1.19	1.9	1.14	1.2	0.481	0.98	0.318	0.92
GROSS BETA MEAN ACTIVITY	1.48	1.66	1.90	1.34	3.80	2.06	0.99	1.88	1.28	1.91
First Quarter	.	.	3.92	2.6	.	.	.	.	.	.
Second Quarter	2.03	2.4	2.78	2.7	3.08	3.1	0.79	2.9	0.176	2.9
Third Quarter	.	.	0.313	2.5	.	.	.	.	.	.
Fourth Quarter	0.934	2.3	0.599	2.9	4.52	2.7	1.19	2.4	2.38	2.5

APPENDIX G
Gross Alpha & Gross Beta Activity Data Summary, 1995

Sampling Point Type	GM-521 PCI/L	CE +/-	GM-522 PCI/L	CE +/-	GM-539 PCI/L	CE +/-	GM-540 PCI/L	CE +/-	GM-541 PCI/L	CE +/-
GROSS ALPHA MEAN ACTIVITY	0.38	0.99	0.07	1.04	0.94	0.96	-1.33	2.39	3.21	2.86
First Quarter	-0.00578	1	-0.167	1.2	2.86	1.5	.	.	.	.
Second Quarter	.	1.7	0.313	1.7	0.302	2	0	1.6	2.61	2.4
Third Quarter	0.774	.	.	.	-0.334	1.4	-2.65	4.5	3.81	5.2
Fourth Quarter	.	1.91	-0.49	1.91	2.83	1.55	-5.05	3.58	2.22	3.95
GROSS BETA MEAN ACTIVITY	1.93	2.5	-0.986	2.5	3.59	2.6	.	2.8	1.37	3
First Quarter	2.62	2.9	0	2.9	3.17	3	1.2	.	.	.
Second Quarter	1.23	.	.	.	1.74	2.4	-11.3	6.6	3.07	7.3
Third Quarter	.	.	.	.	.	.	.	.	.	.
Fourth Quarter	.	.	.	.	.	.	.	.	.	.

APPENDIX G
Gross Alpha & Gross Beta Activity Data Summary, 1995

Sampling Point Type	GW-542 PCI/L	CE +/-	GW-543 PCI/L	CE +/-	GW-544 PCI/L	CE +/-	GW-546 PCI/L	CE +/-	GW-557 PCI/L	CE +/-
GROSS ALPHA MEAN ACTIVITY	-0.14	2.39	-1.46	2.29	4.35	2.21	2.92	2.88	0.40	0.84
First Quarter	.	.	.	.	.	.	.	.	.	.
Second Quarter	1.18	1.6	0.919	1.6	2.47	1.9	4.96	3.2	0.149	1.4
Third Quarter	.	.	.	.	.	.	.	.	.	.
Fourth Quarter	-1.45	4.5	-3.83	4.3	6.22	4	0.871	4.8	0.658	0.94
GROSS BETA MEAN ACTIVITY	-3.58	3.63	-6.54	3.54	-4.71	3.58	6.06	4.02	-1.33	1.84
First Quarter	.	.	.	.	.	.	.	.	.	.
Second Quarter	1.19	2.8	-0.0859	2.8	1.38	2.8	11.1	3.6	-1.11	2.7
Third Quarter	.	.	.	.	.	.	.	.	.	.
Fourth Quarter	-8.35	6.7	-13	6.5	-10.8	6.6	1.02	7.2	-1.54	2.5

APPENDIX G
Gross Alpha & Gross Beta Activity Data Summary, 1995

Sampling Point Type	GW-560 PCI/L	CE +/-	GW-562 PCI/L	CE +/-	GW-564 PCI/L	CE +/-	GW-608 PCI/L	CE +/-	GW-609 PCI/L	CE +/-
GROSS ALPHA MEAN ACTIVITY	0.80	1.19	24.97	1.09	0.54	0.88	1.02	0.83	0.47	0.70
First Quarter	0.611	2.1	-0.152	2	0.442	1.5	-0.51	1.3	0.505	1.2
Second Quarter	0.611	2.1	-0.152	2	0.442	1.5	2.98	2.1	0.872	1.5
Third Quarter	0.994	1.1	50.1	0.89	0.641	0.91	1.27	1.6	0.486	1.5
Fourth Quarter	0.994	1.1	50.1	0.89	0.641	0.91	0.329	1.5	-0.00078	1.4
GROSS BETA MEAN ACTIVITY	0.37	1.98	-0.84	1.91	-0.19	1.88	0.75	1.29	0.48	1.28
First Quarter	0.258	3	-1.12	2.9	0.939	2.8	2.08	2.6	-1.67	2.5
Second Quarter	0.258	3	-1.12	2.9	0.939	2.8	1.27	2.6	1.49	2.5
Third Quarter	0.473	2.6	-0.568	2.5	-1.32	2.5	-1.86	2.4	0.94	2.5
Fourth Quarter	0.473	2.6	-0.568	2.5	-1.32	2.5	1.5	2.7	1.16	2.7

APPENDIX G
Gross Alpha & Gross Beta Activity Data Summary, 1995

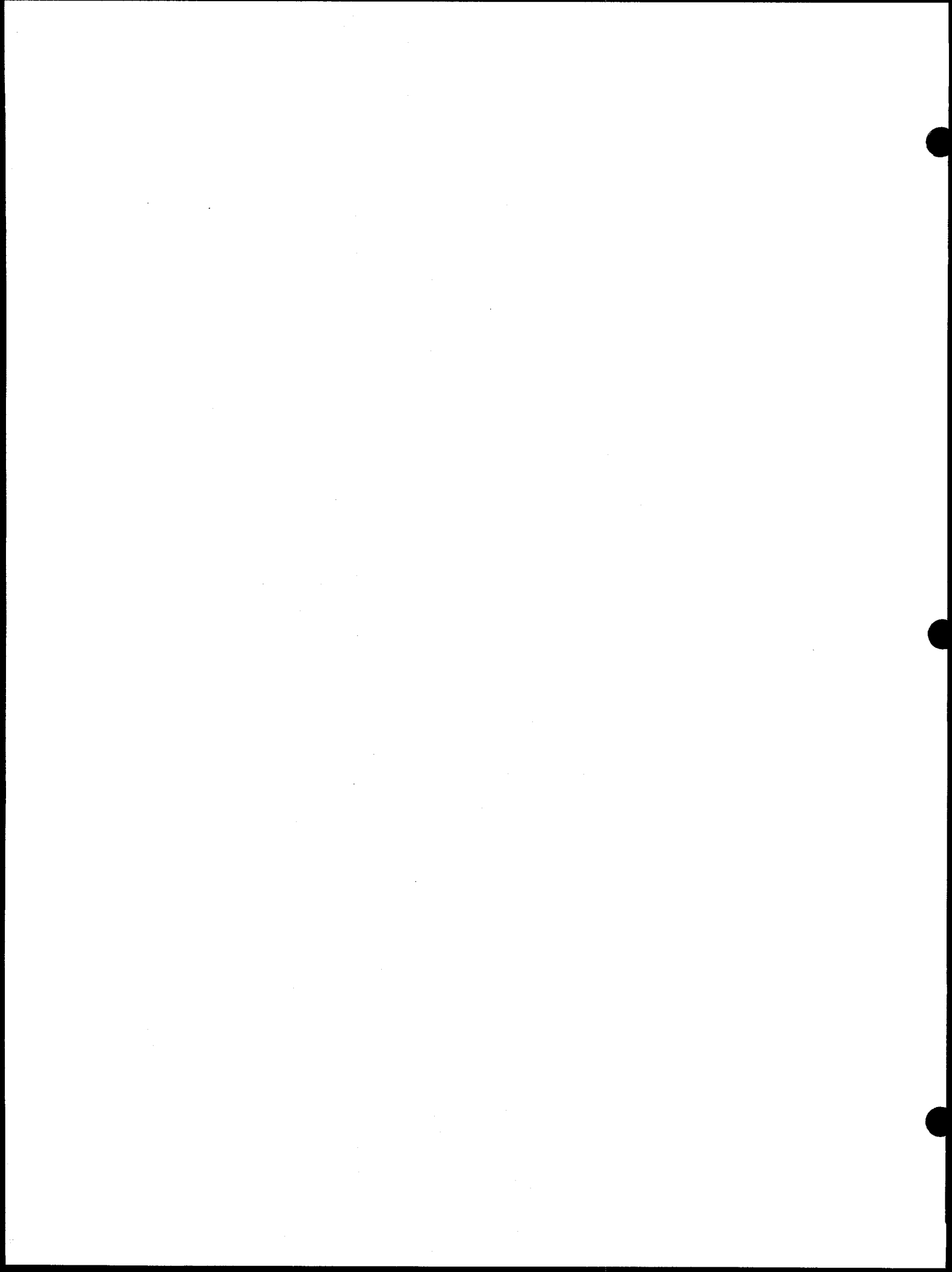
Sampling Point Type	GW-610 PCI/L	CE +/-	GW-611 PCI/L	CE +/-	GW-709 PCI/L	CE +/-	GW-731 PCI/L	CE +/-	GW-732 PCI/L	CE +/-
GROSS ALPHA MEAN ACTIVITY	0.51	0.90	1.15	0.82	2.46	5.36	0.37	0.70	32.64	7.19
First Quarter	0.754	2.1	1.03	1.4	-0.00469	1.2	0.97	1.2	34.1	6
Second Quarter	0.619	2	1.81	1.7	.	.	0.615	1.6	91	28
Third Quarter	0.66	1.6	0.857	1.7	1.62	1.2	0.0847	0.75	6.48	1.8
Fourth Quarter	-0.000714	1.4	0.887	1.7	5.75	16	-0.174	1.8	-1.03	1.7
GROSS BETA MEAN ACTIVITY	1.87	1.33	1.11	1.28	6.30	9.42	11.57	1.61	29.10	7.92
First Quarter	4.79	2.9	-0.485	2.5	-0.737	2.5	19.8	3.9	27.4	4.6
Second Quarter	1.37	2.6	3.14	2.6	.	.	9.47	3.3	59.8	31
Third Quarter	1.25	2.5	1.64	2.5	8.34	3	14.6	2.8	11.7	2.6
Fourth Quarter	0.0777	2.6	0.156	2.6	11.3	28	2.39	2.7	17.5	3.9

APPENDIX G
Gross Alpha & Gross Beta Activity Data Summary, 1995

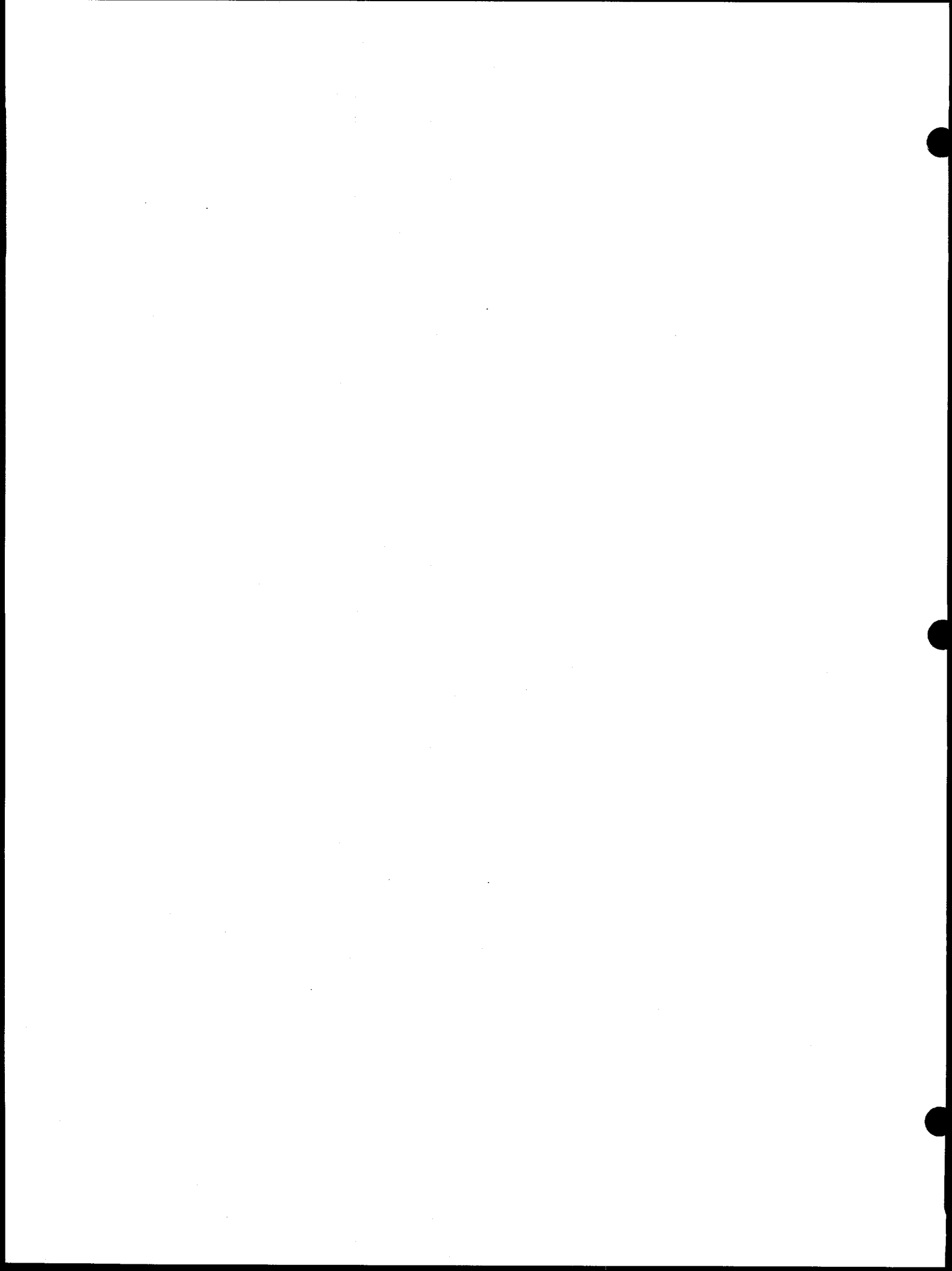
Sampling Point Type	GW-742 PCI/L	CE +/-	GW-743 PCI/L	CE +/-	GW-757 PCI/L	CE +/-	GW-796 PCI/L	CE +/-	GW-797 PCI/L	CE +/-
GROSS ALPHA MEAN ACTIVITY	5.59	1.25	1.93	0.96	4.74	5.40	0.40	0.70	0.75	0.82
First Quarter	6.42	2.8	3.23	2.3	0.663	1.4	.	.	.	.
Second Quarter	6.34	2.6	3.84	2.3	.	.	0.32	1.1	-0.166	0.99
Third Quarter	4.58	2.2	-0.165	1.3	6.39	2.2	.	.	.	.
Fourth Quarter	5.01	2.4	0.823	1.6	7.17	16	0.482	0.86	1.66	1.3
GROSS BETA MEAN ACTIVITY	2.76	1.39	5.21	1.47	6.49	9.43	-0.06	1.80	1.15	1.84
First Quarter	4.22	2.8	3.29	2.8	1.92	2.7	.	.	.	.
Second Quarter	2.15	2.7	4.06	2.8	.	.	1.85	2.6	1.59	2.6
Third Quarter	-0.0412	2.5	0.0707	2.4	7.98	3	.	.	.	.
Fourth Quarter	4.72	3.1	13.4	3.6	9.57	28	-1.97	2.5	0.709	2.6

APPENDIX G
Gross Alpha & Gross Beta Activity Data Summary, 1995

Sampling Point Type	GW-798 PCI/L	CE +/-	GW-799 PCI/L	CE +/-	GW-801 PCI/L	CE +/-	GW-827 PCI/L	CE +/-	SCR2.2SP PCI/L	CE +/-
GROSS ALPHA MEAN ACTIVITY	0.73	0.78	0.85	0.94	0.16	0.66	-0.80	2.48	0.92	2.10
First Quarter	.	.	.	.	.	.	.	.	.	.
Second Quarter	0.324	1.1	0.882	1.6	0.164	1.1	0.449	2.1	0.924	2.1
Third Quarter	.	.	.	.	.	.	.	.	.	.
Fourth Quarter	1.13	1.1	0.814	0.99	0.159	0.73	-2.05	4.5	.	.
GROSS BETA MEAN ACTIVITY	1.15	1.84	0.39	1.91	0.27	1.77	-4.82	3.65	1.63	2.90
First Quarter	.	.	.	.	.	.	.	.	.	.
Second Quarter	1.17	2.5	1.28	2.8	1.51	2.5	-0.428	2.9	1.63	2.9
Third Quarter	.	.	.	.	.	.	.	.	.	.
Fourth Quarter	1.13	2.7	-0.497	2.6	-0.979	2.5	-9.21	6.7	.	.



APPENDIX H
GROUNDWATER ELEVATIONS, 1995



EXPLANATION

LOCATION:

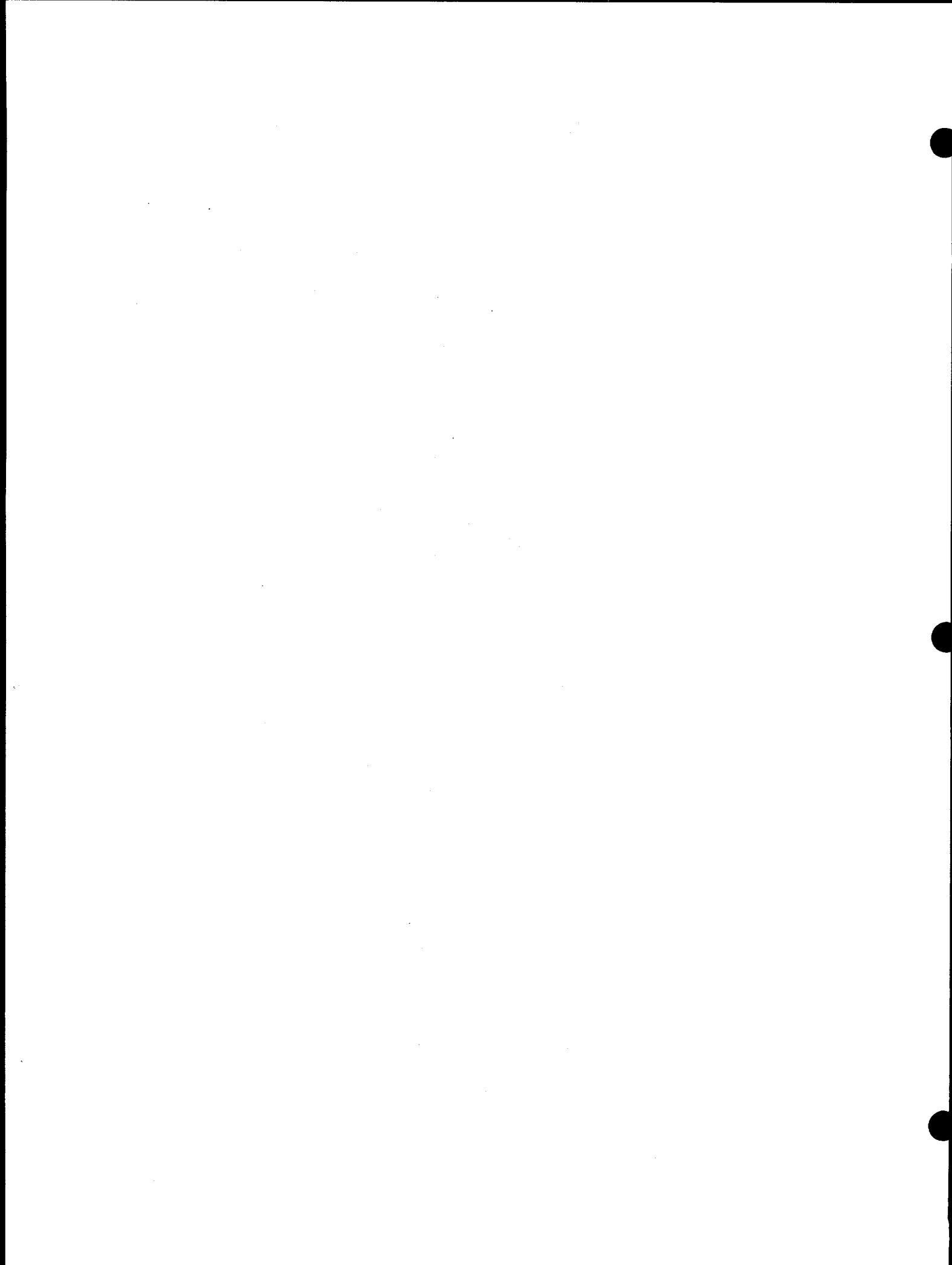
ADB	-	Ash Disposal Basin
CDL VI	-	Construction/Demolition Landfill VI
CDL VII	-	Construction/Demolition Landfill VII
CRBAWP	-	Chestnut Ridge Borrow Area Waste Pile
CRDT	-	Chestnut Ridge Deer Trap #10
CRSDB	-	Chestnut Ridge Sediment Disposal Basin
CRSP	-	Chestnut Ridge Security Pits
ECRWP	-	East Chestnut Ridge Waste Pile
KHQ	-	Kerr Hollow Quarry
LII	-	Industrial Landfill II
LIV	-	Industrial Landfill IV
LV	-	Industrial Landfill V
ORSF	-	Oak Ridge Sludge Farm
RQ	-	Rogers Quarry
SSCR	-	South Side Chestnut Ridge
UNCS	-	United Nuclear Corporation Site

SAMPLED IN 95:

Y	-	Well included in the 1995 groundwater monitoring program.

NOTES:

CTP Elev.	-	The elevation of the centerpoint of the monitored interval.
April	-	Measuring event from April 3 to 7, 1995.
October	-	Measuring event from October 16 to 23, 1995.
Depth	-	The distance in ft from the top-of-casing measuring point to the static water level.
Elev.	-	The groundwater elevation in ft above mean sea level.
+/- Ft	-	The calculated drop in water-level from the April to the October measuring events. Negative results show a rise in water level.
.	-	No information available.



APPENDIX H
Groundwater Elevations, 1995

Sampling Pt.	Location	Sampled in 95	CTP Elev.	April Depth	April Elev.	October Depth	October Elev.	+/- Ft.
Water Table Interval								
1082	ORSF		789.44	25.4	811.88	25.6	811.68	0.2
1090	UNCS	Y	1101.58	50.3	1053.58	60.6	1043.28	10.3
1096	CRSDB		983.44	65.7	982.04	68.7	979.04	3.0
GW-145	KHQ	Y	739.29	3.6	836.44	6.4	833.64	2.8
GW-160	CRBAWP	Y	870.66	146.2	946.89	153.3	939.79	7.1
GW-179	CRSP		1012.83	115.9	1012.10	116.0	1012.00	0.1
GW-241	CRSDB	Y	890.30	44.0	938.64	54.1	928.54	10.1
GW-512	ADB	Y	944.49	19.8	981.74	31.4	970.14	11.6
GW-542	CDLVI	Y	981.28	69.4	982.20	70.7	980.90	1.3
GW-546	CDLVI	Y	994.34	79.3	992.91	85.3	986.91	6.0
GW-557	LV	Y	953.18	117.0	964.16	122.5	958.66	5.5
GW-558	SSCR		907.31	47.4	936.57	52.9	931.07	5.5
GW-559	SSCR		927.20	134.7	968.09	141.4	961.39	6.7
GW-560	CDLVII	Y	879.07	28.7	910.22	36.8	902.12	8.1
GW-562	CDLVII	Y	883.86	3.2	931.29	10.6	923.89	7.4
GW-564	CDLVII	Y	868.62	10.1	927.67	11.5	926.27	1.4
GW-674	ADB		868.48	7.2	876.59	9.7	874.09	2.5
GW-676	ADB		832.02	3.8	842.70	6.2	840.30	2.4
Bedrock Interval								
1084	ORSF		823.74	61.4	904.00	62.3	903.10	0.9
GW-141	LIV	Y	1034.95	94.4	1091.66	98.6	1087.46	4.2
GW-142	KHQ	Y	696.54	133.3	837.05	136.2	834.15	2.9
GW-143	KHQ	Y	682.04	77.6	835.58	70.9	842.28	-6.7
GW-144	KHQ	Y	738.98	78.2	835.14	80.4	832.94	2.2
GW-146	KHQ	Y	632.00	113.9	724.26	82.5	755.66	-31.4
GW-147	KHQ	Y	787.91	14.8	836.82	17.8	833.82	3.0
GW-156	CRSDB	Y	895.44	142.8	906.33	143.4	905.73	0.6
GW-158	CRSDB	Y	582.74	44.9	938.15	49.4	933.65	4.5
GW-159	CRSDB	Y	897.29	116.5	934.65	128.7	922.45	12.2
GW-161	CRBAWP	Y	715.91	159.1	934.44	162.8	930.74	3.7
GW-165	CRDT		789.89	83.7	1007.67	105.4	985.97	21.7
GW-166	CRDT		709.51	86.2	1007.09	107.5	985.79	21.3
GW-173	CRSP		953.47	143.2	971.80	.	.	.
GW-174	CRSP		974.56	111.2	1005.32	123.3	993.22	12.1
GW-175	CRSP	Y	924.39	116.3	967.70	126.8	957.20	10.5
GW-176	CRSP		982.63	116.1	1009.17	117.2	1008.07	1.1

APPENDIX H
Groundwater Elevations, 1995

Sampling Pt.	Location	Sampled in 95	CTP Elev.	April Depth	April Elev.	October Depth	October Elev.	+/- Ft.
GW-177	CRSP	Y	1017.02	107.0	1050.95	119.9	1038.05	12.9
GW-178	CRSP		1015.81	89.9	1053.59	98.9	1044.59	9.0
GW-180	CRSP		966.43	104.3	999.67	130.9	973.07	26.6
GW-184	RQ	Y	808.90	110.1	817.53	110.9	816.73	0.8
GW-186	RQ	Y	671.81	14.6	816.72	14.9	816.42	0.3
GW-203	UNCS	Y	952.34	74.5	1030.76	83.9	1021.36	9.4
GW-205	UNCS	Y	942.46	72.3	1031.67	81.3	1022.67	9.0
GW-217	LIV	Y	1001.69	108.9	1067.96	118.7	1058.16	9.8
GW-221	UNCS	Y	950.86	76.2	1029.80	85.4	1020.60	9.2
GW-231	KHQ	Y	818.00	12.7	836.77	15.7	833.77	3.0
GW-292	ECRWP	Y	891.06	112.0	961.00	116.4	956.60	4.4
GW-293	ECRWP	Y	856.20	114.4	949.50	118.9	945.00	4.5
GW-298	CRBAWP	Y	865.85	107.8	941.21	110.8	938.21	3.0
GW-299	CRBAWP	Y	890.83	95.3	958.56	103.2	950.66	7.9
GW-300	CRBAWP	Y	931.19	107.9	965.22	117.6	955.52	9.7
GW-301	CRBAWP	Y	927.94	129.1	957.28	135.9	950.48	6.8
GW-302	UNCS	Y	1011.44	98.5	1043.17	108.1	1033.57	9.6
GW-303	CRSDB	Y	693.94	86.8	920.36	89.4	917.76	2.6
GW-304	CRSDB	Y	885.07	116.7	928.79	118.6	926.89	1.9
GW-305	LIV	Y	1008.62	120.4	1063.15	128.4	1055.15	8.0
GW-321	ADB	Y	831.80	18.0	907.58	22.7	902.88	4.7
GW-322	CRSP		971.31	149.7	984.55	165.9	968.35	16.2
GW-339	UNCS	Y	1014.68	70.9	1053.69	81.3	1043.29	10.4
GW-511	CRSP	Y	943.85	100.6	992.61	114.1	979.11	13.5
GW-514	ADB	Y	814.16	19.8	981.42	31.9	969.32	12.1
GW-521	LIV	Y	1049.86	81.6	1101.08	88.9	1093.78	7.3
GW-522	LIV	Y	982.89	92.2	1083.11	102.6	1072.71	10.4
GW-539	LII	Y	944.19	100.4	992.60	109.5	983.50	9.1
GW-540	CDLVI	Y	904.38	79.3	992.82	85.2	986.92	5.9
GW-541	CDLVI	Y	960.19	65.2	993.20	65.6	992.80	0.4
GW-543	CDLVI	Y	936.29	63.2	960.60	64.1	959.70	0.9
GW-544	CDLVI	Y	942.38	63.9	981.09	68.3	976.69	4.4
GW-608	CRSP	Y	887.00	131.8	942.15	138.4	935.55	6.6
GW-609	CRSP	Y	847.00	168.0	944.11	173.2	938.91	5.2
GW-610	CRSP	Y	945.53	81.4	978.04	93.7	965.74	12.3
GW-611	CRSP	Y	933.88	86.6	961.78	110.1	938.28	23.5
GW-612	CRSP		884.15	121.1	1009.93	131.3	999.73	10.2
GW-673	ADB		757.70	8.2	873.81	10.9	871.11	2.7
GW-677	ADB		873.30	24.9	1005.50	32.7	997.70	7.8
GW-679	ADB		899.70	47.8	979.10	59.0	967.90	11.2

APPENDIX H
Groundwater Elevations, 1995

Sampling Pt.	Location	Sampled in 95	CTP Elev.	April Depth	April Elev.	October Depth	October Elev.	+/- Ft.
GW-709	LII	Y	829.19	29.5	877.10	29.7	876.90	0.2
GW-731	CRSDB	Y	874.40	124.2	924.98	125.2	923.98	1.0
GW-732	CRSDB	Y	876.50	157.4	906.69	157.8	906.29	0.4
GW-743	CRSP	Y	943.12	120.4	979.96	.	.	.
GW-757	LII	Y	808.30	84.4	877.03	84.5	876.93	0.1
GW-796	LV	Y	919.10	69.8	982.62	84.6	967.82	14.8
GW-797	LV	Y	930.05	65.4	994.40	70.7	989.10	5.3
GW-798	CDLVII	Y	857.90	73.8	926.50	84.2	916.10	10.4
GW-799	CDLVII	Y	892.75	8.7	972.39	17.3	963.79	8.6
GW-801	LV	Y	911.70	101.9	995.06	112.9	984.06	11.0
GW-827	CDLVI	Y	919.03	39.8	1011.59	44.4	1006.99	4.6

APPENDIX I
ION-CHARGE BALANCE CALCULATIONS

EXPLANATION

SAMPLING POINT:

GW	-	Monitoring Well
CBS-1	-	Chestnut Branch Spring 1
SCR2.2SP	-	South Chestnut Ridge Spring 2.2
1090	-	Historical 1000-Series Monitoring Well

LOCATION:

ADB	-	Ash Disposal Basin
CDL VI	-	Construction/Demolition Landfill VI
CDL VII	-	Construction/Demolition Landfill VII
CRBAWP	-	Chestnut Ridge Borrow Area Waste Pile
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
LIV	-	Industrial Landfill IV
LV	-	Industrial Landfill V
RQ	-	Rogers Quarry
UNCS	-	United Nuclear Corporation Site

NOTES:

mg/L	-	milligrams per liter
meq/L	-	milliequivalents per liter
NTU	-	Nephelometric Turbidity Units
TDS	-	Total Dissolved Solids
TSS	-	Total Suspended Solids

Bicarbonate and carbonate alkalinities (reported as CaCO_3) were converted to HCO_3 and CO_3 .

Charge balances for each sample were evaluated by computing a relative percent difference (RPD) between the summed milliequivalent concentrations of the principal cations and anions using the following formula:

$$RPD = \left(\frac{\sum \text{cations} - \sum \text{anions}}{\sum \text{cations} + \sum \text{anions}} \right) \times 100$$

Absolute Value of the RPD calculated for the following samples exceeded 10%

Sampling Point	Location	Date Sampled	RPD (%)
GW-205	UNCS	04/18/95	-11
GW-732	CRSDB	10/24/95	-57
GW-732	CRSDB	10/25/95	-39
GW-732	CRSDB	10/26/95	-13

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location	1090 UNCS 04/20/95	1090 UNCS 10/09/95	CBS-1 LV 04/17/95	CBS-1 LV 10/11/95	GW-141 LIV 01/09/95	GW-141 LIV 07/10/95	GW-142 KHQ 01/10/95	GW-142 KHQ 04/20/95	GW-142 KHQ 07/14/95	GW-142 KHQ 11/05/95
DATE SAMPLED	04/20/95	10/09/95	04/17/95	10/11/95	01/09/95	07/10/95	01/10/95	04/20/95	07/14/95	11/05/95
CATIONS (MEQ/L)										
Calcium	2.74	2.64	1.45	1.80	2.40	2.40	2.15	2.20	2.25	2.00
Magnesium	2.55	2.63	0.99	0.99	2.30	2.55	2.39	2.55	2.55	2.47
Potassium	0.03	0.03	0.03	0.04	0.02	0.00	0.08	0.10	0.11	0.10
Sodium	0.48	0.48	0.07	0.11	0.04	0.04	0.04	0.04	0.05	0.04
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	-	-	0.00	0.00	-	-	-	-	-	-
Total Cations	5.80	5.78	2.53	2.94	4.76	4.98	4.66	4.89	4.96	4.61
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
Alkalinity-HCO3	5.34	5.08	2.46	2.52	4.68	4.64	4.70	4.84	4.72	4.68
Chloride	0.65	0.56	0.11	0.15	0.07	0.07	0.06	0.07	0.06	0.05
Fluoride	0.00	0.00	0.00	0.01	0.00	0.00	0.03	0.03	0.03	0.03
Nitrate Nitrogen	0.07	0.06	0.05	0.05	0.06	0.05	0.09	0.00	0.04	0.00
Sulfate	0.11	0.08	0.12	0.27	0.05	0.04	0.11	0.12	0.12	0.11
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	6.17	5.79	2.74	2.99	4.86	4.79	4.99	5.06	4.97	4.87
CHARGE BALANCE (%)	-3	-0	-4	-1	-1	2	-3	-2	-0	-3
TDS (mg/L)	322	286	152	160	240	250	180	268	208	226
TSS (mg/L)	3	<1	2.5	4	18	4.5	8	3.8	9	5
Turbidity (NTU)	3.7	0.35	2.5	10	55	30	27	34	40	35

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location	GW-143 KHQ 01/17/95	GW-143 KHQ 04/24/95	GW-143 KHQ 07/16/95	GW-143 KHQ 11/09/95	GW-144 KHQ 01/18/95	GW-144 KHQ 04/25/95	GW-144 KHQ 07/16/95	GW-144 KHQ 11/14/95
Date Sampled								
CATIONS (MEQ/L)								
Calcium	1.50	1.45	1.60	1.40	2.10	1.95	1.95	2.05
Magnesium	2.30	1.89	2.06	1.89	1.40	1.15	1.23	1.32
Potassium	0.41	0.43	0.49	0.43	0.04	0.05	0.04	0.04
Sodium	1.04	1.17	1.26	1.13	0.05	0.06	0.06	0.05
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	.	.	.	.	.	.	.	.
Total Cations	5.25	4.95	5.40	4.85	3.58	3.20	3.27	3.45
ANIONS (MEQ/L)								
Alkalinity- CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	4.06	4.14	4.08	4.20	3.02	3.02	3.10	3.30
Chloride	0.17	0.17	0.17	0.15	0.06	0.08	0.07	0.07
Fluoride	0.19	0.17	0.14	0.16	0.01	0.01	0.01	0.00
Nitrate Nitrogen	0.00	0.00	0.00	0.00	0.11	0.14	0.16	0.18
Sulfate	0.71	0.73	0.73	0.63	0.11	0.12	0.11	0.10
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	5.13	5.20	5.12	5.14	3.32	3.36	3.44	3.65
CHARGE BALANCE (%)	1	-2	3	-3	4	-2	-2	-3
TDS (mg/L)	196	278	286	266	104	166	186	186
TSS (mg/L)	7	3	<1	<1	<1	<1	<1	<1
Turbidity (NTU)	22	9.9	3.6	7.8	0.1	0.4	0.25	0.3

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location Date Sampled	GW-145 KHQ 01/18/95	GW-145 KHQ 04/26/95	GW-145 KHQ 07/17/95	GW-145 KHQ 11/15/95	GW-146 KHQ 01/17/95	GW-146 KHQ 04/24/95	GW-146 KHQ 07/17/95	GW-146 KHQ 11/08/95
CATIONS (MEQ/L)								
Calcium	2.20	2.10	2.25	2.10	1.90	1.90	2.10	1.80
Magnesium	3.45	2.80	2.96	2.88	3.13	2.30	2.88	2.63
Potassium	0.31	0.31	0.33	0.28	0.38	0.31	0.46	0.38
Sodium	0.28	0.26	0.24	0.25	0.48	0.48	0.61	0.52
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	.	.	.	.	.	.	.	.
Total Cations	6.24	5.46	5.78	5.51	5.88	4.98	6.04	5.33
ANIONS (MEQ/L)								
Alkalinity- CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	4.58	4.64	4.54	4.70	3.94	3.96	3.92	4.18
Chloride	0.25	0.27	0.27	0.24	0.31	0.31	0.34	0.32
Fluoride	0.15	0.13	0.12	0.13	0.16	0.15	0.14	0.14
Nitrate Nitrogen	0.03	0.02	0.07	0.03	0.05	0.04	0.07	0.00
Sulfate	0.75	0.77	0.77	0.80	1.37	1.46	1.40	1.36
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	5.76	5.83	5.76	5.89	5.83	5.91	5.86	5.99
CHARGE BALANCE (%)	4	-3	0	-3	0	-8	2	-6
TDS (mg/L)	226	276	310	164	268	342	344	310
TSS (mg/L)	6	22	2.5	17	2	4	5	<1
Turbidity (NTU)	5.2	4.2	6	20	6	6.2	7.6	9.6

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location Date Sampled	GW-147 KHQ 01/15/95	GW-147 KHQ 04/21/95	GW-147 KHQ 07/14/95	GW-147 KHQ 11/06/95	GW-156 CRSDB 01/18/95	GW-156 CRSDB 04/07/95	GW-156 CRSDB 07/13/95	GW-156 CRSDB 10/23/95
CATIONS (MEQ/L)								
Calcium	1.85	1.65	1.70	1.65	3.64	3.44	3.59	3.49
Magnesium	1.65	1.65	1.56	1.56	3.45	3.37	3.54	3.54
Potassium	0.14	0.14	0.16	0.06	0.10	0.19	0.12	0.09
Sodium	0.13	0.17	0.13	0.10	0.14	0.24	0.14	0.11
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	.	.	.	.	.	.	.	.
Total Cations	3.76	3.61	3.56	3.37	7.34	7.24	7.39	7.24
ANIONS (MEQ/L)								
Alkalinity- CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	3.44	3.38	3.16	3.28	6.83	7.05	6.83	6.83
Chloride	0.07	0.07	0.07	0.06	0.08	0.09	0.08	0.08
Fluoride	0.02	0.04	0.01	0.01	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.09	0.08	0.11	0.10	0.04	0.05	0.04	0.03
Sulfate	0.09	0.11	0.09	0.07	0.21	0.19	0.14	0.15
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	3.70	3.68	3.44	3.52	7.16	7.39	7.10	7.09
CHARGE BALANCE (%)	1	-1	2	-2	1	-1	2	1
TDS (mg/L)	164	202	192	168	266	380	358	384
TSS (mg/L)	4	18	3	1.5	10	4	1.5	16
Turbidity (NTU)	4.5	17	3.9	3.2	5.3	3.8	1.5	21

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location Date Sampled	GW-156 CRSDB 10/24/95	GW-156 CRSDB 10/25/95	GW-156 CRSDB 10/26/95	GW-158 CRSDB 01/20/95	GW-158 CRSDB 04/13/95	GW-158 CRSDB 07/18/95	GW-159 CRSDB 01/15/95	GW-159 CRSDB 04/06/95	GW-159 CRSDB 07/12/95	GW-159 CRSDB 10/23/95
CATIONS (NEQ/L)										
Calcium	3.44	3.29	2.94	2.10	1.80	1.95	2.05	1.85	1.95	2.05
Magnesium	3.45	3.45	3.13	1.81	1.65	1.81	2.22	1.81	1.89	2.14
Potassium	0.08	0.12	0.15	0.02	0.02	0.02	0.02	0.04	0.07	0.04
Sodium	0.08	0.09	0.09	0.03	0.02	0.03	0.03	0.03	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
Ammonia Nitrogen	.	.	.	.	.	.	.	.	.	.
Total Cations	7.06	6.96	6.30	3.96	3.49	3.81	4.31	3.72	3.94	4.26
ANIONS (NEQ/L)										
Alkalinity- CO3	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	6.67	6.71	6.77	3.50	3.50	3.44	3.60	3.90	3.76	3.68
Chloride	0.06	0.07	0.06	0.03	0.04	0.05	0.06	0.05	0.05	0.04
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.03	0.03	0.03	0.00	0.00	0.00	0.05	0.05	0.03	0.03
Sulfate	0.08	0.09	0.09	0.21	0.19	0.20	0.18	0.18	0.16	0.14
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	6.84	6.90	6.98	3.74	3.73	3.68	3.89	4.17	4.01	3.88
CHARGE BALANCE (%)	2	0	-5	3	-3	2	5	-6	-1	5
TDS (mg/L)	366	336	350	108	190	210	180	226	222	176
TSS (mg/L)	<1	4	5	8	<1	<1	6	3	1	13
Turbidity (NTU)	2.2	0.95	3.1	5	1.4	5.7	1.8	7.7	0.45	19

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location Date Sampled	GW-159 CRSDB 10/24/95	GW-159 CRSDB 10/25/95	GW-159 CRSDB 10/26/95	GW-160 CRBAMP 04/26/95	GW-160 CRBAMP 11/02/95	GW-161 CRBAMP 04/20/95	GW-161 CRBAMP 10/31/95
CATIONS (MEQ/L)							
Calcium	2.00	1.90	1.85	2.40	2.25	2.00	1.70
Magnesium	2.06	1.97	2.06	2.30	2.39	1.97	2.06
Potassium	0.05	0.05	0.04	0.02	0.03	0.02	0.03
Sodium	0.04	0.03	0.03	0.13	0.11	0.03	0.06
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	.	.	.	.	.	.	.
Total Cations	4.14	3.95	3.98	4.86	4.77	4.02	3.84
ANIONS (MEQ/L)							
Alkalinity- CO3	0.00	0.02	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	3.78	3.84	3.80	4.64	4.36	4.12	3.82
Chloride	0.06	0.04	0.04	0.20	0.15	0.08	0.07
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.03	0.03	0.03	0.07	0.06	0.04	0.02
Sulfate	0.18	0.17	0.18	0.08	0.08	0.04	0.03
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	4.04	4.10	4.05	4.99	4.64	4.27	3.94
CHARGE BALANCE (%)	1	-2	-1	-1	1	-3	-1
TDS (mg/L)	224	216	186	402	730	226	198
TSS (mg/L)	1696	2.5	1	117	5365	<1	<1
Turbidity (NTU)	41	2.9	3	260	7600	0.7	5.3

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location Date Sampled	GW-175 CRSP 02/14/95	GW-175 CRSP 05/15/95	GW-175 CRSP 08/01/95	GW-175 CRSP 11/17/95	GW-177 CRSP 02/13/95	GW-177 CRSP 05/11/95	GW-177 CRSP 08/01/95	GW-177 CRSP 11/16/95
CATIONS (MEQ/L)								
Calcium	2.40	2.45	2.40	2.15	2.25	2.25	2.20	2.25
Magnesium	2.39	2.47	2.39	2.22	2.22	2.14	2.30	2.39
Potassium	0.02	0.03	0.02	0.00	0.08	0.07	0.05	0.07
Sodium	0.04	0.04	0.07	0.10	0.07	0.05	0.06	0.07
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	.	.	.	.	.	.	.	.
Total Cations	4.84	4.98	4.86	4.47	4.62	4.50	4.61	4.78
ANIONS (MEQ/L)								
Alkalinity- CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	4.70	4.52	4.60	4.34	4.30	4.32	4.32	4.58
Chloride	0.06	0.06	0.07	0.07	0.08	0.05	0.08	0.08
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.05	0.02	0.04	0.05	0.05	0.00	0.03	0.06
Sulfate	0.03	0.00	0.02	0.00	0.18	0.21	0.17	0.14
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	4.84	4.60	4.74	4.46	4.61	4.58	4.61	4.86
CHARGE BALANCE (%)	0	4	1	0	0	-1	0	-1
TDS (mg/L)	214	278	234	190	260	234	272	120
TSS (mg/L)	1	<1	<1	2	2	24	<1	12
Turbidity (NTU)	2	1.4	3.4	4.1	4	4.1	4.5	5.2

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location	GW-181 CRSP	GW-181 CRSP	GW-181 CRSP	GW-184 RQ	GW-184 RQ	GW-186 RQ	GW-187 RQ	GW-187 RQ
Date Sampled	01/24/95	05/02/95	07/28/95	05/01/95	10/31/95	05/03/95	05/02/95	11/02/95
CATIONS (MEQ/L)								
Calcium	1.75	1.65	1.60	3.34	3.79	5.49	5.49	2.40
Magnesium	1.73	1.56	1.73	0.52	0.65	2.55	2.80	1.81
Potassium	0.04	0.05	0.03	0.04	0.06	0.08	0.08	0.04
Sodium	0.03	0.03	0.03	0.06	0.08	1.65	1.74	6.09
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	.	.	.	.	.	.	.	.
Total Cations	3.55	3.29	3.38	3.95	4.58	9.77	10.11	10.33
ANIONS (MEQ/L)								
Alkalinity- CO ₃	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO ₃	3.38	3.44	3.36	3.54	3.58	8.37	8.21	6.47
Chloride	0.05	0.06	0.06	0.06	0.06	0.45	0.45	2.96
Fluoride	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.05
Nitrate Nitrogen	0.02	0.03	0.00	0.20	0.42	0.00	0.00	0.00
Sulfate	0.04	0.04	0.03	0.44	0.44	1.27	1.14	0.50
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	3.48	3.57	3.45	4.24	4.49	10.11	9.82	9.99
CHARGE BALANCE (%)	1	-4	-1	-3	1	-2	1	2
TDS (mg/L)	164	188	190	252	250	538	532	592
TSS (mg/L)	2	3	<1	<1	1.5	<1	4	<1
Turbidity (NTU)	7.1	4.4	1.8	1.5	2.4	8.4	0.8	95

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location	GW-188 Rq	GW-188 Rq	GW-203 UNCS	GW-203 UNCS	GW-203 UNCS	GW-205 UNCS	GW-205 UNCS	GW-217 LIV	GW-217 LIV	GW-221 UNCS	GW-221 UNCS
Date Sampled	05/01/95	10/31/95	04/18/95	10/07/95	04/18/95	10/07/95	01/04/95	07/10/95	04/19/95	10/08/95	10/08/95
CATIONS (MEQ/L)											
Calcium	1.70	1.75	1.50	1.35	1.55	1.15	1.40	1.50	1.45	1.45	1.45
Magnesium	1.97	2.14	1.32	1.32	1.48	1.56	1.48	1.56	1.40	1.48	1.48
Potassium	0.07	0.07	0.03	0.02	0.03	0.25	0.11	0.09	0.03	0.04	0.04
Sodium	0.83	0.96	0.02	0.02	0.03	0.09	0.24	0.27	0.03	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
Ammonia Nitrogen	.	.	.	.	.	.	.	.	.	.	.
Total Cations	4.56	4.91	2.86	2.71	3.09	3.05	3.22	3.42	2.90	2.99	2.99
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	4.16	2.76	2.74	3.20	2.90	3.02	3.12	3.02	3.04	3.04
Chloride	0.14	0.14	0.05	0.05	0.08	0.07	0.06	0.07	0.05	0.05	0.05
Fluoride	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.03	0.02	0.10	0.09	0.45	0.03	0.08	0.04	0.06	0.05	0.05
Sulfate	0.56	0.55	0.02	0.00	0.13	0.06	0.11	0.14	0.03	0.03	0.03
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	4.91	4.90	2.94	2.87	3.85	3.06	3.27	3.37	3.17	3.16	3.16
CHARGE BALANCE (%)	-4	0	-1	-3	-11	-0	-1	1	-4	-3	-3
TDS (mg/L)	276	324	154	140	150	162	108	176	162	142	142
TSS (mg/L)	<1	34	5.5	3	<1	4	5	27	<1	<1	<1
Turbidity (NTU)	2	74	7.1	3.6	2.8	2	8.9	5.1	1	1.1	1.1

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location	GW-231 KHQ 01/15/95	GW-231 KHQ 04/21/95	GW-231 KHQ 07/15/95	GW-231 KHQ 11/06/95	GW-241 CRSDB 01/20/95	GW-241 CRSDB 04/09/95	GW-241 CRSDB 07/16/95	GW-292 ECRWP 04/24/95	GW-292 ECRWP 11/06/95
Date Sampled									
CATIONS (MEQ/L)									
Calcium	1.80	1.90	2.30	2.25	1.60	1.40	1.60	2.45	2.64
Magnesium	1.48	1.65	1.89	1.97	1.48	1.23	1.48	2.47	2.71
Potassium	0.03	0.02	0.04	0.02	0.05	0.06	0.06	0.04	0.02
Sodium	0.04	0.04	0.04	0.04	0.03	0.04	0.03	0.21	0.20
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	.	.	.	.	.	.	.	.	.
Total Cations	3.34	3.60	4.27	4.28	3.16	2.73	3.16	5.16	5.58
ANIONS (MEQ/L)									
Alkalinity- CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	3.22	3.42	3.70	4.22	2.98	2.88	3.04	5.06	5.00
Chloride	0.08	0.07	0.06	0.07	0.03	0.04	0.04	0.24	0.21
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.07	0.08	0.10	0.05	0.03	0.00	0.06	0.05	0.06
Sulfate	0.11	0.09	0.07	0.13	0.02	0.04	0.02	0.07	0.06
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	3.47	3.66	3.94	4.47	3.06	2.96	3.17	5.41	5.33
CHARGE BALANCE (%)	-2	-1	4	-2	2	-4	-0	-2	2
TDS (mg/L)	146	322	194	242	138	160	178	270	228
TSS (mg/L)	1	<1	<1	1	4	40	1	<1	<1
Turbidity (NTU)	1.4	0.1	0.25	0.5	5.5	50	5	0.4	0.5

APPENDIX 1
Ion-Charge Balance Calculations, 1995

Sampling Point Location Date Sampled	GW-293 ECRMP 04/23/95	GW-294 ECRMP 04/22/95	GW-294 ECRMP 11/05/95	GW-296 ECRMP 04/22/95	GW-296 ECRMP 11/05/95	GW-298 CRBAMP 05/02/95	GW-298 CRBAMP 11/04/95	GW-299 CRBAMP 05/01/95	GW-299 CRBAMP 11/03/95
CATIONS (MEQ/L)									
Calcium	2.40	2.79	2.40	2.15	2.25	1.70	1.65	1.45	1.40
Magnesium	2.47	2.80	2.39	2.14	2.30	1.73	1.81	1.40	1.40
Potassium	0.05	0.03	0.04	0.02	0.02	0.02	0.03	0.03	0.02
Sodium	0.21	0.25	0.18	0.07	0.06	0.07	0.08	0.05	0.03
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	.	.	.	.	.	.	.	.	.
Total Cations	5.13	5.87	5.01	4.38	4.62	3.51	3.57	2.92	2.85
ANIONS (MEQ/L)									
Alkalinity- CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	4.92	5.14	4.42	4.40	4.44	3.40	3.40	2.82	2.82
Chloride	0.28	0.31	0.28	0.10	0.08	0.05	0.03	0.05	0.04
Fluoride	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Nitrate Nitrogen	0.04	0.06	0.19	0.03	0.06	0.03	0.00	0.03	0.02
Sulfate	0.07	0.07	0.07	0.02	0.03	0.14	0.17	0.08	0.06
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	5.31	5.57	4.96	4.56	4.60	3.62	3.61	2.97	2.94
CHARGE BALANCE (%)	-2	3	0	-2	0	-1	-1	-1	-2
TDS (mg/L)	276	166	254	226	184	180	172	270	86
TSS (mg/L)	<1	3.5	<1	1	1	19	13	<1	<1
Turbidity (NTU)	8.4	8.8	0.2	0.6	2	90	16	0.6	1.1

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location Date Sampled	GW-300 CRBAMP 04/27/95	GW-300 CRBAMP 11/03/95	GW-301 CRBAMP 04/27/95	GW-301 CRBAMP 11/03/95	GW-302 UNCS 04/19/95	GW-302 UNCS 10/08/95	GW-303 CRSDB 01/19/95	GW-303 CRSDB 04/09/95	GW-303 CRSDB 07/16/95
CATIONS (MEQ/L)									
Calcium	1.50	1.30	1.65	1.65	2.59	2.54	3.69	3.39	3.99
Magnesium	1.48	1.32	1.73	1.81	2.47	2.71	3.37	3.13	3.45
Potassium	0.00	0.00	0.00	0.03	0.03	0.02	0.11	0.10	0.11
Sodium	0.03	0.03	0.03	0.03	0.44	0.41	0.05	0.05	0.05
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	.	.	.	.	.	.	.	.	.
Total Cations	3.01	2.64	3.41	3.52	5.53	5.69	7.22	6.67	7.61
ANIONS (MEQ/L)									
Alkalinity- CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	2.90	2.50	3.38	3.52	4.90	4.84	3.32	3.72	3.62
Chloride	0.06	0.04	0.06	0.04	0.73	0.56	0.06	0.06	0.06
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05
Nitrate Nitrogen	0.04	0.02	0.05	0.03	0.09	0.08	0.00	0.00	0.00
Sulfate	0.07	0.10	0.05	0.05	0.08	0.07	3.58	3.33	3.33
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	3.07	2.66	3.54	3.64	5.80	5.55	7.01	7.16	7.06
CHARGE BALANCE (%)	-1	-0	-2	-2	-2	1	2	-4	4
TDS (mg/L)	166	144	192	168	186	278	420	444	470
TSS (mg/L)	<1	<1	23	7	2	2	<1	<1	<1
Turbidity (NTU)	1	7.5	23	10.2	18	9.2	14	13	9.8

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location Date Sampled	GW-304 CRSDB 01/15/95	GW-304 CRSDB 04/06/95	GW-304 CRSDB 07/12/95	GW-305 LIV 01/10/95	GW-305 LIV 07/12/95	GW-321 ADB 04/25/95	GW-321 ADB 10/26/95	GW-339 UNCS 04/19/95	GW-339 UNCS 10/08/95
CATIONS (MEQ/L)									
Calcium	1.90	1.80	1.95	1.40	1.35	1.25	1.30	2.84	2.79
Magnesium	1.97	1.89	2.06	1.40	1.48	1.15	1.23	2.63	2.80
Potassium	0.05	0.05	0.06	0.00	0.02	0.02	0.02	0.04	0.03
Sodium	0.20	0.20	0.22	0.06	0.09	0.02	0.03	0.48	0.52
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	.	.	.	.	.	.	.	.	.
Total Cations	4.12	3.94	4.28	2.86	2.94	2.44	2.58	5.99	6.14
ANIONS (MEQ/L)									
Alkalinity- CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	3.70	3.82	3.74	2.66	2.74	2.52	2.54	5.30	5.26
Chloride	0.08	0.08	0.08	0.07	0.08	0.05	0.04	0.76	0.65
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.04	0.04	0.03	0.05	0.03	0.03	0.03	0.08	0.06
Sulfate	0.37	0.40	0.42	0.08	0.03	0.04	0.05	0.11	0.09
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	4.20	4.33	4.27	2.86	2.88	2.65	2.66	6.25	6.06
CHARGE BALANCE (%)	-1	-5	0	-0	1	-4	-2	-2	1
TDS (mg/L)	222	222	226	128	138	140	166	326	142
TSS (mg/L)	24	6.5	10	5	2	<1	<1	<1	2.5
Turbidity (NTU)	2.6	2.8	4.7	3.5	3.9	0.1	0.25	0.4	7.2

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location	GW-511 CRSP	GW-511 CRSP	GW-511 CRSP	GW-512 ADB	GW-513 ADB	GW-514 ADB	GW-514 ADB
Date Sampled	01/24/95	05/03/95	07/29/95	11/07/95	04/26/95	10/31/95	04/27/95
CATIONS (MEQ/L)							
Calcium	1.30	1.45	1.35	1.40	1.60	1.55	1.75
Magnesium	1.32	1.40	1.48	1.40	1.48	1.56	1.81
Potassium	0.11	0.07	0.08	0.08	0.10	0.11	0.03
Sodium	0.08	0.05	0.04	0.05	0.03	0.05	0.04
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	.	.	.	.	.	.	.
Total Cations	2.81	2.97	2.95	2.93	3.21	3.27	3.61
ANIONS (MEQ/L)							
Alkalinity- CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	2.70	3.00	2.86	2.84	3.26	3.14	3.66
Chloride	0.09	0.07	0.08	0.07	0.05	0.04	0.06
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.02	0.02	0.02	0.02	0.00	0.00	0.00
Sulfate	0.04	0.04	0.04	0.03	0.06	0.08	0.09
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	2.84	3.12	2.99	2.96	3.37	3.25	3.84
CHARGE BALANCE (%)	-1	-3	-1	-1	-3	0	-5
TDS (mg/L)	132	168	166	162	180	214	190
TSS (mg/L)	1	2.5	<1	<1	<1	5	<1
Turbidity (NTU)	2.5	4.7	0.7	0.5	4.9	7.7	3.5
							142
							2
							8.6

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location Date Sampled	GW-521 LIV 01/09/95	GW-521 LIV 07/11/95	GW-522 LIV 01/10/95	GW-522 LIV 07/12/95	GW-539 LII 01/04/95	GW-539 LII 07/10/95	GW-539 LII 10/06/95	GW-540 CDLVI 04/04/95	GW-540 CDLVI 10/11/95
CATIONS (MEQ/L)									
Calcium	1.50	1.50	1.45	1.30	1.90	1.80	1.80	2.05	1.95
Magnesium	1.56	1.65	1.40	1.32	1.73	1.81	1.81	1.89	1.97
Potassium	0.00	0.00	0.02	0.03	0.03	0.04	0.05	0.02	0.04
Sodium	0.03	0.04	0.03	0.03	0.11	0.17	0.10	0.10	0.13
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	.	.	.	.	0.00	0.00	0.00	0.00	0.00
Total Cations	3.09	3.18	2.89	2.67	3.77	3.81	3.76	4.06	4.09
ANIONS (MEQ/L)									
Alkalinity- CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	3.04	3.02	2.80	2.52	2.98	3.00	3.04	3.98	3.92
Chloride	0.06	0.05	0.06	0.06	0.59	0.56	0.51	0.07	0.05
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.04	0.04	0.06	0.04	0.07	0.05	0.03	0.03	0.03
Sulfate	0.03	0.00	0.00	0.00	0.16	0.23	0.15	0.09	0.09
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	3.18	3.11	2.92	2.62	3.80	3.84	3.72	4.16	4.09
CHARGE BALANCE (%)	-1	1	-1	1	-0	-0	0	-1	-0
TDS (mg/L)	118	176	100	146	40	220	202	204	232
TSS (mg/L)	2	<1	5	17	78	6	9	1	<1
Turbidity (NTU)	6.7	2.9	3.5	9.2	34	3.6	12	0.2	0.15

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location Date Sampled	GW-541 CDLVI 04/05/95	GW-541 CDLVI 10/12/95	GW-542 CDLVI 04/06/95	GW-542 CDLVI 10/16/95	GW-543 CDLVI 04/06/95	GW-543 CDLVI 10/17/95	GW-544 CDLVI 04/06/95	GW-544 CDLVI 10/17/95	GW-546 CDLVI 04/05/95	GW-546 CDLVI 10/11/95
CATIONS (MEQ/L)										
Calcium	1.90	1.85	2.00	1.40	2.54	2.35	2.40	2.25	1.65	1.40
Magnesium	1.65	1.73	1.81	1.32	2.39	2.39	2.22	2.30	1.56	1.56
Potassium	0.02	0.02	0.04	0.04	0.02	0.03	0.04	0.03	0.05	0.05
Sodium	0.02	0.03	0.04	0.04	0.04	0.05	0.22	0.22	0.10	0.09
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	3.59	3.62	3.89	2.80	4.99	4.80	4.87	4.80	3.35	3.10
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
Alkalinity-HCO3	3.76	3.38	3.70	2.70	4.80	4.72	4.34	4.28	2.90	2.50
Chloride	0.05	0.04	0.07	0.05	0.09	0.08	0.28	0.25	0.07	0.05
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.00	0.00	0.05	0.05	0.04	0.03	0.06	0.06	0.03	0.03
Sulfate	0.25	0.25	0.15	0.07	0.07	0.06	0.18	0.16	0.09	0.05
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	4.06	3.67	3.96	2.86	5.00	4.89	4.86	4.75	3.08	2.63
CHARGE BALANCE (%)	-6	-1	-1	-1	-0	-1	0	1	4	8
TDS (mg/L)	200	240	208	36	252	256	262	178	172	176
TSS (mg/L)	3	<1	1	4	<1	<1	1.5	<1	62	194
Turbidity (NTU)	0.5	1.3	1.3	2.6	2	3.1	2	1.7	152	160

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location Date Sampled	GW-557 LV 04/06/95	GW-557 LV 10/07/95	GW-560 CDLVII 04/05/95	GW-560 CDLVII 10/06/95	GW-562 CDLVII 04/05/95	GW-562 CDLVII 10/06/95	GW-564 CDLVII 04/06/95	GW-564 CDLVII 10/07/95
CATIONS (MEQ/L)								
Calcium	1.85	1.80	1.90	1.80	2.00	1.90	1.55	1.40
Magnesium	1.81	1.65	1.23	1.23	1.97	1.81	1.23	0.99
Potassium	0.04	0.02	0.04	0.03	0.00	0.03	0.03	0.04
Sodium	0.03	0.03	0.03	0.03	0.04	0.04	0.02	0.05
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	3.73	3.49	3.21	3.08	4.01	3.77	2.84	2.48
ANIONS (MEQ/L)								
Alkalinity- CO ₃	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO ₃	3.38	3.36	2.94	3.00	3.68	3.62	2.80	2.32
Chloride	0.06	0.05	0.05	0.04	0.06	0.05	0.05	0.07
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.08	0.07	0.03	0.02	0.04	0.04	0.05	0.06
Sulfate	0.04	0.03	0.04	0.04	0.04	0.04	0.03	0.10
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	3.55	3.50	3.06	3.10	3.83	3.75	2.93	2.55
CHARGE BALANCE (%)	2	-0	2	-0	2	0	-2	-1
TDS (mg/L)	190	158	140	152	194	194	174	128
TSS (mg/L)	5	3	<1	<1	4	5	<1	1.5
Turbidity (NTU)	4.4	1.8	0.3	1.3	9.5	8.9	1	1.4

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location Date Sampled	GW-608 CRSP 02/02/95	GW-608 CRSP 05/11/95	GW-608 CRSP 07/31/95	GW-608 CRSP 11/16/95	GW-609 CRSP 02/15/95	GW-609 CRSP 05/16/95	GW-609 CRSP 08/01/95	GW-609 CRSP 11/20/95
CATIONS (MEQ/L)								
Calcium	1.55	1.50	1.50	1.65	1.95	2.05	2.15	1.90
Magnesium	1.48	1.40	1.48	1.65	1.89	1.89	2.14	1.97
Potassium	0.02	0.04	0.06	0.02	0.04	0.03	0.02	0.03
Sodium	0.03	0.03	0.04	0.03	0.04	0.03	0.03	0.03
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	.	.	.	.	.	.	.	.
Total Cations	3.08	2.96	3.07	3.34	3.92	4.00	4.34	3.94
ANIONS (MEQ/L)								
Alkalinity- CO ₃	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO ₃	3.06	2.98	2.90	3.10	3.92	4.06	3.94	4.04
Chloride	0.07	0.06	0.07	0.07	0.05	0.04	0.06	0.06
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.05	0.03	0.05	0.08	0.09	0.08	0.09	0.08
Sulfate	0.05	0.05	0.06	0.05	0.05	0.05	0.05	0.04
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	3.24	3.12	3.07	3.30	4.12	4.22	4.14	4.22
CHARGE BALANCE (%)	-3	-3	-0	1	-2	-3	2	-3
TDS (mg/L)	178	176	132	148	212	216	212	202
TSS (mg/L)	<1	3	<1	5	1	<1	<1	<1
Turbidity (NTU)	1.9	5.5	2.2	5.1	0.3	0.6	0.1	0.3

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location Date Sampled	GW-610 CRSP 01/31/95	GW-610 CRSP 05/07/95	GW-610 CRSP 07/31/95	GW-610 CRSP 11/13/95	GW-611 CRSP 02/14/95	GW-611 CRSP 05/15/95	GW-611 CRSP 08/01/95	GW-611 CRSP 11/17/95
CATIONS (MEQ/L)								
Calcium	2.15	2.40	2.15	2.25	2.84	2.84	2.74	2.69
Magnesium	2.14	2.30	2.22	2.30	2.71	2.63	2.80	2.71
Potassium	0.02	0.02	0.00	0.03	0.03	0.07	0.00	0.03
Sodium	0.04	0.05	0.04	0.04	0.10	0.09	0.08	0.27
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	.	.	.	.	.	.	.	.
Total Cations	4.34	4.77	4.40	4.62	5.68	5.63	5.62	5.71
ANIONS (MEQ/L)								
Alkalinity- CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	4.54	4.54	4.42	4.54	5.44	5.64	5.32	5.26
Chloride	0.08	0.08	0.08	0.08	0.05	0.04	0.06	0.08
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.07	0.06	0.06	0.06	0.24	0.24	0.23	0.25
Sulfate	0.03	0.00	0.00	0.00	0.04	0.03	0.05	0.12
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	4.72	4.68	4.56	4.68	5.77	5.94	5.66	5.70
CHARGE BALANCE (%)	-4	1	-2	-1	-1	-3	-0	0
TDS (mg/L)	210	242	228	92	274	332	226	286
TSS (mg/L)	1	1	1	1	<1	<1	1.5	6
Turbidity (NTU)	0.8	1.6	0.5	0.3	0.8	1.2	15	6.9

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location Date Sampled	GW-709 LII 01/09/95	GW-709 LII 07/10/95	GW-709 LII 10/06/95	GW-731 CRSDB 01/17/95	GW-731 CRSDB 04/07/95	GW-731 CRSDB 07/13/95	GW-731 CRSDB 10/23/95	GW-731 CRSDB 10/24/95	GW-731 CRSDB 10/25/95	GW-731 CRSDB 10/26/95
CATIONS (MEQ/L)										
Calcium	1.90	1.75	1.45	0.85	0.85	0.75	1.05	0.70	0.60	0.47
Magnesium	1.73	1.73	1.89	1.07	1.07	1.56	1.23	1.07	1.07	1.07
Potassium	0.03	0.00	0.03	0.28	0.28	0.59	0.14	0.31	0.36	0.41
Sodium	0.02	0.03	0.03	0.16	0.16	0.22	0.12	0.17	0.19	0.20
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	.	.	.	.	.	.	.	.	.	.
Total Cations	3.68	3.50	3.40	2.71	2.36	3.12	2.54	2.25	2.22	2.14
ANIONS (MEQ/L)										
Alkalinity- CO3	0.00	0.00	0.00	0.32	0.36	0.76	0.00	0.20	0.40	0.32
Alkalinity-HCO3	3.54	3.42	3.52	1.94	2.02	2.04	2.24	1.84	1.62	1.68
Chloride	0.06	0.06	0.05	0.05	0.05	0.05	0.04	0.03	0.04	0.04
Fluoride	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.04	0.03	0.02	0.05	0.05	0.04	0.03	0.03	0.03	0.03
Sulfate	0.04	0.03	0.04	0.13	0.12	0.10	0.10	0.11	0.11	0.12
Hydroxyl Ion	0.00	0.00	0.00	0.01	0.01	0.03	0.01	0.01	0.01	0.02
Total Anions	3.68	3.54	3.64	2.50	2.62	3.02	2.41	2.22	2.21	2.20
CHARGE BALANCE (%)	-0	-1	-3	4	-5	2	3	1	0	-1
TDS (mg/L)	150	200	172	98	148	182	150	146	142	136
TSS (mg/L)	<1	1	48	24	<1	2	4.5	3	9	11
Turbidity (NTU)	0.9	0.4	25	24	2.7	0.35	13	7	33	5.2

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location Date Sampled	GW-732 CRSDB 01/18/95	GW-732 CRSDB 04/07/95	GW-732 CRSDB 07/13/95	GW-732 CRSDB 08/14/95	GW-732 CRSDB 10/23/95	GW-732 CRSDB 10/24/95	GW-732 CRSDB 10/25/95	GW-732 CRSDB 10/26/95
CATIONS (MEQ/L)								
Calcium	1.45	1.25	1.05	1.45	1.55	0.37	0.41	0.35
Magnesium	1.23	1.07	1.15	1.48	1.56	0.10	0.75	0.90
Potassium	0.25	0.23	0.28	0.05	0.04	0.84	0.61	0.56
Sodium	0.48	0.52	0.34	0.04	0.04	0.37	0.30	0.26
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	.	.	.	.	.	.	.	.
Total Cations	3.41	3.06	2.82	3.01	3.19	1.69	2.08	2.07
ANIONS (MEQ/L)								
Alkalinity- CO3	0.02	0.00	1.52	0.00	0.00	2.92	2.96	2.40
Alkalinity-HCO3	3.24	3.14	0.58	3.12	2.98	0.00	0.00	0.00
Chloride	0.04	0.05	0.05	0.04	0.03	0.03	0.04	0.04
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.04	0.05	0.05	0.07	0.02	0.03	0.04	0.03
Sulfate	0.04	0.06	0.10	0.04	0.03	0.07	0.08	0.07
Hydroxyl Ion	0.00	0.00	0.10	0.00	0.00	3.16	1.58	0.16
Total Anions	3.38	3.29	2.40	3.27	3.07	6.22	4.71	2.70
CHARGE BALANCE (%)	0	-4	8	-4	2	-57	-39	-13
TDS (mg/L)	166	208	330	154	164	160	130	138
TSS (mg/L)	820	1152	1065	<1	2.5	30	32	41
Turbidity (NTU)	160	300	280	2.8	1.4	19	28	38

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location Date Sampled	GW-742 CRSP 01/27/95	GW-742 CRSP 05/07/95	GW-742 CRSP 07/30/95	GW-742 CRSP 11/09/95	GW-743 CRSP 01/31/95	GW-743 CRSP 05/07/95	GW-743 CRSP 07/31/95	GW-743 CRSP 11/13/95
CATIONS (MEQ/L)								
Calcium	1.90	1.90	1.75	1.80	1.55	1.55	1.50	1.55
Magnesium	1.81	1.73	1.73	1.81	1.48	1.48	1.56	1.56
Potassium	0.03	0.03	0.03	0.03	0.03	0.04	0.02	0.04
Sodium	0.03	0.03	0.03	0.03	0.04	0.05	0.04	0.05
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	.	.	.	.	.	.	.	.
Total Cations	3.77	3.69	3.53	3.67	3.10	3.11	3.13	3.21
ANIONS (MEQ/L)								
Alkalinity- CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	3.34	3.50	3.38	3.40	2.86	2.90	2.98	2.92
Chloride	0.05	0.04	0.05	0.04	0.08	0.06	0.06	0.06
Fluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.00	0.00	0.00	0.00	0.09	0.06	0.06	0.07
Sulfate	0.25	0.27	0.27	0.26	0.10	0.07	0.07	0.08
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	3.64	3.81	3.70	3.70	3.12	3.09	3.17	3.14
CHARGE BALANCE (%)	2	-2	-2	-0	-0	0	-1	1
TDS (mg/L)	188	198	198	190	186	168	152	106
TSS (mg/L)	2	<1	<1	<1	<1	1	<1	<1
Turbidity (NTU)	15	2.4	13	10	1.4	1	1	0.65

APPENDIX I
Ion-Charge Balance Calculations, 1995

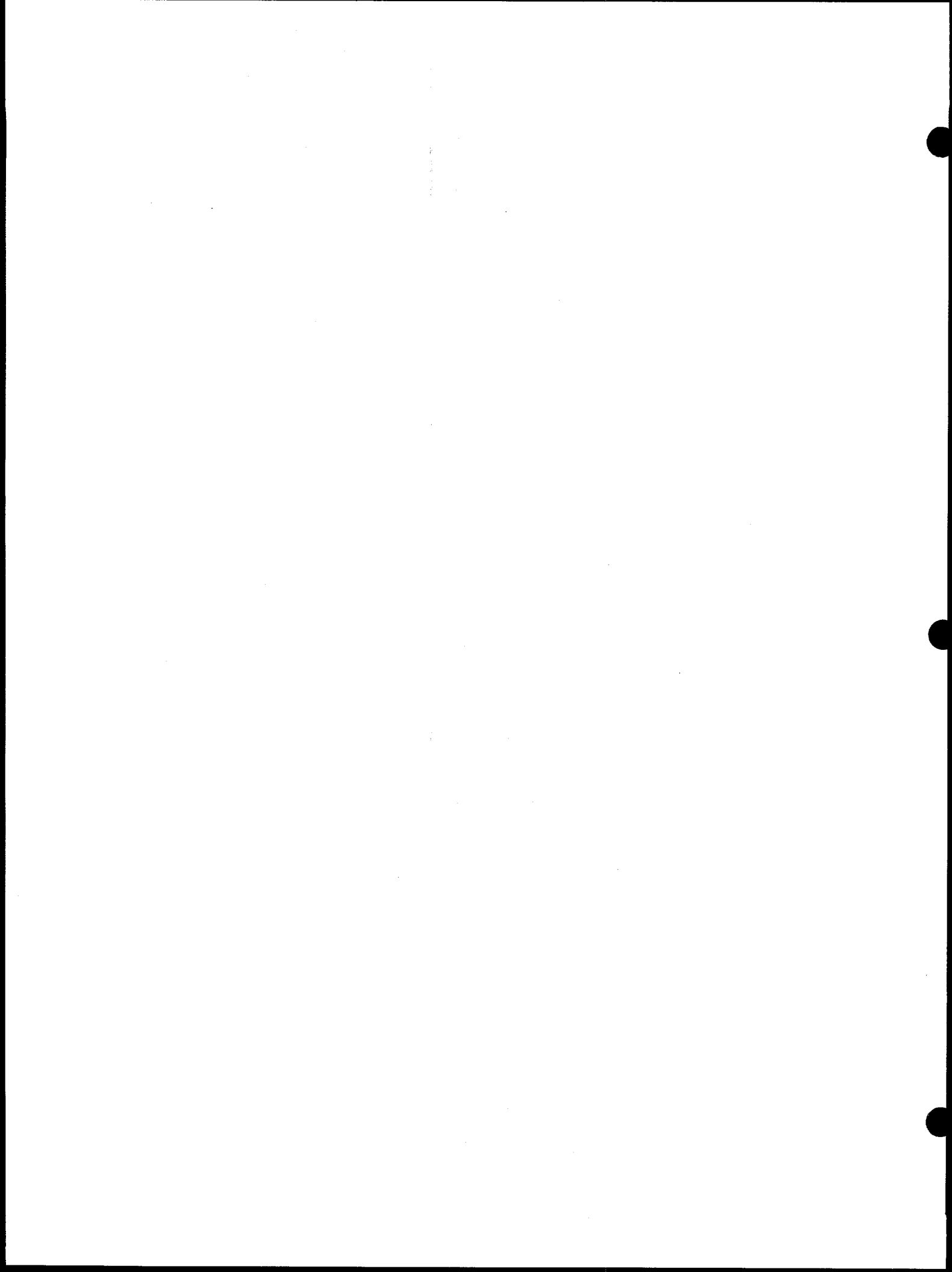
Sampling Point Location Date Sampled	GW-757 LII 01/09/95	GW-757 LII 07/11/95	GW-757 LII 10/06/95	GW-796 LV 04/12/95	GW-796 LV 10/08/95	GW-797 LV 04/11/95	GW-797 LV 10/08/95	GW-798 CDLVI 04/11/95	GW-798 CDLVI 10/08/95
CATIONS (MEQ/L)									
Calcium	1.65	1.50	1.65	1.00	1.10	1.70	1.55	1.40	1.35
Magnesium	1.40	1.40	1.65	1.15	1.15	1.65	1.48	1.40	1.23
Potassium	0.04	0.07	0.05	0.07	0.07	0.03	0.02	0.04	0.04
Sodium	0.06	0.11	0.22	0.05	0.04	0.03	0.05	0.03	0.03
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	.	.	.	0.00	0.00	0.00	0.00	0.00	0.00
Total Cations	3.14	3.08	3.56	2.27	2.37	3.41	3.10	2.86	2.66
ANIONS (MEQ/L)									
Alkalinity- CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	2.82	2.82	3.26	2.28	2.36	3.18	3.02	2.56	2.66
Chloride	0.07	0.07	0.06	0.06	0.05	0.05	0.04	0.09	0.04
Fluoride	0.11	0.09	0.08	0.00	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.00	0.02	0.02	0.04	0.02	0.04	0.03	0.07	0.06
Sulfate	0.21	0.23	0.20	0.04	0.03	0.04	0.05	0.06	0.05
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	3.21	3.23	3.62	2.42	2.46	3.30	3.14	2.77	2.80
CHARGE BALANCE (%)	-1	-3	-1	-3	-2	2	-1	2	-3
TDS (mg/L)	140	164	200	144	140	184	300	164	124
TSS (mg/L)	4	<1	4	1	3	1.5	1	<1	<1
Turbidity (NTU)	2.3	1.7	4.9	1.5	4.3	2.5	1.7	0.8	0.65

APPENDIX I
Ion-Charge Balance Calculations, 1995

Sampling Point Location Date Sampled	GW-799 LV 04/06/95	GW-799 LV 10/07/95	GW-801 LV 04/13/95	GW-801 LV 10/09/95	GW-827 CDLVI 04/05/95	GW-827 CDLVI 10/16/95	SCR2.2SP CRSP 03/15/95
CATIONS (MEQ/L)							
Calcium	1.35	1.35	1.45	1.45	1.50	1.45	2.40
Magnesium	1.32	1.23	1.40	1.40	1.40	1.40	0.58
Potassium	0.02	0.02	0.03	0.02	0.03	0.03	0.02
Sodium	0.03	0.04	0.03	0.03	0.03	0.04	0.11
Hydrogen Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ammonia Nitrogen	0.00	0.00	0.00	0.00	0.00	0.00	.
Total Cations	2.72	2.64	2.91	2.89	2.96	2.91	3.10
ANIONS (MEQ/L)							
Alkalinity- CO3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alkalinity-HCO3	2.58	2.64	2.86	2.90	2.94	2.88	2.86
Chloride	0.05	0.04	0.08	0.05	0.05	0.04	0.13
Fluoride	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Nitrate Nitrogen	0.08	0.07	0.02	0.02	0.02	0.03	0.15
Sulfate	0.03	0.03	0.06	0.05	0.04	0.04	0.17
Hydroxyl Ion	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Anions	2.74	2.78	3.03	3.03	3.05	2.99	3.30
CHARGE BALANCE (%)	-0	-3	-2	-2	-2	-1	-3
TDS (mg/L)	164	134	160	150	160	180	224
TSS (mg/L)	<1	11	<1	<1	<1	<1	<1
Turbidity (NTU)	3.2	14	2.5	3.7	0.8	0.8	3.4

APPENDIX J

**TRACE METAL CONCENTRATIONS THAT EXCEED
MAXIMUM CONTAMINANT LEVELS**



EXPLANATION

SAMPLING POINT:

GW	-	Monitoring Well
CBS-1	-	Chestnut Branch Spring 1
SCR2.2SP	-	South Chestnut Ridge Spring 2.2
1090	-	Historical 1000-Series Monitoring Well

LOCATION:

ADB	-	Ash Disposal Basin
CDL VI	-	Construction/Demolition Landfill VI
CDL VII	-	Construction/Demolition Landfill VII
CRBAWP	-	Chestnut Ridge Borrow Area Waste Pile
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
LIV	-	Industrial Landfill IV
LV	-	Industrial Landfill V
RQ	-	Rogers Quarry
UNCS	-	United Nuclear Corporation Site

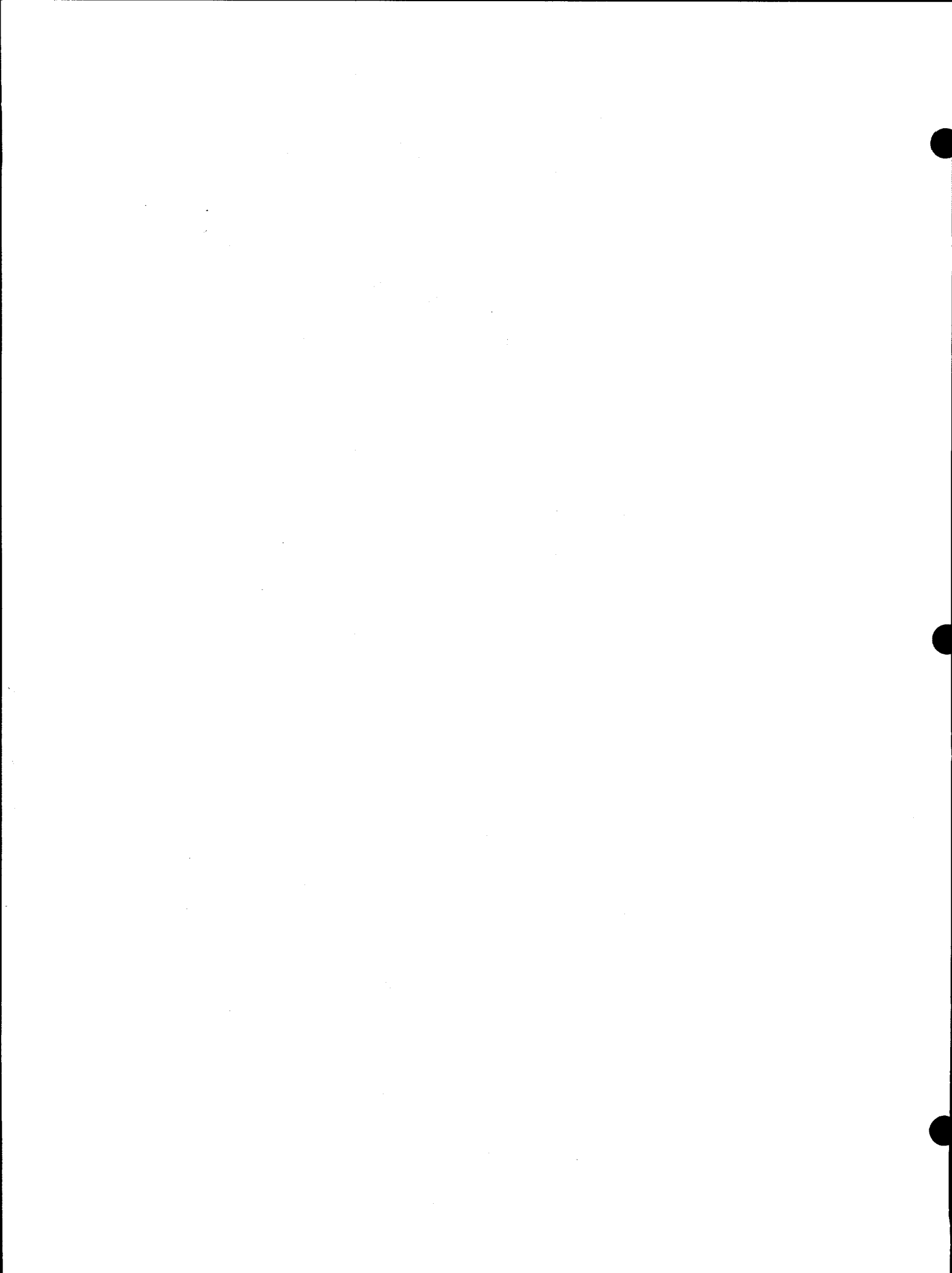
NOTES:

<	-	Compound less than detection limit
mg/L	-	milligrams per liter
.	-	Total Metal Concentration less than the Maximum Contaminant Level (MCL)
TOT	-	Total Concentration (Unfiltered Sample)
DIS	-	Dissolved Concentration (Filtered Sample)
TSS	-	Total Suspended Solids
NTU	-	Nephelometric Turbidity Units
AAS	-	Atomic Absorption Spectroscopy
ICAP	-	Inductively Coupled Arc Plasma Spectroscopy
CVAA	-	Cold Vapor Atomic Absorption Spectroscopy

MCLS:

<u>Metal</u>	<u>Maximum Contaminant Level (mg/L)</u>
Barium (ICP)	2.0
Cadmium (AAS)	0.005
Chromium (AAS)	0.10
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 J
Trace Metal Concentrations That Exceed
Maximum Contaminant Levels, 1995

WELL IDENTITY	WASTE DISPOSAL SITE NAME	GW-145	GW-145	GW-159	GW-159	GW-160	GW-160	GW-302	GW-302	GW-302	GW-302
DATE SAMPLED		GW-145	GW-145	GW-159	GW-159	GW-160	GW-160	GW-302	GW-302	GW-302	GW-302
SAMPLE		03/24/95	03/24/95	10/25/95	10/25/95	11/02/95	11/02/95	04/19/95	04/19/95	10/08/95	10/08/95
SAMPLE TYPE		TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
BARIUM	ICAP (MG/L)	.	.	.	.	.	.	.	.	.	.
CADMIUM	AAS (MG/L)	.	.	.	.	.	.	.	.	.	.
CHROMIUM	ICAP (MG/L)	0.007	<0.003	.	.	<0.002	<0.003	.	.	.	.
CHROMIUM	AAS (MG/L)	.	.	.	.	0.0082	.	.	.	.	.
CHROMIUM	ICAP (MG/L)	.	.	.	.	0.31	<0.01	0.34	<0.01	0.23	<0.01
LEAD	AAS (MG/L)	.	.	0.12	<0.004	0.14	<0.01	0.3	<0.01	0.26	<0.01
LEAD	ICAP (MG/L)	.	.	0.16	<0.05	0.55	<0.004	.	.	.	.
MERCURY	CVAA (MG/L)	.	.	.	.	0.52	<0.05	.	.	.	.
TOTAL SUSPENDED SOLIDS	(MG/L)	.	.	2.5	.	5365	.	2	.	2	.
TURBIDITY	(NTU)	.	.	2.9	.	7600	.	18	.	9.2	.

APPENDIX J
Trace Metal Concentrations That Exceed
Maximum Contaminant Levels, 1995

WELL IDENTITY	WASTE DISPOSAL SITE NAME	GW-511	GW-511	GW-539	GW-539	GW-757	GW-757
DATE SAMPLED	DATE SAMPLED	CRSP	CRSP	LII	LII	LII	LII
SAMPLE	SAMPLE	TOT	DIS	TOT	DIS	TOT	DIS
SAMPLE TYPE	SAMPLE TYPE						
BARIUM	ICAP (MG/L)	.	.	.	.	.	.
CADMIUM	AAS (MG/L)	.	.	.	.	.	.
CADMIUM	ICAP (MG/L)	.	.	.	.	.	.
CHROMIUM	AAS (MG/L)	.	.	0.19	<0.01	0.12	0.067
CHROMIUM	ICAP (MG/L)	.	.	0.19	<0.01	0.1	0.055
LEAD	AAS (MG/L)	.	.	.	.	.	.
LEAD	ICAP (MG/L)	<0.05	0.072	.	.	.	.
MERCURY	CVAA (MG/L)	.	.	.	.	.	.
TOTAL SUSPENDED SOLIDS	(MG/L)	<1	.	6	.	4	.
TURBIDITY	(NTU)	0.7	.	3.6	.	2.3	.

APPENDIX K
NITRATE CONCENTRATIONS

EXPLANATION

SAMPLING POINT:

GW	-	Monitoring Well
CBS-1	-	Chestnut Branch Spring 1
SCR2.2SP	-	South Chestnut Ridge Spring 2.2
1090	-	Historical 1000-Series Monitoring Well

LOCATION:

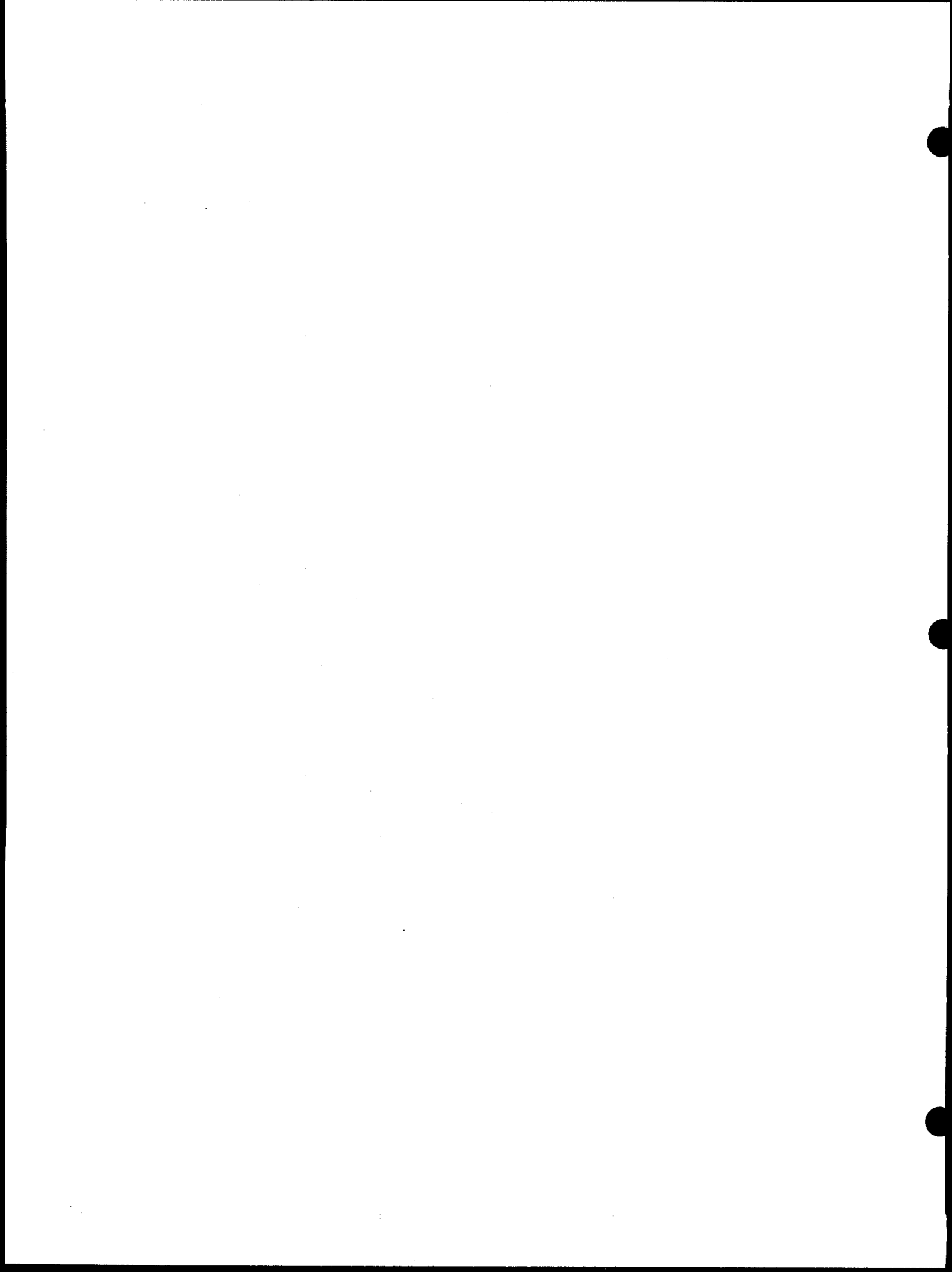
ADB	-	Ash Disposal Basin
CDL VI	-	Construction/Demolition Landfill VI
CDL VII	-	Construction/Demolition Landfill VII
CRBAWP	-	Chestnut Ridge Borrow Area Waste Pile
CRSDB	-	Chestnut Ridge Sediment Disposal Basin
CRSP	-	Chestnut Ridge Security Pits
ECRWP	-	East Chestnut Ridge Waste Pile
KHQ	-	Kerr Hollow Quarry
LII	-	Industrial Landfill II
LIV	-	Industrial Landfill IV
LV	-	Industrial Landfill V
RQ	-	Rogers Quarry
UNCS	-	United Nuclear Corporation Site

NOTES:

All concentrations reported as nitrate (as N) in milligrams per liter (mg/L).

Results reported as less than the detection limit were not used to calculate mean concentrations.

- - Not sampled; average not calculated (all results less than detection).
- < - Not detected at the minimum attainable detection limit.
- h - Qualifier denoting holding time for analysis was exceeded.



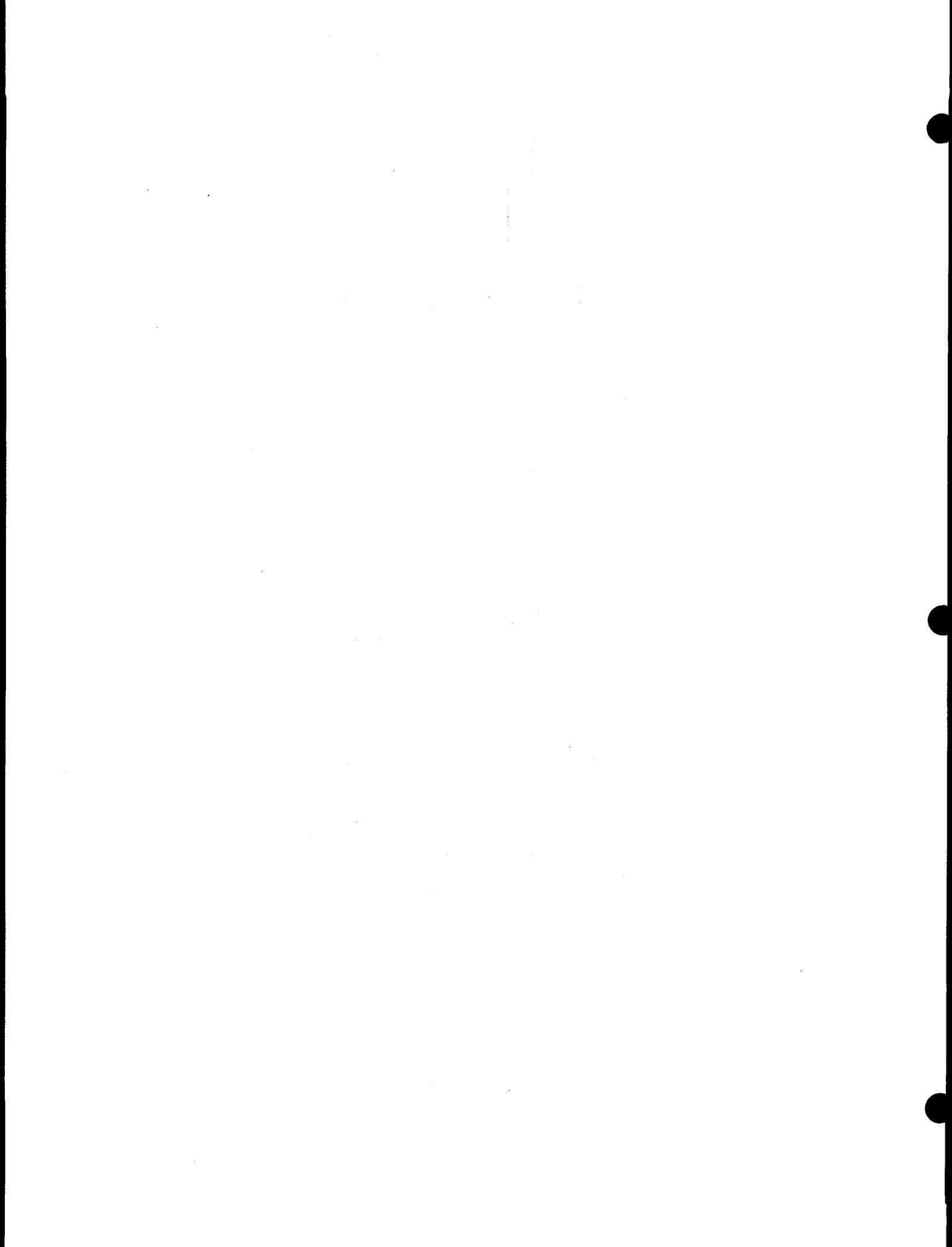
Appendix K
Average Annual Detected Nitrate Concentrations (mg/L), 1995

Sampling Point	Location	No. Detected	1995 Average	1st Q	2nd Q	3rd Q	4th Q
1090	UNCS	2	0.94	.	1	.	0.87
CBS-1	LV	2	0.66	.	0.68	.	0.64
GW-141	LIV	2	0.78	0.88	.	0.67	.
GW-142	KHQ	2	0.86	1.2	<0.2	0.52	<0.2
GW-143	KHQ	0	.	<0.2	<0.2	<0.2	<0.2
GW-144	KHQ	4	2.07	1.6	2	2.2	2.46
GW-145	KHQ	4	0.54	0.47	0.35	0.95	0.384
GW-146	KHQ	3	0.71	0.66	0.5	0.97	<0.2
GW-147	KHQ	4	1.31	1.2	1.1	1.6	1.34
GW-156	CRSDB	4	0.58	0.56	0.71	0.62	0.446
GW-158	CRSDB	0	.	<0.2	<0.2	<0.2	.
GW-159	CRSDB	4	0.57	0.72	0.65	0.49	0.435
GW-160	CRBAWP	2	0.90	.	1	.	0.795
GW-161	CRBAWP	2	0.44	.	0.54	.	0.34
GW-175	CRSP	4	0.59	0.68	0.28	0.63	0.763
GW-177	CRSP	3	0.68	0.69	<0.2	0.49	0.847
GW-181	CRSP	3	0.31	0.26	0.4	<0.2	0.27
GW-184	RQ	2	4.34	.	2.8	.	5.87
GW-186	RQ	0	.	.	<0.2	.	<0.2
GW-187	RQ	1	0.65	.	0.65	.	<0.2
GW-188	RQ	2	0.33	.	0.37	.	0.28
GW-203	UNCS	2	1.30	.	1.4	.	1.2
GW-205	UNCS	2	3.38	.	6.3	.	0.46
GW-217	LIV	2	0.85	1.1	.	0.59	.
GW-221	UNCS	2	0.83	.	0.9	.	0.75
GW-231	KHQ	4	1.07	1	1.1	1.4	0.76
GW-241	CRSDB	2	0.62	0.36	<0.2	0.88	.
GW-292	ECRWP	2	0.79	.	0.67	.	0.9
GW-293	ECRWP	2	0.72	.	0.58	.	0.86
GW-294	ECRWP	2	2.70	.	2.7	.	2.7
GW-296	ECRWP	2	0.64	.	0.47	.	0.8
GW-298	CRBAWP	1	0.42	.	0.42	.	<0.2
GW-299	CRBAWP	2	0.30	.	0.37	.	0.227
GW-300	CRBAWP	2	0.38	.	0.5	.	0.254
GW-301	CRBAWP	2	0.52	.	0.64	.	0.404
GW-302	UNCS	2	1.15	.	1.2	.	1.1
GW-303	CRSDB	0	.	<0.2	<0.2	<0.2	.
GW-304	CRSDB	3	0.53	0.58	0.54	0.46	.
GW-305	LIV	2	0.56	0.68	.	0.44	.
GW-321	ADB	2	0.44	.	0.45	.	0.424
GW-339	UNCS	2	1.00	.	1.1	.	0.89
GW-511	CRSP	4	0.26	0.26	0.22	0.28	0.28
GW-512	ADB	0	.	.	<0.2	.	<0.2
GW-513	ADB	2	0.30	.	0.33	.	0.26

Appendix K
Average Annual Detected Nitrate Concentrations (mg/L), 1995

Sampling Point	Location	No. Detected	1995 Average	1st Q	2nd Q	3rd Q	4th Q
GW-514	ADB	1	0.41	.	0.41	.	<0.2
GW-521	LIV	2	0.60	0.63	.	0.56	.
GW-522	LIV	2	0.70	0.81	.	0.58	.
GW-539	LII	3	0.70	1	.	0.69	0.42
GW-540	CDLVI	2	0.40	.	0.39	.	0.41
GW-541	CDLVI	0	.	.	<0.2	.	<0.2h
GW-542	CDLVI	2	0.67	.	0.68	.	0.65
GW-543	CDLVI	2	0.47	.	0.57	.	0.373
GW-544	CDLVI	2	0.82	.	0.84	.	0.797
GW-546	CDLVI	2	0.39	.	0.39	.	0.39
GW-557	LV	2	1.05	.	1.1	.	1
GW-560	CDLVII	2	0.36	.	0.39	.	0.32
GW-562	CDLVII	2	0.55	.	0.58	.	0.52
GW-564	CDLVII	2	0.75	.	0.68	.	0.81
GW-608	CRSP	4	0.75	0.77	0.48	0.67	1.08
GW-609	CRSP	4	1.22	1.3	1.1	1.3	1.17
GW-610	CRSP	4	0.89	1	0.81	0.85	0.91
GW-611	CRSP	4	3.31	3.3	3.3	3.2	3.44
GW-709	LII	3	0.45	0.58	.	0.43	0.33
GW-731	CRSDB	4	0.58	0.67	0.65	0.57	0.418
GW-732	CRSDB	4	0.60	0.54	0.68	0.69	0.485
GW-742	CRSP	0	.	<0.2	<0.2	<0.2	<0.2
GW-743	CRSP	4	0.99	1.3	0.81	0.8	1.05
GW-757	LII	2	0.28	<0.2	.	0.32	0.24
GW-796	LV	2	0.42	.	0.52	.	0.32
GW-797	LV	2	0.48	.	0.56	.	0.39
GW-798	CDLVII	2	0.90	.	1	.	0.8
GW-799	LV	2	1.03	.	1.1	.	0.96
GW-801	LV	2	0.33	.	0.32	.	0.34
GW-827	CDLVI	2	0.37	.	0.33	.	0.4
SCR2.2SP	CRSP	1	2.10	2.1	.	.	.

APPENDIX L
QA/QC DATA SUMMARIES



EXPLANATION

SAMPLING POINT:

GW	-	Monitoring Well
CBS-1	-	Chestnut Branch Spring 1
SCR2.2SP	-	South Chestnut Ridge Spring 2.2
1090	-	Historical 1000-Series Monitoring Well

LOCATION:

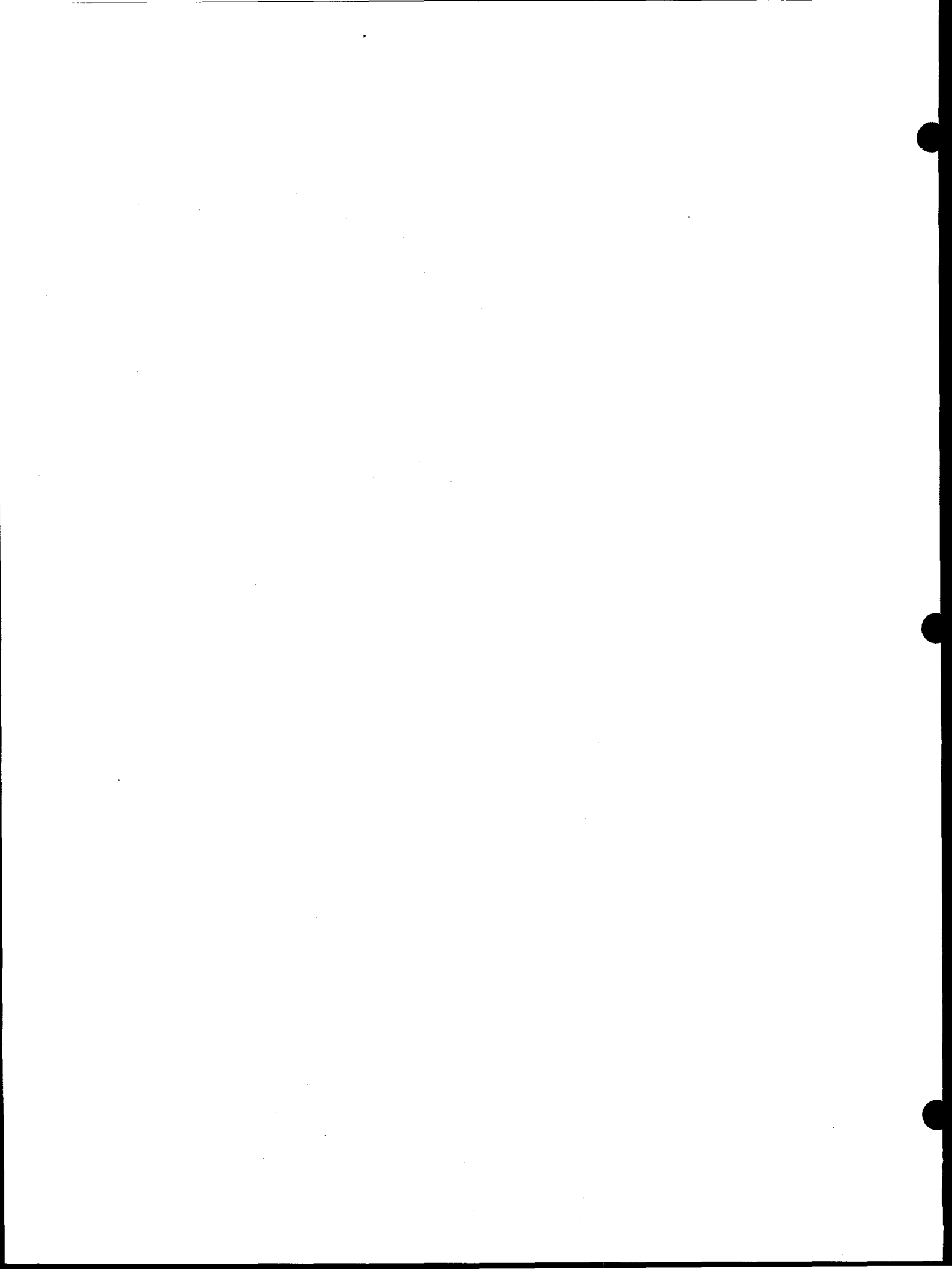
ADB	-	Ash Disposal Basin
CDL VI	-	Construction/Demolition Landfill VI
CDL VII	-	Construction/Demolition Landfill VII
CRBAWP	-	Chestnut Ridge Borrow Area Waste Pile
CRSDB	-	Chestnut Ridge Sediment Disposal Basin
CRSP	-	Chestnut Ridge Security Pits
ECRWP	-	East Chestnut Ridge Waste Pile
EXP-SW	-	Exit Pathway, Surface Water Sampling Location
KHQ	-	Kerr Hollow Quarry
LII	-	Industrial Landfill II
LIV	-	Industrial Landfill IV
LV	-	Industrial Landfill V
RQ	-	Rogers Quarry
UNCS	-	United Nuclear Corporation Site

NOTES:

.	-	Not analyzed
U	-	Compound not detected at the reported minimum attainable detection limit

UNITS:

ug/L	-	micrograms per liter
mg/L	-	milligrams per liter
pCi/L	-	picoCuries per liter
Bq/L	-	Becquerels per liter
CE+/-	-	Counting Error (two standard deviations)



Appendices L.2 through L.4 show only results for the target compound list of VOCs that were detected in each type of QA/QC sample. Ethanol was the only organic compound not in the target compound list that was detected, and was detected only in the following first and second quarter trip and laboratory blank samples:

Trip Blank Number	Date Sampled	Ethanol (ug/L)		Laboratory Blank Number	Date Sampled	Ethanol (ug/L)
950104-284	1/4/95	620		950109-046	1/4/95	570
950105-054	1/4/95	800		950111-001	1/9/95	560
950110-044	1/9/95	630		950112-001	1/10/95	1100
950110-A12	1/9/95	810		950407-001	4/5/95	780
950111-089	1/10/95	800		950411-001	4/6/95	750
950406-016	4/5/95	450		950421-001	4/20/95	920
950407-013	4/6/95	710		950501-002	4/26/95	870
950420-131	4/20/95	770		950502-001	5/1/95	1000
950427-126	4/26/95	530		950504-001	5/3/95	860
950427-199	4/27/95	420				
950501-131	5/1/95	610				
950502-093	5/2/95	700				
950503-139	5/3/95	490				

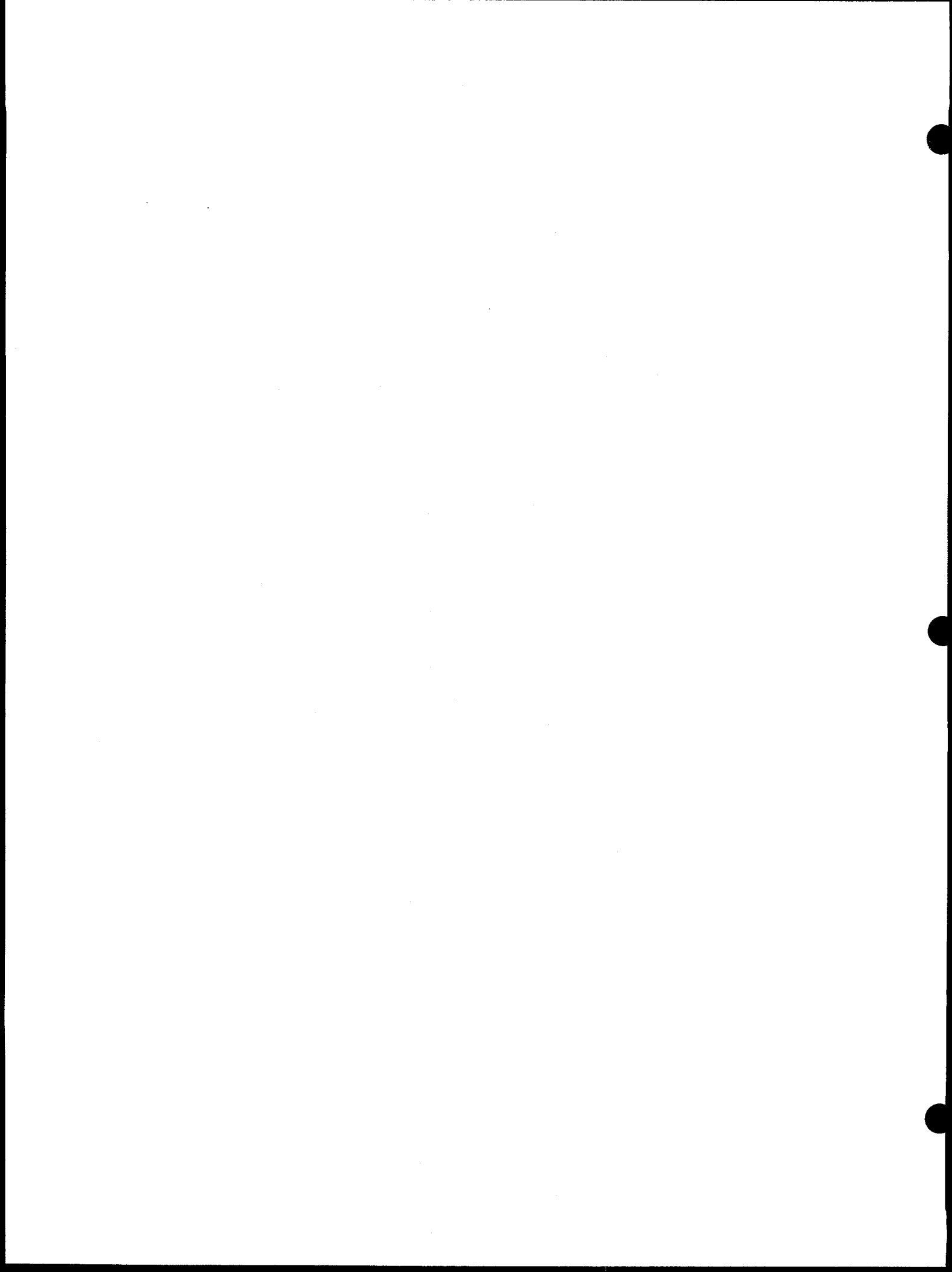
Compounds Detected in QA/QC Samples, CY 1995

Trip Blank Samples	Quarter of CY 1995				Annual Total
	First	Second	Third	Fourth	
Total Number of Samples	23	42	20	38	123
Samples With VOCs	19	24	14	34	91
Percent Contaminated	83	57	70	89	75
Acetone	4	4	1	4	13
2-Butanone	4	1	0	7	12
1,2-Dichloroethane	0	1	0	0	1
Ethylbenzene	0	0	0	2	2
2-Hexanone	0	0	0	1	1
Methylene chloride	3	2	0	2	7
Toluene	5	0	0	0	5
1,1,1-Trichloroethane	19	22	14	31	86
Xylenes	0	0	0	2	2
Total Organic Halide	1	0	0	0	1

Laboratory Blank Samples	Quarter of CY 1995				Annual Total
	First	Second	Third	Fourth	
Total Number of Samples	15	24	10	21	70
Samples With VOCs	3	6	1	5	15
Percent Contaminated	20	25	10	24	21
Acetone	2	4	0	1	7
2-Butanone	3	1	1	4	9
Ethylbenzene	0	0	0	1	1
Methylene chloride	0	2	0	0	2
Toluene	2	0	0	0	2
Xylenes	0	0	0	1	1

Rinsate Samples	Quarter of CY 1995				Annual Total
	First	Second	Third	Fourth	
Total Number of Samples	6	10	6	11	32
Samples With VOCs	3	2	4	7	15
Percent Contaminated	50	20	67	64	47
Acetone	2	0	0	3	5
2-Butanone	1	0	0	1	2
Chloroform	0	0	0	1	1
Ethylbenzene	0	0	0	2	2
Methylene chloride	2	0	0	2	4
Toluene	1	0	0	1	2
1,1,1-Trichloroethane	3	2	4	4	13
Xylenes	0	0	0	2	2

Field Blank Samples	Quarter of CY 1995				Annual Total
	First	Second	Third	Fourth	
Total Number of Samples	1	1	1	1	4
Samples With VOCs	1	1	0	1	3
Percent Contaminated	100	100	0	100	75
1,1,1-Trichloroethane	1	1	0	1	3



APPENDIX L.1

**CORRELATION OF GROUNDWATER AND SURFACE WATER
SAMPLES TO ASSOCIATED BLANKS**

APPENDIX L.1
Correlation of Samples to Associated Blanks
First Quarter 1995

Sampling Point	Location	Date Sampled	Sample No.	Trip Blank No.	Lab Blank No.
GW-141	LIV	01/09/95	950110-035	950110-043	950110-A28
GW-141	LIV	01/09/95	950110-037	950110-044	950111-001
GW-141	LIV	01/09/95	950110-038	950110-045	950119-065
GW-142	KHQ	01/10/95	950111-100	950111-102	950112-006
GW-142	KHQ	03/20/95	950320-173		
GW-143	KHQ	01/17/95	950118-012	950118-016	950123-007
GW-144	KHQ	01/18/95	950118-053	950118-055	950123-047
GW-144	KHQ	03/22/95	950322-085		
GW-145	KHQ	01/18/95	950118-051	950118-055	950123-047
GW-145	KHQ	03/24/95	950324-048		
GW-146	KHQ	01/17/95	950118-010	950118-016	950123-007
GW-146	KHQ	03/23/95	950324-008		
GW-147	KHQ	01/15/95	950117-115	950117-119	950119-019
GW-156	CRSDB	01/18/95	950119-022	950119-017	950123-007
GW-158	CRSDB	01/20/95	950120-125	950120-127	950124-012
GW-159	CRSDB	01/15/95	950117-076	950117-080	950119-019
GW-175	CRSP	02/14/95	950214-094	950214-098	950215-011
GW-177	CRSP	02/13/95	950213-105	950213-107	950214-014
GW-181	CRSP	01/24/95	950125-073	950125-079	950126-044
GW-217	LIV	01/04/95	950104-279	950104-283	950105-041
GW-217	LIV	01/04/95	950104-281	950104-284	950109-046
GW-217	LIV	01/04/95	950104-282	950104-285	950117-088
GW-231	KHQ	01/15/95	950117-117	950117-119	950119-019
GW-241	CRSDB	01/20/95	950120-129	950120-131	950124-012
GW-303	CRSDB	01/19/95	950119-093	950119-095	950123-007
GW-304	CRSDB	01/15/95	950117-078	950117-080	950119-019
GW-305	LIV	01/10/95	950111-077	950111-088	950112-006
GW-305	LIV	01/10/95	950111-079	950111-089	950112-001
GW-305	LIV	01/10/95	950111-080	950111-090	950119-068
GW-321	ADB	01/10/95	950111-103	950111-102	
GW-511	CRSP	01/24/95	950125-075	950125-079	950126-044
GW-521	LIV	01/09/95	950110-031	950110-043	950110-A28
GW-521	LIV	01/09/95	950110-033	950110-044	950111-001
GW-521	LIV	01/09/95	950110-034	950110-045	950119-065
GW-522	LIV	01/10/95	950111-081	950111-088	950112-006
GW-522	LIV	01/10/95	950111-083	950111-089	950112-001
GW-522	LIV	01/10/95	950111-084	950111-090	950119-068
GW-539	LII	01/04/95	950105-049	950105-053	950109-042
GW-539	LII	01/04/95	950105-051	950105-054	950109-046
GW-539	LII	01/04/95	950105-052	950105-055	950117-088
GW-608	CRSP	02/02/95	950203-049	950203-051	950208-015
GW-609	CRSP	02/15/95	950216-005	950216-008	950217-009
GW-610	CRSP	01/31/95	950201-003	950201-005	950201-008
GW-611	CRSP	02/14/95	950214-096	950214-098	950215-011
GW-709	LII	01/09/95	950110-996	950110-A11	950110-A28
GW-709	LII	01/09/95	950110-998	950110-A12	950111-001
GW-709	LII	01/09/95	950110-999	950110-A13	950119-065
GW-731	CRSDB	01/17/95	950118-007	950118-009	950119-019
GW-732	CRSDB	01/18/95	950119-015	950119-017	950123-007
GW-742	CRSP	01/27/95	950130-040	950130-042	950201-008
GW-743	CRSP	01/31/95	950201-001	950201-005	950201-008
GW-757	LII	01/09/95	950110-A04	950110-A11	950110-A28
GW-757	LII	01/09/95	950110-A06	950110-A12	950111-001
GW-757	LII	01/09/95	950110-A07	950110-A13	950119-065
SCR2.2SP	EXP-SW	03/15/95	950316-063	950316-065	950317-011

APPENDIX L.1
Correlation of Samples to Associated Blanks
Second Quarter 1995

Sampling Point	Location	Date Sampled	Sample No.	Trip Blank No.	Lab Blank No.
1090	UNCS	04/20/95	950420-101	950420-104	950424-009
CBS-1	CDLVII	04/17/95	950417-087	950417-089	950418-003
CBS-1	CDLVII	04/17/95	950417-090	950417-092	950418-098
CBS-1	CDLVII	04/17/95	950417-091	950417-093	950426-003
GW-142	KHQ	04/20/95	950421-004	950421-006	950424-009
GW-143	KHQ	04/24/95	950425-053	950425-057	950426-301
GW-144	KHQ	04/25/95	950426-261	950426-265	950427-001
GW-145	KHQ	04/26/95	950426-310	950426-312	950426-301
GW-146	KHQ	04/24/95	950425-055	950425-057	950427-001
GW-147	KHQ	04/21/95	950421-056	950421-058	950424-009
GW-156	CRSDB	04/07/95	950410-044	950410-041	950411-050
GW-158	CRSDB	04/13/95	950413-166	950413-168	950417-001
GW-159	CRSDB	04/06/95	950407-055	950407-057	950410-046
GW-160	CRBAWP	04/26/95	950427-122	950427-125	950501-034
GW-160	CRBAWP	04/26/95	950427-124	950427-126	950501-002
GW-161	CRBAWP	04/20/95	950420-117	950420-119	950424-009
GW-161	CRBAWP	04/20/95	950420-130	950420-131	950421-001
GW-175	CRSP	05/15/95	950516-001	950516-005	950516-021
GW-177	CRSP	05/11/95	950512-004	950512-003	950515-003
GW-181	CRSP	05/02/95	950502-135	950502-137	950505-001
GW-184	RQ	05/01/95	950501-140	950501-145	950504-016
GW-186	RQ	05/03/95	950503-147	950503-149	950505-001
GW-187	RQ	05/02/95	950502-104	950502-106	950504-016
GW-188	RQ	05/01/95	950501-138	950501-145	950504-016
GW-203	UNCS	04/18/95	950418-196	950418-198	950419-002
GW-205	UNCS	04/18/95	950418-199	950418-198	950419-002
GW-221	UNCS	04/19/95	950420-007	950420-009	950420-023
GW-231	KHQ	04/21/95	950421-054	950421-058	950424-009
GW-241	CRSDB	04/09/95	950410-058	950410-057	950411-050
GW-292	ECRWP	04/24/95	950424-139	950424-141	950426-301
GW-293	ECRWP	04/23/95	950424-068	950424-070	950426-301
GW-294	ECRWP	04/22/95	950423-004	950423-003	950425-005
GW-295	CRBAWP	05/03/95	950503-135	950503-137	950505-001
GW-295	CRBAWP	05/03/95	950503-138	950503-139	950504-001
GW-296	ECRWP	04/22/95	950423-001	950423-003	950425-005
GW-298	CRBAWP	05/02/95	950502-089	950502-091	950504-016
GW-298	CRBAWP	05/02/95	950502-092	950502-093	950504-001
GW-299	CRBAWP	05/01/95	950501-127	950501-129	950502-023
GW-299	CRBAWP	05/01/95	950501-130	950501-131	950502-001
GW-300	CRBAWP	04/27/95	950427-200	950427-197	950502-023
GW-300	CRBAWP	04/27/95	950427-202	950427-199	950501-002
GW-301	CRBAWP	04/27/95	950427-195	950427-197	950501-034
GW-301	CRBAWP	04/27/95	950427-198	950427-199	950501-002
GW-302	UNCS	04/19/95	950420-001	950420-009	950420-023
GW-303	CRSDB	04/09/95	950410-055	950410-057	950411-050
GW-304	CRSDB	04/06/95	950407-060	950407-057	950410-046
GW-321	ADB	04/25/95	950426-266	950426-270	950427-001
GW-339	UNCS	04/19/95	950420-003	950420-009	950420-023
GW-511	CRSP	05/03/95	950503-140	950503-145	950505-001
GW-512	ADB	04/26/95	950427-127	950427-131	950501-034
GW-513	ADB	04/25/95	950426-268	950426-270	950427-001
GW-514	ADB	04/27/95	950427-211	950427-213	950502-023
GW-540	CDLVI	04/04/95	950405-007	950405-009	950405-067
GW-540	CDLVI	04/04/95	950405-010	950405-011	950411-088
GW-541	CDLVI	04/05/95	950406-032	950406-029	950406-057

APPENDIX L.1
Correlation of Samples to Associated Blanks
Second Quarter 1995

Sampling Point	Location	Date Sampled	Sample No.	Trip Blank No.	Lab Blank No.
1090	UNCS	04/20/95	950420-101	950420-104	950424-009
CBS-1	CDLVII	04/17/95	950417-087	950417-089	950418-003
CBS-1	CDLVII	04/17/95	950417-090	950417-092	950418-098
CBS-1	CDLVII	04/17/95	950417-091	950417-093	950426-003
GW-142	KHQ	04/20/95	950421-004	950421-006	950424-009
GW-143	KHQ	04/24/95	950425-053	950425-057	950426-301
GW-144	KHQ	04/25/95	950426-261	950426-265	950427-001
GW-145	KHQ	04/26/95	950426-310	950426-312	950426-301
GW-146	KHQ	04/24/95	950425-055	950425-057	950427-001
GW-147	KHQ	04/21/95	950421-056	950421-058	950424-009
GW-156	CRSDB	04/07/95	950410-044	950410-041	950411-050
GW-158	CRSDB	04/13/95	950413-166	950413-168	950417-001
GW-159	CRSDB	04/06/95	950407-055	950407-057	950410-046
GW-160	CRBAWP	04/26/95	950427-122	950427-125	950501-034
GW-160	CRBAWP	04/26/95	950427-124	950427-126	950501-002
GW-161	CRBAWP	04/20/95	950420-117	950420-119	950424-009
GW-161	CRBAWP	04/20/95	950420-130	950420-131	950421-001
GW-175	CRSP	05/15/95	950516-001	950516-005	950516-021
GW-177	CRSP	05/11/95	950512-004	950512-003	950515-003
GW-181	CRSP	05/02/95	950502-135	950502-137	950505-001
GW-184	RQ	05/01/95	950501-140	950501-145	950504-016
GW-186	RQ	05/03/95	950503-147	950503-149	950505-001
GW-187	RQ	05/02/95	950502-104	950502-106	950504-016
GW-188	RQ	05/01/95	950501-138	950501-145	950504-016
GW-203	UNCS	04/18/95	950418-196	950418-198	950419-002
GW-205	UNCS	04/18/95	950418-199	950418-198	950419-002
GW-221	UNCS	04/19/95	950420-007	950420-009	950420-023
GW-231	KHQ	04/21/95	950421-054	950421-058	950424-009
GW-241	CRSDB	04/09/95	950410-058	950410-057	950411-050
GW-292	ECRWP	04/24/95	950424-139	950424-141	950426-301
GW-293	ECRWP	04/23/95	950424-068	950424-070	950426-301
GW-294	ECRWP	04/22/95	950423-004	950423-003	950425-005
GW-295	CRBAWP	05/03/95	950503-135	950503-137	950505-001
GW-295	CRBAWP	05/03/95	950503-138	950503-139	950504-001
GW-296	ECRWP	04/22/95	950423-001	950423-003	950425-005
GW-298	CRBAWP	05/02/95	950502-089	950502-091	950504-016
GW-298	CRBAWP	05/02/95	950502-092	950502-093	950504-001
GW-299	CRBAWP	05/01/95	950501-127	950501-129	950502-023
GW-299	CRBAWP	05/01/95	950501-130	950501-131	950502-001
GW-300	CRBAWP	04/27/95	950427-200	950427-197	950502-023
GW-300	CRBAWP	04/27/95	950427-202	950427-199	950501-002
GW-301	CRBAWP	04/27/95	950427-195	950427-197	950501-034
GW-301	CRBAWP	04/27/95	950427-198	950427-199	950501-002
GW-302	UNCS	04/19/95	950420-001	950420-009	950420-023
GW-303	CRSDB	04/09/95	950410-055	950410-057	950411-050
GW-304	CRSDB	04/06/95	950407-060	950407-057	950410-046
GW-321	ADB	04/25/95	950426-266	950426-270	950427-001
GW-339	UNCS	04/19/95	950420-003	950420-009	950420-023
GW-511	CRSP	05/03/95	950503-140	950503-145	950505-001
GW-512	ADB	04/26/95	950427-127	950427-131	950501-034
GW-513	ADB	04/25/95	950426-268	950426-270	950427-001
GW-514	ADB	04/27/95	950427-211	950427-213	950502-023
GW-540	CDLVI	04/04/95	950405-007	950405-009	950405-067
GW-540	CDLVI	04/04/95	950405-010	950405-011	950411-088
GW-541	CDLVI	04/05/95	950406-032	950406-029	950406-057

APPENDIX L.1
Correlation of Samples to Associated Blanks
Second Quarter 1995

Sampling Point	Location	Date Sampled	Sample No.	Trip Blank No.	Lab Blank No.
GW-541	CDLVI	04/05/95	950406-034	950406-031	950411-088
GW-542	CDLVI	04/06/95	950407-026	950407-037	950410-046
GW-542	CDLVI	04/06/95	950407-028	950407-038	950413-016
GW-543	CDLVI	04/06/95	950407-029	950407-037	950410-046
GW-543	CDLVI	04/06/95	950407-031	950407-038	950413-016
GW-544	CDLVI	04/06/95	950407-032	950407-037	950410-046
GW-544	CDLVI	04/06/95	950407-034	950407-038	950413-016
GW-546	CDLVI	04/05/95	950406-027	950406-029	950406-057
GW-546	CDLVI	04/05/95	950406-030	950406-031	950411-088
GW-557	LV	04/06/95	950407-020	950407-011	950407-062
GW-557	LV	04/06/95	950407-022	950407-013	950411-001
GW-557	LV	04/06/95	950407-023	950407-015	950413-016
GW-560	CDLVII	04/05/95	950406-019	950406-014	950406-054
GW-560	CDLVII	04/05/95	950406-021	950406-016	950407-001
GW-560	CDLVII	04/05/95	950406-022	950406-018	950411-088
GW-562	CDLVII	04/05/95	950406-012	950406-014	950406-054
GW-562	CDLVII	04/05/95	950406-015	950406-016	950407-001
GW-562	CDLVII	04/05/95	950406-017	950406-018	950411-088
GW-564	CDLVII	04/06/95	950407-016	950407-011	950407-062
GW-564	CDLVII	04/06/95	950407-018	950407-013	950411-001
GW-564	CDLVII	04/06/95	950407-019	950407-015	950413-016
GW-608	CRSP	05/11/95	950512-001	950512-003	950512-028
GW-609	CRSP	05/16/95	950516-122	950516-127	950518-022
GW-610	CRSP	05/07/95	950508-032	950508-031	950508-027
GW-611	CRSP	05/15/95	950516-003	950516-005	950516-021
GW-731	CRSDB	04/07/95	950410-039	950410-041	950411-050
GW-732	CRSDB	04/07/95	950410-042	950410-041	950411-050
GW-742	CRSP	05/07/95	950508-029	950508-031	950508-027
GW-743	CRSP	05/07/95	950508-034	950508-031	950508-027
GW-796	LV	04/12/95	950413-113	950413-117	950417-001
GW-796	LV	04/12/95	950413-115	950413-118	950418-084
GW-796	LV	04/12/95	950413-116	950413-119	950426-003
GW-797	LV	04/11/95	950412-041	950412-036	950413-001
GW-797	LV	04/11/95	950412-043	950412-038	950412-052
GW-797	LV	04/11/95	950412-044	950412-040	950413-016
GW-798	CDLVII	04/11/95	950412-034	950412-036	950413-001
GW-798	CDLVII	04/11/95	950412-037	950412-038	950412-052
GW-798	CDLVII	04/11/95	950412-039	950412-040	950413-016
GW-799	CDLVII	04/06/95	950407-009	950407-011	950407-062
GW-799	CDLVII	04/06/95	950407-012	950407-013	950411-001
GW-799	CDLVII	04/06/95	950407-014	950407-015	950413-016
GW-801	LV	04/13/95	950413-139	950413-141	950417-001
GW-801	LV	04/13/95	950413-142	950413-143	950418-084
GW-801	LV	04/13/95	950413-144	950413-145	950426-003
GW-827	CDLVI	04/05/95	950406-035	950406-029	950406-057
GW-827	CDLVI	04/05/95	950406-037	950406-031	950412-123

APPENDIX L.1
Correlation of Samples to Associated Blanks
Third Quarter 1995

Sampling Point	Location	Date Sampled	Sample No.	Trip Blank No.	Lab Blank No.
GW-141	LIV	07/10/95	950711-057	950711-065	950713-021
GW-141	LIV	07/10/95	950711-059	950711-072	950717-062
GW-141	LIV	07/10/95	950711-060	950711-066	950716-015
GW-142	KHQ	07/14/95	950714-054	950714-056	950712-048
GW-143	KHQ	07/16/95	950717-106	950717-108	950718-003
GW-144	KHQ	07/16/95	950717-109	950717-108	950718-003
GW-145	KHQ	07/17/95	950718-004	950718-006	950718-003
GW-146	KHQ	07/17/95	950718-007	950718-006	950718-003
GW-147	KHQ	07/14/95	950714-057	950714-056	950712-048
GW-156	CRSDB	07/13/95	950713-120	950713-126	950712-048
GW-158	CRSDB	07/18/95	950719-290	950719-292	950726-030
GW-159	CRSDB	07/12/95	950713-068	950713-070	950717-003
GW-175	CRSP	08/01/95	950802-031	950802-033	950804-040
GW-177	CRSP	08/01/95	950801-069	950801-071	950804-040
GW-181	CRSP	07/28/95	950731-082	950731-084	950803-044
GW-217	LIV	07/10/95	950711-061	950711-065	950713-021
GW-217	LIV	07/10/95	950711-063	950711-072	950717-062
GW-217	LIV	07/10/95	950711-064	950711-066	950716-015
GW-231	KHQ	07/15/95	950717-103	950717-105	950718-035
GW-241	CRSDB	07/16/95	950717-118	950717-115	950718-003
GW-303	CRSDB	07/16/95	950717-113	950717-115	950718-035
GW-304	CRSDB	07/12/95	950713-071	950713-070	950717-003
GW-305	LIV	07/12/95	950713-026	950713-016	950717-003
GW-305	LIV	07/12/95	950713-028	950713-018	950714-001
GW-305	LIV	07/12/95	950713-029	950713-020	950721-006
GW-511	CRSP	07/29/95	950731-022	950731-024	950731-106
GW-521	LIV	07/11/95	950712-001	950712-003	950713-021
GW-521	LIV	07/11/95	950712-004	950712-005	950717-062
GW-521	LIV	07/11/95	950712-006	950712-007	950716-015
GW-522	LIV	07/12/95	950713-014	950713-016	950713-021
GW-522	LIV	07/12/95	950713-017	950713-018	950714-001
GW-522	LIV	07/12/95	950713-019	950713-020	950716-015
GW-539	LII	07/10/95	950711-001	950711-003	950711-016
GW-539	LII	07/10/95	950711-004	950711-005	950712-049
GW-539	LII	07/10/95	950711-006	950711-007	950716-015
GW-608	CRSP	07/31/95	950801-010	950801-012	950803-044
GW-609	CRSP	08/01/95	950802-028	950802-033	950804-040
GW-610	CRSP	07/31/95	950801-030	950801-034	950803-044
GW-611	CRSP	08/01/95	950801-066	950801-071	950804-040
GW-709	LII	07/10/95	950711-008	950711-003	950711-016
GW-709	LII	07/10/95	950711-010	950711-005	950712-049
GW-709	LII	07/10/95	950711-011	950711-007	950716-015
GW-731	CRSDB	07/13/95	950713-124	950713-126	950712-048
GW-732	CRSDB	07/13/95	950713-122	950713-126	950712-048
GW-732	CRSDB	08/14/95	950815-079		
GW-742	CRSP	07/30/95	950731-051	950731-053	950803-044
GW-743	CRSP	07/31/95	950801-032	950801-034	950803-044
GW-757	LII	07/11/95	950712-009	950712-011	950713-021
GW-757	LII	07/11/95	950712-012	950712-013	950714-001
GW-757	LII	07/11/95	950712-014	950712-015	950716-015

APPENDIX L.1
Correlation of Samples to Associated Blanks
Fourth Quarter 1995

Sampling Point	Location	Date Sampled	Sample No.	Trip Blank No.	Lab Blank No.
1090	UNCS	10/09/95	951010-011	951010-013	951012-008
CBS-1	CDLVII	10/11/95	951011-058	951011-064	951012-036
CBS-1	CDLVII	10/11/95	951011-065	951011-067	951024-139
CBS-1	CDLVII	10/11/95	951011-066	951011-068	951016-002
GW-142	KHQ	11/05/95	951106-061	951106-063	951107-009
GW-142-S	KHQ	11/05/95	951107-068		951107-009
GW-143	KHQ	11/09/95	951110-004	951110-006	951110-048
GW-144	KHQ	11/14/95	951114-093	951114-095	951116-013
GW-145	KHQ	11/15/95	951115-056	951115-058	951116-002
GW-146	KHQ	11/08/95	951108-170	951108-172	951109-024
GW-147	KHQ	11/06/95	951106-095	951106-097	951109-004
GW-156	CRSDB	10/26/95	951027-071		
GW-156	CRSDB	10/23/95	951024-046		
GW-156	CRSDB	10/24/95	951025-001		
GW-156	CRSDB	10/25/95	951025-110		
GW-159	CRSDB	10/26/95	951027-073		
GW-159	CRSDB	10/23/95	951025-011		
GW-159	CRSDB	10/24/95	951025-003		
GW-159	CRSDB	10/25/95	951025-112		
GW-160	CRBAWP	11/02/95	951103-030	951103-032	951106-041
GW-160	CRBAWP	11/02/95	951103-033	951103-034	951107-071
GW-161	CRBAWP	10/31/95	951102-042	951102-044	951102-001
GW-161	CRBAWP	10/31/95	951102-045	951102-046	951102-014
GW-161-S	CRBAWP	10/31/95	951102-065		951102-014
GW-175	CRSP	11/17/95	951120-003	951120-007	951120-082
GW-177	CRSP	11/16/95	951117-001	951117-005	951120-082
GW-181	CRSP	11/05/95	951107-014	951107-056	951109-004
GW-184	RQ	10/31/95	951101-050	951101-052	951102-001
GW-186	RQ	11/03/95	951103-050	951103-052	951106-041
GW-187	RQ	11/02/95	951103-041	951103-043	951106-041
GW-188	RQ	10/31/95	951101-048	951101-052	951102-001
GW-203	UNCS	10/07/95	951009-073	951009-075	951023-009
GW-205	UNCS	10/07/95	951009-076	951009-075	951019-076
GW-221	UNCS	10/08/95	951010-005	951010-007	951012-008
GW-231	KHQ	11/06/95	951106-093	951106-097	951109-004
GW-292	ECRWP	11/06/95	951107-001	951107-007	951110-048
GW-293	ECRWP	11/06/95	951107-005	951107-007	951109-024
GW-294	ECRWP	11/05/95	951106-038	951106-037	951107-009
GW-296	ECRWP	11/05/95	951106-035	951106-037	951107-009
GW-298	CRBAWP	11/04/95	951106-002	951106-004	951107-020
GW-298	CRBAWP	11/04/95	951106-005	951106-006	951107-071
GW-299	CRBAWP	11/03/95	951104-009	951104-003	951107-020
GW-299	CRBAWP	11/03/95	951104-011	951104-005	951107-071
GW-300	CRBAWP	11/03/95	951104-006	951104-003	951107-020
GW-300	CRBAWP	11/03/95	951104-008	951104-005	951107-071
GW-301	CRBAWP	11/03/95	951104-001	951104-003	951107-020
GW-301	CRBAWP	11/03/95	951104-004	951104-005	951107-071
GW-302	UNCS	10/08/95	951010-003	951010-007	951012-008
GW-321	ADB	10/26/95	951027-053	951027-055	951031-007
GW-339	UNCS	10/08/95	951010-001	951010-007	951012-008
GW-511	CRSP	11/07/95	951107-085	951107-087	951109-024
GW-511-S	CRSP	11/07/95	951109-025		951109-024
GW-512	ADB	10/31/95	951101-027	951101-031	951102-001
GW-513	ADB	10/31/95	951101-029	951101-031	951102-001
GW-514	ADB	11/02/95	951103-060	951103-062	951107-020

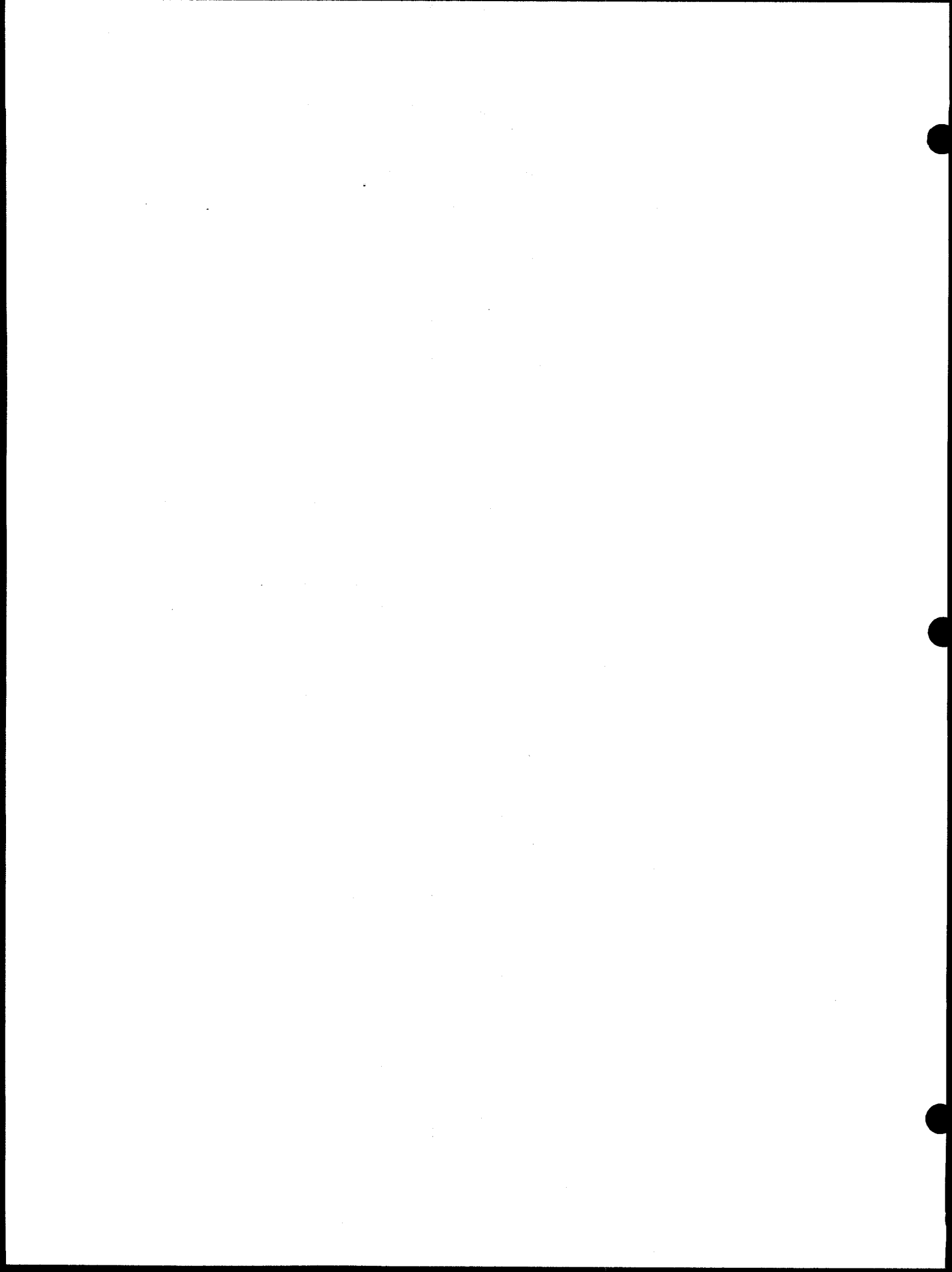
APPENDIX L.1
Correlation of Samples to Associated Blanks
Fourth Quarter 1995

Sampling Point	Location	Date Sampled	Sample No.	Trip Blank No.	Lab Blank No.
GW-539	LII	10/06/95	951009-041	951009-045	951019-076
GW-539	LII	10/06/95	951009-043	951009-134	951010-015
GW-539	LII	10/06/95	951009-044	951009-135	951023-045
GW-540	CDLVI	10/11/95	951012-028	951012-030	951012-036
GW-540	CDLVI	10/11/95	951012-031	951012-032	951024-041
GW-541	CDLVI	10/12/95	951013-008	951013-010	951016-028
GW-541	CDLVI	10/12/95	951013-011	951013-012	951024-041
GW-542	CDLVI	10/16/95	951017-034	951017-031	951019-002
GW-542	CDLVI	10/16/95	951017-036	951017-033	951025-023
GW-543	CDLVI	10/17/95	951018-014	951018-016	951023-003
GW-543	CDLVI	10/17/95	951018-017	951018-018	951025-023
GW-544	CDLVI	10/17/95	951018-011	951018-016	951019-002
GW-544	CDLVI	10/17/95	951018-013	951018-018	951025-023
GW-546	CDLVI	10/11/95	951013-005	951012-030	951012-036
GW-546	CDLVI	10/11/95	951013-007	951012-032	951025-023
GW-557	LV	10/07/95	951009-143	951009-121	951019-076
GW-557	LV	10/07/95	951009-145	951009-136	951017-057
GW-557	LV	10/07/95	951009-146	951009-138	951024-139
GW-560	CDLVII	10/06/95	951009-005	951009-007	951011-008
GW-560	CDLVII	10/06/95	951009-008	951009-009	951010-015
GW-560	CDLVII	10/06/95	951009-010	951009-011	951023-045
GW-562	CDLVII	10/06/95	951009-016	951009-007	951011-008
GW-562	CDLVII	10/06/95	951009-018	951009-009	951010-015
GW-562	CDLVII	10/06/95	951009-019	951009-011	951023-045
GW-564	CDLVII	10/07/95	951009-119	951009-121	951019-076
GW-564	CDLVII	10/07/95	951009-122	951009-136	951017-057
GW-564	CDLVII	10/07/95	951009-137	951009-138	951023-045
GW-608	CRSP	11/16/95	951117-003	951117-005	951120-082
GW-609	CRSP	11/20/95	951121-001	951121-003	951122-005
GW-610	CRSP	11/13/95	951114-009	951114-008	951115-052
GW-611	CRSP	11/17/95	951120-005	951120-007	951120-082
GW-709	LII	10/06/95	951009-029	951009-045	951011-008
GW-709	LII	10/06/95	951009-031	951009-134	951010-015
GW-709	LII	10/06/95	951009-032	951009-135	951023-045
GW-731	CRSDB	10/26/95	951027-075		
GW-731	CRSDB	10/23/95	951024-044		
GW-731	CRSDB	10/24/95	951025-005		
GW-731	CRSDB	10/25/95	951025-104		
GW-732	CRSDB	10/26/95	951027-077		
GW-732	CRSDB	10/23/95	951025-013		
GW-732	CRSDB	10/24/95	951025-007		
GW-732	CRSDB	10/25/95	951025-106		
GW-742	CRSP	11/09/95	951110-001	951110-003	951110-048
GW-743	CRSP	11/13/95	951114-006	951114-008	951115-052
GW-743-S	CRSP	11/13/95	951115-053		951115-052
GW-757	LII	10/06/95	951009-033	951009-045	951011-008
GW-757	LII	10/06/95	951009-035	951009-134	951010-015
GW-757	LII	10/06/95	951009-036	951009-135	951023-045
GW-796	LV	10/08/95	951009-170	951009-161	951012-008
GW-796	LV	10/08/95	951009-172	951009-163	951011-001
GW-796	LV	10/08/95	951009-173	951009-165	951024-041
GW-797	LV	10/08/95	951009-166	951009-161	951023-009
GW-797	LV	10/08/95	951009-168	951009-163	951011-001
GW-797	LV	10/08/95	951009-169	951009-165	951024-041
GW-798	CDLVII	10/08/95	951009-159	951009-161	951019-076

APPENDIX L.1
Correlation of Samples to Associated Blanks
Fourth Quarter 1995

Sampling Point	Location	Date Sampled	Sample No.	Trip Blank No.	Lab Blank No.
GW-798	CDLVII	10/08/95	951009-162	951009-163	951011-001
GW-798	CDLVII	10/08/95	951009-164	951009-165	951024-041
GW-799	CDLVII	10/07/95	951009-139	951009-121	951019-076
GW-799	CDLVII	10/07/95	951009-141	951009-136	951017-057
GW-799	CDLVII	10/07/95	951009-142	951009-138	951024-041
GW-801	LV	10/09/95	951010-026	951010-028	951023-009
GW-801	LV	10/09/95	951010-029	951010-032	951011-001
GW-801	LV	10/09/95	951010-033	951010-034	951024-041
GW-827	CDLVI	10/16/95	951017-029	951017-031	951019-002
GW-827	CDLVI	10/16/95	951017-032	951017-033	951025-023

APPENDIX L.2
TRIP BLANK DATA SUMMARY



APPENDIX L.2
VOCs Detected in Trip Blank Samples, First Quarter 1995

1

Sample No.	950104- 283	950105- 053	950110- 043	950110- A11	950111- 088	950111- 102	950117- 080	950117- 119	950118- 009
Acetone	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Butanone	10U	10U	10U	10U	10U	10U	10U	10U	10U
Methylene chloride	10U	10U	10U	10U	10U	10U	10U	10U	10U
Toluene	10U	10U	1	1	10U	10U	10U	10U	10U
1,1,1-Trichloroethane	3	10U	13	13	2	4	10	10	9
Total Organic Halide	10U	10U	15.69	.	10U	10U	10U	10U	10U

(CONTINUED)

Sample No.	950118- 016	950118- 055	950119- 017	950119- 095	950120- 127	950120- 131	950125- 079	950130- 042	950201- 005
Acetone	15	17	10U	10U	10U	10U	9	10U	10U
2-Butanone	13	11	10U	10U	10U	10U	8	10U	10U
Methylene chloride	10U	10U	10U	10U	10U	10U	10U	10U	10U
Toluene	7	7	10U	10U	10U	10U	8	10U	10U
1,1,1-Trichloroethane	9	2	2	3	10U	10U	6	10	14
Total Organic Halide	10U	10U	10U	10U	10U	10U	.	.	.

(CONTINUED)

Sample No.	950203- 051	950213- 107	950214- 098	950216- 008	950316- 065
Acetone	10U	10U	10U	12	10U
2-Butanone	10U	10U	10U	8	10U
Methylene chloride	3	10U	1	2	10U
Toluene	10U	10U	10U	10U	10U
1,1,1-Trichloroethane	1	6	3	1	10U
Total Organic Halide	.	.	.	.	.

APPENDIX L.2
VOCs Detected in Trip Blank Samples, Second Quarter 1995

2

Sample No.	950405-009	950406-014	950406-029	950407-011	950407-037	950407-057	950410-041	950410-057	950412-036
Acetone	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Butanone	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-Dichloroethane	10U	10U	10U	10U	10U	10U	10U	10U	10U
Methylene chloride	10U	10U	3	3	10U	10U	10U	10U	10U
1,1,1-Trichloroethane	3	3	3	10U	3	10U	10U	2	2

(CONTINUED)

Sample No.	950413-117	950413-141	950413-168	950417-089	950418-198	950420-009	950420-104	950420-119	950421-006
Acetone	10U	10U	15	10U	17	10U	10U	10U	10U
2-Butanone	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-Dichloroethane	10U	10U	10U	10U	10U	10U	10U	10U	10U
Methylene chloride	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-Trichloroethane	3	2	2	10U	3	3	10U	10U	10U

(CONTINUED)

Sample No.	950421-058	950423-003	950424-070	950424-141	950425-057	950426-265	950426-270	950426-312	950427-125
Acetone	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Butanone	10U	10U	10U	10U	10U	10U	11	10U	10U
1,2-Dichloroethane	10U	10U	10U	10U	10U	10U	10U	10U	10U
Methylene chloride	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-Trichloroethane	10U	1	2	2	2	10U	2	10U	10U

(CONTINUED)

Sample No.	950427-131	950427-197	950427-213	950501-129	950501-145	950502-091	950502-106	950502-137	950503-137
Acetone	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Butanone	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,2-Dichloroethane	10U	10U	10U	10U	10U	10U	10U	10U	1
Methylene chloride	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-Trichloroethane	10U	10U	10U	10U	2	10U	10U	10U	10U

(CONTINUED)

Sample No.	950503-145	950503-149	950508-031	950512-003	950516-005	950516-127
Acetone	10U	4	27	10U	10U	10U
2-Butanone	10U	10U	10U	10U	10U	10U
1,2-Dichloroethane	10U	10U	10U	10U	10U	10U
Methylene chloride	10U	10U	10U	10U	10U	10U
1,1,1-Trichloroethane	1	1	3	3	2	10U

APPENDIX L.2
VOCs Detected in Trip Blank Samples, Third Quarter 1995

3

Sample No.	950711-003	950711-065	950712-003	950712-011	950713-016	950713-070	950713-126	950714-056	950717-105
Acetone	10U	6	10U	10U	10U	10U	10U	10U	10U
1,1,1-Trichloroethane	1	1	1	1	1	10U	10U	10U	10U

(CONTINUED)

Sample No.	950717-108	950717-115	950718-006	950719-292	950731-024	950731-053	950731-084	950801-012	950801-034
Acetone	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-Trichloroethane	1	10U	1	10U	2	2	2	3	2

(CONTINUED)

Sample No.	950801-071	950802-033
Acetone	10U	10U
1,1,1-Trichloroethane	3	3

APPENDIX L.2
VOCs Detected in Trip Blank Samples, Fourth Quarter 1995

4

Sample No.	951009-007	951009-045	951009-075	951009-121	951009-161	951010-007	951010-013	951010-028	951011-064
Acetone	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Butanone	7	10U	10U	10U	10U	10	9	10U	10U
Ethylbenzene	10U	10U	10U	10U	10U	3	3	10U	10U
2-Hexanone	10U	10U	10U	10U	10U	10U	10U	10U	10U
Methylene chloride	10U	10U	10U	10U	10U	1	1	10U	10U
1,1,1-Trichloroethane	7	8	2	2	2	1	2	2	2
Xylenes	10U	10U	10U	10U	10U	12	12	10U	10U

(CONTINUED)

Sample No.	951012-030	951013-010	951017-031	951018-016	951027-055	951101-031	951101-052	951102-044	951103-032
Acetone	10U	10U	120	14	10U	10U	10U	4	10U
2-Butanone	10U	10	34	10U	10U	10U	10U	10U	10U
Ethylbenzene	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Hexanone	10U	10U	8	10U	10U	10U	10U	10U	10U
Methylene chloride	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-Trichloroethane	2	2	10U	10U	4	4	4	4	4
Xylenes	10U	10U	10U	10U	10U	10U	10U	10U	10U

(CONTINUED)

Sample No.	951103-043	951103-052	951103-062	951104-003	951106-004	951106-037	951106-063	951106-097	951107-007
Acetone	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Butanone	10U	10U	10U	10U	10	10U	10U	10U	10U
Ethylbenzene	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Hexanone	10U	10U	10U	10U	10U	10U	10U	10U	10U
Methylene chloride	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-Trichloroethane	4	3	4	3	2	1	1	10U	10U
Xylenes	10U	10U	10U	10U	10U	10U	10U	10U	10U

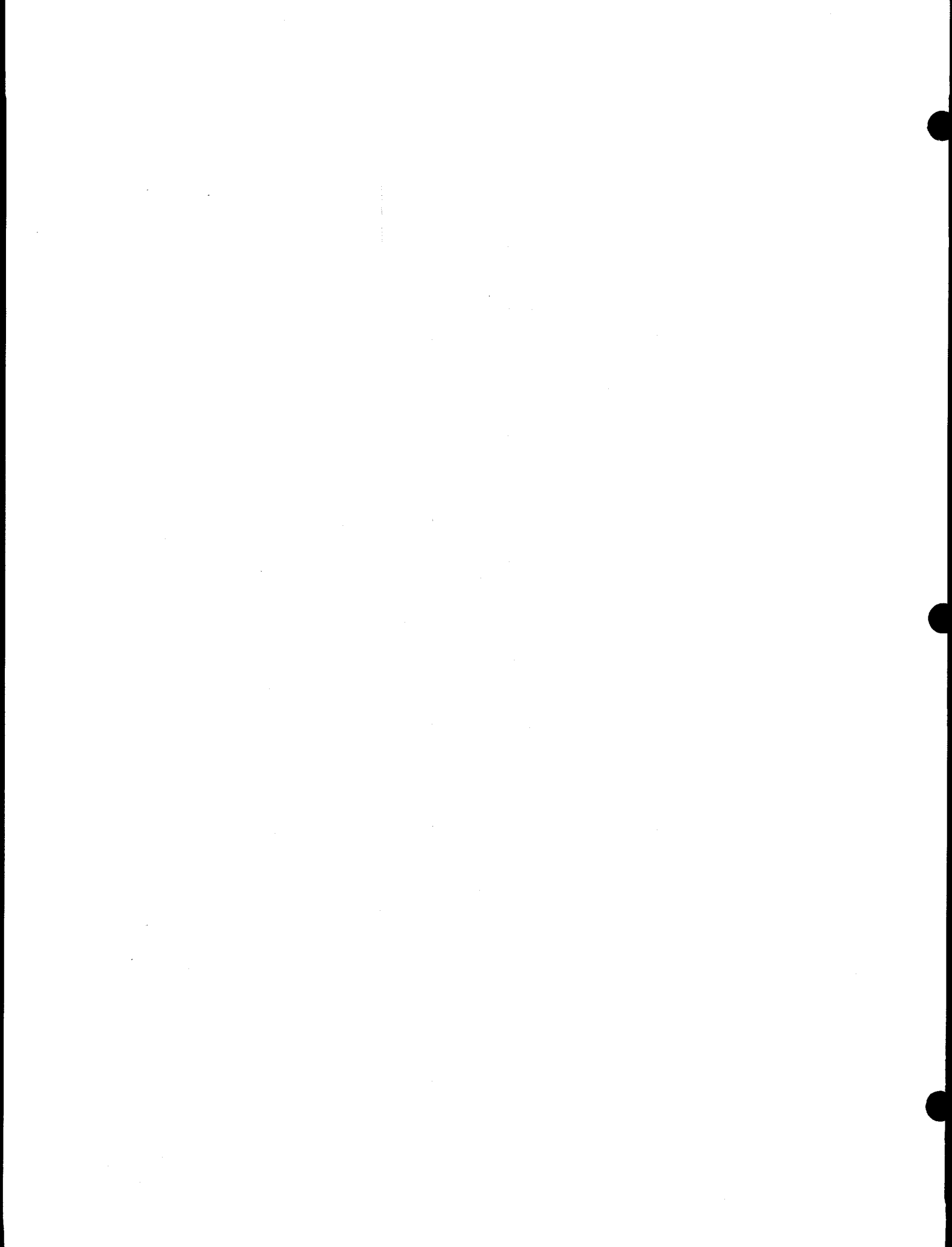
(CONTINUED)

Sample No.	951107-056	951107-087	951108-172	951110-003	951110-006	951114-008	951114-095	951115-058	951117-005
Acetone	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Butanone	10U	10U	10U	10U	10U	10U	10U	10U	10U
Ethylbenzene	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Hexanone	10U	10U	10U	10U	10U	10U	10U	10U	10U
Methylene chloride	10U	10U	10U	10U	10U	10U	10U	10U	10U
1,1,1-Trichloroethane	1	10U	10U	2	2	3	3	3	3
Xylenes	10U	10U	10U	10U	10U	10U	10U	10U	10U

(CONTINUED)

Sample No.	951120-007	951121-003
Acetone	12	10U
2-Butanone	10U	15
Ethylbenzene	10U	10U
2-Hexanone	10U	10U
Methylene chloride	10U	10U
1,1,1-Trichloroethane	10U	2
Xylenes	10U	10U

APPENDIX L.3
LABORATORY BLANK DATA SUMMARY



APPENDIX L.3
VOCs Detected in Laboratory Blank Samples, First Quarter 1995

1

Sample No.	950105- 041	950109- 042	950110- A28	950112- 006	950119- 019	950123- 007	950123- 047	950124- 012	950126- 044
Acetone	10U	10U	10U	10U	10U	10U	12	10U	6
2-Butanone	10U	10U	10U	10U	10U	10U	14	10U	9
Toluene	10U	10U	10U	10U	10U	10U	6	10U	8

(CONTINUED)

Sample No.	950201- 008	950208- 015	950214- 014	950215- 011	950217- 009	950317- 011
Acetone	10U	10U	10U	10U	10U	10U
2-Butanone	10U	10U	10U	9	10U	10U
Toluene	10U	10U	10U	10U	10U	10U

APPENDIX L.3
VOCs Detected in Laboratory Blank Samples, Second Quarter 1995

2

Sample No.	950405-067	950406-054	950406-057	950407-062	950410-046	950411-050	950413-001	950417-001	950418-003
Acetone	10U	10U	10U	10U	10U	10U	10U	13	10U
2-Butanone	10U	10U	10U	10U	10U	10U	10U	10U	10U
Methylene chloride	10U	10U	4	3	10U	10U	10U	10U	10U

(CONTINUED)

Sample No.	950419-002	950420-023	950424-009	950425-005	950426-301	950427-001	950501-034	950502-023	950504-016
Acetone	13	10U	10U	9	10U	3	10U	10U	10U
2-Butanone	10U	10U	10U	13	10U	10U	10U	10U	10U
Methylene chloride	10U	10U	10U	10U	10U	10U	10U	10U	10U

(CONTINUED)

Sample No.	950505-001	950508-027	950512-028	950515-003	950516-021	950518-022
Acetone	10U	10U	10U	10U	10U	10U
2-Butanone	10U	10U	10U	10U	10U	10U
Methylene chloride	10U	10U	10U	10U	10U	10U

APPENDIX L.3
VOCs Detected in Laboratory Blank Samples, Third Quarter 1995

3

Sample No.	950711- 016	950712- 048	950713- 021	950717- 003	950718- 003	950718- 035	950726- 030	950731- 106	950803- 044
2-Butanone	10U	10U	8	10U	10U	10U	10U	10U	10U

(CONTINUED)

Sample No.	950804- 040
2-Butanone	10U

APPENDIX L.3
VOCs Detected in Laboratory Blank Samples, Fourth Quarter 1995

4

Sample No.	951011-008	951012-008	951012-036	951016-028	951019-002	951019-076	951023-003	951023-009	951031-007
Acetone	10U	10U	10U	10U	10U	10U	10U	10U	9
2-Butanone	10	9	10U	10	10U	10U	10U	10U	10U
Ethylbenzene	10U	2	10U	10U	10U	10U	10U	10U	10U
Xylenes	10U	7	10U	10U	10U	10U	10U	10U	10U

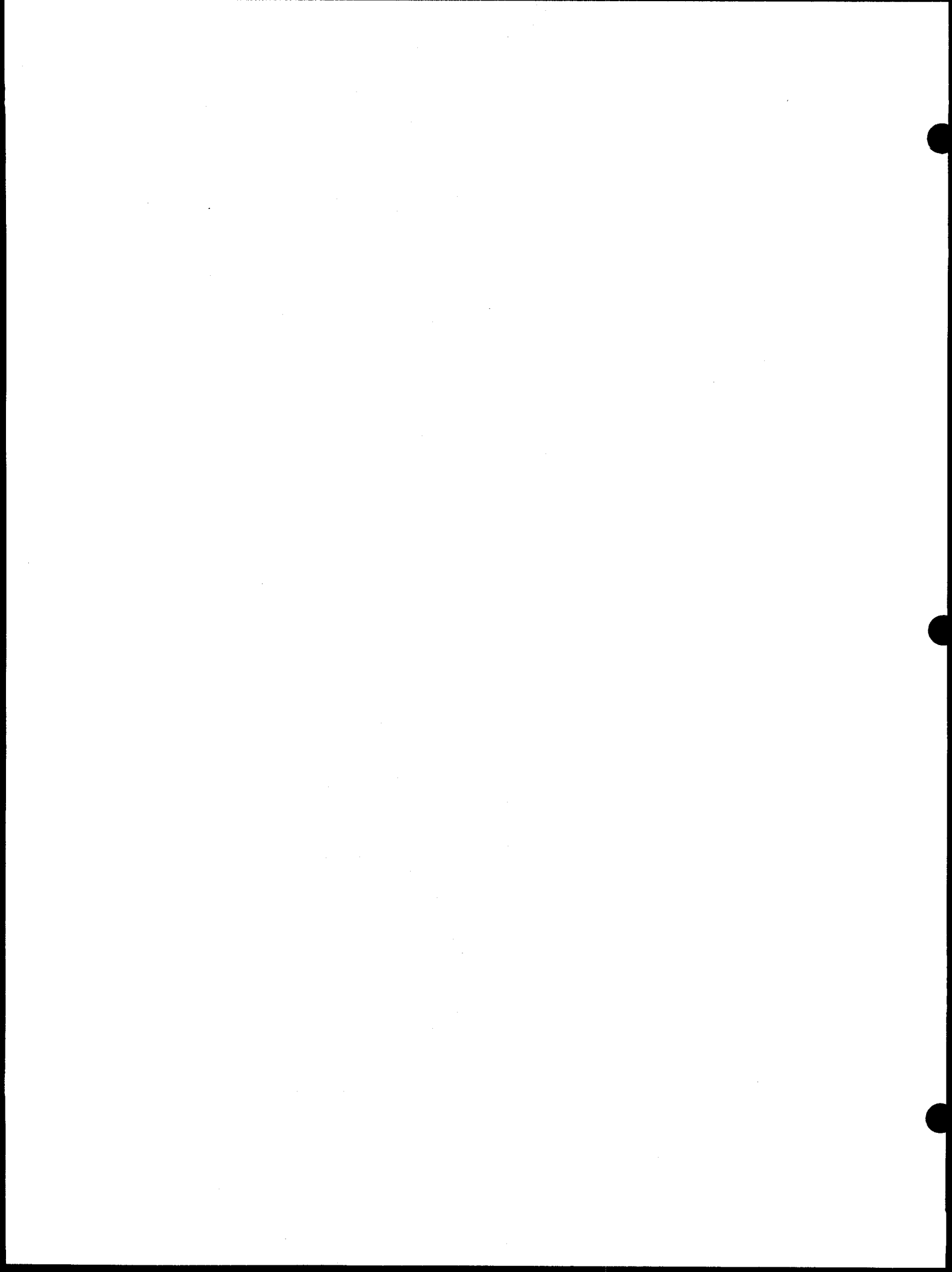
(CONTINUED)

Sample No.	951102-001	951106-041	951107-009	951107-020	951109-004	951109-024	951110-048	951115-052	951116-002
Acetone	10U	10U	10U	10U	10U	10U	10U	10U	10U
2-Butanone	10U	10U	10U	10U	10U	10U	10U	10U	9
Ethylbenzene	10U	10U	10U	10U	10U	10U	10U	10U	10U
Xylenes	10U	10U	10U	10U	10U	10U	10U	10U	10U

(CONTINUED)

Sample No.	951116-013	951120-082	951122-005
Acetone	10U	10U	10U
2-Butanone	10U	10U	10U
Ethylbenzene	10U	10U	10U
Xylenes	10U	10U	10U

APPENDIX L.4
EQUIPMENT RINSATE DATA SUMMARY



APPENDIX L.4
Equipment Rinsate Data Summary, First Quarter 1995

1

Sampling Group	ER CR 1	ER CR 3	ER CR 6		ER CR 7	ER CR 10
Associated Well	GW-305	GW-609	GW-158	GW-241	GW-145	GW-757
Pump Number	11	2	2	11	7	10
VOLATILE ORGANICS (ug/L)						
Acetone	10U	10	10U	10U	18	10U
2-Butanone	10U	10U	10U	10U	10	10U
Methylene chloride	10U	2	10U	10U	1	10U
Toluene	10U	10U	10U	10U	7	10U
1,1,1-Trichloroethane	1	3	10U	10U	2	10U
METALS (mg/L)						
Aluminum	.	<0.02	.	.	<0.02	.
Antimony	.	<0.05	.	.	<0.05	.
Arsenic	.	<0.05	.	.	<0.05	.
Barium	.	<0.001	.	.	<0.001	.
Beryllium	.	<0.0003	.	.	<0.0003	.
Boron	.	0.0045	.	.	0.0045	.
Cadmium	.	<0.003	.	.	<0.003	.
Calcium	.	0.057	.	.	0.08	.
Chromium	.	<0.01	.	.	<0.01	.
Cobalt	.	<0.005	.	.	<0.005	.
Copper	.	<0.004	.	.	<0.004	.
Iron	.	0.017	.	.	<0.005	.
Magnesium	.	0.013	.	.	0.0078	.
Manganese	.	<0.001	.	.	<0.001	.
Molybdenum	.	<0.01	.	.	<0.01	.
Nickel	.	<0.01	.	.	<0.01	.
Potassium	.	0.86	.	.	<0.6	.
Selenium	.	<0.05	.	.	<0.05	.
Silver	.	<0.006	.	.	<0.006	.
Sodium	.	0.13	.	.	0.023	.
Strontium	.	<0.0004	.	.	<0.0004	.
Thorium	.	<0.2	.	.	<0.2	.
Vanadium	.	<0.005	.	.	<0.005	.
Zinc	.	0.0028	.	.	<0.002	.

2

[illegible]

APPENDIX L.4
Equipment Rinsate Data Summary, Third Quarter 1995

3

Sampling Group	ER CR 1	ER CR 3	ER CR 6	ER CR 7	ER CR 10	
Associated Well	GW-305	GW-609	GW-611	GW-158	GW-145	GW-757
Pump Number	10	2	10	2	8	8
VOLATILE ORGANICS (ug/L)	.	.	.	.	.	.
1,1,1-Trichloroethane	10U	3	3	2	10U	1
METALS (mg/L)	.	.	.	.	.	.
Aluminum	.	<0.02	<0.02	.	<0.02	.
Antimony	.	<0.05	<0.05	.	<0.05	.
Arsenic	.	<0.05	0.062	.	<0.05	.
Barium	.	<0.001	<0.001	.	<0.001	.
Beryllium	.	<0.0003	<0.0003	.	<0.0003	.
Boron	.	0.0076	<0.004	.	0.017	.
Cadmium	.	<0.003	<0.003	.	<0.003	.
Calcium	.	0.15	0.13	.	0.047	.
Chromium	.	<0.01	<0.01	.	<0.01	.
Cobalt	.	<0.005	<0.005	.	<0.005	.
Copper	.	<0.004	<0.004	.	<0.004	.
Iron	.	<0.005	<0.005	.	0.027	.
Magnesium	.	0.075	0.076	.	<0.003	.
Manganese	.	<0.001	<0.001	.	<0.001	.
Molybdenum	.	<0.01	<0.01	.	<0.01	.
Nickel	.	<0.01	<0.01	.	<0.01	.
Potassium	.	<0.6	0.77	.	<0.6	.
Selenium	.	<0.05	<0.05	.	0.086	.
Silver	.	<0.006	<0.006	.	<0.006	.
Sodium	.	0.062	0.12	.	0.16	.
Strontium	.	<0.0004	<0.0004	.	<0.0004	.
Thorium	.	<0.2	<0.2	.	<0.2	.
Vanadium	.	<0.005	<0.005	.	<0.005	.
Zinc	.	0.0032	<0.002	.	<0.002	.

APPENDIX L.4
Equipment Rinsate Data Summary, Fourth Quarter 1995

4

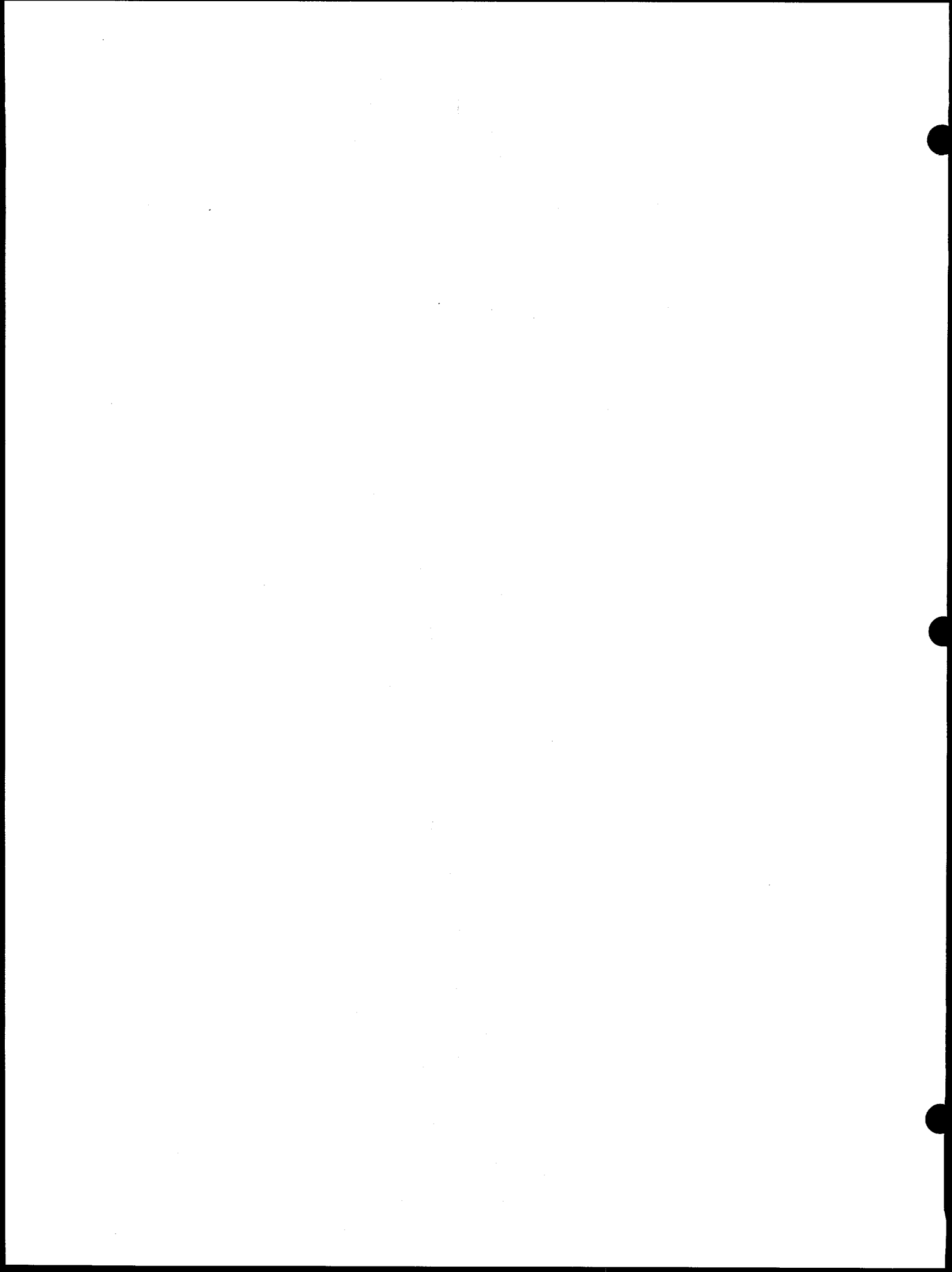
Sampling Group	ER CR 2	ER CR 3	ER CR 4	ER CR 5	ER CR 6	ER CR 7	ER CR 8		
Associated Well	1090	GW-609	GW-292	GW-298	GW-156	GW-732	GW-145	GW-742	GW-514
Pump Number	11	2	6	6	10	7	4	2	8
VOLATILE ORGANICS (ug/L)									
Acetone	10U	20	10U	5	.	.	10U	10U	10U
2-Butanone	10U	10U	10U	10U	.	.	10U	10U	10U
Chloroform	10U	3	10U	10U	.	.	10U	10U	10U
Ethylbenzene	3	10U	10U	10U	.	.	10U	10U	10U
Methylene chloride	10U	1	10U	10U	.	.	10U	10U	10U
Toluene	10U	1	10U	10U	.	.	10U	10U	10U
1,1,1-Trichloroethane	2	10U	10U	10U	.	.	2	10U	4
Xylenes	11	10U	10U	10U	.	.	10U	10U	10U
METALS (mg/L)									
Aluminum	.	<0.02	.	<0.02	<0.02	0.11	0.043	0.039	.
Antimony	.	<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	.
Barium	.	<0.001	.	<0.001	<0.001	<0.001	<0.001	<0.001	.
Beryllium	.	<0.0003	.	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	.
Boron	.	<0.004	.	0.017	0.0048	0.0067	0.046	0.046	.
Cadmium (AAS)	.	.	.	.	<0.002	<0.002	.	.	.
Cadmium	.	<0.003	.	<0.003	<0.003	<0.003	<0.003	<0.003	.
Calcium	.	0.06	.	0.029	0.25	0.41	0.34	0.029	.
Chromium (AAS)	.	.	.	.	<0.01	<0.01	.	.	.
Chromium	.	<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	.
Copper	.	<0.004	.	<0.004	0.021	<0.004	<0.004	<0.004	.
Iron	.	<0.005	.	<0.005	0.14	<0.005	0.098	0.0086	.
Lead (AAS)	.	.	.	.	<0.004	<0.004	.	.	.
Magnesium	.	0.011	.	<0.003	0.047	0.076	0.087	<0.003	.
Manganese	.	<0.001	.	<0.001	0.0017	<0.001	<0.001	<0.001	.
Mercury (CVAA)	.	<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	.
Nickel	.	<0.01	.	<0.01	<0.01	<0.01	<0.01	<0.01	.
Potassium	.	<0.6	.	<0.6	<0.6	<0.6	<0.6	<0.6	.
Selenium	.	<0.05	.	<0.05	<0.05	<0.05	<0.05	<0.05	.
Silver	.	<0.006	.	<0.006	<0.006	<0.006	<0.006	<0.006	.
Sodium	.	0.067	.	0.19	0.03	0.054	0.26	0.28	.
Strontium	.	<0.0004	.	<0.0004	0.00049	0.0015	0.012	0.00043	.
Thorium	.	<0.2	.	<0.2	<0.2	<0.2	<0.2	<0.2	.
Vanadium	.	<0.005	.	<0.005	<0.005	<0.005	<0.005	<0.005	.
Zinc	.	0.0087	.	0.0038	0.0071	0.0039	0.021	0.014	.
RADIOCHEMISTRY									
Gross Alpha (pCi/L)	.	.	.	.	0.136	-0.981	.	.	.
Gross Alpha (CE+/-)	.	.	.	.	0.74	1.2	.	.	.
Gross Beta (pCi/L)	.	.	.	.	0.164	-1.75	.	.	.
Gross Beta (CE+/-)	.	.	.	.	2.5	2.3	.	.	.
MISCELLANEOUS									
pH (pH units)	.	.	.	.	6.7	8.7	.	.	.
Dissolved Solids (mg/L)	.	.	.	.	26	<1	.	.	.
TSS (mg/L)	.	.	.	.	<1	<1	.	.	.
Turbidity (NTU)	.	.	.	.	0.45	0.2	.	.	.
Chloride (mg/L)	.	.	.	.	<1	<1	.	.	.
Alkalinity-HCO3 (mg/L)	.	.	.	.	4	3	.	.	.
Alkalinity-CO3 (mg/L)	.	.	.	.	<1	<1	.	.	.
Chloride (mg/L)	.	.	.	.	<1	<1	.	.	.
Fluoride (mg/L)	.	.	.	.	<0.1	<0.1	.	.	.
Nitrate (as N)	.	.	.	.	<0.2	<0.2	.	.	.
Sulfate (mg/L)	.	.	.	.	<1	<1	.	.	.

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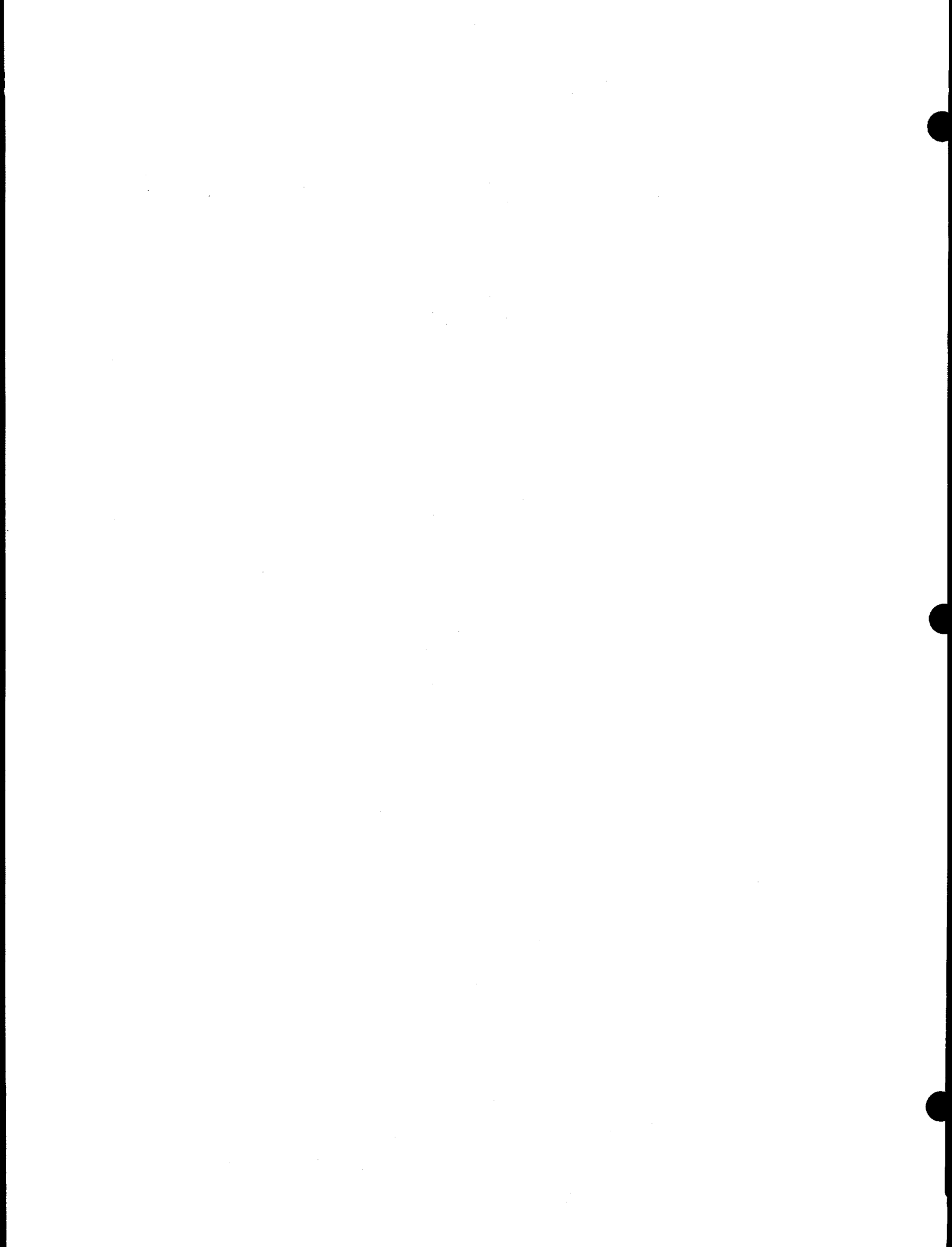
APPENDIX L.4
Equipment Rinsate Data Summary, Fourth Quarter 1995

5

Sampling Group	ER CR 9	ER CR 10	ER CR 11	ER CR 12
Associated Well	GW-186	GW-757	GW-544	GW-801
Pump Number	4	10	8	7
VOLATILE ORGANICS (ug/L)				
Acetone	10U	10U	14	10U
2-Butanone	10U	10U	10U	11
Chloroform	10U	10U	10U	10U
Ethylbenzene	10U	10U	10U	4
Methylene chloride	10U	10U	10U	1
Toluene	10U	10U	10U	10U
1,1,1-Trichloroethane	10U	10U	10U	2
Xylenes	10U	10U	10U	13
METALS (mg/L)				
Aluminum	.	.	.	.
Antimony	.	.	.	.
Arsenic	.	.	.	.
Barium	.	.	.	.
Beryllium	.	.	.	.
Boron	.	.	.	.
Cadmium (AAS)	.	.	.	.
Cadmium	.	.	.	.
Calcium	.	.	.	.
Chromium (AAS)	.	.	.	.
Chromium	.	.	.	.
Cobalt	.	.	.	.
Copper	.	.	.	.
Iron	.	.	.	.
Lead (AAS)	.	.	.	.
Magnesium	.	.	.	.
Manganese	.	.	.	.
Mercury (CVAA)	.	.	.	.
Molybdenum	.	.	.	.
Nickel	.	.	.	.
Potassium	.	.	.	.
Selenium	.	.	.	.
Silver	.	.	.	.
Sodium	.	.	.	.
Strontium	.	.	.	.
Thorium	.	.	.	.
Vanadium	.	.	.	.
Zinc	.	.	.	.
RADIOCHEMISTRY				
Gross Alpha (pCi/L)	.	.	.	0
Gross Alpha (CE+/-)	.	.	.	14
Gross Beta (pCi/L)	.	.	.	-6.08
Gross Beta (CE+/-)	.	.	.	27
MISCELLANEOUS				
pH (pH units)	.	.	.	.
Dissolved Solids (mg/L)	.	.	.	.
TSS (mg/L)	.	.	.	.
Turbidity (NTU)	.	.	.	.
Chloride (mg/L)	.	.	.	.
Alkalinity-HCO ₃ (mg/L)	.	.	.	.
Alkalinity-CO ₃ (mg/L)	.	.	.	.
Chloride (mg/L)	.	.	.	.
Fluoride (mg/L)	.	.	.	.
Nitrate (as N)	.	.	.	.
Sulfate (mg/L)	.	.	.	.



APPENDIX L.5
FIELD BLANK DATA SUMMARY



APPENDIX L.5
Field Blank Data Summary, 1995

1

Sampling Group	FB CR 6			FB CR 7
Date Sampled	01/19/95	04/09/95	07/18/95	11/15/95
VOLATILE ORGANICS (ug/L)	-	-	-	-
1,1,1-Trichloroethane	3	2	100	3

APPENDIX M

**VALIDATED RESULTS OF
VOLATILE ORGANIC COMPOUND ANALYSES**

EXPLANATION

SAMPLING POINT:

GW	-	Monitoring Well
CBS-1	-	Chestnut Branch Spring 1
SCR2.2SP	-	South Chestnut Ridge Spring 2.2
1090	-	Historical 1000-Series Monitoring Well

LOCATION:

ADB	-	Ash Disposal Basin
CDL VI	-	Construction/Demolition Landfill VI
CDL VII	-	Construction/Demolition Landfill VII
CRBAWP	-	Chestnut Ridge Borrow Area Waste Pile
CRSDB	-	Chestnut Ridge Sediment Disposal Basin
CRSP	-	Chestnut Ridge Security Pits
ECRWP	-	East Chestnut Ridge Waste Pile
EXP-SW	-	Exit Pathway, Surface Water Sampling Location
KHQ	-	Kerr Hollow Quarry
LII	-	Industrial Landfill II
LIV	-	Industrial Landfill IV
LV	-	Industrial Landfill V
RQ	-	Rogers Quarry
UNCS	-	United Nuclear Corporation Site

NOTES:

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

FP1	-	False Positive result, screened by laboratory blank
FP2	-	False Positive result, screened by trip blank
.	-	Compound not detected at the reported minimum attainable detection limit.

Results of VOC analyses reported for each groundwater sample were evaluated using results for each associated laboratory and trip 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 either blank sample (Appendix L.2 and L.3) is multiplied by a qualification factor to determine the blank qualification result (BQR) for the compound. A factor of 5 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 1988). 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.

APPENDIX M
Validated VOC Results, 1995

Sampling Point	1090	CBS-1	GW-141	GW-142	GW-143
Location	UNCS	CDLVII	LIV	KHQ	KHQ
Date Sampled	04/20/95	10/09/95	04/17/95	10/11/95	01/09/95
Acetone	.	.	.	.	.
Benzene	.	.	.	.	.
Bromodichloromethane	.	.	.	.	.
Bromoform	.	.	.	.	.
Bromomethane	.	.	.	.	.
2-Butanone	FP1	.	.	.	.
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	FP2	.	.	.	.
Ethylbenzene	.	.	.	.	.
2-Hexanone	.	.	.	.	.
4-Methyl-2-pentanone	.	.	.	.	.
Methylene chloride	FP2	.	.	.	.
Styrene	.	.	.	.	.
1,1,2,2-Tetrachloroethane	.	.	.	.	.
Tetrachloroethene	.	.	.	.	.
Toluene	.	.	.	.	.
1,1,1-Trichloroethane	.	.	.	.	.
1,1,2-Trichloroethane	.	.	.	.	.
Trichloroethene	.	.	.	.	.
Vinyl acetate	.	.	.	.	.
Vinyl chloride	.	.	.	.	.
Xylenes	FP2	.	.	.	.

(CONTINUED)

APPENDIX M
Validated VOC Results, 1995

Sampling Point	GW-144	GW-145	GW-146	GW-147
Location	KHQ	KHQ	KHQ	KHQ
Date Sampled	01/18/95 04/25/95 07/16/95 11/14/95 01/18/95 04/26/95 07/17/95 11/15/95 01/17/95 04/24/95 07/17/95 11/08/95 01/15/95 04/21/95			
Acetone	FP2			
Benzene				
Bromodichloromethane				
Bromoform				
Bromomethane	FP1			
2-Butanone				
Carbon disulfide				
Carbon tetrachloride	3			
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
Chloroform	1			
Chloromethane				
1,1-Dichloroethane				
1,2-Dichloroethane				
1,1,1-Trichloroethane				
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	1			
Toluene	FP2			
1,1,1-Trichloroethane				
1,1,2-Trichloroethane				
Trichloroethene				
Vinyl acetate				
Vinyl chloride				
Xylenes				

(CONTINUED)

APPENDIX M
Validated VOC Results, 1995

Sampling Point	GW-147	GW-156	GW-158	GW-159	GW-160	GW-161
Location	KHQ	CRSDB	CRSDB	CRSDB	CRBAMP	CRBAMP
Date Sampled	07/14/95	01/18/95	01/20/95	04/13/95	07/12/95	04/20/95
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 acetate	.	.	.	.	.	.
Vinyl chloride	.	.	.	.	.	.
Xylenes	.	.	.	.	.	.

(CONTINUED)

APPENDIX M
Validated VOC Results, 1995

Sampling Point	GW-161	GW-175	GW-177	GW-181	GW-184
Location	CRBWP	CRSP	CRSP	CRSP	RQ
Date Sampled	10/31/95	02/14/95	05/15/95	08/01/95	11/17/95
Acetone	10				
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 acetate					
Vinyl chloride					
Xylenes					

(CONTINUED)

APPENDIX M
Validated VOC Results, 1995

Sampling Point	GW-184	GW-186	GW-187	GW-188	GW-203	GW-205	GW-217	GW-221
Location	RQ	RQ	RQ	RQ	UNCS	UNCS	LIV	UNCS
Date Sampled	10/31/95	05/03/95	11/02/95	05/01/95	10/07/95	10/07/95	07/10/95	04/19/95
Acetone	.	.	.	.	FP2	.	.	.
Benzene	.	.	.	.	.	.	.	.
Bromodichloromethane	.	.	.	.	.	.	.	.
Bromoform	.	.	.	.	.	.	.	.
Bromomethane	.	.	.	.	.	.	.	.
2-Butanone	.	.	.	.	.	.	.	.
Carbon disulfide	.	.	.	.	.	.	.	.
Carbon tetrachloride	.	.	.	.	.	.	.	.
Chlorobenzene	.	.	.	.	.	.	.	.
Chlorodibromomethane	.	.	.	.	.	.	.	.
Chloroethane	.	.	.	.	.	.	.	.
Chloroform	.	.	.	.	.	.	.	.
Chloromethane	.	.	.	.	.	.	.	.
1,1-Dichloroethane	.	.	.	.	.	.	.	.
1,2-Dichloroethane	.	.	.	.	.	.	.	.
1,1,1-Trichloroethane	.	.	.	.	.	.	.	.
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 acetate	.	.	.	.	.	.	.	.
Vinyl chloride	.	.	.	.	.	.	.	.
Xylenes	.	.	.	.	.	.	.	.

(CONTINUED)

APPENDIX M
Validated VOC Results, 1995

Sampling Point	GW-221	GW-231	GW-241	GW-292	GW-293	GW-294
Location	UNCS	KHQ	CRSDB	ECRMP	ECRMP	ECRMP
Date Sampled	10/08/95	01/15/95	04/21/95	07/15/95	11/06/95	04/22/95
Acetone	.	.	.	.	.	FP1
Benzene	.	.	.	.	.	.
Bromodichloromethane	.	.	.	.	.	.
Bromoform	.	.	.	.	.	.
Bromomethane	FP2	.	.	.	.	.
2-Butanone	.	.	.	.	.	.
Carbon disulfide	.	.	.	.	.	.
Carbon tetrachloride	.	.	.	.	.	.
Chlorobenzene	.	.	.	.	.	.
Chlorodibromomethane	.	.	.	.	.	.
Chloroethane	.	.	.	.	.	.
Chloroform	.	.	.	.	.	.
Chloromethane	.	.	.	.	.	.
1,1-Dichloroethane	.	.	.	.	.	.
1,2-Dichloroethane	.	.	.	.	.	.
1,1,1-Trichloroethane	.	.	.	.	.	.
1,1,2-Trichloroethane	.	.	.	.	.	.
1,2-Dichloroethane	.	.	.	.	.	.
1,2-Dichloropropane	.	.	.	.	.	.
cis-1,3-Dichloropropene	.	.	.	.	.	.
trans-1,3-Dichloropropene	.	.	.	.	.	.
Ethylbenzene	FP2	.	.	.	.	.
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 acetate	.	.	.	.	.	.
Vinyl chloride	.	.	.	.	.	.
Xylenes	FP2	.	.	.	.	.

(CONTINUED)

APPENDIX M
Validated VOC Results, 1995

Sampling Point	GW-295	GW-296	GW-298	GW-299	GW-300	GW-301	GW-302	GW-303
Location	CRBWP	ECRWP	CRBWP	CRBWP	CRBWP	CRBWP	UNCS	CRSDB
Date Sampled	05/03/95	04/22/95	11/05/95	05/02/95	11/04/95	05/01/95	11/03/95	04/19/95
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 acetate	.	.	.	.	.	.	.	.
Vinyl chloride	.	.	.	.	.	.	.	.
Xylenes	.	.	.	.	.	.	.	.

FP2

FP2

(CONTINUED)

APPENDIX M
Validated VOC Results, 1995

Sampling Point	GW-303	GW-304	GW-305	GW-321	GW-339	GW-511
Location	CRSDB	CRSDB	LIV	ADB	UNCS	CRSP
Date Sampled	04/09/95	01/15/95	07/12/95	04/25/95	10/08/95	05/03/95
Acetone	.	.	.	.	.	2
Benzene	.	.	.	.	.	.
Bromodichloromethane	.	.	.	.	.	.
Bromoform	.	.	.	.	.	.
Bromomethane	.	.	.	.	.	.
2-Butanone	.	.	.	.	.	.
Carbon disulfide	.	.	.	.	.	.
Carbon tetrachloride	.	.	.	.	.	.
Chlorobenzene	.	.	.	.	.	.
Chlorodibromomethane	.	.	.	.	.	.
Chloroethane	.	.	.	.	.	.
Chloroform	.	.	.	.	.	.
Chloromethane	.	.	.	.	.	.
1,1-Dichloroethane	.	.	.	.	.	.
1,2-Dichloroethane	.	.	.	.	.	.
1,1,1-Trichloroethane	.	.	.	.	.	.
1,2-Dichloroethene	.	.	.	.	.	.
1,2-Dichloropropane	.	.	.	.	.	.
cis-1,3-Dichloropropene	.	.	.	.	.	.
trans-1,3-Dichloropropene	.	.	.	.	.	.
Ethylbenzene	.	.	.	.	FP2	.
2-Hexanone	.	.	.	.	.	.
4-Methyl-2-pentanone	.	.	.	.	.	.
Methylene chloride	.	.	.	.	FP2	.
Styrene	.	.	.	.	.	.
1,1,2,2-Tetrachloroethane	.	.	.	.	.	.
Tetrachloroethene	.	.	.	.	.	.
Toluene	.	.	.	.	.	.
1,1,1-Trichloroethane	.	.	FP2	.	.	FP1
1,1,2-Trichloroethane	.	.	.	.	.	.
Trichloroethene	.	.	.	.	.	.
Vinyl acetate	.	.	.	.	.	.
Vinyl chloride	.	.	.	.	FP2	.
Xylenes	.	.	.	.	.	.

(CONTINUED)

APPENDIX M
Validated VOC Results, 1995

Sampling Point	GW-511	GW-512	GW-513	GW-514	GW-521	GW-522	GW-539
Location	CRSP	ADB	ADB	ADB	LIV	LIV	LII
Date Sampled	11/07/95	04/26/95	10/31/95	04/27/95	11/02/95	01/10/95	07/10/95
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 acetate	.	.	.	.	.	.	.
Vinyl chloride	.	.	.	.	.	.	.
Xylenes	.	.	.	.	.	.	.

(CONTINUED)

APPENDIX M
Validated VOC Results, 1995

Sampling Point	GW-540	GW-541	GW-542	GW-543	GW-544	GW-546	GW-557
Location	CDLVI	CDLVI	CDLVI	CDLVI	CDLVI	CDLVI	LV
Date Sampled	04/04/95	04/05/95	04/06/95	04/06/95	04/06/95	04/05/95	04/06/95
Acetone	.	.	.	.	.	.	.
Benzene	.	.	.	.	.	.	.
Bromodichloromethane	.	.	.	.	.	.	.
Bromoform	.	.	.	.	.	.	.
Bromomethane	.	.	.	.	.	.	.
2-Butanone	.	.	.	.	.	.	.
Carbon disulfide	.	.	.	.	.	.	.
Carbon tetrachloride	.	.	.	.	.	.	.
Chlorobenzene	.	.	.	.	.	.	.
Chlorodibromomethane	.	.	.	.	.	.	.
Chloroethane	.	.	.	.	.	.	.
Chloroform	.	.	.	.	.	.	.
Chloromethane	.	.	.	.	.	.	.
1,1-Dichloroethane	.	.	.	.	.	.	.
1,2-Dichloroethane	.	.	.	.	.	.	.
1,1,1-Trichloroethane	.	.	.	.	.	.	.
1,2-Dichloropropane	.	.	.	.	.	.	.
cis-1,3-Dichloropropene	.	.	.	.	.	.	.
trans-1,3-Dichloropropene	.	.	.	.	.	.	.
Ethylbenzene	.	.	.	.	.	.	.
2-Hexanone	.	.	.	.	.	.	.
4-Methyl-2-pentanone	.	.	.	.	.	.	.
Methylene chloride	.	FP1	.	.	.	FP1	FP1
Styrene	.	.	.	.	.	.	.
1,1,2,2-Tetrachloroethane	.	.	.	.	.	.	.
Tetrachloroethene	.	.	.	.	.	.	.
Toluene	.	.	.	.	.	.	.
1,1,1-Trichloroethane	.	.	.	.	.	.	.
1,1,2-Trichloroethane	.	.	.	.	.	.	.
Trichloroethene	.	.	.	.	.	.	.
Vinyl acetate	.	.	.	.	.	.	.
Vinyl chloride	.	.	.	.	.	.	.
Xylenes	.	.	.	.	.	.	.

(CONTINUED)

APPENDIX M
Validated VOC Results, 1995

Sampling Point	GW-560	GW-562	GW-564	GW-608	GW-609
Location	CDLVII	CDLVII	CDLVII	CRSP	CRSP
Date Sampled	04/05/95	10/06/95	04/06/95	05/11/95	02/15/95
Acetone					FP2
Benzene					
Bromodichloromethane					
Bromoform					
Bromomethane					
2-Butanone					FP2
Carbon disulfide					
Carbon tetrachloride					
Chlorobenzene					
Chlorodibromomethane					
Chloroethane					
Chloroform					
Chloromethane					
1,1-Dichloroethane					
1,2-Dichloroethane					13
1,1,2-Dichloroethane					13
1,2-Dichloroethane					9
1,2-Dichloropropane					
cis-1,3-Dichloropropene					
trans-1,3-Dichloropropene					
Ethylbenzene					
2-Hexanone					
4-Methyl-2-pentanone					
Methylene chloride			FP1		
Styrene					
1,1,2,2-Tetrachloroethane					13
Tetrachloroethene					19
Toluene				2	
1,1,1-Trichloroethane				FP2	
1,1,2-Trichloroethane					
Trichloroethene					1
Vinyl acetate					2
Vinyl chloride					
Xylenes					

(CONTINUED)

APPENDIX M
Validated VOC Results, 1995

Sampling Point	GW-610	GW-611	GW-709	GW-731
Location	CRSP	CRSP	LII	CRSDB
Date Sampled	01/31/95	05/07/95	07/31/95	11/13/95
Acetone	.	.	.	.
Benzene	.	.	.	.
Bromodichloromethane	.	.	.	.
Bromoform	.	.	.	.
2-Butanone	.	.	.	.
Carbon disulfide	.	.	.	.
Carbon tetrachloride	.	.	.	.
Chlorobenzene	.	.	.	.
Chlorodibromomethane	.	.	.	.
Chloroethane	.	.	.	.
Chloroform	.	.	.	.
Chloromethane	.	.	.	.
1,1-Dichloroethane	.	.	.	.
1,2-Dichloroethane	.	.	.	.
1,1,1-Trichloroethane	.	.	.	.
1,1,2-Trichloroethane	.	.	.	.
1,2-Dichloroethane	.	.	.	.
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 acetate	.	.	.	.
Vinyl chloride	.	.	.	.
Xylenes	.	.	.	.

(CONTINUED)

APPENDIX M
Validated VOC Results, 1995

Sampling Point	GW-732	GW-742	GW-743	GW-757
Location	CRSDB	CRSP	CRSP	LII
Date Sampled	01/18/95 04/07/95 07/13/95 01/27/95 05/07/95 07/30/95 11/09/95 01/31/95 05/07/95 07/31/95 11/13/95 01/09/95 07/11/95 10/06/95			
Acetone	.	.	.	.
Benzene	.	.	.	.
Bromodichloromethane	.	.	.	.
Bromoform	.	.	.	.
Bromomethane	.	.	.	.
2-Butanone	.	.	.	.
Carbon disulfide	.	.	.	.
Carbon tetrachloride	.	.	.	.
Chlorobenzene	.	.	.	.
Chlorodibromomethane	.	.	.	.
Chloroethane	.	.	.	.
Chloroform	.	.	.	.
Chloromethane	.	.	.	.
1,1-Dichloroethane	.	.	.	.
1,2-Dichloroethane	.	.	.	.
1,1,1-Trichloroethane	.	.	.	.
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 acetate	.	.	.	.
Vinyl chloride	.	.	.	.
Xylenes	.	.	.	.

(CONTINUED)

APPENDIX M
Validated VOC Results, 1995

Sampling Point	GW-796	GW-797	GW-798	GW-799	GW-801	GW-827	SCR2.2SP
Location	LV	LV	CDLVI	CDLVII	LV	CDLVI	EXP-SW
Date Sampled	04/12/95	10/08/95	04/11/95	10/08/95	04/06/95	10/07/95	04/13/95
Acetone		21					
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							
Tetrachloroethane							
Toluene							
1,1,1-Trichloroethane							
1,1,2-Trichloroethane							
Trichloroethene							
Vinyl acetate							
Vinyl chloride							
Xylenes							

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