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Livermore Site Office, Livermore, California 94551

Lawrence Livermore National Laboratory

University of California, Livermore, California 94551

Characterization Summary Report for the Building 865 Study Area at Lawrence Livermore National Laboratory Site 300

September 2006

Environmental Protection Department

Environmental Restoration Division

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Re: Characterization Summary Report for the Building 865 Study Area at Lawrence Livermore National Laboratory Site 300

Dear Ms. Setian, Mr. Soto, and Ms. Timm:

The U.S. Department of Energy (DOE) and Lawrence Livermore National Laboratory (LLNL) are submitting this Characterization Summary Report for the Building 865 study area at LLNL Site 300. This letter report summarizes the results of environmental investigations performed in the Building 865 study area to determine if contamination has been released to the environment as a result of past activities. The results of this remedial investigation are organized into nine sections:

1. Introduction.
2. Background
3. Characterization and Remediation Activities.
4. Physical Setting.
5. Geology.
6. Hydrogeology.
7. Nature and Extent of Contamination.

8. Summary
9. Recommendations.

Hydrogeological, chemical, and radionuclide data collected between January 1, 1988 and March 31, 2006 were used to complete this assessment. The ground water elevation and analytical data collected as part of this characterization effort for the Building 865 study area are presented in Attachment A. A description and the results of the fate and transport modeling of the migration of Freon 113 and Freon 11 in ground water are presented in Attachment B.

1. Introduction

Site 300 is a U.S. DOE experimental test facility operated by the University of California and is located 17 miles east of Livermore and 8.5 miles southwest of Tracy, California (Figure 1). LLNL Site 300 was placed on the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) National Priorities List in 1990. Environmental investigations have been conducted under the joint oversight of the U.S. Environmental Protection Agency (EPA) – Region IX, the California Regional Water Quality Control Board (RWQCB) – Central Valley Region, and the California Department of Toxic Substances Control (DTSC) – Northern California Coastal Cleanup Operations Branch. A Federal Facility Agreement (FFA) is in place between DOE and these regulatory agencies (U.S. DOE, 1992) governing cleanup operations at LLNL Site 300.

The Building 865 study area is located in the north-central portion of Site 300 (Figure 1). The Building 865 Complex was constructed during 1980 to 1982. Building 865 facilities were used to conduct high–energy laser tests and diagnostics in support of national defense programs. The Building 865 Complex housed a 275-foot linear electron accelerator called the Advanced Test Accelerator (ATA). The ATA was designed to produce a repetitively-pulsed electron beam for charged particle beam research. In 1988, large-scale operations of the ATA were discontinued and much smaller experiments were conducted until 1995. Neither fissile nor high explosive (HE) materials were used at the Building 865 Complex. However, short-lived radioactivity was induced by the accelerator. The Building 865 Complex and ATA were slated for decontamination and decommissioning (D&D) during 2005-2006, but this activity has been delayed. Figure 2 shows the locations of buildings, ground water monitor wells, and springs in the Building 865 study area.

Figure 3 shows the locations of the facilities that existed during operations including:

- A Waste Accumulation Area (WAA).
- A control and support building (Building 865A).
- An electrical supply substation.
- Electrical fabrication shop (Building 865C).
- Diagnostic support buildings (Buildings 865B, 865D, and 865G).

- Laser houses (Building 865E and 865H).
- Radioactive materials storage (Building 865G).
- A modular office trailer (T8656).
- The 656-foot-long tunnel beneath Building 865A and 865E contained the accelerator, which consisted of a pulse-forming unit, an electron injector, and numerous accelerator modules.

2. Background

As part of the characterization investigation at the Building 865 Complex, DOE/LLNL reviewed historical records, and interviewed LLNL employees that worked at this facility when it was in operation. This information was used to identify historic operations and areas of chemical use and/or storage that could have released contaminants to the environment at the Building 865 Complex. This section summarizes past operations and activities at potential releases sites including the :

- Waste accumulation area and ATA storage tent (Section 2.1).
- Electrical supply substation transformer pad (Section 2.2).
- Building 865A machine shop and materials assembly room (Section 2.3).
- Solvent rack, Freon 113 tank, and tensile block wash area (Section 2.4).
- Oil conditioning system and tanks 865-T1A1, 865-T1A2, and 865-T1A3 (Section 2.5).
- Cooling tower sludge disposal area (Section 2.6).
- Storm drain outfall (Section 2.7).
- Accelerator tunnel (Section 2.8).
- Former surface impoundment and retention tanks 865-R1U1, 865-R1A1, 865-R1A2, and 865-R1A3 (Section 2.9).
- Rinsewater tank 865-R1U2 (Section 2-10).
- Former diesel tank (Section 2.11).

Figure 3 depicts the locations of these sites that are generally presented in the text in order of location from northwest to southeast. The principal liquid chemicals used in operations at Building 865 were Freon 113 (1,1,2-trichloro-1,2,2-trifluoroethane) that was used as a degreaser, and insulating mineral oil. While Building 865 was operational, activities conducted at Building 865A produced as much as 300 pounds of solid hazardous waste, 100 gallons of waste oils, and 2,000 gallons of Freon 113 or oil-contaminated wash down water each month. Based on its presence in ground water samples, Freon 11 (trichlorofluoromethane) was also a component of the Freon liquid used at Building 865.

2.1. Waste Accumulation Area (WAA) and ATA Storage Tent

The WAA and ATA storage tent were located about 100 feet (ft) southwest of Building 865A. Drums of solid hazardous waste, waste oils, and Freon-contaminated wash down water were stored in the WAA from approximately 1988 to 1995. The WAA was operated in accordance with the Resources Conservation and Recovery Act (RCRA) requirements. Hazardous wastes were transported by truck to the LLNL Livermore Site for treatment or disposal at an offsite permitted facility. The WAA was formally closed under California Title 22 requirements in August 1995 (Tageson, 2006). The ATA storage tent was located directly adjacent to the WAA and was used to store equipment and parts associated with experiments conducted at the Building 865 Complex. Because there is no documentation or physical evidence of chemical releases from the WAA or ATA storage tent area, the WAA/ATA storage tent area is not considered a release site and was not investigated further. Therefore, it is not discussed further in this document.

2.2. Electrical Supply Substation Transformer Pad

In October 1991, oil contamination was identified in shallow soil during the construction of a concrete berm around the electrical supply substation transformer on the northeast side of Building 865A. This soil was subsequently excavated to a depth of 3 ft, and disposed offsite as hazardous waste. Because potential contamination was identified in the vicinity of the electrical supply substation transformer, this area was evaluated as a potential release site.

2.3. Building 865A Machine Shop and Materials Assembly Room

A machine shop and the materials assembly room were located at the north end of the Building 865A. Solvents and bright-dip cleaning were used in the machine shop. A floor drain connected the machine shop to retention tank 865-R1U1. The surface impoundment received liquid overflow from tank 865-R1U1. The surface impoundment was later replaced by tanks 865-R1A1, 865-R1A2, and 865-R1A3.

There is no documentation or evidence of contaminant releases in the immediate vicinity of the Building 865A machine shop and materials assembly room, therefore these facilities are not considered release sites and were not investigated further. Therefore, they are not discussed further in this document. However, the rinsewater from these facilities that was discharged to retention tank 865-R1U1 and the surface impoundment were evaluated as potential release sites. The surface impoundment and these retention tanks are discussed in more detail in Section 2.9.

2.4. Solvent Rack, Freon 113 Tank, and Tensile Block Wash Area

Three chemical use sites were located immediately southwest of Building 865A and the Materials Assembly Room: (1) a solvent rack on a concrete pad contained drums of acetone, methyl ethyl ketone, and insulating oil, (2) a 345-gallon waste Freon 113 tank, and (3) a solvent wash bin that was used to wash tensile blocks (large electrical components). In 1988, these sites were removed and the use of Freon 113 as a solvent was discontinued. The tensile block wash area was directly outside the Machine Shop/Material Assembly Room rollup door and just southeast of the former solvent rack location. Between 1986 and 1988, at least 20 tensile blocks were washed with Freon 113 outdoors to remove insulating oil. No containment was used during the washing process. The storm drain grate immediately southwest of the solvent rack was connected to the storm drain outfall located on Figure 3. In July 1996, 35 cubic yards (yd^3) of oil-, diesel-, and toluene-contaminated soil were removed from a 38 ft long, 5 ft wide, and 5 ft deep excavation. The excavated soil was characterized, and disposed in the nearby Altamont Landfill (Galles, 1996). The excavation was located immediately south of the concrete pad for the solvent rack and included soil around the storm drain grate. The analytical data collected during this excavation is discussed in Sections 7.1 and 7.2. Because activities were conducted in vicinity of the solvent rack, Freon 113 tank, and tensile block wash area that may have resulted in the release of contaminants to the environment, these chemical use sites were evaluated as potential release sites.

2.5. Oil Conditioning System (OCS) and Tanks 865-T1A1, 865-T1A2, and 865-T1A3

An oil conditioning pad and several vacuum pumps were located on the southwest side of Building 865A. The OCS holding tank area is a potential release site because Freon 113 was used to remove oil stains on the concrete pad. A 1,750-gallon steel tank (865-T1A1) and two smaller tanks (865-T1A2 and 865-T1A3) containing insulating oil were removed from service. Overflow of the rinsewater used to hose down the OCS drained into tank 865-R1U1. All liquids were removed from the tanks, which were subsequently steam-cleaned. The concrete pad was also steam-cleaned. The tanks were not officially closed because they were considered non-hazardous by San Joaquin County (Castro, 2006). Approximately 3 cubic feet (ft^3) of soil were removed from the grated drain at the OCS, revealing that the floor of the drain was concrete. The 3 ft^3 of soil was shipped to Ensco for disposal as a non-Resource Conservation and Recovery Act (RCRA) waste contaminated with 1 to 2% petroleum hydrocarbons. The catch basin was then filled with 8 inches of gravel and topped with 4 inches of grout (Jackson, 1999). Jackson (1999) states that although Susan Timm of the RWQCB requested that the soil be cleaned from the storm drain, in an October 5, 1998 telephone conversation, Ms. Timm agreed that the drain could be sealed with concrete. Thus, after removal of 3 ft^3 of soil from the drain, the remainder was sealed beneath gravel and concrete. Because activities were conducted in vicinity of the oil conditioning system and tanks 865-T1A1, -T1A2, and –T1A3 that may have resulted in the release of contaminants to the environment, these chemical use sites were evaluated as potential release sites.

2.6. Cooling Tower Sludge Disposal Area

A cooling tower with a discharge rate of 23,000 gallons per day (gpd) was located on the southwest side of Building 865A. Water from the cooling tower discharged into the ephemeral drainage channel that parallels the east side of Route 3. This discharge created a wetlands habitat for California red-legged frogs, a Federal endangered species. The discharge of water from the cooling tower was discontinued in 1996. From 1993 to 2005, potable water was continuously released to the ephemeral drainage channel to maintain the wetland habitat for the frogs. This discharge was discontinued in 2005 upon completion of red-legged frog habitat in Elk Ravine south of Building 812 that was constructed in consultation with the U.S. Fish and Wildlife Service.

While the cooling tower was operating from 1982 until 1993, sludge that accumulated in the bottom of the cooling tower was routinely disposed on the ground about 50 ft northwest of the tower. About 150 pounds per year or a total of 1,800 pounds of sludge were placed on the ground in this location. In 1994, the RWQCB was notified of this practice and cooling tower sludge was subsequently containerized and transferred offsite for disposal. Total threshold limit concentration (TTLC) and soluble threshold limit concentration (STLC) metals analytical results for the containerized sludge samples indicated zinc was present at 26,000 milligrams per kilogram (mg/kg) TTLC and 456 milligrams per liter (mg/L) STLC. These zinc concentrations exceeded the TTLC and STLC hazardous waste criteria of 5,000 mg/kg and 250 mg/L, respectively. Therefore, the sludge was handled and disposed as a hazardous waste (Fisher, 1994).

In 1994, soil from the sludge disposal area northwest of the cooling tower was sampled and analyzed for metals. The results of the metal analysis are discussed in Section 7.1 and 7.2. In 1994, after receipt of the analytical data, several inches of soil were removed from the sludge disposal area and transported offsite to a hazardous waste disposal facility (Fisher, 1994).

Because activities were conducted in vicinity of cooling tower sludge disposal area that may have resulted in the release of contaminants to the environment, these chemical use sites were evaluated as potential release sites.

2.7. Storm Drain Outfall

A storm drain is located approximately 130 ft southwest of Building 865A. Wastewater that may have contained Freon 113 and oil entered a storm grate near the material assembly room and the tensile block washing area of Building 865A. The storm drain would have directed this water southward to the ephemeral drainage channel that runs along the east side of Route 3 (Figure 3). Soil samples were collected from the drainage channel and analyzed for Freon 113 and oil. The analytical results for these soil samples are discussed in Section 7.2. Because wastewater was discharged to the storm drain outfall that may have resulted in the release of contaminants to the environment, this area was evaluated as potential release sites.

2.8. Accelerator Tunnel

A 656-foot-long tunnel was located beneath Buildings 865A and 865E. At present, numerous components that were activated by the electron beam still remain in the tunnel and will be removed as a part of a future decontamination and decommissioning activity. Activated materials consist primarily of aluminum beam pipes containing sodium-22 (^{22}Na). In 1995, the estimated total quantity of ^{22}Na in the facility was 1 millicurie (Biesecker, 1995). Sodium-22 has a half-life of 2.6 years and is primarily a weak beta particle emitter. This material will remain until final decommissioning of the Building 865 Complex. The material is isolated from water and the atmosphere and does not represent an exposure risk to workers. A visual inspection of the facility and interviews with program personnel have indicated that during the operational years of ATA, the floor of the tunnel was coated annually with an impervious epoxy as part of the facility maintenance program (Woods, 1995). In addition, the tunnel was outfitted with functional floor drains that were connected to a retention tank system located near the southwest corner of Building 865A or to surface impoundments located southwest of Building 865D. The retention tank system and surface impoundment are discussed in the subsequent section.

Because the ^{22}Na in the accelerator tunnel has been and continues to be isolated from environmental media and does not pose an exposure risk, the accelerator tunnel facility is not considered a release site and was not evaluated further. Therefore, it is not discussed further in this document.

2.9. Surface Impoundment and Retention Tanks 865-R1U1, 865-R1A1, 865-R1A2, and 865-R1A3

The bermed area located southwest of Building 865D was the original location of a surface impoundment and 550-gallon carbon steel underground tank 865-R1U1.

Approximately 25 gallons of rinsewater was released during a performance test of tank 865-R1U1 in December 1990. Fill material near this tank was excavated to sandstone bedrock and replaced with clean fill. Tank 865-R1U1 was subsequently moved to its current subsurface location (Figure 3), immediately northeast of the former surface impoundment. Washdown rinsewater is collected in tank 865-R1U1 from floor drains within the epoxy-lined tunnel, oil conditioning pad, and machine shop. A precision test of tank 865-R1U1 and the associated piping was last conducted on December 8, 1992 and indicated that the tank and piping were found to be product-tight (Castro, 2006). The tank continues to receive rinsewater and is still in service.

Prior to 1985, excess rinsewater from tank 865-R1U1 was retained in a 7,000-gallon capacity, rubber-lined surface impoundment. From 1982 to 1985, the rinsewater occasionally contained a large fraction of insulating oil. The insulating oil was used for transferring heat in the electrical transmission lines and accelerator modules. Some Freon 113 was also present in the rinsewater because it had been used as a solvent for cleaning accelerator modules and other experimental apparatus. Butylated hydroxyl toluene was a constituent of the insulating oil. The surface impoundment was removed in 1985 and the surrounding soil was excavated and disposed as hazardous waste.

In late 1985, the surface impoundment was replaced with three 4,000-gallon aboveground retention tanks (865-R1A1, 865-R1A2, and 865-R1A3), located within a 3-ft high rectangular berm that had been sprayed with gunite cement. Operation of the three-tank system resulted in oil stains on the gunite surface. During a tank upgrade evaluation conducted by LLNL in 1990, extensive oil and grease contamination was identified on the gunite in the bermed area where the former rinsewater surface impoundment and three aboveground tanks had been located. Much of the earthen berm was excavated in 1990.

In the fall of 1990, tanks 865-R1A1, 865-R1A2, and 865-R1A3 were moved from the bermed area to a new location immediately adjacent to Building 865A (Figure 3). The tanks on west side of building were drained and the concrete pad and trench were steam-cleaned. The tanks ceased operation in 1995 and did not require regulatory closure because the rinsewater was not considered hazardous by San Joaquin County (Castro, 2006).

Because activities were conducted in vicinity of the former surface impoundment and retention tanks 865-R1U1, 865-R1A1, 865-R1A2, and 865-R1A3 that may have resulted in the release of contaminants to the environment, these areas were evaluated as potential release sites.

2.10. Rinsewater Tank 865-R1U2

A 135-gallon capacity concrete rinse water tank (865-R1U2) is located beneath Building 865A (Figure 3). The tank was installed in 1980 and received rinsewater from the floor drains within Building 865A. The tank is still operational and was last precision tested on December 9, 1992. The tank and piping were found to be product-tight (Castro, 2006). Because there is no documentation or physical evidence of chemical releases from rinsewater tank 865-R1-U2, it is not considered a release site and was not investigated further. Therefore, it is not discussed further in this document.

2.11. Former Diesel Tank 865-D1U1

A 4,000-gallon underground diesel tank 865-D1U1 was formerly located adjacent to Building 865D (Figure 3). In 1994, the tank was tested and found to be product-tight. The tank was removed in October 1994 and closed under the authority of San Joaquin County (San Joaquin County, 1995). During removal, diesel-contaminated soil was noted in the excavation. The diesel contamination was likely the result of overfilling of the tank. Soil sampling and analysis was conducted after excavation of the affected soil (Jackson, 1994). All contaminated soil was excavated and bioremediated onsite or disposed offsite. Because former diesel tank 865-D1U1 and associated contaminated soil was removed and the tank area formally closed, it is not considered a release site and was not investigated further. Therefore, it is not discussed further in this document.

3. Characterization and Remediation Activities

Environmental investigations in the Building 865 study area began in 1996 when milestones for this area were added to the Site 300 FFA schedule (U.S. DOE, 1992). The site characterization work performed in the study area included:

- Records searches and interviews with current and former employees.
- Geological mapping.
- Drilling, geophysical logging, and collection of soil and rock samples from boreholes.

- Installing ground water monitor wells.
- Correlating stratigraphic units and hydrostratigraphic units.
- Sampling and chemical/radiological analysis of soil, rock, and water.
- Measuring ground water elevations.
- Hydraulic testing.

Previous remedial activities included:

- Excavating and disposing of contaminated soil.
- Removing and disposing of waste.
- Flushing tanks and pipes and removing tanks.

Table 1 contains a summary of investigation and cleanup activities conducted at the Building 865 study area. Table 2 contains completion data for monitor wells installed in the Building 865 study area.

4. Physical Setting

The Building 865 study area covers approximately 0.4 square miles in north-central Site 300 (Figure 1). The local topography and locations of roads, buildings, ephemeral drainages, and monitor wells are shown on Figure 2. The physical locations of chemical use and storage at the Building 865 Complex are shown on Figure 3. Physical characteristics of the study area are shown on the geologic map presented as Figure 4. These features are described in more detail in Section 5.

The Building 865 Complex facilities are located on the northeast side of Elk Ravine and northwest of the Pit 1 and 2 Landfills. Elk Ravine trends northwest-southeast in the western portion of the study area. Except for Building 865E, all buildings are situated on a cut-and-fill slope about 1,100 ft above mean sea level (MSL). The hills to the northeast rise to over 1,300 ft above MSL. A shallow northwest-southeast oriented channel runs within Elk Ravine along the southwest side of the building complex (Figure 2). Due to the rugged terrain, safe and accessible drilling locations are often limited to paved areas near buildings, fire trails, and other dirt roads.

The climate at Site 300 is classified as semi-arid. Rainfall averages 10 to 11 inches per year, most of which falls during winter storms. During these storms, ephemeral water may flow within the drainage in Elk Ravine. Surface water flowing locally in channels after rainfall events quickly infiltrates into the ground after traveling short distances. Surface water, rarely if ever, is continuous to the confluence of Elk Ravine and Corral Hollow at the southeastern boundary of Site 300.

5. Geology

Site 300 is located within the Coast Range Physiographic Province of north-central California. The province is characterized by a sub-parallel system of northwest-southeast trending ridges and valleys. Rocks at Site 300 are principally comprised of terrestrial and estuarine sediments of Miocene-to-Pliocene age. Quaternary alluvium occurs as fill within the floors of valleys. The geology of the Building 865 study area is complex. There are several major shear zones of faulting, two major folds, and a number of stratigraphic units that are folded and offset by faulting. One of the most notable features in the area is the northwest-southeast-oriented Elk Ravine Fault Zone; the southwest branch of the Elk Ravine Fault occurs within the study area (Figure 4). The East Firing Area Syncline extends west-east beneath the Building 865 Complex and plunges east and southeast. The Patterson Anticline crosses Site 300 west-to-east about a thousand feet south of the Building 865 Complex. These faults and folds are discussed in more detail in Section 5.2.

5.1. Stratigraphy

Quaternary alluvium (Qal) and weathered bedrock (WBR) occur as stream channel sediment and underlying decomposed bedrock within Elk Ravine and the short canyons that run tributary to it (Figure 4). Rocks beneath the Building 865 study area are principally comprised of two formations: (1) the Neroly Formation and (2) the underlying Cierbo Formation. In the higher elevation areas, there is also a semi-lithified veneer of Pliocene sediment. A type-section including the major water-bearing stratigraphic units in the study area is presented in Figure 5.

The uppermost bedrock stratigraphic unit is a sandstone unit of the lower Neroly Formation ($Tnbs_1$) that contains interbeds of claystone and siltstone. Within the $Tnbs_1$ stratigraphic interval is a conglomerate subunit ($Tnbs_1$-cong). Below the base of the $Tnbs_1$ unit is a sandstone unit with minor interbeds of claystone and siltstone ($Tnbs_0$). Beneath the $Tnbs_1$ and $Tnbs_0$, at the base of the Neroly Formation, is a siltstone and claystone-dominated unit ($Tnsc_0$). The Neroly Formation rests on an erosional contact with massive sandstones and interbedded siltstones and claystones of the underlying Cierbo Formation (Tmss).

Figure 6 is a geologic cross-section through the Building 865 study area. It presents a summary of correlations that were made using sequence stratigraphic analysis (Ehman, 2006) in which cyclic sequences of distinct rock units observed in borehole core are defined across the study area. Borehole geophysical logs and optical televiewer imaging assisted in defining stratigraphic contacts. The section line for the cross-section is shown on Figures 4 and 6. Relevant characteristics of each stratigraphic unit present beneath the Building 865 study area are described below.

5.1.1. Quaternary Alluvium (Qal/WBR)

The alluvial deposits of the Qal/WBR stratigraphic unit are composed of sand, silt, sandy clays, and gravelly sands and silts. The maximum thickness of alluvial deposits in the Building 865 study area is about 15 to 20 ft within portions of Elk Ravine. Weathered Neroly Formation bedrock underlies colluvium, principally on east-facing slopes, and alluvium in valley bottoms.

5.1.2. Pliocene Non-Marine Unit (Tps)

The Tps unit is present on hilltops and is composed of semi-lithified dense silty sands, with channel deposits of dense silty and sandy gravel, silty to clean, fine-to-coarse-grained sand, and minor sandstone and conglomerate. These sediments were only penetrated in the borehole for one well in the study area (W-865-2133), where the unit is 16 ft thick. Elsewhere in the study area, the unit may be as much as 25 ft thick.

5.1.3. Neroly Formation Lower Blue Sandstone Unit ($Tnbs_1$) and Conglomerate subunit ($Tnbs_1$-cong)

The lower $Tnbs_1$ sandstone rests above the sandstone of the $Tnbs_0$ unit. The $Tnbs_1$ unit is composed of massive sandstones and gravelly sandstones with interbeds of siltstone and claystone. The $Tnbs_1$-cong subunit occurs as an extensive channel fill within the $Tnbs_1$ and is well-exposed in the eastern end of Doall Ravine and less well-exposed on the hills southeast of Building 865 and on the slopes on the west side of Elk Ravine just north of Doall Ravine. The $Tnbs_1$-cong rests on a sharp, erosive contact above sandstones and siltstones in the $Tnbs_1$ stratigraphic interval (Figures 5 and 6). The conglomerate subunit is composed of well-cemented pebble-to-cobble clast-supported andesite and basalt conglomerate with interstratified sandstone and gravelly sandstone. The thickness of the $Tnbs_1$-cong varies, but is locally up to 50 feet thick. The conglomerate is overlain by fining upward channel fill packages of gravelly sandstone, sandstone, siltstone and claystone of the $Tnbs_1$. The thickness of the $Tnbs_1$ stratigraphic interval varies from about 100 to almost 300 ft. Fractures are common, especially in the finer-grained lenses and within the conglomerate. The Claystone Marker Bed (CMB) is a 10-ft thick claystone within $Tnbs_1$ that separates the Upper and Lower $Tnbs_1$.

5.1.4. Neroly Formation Basal Blue Sandstone Unit ($Tnbs_0$)

The $Tnbs_0$ sandstone at the base of the $Tnbs_1$ stratigraphic interval overlies siltstones and claystones of the $Tnsc_0$ unit. The $Tnbs_0$ unit is a dark grayish brown to dark bluish gray, fine-to-medium-grained sandstone that is parallel-laminated and is generally between 10 to 20 ft thick. Portions of this unit may be fractured. The $Tnbs_0$ unit is the main water-bearing unit in the study area.

5.1.5. Neroly Formation Lower Claystone Unit ($Tnsc_0$)

The lower claystone unit of the Neroly Formation ($Tnsc_0$) underlies the $Tnbs_0$ unit and is located above the Cierbo Formation (Figures 5 and 6). The unit is comprised of dark greenish-gray claystone, siltstone, clayey siltstone, and silty claystone with thin, discontinuous silty sandstone and sandy siltstone interbeds. The clayey siltsones and silty claystones are fractured and typically have a sheared appearance in core. Where completely penetrated within the study area, the $Tnsc_0$ unit is approximately 60 to 100 ft thick.

5.1.6. Cierbo Formation (Tmss)

The Cierbo Formation (Tmss) was encountered in the drilling of several boreholes and is not exposed at the surface in the Building 865 study area. The unit is distinguished by the presence of light gray quartzose sandstones, as opposed to the blue-gray volcanic-rich sandstones of the overlying Neroly Formation. The Cierbo Formation consists of fine- to medium-grained, light gray to light olive gray sandstones with clayey siltstone and silty claystone interbeds. Because the sandstone is very friable, recovery during drilling tends to be fair to poor. The clayey siltstone and silty claystone interbeds are often fractured. Where completely penetrated, north of the study area at well NC7-50 (Figure 2), the Cierbo Formation is approximately 140 ft thick.

5.2. Geologic Structure

Two major structures dominate the Building 865 study area: (1) the Elk Ravine Fault Zone and (2) the East Firing Area Syncline. The Elk Ravine Fault zone extends northwest to southeast through the study area and affects both the bedrock stratigraphy and the present day topography.

Neroly Formation rocks within and on both sides of the Elk Ravine Fault Zone possess a very shallow dip that is difficult to accurately measure in outcrop. Trenching across the fault north of Pit 1 in 1988 detected the fault offsetting bedrock but not offsetting alluvial material (Hoffman, 1988). Although fault dip was measured as 28° to the southwest, the surface trace of the fault appears relatively straight, suggesting a steeper-dipping fault zone. The apparent offset is down on the northwest side of this fault. A shear zone within eastern Doall Ravine, about 200 ft west of Pit 2 showed a measured orientation of 209° and a vertical dip (Dugan, 1994). Cross-section A-A’ (Figure 6) crosses the Elk Ravine Fault zone and shows the southwestern shear zone as vertical. Detailed stratigraphic analysis delineated offset of stratigraphic units along this shear zone.

The East Firing Area Syncline trends west-east beneath the Building 865 Complex and plunges east and southeast within the study area. Both the East Firing Area Syncline and the Elk Ravine Fault affect ground water flow within the Building 865 study area.

6. Hydrogeology

The hydrogeology of the Building 865 study area is controlled by stratigraphy, structure, and topography. The areal distribution of strata and the folding created by the East Firing Area Syncline, offset along the southwestern branch of the Elk Ravine Fault Zone, and fracturing play important roles in the location and hydraulic character of water-bearing zones. Section 6.1 describes the characteristics of the hydrostratigraphic units (HSUs) present within the Building 865 study area. Section 6.2 discusses ground water elevations and recharge and discharge in the $Tnbs_1/Tnbs_0$ HSU. A description of hydraulic parameters for the $Tnbs_1/Tnbs_0$ HSU is presented in Section 6.3.

6.1. Hydrostratigraphic Units (HSUs)

For the purposes of this Characterization Summary report, saturated stratigraphic units are grouped into HSUs. An HSU is a water-bearing zone that exhibits similar hydraulic and chemical properties within particular stratigraphic units. Based on the distribution of saturation in statigraphic units, water elevation analysis, statigraphic correlation, and fault and fracture geometry, three HSUs have been defined for the Building 865 study area:

1. Qal/WBR HSU (Section 6.1.1.).
2. $Tnbs_1$/$Tnbs_0$ HSU (Section 6.1.2).
3. Tmss HSU (Section 6.1.3).

Completion data for monitor wells installed in the Building 865 study area are presented in Table 2. Ground water elevation data are presented in Table A-1. The hydraulic and hydrogeologic characteristics of these HSUs are summarized in Table 3 and are described in this section and Sections 6.2 through 6.3.

6.1.1. Qal/WBR HSU

The Qal/WBR HSU consists of unconsolidated Qal sediments and an upper veneer of weathered bedrock of the Neroly Formation that occupy the valley bottom within Elk Ravine and subsidiary drainages. Saturation is likely intermittent and occurs in the deepest and thickest portions of the Qal/WBR. Zero to 5 ft of ephemeral, unconfined ground water may be present in the Qal/WBR HSU at a depth of 0 to 20 ft below ground surface (bgs). Ground water in this HSU generally follows the topography of the valley bottoms, flowing south-southeast in Elk Ravine. Only one well in the study area (W-865-07) is completed within the Qal/WBR HSU. Based on topography, this well is upgradient of the Building 865 Complex.

6.1.2. $Tnbs_1$/$Tnbs_0$ HSU

The $Tnbs_1$/$Tnbs_0$ HSU is the principal water-bearing zone within the study area. As shown in Figure 6, the $Tnbs_1$/$Tnbs_0$ HSU is 5 to 10 ft thick and is generally under unconfined conditions at a depth of 90 to over 350 ft bgs. It is present at a depth of about 100 to 120 ft beneath the immediate vicinity of the Building 865 Complex. In the eastern portion of the study area, such as near wells W-865-2133 and W-865-2224, the saturated thickness of this HSU increases up to 120 ft and becomes confined about 500 ft east of W-865-2121. Well W-865-2133 is completed in $Tnbs_1$ strata and has the same potentiometric surface elevation as adjacent well W-865-2224, which is completed deeper within the $Tnbs_0$ unit. The confining layer appears to be an unfractured, 30-ft thick claystone present at 90 to 120 ft at wells W-865-2133 and W-865-2224.

The potentiometric surface contours for ground water in the $Tnbs_1$/$Tnbs_0$ HSU are shown on Figure 7. The main geologic structures that influence the extent and direction of ground water flow in the study area are the: (1) northwest-trending Elk Ravine Fault, and (2) eastward-trending East Firing Area synclinal axis. West of the Building 865 Complex, the general ground water flow direction is to the east with a gradient of about 0.1. Although the ground water gradient magnitude and direction do not significantly change across the Elk Ravine Fault, the depth to ground water drops by 20 to 30 ft across the fault in the central part of the study area. Ground water flows east-northeast from the Building 865 Complex and the gradient decreases significantly to about 0.02 north of Pit 1 in the vicinity of the W-865-2121 and W-865-2133 wells. To the north, the extent of ground water in the $Tnbs_1/Tnbs_0$ HSU is controlled and limited by the intersection of the water table with the southward-dipping base of the $Tnbs_1/Tnbs_0$ HSU along the northern flank of the East Firing Area syncline. Saturation was not observed within the $Tnbs_1/Tnbs_0$ HSU during the drilling of the boreholes for wells NC7-50 and W-896-1806. The underlying $Tnsc_0$ stratigraphic unit is primarily unsaturated in the study area.

What appears to be discontinuous, perched water-bearing zone was encountered within the upper $Tnbs_1$ sandstone and was observed during the drilling of well W-865-2133 at a depth of about 89 to 94 ft bgs. Perched ground water was also encountered in the $Tnbs_0$ strata in well W-896-1806. The ground water elevations and recovery rates for these water-bearing zones indicate that they are not hydraulically connected with the $Tnbs_1/Tnbs_0$ HSU. Depth to ground water in these water-bearing zones is variable and the direction of ground water flow within these discontinuous lenses is not known. The maximum saturated thickness encountered in these water-bearing zones is about 5 ft and borehole data indicate they are not continuous over a large area. Because of the discontinuous extent and variable saturation, these water-bearing zones do not constitute mappable HSUs.

6.1.3. Tmss HSU

A continuous, confined water-bearing zone is inferred to occur within the deeper underlying Tmss HSU. Saturated conditions were encountered at a depth of 122-132 ft bgs in the Tmss HSU during the drilling and installation of well W-865-06. There are no other wells screened within Tmss in the study area. However, the Tmss HSU, which is screened in other wells west and south of the study area has a strong upward gradient.

6.2. Ground Water Elevations and Recharge and Discharge

Water elevation hydrographs for selected wells within the primary water-bearing zone at the Building 865 study area, the $Tnbs_1/Tnbs_0$ HSU (Figure 8), were constructed to evaluate responses of water elevations to rainfall.

The hydrograph for well K1-09 is representative of other wells (K1-05, K1-07, and K1-08) screened in the area prior to 2000. Water elevations gradually declined during the low rainfall years of 1987 through 1992 but began rising following the higher rainfall in 1993. Water elevations again declined in 1994 but began rising in response to the higher rainfall observed during 1995 through 2000.

Hydrographs for wells W-865-02 and W-865-05, both completed in 2000, show similar responses to the low rainfall during 2000 through 2004, though well W-865-02 shows slightly lower responses to the higher rainfall in 2005. Wells W-865-2002 and W-865-2003, completed in 2004, show similar water elevation responses to rainfall to the other wells depicted.

The response time of less than a year to higher rainfall seasons indicates that direct recharge likely occurs in the valley bottoms of Elk Ravine and subsidiary drainages. A north-trending canyon located east of Building 865 appears to be a significant source of recharge to the $Tnbs_1/Tnbs_0$ HSU. As shown on cross-section A-A' (Figure 7) the saturated thickness in this HSU increases significantly between wells W-865-2121 and W-865-2133.

Discharge from the $Tnbs_1/Tnsc_0$ HSU likely occurs via evapotranspiration where this HSU crops out and discharges at springs north and east of the study area. As has been shown in previous reports documenting contamination within the $Tnbs_1/Tnbs_0$ HSU in northern Site 300, such as the Final Remedial Investigation/Feasibility Study for the Site 300 Pit 7 Complex (Taffet et al., 2005), there is no continuous pathway for ground water in the HSU to reach the City of Tracy or its water-supply wells. Ground water within the $Tnbs_1/Tnbs_0$ HSU ultimately flows southeast and discharges south of Building 812 at Spring 6 and as shallow flow in Qal/WBR within Elk Ravine and Corral Hollow.

6.3. Hydraulic Characterization of the $Tnbs_1/Tnbs_0$ HSU

A total of 67 hydraulic tests have been conducted in 41 different wells in the Building 865 study area and surrounding areas (Table 4). The objective of these tests was to determine hydraulic parameters, such as hydraulic conductivity and maximum sustainable yield, and if possible, to determine hydraulic communication between wells. Twenty-seven of the 41 wells tested are completed within the $Tnbs_1/Tnbs_0$ HSU, which contains the Freon 113 and Freon 11 in ground water within the Building 865 study area.

As summarized in Table 4, results vary from well to well. This variation is associated with the location of each well and the HSU the well screen intersects. In areas where the saturated thickness is limited and the formation lacks secondary porosity, well yields are typically low. In areas where screens intersect fracture networks, wells typically yield higher flow rates.

Most of the wells immediately east and northeast of the Building 865 Complex were not suitable for hydraulic testing because of very low well yields, or limited saturated thickness. For these wells, water elevation response during well development and/or purging during sampling events were used to evaluate the hydraulic characteristics of the strata within the screened intervals.

The majority of wells completed in the $Tnbs_1/Tnbs_0$ HSU have very low sustainable flow rates (< 0.5 gallons per minute [gpm]) with the exception of a few wells that can sustain flow rates of 2 or more gpm. For example, the recently installed well W-865-2224 well was air lifted at 3 gpm during well development with minimal drawdown. The screened intervals of these wells likely intersect fractures that are capable of transmitting more water. The bi-modal distribution of estimated hydraulic conductivity and flow rate data are typical of fractured bedrock aquifers such as the $Tnbs_1/Tnbs_0$ HSU at the Building 865 area. The average hydraulic conductivity estimated using the wells near Building 865 area is 1.6×10^{-3} centimeters per second (cm/sec) (35 gallons per day per square foot or 4.5 feet per day), with a range of 1×10^{-2} to 1×10^{-5} cm/sec. These values are consistent with the calibrated hydraulic conductivity values used in the numerical model described in Attachment B. Ground water flow (seepage) velocities within the HSU generally vary from 50 to 100 meters per year.

7. Nature and Extent of Contamination

Samples were collected from environmental media in the Building 865 study area and analyzed for constituents that may have been released as a result of activities conducted at the Building 865 Complex. The nature and extent of contamination in surface soil, subsurface soil/rock, and ground water are presented in Sections 7.1, 7.2, and 7.3, respectively.

As part of the evaluation of the nature and extent of contamination at the Building 865 study area, a screening-level human health and ecological risk assessment was conducted to identify contaminants of concern (COCs) in environmental media. COCs were identified based on exceedences of regulatory criteria or background concentrations in surface and subsurface soil and exceedences of regulatory criteria, persistence, and frequency of detection in ground water. The risk assessment process and results are included in the discussions for each environmental media (Sections 7.1 through 7.3).

7.1. Nature and Extent of Contamination in Surface Soil

Surface soil samples from the Building 865 study area were collected and analyzed for halogenated and aromatic volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH) as diesel and motor oil, and TTLC and STLC metals (Tables A-2 through A-6). Analyses performed were based on chemicals used or that may have been released in each potential source area. In this section, surface soil sampling and analytical results are discussed by proximity to potential source areas as follows:

- Electrical supply substation transformer pad (Section 7.1.1).
- Solvent rack, Freon 113 tank, and tensile block wash area (Section 7.1.2).
- Oil conditioning system and tanks 865-T1A1, -T1A2, and-T1A3 (Section 7.1.3).
- Cooling tower sludge disposal area and drainage channel (Section 7.1.4).
- Storm drain outfall (Section 7.1.5).
- Former surface impoundment and retention tanks 865-R1U1, 865-R1A1, -R1A2, and -R1A3 (Section 7.1.6).

The locations of these potential source areas are shown on Figure 3. Section 7.1.7 discusses surface soil sample data for samples outside of the immediate Building 865 Complex area. Section 7.1.8 discusses the results of the evaluation of COCs in surface soil in the study area.

7.1.1. Electrical Supply Substation Transformer Pad

In 2005, surface soil samples were collected during the drilling of the borehole from well W-865-2003 (Figures 2 and 9) and analyzed for halogenated and aromatic VOCs (Tables A-2 and A-3). The well was located on the southwest sides of Building 865 in the area of the former transformer pad. No VOCs were identified at concentrations in excess of method detection limits.

7.1.2. Solvent Rack, Freon 113 Tank, and Tensile Block Wash Area

In August 1995, a surface soil sample was collected from the vicinity of the tensile block wash area/solvent rack (MS-B865-037) and analyzed for halogenated and aromatic VOCs and TPH (Tables A-2, A-3, and A-4). No VOCs were identified at concentrations in excess of method detection limits. TPH as diesel was detected at a concentration of 1,300 mg/kg in the sample, while TPH as motor oil was not detected. A second surface soil sample collected from this location in February 1996 did not contain TPH as diesel above the 10 mg/kg reporting limit. However, TPH as motor oil was detected at a concentration of 110 mg/kg.

In July 1996, soil was excavated to a 5 ft depth over an area including the site of MS-B865-037 as a cleanup activity (Galles, 1996). Thus, these analytical results were not included in the assessment of contaminant maxima in surface soil presented in Table 5.

In 2005, surface soil samples were collected during the drilling of the borehole for well W-865-2002 (Figures 2 and 9) and analyzed for halogenated and aromatic VOCs (Tables A-2 and A-3). Well W-865-2002 was drilled within the area of the tensile block washdown area and solvent drum rack, adjacent to where soil was excavated to 5 ft in 1996. No VOCs were identified in surface soil at concentrations in excess of method detection limits in this area.

7.1.3. Oil Conditioning System and Tanks 865-T1A1, -T1A2, and-T1A3

No surface soil samples were collected in the vicinity of the OCS and tanks 865-T1A1, -T1A2, and-T1A3 because this area is paved.

7.1.4. Cooling Tower Sludge Disposal Area and Drainage Channel

In 1994, six surface soil samples (MS-B865-002, -004, -008, -010, -012, and -014) were collected from the area where sludge was deposited northwest of the cooling tower (Figure 3). Four samples (MS-B865-016, -018, -020, and -022) were also collected in the drainage channel immediately southeast. These samples were analyzed for TTLC and STLC metals. The analytical results are presented in Tables A-5 and A-6. The STLC data (Table A-6) for these samples were used for waste disposal criteria and were not used for site characterization.

The highest concentrations of TTLC metals in surface soil were identified in the sample from location MS-865-002 (Figure 9). Concentrations of metals in surface soil in the drainage channel generally declined in the downgradient (southeast) direction.

In 1996, soil was excavated from the cooling tower sludge area and disposed at an offsite landfill. Records documenting the exact dimensions of the excavation and the volume of soil removed could not be located.

7.1.5. Storm Drain Outfall

In August 1995, a surface soil sample was collected from the drain outfall near Route 3 (MS-B865-038) and analyzed for halogenated and aromatic VOCs (Tables A-2 and A-3). No VOCs were identified at concentrations in excess of method detection limits.

7.1.6. Former Surface Impoundment and Retention Tanks 865-R1U1, 865-R1A1, -R1A2, and -R1A3

No surface soil samples were collected in the vicinity of the former Surface Impoundment and Retention Tanks 865-R1U1, 865-R1A1, -R1A2, and -R1A3 because the soil in this area was excavated and disposed offsite in 1985 when the surface impoundment was removed. This area was then sprayed with gunite cement.

7.1.7. Surface Soil Sampling Data Outside Building 865 Complex

In August 1991, a single surface soil sample was collected from a location approximately 100 ft south of Building 865E (3SS-05-01) and was analyzed for halogenated and aromatic VOCs. No VOCs were identified at concentrations in excess of method detection limits. The sample was collected as part of a sitewide assessment of surface soil that used a random grid to locate the samples.

7.1.8. Evaluation of COCs in Surface Soil

The surface soil data collected from potential sources areas of the Building 865 Complex discussed in Section 7.1.1 through 7.1.5 above was evaluated to determine if contaminants of concern are present in surface soil. Table 5 lists the maximum concentrations of chemicals detected in surface soil samples collected in the Building 865 study area.

To evaluate human health risk, the maximum concentrations of constituents detected in surface soil were compared to EPA's industrial soil Preliminary Remediation Goals (PRGs) (U.S. EPA, 2004), California Human Health Screening Levels (CHHSLs) (California EPA, 2005), and California State Action Levels (SALs) (California EPA, 2003) (Table 5). To evaluate potential impacts to ecological receptors, the maximum concentrations of constituents detected in surface soil were compared to EPA's ecological SSLs (U.S. EPA 2005a through 2005f, 2006) where concentrations exceeded background levels (Table 6). The maximum concentrations of constituents detected in surface soil were also compared to EPA's Soil Screening Levels (SSLs) using a dilution attenuation factor (DAF) of 20 (U.S. EPA, 2004) to determine potential impacts to ground water (Table 5). Concentrations were also compared with background concentrations in surface soil (Table 5 and 6). These background concentration ranges were calculated during the Site-Wide Feasibility Study (FS) by constructing log probability plots for the analytes (Ferry et al. 1999). The 1994 metals analytical data obtained from the sampling and analysis of MS-B865-002 and the 1995 TPH as diesel and 1996 TPH as motor oil data obtained from the sampling and analysis of MS-B865-037 are not included in Table 5 because the soil was excavated. Identification of COCs in surface soil was based on the presence of a constituent in surface soil that poses a risk to human health or ecological receptors, or a threat to ground water.

Sampling within the cooling tower sludge area and the drainage channel was likely sufficient to define the extent of metals concentrations in surface soil that may have been impacted by sludge disposal. Excavation of some soil in the area reduced the extent of metals in soil. Two surface soil samples did contain cadmium in excess of the 8 mg/kg SSL for protection of ground water and the 7.5 mg/kg CHSSL (Table 5). Except for these two exceedences, metals concentrations in surface soil do not pose a threat to ground water or exceed human health screening levels. Arsenic did exceed industrial PRGs and CHSSLs in the majority of samples, but only one sample exceeded background concentrations. Surface soil sample concentrations for cadmium, copper, lead, and zinc did exceed background concentrations in one, two, four, and one samples, respectively. However, none of these metals exceeded PRGs or CHSSLs. Of the metals that exceeded background concentrations and therefore required comparison with ecological SSLs: 1) arsenic exceeded the plant SSL (one sample), 2) cadmium exceeded the avian (three samples) and mammalian (three samples) SSLs, 3) copper exceeded all 4 ecological SSLs (one, one, six, and three samples, respectively), and 4) lead exceeded the avian (six samples) and mammalian (one sample) SSLs (Table 6). Ecological SSLs for zinc are still pending.

While metal concentrations in surface soil exceeded background concentrations, PRGs, CHSSLs, and SSLs in a few samples, their extent is limited and localized to only a few sampling locations. Because the surface soil with concentrations exceeding background, PRGs, CHSSLs, and SSLs concentrations may have been removed during soil excavation in these areas, additional surface soil samples will be collected following D&D of the Building 865 Complex to evaluate whether metals are still present in surface soil at Building 865 at concentrations exceeding regulatory standards or background levels (Tables 5 and 6).

7.2. Nature and Extent of Contamination in Subsurface Soil and Rock

Subsurface soil samples from boreholes were analyzed for halogenated and aromatic VOCs, TPH as diesel and motor oil, TTLC and STLC metals, tritium in soil moisture, and uranium isotopes (Tables A-7 through A-13). In this section, subsurface soil and rock sampling and analytical results are discussed by proximity to potential source areas as follows:

- Electrical supply substation transformer pad (Section 7.2.1).
- Solvent rack, Freon 113 tank, and tensile block wash area (Section 7.2.2).
- Oil conditioning system and tanks 865-T1A1, -T1A2, and-T1A3 (Section 7.2.3).
- Cooling tower sludge disposal area and drainage channel (Section 7.2.4).
- Storm drain outfall (Section 7.2.5).
- Former surface impoundment and retention tanks 865-R1U1, 865-R1A1, -R1A2, and -R1A3 (Section 7.2.6).

The locations of these potential source areas are shown on Figure 3. Section 7.2.7 discusses subsurface soil sample data for samples collected from boreholes drilled for the installation of monitor wells located downgradient of the Building 865 Complex. Section 7.2.8 discusses the results of the evaluation of COCs in subsurface soil and rock in the study area.

7.2.1. Electrical Supply Substation Transformer Pad

In August 1995, a subsurface soil sample (MS-B865-031) was collected at a depth of 1.5 ft within soil beneath the northeast corner of the electrical supply substation transformer pad and analyzed for halogenated and aromatic VOCs and TPH (Tables A-7, A-8, and A-9). VOCs and TPH as motor oil were not detected. TPH as diesel was detected at 41 mg/kg in the sample.

Subsurface soil and rock samples were collected in January 2004 from the borehole for well W-865-2003, about 50 ft north of the substation transformer, and analyzed for halogenated and aromatic VOCs. Samples were collected from 5 to 128 ft below ground surface. No VOCs were detected in any samples from the borehole.

7.2.2. Solvent Rack, Freon 113 Tank, and Tensile Block Wash Area

In August 1995, subsurface soil samples were collected from an exposed unpaved area just north of the concrete pad at 1.5 ft bgs (MS-B865-035), from the lowest point (1.5 ft bgs) in a soil-lined drainage ditch (MS-B865-0036), from adjacent to the former solvent rack (MS-B865-037), and beneath the asphalt and adjacent to the Materials Assembly Room door to Building 865A at depths of 1.5 ft and 3 ft bgs (MS-B865-042, -043, -044, and -045). These subsurface soil samples were collected near the locations of the former tensile block wash area and solvent rack and analyzed for halogenated and aromatic VOCs and TPH (Tables A-7, A-8, and A-9). No halogenated VOCs were detected in any of the samples. Toluene was detected from 0.00061 mg/kg to 0.0015 mg/kg in samples from locations MS-B865-042, -043, -044, and -045. Total xylenes were also detected from <0.001 mg/kg to 0.0036 mg/kg in these samples. TPH as diesel was detected from 3.9 mg/kg to 220 mg/kg in samples from locations MS-B865-036, -042, -043, -044, and -045. TPH as motor oil was detected from 4.2 mg/kg to 140 mg/kg in samples from locations MS-B865-035, -042, 043, -044, and -045.

Soils in this area, including the locations of MS-B865-035, -036, and -037, were excavated to a depth of 5 ft (areal dimensions of 38 ft by 5 ft) and disposed (Galles, 1996). Soil from the area including the locations of samples MS-B865-042, -043, -044, and -045 was not excavated. Thus, maximum concentrations of analytes in samples from these latter locations were included in Table 5. Cleanup verification samples were collected from locations MS-B865-035, -036, and -037 at a depth of 5 ft in July 1996. Only a sample from location MS-B865-035 contained TPH as diesel and as motor oil at concentrations of 8.1 mg/kg and 3.7 mg/kg, respectively. A sample collected at 1.5 ft depth from this location in 1995 was non-detect for TPH as diesel.

Subsurface soil and rock samples were collected in January 2004 from the borehole for well W-865-2002, about 20 ft southwest of Building 865A within the tensile block washing area, and analyzed for halogenated and aromatic VOCs. Samples were collected from 5.5 to 95 ft bgs. Freon 113 was detected in the two samples from 75 ft at concentrations of 0.54 and 0.008 mg/kg. Toluene at a concentration of 0.00088 mg/kg was detected in the samples collected at 70 ft. No other VOCs were detected in samples from the borehole.

7.2.3. Oil Conditioning System and Tanks 865-T1A1, -T1A2, and-T1A3

In August 1995, subsurface soil samples were collected at depths between 1 ft and 1.5 ft bgs immediately northwest of the OCS, from the storm drain directly west of the OCS, and from a location southwest of the OCS tank area (MS-B865-032, -033, and -034) and analyzed for halogenated and aromatic VOCs and TPH (Tables A-7, A-8, and A-9). Samples MS-B865-032 and -034 were collected from below the asphalt. The sample from the storm drain (MS-B865-033) was collected from the sediment within the basin, which is surrounded by a concrete area. Toluene was detected in two samples at concentrations of 0.0011 mg/kg and 0.002 mg/kg from MS-B865-032 and -034. The duplicate sample from MS-B865-034 was non-detect for toluene. The only other VOC detected in this area was Freon 113 in the sample from MS-B865-033 at a concentration of 0.031 mg/kg. TPH as diesel was only detected in the duplicate samples from MS-B865-034 at concentrations of 680 mg/kg and 760 mg/kg. TPH as motor oil was detected in samples from MS-B865-032 and -033 at concentrations of 10 mg/kg and 1100 mg/kg, respectively.

In 1999, 3 ft^3 of soil within the storm grate were excavated and the grate was filled with gravel and concrete (Jackson, 1999). Therefore, the soil representing concentrations of chemicals at sample location MS-B865-033 collected from the storm drain west of the OCS was removed. The soil in the vicinity of sample locations MS-B865-032 and -034 that contained toluene and TPH beneath the pavement at the OCS was not removed. Because this soil is located beneath the pavement, it will be evaluated further during the planned D&D activities at Building 865, and may be excavated, if necessary.

7.2.4. Cooling Tower Sludge Disposal Area and Drainage Channel

In 1994, ten subsurface soil samples (MS-B865-006, -007, -009, -011, -013, -015, -019, -028, -029, and -030) were collected from the area where cooling tower sludge was deposited northwest of the cooling tower. Three samples (MS-B865-017, -021, and -023) were collected in the drainage channel to the southeast for analyses of total TTLC metals (Figure 9). Samples from ten of these locations were also analyzed for STLC metals. The analytical results for these subsurface soil and rock samples are presented in Tables A-10 and A-11. The STLC data (Table A-11) for these samples were used for waste disposal criteria and were not used for site characterization. The TTLC metals concentration data are all within background concentrations for Site 300 subsurface soil.

7.2.5. Storm Drain Outfall

In February 1996, a subsurface soil sample was collected from the drain outfall (MS-B865-038) north of Route 3 at a depth of 1 ft and analyzed for TPH as diesel and motor oil. These constituents were not detected above the analytical method detection limit in this sample.

7.2.6. Former Site of Surface Impoundment and Retention Tanks 865-R1U1, 865-R1A1, -R1A2, and -R1A3

Subsurface soil samples were collected in 1995 from the former location of the surface impoundment at locations MS-B865-039, -040, and -041. The MS-B865-039 and MS-B865-040 samples were collected at a depth of 2 ft. The sample from MS-B865-041 was collected at a depth of 4 ft. The samples were analyzed for halogenated and aromatic VOC and TPH. None were detected.

7.2.7. Downgradient Borehole Sampling Locations

In December 1999, subsurface soil and rock samples were collected from the borehole for well W-865-02, about 20 ft northeast of Building 865A. Samples were collected from 5 to 130 ft bgs and analyzed for halogenated and aromatic VOCs. No VOCs were detected.

Soil and rock samples were collected in February 2000 from the borehole for well W-865-05 on the hill adjacent to drinking water Tank 5. Samples were collected from 5 to 273 ft bgs and analyzed for halogenated and aromatic VOCs. The sample from 5 ft contained 0.001 mg/kg of total xylenes and 0.0015 mg/kg of 1,4-dichlorobenzene. The sample from 245.1 ft contained 0.0032 mg/kg of methylene chloride that was also detected in the method blank. The samples from 264.7 and 273 ft contained 0.011 mg/kg and 0.014 mg/kg of Freon 113, respectively. These latter two samples were collected from the saturated zone within the Freon 113 plume in ground water. No other VOCs were detected.

Subsurface soil and rock samples were collected in January 2004 from the borehole for well W-865-2121, about 1,500 ft northeast of Building 865A, and analyzed for halogenated and aromatic VOCs. Samples were collected from the saturated zone at depths of 343 to 355 ft below ground surface. Toluene was detected at concentrations of 0.0006 mg/kg and 0.0012 mg/kg from the 351 ft and 355 ft depths, respectively. No other VOCs were detected in any samples from the borehole.

Subsurface soil and rock samples were collected from the borehole for wells W-865-01, W-865-03, W-865-04, W-865-06, W-865-07, W-865-1802, W-896-1806, and W-PIT1-02 and analyzed for tritium in soil moisture (Figure 9). Tritium was not detected in excess of detection limits of 2 to 200 pCi/L_{sm} or pCi/g (Table A-12). This range of tritium detection limits is within range of background for tritium in soil moisture at Site 300 (Ferry et al., 1999).

Subsurface soil and rock samples were collected in January 2000 from the borehole for well W-865-04, about 2,500 ft northwest of Building 865A, and analyzed for uranium isotopes. Samples were collected from the saturated zone at depths 100 to 152 ft bgs. The maximum total uranium activity detected in the subsurface soil/rock samples was 2.733 pCi/g; within the range of natural background uranium activities. (Table A-13). The uranium-235/uranium-238 ($^{235}U/^{238}U$) atom ratios in all five samples indicated the presence of only natural uranium (about 0.0072).

7.2.8. Evaluation of COCs in Subsurface Soil and Rock

Table 5 lists the maximum concentrations of constituents detected in subsurface soil/rock in the study area that was not excavated, and the applicable regulatory standards and background concentrations for these constituents and media.

To define COCs in subsurface soil/rock, maximum concentrations of constituents detected in subsurface soil were compared to EPA's SSLs (U.S. EPA, 2004) to determine potential impacts to ground water (Table 5). Concentrations were also compared with background concentrations in subsurface soil (Table 5 and 6). These background concentration ranges were calculated during the Site-Wide Feasibility Study (FS) by constructing log probability plots for the analytes (Ferry et al. 1999). The only potential human health and ecological exposure pathway for contaminants in subsurface soil is for VOCs (e.g., Freon 113) detected in subsurface soil and rock at depths of less than 12 ft bgs. Therefore, VOC concentrations in subsurface soil to a depth of 12 ft bgs were evaluated to determine human health and ecological risk.

TTLC metals concentration maxima from the cooling tower sludge disposal area were all within background concentration ranges (Ferry et al., 1999). Additionally, all metals concentrations for the subsurface soil are below EPA SSLs (using a DAF of 20) and therefore do not represent a threat to underlying ground water. Because all metals concentrations in subsurface soil were within background concentration ranges, there was no need to compare the maxima with ecological SSLs (Table 6). Therefore, metals are not considered COCs in subsurface soil and rock in the Building 865 study area.

Table 5 also lists the maximum concentrations of TPH and volatile and aromatic organic compounds detected in subsurface soil at the study area excluding the sampling location MS-B865-033, because the soil from this location was excavated in 1999. All maximum concentrations of TPH as motor oil, TPH as diesel, Freon 113, toluene, and total xylene were above background, because these constituents are anthropogenic in origin, the analytical method detection limit is used as the surrogate for background concentrations. The comparison of the maximum concentrations of TPH and halogenated and aromatic VOCs in subsurface soil and rock in the Building 865 study area to EPA's SSLs indicate that these constituents do not pose a threat to ground water. In addition, very little Freon was found in the borehole for well W-865-2002, drilled through the former tensile block wash area which is a confirmed Freon release site, or in the boreholes for wells W-865-02 and W-865-2003 located in close proximity to the building. These data suggest that the Freon has largely migrated to ground water and has not remained in the vadose zone. Because VOCs detected in subsurface soil and rock (e.g., Freon 113) were not present at depths of less than 12 ft bgs, there is no potential for volatilization of Freon to ambient air or risk to human health from the inhalation of volatilized contaminants in the study area. Because there is no risk to human health or threat to ground water posed by TPH and VOCs detected in subsurface soil, the constituents are not considered COCs in subsurface soil and rock in the Building 865 study area. Tritium and uranium activities in subsurface soil and rock in the study area were all within the range of background levels for these constituents, and therefore are not considered COCs in this media.

Based on this analysis, there were no COCs identified in subsurface soil in the Building 865 study area.

7.3. Nature and Extent of Contamination in Ground Water

Ground water samples were collected from monitor wells in the Building 865 study area from January 1, 1988 to March 30, 2006 to determine whether activities at the Building 865 Complex have impacted ground water. Ground water samples were analyzed for the following constituents:

- Halogenated and aromatic VOCs (Section 7.3.1).
- Fuel hydrocarbons (Section 7.3.2).
- Nitrogenous compounds (Section 7.3.3).
- Perchlorate (Section 7.3.4).
- High explosive compounds (Section 7.3.5)
- Metals and other cations, anions, total dissolved solids (TDS), specific conductance, and pH (Section 7.3.6).
- Tritium and uranium isotopes (Section 7.3.7).

Analytical data are tabulated in Tables A-14 to A-23. Section 7.3.8 discusses the results of the evaluation of COCs in ground water in the study area.

7.3.1. Halogenated and Aromatic VOCs Ground Water Analytical Results

Ground water samples collected from 25 wells in the Building 865 study area were analyzed for halogenated VOCs (Table A-14). Freon 113 is the principal halogenated VOC detected in Building 865 ground water. Freon 113 has been detected in ground water samples from 10 of the 25 wells in the study area, all completed within the $Tnbs_1/Tnbs_0$ HSU. The historical maximum concentration of Freon 113 detected in ground water in the study area was 490 micrograms per liter (μg/L) in a sample collected from well W-865-05 on February 28, 2002. Ground water samples from this well have consistently contained the highest Freon 113 concentrations in the study area since it was installed in February 2000. In the first quarter 2006, the maximum Freon 113 concentration in ground water in the study area was 290 μg/L in the ground water sample from this well. However, Freon 113 concentrations in Building 865 ground water have always been and continue to be below both the California drinking water Maximum Contaminant Level (MCL) of 1,200 μg/L and the California Public Health Goal (PHG) of 4,000 μg/L (California EPA, 2003). There is no Federal drinking water standard established for Freon 113.

As shown in Figure 10, the Freon 113 plume was approximately 3,000 ft long and 1,200 ft wide during the first quarter of 2006. The distribution of Freon 113 in ground water suggests that sources at the tensile block wash area, the oil conditioning system area, and possibly the former surface impoundment on the southwest side of Building 865A contributed to the Freon 113 detected in ground water. The lateral extent of the Freon 113 plume is bounded to the north by the extent of saturation within the $Tnbs_1/Tnbs_0$ HSU. It is bounded in the upgradient and downgradient directions by ground water monitor wells that do not contain Freon 113. The plume is bounded vertically by a dense claystone aquitard within $Tnsc_0$ strata that hydraulically separate the $Tnbs_1/Tnbs_0$ HSU from the underlying Tmss HSU (Figures 5 and 6). The Tmss HSU is under confining pressure due to this aquitard.

Figure 11 presents a time-series plot of Freon 113 concentrations in ground water samples from the ten $Tnbs_1/Tnbs_0$ HSU wells in which Freon 113 has been detected.

Wells W-865-2002, and -2003 are located in the vicinity of and immediately downgradient of the former tensile block wash area. Freon 113 concentrations in ground water at these wells are low with a maximum concentration of 35 μg/L in the first quarter of 2006. The low concentrations (up to 35 μg/L) and stable trend indicate that the former tensile block wash area is not a continued significant source of Freon 113 to ground water. Freon 113 concentrations are higher in wells located further downgradient from this source area, i.e., well W-865-2004, with maximum concentrations of 180 μg/L in the first quarter of 2006.

Wells W-865-02 and -05 are located downgradient of the OCS and former surface impoundment. Freon 113 concentrations are higher in ground water samples from these wells both in the source area and downgradient ground water indicating that the OCS and/or former surface impoundment were more significant sources of Freon 113 than the former tensile block wash area. Freon 113 concentrations are higher in wells located further downgradient from OCS and former surface impoundment, i.e., well W-865-05, with maximum concentrations of 290 μg/L in the first quarter of 2006.

Data from wells with the longest monitoring history in the Building 865 area, i.e., wells K1-05, K1-08, and K1-09, indicate that Freon 113 concentrations peaked during 1997 to 1998 and have been steadily declining since that time. The Freon 113 concentrations observed in samples from these wells peak in time in order of distance away from the Building 865 Complex.

Wells completed beneath and/or downgradient from potential Freon 113 sources, such as the tensile block wash area, the OCS, and the former surface impoundment, show lower fairly stable or generally declining ground water concentrations. Freon use was suspended in 1988 and therefore, 18 years have elapsed since it was released to the environment. Based on the spatial and temporal distribution of Freon 113 in ground water, it is likely that the sources are no longer significant and that any flux of Freon 113 to ground water is diminishing over time.

FEFLOW, a 3-dimensional (3D) finite element model, was used to simulate the fate and transport of Freon 113 in ground water over time. Results and a description of the model are presented in detail in Attachment B. The modeling results indicate that Freon 113 concentrations will be reduced to below the 0.5 μg/L method detection limit in 60 to 70 years. The Freon 113 plume will not migrate offsite during this time period.

Freon 11 is also present in ground water in the Building 865 study area, although its lateral extent is less than that of the Freon 113 plume. Freon 11 has been detected in ground water samples from four of the 25 wells in the study area, all completed within the $Tnbs_1/Tnbs_0$ HSU. The historical maximum concentration of Freon 11 detected in ground water in the study area was 5.1 μg/L in a sample collected from well W-865-2004 on March 15, 2006. In the first quarter 2006, the maximum Freon 113 concentration in ground water in the study area was 3.4 μg/L in the ground water sample from this well. Freon 11 concentrations in Building 865 ground water have always been and continue to be well below both the California MCL of 150 μg/L and the California PHG of 400 μg/L (California EPA, 2003). There is no Federal drinking water standard established for Freon 11.

As shown in Figure 12, the Freon 11 ground water plume in the $Tnbs_1/Tnbs_0$ HSU was approximately 1,400 ft long and 900 ft wide in the first quarter of 2006. The Freon 11 plume occurs entirely within the extent of the larger Freon 113 plume. Freon 11 was likely a component of the Freon mixture used at Building 865.

FEFLOW, a 3-D finite element model, was also used to simulate the fate and transport of Freon 11 in ground water over time. Results and a description of the model are presented in detail in Attachment B. The modeling results indicate that Freon 11 concentrations will be reduced to below the 0.5 μg/L method detection limit in 10 to 15 years. The Freon 11 plume will not migrate offsite during this time period.

Tetrachloroethylene (PCE) was detected in ground water samples from three wells in the study area. These wells, W-865-02, W-865-05, and W-865-2004, are all completed in the $Tnbs_1/Tnbs_0$ HSU. The historical maximum concentration of PCE detected in ground water was 10 μg/L in a sample collected from well W-865-2004 on March 30, 2005. In the first quarter 2006, the maximum PCE concentration in ground water in the study area was 7.5 μg/L in a ground water sample from this well; exceeding both the 5 μg/L MCL and 0.9 μg/L PHG for PCE. PCE concentrations in wells W-865-02 and -05 have been below the MCL but slightly above the PHG both historically and in the first quarter of 2006 PCE is considered a COC in ground water, though the extent of PCE is limited to three wells proximal to the Building 865 Complex and concentrations are stable to declining over time.

Trichloroethylene (TCE) has been sporadically detected in ground water samples from three wells in the study area (K1-02B, K1-09, and W-865-01) at concentrations ranging from 0.5 μg/L to 3.8 μg/L. TCE was detected in only five of the 181 samples collected from these wells and has never been detected above the 5 μg/L State and Federal MCL in any well. TCE has not been detected at concentrations above the analytical method detection limit of 0.5 μg/L since 1990 in well K1-09, since 1999 in well W-865-01, which is upgradient of Building 865, and since 2003 in well K1-02B, which is downgradient of Pit 1.

One sample collected from well W-865-01 on August 6, 2003 contained 2 μg/L of chloroform. This detection of chloroform is likely a laboratory artifact and is not included in the COC assessment.

No other VOCs have been identified in ground water samples collected from the Building 865 study area wells.

Ground water samples were collected from 29 wells in the Building 865 study area and analyzed for aromatic hydrocarbons (Table A-15). Aromatic VOCs were not detected in any of the ground water samples. Assuming that the compounds analyzed for are constituents of oils and greases that may have been released to soil and rock at the facility, the absence of aromatic

VOCs in ground water beneath and downgradient of the Building 865 Complex suggests that these substances have not impacted ground water.

7.3.2. Fuel Hydrocarbons Ground Water Analytical Results

Ground water samples were collected from 5 wells in the Building 865 study area and analyzed for fuel hydrocarbons (Table A-16). Oil and grease was not detected in any samples in excess of the 5 mg/L reporting limit.

7.3.3. Nitrogenous Compounds Ground Water Analytical Results

Ground water samples were collected from 26 wells in the Building 865 study area and analyzed for nitrogenous compounds (Table A-17). The historical maximum nitrate (as NO_3) concentrations detected in ground water was 146.2 mg/L in a sample collected from well K1-09 on July 26, 1993. It appears that nitrate analytical results for all ground water samples collected on that day, i.e., from wells K1-02B through K1-09, were elevated relative to historical analytical results. The maximum historical nitrate concentration, not counting samples collected on that date, is 110 mg/L in a sample collected from well W-PIT1-01 on May 25, 1999. Historically, nitrate concentrations in excess of the 45 mg/L State MCL have been detected in ground water upgradient, cross-gradient, and downgradient of the Building 865 Complex. For example, nitrate was detected in upgradient wells W-865-03 and W-865-1804 at historical maximum concentrations of 66 mg/L and 70 mg/L, respectively. In addition, the maximum historical nitrate concentration in ground water in the study area was detected in well W-Pit1-01 that is located cross-gradient from any potential contaminant sources in the Building 865 Complex. These wells are all located in areas that could not be impacted by any possible anthropogenic sources of nitrate indicating elevated levels of natural nitrate in the ground water.

Figure 13 is a map of the distribution of nitrate in ground water during the first quarter 2006. In the first quarter 2006, nitrate was detected at concentration exceeding the MCL in three $Tnbs_1/Tnbs_0$ HSU wells, W-865-05, W-865-2004, and W-865-2121. The maximum nitrate concentration during this quarter was 64 mg/L in the ground water sample collected from well W-865-2204 on February 21, 2006.

7.3.4. Perchlorate Ground Water Analytical Results

Ground water samples were collected from 26 wells in the Building 865 study area and analyzed for perchlorate (Table A-18). Historically, perchlorate has been detected in ground water samples from four of the 25 wells in the study area at concentrations exceeding the 6 μg/L State PHG (California EPA, 2005). These wells, W-865-02, K1-02B, W-PIT-01-01, and W-PIT1-02, are all completed within the $Tnbs_1/Tnbs_0$ HSU. The historical maximum concentration of perchlorate detected in ground water in the study area was 9.6 μg/L in a sample collected from well K1-02B in January 2006. During the first semester of 2006, perchlorate was detected at a concentration exceeding the PHG in a ground water sample from well K1-02B (Figure 14). While perchlorate was also detected in samples from wells W-865-02 and W-PIT1-02 during the first semester of 2006, perchlorate concentrations in the duplicate samples collected from these wells on the same day were below the PHG. Perchlorate has not been detected in samples from any other wells in the Building 865 study area at concentrations above the 4 μg/L analytical method detection limit.

Wells K1-02B, W-PIT-01, and W-PIT1-02 are all located cross-gradient from any possible sources at Building 865. Perchlorate was detected only once (January 2006) at a concentration of 9.5 μg/L in a sample from well W-865-02 that is located directly downgradient of the Building 865 Complex. However, perchlorate was not detected above the 4 μg/L analytical detection limit in the duplicate sample collected from this well the same day.

The distribution of perchlorate in ground water does not suggest a source at Building 865. Additional ground water samples will be collected from well W-865-02 to confirm whether a local source exists. DOE/LLNL will continue to monitor for perchlorate in ground water at wells K1-02B, W-PIT-01-01, and W-PIT1-02, located downgradient of the Pit 1 Landfill, to evaluate whether releases may have occurred from the landfill.

7.3.5. HE Compounds Ground Water Analytical Results

Samples from 23 wells have been collected and analyzed for the HE compounds high melting explosive (HMX) and research department explosive (RDX). Limited analyses for trinitrotoluene (TNT) were also conducted. Table A-19 contains HE compound concentration data for these ground water samples. HMX and RDX were detected in a single ground water sample collected from $Tnbs_1/Tnbs_0$ HSU well W-865-02 in March 29, 2000 at concentrations of 34 and 17 μg/L, respectively. Because only one sample from this well was analyzed for HE compounds, additional ground water samples will be collected from this well during the fourth quarter of 2006 for HMX and RDX analysis. HMX was detected in a single sample collected from well K1-02B on July 20, 2004. RDX was detected in a single sample collected from well K1-03 on April 13, 2005. No HE compounds were detected in subsequent samples collected from these wells or in any samples from other wells in the Building 865 study area. There are no State or Federal drinking water MCLs or State PHGs established for HMX or RDX. TNT was not detected in any ground water samples from study area wells.

7.3.6. Metals, Cations and Anions, and General Water Quality Parameters in Ground Water

Ground water samples from 27 wells have been analyzed for metals and cations. Table A-20 contains metals and cation concentration data for water samples collected at Building 865. Metals concentrations in Building 865 study area water ground samples did not exceed any regulatory criterion, and are well within background ranges or below detection limits.

Table A-21 presents anion concentrations and general water quality parameters for water samples collected at Building 865. All concentration data tabulated in Table A-21 is well within natural ranges.

7.3.7. Radionuclides in Ground Water

Ground water from wells in the Building 865 study area were analyzed for tritium, uranium isotopes and $^{235}U/^{238}U$ mass ratios.

Ground water samples were collected from 21 wells in the Building 865 study area and analyzed for tritium. Tritium activities in ground water samples are shown in Table A-22. While tritium was detected in ground water in excess of the 100 picocuries per liter (pCi/L) background activity, these samples were collected from $Tnbs_1/Tnbs_0$ HSU monitor wells located upgradient from the Building 865 Complex (W-865-1802, W-865-1803, W-865-1804) and cross-gradient from Building 865 (K1-02B, K1-03, W-PIT1-01 and W-PIT1-02). The tritium detected in these upgradient and cross-gradient wells is likely the result of the migration of the tritium plume from the Building 850 source area. Historically, tritium has not been measured above the 100 pCi/L analytical detection limit in any ground water samples from wells that are downgradient of Building 865.

Ground water samples were collected from 26 wells in the Building 865 study area and analyzed for uranium isotopes and $^{235}U/^{238}U$ atom ratios. $^{235}U/^{238}U$ atom ratios are used to differentiate anthropogenic, depleted uranium from natural uranium. Uranium isotope activity data and $^{235}U/^{238}U$ atom ratios in ground water samples are shown in Table A-23. All $^{235}U/^{238}U$ atom ratios in ground water samples from wells located downgradient of the Building 865 Complex are indicative of natural uranium (0.0072). The maximum historic total uranium activity was 9.43 pCi/L in a ground water sample collected from well W-PIT1-01 on March 13, 2001. $^{235}U/^{238}U$ atom ratios indicate that the uranium detected in this well was comprised entirely of natural uranium, and the total uranium activity is within natural background levels.

7.3.8. Evaluation of COCs in Ground Water

In the Site-Wide Feasibility Study (Ferry et al., 1999), background concentration ranges were developed for naturally occurring constituents in ground water, such as metals and nitrate, using analytical data collected from wells upgradient and outside areas of known or suspected contamination. COCs were defined based on exceedence of MCLs, PHGs, and/or background concentrations, persistence, and occurrence in ground water downgradient of Building 865. Because PHGs are based on a 10^{-6} incremental cancer risk, site-specific risk numbers were not estimated. Table 7 contains a comparison of maximum concentrations of analytes detected in ground water and relevant water quality parameters. Based on the comparison of the ground water data collected and evaluated as part of this characterization effort against regulatory standards and background levels, Freon 113, Freon 11, and PCE are COCs in ground water in the Building 865 study area.

Although Freon 113 and Freon 11 have not been detected above drinking water MCLs or State PHGs in study area ground water, they are considered COCs because they have impacted waters of the state above background concentrations (<0.5 μg/L). It appears that Freon sources in the Building 865 study area are not significant and appear to be diminishing over time. Freon 113 has not been detected above drinking water MCLs or State PHGs in study area ground water. Freon 11 concentrations in Building 865 ground water continue to be well below both the California MCL and PHG. The general trends in maximum Freon 113 and Freon 11 concentrations in ground water are stable or declining. Fate and transport modeling indicates that Freon 113 and Freon 11 concentrations will be reduced to below the 0.5 μg/L method detection limit in 60 to 70 years, and 10 to 15 years, respectively without migrating offsite.

Although identified as a COC because of its persistence in recent ground water samples from wells downgradient of Building 865, the extent of PCE in ground water is limited, maximum concentrations are just above the MCL, and concentrations are stable to declining over time.

Because TCE has not been detected in ground water downgradient of Building 865 since 1990, it is not considered a ground water COC.

The absence of aromatic VOCs in ground water beneath and downgradient of the Building 865 Complex indicates that these substances have not impacted ground water. Therefore, aromatic VOCs are not considered to be ground water COCs in the study area.

Although nitrate has been detected at concentrations exceeding the MCL in the Building 865 study area, it is not considered a ground water COC at this time because of: (1) the historical presence of nitrate in ground water above MCLs both upgradient and cross-gradient of Building 865, and (2) the lack of any known potential sources of nitrate in the Building 865 Complex, other than possibly the septic system.

Although perchlorate has been detected in ground water at concentrations in excess of drinking water PHGs, with the exception of one well, these samples have been collected from wells cross-gradient of Building 865. Perchlorate was only detected once in a recent sample from one downgradient well. A duplicate sample collected from the well the same day did not contain perchlorate above method detection limits. Additional samples will be collected to confirm the result. Presently, perchlorate is not considered as a COC in ground water at the Building 865 study area.

HE compounds are not considered COCs in ground water at the Building 865 study area because: (1) HE compounds have not been detected in recent ground water samples collected from wells throughout the study area, and (2) there are no indications that HE compounds were ever used at the Building 865 Complex.

Metals concentrations in Building 865 study area water ground samples did not exceed any regulatory criterion, and are well within background ranges or below detection limits. Therefore metals are not considered COCs in ground water in the study area.

Because there is no evidence of anthropogenic tritium in ground water that emanates from the Building 865 Complex, tritium is not a COC in ground water at the Building 865 study area.

Uranium is not considered a ground water COC because data indicate that only natural uranium is present at background levels in Building 865 study area ground water.

Because there is no exposure pathway for ground water to ecological receptors, there is no ecological risk from COCs in ground water in the Building 865 study area.

The extents of all COCs (Freon 113, Freon 11, and PCE) in ground water have been defined and are bounded by wells that exhibit background concentrations of COCs in ground water. All COCs are confined to $Tnbs_1/Tnbs_0$ HSU ground water. Because tritium, uranium, HE compounds, metals, and aromatic hydrocarbons have not historically and/or currently been detected at concentrations exceeding regulatory standards in ground water downgradient of Building 865 Complex, these constituents are not considered COCs in ground water and except for some discretionary or verification samples, will not be monitored for in the future.

8. Summary

Environmental investigation activities were conducted in the Building 865 study area to determine if contamination had been released to environmental media and if so, the extent of the contamination. As part of this investigation, the geology and hydrogeology of the study area were characterized to facilitate the evaluation of potential contaminant migration pathways in the subsurface. In addition, a screening-level risk assessment was conducted to identify contaminants of concern in environmental media.

Samples of surface soil, subsurface soil/rock, surface water, and ground water were collected and analyzed for chemical and radiological constituents that have been used in programmatic work at Building 865 and may have been released to the environment. Surface soil data were compared to EPA industrial soil PRGs and ground water and ecological SSLs and California CHSSLs to determine which constituents detected in this media could pose a risk to human health, ecological receptors, or ground water. A minimal impact to ground water was possible from cadmium in two surface soil samples. Impact to ecological receptors from arsenic, cadmium, copper, and lead in several samples was also identified. The evaluation of subsurface soil and rock data and comparison to PRGs, SSLs, SALs, and CHHSLs indicate no impact to ground water and no impact to human health or ecological receptors. Freon 113, Freon 11, and PCE, were identified as contaminants of concern in ground water because concentrations of these constituents arise from sources at Building 865 and either are persistent or have degraded waters of the state (Freon 113 and Freon 11) or occur at concentrations exceeding drinking water MCLs. There is no pathway for contaminated ground water to impact ecological receptors and thus there is no risk.

9. Recommendations

While metal concentrations in surface soil exceeded background concentrations, PRGs, CHSSLs, and SSLs in a few samples, their extent is limited and localized to only a few sampling locations. Because some surface soil with concentrations exceeding background, PRGs, CHSSLs, and SSLs concentrations may have been removed during soil excavation in these areas, additional surface soil samples will be collected following D&D of the Building 865 Complex to evaluate whether metals are still present in surface soil at Building 865 at concentrations exceeding regulatory standards or background levels.

Because there are no ground water contaminants above their respective regulatory standards that appear to arise from Building 865 facilities, with the exception of PCE being slightly above the MCL, and no soil contaminants that represent a threat to ground water, DOE recommends folding the Building 865 area into Operable Unit 8 for monitoring-only for VOCs in ground water until PCE is below the MCL and then for another five years after to ensure that concentration trends continue to decrease. In addition, although modeling indicates that the Freon plume will not migrate offsite, guard wells located at the boundary of the Freon 113 plume will be monitored to detect any migration of Freon 11 or Freon 113 toward the site boundary.

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Sincerely,

Leslie Ferry

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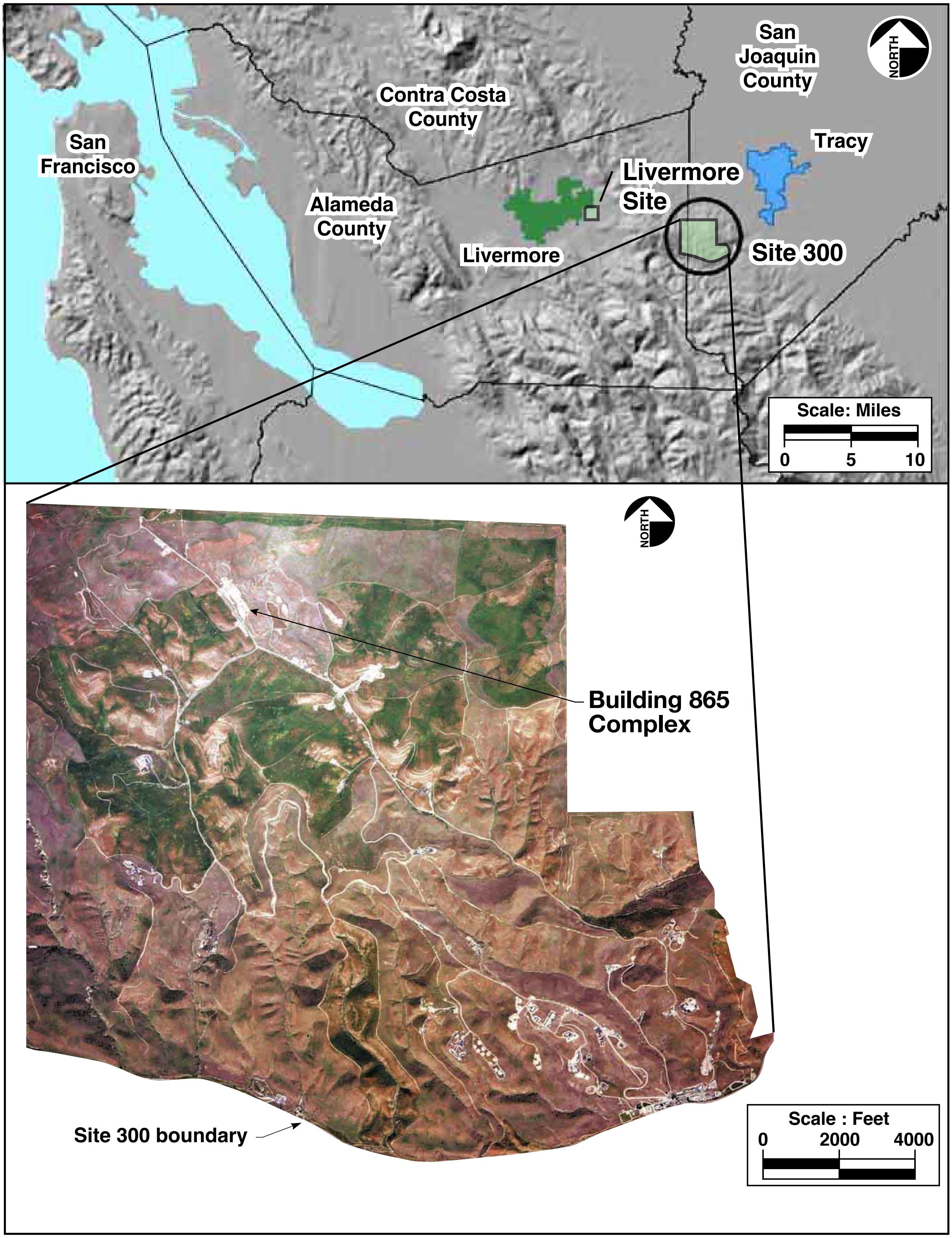
Figures



ERD-S3R-06-0090

Figure 1. Location map of LLNL Site 300 and Building 865 Complex.

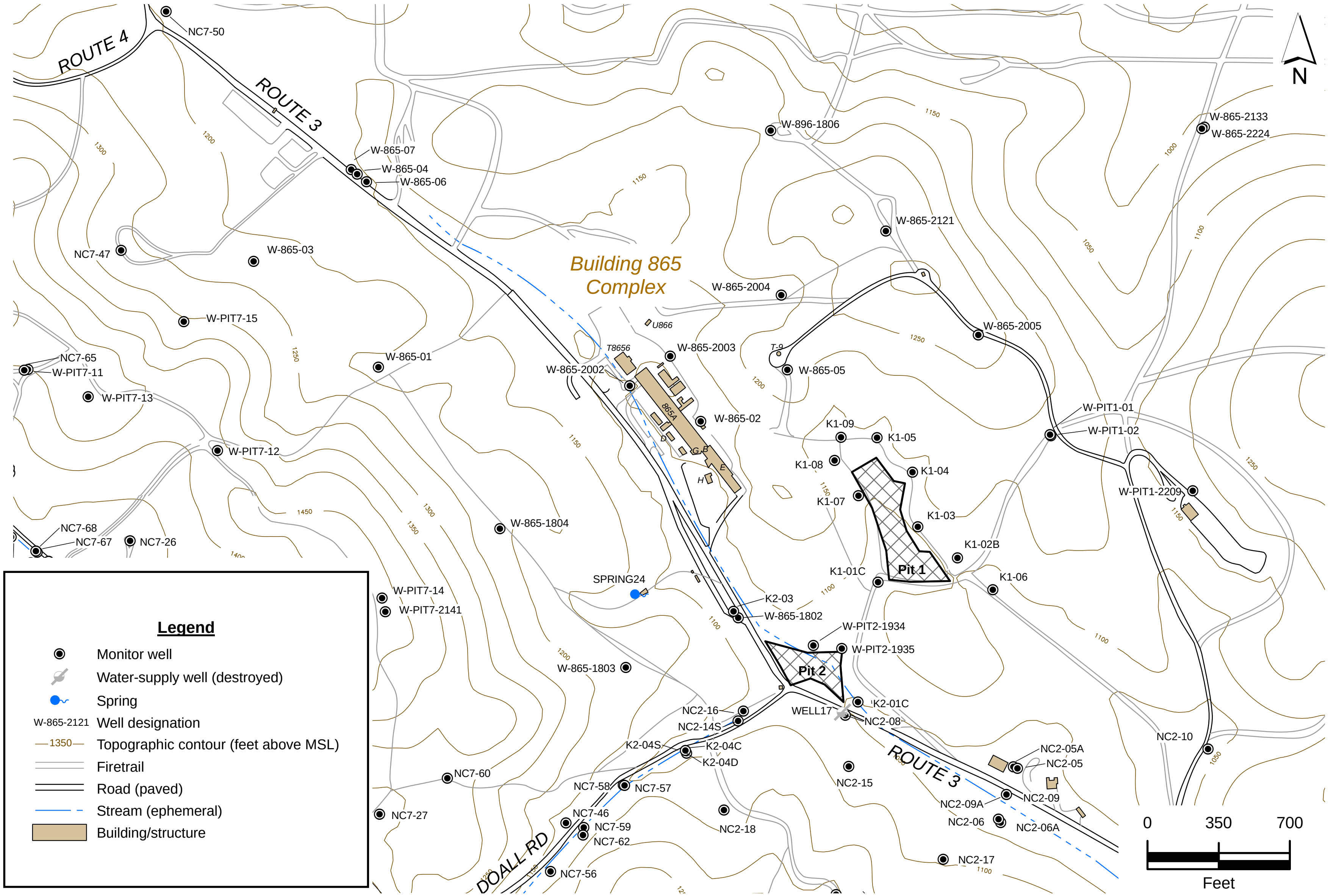


Figure 2. Topography and locations of buildings, monitor wells, and springs at the Building 865 study area.

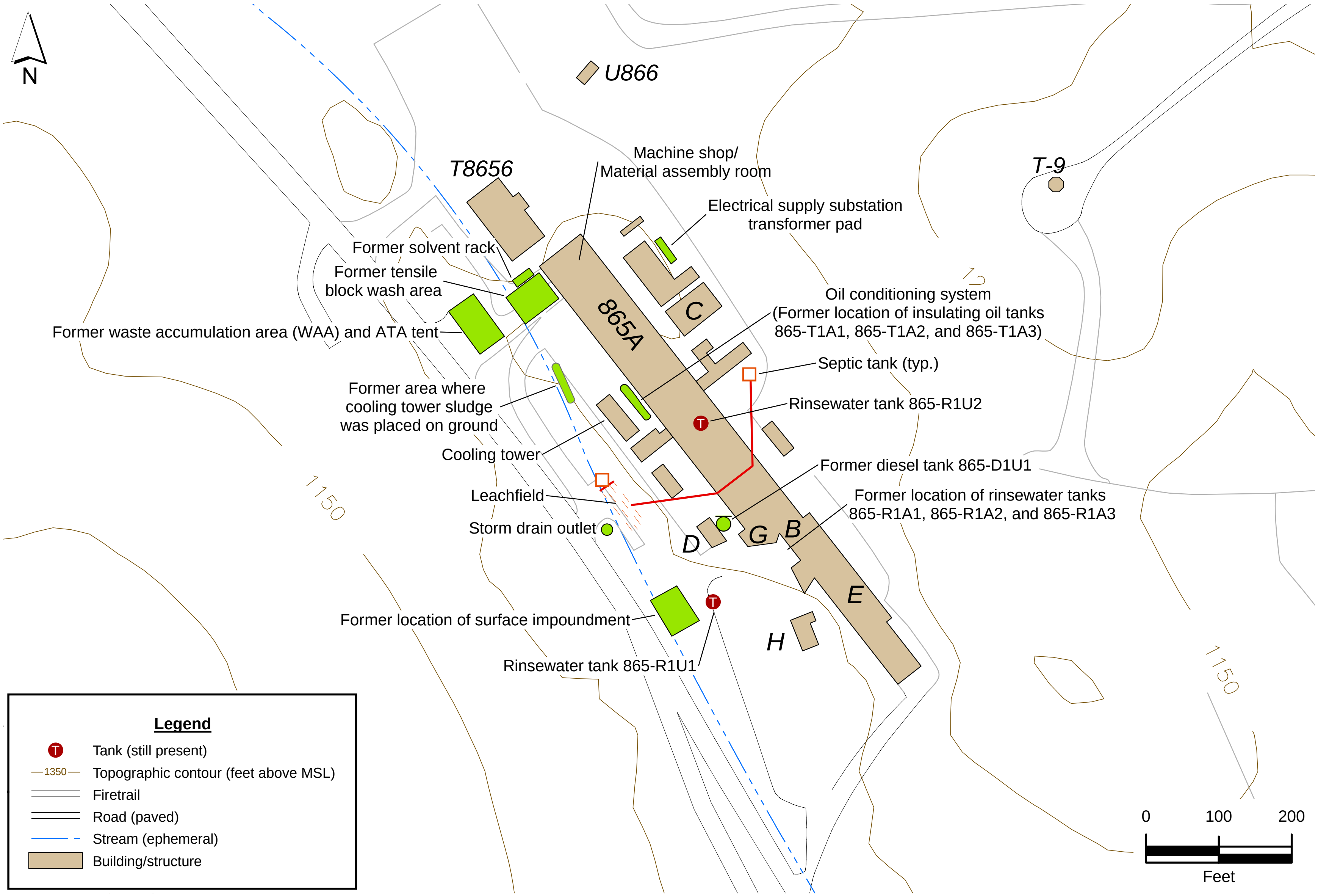
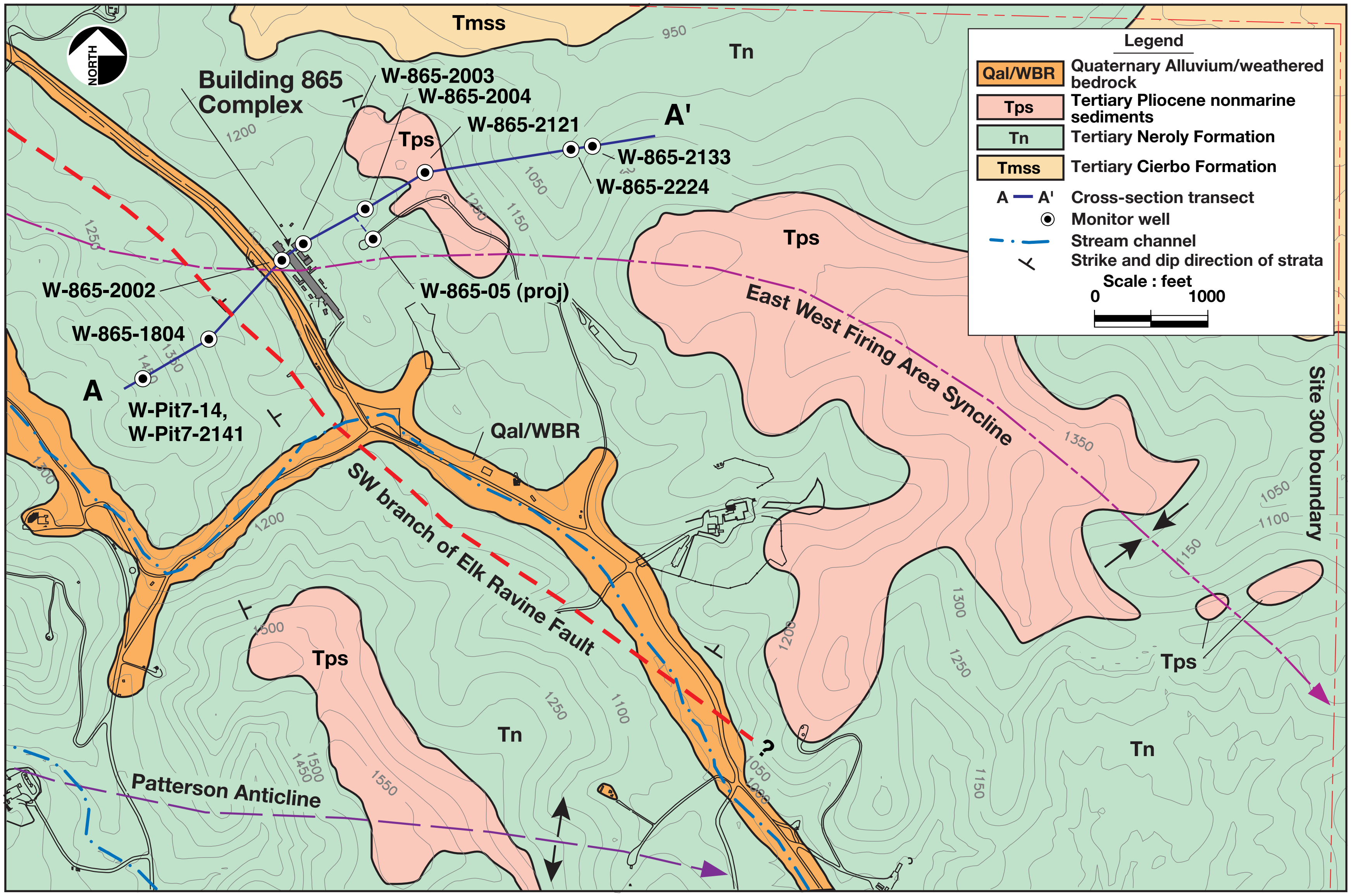


Figure 3. Principal locations of chemical use and storage at the Building 865 complex.



ERD-S3R-06-0089

Figure 4. Geologic map of the Building 865 study area (modified after Dibblee, 1980).

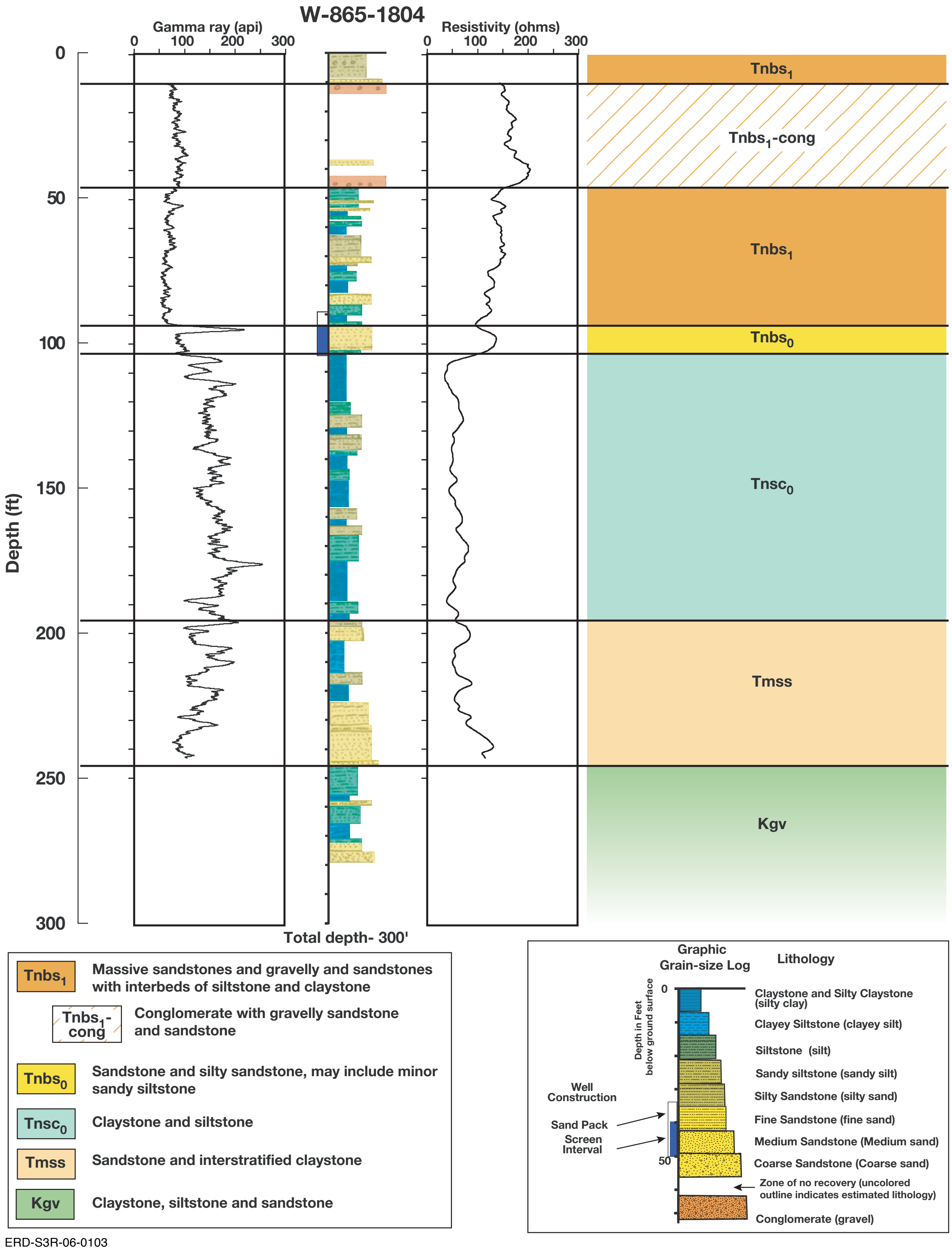


Figure 5. Stratigraphic type-section for the Site 300 Building 865 study area.

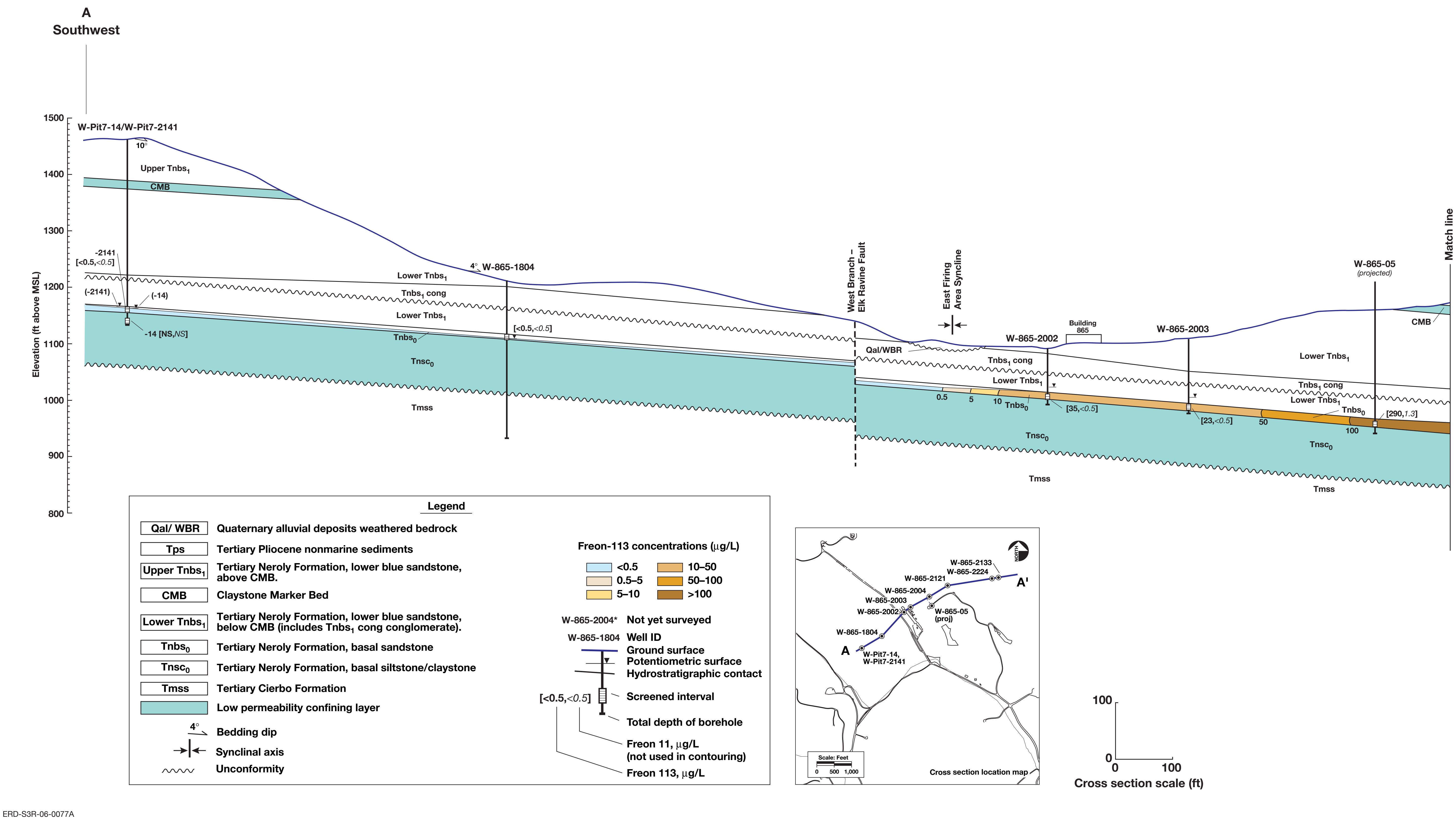
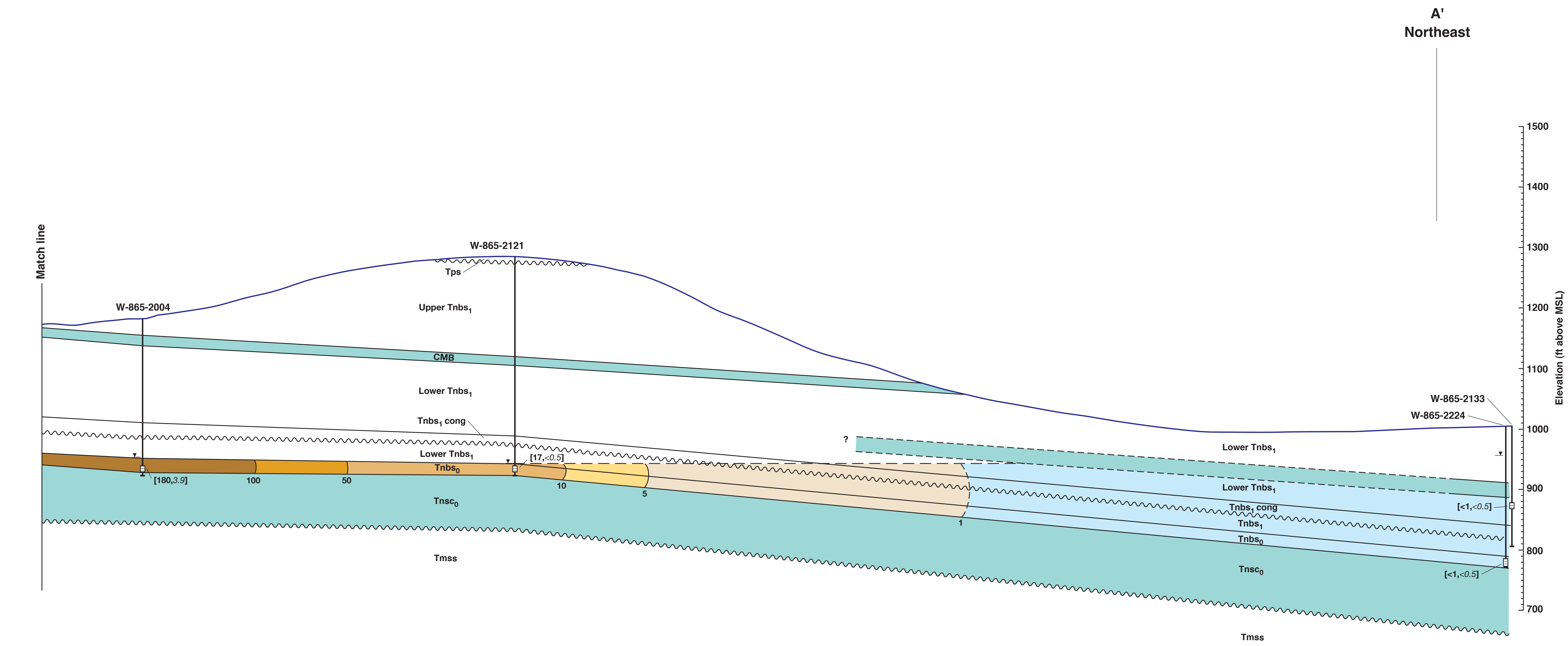


Figure 6. Building 865 study area hydrogeologic cross-section A-A'.



ERD-S3R-06-0077B

Figure 6. Building 865 study area hydrogeologic cross-section A-A' (continued).

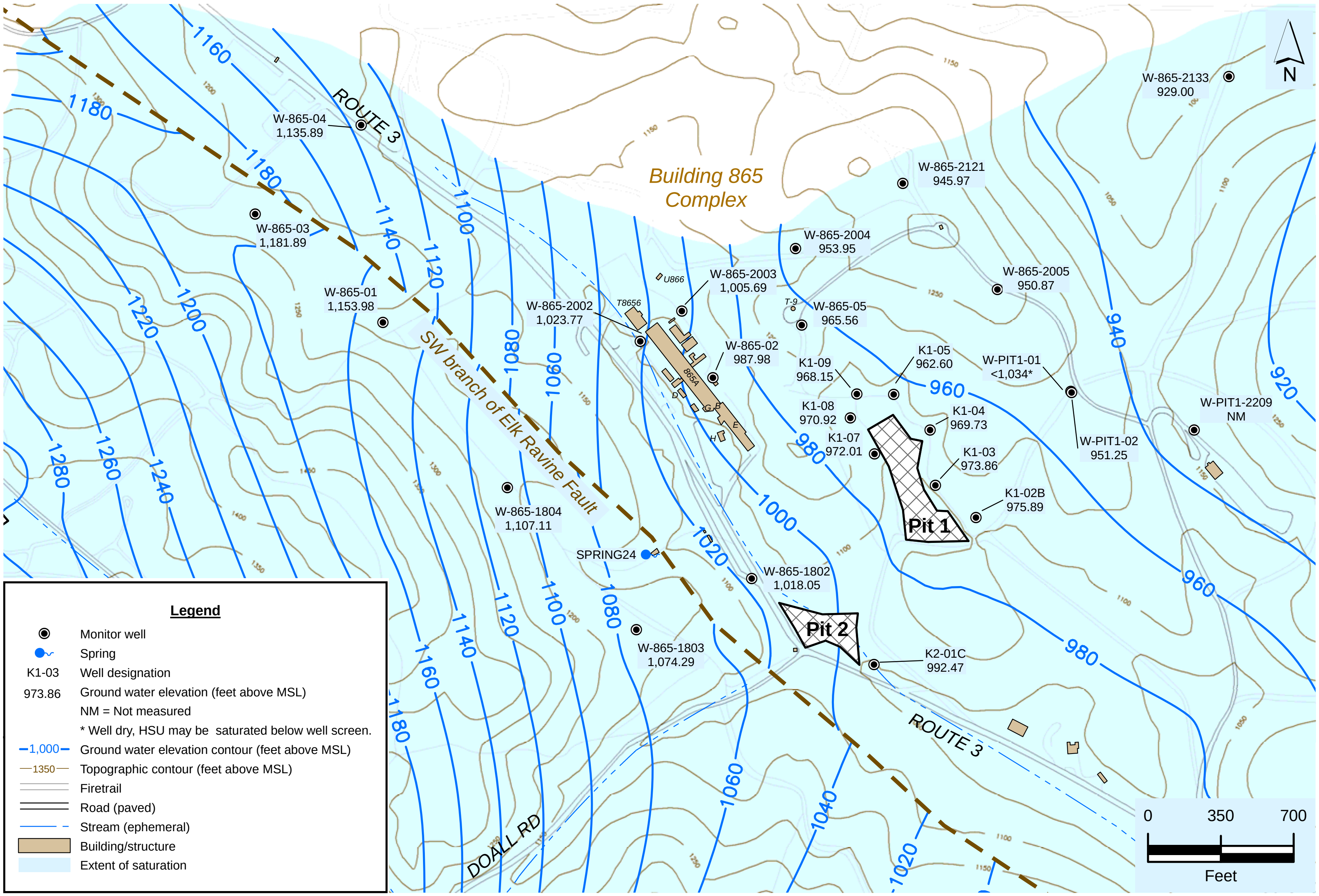
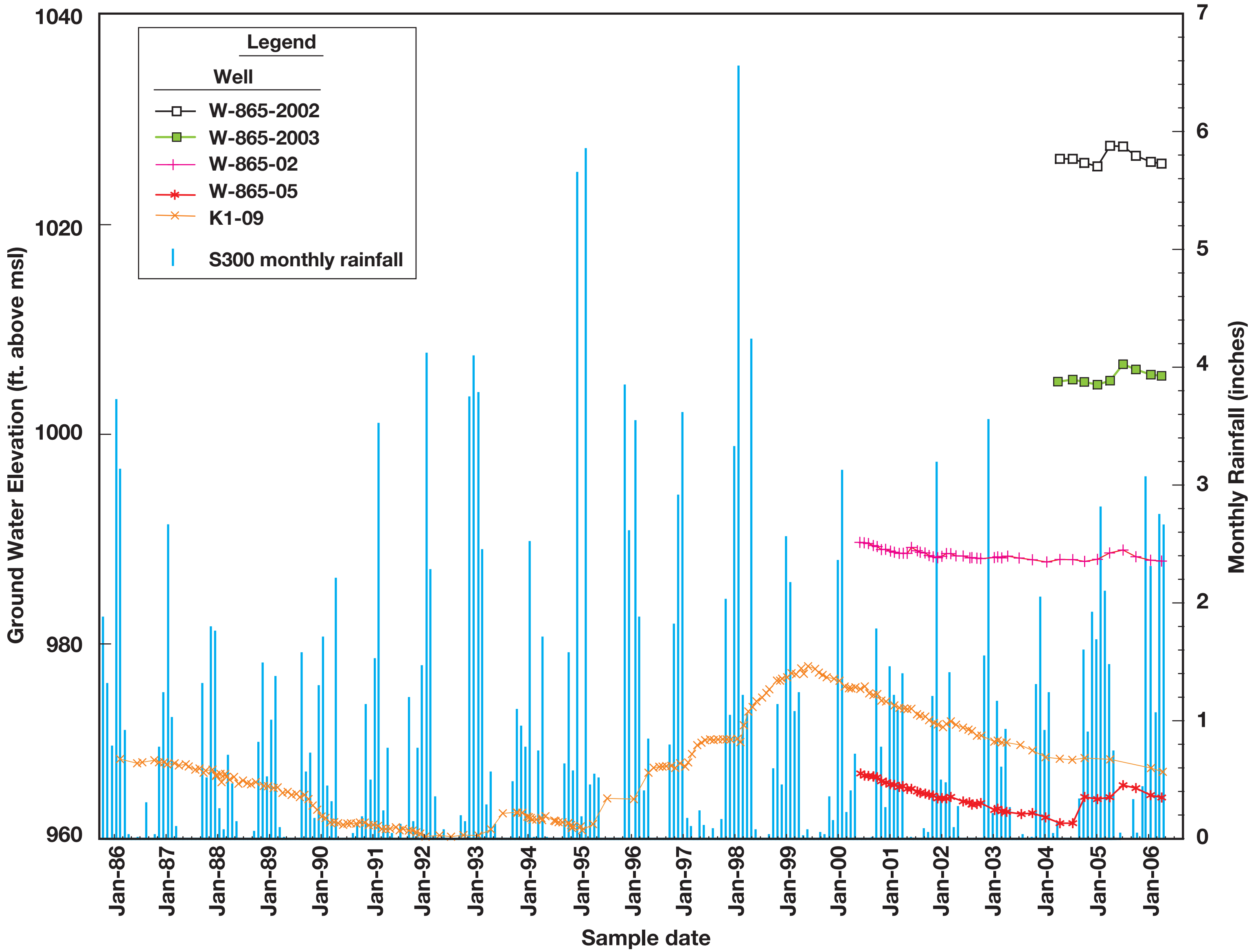


Figure 7. Potentiometric surface contours for ground water in the $Tnbs_1/Tnbs_0$ HSU at the Building 865 study area, 1st Quarter 2006.



ERD-S3R-06-0091

Figure 8. Time-series plot of ground water elevations from selected wells completed in the $Tnbs_1/Tnbs_0$ HSU at the Building 865 study area and monthly rainfall hydrograph for Site 300.

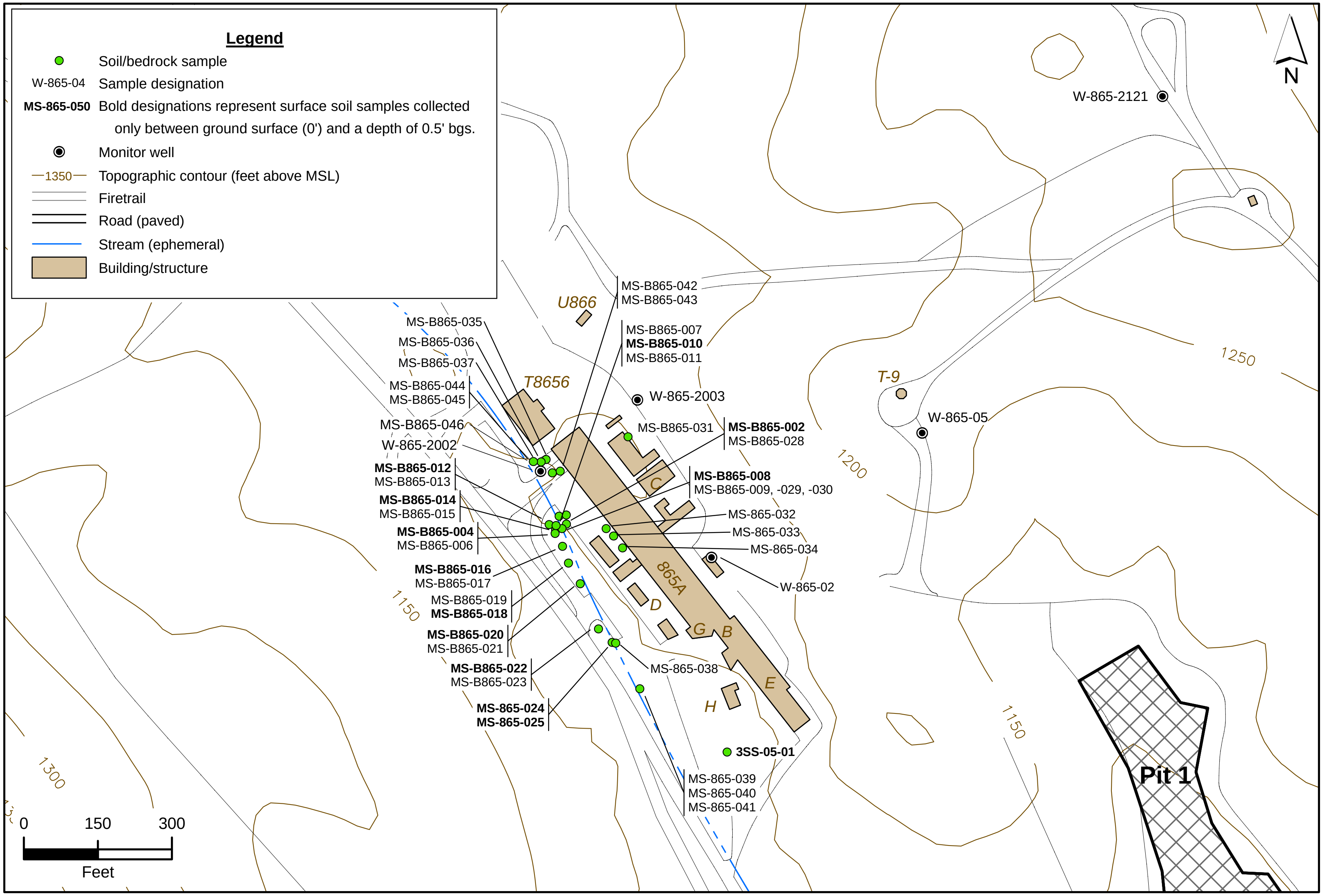


Figure 9. Locations of surface and subsurface soil and rock samples collected in the immediate vicinity of Building 865.

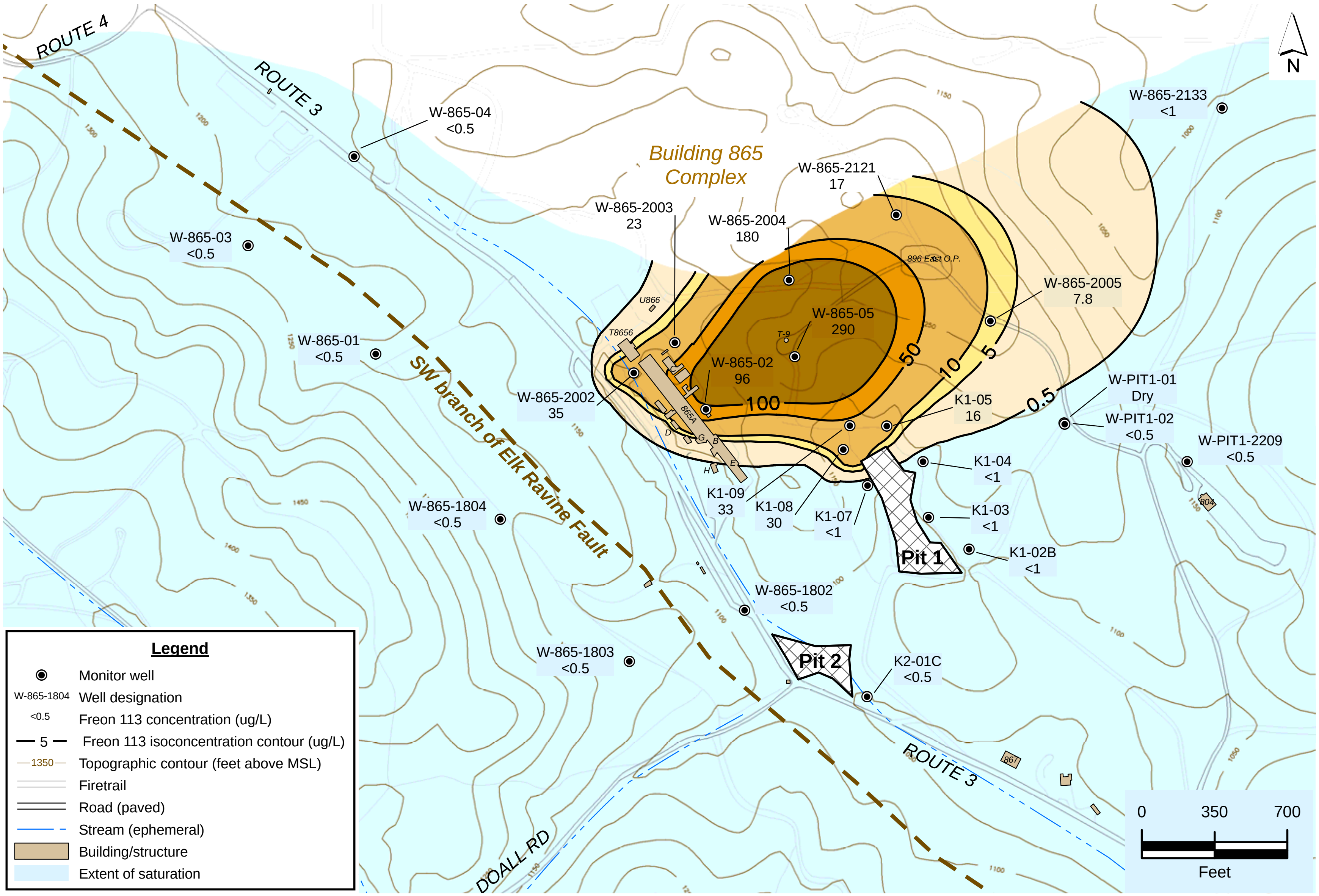


Figure 10. Freon 113 concentrations (ug/L) in ground water within the Tnbs$_1$/Tnbs$_0$ HSU at the Building 865 study area, 1st Quarter 2006.

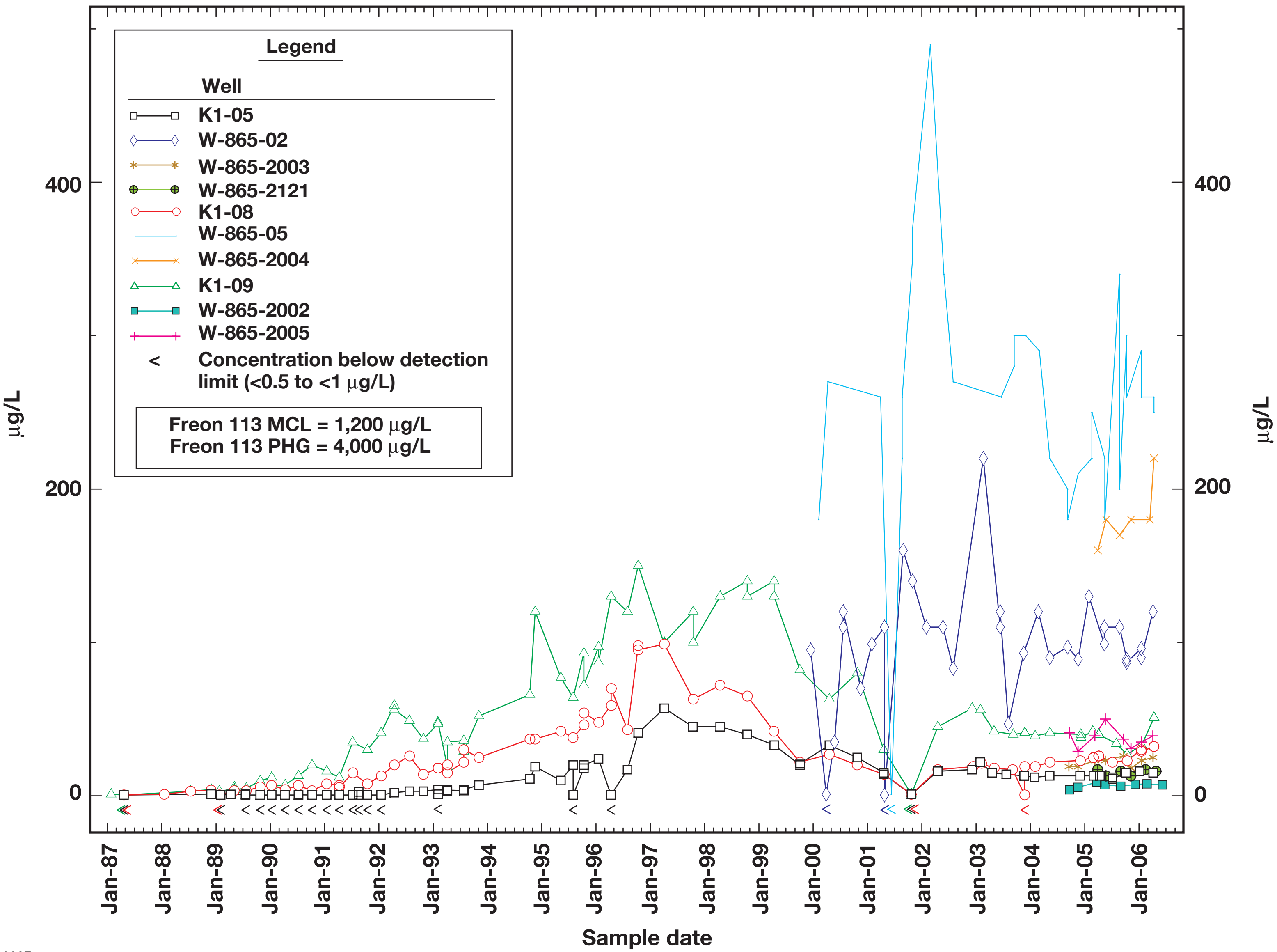


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Figure 11. Time-series plot of Freon 113 concentrations in ground water in the $Tnbs_1/Tnbs_0$ HSU at the Building 865 study area.

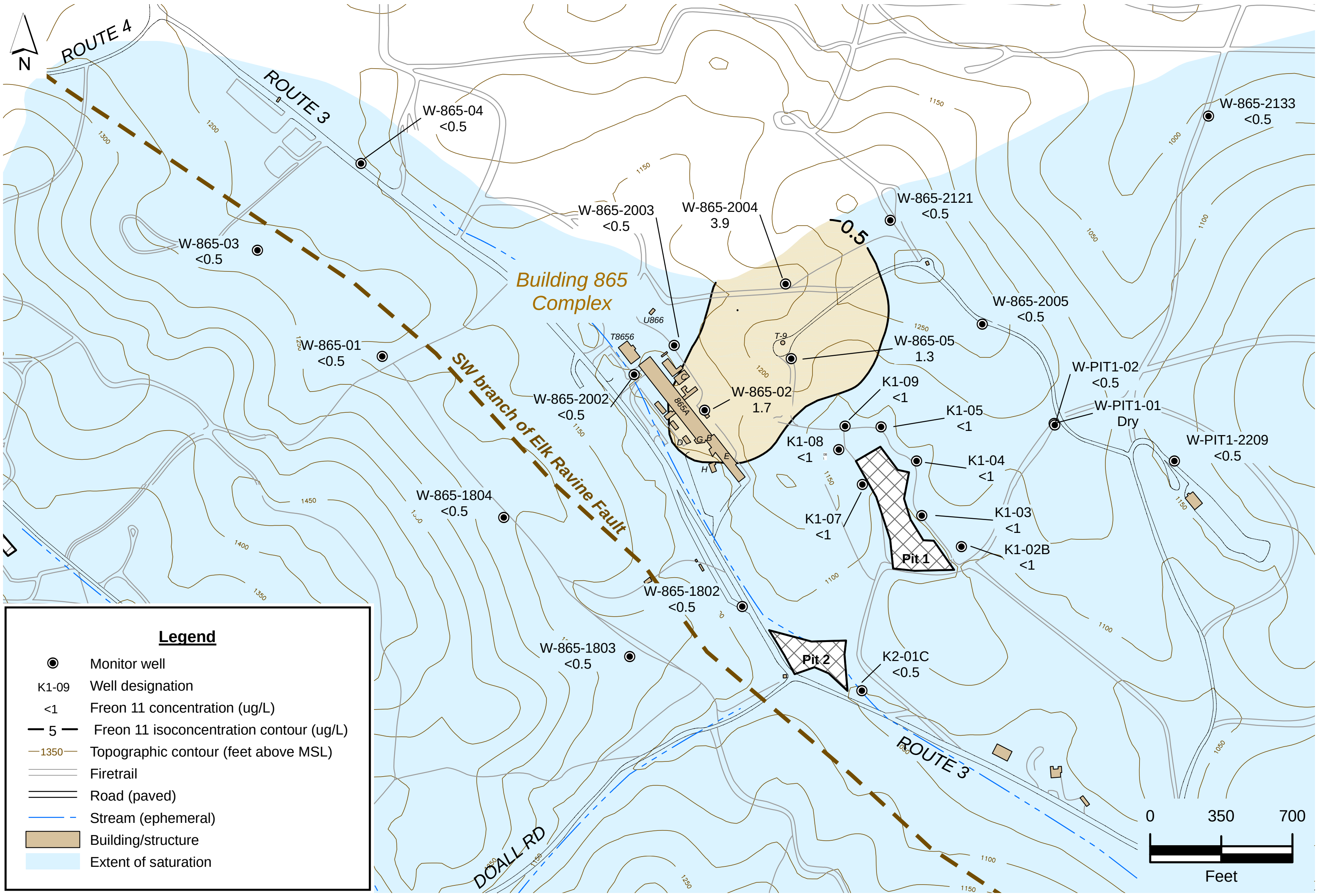

Figure 12. Freon 11 concentrations (ug/L) in ground water within the $Tnbs_1/Tnbs_0$ HSU at the Building 865 study area, 1st Quarter 2006.

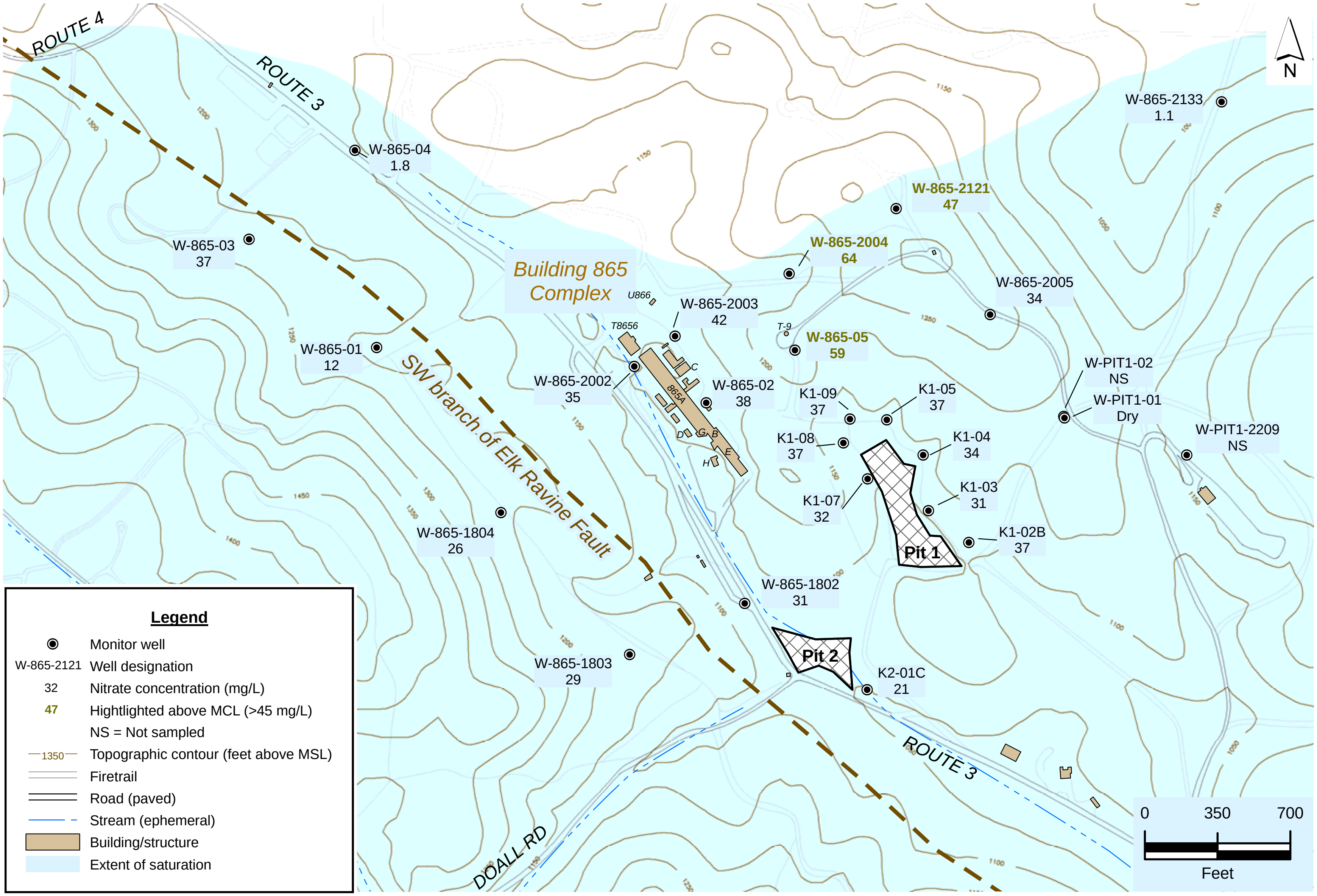

Figure 13. Nitrate concentrations (mg/L) in ground water within the $Tnbs_1/Tnbs_0$ HSU at the Building 865 study area, 1st Quarter 2006.

Tables

Table 1. Field characterization and remediation activities at the Building 865 study area.

Year	Activity
1982-2006	Installed 29 monitoring wells in the study area.
1982-2006	Collected ground water elevations and water samples for chemical analysis and conducted hydraulic tests.
1985	Surface impoundment and contaminated soil removed and disposed as hazardous waste.
1988	Freon 113 first detected in ground water. Use of Freon 113 ceases at the Building 865 Complex. Tensile block wash basin, solvent rack, and Freon 113 tank removed.
1990 and 2006	Conducted geologic mapping and site reconnaisance.
1990	Wastewater tank 865-R1U1 was moved to its current location and the adjacent and underlying soil was disposed and replaced with clean fill.
1991	Excavated and disposed of contaminated soil from substation transformer.
1994	Collected and analyzed soil samples from substation transformer, tensile block wash area/drum rack/Freon 113 tank, oil conditioning system, drainage outfall, former surface impoundment, and cooling tower sludge area and drainage channel.
1994	Removed and closed diesel tank 865-D1U1 and excavated and disposed/bio-remediated diesel-bearing soil.
1995	Excavated and disposed of soil contaminated with cooling tower sludge.
1996	Excavated and disposed of contaminated soil from tensile block wash area and adjacent drainage grate.
1999	Removed contaminated dirt from drainage grate beneath the oil conditioning system and filled catch basin with gravel and concrete.

Table 2. Monitor well completion data for the Building 865 study area.

Well	HSU	Screened Stratigraphic Unit	Northing	Easting	Borehole Depth (ft)	Depth of Screened Interval (ft)	Ground Elevation (ft above MSL)	Casing Diameter (in.)	Approximate Well Yield (gpm)	Completion Date
K1-02A[a]	Tmss	Tmss	427893.05	1699451.74	284	222.7-224.5	1105.2	NA	NA	17-Aug-82
K1-02B	$Tnbs_1/Tnbs_0$	$Tnbs_1$	427893.05	1699451.74	284	146.5-166.5	1105.2	3.5	2	17-Aug-82
K1-03	$Tnbs_1/Tnbs_0$	$Tnbs_1$-$Tnbs_0$	428046.92	1699257.80	171	151-171	1106.1	3	3	24-Aug-83
K1-04	$Tnbs_1/Tnbs_0$	$Tnbs_0$-$Tnsc_0$	428315.51	1699231.70	201	183-200	1120.0	3	2	23-Aug-83
K1-05	$Tnbs_1/Tnbs_0$	$Tnbs_1$-$Tnbs_0$	428485.47	1699057.58	198.7	163-184	1128.9	4	1	21-Nov-84
K1-07	$Tnbs_1/Tnbs_0$	$Tnbs_1$	428199.97	1698965.54	155.8	128-148	1106.6	4	2	28-Oct-85
K1-08	$Tnbs_1/Tnbs_0$	$Tnbs_1$	428373.10	1698848.94	174.9	141-166	1120.7	4.5	2	31-Oct-85
K1-09	$Tnbs_1/Tnbs_0$	$Tnbs_1$	428488.09	1698880.26	195.6	155-190	1124.7	4.5	3	5-Nov-85
K2-01C	$Tnbs_1/Tnbs_0$	$Tnbs_1$	427184.56	1698962.87	234.3	67-82.3	1048.9	3.5	1	14-Jun-82
W-865-01	$Tnbs_1/Tnbs_0$	$Tnbs_0$	428832.21	1696604.30	150	45-55	1184.9	5	0.25	15-Dec-98
W-865-02	$Tnbs_1/Tnbs_0$	$Tnbs_1$-$Tnbs_0$	428567.05	1698189.37	140	124-134	1110.4	5	1	14-Dec-99
W-865-03	$Tnbs_1/Tnbs_0$	$Tnbs_0$	429354.19	1695990.59	66	46-56	1234.0	5	2	15-Feb-00
W-865-04	$Tnbs_1/Tnbs_0$	$Tnsc_0$	429783.14	1696499.81	157	63-73	1154.2	5	2.5	6-Jan-00
W-865-05	$Tnbs_1/Tnbs_0$	$Tnbs_0$	428819.65	1698616.86	274	260-270	1232.1	5	1.4	16-Feb-00
W-865-06	Tmss	Tmss	429746.27	1696545.99	202	122-132	1152.6	5	1	25-Jan-00
W-865-07	Qal/WBR	$Tnbs_1$-$Tnbs_0$	429805.85	1696470.63	43	28-38	1154.9	5	3	1-Feb-00
W-865-1802	$Tnbs_1/Tnbs_0$	$Tnbs_0$	427599.45	1698374.67	200.5	89-99	1067.1	2	0.5	27-Jun-02
W-865-1803	$Tnbs_1/Tnbs_0$	$Tnbs_0$	427353.07	1697821.33	231	101-111	1178.0	5	0.75	11-Jul-02
W-865-1804	$Tnbs_1/Tnbs_0$	$Tnbs_0$	428037.41	1697201.86	279	93-103	1210.1	5	0.1	30-Jul-02
W-865-2002	$Tnbs_1/Tnbs_0$	$Tnbs_0$-$Tnsc_0$	428741.90	1697843.33	98	79-89	1093.8	5	1	27-Jan-04
W-865-2003	$Tnbs_1/Tnbs_0$	$Tnbs_0$	428886.80	1698039.52	133	117-127	1109.4	5	1	14-Jan-04
W-865-2004	$Tnbs_1/Tnbs_0$	$Tnbs_0$-$Tnsc_0$	429187.80	1698587.82	261	246-256	1183.0	5	2	6-Oct-04

Table 2 (cont.). Monitor well completion data for the Building 865 study area.

Well	HSU	Screened Stratigraphic Unit	Northing	Easting	Borehole Depth (ft)	Depth of Screened Interval (ft)	Ground Elevation (ft above MSL)	Casing Diameter (in.)	Approximate Well Yield (gpm)	Completion Date
W-865-2005	$Tnbs_1$/$Tnbs_0$	$Tnbs_1$	428990.64	1699555.36	401	330-350	1272.9	5	5	11-Dec-03
W-865-2121	$Tnbs_1$/$Tnbs_0$	$Tnbs_0$	429502.81	1699103.22	361.5	347-357	1288.0	5	3.5	1-Dec-04
W-865-2133	$Tnbs_1$/$Tnbs_0$	$Tnbs_1$	430015.58	1700667.66	201	128-138	1006.5	5	15	11-Aug-05
W-896-1806	$Tnsc_0$[b]	$Tnbs_0$-$Tnsc_0$	429998.65	1698533.94	352	80-90	1202.4	5	Unknown	21-Aug-02
W-PIT1-01	$Tnbs_1$/$Tnbs_0$	$Tnbs_1$	428500.71	1699908.61	162	136-146	1179.9	5	0.2	27-Jan-99
W-PIT1-02	$Tnbs_1$/$Tnbs_0$	$Tnbs_1$	428494.39	1699912.16	278	250-260	1179.3	5	6	28-May-99
W-PIT1-2209	$Tnbs_1$/$Tnbs_0$	$Tnbs_1$-$Tnbs_0$	428224.00	1700610.00	360	245-265	1156	5	4	11-May-06

Notes:

ft = Feet.

gpm = Gallons per minute.

HSU = Hydrostratigraphic unit.

in. = Inch.

MSL = Mean sea level.

NA = Not applicable.

Qal/WBR = Quaternary alluvium/weathered bedrock.

$Tnbs_1$ = Tertiary Neroly Formation lower blue sandstone unit.

$Tnbs_0$ = Tertiary Neroly Formation basal sandstone unit.

$Tnsc_0$ = Tertiary Neroly Formation lower siltstone/claystone unit.

Tmss = Tertiary Cierbo Formation.

[a] K1-02A is not a monitor well. It is a Barcard sampling device that uses N_2 gas to push a sample to ground surface.

[b] Screened in a perched water-bearing zone, not an HSU.

Table 3. Characteristics of hydrostratigraphic units (HSUs) in the Building 812 Study Area.

HSU	Hydraulic condition	Saturated thickness	Extent of saturation	Gradient and flow direction	Depth to water below ground surface
Qal/WBR	Unconfined	0-5 ft of ephemeral saturation likely exists following storms, but HSU is probably unsaturated most of the year.	Restricted to valley-fill alluvium and weathered bedrock. Continuous saturation during and following rainy periods.	Flow direction is southeast within Elk Ravine and elsewhere downhill and parallel to axis of subsidiary drainages. Downward to no vertical gradient between Qal/WBR and $Tnbs_1$/$Tnbs_0$ HSU.	0 to 20 ft
$Tnbs_1$/$Tnbs_0$	Unconfined in west and confined in northeast portion of study area	5-100 ft (thickens to the northeast)	Extent of saturation is limited to the north by intersection of potentiometric surface and the top of the $Tnsc_0$ stratigraphic unit. Limited to east and northeast by absence of $Tnbs_1$ and $Tnbs_0$ stratigraphic units, which are eroded away. Extent of saturation is continuous to southern boundary of Site 300.	Flow direction is northeast in northern portion of study area with a 0.01 to 0.1 gradient. Flow direction is southeast along southwest branch or Elk Ravine Fault with a gradient of 0.05 to 0.1. Flow is directed to east and northeast west of the fault branch with a 0.05 to 0.2 gradient.	90 to 450 ft (about 100 to 120 ft below Building 865 Complex)
Tmss	Confined	10 to 20 ft	Tmss is inferred to be saturated beneath much of the study area.	Gradient of about 0.03 to 0.1. Average flow direction is south-southeast. Downward gradient between $Tnsc_0$ HSU and underlying Tmss HSU.	200 to 550 ft
$Tnbs_1$, $Tnbs_0$, and $Tnsc_0$[a]	Unconfined	0 to 5 ft	Includes several discontinuous water-bearing lenses within $Tnbs_1$ and $Tnsc_0$.	Downward gradient between perched zones and $Tnbs_1$/$Tnbs_0$ HSU.	Varies

Notes:

ft = Feet.

HSU = Hydrostratigraphic unit.

Qal/WBR = Quaternary alluvium/weathered bedrock.

Tmss = Tertiary Cierbo Formation.

$Tnbs_1$ = Tertiary Neroly Formation lower blue sandstone.

$Tnbs_0$ = Tertiary Neroly Formation basal silty sandstone.

$Tnsc_0$ = Tertiary Neroly Formation lower siltstone/claystone.

[a] Denotes discontinuous lenses of ground water within the $Tnbs_1$, $Tnbs_0$, and $Tnsc_0$ stratigraphic units. These are not mappable HSUs.

Table 4. Summary of hydraulic test and well development data for the Building 865 study area[a].

Well	Date	Type of test[b]	Aquifer Thickness (ft)	Flow rate (Q) (gpm)	Hydraulic conductivity[c] (K) (gpd/sq ft)	Data quality[d]
K1-01C	12/7/1987	Drawdown	11	0.9	144-360	Good
K1-01C	12/7/1987	Slug/Bail	10	NA	33-47	Good
K1-02B	12/10/1987	Drawdown	20	2.0	32-56	Good
K1-02B	12/10/1987	Slug/Bail	21	NA	20-23	Fair
K2-01C	12/4/1987	Slug/Bail	16	NA	13-16	Fair
K2-01C	12/17/1987	Drawdown	15	0.6	25	Fair
K2-03	9/24/1987	Drawdown	20	11.4	6	Fair
K2-04D	12/30/1988	Drawdown	11	12.0	110-260	Good
K2-04S	12/10/1987	Drawdown	10	0.3	10	Fair
K2-04S	12/17/1987	Slug/Bail	11	NA	9-16	Fair
K7-01	12/5/1986	Drawdown	6	0.1	4	Fair
K7-01	12/8/1986	Drawdown	6	0.3	4-6	Fair
K7-01	12/9/1986	Slug	6	NA	14	Good
K7-01	12/10/1986	Bail	6	NA	5	Fair
K7-03	12/3/1986	Drawdown	10	0.2	4	Fair
K7-03	1/8/1987	Drawdown	10	0.1	4	Fair
K7-03	1/9/1987	Slug/Bail	10	NA	3.6-4.7	Poor
K7-06	1/7/1987	Slug	18	NA	4	Fair
K7-06	1/9/1987	Bail	17	NA	2	Fair
K7-09	3/3/1989	Slug/Bail	5	NA	0.3	Good
K7-10	3/14/1989	Slug/Bail	5	NA	0.6-1.4	Good-Excellent
K8-04	12/29/1989	Drawdown	5	5.0	140-400	Fair-Good
K9-01	5/15/1989	Drawdown	10	1.7	2.5-14	Excellent
K9-02	5/17/1989	Drawdown	7	0.5	0.8-3.8	Good
K9-03	5/16/1989	Drawdown	11	1.1	1.2-10	Fair-Good
NC2-05A	10/2/1987	Step	2	4.3	300	Fair
NC2-05A	12/2/1987	Slug/Bail	15	NA	57-87	Good
NC2-06	8/24/1987	Slug/Bail	19	NA	25-40	Fair
NC2-06	8/27/1987	Drawdown	19	2.0	95	Fair
NC2-08	10/20/1987	Drawdown	25	2.7	10	Fair
NC2-08	12/3/1987	Slug/Bail	25	NA	12-13	Fair
NC2-09	9/2/1987	Slug/Bail	3	NA	13-21	Good
NC2-09	9/21/1987	Drawdown	20	0.5	4	Fair
NC2-11D	12/15/1988	Drawdown	8	15.8	440-2,300	Good
NC2-11I	12/13/1988	Drawdown	10	21.6	310-1,200	Fair-Good

Table 4 (cont.). Summary of hydraulic test and well development data for the Building 865 study area[a].

Well	Date	Type of test[b]	Aquifer Thickness (ft)	Flow rate (Q) (gpm)	Hydraulic conductivity[c] (K) (gpd/sq ft)	Data quality[d]
NC2-11S	12/15/1988	Drawdown	7	2.9	430-790	Fair-Good
NC2-12D	12/22/1988	Drawdown	14	16.5	100-470	Fair
NC2-12I	12/19/1988	Drawdown	6	12.4	120-750	Good-Excellent
NC2-12S	12/14/1988	Drawdown	19	11.0	90-220	Good-Excellent
NC2-13	12/14/1988	Drawdown	13	3.9	170-410	Fair-Good
NC2-14S	1/12/1989	Drawdown	7	1.1	56-98	Fair – Good
NC2-15	3/30/1989	Slug/Bail	10	NA	28	Fair
NC7-11	1/1/1985	Bail	2	NA	3-150	Fair
NC7-11	1/21/1987	Slug/Bail	3	NA	25-85	Fair
NC7-16	1/1/1985	Bail	2	NA	1.3-121	Fair
NC7-17	3/14/1989	Slug/Bail	5	NA	1.0-1.3	Fair-Excellent
NC7-23	1/1/1985	Bail	2	NA	0.01-0.16	Fair
NC7-23	1/13/1987	Slug/Bail	5	NA	0.06-0.16	Fair
NC7-25	1/1/1985	Slug	6	NA	0.2-3.0	Fair
NC7-25	9/9/1986	Drawdown	3	0.0	0.7	Fair
NC7-25	12/9/1986	Slug/Bail	4	NA	3	Fair
NC7-26	1/1/1985	Slug	12	NA	2-30	Fair
NC7-26	12/2/1986	Drawdown	5	0.2	55	Fair
NC7-26	12/2/1986	Drawdown	5	0.4	42-150	Fair
NC7-26	12/3/1986	Drawdown	5	0.3	28	Fair
NC7-26	12/3/1986	Slug/Bail	5	NA	35	Fair
NC7-27	1/27/1987	Slug/Bail	5	NA	0.6-0.8	Fair
NC7-28	1/1/1985	Slug	6	NA	0.4-12	Fair
NC7-28	1/27/1987	Slug	5	NA	7	Fair
NC7-28	1/28/1987	Bail	5	NA	7	Fair
NC7-48	5/8/1986	Slug/Bail	10	NA	0.3	Fair
NC7-49	5/9/1986	Bail	10	NA	0.8	Fair
NC7-49	6/18/1986	Slug/Bail	10	NA	0.2-0.5	Fair
NC7-56	12/27/1988	Slug/Bail	2	NA	820-1,500	Good
NC7-59	12/16/1988	Slug/Bail	5	NA	100	Fair
NC7-67	12/27/1987	Slug/Bail	7	NA	33-47	Good
NC7-67	7/27/1989	Drawdown	7	1.3	2-16	Good
W-865-01	12/16/1998	Development	NA	0.3	NC	Poor
W-865-02	12/21/1999	Development	NA	0.9	NC	Poor
W-865-03	2/17/2000	Development	NA	3.8	NC	Poor

Table 4 (cont.). Summary of hydraulic test and well development data for the Building 865 study area[a].

Well	Date	Type of test[ß]	Aquifer Thickness (ft)	Flow rate (Q) (gpm)	Hydraulic conductivity[c] (K) (gpd/sq ft)	Data quality[d]
W-865-04	1/10/2000	Development	NA	2.7	NC	Poor
W-865-05	2/17/2000	Development	NA	1.2	NC	Fair
W-865-06	1/26/2000	Development	NA	1.1	NC	Poor
W-865-07	2/2/2000	Development	NA	3.2	NC	Poor
W-865-1802	6/27/2003	Sampling	NA	0.1	NC	Poor
W-865-1803	6/26/2003	Sampling	NA	0.1	NC	Very Poor
W-865-1804	7/31/2002	Development	NA	0.3	NC	Poor
W-865-2002	1/28/2004	Development	NA	0.6	NC	Fair
W-865-2003	1/15/2004	Development	NA	1.1	NC	Poor
W-865-2005	12/17/2003	Development	NA	5.0	NC	Fair
W-865-2121	12/7/2004	Development	NA	3.3	NC	Good
W-865-2133	8/16/2005	Development	NA	14.5	NC	Fair
W-PIT1-01	1/28/1999	Development	NA	0.1	NC	Fair
W-PIT1-2209	6/1/2006	Development	NA	4.0	NC	Fair
W-PIT2-1934	10/23/2003	Development	NA	0.6	NC	Fair
W-PIT2-1935	10/13/2003	Development	NA	0.7	NC	Fair

Notes:

ft = Feet.

gpd = Gallons per day.

gpm = Gallons per minute.

NA = Not applicable.

NC = Not calculated.

sq ft = Square feet.

[a] The pumping test results were obtained by using the analytic techniques of Theis (1935), Cooper and Jacob (1946), Papadopulos and Cooper (1967), Hantush and Jacob (1955), Hantush (1960), or Boulton (1963). The particular method used depends on the character of the data obtained. The slug test results were obtained using the method of Cooper et al. (1967).

[b] "Drawdown" denotes 1-hour (hr) pumping tests; "Longterm" denotes 24- to 48-hr pumping tests; "Slug or Bail" denotes monitoring and recovery after an instantaneous change in ground water elevations; "Step" denotes a step-drawdown test, flow rate given is the maximum or final step. "Development" denotes well-development performed before the baseline sampling of each well to determine approximate sustainable extraction flow rate. "Sampling" denotes extraction flow rate information gained during chemical sampling events.

[c] K is calculated by dividing T (transmissivity) by the thickness of permeable sediments intercepted by the sand pack of the well. This thickness is the sum of all sediments with moderate to high estimated conductivities determined from the geologic and geophysical logs of the well.

[d] **Hydraulic test quality criteria:**

Excel: **High confidence that type curve match is unique. Data are smooth and flow rate well controlled.**

Good: **Some confidence that curve match is unique. Data are not too "noisy." Well bore storage effects, if present, do not significantly interfere with the curve match. Boundary effects can be separated from properties of the pumped zone.**

Fair: **Low confidence that curve match is unique. Data are "noisy." Multiple leakiness and other boundary effects tend to obscure the curve match.**

Poor: **Unique curve match cannot be obtained due to multiple boundaries, well bore storage, uneven flow rate, or equipment problems. Usually, the test is repeated.**

Table 5. Concentrations of analytes in Building 865 study area surface and subsurface soil compared to PRGs, CHHSLs, SSLs, and background concentrations.

Medium	Analyte	Maximum Concentration[a]	PRG (Industrial)	CHHSL (Industrial)	SSLs (DAF =20)	Background[b]
Surface Soil	Arsenic	24 mg/kg	1.6 mg/kg (0.16 mg/kg CA)	0.24 mg/kg	29 mg/kg	16 mg/kg
	Barium	100 mg/kg	67,000 mg/kg	63,000 mg/kg	1,600 mg/kg	540 mg/kg
	Beryllium	<0.05 mg/kg	1,900 mg/kg	1,700 mg/kg	63 mg/kg	2.5 mg/kg
	Cadmium	17 mg/kg	450 mg/kg	7.5 mg/kg	8 mg/kg	1.9 mg/kg
	Copper	110 mg/kg	41,000 mg/kg	38,000 mg/kg	NA	39 mg/kg
	Total chromium	100 mg/kg	450 mg/kg	NA	380 mg/kg	122 mg/kg
	Lead	65 mg/kg	800 mg/kg(150 mg/kg CA)	3,500 mg/kg	NA	51 mg/kg
	Mercury	<0.05 mg/kg	310 mg/kg	180 mg/kg	NA	0.29 mg/kg
	Nickel	19 mg/kg	62,000 mg/kg	16,000 mg/kg	130 mg/kg	110 mg/kg
	Selenium	<0.05 mg/kg	5,100 mg/kg	4,800 mg/kg	5 mg/kg	0.96 mg/kg
	Silver	<2.5 mg/kg	5,100 mg/kg	4,800 mg/kg	34 mg/kg	NA
	Zinc	970 mg/kg	100,000 mg/kg	100,000 mg/kg	12,000 mg/kg	110 mg/kg
Subsurface soil	Arsenic	2.8 mg/kg	—[c]	NA	29 mg/kg	8.3 mg/kg
	Barium	110 mg/kg	—[c]	NA	1,600 mg/kg	560 mg/kg
	Beryllium	<0.5 mg/kg	—[c]	NA	63 mg/kg	1.4 mg/kg
	Cadmium	< 1 mg/kg	—[c]	NA	8 mg/kg	1.5 mg/kg
	Copper	24 mg/kg	—[c]	NA	NA	66 mg/kg
	Total chromium	28 mg/kg	—[c]	NA	380 mg/kg	78 mg/kg
	Lead	< 10 mg/kg	—[c]	NA	NA	NA
	Mercury	0.06 mg/kg	—[c]	NA	NA	0.2 mg/kg
	Nickel	43 mg/kg	—[c]	NA	130 mg/kg	140 mg/kg
	Selenium	0.59 mg/kg	—[c]	NA	5 mg/kg	1.5 mg/kg

Table 5 (cont.). Concentrations of analytes in Building 865 study area surface and subsurface soil compared to PRGs, CHHSLs, SSLs, and background concentrations.

Medium	Analyte	Maximum Concentration[a]	PRG (Industrial)	CHHSL (Industrial)	SSLs (DAF =20)	Background[b]
	Silver	<2.5 mg/kg	—[c]	NA	34 mg/kg	NA
	Zinc	65 mg/kg	—[c]	NA	12,000 mg/kg	91 mg/kg
	TPH as motor oil	140 mg/kg	NA[c]	100-10,000 mg/kg (SAL)	NA	NA
	TPH as diesel	760 mg/kg	NA[c]	100-10,000 mg/kg (SAL)	NA	NA
	Freon 113	0.014 mg/kg	—[c]	NA	NA	< 0.0005 mg/kg
	Toluene	0.002 mg/kg	—[c]	NA	120 mg/kg	< 0.0005 mg/kg
	Total xylenes	0.0036 mg/kg	—[c]	NA	210 mg/kg	< 0.0005 mg/kg

Notes:

CA = California.
CHHSLs = California Human Health Screening levels.
DAF = Dilution attenuation factor.
mg/kg = Milligrams per kilograms.
NA = Not available.
PRGs = U.S. Environmental Protection Agency, Region IX, Preliminary Remediation Goals.
SAL = State Action Level.
SSLs = U.S. Environmental Protection Agency, Region IX Soil screening level.
TPH = Total petroleum hydrocarbons.
NA = Not available.

[a] Surface soil and subsurface soil concentrations are the maximum concentrations or activities measured in the soil profile.

[b] Background as determined in surface soil or subsurface soil, respectively (Source: Ferry et al., 1999).

[c] PRG comparison to subsurface soil concentrations is not applicable.

1995 and 1996 analytical data obtained from sample locations MS-B865-002 and MS-865-037 were excluded from the surface soil maximum concentration evaluation because the soil was removed in 1996.

1995 and 1996 analytical data obtained from sample location, MS-B865-033 and from above 5 ft from locations MS-B865-035, -036, and -037 were excluded from the subsurface soil maximum concentration evaluation because the soil was removed.

Table 6. Concentrations of analytes in Building 865 study area surface and subsurface soil compared to U.S. EPA ecological soil screening levels (SSLs) and background concentrations.

Medium	Analyte	Maximum Concentration[a]	Plant SSL	Soil Invertebrate SSL	Avian SSL	Mammalian SSL	Background[b]
Surface Soil	Arsenic	24 mg/kg	18 mg/kg	NA	43 mg/kg	46 mg/kg	16 mg/kg
	Barium	100 mg/kg	NA	330 mg/kg	NA	2,000 mg/kg	540 mg/kg
	Beryllium	<0.05 mg/kg	NA	40 mg/kg	NA	21 mg/kg	2.5 mg/kg
	Cadmium	17 mg/kg	32 mg/kg	140 mg/kg	0.77 mg/kg	0.36 mg/kg	1.9 mg/kg
	Copper	110 mg/kg	70 mg/kg	80 mg/kg	28 mg/kg	51 mg/kg	39 mg/kg
	Total chromium	100 mg/kg	NA	NA	Cr III 26 mg/kg Cr VI NA	Cr III 34 mg/kg Cr VI 81 mg/kg	122 mg/kg
	Lead	65 mg/kg	120 mg/kg	1,700 mg/kg	11 mg/kg	56 mg/kg	51 mg/kg
	Mercury	<0.05 mg/kg	NA	NA	NA	NA	0.29 mg/kg
	Nickel	19 mg/kg	P	P	P	P	110 mg/kg
	Selenium	<0.05 mg/kg	P	P	P	P	0.96 mg/kg
	Silver	<2.5 mg/kg	P	P	P	P	NA
	Zinc	970 mg/kg	P	P	P	P	110 mg/kg
Subsurface soil	Arsenic	2.8 mg/kg	18 mg/kg	NA	43 mg/kg	46 mg/kg	8.3 mg/kg
	Barium	110 mg/kg	NA	330 mg/kg	NA	2,000 mg/kg	560 mg/kg
	Beryllium	<0.5 mg/kg	NA	40 mg/kg	NA	21 mg/kg	1.4 mg/kg
	Cadmium	< 1 mg/kg	32 mg/kg	140 mg/kg	0.77 mg/kg	0.36 mg/kg	1.5 mg/kg
	Copper	24 mg/kg	70 mg/kg	80 mg/kg	28 mg/kg	51 mg/kg	66 mg/kg
	Total chromium	28 mg/kg	NA	NA	Cr III 26 mg/kg Cr VI NA	Cr III 34 mg/kg Cr VI 81 mg/kg	78 mg/kg
	Lead	< 10 mg/kg	120 mg/kg	1,700 mg/kg	11 mg/kg	56 mg/kg	NA
	Mercury	0.06 mg/kg	NA	NA	NA	NA	0.2 mg/kg
	Nickel	43 mg/kg	P	P	P	P	140 mg/kg
	Selenium	0.59 mg/kg	P	P	P	P	1.5 mg/kg

Table 6 (cont.). Concentrations of analytes in Building 865 study area surface and subsurface soil compared to to U.S. EPA ecological soil screening levels (SSLs) and background concentrations.

Medium	Analyte	Maximum Concentration[a]	Plant SSL	Soil Invertebrate SSL	Avian SSL	Mammalian SSL	Background[b]
Subsurface Soil	Silver	<2.5 mg/kg	P	P	P	P	NA
	Zinc	65 mg/kg	P	P	P	P	91 mg/kg
	TPH as motor oil	140 mg/kg	NA	NA	NA	NA	NA
	TPH as diesel	760 mg/kg	NA	NA	NA	NA	NA
	Freon 113[d]	0.014 mg/kg	NA	NA	NA	NA	< 0.0005 mg/kg
	Toluene[d]	0.002 mg/kg	NA	NA	NA	NA	< 0.0005 mg/kg
	Total xylenes[d]	0.0036 mg/kg	NA	NA	NA	NA	< 0.0005 mg/kg

Notes:

mg/kg = Milligrams per kilogram.

NA = Not available. Data were insufficient to derive an eco-SSL or a background concentration.

P = SSLs not yet published but pending.

TPH = Total petroleum hydrocarbons.

[a] Surface soil and subsurface soil concentrations are the maximum concentrations or activities measured in the soil profile.

[b] Background as determined in surface soil or subsurface soil, respectively (Source: Ferry et al., 1999).

[c] PRG comparison to subsurface soil concentrations is not applicable.

[d] Contaminant was detected below 12 ft depth and thus there is no volatilization pathway to the ground surface.

1995 and 1996 analytical data obtained from sample locations MS-B865-002 and MS-865-037 were excluded from the surface soil maximum concentration evaluation because the soil was removed in 1996.

1995 and 1996 analytical data obtained from sample location, MS-B865-033 and from above 5 ft from locations MS-B865-035, -036, and -037 were excluded from the subsurface soil maximum concentration evaluation because the soil was removed.

Table 7. Maximum analyte concentrations in Building 865 study area ground water, regulatory standards, and background levels.

Medium	Analyte	Current Maximum Concentration[a]	Historical Maximum Concentration	MCL	WQO	Background[b]
Ground water	Freon 113	290 μg/L	490 μg/L, 2/02	1,200 μg/L	4,000 μg/L (PHG)	<0.5 μg/L
	Freon 11	3.9 μg/L	5.1 μg/L, 3/05	150 μg/L	700 μg/L (PHG)	<0.5 μg/L
	PCE	7.5 μg/L	10 μg/L, 3/05	5 μg/L	0.6 μg/L	<0.5 μg/L
	TCE	0.61 μg/L	3.8 μg/L, 1/90	5 μg/L	0.8 μg/L	<0.5 μg/L
	Tritium	<100[c]	<100[c]	20,000 pCi/L	400 pCi/L	100 pCi/L
	Total uranium	3.3 pCi/L	9.4 pCi/L, 3/01[d]	20 pCi/L	0.5 pCi/L (PHG)	Varies
	Nitrate	64 mg/L	110 mg/L, 5/99	45 mg/L	10 mg/L (PHG)	91 mg/L
	Perchlorate	9.6 μg/L	9.6 μg/L	NA	6 μg/L (PHG)	<4 μg/L
	HMX	NS	34 μg/L, 3/01	NA	400 μg/L (SNARL)	<1 μg/L
	RDX	NS	17 μg/L, 3/01	NA	0.3 μg/L (SNARL)	<1 μg/L

Notes:

Individual metals concentrations are not included in this table because no metal exceeded regulatory standards or background levels in ground water.

mg/L = Milligrams per liter.

MCL = Maximum Contaminant Level.

NS = Not sampled in 2006.

NA = Not available.

pCi/L = PicoCuries per liter.

PHG = Public Health Goal.

SNARL = Suggested No-Adverse-Response Levels.

WQO = Water Quality Objective.

μg/L = Micrograms per liter.

[a] Current maximum concentration from the first quarter 2006.

[b] Source: Ferry et al., 1999

[c] Maximum tritium activity detected in samples from wells downgradient of Building 865. Other wells in study area yield a maximum historic tritium activity of 2,490 pCi/L.

[d] Uranium-235/Uranium-238 atom ratio (0.007) indicates that the uranium is natural in origin.

Attachment A

Tables

Building 865 Study Area
Characterization Summary Report
Attachment A Table List

A-16 Ground and surface water analyses for total petroleum hydrocarbons (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

A-17 Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

A-18 Ground and surface water analyses for perchlorate (μg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

A-19 Ground and surface water analyses for high explosive compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

A-20 Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

A-21 Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

A-22 Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

A-23 Ground and surface water analyses for total uranium and uranium isotopes (pCi/L) and $^{235}U/^{238}U$ atom ratio in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-02B	11-Jan-95	138.90	968.33	
K1-02B	18-Jan-95	139.00	968.23	
K1-02B	5-Apr-95	137.80	969.43	
K1-02B	10-May-95	138.65	968.58	PS
K1-02B	14-Jul-95	137.80	969.43	
K1-02B	31-Jul-95	137.70	969.53	PS
K1-02B	17-Jan-96	137.00	970.23	
K1-02B	27-Feb-96	136.70	970.53	PS
K1-02B	10-Apr-96	136.10	971.13	PS
K1-02B	1-May-96	135.68	971.55	
K1-02B	6-Jun-96	134.95	972.28	
K1-02B	16-Jul-96	134.30	972.93	
K1-02B	30-Jul-96	134.00	973.23	PS
K1-02B	8-Aug-96	133.91	973.32	
K1-02B	4-Sep-96	133.52	973.71	
K1-02B	20-Sep-96	133.40	973.83	PS
K1-02B	27-Sep-96	133.33	973.90	PS
K1-02B	8-Oct-96	132.98	974.25	
K1-02B	9-Oct-96	133.10	974.13	PS
K1-02B	28-Oct-96	132.90	974.33	PS
K1-02B	6-Nov-96	132.91	974.32	
K1-02B	10-Dec-96	132.22	975.01	
K1-02B	15-Jan-97	132.27	974.96	
K1-02B	5-Feb-97	131.93	975.30	
K1-02B	4-Mar-97	131.66	975.57	
K1-02B	3-Apr-97	130.85	976.38	
K1-02B	10-May-97	130.47	976.76	
K1-02B	5-Jun-97	129.92	977.31	
K1-02B	1-Jul-97	129.74	977.49	
K1-02B	4-Aug-97	129.15	978.08	
K1-02B	4-Sep-97	128.80	978.43	
K1-02B	7-Oct-97	128.51	978.72	
K1-02B	4-Nov-97	128.39	978.84	
K1-02B	2-Dec-97	128.31	978.92	
K1-02B	8-Jan-98	128.16	979.07	PS
K1-02B	8-Jan-98	128.16	979.07	
K1-02B	9-Feb-98	128.44	978.79	
K1-02B	5-Mar-98	127.61	979.62	
K1-02B	6-Apr-98	126.99	980.24	
K1-02B	9-Apr-98	126.90	980.33	PS
K1-02B	6-May-98	125.96	981.27	
K1-02B	11-May-98	125.65	981.58	PS
K1-02B	18-May-98	125.50	981.73	PS
K1-02B	3-Jun-98	124.85	982.38	
K1-02B	14-Jul-98	123.40	983.83	PS

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-02B	11-Aug-98	0.00	0.00	DRY
K1-02B	1-Sep-98	0.00	0.00	DRY
K1-02B	13-Oct-98	120.54	986.69	PS
K1-02B	26-Oct-98	120.24	986.99	
K1-02B	17-Nov-98	119.46	987.77	
K1-02B	1-Dec-98	119.76	987.47	
K1-02B	4-Dec-98	119.50	987.73	PS
K1-02B	11-Dec-98	119.31	987.92	PS
K1-02B	5-Jan-99	119.27	987.96	
K1-02B	12-Jan-99	118.90	988.33	PS
K1-02B	5-Feb-99	119.13	988.10	
K1-02B	9-Mar-99	118.52	988.71	
K1-02B	15-Apr-99	118.04	989.19	
K1-02B	15-Apr-99	118.36	988.87	PS
K1-02B	4-May-99	118.51	988.72	
K1-02B	2-Jun-99	117.91	989.32	
K1-02B	9-Jul-99	118.65	988.58	PS
K1-02B	22-Jul-99	118.22	989.01	
K1-02B	18-Aug-99	118.32	988.91	
K1-02B	8-Sep-99	118.87	988.36	
K1-02B	7-Oct-99	119.48	987.75	PS
K1-02B	12-Oct-99	119.37	987.86	
K1-02B	3-Dec-99	119.93	987.30	
K1-02B	10-Jan-00	120.18	987.05	
K1-02B	7-Feb-00	120.91	986.32	PS
K1-02B	16-Feb-00	120.70	986.53	
K1-02B	16-Mar-00	120.93	986.30	
K1-02B	3-Apr-00	120.86	986.37	
K1-02B	18-Apr-00	120.99	986.24	PS
K1-02B	2-May-00	120.92	986.31	
K1-02B	5-Jun-00	121.26	985.97	
K1-02B	7-Jul-00	121.26	985.97	
K1-02B	19-Jul-00	121.25	985.98	PS
K1-02B	2-Aug-00	121.42	985.81	
K1-02B	6-Sep-00	121.46	985.77	
K1-02B	2-Oct-00	121.96	985.27	
K1-02B	19-Oct-00	122.68	984.55	PS
K1-02B	1-Nov-00	122.43	984.80	
K1-02B	4-Dec-00	122.94	984.29	
K1-02B	14-Dec-00	122.80	984.43	PS
K1-02B	21-Dec-00	122.80	984.43	PS
K1-02B	4-Jan-01	123.24	983.99	
K1-02B	18-Jan-01	123.25	983.98	PS
K1-02B	1-Feb-01	123.39	983.84	
K1-02B	8-Mar-01	123.78	983.45	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-02B	10-Apr-01	124.04	983.19	
K1-02B	18-Apr-01	124.10	983.13	PS
K1-02B	3-May-01	124.01	983.22	
K1-02B	1-Jun-01	124.43	982.80	
K1-02B	9-Jul-01	124.50	982.73	PS
K1-02B	9-Jul-01	124.55	982.68	
K1-02B	2-Aug-01	125.21	982.02	
K1-02B	7-Sep-01	125.20	982.03	
K1-02B	4-Oct-01	125.55	981.68	
K1-02B	22-Oct-01	125.70	981.53	PS
K1-02B	7-Nov-01	125.89	981.34	
K1-02B	5-Dec-01	126.10	981.13	
K1-02B	10-Jan-02	126.26	980.97	
K1-02B	16-Jan-02	126.30	980.93	PS
K1-02B	4-Feb-02	126.28	980.95	
K1-02B	6-Mar-02	125.97	981.26	
K1-02B	12-Apr-02	126.28	980.95	
K1-02B	16-Apr-02	126.30	980.93	PS
K1-02B	1-Jun-02	126.29	980.94	
K1-02B	9-Jul-02	126.60	980.63	
K1-02B	29-Jul-02	126.80	980.43	PS
K1-02B	3-Aug-02	126.80	980.43	
K1-02B	7-Sep-02	127.05	980.18	
K1-02B	3-Oct-02	127.20	980.03	
K1-02B	4-Dec-02	127.69	979.54	PS
K1-02B	8-Jan-03	127.64	979.59	
K1-02B	30-Jan-03	128.04	979.19	PS
K1-02B	1-Feb-03	128.04	979.19	
K1-02B	1-Mar-03	128.17	979.06	
K1-02B	5-Apr-03	128.20	979.03	
K1-02B	17-Apr-03	128.17	979.06	PS
K1-02B	11-Jul-03	128.50	978.73	
K1-02B	8-Sep-03	128.88	978.35	PS
K1-02B	4-Oct-03	128.84	978.39	
K1-02B	4-Nov-03	129.09	978.14	PS
K1-02B	5-Jan-04	129.62	977.61	
K1-02B	28-Jan-04	129.86	977.37	PS
K1-02B	14-Apr-04	130.01	977.22	
K1-02B	19-May-04	130.08	977.15	PS
K1-02B	12-Jul-04	130.58	976.65	
K1-02B	20-Jul-04	130.23	977.00	PS
K1-02B	18-Aug-04	130.42	976.81	PS
K1-02B	25-Aug-04	130.50	976.73	PS
K1-02B	7-Oct-04	130.58	976.65	
K1-02B	22-Nov-04	130.72	976.51	PS

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-02B	15-Jan-05	131.20	976.03	
K1-02B	23-Feb-05	131.29	975.94	PS
K1-02B	11-Apr-05	131.08	976.15	
K1-02B	12-Apr-05	131.08	976.15	PS
K1-02B	6-Jul-05	130.65	976.58	PS
K1-02B	6-Jul-05	130.65	976.58	
K1-02B	4-Oct-05	130.88	976.35	PS
K1-02B	3-Jan-06	131.34	975.89	PS
K1-02B	3-Jan-06	131.34	975.89	
K1-03	11-Jan-95	141.50	966.55	
K1-03	18-Jan-95	141.65	966.40	
K1-03	5-Apr-95	141.44	966.61	
K1-03	10-May-95	141.30	966.75	PS
K1-03	14-Jul-95	140.37	967.68	
K1-03	31-Jul-95	140.30	967.75	PS
K1-03	18-Jan-96	139.45	968.60	
K1-03	10-Apr-96	138.66	969.39	PS
K1-03	1-May-96	138.24	969.81	
K1-03	6-Jun-96	137.60	970.45	
K1-03	16-Jul-96	136.94	971.11	
K1-03	30-Jul-96	136.73	971.32	PS
K1-03	8-Aug-96	136.59	971.46	
K1-03	4-Sep-96	136.20	971.85	
K1-03	9-Oct-96	135.77	972.28	
K1-03	10-Oct-96	135.95	972.10	PS
K1-03	6-Nov-96	135.67	972.38	
K1-03	10-Dec-96	135.05	973.00	
K1-03	15-Jan-97	135.08	972.97	
K1-03	5-Feb-97	134.68	973.37	
K1-03	4-Mar-97	134.42	973.63	
K1-03	10-Apr-97	133.70	974.35	
K1-03	10-May-97	133.28	974.77	
K1-03	5-Jun-97	132.71	975.34	
K1-03	2-Jul-97	132.50	975.55	
K1-03	4-Aug-97	131.97	976.08	
K1-03	4-Sep-97	131.67	976.38	
K1-03	7-Oct-97	131.37	976.68	
K1-03	4-Nov-97	131.22	976.83	
K1-03	2-Dec-97	131.14	976.91	
K1-03	8-Jan-98	130.95	977.10	PS
K1-03	8-Jan-98	130.95	977.10	
K1-03	9-Feb-98	131.25	976.80	
K1-03	5-Mar-98	130.37	977.68	
K1-03	6-Apr-98	129.75	978.30	
K1-03	9-Apr-98	129.67	978.38	PS

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-03	6-May-98	128.84	979.21	
K1-03	3-Jun-98	127.67	980.38	
K1-03	15-Jul-98	126.40	981.65	PS
K1-03	1-Sep-98	124.51	983.54	
K1-03	13-Oct-98	123.52	984.53	PS
K1-03	26-Oct-98	122.98	985.07	
K1-03	4-Dec-98	122.97	985.08	PS
K1-03	11-Dec-98	122.00	986.05	PS
K1-03	5-Jan-99	121.98	986.07	
K1-03	12-Jan-99	121.58	986.47	PS
K1-03	5-Feb-99	120.92	987.13	
K1-03	9-Mar-99	121.32	986.73	
K1-03	15-Apr-99	120.83	987.22	PS
K1-03	15-Apr-99	120.90	987.15	
K1-03	4-May-99	120.73	987.32	
K1-03	2-Jun-99	121.02	987.03	
K1-03	9-Jul-99	121.30	986.75	PS
K1-03	22-Jul-99	121.27	986.78	
K1-03	18-Aug-99	120.92	987.13	
K1-03	8-Sep-99	121.49	986.56	
K1-03	6-Oct-99	122.00	986.05	PS
K1-03	12-Oct-99	121.99	986.06	
K1-03	3-Dec-99	122.50	985.55	
K1-03	7-Dec-99	122.63	985.42	PS
K1-03	15-Dec-99	122.69	985.36	PS
K1-03	10-Jan-00	122.84	985.21	
K1-03	7-Feb-00	123.58	984.47	PS
K1-03	16-Feb-00	123.35	984.70	
K1-03	16-Mar-00	123.58	984.47	
K1-03	3-Apr-00	123.58	984.47	
K1-03	18-Apr-00	123.75	984.30	PS
K1-03	2-May-00	123.71	984.34	
K1-03	5-Jun-00	123.95	984.10	
K1-03	7-Jul-00	124.13	983.92	
K1-03	19-Jul-00	124.00	984.05	PS
K1-03	2-Aug-00	124.00	984.05	
K1-03	6-Sep-00	124.13	983.92	
K1-03	11-Sep-00	124.25	983.80	PS
K1-03	18-Sep-00	124.49	983.56	PS
K1-03	3-Oct-00	124.37	983.68	
K1-03	23-Oct-00	125.74	982.31	PS
K1-03	1-Nov-00	125.18	982.87	
K1-03	4-Dec-00	125.38	982.67	
K1-03	4-Jan-01	125.71	982.34	
K1-03	18-Jan-01	125.87	982.18	PS

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-03	1-Feb-01	125.77	982.28	
K1-03	8-Mar-01	126.57	981.48	
K1-03	10-Apr-01	126.23	981.82	
K1-03	18-Apr-01	126.20	981.85	PS
K1-03	3-May-01	126.20	981.85	
K1-03	1-Jun-01	126.66	981.39	
K1-03	9-Jul-01	126.78	981.27	PS
K1-03	9-Jul-01	126.78	981.27	
K1-03	2-Aug-01	127.83	980.22	
K1-03	7-Sep-01	128.04	980.01	
K1-03	4-Oct-01	128.29	979.76	
K1-03	22-Oct-01	128.35	979.70	PS
K1-03	7-Nov-01	128.66	979.39	
K1-03	5-Dec-01	128.81	979.24	
K1-03	10-Jan-02	128.92	979.13	
K1-03	16-Jan-02	128.95	979.10	PS
K1-03	4-Feb-02	128.88	979.17	
K1-03	6-Mar-02	128.66	979.39	
K1-03	12-Apr-02	129.00	979.05	
K1-03	16-Apr-02	129.00	979.05	PS
K1-03	1-Jun-02	128.99	979.06	
K1-03	9-Jul-02	129.30	978.75	
K1-03	29-Jul-02	129.55	978.50	PS
K1-03	3-Aug-02	129.55	978.50	
K1-03	7-Sep-02	129.91	978.14	
K1-03	3-Oct-02	129.90	978.15	
K1-03	4-Dec-02	130.57	977.48	PS
K1-03	8-Jan-03	130.65	977.40	
K1-03	30-Jan-03	130.95	977.10	PS
K1-03	1-Feb-03	130.95	977.10	
K1-03	1-Mar-03	130.95	977.10	
K1-03	5-Apr-03	131.15	976.90	
K1-03	17-Apr-03	130.94	977.11	PS
K1-03	11-Jul-03	131.35	976.70	
K1-03	24-Jul-03	131.36	976.69	PS
K1-03	4-Oct-03	131.27	976.78	
K1-03	4-Nov-03	131.92	976.13	PS
K1-03	5-Jan-04	132.44	975.61	
K1-03	28-Jan-04	132.70	975.35	PS
K1-03	14-Apr-04	132.85	975.20	
K1-03	20-May-04	132.97	975.08	PS
K1-03	12-Jul-04	133.10	974.95	
K1-03	19-Jul-04	133.14	974.91	PS
K1-03	7-Oct-04	133.52	974.53	
K1-03	30-Nov-04	133.69	974.36	PS

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-03	15-Jan-05	134.00	974.05	
K1-03	22-Feb-05	134.09	973.96	PS
K1-03	13-Apr-05	134.06	973.99	PS
K1-03	13-Apr-05	134.06	973.99	
K1-03	7-Jun-05	134.69	973.36	PS
K1-03	14-Jun-05	133.54	974.51	PS
K1-03	7-Jul-05	133.43	974.62	
K1-03	28-Jul-05	133.31	974.74	PS
K1-03	4-Oct-05	133.62	974.43	PS
K1-03	3-Jan-06	134.19	973.86	PS
K1-03	3-Jan-06	134.19	973.86	
K1-04	11-Jan-95	159.70	962.97	
K1-04	18-Jan-95	159.85	962.82	
K1-04	5-Apr-95	159.61	963.06	
K1-04	10-May-95	159.43	963.24	PS
K1-04	14-Jul-95	158.57	964.10	
K1-04	31-Jul-95	158.45	964.22	PS
K1-04	18-Jan-96	157.80	964.87	
K1-04	11-Apr-96	157.23	965.44	PS
K1-04	1-May-96	156.66	966.01	
K1-04	17-May-96	156.57	966.10	PS
K1-04	6-Jun-96	156.10	966.57	
K1-04	16-Jul-96	155.63	967.04	
K1-04	31-Jul-96	155.43	967.24	PS
K1-04	8-Aug-96	155.38	967.29	
K1-04	4-Sep-96	155.05	967.62	
K1-04	9-Oct-96	154.78	967.89	
K1-04	10-Oct-96	155.00	967.67	PS
K1-04	6-Nov-96	154.71	967.96	
K1-04	10-Dec-96	154.11	968.56	
K1-04	13-Jan-97	153.99	968.68	
K1-04	5-Feb-97	154.00	968.67	
K1-04	4-Mar-97	153.66	969.01	
K1-04	3-Apr-97	153.00	969.67	
K1-04	10-May-97	152.57	970.10	
K1-04	5-Jun-97	152.18	970.49	
K1-04	10-Jul-97	151.77	970.90	
K1-04	4-Aug-97	151.60	971.07	
K1-04	4-Sep-97	151.33	971.34	
K1-04	7-Oct-97	151.10	971.57	
K1-04	4-Nov-97	150.95	971.72	
K1-04	2-Dec-97	150.89	971.78	
K1-04	8-Jan-98	150.67	972.00	PS
K1-04	8-Jan-98	150.67	972.00	
K1-04	9-Feb-98	151.04	971.63	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-04	5-Mar-98	150.23	972.44	
K1-04	6-Apr-98	149.75	972.92	
K1-04	9-Apr-98	149.57	973.10	PS
K1-04	6-May-98	148.72	973.95	
K1-04	3-Jun-98	147.78	974.89	
K1-04	13-Jul-98	146.70	975.97	
K1-04	15-Jul-98	146.73	975.94	PS
K1-04	11-Aug-98	146.18	976.49	
K1-04	1-Sep-98	145.31	977.36	
K1-04	15-Sep-98	144.90	977.77	PS
K1-04	14-Oct-98	144.25	978.42	PS
K1-04	26-Oct-98	144.00	978.67	
K1-04	17-Nov-98	143.24	979.43	
K1-04	1-Dec-98	143.14	979.53	
K1-04	4-Dec-98	143.35	979.32	PS
K1-04	11-Dec-98	143.25	979.42	PS
K1-04	5-Jan-99	142.86	979.81	
K1-04	13-Jan-99	142.75	979.92	PS
K1-04	5-Feb-99	142.43	980.24	
K1-04	3-Mar-99	142.25	980.42	PS
K1-04	9-Mar-99	142.03	980.64	
K1-04	10-Mar-99	142.30	980.37	PS
K1-04	14-Apr-99	142.22	980.45	PS
K1-04	15-Apr-99	141.70	980.97	
K1-04	4-May-99	141.21	981.46	
K1-04	2-Jun-99	141.61	981.06	
K1-04	9-Jul-99	142.25	980.42	PS
K1-04	22-Jul-99	142.15	980.52	
K1-04	18-Aug-99	141.82	980.85	
K1-04	8-Sep-99	142.14	980.53	
K1-04	6-Oct-99	142.57	980.10	PS
K1-04	12-Oct-99	142.47	980.20	
K1-04	3-Dec-99	143.12	979.55	
K1-04	10-Jan-00	143.19	979.48	
K1-04	7-Feb-00	143.85	978.82	PS
K1-04	16-Feb-00	143.81	978.86	
K1-04	16-Mar-00	144.00	978.67	
K1-04	3-Apr-00	143.69	978.98	
K1-04	18-Apr-00	143.99	978.68	PS
K1-04	2-May-00	143.76	978.91	
K1-04	5-Jun-00	144.41	978.26	
K1-04	7-Jul-00	144.28	978.39	
K1-04	19-Jul-00	144.19	978.48	PS
K1-04	2-Aug-00	144.11	978.56	
K1-04	6-Sep-00	144.18	978.49	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-04	3-Oct-00	144.47	978.20	
K1-04	23-Oct-00	144.92	977.75	PS
K1-04	1-Nov-00	145.01	977.66	
K1-04	4-Dec-00	145.59	977.08	
K1-04	4-Jan-01	145.74	976.93	
K1-04	18-Jan-01	145.75	976.92	PS
K1-04	1-Feb-01	145.85	976.82	
K1-04	8-Mar-01	146.34	976.33	
K1-04	10-Apr-01	146.41	976.26	
K1-04	23-Apr-01	146.50	976.17	PS
K1-04	3-May-01	146.50	976.17	
K1-04	1-Jun-01	146.60	976.07	
K1-04	10-Jul-01	146.95	975.72	PS
K1-04	10-Jul-01	146.95	975.72	
K1-04	2-Aug-01	146.97	975.70	
K1-04	7-Sep-01	147.43	975.24	
K1-04	4-Oct-01	147.66	975.01	
K1-04	22-Oct-01	147.80	974.87	PS
K1-04	7-Nov-01	148.03	974.64	
K1-04	5-Dec-01	148.26	974.41	
K1-04	10-Jan-02	148.44	974.23	
K1-04	16-Jan-02	148.45	974.22	PS
K1-04	4-Feb-02	148.51	974.16	
K1-04	6-Mar-02	148.02	974.65	
K1-04	12-Apr-02	148.40	974.27	
K1-04	16-Apr-02	148.40	974.27	PS
K1-04	1-Jun-02	148.53	974.14	
K1-04	9-Jul-02	148.97	973.70	
K1-04	29-Jul-02	148.90	973.77	PS
K1-04	3-Aug-02	148.90	973.77	
K1-04	7-Sep-02	149.23	973.44	
K1-04	3-Oct-02	149.26	973.41	
K1-04	5-Dec-02	149.60	973.07	PS
K1-04	8-Jan-03	149.71	972.96	
K1-04	29-Jan-03	150.37	972.30	PS
K1-04	1-Feb-03	150.37	972.30	
K1-04	1-Mar-03	150.17	972.50	
K1-04	5-Apr-03	150.20	972.47	
K1-04	18-Apr-03	150.34	972.33	PS
K1-04	24-Jun-03	150.53	972.14	PS
K1-04	11-Jul-03	150.49	972.18	
K1-04	24-Jul-03	150.49	972.18	PS
K1-04	4-Oct-03	150.82	971.85	
K1-04	18-Nov-03	151.11	971.56	PS
K1-04	5-Jan-04	151.49	971.18	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-04	29-Jan-04	151.54	971.13	PS
K1-04	14-Apr-04	151.91	970.76	
K1-04	11-May-04	151.81	970.86	PS
K1-04	12-Jul-04	152.05	970.62	
K1-04	19-Jul-04	152.02	970.65	PS
K1-04	7-Oct-04	152.55	970.12	
K1-04	30-Nov-04	152.61	970.06	PS
K1-04	15-Jan-05	153.00	969.67	
K1-04	24-Feb-05	153.04	969.63	PS
K1-04	12-Apr-05	152.82	969.85	PS
K1-04	12-Apr-05	152.82	969.85	
K1-04	7-Jul-05	152.54	970.13	
K1-04	1-Aug-05	152.34	970.33	PS
K1-04	4-Oct-05	152.00	970.67	PS
K1-04	5-Oct-05	152.44	970.23	PS
K1-04	10-Jan-06	152.94	969.73	PS
K1-04	10-Jan-06	152.94	969.73	
K1-05	9-Jan-95	173.70	957.16	
K1-05	18-Jan-95	174.12	956.74	
K1-05	5-Apr-95	173.88	956.98	
K1-05	10-May-95	173.75	957.11	PS
K1-05	14-Jul-95	172.89	957.97	
K1-05	31-Jul-95	172.90	957.96	PS
K1-05	18-Jan-96	172.50	958.36	
K1-05	11-Apr-96	171.90	958.96	PS
K1-05	1-May-96	171.51	959.35	
K1-05	6-Jun-96	170.98	959.88	
K1-05	16-Jul-96	170.67	960.19	
K1-05	31-Jul-96	170.50	960.36	PS
K1-05	8-Aug-96	170.53	960.33	
K1-05	4-Sep-96	170.33	960.53	
K1-05	9-Oct-96	170.10	960.76	
K1-05	11-Oct-96	170.30	960.56	PS
K1-05	6-Nov-96	170.15	960.71	
K1-05	10-Dec-96	170.00	960.86	
K1-05	13-Jan-97	169.62	961.24	
K1-05	5-Feb-97	169.80	961.06	
K1-05	4-Mar-97	169.37	961.49	
K1-05	10-Apr-97	168.69	962.17	
K1-05	10-May-97	168.49	962.37	
K1-05	5-Jun-97	168.14	962.72	
K1-05	10-Jul-97	167.88	962.98	
K1-05	4-Aug-97	167.79	963.07	
K1-05	4-Sep-97	167.59	963.27	
K1-05	7-Oct-97	167.40	963.46	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-05	4-Nov-97	167.36	963.50	
K1-05	2-Dec-97	167.23	963.63	
K1-05	12-Jan-98	167.10	963.76	PS
K1-05	12-Jan-98	167.10	963.76	
K1-05	9-Feb-98	167.45	963.41	
K1-05	5-Mar-98	166.69	964.17	
K1-05	6-Apr-98	166.13	964.73	
K1-05	15-Apr-98	166.00	964.86	PS
K1-05	6-May-98	165.60	965.26	
K1-05	3-Jun-98	164.88	965.98	
K1-05	13-Jul-98	164.23	966.63	
K1-05	16-Jul-98	164.00	966.86	PS
K1-05	11-Aug-98	163.71	967.15	
K1-05	1-Sep-98	163.09	967.77	
K1-05	14-Oct-98	162.30	968.56	PS
K1-05	26-Oct-98	162.03	968.83	
K1-05	17-Nov-98	161.94	968.92	
K1-05	1-Dec-98	162.04	968.82	
K1-05	4-Dec-98	161.73	969.13	PS
K1-05	11-Dec-98	161.80	969.06	PS
K1-05	5-Jan-99	161.91	968.95	
K1-05	13-Jan-99	161.25	969.61	PS
K1-05	5-Feb-99	160.87	969.99	
K1-05	9-Mar-99	160.79	970.07	
K1-05	14-Apr-99	160.60	970.26	PS
K1-05	15-Apr-99	160.52	970.34	
K1-05	4-May-99	160.68	970.18	
K1-05	2-Jun-99	160.21	970.65	
K1-05	8-Jul-99	160.45	970.41	PS
K1-05	22-Jul-99	160.45	970.41	
K1-05	18-Aug-99	160.30	970.56	
K1-05	8-Sep-99	160.22	970.64	
K1-05	6-Oct-99	160.58	970.28	PS
K1-05	12-Oct-99	160.52	970.34	
K1-05	3-Dec-99	160.70	970.16	
K1-05	10-Jan-00	160.52	970.34	
K1-05	8-Feb-00	161.22	969.64	PS
K1-05	16-Feb-00	161.14	969.72	
K1-05	16-Mar-00	161.47	969.39	
K1-05	3-Apr-00	161.21	969.65	
K1-05	19-Apr-00	161.50	969.36	PS
K1-05	2-May-00	161.29	969.57	
K1-05	5-Jun-00	161.52	969.34	
K1-05	7-Jul-00	161.53	969.33	
K1-05	19-Jul-00	161.35	969.51	PS

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-05	2-Aug-00	161.58	969.28	
K1-05	6-Sep-00	161.69	969.17	
K1-05	3-Oct-00	161.67	969.19	
K1-05	24-Oct-00	161.89	968.97	PS
K1-05	1-Nov-00	162.04	968.82	
K1-05	4-Dec-00	161.99	968.87	
K1-05	19-Dec-00	162.00	968.86	PS
K1-05	27-Dec-00	162.00	968.86	PS
K1-05	4-Jan-01	162.21	968.65	
K1-05	18-Jan-01	162.25	968.61	PS
K1-05	1-Feb-01	162.60	968.26	
K1-05	8-Mar-01	162.83	968.03	
K1-05	10-Apr-01	162.70	968.16	
K1-05	20-Apr-01	162.75	968.11	PS
K1-05	3-May-01	162.75	968.11	
K1-05	1-Jun-01	163.03	967.83	
K1-05	10-Jul-01	163.00	967.86	PS
K1-05	10-Jul-01	163.00	967.86	
K1-05	2-Aug-01	163.67	967.19	
K1-05	7-Sep-01	163.63	967.23	
K1-05	4-Oct-01	163.74	967.12	
K1-05	23-Oct-01	163.65	967.21	PS
K1-05	7-Nov-01	164.02	966.84	
K1-05	5-Dec-01	164.16	966.70	
K1-05	10-Jan-02	164.25	966.61	
K1-05	22-Jan-02	164.20	966.66	PS
K1-05	4-Feb-02	164.21	966.65	
K1-05	6-Mar-02	164.01	966.85	
K1-05	12-Apr-02	164.40	966.46	
K1-05	18-Apr-02	164.45	966.41	PS
K1-05	1-Jun-02	164.37	966.49	
K1-05	9-Jul-02	164.73	966.13	
K1-05	30-Jul-02	164.75	966.11	PS
K1-05	1-Aug-02	164.73	966.13	
K1-05	7-Sep-02	164.91	965.95	
K1-05	3-Oct-02	165.15	965.71	
K1-05	6-Dec-02	115.39	1015.47	PS
K1-05	8-Jan-03	165.58	965.28	
K1-05	29-Jan-03	165.81	965.05	PS
K1-05	1-Feb-03	165.81	965.05	
K1-05	1-Mar-03	165.74	965.12	
K1-05	5-Apr-03	165.90	964.96	
K1-05	18-Apr-03	165.98	964.88	PS
K1-05	24-Jun-03	166.04	964.82	PS
K1-05	11-Jul-03	166.20	964.66	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-05	24-Jul-03	166.22	964.64	PS
K1-05	4-Oct-03	166.38	964.48	
K1-05	19-Nov-03	166.65	964.21	PS
K1-05	5-Jan-04	166.91	963.95	
K1-05	29-Jan-04	166.93	963.93	PS
K1-05	14-Apr-04	167.30	963.56	
K1-05	10-May-04	167.25	963.61	PS
K1-05	12-Jul-04	167.45	963.41	
K1-05	13-Jul-04	167.40	963.46	PS
K1-05	7-Oct-04	167.75	963.11	
K1-05	1-Dec-04	167.91	962.95	PS
K1-05	15-Jan-05	168.35	962.51	
K1-05	1-Mar-05	168.21	962.65	PS
K1-05	13-Apr-05	168.48	962.38	PS
K1-05	13-Apr-05	168.48	962.38	
K1-05	7-Jul-05	167.76	963.10	
K1-05	7-Jul-05	167.86	963.00	PS
K1-05	5-Oct-05	167.90	962.96	PS
K1-05	5-Jan-06	168.26	962.60	PS
K1-05	5-Jan-06	168.26	962.60	
K1-07	9-Jan-95	143.90	965.73	
K1-07	18-Jan-95	144.31	965.32	
K1-07	5-Apr-95	143.99	965.64	
K1-07	11-May-95	143.55	966.08	PS
K1-07	14-Jul-95	142.70	966.93	
K1-07	31-Jul-95	142.60	967.03	PS
K1-07	18-Jan-96	141.80	967.83	
K1-07	12-Apr-96	141.00	968.63	PS
K1-07	1-May-96	140.61	969.02	
K1-07	6-Jun-96	139.93	969.70	
K1-07	16-Jul-96	139.48	970.15	
K1-07	31-Jul-96	139.30	970.33	PS
K1-07	8-Aug-96	139.22	970.41	
K1-07	4-Sep-96	139.00	970.63	
K1-07	9-Oct-96	138.73	970.90	
K1-07	11-Oct-96	138.80	970.83	PS
K1-07	6-Nov-96	138.71	970.92	
K1-07	10-Dec-96	138.32	971.31	
K1-07	13-Jan-97	138.07	971.56	
K1-07	5-Feb-97	137.98	971.65	
K1-07	4-Mar-97	137.56	972.07	
K1-07	4-Apr-97	136.90	972.73	
K1-07	10-May-97	136.59	973.04	
K1-07	5-Jun-97	136.05	973.58	
K1-07	10-Jul-97	135.73	973.90	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-07	4-Aug-97	135.60	974.03	
K1-07	4-Sep-97	135.32	974.31	
K1-07	7-Oct-97	135.18	974.45	
K1-07	4-Nov-97	135.06	974.57	
K1-07	2-Dec-97	135.09	974.54	
K1-07	12-Jan-98	134.80	974.83	PS
K1-07	12-Jan-98	134.80	974.83	
K1-07	9-Feb-98	135.12	974.51	
K1-07	5-Mar-98	134.31	975.32	
K1-07	6-Apr-98	133.52	976.11	
K1-07	15-Apr-98	133.30	976.33	PS
K1-07	6-May-98	132.73	976.90	
K1-07	3-Jun-98	131.87	977.76	
K1-07	13-Jul-98	130.82	978.81	
K1-07	16-Jul-98	130.68	978.95	PS
K1-07	11-Aug-98	130.17	979.46	
K1-07	1-Sep-98	129.52	980.11	
K1-07	15-Oct-98	128.30	981.33	PS
K1-07	26-Oct-98	128.01	981.62	
K1-07	17-Nov-98	127.86	981.77	
K1-07	1-Dec-98	127.76	981.87	
K1-07	5-Jan-99	127.18	982.45	
K1-07	14-Jan-99	127.00	982.63	PS
K1-07	5-Feb-99	126.51	983.12	
K1-07	3-Mar-99	126.39	983.24	PS
K1-07	9-Mar-99	126.43	983.20	
K1-07	10-Mar-99	125.50	984.13	PS
K1-07	12-Apr-99	126.46	983.17	PS
K1-07	15-Apr-99	125.92	983.71	
K1-07	4-May-99	126.20	983.43	
K1-07	2-Jun-99	125.91	983.72	
K1-07	6-Jul-99	126.30	983.33	PS
K1-07	22-Jul-99	126.18	983.45	
K1-07	18-Aug-99	126.41	983.22	
K1-07	13-Sep-99	126.64	982.99	
K1-07	4-Oct-99	127.17	982.46	PS
K1-07	12-Oct-99	126.98	982.65	
K1-07	3-Dec-99	127.47	982.16	
K1-07	12-Jan-00	127.53	982.10	
K1-07	8-Feb-00	128.45	981.18	PS
K1-07	16-Feb-00	128.22	981.41	
K1-07	16-Mar-00	128.58	981.05	
K1-07	3-Apr-00	128.47	981.16	
K1-07	19-Apr-00	131.72	977.91	PS
K1-07	2-May-00	128.62	981.01	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-07	5-Jun-00	128.72	980.91	
K1-07	7-Jul-00	128.74	980.89	
K1-07	20-Jul-00	128.68	980.95	PS
K1-07	7-Aug-00	129.04	980.59	
K1-07	6-Sep-00	129.31	980.32	
K1-07	3-Oct-00	129.34	980.29	
K1-07	25-Oct-00	129.57	980.06	PS
K1-07	1-Nov-00	129.73	979.90	
K1-07	4-Dec-00	130.19	979.44	
K1-07	4-Jan-01	130.38	979.25	
K1-07	22-Jan-01	131.75	977.88	PS
K1-07	1-Feb-01	130.64	978.99	
K1-07	8-Mar-01	130.88	978.75	
K1-07	10-Apr-01	130.95	978.68	
K1-07	23-Apr-01	133.15	976.48	PS
K1-07	3-May-01	133.15	976.48	
K1-07	1-Jun-01	131.33	978.30	
K1-07	10-Jul-01	131.70	977.93	PS
K1-07	10-Jul-01	131.70	977.93	
K1-07	2-Aug-01	131.94	977.69	
K1-07	7-Sep-01	132.19	977.44	
K1-07	4-Oct-01	132.34	977.29	
K1-07	23-Oct-01	132.50	977.13	PS
K1-07	7-Nov-01	132.75	976.88	
K1-07	5-Dec-01	132.93	976.70	
K1-07	10-Jan-02	133.11	976.52	
K1-07	22-Jan-02	133.00	976.63	PS
K1-07	4-Feb-02	132.96	976.67	
K1-07	6-Mar-02	132.75	976.88	
K1-07	12-Apr-02	133.10	976.53	
K1-07	18-Apr-02	133.15	976.48	PS
K1-07	1-Jun-02	133.15	976.48	
K1-07	9-Jul-02	133.27	976.36	
K1-07	30-Jul-02	133.60	976.03	PS
K1-07	3-Aug-02	133.62	976.01	
K1-07	7-Sep-02	133.88	975.75	
K1-07	3-Oct-02	133.90	975.73	
K1-07	6-Dec-02	134.32	975.31	PS
K1-07	8-Jan-03	134.55	975.08	
K1-07	30-Jan-03	134.85	974.78	PS
K1-07	1-Feb-03	134.83	974.80	
K1-07	1-Mar-03	134.87	974.76	
K1-07	5-Apr-03	135.00	974.63	
K1-07	1-May-03	134.95	974.68	PS
K1-07	6-Jun-03	135.15	974.48	PS

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-07	11-Jul-03	135.20	974.43	
K1-07	28-Aug-03	135.47	974.16	PS
K1-07	4-Oct-03	135.68	973.95	
K1-07	24-Nov-03	136.82	972.81	PS
K1-07	5-Jan-04	136.26	973.37	
K1-07	4-Feb-04	136.56	973.07	PS
K1-07	14-Apr-04	136.60	973.03	
K1-07	10-May-04	136.58	973.05	PS
K1-07	12-Jul-04	136.85	972.78	
K1-07	21-Jul-04	136.81	972.82	PS
K1-07	7-Oct-04	137.14	972.49	
K1-07	2-Dec-04	137.35	972.28	PS
K1-07	15-Jan-05	137.30	972.33	
K1-07	28-Feb-05	137.86	971.77	PS
K1-07	6-Apr-05	137.56	972.07	PS
K1-07	6-Apr-05	137.56	972.07	
K1-07	6-Jul-05	137.05	972.58	
K1-07	6-Jul-05	137.50	972.13	PS
K1-07	13-Oct-05	137.08	972.55	PS
K1-07	17-Oct-05	137.08	972.55	PS
K1-07	17-Jan-06	137.62	972.01	PS
K1-07	17-Jan-06	137.62	972.01	
K1-08	9-Jan-95	157.60	965.14	
K1-08	18-Jan-95	157.92	964.82	
K1-08	5-Apr-95	157.35	965.39	
K1-08	11-May-95	156.40	966.34	PS
K1-08	14-Jul-95	155.04	967.70	
K1-08	31-Jul-95	155.00	967.74	PS
K1-08	18-Jan-96	154.80	967.94	
K1-08	12-Apr-96	152.80	969.94	PS
K1-08	1-May-96	152.15	970.59	
K1-08	6-Jun-96	151.78	970.96	
K1-08	16-Jul-96	151.72	971.02	
K1-08	31-Jul-96	151.65	971.09	PS
K1-08	8-Aug-96	151.64	971.10	
K1-08	4-Sep-96	151.61	971.13	
K1-08	9-Oct-96	151.56	971.18	
K1-08	11-Oct-96	151.90	970.84	PS
K1-08	6-Nov-96	151.71	971.03	
K1-08	10-Dec-96	151.31	971.43	
K1-08	13-Jan-97	151.30	971.44	
K1-08	5-Feb-97	151.07	971.67	
K1-08	4-Mar-97	150.13	972.61	
K1-08	10-Apr-97	149.40	973.34	
K1-08	10-May-97	149.10	973.64	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-08	5-Jun-97	148.84	973.90	
K1-08	10-Jul-97	148.72	974.02	
K1-08	4-Aug-97	148.79	973.95	
K1-08	4-Sep-97	148.67	974.07	
K1-08	7-Oct-97	148.67	974.07	
K1-08	4-Nov-97	148.68	974.06	
K1-08	2-Dec-97	148.68	974.06	
K1-08	12-Jan-98	148.60	974.14	PS
K1-08	12-Jan-98	148.60	974.14	
K1-08	9-Feb-98	148.84	973.90	
K1-08	5-Mar-98	147.30	975.44	
K1-08	6-Apr-98	145.83	976.91	
K1-08	15-Apr-98	145.80	976.94	PS
K1-08	6-May-98	145.30	977.44	
K1-08	3-Jun-98	144.78	977.96	
K1-08	13-Jul-98	144.16	978.58	
K1-08	16-Jul-98	144.20	978.54	PS
K1-08	11-Aug-98	143.79	978.95	
K1-08	1-Sep-98	143.31	979.43	
K1-08	15-Oct-98	142.54	980.20	PS
K1-08	26-Oct-98	142.35	980.39	
K1-08	17-Nov-98	142.47	980.27	
K1-08	1-Dec-98	142.16	980.58	
K1-08	4-Dec-98	142.10	980.64	PS
K1-08	11-Dec-98	142.13	980.61	PS
K1-08	5-Jan-99	141.97	980.77	
K1-08	14-Jan-99	141.98	980.76	PS
K1-08	5-Feb-99	141.50	981.24	
K1-08	3-Mar-99	141.60	981.14	PS
K1-08	9-Mar-99	141.54	981.20	
K1-08	10-Mar-99	141.72	981.02	PS
K1-08	12-Apr-99	141.54	981.20	PS
K1-08	15-Apr-99	141.25	981.49	
K1-08	4-May-99	141.55	981.19	
K1-08	2-Jun-99	141.36	981.38	
K1-08	7-Jul-99	141.65	981.09	PS
K1-08	22-Jul-99	141.51	981.23	
K1-08	18-Aug-99	141.43	981.31	
K1-08	13-Sep-99	141.90	980.84	
K1-08	4-Oct-99	142.28	980.46	PS
K1-08	12-Oct-99	142.18	980.56	
K1-08	3-Dec-99	142.60	980.14	
K1-08	10-Jan-00	142.93	979.81	
K1-08	9-Feb-00	143.33	979.41	PS
K1-08	16-Feb-00	143.37	979.37	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-08	16-Mar-00	143.60	979.14	
K1-08	3-Apr-00	143.36	979.38	
K1-08	19-Apr-00	143.65	979.09	PS
K1-08	2-May-00	143.50	979.24	
K1-08	5-Jun-00	143.82	978.92	
K1-08	7-Jul-00	143.71	979.03	
K1-08	20-Jul-00	143.75	978.99	PS
K1-08	7-Aug-00	144.01	978.73	
K1-08	6-Sep-00	144.30	978.44	
K1-08	3-Oct-00	144.24	978.50	
K1-08	24-Oct-00	144.62	978.12	PS
K1-08	1-Nov-00	144.88	977.86	
K1-08	4-Dec-00	145.03	977.71	
K1-08	4-Jan-01	145.03	977.71	
K1-08	22-Jan-01	145.15	977.59	PS
K1-08	1-Feb-01	145.65	977.09	
K1-08	8-Mar-01	145.62	977.12	
K1-08	10-Apr-01	145.87	976.87	
K1-08	23-Apr-01	146.05	976.69	PS
K1-08	3-May-01	146.05	976.69	
K1-08	1-Jun-01	146.12	976.62	
K1-08	11-Jul-01	146.40	976.34	PS
K1-08	11-Jul-01	146.40	976.34	
K1-08	2-Aug-01	146.69	976.05	
K1-08	7-Sep-01	146.83	975.91	
K1-08	4-Oct-01	146.94	975.80	
K1-08	23-Oct-01	147.00	975.74	PS
K1-08	7-Nov-01	147.23	975.51	
K1-08	5-Dec-01	147.36	975.38	
K1-08	10-Jan-02	147.40	975.34	
K1-08	22-Jan-02	147.40	975.34	PS
K1-08	4-Feb-02	147.25	975.49	
K1-08	6-Mar-02	147.01	975.73	
K1-08	12-Apr-02	147.46	975.28	
K1-08	18-Apr-02	147.50	975.24	PS
K1-08	1-Jun-02	147.63	975.11	
K1-08	9-Jul-02	146.90	975.84	
K1-08	30-Jul-02	148.15	974.59	PS
K1-08	3-Aug-02	148.15	974.59	
K1-08	7-Sep-02	148.29	974.45	
K1-08	3-Oct-02	148.52	974.22	
K1-08	13-Dec-02	148.92	973.82	PS
K1-08	8-Jan-03	149.14	973.60	
K1-08	31-Jan-03	149.15	973.59	PS
K1-08	1-Feb-03	149.15	973.59	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-08	7-Feb-03	149.05	973.69	PS
K1-08	1-Mar-03	149.15	973.59	
K1-08	5-Apr-03	149.25	973.49	
K1-08	2-May-03	149.22	973.52	PS
K1-08	6-Jun-03	149.53	973.21	PS
K1-08	11-Jul-03	149.58	973.16	
K1-08	4-Sep-03	149.96	972.78	PS
K1-08	4-Oct-03	150.06	972.68	
K1-08	24-Nov-03	150.31	972.43	PS
K1-08	5-Jan-04	150.67	972.07	
K1-08	3-Feb-04	150.69	972.05	PS
K1-08	14-Apr-04	150.88	971.86	
K1-08	11-May-04	158.81	963.93	PS
K1-08	12-Jul-04	151.00	971.74	
K1-08	21-Jul-04	143.32	979.42	PS
K1-08	7-Oct-04	151.40	971.34	
K1-08	2-Dec-04	151.74	971.00	PS
K1-08	15-Jan-05	151.90	970.84	
K1-08	2-Mar-05	152.17	970.57	PS
K1-08	6-Apr-05	151.76	970.98	PS
K1-08	6-Apr-05	151.76	970.98	
K1-08	6-Jul-05	150.92	971.82	PS
K1-08	6-Jul-05	150.92	971.82	
K1-08	13-Oct-05	151.52	971.22	PS
K1-08	18-Jan-06	151.82	970.92	PS
K1-08	18-Jan-06	151.82	970.92	
K1-09	9-Jan-95	164.10	962.58	
K1-09	18-Jan-95	164.47	962.21	
K1-09	5-Apr-95	163.88	962.80	
K1-09	10-May-95	163.01	963.67	PS
K1-09	14-Jul-95	161.43	965.25	
K1-09	31-Jul-95	161.45	965.23	PS
K1-09	18-Jan-96	161.50	965.18	
K1-09	12-Apr-96	159.50	967.18	PS
K1-09	1-May-96	158.97	967.71	
K1-09	6-Jun-96	158.51	968.17	
K1-09	16-Jul-96	158.41	968.27	
K1-09	31-Jul-96	158.38	968.30	PS
K1-09	8-Aug-96	158.40	968.28	
K1-09	4-Sep-96	158.35	968.33	
K1-09	9-Oct-96	158.32	968.36	
K1-09	11-Oct-96	158.50	968.18	PS
K1-09	6-Nov-96	158.52	968.16	
K1-09	10-Dec-96	158.08	968.60	
K1-09	15-Jan-97	158.40	968.28	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-09	5-Feb-97	158.00	968.68	
K1-09	4-Mar-97	157.19	969.49	
K1-09	10-Apr-97	156.35	970.33	
K1-09	10-May-97	156.11	970.57	
K1-09	5-Jun-97	155.88	970.80	
K1-09	10-Jul-97	155.79	970.89	
K1-09	4-Aug-97	155.86	970.82	
K1-09	4-Sep-97	155.81	970.87	
K1-09	7-Oct-97	155.78	970.90	
K1-09	4-Nov-97	155.79	970.89	
K1-09	2-Dec-97	155.80	970.88	
K1-09	20-Jan-98	155.74	970.94	
K1-09	9-Feb-98	156.05	970.63	
K1-09	5-Mar-98	154.45	972.23	
K1-09	17-Mar-98	155.75	970.93	PS
K1-09	6-Apr-98	153.14	973.54	
K1-09	15-Apr-98	153.00	973.68	PS
K1-09	6-May-98	152.70	973.98	
K1-09	3-Jun-98	152.16	974.52	
K1-09	13-Jul-98	151.81	974.87	
K1-09	16-Jul-98	151.45	975.23	PS
K1-09	11-Aug-98	151.36	975.32	
K1-09	1-Sep-98	151.02	975.66	
K1-09	15-Oct-98	150.35	976.33	PS
K1-09	26-Oct-98	150.18	976.50	
K1-09	17-Nov-98	150.18	976.50	
K1-09	1-Dec-98	150.01	976.67	
K1-09	5-Jan-99	149.87	976.81	
K1-09	13-Jan-99	149.65	977.03	PS
K1-09	5-Feb-99	149.48	977.20	
K1-09	9-Mar-99	149.58	977.10	
K1-09	13-Apr-99	149.56	977.12	PS
K1-09	15-Apr-99	149.02	977.66	
K1-09	4-May-99	149.54	977.14	
K1-09	2-Jun-99	148.82	977.86	
K1-09	7-Jul-99	149.41	977.27	PS
K1-09	22-Jul-99	149.07	977.61	
K1-09	18-Aug-99	149.43	977.25	
K1-09	13-Sep-99	149.64	977.04	
K1-09	4-Oct-99	149.87	976.81	PS
K1-09	12-Oct-99	149.87	976.81	
K1-09	3-Dec-99	150.00	976.68	
K1-09	10-Jan-00	150.20	976.48	
K1-09	9-Feb-00	150.59	976.09	PS
K1-09	16-Feb-00	150.76	975.92	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-09	16-Mar-00	150.92	975.76	
K1-09	3-Apr-00	150.94	975.74	
K1-09	19-Apr-00	151.02	975.66	PS
K1-09	2-May-00	150.82	975.86	
K1-09	5-Jun-00	150.99	975.69	
K1-09	7-Jul-00	150.74	975.94	
K1-09	20-Jul-00	151.55	975.13	PS
K1-09	7-Aug-00	151.40	975.28	
K1-09	6-Sep-00	151.55	975.13	
K1-09	3-Oct-00	151.48	975.20	
K1-09	24-Oct-00	151.81	974.87	PS
K1-09	1-Nov-00	152.10	974.58	
K1-09	4-Dec-00	152.18	974.50	
K1-09	4-Jan-01	152.18	974.50	PS
K1-09	22-Jan-01	152.25	974.43	PS
K1-09	1-Feb-01	152.56	974.12	
K1-09	8-Mar-01	152.77	973.91	
K1-09	10-Apr-01	152.84	973.84	
K1-09	20-Apr-01	152.92	973.76	PS
K1-09	3-May-01	152.92	973.76	
K1-09	1-Jun-01	152.87	973.81	
K1-09	11-Jul-01	153.40	973.28	PS
K1-09	11-Jul-01	153.40	973.28	
K1-09	2-Aug-01	153.53	973.15	
K1-09	7-Sep-01	153.62	973.06	
K1-09	4-Oct-01	153.97	972.71	
K1-09	23-Oct-01	154.00	972.68	PS
K1-09	7-Nov-01	154.23	972.45	
K1-09	5-Dec-01	154.37	972.31	
K1-09	10-Jan-02	154.63	972.05	
K1-09	22-Jan-02	154.40	972.28	PS
K1-09	4-Feb-02	154.33	972.35	
K1-09	6-Mar-02	154.07	972.61	
K1-09	12-Apr-02	154.40	972.28	
K1-09	18-Apr-02	154.50	972.18	PS
K1-09	1-Jun-02	154.67	972.01	OILY RESIDUE
K1-09	9-Jul-02	154.87	971.81	
K1-09	30-Jul-02	155.00	971.68	PS
K1-09	3-Aug-02	155.00	971.68	
K1-09	7-Sep-02	155.45	971.23	
K1-09	9-Oct-02	155.43	971.25	
K1-09	6-Dec-02	155.72	970.96	PS
K1-09	8-Jan-03	156.01	970.67	
K1-09	31-Jan-03	155.92	970.76	PS
K1-09	1-Feb-03	155.92	970.76	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
K1-09	1-Mar-03	156.08	970.60	
K1-09	5-Apr-03	156.10	970.58	
K1-09	2-May-03	156.15	970.53	PS
K1-09	6-Jun-03	156.46	970.22	PS
K1-09	11-Jul-03	156.33	970.35	
K1-09	8-Sep-03	156.63	970.05	PS
K1-09	4-Oct-03	156.84	969.84	
K1-09	25-Nov-03	157.08	969.60	PS
K1-09	5-Jan-04	157.50	969.18	
K1-09	3-Feb-04	157.41	969.27	PS
K1-09	14-Apr-04	157.65	969.03	
K1-09	11-May-04	157.64	969.04	PS
K1-09	12-Jul-04	157.74	968.94	
K1-09	20-Jul-04	157.72	968.96	PS
K1-09	7-Oct-04	157.58	969.10	
K1-09	6-Dec-04	157.70	968.98	PS
K1-09	6-Apr-05	157.70	968.98	PS
K1-09	6-Apr-05	157.70	968.98	
K1-09	1-Aug-05	157.42	969.26	PS
K1-09	13-Oct-05	157.91	968.77	PS
K1-09	19-Jan-06	158.53	968.15	PS
K1-09	19-Jan-06	158.53	968.15	
W-865-01	5-Jun-00	33.42	1154.24	
W-865-01	7-Jul-00	33.47	1154.19	
W-865-01	2-Aug-00	33.30	1154.36	
W-865-01	5-Sep-00	33.33	1154.33	
W-865-01	2-Oct-00	33.31	1154.35	
W-865-01	1-Nov-00	33.42	1154.24	
W-865-01	4-Dec-00	33.41	1154.25	
W-865-01	4-Jan-01	33.50	1154.16	
W-865-01	8-Feb-01	33.34	1154.32	
W-865-01	7-Mar-01	33.26	1154.40	
W-865-01	5-Apr-01	33.47	1154.19	
W-865-01	2-May-01	33.47	1154.19	
W-865-01	5-Jun-01	33.53	1154.13	
W-865-01	13-Jul-01	33.46	1154.20	
W-865-01	2-Aug-01	33.52	1154.14	
W-865-01	7-Sep-01	33.50	1154.16	
W-865-01	4-Oct-01	33.52	1154.14	
W-865-01	2-Nov-01	33.61	1154.05	
W-865-01	5-Dec-01	33.65	1154.01	
W-865-01	10-Jan-02	33.50	1154.16	
W-865-01	4-Feb-02	33.60	1154.06	
W-865-01	6-Mar-02	33.60	1154.06	
W-865-01	11-Apr-02	34.11	1153.55	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
W-865-01	2-Jun-02	34.03	1153.63	
W-865-01	22-Jul-02	34.06	1153.60	
W-865-01	3-Aug-02	34.08	1153.58	
W-865-01	7-Sep-02	34.09	1153.57	
W-865-01	4-Oct-02	34.04	1153.62	
W-865-01	8-Jan-03	33.48	1154.18	
W-865-01	1-Feb-03	33.85	1153.81	
W-865-01	1-Mar-03	34.10	1153.56	
W-865-01	12-Apr-03	34.02	1153.64	
W-865-01	24-Jul-03	34.15	1153.51	
W-865-01	4-Oct-03	34.26	1153.40	
W-865-01	6-Jan-04	34.31	1153.35	
W-865-01	14-Apr-04	34.23	1153.43	
W-865-01	13-Jul-04	34.09	1153.57	
W-865-01	7-Oct-04	34.22	1153.44	
W-865-01	5-Jan-05	34.17	1153.49	
W-865-01	6-Apr-05	33.49	1154.17	
W-865-01	1-Jul-05	33.35	1154.31	
W-865-01	4-Oct-05	33.61	1154.05	
W-865-01	16-Jan-06	33.68	1153.98	
W-865-02	2-Jun-00	122.72	989.68	POM2.00
W-865-02	3-Jul-00	122.76	989.64	
W-865-02	2-Aug-00	122.82	989.58	
W-865-02	5-Sep-00	123.02	989.38	
W-865-02	2-Oct-00	123.11	989.29	
W-865-02	1-Nov-00	123.41	988.99	
W-865-02	1-Dec-00	123.38	989.02	
W-865-02	4-Jan-01	123.55	988.85	
W-865-02	1-Feb-01	123.66	988.74	
W-865-02	7-Mar-01	123.76	988.64	
W-865-02	5-Apr-01	123.75	988.65	
W-865-02	2-May-01	123.77	988.63	
W-865-02	1-Jun-01	123.20	989.20	
W-865-02	13-Jul-01	123.52	988.88	
W-865-02	2-Aug-01	123.65	988.75	
W-865-02	5-Sep-01	123.73	988.67	
W-865-02	4-Oct-01	123.97	988.43	
W-865-02	2-Nov-01	124.10	988.30	
W-865-02	4-Dec-01	124.18	988.22	
W-865-02	2-Jan-02	124.04	988.36	
W-865-02	4-Feb-02	123.78	988.62	
W-865-02	6-Mar-02	123.80	988.60	
W-865-02	12-Apr-02	124.00	988.40	
W-865-02	2-Jun-02	124.02	988.38	
W-865-02	19-Jul-02	124.20	988.20	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
W-865-02	3-Aug-02	124.17	988.23	
W-865-02	7-Sep-02	124.22	988.18	
W-865-02	3-Oct-02	124.26	988.14	
W-865-02	8-Jan-03	124.17	988.23	
W-865-02	1-Feb-03	124.10	988.30	
W-865-02	1-Mar-03	124.20	988.20	
W-865-02	12-Apr-03	124.03	988.37	
W-865-02	2-Jul-03	124.21	988.19	
W-865-02	4-Oct-03	124.38	988.02	
W-865-02	13-Jan-04	124.59	987.81	
W-865-02	15-Apr-04	124.35	988.05	
W-865-02	15-Jul-04	124.36	988.04	
W-865-02	7-Oct-04	124.53	987.87	
W-865-02	5-Jan-05	124.34	988.06	
W-865-02	1-Apr-05	123.73	988.67	
W-865-02	5-Jul-05	123.45	988.95	
W-865-02	4-Oct-05	124.08	988.32	
W-865-02	16-Jan-06	124.42	987.98	
W-865-03	5-Jun-00	50.79	1185.19	POM2.00
W-865-03	7-Jul-00	50.98	1185.00	
W-865-03	2-Aug-00	50.67	1185.31	
W-865-03	5-Sep-00	50.83	1185.15	
W-865-03	2-Oct-00	50.85	1185.13	
W-865-03	1-Nov-00	51.14	1184.84	
W-865-03	4-Dec-00	51.29	1184.69	
W-865-03	4-Jan-01	51.20	1184.78	
W-865-03	7-Feb-01	51.30	1184.68	
W-865-03	7-Mar-01	51.47	1184.51	
W-865-03	5-Apr-01	51.42	1184.56	
W-865-03	2-May-01	51.42	1184.56	
W-865-03	1-Jun-01	51.50	1184.48	
W-865-03	13-Jul-01	51.69	1184.29	
W-865-03	2-Aug-01	51.79	1184.19	
W-865-03	7-Sep-01	51.82	1184.16	
W-865-03	4-Oct-01	51.93	1184.05	
W-865-03	2-Nov-01	51.80	1184.18	
W-865-03	5-Dec-01	52.04	1183.94	
W-865-03	10-Jan-02	52.17	1183.81	
W-865-03	4-Feb-02	52.15	1183.83	
W-865-03	6-Mar-02	52.16	1183.82	
W-865-03	11-Apr-02	52.37	1183.61	
W-865-03	2-Jun-02	52.49	1183.49	
W-865-03	19-Jul-02	52.73	1183.25	
W-865-03	3-Aug-02	52.69	1183.29	
W-865-03	7-Sep-02	52.69	1183.29	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
W-865-03	3-Oct-02	52.68	1183.30	
W-865-03	8-Jan-03	52.83	1183.15	
W-865-03	1-Feb-03	52.95	1183.03	
W-865-03	1-Mar-03	53.00	1182.98	
W-865-03	12-Apr-03	53.06	1182.92	
W-865-03	24-Jul-03	53.28	1182.70	
W-865-03	4-Oct-03	53.43	1182.55	
W-865-03	6-Jan-04	53.55	1182.43	
W-865-03	14-Apr-04	53.70	1182.28	
W-865-03	13-Jul-04	53.82	1182.16	
W-865-03	7-Oct-04	53.97	1182.01	
W-865-03	5-Jan-05	53.99	1181.99	
W-865-03	1-Apr-05	53.70	1182.28	
W-865-03	5-Jul-05	53.75	1182.23	
W-865-03	4-Oct-05	53.87	1182.11	
W-865-03	16-Jan-06	54.09	1181.89	
W-865-04	5-Sep-00	16.93	1139.24	
W-865-04	2-Oct-00	17.03	1139.14	
W-865-04	1-Nov-00	17.18	1138.99	
W-865-04	1-Dec-00	17.44	1138.73	
W-865-04	4-Jan-01	17.65	1138.52	
W-865-04	1-Feb-01	17.56	1138.61	
W-865-04	7-Mar-01	17.58	1138.59	
W-865-04	5-Apr-01	17.68	1138.49	
W-865-04	2-May-01	17.71	1138.46	
W-865-04	1-Jun-01	17.76	1138.41	
W-865-04	13-Jul-01	17.82	1138.35	
W-865-04	2-Aug-01	17.91	1138.26	
W-865-04	7-Sep-01	17.92	1138.25	
W-865-04	4-Oct-01	17.98	1138.19	
W-865-04	2-Nov-01	18.03	1138.14	
W-865-04	4-Dec-01	18.15	1138.02	
W-865-04	2-Jan-02	18.01	1138.16	
W-865-04	4-Feb-02	17.66	1138.51	
W-865-04	6-Mar-02	17.90	1138.27	
W-865-04	11-Apr-02	18.24	1137.93	
W-865-04	2-Jun-02	18.49	1137.68	
W-865-04	19-Jul-02	18.85	1137.32	
W-865-04	3-Aug-02	18.89	1137.28	
W-865-04	7-Sep-02	19.00	1137.17	
W-865-04	3-Oct-02	19.12	1137.05	
W-865-04	8-Jan-03	18.75	1137.42	
W-865-04	1-Feb-03	18.76	1137.41	
W-865-04	1-Mar-03	19.00	1137.17	
W-865-04	12-Apr-03	19.31	1136.86	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
W-865-04	2-Jul-03	19.79	1136.38	
W-865-04	4-Oct-03	20.25	1135.92	
W-865-04	8-Jan-04	20.64	1135.53	
W-865-04	15-Apr-04	19.96	1136.21	
W-865-04	15-Jul-04	20.67	1135.50	
W-865-04	7-Oct-04	21.00	1135.17	
W-865-04	5-Jan-05	21.21	1134.96	
W-865-04	5-Apr-05	18.49	1137.68	
W-865-04	5-Jul-05	19.10	1137.07	
W-865-04	4-Oct-05	19.86	1136.31	
W-865-04	16-Jan-06	20.28	1135.89	
W-865-05	7-Jun-00	263.93	967.64	POM2.00
W-865-05	5-Jul-00	264.14	967.43	
W-865-05	2-Aug-00	264.17	967.40	
W-865-05	6-Sep-00	264.23	967.34	
W-865-05	2-Oct-00	264.29	967.28	
W-865-05	1-Nov-00	264.68	966.89	
W-865-05	4-Dec-00	264.81	966.76	
W-865-05	3-Jan-01	264.97	966.60	
W-865-05	1-Feb-01	265.02	966.55	
W-865-05	7-Mar-01	265.22	966.35	
W-865-05	2-Apr-01	265.14	966.43	
W-865-05	2-May-01	265.42	966.15	
W-865-05	1-Jun-01	265.40	966.17	
W-865-05	13-Jul-01	265.66	965.91	
W-865-05	2-Aug-01	265.79	965.78	
W-865-05	7-Sep-01	265.86	965.71	
W-865-05	4-Oct-01	265.97	965.60	
W-865-05	2-Nov-01	266.04	965.53	
W-865-05	4-Dec-01	266.31	965.26	
W-865-05	2-Jan-02	266.28	965.29	
W-865-05	4-Feb-02	266.34	965.23	
W-865-05	6-Mar-02	266.17	965.40	
W-865-05	2-Jun-02	266.61	964.96	
W-865-05	16-Jul-02	266.69	964.88	
W-865-05	3-Aug-02	266.91	964.66	
W-865-05	7-Sep-02	266.85	964.72	
W-865-05	4-Oct-02	266.75	964.82	
W-865-05	10-Jan-03	267.42	964.15	
W-865-05	1-Feb-03	267.30	964.27	
W-865-05	1-Mar-03	267.55	964.02	
W-865-05	5-Apr-03	267.60	963.97	
W-865-05	17-Jul-03	267.81	963.76	
W-865-05	4-Oct-03	267.71	963.86	
W-865-05	5-Jan-04	268.12	963.45	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
W-865-05	15-Apr-04	268.68	962.89	
W-865-05	15-Jul-04	268.68	962.89	
W-865-05	7-Oct-04	268.70	965.39	
W-865-05	5-Jan-05	268.91	965.18	
W-865-05	2-Apr-05	268.72	965.37	
W-865-05	5-Jul-05	267.58	966.51	
W-865-05	4-Oct-05	267.85	966.24	
W-865-05	16-Jan-06	268.53	965.56	
W-865-06	5-Sep-00	90.82	1063.79	
W-865-06	2-Oct-00	90.67	1063.94	
W-865-06	1-Nov-00	90.82	1063.79	
W-865-06	1-Dec-00	90.68	1063.93	
W-865-06	4-Jan-01	90.75	1063.86	
W-865-06	1-Feb-01	90.79	1063.82	
W-865-06	7-Mar-01	90.36	1064.25	
W-865-06	5-Apr-01	90.49	1064.12	
W-865-06	4-May-01	90.41	1064.20	
W-865-06	1-Jun-01	90.26	1064.35	
W-865-06	13-Jul-01	90.57	1064.04	
W-865-06	2-Aug-01	90.56	1064.05	
W-865-06	7-Sep-01	90.52	1064.09	
W-865-06	4-Oct-01	90.60	1064.01	
W-865-06	2-Nov-01	90.76	1063.85	
W-865-06	4-Dec-01	90.75	1063.86	
W-865-06	2-Jan-02	90.76	1063.85	
W-865-06	4-Feb-02	90.92	1063.69	
W-865-06	6-Mar-02	90.95	1063.66	
W-865-06	11-Apr-02	90.97	1063.64	
W-865-06	2-Jun-02	90.82	1063.79	
W-865-06	19-Jul-02	91.20	1063.41	
W-865-06	3-Aug-02	91.09	1063.52	
W-865-06	7-Sep-02	91.17	1063.44	
W-865-06	3-Oct-02	91.20	1063.41	
W-865-06	8-Jan-03	91.32	1063.29	
W-865-06	1-Feb-03	91.47	1063.14	
W-865-06	1-Mar-03	91.37	1063.24	
W-865-06	12-Apr-03	91.52	1063.09	
W-865-06	2-Jul-03	91.65	1062.96	
W-865-06	4-Oct-03	91.82	1062.79	
W-865-06	8-Jan-04	92.35	1062.26	
W-865-06	15-Apr-04	92.25	1062.36	
W-865-06	15-Jul-04	92.37	1062.24	
W-865-06	7-Oct-04	92.61	1062.00	
W-865-06	5-Jan-05	92.76	1061.85	
W-865-06	5-Apr-05	92.78	1061.83	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
W-865-06	5-Jul-05	92.52	1062.09	
W-865-06	4-Oct-05	92.92	1061.69	
W-865-06	18-Jan-06	93.25	1061.36	
W-865-07	5-Sep-00	17.13	1139.78	
W-865-07	2-Oct-00	17.23	1139.68	
W-865-07	1-Nov-00	17.50	1139.41	
W-865-07	1-Dec-00	17.64	1139.27	
W-865-07	4-Jan-01	17.92	1138.99	
W-865-07	1-Feb-01	17.88	1139.03	
W-865-07	7-Mar-01	18.02	1138.89	
W-865-07	5-Apr-01	18.04	1138.87	
W-865-07	2-May-01	18.13	1138.78	
W-865-07	1-Jun-01	18.24	1138.67	
W-865-07	13-Jul-01	18.57	1138.34	
W-865-07	1-Aug-01	18.63	1138.28	
W-865-07	7-Sep-01	18.68	1138.23	
W-865-07	4-Oct-01	18.85	1138.06	
W-865-07	2-Nov-01	18.84	1138.07	
W-865-07	4-Dec-01	19.17	1137.74	
W-865-07	2-Jan-02	18.71	1138.20	
W-865-07	4-Feb-02	18.47	1138.44	
W-865-07	6-Mar-02	18.75	1138.16	
W-865-07	11-Apr-02	19.18	1137.73	
W-865-07	2-Jun-02	19.41	1137.50	
W-865-07	19-Jul-02	19.75	1137.16	
W-865-07	3-Aug-02	19.80	1137.11	
W-865-07	7-Sep-02	19.94	1136.97	
W-865-07	3-Oct-02	20.10	1136.81	
W-865-07	8-Jan-03	19.17	1137.74	
W-865-07	1-Feb-03	19.40	1137.51	
W-865-07	1-Mar-03	19.80	1137.11	
W-865-07	12-Apr-03	20.03	1136.88	
W-865-07	2-Jul-03	20.65	1136.26	
W-865-07	4-Oct-03	21.16	1135.75	
W-865-07	8-Jan-04	21.46	1135.45	
W-865-07	15-Apr-04	20.55	1136.36	
W-865-07	15-Jul-04	20.49	1136.42	
W-865-07	7-Oct-04	21.86	1135.05	
W-865-07	5-Jan-05	21.94	1134.97	
W-865-07	5-Apr-05	18.38	1138.53	
W-865-07	5-Jul-05	19.57	1137.34	
W-865-07	4-Oct-05	20.50	1136.41	
W-865-07	16-Jan-06	20.87	1136.04	
W-865-1802	12-Apr-03	48.04	1019.01	
W-865-1802	24-Jul-03	48.72	1018.33	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
W-865-1802	4-Oct-03	49.07	1017.98	
W-865-1802	8-Jan-04	49.26	1017.79	
W-865-1802	15-Apr-04	48.41	1018.64	
W-865-1802	15-Jul-04	48.68	1018.37	
W-865-1802	7-Oct-04	49.39	1017.66	
W-865-1802	5-Jan-05	49.52	1017.53	
W-865-1802	2-Apr-05	47.90	1019.15	
W-865-1802	1-Jul-05	47.69	1019.36	
W-865-1802	4-Oct-05	48.58	1018.47	
W-865-1802	18-Jan-06	49.00	1018.05	
W-865-1803	4-Oct-03	105.15	1072.84	
W-865-1803	14-Apr-04	104.45	1073.54	
W-865-1803	13-Jul-04	102.44	1075.55	
W-865-1803	7-Oct-04	104.38	1073.61	
W-865-1803	15-Jan-05	104.60	1073.39	
W-865-1803	6-Apr-05	101.71	1076.28	
W-865-1803	1-Jul-05	101.20	1076.79	
W-865-1803	4-Oct-05	103.75	1074.24	
W-865-1803	30-Jan-06	103.70	1074.29	
W-865-1804	4-Oct-03	104.89	1105.22	
W-865-1804	14-Apr-04	102.50	1107.61	
W-865-1804	13-Jul-04	102.69	1107.42	
W-865-1804	7-Oct-04	102.83	1107.28	
W-865-1804	15-Jan-05	102.95	1107.16	
W-865-1804	6-Apr-05	102.85	1107.26	
W-865-1804	1-Jul-05	102.87	1107.24	
W-865-1804	4-Oct-05	103.00	1107.11	
W-865-1804	30-Jan-06	103.00	1107.11	
W-865-2002	15-Apr-04	69.49	1026.29	
W-865-2002	15-Jul-04	69.49	1026.29	
W-865-2002	4-Oct-04	69.88	1025.90	
W-865-2002	5-Jan-05	70.21	1025.57	
W-865-2002	5-Apr-05	68.25	1027.53	
W-865-2002	5-Jul-05	68.32	1027.46	
W-865-2002	4-Oct-05	69.20	1026.58	
W-865-2002	18-Jan-06	69.78	1026.00	
W-865-2003	1-Apr-04	106.42	1005.02	POM 2.00
W-865-2003	15-Jul-04	106.23	1005.21	POM 2.00
W-865-2003	4-Oct-04	106.44	1005.00	POM 2.00
W-865-2003	5-Jan-05	106.71	1004.73	POM 2.00
W-865-2003	5-Apr-05	106.32	1005.12	POM 2.00
W-865-2003	5-Jul-05	104.75	1006.69	
W-865-2003	4-Oct-05	105.25	1006.19	
W-865-2003	18-Jan-06	105.75	1005.69	
W-865-2005	7-Oct-04	323.42	951.45	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
W-865-2005	8-Jan-05	232.28	1042.59	
W-865-2005	1-Apr-05	323.17	951.70	
W-865-2005	5-Jul-05	323.72	951.15	
W-865-2005	17-Jan-06	324.00	950.87	
W-896-1806	1-Apr-04	89.12	1115.25	POM 2.00
W-896-1806	19-Jul-04	89.19	1115.18	POM 2.00
W-896-1806	4-Oct-04	89.22	1115.15	POM 2.00
W-896-1806	21-Jan-05	89.30	1115.07	POM 2.00
W-896-1806	5-Apr-05	89.50	1114.87	POM 2.00
W-896-1806	14-Jul-05	89.10	1115.27	
W-896-1806	4-Oct-05	92.32	1112.05	
W-896-1806	17-Jan-06	89.65	1114.72	
W-PIT1-01	10-Jan-00	143.88	1038.01	
W-PIT1-01	16-Feb-00	144.00	1037.89	
W-PIT1-01	18-Mar-00	144.25	1037.64	
W-PIT1-01	6-Sep-00	144.47	1046.19	
W-PIT1-01	11-Oct-00	144.72	1045.94	
W-PIT1-01	1-Nov-00	144.73	1045.93	
W-PIT1-01	4-Dec-00	144.77	1045.89	
W-PIT1-01	3-Jan-01	144.73	1045.93	
W-PIT1-01	1-Feb-01	144.95	1045.71	
W-PIT1-01	7-Mar-01	145.15	1045.51	
W-PIT1-01	5-Apr-01	145.10	1045.56	
W-PIT1-01	2-May-01	145.23	1045.43	
W-PIT1-01	5-Jun-01	145.31	1045.35	
W-PIT1-01	13-Jul-01	145.53	1045.13	
W-PIT1-01	2-Aug-01	145.68	1044.98	
W-PIT1-01	7-Sep-01	145.72	1044.94	
W-PIT1-01	4-Oct-01	145.90	1044.76	
W-PIT1-01	2-Nov-01	146.05	1044.61	
W-PIT1-01	4-Dec-01	146.31	1044.35	
W-PIT1-01	2-Jan-02	146.19	1044.47	
W-PIT1-01	4-Feb-02	146.37	1044.29	
W-PIT1-01	6-Mar-02	146.32	1044.34	
W-PIT1-01	12-Apr-02	146.64	1044.02	
W-PIT1-01	2-Jun-02	146.80	1035.09	
W-PIT1-01	16-Jul-02	147.02	1034.87	
W-PIT1-01	7-Aug-02	147.11	1034.78	
W-PIT1-01	7-Sep-02	147.20	1034.69	
W-PIT1-01	3-Oct-02	147.30	1034.59	
W-PIT1-01	10-Jan-03	147.70	1034.19	
W-PIT1-01	1-Feb-03	147.70	1034.19	
W-PIT1-01	10-Mar-03	147.91	1033.98	
W-PIT1-01	5-Apr-03	148.10	1033.79	
W-PIT1-01	17-Jul-03	148.32	1033.57	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
W-PIT1-01	4-Oct-03	148.77	1033.12	
W-PIT1-01	6-Jan-04	0.00	0.00	DRY
W-PIT1-01	15-Apr-04	0.00	0.00	DRY
W-PIT1-01	15-Jul-04	0.00	0.00	DRY
W-PIT1-01	13-Oct-04	0.00	0.00	DRY
W-PIT1-01	8-Jan-05	0.00	0.00	DRY
W-PIT1-01	2-Apr-05	0.00		DRY
W-PIT1-01	5-Jul-05	0.00		DRY
W-PIT1-01	4-Oct-05	0.00		DRY
W-PIT1-01	17-Jan-06	0.00		DRY
W-PIT1-02	6-Sep-00	226.31	959.88	
W-PIT1-02	11-Oct-00	226.63	959.56	
W-PIT1-02	1-Nov-00	226.28	959.91	
W-PIT1-02	4-Dec-00	225.42	960.77	
W-PIT1-02	3-Jan-01	226.50	959.69	
W-PIT1-02	1-Feb-01	226.24	959.95	
W-PIT1-02	7-Mar-01	226.39	959.80	
W-PIT1-02	1-Apr-01	226.23	959.96	
W-PIT1-02	1-May-01	226.40	959.79	
W-PIT1-02	5-Jun-01	226.21	959.98	
W-PIT1-02	13-Jul-01	226.52	959.67	
W-PIT1-02	2-Aug-01	226.52	959.67	
W-PIT1-02	7-Sep-01	226.41	959.78	
W-PIT1-02	4-Oct-01	226.60	959.59	
W-PIT1-02	2-Nov-01	226.72	959.47	
W-PIT1-02	4-Dec-01	226.95	959.24	
W-PIT1-02	2-Jan-02	226.63	959.56	
W-PIT1-02	4-Feb-02	226.88	959.31	
W-PIT1-02	6-Mar-02	226.60	959.59	
W-PIT1-02	12-Apr-02	226.98	959.21	
W-PIT1-02	2-Jun-02	226.93	954.37	
W-PIT1-02	16-Jul-02	227.14	954.16	
W-PIT1-02	7-Aug-02	227.21	954.09	
W-PIT1-02	7-Sep-02	227.22	954.08	
W-PIT1-02	3-Oct-02	227.26	954.04	
W-PIT1-02	10-Jan-03	227.38	953.92	
W-PIT1-02	1-Feb-03	227.30	954.00	
W-PIT1-02	10-Mar-03	227.54	953.76	
W-PIT1-02	5-Apr-03	227.63	953.67	
W-PIT1-02	17-Jul-03	227.94	953.36	
W-PIT1-02	4-Oct-03	228.03	953.27	
W-PIT1-02	5-Jan-04	228.46	952.84	
W-PIT1-02	15-Apr-04	228.10	953.20	
W-PIT1-02	15-Jul-04	228.99	952.31	
W-PIT1-02	13-Oct-04	228.90	952.40	

Table A-1. Ground water elevations for monitor wells in the Building 865 study area measured between January 1, 1995 and March 31, 2006.

Location	Sample Date	Depth to Water (ft)	Elevation (ft)	Note
W-PIT1-02	8-Jan-05	228.89	952.41	
W-PIT1-02	2-Apr-05	229.22	952.08	
W-PIT1-02	5-Jul-05	229.30	952.00	
W-PIT1-02	4-Oct-05	229.65	951.65	
W-PIT1-02	17-Jan-06	230.05	951.25	

Notes:

DRY = Well is dry.
ft = Feet.
OILY RESIDUE = Oily residue present.
POM 2.00 = Point of measurement is ground elevation plus 2 feet.
PS = Measurement taken juist before sampling.

Table A-2. Surface soil analyses for volatile organic compounds (mg/kg) in samples collected from the Building 865 study area between January 1, 1988 and March 30, 2006.

Location	Depth (ft)	Sample Date	Carbon tetrachloride (mg/kg)	Chloroform (mg/kg)	1,1-DCA (mg/kg)	1,2-DCA (mg/kg)	1,1-DCE (mg/kg)	cis-1,2-DCE (mg/kg)	trans-1,2-DCE (mg/kg)	Total 1,2-DCE (mg/kg)	Freon 113 (mg/kg)	PCE (mg/kg)	1,1,1-TCA (mg/kg)	TCE (mg/kg)	Freon 11 (mg/kg)	Vinyl Chloride (mg/kg)	Methylene chloride (mg/kg)	1,1,2-TCA (mg/kg)
B-865-2002	0.5	21-Jan-04	<0.00056	<0.00053	<0.00056	<0.0005	<0.0007	<0.0005	<0.0005	<0.00087	<0.002	<0.0005	<0.0005	<0.0005	<0.00058	<0.0007	<0.002	<0.0005
B-865-2002	0.5	21-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005
B-865-2003	0.5	6-Jan-04	<0.0005	<0.0005	<0.00056	<0.00074	<0.0011	<0.00079	<0.00091	<0.0017	<0.002	<0.0006	<0.00066	<0.00068	<0.00091	<0.0016	<0.002	<0.0005
3SS-05-01	0.0	20-Sep-91	<0.005 P	<0.005 P	<0.005 P	<0.005 P	<0.005 P	<0.005 P	<0.005 P	<0.005 P	<0.005 P	<0.005 P	<0.005 P	<0.005 P	<0.005 P	<0.005 P	<0.02 P	<0.005 P
MS-B865-037	0.5	1-Aug-95	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	<0.0005
MS-B865-038	0.5	2-Aug-95	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	<0.0005

Notes:

1,1,1-TCA = 1,1,1-trichloroethane.
1,1,2-TCA = 1,1,2-trichloroethane.
1,1-DCA = 1,1-dichloroethane.
1,1-DCE = 1,1-dichloroethylene.
1,2-DCA = 1,2-dichloroethane.
1,2-DCE = 1,2-dichloroethylene.
ft = Feet.
mg/kg = Milligrams per kilogram.
P = Indicates that the absence of a data qualifier flag does not mean that the data does not need qualification, but that the implementation of electronic data qualifier flags was not yet established.
PCE = Tetrachloroethylene.
TCE = Trichloroethylene.

Table A-3. Surface soil analyses for aromatic hydrocarbon compounds (mg/kg) in samples collected from the Building 865 study area between January 1, 1988 and March 30, 2006.

Location	Depth (ft)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total xylenes (mg/kg)	1,2-Dichloro-benzene (mg/kg)	1,3-Dichloro-benzene (mg/kg)	1,4-Dichloro-benzene (mg/kg)	Chloro-benzene (mg/kg)
B-865-2002	0.5	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0015	<0.0005	<0.0005	<0.0005	<0.0005
B-865-2002	0.5	21-Jan-04	<0.005	<0.005	<0.005	<0.01				<0.005
B-865-2003	0.5	6-Jan-04	<0.00089	<0.00065	<0.00058	<0.0021	<0.0009	<0.0012	<0.00084	<0.00057
3SS-05-01	0.0	20-Sep-91	<0.005 P	<0.005 P	<0.005 P	<0.005 P	<0.005 P	<0.005 P	<0.005 P	<0.005 P
MS-B865-037	0.5	1-Aug-95					<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-037	0.5	1-Aug-95	<0.0005	0.0053	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-038	0.5	2-Aug-95					<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-038	0.5	2-Aug-95	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005

Notes:

ft = Feet

mg/kg = Milligrams per kilogram.

P = Indicates that the absence of a data qualifier flag does not mean that the data does not need qualification, but that the implementation of electronic data qualifier flags was not yet established.

Table A-4. Surface soil analyses for total petroleum hydrocarbons (mg/kg) in samples collected from the Building 865 study area between January 1, 1988 and March 30, 2006.

Location	Depth (ft)	Sample Date	TPH as Diesel (mg/kg)	TPH as Motor Oil (mg/kg)
MS-B865-037	0.5	1-Aug-95	1,300 LOD	<200 D
MS-B865-037	0.5	29-Feb-96	<10 DLO	110 D

Notes:

ft = Feet.
mg/kg = Milligrams per kilogram.
D = Analysis performed at a secondary dilution or concentration.
L = Spike accuracy not within control limits.
O = Duplicate spike or sample precision not within control limits.
TPH = Total petroleum hydrocarbons.

Table A-5. Surface soil analyses for TTLC metals (mg/kg) in samples collected from the Building 865 study area between January 1, 1988 and March 30, 2006.

Location	Depth (ft)	Sample Date	Lead (mg/kg)	Mercury (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Total Chromium (mg/kg)	Copper (mg/kg)
MS-B865-002	0	12-Aug-94	110	0.1	23	<0.5	<2.5	6,200	140	150	<0.5	190	530	490
MS-B865-004	0	12-Aug-94	<10	<0.05	15	<0.5	<2.5	540	4.4	83	<0.5	1.3	40	41
MS-B865-008	0	15-Aug-94	65	<0.05	12	<0.5	<2.5	970	24 D	77	<0.5	17	100	110
MS-B865-010	0	15-Aug-94	16	<0.05	18	<0.5	<2.5	100	4.6	63	<0.5	<0.1	30	30
MS-B865-012	0	15-Aug-94	26	<0.05	14	<0.5	<2.5	49	1.3	78	<0.5	<0.1	24	20
MS-B865-014	0	15-Aug-94	14	<0.05	19	<0.5	<2.5	180	6.3	100	<0.5	<0.1	31	67
MS-B865-016	0	15-Aug-94	19	<0.05	14	<0.5	<2.5	780	12	91	<0.5	8.1	47	51
MS-B865-018	0	15-Aug-94	<10	<0.05	13	<0.5	<2.5	110	3	75	<0.5	<0.1	25	26
MS-B865-020	0	15-Aug-94	11	<0.05	10	<0.5	<2.5	110	4.6	82	<0.5	<0.1	28	31
MS-B865-022	0	15-Aug-94	16	<0.05	14	<0.5	<2.5	90	1.6	92	<0.5	<0.1	18	24

Notes:

D = Analysis performed at a secondary dilution or concentration.
ft = Feet.
mg/kg = Milligrams per kilogram.

Table A-6. Surface soil analyses for STLC metals (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Depth (ft)	Sample Date	Antimony (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Lead (mg/L)	Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Thallium (mg/L)	Vanadium (mg/L)	Zinc (mg/L)
MS-B865-002	0	12-Aug-94	<0.3	1.7	2.3	<0.05	0.64	3.7	<0.5	0.74	0.81	<0.005	<0.5	<0.5	<0.05	<0.5	<0.05	4.5	580
MS-B865-004	0	12-Aug-94	<0.3	0.076	4.1	<0.05	<0.1	<0.5	<0.5	0.6	<0.5	<0.005	0.58	<0.5	<0.05	<0.5	<0.05	<0.5	16
MS-B865-008	0	15-Aug-94	<0.3	0.23	3.9	<0.05	0.47	<0.5	<0.5	2	1	<0.005	<0.5	<0.5	<0.05	<0.5	<0.05	<0.5	30
MS-B865-010	0	15-Aug-94	<0.3	0.075	3.8	<0.05	<0.1	<0.5	<0.5	0.6	<0.5	<0.005	<0.5	<0.5	<0.05	<0.5	<0.05	<0.5	6.8
MS-B865-012	0	15-Aug-94	<0.3	<0.05	4.7	<0.05	<0.1	<0.5	<0.5	<0.5	0.69	<0.005	<0.5	<0.5	<0.05	<0.5	<0.05	<0.5	2
MS-B865-014	0	15-Aug-94	<0.3	0.09	3.5	<0.05	0.23	<0.5	<0.5	0.64	<0.5	<0.005	<0.5	<0.5	<0.05	<0.5	<0.05	<0.5	17
MS-B865-016	0	15-Aug-94	<0.3	0.31	3.8	<0.05	0.14	<0.5	0.59	1	<0.5	<0.005	<0.5	<0.5	<0.05	<0.5	<0.05	<0.5	19
MS-B865-018	0	15-Aug-94	<0.3	0.05	4.1	<0.05	<0.1	<0.5	<0.5	<0.5	<0.5	<0.005	<0.5	<0.5	<0.05	<0.5	<0.05	<0.5	6.3
MS-B865-020	0	15-Aug-94	<0.3	<0.05	3.6	<0.05	<0.1	<0.5	<0.5	<0.5	<0.5	<0.005	<0.5	<0.5	<0.05	<0.5	<0.05	<0.5	3.7
MS-B865-022	0	15-Aug-94	<0.3	<0.05	4.7	<0.05	<0.1	<0.5	<0.5	<0.5	<0.5	<0.005	<0.5	<0.5	<0.05	<0.5	<0.05	<0.5	4.5

Notes:

ft = Feet.
mg/L = Milligrams per liter.
STLC = Soluble threshold limit concentration.

Table A-7. Subsurface soil and rock soil analyses for volatile organic compounds (mg/kg) in samples collected from the Building 865 study area between January 1, 1988 and March 30, 2006.

Location	Depth (ft)	Sample Date	Carbon tetrachloride (mg/kg)	Chloroform (mg/kg)	1,1-DCA (mg/kg)	1,2-DCA (mg/kg)	1,1-DCE (mg/kg)	cis-1,2-DCE (mg/kg)	trans-1,2-DCE (mg/kg)	Total 1,2-DCE (mg/kg)	Freon 113 (mg/kg)	PCE (mg/kg)	1,1,1-TCA (mg/kg)	TCE (mg/kg)	Freon 11 (mg/kg)	Vinyl Chloride (mg/kg)	Methylene chloride (mg/kg)	1,1,2-TCA (mg/kg)
B-865-2002	5.5	21-Jan-04	<0.00056	<0.00053	<0.00056	<0.0005	<0.0007	<0.0005	<0.0005	<0.00087	<0.002	<0.0005	<0.0005	<0.0005	<0.00058	<0.0007	<0.002	<0.0005
B-865-2002	5.5	21-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005
B-865-2002	15.5	21-Jan-04	<0.00056	<0.00053	<0.00056	<0.0005	<0.0007	<0.0005	<0.0005	<0.00087	<0.002	<0.0005	<0.0005	<0.0005	<0.00058	<0.0007	<0.002	<0.0005
B-865-2002	15.5	21-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005
B-865-2002	20.5	21-Jan-04	<0.00056	<0.00053	<0.00056	<0.0005	<0.0007	<0.0005	<0.0005	<0.00087	<0.002	<0.0005	<0.0005	<0.0005	<0.00058	<0.0007	<0.002	<0.0005
B-865-2002	20.5	21-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005
B-865-2002	29.5	21-Jan-04	<0.00056	<0.00053	<0.00056	<0.0005	<0.0007	<0.0005	<0.0005	<0.00087	<0.002	<0.0005	<0.0005	<0.0005	<0.00058	<0.0007	<0.002	<0.0005
B-865-2002	29.5	21-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005
B-865-2002	45.5	21-Jan-04	<0.00056	<0.00053	<0.00056	<0.0005	<0.0007	<0.0005	<0.0005	<0.00087	<0.002	<0.0005	<0.0005	<0.0005	<0.00058	<0.0007	<0.002	<0.0005
B-865-2002	45.5	21-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005
B-865-2002	50.2	21-Jan-04	<0.00056	<0.00053	<0.00056	<0.0005	<0.0007	<0.0005	<0.0005	<0.00087	<0.002	<0.0005	<0.0005	<0.0005	<0.00058	<0.0007	<0.002	<0.0005
B-865-2002	50.2	21-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005
B-865-2002	55.0	21-Jan-04	<0.00056	<0.00053	<0.00056	<0.0005	<0.0007	<0.0005	<0.0005	<0.00087	<0.002	<0.0005	<0.0005	<0.0005	<0.00058	<0.0007	<0.002	<0.0005
B-865-2002	55.0	21-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005
B-865-2002	58.7	21-Jan-04	<0.00056	<0.00053	<0.00056	<0.0005	<0.0007	<0.0005	<0.0005	<0.00087	<0.002	<0.0005	<0.0005	<0.0005	<0.00058	<0.0007	<0.002	<0.0005
B-865-2002	58.7	21-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005
B-865-2002	65.0	21-Jan-04	<0.00056	<0.00053	<0.00056	<0.0005	<0.0007	<0.0005	<0.0005	<0.00087	<0.002	<0.0005	<0.0005	<0.0005	<0.00058	<0.0007	<0.002	<0.0005
B-865-2002	65.0	21-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005
B-865-2002	70.0	21-Jan-04	<0.00056	<0.00053	<0.00056	<0.0005	<0.0007	<0.0005	<0.0005	<0.00087	<0.002	<0.0005	<0.0005	<0.0005	<0.00058	<0.0007	<0.002	<0.0005
B-865-2002	70.0	21-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005
B-865-2002	75.0	22-Jan-04	<0.0005	<0.0005	<0.00056	<0.00074	<0.0011	<0.00079	<0.00091	<0.0017	**0.0054**	<0.0006	<0.00066	<0.00068	<0.00091	<0.0016	<0.002	<0.0005
B-865-2002	75.0	22-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	**0.008**	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005
B-865-2002	85.0	22-Jan-04	<0.0005	<0.0005	<0.00056	<0.00074	<0.0011	<0.00079	<0.00091	<0.0017	<0.002	<0.0006	<0.00066	<0.00068	<0.00091	<0.0016	<0.002	<0.0005
B-865-2002	85.0	22-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005
B-865-2002	95.0	22-Jan-04	<0.0005	<0.0005	<0.00056	<0.00074	<0.0011	<0.00079	<0.00091	<0.0017	<0.002	<0.0006	<0.00066	<0.00068	<0.00091	<0.0016	<0.002	<0.0005
B-865-2002	95.0	22-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005		<0.005	<0.01	<0.005
B-865-2003	5.0	6-Jan-04	<0.0005	<0.0005	<0.00056	<0.00074	<0.0011	<0.00079	<0.00091	<0.0017	<0.002	<0.0006	<0.00066	<0.00068	<0.00091	<0.0016	<0.002	<0.0005
B-865-2003	10.0	6-Jan-04	<0.0005	<0.0005	<0.00056	<0.00074	<0.0011	<0.00079	<0.00091	<0.0017	<0.002	<0.0006	<0.00066	<0.00068	<0.00091	<0.0016	<0.002	<0.0005
B-865-2003	13.5	6-Jan-04	<0.0005	<0.0005	<0.00056	<0.00074	<0.0011	<0.00079	<0.00091	<0.0017	<0.002	<0.0006	<0.00066	<0.00068	<0.00091	<0.0016	<0.002	<0.0005
B-865-2003	20.0	6-Jan-04	<0.0005	<0.0005	<0.00056	<0.00074	<0.0011	<0.00079	<0.00091	<0.0017	<0.002	<0.0006	<0.00066	<0.00068	<0.00091	<0.0016	<0.002	<0.0005
B-865-2003	27.0	6-Jan-04	<0.0005	<0.0005	<0.00056	<0.00074	<0.0011	<0.00079	<0.00091	<0.0017	<0.002	<0.0006	<0.00066	<0.00068	<0.00091	<0.0016	<0.002	<0.0005
B-865-2003	30.0	6-Jan-04	<0.0005	<0.0005	<0.00056	<0.00074	<0.0011	<0.00079	<0.00091	<0.0017	<0.002	<0.0006	<0.00066	<0.00068	<0.00091	<0.0016	<0.002	<0.0005
B-865-2003	35.0	6-Jan-04	<0.0005	<0.0005	<0.00056	<0.00074	<0.0011	<0.00079	<0.00091	<0.0017	<0.002	<0.0006	<0.00066	<0.00068	<0.00091	<0.0016	<0.002	<0.0005
B-865-2003	40.0	6-Jan-04	<0.0005	<0.0005	<0.00056	<0.00074	<0.0011	<0.00079	<0.00091	<0.0017	<0.002	<0.0006	<0.00066	<0.00068	<0.00091	<0.0016	<0.002	<0.0005
B-865-2003	45.0	6-Jan-04	<0.0005	<0.0005	<0.00056	<0.00074	<0.0011	<0.00079	<0.00091	<0.0017	<0.002	<0.0006	<0.00066	<0.00068	<0.00091	<0.0016	<0.002	<0.0005
B-865-2003	50.0	6-Jan-04	<0.0005	<0.0005	<0.00056	<0.00074	<0.0011	<0.00079	<0.00091	<0.0017	<0.002	<0.0006	<0.00066	<0.00068	<0.00091	<0.0016	<0.002	<0.0005
B-865-2003	128.0	7-Jan-04	<0.00047	<0.0004	<0.00056	<0.00074	<0.0011	<0.00079	<0.00091	<0.0017	<0.00047	<0.0006	<0.00066	<0.00068	<0.00091	<0.0016	<0.0016	<0.00047
B-865-2121	343.0	16-Nov-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00065	<0.002	<0.0005	<0.0005	<0.00051	<0.0005	<0.0006	<0.002	<0.0005
B-865-2121	351.0	16-Nov-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00065	<0.002	<0.0005	<0.0005	<0.00051	<0.0005	<0.0006	<0.002	<0.0005
B-865-2121	355.0	16-Nov-04	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00065	<0.002	<0.0005	<0.0005	<0.00051	<0.0005	<0.0006	<0.002	<0.0005
W-865-02	5.0	9-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	10.0	9-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	10.0	21-Mar-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	15.0	9-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Table A-7. Subsurface soil and rock soil analyses for volatile organic compounds (mg/kg) in samples collected from the Building 865 study area between January 1, 1988 and March 30, 2006.

Location	Depth (ft)	Sample Date	Carbon tetrachloride (mg/kg)	Chloroform (mg/kg)	1,1-DCA (mg/kg)	1,2-DCA (mg/kg)	1,1-DCE (mg/kg)	cis-1,2-DCE (mg/kg)	trans-1,2-DCE (mg/kg)	Total 1,2-DCE (mg/kg)	Freon 113 (mg/kg)	PCE (mg/kg)	1,1,1-TCA (mg/kg)	TCE (mg/kg)	Freon 11 (mg/kg)	Vinyl Chloride (mg/kg)	Methylene chloride (mg/kg)	1,1,2-TCA (mg/kg)
W-865-02	20.0	9-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	30.0	9-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	40.0	13-Dec-99	<0.0005	<0.0005 L	<0.0005	<0.0005 LO	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	50.0	13-Dec-99	<0.0005	<0.0005 L	<0.0005	<0.0005 LO	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	60.0	13-Dec-99	<0.0005	<0.0005 L	<0.0005	<0.0005 LO	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	70.0	13-Dec-99	<0.0005	<0.0005 L	<0.0005	<0.0005 LO	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	70.0	13-Dec-99	<0.0005	<0.0005 L	<0.0005	<0.0005 LO	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	80.0	13-Dec-99	<0.0005	<0.0005 L	<0.0005	<0.0005 LO	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	90.0	14-Dec-99	<0.0005	<0.0005 L	<0.0005	<0.0005 O	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	100.0	14-Dec-99	<0.0005	<0.0005 L	<0.0005	<0.0005 O	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	105.0	14-Dec-99	<0.0005	<0.0005 L	<0.0005	<0.0005 O	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	110.0	14-Dec-99	<0.0005	<0.0005 L	<0.0005	<0.0005 O	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	115.0	14-Dec-99	<0.0005	<0.0005 L	<0.0005	<0.0005 O	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	120.0	14-Dec-99	<0.0005	<0.0005 L	<0.0005	<0.0005 O	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	125.0	14-Dec-99	<0.0005	<0.0005 L	<0.0005	<0.0005 O	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	130.0	14-Dec-99	<0.0005	<0.0005 L	<0.0005	<0.0005 O	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	5.0	27-Jan-00	<0.0005 L	<0.0005 L	<0.0005	<0.0005 L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	175.0	2-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	185.0	2-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	199.2	3-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	204.6	3-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	214.5	3-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	225.0	7-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	234.8	7-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	245.1	7-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**0.0032 B**	<0.0005
W-865-05	245.1	7-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	254.9	7-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	261.7	8-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	264.7	8-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**0.011**	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	269.2	8-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	273.0	8-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**0.014**	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-031	1.5	1-Aug-95	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	<0.0005
MS-B865-032	1.5	1-Aug-95	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	<0.0005
MS-B865-033	1.0	1-Aug-95	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	**0.031 D**	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	<0.0005
MS-B865-034	1.5	1-Aug-95	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	<0.0005
MS-B865-034	1.5	1-Aug-95	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	<0.0005
MS-B865-035	1.5	1-Aug-95	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	<0.0005
MS-B865-036	1.5	1-Aug-95	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	<0.0005
MS-B865-036	1.5	1-Aug-95	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	<0.0005
MS-B865-039	2.0	8-Aug-95	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	<0.0005
MS-B865-040	2.0	8-Aug-95	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	<0.0005
MS-B865-041	4.0	8-Aug-95	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	<0.0005
MS-B865-042	1.5	8-Aug-95	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	<0.0005
MS-B865-043	3.0	8-Aug-95	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	<0.0005

Table A-7. Subsurface soil and rock soil analyses for volatile organic compounds (mg/kg) in samples collected from the Building 865 study area between January 1, 1988 and March 30, 2006.

Location	Depth (ft)	Sample Date	Carbon tetrachloride (mg/kg)	Chloroform (mg/kg)	1,1-DCA (mg/kg)	1,2-DCA (mg/kg)	1,1-DCE (mg/kg)	cis-1,2-DCE (mg/kg)	trans-1,2-DCE (mg/kg)	Total 1,2-DCE (mg/kg)	Freon 113 (mg/kg)	PCE (mg/kg)	1,1,1-TCA (mg/kg)	TCE (mg/kg)	Freon 11 (mg/kg)	Vinyl Chloride (mg/kg)	Methylene chloride (mg/kg)	1,1,2-TCA (mg/kg)
MS-B865-044	1.5	8-Aug-95	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	<0.0005
MS-B865-045	3.0	8-Aug-95	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	<0.0005

Notes:

1,1,1-TCA = 1,1,1-trichloroethane.
1,1,2-TCA = 1,1,2-trichloroethane.
1,1-DCA = 1,1-dichloroethane.
1,1-DCE = 1,1-dichloroethylene.
1,2-DCA = 1,2-dichloroethane.
1,2-DCE = 1,2-dichloroethylene.
B = Analyte found in method blank.
D = Analysis performed at a secondary dilution or concentration.
ft = Feet.
L = Spike accuracy not within control limits.
mg/kg = Milligrams per kilogram.
O = Duplicate spike or sample precision not within control limits.
PCE = Tetrachloroethylene.
TCE = Trichloroethylene.

Table A-8. Subsurface soil and rock soil analyses for aromatic hydrocarbon compounds (mg/kg) in samples collected from the Building 865 study area between January 1, 1988 and March 30, 2006.

Location	Depth (ft)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total xylenes (mg/kg)	1,2-Dichloro-benzene (mg/kg)	1,3-Dichloro-benzene (mg/kg)	1,4-Dichloro-benzene (mg/kg)	Chloro-benzene (mg/kg)
B-865-2002	5.5	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0015	<0.0005	<0.0005	<0.0005	<0.0005
B-865-2002	5.5	21-Jan-04	<0.005	<0.005	<0.005	<0.01				<0.005
B-865-2002	15.5	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0015	<0.0005	<0.0005	<0.0005	<0.0005
B-865-2002	15.5	21-Jan-04	<0.005	<0.005	<0.005	<0.01				<0.005
B-865-2002	20.5	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0015	<0.0005	<0.0005	<0.0005	<0.0005
B-865-2002	20.5	21-Jan-04	<0.005	<0.005	<0.005	<0.01				<0.005
B-865-2002	29.5	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0015	<0.0005	<0.0005	<0.0005	<0.0005
B-865-2002	29.5	21-Jan-04	<0.005	<0.005	<0.005	<0.01				<0.005
B-865-2002	45.5	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0015	<0.0005	<0.0005	<0.0005	<0.0005
B-865-2002	45.5	21-Jan-04	<0.005	<0.005	<0.005	<0.01				<0.005
B-865-2002	50.2	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0015	<0.0005	<0.0005	<0.0005	<0.0005
B-865-2002	50.2	21-Jan-04	<0.005	<0.005	<0.005	<0.01				<0.005
B-865-2002	55.0	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0015	<0.0005	<0.0005	<0.0005	<0.0005
B-865-2002	55.0	21-Jan-04	<0.005	<0.005	<0.005	<0.01				<0.005
B-865-2002	58.7	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0015	<0.0005	<0.0005	<0.0005	<0.0005
B-865-2002	58.7	21-Jan-04	<0.005	<0.005	<0.005	<0.01				<0.005
B-865-2002	65.0	21-Jan-04	<0.0005	<0.0005	<0.0005	<0.0015	<0.0005	<0.0005	<0.0005	<0.0005
B-865-2002	65.0	21-Jan-04	<0.005	<0.005	<0.005	<0.01				<0.005
B-865-2002	70.0	21-Jan-04	<0.0005	0.00088	<0.0005	<0.0015	<0.0005	<0.0005	<0.0005	<0.0005
B-865-2002	70.0	21-Jan-04	<0.005	<0.005	<0.005	<0.01				<0.005
B-865-2002	75.0	22-Jan-04	<0.00089	<0.00065	<0.00058	<0.0021	<0.0009	<0.0012	<0.00084	<0.00057
B-865-2002	75.0	22-Jan-04	<0.005	<0.005	<0.005	<0.01				<0.005
B-865-2002	85.0	22-Jan-04	<0.00089	<0.00065	<0.00058	<0.0021	<0.0009	<0.0012	<0.00084	<0.00057
B-865-2002	85.0	22-Jan-04	<0.005	<0.005	<0.005	<0.01				<0.005
B-865-2002	95.0	22-Jan-04	<0.00089	<0.00065	<0.00058	<0.0021	<0.0009	<0.0012	<0.00084	<0.00057

Table A-8. Subsurface soil and rock soil analyses for aromatic hydrocarbon compounds (mg/kg) in samples collected from the Building 865 study area between January 1, 1988 and March 30, 2006.

Location	Depth (ft)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total xylenes (mg/kg)	1,2-Dichloro-benzene (mg/kg)	1,3-Dichloro-benzene (mg/kg)	1,4-Dichloro-benzene (mg/kg)	Chloro-benzene (mg/kg)
B-865-2002	95.0	22-Jan-04	<0.005	<0.005	<0.005	<0.01				<0.005
B-865-2003	5.0	6-Jan-04	<0.00089	<0.00065	<0.00058	<0.0021	<0.0009	<0.0012	<0.00084	<0.00057
B-865-2003	10.0	6-Jan-04	<0.00089	<0.00065	<0.00058	<0.0021	<0.0009	<0.0012	<0.00084	<0.00057
B-865-2003	13.5	6-Jan-04	<0.00089	<0.00065	<0.00058	<0.0021	<0.0009	<0.0012	<0.00084	<0.00057
B-865-2003	20.0	6-Jan-04	<0.00089	<0.00065	<0.00058	<0.0021	<0.0009	<0.0012	<0.00084	<0.00057
B-865-2003	27.0	6-Jan-04	<0.00089	<0.00065	<0.00058	<0.0021	<0.0009	<0.0012	<0.00084	<0.00057
B-865-2003	30.0	6-Jan-04	<0.00089	<0.00065	<0.00058	<0.0021	<0.0009	<0.0012	<0.00084	<0.00057
B-865-2003	35.0	6-Jan-04	<0.00089	<0.00065	<0.00058	<0.0021	<0.0009	<0.0012	<0.00084	<0.00057
B-865-2003	40.0	6-Jan-04	<0.00089	<0.00065	<0.00058	<0.0021	<0.0009	<0.0012	<0.00084	<0.00057
B-865-2003	45.0	6-Jan-04	<0.00089	<0.00065	<0.00058	<0.0021	<0.0009	<0.0012	<0.00084	<0.00057
B-865-2003	50.0	6-Jan-04	<0.00089	<0.00065	<0.00058	<0.0021	<0.0009	<0.0012	<0.00084	<0.00057
B-865-2003	128.0	7-Jan-04	<0.00089	<0.00065	<0.00058	<0.0021	<0.0009	<0.0012	<0.00084	<0.00057
B-865-2121	343.0	16-Nov-04	<0.0005	<0.0005	<0.0005	<0.0012	<0.0005	<0.00052	<0.0005	<0.0005
B-865-2121	351.0	16-Nov-04	<0.0005	0.0006	<0.0005	<0.0012	<0.0005	<0.00052	<0.0005	<0.0005
B-865-2121	355.0	16-Nov-04	<0.0005	0.0012	<0.0005	<0.0012	<0.0005	<0.00052	<0.0005	<0.0005
W-865-02	5.0	9-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	10.0	9-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	10.0	21-Mar-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	15.0	9-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	20.0	9-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	30.0	9-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	40.0	13-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	50.0	13-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	60.0	13-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	70.0	13-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Table A-8. Subsurface soil and rock soil analyses for aromatic hydrocarbon compounds (mg/kg) in samples collected from the Building 865 study area between January 1, 1988 and March 30, 2006.

Location	Depth (ft)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total xylenes (mg/kg)	1,2-Dichloro-benzene (mg/kg)	1,3-Dichloro-benzene (mg/kg)	1,4-Dichloro-benzene (mg/kg)	Chloro-benzene (mg/kg)
W-865-02	70.0	13-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	80.0	13-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	90.0	14-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	100.0	14-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	105.0	14-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	110.0	14-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	115.0	14-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	120.0	14-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	125.0	14-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-02	130.0	14-Dec-99	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	5.0	27-Jan-00	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.0005	0.0015	<0.0005
W-865-05	175.0	2-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	185.0	2-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	199.2	3-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	204.6	3-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	214.5	3-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	225.0	7-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	234.8	7-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	245.1	7-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	245.1	7-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	254.9	7-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	261.7	8-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	264.7	8-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	269.2	8-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
W-865-05	273.0	8-Feb-00	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Table A-8. Subsurface soil and rock soil analyses for aromatic hydrocarbon compounds (mg/kg) in samples collected from the Building 865 study area between January 1, 1988 and March 30, 2006.

Location	Depth (ft)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total xylenes (mg/kg)	1,2-Dichloro-benzene (mg/kg)	1,3-Dichloro-benzene (mg/kg)	1,4-Dichloro-benzene (mg/kg)	Chloro-benzene (mg/kg)
MS-B865-031	1.5	1-Aug-95					<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-031	1.5	1-Aug-95	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-032	1.5	1-Aug-95					<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-032	1.5	1-Aug-95	<0.0005	0.0011	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-033	1.0	1-Aug-95					<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-033	1.0	1-Aug-95	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-034	1.5	1-Aug-95					<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-034	1.5	1-Aug-95					<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-034	1.5	1-Aug-95	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-034	1.5	1-Aug-95	<0.0005	0.002	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-035	1.5	1-Aug-95					<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-035	1.5	1-Aug-95	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-036	1.5	1-Aug-95					<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-036	1.5	1-Aug-95					<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-036	1.5	1-Aug-95	<0.0005	0.0025	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-036	1.5	1-Aug-95	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-039	2.0	8-Aug-95					<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-039	2.0	8-Aug-95	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-040	2.0	8-Aug-95					<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-040	2.0	8-Aug-95	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-041	4.0	8-Aug-95					<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-041	4.0	8-Aug-95	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-042	1.5	8-Aug-95					<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-042	1.5	8-Aug-95	<0.0005	0.0015	<0.0005	0.0036	<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-043	3.0	8-Aug-95					<0.0005	<0.0005	<0.0005	<0.0005

Table A-8. Subsurface soil and rock soil analyses for aromatic hydrocarbon compounds (mg/kg) in samples collected from the Building 865 study area between January 1, 1988 and March 30, 2006.

Location	Depth (ft)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total xylenes (mg/kg)	1,2-Dichloro-benzene (mg/kg)	1,3-Dichloro-benzene (mg/kg)	1,4-Dichloro-benzene (mg/kg)	Chloro-benzene (mg/kg)
MS-B865-043	3.0	8-Aug-95	<0.0005	0.00089	<0.0005	0.001	<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-044	1.5	8-Aug-95					<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-044	1.5	8-Aug-95	<0.0005	0.00076	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-045	3.0	8-Aug-95					<0.0005	<0.0005	<0.0005	<0.0005
MS-B865-045	3.0	8-Aug-95	<0.0005	0.00061	<0.0005	0.0012	<0.0005	<0.0005	<0.0005	<0.0005

Notes:

ft = Feet.

mg/kg = Milligrams per kilogram.

Table A-9. Subsurface soil and rock soil analyses for total petroleum hydrocarbons (mg/kg) in samples collected from the Building 865 study area between January 1, 1988 and March 30, 2006.

Location	Depth (ft)	Sample Date	TPH as Diesel (mg/kg)	TPH as Motor Oil (mg/kg)
MS-B865-031	1.5	1-Aug-95	41 LOD	<20 D
MS-B865-032	1.5	1-Aug-95	<1 LO	10
MS-B865-033	1.0	1-Aug-95	<100 LOD	1100 D
MS-B865-034	1.5	1-Aug-95	680 LOD	<200 D
MS-B865-034	1.5	1-Aug-95	760 LOD	<200 D
MS-B865-035	1.5	1-Aug-95	<1 LO	4.2
MS-B865-036	1.5	1-Aug-95	220 LOD	<20 D
MS-B865-036	1.5	1-Aug-95	190 LOD	<20 D
MS-B865-039	2.0	8-Aug-95	<1	<2
MS-B865-040	2.0	8-Aug-95	<1	<2
MS-B865-041	4.0	8-Aug-95	<1	<2
MS-B865-042	1.5	8-Aug-95	150 D	140 D
MS-B865-043	3.0	8-Aug-95	29 D	80 D
MS-B865-044	1.5	8-Aug-95	29 D	88 D
MS-B865-045	3.0	8-Aug-95	3.9	7.6
MS-B865-038	1.0	29-Feb-96	<1	<2
MS-B865-046	1.0	29-Feb-96	<10 D	20 D
MS-B865-035	5.0	17-Jul-96	8.1	3.7
MS-B865-036	5.0	17-Jul-96	<1	<2
MS-B865-037	5.0	17-Jul-96	<1	<2

Notes:

ft = Feet.
mg/kg = Milligrams per kilogram.
D = Analysis performed at a secondary dilution or concentration.
L = Spike accuracy not within control limits.
O = Duplicate spike or sample precision not within control limits.
TPH = Total petroleum hydrocarbons.

Table A-10. Subsurface soil and rock soil analyses for TTLC metals (mg/kg) in samples collected from the Building 865 study area between January 1, 1988 and March 30, 2006.

Location	Depth (ft)	Sample Date	Lead (mg/kg)	Mercury (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Total Chromium (mg/kg)	Copper (mg/kg)
MS-B865-006	3.0	12-Aug-94	<10	<0.05	13	0.59	<2.5	44	1.6	83	<0.5	<0.1	15	18
MS-B865-007	1.5	15-Aug-94	<10	0.06	<10	<0.5	<2.5	27	<0.5	53	<0.5	<0.1	5.4	16
MS-B865-009	2.5	15-Aug-94	<10	<0.05	<10	<0.5	<2.5	37	0.68	60	<0.5	<0.1	9.2	18
MS-B865-011	2.0	15-Aug-94	<10	<0.05	13	<0.5	<2.5	43	0.87	73	<0.5	<0.1	15	22
MS-B865-013	3.0	15-Aug-94	<10	<0.05	<10	<0.5	<2.5	34	0.55	62	<0.5	<0.1	9.2	19
MS-B865-015	3.0	15-Aug-94	<10	<0.05	14	<0.5	<2.5	39	1.2	100	<0.5	<0.1	19	16
MS-B865-017	3.0	15-Aug-94	<10	<0.05	15	<0.5	<2.5	28	1.5	62	<0.5	<0.1	7.7	13
MS-B865-019	3.0	15-Aug-94	<10	<0.05	43	<0.5	<2.5	37	1.3	110	<0.5	<0.1	28	17
MS-B865-021	3.0	15-Aug-94	<10	<0.05	16	<0.5	<2.5	23	0.51	49	<0.5	<0.1	12	10
MS-B865-023	1.5	15-Aug-94	<10	<0.05	12	<0.5	<2.5	65	2.8	80	<0.5	<0.1	20	24
MS-B865-028	1.0	15-Nov-94	<10	<0.05	12	<0.5	<2.5 LO	62	<2.5 D	77	<0.5	<1	17	17
MS-B865-029	1.0	15-Nov-94	<10	<0.05	12	<0.5	<2.5 LO	40	<2.5 D	72	<0.5	<1	13	15
MS-B865-030	1.0	15-Nov-94	<10	<0.05	12	<0.5	<2.5 LO	40	<2.5 D	68	<0.5	<1	13	15

Notes:

D = Analysis performed at a secondary dilution or concentration.
ft = Feet.
L = Spike accuracy not within control limits.
mg/kg = Milligrams per kilogram.
O = Duplicate spike or sample precision not within control limits.
TTLC = Total threshold limit concentration.

Table A-11. Subsurface soil and rock soil analyses for STLC metals (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 30, 2006.

Location	Depth (ft)	Sample Date	Antimony (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Lead (mg/L)	Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Thallium (mg/L)	Vanadium (mg/L)	Zinc (mg/L)
MS-B865-006	3.0	12-Aug-94	<0.3	<0.05	3.5	<0.05	<0.1	<0.5	<0.5	<0.5	<0.5	<0.005	<0.5	<0.5	<0.05	<0.5	<0.05	<0.5	1.2
MS-B865-007	1.5	15-Aug-94	<0.3	<0.05	4.9	<0.05	<0.1	<0.5	<0.5	<0.5	<0.5	<0.005	<0.5	0.78	<0.05	<0.5	<0.05	0.53	1.8
MS-B865-009	2.5	15-Aug-94	<0.3	<0.05	4.8	<0.05	<0.1	<0.5	<0.5	<0.5	<0.5	<0.005	<0.5	<0.5	<0.05	<0.5	<0.05	<0.5	1.5
MS-B865-011	2.0	15-Aug-94	<0.3	<0.05	4.1	<0.05	<0.1	<0.5	<0.5	<0.5	<0.5	<0.005	<0.5	<0.5	<0.05	<0.5	<0.05	<0.5	1.3
MS-B865-013	3.0	15-Aug-94	<0.3	<0.05	4.3	<0.05	<0.1	<0.5	<0.5	<0.5	<0.5	<0.005	<0.5	<0.5	<0.05	<0.5	<0.05	<0.5	1.1
MS-B865-015	3.0	15-Aug-94	<0.3	<0.05	5.8	<0.05	<0.1	<0.5	<0.5	<0.5	<0.5	<0.005	<0.5	<0.5	<0.05	<0.5	<0.05	<0.5	1.7
MS-B865-017	3.0	15-Aug-94	<0.3	<0.05	3.7	<0.05	<0.1	<0.5	<0.5	<0.5	<0.5	<0.005	<0.5	<0.5	<0.05	<0.5	<0.05	<0.5	1.1
MS-B865-019	3.0	15-Aug-94	<0.3	<0.05	5.3	<0.05	<0.1	<0.5	<0.5	<0.5	<0.5	<0.005	<0.5	<0.5	<0.05	<0.5	<0.05	<0.5	1.1
MS-B865-021	3.0	15-Aug-94	<0.3	<0.05	4.3	<0.05	<0.1	<0.5	<0.5	<0.5	<0.5	<0.005	<0.5	<0.5	<0.05	<0.5	<0.05	<0.5	0.84
MS-B865-023	1.5	15-Aug-94	<0.3	0.06	4.8	<0.05	<0.1	<0.5	<0.5	<0.5	<0.5	<0.005	<0.5	<0.5	<0.05	<0.5	<0.05	<0.5	3.2

Notes:

ft = Feet.

mg/kg = Milligrams per kilogram.

STLC = Soluble threshold limit concentration.

Table A-12. Subsurface soil and rock soil analyses for tritium in soil moisture (pCi/Lsm and pCi/g) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Depth (ft)	Sample Date	Tritium (pCi/Lsm)	Tritium (pCi/g)	Moisture by Weight Percent
B-865-1803	98.0	3-Jul-02		<200±0.13	
B-865-1803	106.4	3-Jul-02		<200±0.15	
B-865-1803	114.2	8-Jul-02		<200±0.14	
B-865-1804	110.3	17-Jul-02		<200±0.18	
B-865-1804	115.8	17-Jul-02		<200±0.27	
B-896-1806	72.3	6-Aug-02		<200±0.16	
B-896-1806	84.0	6-Aug-02		<200±0.18	
B-896-1806	90.0	6-Aug-02		<200	
B-896-1806	164.0	7-Aug-02		<200±0.16	
B-896-1806	173.0	7-Aug-02		<200±0.12	
B-896-1806	183.5	8-Aug-02		<200±0.17	
B-896-1806	208.0	8-Aug-02		<200±0.15	
W-865-01	121.0	15-Dec-98		<2±1.14	
W-865-01	126.3	15-Dec-98		<2±1.18	
W-865-01	131.0	15-Dec-98		<2±1.27	
W-865-03	55.0	10-Feb-00	<200±180		
W-865-03	61.0	10-Feb-00	<200±100		
W-865-04	100.0	3-Jan-00		<0.0425±0.0321	19.83
W-865-04	110.0	3-Jan-00		<0.0453±0.0345	21.07
W-865-04	118.0	3-Jan-00		<0.0581±0.0422	25.57
W-865-04	124.5	4-Jan-00		<0.0357±0.0255	17.35
W-865-04	152.0	4-Jan-00		<0.033±0.0241	16.31
W-865-04	100.0	3-Jan-00	<172±130		
W-865-04	110.0	3-Jan-00	<170±129		
W-865-04	118.0	3-Jan-00	<169±123		
W-865-04	124.5	4-Jan-00	<170±122		
W-865-04	152.0	4-Jan-00	<169±124		
W-865-06	120.0	18-Jan-00	<200±120		
W-865-06	139.0	19-Jan-00	<200±120		
W-865-06	161.0	19-Jan-00	<200±110		
W-865-06	180.0	20-Jan-00	<200±100		
W-865-06	200.0	20-Jan-00	<200±110		
W-865-07	25.0	31-Jan-00	<200±110		
W-865-07	30.0	31-Jan-00	<200±100		
W-865-07	35.0	31-Jan-00	<200±110		
W-865-07	40.0	31-Jan-00	<200±120		
W-865-1802	54.3	19-Jun-02		<200±0.083	
W-865-1802	84.3	20-Jun-02		<200±0.094	
W-865-1802	124.4	20-Jun-02		<200±0.094	
MS-B865-052	5.0	17-Jul-96		<1.63±100	
MS-B865-052	5.0	17-Jul-96		<1.64±100	

Notes:

ft = Feet.
pCi/g = PicoCuries per gram.
pCi/Lsm = PicoCuries per liter in soil moisture.

Table A-13. Subsurface soil and rock soil analyses for total uranium and uranium isotopes (pCi/g) and 235U/238U atom ratio by mass spectrometer in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Depth (ft)	Sample Date	Total Uranium (pCi/g)	Uranium 235/238 (atom ratio) ratio	Uranium 234 by mass measurement (pCi/g)	Uranium 235 by mass measurement (pCi/g)	Uranium 236 by mass measurement (pCi/g)	Uranium 238 by mass measurement (pCi/g)
W-865-04	100.0	3-Jan-00	2.713±0.009	0.00725±0.000006	1.354±0.007	0.0606±0.0003	<0.007±0.0005	1.299±0.006
W-865-04	110.0	3-Jan-00	2.733±0.011	0.00722±0.000007	1.289±0.009	0.0641±0.0003	<0.007±0.0003	1.38±0.007
W-865-04	118.0	3-Jan-00	1.515±0.007	0.00725±0.000006	0.761±0.006	0.0336±0.0002	<0.007±0.0003	0.721±0.004
W-865-04	124.5	4-Jan-00	1.743±0.006	0.00722±0.000007	0.892±0.005	0.0377±0.0002	<0.007±0.0004	0.813±0.004
W-865-04	152.0	4-Jan-00	2.072±0.008	0.00724±0.000007	1.013±0.006	0.0471±0.0002	<0.007±0.0003	1.012±0.005

Notes:

ft = Feet.

pCi/g = Picocuries per gram.

Table A-14. Ground and surface water analyses for volatile organic compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	Freon 113 (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	Freon 11 (µg/L)	Vinyl Chloride (µg/L)	Methylene chloride (µg/L)	1,1,2-TCA (µg/L)
K1-02A	23-May-96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5
K1-02A	21-May-97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	19-Jan-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-02B	4-Apr-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-02B	4-Apr-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-02B	25-Jul-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-02B	3-Oct-88	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	12-Jan-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	10-Apr-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	19-Jul-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	31-Jul-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	24-Oct-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P		<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	10-Jan-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	10-Apr-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	10-Apr-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	9-Jul-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	8-Oct-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	14-Jan-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	8-Apr-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	8-Jul-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	15-Nov-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	15-Jan-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	14-Apr-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	25-Jul-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	26-Oct-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.3**	<0.5	<0.5	<0.5	<0.5
K1-02B	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	17-Mar-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	17-Mar-93	<0.6	<0.5	<0.4	<0.3	<0.2	<0.4	<0.4	<0.4	<0.6	<0.5	<0.5	<0.3	<0.4	<0.5	<2	<0.6
K1-02B	24-Mar-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	24-Mar-93	<0.6	<0.5	<0.4	<0.3	<0.2	<0.4	<0.4	<0.4	<0.6	<0.5	<0.5	<0.3	<0.4	<0.5	<2	<0.6
K1-02B	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	26-Jul-93	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	26-Jul-93	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-02B	5-Nov-93	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-02B	13-Oct-94	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-02B	11-Oct-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	11-Oct-95	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-02B	17-Jan-96	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	10-Apr-96	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	30-Jul-96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	9-Oct-96	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1

Table A-14. Ground and surface water analyses for volatile organic compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	Freon 113 (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	Freon 11 (µg/L)	Vinyl Chloride (µg/L)	Methylene chloride (µg/L)	1,1,2-TCA (µg/L)
K1-02B	3-Apr-97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	13-Oct-97	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-02B	9-Apr-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	13-Oct-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	15-Apr-99	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-02B	7-Oct-99	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-02B	18-Apr-00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	19-Oct-00	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1
K1-02B	18-Apr-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	22-Oct-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	16-Apr-02	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-02B	4-Dec-02	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1
K1-02B	30-Jan-03	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<3 L	<1 L
K1-02B	17-Apr-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
K1-02B	17-Apr-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
K1-02B	8-Sep-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-02B	4-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	**0.59**	<0.5	<0.5	<1	<0.5
K1-02B	4-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-02B	28-Jan-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-02B	20-May-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-02B	20-May-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-02B	22-Nov-04	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<1 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<1 H	<0.5 H
K1-02B	23-Feb-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-02B	12-Apr-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-02B	12-Apr-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-02B	6-Jul-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	4-Oct-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	4-Oct-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	3-Jan-06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
K1-02B	12-Apr-06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
K1-02B	12-Apr-06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
K1-03	19-Jan-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-03	4-Apr-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-03	25-Jul-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-03	4-Oct-88	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	12-Jan-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	11-Apr-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	24-Jul-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	24-Oct-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P		<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	10-Jan-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	10-Apr-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	9-Jul-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	8-Oct-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	8-Oct-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	14-Jan-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P

Table A-14. Ground and surface water analyses for volatile organic compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	Freon 113 (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	Freon 11 (µg/L)	Vinyl Chloride (µg/L)	Methylene chloride (µg/L)	1,1,2-TCA (µg/L)
K1-03	8-Apr-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	8-Jul-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	15-Nov-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	15-Jan-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	14-Apr-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	25-Jul-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	27-Oct-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	26-Jul-93	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	26-Jul-93	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-03	4-Nov-93	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-03	13-Oct-94	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-03	11-Oct-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	11-Oct-95	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-03	11-Oct-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	11-Oct-95	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-03	18-Jan-96	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	30-Jul-96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	10-Oct-96	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-03	3-Apr-97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	14-Oct-97	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-03	9-Apr-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	9-Apr-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	13-Oct-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	15-Apr-99	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-03	6-Oct-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	18-Apr-00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	23-Oct-00	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1
K1-03	23-Oct-00	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1
K1-03	18-Apr-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	22-Oct-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	16-Apr-02	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-03	4-Dec-02	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1
K1-03	30-Jan-03	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<3 L	<1 L
K1-03	17-Apr-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
K1-03	24-Jul-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-03	4-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	**0.51**	<0.5	<0.5	<1	<0.5
K1-03	4-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-03	28-Jan-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-03	28-Jan-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-03	20-May-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-03	30-Nov-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5

Table A-14. Ground and surface water analyses for volatile organic compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	Freon 113 (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	Freon 11 (µg/L)	Vinyl Chloride (µg/L)	Methylene chloride (µg/L)	1,1,2-TCA (µg/L)
K1-03	22-Feb-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5		<1	<0.5
K1-03	13-Apr-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-03	28-Jul-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	4-Oct-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	3-Jan-06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
K1-03	3-Apr-06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
K1-04	19-Jan-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-04	4-Apr-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-04	25-Jul-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-04	28-Nov-88	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	24-Jan-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	24-Jan-89	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**0.8 B**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	11-Apr-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	19-Jul-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	24-Oct-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P		<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	10-Jan-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	10-Apr-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	9-Jul-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	8-Oct-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	14-Jan-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	14-Jan-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	8-Apr-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	9-Jul-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	15-Oct-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	15-Jan-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	14-Apr-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	25-Jul-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	25-Jul-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	27-Oct-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	26-Jul-93	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	26-Jul-93	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-04	26-Jul-93	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	26-Jul-93	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-04	4-Nov-93	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-04	13-Oct-94	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-04	10-May-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	31-Jul-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	11-Oct-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	11-Oct-95	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-04	18-Jan-96	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	11-Apr-96	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-14. Ground and surface water analyses for volatile organic compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	Freon 113 (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	Freon 11 (µg/L)	Vinyl Chloride (µg/L)	Methylene chloride (µg/L)	1,1,2-TCA (µg/L)
K1-04	31-Jul-96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	31-Jul-96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	10-Oct-96	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-04	3-Apr-97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	14-Oct-97	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-04	9-Apr-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	14-Oct-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	14-Apr-99	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-04	6-Oct-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	18-Apr-00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	18-Apr-00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	23-Oct-00	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1
K1-04	23-Apr-01	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L
K1-04	22-Oct-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	16-Apr-02	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-04	16-Apr-02	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-04	5-Dec-02	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1
K1-04	29-Jan-03	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1
K1-04	29-Jan-03	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1
K1-04	18-Apr-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	24-Jul-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-04	18-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-04	18-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-04	18-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-04	18-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-04	29-Jan-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-04	11-May-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-04	30-Nov-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-04	24-Feb-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-04	12-Apr-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-04	1-Aug-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	5-Oct-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	10-Jan-06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
K1-04	4-Apr-06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
K1-05	21-Jan-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-05	4-Apr-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-05	15-Jul-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-05	15-Jul-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-05	28-Nov-88	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	**1.1 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	1-Feb-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	11-Apr-89	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**0.9 B**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	19-Jul-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	**1 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	19-Jul-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	25-Oct-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P		<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	11-Jan-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P

Table A-14. Ground and surface water analyses for volatile organic compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	Freon 113 (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	Freon 11 (µg/L)	Vinyl Chloride (µg/L)	Methylene chloride (µg/L)	1,1,2-TCA (µg/L)
K1-05	11-Apr-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	10-Jul-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	10-Jul-90	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.6 B**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	9-Oct-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	15-Jan-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	9-Apr-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	9-Jul-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**0.8 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	19-Aug-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	19-Aug-91	<0.6 P	<0.5 P	<0.4 P	<0.3 P	<0.2 P	<0.4 P	<0.4 P	<0.4 P	**2.6 P**	<0.5 P	<0.5 P	<0.3 P	<0.4 P	<0.5 P	<2 P	<0.6 P
K1-05	16-Oct-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	16-Jan-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	14-Apr-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**2 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	25-Jul-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**3 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	27-Oct-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**3 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**4.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**3.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**3.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	26-Jul-93	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**3.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	26-Jul-93	<1	<1	<1	<1	<1			<1	**4**	<1	<1	<0.5	<1	<2	<1	<1
K1-05	4-Nov-93	<1	<1	<1	<1	<1			<1	**7**	<1	<1	<0.5	<1	<2	<1	<1
K1-05	13-Oct-94	<1	<1	<1	<1	<1			<1	**11**	<1	<1	<0.5	<1	<2	<1	<1
K1-05	13-Oct-94	<5	<5	<5	<5	<5			<5		<5	<5	<5	<5	<10	<5	<5
K1-05	18-Nov-94	<1	<1	<1	<1	<1			<1	**19**	<1	<1	<0.5	<1	<2	<1	<1
K1-05	10-May-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**10**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	31-Jul-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**20**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	31-Jul-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	12-Oct-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**18**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	12-Oct-95	<1	<1	<1	<1	<1			<1	**20**	<1	<1	<0.5	<1	<2	<1	<1
K1-05	18-Jan-96	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**24**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	11-Apr-96	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	31-Jul-96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		**17**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	11-Oct-96	<1 H	<1 H	<1 H	<1 H	<1 H			<1 H	**41 H**	<1 H	<1 H	<0.5 H	<1 H	<2 H	<1 H	<1 H
K1-05	4-Apr-97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		**57 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	14-Oct-97	<1	<1	<1	<1	<1			<1	**45 D**	<1	<1	<0.5	<1	<2	<1	<1
K1-05	15-Apr-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		**45 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	14-Oct-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		**40 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	14-Apr-99	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	**33 LO**	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-05	6-Oct-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**20 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	6-Oct-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**21 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	19-Apr-00	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**33**	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5
K1-05	24-Oct-00	<1	<1	<1	<1	<1	<1	<1	<1	**25**	<1	<1	<1	<1	<1	<3	<1
K1-05	20-Apr-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**15**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	20-Apr-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**14**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	23-Oct-01	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	**23 HLO**	<1 HLO	<3 HLO	<1 HLO

Table A-14. Ground and surface water analyses for volatile organic compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	Freon 113 (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	Freon 11 (µg/L)	Vinyl Chloride (µg/L)	Methylene chloride (µg/L)	1,1,2-TCA (µg/L)
K1-05	18-Apr-02	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	**16 LO**	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-05	6-Dec-02	<1	<1	<1	<1	<1	<1	<1	<1	**17**	<1	<1	<1	<1	<1	<3	<1
K1-05	29-Jan-03	<1	<1	<1	<1	<1	<1	<1	<1	**22**	<1	<1	<1	<1	<1	<3	<1
K1-05	18-Apr-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	**15**	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	24-Jul-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**14**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-05	19-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**13**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-05	19-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**13**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-05	29-Jan-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**12**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-05	10-May-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**13**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-05	1-Dec-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**13 J**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-05	1-Mar-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**13**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-05	13-Apr-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**13**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-05	7-Jul-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**12**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	7-Jul-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**11**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	5-Oct-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**15**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	5-Jan-06	<1	<1 B	<1	<1	<1	<1	<1	<1	**16**	<1	<1	<0.5	<1	<1	<1	<1
K1-05	6-Apr-06	<1	<1	<1	<1	<1	<1	<1	<1	**15**	<1	<1	<0.5	<1	<1	<1	<1
K1-07	20-Jan-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-07	20-Jan-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-07	4-Apr-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-07	25-Jul-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-07	10-Oct-88	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	10-Oct-88	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	23-Jan-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	11-Apr-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	24-Jul-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	25-Oct-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P		<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	11-Jan-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	11-Apr-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	10-Jul-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	9-Oct-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	15-Jan-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	9-Apr-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	9-Jul-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	16-Oct-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	16-Jan-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	16-Jan-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	14-Apr-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	25-Jul-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	26-Oct-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	26-Oct-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-14. Ground and surface water analyses for volatile organic compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	Freon 113 (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	Freon 11 (µg/L)	Vinyl Chloride (µg/L)	Methylene chloride (µg/L)	1,1,2-TCA (µg/L)
K1-07	26-Jul-93	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	26-Jul-93	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-07	4-Nov-93	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-07	13-Oct-94	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-07	18-Nov-94	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-07	11-May-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	31-Jul-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	12-Oct-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	12-Oct-95	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-07	18-Jan-96	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	12-Apr-96	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	31-Jul-96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	11-Oct-96	<1 H	<1 H	<1 H	<1 H	<1 H			<1 H	<1 H	<1 H	<1 H	<0.5 H	<1 H	<2 H	<1 H	<1 H
K1-07	4-Apr-97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	16-Oct-97	<1	<1	<1	<1	<1			<1	<1	<1	<1	<0.5	<1	<2	<1	<1
K1-07	15-Apr-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	15-Oct-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	12-Apr-99	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-07	4-Oct-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	19-Apr-00	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5
K1-07	25-Oct-00	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H		<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<3 H	<1 H
K1-07	23-Apr-01	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L
K1-07	23-Oct-01	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<3 HLO	<1 HLO
K1-07	23-Oct-01	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<3 HLO	<1 HLO
K1-07	18-Apr-02	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-07	6-Dec-02	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1
K1-07	30-Jan-03	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<3 L	<1 L
K1-07	1-May-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
K1-07	28-Aug-03	<0.5 IJL	<0.5 IJL	<0.5 IJL	<0.5 IJL	<0.5 IJL	<0.5	<0.5	<0.5 IJL	<0.5	<0.5	<0.5 IJL	<0.5 IJL	<0.5 IJL	<0.5 IJL	<3 IJL	<0.5
K1-07	24-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-07	24-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-07	4-Feb-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-07	10-May-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-07	2-Dec-04	<0.5	<0.5 F	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-07	28-Feb-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-07	6-Apr-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-07	6-Apr-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-07	6-Jul-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	17-Oct-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	17-Jan-06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5 BE	<1	<1	<1	<1
K1-07	11-Apr-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-07	11-Apr-06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1
K1-08	21-Jan-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P	**1 P**	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-08	6-Apr-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-08	15-Jul-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P	**3 P**	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P

Table A-14. Ground and surface water analyses for volatile organic compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	Freon 113 (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	Freon 11 (µg/L)	Vinyl Chloride (µg/L)	Methylene chloride (µg/L)	1,1,2-TCA (µg/L)
K1-08	29-Nov-88	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	**3.7 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	24-Jan-89	<0.5 P	**5.9 P**	<0.5 P	<0.5 P	<0.5 P			<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	4-May-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	**3.4 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	24-Jul-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	**3.3 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	25-Oct-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P		**5.8 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	11-Jan-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**6.8 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	11-Apr-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**4.1 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	10-Jul-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**6.7 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	9-Oct-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**3.4 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	15-Jan-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**7.9 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	10-Apr-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**6.7 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	10-Apr-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**5.4 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	9-Jul-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**15 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	16-Oct-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**7.7 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	16-Jan-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**13 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	14-Apr-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**20 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	25-Jul-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**26 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	27-Oct-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**14 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**18**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**18**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**20**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**15**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	26-Jul-93	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**22**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	26-Jul-93	<1	<1	<1	<1	<1			<1	**30**	<1	<1	<0.5	<1	<2	<1	<1
K1-08	4-Nov-93	<1	<1	<1	<1	<1			<1	**25**	<1	<1	<0.5	<1	<2	<1	<1
K1-08	13-Oct-94	<1	<1	<1	<1	<1			<1	**37**	<1	<1	<0.5	<1	<2	<1	<1
K1-08	18-Nov-94	<1	<1	<1	<1	<1			<1	**37**	<1	<1	<0.5	<1	<2	<1	<1
K1-08	11-May-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**42**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	31-Jul-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**38 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	12-Oct-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**46**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	12-Oct-95	<1	<1	<1	<1	<1			<1	**54 D**	<1	<1	<0.5	<1	<2	<1	<1
K1-08	18-Jan-96	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**48 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	12-Apr-96	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**59 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	12-Apr-96	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**70 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	31-Jul-96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		**43**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	11-Oct-96	<1 H	<1 H	<1 H	<1 H	<1 H			<1 H	**98 H**	<1 H	<1 H	<0.5 H	<1 H	<2 H	<1 H	<1 H
K1-08	11-Oct-96	<1 H	<1 H	<1 H	<1 H	<1 H			<1 H	**95 H**	<1 H	<1 H	<0.5 H	<1 H	<2 H	<1 H	<1 H
K1-08	4-Apr-97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		**99 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	16-Oct-97	<1	<1	<1	<1	<1			<1	**63 D**	<1	<1	<0.5	<1	<2	<1	<1
K1-08	15-Apr-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		**72 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	15-Oct-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		**65 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	12-Apr-99	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	**42 DLO**	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-08	4-Oct-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**22 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	19-Apr-00	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**27**	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5
K1-08	24-Oct-00	<1	<1	<1	<1	<1	<1	<1	<1	**20**	<1	<1	<1	<1	<1	<3	<1

Table A-14. Ground and surface water analyses for volatile organic compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	Freon 113 (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	Freon 11 (µg/L)	Vinyl Chloride (µg/L)	Methylene chloride (µg/L)	1,1,2-TCA (µg/L)
K1-08	23-Apr-01	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	**14 L**	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L
K1-08	23-Oct-01	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	**23 HLO**	<1 HLO	<3 HLO	<1 HLO
K1-08	18-Apr-02	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	**17 LO**	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-08	13-Dec-02	<1	<1	<1	<1	<1	<1	<1	<1	**19**	<1	<1	<1	<1	<1	<3	<1
K1-08	7-Feb-03	<1	<1	<1	<1	<1	<1	<1	<1	**21**	<1	<1	<1	<1	<1	<3	<1
K1-08	2-May-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**18**	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
K1-08	4-Sep-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**17**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-08	24-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-08	24-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**19**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-08	3-Feb-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**19**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-08	11-May-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**22**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-08	2-Dec-04	<0.5	<0.5 F	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**23**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-08	2-Mar-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**25**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-08	2-Mar-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**25**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-08	6-Apr-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**26**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-08	6-Apr-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**26**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-08	6-Jul-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**22**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	13-Oct-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**23**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	18-Jan-06	<1	<1	<1	<1	<1	<1	<1	<1	**30**	<1	<1	<0.5 BE	<1	<1	<1	<1
K1-08	18-Jan-06	<1	<1	<1	<1	<1	<1	<1	<1	**29**	<1	<1	<0.5 BE	<1	<1	<1	<1
K1-08	11-Apr-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**32**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-08	11-Apr-06	<1	<1	<1	<1	<1	<1	<1	<1	**32**	<1	<1	<0.5	<1	<1	<1	<1
K1-09	21-Jan-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-09	6-Apr-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P		<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-09	15-Jul-88	<1 P	<1 P	<1 P	<1 P	<1 P			<1 P	**3 P**	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P	<1 P
K1-09	29-Nov-88	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	**4.1 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	24-Jan-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	**3.2 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	4-May-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	**4.2 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	4-May-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	**5.7 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	4-May-89	<0.6 P	<0.5 P	<0.4 P	<0.3 P	<0.2 P	<0.4 P	<0.4 P		**4 P**	<0.5 P	<0.5 P	<0.3 P	<0.4 P	<0.5 P	<2 P	<0.6 P
K1-09	24-Jul-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P			<0.5 P	**4.9 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	25-Oct-89	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P		**9.7 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	11-Jan-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**12 P**	<0.5 P	<0.5 P	**0.5 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	11-Jan-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**6.1 P**	<0.5 P	<0.5 P	**3.8 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	11-Apr-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**7.1 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	10-Jul-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**13 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	9-Oct-90	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**20 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	15-Jan-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**16 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	9-Apr-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**12 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	9-Jul-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**35 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	16-Oct-91	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**30 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	16-Jan-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**41 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	14-Apr-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**59 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	14-Apr-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**56 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	25-Jul-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**49 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P

Table A-14. Ground and surface water analyses for volatile organic compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	Freon 113 (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	Freon 11 (µg/L)	Vinyl Chloride (µg/L)	Methylene chloride (µg/L)	1,1,2-TCA (µg/L)
K1-09	27-Oct-92	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	**37 P**	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**47**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**48**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**19**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**35**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	26-Jul-93	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**36**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	26-Jul-93	<1	<1	<1	<1	<1			<1	**29**	<1	<1	<0.5	<1	<2	<1	<1
K1-09	4-Nov-93	<1	<1	<1	<1	<1			<1	**52**	<1	<1	<0.5	<1	<2	<1	<1
K1-09	13-Oct-94	<1	<1	<1	<1	<1			<1	**66**	<1	<1	<0.5	<1	<2	<1	<1
K1-09	18-Nov-94	<5 D	<5 D	<5 D	<5 D	<5 D			<5 D	**120 D**	<5 D	<5 D	<2.5 D	<5 D	<10 D	<5 D	<5 D
K1-09	10-May-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**77 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	31-Jul-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**64 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	12-Oct-95	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**93 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	12-Oct-95	<1	<1	<1	<1	<1			<1	**72 D**	<1	<1	<0.5	<1	<2	<1	<1
K1-09	18-Jan-96	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**97 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	18-Jan-96	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**87 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	12-Apr-96	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	**130 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	31-Jul-96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		**120 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	11-Oct-96	<1 H	<1 H	<1 H	<1 H	<1 H			<1 H	**150 H**	<1 H	<1 H	<0.5 H	<1 H	<2 H	<1 H	<1 H
K1-09	4-Apr-97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		**99 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	4-Apr-97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		**100 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	16-Oct-97	<1	<1	<1	<1	<1			<1	**120 D**	<1	<1	<0.5	<1	<2	<1	<1
K1-09	16-Oct-97	<1	<1	<1	<1	<1			<1	**100 D**	<1	<1	<0.5	<1	<2	<1	<1
K1-09	15-Apr-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		**130 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	15-Oct-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		**140 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	15-Oct-98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		**130 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	13-Apr-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**140 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	13-Apr-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**130 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	4-Oct-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**82 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	19-Apr-00	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**63 DH**	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5
K1-09	24-Oct-00	<1	<1	<1	<1	<1	<1	<1	<1	**80**	<1	<1	<1	<1	<1	<3	<1
K1-09	20-Apr-01	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	**30 D**	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L
K1-09	23-Oct-01	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	**64 HLO**	<1 HLO	<3 HLO	<1 HLO
K1-09	18-Apr-02	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	**45 LO**	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-09	6-Dec-02	<1	<1	<1	<1	<1	<1	<1	<1	**57**	<1	<1	<1	<1	<1	<3	<1
K1-09	31-Jan-03	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	<1 L	**56 L**	<1 L	<1 L	<1 L	<1 L	<1 L	<3 L	<1 L
K1-09	2-May-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**42**	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
K1-09	8-Sep-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**40**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-09	25-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**41**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-09	25-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**41**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-09	3-Feb-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**39**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-09	11-May-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**41**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-09	6-Dec-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**40**	<0.5	<0.5	<0.5	<0.5	<0.5 O	<1	<0.5
K1-09	6-Dec-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**38**	<0.5	<0.5	<0.5	<0.5	<0.5 O	<1	<0.5
K1-09	24-Feb-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**42**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5

Table A-14. Ground and surface water analyses for volatile organic compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	Freon 113 (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	Freon 11 (µg/L)	Vinyl Chloride (µg/L)	Methylene chloride (µg/L)	1,1,2-TCA (µg/L)
K1-09	6-Apr-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**40**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-09	6-Apr-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**40**	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
K1-09	1-Aug-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**34**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	13-Oct-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**27**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	19-Jan-06	<1	<1	<1	<1	<1	<1	<1	<1	**33**	<1	<1	<0.5 E	<1	<1	<1	<1
K1-09	12-Apr-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**51**	<0.5	<0.5	<0.5	<0.5 E	<0.5	<1	<0.5
K1-09	12-Apr-06	<1	<1	<1	<1	<1	<1	<1	<1	**51 F**	<1	<1	<0.5	<1 E	<1	<1	<1
W-865-01	30-Mar-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	**0.61**	<0.5	<0.5	<1 F	<0.5
W-865-01	24-May-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
W-865-01	24-May-99	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-865-01	25-Aug-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-01	9-Dec-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-01	7-Mar-00	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-865-01	24-May-00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-01	21-Jul-00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5
W-865-01	16-Nov-00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-01	26-Jan-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.8 B**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-01	25-Apr-01	<0.5 HLO	<0.5 HLO	<0.5 HLO	<0.5 HLO	<0.5 HLO	<0.5 HLO	<0.5 HLO	<0.5 HLO	<0.5 HLO	<0.5 HLO	<0.5 HLO	<0.5 HLO	<0.5 HLO	<0.5 HLO	<0.5 HLO	<0.5 HLO
W-865-01	14-Aug-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-01	31-Oct-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-01	31-Jan-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5
W-865-01	30-May-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-01	31-Jul-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-01	19-Feb-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-01	29-May-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-01	6-Aug-03	<0.5	**2**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-01	17-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-01	3-Mar-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-01	5-May-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<3	<0.5
W-865-01	3-Nov-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5 LO	<0.5	<0.5	<3	<0.5
W-865-01	29-Jan-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-01	17-May-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-01	24-Aug-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-01	19-Oct-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-01	16-Jan-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-01	11-Apr-06	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5
W-865-02	29-Mar-00	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	**1.4 H**	<1 H	<1 H	**1.4 H**	<1 H	<3 H	<1 H
W-865-02	24-May-00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	**35**	**1.9**	<0.5	<0.5	**2.2**	<0.5	<0.5	<0.5
W-865-02	21-Jul-00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**110 D**	**2.3**	<0.5	<0.5	**1.8**	<0.5	<1	<0.5
W-865-02	21-Jul-00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**120 DLO**	**1.7 O**	<0.5	<0.5 O	**1**	<0.5	<0.5	<0.5
W-865-02	16-Nov-00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**70 D**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-02	30-Jan-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**99 D**	**2.6**	<0.5	<0.5	**2.2**	<0.5	<0.5	<0.5
W-865-02	25-Apr-01	<3 D	<3 D	<3 D	<3 D	<3 D	<3 D	<3 D	<5 D	**110 D**	**3.2 D**	<3 D	<3 D	<3 D	<3 D	<5 D	<3 D
W-865-02	25-Apr-01	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-865-02	28-Aug-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**160**	**2.6**	<0.5	<0.5 L	**1.9**	<0.5	<0.5	<0.5

Table A-14. Ground and surface water analyses for volatile organic compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	Freon 113 (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	Freon 11 (µg/L)	Vinyl Chloride (µg/L)	Methylene chloride (µg/L)	1,1,2-TCA (µg/L)
W-865-02	31-Oct-01	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	**140 DLO**	**3.5 LO**	<0.5 LO	<0.5 LO	**2.5 LO**	<0.5 LO	<0.5 LO	<0.5 LO
W-865-02	31-Jan-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**110 D**	**2.7**	<0.5	<0.5 L	**2**	<0.5	<0.5	<0.5
W-865-02	23-May-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**110 D**	**3**	<0.5	<0.5	**2.2**	<0.5	<0.5	<0.5
W-865-02	31-Jul-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**83 D**	**2.5**	<0.5	<0.5	**2**	<0.5	<0.5	<0.5
W-865-02	19-Feb-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**220 D**	**3**	<0.5	<0.5	**2**	<0.5	<3	<0.5
W-865-02	12-Jun-03	<0.5	<0.5	<0.5	<0.5	**0.61**	<0.5	<0.5	<1	**110 D**	**2.2**	<0.5	<0.5	**1.6**	<0.5	<1	<0.5
W-865-02	12-Jun-03	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	<0.5	<0.5	**120 D**	**3.1**	<0.5	<0.5	**2.2**	<0.5	<3	<0.5
W-865-02	6-Aug-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**47 D**	**3.8**	<0.5	<0.5	**1.4**	<0.5	<3	<0.5
W-865-02	17-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**93 D**	**2.3**	<0.5	<0.5	**1.2**	<0.5	<3	<0.5
W-865-02	24-Feb-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**120**	**2.2**	<0.5	<0.5	**2.2**	<0.5	<3	<0.5
W-865-02	11-May-04	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<0.5 D	**90 D**	**5.8 D**	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<15 D	<2.5 D
W-865-02	8-Sep-04									**97 DIJ**	**2.3 IJ**			**1.6 IJ**			
W-865-02	18-Nov-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**89 D**	**2**	<0.5	<0.5 L	<0.5	<0.5	<3	<0.5
W-865-02	29-Jan-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**130 D**	**2.9**	<0.5	<0.5	**2**	<0.5	<0.5	<0.5
W-865-02	13-May-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**99 D**	**2.4**	<0.5	<0.5	**1.4**	<0.5	<1	<0.5
W-865-02	13-May-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**110**	**2.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-02	24-Aug-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	**110 D**	**2.7**	<0.5	<0.5	**1.5**	<0.5	<0.5	<0.5
W-865-02	10-Oct-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**89 D**	**2.5**	<0.5	<0.5 B	**1.4**	<0.5	<1	<0.5
W-865-02	10-Oct-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	**87 D**	**2.4**	<0.5	<0.5 L	**2.1**	<0.5	<0.5	<0.5
W-865-02	16-Jan-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**96**	**2.2**	<0.5	<0.5	**1.4**	<0.5	<1	<0.5
W-865-02	16-Jan-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**90 D**	**2.2**	<0.5	<0.5	**1.7**	<0.5	<0.5	<0.5
W-865-02	5-Apr-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**120 D**	**2.4**	<0.5	<0.5	**1.5**	<0.5	<0.5	<0.5
W-865-03	29-Sep-00	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<3	<1
W-865-03	16-Nov-00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-03	30-Jan-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-03	25-Apr-01	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-865-03	14-Aug-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-03	30-Oct-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-03	31-Jan-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5
W-865-03	30-May-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-03	31-Jul-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-03	19-Feb-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-03	29-May-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-03	6-Aug-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-03	17-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-03	3-Mar-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-03	5-May-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<3	<0.5
W-865-03	2-Nov-04	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO		<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<3 LO	<0.5 LO
W-865-03	29-Jan-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-03	20-May-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-03	24-Aug-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-03	19-Oct-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-03	16-Jan-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-03	11-Apr-06	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5
W-865-04	28-Sep-00	<1 LO	<1 LO	<1 LO	<1 LO	<1 LO	<1 LO	<1 LO	<0.5 LO	<1 LO	<1 LO	<1 LO	<1 LO	<1 LO	<1 LO	<3 LO	<1 LO

Table A-14. Ground and surface water analyses for volatile organic compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	Freon 113 (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	Freon 11 (µg/L)	Vinyl Chloride (µg/L)	Methylene chloride (µg/L)	1,1,2-TCA (µg/L)
W-865-04	16-Nov-00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-04	26-Jan-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.8 B**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-04	25-Apr-01	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-865-04	14-Aug-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-04	30-Oct-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-04	31-Jan-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5
W-865-04	23-May-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-04	31-Jul-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-04	19-Feb-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-04	29-May-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-04	6-Aug-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-04	17-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-04	24-Feb-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-04	5-May-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<3	<0.5
W-865-04	5-May-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<3	<0.5
W-865-04	18-Nov-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5 L	<0.5	<0.5	<3	<0.5
W-865-04	29-Jan-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-04	13-May-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-04	18-Aug-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-04	6-Oct-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5
W-865-04	16-Jan-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-04	5-Apr-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-05	10-Apr-00	<1 LO	<1 LO	<1 LO	<1 LO	<1 LO	<1 LO	<1 LO	<0.5 LO	**270 DLO**	<1 LO	<1 LO	<1 LO	<1 LO	<1 LO	<3 LO	<1 LO
W-865-05	30-Mar-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**260 D**	**1.2**	<0.5	<0.5	<0.5	<0.5	<1	<0.5
W-865-05	11-Jun-01	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	**34 H**	<1 H	<1 H	<3 H	<1 H
W-865-05	22-Aug-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**220 D**	**0.89**	<0.5	<0.5	**0.79**	<0.5 L	<1	<0.5
W-865-05	22-Aug-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**260 D**	**0.9 O**	<0.5	<0.5 LO	**2.1**	<0.5	<0.5	<0.5
W-865-05	31-Oct-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**350 D**	**1.1**	<0.5	<0.5	**0.88**	<0.5	<1	<0.5
W-865-05	31-Oct-01	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	**370 DLO**	**1.3 LO**	<0.5 LO	<0.5 LO	**1.2 LO**	<0.5 LO	<0.5 LO	<0.5 LO
W-865-05	28-Feb-02	<0.5	<0.5	<0.5	<0.5	**0.9**	<0.5	<0.5	<0.5	**490 DLO**	**1.2**	<0.5	<0.5	**1**	<0.5	<0.5	<0.5
W-865-05	30-May-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**340 D**	**0.8**	<0.5	<0.5	**1.2**	<0.5	<0.5	<0.5
W-865-05	31-Jul-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**270 D**	**1.2**	<0.5	<0.5	**1.2**	<0.5	<0.5	<0.5
W-865-05	20-Jun-03	<0.5	<0.5	<0.5	<0.5	**0.9**	<0.5	<0.5	<0.5	**260 D**	**1.1**	<0.5	<0.5	**1.1**	<0.5	<3	<0.5
W-865-05	15-Sep-03	<0.5	<0.5	<0.5	<0.5	**0.54**	<0.5	<0.5	<1	**280 D**	**1**	<0.5	<0.5	**0.91**	<0.5	<1	<0.5
W-865-05	15-Sep-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**300 D**	**1**	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-05	2-Dec-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**300 D**	**1**	<0.5	<0.5	**1**	<0.5	<3	<0.5
W-865-05	2-Mar-04	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	**290 D**	<10 D	<10 D	<10 D	<10 D	<10 D	<60 D	<10 D
W-865-05	11-May-04	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<0.5 D	**220 D**	<10 D	<10 D	<10 D	<10 D	<10 D	<60 D	<10 D
W-865-05	8-Sep-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**200 D**	**0.97**	<0.5	<0.5	**0.82**	<0.5	<1	<0.5
W-865-05	8-Sep-04									**180 DIJ**	**0.8 IJ**			**1 IJ**			
W-865-05	18-Nov-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**210 D**	**0.7**	<0.5	<0.5 L	<0.5	<0.5	<3	<0.5
W-865-05	18-Feb-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**220 D**	**1**	<0.5	<0.5	**1.2**	<0.5	<0.5	<0.5
W-865-05	18-Feb-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**250 D**	**0.9**	<0.5	<0.5	**1.1**	<0.5	<0.5	<0.5
W-865-05	16-May-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	**220 D**	**0.8**	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5
W-865-05	16-May-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	**180**	**0.8**	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5

Table A-14. Ground and surface water analyses for volatile organic compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	Freon 113 (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	Freon 11 (µg/L)	Vinyl Chloride (µg/L)	Methylene chloride (µg/L)	1,1,2-TCA (µg/L)
W-865-05	24-Aug-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	**340 D**	**1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-05	24-Aug-05	<0.5	<0.5	<0.5	<0.5	**1.1**	<0.5	<0.5	<0.5	**200 D**		<0.5	<0.5		<0.5	<0.5 L	
W-865-05	10-Oct-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	**300 D**	**0.9**	<0.5	<0.5 L	**1.5 IJ**	<0.5	<0.5	<0.5
W-865-05	10-Oct-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	**260 D**	**0.9**	<0.5	<0.5 L	**1.5 IJ**	<0.5	<0.5	<0.5
W-865-05	16-Jan-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**290 D**	**1**	<0.5	<0.5	**1.3**	<0.5	<0.5	<0.5
W-865-05	16-Jan-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**260 D**	**0.9**	<0.5	<0.5	**1.2**	<0.5	<0.5	<0.5
W-865-05	12-Apr-06	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<200 D	**260 D**	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D
W-865-05	12-Apr-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**250 D**	**1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-07	29-Sep-00	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	<3	<1
W-865-07	16-Nov-00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-07	26-Jan-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.8 B**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-07	25-Apr-01	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-865-07	14-Aug-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-07	30-Oct-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-07	31-Jan-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5
W-865-07	23-May-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-07	31-Jul-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-07	19-Feb-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-07	29-May-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-07	6-Aug-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-07	2-Dec-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-07	24-Feb-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-07	5-May-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<3	<0.5
W-865-07	5-May-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<3	<0.5
W-865-07	18-Nov-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5 L	<0.5	<0.5	<3	<0.5
W-865-07	29-Jan-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-07	13-May-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-07	18-Aug-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-07	6-Oct-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5
W-865-07	16-Jan-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-07	5-Apr-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1802	27-Jun-03	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<3 H	<1 H
W-865-1802	26-Aug-03	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<3	<0.5
W-865-1802	22-Dec-03	<1 H	<1 H	<1 H	<1 H	<1 HL	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 HL	<1 H	<1 H	<3 H	<1 H
W-865-1802	1-Mar-04	<1 H	<1 H	<1 H	<1 H	<1 HL	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 HL	<1 H	<1 H	<3 H	<1 H
W-865-1802	9-Jun-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-1802	17-Nov-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-1802	3-Mar-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
W-865-1802	3-Mar-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1802	10-May-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1802	24-Aug-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1802	6-Oct-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5
W-865-1802	15-Feb-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1802	3-Apr-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
W-865-1802	3-Apr-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-14. Ground and surface water analyses for volatile organic compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	Freon 113 (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	Freon 11 (µg/L)	Vinyl Chloride (µg/L)	Methylene chloride (µg/L)	1,1,2-TCA (µg/L)
W-865-1803	26-Jun-03	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<3 H	<1 H
W-865-1803	26-Aug-03	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<3	<0.5
W-865-1803	3-Mar-04	<1 H	<1 H	<1 H	<1 H	<1 HLO	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 HLO	<1 H	<1 H	<3 H	<1 H
W-865-1803	8-Jun-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-1803	3-Nov-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5 LO	<0.5	<0.5	<3	<0.5
W-865-1803	10-Mar-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1803	17-May-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1803	30-Aug-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1803	3-Nov-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1803	22-Feb-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1803	12-Apr-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1804	23-Jun-03	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1
W-865-1804	26-Aug-03	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<3	<0.5
W-865-1804	18-Dec-03	<1	<1	<1	<1	<1 L	<1	<1	<1	<1	<1	<1	<1 L	<1	<1	<3	<1
W-865-1804	4-Mar-04	<1 H	<1 H	<1 H	<1 H	<1 HL	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 HL	<1 H	<1 H	<3 H	<1 H
W-865-1804	9-Jun-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-1804	3-Nov-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5 LO	<0.5	<0.5	<3	<0.5
W-865-1804	10-Mar-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1804	17-May-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1804	30-Aug-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1804	3-Nov-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1804	22-Feb-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1804	12-Apr-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2002	21-Sep-04									**41 IJ**	**1 IJ**			**1 IJ**			
W-865-2002	17-Nov-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**29**	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-2002	10-Mar-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**39**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2002	19-May-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**50 D**	**1.2**	<0.5	<0.5	**1.3**	<0.5	<0.5	<0.5
W-865-2002	19-Sep-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**37**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2002	8-Nov-05	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<1	**31**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2002	19-Jan-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**35**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2002	4-Apr-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**39**	<0.5	<0.5	<0.5	**0.9**	<0.5	<0.5	<0.5
W-865-2003	16-Sep-04									**19 HIJ**							
W-865-2003	17-Nov-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**19**	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-2003	10-Mar-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**23**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2003	19-May-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**23**	<0.5	<0.5	<0.5	**0.9**	<0.5	<0.5	<0.5
W-865-2003	19-Sep-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**26**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2003	8-Nov-05	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<1	**18**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2003	19-Jan-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**23**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2003	5-Apr-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**25**	<0.5	<0.5	<0.5	**0.8**	<0.5	<0.5	<0.5
W-865-2004	30-Mar-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		**160 D**	**10**	<0.5	<0.5	**5.1**	<0.5	<3	<0.5
W-865-2004	25-May-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5		**180 DH**	**6.8**	<0.5	<0.5	**4**	<0.5	<3	<0.5
W-865-2004	24-Aug-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	**170 DH**	**8.6**	<0.5	<0.5	**3.2**	<0.5	<3	<0.5
W-865-2004	8-Nov-05	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	**180 D**	**8.2**	<0.5	<0.5	**3.8**	<0.5	<3	<0.5
W-865-2004	15-Mar-06	<0.5	<0.5	<0.5	<0.5	**1.8**	<0.5	<0.5	<0.5	**180 DH**	**7.5**	<0.5	<0.5	**3.9**	<0.5	<3	<0.5
W-865-2004	12-Apr-06	<50 DH	<50 DH	<50 DH	<50 DH	<50 DH	<50 DH	<50 DH	<50 DH	**220 DH**	<50 DH	<50 DH	<50 DH	<50 DH	<50 DH	<300 DH	<50 DH

Table A-14. Ground and surface water analyses for volatile organic compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	Freon 113 (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	Freon 11 (µg/L)	Vinyl Chloride (µg/L)	Methylene chloride (µg/L)	1,1,2-TCA (µg/L)
W-865-2005	21-Sep-04									**3.9 IJ**							
W-865-2005	17-Nov-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**5.5**	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-2005	24-Mar-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**8.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2005	16-May-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	**7.2**	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5
W-865-2005	31-Aug-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	**6.2**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2005	7-Dec-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**7.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2005	24-Feb-06	<0.5 B	<0.5 B	<0.5 B	<0.5 B	<0.5 B	<0.5 B	<0.5 B	<1 B	**7.8 B**	<0.5 B	<0.5 B	<0.5 BL	<0.5 B	<0.5 B	<0.5 B	<0.5 B
W-865-2005	8-Jun-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**7.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2121	30-Mar-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		**17**	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-2121	24-May-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		**13**	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-865-2121	31-Aug-05	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 HL	<0.5 H	<0.5 H	<0.5 H	**16 H**	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<3 H	<0.5 H
W-865-2121	8-Nov-05	<1	<1	<1	<1	<1 O	<1	<1	<1	**13**	<1	<1	<0.5	<1	<1	<1	<1
W-865-2121	15-Feb-06	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	**17 H**	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<3 H	<0.5 H
W-865-2121	26-Apr-06	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	**16 H**	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<3 H	<0.5 H
W-865-2133	21-Feb-06	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<1 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<3 H	<0.5 H
W-865-2133	12-Jun-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-896-1806	8-Nov-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-896-1806	27-Mar-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-896-1806	12-Jun-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-PIT1-01	25-May-99	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-PIT1-01	23-Aug-99	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-PIT1-01	9-Dec-99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-01	15-Jun-00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-01	21-Dec-00	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1
W-PIT1-01	13-Mar-01	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<3 H	<1 H
W-PIT1-01	17-May-01	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-01	13-Aug-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-01	26-Oct-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-01	28-Feb-02	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-PIT1-01	29-May-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-01	8-Aug-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-01	19-Aug-03	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<3	<0.5
W-PIT1-02	21-Mar-01	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<3 H	<1 H
W-PIT1-02	17-May-01	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-02	13-Aug-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-02	26-Oct-01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-02	28-Feb-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-02	29-May-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-02	8-Aug-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-02	29-Aug-03	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<3	<0.5
W-PIT1-02	4-Nov-03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-PIT1-02	24-Feb-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-PIT1-02	14-Jun-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
W-PIT1-02	13-Nov-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5
W-PIT1-02	29-Jan-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-14. Ground and surface water analyses for volatile organic compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	Freon 113 (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	TCE (µg/L)	Freon 11 (µg/L)	Vinyl Chloride (µg/L)	Methylene chloride (µg/L)	1,1,2-TCA (µg/L)
W-PIT1-02	13-May-05	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5
W-PIT1-02	31-Aug-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-02	16-Nov-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-02	3-Feb-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-02	11-May-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
W-PIT1-02	11-May-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Notes:

µg/L = Micrograms per liter.
1,1,1-TCA = 1,1,1-trichloroethane.
1,1,2-TCA = 1,1,2-trichloroethane.
1,1-DCA = 1,1-dichloroethane.
1,1-DCE = 1,1-dichloroethylene.
1,2-DCA = 1,2-dichloroethane.
1,2-DCE = 1,2-dichloroethylene.
B = Analyte found in method blank
D = Analysis performed at a secondary dilution or concentration (i.e., vapor samples)
E = The analyte was detected below LLNL reporting limit, but above analytical laboratory minimum detection limit
F = Analyte found in field blank, trip blank, or equipment blank
H = Sample analyzed outside of holding time, sample results should be evaluated
I = Surrogate recoveries outside of QC limits
J = Analyte was postively identified; the associated numerical value is approximate concentration of the analyte
L = Spike accuracy not within control limits
O = Duplicate spike or sample precision not within control limits
P = Indicates that the absence of a data qualifier flag does not mean that the data does not need qualification, but that the implementation of electronic data qualifier flags was not yet established.
PCE = Tetrachloroethylene.
TCE = Trichloroethylene.

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
K1-02A	23-May-96					<0.5	<0.5	<0.5	<0.5
K1-02A	21-May-97					<0.5	<0.5	<0.5	<0.5
K1-02B	19-Jan-88	<1 P	<1 P	<1 P					<1 P
K1-02B	4-Apr-88	<1 P	<1 P	<1 P					<1 P
K1-02B	4-Apr-88	<1 P	<1 P	<1 P					<1 P
K1-02B	25-Jul-88	<1 P	<1 P	<1 P					<1 P
K1-02B	3-Oct-88					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	12-Jan-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	10-Apr-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	19-Jul-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	31-Jul-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	24-Oct-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	10-Jan-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	10-Apr-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	10-Apr-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	9-Jul-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	8-Oct-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	14-Jan-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	8-Apr-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	8-Jul-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	15-Nov-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	15-Jan-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	14-Apr-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	25-Jul-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	26-Oct-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-02B	2-Feb-93					<0.5	<0.5	<0.5	<0.5
K1-02B	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	2-Feb-93					<4	<3	<3	
K1-02B	2-Feb-93					<0.5	<0.5	<0.5	<0.5
K1-02B	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	2-Feb-93					<4	<3	<3	
K1-02B	17-Mar-93					<0.5	<0.5	<0.5	<0.5
K1-02B	17-Mar-93					<4	<2	<4	<0.7
K1-02B	24-Mar-93					<0.5	<0.5	<0.5	<0.5
K1-02B	24-Mar-93					<4	<2	<4	<0.7
K1-02B	7-Apr-93					<0.5	<0.5	<0.5	<0.5
K1-02B	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	7-Apr-93					<4	<3	<3	
K1-02B	26-Jul-93					<0.5	<0.5	<0.5	<0.5

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
K1-02B	26-Jul-93	<1	<1	<1	<2	<1	<1	<1	<1
K1-02B	26-Jul-93					<10	<10	<10	
K1-02B	5-Nov-93	<1	<1	<1	<2	<1	<1	<1	<1
K1-02B	5-Nov-93					<10	<10	<10	
K1-02B	13-Oct-94	<1	<1	<1	<2	<1	<1	<1	<1
K1-02B	13-Oct-94					<10	<10	<10	
K1-02B	11-Oct-95					<0.5	<0.5	<0.5	<0.5
K1-02B	11-Oct-95					<10	<10	<10	
K1-02B	11-Oct-95	<1	<1	<1	<2	<1	<1	<1	<1
K1-02B	17-Jan-96					<0.5	<0.5	<0.5	<0.5
K1-02B	10-Apr-96					<0.5	<0.5	<0.5	<0.5
K1-02B	30-Jul-96					<0.5	<0.5	<0.5	<0.5
K1-02B	9-Oct-96					<5	<5	<5	
K1-02B	9-Oct-96	<1	<1	<1	<2	<1	<1	<1	<1
K1-02B	3-Apr-97					<0.5	<0.5	<0.5	<0.5
K1-02B	13-Oct-97	<1	<1	<1	<2	<1	<1	<1	<1
K1-02B	13-Oct-97					<5	<5	<5	
K1-02B	9-Apr-98					<0.5	<0.5	<0.5	<0.5
K1-02B	13-Oct-98					<0.5	<0.5	<0.5	<0.5
K1-02B	13-Oct-98					<5	<5	<5	
K1-02B	15-Apr-99					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-02B	7-Oct-99					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-02B	7-Oct-99					<5	<5	<5 L	
K1-02B	18-Apr-00					<0.5	<0.5	<0.5	<0.5
K1-02B	19-Oct-00	<1	<1	<1	<1	<1	<1	<1	<1
K1-02B	19-Oct-00					<5	<5	<5 LO	
K1-02B	18-Apr-01					<0.5	<0.5	<0.5	<0.5
K1-02B	22-Oct-01					<0.5	<0.5	<0.5	<0.5
K1-02B	22-Oct-01	<0.5 H	<0.5 H	<0.5 H	<0.5 H				
K1-02B	22-Oct-01					<5	<5	<5 O	
K1-02B	16-Apr-02					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-02B	4-Dec-02	<1	<1	<1	<1	<1	<1	<1	<1
K1-02B	4-Dec-02					<5	<5	<5	
K1-02B	30-Jan-03					<1 L	<1 L	<1 L	<1 L
K1-02B	17-Apr-03					<0.5	<0.5	<0.5	<0.5
K1-02B	17-Apr-03					<0.5	<0.5	<0.5	<0.5
K1-02B	8-Sep-03					<0.5	<0.5	<0.5	<0.5
K1-02B	4-Nov-03	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-02B	4-Nov-03					<2	<2	<2	

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
K1-02B	4-Nov-03					<0.5	<0.5	<0.5	<0.5
K1-02B	28-Jan-04					<0.5	<0.5	<0.5	<0.5
K1-02B	20-May-04					<0.5	<0.5	<0.5	<0.5
K1-02B	20-May-04					<0.5	<0.5	<0.5	<0.5
K1-02B	22-Nov-04	<0.5 H	<0.5 H	<0.5 H	<1 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H
K1-02B	23-Feb-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-02B	23-Feb-05					<2	<2	<2	
K1-02B	12-Apr-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-02B	12-Apr-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-02B	6-Jul-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-02B	4-Oct-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-02B	4-Oct-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-02B	3-Jan-06	<1	<1	<1	<2	<1	<1	<1	<1
K1-02B	3-Jan-06					<5 D	<5 D	<5 D	
K1-02B	12-Apr-06	<1	<1	<1	<2	<1	<1	<1	<1
K1-02B	12-Apr-06	<1	<1	<1	<2	<1	<1	<1	<1
K1-03	19-Jan-88	<1 P	<1 P	<1 P					<1 P
K1-03	4-Apr-88	<1 P	<1 P	<1 P					<1 P
K1-03	25-Jul-88	<1 P	<1 P	<1 P					<1 P
K1-03	4-Oct-88					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	12-Jan-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	11-Apr-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	24-Jul-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	24-Oct-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	10-Jan-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	10-Apr-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	9-Jul-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	8-Oct-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	8-Oct-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	14-Jan-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	8-Apr-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	8-Jul-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	15-Nov-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	15-Jan-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	14-Apr-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	25-Jul-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	27-Oct-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-03	2-Feb-93					<0.5	<0.5	<0.5	<0.5
K1-03	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
K1-03	2-Feb-93					<4	<3	<3	
K1-03	7-Apr-93					<0.5	<0.5	<0.5	<0.5
K1-03	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-03	7-Apr-93					<4	<3	<3	
K1-03	26-Jul-93					<0.5	<0.5	<0.5	<0.5
K1-03	26-Jul-93	<1	<1	<1	<2	<1	<1	<1	<1
K1-03	26-Jul-93					<10	<10	<10	
K1-03	4-Nov-93	<1	<1	<1	<2	<1	<1	<1	<1
K1-03	4-Nov-93					<10	<10	<10	
K1-03	13-Oct-94	<1	<1	<1	<2	<1	<1	<1	<1
K1-03	13-Oct-94					<10	<10	<10	
K1-03	11-Oct-95					<0.5	<0.5	<0.5	<0.5
K1-03	11-Oct-95					<10	<10	<10	
K1-03	11-Oct-95	<1	<1	<1	<2	<1	<1	<1	<1
K1-03	11-Oct-95					<0.5	<0.5	<0.5	<0.5
K1-03	11-Oct-95					<10	<10	<10	
K1-03	11-Oct-95	<1	<1	<1	<2	<1	<1	<1	<1
K1-03	18-Jan-96					<0.5	<0.5	<0.5	<0.5
K1-03	30-Jul-96					<0.5	<0.5	<0.5	<0.5
K1-03	10-Oct-96	<1	<1	<1	<2	<1	<1	<1	<1
K1-03	3-Apr-97					<0.5	<0.5	<0.5	<0.5
K1-03	14-Oct-97	<1	<1	<1	<2	<1	<1	<1	<1
K1-03	14-Oct-97					<5	<5	<5	
K1-03	9-Apr-98					<0.5	<0.5	<0.5	<0.5
K1-03	9-Apr-98					<0.5	<0.5	<0.5	<0.5
K1-03	13-Oct-98					<0.5	<0.5	<0.5	<0.5
K1-03	13-Oct-98					<5	<5	<5	
K1-03	15-Apr-99					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-03	6-Oct-99					<0.5	<0.5	<0.5	<0.5
K1-03	6-Oct-99					<5	<5	<5 L	
K1-03	18-Apr-00					<0.5	<0.5	<0.5	<0.5
K1-03	23-Oct-00	<1	<1	<1	<1	<1	<1	<1	<1
K1-03	23-Oct-00					<5	<5	<5	
K1-03	23-Oct-00	<1	<1	<1	<1	<1	<1	<1	<1
K1-03	23-Oct-00					<5	<5	<5	
K1-03	18-Apr-01					<0.5	<0.5	<0.5	<0.5
K1-03	22-Oct-01					<0.5	<0.5	<0.5	<0.5
K1-03	22-Oct-01	<0.5 H	<0.5 H	<0.5 H	<0.5 H				
K1-03	22-Oct-01					<5	<5	<5 O	

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
K1-03	16-Apr-02					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-03	4-Dec-02	<1	<1	<1	<1	<1	<1	<1	<1
K1-03	4-Dec-02					<5	<5	<5	
K1-03	30-Jan-03					<1 L	<1 L	<1 L	<1 L
K1-03	17-Apr-03					<0.5	<0.5	<0.5	<0.5
K1-03	24-Jul-03					<0.5	<0.5	<0.5	<0.5
K1-03	4-Nov-03	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-03	4-Nov-03					<2	<2	<2	
K1-03	4-Nov-03					<0.5	<0.5	<0.5	<0.5
K1-03	28-Jan-04					<0.5	<0.5	<0.5	<0.5
K1-03	28-Jan-04					<0.5	<0.5	<0.5	<0.5
K1-03	20-May-04					<0.5	<0.5	<0.5	<0.5
K1-03	30-Nov-04	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-03	30-Nov-04					<2	<2	<2	
K1-03	22-Feb-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-03	22-Feb-05					<2	<2	<2	
K1-03	13-Apr-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-03	28-Jul-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-03	4-Oct-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-03	3-Jan-06	<1	<1	<1	<2	<1	<1	<1	<1
K1-03	3-Jan-06					<5	<5	<5	
K1-03	3-Apr-06	<1	<1	<1	<2	<1	<1	<1	<1
K1-04	19-Jan-88	<1 P	<1 P	<1 P					<1 P
K1-04	4-Apr-88	<1 P	<1 P	<1 P					<1 P
K1-04	25-Jul-88	<1 P	<1 P	<1 P					<1 P
K1-04	28-Nov-88					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	24-Jan-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	24-Jan-89					<0.5	<0.5	<0.5	<0.5
K1-04	11-Apr-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	19-Jul-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	24-Oct-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	10-Jan-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	10-Apr-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	9-Jul-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	8-Oct-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	14-Jan-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	14-Jan-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	8-Apr-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	9-Jul-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
K1-04	15-Oct-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	15-Jan-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	14-Apr-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	25-Jul-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	25-Jul-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	27-Oct-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-04	2-Feb-93					<0.5	<0.5	<0.5	<0.5
K1-04	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	2-Feb-93					<4	<3	<3	
K1-04	7-Apr-93					<0.5	<0.5	<0.5	<0.5
K1-04	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-04	7-Apr-93					<4	<3	<3	
K1-04	26-Jul-93					<0.5	<0.5	<0.5	<0.5
K1-04	26-Jul-93	<1	<1	<1	<2	<1	<1	<1	<1
K1-04	26-Jul-93					<10	<10	<10	
K1-04	26-Jul-93					<0.5	<0.5	<0.5	<0.5
K1-04	26-Jul-93	<1	<1	<1	<2	<1	<1	<1	<1
K1-04	26-Jul-93					<10	<10	<10	
K1-04	4-Nov-93	<1	<1	<1	<2	<1	<1	<1	<1
K1-04	4-Nov-93					<10	<10	<10	
K1-04	13-Oct-94	<1	<1	<1	<2	<1	<1	<1	<1
K1-04	13-Oct-94					<10	<10	<10	
K1-04	10-May-95					<0.5	<0.5	<0.5	<0.5
K1-04	31-Jul-95					<0.5	<0.5	<0.5	<0.5
K1-04	11-Oct-95					<0.5	<0.5	<0.5	<0.5
K1-04	11-Oct-95					<10	<10	<10	
K1-04	11-Oct-95	<1	<1	<1	<2	<1	<1	<1	<1
K1-04	18-Jan-96					<0.5	<0.5	<0.5	<0.5
K1-04	11-Apr-96					<0.5	<0.5	<0.5	<0.5
K1-04	31-Jul-96					<0.5	<0.5	<0.5	<0.5
K1-04	31-Jul-96					<0.5	<0.5	<0.5	<0.5
K1-04	10-Oct-96	<1	<1	<1	<2	<1	<1	<1	<1
K1-04	3-Apr-97					<0.5	<0.5	<0.5	<0.5
K1-04	14-Oct-97	<1	<1	<1	<2	<1	<1	<1	<1
K1-04	14-Oct-97					<5	<5	<5	
K1-04	9-Apr-98					<0.5	<0.5	<0.5	<0.5
K1-04	14-Oct-98					<0.5	<0.5	<0.5	<0.5
K1-04	14-Oct-98					<5	<5	<5	
K1-04	14-Apr-99					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
K1-04	6-Oct-99					<0.5	<0.5	<0.5	<0.5
K1-04	6-Oct-99					<5	<5	<5 L	
K1-04	18-Apr-00					<0.5	<0.5	<0.5	<0.5
K1-04	18-Apr-00					<0.5	<0.5	<0.5	<0.5
K1-04	23-Oct-00	<1	<1	<1	<1	<1	<1	<1	<1
K1-04	23-Oct-00					<5	<5	<5	
K1-04	23-Apr-01					<0.5 L	<0.5 L	<0.5 L	<0.5 L
K1-04	22-Oct-01					<0.5	<0.5	<0.5	<0.5
K1-04	22-Oct-01	<0.5 H	<0.5 H	<0.5 H	<0.5 H				
K1-04	22-Oct-01					<5	<5	<5 O	
K1-04	16-Apr-02					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-04	16-Apr-02					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-04	5-Dec-02	<1	<1	<1	<1	<1	<1	<1	<1
K1-04	5-Dec-02					<5 L	<5 L	<5 L	
K1-04	29-Jan-03					<1	<1	<1	<1
K1-04	29-Jan-03					<1	<1	<1	<1
K1-04	18-Apr-03					<0.5	<0.5	<0.5	<0.5
K1-04	24-Jul-03					<0.5	<0.5	<0.5	<0.5
K1-04	18-Nov-03	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-04	18-Nov-03					<2	<2	<2	
K1-04	18-Nov-03	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-04	18-Nov-03					<2	<2	<2	
K1-04	18-Nov-03					<0.5	<0.5	<0.5	<0.5
K1-04	18-Nov-03					<0.5	<0.5	<0.5	<0.5
K1-04	29-Jan-04					<0.5	<0.5	<0.5	<0.5
K1-04	11-May-04					<0.5	<0.5	<0.5	<0.5
K1-04	30-Nov-04	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-04	30-Nov-04					<2	<2	<2	
K1-04	24-Feb-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-04	24-Feb-05					<2	<2	<2	
K1-04	12-Apr-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-04	1-Aug-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-04	5-Oct-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-04	10-Jan-06	<1	<1	<1	<2	<1	<1	<1	<1
K1-04	10-Jan-06					<5 DIJ	<5 DIJ	<5 DIJ	
K1-04	4-Apr-06	<1	<1	<1	<2	<1	<1	<1	<1
K1-05	21-Jan-88	<1 P	<1 P	<1 P					<1 P
K1-05	4-Apr-88	<1 P	<1 P	<1 P					<1 P
K1-05	15-Jul-88	<1 P	<1 P	<1 P					<1 P

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
K1-05	15-Jul-88	<1 P	<1 P	<1 P					<1 P
K1-05	28-Nov-88					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	1-Feb-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	11-Apr-89					<0.5	<0.5	<0.5	<0.5
K1-05	19-Jul-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	19-Jul-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	25-Oct-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	11-Jan-90					<0.5 P	1.3 P	<0.5 P	<0.5 P
K1-05	11-Apr-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	10-Jul-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	10-Jul-90					<0.5	<0.5	<0.5	<0.5
K1-05	9-Oct-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	15-Jan-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	9-Apr-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	9-Jul-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	19-Aug-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	19-Aug-91					<4 P	<2 P	<4 P	<0.7 P
K1-05	16-Oct-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	16-Jan-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	14-Apr-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	25-Jul-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	27-Oct-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-05	2-Feb-93					<0.5	<0.5	<0.5	<0.5
K1-05	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	2-Feb-93					<4	<3	<3	
K1-05	7-Apr-93					<0.5	<0.5	<0.5	<0.5
K1-05	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	7-Apr-93					<4	<3	<3	
K1-05	26-Jul-93					<0.5	<0.5	<0.5	<0.5
K1-05	26-Jul-93	<1	<1	<1	<2	<1	<1	<1	<1
K1-05	26-Jul-93					<10	<10	<10	
K1-05	4-Nov-93	<1	<1	<1	<2	<1	<1	<1	<1
K1-05	4-Nov-93					<10	<10	<10	
K1-05	13-Oct-94	<1	<1	<1	<2	<1	<1	<1	<1
K1-05	13-Oct-94					<10	<10	<10	
K1-05	13-Oct-94	<5	<5	<5	<5	<5	<5	<5	<5
K1-05	13-Oct-94					<10	<10	<10	
K1-05	18-Nov-94	<1	<1	<1	<2	<1	<1	<1	<1
K1-05	18-Nov-94					<10	<10	<10	

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
K1-05	10-May-95					<0.5	<0.5	<0.5	<0.5
K1-05	31-Jul-95					<0.5	<0.5	<0.5	<0.5
K1-05	31-Jul-95					<0.5	<0.5	<0.5	<0.5
K1-05	12-Oct-95					<0.5	<0.5	<0.5	<0.5
K1-05	12-Oct-95					<10	<10	<10	
K1-05	12-Oct-95	<1	<1	<1	<2	<1	<1	<1	<1
K1-05	18-Jan-96					<0.5	<0.5	<0.5	<0.5
K1-05	11-Apr-96					<0.5	<0.5	<0.5	<0.5
K1-05	31-Jul-96					<0.5	<0.5	<0.5	<0.5
K1-05	11-Oct-96	<1 H	<1 H	<1 H	<2 H	<1 H	<1 H	<1 H	<1 H
K1-05	4-Apr-97					<0.5	<0.5	<0.5	<0.5
K1-05	14-Oct-97	<1	<1	<1	<2	<1	<1	<1	<1
K1-05	14-Oct-97					<5	<5	<5	
K1-05	15-Apr-98					<0.5	<0.5	<0.5	<0.5
K1-05	14-Oct-98					<0.5	<0.5	<0.5	<0.5
K1-05	14-Oct-98					<5	<5	<5	
K1-05	14-Apr-99					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-05	6-Oct-99					<0.5	<0.5	<0.5	<0.5
K1-05	6-Oct-99					<5	<5	<5 L	
K1-05	6-Oct-99					<0.5	<0.5	<0.5	<0.5
K1-05	6-Oct-99					<5	<5	<5 L	
K1-05	19-Apr-00					<0.5	<0.5	<0.5	<0.5
K1-05	24-Oct-00	<1	<1	<1	<1	<1	<1	<1	<1
K1-05	24-Oct-00					<5	<5	<5	
K1-05	20-Apr-01					<0.5	<0.5	<0.5	<0.5
K1-05	20-Apr-01					<0.5	<0.5	<0.5	<0.5
K1-05	23-Oct-01	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO
K1-05	23-Oct-01					<5	<5	<5 O	
K1-05	18-Apr-02					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-05	6-Dec-02	<1	<1	<1	<1	<1	<1	<1	<1
K1-05	6-Dec-02					<5 L	<5 L	<5 L	
K1-05	29-Jan-03					<1	<1	<1	<1
K1-05	18-Apr-03					<0.5	<0.5	<0.5	<0.5
K1-05	24-Jul-03					<0.5	<0.5	<0.5	<0.5
K1-05	19-Nov-03	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-05	19-Nov-03					<2	<2	<2	
K1-05	19-Nov-03					<0.5	<0.5	<0.5	<0.5
K1-05	29-Jan-04					<0.5	<0.5	<0.5	<0.5
K1-05	10-May-04					<0.5	<0.5	<0.5	<0.5

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
K1-05	1-Dec-04	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-05	1-Dec-04					<2	<2	<2	
K1-05	1-Mar-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-05	1-Mar-05					<2	<2	<2	
K1-05	13-Apr-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-05	7-Jul-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-05	7-Jul-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-05	5-Oct-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-05	5-Jan-06	<1	<1	<1	<2	<1	<1	<1	<1
K1-05	5-Jan-06					<5 D	<5 D	<5 D	
K1-05	6-Apr-06	<1	<1	<1	<2	<1	<1	<1	<1
K1-07	20-Jan-88	<1 P	<1 P	<1 P					<1 P
K1-07	20-Jan-88	<1 P	<1 P	<1 P					<1 P
K1-07	4-Apr-88	<1 P	<1 P	<1 P					<1 P
K1-07	25-Jul-88	<1 P	<1 P	<1 P					<1 P
K1-07	10-Oct-88					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	10-Oct-88					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	23-Jan-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	11-Apr-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	24-Jul-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	25-Oct-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	11-Jan-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	11-Apr-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	10-Jul-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	9-Oct-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	15-Jan-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	9-Apr-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	9-Jul-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	16-Oct-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	16-Jan-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	16-Jan-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	14-Apr-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	25-Jul-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	26-Oct-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	26-Oct-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-07	2-Feb-93					<0.5	<0.5	<0.5	<0.5
K1-07	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	2-Feb-93					<4	<3	<3	
K1-07	7-Apr-93					<0.5	<0.5	<0.5	<0.5

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
K1-07	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	7-Apr-93					<4	<3	<3	
K1-07	26-Jul-93					<0.5	<0.5	<0.5	<0.5
K1-07	26-Jul-93	<1	<1	<1	<2	<1	<1	<1	<1
K1-07	26-Jul-93					<10	<10	<10	
K1-07	4-Nov-93	<1	<1	<1	<2	<1	<1	<1	<1
K1-07	4-Nov-93					<10	<10	<10	
K1-07	13-Oct-94	<1	<1	<1	<2	<1	<1	<1	<1
K1-07	13-Oct-94					<10	<10	<10	
K1-07	18-Nov-94	<1	<1	<1	<2	<1	<1	<1	<1
K1-07	18-Nov-94					<10	<10	<10	
K1-07	11-May-95					<0.5	<0.5	<0.5	<0.5
K1-07	31-Jul-95					<0.5	<0.5	<0.5	<0.5
K1-07	12-Oct-95					<0.5	<0.5	<0.5	<0.5
K1-07	12-Oct-95					<10	<10	<10	
K1-07	12-Oct-95	<1	<1	<1	<2	<1	<1	<1	<1
K1-07	18-Jan-96					<0.5	<0.5	<0.5	<0.5
K1-07	12-Apr-96					<0.5	<0.5	<0.5	<0.5
K1-07	31-Jul-96					<0.5	<0.5	<0.5	<0.5
K1-07	11-Oct-96	<1 H	<1 H	<1 H	<2 H	<1 H	<1 H	<1 H	<1 H
K1-07	4-Apr-97					<0.5	<0.5	<0.5	<0.5
K1-07	16-Oct-97	<1	<1	<1	<2	<1	<1	<1	<1
K1-07	16-Oct-97					<5	<5	<5	
K1-07	15-Apr-98					<0.5	<0.5	<0.5	<0.5
K1-07	15-Oct-98					<0.5	<0.5	<0.5	<0.5
K1-07	15-Oct-98					<5	<5	<5	
K1-07	12-Apr-99					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-07	4-Oct-99					<0.5	<0.5	<0.5	<0.5
K1-07	4-Oct-99					<5	<5	<5	
K1-07	19-Apr-00					<0.5	<0.5	<0.5	<0.5
K1-07	25-Oct-00	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H
K1-07	25-Oct-00					<5	<5	<5	
K1-07	23-Apr-01					<0.5 L	<0.5 L	<0.5 L	<0.5 L
K1-07	23-Oct-01	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO
K1-07	23-Oct-01					<5	<5	<5 O	
K1-07	23-Oct-01	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO
K1-07	23-Oct-01					<5	<5	<5 O	
K1-07	18-Apr-02					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-07	6-Dec-02	<1	<1	<1	<1	<1	<1	<1	<1

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
K1-07	6-Dec-02					<5 L	<5 L	<5 L	
K1-07	30-Jan-03					<1 L	<1 L	<1 L	<1 L
K1-07	1-May-03					<0.5	<0.5	<0.5	<0.5
K1-07	28-Aug-03					<0.5	<0.5	<0.5	<0.5 IJL
K1-07	24-Nov-03	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-07	24-Nov-03					<2	<2	<2	
K1-07	24-Nov-03					<0.5	<0.5	<0.5	<0.5
K1-07	4-Feb-04					<0.5	<0.5	<0.5	<0.5
K1-07	10-May-04					<0.5	<0.5	<0.5	<0.5
K1-07	2-Dec-04	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-07	2-Dec-04					<2	<2	<2	
K1-07	28-Feb-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-07	28-Feb-05					<2	<2	<2	
K1-07	6-Apr-05					<0.5	<0.5	<0.5	<0.5
K1-07	6-Apr-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-07	6-Jul-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-07	17-Oct-05	<0.5 E	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-07	17-Jan-06	<1	<1	<1	<2	<1	<1	<1	<1
K1-07	17-Jan-06					<5 D	<5 D	<5 D	
K1-07	11-Apr-06					<0.5	<0.5	<0.5	<0.5
K1-07	11-Apr-06	<1	<1	<1	<2	<1	<1	<1	<1
K1-08	21-Jan-88	<1 P	<1 P	<1 P					<1 P
K1-08	6-Apr-88	<1 P	<1 P	<1 P					<1 P
K1-08	15-Jul-88	<1 P	<1 P	<1 P					<1 P
K1-08	29-Nov-88					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	24-Jan-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	4-May-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	24-Jul-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	25-Oct-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	11-Jan-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	11-Apr-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	10-Jul-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	9-Oct-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	15-Jan-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	10-Apr-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	10-Apr-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	9-Jul-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	16-Oct-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	16-Jan-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
K1-08	14-Apr-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	25-Jul-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	27-Oct-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-08	2-Feb-93					<0.5	<0.5	<0.5	<0.5
K1-08	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	2-Feb-93					<4	<3	<3	
K1-08	7-Apr-93					<0.5	<0.5	<0.5	<0.5
K1-08	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	7-Apr-93					<4	<3	<3	
K1-08	26-Jul-93					<0.5	<0.5	<0.5	<0.5
K1-08	26-Jul-93	<1	<1	<1	<2	<1	<1	<1	<1
K1-08	26-Jul-93					<10	<10	<10	
K1-08	4-Nov-93	<1	<1	<1	<2	<1	<1	<1	<1
K1-08	4-Nov-93					<10	<10	<10	
K1-08	13-Oct-94	<1	<1	<1	<2	<1	<1	<1	<1
K1-08	13-Oct-94					<10	<10	<10	
K1-08	18-Nov-94	<1	<1	<1	<2	<1	<1	<1	<1
K1-08	18-Nov-94					<10	<10	<10	
K1-08	11-May-95					<0.5	<0.5	<0.5	<0.5
K1-08	31-Jul-95					<0.5	<0.5	<0.5	<0.5
K1-08	12-Oct-95					<0.5	<0.5	<0.5	<0.5
K1-08	12-Oct-95					<10	<10	<10	
K1-08	12-Oct-95	<1	<1	<1	<2	<1	<1	<1	<1
K1-08	18-Jan-96					<0.5	<0.5	<0.5	<0.5
K1-08	12-Apr-96					<0.5	<0.5	<0.5	<0.5
K1-08	12-Apr-96					<0.5	<0.5	<0.5	<0.5
K1-08	31-Jul-96					<0.5	<0.5	<0.5	<0.5
K1-08	11-Oct-96					<5	<5	<5 O	
K1-08	11-Oct-96	<1 H	<1 H	<1 H	<2 H	<1 H	<1 H	<1 H	<1 H
K1-08	11-Oct-96					<5	<5	<5 O	
K1-08	11-Oct-96	<1 H	<1 H	<1 H	<2 H	<1 H	<1 H	<1 H	<1 H
K1-08	4-Apr-97					<0.5	<0.5	<0.5	<0.5
K1-08	16-Oct-97	<1	<1	<1	<2	<1	<1	<1	<1
K1-08	16-Oct-97					<5	<5	<5	
K1-08	15-Apr-98					<0.5	<0.5	<0.5	<0.5
K1-08	15-Oct-98					<0.5	<0.5	<0.5	<0.5
K1-08	15-Oct-98					<5	<5	<5	
K1-08	12-Apr-99					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-08	4-Oct-99					<0.5	<0.5	<0.5	<0.5

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
K1-08	4-Oct-99					<5	<5	<5	
K1-08	19-Apr-00					<0.5	<0.5	<0.5	<0.5
K1-08	24-Oct-00	<1	<1	<1	<1	<1	<1	<1	<1
K1-08	24-Oct-00					<5	<5	<5	
K1-08	23-Apr-01					<0.5 L	<0.5 L	<0.5 L	<0.5 L
K1-08	23-Oct-01	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO
K1-08	23-Oct-01					<5	<5	<5 O	
K1-08	18-Apr-02					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-08	13-Dec-02	<1	<1	<1	<1	<1	<1	<1	<1
K1-08	13-Dec-02					<5	<5	<5 O	
K1-08	7-Feb-03					<1	<1	<1	<1
K1-08	2-May-03					<0.5	<0.5	<0.5	<0.5
K1-08	4-Sep-03					<0.5	<0.5	<0.5	<0.5
K1-08	24-Nov-03	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-08	24-Nov-03					<2	<2	<2	
K1-08	24-Nov-03					<0.5	<0.5	<0.5	<0.5
K1-08	3-Feb-04					<0.5	<0.5	<0.5	<0.5
K1-08	11-May-04					<0.5	<0.5	<0.5	<0.5
K1-08	2-Dec-04	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-08	2-Dec-04					<2	<2	<2	
K1-08	2-Mar-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-08	2-Mar-05					<2	<2	<2	
K1-08	2-Mar-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-08	2-Mar-05					<2	<2	<2	
K1-08	6-Apr-05					<0.5	<0.5	<0.5	<0.5
K1-08	6-Apr-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-08	6-Jul-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-08	13-Oct-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-08	18-Jan-06	<1	<1	<1	<2	<1	<1	<1 L	<1
K1-08	18-Jan-06					<5 D	<5 D	<5 DL	
K1-08	18-Jan-06	<1	<1	<1	<2	<1	<1	<1 L	<1
K1-08	18-Jan-06					<5 D	<5 D	<5 DL	
K1-08	11-Apr-06					<0.5	<0.5	<0.5	<0.5
K1-08	11-Apr-06	<1	<1	<1	<2	<1	<1	<1	<1
K1-09	21-Jan-88	<1 P	<1 P	<1 P					<1 P
K1-09	6-Apr-88	<1 P	<1 P	<1 P					<1 P
K1-09	15-Jul-88	<1 P	<1 P	<1 P					<1 P
K1-09	29-Nov-88					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	24-Jan-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
K1-09	4-May-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	4-May-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	4-May-89					<4 P	<2 P	<4 P	<0.7 P
K1-09	24-Jul-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	25-Oct-89					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	11-Jan-90					<0.5 P	0.5 P	<0.5 P	<0.5 P
K1-09	11-Jan-90					<0.5 P	1.9 P	<0.5 P	<0.5 P
K1-09	11-Apr-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	10-Jul-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	9-Oct-90					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	15-Jan-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	9-Apr-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	9-Jul-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	16-Oct-91					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	16-Jan-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	14-Apr-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	14-Apr-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	25-Jul-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	27-Oct-92					<0.5 P	<0.5 P	<0.5 P	<0.5 P
K1-09	2-Feb-93					<0.5	<0.5	<0.5	<0.5
K1-09	2-Feb-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	2-Feb-93					<4	<3	<3	
K1-09	7-Apr-93					<0.5	<0.5	<0.5	<0.5
K1-09	7-Apr-93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	7-Apr-93					<4	<3	<3	
K1-09	26-Jul-93					<0.5	<0.5	<0.5	<0.5
K1-09	26-Jul-93	<1	<1	<1	<2	<1	<1	<1	<1
K1-09	26-Jul-93					<10	<10	<10	
K1-09	4-Nov-93	<1	<1	<1	<2	<1	<1	<1	<1
K1-09	4-Nov-93					<10	<10	<10	
K1-09	13-Oct-94	<1	<1	<1	<2	<1	<1	<1	<1
K1-09	13-Oct-94					<10	<10	<10	
K1-09	18-Nov-94	<5 D	<5 D	<5 D	<10 D	<5 D	<5 D	<5 D	<5 D
K1-09	18-Nov-94					<10	<10	<10	
K1-09	10-May-95					<0.5	<0.5	<0.5	<0.5
K1-09	31-Jul-95					<0.5	<0.5	<0.5	<0.5
K1-09	12-Oct-95					<0.5	<0.5	<0.5	<0.5
K1-09	12-Oct-95					<10	<10	<10	
K1-09	12-Oct-95	<1	<1	<1	<2	<1	<1	<1	<1

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
K1-09	18-Jan-96					<0.5	<0.5	<0.5	<0.5
K1-09	18-Jan-96					<0.5	<0.5	<0.5	<0.5
K1-09	12-Apr-96					<0.5	<0.5	<0.5	<0.5
K1-09	31-Jul-96					<0.5	<0.5	<0.5	<0.5
K1-09	11-Oct-96					<5	<5	<5 O	
K1-09	11-Oct-96	<1 H	<1 H	<1 H	<2 H	<1 H	<1 H	<1 H	<1 H
K1-09	4-Apr-97					<0.5	<0.5	<0.5	<0.5
K1-09	4-Apr-97					<0.5	<0.5	<0.5	<0.5
K1-09	16-Oct-97	<1	<1	<1	<2	<1	<1	<1	<1
K1-09	16-Oct-97					<5	<5	<5	
K1-09	16-Oct-97	<1	<1	<1	<2	<1	<1	<1	<1
K1-09	16-Oct-97					<5	<5	<5	
K1-09	15-Apr-98					<0.5	<0.5	<0.5	<0.5
K1-09	15-Oct-98					<0.5	<0.5	<0.5	<0.5
K1-09	15-Oct-98					<5	<5	<5	
K1-09	15-Oct-98					<0.5	<0.5	<0.5	<0.5
K1-09	15-Oct-98					<5	<5	<5	
K1-09	13-Apr-99					<0.5	<0.5	<0.5	<0.5
K1-09	13-Apr-99					<0.5	<0.5	<0.5	<0.5
K1-09	4-Oct-99					<0.5	<0.5	<0.5	<0.5
K1-09	4-Oct-99					<5	<5	<5	
K1-09	19-Apr-00					<0.5	<0.5	<0.5	<0.5
K1-09	24-Oct-00	<1	<1	<1	<1	<1	<1	<1	<1
K1-09	24-Oct-00					<6	<6	<6	
K1-09	20-Apr-01					<0.5 L	<0.5 L	<0.5 L	<0.5 L
K1-09	23-Oct-01	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO	<1 HLO
K1-09	23-Oct-01					<5	<5	<5 O	
K1-09	18-Apr-02					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
K1-09	6-Dec-02	<1	<1	<1	<1	<1	<1	<1	<1
K1-09	6-Dec-02					<5 L	<5 L	<5 L	
K1-09	31-Jan-03					<1 L	<1 L	<1 L	<1 L
K1-09	2-May-03					<0.5	<0.5	<0.5	<0.5
K1-09	8-Sep-03					<0.5	<0.5	<0.5	<0.5
K1-09	25-Nov-03	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-09	25-Nov-03					<2	<2	<2	
K1-09	25-Nov-03					<0.5	<0.5	<0.5	<0.5
K1-09	3-Feb-04					<0.5	<0.5	<0.5	<0.5
K1-09	11-May-04					<0.5	<0.5	<0.5	<0.5
K1-09	6-Dec-04	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
K1-09	6-Dec-04					<2	<2	<2	
K1-09	6-Dec-04	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-09	6-Dec-04					<2	<2	<2	
K1-09	24-Feb-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-09	24-Feb-05					<2	<2	<2	
K1-09	6-Apr-05					<0.5	<0.5	<0.5	<0.5
K1-09	6-Apr-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-09	1-Aug-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-09	13-Oct-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
K1-09	19-Jan-06	<1	<1	<1	<2	<1	<1	<1 L	<1
K1-09	19-Jan-06					<5 D	<5 D	<5 LD	
K1-09	12-Apr-06					<0.5	<0.5	<0.5	<0.5
K1-09	12-Apr-06	<1	<1	<1	<2	<1	<1	<1	<1
W-865-01	30-Mar-99	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
W-865-01	24-May-99					<0.5	<0.5	<0.5	<0.5
W-865-01	24-May-99					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-865-01	25-Aug-99					<0.5	<0.5	<0.5	<0.5
W-865-01	9-Dec-99					<0.5	<0.5	<0.5	<0.5
W-865-01	7-Mar-00					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-865-01	24-May-00					<0.5	<0.5	<0.5	<0.5
W-865-01	21-Jul-00					<0.5	<0.5	<0.5	<0.5
W-865-01	16-Nov-00					<0.5	<0.5	<0.5	<0.5
W-865-01	26-Jan-01					<0.5	<0.5	<0.5	<0.5
W-865-01	25-Apr-01					<0.5 HLO	<0.5 HLO	<0.5 HLO	<0.5 HLO
W-865-01	14-Aug-01					<0.5	<0.5	<0.5	<0.5
W-865-01	31-Oct-01					<0.5	<0.5	<0.5	<0.5
W-865-01	31-Jan-02					<0.5	<0.5	<0.5	<0.5
W-865-01	30-May-02					<0.5	<0.5	<0.5	<0.5
W-865-01	31-Jul-02					<0.5	<0.5	<0.5	<0.5
W-865-01	19-Feb-03					<0.5	<0.5	<0.5	<0.5
W-865-01	29-May-03					<0.5	<0.5	<0.5	<0.5
W-865-01	6-Aug-03					<0.5	<0.5	<0.5	<0.5
W-865-01	17-Nov-03					<0.5	<0.5	<0.5	<0.5
W-865-01	3-Mar-04					<0.5	<0.5	<0.5	<0.5
W-865-01	5-May-04					<0.5	<0.5	<0.5	<0.5
W-865-01	5-May-04	<0.5	<0.5	<0.5	<0.5	<0.3	<0.3	<0.3	<0.3
W-865-01	3-Nov-04					<0.5	<0.5	<0.5	<0.5
W-865-01	29-Jan-05					<0.5	<0.5	<0.5	<0.5
W-865-01	17-May-05					<0.5	<0.5	<0.5	<0.5

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
W-865-01	24-Aug-05					<0.5	<0.5	<0.5	<0.5
W-865-01	19-Oct-05					<0.5	<0.5	<0.5	<0.5
W-865-01	16-Jan-06					<0.5	<0.5	<0.5	<0.5
W-865-01	11-Apr-06					<0.5	<0.5	<0.5	<0.5
W-865-02	29-Mar-00	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H
W-865-02	24-May-00					<0.5	<0.5	<0.5	<0.5
W-865-02	21-Jul-00					<0.5	<0.5	<0.5	<0.5
W-865-02	21-Jul-00					<0.5	<0.5	<0.5	<0.5
W-865-02	16-Nov-00					<0.5	<0.5	<0.5	<0.5
W-865-02	30-Jan-01					<0.5	<0.5	<0.5	<0.5
W-865-02	25-Apr-01					<3 D	<3 D	<3 D	<3 D
W-865-02	25-Apr-01					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-865-02	28-Aug-01					<0.5	<0.5	<0.5	<0.5
W-865-02	31-Oct-01					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-865-02	31-Jan-02					<0.5	<0.5	<0.5	<0.5
W-865-02	23-May-02					<0.5	<0.5	<0.5	<0.5
W-865-02	31-Jul-02					<0.5	<0.5	<0.5	<0.5
W-865-02	19-Feb-03					<0.5	<0.5	<0.5	<0.5
W-865-02	12-Jun-03					<0.5	<0.5	<0.5	<0.5
W-865-02	12-Jun-03					<0.5	<0.5	<0.5	<0.5
W-865-02	6-Aug-03					<0.5	<0.5	<0.5	<0.5
W-865-02	17-Nov-03					<0.5	<0.5	<0.5	<0.5
W-865-02	24-Feb-04					<0.5	<0.5	<0.5	<0.5
W-865-02	11-May-04					<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-865-02	11-May-04	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<1.5 D	<1.5 D	<1.5 D	<1.5 D
W-865-02	18-Nov-04					<0.5	<0.5	<0.5	<0.5 L
W-865-02	29-Jan-05					<0.5	<0.5	<0.5	<0.5
W-865-02	13-May-05					<0.5	<0.5	<0.5	<0.5
W-865-02	13-May-05					<0.5	<0.5	<0.5	<0.5
W-865-02	24-Aug-05					<0.5	<0.5	<0.5	<0.5
W-865-02	10-Oct-05					<0.5	<0.5	<0.5	<0.5
W-865-02	10-Oct-05					<0.5	<0.5	<0.5	<0.5
W-865-02	16-Jan-06					<0.5	<0.5	<0.5	<0.5
W-865-02	16-Jan-06					<0.5	<0.5	<0.5	<0.5
W-865-02	5-Apr-06					<0.5	<0.5	<0.5	<0.5
W-865-03	29-Sep-00	<1	<1	<1	<1	<1	<1	<1	<1
W-865-03	16-Nov-00					<0.5	<0.5	<0.5	<0.5
W-865-03	30-Jan-01					<0.5	<0.5	<0.5	<0.5
W-865-03	25-Apr-01					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
W-865-03	14-Aug-01					<0.5	<0.5	<0.5	<0.5
W-865-03	30-Oct-01					<0.5	<0.5	<0.5	<0.5
W-865-03	31-Jan-02					<0.5	<0.5	<0.5	<0.5
W-865-03	30-May-02					<0.5	<0.5	<0.5	<0.5
W-865-03	31-Jul-02					<0.5	<0.5	<0.5	<0.5
W-865-03	19-Feb-03					<0.5	<0.5	<0.5	<0.5
W-865-03	29-May-03					<0.5	<0.5	<0.5	<0.5
W-865-03	6-Aug-03					<0.5	<0.5	<0.5	<0.5
W-865-03	17-Nov-03					<0.5	<0.5	<0.5	<0.5
W-865-03	3-Mar-04					<0.5	<0.5	<0.5	<0.5
W-865-03	5-May-04					<0.5	<0.5	<0.5	<0.5
W-865-03	5-May-04	<0.5	<0.5	<0.5	<0.5	<0.3	<0.3	<0.3	<0.3
W-865-03	2-Nov-04					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-865-03	29-Jan-05					<0.5	<0.5	<0.5	<0.5
W-865-03	20-May-05					<0.5	<0.5	<0.5	<0.5
W-865-03	24-Aug-05					<0.5	<0.5	<0.5	<0.5
W-865-03	19-Oct-05					<0.5	<0.5	<0.5	<0.5
W-865-03	16-Jan-06					<0.5	<0.5	<0.5	<0.5
W-865-03	11-Apr-06					<0.5	<0.5	<0.5	<0.5
W-865-04	28-Sep-00	<1 LO	<1 LO	<1 LO	<1 LO	<1 LO	<1 LO	<1 LO	<1 LO
W-865-04	16-Nov-00					<0.5	<0.5	<0.5	<0.5
W-865-04	26-Jan-01					<0.5	<0.5	<0.5	<0.5
W-865-04	25-Apr-01					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-865-04	14-Aug-01					<0.5	<0.5	<0.5	<0.5
W-865-04	30-Oct-01					<0.5	<0.5	<0.5	<0.5
W-865-04	31-Jan-02					<0.5	<0.5	<0.5	<0.5
W-865-04	23-May-02					<0.5	<0.5	<0.5	<0.5
W-865-04	31-Jul-02					<0.5	<0.5	<0.5	<0.5
W-865-04	19-Feb-03					<0.5	<0.5	<0.5	<0.5
W-865-04	29-May-03					<0.5	<0.5	<0.5	<0.5
W-865-04	6-Aug-03					<0.5	<0.5	<0.5	<0.5
W-865-04	17-Nov-03					<0.5	<0.5	<0.5	<0.5
W-865-04	24-Feb-04					<0.5	<0.5	<0.5	<0.5
W-865-04	5-May-04					<0.5	<0.5	<0.5	<0.5
W-865-04	5-May-04	<0.5	<0.5	<0.5	<0.5	<0.3	<0.3	<0.3	<0.3
W-865-04	5-May-04					<0.5	<0.5	<0.5	<0.5
W-865-04	5-May-04	<0.5	<0.5	<0.5	<0.5	<0.3	<0.3	<0.3	<0.3
W-865-04	18-Nov-04					<0.5	<0.5	<0.5	<0.5 L
W-865-04	29-Jan-05					<0.5	<0.5	<0.5	<0.5

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
W-865-04	13-May-05					<0.5	<0.5	<0.5	<0.5
W-865-04	18-Aug-05					<0.5	<0.5	<0.5	<0.5
W-865-04	6-Oct-05					<0.5	<0.5	<0.5	<0.5
W-865-04	16-Jan-06					<0.5	<0.5	<0.5	<0.5
W-865-04	5-Apr-06					<0.5	<0.5	<0.5	<0.5
W-865-05	10-Apr-00	<1 LO	<1 LO	<1 LO	<1 LO	<1 LO	<1 LO	<1 LO	<1 LO
W-865-05	30-Mar-01					<0.5	<0.5	<0.5	<0.5
W-865-05	11-Jun-01	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H
W-865-05	22-Aug-01					<0.5	<0.5	<0.5	<0.5
W-865-05	22-Aug-01					<0.5	<0.5	<0.5	<0.5
W-865-05	31-Oct-01					<0.5	<0.5	<0.5	<0.5
W-865-05	31-Oct-01					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-865-05	28-Feb-02					<0.5	<0.5	<0.5	<0.5
W-865-05	30-May-02					<0.5	<0.5	<0.5	<0.5
W-865-05	31-Jul-02					<0.5	<0.5	<0.5	<0.5
W-865-05	20-Jun-03					<0.5	<0.5	<0.5	<0.5
W-865-05	15-Sep-03					<0.5	<0.5	<0.5	<0.5
W-865-05	15-Sep-03					<0.5	<0.5	<0.5	<0.5
W-865-05	2-Dec-03					<0.5	<0.5	<0.5	<0.5
W-865-05	2-Mar-04					<10 D	<10 D	<10 D	<10 D
W-865-05	11-May-04					<10 D	<10 D	<10 D	<10 D
W-865-05	11-May-04	<10 D	<10 D	<10 D	<10 D	<6 D	<6 D	<6 D	<6 D
W-865-05	8-Sep-04					<0.5	<0.5	<0.5	<0.5
W-865-05	18-Nov-04					<0.5	<0.5	<0.5	<0.5 L
W-865-05	18-Feb-05					<0.5	<0.5	<0.5	<0.5
W-865-05	18-Feb-05					<0.5	<0.5	<0.5	<0.5
W-865-05	16-May-05					<0.5	<0.5	<0.5	<0.5 L
W-865-05	16-May-05					<0.5	<0.5	<0.5	<0.5 L
W-865-05	24-Aug-05					<0.5	<0.5	<0.5	<0.5
W-865-05	24-Aug-05					<0.5	<0.5	<0.5	<0.5
W-865-05	10-Oct-05					<0.5	<0.5	<0.5	<0.5
W-865-05	10-Oct-05					<0.5	<0.5	<0.5	<0.5
W-865-05	16-Jan-06					<0.5	<0.5	<0.5	<0.5
W-865-05	16-Jan-06					<0.5	<0.5	<0.5	<0.5
W-865-05	12-Apr-06					<100 D	<100 D	<100 D	<100 D
W-865-05	12-Apr-06					<0.5	<0.5	<0.5	<0.5
W-865-07	29-Sep-00	<1	<1	<1	<1	<1	<1	<1	<1
W-865-07	16-Nov-00					<0.5	<0.5	<0.5	<0.5
W-865-07	26-Jan-01					<0.5	<0.5	<0.5	<0.5

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
W-865-07	25-Apr-01					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-865-07	14-Aug-01					<0.5	<0.5	<0.5	<0.5
W-865-07	30-Oct-01					<0.5	<0.5	<0.5	<0.5
W-865-07	31-Jan-02					<0.5	<0.5	<0.5	<0.5
W-865-07	23-May-02					<0.5	<0.5	<0.5	<0.5
W-865-07	31-Jul-02					<0.5	<0.5	<0.5	<0.5
W-865-07	19-Feb-03					<0.5	<0.5	<0.5	<0.5
W-865-07	29-May-03					<0.5	<0.5	<0.5	<0.5
W-865-07	6-Aug-03					<0.5	<0.5	<0.5	<0.5
W-865-07	2-Dec-03					<0.5	<0.5	<0.5	<0.5
W-865-07	24-Feb-04					<0.5	<0.5	<0.5	<0.5
W-865-07	5-May-04					<0.5	<0.5	<0.5	<0.5
W-865-07	5-May-04	<0.5	<0.5	<0.5	<0.5	<0.3	<0.3	<0.3	<0.3
W-865-07	5-May-04					<0.5	<0.5	<0.5	<0.5
W-865-07	5-May-04	<0.5	<0.5	<0.5	<0.5	<0.3	<0.3	<0.3	<0.3
W-865-07	18-Nov-04					<0.5	<0.5	<0.5	<0.5 L
W-865-07	29-Jan-05					<0.5	<0.5	<0.5	<0.5
W-865-07	13-May-05					<0.5	<0.5	<0.5	<0.5
W-865-07	18-Aug-05					<0.5	<0.5	<0.5	<0.5
W-865-07	6-Oct-05					<0.5	<0.5	<0.5	<0.5
W-865-07	16-Jan-06					<0.5	<0.5	<0.5	<0.5
W-865-07	5-Apr-06					<0.5	<0.5	<0.5	<0.5
W-865-1802	27-Jun-03	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H
W-865-1802	26-Aug-03					<0.5	<0.5	<0.5	<0.5 L
W-865-1802	22-Dec-03	<1 HL	<1 HL	<1 H	<1 H	<1 H	<1 H	<1 H	<1 HL
W-865-1802	1-Mar-04	<1 HL	<1 HL	<1 H	<1 H	<1 H	<1 H	<1 H	<1 HL
W-865-1802	9-Jun-04					<0.5	<0.5	<0.5	<0.5
W-865-1802	9-Jun-04	<0.5	<0.5	<0.5	<0.5	<0.3	<0.3	<0.3	<0.3
W-865-1802	17-Nov-04					<0.5	<0.5	<0.5	<0.5
W-865-1802	3-Mar-05					<0.5	<0.5	<0.5	<0.5
W-865-1802	3-Mar-05					<0.5	<0.5	<0.5	<0.5
W-865-1802	10-May-05					<0.5	<0.5	<0.5	<0.5
W-865-1802	24-Aug-05					<0.5	<0.5	<0.5	<0.5
W-865-1802	6-Oct-05					<0.5	<0.5	<0.5	<0.5
W-865-1802	15-Feb-06					<0.5	<0.5	<0.5	<0.5
W-865-1802	3-Apr-06					<0.5	<0.5	<0.5	<0.5
W-865-1802	3-Apr-06					<0.5	<0.5	<0.5	<0.5
W-865-1803	26-Jun-03	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H
W-865-1803	26-Aug-03					<0.5	<0.5	<0.5	<0.5 L

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
W-865-1803	3-Mar-04	<1 HLO	<1 HLO	<1 H	<1 H	<1 H	<1 H	<1 H	<1 HLO
W-865-1803	8-Jun-04					<0.5	<0.5	<0.5	<0.5
W-865-1803	8-Jun-04	<0.5	<0.5	<0.5	<0.5	<0.3	<0.3	<0.3	<0.3
W-865-1803	3-Nov-04					<0.5	<0.5	<0.5	<0.5
W-865-1803	10-Mar-05					<0.5	<0.5	<0.5	<0.5 L
W-865-1803	17-May-05					<0.5	<0.5	<0.5	<0.5
W-865-1803	30-Aug-05					<0.5	<0.5	<0.5	<0.5
W-865-1803	3-Nov-05					<0.5	<0.5	<0.5	<0.5
W-865-1803	22-Feb-06					<0.5	<0.5	<0.5	<0.5
W-865-1803	12-Apr-06					<0.5	<0.5	<0.5	<0.5
W-865-1804	23-Jun-03	<1	<1	<1	<1	<1	<1	<1	<1
W-865-1804	26-Aug-03					<0.5	<0.5	<0.5	<0.5 L
W-865-1804	18-Dec-03	<1 L	<1	<1	<1	<1	<1	<1	<1 L
W-865-1804	4-Mar-04	<1 HL	<1 HL	<1 H	<1 H	<1 H	<1 H	<1 H	<1 HL
W-865-1804	9-Jun-04					<0.5	<0.5	<0.5	<0.5
W-865-1804	9-Jun-04	<0.5	<0.5	<0.5	<0.5	<0.3	<0.3	<0.3	<0.3
W-865-1804	3-Nov-04					<0.5	<0.5	<0.5	<0.5
W-865-1804	10-Mar-05					<0.5	<0.5	<0.5	<0.5 L
W-865-1804	17-May-05					<0.5	<0.5	<0.5	<0.5
W-865-1804	30-Aug-05					<0.5	<0.5	<0.5	<0.5
W-865-1804	3-Nov-05					<0.5	<0.5	<0.5	<0.5
W-865-1804	22-Feb-06					<0.5	<0.5	<0.5	<0.5
W-865-1804	12-Apr-06					<0.5	<0.5	<0.5	<0.5
W-865-2002	21-Sep-04	<0.5	<0.5	<0.5	<0.5	<0.3	<0.3	<0.3	<0.3
W-865-2002	17-Nov-04					<0.5	<0.5	<0.5	<0.5
W-865-2002	17-Nov-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2002	10-Mar-05					<0.5	<0.5	<0.5	<0.5 L
W-865-2002	10-Mar-05	<0.5 HL	<0.5 HL	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H
W-865-2002	19-May-05					<0.5	<0.5	<0.5	<0.5
W-865-2002	19-May-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2002	19-Sep-05					<0.5	<0.5	<0.5	<0.5
W-865-2002	19-Sep-05	<0.5 H	<0.5 H	<0.5 H	<1.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H
W-865-2002	8-Nov-05					<0.5	<0.5	<0.5	<0.5
W-865-2002	8-Nov-05	<0.5	<0.5 O	<0.5	<1.5	<0.5	<0.5	<0.5	<0.5
W-865-2002	19-Jan-06					<0.5	<0.5	<0.5	<0.5
W-865-2002	19-Jan-06	<0.5	<0.5	<0.5	<1.5	<0.5	<0.5	<0.5	<0.5
W-865-2002	4-Apr-06					<0.5	<0.5	<0.5	<0.5
W-865-2002	4-Apr-06	<0.5 H	<0.5 H	<0.5 H	<1.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H
W-865-2003	17-Nov-04					<0.5	<0.5	<0.5	<0.5

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
W-865-2003	17-Nov-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2003	10-Mar-05					<0.5	<0.5	<0.5	<0.5 L
W-865-2003	10-Mar-05	<0.5 HL	<0.5 HL	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H
W-865-2003	19-May-05					<0.5	<0.5	<0.5	<0.5
W-865-2003	19-May-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2003	19-Sep-05					<0.5	<0.5	<0.5	<0.5
W-865-2003	19-Sep-05	<0.5 H	<0.5 H	<0.5 H	<1.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H
W-865-2003	8-Nov-05					<0.5	<0.5	<0.5	<0.5
W-865-2003	8-Nov-05	<0.5	<0.5 O	<0.5	<1.5	<0.5	<0.5	<0.5	<0.5
W-865-2003	19-Jan-06					<0.5	<0.5	<0.5	<0.5
W-865-2003	19-Jan-06	<0.5	<0.5	<0.5	<1.5	<0.5	<0.5	<0.5	<0.5
W-865-2003	5-Apr-06					<0.5	<0.5	<0.5	<0.5
W-865-2003	5-Apr-06	<0.5 H	<0.5 H	<0.5 H	<1.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H
W-865-2004	30-Mar-05	<1	<1	<1	<2	<0.5	<0.5	<0.5	<0.5
W-865-2004	25-May-05	<1	<1	<1	<2	<0.5	<0.5	<0.5	<0.5
W-865-2004	24-Aug-05	<1	<1 L	<1	<2	<0.5	<0.5	<0.5	<0.5
W-865-2004	8-Nov-05	<1	<1 O	<1	<2	<0.5	<0.5	<0.5	<0.5
W-865-2004	15-Mar-06	<1	<1	<1	<2	<0.5	<0.5	<0.5	<0.5
W-865-2004	12-Apr-06	<100 DH	<100 DH	<100 DH	<200 DH	<50 DH	<50 DH	<50 DH	<50 DH
W-865-2005	21-Sep-04	<0.5	<0.5	<0.5	<0.5	<0.3	<0.3	<0.3	<0.3
W-865-2005	17-Nov-04					<0.5	<0.5	<0.5	<0.5
W-865-2005	17-Nov-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2005	24-Mar-05					<0.5	<0.5	<0.5	<0.5 L
W-865-2005	24-Mar-05	<0.5 L	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2005	16-May-05					<0.5	<0.5	<0.5	<0.5 L
W-865-2005	16-May-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L
W-865-2005	31-Aug-05					<0.5	<0.5	<0.5	<0.5 L
W-865-2005	31-Aug-05	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 HL
W-865-2005	7-Dec-05					<0.5	<0.5	<0.5	<0.5
W-865-2005	7-Dec-05	<0.5	<0.5	<0.5	<1.5	<0.5	<0.5	<0.5	<0.5
W-865-2005	24-Feb-06					<0.5 B	<0.5 B	<0.5 B	<0.5 B
W-865-2005	8-Jun-06					<0.5	<0.5	<0.5	<0.5
W-865-2005	8-Jun-06	<0.5	<0.5	<0.5	<1.5	<0.5	<0.5	<0.5	<0.5
W-865-2121	30-Mar-05	<1	<1	<1	<2	<0.5	<0.5	<0.5	<0.5
W-865-2121	24-May-05	<1	<1	<1	<2	<0.5	<0.5	<0.5	<0.5
W-865-2121	31-Aug-05	<1 H	<1 H	<1 H	<2 H	<0.5 H	<0.5 H	<0.5 H	<0.5 HL
W-865-2121	8-Nov-05	<1	<1 O	<1	<2	<1	<1	<1	<1
W-865-2121	15-Feb-06	<1 H	<1 H	<1 H	<2 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H
W-865-2121	26-Apr-06	<1 H	<1 H	<1 H	<2 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
W-865-2133	21-Feb-06	<1 H	<1 H	<1 H	<2 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H
W-865-2133	12-Jun-06	<1	<1	<1	<2	<0.5	<0.5	<0.5	<0.5
W-896-1806	8-Nov-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
W-896-1806	27-Mar-06	<1	<1	<1	<2	<0.5	<0.5	<0.5	<0.5
W-896-1806	12-Jun-06	<1	<1	<1	<2	<0.5	<0.5	<0.5	<0.5
W-PIT1-01	25-May-99					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-PIT1-01	23-Aug-99					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-PIT1-01	9-Dec-99					<0.5	<0.5	<0.5	<0.5
W-PIT1-01	15-Jun-00					<0.5	<0.5	<0.5	<0.5
W-PIT1-01	21-Dec-00	<1	<1	<1	<1	<1	<1	<1	<1
W-PIT1-01	13-Mar-01	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H
W-PIT1-01	17-May-01					<0.5	<0.5	<0.5	<0.5
W-PIT1-01	13-Aug-01					<0.5	<0.5	<0.5	<0.5
W-PIT1-01	26-Oct-01					<0.5	<0.5	<0.5	<0.5
W-PIT1-01	28-Feb-02					<0.5 LO	<0.5 LO	<0.5 LO	<0.5 LO
W-PIT1-01	29-May-02					<0.5	<0.5	<0.5	<0.5
W-PIT1-01	8-Aug-02					<0.5	<0.5	<0.5	<0.5
W-PIT1-01	19-Aug-03					<0.5	<0.5	<0.5	<0.5 L
W-PIT1-02	21-Mar-01	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H	<1 H
W-PIT1-02	17-May-01					<0.5	<0.5	<0.5	<0.5
W-PIT1-02	13-Aug-01					<0.5	<0.5	<0.5	<0.5
W-PIT1-02	26-Oct-01					<0.5	<0.5	<0.5	<0.5
W-PIT1-02	28-Feb-02					<0.5	<0.5	<0.5	<0.5
W-PIT1-02	29-May-02					<0.5	<0.5	<0.5	<0.5
W-PIT1-02	8-Aug-02					<0.5	<0.5	<0.5	<0.5
W-PIT1-02	29-Aug-03					<0.5	<0.5	<0.5	<0.5 L
W-PIT1-02	4-Nov-03					<0.5	<0.5	<0.5	<0.5
W-PIT1-02	24-Feb-04					<0.5	<0.5	<0.5	<0.5
W-PIT1-02	14-Jun-04					<0.5	<0.5	<0.5	<0.5
W-PIT1-02	13-Nov-04					<0.5	<0.5	<0.5	<0.5
W-PIT1-02	29-Jan-05					<0.5	<0.5	<0.5	<0.5
W-PIT1-02	13-May-05					<0.5	<0.5	<0.5	<0.5 L
W-PIT1-02	31-Aug-05					<0.5	<0.5	<0.5	<0.5
W-PIT1-02	16-Nov-05	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
W-PIT1-02	3-Feb-06					<0.5	<0.5	<0.5	<0.5
W-PIT1-02	3-Feb-06	<0.5 H	<0.5 H	<0.5 H	<1.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H
W-PIT1-02	11-May-06					<0.5	<0.5	<0.5	<0.5
W-PIT1-02	11-May-06	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
W-PIT1-02	11-May-06					<0.5	<0.5	<0.5	<0.5

Table A-15. Ground and surface water analyses for aromatic hydrocarbons compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total xylenes (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,4-Dichloro-benzene (µg/L)	Chloro-benzene (µg/L)
W-PIT1-02	11-May-06	<0.5	<0.5	<0.5	<1.5	<0.5	<0.5	<0.5	<0.5

Notes:

µg/L = Micrograms per liter.
B = Analyte found in method blank.
D = Analysis performed at a secondary dilution or concentration (i.e., vapor samples).
E = The analyte was detected below LLNL reporting limit, but above analytical laboratory minimum detection limit.

H = Sample analyzed outside of holding time, sample results should be evaluated.
I = Surrogate recoveries outside of QC limits.
J = Analyte was postively identified; the associated numerical value is approximate concentration of the analyte.

L = Spike accuracy not within control limits.
O = Duplicate spike or sample precision not within control limits.
P = Indicates that the absence of a data qualifier flag does not mean that the data does not need qualification, but that the implementation of electronic data qualifier flags was not yet established.

Table A-16. Ground and surface water analyses for total petroleum hydrocarbons (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Oil and Grease (mg/L)
K1-04	10-May-95	<5
K1-04	31-Jul-95	<5 LO
K1-04	11-Oct-95	<5
K1-04	18-Jan-96	<5
K1-05	10-May-95	<5
K1-05	31-Jul-95	<5 LO
K1-05	31-Jul-95	<5 LO
K1-05	12-Oct-95	<5
K1-05	18-Jan-96	<5
K1-07	11-May-95	<5
K1-07	31-Jul-95	<5 LO
K1-07	12-Oct-95	<5
K1-07	18-Jan-96	<5
K1-08	11-May-95	<5
K1-08	31-Jul-95	<5 LO
K1-08	12-Oct-95	<5
K1-08	18-Jan-96	<5
K1-09	10-May-95	<5
K1-09	31-Jul-95	<5 LO
K1-09	12-Oct-95	<5
K1-09	18-Jan-96	<5
K1-09	18-Jan-96	<5

Notes:

mg/L = Milligrams per liter.
L = Spike accuracy not within control limits.
O = Duplicate spike or sample precision not within control limits.

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
K1-02A	21-May-97							<0.5	
K1-02A	8-Dec-97							<0.4	
K1-02A	24-Jun-98							<0.4	
K1-02A	16-Dec-98							<0.4	
K1-02A	16-Dec-98							<0.4	
K1-02A	21-May-99							<0.5 S	
K1-02A	21-May-99							<0.5 S	
K1-02A	2-Nov-99							33 S	
K1-02A	24-May-00							7.7	
K1-02A	7-Dec-00							31 D	
K1-02A	30-May-01							<0.4	
K1-02A	5-Jun-02							<0.1	
K1-02A	5-Jun-02							<0.1	
K1-02B	19-Jan-88	0.13 P	6.7 P			<0.01 P			0.13 P
K1-02B	4-Apr-88	<0.1 P	5.7 P			<0.01 P			<0.1 P
K1-02B	4-Apr-88	<0.1 P	5.3 P			<0.01 P			<0.1 P
K1-02B	25-Jul-88	<0.1 P	7.5 P			<0.02 P			<0.5 P
K1-02B	3-Oct-88	<0.5 P	2.7 P	25 P		<0.01 P			<0.5 P
K1-02B	12-Jan-89	0.7 P	6.4 P	28 P		<0.01 P			0.8 P
K1-02B	10-Apr-89	<0.02 P	7.4 P	33 P		<0.01 P			<0.5 P
K1-02B	19-Jul-89	0.02 P	7.6 P	20 P		<0.01 P			<0.5 P
K1-02B	31-Jul-89		6.2 P	27 P					
K1-02B	31-Jul-89	<0.02 P				<0.01 P			<0.5 P
K1-02B	24-Oct-89		5.2 P	22 P					
K1-02B	24-Oct-89	<0.02 P				<0.01 P			<0.5 P
K1-02B	10-Jan-90		5.6 P	25 P					
K1-02B	10-Jan-90	<0.02 P	5.6 P			<0.01 P			<0.5 P
K1-02B	10-Apr-90		6.4 P	28 P					
K1-02B	10-Apr-90	0.03 P	6.4 P			<0.01 P			<0.5 P
K1-02B	10-Apr-90		6.3 P	28 P					
K1-02B	10-Apr-90	0.02 P	6.3 P			<0.01 P			<0.5 P
K1-02B	9-Jul-90		6 P	26 P					
K1-02B	9-Jul-90	0.02 P	6 P			<0.01 P			<0.5 P
K1-02B	8-Oct-90		6.6 P	29 P					
K1-02B	8-Oct-90	0.04 P		29 P					<0.5 P
K1-02B	14-Jan-91		6.4 P	28 P					
K1-02B	14-Jan-91	0.05 P		28 P					<0.5 P
K1-02B	8-Apr-91		5.9 P	26 P					
K1-02B	8-Apr-91	0.02 P		26 P					<0.5 P
K1-02B	8-Jul-91		6.2 P	27 P					
K1-02B	8-Jul-91	0.02 P		27 P					<0.5 P
K1-02B	15-Nov-91		6 P	26 P					
K1-02B	15-Nov-91	<0.02 P		26 P					<0.5 P
K1-02B	15-Jan-92		5.8 P	25 P					
K1-02B	15-Jan-92	0.04 P		25 P					<0.5 P
K1-02B	14-Apr-92		7 P	31 P					

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
K1-02B	14-Apr-92	0.02 P		31 P					<0.5 P
K1-02B	25-Jul-92		7 P	31 P					
K1-02B	25-Jul-92	0.03 P				<0.01 P	<0.03 P		<0.5 P
K1-02B	26-Oct-92		7.1 P	31 P					
K1-02B	26-Oct-92	<0.03 P				<0.01 P	<0.03 P		<0.5 P
K1-02B	2-Feb-93		7	31					
K1-02B	2-Feb-93	<0.03				<0.01	<0.03		<0.5
K1-02B	2-Feb-93		7.3	32					
K1-02B	2-Feb-93	<0.03				<0.01	<0.03		<0.5
K1-02B	7-Apr-93		6.9	30					
K1-02B	7-Apr-93	0.076		30					<1
K1-02B	26-Jul-93				28 S			124.04 S	
K1-02B	26-Jul-93	<0.1					<0.5		0.16
K1-02B	5-Nov-93				5.2			23.036	
K1-02B	4-May-94				9			39.87	
K1-02B	4-May-94				9.5			42.085	
K1-02B	3-Aug-94				6.6			29.238	
K1-02B	13-Oct-94	<0.1				<0.5			
K1-02B	13-Oct-94								<0.5
K1-02B	13-Oct-94				8.4			37.212	
K1-02B	11-Jan-95				5.9			26.137	
K1-02B	10-May-95							27	
K1-02B	31-Jul-95							36	
K1-02B	11-Oct-95							32	
K1-02B	17-Jan-96							28 D	
K1-02B	10-Apr-96	<0.1			7	<0.5	<2.5 DH	31	<0.5
K1-02B	30-Jul-96	0.35			6.5	<0.5	<0.5 LO	29 LO	<0.5
K1-02B	9-Oct-96				6.3 D	<0.5	<0.5	28 D	
K1-02B	28-Oct-96				6.5 D	<5 D		29 D	
K1-02B	16-Jan-97							31 D	
K1-02B	3-Apr-97							29 D	
K1-02B	1-Jul-97							30 D	
K1-02B	13-Oct-97							31	
K1-02B	8-Jan-98							31	
K1-02B	9-Apr-98							29	
K1-02B	14-Jul-98							31	
K1-02B	13-Oct-98							33	
K1-02B	12-Jan-99							33	
K1-02B	12-Jan-99							33	
K1-02B	15-Apr-99							4.6 S	
K1-02B	9-Jul-99							<0.5 LS	
K1-02B	7-Oct-99							70 DS	
K1-02B	7-Feb-00							34	
K1-02B	18-Apr-00							28 D	
K1-02B	19-Jul-00							31 D	
K1-02B	18-Jan-01							24 D	

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
K1-02B	18-Apr-01							8 DH	
K1-02B	9-Jul-01							19 D	
K1-02B	16-Apr-02							35	
K1-02B	29-Jul-02							39	
K1-02B	30-Jan-03							38	
K1-02B	17-Apr-03							37 D	
K1-02B	17-Apr-03							39 D	
K1-02B	8-Sep-03							34	
K1-02B	4-Nov-03							35.5	
K1-02B	28-Jan-04							36.1	
K1-02B	19-May-04							35.6	
K1-02B	19-May-04							35.6	
K1-02B	20-Jul-04							35.9	
K1-02B	22-Nov-04							36.9	
K1-02B	23-Feb-05							38	
K1-02B	12-Apr-05							38	
K1-02B	12-Apr-05							37	
K1-02B	6-Jul-05							37.5	
K1-02B	4-Oct-05							33.2 D	
K1-02B	4-Oct-05							31.6 D	
K1-02B	3-Jan-06							37	
K1-02B	12-Apr-06							38	
K1-02B	12-Apr-06							37	
K1-03	19-Jan-88	0.1 P	8 P			<0.01 P			0.1 P
K1-03	4-Apr-88	0.1 P	6 P			<0.01 P			0.1 P
K1-03	25-Jul-88	<0.1 P	12 P			<0.02 P			<0.5 P
K1-03	4-Oct-88	<0.5 P	3.1 P	14 P		<0.01 P			<0.5 P
K1-03	12-Jan-89	<0.5 P	7.1 P	31 P		<0.01 P			0.7 P
K1-03	11-Apr-89	<0.02 P	8.1 P	36 P		<0.01 P			<0.5 P
K1-03	24-Jul-89	<0.02 P	7.5 P	33 P		<0.01 P			<0.5 P
K1-03	24-Oct-89		5.2 P	23 P					
K1-03	24-Oct-89	<0.02 P				<0.01 P			<0.5 P
K1-03	10-Jan-90		5.1 P	22 P					
K1-03	10-Jan-90	<0.02 P	5.1 P			<0.01 P			<0.5 P
K1-03	10-Apr-90		6.5 P	29 P					
K1-03	10-Apr-90	0.02 P	6.5 P			<0.01 P			<0.5 P
K1-03	9-Jul-90		5.9 P	26 P					
K1-03	9-Jul-90	<0.02 P	5.9 P			<0.01 P			<0.5 P
K1-03	8-Oct-90		6.4 P	28 P					
K1-03	8-Oct-90	0.03 P		28 P					<0.5 P
K1-03	8-Oct-90		6.4 P	28 P					
K1-03	8-Oct-90	0.04 P		28 P					<0.5 P
K1-03	14-Jan-91		6.2 P	27 P					
K1-03	14-Jan-91	0.03 P		27 P					<0.5 P
K1-03	8-Apr-91		5.3 P	23 P					
K1-03	8-Apr-91	0.02 P		23 P					<0.5 P

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
K1-03	8-Jul-91		5.8 P	26 P					
K1-03	8-Jul-91	0.02 P		25 P					<0.5 P
K1-03	15-Nov-91		5.4 P	24 P					
K1-03	15-Nov-91	<0.02 P		24 P					<0.5 P
K1-03	15-Jan-92		5.2 P	23 P					
K1-03	15-Jan-92	0.06 P		23 P					<0.5 P
K1-03	14-Apr-92		6.4 P	28 P					
K1-03	14-Apr-92	0.02 P		28 P					<0.5 P
K1-03	25-Jul-92		6.2 P	28 P					
K1-03	25-Jul-92	0.03 P				<0.01 P	<0.03 P		<0.5 P
K1-03	27-Oct-92		6.7 P	30 P					
K1-03	27-Oct-92	<0.03 P				<0.01 P	<0.03 P		<0.5 P
K1-03	2-Feb-93		6.3	28					
K1-03	2-Feb-93	<0.03				<0.01	<0.03		<0.5
K1-03	7-Apr-93		5.9	26					
K1-03	7-Apr-93	0.057		26					<1
K1-03	26-Jul-93				25 S			110.75 S	
K1-03	26-Jul-93	<0.1					<0.5		<0.1
K1-03	4-Nov-93				4.1			18.163	
K1-03	4-May-94				8.5			37.655	
K1-03	3-Aug-94				6.3			27.909	
K1-03	13-Oct-94	<0.1				<0.5			
K1-03	13-Oct-94								<0.5
K1-03	13-Oct-94				6.3			27.909	
K1-03	11-Jan-95				4.5			19.935	
K1-03	10-May-95							22	
K1-03	31-Jul-95							30	
K1-03	11-Oct-95							27	
K1-03	11-Oct-95							27	
K1-03	18-Jan-96							29 LO	
K1-03	10-Apr-96	<0.1			6.1	<0.5	<2.5 DH	27	<0.5
K1-03	30-Jul-96	0.25			6.2	<0.5	<0.5 LO	27 LO	<0.5
K1-03	10-Oct-96				5.4 D	<0.5	<0.5	24 D	
K1-03	16-Jan-97							26 D	
K1-03	3-Apr-97							25 D	
K1-03	2-Jul-97							27 D	
K1-03	14-Oct-97							29	
K1-03	8-Jan-98							29	
K1-03	9-Apr-98							29	
K1-03	9-Apr-98							30	
K1-03	15-Jul-98							30	
K1-03	13-Oct-98							31	
K1-03	12-Jan-99							33	
K1-03	15-Apr-99							<0.5 S	
K1-03	9-Jul-99							<0.5 LS	
K1-03	6-Oct-99							10 DS	

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
K1-03	7-Feb-00							7.6	
K1-03	18-Apr-00							28 D	
K1-03	19-Jul-00							29 D	
K1-03	23-Oct-00							29 D	
K1-03	23-Oct-00							29 D	
K1-03	18-Jan-01							24 D	
K1-03	18-Apr-01							8 DH	
K1-03	9-Jul-01							19 D	
K1-03	9-Jul-01							19 D	
K1-03	16-Apr-02							34	
K1-03	29-Jul-02							36	
K1-03	30-Jan-03							35 D	
K1-03	17-Apr-03							35 D	
K1-03	24-Jul-03							31.5	
K1-03	4-Nov-03							31.9	
K1-03	28-Jan-04							32.2	
K1-03	28-Jan-04							32	
K1-03	20-May-04							32.1	
K1-03	19-Jul-04							30.3	
K1-03	30-Nov-04							31.3	
K1-03	22-Feb-05							32	
K1-03	13-Apr-05							32	
K1-03	28-Jul-05							28.3 D	
K1-03	4-Oct-05							27.5 D	
K1-03	3-Jan-06							31	
K1-03	3-Apr-06							32	
K1-04	19-Jan-88	0.11 P	5.1 P			<0.01 P			0.11 P
K1-04	4-Apr-88	<0.1 P	3.2 P			<0.01 P			<0.1 P
K1-04	25-Jul-88	<0.1 P	6 P			<0.02 P			<0.5 P
K1-04	6-Oct-88	<0.5 P	2.9 P	13 P		<0.01 P			<0.5 P
K1-04	24-Jan-89	<0.02 P		25 P		<0.01 P			<0.5 P
K1-04	24-Jan-89	<0.02		28		<0.01			<0.5
K1-04	11-Apr-89	<0.02 P	6.5 P	28 P		<0.01 P			<0.5 P
K1-04	19-Jul-89	0.02 P	7 P	31 P		<0.01 P			<0.5 P
K1-04	24-Oct-89		5.4 P	24 P					
K1-04	24-Oct-89	0.02 P				0.03 P			<0.5 P
K1-04	10-Jan-90		4.6 P	20 P					
K1-04	10-Jan-90	<0.02 P	4.6 P			0.02 P			<0.5 P
K1-04	10-Apr-90		5.4 P	24 P					
K1-04	10-Apr-90	0.02 P	5.4 P			0.02 P			<0.5 P
K1-04	9-Jul-90	<0.02 P	5.2 P			<0.01 P			<0.5 P
K1-04	10-Jul-90		5.2 P	23 P					
K1-04	8-Oct-90		5.4 P	24 P					
K1-04	8-Oct-90	0.03 P		24 P					<0.5 P
K1-04	14-Jan-91		5.2 P	23 P					
K1-04	14-Jan-91	0.03 P		23 P					<0.5 P

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
K1-04	14-Jan-91		5.4 P	24 P					
K1-04	14-Jan-91	0.03 P		24 P					<0.5 P
K1-04	8-Apr-91		4.7 P	21 P					
K1-04	8-Apr-91	<0.02 P		21 P					<0.5 P
K1-04	9-Jul-91		5.9 P	26 P					
K1-04	9-Jul-91	<0.02 P		26 P					<0.5 P
K1-04	15-Oct-91		5.1 P	22 P					
K1-04	15-Oct-91	<0.02 P		22 P					<0.5 P
K1-04	15-Jan-92		4.6 P	20 P					
K1-04	15-Jan-92	0.04 P		20 P					<0.5 P
K1-04	14-Apr-92		5.5 P	24 P					
K1-04	14-Apr-92	0.02 P		24 P					<0.5 P
K1-04	25-Jul-92		5.5 P	24 P					
K1-04	25-Jul-92	0.03 P				<0.01 P	<0.03 P		<0.5 P
K1-04	25-Jul-92		5.4 P	24 P					
K1-04	25-Jul-92	0.03 P				<0.01 P	<0.03 P		<0.5 P
K1-04	27-Oct-92		5.6 P	25 P					
K1-04	27-Oct-92	<0.03 P				<0.01 P	<0.03 P		<0.5 P
K1-04	2-Feb-93		5.4	24					
K1-04	2-Feb-93	<0.03				<0.01	<0.03		<0.5
K1-04	7-Apr-93		4.6	20					
K1-04	7-Apr-93	0.12		21					<1
K1-04	26-Jul-93				20 S			88.6 S	
K1-04	26-Jul-93	<0.1					<0.5		<0.1
K1-04	26-Jul-93				20 S			88.6 S	
K1-04	26-Jul-93	<0.1					<0.5		<0.1
K1-04	4-Nov-93				6.7			29.681	
K1-04	4-May-94				7.1			31.453	
K1-04	3-Aug-94				4.8			21.264	
K1-04	3-Aug-94				4.5			19.935	
K1-04	13-Oct-94	<0.1				<0.5			
K1-04	13-Oct-94								0.99
K1-04	13-Oct-94				5.4			23.922	
K1-04	11-Jan-95				4.1			18.163	
K1-04	10-May-95							18	
K1-04	31-Jul-95							22	
K1-04	11-Oct-95							21	
K1-04	18-Jan-96							24 LO	
K1-04	11-Apr-96	<0.1			4.1	<0.5	<0.5 HLO	18	<0.5
K1-04	31-Jul-96	0.13			4.6	<0.5	<0.5 LO	20 LO	<0.5
K1-04	31-Jul-96	0.29			5	<0.5	<0.5 LO	22 LO	<0.5
K1-04	10-Oct-96				<5 D	<0.5	<0.5	20 D	
K1-04	16-Jan-97							22 D	
K1-04	3-Apr-97							20 D	
K1-04	2-Jul-97							22 D	
K1-04	14-Oct-97							24	

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
K1-04	8-Jan-98							23	
K1-04	9-Apr-98							22	
K1-04	15-Jul-98							24	
K1-04	14-Oct-98							28	
K1-04	13-Jan-99							27	
K1-04	14-Apr-99							<0.5 S	
K1-04	6-Oct-99							41 DS	
K1-04	7-Feb-00							5.9	
K1-04	18-Apr-00							25 D	
K1-04	18-Apr-00							25 D	
K1-04	19-Jul-00							26 D	
K1-04	23-Oct-00							24 D	
K1-04	18-Jan-01							8	
K1-04	23-Apr-01							14 D	
K1-04	10-Jul-01							2.4 L	
K1-04	16-Apr-02							25	
K1-04	29-Jul-02							37	
K1-04	29-Jul-02							33	
K1-04	29-Jan-03							44 D	
K1-04	29-Jan-03							43 D	
K1-04	18-Apr-03							30 D	
K1-04	24-Jul-03							34.2	
K1-04	18-Nov-03							35.7	
K1-04	18-Nov-03							36	
K1-04	29-Jan-04							34	
K1-04	11-May-04							34.9	
K1-04	19-Jul-04							34.7	
K1-04	30-Nov-04							35	
K1-04	24-Feb-05							33	
K1-04	12-Apr-05							27	
K1-04	1-Aug-05							29.6 D	
K1-04	5-Oct-05							5.95 D	
K1-04	10-Jan-06							34	
K1-04	4-Apr-06							36	
K1-05	21-Jan-88	0.12 P	8.7 P			<0.01 P			0.12 P
K1-05	4-Apr-88	<0.1 P	8.1 P			<0.01 P			<0.1 P
K1-05	15-Jul-88	<0.1 P	7.5 P			<0.02 P			<0.5 P
K1-05	15-Jul-88	<0.1 P	13 P			<0.02 P			<0.5 P
K1-05	6-Oct-88	<0.5 P	4.5 P	20 P		<0.01 P			<0.5 P
K1-05	1-Feb-89	0.02 P	8.8 P			<0.01 P			<0.5 P
K1-05	11-Apr-89	<0.02	9.9	44		<0.01			<0.5
K1-05	19-Jul-89	0.04 P	8.8 P	39 P		<0.01 P			<0.5 P
K1-05	19-Jul-89	<0.02 P	8.8 P	38 P		<0.01 P			<0.5 P
K1-05	25-Oct-89		8.3 P	37 P					
K1-05	25-Oct-89	0.03 P				<0.01 P			<0.5 P
K1-05	11-Jan-90		7.4 P	32 P					

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
K1-05	11-Jan-90	<0.02 P	7.4 P			<0.01 P			<0.5 P
K1-05	11-Apr-90		8.2 P	36 P					
K1-05	11-Apr-90	0.03 P	8.2 P			<0.01 P			<0.5 P
K1-05	10-Jul-90		8.5 P	37 P					
K1-05	10-Jul-90	0.03 P	8.5 P			<0.01 P			<0.5 P
K1-05	10-Jul-90		8.2	36					
K1-05	10-Jul-90	<0.02	8.2			<0.01			<0.5
K1-05	9-Oct-90		8 P	35 P					
K1-05	9-Oct-90	0.04 P		8 P					<0.5 P
K1-05	15-Jan-91		8.1 P	36 P					
K1-05	15-Jan-91	0.06 P		36 P					<0.5 P
K1-05	9-Apr-91		7.4 P	32 P					
K1-05	9-Apr-91	0.03 P		33 P					<0.5 P
K1-05	9-Jul-91		8.5 P	37 P					
K1-05	9-Jul-91	<0.02 P		37 P					<0.5 P
K1-05	16-Oct-91	0.02 P	7.8 P	34 P		<0.01 P	<0.03 P		<0.5 P
K1-05	16-Jan-92		8.4 P	37 P					
K1-05	16-Jan-92	<0.02 P		37 P					<0.5 P
K1-05	14-Apr-92		8.5 P	37 P					
K1-05	14-Apr-92	0.02 P		37 P					<0.5 P
K1-05	25-Jul-92		8.2 P	36 P					
K1-05	25-Jul-92	0.08 P				<0.01 P	<0.03 P		<0.5 P
K1-05	27-Oct-92		8.6 P	38 P					
K1-05	27-Oct-92	<0.03 P				<0.01 P	<0.03 P		<0.5 P
K1-05	2-Feb-93		8.3	36					
K1-05	2-Feb-93	<0.03				<0.01	<0.03		<0.5
K1-05	7-Apr-93		7.8	34					
K1-05	7-Apr-93	0.06		35					<1
K1-05	26-Jul-93				32 S			141.76 S	
K1-05	26-Jul-93	<0.1					<0.5		<0.1
K1-05	4-Nov-93				5.1			22.593	
K1-05	4-May-94				12			53.16	
K1-05	5-Aug-94				7.7			34.111	
K1-05	13-Oct-94	<0.1				<0.5			
K1-05	13-Oct-94								<0.5
K1-05	13-Oct-94				8.6			38.098	
K1-05	13-Oct-94	<0.08	7.5						<0.06
K1-05	9-Jan-95				6.3			27.909	
K1-05	10-May-95							30	
K1-05	31-Jul-95							39	
K1-05	31-Jul-95							40	
K1-05	12-Oct-95							36	
K1-05	18-Jan-96							29 LO	
K1-05	11-Apr-96	<0.1			7.8	<0.5	<2.5 DHL	35	<0.5
K1-05	31-Jul-96	<0.1			8	<0.5	<0.5 LO	35 LO	<0.5
K1-05	11-Oct-96				6.9 DLOH	<0.5 LOH	<0.5 LOH	31 DLOH	

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
K1-05	17-Jan-97							35 D	
K1-05	17-Jan-97							34 D	
K1-05	4-Apr-97							30 D	
K1-05	2-Jul-97							33 D	
K1-05	14-Oct-97							35	
K1-05	12-Jan-98							35	
K1-05	12-Jan-98							35	
K1-05	15-Apr-98							35	
K1-05	16-Jul-98							35	
K1-05	14-Oct-98							37	
K1-05	13-Jan-99							33	
K1-05	14-Apr-99							<0.5 S	
K1-05	8-Jul-99							<0.5 LS	
K1-05	6-Oct-99							24 DS	
K1-05	6-Oct-99							52 DS	
K1-05	8-Feb-00							37	
K1-05	19-Jul-00							33 D	
K1-05	24-Oct-00							31 D	
K1-05	18-Jan-01							28 D	
K1-05	20-Apr-01							9.4 DH	
K1-05	20-Apr-01							8.8 DH	
K1-05	12-Jul-01							35	
K1-05	18-Apr-02							33 L	
K1-05	30-Jul-02							42	
K1-05	29-Jan-03							46 D	
K1-05	18-Apr-03							35 D	
K1-05	24-Jul-03							38	
K1-05	19-Nov-03							38.8	
K1-05	29-Jan-04							38.3	
K1-05	10-May-04							36.6	
K1-05	13-Jul-04							37.4	
K1-05	13-Jul-04							37.1	
K1-05	1-Dec-04							36.8	
K1-05	1-Mar-05							38	
K1-05	13-Apr-05							39	
K1-05	7-Jul-05							37.9	
K1-05	7-Jul-05							37.9	
K1-05	5-Oct-05							30.8 D	
K1-05	5-Jan-06							37	
K1-05	6-Apr-06							38	
K1-07	20-Jan-88	<0.1 P	11 P			<0.01 P			<0.1 P
K1-07	20-Jan-88	<0.1 P	10 P			<0.01 P			<0.1 P
K1-07	4-Apr-88	<0.1 P	8.6 P			<0.01 P			<0.1 P
K1-07	25-Jul-88	<0.1 P	13 P			<0.02 P			<0.5 P
K1-07	10-Oct-88	<0.5 P	6.1 P	27 P		<0.01 P			<0.5 P
K1-07	10-Oct-88	<0.5 P	3.9 P	17 P		<0.01 P			<0.5 P

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
K1-07	23-Jan-89	<0.02 P		45 P		<0.01 P			<0.5 P
K1-07	11-Apr-89	<0.02 P	10 P	48 P		<0.01 P			<0.5 P
K1-07	24-Jul-89	<0.02 P	10 P	45 P		<0.01 P			<0.5 P
K1-07	25-Oct-89		9.6 P	42 P					
K1-07	25-Oct-89	0.02 P				<0.01 P			<0.5 P
K1-07	11-Jan-90		8.3 P	36 P					
K1-07	11-Jan-90	<0.02 P	8.3 P			<0.01 P			<0.5 P
K1-07	11-Apr-90		8 P	35 P					
K1-07	11-Apr-90	<0.02 P				<0.01 P			<0.5 P
K1-07	10-Jul-90		8.2 P	36 P					
K1-07	10-Jul-90	0.04 P	8.2 P			<0.01 P			<0.5 P
K1-07	9-Oct-90		7.8 P	34 P					
K1-07	9-Oct-90	0.02 P		7.8 P					<0.5 P
K1-07	15-Jan-91		7.8 P	34 P					
K1-07	15-Jan-91	0.04 P		34 P					<0.5 P
K1-07	9-Apr-91		7.4 P	33 P					
K1-07	9-Apr-91	0.02 P		33 P					<0.5 P
K1-07	9-Jul-91		8.2 P	36 P					
K1-07	9-Jul-91	<0.02 P		36 P					<0.5 P
K1-07	16-Oct-91	<0.02 P	7.2 P	32 P		<0.01 P	<0.03 P		<0.5 P
K1-07	16-Jan-92		7.8 P	34 P					
K1-07	16-Jan-92	<0.02 P		34 P					<0.5 P
K1-07	16-Jan-92		7.6 P	33 P					
K1-07	16-Jan-92	<0.02 P		33 P					<0.5 P
K1-07	14-Apr-92		7.7 P	34 P					
K1-07	14-Apr-92	0.02 P		34 P					<0.5 P
K1-07	25-Jul-92		7.5 P	33 P					
K1-07	25-Jul-92	0.04 P				<0.01 P	<0.03 P		<0.5 P
K1-07	26-Oct-92		7.3 P	32 P					
K1-07	26-Oct-92	<0.03 P				<0.01 P	<0.03 P		<0.5 P
K1-07	26-Oct-92		7.9 P	35 P					
K1-07	26-Oct-92	<0.03 P				<0.01 P	<0.03 P		<0.5 P
K1-07	2-Feb-93		7.5	33					
K1-07	2-Feb-93	<0.03				<0.01	<0.03		<0.5
K1-07	7-Apr-93		6.9	30					
K1-07	7-Apr-93	0.04		32					<1
K1-07	26-Jul-93				29 S			128.47 S	
K1-07	26-Jul-93	<0.1					<0.5		<0.1
K1-07	4-Nov-93				3.8			16.834	
K1-07	4-May-94				10			44.3	
K1-07	5-Aug-94				7.1			31.453	
K1-07	13-Oct-94	<0.1				<0.5			
K1-07	13-Oct-94								<0.5
K1-07	13-Oct-94				7.4			32.782	
K1-07	9-Jan-95				5.9			26.137	
K1-07	11-May-95							28 D	

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
K1-07	31-Jul-95							35	
K1-07	12-Oct-95							32	
K1-07	18-Jan-96							32 LO	
K1-07	12-Apr-96	<0.1 LO			6.2	<0.5	<0.5 H	28	<0.5
K1-07	31-Jul-96	<0.1			6.9	<0.5	<0.5 LO	30 LO	<0.5
K1-07	11-Oct-96				6.3 DLOH	<0.5 LOH	<0.5 LOH	28 DLOH	
K1-07	17-Jan-97							31 D	
K1-07	4-Apr-97							25 D	
K1-07	3-Jul-97							31 D	
K1-07	16-Oct-97							34	
K1-07	12-Jan-98							33	
K1-07	15-Apr-98							32	
K1-07	16-Jul-98							33	
K1-07	15-Oct-98							34	
K1-07	14-Jan-99							30	
K1-07	12-Apr-99							5.5 S	
K1-07	6-Jul-99							<0.5 S	
K1-07	4-Oct-99							29 LS	
K1-07	8-Feb-00							30	
K1-07	8-Feb-00							30	
K1-07	20-Jul-00							27 D	
K1-07	25-Oct-00							19	
K1-07	22-Jan-01							12 L	
K1-07	23-Apr-01							22 D	
K1-07	10-Jul-01							12 DL	
K1-07	18-Apr-02							25 L	
K1-07	30-Jul-02							33	
K1-07	30-Jan-03							36 D	
K1-07	1-May-03							37 D	
K1-07	28-Aug-03							29	
K1-07	24-Nov-03							30.4	
K1-07	4-Feb-04							29.5	
K1-07	10-May-04							30.2	
K1-07	21-Jul-04							34.2	
K1-07	2-Dec-04							31.2	
K1-07	28-Feb-05				7.5				
K1-07	6-Apr-05							34	
K1-07	6-Jul-05							31.4	
K1-07	17-Oct-05				6.57 D			29.1 D	
K1-07	17-Jan-06							32	
K1-07	11-Apr-06							34	
K1-08	21-Jan-88	0.13 P	9.2 P			<0.01 P			0.13 P
K1-08	6-Apr-88	<0.1 P	8.8 P			<0.01 P			<0.1 P
K1-08	15-Jul-88	<0.1 P	14 P			<0.02 P			<0.5 P
K1-08	6-Oct-88	<0.5 P	4.5 P	20 P		<0.01 P			<0.5 P
K1-08	24-Jan-89	<0.02 P		45 P		<0.01 P			<0.5 P

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
K1-08	4-May-89	0.03 P	11 P	46 P		<0.01 P			<0.5 P
K1-08	24-Jul-89	<0.02 P	7.8 P	34 P		<0.01 P			<0.5 P
K1-08	25-Oct-89		8.7 P	38 P					
K1-08	25-Oct-89	0.02 P				<0.01 P			<0.5 P
K1-08	11-Jan-90		6.6 P	29 P					
K1-08	11-Jan-90	<0.02 P	6.6 P			<0.01 P			<0.5 P
K1-08	11-Apr-90		7.9 P	35 P					
K1-08	11-Apr-90	<0.02 P	7.9 P			<0.01 P			<0.5 P
K1-08	10-Jul-90		8.3 P	36 P					
K1-08	10-Jul-90	0.03 P	8.3 P			<0.01 P			<0.5 P
K1-08	9-Oct-90		8 P	35 P					
K1-08	9-Oct-90	0.02 P		8 P					<0.5 P
K1-08	15-Jan-91		8 P	35 P					
K1-08	15-Jan-91	0.05 P		35 P					<0.5 P
K1-08	10-Apr-91		8 P	35 P					
K1-08	10-Apr-91	<0.02 P		35 P					<0.5 P
K1-08	10-Apr-91		8.1 P	36 P					
K1-08	10-Apr-91	<0.02 P		36 P					<0.5 P
K1-08	9-Jul-91		8.3 P	37 P					
K1-08	9-Jul-91	<0.02 P		37 P					<0.5 P
K1-08	16-Oct-91	<0.02 P	7.6 P	33 P		<0.01 P	<0.03 P		<0.5 P
K1-08	16-Jan-92		8.4 P	37 P					
K1-08	16-Jan-92	<0.02 P		37 P					<0.5 P
K1-08	14-Apr-92		8.3 P	37 P					
K1-08	14-Apr-92	0.02 P		36 P					<0.5 P
K1-08	25-Jul-92		8 P	35 P					
K1-08	25-Jul-92	0.04 P				<0.01 P	<0.03 P		<0.5 P
K1-08	27-Oct-92		8.7 P	38 P					
K1-08	27-Oct-92	<0.03 P				<0.01 P	<0.03 P		<0.5 P
K1-08	2-Feb-93		8.1	36					
K1-08	2-Feb-93	<0.03				<0.01	<0.03		<0.5
K1-08	7-Apr-93		7.3	32					
K1-08	7-Apr-93	0.047		37					<1
K1-08	26-Jul-93				31 S			137.33 S	
K1-08	26-Jul-93	<0.1					<0.5		<0.1
K1-08	4-Nov-93				5.2			23.036	
K1-08	4-May-94				10			44.3	
K1-08	5-Aug-94				7.4			32.782	
K1-08	13-Oct-94	0.21				<0.5			
K1-08	13-Oct-94								<0.5
K1-08	13-Oct-94				8.1			35.883	
K1-08	9-Jan-95				5.6			24.808	
K1-08	9-Jan-95				5.9			26.137	
K1-08	11-May-95							29 D	
K1-08	31-Jul-95							39	
K1-08	12-Oct-95							35	

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
K1-08	18-Jan-96							28 LO	
K1-08	12-Apr-96	0.5 LO			7.3	<0.5	<2.5 DH	32	<0.5
K1-08	12-Apr-96	0.27 LO			7.2	<0.5	<2.5 DH	32	<0.5
K1-08	31-Jul-96	0.18			8.2	<0.5	<0.5 LO	36 LO	<0.5
K1-08	11-Oct-96				6.4 DLOH	<0.5 LOH	<0.5 LOH	28 DLOH	
K1-08	11-Oct-96				6.6 DLOH	<0.5 LOH	<0.5 LOH	29 DLOH	
K1-08	17-Jan-97							35 D	
K1-08	4-Apr-97							26 D	
K1-08	3-Jul-97							35 D	
K1-08	3-Jul-97							34 D	
K1-08	16-Oct-97							37	
K1-08	12-Jan-98							36	
K1-08	15-Apr-98							36	
K1-08	16-Jul-98							37	
K1-08	16-Jul-98							38	
K1-08	15-Oct-98							37	
K1-08	14-Jan-99							35	
K1-08	12-Apr-99							5.5 S	
K1-08	7-Jul-99							<0.5 S	
K1-08	4-Oct-99							28 DLS	
K1-08	9-Feb-00							42	
K1-08	20-Jul-00							34 D	
K1-08	24-Oct-00							32 D	
K1-08	22-Jan-01							35 DHL	
K1-08	23-Apr-01							32 D	
K1-08	11-Jul-01							31 D	
K1-08	18-Apr-02							34 L	
K1-08	30-Jul-02							43	
K1-08	7-Feb-03							43	
K1-08	2-May-03							40 D	
K1-08	4-Sep-03							37.7	
K1-08	24-Nov-03							38.2	
K1-08	3-Feb-04							38.5	
K1-08	11-May-04							38	
K1-08	21-Jul-04							37.6	
K1-08	2-Dec-04							37.3	
K1-08	2-Mar-05							38	
K1-08	2-Mar-05							38	
K1-08	6-Apr-05							38	
K1-08	6-Jul-05							37.9	
K1-08	13-Oct-05							31.5 D	
K1-08	18-Jan-06							37	
K1-08	18-Jan-06							37	
K1-08	11-Apr-06							37	
K1-09	21-Jan-88	0.12 P	9 P			<0.01 P			0.12 P
K1-09	6-Apr-88	<0.1 P	8.1 P			<0.01 P			<0.1 P

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
K1-09	15-Jul-88	<0.1 P	9 P			<0.02 P			<0.5 P
K1-09	6-Oct-88	<0.5 P	4.6 P	20 P		<0.01 P			<0.5 P
K1-09	24-Jan-89	<0.02 P		46 P		<0.01 P			<0.5 P
K1-09	4-May-89	<0.02 P	10 P	46 P		<0.01 P			<0.5 P
K1-09	4-May-89	<0.05 P	8.6 P			<0.05 P			<0.1 P
K1-09	24-Jul-89	0.05 P	7.8 P	34 P		<0.01 P			<0.5 P
K1-09	25-Oct-89		9 P	39 P					
K1-09	25-Oct-89	0.03 P				<0.01 P			<0.5 P
K1-09	11-Jan-90		7.8 P	34 P					
K1-09	11-Jan-90	<0.02 P	7.8 P			<0.01 P			<0.5 P
K1-09	11-Jan-90		7.5 P	33 P					
K1-09	11-Jan-90	0.02 P	7.6 P			<0.01 P			<0.5 P
K1-09	11-Apr-90		8 P	35 P					
K1-09	11-Apr-90	<0.02 P	8 P			<0.01 P			<0.5 P
K1-09	10-Jul-90		8.3 P	36 P					
K1-09	10-Jul-90	<0.02 P	8.3 P			<0.01 P			<0.5 P
K1-09	9-Oct-90		8.1 P	36 P					
K1-09	9-Oct-90	0.03 P	8.1 P						<0.5 P
K1-09	15-Jan-91		8.1 P	36 P					
K1-09	15-Jan-91	0.03 P		36 P					<0.5 P
K1-09	9-Apr-91		7.8 P	34 P					
K1-09	9-Apr-91	<0.02 P		34 P					<0.5 P
K1-09	9-Jul-91		8.1 P	36 P					
K1-09	9-Jul-91	<0.02 P		37 P					<0.5 P
K1-09	16-Oct-91	<0.02 P	7.6 P	33 P		<0.01 P	<0.03 P		<0.5 P
K1-09	16-Jan-92		8.3 P	36 P					
K1-09	16-Jan-92	<0.02 P		36 P					<0.5 P
K1-09	14-Apr-92		8.4 P	37 P					
K1-09	14-Apr-92	0.02 P		37 P					<0.5 P
K1-09	14-Apr-92		8.4 P	37 P					
K1-09	14-Apr-92	0.02 P		37 P					<0.5 P
K1-09	25-Jul-92		8 P	35 P					
K1-09	25-Jul-92	0.04 P				<0.01 P	<0.03 P		<0.5 P
K1-09	27-Oct-92		8.3 P	37 P					
K1-09	27-Oct-92	<0.03 P				<0.01 P	<0.03 P		<0.5 P
K1-09	2-Feb-93		8.1	36					
K1-09	2-Feb-93	<0.03				<0.01	<0.03		<0.5
K1-09	7-Apr-93		7.5	33					
K1-09	7-Apr-93	0.06		37					<1
K1-09	26-Jul-93				33 S			146.19 S	
K1-09	26-Jul-93	<0.1					<0.5		<0.1
K1-09	4-Nov-93				5.2			23.036	
K1-09	4-May-94				11			48.73	
K1-09	5-Aug-94				7.6			33.668	
K1-09	13-Oct-94	<0.1				<0.5			
K1-09	13-Oct-94								<0.5

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
K1-09	13-Oct-94				8.8			38.984	
K1-09	9-Jan-95				6.1			27.023	
K1-09	10-May-95							29	
K1-09	31-Jul-95							38	
K1-09	12-Oct-95							35	
K1-09	18-Jan-96							12 LO	
K1-09	18-Jan-96							12 LO	
K1-09	12-Apr-96	<0.1 LO			7.8	<0.5	<2.5 DH	34	<0.5
K1-09	31-Jul-96	0.27			7.8	<0.5	<0.5 LO	35 LO	<0.5
K1-09	11-Oct-96				6.7 DLOH	<0.5 LOH	<0.5 LOH	30 DLOH	
K1-09	17-Jan-97							35 D	
K1-09	4-Apr-97							29 D	
K1-09	4-Apr-97							29 D	
K1-09	3-Jul-97							34 D	
K1-09	16-Oct-97							36	
K1-09	16-Oct-97							37	
K1-09	17-Mar-98							36	
K1-09	15-Apr-98							36	
K1-09	16-Jul-98							37	
K1-09	15-Oct-98							37	
K1-09	15-Oct-98							36	
K1-09	13-Jan-99							36	
K1-09	13-Apr-99							11 S	
K1-09	13-Apr-99							11 S	
K1-09	7-Jul-99							<0.5 S	
K1-09	4-Oct-99							28 DLS	
K1-09	9-Feb-00							9.4	
K1-09	20-Jul-00							34 D	
K1-09	20-Jul-00							34 D	
K1-09	24-Oct-00							32 D	
K1-09	22-Jan-01							18 DL	
K1-09	20-Apr-01							9.3 DH	
K1-09	11-Jul-01							31 D	
K1-09	18-Apr-02							34 L	
K1-09	30-Jul-02							46	
K1-09	31-Jan-03							42 D	
K1-09	2-May-03							43 D	
K1-09	8-Sep-03							38.1	
K1-09	25-Nov-03							38.6	
K1-09	3-Feb-04							38.6	
K1-09	11-May-04							37.9	
K1-09	20-Jul-04							37.7	
K1-09	6-Dec-04							37	
K1-09	6-Dec-04							37	
K1-09	24-Feb-05							38	
K1-09	6-Apr-05							37	

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
K1-09	1-Aug-05							32.8 D	
K1-09	13-Oct-05							29.9 D	
K1-09	19-Jan-06							37	
K1-09	12-Apr-06							37	
W-865-01	30-Mar-99				0.1	<0.02		0.44	
W-865-01	14-Aug-01				0.1	<0.1		0.6	
W-865-01	31-Oct-01				<0.1 L	<0.1		0.3	
W-865-01	31-Jan-02				1.3	<0.1 H		5.9	
W-865-01	30-May-02				3.3	<0.1		15	
W-865-01	31-Jul-02				2.9 F	<0.1		13 F	
W-865-01	19-Feb-03				3.4	<0.1		15	
W-865-01	29-May-03				2.8	<0.1		12	
W-865-01	6-Aug-03				2.7 H	<0.1 H		12 H	
W-865-01	17-Nov-03				0.9	<0.1		4	
W-865-01	3-Mar-04				6	<0.1		26	
W-865-01	17-May-05				0.84	<0.1		3.7	
W-865-01	11-Apr-06							12	
W-865-02	29-Mar-00				7.9	<0.1		35	
W-865-02	28-Aug-01				6.2 L	<0.1		28 D	
W-865-02	31-Oct-01				4.9 L	<0.1		22	
W-865-02	31-Jan-02				6.3	<0.1 H		28	
W-865-02	23-May-02				8.6	<0.1		38	
W-865-02	31-Jul-02				8.1 F	<0.1		36 F	
W-865-02	19-Feb-03				9.2	<0.1		41	
W-865-02	12-Jun-03		2 DH		2 DH	<0.02		9 DH	
W-865-02	12-Jun-03				9.3 H	<0.1 H		41 H	
W-865-02	6-Aug-03				9.8 H	<0.1 H		43 H	
W-865-02	17-Nov-03				11.5 D	<0.1		51 D	
W-865-02	24-Feb-04				7.7	<0.1		34	
W-865-02	5-Apr-06							38 D	
W-865-03	29-Sep-00				11 D	<0.1		49 D	
W-865-03	14-Aug-01				9 D	<0.1		40 D	
W-865-03	30-Oct-01				7 L	<0.1		31	
W-865-03	31-Jan-02				7.2	<0.1 H		32	
W-865-03	30-May-02				11 D	<0.1		50 D	
W-865-03	31-Jul-02				11 DF	<0.1		48 DF	
W-865-03	19-Feb-03				12 D	<0.1		55 D	
W-865-03	29-May-03				11 D	<0.1		49 D	
W-865-03	6-Aug-03				15 DH	<0.1 H		66 DH	
W-865-03	17-Nov-03				15 D	<0.1		65 D	
W-865-03	3-Mar-04				10 D	<0.1		42 D	
W-865-03	20-May-05				10 D	<0.1		46 D	
W-865-03	11-Apr-06							37 D	
W-865-04	28-Sep-00				<0.1	<0.1		<0.1	
W-865-04	14-Aug-01				<0.1	<0.1		0.4	
W-865-04	30-Oct-01				<0.1 L	<0.1		0.4	

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
W-865-04	31-Jan-02				<0.1	<0.1 H		<0.1	
W-865-04	23-May-02				2.5	<0.1		11	
W-865-04	31-Jul-02				2.6 F	<0.1		11 F	
W-865-04	19-Feb-03				1.3	<0.1		5.6	
W-865-04	29-May-03				<0.1	<0.1		<0.1	
W-865-04	6-Aug-03				7 DH	<0.1 H		30 DH	
W-865-04	17-Nov-03				4.1	<0.1		18	
W-865-04	24-Feb-04				0.7	<0.1		3.3	
W-865-04	5-Apr-06							1.8	
W-865-05	10-Apr-00				13 D	<0.1		60 D	
W-865-05	11-Jun-01				7.4	<0.1		33 L	
W-865-05	22-Aug-01		12 DH		10 DH	1.3 D		45 DH	
W-865-05	22-Aug-01				8.7 L	0.605 D		38	
W-865-05	31-Oct-01		13 DH		13 DH	<0.02		56 DH	
W-865-05	31-Oct-01				7.3 L	<0.1		32	
W-865-05	28-Feb-02				9.3	<0.1		41	
W-865-05	30-May-02				12 D	<0.1		55 D	
W-865-05	31-Jul-02				12 DF	<0.1		53 DF	
W-865-05	20-Jun-03				11 DH	<0.1 H		49 DH	
W-865-05	15-Sep-03		11 DH		11 DH	0.026		48.7 DH	
W-865-05	15-Sep-03				16 DH	<0.1 H		27 DH	
W-865-05	2-Dec-03				13 D	<0.1		57 D	
W-865-05	2-Mar-04				11 D	<0.1		49 D	
W-865-05	12-Apr-06							56 D	
W-865-05	12-Apr-06							59 D	
W-865-07	29-Sep-00				14 D	0.1		62 D	
W-865-07	14-Aug-01				13 D	<0.1		59 D	
W-865-07	30-Oct-01				9 DL	<0.1		42 D	
W-865-07	31-Jan-02				14 D	<0.1 H		61	
W-865-07	23-May-02				18 D	<0.1		80 D	
W-865-07	31-Jul-02				15 DF	<0.1		66 DF	
W-865-07	19-Feb-03				17 D	<0.1		75 D	
W-865-07	29-May-03				17 D	<0.1		76	
W-865-07	6-Aug-03				20 DH	<0.1 H		88 DH	
W-865-07	2-Dec-03				20 D	<0.1		87 D	
W-865-07	24-Feb-04				18 D	<0.1		79 D	
W-865-07	13-May-05				17 D	<0.1		76 D	
W-865-07	5-Apr-06							86 D	
W-865-1802	27-Jun-03				6.1 DH	<0.1 H		27 DH	
W-865-1802	22-Dec-03				4.1	<0.1		18	
W-865-1802	1-Mar-04				5.7	<0.1		25	
W-865-1802	9-Jun-04							5.9	
W-865-1802	9-Jun-04				5.9	<0.1		26	
W-865-1802	10-May-05							32 D	
W-865-1802	10-May-05				6.9 D	<0.1		30 D	
W-865-1802	3-Apr-06							31	

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
W-865-1802	3-Apr-06							30 D	
W-865-1803	26-Jun-03				7.2 H	<0.1 H		32 H	
W-865-1803	3-Mar-04				6.6	<0.1		30	
W-865-1803	8-Jun-04				7.2 H	<0.1		32	
W-865-1803	8-Jun-04							7.2	
W-865-1803	10-Mar-05				6.7	<0.1		30	
W-865-1803	17-May-05				6.7	<0.1		30	
W-865-1803	12-Apr-06							29 D	
W-865-1804	23-Jun-03				16 DH	<0.1 H		70 DH	
W-865-1804	9-Jun-04							33	
W-865-1804	10-Mar-05				6.6	<0.1		29	
W-865-1804	17-May-05				5.9	<0.1		26	
W-865-2002	21-Sep-04							47 D	
W-865-2002	17-Nov-04				6.9			31	
W-865-2002	10-Mar-05							32	
W-865-2002	10-Mar-05				7.3	<0.1			
W-865-2002	19-May-05				13 D	<0.1			
W-865-2002	19-Sep-05							40 D	
W-865-2002	8-Nov-05							39	
W-865-2002	19-Jan-06							35 D	
W-865-2002	4-Apr-06							38 D	
W-865-2003	16-Sep-04							33	
W-865-2003	17-Nov-04							34 D	
W-865-2003	10-Mar-05							37	
W-865-2003	10-Mar-05				8.4	<0.1			
W-865-2003	19-May-05				9.9	<0.1			
W-865-2003	19-Sep-05							44 D	
W-865-2003	8-Nov-05							43 D	
W-865-2003	19-Jan-06							42 D	
W-865-2003	5-Apr-06							44 D	
W-865-2004	30-Mar-05					<0.1			
W-865-2004	25-May-05				13 D	<0.1			
W-865-2004	24-Aug-05							60 D	
W-865-2004	8-Nov-05							59 D	
W-865-2004	15-Mar-06							64 DL	
W-865-2004	12-Apr-06							59 D	
W-865-2005	21-Sep-04							37	
W-865-2005	17-Nov-04							31 D	
W-865-2005	24-Mar-05							37	
W-865-2005	24-Mar-05				8.1 D	<0.1			
W-865-2005	16-May-05							38	
W-865-2005	16-May-05					<0.1			
W-865-2005	31-Aug-05							37 D	
W-865-2005	7-Dec-05							34 D	
W-865-2005	8-Jun-06							35 D	
W-865-2121	30-Mar-05							50 D	

Table A-17. Ground and surface water analyses for nitrogenous compounds (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Ammonia Nitrogen as N (mg/L)	Nitrate and Nitrite as N (mg/L)	Nitrate and Nitrite as NO3 (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	Nitrite as NO2 (mg/L)	Nitrate as NO3 (mg/L)	Total Kjeldahl Nitrogen (mg/L)
W-865-2121	30-Mar-05					<0.1			
W-865-2121	24-May-05				11 D	<0.1		48 D	
W-865-2121	31-Aug-05							53 D	
W-865-2121	8-Nov-05							50 D	
W-865-2121	15-Feb-06							47 D	
W-865-2121	26-Apr-06							51 D	
W-865-2133	21-Feb-06							1.1	
W-865-2133	21-Feb-06					<0.1			
W-865-2133	12-Jun-06							2.6	
W-896-1806	14-Nov-05							<0.5	
W-896-1806	27-Mar-06				4.7	<0.1			
W-896-1806	12-Jun-06				5.9	<0.1			
W-PIT1-01	25-May-99							110 DS	
W-PIT1-01	21-Apr-00			69.3					
W-PIT1-01	21-Dec-00				15 DL	<0.1		66 D	
W-PIT1-01	13-Mar-01				19 DH	<0.1		84 DH	
W-PIT1-02	21-Mar-01				7.9 DH	<0.1		35 DH	

Notes:

mg/L = Milligrams per liter.
D = Analysis performed at a secondary dilution or concentration.
F = Analyte found in field blank, trip blank, or equipment blank.
H = Sample analyzed outside of holding time, sample results should be evaluated.
L = Spike accuracy not within control limits.
O = Duplicate spike or sample precision not within control limits.
P = Indicates that the absence of a data qualifier flag does not mean that the data does not need qualification, but that the implementation of electronic data qualifier flags was not yet established.
S = Analytical results for this sample are suspect.

Table A-18. Ground and surface water analyses for perchlorate (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Perchlorate (µg/L)
K1-02A	5-Jun-02	<4
K1-02A	5-Jun-02	<4
K1-02A	13-Apr-06	<4
K1-02B	14-Jul-98	6.4
K1-02B	16-Apr-02	5.2
K1-02B	29-Jul-02	<4
K1-02B	30-Jan-03	<4
K1-02B	17-Apr-03	<4
K1-02B	17-Apr-03	<4
K1-02B	8-Sep-03	6.5
K1-02B	4-Nov-03	6.7
K1-02B	28-Jan-04	6.6
K1-02B	19-May-04	5.8
K1-02B	19-May-04	5.8
K1-02B	20-Jul-04	6.1
K1-02B	22-Nov-04	6.7
K1-02B	23-Feb-05	7.1
K1-02B	12-Apr-05	7.6
K1-02B	12-Apr-05	7
K1-02B	6-Jul-05	6.49
K1-02B	4-Oct-05	7.54
K1-02B	4-Oct-05	7.39
K1-02B	3-Jan-06	9.6
K1-02B	12-Apr-06	7.4
K1-02B	12-Apr-06	7.2
K1-03	15-Jul-98	<4
K1-03	16-Apr-02	<4
K1-03	29-Jul-02	<4
K1-03	30-Jan-03	<4
K1-03	17-Apr-03	<4
K1-03	24-Jul-03	<4
K1-03	4-Nov-03	<4
K1-03	28-Jan-04	<4
K1-03	28-Jan-04	<4
K1-03	20-May-04	<4
K1-03	19-Jul-04	<4
K1-03	30-Nov-04	<4 E
K1-03	22-Feb-05	<4 E
K1-03	13-Apr-05	<4 E
K1-03	28-Jul-05	<4 E
K1-03	4-Oct-05	<4 E

Table A-18. Ground and surface water analyses for perchlorate (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Perchlorate (µg/L)
K1-03	3-Jan-06	<4 E
K1-03	3-Apr-06	<4
K1-04	15-Jul-98	<4
K1-04	16-Apr-02	<4
K1-04	29-Jul-02	<4
K1-04	29-Jul-02	<4
K1-04	29-Jan-03	<4
K1-04	29-Jan-03	<4
K1-04	18-Apr-03	<4
K1-04	24-Jul-03	<4
K1-04	18-Nov-03	<4
K1-04	18-Nov-03	<4
K1-04	29-Jan-04	<4
K1-04	11-May-04	<4
K1-04	19-Jul-04	<4
K1-04	30-Nov-04	<4 E
K1-04	24-Feb-05	<4 E
K1-04	12-Apr-05	<4 E
K1-04	1-Aug-05	<4 E
K1-04	5-Oct-05	<4 E
K1-04	10-Jan-06	<4 E
K1-04	4-Apr-06	<4 E
K1-05	16-Jul-98	<4
K1-05	18-Apr-02	<4
K1-05	30-Jul-02	<4
K1-05	29-Jan-03	<4
K1-05	18-Apr-03	<4
K1-05	24-Jul-03	<4
K1-05	19-Nov-03	<4
K1-05	29-Jan-04	<4
K1-05	10-May-04	<4
K1-05	13-Jul-04	<4
K1-05	13-Jul-04	<4
K1-05	1-Dec-04	<4
K1-05	1-Mar-05	<4
K1-05	13-Apr-05	<4
K1-05	7-Jul-05	<4
K1-05	7-Jul-05	<4
K1-05	5-Oct-05	<4
K1-05	5-Jan-06	<4 E
K1-05	6-Apr-06	<4 E

Table A-18. Ground and surface water analyses for perchlorate (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Perchlorate (µg/L)
K1-07	16-Jul-98	<4
K1-07	18-Apr-02	<4
K1-07	30-Jul-02	<4
K1-07	30-Jan-03	<4
K1-07	1-May-03	<4
K1-07	28-Aug-03	<4 H
K1-07	24-Nov-03	<4
K1-07	4-Feb-04	<4
K1-07	10-May-04	<4
K1-07	21-Jul-04	<4
K1-07	2-Dec-04	<4
K1-07	28-Feb-05	<4
K1-07	6-Apr-05	<4 E
K1-07	6-Jul-05	<4
K1-07	17-Oct-05	<4
K1-07	17-Jan-06	<4
K1-07	11-Apr-06	<4
K1-08	16-Jul-98	<4
K1-08	16-Jul-98	<4
K1-08	18-Apr-02	<4
K1-08	30-Jul-02	<4
K1-08	7-Feb-03	<4
K1-08	2-May-03	<4
K1-08	4-Sep-03	<4
K1-08	24-Nov-03	<4
K1-08	3-Feb-04	<4
K1-08	11-May-04	<4
K1-08	21-Jul-04	<4
K1-08	2-Dec-04	<4
K1-08	2-Mar-05	<4
K1-08	2-Mar-05	<4
K1-08	6-Apr-05	<4
K1-08	6-Jul-05	<4
K1-08	13-Oct-05	<4
K1-08	18-Jan-06	<4
K1-08	18-Jan-06	<4
K1-08	11-Apr-06	<4
K1-09	16-Jul-98	<4
K1-09	18-Apr-02	<4
K1-09	30-Jul-02	<4
K1-09	31-Jan-03	<4

Table A-18. Ground and surface water analyses for perchlorate (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Perchlorate (µg/L)
K1-09	2-May-03	<4
K1-09	8-Sep-03	<4
K1-09	25-Nov-03	<4
K1-09	3-Feb-04	<4
K1-09	11-May-04	<4
K1-09	20-Jul-04	<4
K1-09	6-Dec-04	<4
K1-09	6-Dec-04	<4
K1-09	24-Feb-05	<4
K1-09	6-Apr-05	<4
K1-09	1-Aug-05	<4
K1-09	13-Oct-05	<4
K1-09	19-Jan-06	<4
K1-09	12-Apr-06	<4
W-865-01	30-Mar-99	<4
W-865-01	5-May-04	<4
W-865-01	8-Sep-04	<4
W-865-01	3-Nov-04	<4
W-865-01	29-Jan-05	<4
W-865-01	17-May-05	<4
W-865-01	24-Aug-05	<4
W-865-01	19-Oct-05	<4
W-865-01	16-Jan-06	<4
W-865-01	11-Apr-06	<4
W-865-02	29-Mar-00	<4
W-865-02	24-May-00	<4
W-865-02	21-Jul-00	<4
W-865-02	21-Jul-00	<4
W-865-02	11-May-04	<4
W-865-02	8-Sep-04	<4
W-865-02	18-Nov-04	<4
W-865-02	29-Jan-05	<4
W-865-02	13-May-05	<4
W-865-02	13-May-05	<4
W-865-02	24-Aug-05	<4
W-865-02	10-Oct-05	<4
W-865-02	10-Oct-05	<4
W-865-02	16-Jan-06	9.5
W-865-02	16-Jan-06	<4
W-865-02	5-Apr-06	<4
W-865-03	29-Sep-00	<4

Table A-18. Ground and surface water analyses for perchlorate (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Perchlorate (µg/L)
W-865-03	5-May-04	<4
W-865-03	8-Sep-04	<4
W-865-03	2-Nov-04	<4
W-865-03	29-Jan-05	<4
W-865-03	20-May-05	<4
W-865-03	24-Aug-05	<4
W-865-03	19-Oct-05	<4
W-865-03	16-Jan-06	<4
W-865-03	11-Apr-06	<4
W-865-04	28-Sep-00	<4
W-865-04	5-May-04	<4
W-865-04	5-May-04	<4
W-865-04	8-Sep-04	<4
W-865-04	18-Nov-04	<4
W-865-04	29-Jan-05	<4
W-865-04	13-May-05	<4
W-865-04	18-Aug-05	<4
W-865-04	6-Oct-05	<4 L
W-865-04	16-Jan-06	<4
W-865-04	5-Apr-06	<4
W-865-05	10-Apr-00	<4
W-865-05	11-Jun-01	<4
W-865-05	11-May-04	<4
W-865-05	8-Sep-04	<4
W-865-05	8-Sep-04	<4
W-865-05	18-Nov-04	<4
W-865-05	18-Feb-05	<4
W-865-05	18-Feb-05	<4
W-865-05	16-May-05	<4
W-865-05	16-May-05	<4
W-865-05	24-Aug-05	<4
W-865-05	24-Aug-05	<4 L
W-865-05	10-Oct-05	<4
W-865-05	10-Oct-05	<4
W-865-05	16-Jan-06	<4
W-865-05	16-Jan-06	<4
W-865-05	12-Apr-06	<4
W-865-05	12-Apr-06	<4
W-865-07	29-Sep-00	<4
W-865-07	5-May-04	<4
W-865-07	5-May-04	<4

Table A-18. Ground and surface water analyses for perchlorate (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Perchlorate (µg/L)
W-865-07	9-Sep-04	<4
W-865-07	18-Nov-04	<4
W-865-07	29-Jan-05	<4
W-865-07	13-May-05	<4
W-865-07	18-Aug-05	<4
W-865-07	6-Oct-05	<4 L
W-865-07	16-Jan-06	<4
W-865-07	5-Apr-06	<4
W-865-1802	27-Jun-03	<4
W-865-1802	22-Dec-03	<4
W-865-1802	1-Mar-04	<4
W-865-1802	9-Jun-04	<4
W-865-1802	9-Sep-04	<4
W-865-1802	17-Nov-04	<4
W-865-1802	3-Mar-05	<4
W-865-1802	3-Mar-05	<4
W-865-1802	10-May-05	<4
W-865-1802	24-Aug-05	<4
W-865-1802	6-Oct-05	<4 L
W-865-1802	15-Feb-06	<4
W-865-1802	3-Apr-06	<4
W-865-1802	3-Apr-06	<4
W-865-1803	26-Jun-03	<4
W-865-1803	3-Mar-04	<4
W-865-1803	8-Jun-04	<4
W-865-1803	2-Sep-04	<4
W-865-1803	3-Nov-04	<4
W-865-1803	10-Mar-05	<4
W-865-1803	17-May-05	<4
W-865-1803	30-Aug-05	<4 E
W-865-1803	3-Nov-05	<4 E
W-865-1803	22-Feb-06	<4
W-865-1803	12-Apr-06	<4
W-865-1804	23-Jun-03	<4
W-865-1804	9-Jun-04	<4
W-865-1804	9-Sep-04	<4
W-865-1804	3-Nov-04	<4
W-865-1804	10-Mar-05	<4
W-865-1804	17-May-05	<4
W-865-1804	30-Aug-05	<4
W-865-1804	3-Nov-05	<4

Table A-18. Ground and surface water analyses for perchlorate (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Perchlorate (µg/L)
W-865-1804	22-Feb-06	<4
W-865-1804	12-Apr-06	<4
W-865-2002	21-Sep-04	<4
W-865-2002	17-Nov-04	<4
W-865-2002	10-Mar-05	<4
W-865-2002	19-May-05	<4
W-865-2002	19-Sep-05	<4 L
W-865-2002	8-Nov-05	<4
W-865-2002	19-Jan-06	<4
W-865-2002	4-Apr-06	<4
W-865-2003	16-Sep-04	<4
W-865-2003	17-Nov-04	<4
W-865-2003	10-Mar-05	<4
W-865-2003	19-May-05	<4
W-865-2003	19-Sep-05	<4 L
W-865-2003	8-Nov-05	<4
W-865-2003	19-Jan-06	<4
W-865-2003	5-Apr-06	<4
W-865-2004	30-Mar-05	<4
W-865-2004	25-May-05	<4
W-865-2004	24-Aug-05	<4
W-865-2004	8-Nov-05	<4
W-865-2004	15-Mar-06	<4
W-865-2004	12-Apr-06	<4
W-865-2005	21-Sep-04	<4
W-865-2005	17-Nov-04	<4
W-865-2005	24-Mar-05	<4
W-865-2005	16-May-05	<4
W-865-2005	31-Aug-05	<4
W-865-2005	7-Dec-05	<4
W-865-2005	24-Feb-06	<4
W-865-2005	8-Jun-06	<4
W-865-2121	30-Mar-05	<4
W-865-2121	24-May-05	<4
W-865-2121	31-Aug-05	<4
W-865-2121	8-Nov-05	<4
W-865-2121	15-Feb-06	<4
W-865-2121	26-Apr-06	<4
W-865-2133	21-Feb-06	<4
W-865-2133	12-Jun-06	<4
W-896-1806	14-Nov-05	<4

Table A-18. Ground and surface water analyses for perchlorate (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and June 30, 2006.

Location	Sample Date	Perchlorate (µg/L)
W-896-1806	27-Mar-06	<4
W-896-1806	12-Jun-06	<4
W-PIT1-01	25-May-99	<4 H
W-PIT1-01	23-Aug-99	<4 H
W-PIT1-01	9-Dec-99	<4 H
W-PIT1-01	15-Jun-00	<4
W-PIT1-01	21-Dec-00	8
W-PIT1-02	21-Mar-01	<4
W-PIT1-02	3-Feb-06	4.1
W-PIT1-02	11-May-06	7.7
W-PIT1-02	11-May-06	5

Notes:

µg/L = Micrograms per liter.
E = The analyte was detected below LLNL reporting limit, but above analytical laboratory minimum detection limit.
H = Sample analyzed outside of holding time, sample results should be evaluated.
L = Spike accuracy not within control limits.

Table A-19. Ground and surface water analyses for high explosive compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	HMX (µg/L)	RDX (µg/L)	TNT (µg/L)
K1-02A	23-May-96	<5	<5	
K1-02A	21-May-97	<5	<5	
K1-02A	8-Dec-97	<5	<5	
K1-02A	24-Jun-98	<5	<5	
K1-02A	16-Dec-98	<5	<5	
K1-02A	16-Dec-98	<5	<5	
K1-02A	21-May-99	<1	<1	
K1-02A	21-May-99	<1	<1	
K1-02A	2-Nov-99	<1	<1	
K1-02A	24-May-00	<1	<1	
K1-02A	7-Dec-00	<1 LO	<1 LO	
K1-02A	30-May-01	<5	<5	<5
K1-02A	5-Jun-02	<1 LO	<1 LO	
K1-02A	5-Jun-02	<1 LO	<1 LO	
K1-02A	28-Oct-02	<2.1	<2.1	
K1-02A	28-Oct-02	<2.1	<2.1	
K1-02B	19-Jan-88	<10 P	<15 P	<15 P
K1-02B	4-Apr-88	<20 P	<25 P	<20 P
K1-02B	4-Apr-88	<20 P	<25 P	<20 P
K1-02B	25-Jul-88	<20 P	<20 P	<20 P
K1-02B	3-Oct-88	<20 P	<30 P	<40 P
K1-02B	12-Jan-89	<20 P	<20 P	<20 P
K1-02B	10-Apr-89	<20 P	<20 P	<20 P
K1-02B	19-Jul-89	<20 P	<20 P	<20 P
K1-02B	31-Jul-89	<20 P	<20 P	<20 P
K1-02B	24-Oct-89	<20 P	<30 P	<30 P
K1-02B	10-Jan-90	<15 P	<30 P	<30 P
K1-02B	10-Apr-90	<20 P	<20 P	<30 P
K1-02B	10-Apr-90	<20 P	<20 P	<30 P
K1-02B	9-Jul-90	<20 P	<30 P	<30 P
K1-02B	8-Oct-90	<20 P	<30 P	<30 P
K1-02B	14-Jan-91	<20 P	<30 P	<30 P
K1-02B	8-Apr-91	<20 P	<30 P	<30 P
K1-02B	8-Jul-91	<20 P	<30 P	<30 P
K1-02B	15-Oct-91	<20 P	<30 P	<30 P
K1-02B	15-Jan-92	<20 P	<30 P	<30 P
K1-02B	14-Apr-92	<20 P	<30 P	<30 P
K1-02B	25-Jul-92	<20 P	<30 P	<30 P
K1-02B	26-Oct-92	<20 P	<30 P	<30 P

Table A-19. Ground and surface water analyses for high explosive compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	HMX (µg/L)	RDX (µg/L)	TNT (µg/L)
K1-02B	2-Feb-93	<20	<30	<30
K1-02B	2-Feb-93	<20	<30	<30
K1-02B	7-Apr-93	<20	<30	<30
K1-02B	26-Jul-93	<20	<30	<30
K1-02B	26-Oct-93	<20	<30	<30
K1-02B	31-Jan-94	<20	<30	<30
K1-02B	4-May-94	<20	<30	<30
K1-02B	4-May-94	<20	<30	<30
K1-02B	3-Aug-94	<20	<30	<30
K1-02B	13-Oct-94	<20	<30	<30
K1-02B	11-Jan-95	<10	<15	<15
K1-02B	10-May-95	<5	<5	<5
K1-02B	31-Jul-95	<5	<5	<5
K1-02B	11-Oct-95	<5	<5	<5
K1-02B	17-Jan-96	<5	<5	
K1-02B	10-Apr-96	<5	<5	
K1-02B	30-Jul-96	<5	<5	
K1-02B	9-Oct-96	<5	<5	
K1-02B	16-Jan-97	<5	<5	
K1-02B	3-Apr-97	<5 O	<5 O	
K1-02B	1-Jul-97	<5	<5	
K1-02B	13-Oct-97	<5	<5	
K1-02B	8-Jan-98	<5	<5	
K1-02B	9-Apr-98	<5	<5	
K1-02B	14-Jul-98	<5	<5	
K1-02B	13-Oct-98	<5	<5	
K1-02B	12-Jan-99	<5	<5	
K1-02B	12-Jan-99	<5	<5	
K1-02B	15-Apr-99	<1	<1	
K1-02B	9-Jul-99	<1	<1	
K1-02B	7-Oct-99	<1	<1	
K1-02B	7-Feb-00	<1	<1	
K1-02B	18-Apr-00	<1 LO	<1 LO	
K1-02B	19-Jul-00	<1 LO	<1 LO	
K1-02B	19-Oct-00	<1 LO	<1 LO	
K1-02B	18-Jan-01	<1	<1	
K1-02B	18-Apr-01	<1 L	<1 L	
K1-02B	9-Jul-01	<1	<1	
K1-02B	22-Oct-01	<1	<1	

Table A-19. Ground and surface water analyses for high explosive compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	HMX (µg/L)	RDX (µg/L)	TNT (µg/L)
K1-02B	16-Jan-02	<1	<1	
K1-02B	16-Apr-02	<1 LO	<1 LO	
K1-02B	29-Jul-02	<1 LO	<1 LO	
K1-02B	4-Dec-02	<1 O	<1 O	
K1-02B	30-Jan-03	<5	<5	<5
K1-02B	17-Apr-03	<1	<1	
K1-02B	17-Apr-03	<1	<1	
K1-02B	8-Sep-03	<5	<5	
K1-02B	4-Nov-03	<5 O	<5 O	
K1-02B	28-Jan-04	<5	<5	
K1-02B	19-May-04	<5	<5	
K1-02B	19-May-04	<5	<5	
K1-02B	20-Jul-04	30	<5	
K1-02B	18-Aug-04	<5	<5	
K1-02B	25-Aug-04	<5	<5	
K1-02B	22-Nov-04	<5	<5	
K1-02B	23-Feb-05	<2.8	<2.8	
K1-02B	12-Apr-05	<5 D	<5 D	
K1-02B	12-Apr-05	<5 D	<5 D	
K1-02B	6-Jul-05	<1	<1	
K1-02B	4-Oct-05	<1	<1	
K1-02B	4-Oct-05	<1	<1	
K1-02B	3-Jan-06	<5	<5	
K1-03	19-Jan-88	<10 P	<15 P	<15 P
K1-03	4-Apr-88	<20 P	<25 P	<20 P
K1-03	25-Jul-88	<20 P	<20 P	<20 P
K1-03	4-Oct-88	<20 P	<30 P	<40 P
K1-03	12-Jan-89	<20 P	<20 P	<20 P
K1-03	11-Apr-89	<20 P	<20 P	<20 P
K1-03	24-Jul-89	<20 P	<20 P	<20 P
K1-03	24-Oct-89	<20 P	<30 P	<30 P
K1-03	10-Jan-90	<15 P	<30 P	<30 P
K1-03	10-Apr-90	<20 P	<20 P	<30 P
K1-03	9-Jul-90	<20 P	<30 P	<30 P
K1-03	8-Oct-90	<20 P	<30 P	<30 P
K1-03	8-Oct-90	<20 P	<30 P	<30 P
K1-03	14-Jan-91	<20 P	<30 P	<30 P
K1-03	8-Apr-91	<20 P	<30 P	<30 P
K1-03	8-Jul-91	<20 P	<30 P	<30 P

Table A-19. Ground and surface water analyses for high explosive compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	HMX (µg/L)	RDX (µg/L)	TNT (µg/L)
K1-03	15-Oct-91	<20 P	<30 P	<30 P
K1-03	15-Jan-92	<20 P	<30 P	<30 P
K1-03	14-Apr-92	<20 P	<30 P	<30 P
K1-03	25-Jul-92	<20 P	<30 P	<30 P
K1-03	27-Oct-92	<20 P	<30 P	<30 P
K1-03	2-Feb-93	<20	<30	<30
K1-03	7-Apr-93	<20	<30	<30
K1-03	26-Jul-93	<20	<30	<30
K1-03	26-Oct-93	<20	<30	<30
K1-03	31-Jan-94	<20	<30	<30
K1-03	4-May-94	<20	<30	<30
K1-03	3-Aug-94	<20	<30	<30
K1-03	13-Oct-94	<20	<30	<30
K1-03	11-Jan-95	<10	<15	<15
K1-03	10-May-95	<5	<5	<5
K1-03	31-Jul-95	<5	<5	<5
K1-03	11-Oct-95	<5	<5	<5
K1-03	11-Oct-95	<5	<5	<5
K1-03	18-Jan-96	<5	<5	
K1-03	10-Apr-96	<5	<5	
K1-03	30-Jul-96	<5	<5	
K1-03	10-Oct-96	<5	<5	
K1-03	16-Jan-97	<5	<5	
K1-03	3-Apr-97	<5 O	<5 O	
K1-03	2-Jul-97	<5	<5	
K1-03	14-Oct-97	<5	<5	
K1-03	8-Jan-98	<5	<5	
K1-03	9-Apr-98	<5	<5	
K1-03	9-Apr-98	<5	<5	
K1-03	15-Jul-98	<5	<5	
K1-03	13-Oct-98	<5	<5	
K1-03	12-Jan-99	<5	<5	
K1-03	15-Apr-99	<1	<1	
K1-03	9-Jul-99	<1	<1	
K1-03	6-Oct-99	<1	<1	
K1-03	7-Feb-00	<1	<1	
K1-03	18-Apr-00	<1 LO	<1 LO	
K1-03	19-Jul-00	<1 LO	<1 LO	
K1-03	23-Oct-00	<5 LO	<5 LO	<5 LO

Table A-19. Ground and surface water analyses for high explosive compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	HMX (µg/L)	RDX (µg/L)	TNT (µg/L)
K1-03	23-Oct-00	<5 LO	<5 LO	<5 LO
K1-03	18-Jan-01	<1	<1	
K1-03	18-Apr-01	<1 L	<1 L	
K1-03	9-Jul-01	<2	<2	
K1-03	9-Jul-01	<1	<1	
K1-03	22-Oct-01	<1	<1	
K1-03	16-Jan-02	<1	<1	
K1-03	16-Apr-02	<1 LO	<1 LO	
K1-03	29-Jul-02	<1 LO	<1 LO	
K1-03	4-Dec-02	<1 O	<1 O	
K1-03	30-Jan-03	<5	<5	<5
K1-03	17-Apr-03	<1	<1	
K1-03	24-Jul-03	<5	<5	
K1-03	4-Nov-03	<5 O	<5 O	
K1-03	28-Jan-04	<5	<5	
K1-03	28-Jan-04	<5	<5	
K1-03	20-May-04	<5	<5	
K1-03	19-Jul-04	<5	<5	
K1-03	30-Nov-04	<5	<5	
K1-03	22-Feb-05	<4.3	<4.3	
K1-03	13-Apr-05	<5.8 D	11 D	
K1-03	7-Jun-05		<3	
K1-03	14-Jun-05		<3.2	
K1-03	28-Jul-05	<1 LO	<1 LO	
K1-03	4-Oct-05	<1	<1	
K1-03	3-Jan-06	<5	<5	
K1-04	19-Jan-88	<10 P	<15 P	<15 P
K1-04	4-Apr-88	<20 P	<25 P	<20 P
K1-04	25-Jul-88	<20 P	<20 P	<20 P
K1-04	6-Oct-88	<20 P	<30 P	<40 P
K1-04	24-Jan-89	<20 P	<20 P	<20 P
K1-04	24-Jan-89	<20 P	<20 P	<20 P
K1-04	11-Apr-89	<20 P	<20 P	<20 P
K1-04	19-Jul-89	<20 P	<20 P	<20 P
K1-04	24-Oct-89	<20 P	<30 P	<30 P
K1-04	10-Jan-90	<15 P	<30 P	<30 P
K1-04	10-Apr-90	<20 P	<20 P	<30 P
K1-04	9-Jul-90	<20 P	<30 P	<30 P
K1-04	8-Oct-90	<20 P	<30 P	<30 P

Table A-19. Ground and surface water analyses for high explosive compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	HMX (µg/L)	RDX (µg/L)	TNT (µg/L)
K1-04	14-Jan-91	<20 P	<30 P	<30 P
K1-04	8-Apr-91	<20 P	<30 P	<30 P
K1-04	9-Jul-91	<20 P	<30 P	<30 P
K1-04	15-Oct-91	<20 P	<30 P	<30 P
K1-04	15-Jan-92	<20 P	<30 P	<30 P
K1-04	14-Apr-92	<20 P	<30 P	<30 P
K1-04	25-Jul-92	<20 P	<30 P	<30 P
K1-04	25-Jul-92	<20 P	<30 P	<30 P
K1-04	27-Oct-92	<20 P	<30 P	<30 P
K1-04	2-Feb-93	<20	<30	<30
K1-04	7-Apr-93	<20	<30	<30
K1-04	26-Jul-93	<20	<30	<30
K1-04	26-Jul-93	<20	<30	<30
K1-04	28-Oct-93	<20	<30	<30
K1-04	31-Jan-94	<20	<30	<30
K1-04	4-May-94	<20	<30	<30
K1-04	3-Aug-94	<20	<30	<30
K1-04	3-Aug-94	<20	<30	<30
K1-04	13-Oct-94	<20	<30	<30
K1-04	11-Jan-95	<10	<15	<15
K1-04	10-May-95	<5	<5	<5
K1-04	31-Jul-95	<5	<5	<5
K1-04	11-Oct-95	<5	<5	<5
K1-04	18-Jan-96	<5	<5	
K1-04	11-Apr-96	<5	<5	
K1-04	31-Jul-96	<5	<5	
K1-04	31-Jul-96	<5	<5	
K1-04	10-Oct-96	<5	<5	
K1-04	16-Jan-97	<5	<5	
K1-04	3-Apr-97	<5 O	<5 O	
K1-04	2-Jul-97	<5	<5	
K1-04	14-Oct-97	<5	<5	
K1-04	8-Jan-98	<5	<5	
K1-04	9-Apr-98	<5	<5	
K1-04	15-Jul-98	<5	<5	
K1-04	14-Oct-98	<5	<5	
K1-04	13-Jan-99	<5	<5	
K1-04	14-Apr-99	<1	<1	
K1-04	9-Jul-99	<1	<1	

Table A-19. Ground and surface water analyses for high explosive compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	HMX (µg/L)	RDX (µg/L)	TNT (µg/L)
K1-04	6-Oct-99	<1	<1	
K1-04	7-Feb-00	<1	<1	
K1-04	18-Apr-00	<1 LO	<1 LO	
K1-04	18-Apr-00	<1 LO	<1 LO	
K1-04	19-Jul-00	<1 LO	<1 LO	
K1-04	23-Oct-00	<5 LO	<5 LO	<5 LO
K1-04	18-Jan-01	<1	<1	
K1-04	23-Apr-01	<1	<1	
K1-04	10-Jul-01	<1	<1	
K1-04	22-Oct-01	<1	<1	
K1-04	16-Jan-02	<1	<1	
K1-04	16-Jan-02	<1	<1	
K1-04	16-Apr-02	<1 LO	<1 LO	
K1-04	29-Jul-02	<1 LO	<1 LO	
K1-04	29-Jul-02	<1 LO	<1 LO	
K1-04	5-Dec-02	<1 O	<1 O	
K1-04	29-Jan-03	<1	<1	
K1-04	29-Jan-03	<1	<1	
K1-04	18-Apr-03	<2.2	<2.2	
K1-04	24-Jul-03	<5	<5	
K1-04	18-Nov-03	<5	<5	
K1-04	18-Nov-03	<5	<5	
K1-04	29-Jan-04	<5	<5	
K1-04	11-May-04	<5	<5	
K1-04	19-Jul-04	<5	<5	
K1-04	30-Nov-04	<5	<5	
K1-04	24-Feb-05	<5	<5	
K1-04	12-Apr-05	<5 D	<5 D	
K1-04	1-Aug-05	<1	<1	
K1-04	5-Oct-05	<1	<1	
K1-04	10-Jan-06	<5 D	<5 D	
K1-05	21-Jan-88	<10 P	<15 P	<15 P
K1-05	4-Apr-88	<20 P	<25 P	<20 P
K1-05	15-Jul-88	<20 P	<20 P	<20 P
K1-05	15-Jul-88	<20 P	<20 P	<20 P
K1-05	6-Oct-88	<20 P	<30 P	<40 P
K1-05	1-Feb-89	<20 P	<20 P	<20 P
K1-05	11-Apr-89	<20 P	<20 P	<20 P
K1-05	19-Jul-89	<20 P	<20 P	<20 P

Table A-19. Ground and surface water analyses for high explosive compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	HMX (µg/L)	RDX (µg/L)	TNT (µg/L)
K1-05	19-Jul-89	<20 P	<20 P	<20 P
K1-05	25-Oct-89	<20 P	<30 P	<30 P
K1-05	11-Jan-90	<15 P	<30 P	<30 P
K1-05	11-Apr-90	<20 P	<20 P	<30 P
K1-05	10-Jul-90	<20 P	<30 P	<30 P
K1-05	10-Jul-90	<20 P	<30 P	<30 P
K1-05	9-Oct-90	<20 P	<30 P	<30 P
K1-05	15-Jan-91	<20 P	<30 P	<30 P
K1-05	9-Apr-91	<20 P	<30 P	<30 P
K1-05	9-Jul-91	<20 P	<30 P	<30 P
K1-05	16-Oct-91	<20 P	<30 P	<30 P
K1-05	16-Jan-92	<20 P	<30 P	<30 P
K1-05	14-Apr-92	<20 P	<30 P	<30 P
K1-05	25-Jul-92	<20 P	<30 P	<30 P
K1-05	27-Oct-92	<20 P	<30 P	<30 P
K1-05	2-Feb-93	<20	<30	<30
K1-05	7-Apr-93	<20	<30	<30
K1-05	26-Jul-93	<20	<30	<30
K1-05	27-Oct-93	<20	<30	<30
K1-05	31-Jan-94	<20	<30	<30
K1-05	4-May-94	<20	<30	<30
K1-05	5-Aug-94	<20	<30	<30
K1-05	13-Oct-94	<20	<30	<30
K1-05	13-Oct-94	<20	<30	<30
K1-05	11-Jan-95	<10	<15	<15
K1-05	10-May-95	<5	<5	<5
K1-05	31-Jul-95	<5	<5	<5
K1-05	31-Jul-95	<5	<5	<5
K1-05	12-Oct-95	<5	<5	<5
K1-05	18-Jan-96	<5	<5	
K1-05	11-Apr-96	<5	<5	
K1-05	31-Jul-96	<5	<5	
K1-05	11-Oct-96	<5	<5	
K1-05	17-Jan-97	<5	<5	
K1-05	17-Jan-97	<5	<5	
K1-05	4-Apr-97	<5	<5	
K1-05	2-Jul-97	<5	<5	
K1-05	14-Oct-97	<5	<5	
K1-05	12-Jan-98	<5	<5	

Table A-19. Ground and surface water analyses for high explosive compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	HMX (µg/L)	RDX (µg/L)	TNT (µg/L)
K1-05	12-Jan-98	<5	<5	
K1-05	15-Apr-98	<5	<5	
K1-05	16-Jul-98	<5	<5	
K1-05	14-Oct-98	<5	<5	
K1-05	13-Jan-99	<5	<5	
K1-05	14-Apr-99	<1	<1	
K1-05	8-Jul-99	<1	<1	
K1-05	6-Oct-99	<1	<1	
K1-05	6-Oct-99	<1	<1	
K1-05	8-Feb-00	<1 LO	<1 LO	
K1-05	19-Apr-00	<1	<1	
K1-05	19-Jul-00	<1 LO	<1 LO	
K1-05	24-Oct-00	<1 LO	<1 LO	
K1-05	18-Jan-01	<1	<1	
K1-05	20-Apr-01	<1 L	<1 L	
K1-05	20-Apr-01	<1 L	<1 L	
K1-05	12-Jul-01	<1	<1	
K1-05	23-Oct-01	<1	<1	
K1-05	22-Jan-02	<1	<1	
K1-05	18-Apr-02	<1 LO	<1 LO	
K1-05	30-Jul-02	<1 LO	<1 LO	
K1-05	6-Dec-02	<1 O	<1 O	
K1-05	29-Jan-03	<1	<1	
K1-05	18-Apr-03	<2.2	<2.2	
K1-05	24-Jul-03	<5	<5	
K1-05	19-Nov-03	<5	<5	
K1-05	29-Jan-04	<5	<5	
K1-05	10-May-04	<5	<5	
K1-05	13-Jul-04	<5	<5	
K1-05	13-Jul-04	<5	<5	
K1-05	1-Dec-04	<5	<5	
K1-05	1-Mar-05	<4.5	<4.5	
K1-05	13-Apr-05	<5 D	<5 D	
K1-05	7-Jul-05	<1	<1	
K1-05	7-Jul-05	<1	<1	
K1-05	5-Oct-05	<1	<1	
K1-05	5-Jan-06	<5	<5	
K1-07	20-Jan-88	<10 P	<15 P	<15 P
K1-07	20-Jan-88	<10 P	<15 P	<15 P

Table A-19. Ground and surface water analyses for high explosive compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	HMX (µg/L)	RDX (µg/L)	TNT (µg/L)
K1-07	4-Apr-88	<20 P	<25 P	<20 P
K1-07	25-Jul-88	<20 P	<20 P	<20 P
K1-07	10-Oct-88	<20 P	<30 P	<40 P
K1-07	10-Oct-88	<20 P	<30 P	<40 P
K1-07	23-Jan-89	<20 P	<20 P	<20 P
K1-07	11-Apr-89	<20 P	<20 P	<20 P
K1-07	24-Jul-89	<20 P	<20 P	<20 P
K1-07	25-Oct-89	<20 P	<30 P	<30 P
K1-07	11-Jan-90	<15 P	<30 P	<30 P
K1-07	11-Apr-90	<20 P	<20 P	<30 P
K1-07	10-Jul-90	<20 P	<30 P	<30 P
K1-07	9-Oct-90	26 P	<30 P	<30 P
K1-07	15-Jan-91	<20 P	<30 P	<30 P
K1-07	9-Apr-91	<20 P	<30 P	<30 P
K1-07	9-Jul-91	<20 P	<30 P	<30 P
K1-07	16-Oct-91	<20 P	<30 P	<30 P
K1-07	16-Jan-92	<20 P	<30 P	<30 P
K1-07	16-Jan-92	<20 P	<30 P	<30 P
K1-07	14-Apr-92	<20 P	<30 P	<30 P
K1-07	25-Jul-92	<20 P	<30 P	<30 P
K1-07	26-Oct-92	<20 P	<30 P	<30 P
K1-07	26-Oct-92	<20 P	<30 P	<30 P
K1-07	2-Feb-93	<20	<30	<30
K1-07	7-Apr-93	<20	<30	<30
K1-07	26-Jul-93	<20	<30	<30
K1-07	27-Oct-93	<20	<30	<30
K1-07	31-Jan-94	<20	<30	<30
K1-07	4-May-94	<20	<30	<30
K1-07	5-Aug-94	<20	<30	<30
K1-07	13-Oct-94	<20	<30	<30
K1-07	9-Jan-95	<10	<15	<15
K1-07	11-May-95	<5	<5	<5
K1-07	31-Jul-95	<5	<5	<5
K1-07	12-Oct-95	<5	<5	<5
K1-07	18-Jan-96	<5	<5	
K1-07	12-Apr-96	<5	<5	
K1-07	31-Jul-96	<5	<5	
K1-07	11-Oct-96	<5	<5	
K1-07	17-Jan-97	<5	<5	

Table A-19. Ground and surface water analyses for high explosive compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	HMX (µg/L)	RDX (µg/L)	TNT (µg/L)
K1-07	4-Apr-97	<5	<5	
K1-07	3-Jul-97	<5	<5	
K1-07	16-Oct-97	<5	<5	
K1-07	12-Jan-98	<5	<5	
K1-07	15-Apr-98	<5	<5	
K1-07	16-Jul-98	<5	<5	
K1-07	15-Oct-98	<5	<5	
K1-07	14-Jan-99	<5	<5	
K1-07	12-Apr-99	<1	<1	
K1-07	6-Jul-99	<1	<1	
K1-07	4-Oct-99	<1.4		
K1-07	8-Feb-00	<1.2 LO	<1.2 LO	
K1-07	8-Feb-00	<1.1 LO	<1.1 LO	
K1-07	19-Apr-00	<1	<1	
K1-07	20-Jul-00	<1 LO	<1 LO	
K1-07	25-Oct-00	<1 L	<1	
K1-07	22-Jan-01	<1	<1	
K1-07	23-Apr-01	<1	<1	
K1-07	10-Jul-01	<1	<1	
K1-07	23-Oct-01	<1	<1	
K1-07	23-Oct-01	<1	<1	
K1-07	22-Jan-02	<1	<1	
K1-07	18-Apr-02	<1 LO	<1 LO	
K1-07	30-Jul-02	<1 LO	<1 LO	
K1-07	6-Dec-02	<1 O	<1 O	
K1-07	30-Jan-03	<5	<5	<5
K1-07	1-May-03	<1	<1	
K1-07	28-Aug-03	<1	<1	
K1-07	24-Nov-03	<5	<5	
K1-07	4-Feb-04	<5	<5	
K1-07	10-May-04	<5	<5	
K1-07	21-Jul-04	<5 IJ	<5 IJ	
K1-07	2-Dec-04	<5	<5	
K1-07	28-Feb-05	<6 D	<6 D	
K1-07	6-Apr-05	<5 D	<5 D	
K1-07	6-Jul-05	<1	<1	
K1-07	17-Oct-05	<1	<1	
K1-07	17-Jan-06	<5 D	<5 D	
K1-08	21-Jan-88	<10 P	<15 P	<15 P

Table A-19. Ground and surface water analyses for high explosive compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	HMX (µg/L)	RDX (µg/L)	TNT (µg/L)
K1-08	4-Apr-88	<20 P	<25 P	<20 P
K1-08	15-Jul-88	<20 P	<20 P	<20 P
K1-08	6-Oct-88	<20 P	<30 P	<40 P
K1-08	24-Jan-89	<20 P	<20 P	<20 P
K1-08	4-May-89	<20 P	<20 P	<20 P
K1-08	24-Jul-89	<20 P	<20 P	<20 P
K1-08	25-Oct-89	<20 P	<30 P	<30 P
K1-08	11-Jan-90	<15 P	<30 P	<30 P
K1-08	11-Apr-90	<20 P	<20 P	<30 P
K1-08	10-Jul-90	<20 P	<30 P	<30 P
K1-08	9-Oct-90	<20 P	<30 P	<30 P
K1-08	15-Jan-91	<20 P	<30 P	<30 P
K1-08	9-Apr-91	<20 P	<30 P	<30 P
K1-08	9-Apr-91	<20 P	<30 P	<30 P
K1-08	10-Apr-91	<20 P	<30 P	<30 P
K1-08	10-Apr-91	<20 P	<30 P	<30 P
K1-08	9-Jul-91	<20 P	<30 P	<30 P
K1-08	16-Oct-91	<20 P	<30 P	<30 P
K1-08	16-Jan-92	<20 P	<30 P	<30 P
K1-08	14-Apr-92	<20 P	<30 P	<30 P
K1-08	25-Jul-92	<20 P	<30 P	<30 P
K1-08	27-Oct-92	<20 P	<30 P	<30 P
K1-08	2-Feb-93	<20	<30	<30
K1-08	7-Apr-93	<20	<30	<30
K1-08	26-Jul-93	<20	<30	<30
K1-08	28-Oct-93	<20	<30	<30
K1-08	31-Jan-94	<20	<30	<30
K1-08	31-Jan-94	<20	<30	<30
K1-08	4-May-94	<20	<30	<30
K1-08	5-Aug-94	<20	<30	<30
K1-08	13-Oct-94	<20	<30	<30
K1-08	9-Jan-95	<10	<15	<15
K1-08	9-Jan-95	<10	<15	<15
K1-08	11-May-95	<5	<5	<5
K1-08	31-Jul-95	<5	<5	<5
K1-08	12-Oct-95	<5	<5	<5
K1-08	18-Jan-96	<5	<5	
K1-08	12-Apr-96	<5	<5	
K1-08	12-Apr-96	<5	<5	

Table A-19. Ground and surface water analyses for high explosive compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	HMX (µg/L)	RDX (µg/L)	TNT (µg/L)
K1-08	31-Jul-96	<5	<5	
K1-08	11-Oct-96	<5	<5	
K1-08	11-Oct-96	<5	<5	
K1-08	17-Jan-97	<5	<5	
K1-08	4-Apr-97	<5	<5	
K1-08	3-Jul-97	<5	<5	
K1-08	3-Jul-97	<5	<5	
K1-08	16-Oct-97	<5	<5	
K1-08	12-Jan-98	<5	<5	
K1-08	15-Apr-98	<5	<5	
K1-08	16-Jul-98	<5	<5	
K1-08	16-Jul-98	<5	<5	
K1-08	15-Oct-98	<5	<5	
K1-08	14-Jan-99	<5	<5	
K1-08	12-Apr-99	<1	<1	
K1-08	7-Jul-99	<1	<1	
K1-08	4-Oct-99	<1		
K1-08	9-Feb-00	<1	<1	
K1-08	19-Apr-00	<1	<1	
K1-08	20-Jul-00	<1 LO	<1 LO	
K1-08	24-Oct-00	<1 LO	<1 LO	
K1-08	22-Jan-01	<1	<1	
K1-08	23-Apr-01	<1	<1	
K1-08	11-Jul-01	<1	<1	
K1-08	23-Oct-01	<1	<1	
K1-08	22-Jan-02	<1	<1	
K1-08	18-Apr-02	<1 LO	<1 LO	
K1-08	30-Jul-02	<1 LO	<1 LO	
K1-08	13-Dec-02	<1	<1	
K1-08	7-Feb-03	<1	<1	
K1-08	2-May-03	<1	<1	
K1-08	4-Sep-03	<5	<5	
K1-08	24-Nov-03	<5	<5	
K1-08	3-Feb-04	<5	<5	
K1-08	11-May-04	<5	<5	
K1-08	21-Jul-04	<5	<5	
K1-08	2-Dec-04	<5	<5	
K1-08	2-Mar-05	<5 D	<5 D	
K1-08	2-Mar-05	<5 D	<5 D	

Table A-19. Ground and surface water analyses for high explosive compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	HMX (µg/L)	RDX (µg/L)	TNT (µg/L)
K1-08	6-Apr-05	<5 D	<5 D	
K1-08	6-Jul-05	<1	<1	
K1-08	13-Oct-05	<1	<1	
K1-08	18-Jan-06	<5 D	<5 D	
K1-08	18-Jan-06	<5 D	<5 D	
K1-09	21-Jan-88	<10 P	<15 P	<15 P
K1-09	4-Apr-88	<20 P	<25 P	<20 P
K1-09	15-Jul-88	<20 P	<20 P	<20 P
K1-09	6-Oct-88	<20 P	<30 P	<40 P
K1-09	24-Jan-89	<20 P	<20 P	<20 P
K1-09	4-May-89	<20 P	<20 P	<20 P
K1-09	4-May-89	<20 P	<20 P	<20 P
K1-09	24-Jul-89	<20 P	<20 P	<20 P
K1-09	25-Oct-89	<20 P	<30 P	<30 P
K1-09	11-Jan-90	<15 P	<30 P	<30 P
K1-09	11-Jan-90	<15 P	<30 P	<30 P
K1-09	11-Apr-90	<20 P	<20 P	<30 P
K1-09	10-Jul-90	<20 P	<30 P	<30 P
K1-09	9-Oct-90	<20 P	<30 P	<30 P
K1-09	15-Jan-91	<20 P	<30 P	<30 P
K1-09	9-Apr-91	<20 P	<30 P	<30 P
K1-09	9-Jul-91	<20 P	<30 P	<30 P
K1-09	16-Oct-91	<20 P	<30 P	<30 P
K1-09	16-Jan-92	<20 P	<30 P	<30 P
K1-09	14-Apr-92	<20 P	<30 P	<30 P
K1-09	14-Apr-92	<20 P	<30 P	<30 P
K1-09	25-Jul-92	<20 P	<30 P	<30 P
K1-09	27-Oct-92	<20 P	<30 P	<30 P
K1-09	2-Feb-93	<20	<30	<30
K1-09	7-Apr-93	<20	<30	<30
K1-09	26-Jul-93	<20	<30	<30
K1-09	27-Oct-93	<20	<30	<30
K1-09	31-Jan-94	<20	<30	<30
K1-09	4-May-94	<20	<30	<30
K1-09	5-Aug-94	<20	<30	<30
K1-09	13-Oct-94	<20	<30	<30
K1-09	9-Jan-95	<10	<15	<15
K1-09	10-May-95	<5	<5	<5
K1-09	10-May-95	<5	<5	<5

Table A-19. Ground and surface water analyses for high explosive compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	HMX (µg/L)	RDX (µg/L)	TNT (µg/L)
K1-09	31-Jul-95	<5	<5	<5
K1-09	12-Oct-95	<5	<5	<5
K1-09	18-Jan-96	<5	<5	
K1-09	18-Jan-96	<5	<5	
K1-09	12-Apr-96	<5	<5	
K1-09	31-Jul-96	<5	<5	
K1-09	11-Oct-96	<5	<5	
K1-09	17-Jan-97	<5	<5	
K1-09	4-Apr-97	<5	<5	
K1-09	4-Apr-97	<5	<5	
K1-09	3-Jul-97	<5	<5	
K1-09	16-Oct-97	<5	<5	
K1-09	16-Oct-97	<5	<5	
K1-09	17-Mar-98	<5	<5	
K1-09	15-Apr-98	<5	<5	
K1-09	16-Jul-98	<5	<5	
K1-09	15-Oct-98	<5	<5	
K1-09	15-Oct-98	<5	<5	
K1-09	13-Jan-99	<5	<5	
K1-09	13-Apr-99	<1	<1	
K1-09	13-Apr-99	<1 LO	<1 LO	
K1-09	7-Jul-99	<1	<1	
K1-09	4-Oct-99	<1		
K1-09	9-Feb-00	<1	<1	
K1-09	19-Apr-00	<1	<1	
K1-09	20-Jul-00	<1 LO	<1 LO	
K1-09	20-Jul-00	<1 LO	<1 LO	
K1-09	24-Oct-00	<2 LO	<2 LO	
K1-09	22-Jan-01	<1	<1	
K1-09	20-Apr-01	<1 L	<1 L	
K1-09	11-Jul-01	<1	<1	
K1-09	23-Oct-01	<1	<1	
K1-09	22-Jan-02	<1	<1	
K1-09	18-Apr-02	<1 LO	<1 LO	
K1-09	30-Jul-02	<1 LO	<1 LO	
K1-09	6-Dec-02	<1 O	<1 O	
K1-09	31-Jan-03	<5	<5	<5
K1-09	2-May-03	<1	<1	
K1-09	8-Sep-03	<5	<5	

Table A-19. Ground and surface water analyses for high explosive compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	HMX (µg/L)	RDX (µg/L)	TNT (µg/L)
K1-09	25-Nov-03	<5	<5	
K1-09	3-Feb-04	<5	<5	
K1-09	11-May-04	<5	<5	
K1-09	20-Jul-04	<5	<5	
K1-09	6-Dec-04	<5	<5	
K1-09	6-Dec-04	<5	<5	
K1-09	24-Feb-05	<4.2	<4.2	
K1-09	6-Apr-05	<5 D	<5 D	
K1-09	1-Aug-05	<1	<1	
K1-09	13-Oct-05	<1	<1	
K1-09	19-Jan-06	<5	<5	
W-865-01	30-Mar-99	<1	<0.8	
W-865-02	29-Mar-00	34 LO	17 LO	
W-865-03	29-Sep-00	<1 O	<1 O	
W-865-04	28-Sep-00	<1 O	<1 O	
W-865-05	10-Apr-00	<1	<1	
W-865-05	11-Jun-01	<1	<1	
W-865-07	29-Sep-00	<1 O	<1 O	
W-865-1802	27-Jun-03	<1	<1	
W-865-1802	22-Dec-03	<1	<1	
W-865-1802	1-Mar-04	<1	<1	
W-865-1802	9-Jun-04	<1	<1	
W-865-1803	26-Jun-03	<1	<1	
W-865-1803	3-Mar-04	<1	<1	
W-865-1803	8-Jun-04	<1	<1	
W-865-1804	23-Jun-03	<1	<1	
W-865-1804	18-Dec-03	<1	<1	
W-865-1804	4-Mar-04	<1	<1	
W-865-1804	9-Jun-04	<1	<1	
W-865-2002	21-Sep-04	<1	<1	
W-865-2002	17-Nov-04	<1	<1	
W-865-2002	10-Mar-05	<1	<1	
W-865-2002	19-May-05	<1	<1	
W-865-2002	19-Sep-05	<1	<1	
W-865-2002	8-Nov-05	<1	<1	
W-865-2002	19-Jan-06	<1	<1	
W-865-2003	16-Sep-04	<1	<1	
W-865-2003	17-Nov-04	<1	<1	
W-865-2003	10-Mar-05	<1	<1	

Table A-19. Ground and surface water analyses for high explosive compounds (µg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	HMX (µg/L)	RDX (µg/L)	TNT (µg/L)
W-865-2003	19-May-05	<1	<1	
W-865-2003	19-Sep-05	<1	<1	
W-865-2003	8-Nov-05	<1	<1	
W-865-2003	19-Jan-06	<1	<1	
W-865-2004	30-Mar-05	<1	<1	
W-865-2004	25-May-05	<1	<1	
W-865-2004	24-Aug-05	<1	<1	
W-865-2004	8-Nov-05	<1	<1	
W-865-2004	15-Mar-06	<1	<1	
W-865-2005	21-Sep-04	<1	<1	
W-865-2005	17-Nov-04	<1	<1	
W-865-2005	24-Mar-05	<1	<1	
W-865-2005	16-May-05	<1	<1	
W-865-2005	31-Aug-05	<1	<1	
W-865-2005	7-Dec-05	<1	<1	
W-865-2005	24-Feb-06	<1	<1	
W-865-2121	30-Mar-05	<1	<1	
W-865-2121	24-May-05	<1	<1	
W-865-2121	31-Aug-05	<1	<1	
W-865-2121	8-Nov-05	<1	<1	
W-865-2121	15-Feb-06	<1	<1	
W-865-2133	21-Feb-06	<1	<1	
W-PIT1-01	21-Dec-00	<1	<1	
W-PIT1-01	13-Mar-01	<1	<1	
W-PIT1-02	21-Mar-01	<1	<1	

Notes:

µg/L = Micrograms per liter.
D = Analysis performed at a secondary dilution or concentration (i.e., vapor samples).
HMX = High-melting explosive.
I = Surrogate recoveries outside of QC limits.
J = Analyte was postively identified; the associated numerical value is approximate concentration of the analyte.
L = Spike accuracy not within control limits.
O = Duplicate spike or sample precision not within control limits.
P = Indicates that the absence of a data qualifier flag does not mean that the data does not need qualification, but that the implementation of electronic data qualifier flags was not yet established.
RDX = Research Department explosive.
TNT = Trinitrotoluene.

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-02A	28-Jan-88					<0.03 P	<0.01 P			
K1-02A	28-Jan-88									0.012 P
K1-02A	7-Jul-88					<0.03 P	<0.01 P			
K1-02A	25-Jan-89					0.03 P	<0.01 P			
K1-02A	9-Jan-90					<0.04 P	<0.04 P			
K1-02A	23-Jan-91					<0.1 P	0.06 P			
K1-02A	30-Jan-92					0.1 P	<0.05 P			
K1-02A	12-Mar-93					<0.1	<0.05			
K1-02A	16-Feb-94					<0.1	0.036			
K1-02A	1-Aug-94					0.11	0.038			
K1-02A	7-Nov-96							<0.01	<0.02	
K1-02A	21-May-97							<0.01	<0.02	
K1-02A	8-Dec-97							<0.01	<0.02	
K1-02A	24-Jun-98		3.3							
K1-02A	24-Jun-98							<0.01	<0.02 L	
K1-02A	16-Dec-98		3.2							
K1-02A	16-Dec-98							<0.01	<0.02	
K1-02A	16-Dec-98		3.3							
K1-02A	16-Dec-98							<0.01	<0.02	
K1-02A	21-May-99		4.4							
K1-02A	21-May-99							<0.01	<0.02	
K1-02A	21-May-99		3							
K1-02A	21-May-99							<0.01	<0.02	
K1-02A	2-Nov-99		3.3							
K1-02A	2-Nov-99							<0.01	<0.02	
K1-02A	24-May-00		5							
K1-02A	24-May-00							<0.01	<0.02	
K1-02A	7-Dec-00		5							
K1-02A	7-Dec-00							0.04	<0.02	
K1-02A	30-May-01		5 L							
K1-02A	30-May-01							<0.01	<0.02	
K1-02A	5-Jun-02		5							
K1-02A	5-Jun-02							<0.01	<0.02	
K1-02A	5-Jun-02		5							
K1-02A	5-Jun-02							<0.01	<0.02	
K1-02A	28-Oct-02		4.3					<0.01	<0.05	
K1-02A	28-Oct-02		4.1					<0.01	<0.05	
K1-02B	19-Jan-88	34 P				0.13 P	<0.01 P			
K1-02B	19-Jan-88									0.032 P
K1-02B	4-Apr-88	33 P				<0.03 P	<0.01 P			
K1-02B	4-Apr-88	31 P				<0.03 P	<0.01 P			
K1-02B	25-Jul-88	31 P				<0.03 P	<0.01 P			
K1-02B	3-Oct-88	38 P	2.1 P	46 P	20 P	0.07 P	<0.01 P	<0.02 P	<0.01 P	
K1-02B	12-Jan-89	38 P	2.5 P	44 P	20 P	<0.04 P	<0.04 P	<0.02 P	<0.01 P	
K1-02B	10-Apr-89	41 P	2.9 P	52 P	21 P	<0.04 P	<0.04 P	<0.02 P	<0.01 P	
K1-02B	19-Jul-89	30 P	2.2 P	45 P	16 P	<0.04 P	<0.04 P	<0.02 P	0.01 P	
K1-02B	31-Jul-89	26 P	1.6 P	45 P	21 P	<0.04 P	<0.04 P	<0.02 P	<0.01 P	

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-02B	24-Oct-89	35 P	<2 P	43 P	18 P	<0.04 P	<0.04 P	<0.08 P	<0.01 P	
K1-02B	10-Jan-90	37 P	2.4 P	38 P	20 P	<0.04 P	<0.04 P	<0.08 P	<0.01 P	
K1-02B	10-Apr-90	42 P	5 P	45 P	21 P	<0.04 P	<0.04 P	<0.08 P	<0.05 P	
K1-02B	10-Apr-90	39 P	2.8 P	47 P	20 P	<0.04 P	<0.04 P	<0.08 P	<0.05 P	
K1-02B	9-Jul-90	29 P	2 P	41 P	19 P	<0.04 P	<0.04 P	<0.05 P	<0.05 P	
K1-02B	8-Oct-90	38 P	2 P	44 P	20 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-02B	14-Jan-91	42 P	2 P	45 P	22 P	<0.1 P	0.05 P	<0.05 P	<0.05 P	
K1-02B	8-Apr-91	36 P	3 P	38 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-02B	8-Jul-91	42 P	3 P	48 P	21 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-02B	15-Nov-91		2 P	58 P	23 P			<0.05 P	<0.05 P	
K1-02B	15-Nov-91	37 P				<0.1 P	<0.05 P			
K1-02B	15-Jan-92		3 P	54 P	23 P			<0.05 P	<0.05 P	
K1-02B	15-Jan-92	38 P				<0.1 P	<0.05 P			
K1-02B	14-Apr-92	32 P	2 P	47 P	18 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-02B	25-Jul-92	39 P	3 P	50 P	22 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-02B	26-Oct-92	38 P	<5 P	51 P	23 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-02B	2-Feb-93	37	<5	48	21	<0.1	<0.05	<0.05	<0.05	
K1-02B	2-Feb-93	37	<5	47	19	<0.1	<0.05	<0.05	<0.05	
K1-02B	7-Apr-93	39	2.9	44	20	<0.1	<0.05	<0.05	<0.05	
K1-02B	26-Jul-93	40	3.2	54	23	<0.1	<0.03	<0.05	<0.05	<0.2
K1-02B	5-Nov-93								<0.02	
K1-02B	5-Nov-93	42	2.8	55	24	<0.1	<0.03	<0.05	<0.05	<0.2
K1-02B	31-Jan-94									<0.2
K1-02B	31-Jan-94			50	22					
K1-02B	11-Apr-94								<0.02	
K1-02B	11-Apr-94							0.01		
K1-02B	4-May-94								0.066	
K1-02B	4-May-94	39	3	52	23	<0.1	<0.03	<0.05	0.06	<0.2
K1-02B	4-May-94								0.092	
K1-02B	4-May-94	38	2.8	51	22	<0.1	<0.03	<0.05	0.084	<0.2
K1-02B	7-Jun-94							0.0155	0.0554	
K1-02B	17-Jun-94								0.024	
K1-02B	24-Jun-94								<0.02	
K1-02B	3-Aug-94	39	3	54	23	<0.1	<0.03	<0.05	<0.05	<0.2
K1-02B	3-Aug-94								0.022	
K1-02B	13-Oct-94	42	3.1	55	23	<0.1	<0.03	<0.05	<0.05	<0.2
K1-02B	11-Jan-95	41	3.2	56	24	<0.1	<0.03	<0.05	<0.05	<0.2
K1-02B	10-May-95	40	3	54	23	<0.1	<0.03	<0.05	<0.05	<0.2
K1-02B	31-Jul-95	42	3.2	57	24	<0.1	<0.03	<0.05	<0.05	<0.2
K1-02B	11-Oct-95	39	2.6	55	22	<0.1	<0.03	<0.05	<0.05	<0.2
K1-02B	17-Jan-96	41 O	3.4	55	25	<0.1	<0.03	<0.05	<0.05	<0.2
K1-02B	10-Apr-96					<0.1	<0.03	0.018	0.03	
K1-02B	30-Jul-96	38				<0.1	<0.03		<0.02	
K1-02B	30-Jul-96							0.0083		
K1-02B	9-Oct-96							0.025	0.033	
K1-02B	28-Oct-96	39 LO	2.9	53	<0.5	<0.1	<0.03	<0.05	<0.05	<0.2
K1-02B	16-Jan-97							0.014	0.033	

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-02B	3-Apr-97							0.011	0.028	
K1-02B	3-Apr-97	38 LO				<0.1	<0.1			
K1-02B	1-Jul-97							<0.01	<0.02	
K1-02B	13-Oct-97							0.014	0.054	
K1-02B	13-Oct-97	37				<0.1	<0.1			
K1-02B	8-Jan-98							<0.01	0.022	
K1-02B	9-Apr-98		2.7 H							
K1-02B	9-Apr-98							0.011	0.026	
K1-02B	9-Apr-98	37				<0.1	<0.1			
K1-02B	14-Jul-98		3.5							
K1-02B	14-Jul-98							0.012	0.038	
K1-02B	13-Oct-98		2.9							
K1-02B	13-Oct-98							0.017	0.034	
K1-02B	13-Oct-98	39				<0.1	<0.1			
K1-02B	12-Jan-99		3							
K1-02B	12-Jan-99							0.02	0.023	
K1-02B	12-Jan-99		2.9							
K1-02B	12-Jan-99							0.013	<0.02	
K1-02B	15-Apr-99		2.9							
K1-02B	15-Apr-99							<0.01	<0.02	
K1-02B	15-Apr-99	42				<0.1	<0.1			
K1-02B	9-Jul-99		3							
K1-02B	9-Jul-99							0.01	0.02	
K1-02B	7-Oct-99		2.7							
K1-02B	7-Oct-99							<0.01	<0.02	
K1-02B	7-Oct-99	38				0.2	<0.1			
K1-02B	7-Feb-00		4.1							
K1-02B	7-Feb-00							0.03	0.08	
K1-02B	18-Apr-00		3.9							
K1-02B	18-Apr-00							0.01	0.03	
K1-02B	18-Apr-00	39				<0.1	<0.1			
K1-02B	19-Jul-00		4							
K1-02B	19-Jul-00							0.02	0.03	
K1-02B	19-Oct-00							0.27 L	<0.02	
K1-02B	19-Oct-00	42 L				<0.1	<0.1			
K1-02B	14-Dec-00							0.046 D		
K1-02B	21-Dec-00							0.031 D		
K1-02B	18-Jan-01		4							
K1-02B	18-Jan-01							0.01	<0.02	
K1-02B	18-Apr-01		5 L							
K1-02B	18-Apr-01							0.04	0.05	
K1-02B	18-Apr-01	43 L				<0.1	<0.1			
K1-02B	9-Jul-01		4 L							
K1-02B	9-Jul-01							0.02	0.04	
K1-02B	22-Oct-01		4						<0.02	
K1-02B	22-Oct-01							<0.01		
K1-02B	22-Oct-01	39				<0.1	<0.1			

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-02B	16-Jan-02		4							
K1-02B	16-Jan-02							0.03	0.04	
K1-02B	16-Apr-02		4 LO							
K1-02B	16-Apr-02							0.02	0.02	
K1-02B	16-Apr-02	41 LO				<0.1 LO				
K1-02B	29-Jul-02		4							
K1-02B	29-Jul-02							0.02	0.03	
K1-02B	4-Dec-02		4 L							
K1-02B	4-Dec-02							0.01	<0.02	
K1-02B	4-Dec-02	40				<0.1				
K1-02B	30-Jan-03		4							
K1-02B	30-Jan-03							<0.01	<0.02	
K1-02B	17-Apr-03		4							
K1-02B	17-Apr-03							0.01	<0.02	
K1-02B	17-Apr-03	41				<0.1				
K1-02B	17-Apr-03		4							
K1-02B	17-Apr-03							0.02	0.02	
K1-02B	17-Apr-03	42				<0.1				
K1-02B	8-Sep-03		3							
K1-02B	8-Sep-03							0.012	<0.02	
K1-02B	4-Nov-03		2.9							
K1-02B	4-Nov-03	43 L						0.029	0.045	
K1-02B	4-Nov-03					<0.05	<0.001			
K1-02B	28-Jan-04		3.1							
K1-02B	28-Jan-04							<0.01	<0.02	
K1-02B	19-May-04		3							
K1-02B	19-May-04							0.02	0.033	
K1-02B	19-May-04	42				<0.1	<0.1			
K1-02B	19-May-04		3							
K1-02B	19-May-04							<0.01	<0.02	
K1-02B	19-May-04	42				<0.1	<0.1			
K1-02B	20-Jul-04		3.1							
K1-02B	20-Jul-04							0.071	<0.02	
K1-02B	18-Aug-04							0.016		
K1-02B	25-Aug-04							0.0085		
K1-02B	22-Nov-04							<0.01 BE	<0.02 E	
K1-02B	22-Nov-04	44				<0.1 B	<0.1 B			
K1-02B	23-Feb-05							0.011	0.17	
K1-02B	23-Feb-05	41				<0.1	<0.1 E			
K1-02B	12-Apr-05					<0.1	<0.1 E	0.011 B	<0.02 BE	
K1-02B	12-Apr-05					<0.1	<0.1 E	0.023 B	0.031 B	
K1-02B	6-Jul-05							0.00823	<0.01	
K1-02B	6-Jul-05	37.9				<0.1	<0.002 E			
K1-02B	4-Oct-05							0.023	0.0363	
K1-02B	4-Oct-05							0.0238	0.0352	
K1-02B	3-Jan-06							0.015	0.029	
K1-02B	3-Jan-06	43				0.12	<0.01			

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-03	19-Jan-88	31 P				0.13 P	<0.01 P			
K1-03	19-Jan-88									0.047 P
K1-03	4-Apr-88	30 P				<0.03 P	<0.01 P			
K1-03	25-Jul-88	30 P				<0.03 P	<0.01 P			
K1-03	4-Oct-88	40 P	2.3 P	46 P	22 P	<0.03 P	<0.01 P	<0.02 P	<0.01 P	
K1-03	12-Jan-89	34 P	2.6 P	44 P	18 P	<0.04 P	<0.04 P	<0.02 P	<0.01 P	
K1-03	11-Apr-89	37 P	2.5 P	46 P	18 P	<0.04 P	<0.04 P	<0.02 P	<0.01 P	
K1-03	24-Jul-89	30 P	1.3 P	46 P	17 P	<0.04 P	<0.04 P	<0.02 P	0.12 P	
K1-03	24-Oct-89	28 P	<2 P	41 P	14 P	<0.04 P	<0.04 P	<0.08 P	<0.01 P	
K1-03	10-Jan-90	35 P	2.5 P	40 P	18 P	<0.04 P	<0.04 P	<0.08 P	<0.01 P	
K1-03	10-Apr-90	37 P	3.8 P	41 P	17 P	<0.04 P	<0.04 P	<0.08 P	<0.05 P	
K1-03	9-Jul-90	26 P	2 P	40 P	16 P	<0.04 P	<0.04 P	<0.05 P	<0.05 P	
K1-03	8-Oct-90	32 P	2 P	42 P	16 P	<0.1 P	0.05 P	<0.05 P	<0.05 P	
K1-03	8-Oct-90	34 P	2 P	42 P	16 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-03	14-Jan-91	34 P	2 P	46 P	18 P	<0.1 P	0.05 P	0.07 P	<0.05 P	
K1-03	8-Apr-91	39 P	4 P	49 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-03	8-Jul-91	32 P	3 P	37 P	15 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-03	15-Nov-91		3 P	50 P	21 P			<0.05 P	<0.05 P	
K1-03	15-Nov-91	31 P				<0.1 P	<0.05 P			
K1-03	15-Jan-92		3 P	51 P	19 P			<0.05 P	<0.05 P	
K1-03	15-Jan-92	38 P				<0.1 P	<0.05 P			
K1-03	14-Apr-92	31 P	2 P	48 P	15 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-03	25-Jul-92	34 P	2 P	44 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-03	27-Oct-92	29 P	<5 P	42 P	16 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-03	2-Feb-93	33	<5	43	16	<0.1	<0.05	<0.05	<0.05	
K1-03	7-Apr-93	34	2.6	39	15	<0.1	<0.05	<0.05	<0.05	
K1-03	26-Jul-93	34	3.1	49	19	<0.1	<0.03	<0.05	<0.05	<0.2
K1-03	4-Nov-93								<0.02	
K1-03	4-Nov-93	35	2.8	33	15	<0.1	<0.03	<0.05	<0.05	<0.2
K1-03	31-Jan-94									<0.2
K1-03	31-Jan-94			41	16					
K1-03	11-Apr-94								<0.02	
K1-03	11-Apr-94							<0.01		
K1-03	4-May-94								<0.02	
K1-03	4-May-94	32	2.9	46	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-03	3-Aug-94	33	2.9	46	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-03	3-Aug-94								<0.02	
K1-03	13-Oct-94	35	3	47	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-03	11-Jan-95	34	3	48	18	<0.1	<0.03	<0.05	<0.05	<0.2
K1-03	10-May-95	32	2.9	44	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-03	31-Jul-95	35	3	47	18	<0.1	<0.03	<0.05	<0.05	<0.2
K1-03	11-Oct-95	33	2.4	46	16	<0.1	<0.03	<0.05	<0.05	<0.2
K1-03	11-Oct-95	32	2.4	47	16	<0.1	<0.03	<0.05	<0.05	<0.2
K1-03	18-Jan-96	40	3	47	18	<0.1	<0.03	<0.05	<0.05	<0.2
K1-03	10-Apr-96					<0.1	<0.03	<0.01	<0.02	
K1-03	30-Jul-96	32				<0.1	<0.03		<0.02	
K1-03	30-Jul-96							0.0019		

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-03	10-Oct-96							<0.01	<0.02	
K1-03	16-Jan-97							<0.01	0.026	
K1-03	3-Apr-97							<0.01	0.024	
K1-03	3-Apr-97	30 LO				0.17	<0.1			
K1-03	2-Jul-97							<0.01	0.027	
K1-03	14-Oct-97							<0.01	<0.02	
K1-03	14-Oct-97	29				<0.1	<0.1			
K1-03	8-Jan-98							<0.01	<0.02	
K1-03	9-Apr-98		2.7 H							
K1-03	9-Apr-98							<0.01	0.026	
K1-03	9-Apr-98	31				<0.1	<0.1			
K1-03	9-Apr-98		2.9 H							
K1-03	9-Apr-98							<0.01	<0.02	
K1-03	9-Apr-98	33				<0.1	<0.1			
K1-03	15-Jul-98		3.3							
K1-03	15-Jul-98							<0.01	0.024	
K1-03	13-Oct-98		2.8							
K1-03	13-Oct-98							<0.01	0.034	
K1-03	13-Oct-98	33				<0.1	<0.1			
K1-03	12-Jan-99		2.7							
K1-03	12-Jan-99							<0.01	<0.02	
K1-03	15-Apr-99		2.9							
K1-03	15-Apr-99							<0.01	<0.02	
K1-03	15-Apr-99	33				<0.1	<0.1			
K1-03	9-Jul-99		2.8							
K1-03	9-Jul-99							<0.01	<0.02	
K1-03	6-Oct-99		2.4							
K1-03	6-Oct-99							<0.01	<0.02	
K1-03	6-Oct-99	33				<0.1	<0.1			
K1-03	7-Feb-00		3.7							
K1-03	7-Feb-00							<0.01	<0.02	
K1-03	18-Apr-00		3.6							
K1-03	18-Apr-00							<0.01	<0.02	
K1-03	18-Apr-00	32				<0.1	<0.1			
K1-03	19-Jul-00		4							
K1-03	19-Jul-00							<0.01	0.02	
K1-03	23-Oct-00		4							
K1-03	23-Oct-00							<0.01	<0.02	
K1-03	23-Oct-00	33				<0.1	<0.1			
K1-03	23-Oct-00		4							
K1-03	23-Oct-00							<0.01	<0.02	
K1-03	23-Oct-00	32				<0.1	<0.1			
K1-03	18-Jan-01		4							
K1-03	18-Jan-01							<0.01	0.07	
K1-03	18-Apr-01		5 L							
K1-03	18-Apr-01							<0.01	0.04	
K1-03	18-Apr-01	38 L				<0.1	<0.1			

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-03	9-Jul-01		4 L							
K1-03	9-Jul-01							<0.01	<0.02	
K1-03	9-Jul-01		4 L							
K1-03	9-Jul-01							<0.01	<0.02	
K1-03	22-Oct-01		4						<0.02	
K1-03	22-Oct-01							<0.01		
K1-03	22-Oct-01	33				<0.1	<0.1			
K1-03	16-Jan-02		4							
K1-03	16-Jan-02							<0.01	0.04	
K1-03	16-Apr-02		4 LO							
K1-03	16-Apr-02							<0.01	0.06	
K1-03	16-Apr-02	36 LO				<0.1 LO				
K1-03	29-Jul-02		4							
K1-03	29-Jul-02							<0.01	0.04	
K1-03	4-Dec-02		4 L							
K1-03	4-Dec-02							<0.01	0.05	
K1-03	4-Dec-02	35				<0.1				
K1-03	30-Jan-03		4							
K1-03	30-Jan-03							<0.01	0.04	
K1-03	17-Apr-03		4							
K1-03	17-Apr-03							<0.01	<0.02	
K1-03	17-Apr-03	36				<0.1				
K1-03	24-Jul-03		3							
K1-03	24-Jul-03							<0.01	<0.02	
K1-03	4-Nov-03		3							
K1-03	4-Nov-03	37 L						<0.01	<0.02	
K1-03	4-Nov-03					0.06	0.0032			
K1-03	28-Jan-04		3.1							
K1-03	28-Jan-04							<0.01	<0.02	
K1-03	28-Jan-04		3.1							
K1-03	28-Jan-04							<0.01	<0.02	
K1-03	20-May-04		3							
K1-03	20-May-04							<0.01	<0.02	
K1-03	20-May-04	37				<0.1	<0.1			
K1-03	19-Jul-04		3							
K1-03	19-Jul-04							<0.01	0.024	
K1-03	30-Nov-04							<0.01 E	0.037	
K1-03	30-Nov-04	40				<0.1 E	<0.1 E			
K1-03	22-Feb-05							<0.01 E	0.024	
K1-03	22-Feb-05	36				<0.1 E	<0.1 E			
K1-03	13-Apr-05					<0.1 E	<0.1 E	<0.01 BE	<0.02 E	
K1-03	28-Jul-05							0.00314	0.0102	
K1-03	28-Jul-05	33.8 LO				<0.1	<0.002 E			
K1-03	4-Oct-05							<0.002 E	0.0257	
K1-03	3-Jan-06							<0.01 E	<0.02 E	
K1-03	3-Jan-06	36				<0.05 E	<0.01			
K1-04	19-Jan-88	35 P				0.11 P	<0.01 P			

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-04	19-Jan-88									0.01 P
K1-04	4-Apr-88	36 P				<0.03 P	<0.01 P			
K1-04	25-Jul-88	30 P				<0.03 P	<0.01 P			
K1-04	6-Oct-88	40 P	3.4 P	46 P	19 P	<0.03 P	0.02 P	<0.02 P	<0.01 P	
K1-04	24-Jan-89	41 P	3.1 P	46 P	19 P	0.04 P	<0.04 P	<0.02 P	<0.01 P	
K1-04	24-Jan-89	40	2.9	46	19	0.05	0.04	<0.02	<0.01	
K1-04	11-Apr-89	41 P	3.1 P	46 P	17 P	0.05 P	<0.04 P	<0.02 P	<0.01 P	
K1-04	19-Jul-89	31 P	2.7 P	46 P	15 P	<0.04 P	<0.04 P	<0.02 P	0.01 P	
K1-04	24-Oct-89	26 P	<2 P	45 P	24 P	<0.04 P	<0.04 P	<0.08 P	<0.01 P	
K1-04	10-Jan-90	39 P	3.1 P	40 P	17 P	<0.04 P	<0.04 P	<0.08 P	<0.01 P	
K1-04	10-Apr-90	43 P	4.6 P	42 P	17 P	<0.04 P	<0.04 P	<0.08 P	<0.05 P	
K1-04	10-Jul-90	26 P	2 P	43 P	16 P	<0.04 P	<0.04 P	<0.05 P	<0.05 P	
K1-04	8-Oct-90	38 P	2 P	42 P	16 P	<0.1 P	0.05 P	<0.05 P	<0.05 P	
K1-04	14-Jan-91	43 P	2 P	43 P	19 P	<0.1 P	0.06 P	<0.05 P	<0.05 P	
K1-04	14-Jan-91	40 P	3 P	44 P	18 P	<0.1 P	0.05 P	<0.05 P	<0.05 P	
K1-04	8-Apr-91	40 P	4 P	42 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-04	9-Jul-91	40 P	4 P	43 P	16 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-04	15-Oct-91		3 P	51 P	18 P			<0.05 P	<0.05 P	
K1-04	15-Oct-91	35 P				<0.1 P	<0.05 P			
K1-04	15-Jan-92		3 P	45 P	16 P			<0.05 P	<0.05 P	
K1-04	15-Jan-92	35 P				<0.1 P	<0.05 P			
K1-04	14-Apr-92	37 P	2 P	52 P	16 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-04	25-Jul-92	41 P	3 P	46 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-04	25-Jul-92	37 P	3 P	46 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-04	27-Oct-92	36 P	<5 P	45 P	16 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-04	2-Feb-93	36	<5	42	15	<0.1	<0.05	<0.05	<0.05	
K1-04	7-Apr-93	40	2.9	40	21	<0.1	<0.05	<0.05	<0.05	
K1-04	26-Jul-93	39	3.6	50	18	<0.1	<0.03	<0.05	<0.05	<0.2
K1-04	26-Jul-93	38	3.6	49	18	<0.1	<0.03	<0.05	<0.05	<0.2
K1-04	4-Nov-93								<0.02	
K1-04	4-Nov-93	40	3.8	46	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-04	31-Jan-94									<0.2
K1-04	31-Jan-94			41	15					
K1-04	11-Apr-94								<0.02	
K1-04	11-Apr-94							<0.01		
K1-04	4-May-94								<0.02	
K1-04	4-May-94	37	3.2	46	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-04	3-Aug-94	38	3.3	46	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-04	3-Aug-94								<0.02	
K1-04	3-Aug-94	38	3.3	46	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-04	3-Aug-94								<0.02	
K1-04	13-Oct-94	40	3.3	47	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-04	11-Jan-95	38	3.4	48	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-04	10-May-95	38	3.3	45	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-04	31-Jul-95	39	3.3	47	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-04	11-Oct-95	37	2.7	46	16	<0.1	<0.03	<0.05	<0.05	<0.2
K1-04	18-Jan-96	47	3.5	47	17	<0.1	<0.03	<0.05	<0.05	<0.2

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-04	11-Apr-96					0.66 LO	<0.03	<0.01	0.021	
K1-04	31-Jul-96	35				<0.1	<0.03		<0.02	
K1-04	31-Jul-96							<0.001 LO		
K1-04	31-Jul-96	35				<0.1	<0.03		<0.02	
K1-04	31-Jul-96							0.0019 LO		
K1-04	10-Oct-96							<0.01	<0.02	
K1-04	16-Jan-97							<0.01	<0.02	
K1-04	3-Apr-97							<0.01	0.025	
K1-04	3-Apr-97	36 LO				0.14	<0.1			
K1-04	2-Jul-97							<0.01	<0.02	
K1-04	14-Oct-97							<0.01	<0.02	
K1-04	14-Oct-97	33				<0.1	<0.1			
K1-04	8-Jan-98							<0.01	<0.02	
K1-04	9-Apr-98		2.9 H							
K1-04	9-Apr-98							<0.01	<0.02	
K1-04	9-Apr-98	34				<0.1	<0.1			
K1-04	15-Jul-98		3.6							
K1-04	15-Jul-98							<0.01	<0.02	
K1-04	14-Oct-98		3.2							
K1-04	14-Oct-98							<0.01	<0.02	
K1-04	14-Oct-98	36				<0.1	<0.1			
K1-04	13-Jan-99		3.1							
K1-04	13-Jan-99							0.019	<0.02	
K1-04	14-Apr-99		3.2							
K1-04	14-Apr-99							<0.01	<0.02	
K1-04	14-Apr-99	37				<0.1	<0.1			
K1-04	9-Jul-99		3.3							
K1-04	9-Jul-99							<0.01	<0.02	
K1-04	6-Oct-99		2.8							
K1-04	6-Oct-99							<0.01	<0.02	
K1-04	6-Oct-99	37				<0.1	<0.1			
K1-04	7-Feb-00		4							
K1-04	7-Feb-00							<0.01	<0.02	
K1-04	18-Apr-00		4							
K1-04	18-Apr-00							<0.01	<0.02	
K1-04	18-Apr-00	35				0.2	<0.1			
K1-04	18-Apr-00		4							
K1-04	18-Apr-00							<0.01	<0.02	
K1-04	18-Apr-00	35				<0.1	<0.1			
K1-04	19-Jul-00		5							
K1-04	19-Jul-00							<0.01	<0.02	
K1-04	23-Oct-00		4							
K1-04	23-Oct-00							<0.01	<0.02	
K1-04	23-Oct-00	37				<0.1	<0.1			
K1-04	18-Jan-01		4							
K1-04	18-Jan-01							<0.01	<0.02	
K1-04	23-Apr-01		4							

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-04	23-Apr-01							<0.01	<0.02	
K1-04	23-Apr-01	32				<0.1	<0.1			
K1-04	10-Jul-01		5 L							
K1-04	10-Jul-01							<0.01	<0.02	
K1-04	22-Oct-01		4						<0.02	
K1-04	22-Oct-01							<0.01		
K1-04	22-Oct-01	35				<0.1	<0.1			
K1-04	16-Jan-02		4							
K1-04	16-Jan-02							<0.01	<0.02	
K1-04	16-Jan-02		4							
K1-04	16-Jan-02							<0.01	<0.02	
K1-04	16-Apr-02		5 LO							
K1-04	16-Apr-02							<0.01	<0.02	
K1-04	16-Apr-02	38 LO				<0.1 LO				
K1-04	29-Jul-02		4							
K1-04	29-Jul-02							<0.01	0.08	
K1-04	29-Jul-02		4							
K1-04	29-Jul-02							<0.01	0.05	
K1-04	5-Dec-02		5 L							
K1-04	5-Dec-02							<0.01	<0.02	
K1-04	5-Dec-02	39 L				<0.1				
K1-04	29-Jan-03		4							
K1-04	29-Jan-03							<0.01	<0.02	
K1-04	29-Jan-03		5							
K1-04	29-Jan-03							<0.01	<0.02	
K1-04	18-Apr-03		4.1 J							
K1-04	18-Apr-03							<0.01	<0.05	
K1-04	24-Jun-03							<0.01	<0.02	
K1-04	24-Jun-03	38				<0.1	<0.1			
K1-04	24-Jul-03		3.2							
K1-04	24-Jul-03							<0.01	<0.02	
K1-04	18-Nov-03		3.1							
K1-04	18-Nov-03							<0.01	<0.02	
K1-04	18-Nov-03	35				<0.1	<0.1			
K1-04	18-Nov-03		3							
K1-04	18-Nov-03							<0.01	<0.02	
K1-04	18-Nov-03	34				<0.1	<0.1			
K1-04	29-Jan-04		3.3							
K1-04	29-Jan-04							<0.01	<0.02	
K1-04	11-May-04		3.4							
K1-04	11-May-04							<0.01	<0.02	
K1-04	11-May-04	37				<0.1	<0.1			
K1-04	19-Jul-04		3.4							
K1-04	19-Jul-04							<0.01	<0.02	
K1-04	30-Nov-04		3.4							
K1-04	30-Nov-04							<0.01 E	<0.02 E	
K1-04	30-Nov-04	42				<0.1 E	<0.1 E			

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-04	24-Feb-05							<0.01 E	<0.02 E	
K1-04	24-Feb-05	38 O				<0.1 E	<0.1 E			
K1-04	12-Apr-05					<0.1	<0.1 E	<0.01 BE	<0.02 BE	
K1-04	1-Aug-05							<0.002 E	0.011	
K1-04	1-Aug-05	36.3 L				<0.1	0.00717			
K1-04	5-Oct-05							<0.002 E	0.0199	
K1-04	10-Jan-06							<0.01	<0.02 E	
K1-04	10-Jan-06	39				<0.05	<0.01			
K1-05	21-Jan-88	36 P				<0.03 P	<0.01 P			
K1-05	21-Jan-88									0.07 P
K1-05	4-Apr-88	35 P				<0.03 P	<0.01 P			
K1-05	15-Jul-88	36 P				<0.03 P	<0.01 P			
K1-05	15-Jul-88	36 P				0.1 P	0.02 P			
K1-05	6-Oct-88	41 P	2.7 P	37 P	18 P	<0.03 P	<0.01 P	<0.02 P	0.02 P	
K1-05	1-Feb-89	41 P	2.5 P	37 P	18 P	<0.04 P	<0.04 P	<0.08 P	0.09 P	
K1-05	11-Apr-89	44	2.6	38	19	0.05	<0.04	<0.02	<0.01	
K1-05	19-Jul-89	35 P	2.2 P	21 P	16 P	<0.04 P	<0.04 P	<0.02 P	0.02 P	
K1-05	19-Jul-89	35 P	2.2 P	37 P	16 P	<0.04 P	<0.04 P	<0.02 P	<0.01 P	
K1-05	25-Oct-89	38 P	<2 P	34 P	16 P	<0.04 P	<0.04 P	<0.08 P	<0.01 P	
K1-05	11-Jan-90	42 P	2.5 P	35 P	18 P	0.07 P	0.05 P	<0.08 P	0.08 P	
K1-05	11-Apr-90	40 P	4.3 P	35 P	17 P	<0.04 P	<0.04 P	<0.08 P	<0.05 P	
K1-05	10-Jul-90	27 P	2 P	33 P	16 P	<0.04 P	<0.04 P	<0.05 P	<0.05 P	
K1-05	10-Jul-90	32	2	34	16	<0.04	<0.04	<0.05	<0.05	
K1-05	9-Oct-90	38 P	2 P	33 P	16 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-05	15-Jan-91	42 P	2 P	38 P	19 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-05	9-Apr-91	36 P	3 P	32 P	15 P			<0.05 P	0.09 P	
K1-05	9-Apr-91					<0.1 P	<0.05 P			
K1-05	9-Jul-91	44 P	4 P	35 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-05	16-Oct-91	41 P	2 P	34 P	18 P	<0.1 P	<0.05 P	<0.05 P	0.06 P	
K1-05	16-Jan-92	44 P	3 P	37 P	18 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-05	14-Apr-92	38 P	2 P	42 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-05	25-Jul-92	37 P	2 P	36 P	16 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-05	27-Oct-92	42 P	<5 P	41 P	18 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-05	2-Feb-93	38	<5	35	17	<0.1	<0.05	<0.05	<0.05	
K1-05	7-Apr-93	36	2.6	33	16	<0.1	<0.05	<0.05	<0.05	
K1-05	26-Jul-93	41	3.2	40	19	<0.1	<0.03	<0.05	<0.05	<0.2
K1-05	4-Nov-93								<0.02	
K1-05	4-Nov-93	39	3	35	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-05	31-Jan-94									<0.2
K1-05	31-Jan-94			34	17					
K1-05	11-Apr-94								<0.02	
K1-05	11-Apr-94							0.022		
K1-05	4-May-94								<0.02	
K1-05	4-May-94	38	2.8	37	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-05	5-Aug-94	40	2.8	38	18	<0.1	<0.03	<0.05	<0.05	<0.2
K1-05	5-Aug-94								<0.02	
K1-05	13-Oct-94	41	2.9	39	18	<0.1	<0.03	<0.05	<0.05	<0.2

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-05	13-Oct-94	42.8	2.9	42	20	<0.1	<0.005	<0.01	<0.02	<0.05
K1-05	9-Jan-95	41	2.9	40	19	<0.1	<0.03	<0.05	<0.05	<0.2
K1-05	10-May-95	39	2.8	37	18	<0.1	<0.03	<0.05	<0.05	<0.2
K1-05	31-Jul-95	41	2.9	39	18	<0.1	<0.03	<0.05	<0.05	<0.2
K1-05	31-Jul-95	41	2.8	39	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-05	12-Oct-95	44	3.5	42	20	<0.1	<0.03	<0.05	<0.05	<0.2
K1-05	18-Jan-96	49	3.1	40	19	<0.1	<0.03	<0.05	<0.05	<0.2
K1-05	11-Apr-96					0.12 LO	<0.03	0.011	0.023	
K1-05	31-Jul-96	40				<0.1	<0.03		<0.02	
K1-05	31-Jul-96							0.0067 LO		
K1-05	11-Oct-96							<0.01	<0.02	
K1-05	17-Jan-97							0.013	<0.02	
K1-05	17-Jan-97							<0.01	<0.02	
K1-05	4-Apr-97							<0.01	<0.02	
K1-05	4-Apr-97	36 O				<0.1	<0.1			
K1-05	2-Jul-97							<0.01	<0.02	
K1-05	14-Oct-97							0.014	<0.02	
K1-05	14-Oct-97	36				<0.1	<0.1			
K1-05	12-Jan-98							<0.01	<0.02	
K1-05	12-Jan-98							<0.01	<0.02	
K1-05	15-Apr-98		2.8							
K1-05	15-Apr-98							<0.01	<0.02	
K1-05	15-Apr-98	38 LO				<0.1	<0.1			
K1-05	16-Jul-98		4							
K1-05	16-Jul-98							<0.01	0.02	
K1-05	14-Oct-98		3.4							
K1-05	14-Oct-98							0.017	<0.02	
K1-05	14-Oct-98	41				<0.1	<0.1			
K1-05	13-Jan-99		2.8							
K1-05	13-Jan-99							0.022	<0.02	
K1-05	14-Apr-99		3.3							
K1-05	14-Apr-99							<0.01	<0.02	
K1-05	14-Apr-99	43				<0.1	<0.1			
K1-05	8-Jul-99		2.6							
K1-05	8-Jul-99							<0.01	<0.02	
K1-05	6-Oct-99		2.3							
K1-05	6-Oct-99							<0.01	<0.02	
K1-05	6-Oct-99	42				<0.1	<0.1			
K1-05	6-Oct-99		2.2							
K1-05	6-Oct-99							<0.01	<0.02	
K1-05	6-Oct-99	41				<0.1	<0.1			
K1-05	8-Feb-00		3.7							
K1-05	8-Feb-00							<0.01	<0.02	
K1-05	19-Apr-00		4.1							
K1-05	19-Apr-00							<0.01	<0.02	
K1-05	19-Apr-00	40				<0.1	<0.1			
K1-05	19-Jul-00		4							

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-05	19-Jul-00							<0.01	<0.02	
K1-05	24-Oct-00		4							
K1-05	24-Oct-00							<0.01	<0.02	
K1-05	24-Oct-00	43				<0.1	<0.1			
K1-05	18-Jan-01		4							
K1-05	18-Jan-01							0.01	<0.02	
K1-05	20-Apr-01		5 L							
K1-05	20-Apr-01							<0.01	<0.02	
K1-05	20-Apr-01	45 L				<0.1	<0.1			
K1-05	20-Apr-01		5 L							
K1-05	20-Apr-01							<0.01	<0.02	
K1-05	20-Apr-01	46 L				<0.1	<0.1			
K1-05	12-Jul-01		4							
K1-05	12-Jul-01							<0.01	<0.02	
K1-05	23-Oct-01		4						<0.02	
K1-05	23-Oct-01							<0.01		
K1-05	23-Oct-01	41				<0.1	<0.1			
K1-05	22-Jan-02		4							
K1-05	22-Jan-02							<0.01	<0.02	
K1-05	18-Apr-02		5							
K1-05	18-Apr-02							0.05	<0.02 FL	
K1-05	18-Apr-02	41				<0.1				
K1-05	30-Jul-02		4							
K1-05	30-Jul-02							0.03	0.02	
K1-05	6-Dec-02		5 L							
K1-05	6-Dec-02							0.01	<0.02	
K1-05	6-Dec-02	44 L				<0.1				
K1-05	29-Jan-03		4							
K1-05	29-Jan-03							<0.01	<0.02	
K1-05	18-Apr-03		4.5 J							
K1-05	18-Apr-03					0.1	<0.01	<0.01	<0.05	
K1-05	18-Apr-03	41 L								
K1-05	24-Jun-03							<0.01	<0.02	
K1-05	24-Jun-03	44				<0.1	<0.1			
K1-05	24-Jul-03		3							
K1-05	24-Jul-03							<0.01	<0.02	
K1-05	19-Nov-03		2.8							
K1-05	19-Nov-03							0.031	<0.02	
K1-05	19-Nov-03	42 L				<0.1	<0.1			
K1-05	29-Jan-04		3.1							
K1-05	29-Jan-04							<0.01	<0.02	
K1-05	10-May-04		2.8							
K1-05	10-May-04							<0.01	<0.02	
K1-05	10-May-04	42 L				<0.1	<0.1			
K1-05	13-Jul-04		3.5							
K1-05	13-Jul-04							<0.01	<0.02	
K1-05	13-Jul-04		3.6							

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-05	13-Jul-04							<0.01	<0.02	
K1-05	1-Dec-04							<0.01 E	<0.02 E	
K1-05	1-Dec-04	42 L				<0.1 E	<0.1 E			
K1-05	1-Mar-05							<0.01 E	<0.02 E	
K1-05	1-Mar-05	44 B				<0.1	<0.1 BE			
K1-05	13-Apr-05					<0.1	<0.1 E	<0.01 BE	<0.02 E	
K1-05	7-Jul-05							0.00297	<0.01 E	
K1-05	7-Jul-05	41				<0.1	0.00594			
K1-05	7-Jul-05							0.0029	<0.01	
K1-05	7-Jul-05	42				<0.1	<0.002 E			
K1-05	5-Oct-05							0.00288	<0.01	
K1-05	5-Jan-06							<0.01 E	<0.02 FE	
K1-05	5-Jan-06	42				<0.05	<0.01			
K1-07	20-Jan-88	38 P				0.06 P	<0.01 P			
K1-07	20-Jan-88	39 P				0.16 P	<0.01 P			
K1-07	20-Jan-88									0.031 P
K1-07	4-Apr-88	38 P				<0.03 P	<0.01 P			
K1-07	25-Jul-88	34 P				<0.03 P	<0.01 P			
K1-07	10-Oct-88	39 P	3.4 P	40 P	18 P	<0.03 P	0.04 P	<0.02 P	<0.01 P	
K1-07	10-Oct-88	41 P	3.4 P	40 P	19 P	<0.03 P	<0.04 P	<0.02 P	<0.01 P	
K1-07	23-Jan-89	44 P	2.9 P	40 P	18 P	<0.04 P	<0.04 P	<0.02 P	<0.01 P	
K1-07	11-Apr-89	45 P	2.8 P	40 P	19 P	<0.04 P	<0.04 P	<0.02 P	0.02 P	
K1-07	24-Jul-89	37 P	0.9 P	38 P	16 P	<0.04 P	<0.04 P	<0.02 P	0.01 P	
K1-07	25-Oct-89	41 P	3.8 P	37 P	16 P	<0.04 P	<0.04 P	0.17 P	0.11 P	
K1-07	11-Jan-90	38 P	2.6 P	38 P	19 P	0.05 P	0.04 P	<0.08 P	0.06 P	
K1-07	11-Apr-90	41 P	3.8 P	38 P	18 P	<0.04 P	<0.04 P	<0.08 P	<0.05 P	
K1-07	10-Jul-90	29 P	2 P	34 P	16 P	<0.04 P	<0.04 P	<0.05 P	<0.05 P	
K1-07	9-Oct-90	40 P	2 P	39 P	18 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-07	15-Jan-91	45 P	2 P	42 P	20 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-07	9-Apr-91	39 P	3 P	33 P	15 P			<0.05 P	<0.05 P	
K1-07	9-Apr-91					<0.1 P	<0.05 P			
K1-07	9-Jul-91	40 P	3 P	38 P	18 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-07	16-Oct-91	42 P	2 P	37 P	18 P	<0.1 P	<0.05 P	<0.05 P	0.06 P	
K1-07	16-Jan-92	45 P	3 P	39 P	18 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-07	16-Jan-92	40 P	3 P	39 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-07	14-Apr-92	40 P	2 P	44 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-07	25-Jul-92	41 P	2 P	38 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-07	26-Oct-92	41 P	<5 P	36 P	18 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-07	26-Oct-92	38 P	<5 P	40 P	18 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-07	2-Feb-93	40	<5	39	17	<0.1	<0.05	<0.05	<0.05	
K1-07	7-Apr-93	40	2.6	34	16	<0.1	<0.05	<0.05	<0.05	
K1-07	26-Jul-93	42	3.4	42	19	<0.1	<0.03	<0.05	<0.05	<0.2
K1-07	4-Nov-93								<0.02	
K1-07	4-Nov-93	39	3.1	37	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-07	31-Jan-94									<0.2
K1-07	31-Jan-94			36	17					
K1-07	11-Apr-94								<0.02	

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-07	11-Apr-94							<0.01		
K1-07	4-May-94								<0.02	
K1-07	4-May-94	38	2.8	38	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-07	5-Aug-94	40	3	40	18	<0.1	<0.03	<0.05	<0.05	<0.2
K1-07	5-Aug-94								<0.02	
K1-07	13-Oct-94	41	2.9	41	18	<0.1	<0.03	<0.05	<0.05	<0.2
K1-07	9-Jan-95	41	3	42	19	<0.1	<0.03	<0.05	<0.05	<0.2
K1-07	11-May-95	39	2.9	38	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-07	31-Jul-95	41	2.9	40	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-07	12-Oct-95	42	3.5	42	19	<0.1	<0.03	<0.05	<0.05	<0.2
K1-07	18-Jan-96	48	3.1	40	18	<0.1	<0.03	<0.05	<0.05	<0.2
K1-07	12-Apr-96					<0.1 L	<0.03	<0.01	0.023	
K1-07	31-Jul-96	39				<0.1	<0.03		<0.02	
K1-07	31-Jul-96							0.0027 LO		
K1-07	11-Oct-96							<0.01	<0.02	
K1-07	17-Jan-97							<0.01	<0.02	
K1-07	4-Apr-97							<0.01	<0.02	
K1-07	4-Apr-97	37 O				<0.1	<0.1			
K1-07	3-Jul-97							<0.01	<0.02	
K1-07	16-Oct-97							<0.01	<0.02	
K1-07	16-Oct-97	35				<0.1	<0.1			
K1-07	12-Jan-98							<0.01	<0.02	
K1-07	15-Apr-98		2.5							
K1-07	15-Apr-98							<0.01	<0.02	
K1-07	15-Apr-98	36 LO				<0.1	<0.1			
K1-07	16-Jul-98		3							
K1-07	16-Jul-98							<0.01	0.02	
K1-07	15-Oct-98		2.8							
K1-07	15-Oct-98							<0.01	<0.02	
K1-07	15-Oct-98	37				<0.1	<0.1			
K1-07	14-Jan-99		2.6							
K1-07	14-Jan-99							0.011	<0.02	
K1-07	12-Apr-99		2.4							
K1-07	12-Apr-99							<0.01	<0.02 L	
K1-07	12-Apr-99	37				<0.1	<0.1			
K1-07	6-Jul-99		2.4							
K1-07	6-Jul-99							<0.01	<0.02	
K1-07	4-Oct-99		2.6							
K1-07	4-Oct-99							<0.01	<0.02	
K1-07	4-Oct-99	37				<0.1	<0.1			
K1-07	8-Feb-00		3.6							
K1-07	8-Feb-00							<0.01	<0.02	
K1-07	8-Feb-00		3.6							
K1-07	8-Feb-00							<0.01	<0.02	
K1-07	19-Apr-00		3.9							
K1-07	19-Apr-00							<0.01	<0.02	
K1-07	19-Apr-00	38				<0.1	<0.1			

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-07	20-Jul-00		4							
K1-07	20-Jul-00							<0.01	<0.02	
K1-07	25-Oct-00		4							
K1-07	25-Oct-00							<0.01	<0.02	
K1-07	25-Oct-00	41				<0.1	<0.1			
K1-07	22-Jan-01		4							
K1-07	22-Jan-01							<0.01	<0.02	
K1-07	23-Apr-01		4							
K1-07	23-Apr-01							<0.01	<0.02	
K1-07	23-Apr-01	37				<0.1	<0.1			
K1-07	10-Jul-01		4 L							
K1-07	10-Jul-01							<0.01	<0.02	
K1-07	23-Oct-01		4						<0.02	
K1-07	23-Oct-01							<0.01		
K1-07	23-Oct-01	38				<0.1	<0.1			
K1-07	23-Oct-01		4						<0.02	
K1-07	23-Oct-01							<0.01		
K1-07	23-Oct-01	39				<0.1	<0.1			
K1-07	22-Jan-02		4							
K1-07	22-Jan-02							<0.01	<0.02	
K1-07	18-Apr-02		4							
K1-07	18-Apr-02							<0.01	0.02 FL	
K1-07	18-Apr-02	39				<0.1				
K1-07	30-Jul-02		4							
K1-07	30-Jul-02							<0.01	<0.02	
K1-07	6-Dec-02		5 L							
K1-07	6-Dec-02							<0.01	<0.02	
K1-07	6-Dec-02	43 L				<0.1				
K1-07	30-Jan-03		4							
K1-07	30-Jan-03							<0.01	<0.02	
K1-07	1-May-03		4							
K1-07	1-May-03							<0.01	<0.02	
K1-07	6-Jun-03	42				<0.1	0.00064			
K1-07	28-Aug-03		4							
K1-07	28-Aug-03							<0.01	<0.02	
K1-07	24-Nov-03		3							
K1-07	24-Nov-03							<0.01	<0.02	
K1-07	24-Nov-03	41 L				<0.1	<0.1			
K1-07	4-Feb-04		2.3							
K1-07	4-Feb-04							<0.01	<0.02	
K1-07	10-May-04		2.7							
K1-07	10-May-04							<0.01	<0.02	
K1-07	10-May-04	35 L				<0.1	<0.1			
K1-07	21-Jul-04		3.3							
K1-07	21-Jul-04							<0.01	<0.02	
K1-07	2-Dec-04							<0.01 F	<0.02 F	
K1-07	2-Dec-04	40 L				<0.1 E	<0.1 E			

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-07	28-Feb-05							<0.01 E	<0.02 E	
K1-07	28-Feb-05	42				<0.1 E	<0.1 E			
K1-07	6-Apr-05					<0.1 E	<0.1 E	<0.01	<0.02 E	
K1-07	6-Jul-05							<0.002 E	<0.01	
K1-07	6-Jul-05	38.5				<0.1	<0.002 E			
K1-07	17-Oct-05							<0.002	<0.01 O	
K1-07	17-Jan-06						<0.001 E	<0.01	<0.02 E	
K1-07	17-Jan-06	42				<0.05	<0.01			
K1-08	21-Jan-88	37 P				<0.03 P	<0.01 P			
K1-08	21-Jan-88									0.066 P
K1-08	6-Apr-88	36 P				<0.03 P	<0.01 P			
K1-08	15-Jul-88	37 P				<0.03 P	<0.01 P			
K1-08	6-Oct-88	40 P	2.8 P	38 P	18 P	<0.03 P	0.02 P	<0.02 P	<0.01 P	
K1-08	24-Jan-89	42 P	2.6 P	38 P	19 P	<0.04 P	<0.04 P	<0.02 P	<0.01 P	
K1-08	4-May-89	42 P	2.4 P	38 P	17 P	0.04 P	<0.04 P	<0.02 P	<0.01 P	
K1-08	24-Jul-89	40 P	1.1 P	36 P	16 P	0.4 P	<0.04 P	<0.02 P	<0.01 P	
K1-08	25-Oct-89	40 P	3 P	36 P	17 P	<0.04 P	<0.04 P	<0.08 P	<0.01 P	
K1-08	11-Jan-90	38 P	3.8 P	35 P	18 P	<0.04 P	<0.04 P	<0.08 P	<0.01 P	
K1-08	11-Apr-90	43 P	4 P	36 P	16 P	<0.04 P	<0.04 P	<0.08 P	<0.05 P	
K1-08	10-Jul-90	30 P	2 P	36 P	16 P	<0.04 P	<0.04 P	<0.05 P	<0.05 P	
K1-08	9-Oct-90	42 P	2 P	34 P	16 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-08	15-Jan-91	43 P	2 P	41 P	19 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-08	10-Apr-91	43 P	2 P	39 P	16 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-08	10-Apr-91	40 P	2 P	38 P	16 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-08	9-Jul-91	40 P	4 P	36 P	16 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-08	16-Oct-91	41 P	3 P	36 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-08	16-Jan-92	40 P	3 P	40 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-08	14-Apr-92	38 P	2 P	43 P	16 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-08	25-Jul-92	43 P	3 P	39 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-08	27-Oct-92	39 P	<5 P	40 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-08	2-Feb-93	40	<5	36	16	<0.1	<0.05	<0.05	<0.05	
K1-08	7-Apr-93	39	2.5	33	15	<0.1	<0.05	<0.05	<0.05	
K1-08	26-Jul-93	42	3.7	43	19	<0.1	<0.03	<0.05	<0.05	<0.2
K1-08	4-Nov-93								<0.02	
K1-08	4-Nov-93	38	3.2	37	16	<0.1	<0.03	<0.05	<0.05	<0.2
K1-08	31-Jan-94									<0.2
K1-08	31-Jan-94			37	17					
K1-08	31-Jan-94									<0.2
K1-08	31-Jan-94			36	16					
K1-08	11-Apr-94								<0.02	
K1-08	11-Apr-94							<0.01		
K1-08	4-May-94								<0.02	
K1-08	4-May-94	39	2.9	38	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-08	5-Aug-94	40	3.1	40	18	<0.1	<0.03	<0.05	<0.05	<0.2
K1-08	5-Aug-94								<0.02	
K1-08	13-Oct-94	42	3.1	42	18	<0.1	<0.03	<0.05	<0.05	<0.2
K1-08	9-Jan-95	42	3	43	19	<0.1	<0.03	<0.05	<0.05	<0.2

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-08	9-Jan-95	41	3	43	19	<0.1	<0.03	<0.05	<0.05	<0.2
K1-08	11-May-95	40	3.2	40	18	<0.1	<0.03	<0.05	<0.05	<0.2
K1-08	31-Jul-95	42	3.1	42	18	<0.1	<0.03	<0.05	<0.05	<0.2
K1-08	12-Oct-95	43	3.8	45	20	<0.1	<0.03	<0.05	<0.05	<0.2
K1-08	18-Jan-96	50	3.3	44	19	<0.1	<0.03	<0.05	<0.05	<0.2
K1-08	12-Apr-96					<0.1 L	<0.03	<0.01	0.027	
K1-08	12-Apr-96					<0.1 L	<0.03	<0.01	0.031	
K1-08	31-Jul-96	42				<0.1	<0.03		<0.02	
K1-08	31-Jul-96							0.0027 LO		
K1-08	11-Oct-96							<0.01	<0.02	
K1-08	11-Oct-96							<0.01	<0.02	
K1-08	17-Jan-97							<0.01	<0.02	
K1-08	4-Apr-97							<0.01	<0.02	
K1-08	4-Apr-97	38 O				<0.1	<0.1			
K1-08	3-Jul-97							<0.01	<0.02	
K1-08	3-Jul-97							<0.01	<0.02	
K1-08	16-Oct-97							<0.01	<0.02	
K1-08	16-Oct-97	37				<0.1	<0.1			
K1-08	12-Jan-98							<0.01	<0.02	
K1-08	15-Apr-98		2.8							
K1-08	15-Apr-98							<0.01	<0.02	
K1-08	15-Apr-98	41 LO				<0.1	<0.1			
K1-08	16-Jul-98		3.3							
K1-08	16-Jul-98							<0.01	<0.02	
K1-08	16-Jul-98		3.5							
K1-08	16-Jul-98							<0.01	<0.02	
K1-08	15-Oct-98		3							
K1-08	15-Oct-98							<0.01	<0.02	
K1-08	15-Oct-98	43				<0.1	<0.1			
K1-08	14-Jan-99		3							
K1-08	14-Jan-99							<0.01	<0.02	
K1-08	12-Apr-99		2.7							
K1-08	12-Apr-99							<0.01	<0.02 L	
K1-08	12-Apr-99	42				<0.1	<0.1			
K1-08	7-Jul-99		3							
K1-08	7-Jul-99							<0.01	<0.02	
K1-08	4-Oct-99		2.5							
K1-08	4-Oct-99							<0.01	<0.02	
K1-08	4-Oct-99	40				<0.1	<0.1			
K1-08	9-Feb-00		4							
K1-08	9-Feb-00							<0.01	<0.02	
K1-08	19-Apr-00		4.3							
K1-08	19-Apr-00							<0.01	<0.02	
K1-08	19-Apr-00	42				<0.1	<0.1			
K1-08	20-Jul-00		5							
K1-08	20-Jul-00							<0.01	<0.02	
K1-08	24-Oct-00		4							

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-08	24-Oct-00							<0.01	<0.02	
K1-08	24-Oct-00	45				<0.1	<0.1			
K1-08	22-Jan-01		4							
K1-08	22-Jan-01							<0.01	<0.02	
K1-08	23-Apr-01		4							
K1-08	23-Apr-01							<0.01	<0.02	
K1-08	23-Apr-01	40				<0.1	<0.1			
K1-08	11-Jul-01		4							
K1-08	11-Jul-01							<0.01	<0.02	
K1-08	23-Oct-01		4						<0.02	
K1-08	23-Oct-01							<0.01		
K1-08	23-Oct-01	41				<0.1	<0.1			
K1-08	22-Jan-02		4							
K1-08	22-Jan-02							<0.01	<0.02	
K1-08	18-Apr-02		5							
K1-08	18-Apr-02							<0.01	<0.02 FL	
K1-08	18-Apr-02	41				<0.1				
K1-08	30-Jul-02		4							
K1-08	30-Jul-02							<0.01	<0.02	
K1-08	13-Dec-02		5 L							
K1-08	13-Dec-02							<0.01	<0.02	
K1-08	13-Dec-02	46				<0.1				
K1-08	7-Feb-03		5							
K1-08	7-Feb-03							<0.01	<0.02	
K1-08	2-May-03		5							
K1-08	2-May-03							<0.01	<0.02	
K1-08	6-Jun-03	44				<0.1	<0.1			
K1-08	4-Sep-03		3.1							
K1-08	4-Sep-03							<0.01	<0.02	
K1-08	24-Nov-03		3							
K1-08	24-Nov-03							<0.01	<0.02	
K1-08	24-Nov-03	44 L				<0.1	<0.1			
K1-08	3-Feb-04		2.9							
K1-08	3-Feb-04							<0.01	<0.02	
K1-08	11-May-04		3.3							
K1-08	11-May-04							<0.01	<0.02	
K1-08	11-May-04	42				<0.1	<0.1			
K1-08	21-Jul-04		3.3							
K1-08	21-Jul-04							<0.01	<0.02	
K1-08	2-Dec-04							<0.01 F	<0.02 F	
K1-08	2-Dec-04	42 L				<0.1 E	<0.1			
K1-08	2-Mar-05							<0.01 E	<0.02 E	
K1-08	2-Mar-05	46				<0.1 E	<0.1 EL			
K1-08	2-Mar-05							<0.01 E	<0.02 E	
K1-08	2-Mar-05	45				<0.1 E	<0.1 EL			
K1-08	6-Apr-05					<0.1	<0.1 E	<0.01	<0.02	
K1-08	6-Jul-05							<0.002 E	<0.01	

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-08	6-Jul-05	44.3				<0.1	<0.002			
K1-08	13-Oct-05							<0.002 E	<0.01 O	
K1-08	18-Jan-06							<0.01	<0.02 BE	
K1-08	18-Jan-06	44				<0.05	<0.01			
K1-08	18-Jan-06							<0.01	<0.02 BE	
K1-08	18-Jan-06	44				<0.05	<0.01			
K1-09	21-Jan-88	36 P				<0.03 P	<0.01 P			
K1-09	21-Jan-88									0.088 P
K1-09	6-Apr-88	35 P				<0.03 P	<0.01 P			
K1-09	15-Jul-88	35 P				<0.03 P	<0.01 P			
K1-09	6-Oct-88	38 P	2.8 P	37 P	17 P	<0.03 P	<0.01 P	<0.02 P	<0.01 P	
K1-09	24-Jan-89	41 P	2.6 P	38 P	18 P	<0.04 P	<0.04 P	<0.02 P	<0.01 P	
K1-09	4-May-89	42 P	2.4 P	39 P	18 P	0.06 P	<0.04 P	<0.02 P	<0.01 P	
K1-09	4-May-89	37 P	4 P	36 P	16 P	<0.05 P	<0.005 P	<0.05 P	<0.01 P	
K1-09	24-Jul-89	36 P	0.77 P	36 P	15 P	<0.04 P	<0.04 P	<0.02 P	0.02 P	
K1-09	25-Oct-89	31 P	<2 P	32 P	13 P	<0.04 P	<0.04 P	<0.08 P	<0.01 P	
K1-09	11-Jan-90	40 P	2.2 P	36 P	17 P	<0.04 P	<0.04 P	<0.08 P	<0.01 P	
K1-09	11-Jan-90	39 P	2.1 P	34 P	16 P	<0.04 P	<0.04 P	<0.08 P	0.02 P	
K1-09	11-Apr-90	39 P	3.3 P	32 P	14 P	<0.04 P	<0.04 P	<0.08 P	<0.05 P	
K1-09	10-Jul-90	30 P	2 P	35 P	16 P	<0.04 P	<0.04 P	<0.05 P	<0.05 P	
K1-09	9-Oct-90	40 P	2 P	36 P	16 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-09	15-Jan-91	43 P	2 P	39 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-09	9-Apr-91	35 P	2 P	29 P	12 P			<0.05 P	<0.05 P	
K1-09	9-Apr-91					<0.1 P	<0.05 P			
K1-09	9-Jul-91	44 P	3 P	37 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-09	16-Oct-91	38 P	2 P	35 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-09	16-Jan-92	43 P	3 P	40 P	18 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-09	14-Apr-92	38 P	3 P	42 P	16 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-09	14-Apr-92	37 P	2 P	40 P	16 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-09	25-Jul-92	38 P	2 P	37 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-09	27-Oct-92	40 P	<5 P	38 P	17 P	<0.1 P	<0.05 P	<0.05 P	<0.05 P	
K1-09	2-Feb-93	41	<5	37	17	<0.1	<0.05	<0.05	<0.05	
K1-09	7-Apr-93	40	2.9	34	15	<0.1	<0.05	<0.05	<0.05	
K1-09	26-Jul-93	40	3.6	41	19	<0.1	<0.03	<0.05	<0.05	<0.2
K1-09	4-Nov-93								<0.02	
K1-09	4-Nov-93	35	2.8	33	15	<0.1	<0.03	<0.05	<0.05	<0.2
K1-09	31-Jan-94									<0.2
K1-09	31-Jan-94			34	16					
K1-09	11-Apr-94								<0.02	
K1-09	11-Apr-94							<0.01		
K1-09	4-May-94								<0.02	
K1-09	4-May-94	38	2.8	38	17	<0.1	<0.03	<0.05	<0.05	<0.2
K1-09	5-Aug-94	40	3	40	18	<0.1	<0.03	<0.05	<0.05	<0.2
K1-09	5-Aug-94								<0.02	
K1-09	13-Oct-94	42	3	41	18	<0.1	<0.03	<0.05	<0.05	<0.2
K1-09	9-Jan-95	41	3	43	19	<0.1	<0.03	<0.05	<0.05	<0.2
K1-09	10-May-95	40	2.9	39	18	<0.1	<0.03	<0.05	<0.05	<0.2

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-09	10-May-95	51	4.3	42	18	<0.1	<0.005	<0.01	<0.02	
K1-09	31-Jul-95	42	2.9	42	18	<0.1	<0.03	<0.05	<0.05	<0.2
K1-09	12-Oct-95	43	3.5	43	20	<0.1	<0.03	<0.05	<0.05	<0.2
K1-09	18-Jan-96	50	3.2	42	19	0.11	<0.03	<0.05	<0.05	<0.2
K1-09	18-Jan-96	50	3.3	42	19	0.12	<0.03	<0.05	<0.05	<0.2
K1-09	12-Apr-96					<0.1 L	<0.03	<0.01	0.02	
K1-09	31-Jul-96	41				<0.1	<0.03		<0.02	
K1-09	31-Jul-96							0.0028 LO		
K1-09	11-Oct-96							<0.01	<0.02	
K1-09	17-Jan-97							<0.01	<0.02	
K1-09	4-Apr-97							<0.01	<0.02	
K1-09	4-Apr-97	36 O				<0.1	<0.1			
K1-09	4-Apr-97							<0.01	<0.02	
K1-09	4-Apr-97	36 O				<0.1	<0.1			
K1-09	3-Jul-97							<0.01	<0.02	
K1-09	16-Oct-97							<0.01	<0.02	
K1-09	16-Oct-97	38				<0.1	<0.1			
K1-09	16-Oct-97							<0.01	<0.02	
K1-09	16-Oct-97	39				<0.1	<0.1			
K1-09	17-Mar-98							<0.01	<0.02	
K1-09	15-Apr-98		2.9							
K1-09	15-Apr-98							<0.01	<0.02	
K1-09	15-Apr-98	40 LO				<0.1	<0.1			
K1-09	16-Jul-98		3.7							
K1-09	16-Jul-98							<0.01	<0.02	
K1-09	15-Oct-98		3.2							
K1-09	15-Oct-98							<0.01	<0.02	
K1-09	15-Oct-98	42				<0.1	<0.1			
K1-09	15-Oct-98		3.2							
K1-09	15-Oct-98							<0.01	<0.02	
K1-09	15-Oct-98	42				0.18	<0.1			
K1-09	13-Jan-99		3.1							
K1-09	13-Jan-99							0.012	<0.02	
K1-09	13-Apr-99		2.8							
K1-09	13-Apr-99							<0.01	<0.02 L	
K1-09	13-Apr-99	41				<0.1	<0.1			
K1-09	13-Apr-99		2.7							
K1-09	13-Apr-99							<0.01	<0.02 L	
K1-09	13-Apr-99	42				<0.1	<0.1			
K1-09	7-Jul-99		2.7							
K1-09	7-Jul-99							<0.01	<0.02	
K1-09	4-Oct-99		2.8							
K1-09	4-Oct-99							<0.01	<0.02	
K1-09	4-Oct-99	39				<0.1	<0.1			
K1-09	9-Feb-00		4							
K1-09	9-Feb-00							<0.01	<0.02	
K1-09	19-Apr-00		4.3							

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-09	19-Apr-00							<0.01	<0.02	
K1-09	19-Apr-00	42				<0.1	<0.1			
K1-09	20-Jul-00		5							
K1-09	20-Jul-00							<0.01	<0.02	
K1-09	20-Jul-00		5							
K1-09	20-Jul-00							<0.01	<0.02	
K1-09	24-Oct-00		4							
K1-09	24-Oct-00							<0.01	<0.02	
K1-09	24-Oct-00	43				<0.1	<0.1			
K1-09	22-Jan-01		4							
K1-09	22-Jan-01							<0.01	<0.02	
K1-09	20-Apr-01		5 L							
K1-09	20-Apr-01							<0.01	<0.02	
K1-09	20-Apr-01	46 L				<0.1	<0.1			
K1-09	11-Jul-01		5							
K1-09	11-Jul-01							<0.01	<0.02	
K1-09	23-Oct-01		5						<0.02	
K1-09	23-Oct-01							<0.01		
K1-09	23-Oct-01	42				<0.1	<0.1			
K1-09	22-Jan-02		4							
K1-09	22-Jan-02							<0.01	<0.02	
K1-09	18-Apr-02		5							
K1-09	18-Apr-02							<0.01	<0.02 FL	
K1-09	18-Apr-02	42				<0.1				
K1-09	30-Jul-02		4							
K1-09	30-Jul-02							<0.01	<0.02	
K1-09	6-Dec-02		5 L							
K1-09	6-Dec-02							<0.01	<0.02	
K1-09	6-Dec-02	45 L				<0.1				
K1-09	31-Jan-03		5							
K1-09	31-Jan-03							<0.01	<0.02	
K1-09	2-May-03		5							
K1-09	2-May-03							<0.01	<0.02	
K1-09	6-Jun-03	44				<0.1	<0.1			
K1-09	8-Sep-03		3.2							
K1-09	8-Sep-03							<0.01	<0.02	
K1-09	25-Nov-03		2.9							
K1-09	25-Nov-03							<0.01	<0.02	
K1-09	25-Nov-03	41 L				<0.1	<0.1			
K1-09	3-Feb-04		2.9							
K1-09	3-Feb-04							<0.01	<0.02	
K1-09	11-May-04		3.2							
K1-09	11-May-04							<0.01	<0.02	
K1-09	11-May-04	42				<0.1	<0.1			
K1-09	20-Jul-04		3.1							
K1-09	20-Jul-04							<0.01	<0.02	
K1-09	6-Dec-04							<0.01	<0.02 E	

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
K1-09	6-Dec-04	45 L				<0.1	<0.1			
K1-09	6-Dec-04							<0.01	<0.02 E	
K1-09	6-Dec-04	46				<0.1	<0.1			
K1-09	24-Feb-05							<0.01 E	<0.02 E	
K1-09	24-Feb-05	44 O				<0.1	<0.1 E			
K1-09	6-Apr-05					<0.1	<0.1 E	<0.01	<0.02	
K1-09	1-Aug-05							<0.002 E	<0.01	
K1-09	1-Aug-05	41.7 L				<0.1	<0.002			
K1-09	13-Oct-05							<0.002	<0.01 O	
K1-09	19-Jan-06							<0.01 E	<0.02 E	
K1-09	19-Jan-06	44				<0.05	<0.01			
W-865-01	30-Mar-99	58	4.8	48	25	<0.05	0.019	<0.01	0.021	<0.05
W-865-01	14-Aug-01	46	5	57	24	<0.1	<0.03	<0.05 O	<0.05	<0.2
W-865-01	31-Oct-01	48	5	58	25	<0.1 L	<0.03 L	<0.05	<0.05	<0.2 L
W-865-01	31-Jan-02	47	8	57	24	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-01	30-May-02	48 H	6 H	61 H	25 H	<0.1 H	<0.03 H	<0.05 H	<0.05 H	<0.2 H
W-865-01	31-Jul-02	48	6 L	60 L	25	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-01	19-Feb-03	36	25	42	11	0.1 L	<0.03	<0.05	<0.05	<0.2 L
W-865-01	29-May-03	39	20	39	12	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-01	29-May-03							<0.01	<0.02	
W-865-01	6-Aug-03	36 H	18 H	42 H	11 H	<0.1 H	<0.03 H	<0.05 H	<0.05 H	<0.2 H
W-865-01	17-Nov-03	36	17 L	40	12 L	<0.1 L	<0.03	<0.05	<0.05	<0.2 L
W-865-01	3-Mar-04	36	29	43	12	1.6	<0.03	<0.05	<0.05	1.9
W-865-01	17-May-05	20	22 B	31	8.5	<0.1	<0.03	<0.01	<0.02	0.1 J
W-865-02	29-Mar-00	27	3	30	14	20	2.2	<0.05	<0.05	9.8
W-865-02	28-Aug-01	26	3	25	11	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-02	31-Oct-01	26	3	25	11	<0.1 L	<0.03 L	<0.05	<0.05	<0.2 L
W-865-02	31-Jan-02	27	3	26	11	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-02	23-May-02	27	3	27	12	0.4	<0.03	<0.05	<0.05	0.4
W-865-02	31-Jul-02	26	3 L	29 L	12	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-02	19-Feb-03	29	3	28	12	1 L	0.05	<0.05	<0.05	0.6 L
W-865-02	12-Jun-03	28 L	2.3	27 L	12	<0.05	<0.01	<0.01	<0.05	<0.05
W-865-02	12-Jun-03	28 H	3 H	27 H	12 H	0.4 H	<0.03 H	<0.05 H	<0.05 H	0.2 H
W-865-02	6-Aug-03	27 H	3 H	27 H	11 H	<0.1 H	<0.03 H	<0.05 H	<0.05 H	<0.2 H
W-865-02	17-Nov-03	27	3 L	26	11 L	<0.1 L	<0.03	<0.05	<0.05	<0.2 L
W-865-02	24-Feb-04	33	4	28	12	0.5	<0.03	<0.05	<0.05	0.5
W-865-03	29-Sep-00	40	4	35	19	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-03	14-Aug-01	38	4	35	19	<0.1	<0.03	<0.05 O	0.06	<0.2
W-865-03	30-Oct-01	41	4	38	20	<0.1	<0.03	<0.05	<0.05 L	<0.2
W-865-03	31-Jan-02	39	3	35	19	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-03	30-May-02	40 H	4 H	37 H	20 H	<0.1 H	<0.03 H	<0.05 H	<0.05 H	<0.2 H
W-865-03	31-Jul-02	40	3 L	38 L	20	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-03	19-Feb-03	42	4	38	20	0.1 L	<0.03	<0.05	<0.05	<0.2 L
W-865-03	29-May-03	41	4	38	20	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-03	29-May-03							<0.01	<0.02	
W-865-03	6-Aug-03	42 H	4 H	39 H	20 H	<0.1 H	<0.03 H	<0.05 H	<0.05 H	<0.2 H
W-865-03	17-Nov-03	40	4 L	36	20 L	<0.1 L	<0.03	<0.05	<0.05	<0.2 L

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
W-865-03	3-Mar-04	42	4	39	21	0.3	<0.03	<0.05	<0.05	0.3
W-865-03	20-May-05	39	3.7	38	20	<0.1	<0.03	<0.01	<0.02	
W-865-04	28-Sep-00	72	6	32	14	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-04	14-Aug-01	63	6	32	14	<0.1	<0.03	<0.05 O	<0.05	<0.2
W-865-04	30-Oct-01	67	6	35	14	<0.1	<0.03	<0.05	<0.05 L	<0.2
W-865-04	31-Jan-02	63	6	32	14	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-04	23-May-02	65	6	34	14	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-04	31-Jul-02	64	5 L	35 L	15	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-04	19-Feb-03	67	6	34	14	<0.1 L	<0.03	<0.05	<0.05	<0.2 L
W-865-04	29-May-03	66	6	33	14	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-04	29-May-03							<0.01	<0.02	
W-865-04	6-Aug-03	66 H	5 H	35 H	14 H	<0.1 H	<0.03 H	<0.05 H	<0.05 H	<0.2 H
W-865-04	17-Nov-03	64	6 L	33	14 L	<0.1 L	<0.03	<0.05	<0.05	<0.2 L
W-865-04	24-Feb-04	68	6	34	14	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-05	10-Apr-00	43	4	60	24	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-05	11-Jun-01	38 H	4 H	56 H	25 H	<0.1 H	<0.03 H	<0.05 H	<0.05 H	<0.2 H
W-865-05	22-Aug-01	40	3.1	57 L	25	<0.05	<0.01	<0.01	<0.05	<0.05
W-865-05	22-Aug-01	38	4	52	25	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-05	31-Oct-01	41 HL	3 H	58 HL	25 HL	<0.05 H	<0.01 H	<0.01 H	<0.05 H	<0.05 H
W-865-05	31-Oct-01	38	4	52	22	<0.1 L	<0.03 L	<0.05	<0.05	<0.2 L
W-865-05	28-Feb-02	38	4	60	24	0.4	<0.03	<0.05	<0.05	0.2
W-865-05	30-May-02	38 H	4 H	57 H	22 H	0.3 H	<0.03 H	<0.05 H	<0.05 H	0.2 H
W-865-05	31-Jul-02	39	4 L	53 L	22	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-05	20-Jun-03	39 H	4 HL	49 H	22 H	<0.1 HL	<0.03 H	<0.05 H	<0.05 HL	<0.2 H
W-865-05	15-Sep-03	37	2.6	51 L	21	<0.05	<0.01	<0.01 H	<0.05 H	<0.05 H
W-865-05	15-Sep-03	39 H	5 H	52 H	22 H	0.1 H	<0.03 H	<0.05 H	<0.05 H	<0.2 H
W-865-05	2-Dec-03	36	4	58	22	5.1 L	0.08	<0.05	0.06	3.5 L
W-865-05	2-Mar-04	39	4	51	21	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-07	29-Sep-00	55	3	33	16	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-07	14-Aug-01	58	4	37	17	<0.1	<0.03	<0.05 O	<0.05	<0.2
W-865-07	30-Oct-01	60	4	39	18	<0.1	<0.03	<0.05	<0.05 L	<0.2
W-865-07	31-Jan-02	56	3	35	18	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-07	23-May-02	58	3	37	18	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-07	31-Jul-02	58	3 L	39 L	18	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-07	19-Feb-03	61	3	38	18	<0.1 L	<0.03	<0.05	<0.05	<0.2 L
W-865-07	29-May-03	60	3	37	18	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-07	29-May-03							<0.01	<0.02	
W-865-07	6-Aug-03	60 H	3 H	40 H	18 H	<0.1 H	<0.03 H	<0.05 H	<0.05 H	<0.2 H
W-865-07	2-Dec-03	56	3	38	18	0.5 L	<0.03	<0.05	<0.05	0.3 L
W-865-07	24-Feb-04	63	4	39	19	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-07	13-May-05	60	3.8 B	40	18	<0.1	<0.03	<0.01	<0.02	
W-865-1802	27-Jun-03	58 H	3.2	35 H	16 H	<0.1 H	<0.01 H	<0.01 H	<0.05 H	<0.1 H
W-865-1802	22-Dec-03	50	5	35	16	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-1802	1-Mar-04	49	5	36	16	0.2	<0.03	<0.05	<0.05	0.4
W-865-1802	9-Jun-04	50	5	37	17	0.4	<0.03	<0.05	<0.05	0.4
W-865-1802	10-May-05	44	4.2	36	16	<0.1	<0.03	<0.01	<0.02	
W-865-1803	26-Jun-03	48 H	5 H	47 H	21 H	<0.1 H	<0.03 H	<0.05 H	<0.05 H	<0.2 H

Table A-20. Ground and surface water analyses for metals and cations (mg/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)	Zinc (mg/L)	Aluminum (mg/L)
W-865-1803	3-Mar-04	47	6	45	21	<0.1	<0.03	<0.05	<0.05	<0.2
W-865-1803	8-Jun-04	48	5	46	21	<0.1	0.03	<0.05	<0.05	<0.2
W-865-1803	10-Mar-05	47	5.1 B	44	20	0.4		<0.01	<0.02	
W-865-1803	17-May-05	47	5.4 B	46	21	<0.1	0.035	<0.01	<0.02	0.06 J
W-865-1804	23-Jun-03	61 H	7 H	44 H	25 H	<0.1 H	<0.03 H	<0.05 H	<0.05 H	<0.2 H
W-865-1804	10-Mar-05	58	6.2 B	47	22	<0.1	<0.03	<0.01	<0.02	
W-865-1804	17-May-05	57	6 B	46	22	<0.1	0.31	<0.01	0.035	0.06 J
W-865-2002	10-Mar-05	31	3.4 B	26	11	<0.1	<0.03	<0.01	<0.02	
W-865-2002	19-May-05	33	4 B	41	19	<0.1	<0.03	<0.01	<0.02	0.06 J
W-865-2003	10-Mar-05	34	3.9 B	31	14	<0.1	<0.03	<0.01	<0.02	
W-865-2003	19-May-05	34	3.9 B	32	14	<0.1	<0.03	<0.01	<0.02	
W-865-2004	30-Mar-05	37 J	4.5 BF	39	17	<0.1	<0.03	<0.01	<0.02	
W-865-2004	25-May-05	36	3.8	39	18	<0.1	<0.03	<0.01	<0.02	<0.05
W-865-2005	24-Mar-05	45	5.4	42	18 J	<0.1	<0.03	<0.01	<0.02	
W-865-2005	16-May-05	44	5.1	45	20	<0.1	<0.03	<0.01	<0.02	<0.05
W-865-2121	30-Mar-05	33 J	4 BF	29	13	<0.1	<0.03	<0.01	<0.02	
W-865-2121	24-May-05	33	3.6	30	13	<0.1	<0.03	<0.01	0.022	<0.05
W-865-2133	21-Feb-06	40	7.7	48 B	20	<0.1	0.032	<0.01	<0.02	0.14
W-896-1806	27-Mar-06	21	3.7	17	6.9	<0.1	<0.03		<0.02	<0.054
W-PIT1-01	21-Dec-00	78	9 L	28	34	<0.1	<0.03	<0.05	<0.05	<0.2
W-PIT1-01	13-Mar-01	77 HL	8.1 H	27 H	36 H	<0.1 H	<0.03 H	<0.05 H	<0.05 H	<0.2 H
W-PIT1-02	21-Mar-01	35 H	4 H	45 H	18 H	<0.1 H	<0.03 HL	<0.05 H	<0.05 H	<0.2 H

Notes:

mg/L = Milligrams per liter.

B = Analyte found in method blank.

D = Analysis performed at a secondary dilution or concentration.

E = The analyte was detected below LLNL reporting limit, but above analytical laboratory minimum detection limit.

F = Analyte found in field blank, trip blank, or equipment blank.

H = Sample analyzed outside of holding time, sample results should be evaluated.

J = Analyte was postively identified; the associated numerical value is approximate concentration of the analyte.

L = Spike accuracy not within control limits.

O = Duplicate spike or sample precision not within control limits.

P = Indicates that the absence of a data qualifier flag does not mean that the data does not need qualification, but that the implementation of electronic data qualifier flags was not yet established.

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-02A	21-May-97			<0.5							
K1-02A	8-Dec-97			<0.4							
K1-02A	24-Jun-98			<0.4							
K1-02A	16-Dec-98			<0.4							
K1-02A	16-Dec-98			<0.4							
K1-02A	21-May-99			<0.5 S							
K1-02A	21-May-99			<0.5 S							
K1-02A	2-Nov-99			33 S							
K1-02A	24-May-00			7.7							
K1-02A	7-Dec-00			31 D							
K1-02A	30-May-01			<0.4							
K1-02A	5-Jun-02			<0.1							
K1-02A	5-Jun-02			<0.1							
K1-02B	19-Jan-88						<1 P	140 P			
K1-02B	19-Jan-88									570 P	
K1-02B	19-Jan-88										7.6 P
K1-02B	19-Jan-88	0.33 P			35 P	45 P			340 P		
K1-02B	19-Jan-88									540 P	
K1-02B	19-Jan-88										7.6 P
K1-02B	19-Jan-88									550 P	
K1-02B	19-Jan-88										7.6 P
K1-02B	19-Jan-88									560 P	
K1-02B	19-Jan-88										7.7 P
K1-02B	31-Mar-88									520 P	
K1-02B	31-Mar-88									520 P	
K1-02B	31-Mar-88									510 P	
K1-02B	31-Mar-88									510 P	
K1-02B	31-Mar-88									520 P	
K1-02B	31-Mar-88									520 P	
K1-02B	31-Mar-88									520 P	
K1-02B	31-Mar-88									520 P	
K1-02B	4-Apr-88						<1 P	140 P			
K1-02B	4-Apr-88									540 P	
K1-02B	4-Apr-88										7.4 P
K1-02B	4-Apr-88	0.29 P			40 P	40 P			350 P		
K1-02B	4-Apr-88									560 P	
K1-02B	4-Apr-88										7.3 P
K1-02B	4-Apr-88									580 P	
K1-02B	4-Apr-88										7.3 P
K1-02B	4-Apr-88									570 P	
K1-02B	4-Apr-88										7.3 P
K1-02B	4-Apr-88						<1 P	140 P			
K1-02B	4-Apr-88									570 P	
K1-02B	4-Apr-88										7.3 P
K1-02B	4-Apr-88	0.26 P			41 P	40 P			360 P		
K1-02B	4-Apr-88									590 P	
K1-02B	4-Apr-88										7.3 P

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar- bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-02B	4-Apr-88									570 P	
K1-02B	4-Apr-88										7.3 P
K1-02B	4-Apr-88									570 P	
K1-02B	4-Apr-88										7.2 P
K1-02B	2-Jun-88									540 P	
K1-02B	2-Jun-88										7.3 P
K1-02B	2-Jun-88									540 P	
K1-02B	2-Jun-88										7.3 P
K1-02B	2-Jun-88									530 P	
K1-02B	2-Jun-88										7.3 P
K1-02B	2-Jun-88									540 P	
K1-02B	2-Jun-88										7.4 P
K1-02B	25-Jul-88						<1 P	140 P			
K1-02B	25-Jul-88									510 P	
K1-02B	25-Jul-88										7.5 P
K1-02B	25-Jul-88	0.28 P			37 P	52 P	<1 P		360 P		
K1-02B	25-Jul-88									520 P	
K1-02B	25-Jul-88										7.5 P
K1-02B	25-Jul-88									520 P	
K1-02B	25-Jul-88										7.5 P
K1-02B	25-Jul-88									520 P	
K1-02B	25-Jul-88										7.5 P
K1-02B	3-Oct-88						<1 P	140 P			
K1-02B	3-Oct-88									550 P	
K1-02B	3-Oct-88										7.5 P
K1-02B	3-Oct-88	0.35 P			40 P	43 P	<1 P	140 P	320 P	540 P	7.5 P
K1-02B	3-Oct-88									540 P	
K1-02B	3-Oct-88										7.5 P
K1-02B	3-Oct-88									540 P	
K1-02B	3-Oct-88										7.5 P
K1-02B	3-Oct-88									530 P	
K1-02B	3-Oct-88										7.5 P
K1-02B	12-Jan-89						<1 P	140 P			
K1-02B	12-Jan-89									560 P	
K1-02B	12-Jan-89										7.5 P
K1-02B	12-Jan-89	0.3 P			40 P	47 P			370 P		
K1-02B	10-Apr-89						<1 P	140 P			
K1-02B	10-Apr-89									560 P	
K1-02B	10-Apr-89										7.4 P
K1-02B	10-Apr-89	0.3 P			44 P	47 P			310 P		
K1-02B	10-Apr-89									560 P	
K1-02B	10-Apr-89										7.6 P
K1-02B	10-Apr-89									540 P	
K1-02B	10-Apr-89										7.5 P
K1-02B	10-Apr-89									530 P	
K1-02B	10-Apr-89										7.3 P
K1-02B	19-Jul-89						<1 P	180 P			

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-02B	19-Jul-89									560 P	
K1-02B	19-Jul-89										7.3 P
K1-02B	19-Jul-89	0.3 P			48 P	50 P			320 P		
K1-02B	31-Jul-89						<1 P	140 P			
K1-02B	31-Jul-89									560 P	
K1-02B	31-Jul-89										7.4 P
K1-02B	31-Jul-89	0.3 P			43 P	59 P			340 P		
K1-02B	24-Oct-89				46 P	53 P	<1 P	140 P	360 P	560 P	7.6 P
K1-02B	31-Oct-89									560 P	
K1-02B	31-Oct-89										7.2 P
K1-02B	7-Nov-89									630 P	
K1-02B	7-Nov-89										7.5 P
K1-02B	14-Nov-89									590 P	
K1-02B	10-Jan-90				46 P	51 P	<1 P	140 P	290 P	560 P	7.4 P
K1-02B	10-Jan-90	0.3 P									
K1-02B	17-Jan-90									600 P	
K1-02B	17-Jan-90										7.5 P
K1-02B	24-Jan-90									580 P	
K1-02B	24-Jan-90										7.6 P
K1-02B	31-Jan-90									560 P	
K1-02B	31-Jan-90										7.4 P
K1-02B	10-Apr-90	0.3 P									
K1-02B	10-Apr-90				46 P	55 P	<1 P	140 P	390 P	580 P	7.4 P
K1-02B	10-Apr-90	0.3 P									
K1-02B	10-Apr-90				46 P	58 P	<1 P	140 P	340 P	630 P	7.5 P
K1-02B	17-Apr-90									590 P	7.4 P
K1-02B	17-Apr-90									580 P	7.3 P
K1-02B	24-Apr-90									570 P	7.5 P
K1-02B	24-Apr-90									570 P	7.6 P
K1-02B	1-May-90									610 P	7.3 P
K1-02B	1-May-90									600 P	7.5 P
K1-02B	9-Jul-90	0.3 P									
K1-02B	9-Jul-90				48 P	54 P	<1 P	140 P	390 P	600 P	7.3 P
K1-02B	16-Jul-90									580 P	7.4 P
K1-02B	23-Jul-90									650 P	7.1 P
K1-02B	30-Jul-90									580 P	7.5 P
K1-02B	8-Oct-90	0.3 P									
K1-02B	8-Oct-90				50 P	49 P	<1 P	140 P	360 P	480 P	7.2 P
K1-02B	15-Oct-90									540 P	7.2 P
K1-02B	23-Oct-90									510 P	6.8 P
K1-02B	29-Oct-90									580 P	8.4 P
K1-02B	14-Jan-91	0.3 P									
K1-02B	14-Jan-91				56 P	53 P	<1 P	140 P	400 P	570 P	7.3 P
K1-02B	22-Jan-91									510 P	7.5 P
K1-02B	28-Jan-91									540 P	7.2 P
K1-02B	4-Feb-91									500 P	7.4 P
K1-02B	8-Apr-91	0.3 P									

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-02B	8-Apr-91				50 P	58 P	<1 P	140 P	380 P	550 P	6.8 P
K1-02B	16-Apr-91									560 P	7.6 P
K1-02B	23-Apr-91									580 P	7.4 P
K1-02B	29-Apr-91									540 P	7.5 P
K1-02B	8-Jul-91	0.3 P									
K1-02B	8-Jul-91				51 P	60 P	<1 P	140 P	370 P	610 P	7.3 P
K1-02B	16-Jul-91									640 P	7.6 P
K1-02B	22-Jul-91									590 P	7.2 P
K1-02B	29-Jul-91									590 P	7.6 P
K1-02B	21-Oct-91									600 P	7.5 P
K1-02B	28-Oct-91									580 P	7.4 P
K1-02B	4-Nov-91									580 P	
K1-02B	4-Nov-91										7.6 P
K1-02B	15-Nov-91	0.3 P									
K1-02B	15-Nov-91				52 P	61 P	<1 P	140 P	420 P		
K1-02B	15-Nov-91									570 P	7.8 P
K1-02B	15-Jan-92	0.4 P									
K1-02B	15-Jan-92				52 P	65 P	<1 P	140 P	380 P		
K1-02B	15-Jan-92									650 P	7.6 P
K1-02B	22-Jan-92									630 P	7.5 P
K1-02B	29-Jan-92									590 P	7.4 P
K1-02B	4-Feb-92									600 P	7.3 P
K1-02B	14-Apr-92	0.4 P									
K1-02B	14-Apr-92				53 P	64 P	<1 P	140 P	400 P	530 P	7.6 P
K1-02B	20-Apr-92									560 P	7.4 P
K1-02B	30-Apr-92									540 P	7.5 P
K1-02B	12-May-92									560 P	7.6 P
K1-02B	25-Jul-92	0.3 P									
K1-02B	25-Jul-92				53 P	60 P	<1 P	150 P	400 P	540 P	7.5 P
K1-02B	1-Aug-92									550 P	7.7 P
K1-02B	10-Aug-92									530 P	7.8 P
K1-02B	27-Aug-92									590 P	7.4 P
K1-02B	26-Oct-92	0.3 P									
K1-02B	26-Oct-92				55 P	68 P	<1 P	150 P	440 P	590 P	7.1 P
K1-02B	3-Nov-92									570 P	7.1 P
K1-02B	7-Nov-92									610 P	7.6 P
K1-02B	13-Nov-92									600 P	7.6 P
K1-02B	2-Feb-93	0.34									
K1-02B	2-Feb-93				55	74	<1	150	390	610	7.5
K1-02B	2-Feb-93	0.34									
K1-02B	2-Feb-93				54	59	<1	150	380	600	7.5
K1-02B	9-Feb-93									600	7.2
K1-02B	9-Feb-93									550	7.5
K1-02B	16-Feb-93									620	7.6
K1-02B	16-Feb-93									570	7.5
K1-02B	3-Mar-93									590	7.5
K1-02B	3-Mar-93									620	7.4

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-02B	7-Apr-93	0.29									
K1-02B	7-Apr-93				56	63	<1	150	420	580	7.2
K1-02B	14-Apr-93									620	7.2
K1-02B	19-Apr-93									600	7
K1-02B	27-Apr-93									630	7
K1-02B	26-Jul-93	0.31		124.04	50	57	<1	200	430	530	7.8
K1-02B	4-Aug-93									560	7.5
K1-02B	10-Aug-93									590	7.6
K1-02B	24-Aug-93									570	7.5
K1-02B	19-Oct-93									560	
K1-02B	19-Oct-93										7.7
K1-02B	5-Nov-93	0.28		23.036	51	60	<1	140	470	560	8
K1-02B	9-Nov-93								300	450	
K1-02B	9-Nov-93										7.4
K1-02B	15-Nov-93								430	560	
K1-02B	15-Nov-93										7.5
K1-02B	22-Nov-93								360	540	
K1-02B	22-Nov-93										7.4
K1-02B	31-Jan-94								410	550	
K1-02B	31-Jan-94										7.5
K1-02B	8-Feb-94								420	540	
K1-02B	8-Feb-94										7.4
K1-02B	14-Feb-94								410	590	
K1-02B	14-Feb-94										7.4
K1-02B	23-Feb-94								460	590	
K1-02B	23-Feb-94										7.5
K1-02B	4-May-94	0.34		39.87	63	69	<1	140	660	550	7.3
K1-02B	4-May-94	0.33		42.085	53	65	<1	190	670	560	7.3
K1-02B	10-May-94								440	580	
K1-02B	10-May-94										7.6
K1-02B	10-May-94								470	580	
K1-02B	10-May-94										7.3
K1-02B	17-May-94								410	580	
K1-02B	17-May-94										7.4
K1-02B	17-May-94								400	570	
K1-02B	17-May-94										7.4
K1-02B	25-May-94								440	540	
K1-02B	25-May-94										7.3
K1-02B	25-May-94								450	550	
K1-02B	25-May-94										7.3
K1-02B	3-Aug-94	0.33		29.238	51	62	<1	140	320	590	7.6
K1-02B	9-Aug-94								430		
K1-02B	9-Aug-94									640	7.5
K1-02B	15-Aug-94								430		
K1-02B	15-Aug-94									640	7.3
K1-02B	22-Aug-94								410		
K1-02B	22-Aug-94									630	7.4

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-02B	13-Oct-94	0.35		37.212	58	77	<1	140	400	430	7.2
K1-02B	1-Nov-94								400		
K1-02B	1-Nov-94									600	7.3
K1-02B	8-Nov-94								450		
K1-02B	8-Nov-94									620	7
K1-02B	14-Nov-94								380		
K1-02B	14-Nov-94									630	7.2
K1-02B	11-Jan-95	0.28		26.137	55	52	<1	140	420	530	7.1
K1-02B	11-Jan-95										7.12
K1-02B	10-May-95	0.41		27	54 D	75 D	<1	140	430	600	7.4
K1-02B	31-Jul-95	0.33		36	55	65	<1	150	430	590	7.3
K1-02B	11-Oct-95	0.29		32	53 D	58 D	<1	140	430	600	7.2
K1-02B	17-Jan-96	0.29		28 D	59 D	59 D	<1	140	440	490	7.5
K1-02B	10-Apr-96			31							
K1-02B	30-Jul-96									640	
K1-02B	30-Jul-96			29 LO							
K1-02B	9-Oct-96	0.35 F		28 D	55 D	62 D					
K1-02B	28-Oct-96	0.32		29 D	59 D	64 D	<1	150	440	640	7.2
K1-02B	16-Jan-97			31 D							
K1-02B	3-Apr-97			29 D							
K1-02B	1-Jul-97			30 D							
K1-02B	13-Oct-97			31							
K1-02B	8-Jan-98			31							
K1-02B	9-Apr-98			29							
K1-02B	14-Jul-98			31							
K1-02B	13-Oct-98			33							
K1-02B	12-Jan-99			33							
K1-02B	12-Jan-99			33							
K1-02B	15-Apr-99			4.6 S							
K1-02B	9-Jul-99			<0.5 LS							
K1-02B	7-Oct-99			70 DS							
K1-02B	7-Feb-00			34							
K1-02B	18-Apr-00			28 D							
K1-02B	19-Jul-00			31 D							
K1-02B	18-Jan-01			24 D							
K1-02B	18-Apr-01			8 DH							
K1-02B	9-Jul-01			19 D							
K1-02B	16-Apr-02			35							
K1-02B	29-Jul-02			39							
K1-02B	30-Jan-03			38							
K1-02B	17-Apr-03			37 D							
K1-02B	17-Apr-03			39 D							
K1-02B	8-Sep-03			34							
K1-02B	4-Nov-03			35.5							
K1-02B	28-Jan-04			36.1							
K1-02B	19-May-04			35.6							
K1-02B	19-May-04			35.6							

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-02B	20-Jul-04			35.9							
K1-02B	22-Nov-04			36.9							
K1-02B	23-Feb-05			38							
K1-02B	12-Apr-05			38							
K1-02B	12-Apr-05			37							
K1-02B	6-Jul-05			37.5							
K1-02B	4-Oct-05			33.2 D							
K1-02B	4-Oct-05			31.6 D							
K1-02B	3-Jan-06			37							
K1-03	19-Jan-88						<1 P	160 P			
K1-03	19-Jan-88									520 P	
K1-03	19-Jan-88										7.6 P
K1-03	19-Jan-88	0.3 P			30 P	34 P			330 P		
K1-03	19-Jan-88									530 P	
K1-03	19-Jan-88										7.6 P
K1-03	19-Jan-88									540 P	
K1-03	19-Jan-88										7.6 P
K1-03	19-Jan-88									530 P	
K1-03	19-Jan-88										7.6 P
K1-03	4-Apr-88						<1 P	150 P			
K1-03	4-Apr-88									570 P	
K1-03	4-Apr-88										7.1 P
K1-03	4-Apr-88	0.26 P			34 P	30 P			340 P		
K1-03	4-Apr-88									540 P	
K1-03	4-Apr-88										7.3 P
K1-03	4-Apr-88									540 P	
K1-03	4-Apr-88										7.1 P
K1-03	4-Apr-88									560 P	
K1-03	4-Apr-88										7.2 P
K1-03	2-Jun-88									530 P	
K1-03	2-Jun-88										7.3 P
K1-03	2-Jun-88									520 P	
K1-03	2-Jun-88										7.3 P
K1-03	2-Jun-88									520 P	
K1-03	2-Jun-88										7.4 P
K1-03	2-Jun-88									540 P	
K1-03	2-Jun-88										7.3 P
K1-03	2-Jun-88									530 P	
K1-03	2-Jun-88										7.3 P
K1-03	2-Jun-88									530 P	
K1-03	2-Jun-88										7.4 P
K1-03	2-Jun-88									530 P	
K1-03	2-Jun-88										7.4 P
K1-03	2-Jun-88									530 P	
K1-03	2-Jun-88										7.3 P
K1-03	25-Jul-88						<1 P	150 P			
K1-03	25-Jul-88									500 P	

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-03	25-Jul-88										7.5 P
K1-03	25-Jul-88	0.26 P			32 P	38 P	<1 P		350 P		
K1-03	25-Jul-88									490 P	
K1-03	25-Jul-88										7.5 P
K1-03	25-Jul-88									500 P	
K1-03	25-Jul-88										7.5 P
K1-03	25-Jul-88									490 P	
K1-03	25-Jul-88										7.5 P
K1-03	4-Oct-88						<1 P	150 P			
K1-03	4-Oct-88									550 P	
K1-03	4-Oct-88										7.3 P
K1-03	4-Oct-88	0.32 P			54 P	31 P	<1 P		320 P	520 P	7.3 P
K1-03	4-Oct-88									530 P	
K1-03	4-Oct-88										7.2 P
K1-03	4-Oct-88									500 P	
K1-03	4-Oct-88										7.3 P
K1-03	4-Oct-88									500 P	
K1-03	4-Oct-88										7.3 P
K1-03	12-Jan-89						<1 P	150 P			
K1-03	12-Jan-89									540 P	
K1-03	12-Jan-89										7.5 P
K1-03	12-Jan-89	0.3 P			33 P	33 P			350 P		
K1-03	11-Apr-89						<1 P	150 P			
K1-03	11-Apr-89									520 P	
K1-03	11-Apr-89										7.4 P
K1-03	11-Apr-89	0.2 P			36 P	37 P			330 P		
K1-03	11-Apr-89									520 P	
K1-03	11-Apr-89										7.4 P
K1-03	11-Apr-89									500 P	
K1-03	11-Apr-89										7.4 P
K1-03	11-Apr-89									520 P	
K1-03	11-Apr-89										7.4 P
K1-03	24-Jul-89						<1 P	150 P			
K1-03	24-Jul-89									570 P	
K1-03	24-Jul-89										7.4 P
K1-03	24-Jul-89	0.3 P			38 P	37 P			350 P		
K1-03	24-Oct-89				34 P	38 P	<1 P	140 P	340 P	520 P	7.5 P
K1-03	31-Oct-89									530 P	
K1-03	31-Oct-89										7.3 P
K1-03	7-Nov-89									610 P	
K1-03	7-Nov-89										7.5 P
K1-03	14-Nov-89									540 P	
K1-03	10-Jan-90				34 P	35 P	<1 P	150 P	350 P	520 P	7.4 P
K1-03	10-Jan-90	0.3 P									
K1-03	17-Jan-90									540 P	
K1-03	17-Jan-90										7.6 P
K1-03	24-Jan-90									520 P	

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar- bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-03	24-Jan-90										7.6 P
K1-03	31-Jan-90									540 P	
K1-03	31-Jan-90										7.6 P
K1-03	10-Apr-90	0.3 P									
K1-03	10-Apr-90				32 P	40 P	<1 P	140 P	340 P	550 P	7.4 P
K1-03	17-Apr-90									520 P	7.4 P
K1-03	24-Apr-90									570 P	7.6 P
K1-03	1-May-90									550 P	7.6 P
K1-03	9-Jul-90	0.3 P									
K1-03	9-Jul-90				35 P	36 P	<1 P	140 P	370 P	540 P	7.3 P
K1-03	16-Jul-90									500 P	7.4 P
K1-03	23-Jul-90									540 P	7.1 P
K1-03	30-Jul-90									500 P	7.5 P
K1-03	8-Oct-90	0.3 P									
K1-03	8-Oct-90				35 P	37 P	<1 P	140 P	350 P	430 P	7.2 P
K1-03	8-Oct-90	0.3 P									
K1-03	8-Oct-90				36 P	37 P	<1 P	140 P	350 P	410 P	7.2 P
K1-03	15-Oct-90									460 P	7.3 P
K1-03	15-Oct-90									470 P	7.3 P
K1-03	23-Oct-90									450 P	6.8 P
K1-03	23-Oct-90									460 P	6.8 P
K1-03	29-Oct-90									490 P	8.3 P
K1-03	29-Oct-90									470 P	8.3 P
K1-03	14-Jan-91	0.3 P									
K1-03	14-Jan-91				40 P	35 P	<1 P	150 P	330 P	500 P	7.4 P
K1-03	22-Jan-91									480 P	7.6 P
K1-03	28-Jan-91									390 P	7.3 P
K1-03	4-Feb-91									480 P	7.4 P
K1-03	8-Apr-91	0.3 P									
K1-03	8-Apr-91				37 P	43 P	<1 P	150 P	340 P	500 P	6.8 P
K1-03	16-Apr-91									470 P	7.5 P
K1-03	23-Apr-91									500 P	7.4 P
K1-03	29-Apr-91									470 P	7.5 P
K1-03	8-Jul-91	0.3 P									
K1-03	8-Jul-91				34 P	42 P	<1 P	150 P	280 P	490 P	7.3 P
K1-03	16-Jul-91									500 P	7.5 P
K1-03	22-Jul-91									510 P	7.3 P
K1-03	29-Jul-91									540 P	7.6 P
K1-03	21-Oct-91									520 P	7.6 P
K1-03	28-Oct-91									520 P	7.3 P
K1-03	4-Nov-91									520 P	
K1-03	4-Nov-91										7.7 P
K1-03	15-Nov-91	0.3 P									
K1-03	15-Nov-91				37 P	40 P	<1 P	150 P	340 P		
K1-03	15-Nov-91									480 P	7.8 P
K1-03	15-Jan-92	0.3 P									
K1-03	15-Jan-92				35 P	39 P	<1 P	150 P	350 P		

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-03	15-Jan-92									530 P	7.6 P
K1-03	22-Jan-92									530 P	7.6 P
K1-03	29-Jan-92									500 P	7.5 P
K1-03	4-Feb-92									480 P	7.5 P
K1-03	14-Apr-92	0.3 P									
K1-03	14-Apr-92				34 P	39 P	<1 P	150 P	340 P	490 P	7.6 P
K1-03	20-Apr-92									470 P	7.5 P
K1-03	30-Apr-92									450 P	7.6 P
K1-03	12-May-92									460 P	7.7 P
K1-03	25-Jul-92	0.3 P									
K1-03	25-Jul-92				37 P	40 P	<1 P	150 P	350 P	440 P	7.4 P
K1-03	1-Aug-92									490 P	7.4 P
K1-03	8-Aug-92									460 P	7.5 P
K1-03	27-Aug-92									500 P	7.4 P
K1-03	27-Oct-92	0.31 P									
K1-03	27-Oct-92				34 P	41 P	<1 P	150 P	330 P	450 P	7.2 P
K1-03	3-Nov-92									510 P	7.2 P
K1-03	7-Nov-92									520 P	7.6 P
K1-03	13-Nov-92									480 P	7.6 P
K1-03	2-Feb-93	0.32									
K1-03	2-Feb-93				35	45	<1	150	320	470	7.5
K1-03	9-Feb-93									510	7.3
K1-03	16-Feb-93									500	7.6
K1-03	3-Mar-93									510	7.5
K1-03	7-Apr-93	0.28									
K1-03	7-Apr-93				43	39	<1	150	350	480	7.2
K1-03	14-Apr-93									460	7.9
K1-03	19-Apr-93									460	7.1
K1-03	27-Apr-93									460	7.2
K1-03	26-Jul-93	0.29		110.75	33	35	<1	200	330	450	7.6
K1-03	4-Aug-93									470	7.8
K1-03	10-Aug-93									480	7.5
K1-03	24-Aug-93									490	7.9
K1-03	19-Oct-93									460	
K1-03	19-Oct-93										7.9
K1-03	4-Nov-93	0.52		18.163	31	52	<1	120	380	450	7.9
K1-03	9-Nov-93								270	430	
K1-03	9-Nov-93										7.4
K1-03	15-Nov-93								350	460	
K1-03	15-Nov-93										7.5
K1-03	22-Nov-93								430	440	
K1-03	22-Nov-93										7.5
K1-03	31-Jan-94								310	440	
K1-03	31-Jan-94										7.5
K1-03	8-Feb-94								330	440	
K1-03	8-Feb-94										7.4
K1-03	14-Feb-94								340	470	

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-03	14-Feb-94										7.5
K1-03	23-Feb-94								380	470	
K1-03	23-Feb-94										7.6
K1-03	4-May-94	0.31		37.655	31	39	<1	140	540	440	7.4
K1-03	10-May-94								390	470	
K1-03	10-May-94										7.4
K1-03	17-May-94								340	460	
K1-03	17-May-94										7.4
K1-03	25-May-94								340	440	
K1-03	25-May-94										7.4
K1-03	3-Aug-94	0.31		27.909	33	34	<1	140	350	480	7.6
K1-03	9-Aug-94								360		
K1-03	9-Aug-94									500	7.4
K1-03	15-Aug-94								360		
K1-03	15-Aug-94									500	7.5
K1-03	22-Aug-94								350		
K1-03	22-Aug-94									510	7.5
K1-03	13-Oct-94	0.33		27.909	37	51	<1	140	310	520	7.2
K1-03	1-Nov-94								280		
K1-03	1-Nov-94									470	7.2
K1-03	8-Nov-94								340		
K1-03	8-Nov-94									480	7.1
K1-03	14-Nov-94								310		
K1-03	14-Nov-94									510	7.2
K1-03	11-Jan-95	0.27		19.935	31	28	<1	130	340	400	7.1
K1-03	11-Jan-95										7.11
K1-03	10-May-95	0.38		22	33 D	43 D	<1	150	340	470	7.4
K1-03	31-Jul-95	0.32		30	34	51	<1	140	360	480	7.3
K1-03	11-Oct-95	0.28		27	34 D	35 D	<1	140	340	470	7.4
K1-03	11-Oct-95	0.28		27	34 D	35 D	<1	140	340	500	7.4
K1-03	18-Jan-96	0.3 F		29 LO	34	31	<1	140	380	440	7.4
K1-03	10-Apr-96			27							
K1-03	30-Jul-96									520	
K1-03	30-Jul-96			27 LO							
K1-03	10-Oct-96	0.34		24 D	36 D	34 D					
K1-03	16-Jan-97			26 D							
K1-03	3-Apr-97			25 D							
K1-03	2-Jul-97			27 D							
K1-03	14-Oct-97			29							
K1-03	8-Jan-98			29							
K1-03	9-Apr-98			29							
K1-03	9-Apr-98			30							
K1-03	15-Jul-98			30							
K1-03	13-Oct-98			31							
K1-03	12-Jan-99			33							
K1-03	15-Apr-99			<0.5 S							
K1-03	9-Jul-99			<0.5 LS							

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-03	6-Oct-99			10 DS							
K1-03	7-Feb-00			7.6							
K1-03	18-Apr-00			28 D							
K1-03	19-Jul-00			29 D							
K1-03	23-Oct-00			29 D							
K1-03	23-Oct-00			29 D							
K1-03	18-Jan-01			24 D							
K1-03	18-Apr-01			8 DH							
K1-03	9-Jul-01			19 D							
K1-03	9-Jul-01			19 D							
K1-03	16-Apr-02			34							
K1-03	29-Jul-02			36							
K1-03	30-Jan-03			35 D							
K1-03	17-Apr-03			35 D							
K1-03	24-Jul-03			31.5							
K1-03	4-Nov-03			31.9							
K1-03	28-Jan-04			32.2							
K1-03	28-Jan-04			32							
K1-03	20-May-04			32.1							
K1-03	19-Jul-04			30.3							
K1-03	30-Nov-04			31.3							
K1-03	22-Feb-05			32							
K1-03	13-Apr-05			32							
K1-03	28-Jul-05			28.3 D							
K1-03	4-Oct-05			27.5 D							
K1-03	3-Jan-06			31							
K1-04	19-Jan-88						<1 P	140 P			
K1-04	19-Jan-88									570 P	
K1-04	19-Jan-88										7.7 P
K1-04	19-Jan-88	0.35 P			34 P	48 P			340 P		
K1-04	19-Jan-88									580 P	
K1-04	19-Jan-88										7.7 P
K1-04	19-Jan-88									590 P	
K1-04	19-Jan-88										7.6 P
K1-04	19-Jan-88									590 P	
K1-04	19-Jan-88										7.7 P
K1-04	8-Mar-88									530 P	
K1-04	8-Mar-88									540 P	
K1-04	8-Mar-88									520 P	
K1-04	8-Mar-88									540 P	
K1-04	8-Mar-88									540 P	
K1-04	8-Mar-88									540 P	
K1-04	8-Mar-88									530 P	
K1-04	8-Mar-88									530 P	
K1-04	4-Apr-88						<1 P	150 P			
K1-04	4-Apr-88									580 P	
K1-04	4-Apr-88										7.2 P

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-04	4-Apr-88	0.32 P			38 P	44 P			370 P		
K1-04	4-Apr-88									570 P	
K1-04	4-Apr-88										7.2 P
K1-04	4-Apr-88									570 P	
K1-04	4-Apr-88										7.3 P
K1-04	4-Apr-88									570 P	
K1-04	4-Apr-88										7.3 P
K1-04	2-Jun-88									540 P	
K1-04	2-Jun-88										7.3 P
K1-04	2-Jun-88									540 P	
K1-04	2-Jun-88										7.3 P
K1-04	2-Jun-88									540 P	
K1-04	2-Jun-88										7.3 P
K1-04	2-Jun-88									540 P	
K1-04	2-Jun-88										7.4 P
K1-04	2-Jun-88									540 P	
K1-04	2-Jun-88										7.3 P
K1-04	2-Jun-88									540 P	
K1-04	2-Jun-88										7.3 P
K1-04	2-Jun-88									540 P	
K1-04	2-Jun-88										7.3 P
K1-04	2-Jun-88									540 P	
K1-04	2-Jun-88										7.3 P
K1-04	2-Jun-88									550 P	
K1-04	2-Jun-88										7.4 P
K1-04	2-Jun-88									550 P	
K1-04	2-Jun-88										7.4 P
K1-04	2-Jun-88									550 P	
K1-04	2-Jun-88										7.4 P
K1-04	2-Jun-88									550 P	
K1-04	2-Jun-88										7.4 P
K1-04	25-Jul-88						<1 P	150 P			
K1-04	25-Jul-88									530 P	
K1-04	25-Jul-88										7.5 P
K1-04	25-Jul-88	0.32 P			34 P	59 P	<1 P		360 P		
K1-04	25-Jul-88									530 P	
K1-04	25-Jul-88										7.5 P
K1-04	25-Jul-88									530 P	
K1-04	25-Jul-88										7.5 P
K1-04	25-Jul-88									530 P	
K1-04	25-Jul-88										7.5 P
K1-04	6-Oct-88						<1 P	140 P			
K1-04	6-Oct-88	0.38 P			36 P	46 P			340 P	530 P	7.8 P
K1-04	28-Nov-88									580 P	
K1-04	28-Nov-88										7.6 P
K1-04	28-Nov-88									540 P	
K1-04	28-Nov-88										7.5 P

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-04	28-Nov-88									560 P	
K1-04	28-Nov-88										7.5 P
K1-04	28-Nov-88									540 P	
K1-04	28-Nov-88										7.6 P
K1-04	24-Jan-89						<1 P	140 P			
K1-04	24-Jan-89									520 P	
K1-04	24-Jan-89										7.3 P
K1-04	24-Jan-89	0.3 P			40 P	51 P			360 P		
K1-04	24-Jan-89									530 P	
K1-04	24-Jan-89										7.4 P
K1-04	24-Jan-89									500 P	
K1-04	24-Jan-89										7.4 P
K1-04	24-Jan-89									530 P	
K1-04	24-Jan-89										7.4 P
K1-04	24-Jan-89						<1	140			
K1-04	24-Jan-89									530	
K1-04	24-Jan-89										7.2
K1-04	24-Jan-89	0.3			39	55			340		
K1-04	24-Jan-89									530	
K1-04	24-Jan-89										7.4
K1-04	24-Jan-89									520	
K1-04	24-Jan-89										7.5
K1-04	24-Jan-89									530	
K1-04	24-Jan-89										7.4
K1-04	11-Apr-89						<1 P	150 P			
K1-04	11-Apr-89									530 P	
K1-04	11-Apr-89										7.4 P
K1-04	11-Apr-89	0.3 P			39 P	53 P			300 P		
K1-04	11-Apr-89									540 P	
K1-04	11-Apr-89										7.4 P
K1-04	11-Apr-89									520 P	
K1-04	11-Apr-89										7.5 P
K1-04	11-Apr-89									520 P	
K1-04	11-Apr-89										7.4 P
K1-04	19-Jul-89						<1 P	100 P			
K1-04	19-Jul-89									570 P	
K1-04	19-Jul-89										7.3 P
K1-04	19-Jul-89	0.3 P			30 P	51 P			220 P		
K1-04	24-Oct-89				40 P	53 P	<1 P	140 P	360 P	560 P	7.5 P
K1-04	31-Oct-89									560 P	
K1-04	31-Oct-89										7.3 P
K1-04	7-Nov-89									620 P	
K1-04	7-Nov-89										7.4 P
K1-04	14-Nov-89									600 P	
K1-04	10-Jan-90				40 P	48 P	<1 P	150 P	330 P	520 P	7.4 P
K1-04	10-Jan-90	0.4 P									
K1-04	17-Jan-90									580 P	

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-04	17-Jan-90										7.6 P
K1-04	24-Jan-90									560 P	
K1-04	24-Jan-90										7.6 P
K1-04	31-Jan-90									540 P	
K1-04	31-Jan-90										7.6 P
K1-04	10-Apr-90	0.3 P									
K1-04	10-Apr-90				37 P	56 P	<1 P	140 P	360 P	610 P	7.5 P
K1-04	17-Apr-90									560 P	7.5 P
K1-04	24-Apr-90									570 P	7.6 P
K1-04	1-May-90									580 P	7.5 P
K1-04	9-Jul-90	0.4 P									
K1-04	10-Jul-90				39 P	54 P	<1 P	140 P	360 P	510 P	5.8 P
K1-04	16-Jul-90									590 P	7.5 P
K1-04	23-Jul-90									670 P	7.2 P
K1-04	30-Jul-90									520 P	7.5 P
K1-04	8-Oct-90	0.4 P									
K1-04	8-Oct-90				39 P	49 P	<1 P	140 P	370 P	440 P	7.2 P
K1-04	16-Oct-90									530 P	7.2 P
K1-04	23-Oct-90									510 P	6.8 P
K1-04	29-Oct-90									510 P	8.2 P
K1-04	14-Jan-91	0.4 P									
K1-04	14-Jan-91				43 P	52 P	<1 P	150 P	380 P	520 P	7.4 P
K1-04	14-Jan-91	0.4 P									
K1-04	14-Jan-91				42 P	52 P	<1 P	150 P	350 P	550 P	7.4 P
K1-04	22-Jan-91									520 P	7.6 P
K1-04	22-Jan-91									500 P	7.6 P
K1-04	28-Jan-91									520 P	7.4 P
K1-04	28-Jan-91									540 P	7.5 P
K1-04	4-Feb-91									530 P	7.6 P
K1-04	4-Feb-91									520 P	7.5 P
K1-04	8-Apr-91	0.4 P									
K1-04	8-Apr-91				40 P	56 P	<1 P	150 P	360 P	500 P	6.8 P
K1-04	16-Apr-91									540 P	7.6 P
K1-04	23-Apr-91									550 P	7.5 P
K1-04	29-Apr-91									490 P	7.6 P
K1-04	9-Jul-91	0.4 P									
K1-04	9-Jul-91				37 P	57 P	<1 P	140 P	330 P	540 P	7.6 P
K1-04	16-Jul-91									560 P	7.4 P
K1-04	22-Jul-91									550 P	7.3 P
K1-04	29-Jul-91									540 P	7.6 P
K1-04	15-Oct-91	0.4 P									
K1-04	15-Oct-91				38 P	50 P	<1 P	150 P	340 P		
K1-04	15-Oct-91									520 P	7.8 P
K1-04	21-Oct-91									530 P	7.5 P
K1-04	28-Oct-91									530 P	7.3 P
K1-04	4-Nov-91									550 P	
K1-04	4-Nov-91										7.7 P

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-04	15-Jan-92	0.4 P									
K1-04	15-Jan-92				39 P	53 P	<1 P	150 P	370 P		
K1-04	15-Jan-92									560 P	7.6 P
K1-04	22-Jan-92									530 P	7.6 P
K1-04	29-Jan-92									530 P	7.6 P
K1-04	4-Feb-92									560 P	7.3 P
K1-04	14-Apr-92	0.4 P									
K1-04	14-Apr-92				36 P	54 P	<1 P	150 P	360 P	490 P	7.6 P
K1-04	20-Apr-92									480 P	7.5 P
K1-04	30-Apr-92									480 P	7.6 P
K1-04	12-May-92									500 P	7.6 P
K1-04	25-Jul-92	0.4 P									
K1-04	25-Jul-92				38 P	54 P	<1 P	150 P	370 P	490 P	7.5 P
K1-04	25-Jul-92	0.4 P									
K1-04	25-Jul-92				38 P	53 P	<1 P	150 P	380 P	490 P	7.4 P
K1-04	1-Aug-92									540 P	7.5 P
K1-04	1-Aug-92									520 P	7.5 P
K1-04	8-Aug-92									490 P	7.5 P
K1-04	8-Aug-92									470 P	7.5 P
K1-04	27-Aug-92									510 P	7.3 P
K1-04	27-Aug-92									530 P	7.5 P
K1-04	27-Oct-92	0.38 P									
K1-04	27-Oct-92				38 P	54 P	<1 P	150 P	340 P	510 P	7.1 P
K1-04	3-Nov-92									520 P	7.2 P
K1-04	7-Nov-92									510 P	7.5 P
K1-04	13-Nov-92									540 P	7.7 P
K1-04	2-Feb-93	0.39									
K1-04	2-Feb-93				43	61	<1	150	330	460	7.6
K1-04	9-Feb-93									540	7.4
K1-04	17-Feb-93									530	7.6
K1-04	3-Mar-93									400	7.6
K1-04	7-Apr-93	0.35									
K1-04	7-Apr-93				40	54	<1	150	350	470	7.2
K1-04	14-Apr-93									540	7.3
K1-04	19-Apr-93									410	7.2
K1-04	27-Apr-93									560	7.2
K1-04	26-Jul-93	0.38		88.6	34	49	<1	210	350	480	7.7
K1-04	26-Jul-93			88.6	33	46	<1	150	380	490	7.8
K1-04	26-Jul-93	0.42									
K1-04	4-Aug-93									490	7.8
K1-04	4-Aug-93									500	7.7
K1-04	10-Aug-93									520	7.9
K1-04	10-Aug-93									500	7.6
K1-04	24-Aug-93									510	7.7
K1-04	24-Aug-93									500	7.7
K1-04	19-Oct-93									480	
K1-04	19-Oct-93										7.6

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-04	4-Nov-93	0.36		29.681	32	50	<1	140	400	450	8.2
K1-04	9-Nov-93								250	470	
K1-04	9-Nov-93										7.5
K1-04	15-Nov-93								350	480	
K1-04	15-Nov-93										7.6
K1-04	22-Nov-93								440	460	
K1-04	22-Nov-93										7.6
K1-04	31-Jan-94								300	460	
K1-04	31-Jan-94										7.6
K1-04	8-Feb-94								360	470	
K1-04	8-Feb-94										7.5
K1-04	14-Feb-94								340	490	
K1-04	14-Feb-94										7.5
K1-04	23-Feb-94								390	490	
K1-04	23-Feb-94										7.7
K1-04	4-May-94	0.41		31.453	33	51	<1	140	570	470	7.4
K1-04	10-May-94								180	500	
K1-04	10-May-94										7.4
K1-04	17-May-94								340	480	
K1-04	17-May-94										7.5
K1-04	25-May-94								340	450	
K1-04	25-May-94										7.4
K1-04	3-Aug-94	0.39		21.264	33	43	<1	150	310	490	7.6
K1-04	3-Aug-94	0.4		19.935	32	46	<1	150	320	490	7.6
K1-04	9-Aug-94								340		
K1-04	9-Aug-94									520	7.6
K1-04	9-Aug-94								360		
K1-04	9-Aug-94									510	7.6
K1-04	15-Aug-94								360		
K1-04	15-Aug-94									530	7.3
K1-04	15-Aug-94								370		
K1-04	15-Aug-94									520	7.4
K1-04	22-Aug-94								350		
K1-04	22-Aug-94									510	7.7
K1-04	22-Aug-94								360		
K1-04	22-Aug-94									530	7.7
K1-04	13-Oct-94	0.42		23.922	35	58	<1	140	350	420	7.3
K1-04	1-Nov-94								340		
K1-04	1-Nov-94									480	7.2
K1-04	8-Nov-94								380		
K1-04	8-Nov-94									500	7.2
K1-04	14-Nov-94								320		
K1-04	14-Nov-94									530	7.2
K1-04	11-Jan-95	0.35		18.163	33	19	<1	140	350	430	7.2
K1-04	11-Jan-95										7.21
K1-04	10-May-95	0.47		18	31 D	53 D	<1	150	360	490	7.5
K1-04	31-Jul-95	0.42		22	32	47	<1	140	360	500	7.4

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-04	11-Oct-95	0.37		21	31 D	42 D	<1	150	360	510	7.4
K1-04	18-Jan-96	0.4 F		24 LO	31	37	<1	150	370	480	7.5
K1-04	11-Apr-96			18							
K1-04	31-Jul-96									490	
K1-04	31-Jul-96			20 LO							
K1-04	31-Jul-96									490	
K1-04	31-Jul-96			22 LO							
K1-04	10-Oct-96	0.42		20 D	34 D	40 D					
K1-04	16-Jan-97			22 D							
K1-04	3-Apr-97			20 D							
K1-04	2-Jul-97			22 D							
K1-04	14-Oct-97			24							
K1-04	8-Jan-98			23							
K1-04	9-Apr-98			22							
K1-04	15-Jul-98			24							
K1-04	14-Oct-98			28							
K1-04	13-Jan-99			27							
K1-04	14-Apr-99			<0.5 S							
K1-04	6-Oct-99			41 DS							
K1-04	7-Feb-00			5.9							
K1-04	18-Apr-00			25 D							
K1-04	18-Apr-00			25 D							
K1-04	19-Jul-00			26 D							
K1-04	23-Oct-00			24 D							
K1-04	18-Jan-01			8							
K1-04	23-Apr-01			14 D							
K1-04	10-Jul-01			2.4 L							
K1-04	16-Apr-02			25							
K1-04	29-Jul-02			37							
K1-04	29-Jul-02			33							
K1-04	29-Jan-03			44 D							
K1-04	29-Jan-03			43 D							
K1-04	18-Apr-03			30 D						570	
K1-04	24-Jul-03			34.2							
K1-04	18-Nov-03			35.7							
K1-04	18-Nov-03			36							
K1-04	29-Jan-04			34							
K1-04	11-May-04			34.9							
K1-04	19-Jul-04			34.7							
K1-04	30-Nov-04			35							
K1-04	24-Feb-05			33							
K1-04	12-Apr-05			27							
K1-04	1-Aug-05			29.6 D							
K1-04	5-Oct-05			5.95 D							
K1-04	10-Jan-06			34							
K1-05	21-Jan-88						<1 P	130 P			
K1-05	21-Jan-88									480 P	

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-05	21-Jan-88										7.8 P
K1-05	21-Jan-88	0.4 P			33 P	37 P			328 P		
K1-05	21-Jan-88									480 P	
K1-05	21-Jan-88										7.7 P
K1-05	21-Jan-88									480 P	
K1-05	21-Jan-88										7.9 P
K1-05	21-Jan-88									490 P	
K1-05	21-Jan-88										7.7 P
K1-05	4-Apr-88						<1 P	130 P			
K1-05	4-Apr-88									530 P	
K1-05	4-Apr-88										7.2 P
K1-05	4-Apr-88	0.43 P			38 P	34 P			350 P		
K1-05	4-Apr-88									530 P	
K1-05	4-Apr-88										7.3 P
K1-05	4-Apr-88									530 P	
K1-05	4-Apr-88										7.3 P
K1-05	4-Apr-88									530 P	
K1-05	4-Apr-88										7.3 P
K1-05	15-Jul-88						<1 P	130 P			
K1-05	15-Jul-88									520 P	
K1-05	15-Jul-88										7.2 P
K1-05	15-Jul-88	0.42 P			35 P	45 P			330 P		
K1-05	15-Jul-88									520 P	
K1-05	15-Jul-88										7.3 P
K1-05	15-Jul-88									520 P	
K1-05	15-Jul-88										7.4 P
K1-05	15-Jul-88									520 P	
K1-05	15-Jul-88										7.4 P
K1-05	15-Jul-88						<1 P	130 P			
K1-05	15-Jul-88									510 P	
K1-05	15-Jul-88										7.4 P
K1-05	15-Jul-88	0.42 P			35 P	39 P			340 P		
K1-05	15-Jul-88									510 P	
K1-05	15-Jul-88										7.4 P
K1-05	15-Jul-88									510 P	
K1-05	15-Jul-88										7.4 P
K1-05	15-Jul-88									510 P	
K1-05	15-Jul-88										7.4 P
K1-05	6-Oct-88						<1 P	120 P			
K1-05	6-Oct-88	0.46 P			33 P	34 P			310 P	500 P	8 P
K1-05	28-Nov-88									500 P	
K1-05	28-Nov-88										7.6 P
K1-05	28-Nov-88									490 P	
K1-05	28-Nov-88										7.6 P
K1-05	28-Nov-88									490 P	
K1-05	28-Nov-88										7.6 P
K1-05	28-Nov-88									500 P	

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-05	28-Nov-88										7.6 P
K1-05	1-Feb-89						<1 P	120 P			
K1-05	1-Feb-89									490 P	
K1-05	1-Feb-89										7.6 P
K1-05	1-Feb-89	0.4 P			37 P	41 P			340 P		
K1-05	1-Feb-89									500 P	
K1-05	1-Feb-89										7.6 P
K1-05	1-Feb-89									440 P	
K1-05	1-Feb-89										7.5 P
K1-05	1-Feb-89									500 P	
K1-05	1-Feb-89										7.5 P
K1-05	11-Apr-89						<1	120			
K1-05	11-Apr-89									500	
K1-05	11-Apr-89										7.5
K1-05	11-Apr-89	0.4			38	42			260		
K1-05	11-Apr-89									490	
K1-05	11-Apr-89										7.4
K1-05	11-Apr-89									500	
K1-05	11-Apr-89										7.5
K1-05	11-Apr-89									500	
K1-05	11-Apr-89										7.4
K1-05	19-Jul-89						<1 P	130 P			
K1-05	19-Jul-89									530 P	
K1-05	19-Jul-89										7.3 P
K1-05	19-Jul-89	0.4 P			43 P	39 P			360 P		
K1-05	19-Jul-89						<1 P	130 P			
K1-05	19-Jul-89									530 P	
K1-05	19-Jul-89										7.4 P
K1-05	19-Jul-89	0.4 P			42 P	40 P			280 P		
K1-05	25-Oct-89				36 P	45 P	<1 P	120 P	370 P	510 P	7.7 P
K1-05	25-Oct-89	0.4 P									
K1-05	2-Nov-89									500 P	
K1-05	2-Nov-89										7.1 P
K1-05	8-Nov-89									540 P	
K1-05	8-Nov-89										7.6 P
K1-05	15-Nov-89									500 P	
K1-05	15-Nov-89										7.5 P
K1-05	11-Jan-90				40 P	37 P	<1 P	120 P	360 P	510 P	7.8 P
K1-05	11-Jan-90	0.4 P									
K1-05	18-Jan-90									500 P	
K1-05	18-Jan-90										7.2 P
K1-05	25-Jan-90									480 P	
K1-05	25-Jan-90										6.7 P
K1-05	1-Feb-90									520 P	
K1-05	1-Feb-90										7.5 P
K1-05	11-Apr-90	0.4 P									
K1-05	11-Apr-90				36 P	39 P	<1 P	120 P	330 P	500 P	7.5 P

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-05	17-Apr-90									520 P	7.5 P
K1-05	25-Apr-90									690 P	7.6 P
K1-05	1-May-90									560 P	7.4 P
K1-05	10-Jul-90	0.5 P									
K1-05	10-Jul-90				37 P	41 P	<1 P	120 P	370 P	540 P	5.7 P
K1-05	10-Jul-90	0.4									
K1-05	10-Jul-90				38	43	<1	120	360	540	5.9
K1-05	17-Jul-90									540 P	7.7 P
K1-05	17-Jul-90									500 P	7.6 P
K1-05	23-Jul-90									570 P	7.3 P
K1-05	23-Jul-90									560 P	7.3 P
K1-05	31-Jul-90									510 P	7.4 P
K1-05	31-Jul-90									550 P	7.4 P
K1-05	9-Oct-90	0.4 P									
K1-05	9-Oct-90				41 P	37 P	<1 P	120 P	360 P	450 P	7.2 P
K1-05	16-Oct-90									500 P	7.3 P
K1-05	23-Oct-90									460 P	6.9 P
K1-05	30-Oct-90									480 P	7.4 P
K1-05	15-Jan-91	0.5 P									
K1-05	15-Jan-91				39 P	42 P	<1 P	130 P	330 P	500 P	7.4 P
K1-05	22-Jan-91									470 P	7.7 P
K1-05	28-Jan-91									370 P	7.5 P
K1-05	4-Feb-91									490 P	7.6 P
K1-05	9-Apr-91	0.5 P									
K1-05	9-Apr-91				35 P	45 P	<1 P	120 P	310 P		
K1-05	9-Apr-91									430 P	7 P
K1-05	16-Apr-91									470 P	7.6 P
K1-05	23-Apr-91									470 P	7.5 P
K1-05	29-Apr-91									470 P	7.7 P
K1-05	9-Jul-91	0.5 P									
K1-05	9-Jul-91				36 P	47 P	<1 P	130 P	320 P	530 P	7.6 P
K1-05	16-Jul-91									510 P	7.6 P
K1-05	22-Jul-91									480 P	7.3 P
K1-05	29-Jul-91									520 P	7.6 P
K1-05	16-Oct-91	0.4 P									
K1-05	16-Oct-91				38 P	42 P	<1 P	120 P	380 P		
K1-05	16-Oct-91									500 P	7.6 P
K1-05	23-Oct-91									490 P	7.4 P
K1-05	29-Oct-91									490 P	7.5 P
K1-05	5-Nov-91									490 P	7.9 P
K1-05	16-Jan-92	0.5 P									
K1-05	16-Jan-92				36 P	41 P	<1 P	130 P	310 P	520 P	7.6 P
K1-05	22-Jan-92									520 P	7.6 P
K1-05	29-Jan-92									460 P	7.7 P
K1-05	4-Feb-92									510 P	7.4 P
K1-05	14-Apr-92	0.5 P									
K1-05	14-Apr-92				36 P	42 P	<1 P	130 P	330 P	480 P	7.6 P

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-05	20-Apr-92									480 P	7.5 P
K1-05	30-Apr-92									490 P	7.6 P
K1-05	12-May-92									480 P	7.7 P
K1-05	25-Jul-92	0.4 P									
K1-05	25-Jul-92				36 P	45 P	<1 P	130 P	360 P	460 P	7.5 P
K1-05	1-Aug-92									490 P	7.5 P
K1-05	8-Aug-92									460 P	7.6 P
K1-05	27-Aug-92									490 P	7.7 P
K1-05	27-Oct-92	0.48 P									
K1-05	27-Oct-92				38 P	45 P	<1 P	130 P	310 P	480 P	7.2 P
K1-05	3-Nov-92									520 P	7.4 P
K1-05	7-Nov-92									420 P	7.6 P
K1-05	13-Nov-92									500 P	7.7 P
K1-05	2-Feb-93	0.4									
K1-05	2-Feb-93				37	48	<1	130	320	470	7.6
K1-05	9-Feb-93									460	7.5
K1-05	17-Feb-93									480	7.6
K1-05	3-Mar-93									520	7.6
K1-05	7-Apr-93	0.42									
K1-05	7-Apr-93				40	44	<1	130	340	470	7.4
K1-05	14-Apr-93									510	7.4
K1-05	19-Apr-93									440	7.3
K1-05	29-Apr-93									530	7.6
K1-05	26-Jul-93	0.48		141.76	34	37	<1	180	340	470	7.7
K1-05	4-Aug-93									480	7.8
K1-05	10-Aug-93									480	7.6
K1-05	24-Aug-93									490	8
K1-05	19-Oct-93									460	
K1-05	19-Oct-93										7.9
K1-05	4-Nov-93	0.45		22.593	30	55	<1	120	340	440	7.9
K1-05	9-Nov-93								260	440	
K1-05	9-Nov-93										7.5
K1-05	16-Nov-93								350	460	
K1-05	16-Nov-93										7.7
K1-05	22-Nov-93								430	440	
K1-05	22-Nov-93										7.7
K1-05	31-Jan-94								340	410	
K1-05	31-Jan-94										7.6
K1-05	8-Feb-94								350	440	
K1-05	8-Feb-94										7.5
K1-05	14-Feb-94								330	470	
K1-05	14-Feb-94										7.5
K1-05	23-Feb-94								370	470	
K1-05	23-Feb-94										7.7
K1-05	4-May-94	0.51		53.16	37	46	<1	70	510	450	7.4
K1-05	10-May-94								380	460	
K1-05	10-May-94										7.4

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-05	17-May-94								340	460	
K1-05	17-May-94										7.5
K1-05	25-May-94								350	440	
K1-05	25-May-94										7.4
K1-05	5-Aug-94	0.49		34.111	34	38	<1	120	370	480	7.6
K1-05	9-Aug-94								360		
K1-05	9-Aug-94									500	7.6
K1-05	16-Aug-94								370		
K1-05	16-Aug-94									510	7.4
K1-05	22-Aug-94								330		
K1-05	22-Aug-94									500	7.6
K1-05	13-Oct-94	0.5		38.098	37	54	<1	130	320	550	7.3
K1-05	13-Oct-94									570	
K1-05	13-Oct-94				39	37			350	430	7.4
K1-05	1-Nov-94								340		
K1-05	1-Nov-94									470	7.3
K1-05	1-Nov-94								320	530	7.3
K1-05	8-Nov-94								370		
K1-05	8-Nov-94									500	7.2
K1-05	8-Nov-94								320		
K1-05	8-Nov-94									510	7.3
K1-05	14-Nov-94								300		
K1-05	14-Nov-94									510	7.3
K1-05	14-Nov-94								320		
K1-05	14-Nov-94									510	7.3
K1-05	9-Jan-95	0.46		27.909	34	33	<1	120	350	410	7.3
K1-05	9-Jan-95										7.72
K1-05	10-May-95	0.57		30	34 D	47 D	<1	130	350	490	7.6
K1-05	31-Jul-95	0.52		39	35	43	<1	120	360	480	7.4
K1-05	31-Jul-95	0.53		40	36	44	<1	130	300	500	7.5
K1-05	12-Oct-95	0.44		36	35 D	39 D	<1	120	350	500	7.4
K1-05	18-Jan-96	0.5 F		29 LO	35	35	<1	120	370	490	7.5
K1-05	11-Apr-96			35							
K1-05	31-Jul-96									500	
K1-05	31-Jul-96			35 LO							
K1-05	11-Oct-96	0.49 LO		31 DLOH	40 DLO	39 DLO					
K1-05	17-Jan-97			35 D							
K1-05	17-Jan-97			34 D							
K1-05	4-Apr-97			30 D							
K1-05	2-Jul-97			33 D							
K1-05	14-Oct-97			35							
K1-05	12-Jan-98			35							
K1-05	12-Jan-98			35							
K1-05	15-Apr-98			35							
K1-05	16-Jul-98			35							
K1-05	14-Oct-98			37							
K1-05	13-Jan-99			33							

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar- bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-05	14-Apr-99			<0.5 S							
K1-05	8-Jul-99			<0.5 LS							
K1-05	6-Oct-99			24 DS							
K1-05	6-Oct-99			52 DS							
K1-05	8-Feb-00			37							
K1-05	19-Jul-00			33 D							
K1-05	24-Oct-00			31 D							
K1-05	18-Jan-01			28 D							
K1-05	20-Apr-01			9.4 DH							
K1-05	20-Apr-01			8.8 DH							
K1-05	12-Jul-01			35							
K1-05	18-Apr-02			33 L							
K1-05	30-Jul-02			42							
K1-05	29-Jan-03			46 D							
K1-05	18-Apr-03			35 D						600	
K1-05	24-Jul-03			38							
K1-05	19-Nov-03			38.8							
K1-05	29-Jan-04			38.3							
K1-05	10-May-04			36.6							
K1-05	13-Jul-04			37.4							
K1-05	13-Jul-04			37.1							
K1-05	1-Dec-04			36.8							
K1-05	1-Mar-05			38							
K1-05	13-Apr-05			39							
K1-05	7-Jul-05			37.9							
K1-05	7-Jul-05			37.9							
K1-05	5-Oct-05			30.8 D							
K1-05	5-Jan-06			37							
K1-07	20-Jan-88						<1 P	140 P			
K1-07	20-Jan-88									570 P	
K1-07	20-Jan-88										7.8 P
K1-07	20-Jan-88	0.41 P			35 P	95 P			340 P		
K1-07	20-Jan-88									580 P	
K1-07	20-Jan-88										8.2 P
K1-07	20-Jan-88									570 P	
K1-07	20-Jan-88										7.9 P
K1-07	20-Jan-88									580 P	
K1-07	20-Jan-88										7.9 P
K1-07	20-Jan-88						<1 P	140 P			
K1-07	20-Jan-88									570 P	
K1-07	20-Jan-88										8 P
K1-07	20-Jan-88	0.41 P			37 P	33 P			340 P		
K1-07	20-Jan-88									570 P	
K1-07	20-Jan-88										7.7 P
K1-07	20-Jan-88									580 P	
K1-07	20-Jan-88										7.6 P
K1-07	20-Jan-88									590 P	

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (μmhos/cm)	pH Units
K1-07	20-Jan-88										7.7 P
K1-07	8-Mar-88									540 P	
K1-07	8-Mar-88									530 P	
K1-07	8-Mar-88									530 P	
K1-07	8-Mar-88									540 P	
K1-07	8-Mar-88									530 P	
K1-07	8-Mar-88									530 P	
K1-07	8-Mar-88									530 P	
K1-07	8-Mar-88									520 P	
K1-07	4-Apr-88						<1 P	140 P			
K1-07	4-Apr-88									570 P	
K1-07	4-Apr-88										7.4 P
K1-07	4-Apr-88	0.38 P			41 P	30 P			370 P		
K1-07	4-Apr-88									580 P	
K1-07	4-Apr-88										7.4 P
K1-07	4-Apr-88									590 P	
K1-07	4-Apr-88										7.5 P
K1-07	4-Apr-88									570 P	
K1-07	4-Apr-88										7.5 P
K1-07	2-Jun-88									560 P	
K1-07	2-Jun-88										7.5 P
K1-07	2-Jun-88									550 P	
K1-07	2-Jun-88										7.5 P
K1-07	2-Jun-88									550 P	
K1-07	2-Jun-88										7.5 P
K1-07	2-Jun-88									550 P	
K1-07	2-Jun-88										7.5 P
K1-07	2-Jun-88									540 P	
K1-07	2-Jun-88										7.3 P
K1-07	2-Jun-88									540 P	
K1-07	2-Jun-88										7.4 P
K1-07	2-Jun-88									540 P	
K1-07	2-Jun-88										7.5 P
K1-07	2-Jun-88									540 P	
K1-07	2-Jun-88										7.5 P
K1-07	25-Jul-88						<1 P	150 P			
K1-07	25-Jul-88									520 P	
K1-07	25-Jul-88										7.6 P
K1-07	25-Jul-88	0.37 P			37 P	40 P	<1 P		370 P		
K1-07	25-Jul-88									520 P	
K1-07	25-Jul-88										7.6 P
K1-07	25-Jul-88									520 P	
K1-07	25-Jul-88										7.6 P
K1-07	25-Jul-88									520 P	
K1-07	25-Jul-88										7.6 P
K1-07	10-Oct-88						<1 P	140 P			
K1-07	10-Oct-88									530 P	

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-07	10-Oct-88										7.3 P
K1-07	10-Oct-88	0.35 P			42 P	29 P			350 P	540 P	7.3 P
K1-07	10-Oct-88									560 P	
K1-07	10-Oct-88										7.4 P
K1-07	10-Oct-88									550 P	
K1-07	10-Oct-88										7.4 P
K1-07	10-Oct-88									560 P	
K1-07	10-Oct-88										7.4 P
K1-07	10-Oct-88						<1 P	140 P			
K1-07	10-Oct-88									540 P	
K1-07	10-Oct-88										7.6 P
K1-07	10-Oct-88	0.36 P			39 P	29 P			370 P	550 P	7.6 P
K1-07	10-Oct-88									540 P	
K1-07	10-Oct-88										7.5 P
K1-07	10-Oct-88									540 P	
K1-07	10-Oct-88										7.6 P
K1-07	10-Oct-88									520 P	
K1-07	10-Oct-88										7.5 P
K1-07	23-Jan-89						<1 P	140 P			
K1-07	23-Jan-89									520 P	
K1-07	23-Jan-89										7.4 P
K1-07	23-Jan-89	0.4 P			40 P	41 P			340 P		
K1-07	23-Jan-89									520 P	
K1-07	23-Jan-89										7.5 P
K1-07	23-Jan-89									510 P	
K1-07	23-Jan-89										7.5 P
K1-07	23-Jan-89									550 P	
K1-07	23-Jan-89										7.6 P
K1-07	11-Apr-89						<1 P	140 P			
K1-07	11-Apr-89									520 P	
K1-07	11-Apr-89										7.7 P
K1-07	11-Apr-89	0.3 P			42 P	38 P			300 P		
K1-07	11-Apr-89									520 P	
K1-07	11-Apr-89										7.6 P
K1-07	11-Apr-89									520 P	
K1-07	11-Apr-89										7.7 P
K1-07	11-Apr-89									520 P	
K1-07	11-Apr-89										7.6 P
K1-07	24-Jul-89						<1 P	140 P			
K1-07	24-Jul-89									550 P	
K1-07	24-Jul-89										7.6 P
K1-07	24-Jul-89	0.4 P			50 P	37 P			370 P		
K1-07	25-Oct-89				42 P	43 P	<1 P	140 P	340 P	550 P	7.7 P
K1-07	25-Oct-89	0.3 P									
K1-07	2-Nov-89									520 P	
K1-07	2-Nov-89										7.4 P
K1-07	8-Nov-89									540 P	

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-07	8-Nov-89										7.6 P
K1-07	15-Nov-89									540 P	
K1-07	15-Nov-89										7.7 P
K1-07	11-Jan-90				40 P	37 P	<1 P	140 P	380 P	530 P	7.8 P
K1-07	11-Jan-90	0.4 P									
K1-07	18-Jan-90									540 P	
K1-07	18-Jan-90										7.3 P
K1-07	25-Jan-90									580 P	
K1-07	25-Jan-90										7.3 P
K1-07	1-Feb-90									550 P	
K1-07	1-Feb-90										7.5 P
K1-07	11-Apr-90	0.4 P									
K1-07	11-Apr-90				37 P	40 P	<1 P	140 P	360 P	500 P	7.6 P
K1-07	17-Apr-90									560 P	7.6 P
K1-07	25-Apr-90									550 P	7.6 P
K1-07	1-May-90									560 P	7.6 P
K1-07	10-Jul-90	0.4 P									
K1-07	10-Jul-90				38 P	39 P	<1 P	130 P	380 P	560 P	5.7 P
K1-07	17-Jul-90									600 P	7.6 P
K1-07	23-Jul-90									560 P	7.3 P
K1-07	31-Jul-90									510 P	7.6 P
K1-07	9-Oct-90	0.4 P									
K1-07	9-Oct-90				40 P	33 P	<1 P	130 P	370 P	480 P	7 P
K1-07	16-Oct-90									500 P	7.3 P
K1-07	23-Oct-90									490 P	7 P
K1-07	30-Oct-90									500 P	7.6 P
K1-07	15-Jan-91	0.4 P									
K1-07	15-Jan-91				42 P	42 P	<1 P	140 P	360 P	520 P	7.5 P
K1-07	22-Jan-91									490 P	7.7 P
K1-07	28-Jan-91									510 P	7.4 P
K1-07	4-Feb-91									430 P	7.7 P
K1-07	9-Apr-91	0.4 P									
K1-07	9-Apr-91				35 P	42 P	<1 P	140 P	330 P		
K1-07	9-Apr-91									450 P	7.4 P
K1-07	16-Apr-91									500 P	7.8 P
K1-07	23-Apr-91									480 P	7.6 P
K1-07	29-Apr-91									470 P	7.6 P
K1-07	9-Jul-91	0.4 P									
K1-07	9-Jul-91				36 P	44 P	<1 P	160 P	300 P	590 P	7.8 P
K1-07	16-Jul-91									520 P	7.6 P
K1-07	22-Jul-91									500 P	7.5 P
K1-07	29-Jul-91									510 P	7.6 P
K1-07	16-Oct-91	0.4 P									
K1-07	16-Oct-91				35 P	42 P	<1 P	140 P	360 P		
K1-07	16-Oct-91									510 P	7.6 P
K1-07	23-Oct-91									530 P	7.5 P
K1-07	29-Oct-91									430 P	7.5 P

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-07	5-Nov-91									510 P	7.9 P
K1-07	16-Jan-92	0.5 P									
K1-07	16-Jan-92				36 P	41 P	<1 P	140 P	370 P	550 P	7.6 P
K1-07	16-Jan-92	0.5 P									
K1-07	16-Jan-92				36 P	41 P	<1 P	140 P	390 P	530 P	7.6 P
K1-07	22-Jan-92									530 P	7.6 P
K1-07	22-Jan-92									520 P	7.6 P
K1-07	29-Jan-92									500 P	7.7 P
K1-07	29-Jan-92									510 P	7.7 P
K1-07	4-Feb-92									520 P	7.5 P
K1-07	4-Feb-92									490 P	7.4 P
K1-07	14-Apr-92	0.5 P									
K1-07	14-Apr-92				36 P	44 P	<1 P	140 P	340 P	460 P	7.6 P
K1-07	20-Apr-92									490 P	7.6 P
K1-07	30-Apr-92									510 P	7.7 P
K1-07	12-May-92									490 P	7.7 P
K1-07	25-Jul-92	0.4 P									
K1-07	25-Jul-92				37 P	45 P	<1 P	140 P	360 P	440 P	7.5 P
K1-07	26-Oct-92	0.41 P									
K1-07	26-Oct-92				37 P	47 P	<1 P	140 P	380 P	460 P	7.2 P
K1-07	26-Oct-92	0.43 P									
K1-07	26-Oct-92				38 P	45 P	<1 P	140 P	370 P	480 P	7.3 P
K1-07	3-Nov-92									510 P	7.3 P
K1-07	3-Nov-92									500 P	7.4 P
K1-07	7-Nov-92									510 P	7.6 P
K1-07	7-Nov-92									520 P	7.5 P
K1-07	13-Nov-92									520 P	7.7 P
K1-07	13-Nov-92									490 P	7.5 P
K1-07	2-Feb-93	0.44									
K1-07	2-Feb-93				35	48	<1	140	330	470	7.6
K1-07	9-Feb-93									510	7.5
K1-07	17-Feb-93									520	7.7
K1-07	3-Mar-93									420	7.6
K1-07	7-Apr-93	0.42									
K1-07	7-Apr-93				38	45	<1	140	350	500	7.4
K1-07	14-Apr-93									520	7.3
K1-07	19-Apr-93									420	7.3
K1-07	29-Apr-93									140	7.5
K1-07	26-Jul-93			128.47	33	39	<1	190	370	470	7.8
K1-07	26-Jul-93	0.49									
K1-07	4-Aug-93									490	7.7
K1-07	10-Aug-93									490	7.6
K1-07	24-Aug-93									500	7.8
K1-07	19-Oct-93									470	
K1-07	19-Oct-93										7.9
K1-07	19-Oct-93									470	
K1-07	19-Oct-93										8

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-07	4-Nov-93	0.41		16.834	30	43	<1	130	300	450	8
K1-07	9-Nov-93								220	450	
K1-07	9-Nov-93										7.5
K1-07	17-Nov-93								380	460	
K1-07	17-Nov-93										7.6
K1-07	22-Nov-93								440	440	
K1-07	22-Nov-93										7.7
K1-07	31-Jan-94								340	460	
K1-07	31-Jan-94										7.6
K1-07	8-Feb-94								360	440	
K1-07	8-Feb-94										7.5
K1-07	14-Feb-94								340	480	
K1-07	14-Feb-94										7.5
K1-07	24-Feb-94								380	480	
K1-07	24-Feb-94										7.7
K1-07	4-May-94	0.49		44.3	34	42	<1	130	540	450	7.4
K1-07	10-May-94								360	470	
K1-07	10-May-94										7.7
K1-07	17-May-94								300	460	
K1-07	17-May-94										7.6
K1-07	25-May-94								330	440	
K1-07	25-May-94										7.5
K1-07	5-Aug-94	0.47		31.453	33	34	<1	140	340	480	7.6
K1-07	9-Aug-94								260		
K1-07	9-Aug-94									500	7.6
K1-07	16-Aug-94								340		
K1-07	16-Aug-94									510	7.4
K1-07	22-Aug-94								370		
K1-07	22-Aug-94									500	7.6
K1-07	13-Oct-94	0.47		32.782	34	45	<1	130	320	410	7.4
K1-07	1-Nov-94								320		
K1-07	1-Nov-94									470	7.3
K1-07	8-Nov-94								340		
K1-07	8-Nov-94									490	7.4
K1-07	14-Nov-94								310		
K1-07	14-Nov-94									510	7.3
K1-07	9-Jan-95	0.37		26.137	32	31	<1	130	360	410	7.3
K1-07	9-Jan-95										7.28
K1-07	11-May-95	0.5		28 D	31 D	44 D	<1	130	350	480	7.4
K1-07	31-Jul-95	0.49		35	33	41	<1	130	360	480	7.5
K1-07	12-Oct-95	0.44		32	32 D	36 D	<1	140	430	510	7.4
K1-07	18-Jan-96	0.48 F		32 LO	31	33	<1	140	360	480	7.5
K1-07	12-Apr-96			28							
K1-07	31-Jul-96									480	
K1-07	31-Jul-96			30 LO							
K1-07	11-Oct-96	0.47 LO		28 DLOH	34 DLO	46 LO					
K1-07	17-Jan-97			31 D							

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-07	4-Apr-97			25 D							
K1-07	3-Jul-97			31 D							
K1-07	16-Oct-97			34							
K1-07	12-Jan-98			33							
K1-07	15-Apr-98			32							
K1-07	16-Jul-98			33							
K1-07	15-Oct-98			34							
K1-07	14-Jan-99			30							
K1-07	12-Apr-99			5.5 S							
K1-07	6-Jul-99			<0.5 S							
K1-07	4-Oct-99			29 LS							
K1-07	8-Feb-00			30							
K1-07	8-Feb-00			30							
K1-07	20-Jul-00			27 D							
K1-07	25-Oct-00			19							
K1-07	22-Jan-01			12 L							
K1-07	23-Apr-01			22 D							
K1-07	10-Jul-01			12 DL							
K1-07	18-Apr-02			25 L							
K1-07	30-Jul-02			33							
K1-07	30-Jan-03			36 D							
K1-07	1-May-03			37 D							
K1-07	28-Aug-03			29							
K1-07	24-Nov-03			30.4							
K1-07	4-Feb-04			29.5							
K1-07	10-May-04			30.2							
K1-07	21-Jul-04			34.2							
K1-07	2-Dec-04			31.2							
K1-07	6-Apr-05			34							
K1-07	6-Jul-05			31.4							
K1-07	17-Oct-05			29.1 D							
K1-07	17-Jan-06			32							
K1-08	21-Jan-88						<1 P	130 P			
K1-08	21-Jan-88									490 P	
K1-08	21-Jan-88										7.8 P
K1-08	21-Jan-88	0.43 P			34 P	37 P			350 P		
K1-08	21-Jan-88									480 P	
K1-08	21-Jan-88										7.7 P
K1-08	21-Jan-88									480 P	
K1-08	21-Jan-88										7.8 P
K1-08	21-Jan-88									480 P	
K1-08	21-Jan-88										7.8 P
K1-08	6-Apr-88						<1 P	130 P			
K1-08	6-Apr-88									500 P	
K1-08	6-Apr-88										7.5 P
K1-08	6-Apr-88	0.4 P			31 P	33 P			350 P		
K1-08	6-Apr-88									500 P	

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-08	6-Apr-88										7.5 P
K1-08	6-Apr-88									510 P	
K1-08	6-Apr-88										7.5 P
K1-08	6-Apr-88									500 P	
K1-08	6-Apr-88										7.5 P
K1-08	15-Jul-88						<1 P	130 P			
K1-08	15-Jul-88									520 P	
K1-08	15-Jul-88										7.4 P
K1-08	15-Jul-88	0.4 P			35 P	37 P			360 P		
K1-08	15-Jul-88									520 P	
K1-08	15-Jul-88										7.4 P
K1-08	15-Jul-88									530 P	
K1-08	15-Jul-88										7.5 P
K1-08	15-Jul-88									520 P	
K1-08	15-Jul-88										7.5 P
K1-08	6-Oct-88						<1 P	130 P			
K1-08	6-Oct-88	0.46 P			34 P	34 P			320 P	520 P	8 P
K1-08	29-Nov-88									490 P	
K1-08	29-Nov-88										7.8 P
K1-08	29-Nov-88									490 P	
K1-08	29-Nov-88										7.7 P
K1-08	29-Nov-88									490 P	
K1-08	29-Nov-88										7.8 P
K1-08	29-Nov-88									500 P	
K1-08	29-Nov-88										7.8 P
K1-08	24-Jan-89						<1 P	130 P			
K1-08	24-Jan-89									540 P	
K1-08	24-Jan-89										7.3 P
K1-08	24-Jan-89	0.4 P			38 P	44 P			330 P		
K1-08	24-Jan-89									510 P	
K1-08	24-Jan-89										7.5 P
K1-08	24-Jan-89									540 P	
K1-08	24-Jan-89										7.5 P
K1-08	24-Jan-89									530 P	
K1-08	24-Jan-89										7.5 P
K1-08	4-May-89						<1 P	120 P			
K1-08	4-May-89									490 P	
K1-08	4-May-89										7.3 P
K1-08	4-May-89	0.5 P			38 P	48 P			360 P		
K1-08	4-May-89									510 P	
K1-08	4-May-89										7.3 P
K1-08	4-May-89									500 P	
K1-08	4-May-89										7.3 P
K1-08	4-May-89									520 P	
K1-08	4-May-89										7.3 P
K1-08	24-Jul-89						<1 P	130 P			
K1-08	24-Jul-89									550 P	

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-08	24-Jul-89										7.7 P
K1-08	24-Jul-89	0.4 P			42 P	41 P			340 P		
K1-08	25-Oct-89				36 P	47 P	<1 P	130 P	370 P	560 P	7.8 P
K1-08	25-Oct-89	0.4 P									
K1-08	2-Nov-89									510 P	
K1-08	2-Nov-89										7.4 P
K1-08	8-Nov-89									520 P	
K1-08	8-Nov-89										7.8 P
K1-08	15-Nov-89									500 P	
K1-08	15-Nov-89										7.8 P
K1-08	11-Jan-90				40 P	40 P	<1 P	130 P	360 P	510 P	7.9 P
K1-08	11-Jan-90	0.4 P									
K1-08	18-Jan-90									520 P	
K1-08	18-Jan-90										7.4 P
K1-08	25-Jan-90									550 P	
K1-08	25-Jan-90										7.6 P
K1-08	1-Feb-90									520 P	
K1-08	1-Feb-90										7.6 P
K1-08	11-Apr-90	0.4 P									
K1-08	11-Apr-90				35 P	42 P	<1 P	130 P	340 P	510 P	7.6 P
K1-08	17-Apr-90									540 P	7.5 P
K1-08	25-Apr-90									530 P	7.7 P
K1-08	1-May-90									560 P	7.5 P
K1-08	10-Jul-90	0.4 P									
K1-08	10-Jul-90				37 P	42 P	<1 P	130 P	390 P	540 P	5.8 P
K1-08	17-Jul-90									590 P	7.8 P
K1-08	23-Jul-90									590 P	7.4 P
K1-08	31-Jul-90									460 P	7.6 P
K1-08	9-Oct-90	0.4 P									
K1-08	9-Oct-90				38 P	40 P	<1 P	120 P	370 P	450 P	7.1 P
K1-08	16-Oct-90									500 P	7.3 P
K1-08	23-Oct-90									450 P	6.9 P
K1-08	30-Oct-90									500 P	7.5 P
K1-08	15-Jan-91	0.4 P									
K1-08	15-Jan-91				37 P	42 P	<1 P	130 P	370 P	510 P	7.6 P
K1-08	22-Jan-91									480 P	7.7 P
K1-08	28-Jan-91									460 P	7.4 P
K1-08	4-Feb-91									490 P	7.6 P
K1-08	10-Apr-91	0.4 P									
K1-08	10-Apr-91				36 P	46 P	<1 P	130 P	310 P	480 P	7.7 P
K1-08	10-Apr-91	0.4 P									
K1-08	10-Apr-91				36 P	46 P	<1 P	130 P	310 P	470 P	7.7 P
K1-08	16-Apr-91									470 P	7.7 P
K1-08	16-Apr-91									480 P	7.7 P
K1-08	23-Apr-91									480 P	7.6 P
K1-08	23-Apr-91									490 P	7.6 P
K1-08	29-Apr-91									460 P	7.6 P

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-08	29-Apr-91									490 P	7.7 P
K1-08	9-Jul-91	0.5 P									
K1-08	9-Jul-91				36 P	47 P	<1 P	130 P	300 P	530 P	7.6 P
K1-08	16-Jul-91									530 P	7.5 P
K1-08	22-Jul-91									510 P	7.4 P
K1-08	29-Jul-91									510 P	7.7 P
K1-08	16-Oct-91	0.4 P									
K1-08	16-Oct-91				35 P	44 P	<1 P	130 P	350 P		
K1-08	16-Oct-91									480 P	7.7 P
K1-08	23-Oct-91									520 P	7.5 P
K1-08	29-Oct-91									480 P	7.5 P
K1-08	5-Nov-91									490 P	7.8 P
K1-08	16-Jan-92	0.5 P									
K1-08	16-Jan-92				38 P	44 P	<1 P	90 P	360 P	570 P	7.7 P
K1-08	22-Jan-92									540 P	7.6 P
K1-08	29-Jan-92									500 P	7.7 P
K1-08	4-Feb-92									480 P	7.6 P
K1-08	14-Apr-92	0.5 P									
K1-08	14-Apr-92				36 P	45 P	<1 P	130 P	340 P	480 P	7.6 P
K1-08	20-Apr-92									480 P	7.6 P
K1-08	30-Apr-92									430 P	7.7 P
K1-08	12-May-92									460 P	7.8 P
K1-08	25-Jul-92	0.4 P									
K1-08	25-Jul-92				37 P	46 P	<1 P	130 P	360 P	450 P	7.6 P
K1-08	1-Aug-92									510 P	7.6 P
K1-08	8-Aug-92									450 P	7.6 P
K1-08	27-Aug-92									480 P	7.7 P
K1-08	27-Oct-92	0.48 P									
K1-08	27-Oct-92				37 P	46 P	<1 P	130 P	320 P	520 P	7.3 P
K1-08	3-Nov-92									510 P	7.4 P
K1-08	7-Nov-92									510 P	7.6 P
K1-08	13-Nov-92									520 P	7.7 P
K1-08	2-Feb-93	0.47									
K1-08	2-Feb-93				36	51	<1	130	320	420	7.6
K1-08	9-Feb-93									500	7.5
K1-08	17-Feb-93									510	7.7
K1-08	3-Mar-93									510	7.6
K1-08	7-Apr-93	0.42									
K1-08	7-Apr-93				48	45	<1	140	340	490	7.3
K1-08	14-Apr-93									520	7.4
K1-08	19-Apr-93									360	7.3
K1-08	29-Apr-93									530	7.5
K1-08	26-Jul-93			137.33	34	39	<1	180	290	480	7.7
K1-08	26-Jul-93	0.55									
K1-08	4-Aug-93									480	7.7
K1-08	10-Aug-93									490	7.7
K1-08	24-Aug-93									500	7.7

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-08	19-Oct-93									470	
K1-08	19-Oct-93										7.9
K1-08	4-Nov-93	0.45		23.036	32	53	<1	120	400	450	8
K1-08	9-Nov-93								250	450	
K1-08	9-Nov-93										7.6
K1-08	17-Nov-93								370	460	
K1-08	17-Nov-93										7.7
K1-08	22-Nov-93								390	450	
K1-08	22-Nov-93										7.6
K1-08	31-Jan-94								340	460	
K1-08	31-Jan-94										7.6
K1-08	31-Jan-94								340	460	
K1-08	31-Jan-94										7.6
K1-08	8-Feb-94								330	460	
K1-08	8-Feb-94										7.5
K1-08	8-Feb-94								390	460	
K1-08	8-Feb-94										7.6
K1-08	14-Feb-94								360	480	
K1-08	14-Feb-94										7.6
K1-08	14-Feb-94								350	480	
K1-08	14-Feb-94										7.6
K1-08	24-Feb-94								380	490	
K1-08	24-Feb-94										7.7
K1-08	24-Feb-94								380	490	
K1-08	24-Feb-94										7.7
K1-08	4-May-94	0.5		44.3	42	72	<1	120	550	460	7.6
K1-08	10-May-94								380	480	
K1-08	10-May-94										7.7
K1-08	17-May-94								350	480	
K1-08	17-May-94										7.5
K1-08	25-May-94								370	450	
K1-08	25-May-94										7.5
K1-08	5-Aug-94	0.48		32.782	34	45	<1	130	390	490	7.7
K1-08	9-Aug-94								360		
K1-08	9-Aug-94									520	7.6
K1-08	16-Aug-94								370		
K1-08	16-Aug-94									520	7.5
K1-08	22-Aug-94								350		
K1-08	22-Aug-94									520	7.6
K1-08	13-Oct-94	0.5		35.883	38	59	<1	130	350	420	7.4
K1-08	1-Nov-94								330		
K1-08	1-Nov-94									490	7.3
K1-08	8-Nov-94								350		
K1-08	8-Nov-94									510	7.4
K1-08	14-Nov-94								320		
K1-08	14-Nov-94									520	7.3
K1-08	9-Jan-95	0.4		24.808	35	35	<1	130	360	440	7.3

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-08	9-Jan-95	0.41		26.137	34	34	<1	130	340	450	7.4
K1-08	9-Jan-95										7.31
K1-08	11-May-95	0.55		29 D	35 D	50 D	<1	130	370	500	7.5
K1-08	31-Jul-95	0.51		39	38	48	<1	130	390	520	7.5
K1-08	12-Oct-95	0.45		35	38 D	45 D	<1	130	360	540	7.5
K1-08	18-Jan-96	0.48 F		28 LO	37	40	<1	81	390	500	7.5
K1-08	12-Apr-96			32							
K1-08	12-Apr-96			32							
K1-08	31-Jul-96									530	
K1-08	31-Jul-96			36 LO							
K1-08	11-Oct-96	0.46 LO		28 DLOH	42 DLO	46 LO					
K1-08	11-Oct-96	0.46 LO		29 DLOH	43 DLO	45 DLO					
K1-08	17-Jan-97			35 D							
K1-08	4-Apr-97			26 D							
K1-08	3-Jul-97			35 D							
K1-08	3-Jul-97			34 D							
K1-08	16-Oct-97			37							
K1-08	12-Jan-98			36							
K1-08	15-Apr-98			36							
K1-08	16-Jul-98			37							
K1-08	16-Jul-98			38							
K1-08	15-Oct-98			37							
K1-08	14-Jan-99			35							
K1-08	12-Apr-99			5.5 S							
K1-08	7-Jul-99			<0.5 S							
K1-08	4-Oct-99			28 DLS							
K1-08	9-Feb-00			42							
K1-08	20-Jul-00			34 D							
K1-08	24-Oct-00			32 D							
K1-08	22-Jan-01			35 DHL							
K1-08	23-Apr-01			32 D							
K1-08	11-Jul-01			31 D							
K1-08	18-Apr-02			34 L							
K1-08	30-Jul-02			43							
K1-08	7-Feb-03			43							
K1-08	2-May-03			40 D							
K1-08	4-Sep-03			37.7							
K1-08	24-Nov-03			38.2							
K1-08	3-Feb-04			38.5							
K1-08	11-May-04			38							
K1-08	21-Jul-04			37.6							
K1-08	2-Dec-04			37.3							
K1-08	2-Mar-05			38							
K1-08	2-Mar-05			38							
K1-08	6-Apr-05			38							
K1-08	6-Jul-05			37.9							
K1-08	13-Oct-05			31.5 D							

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-08	18-Jan-06			37							
K1-08	18-Jan-06			37							
K1-09	21-Jan-88						<1 P	130 P			
K1-09	21-Jan-88									520 P	
K1-09	21-Jan-88										7.8 P
K1-09	21-Jan-88	0.43 P			32 P	38 P			330 P		
K1-09	21-Jan-88									530 P	
K1-09	21-Jan-88										7.8 P
K1-09	21-Jan-88									530 P	
K1-09	21-Jan-88										7.8 P
K1-09	21-Jan-88									530 P	
K1-09	21-Jan-88										7.8 P
K1-09	6-Apr-88						<1 P	130 P			
K1-09	6-Apr-88									490 P	
K1-09	6-Apr-88										7.5 P
K1-09	6-Apr-88	0.35 P			30 P	35 P			350 P		
K1-09	6-Apr-88									490 P	
K1-09	6-Apr-88										7.4 P
K1-09	6-Apr-88									490 P	
K1-09	6-Apr-88										7.4 P
K1-09	6-Apr-88									510 P	
K1-09	6-Apr-88										7.4 P
K1-09	15-Jul-88						<1 P	130 P			
K1-09	15-Jul-88									510 P	
K1-09	15-Jul-88										7.4 P
K1-09	15-Jul-88	0.42 P			35 P	40 P			340 P		
K1-09	15-Jul-88									520 P	
K1-09	15-Jul-88										7.4 P
K1-09	15-Jul-88									510 P	
K1-09	15-Jul-88										7.4 P
K1-09	15-Jul-88									510 P	
K1-09	15-Jul-88										7.4 P
K1-09	6-Oct-88						<1 P	120 P			
K1-09	6-Oct-88	0.46 P			34 P	45 P			310 P	500 P	7.9 P
K1-09	29-Nov-88									470 P	
K1-09	29-Nov-88										7.7 P
K1-09	29-Nov-88									490 P	
K1-09	29-Nov-88										7.7 P
K1-09	29-Nov-88									490 P	
K1-09	29-Nov-88										7.6 P
K1-09	29-Nov-88									490 P	
K1-09	29-Nov-88										7.7 P
K1-09	24-Jan-89						<1 P	120 P			
K1-09	24-Jan-89									510 P	
K1-09	24-Jan-89										7.2 P
K1-09	24-Jan-89	0.4 P			37 P	46 P			350 P		
K1-09	24-Jan-89									540 P	

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-09	24-Jan-89										7.4 P
K1-09	24-Jan-89									550 P	
K1-09	24-Jan-89										7.4 P
K1-09	24-Jan-89									490 P	
K1-09	24-Jan-89										7.4 P
K1-09	4-May-89						<1 P	120 P			
K1-09	4-May-89									490 P	
K1-09	4-May-89										7.2 P
K1-09	4-May-89	0.4 P			38 P	49 P			350 P		
K1-09	4-May-89									500 P	
K1-09	4-May-89										7.2 P
K1-09	4-May-89									500 P	
K1-09	4-May-89										7.2 P
K1-09	4-May-89									510 P	
K1-09	4-May-89										7.2 P
K1-09	4-May-89									490 P	
K1-09	4-May-89										8.1 P
K1-09	4-May-89	0.39 P			43 P	37 P	<1 P	110 P	350 P		
K1-09	4-May-89									490 P	
K1-09	4-May-89										8.2 P
K1-09	4-May-89									490 P	
K1-09	4-May-89										8.1 P
K1-09	4-May-89									480 P	
K1-09	4-May-89										8.1 P
K1-09	24-Jul-89						<1 P	130 P			
K1-09	24-Jul-89									540 P	
K1-09	24-Jul-89										7.6 P
K1-09	24-Jul-89	0.4 P			45 P	42 P			340 P		
K1-09	25-Oct-89				34 P	45 P	<1 P	120 P	320 P	530 P	7.6 P
K1-09	25-Oct-89	0.4 P									
K1-09	2-Nov-89									500 P	
K1-09	2-Nov-89										7.4 P
K1-09	8-Nov-89									490 P	
K1-09	8-Nov-89										7.6 P
K1-09	15-Nov-89									500 P	
K1-09	15-Nov-89										7.8 P
K1-09	11-Jan-90				40 P	41 P	<1 P	120 P	360 P	490 P	7.8 P
K1-09	11-Jan-90	0.4 P									
K1-09	11-Jan-90				40 P	43 P	<1 P	130 P	340 P	500 P	7.8 P
K1-09	11-Jan-90	0.4 P									
K1-09	18-Jan-90									510 P	
K1-09	18-Jan-90										7.4 P
K1-09	18-Jan-90									510 P	
K1-09	18-Jan-90										7.3 P
K1-09	25-Jan-90									480 P	
K1-09	25-Jan-90										7.7 P
K1-09	25-Jan-90									480 P	

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-09	25-Jan-90										7.6 P
K1-09	1-Feb-90									520 P	
K1-09	1-Feb-90										7.5 P
K1-09	1-Feb-90									520 P	
K1-09	1-Feb-90										7.5 P
K1-09	11-Apr-90	0.4 P									
K1-09	11-Apr-90				36 P	44 P	<1 P	120 P	310 P	520 P	7.6 P
K1-09	17-Apr-90									520 P	7.5 P
K1-09	25-Apr-90									520 P	7.6 P
K1-09	1-May-90									520 P	7.5 P
K1-09	10-Jul-90	0.4 P									
K1-09	10-Jul-90				38 P	46 P	<1 P	120 P	360 P	540 P	5.8 P
K1-09	17-Jul-90									520 P	7.8 P
K1-09	23-Jul-90									580 P	7.4 P
K1-09	31-Jul-90									540 P	7.6 P
K1-09	9-Oct-90	0.4 P									
K1-09	9-Oct-90				39 P	40 P	<1 P	120 P	370 P	460 P	7.1 P
K1-09	16-Oct-90									490 P	7.1 P
K1-09	23-Oct-90									450 P	6.9 P
K1-09	30-Oct-90									490 P	7.5 P
K1-09	15-Jan-91	0.4 P									
K1-09	15-Jan-91				38 P	46 P	<1 P	120 P	330 P	480 P	7.6 P
K1-09	22-Jan-91									470 P	7.6 P
K1-09	28-Jan-91									490 P	7.4 P
K1-09	4-Feb-91									480 P	7.7 P
K1-09	9-Apr-91	0.4 P									
K1-09	9-Apr-91				35 P	47 P	<1 P	120 P	320 P		
K1-09	9-Apr-91									440 P	7.4 P
K1-09	16-Apr-91									490 P	7.7 P
K1-09	23-Apr-91									480 P	7.6 P
K1-09	29-Apr-91									460 P	7.6 P
K1-09	9-Jul-91	0.5 P									
K1-09	9-Jul-91				35 P	50 P	<1 P	120 P	290 P	510 P	7.7 P
K1-09	16-Jul-91									510 P	7.6 P
K1-09	22-Jul-91									490 P	7.4 P
K1-09	29-Jul-91									510 P	7.6 P
K1-09	16-Oct-91	0.4 P									
K1-09	16-Oct-91				33 P	47 P	<1 P	130 P	370 P		
K1-09	16-Oct-91									450 P	7.6 P
K1-09	23-Oct-91									540 P	7.4 P
K1-09	29-Oct-91									320 P	7.4 P
K1-09	5-Nov-91									490 P	7.7 P
K1-09	16-Jan-92	0.5 P									
K1-09	16-Jan-92				35 P	48 P	<1 P	130 P	360 P	540 P	7.6 P
K1-09	22-Jan-92									530 P	7.7 P
K1-09	29-Jan-92									480 P	7.6 P
K1-09	4-Feb-92									500 P	7.5 P

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-09	14-Apr-92	0.5 P									
K1-09	14-Apr-92				35 P	48 P	<1 P	130 P	340 P	490 P	7.6 P
K1-09	14-Apr-92	0.5 P									
K1-09	14-Apr-92				35 P	48 P	<1 P	120 P	330 P	460 P	7.6 P
K1-09	20-Apr-92									460 P	7.6 P
K1-09	20-Apr-92									460 P	7.5 P
K1-09	30-Apr-92									490 P	7.9 P
K1-09	30-Apr-92									430 P	7.6 P
K1-09	12-May-92									480 P	7.9 P
K1-09	12-May-92									470 P	7.7 P
K1-09	25-Jul-92	0.4 P									
K1-09	25-Jul-92				37 P	49 P	<1 P	130 P	350 P	470 P	7.5 P
K1-09	1-Aug-92									460 P	7.5 P
K1-09	8-Aug-92									450 P	7.7 P
K1-09	27-Aug-92									470 P	7.6 P
K1-09	27-Oct-92	0.52 P									
K1-09	27-Oct-92				38 P	48 P	<1 P	130 P	320 P	440 P	7.2 P
K1-09	3-Nov-92									510 P	7.4 P
K1-09	7-Nov-92									510 P	7.6 P
K1-09	13-Nov-92									520 P	7.7 P
K1-09	2-Feb-93	0.47									
K1-09	2-Feb-93				36	54	<1	130	330	490	7.6
K1-09	9-Feb-93									520	7.5
K1-09	17-Feb-93									490	7.6
K1-09	3-Mar-93									490	7.5
K1-09	7-Apr-93	0.42									
K1-09	7-Apr-93				40	48	<1	140	340	480	7.4
K1-09	14-Apr-93									520	7.3
K1-09	19-Apr-93									390	7.3
K1-09	29-Apr-93									480	7.5
K1-09	26-Jul-93			146.19	34	43	<1	170	350	470	7.7
K1-09	26-Jul-93	0.54									
K1-09	4-Aug-93									470	7.6
K1-09	10-Aug-93									480	7.6
K1-09	24-Aug-93									490	7.7
K1-09	19-Oct-93									460	
K1-09	19-Oct-93										7.9
K1-09	4-Nov-93	0.52		23.036	31	52	<1	120	380	450	7.9
K1-09	9-Nov-93								200	450	
K1-09	9-Nov-93										7.5
K1-09	17-Nov-93								360	460	
K1-09	17-Nov-93										7.7
K1-09	22-Nov-93								410	450	
K1-09	22-Nov-93										7.6
K1-09	31-Jan-94								340	450	
K1-09	31-Jan-94										7.6
K1-09	8-Feb-94								350	440	

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-09	8-Feb-94										7.5
K1-09	14-Feb-94								350	480	
K1-09	14-Feb-94										7.5
K1-09	23-Feb-94								370	480	
K1-09	23-Feb-94										7.7
K1-09	4-May-94	0.49		48.73	35	50	<1	120	520	450	7.5
K1-09	10-May-94								370	470	
K1-09	10-May-94										7.5
K1-09	17-May-94								330	470	
K1-09	17-May-94										7.5
K1-09	25-May-94								370	450	
K1-09	25-May-94										7.5
K1-09	5-Aug-94	0.47		33.668	33	41	<1	130	320	500	7.6
K1-09	9-Aug-94								340		
K1-09	9-Aug-94									510	7.6
K1-09	16-Aug-94								360		
K1-09	16-Aug-94									520	7.5
K1-09	22-Aug-94								390		
K1-09	22-Aug-94									520	7.5
K1-09	13-Oct-94	0.49		38.984	37	52	<1	130	340	450	7.4
K1-09	1-Nov-94								320		
K1-09	1-Nov-94									480	7.3
K1-09	8-Nov-94								370		
K1-09	8-Nov-94									520	7.3
K1-09	14-Nov-94								340		
K1-09	14-Nov-94									520	7.3
K1-09	9-Jan-95	0.39		27.023	34	36	<1	120	360	450	7.3
K1-09	9-Jan-95										7.64
K1-09	10-May-95	0.54		29	36 D	54 D	<1	130	360	500	7.6
K1-09	10-May-95				40	51			350	620	8.2
K1-09	31-Jul-95	0.51		38	37	50	<1	120	370	520	7.5
K1-09	12-Oct-95	0.44		35	37 D	46 D	<1	130	370	540	7.5
K1-09	18-Jan-96	0.5 F		12 LO	36	41	<1	180	390	520	7.5
K1-09	18-Jan-96	0.5 F		12 LO	37	41	<1	130	380	520	7.5
K1-09	12-Apr-96			34							
K1-09	31-Jul-96									510	
K1-09	31-Jul-96			35 LO							
K1-09	11-Oct-96	0.47 LO		30 DLOH	40 DLO	43 LO					
K1-09	17-Jan-97			35 D							
K1-09	4-Apr-97			29 D							
K1-09	4-Apr-97			29 D							
K1-09	3-Jul-97			34 D							
K1-09	16-Oct-97			36							
K1-09	16-Oct-97			37							
K1-09	17-Mar-98			36							
K1-09	15-Apr-98			36							
K1-09	16-Jul-98			37							

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
K1-09	15-Oct-98			37							
K1-09	15-Oct-98			36							
K1-09	13-Jan-99			36							
K1-09	13-Apr-99			11 S							
K1-09	13-Apr-99			11 S							
K1-09	7-Jul-99			<0.5 S							
K1-09	4-Oct-99			28 DLS							
K1-09	9-Feb-00			9.4							
K1-09	20-Jul-00			34 D							
K1-09	20-Jul-00			34 D							
K1-09	24-Oct-00			32 D							
K1-09	22-Jan-01			18 DL							
K1-09	20-Apr-01			9.3 DH							
K1-09	11-Jul-01			31 D							
K1-09	18-Apr-02			34 L							
K1-09	30-Jul-02			46							
K1-09	31-Jan-03			42 D							
K1-09	2-May-03			43 D							
K1-09	8-Sep-03			38.1							
K1-09	25-Nov-03			38.6							
K1-09	3-Feb-04			38.6							
K1-09	11-May-04			37.9							
K1-09	20-Jul-04			37.7							
K1-09	6-Dec-04			37							
K1-09	6-Dec-04			37							
K1-09	24-Feb-05			38							
K1-09	6-Apr-05			37							
K1-09	1-Aug-05			32.8 D							
K1-09	13-Oct-05			29.9 D							
K1-09	19-Jan-06			37							
W-865-01	30-Mar-99	0.41		0.44	49	133	<5	143	422	685	7.96
W-865-01	14-Aug-01		<0.2								
W-865-01	14-Aug-01	0.63		0.6	40 D	120	<1 H	160 H	450 H	680 H	7.8
W-865-01	31-Oct-01		26								
W-865-01	31-Oct-01	0.22 L		0.3	25 DL	80 DL	<1 H	170 H	470 H	670 H	8.3 H
W-865-01	31-Jan-02		<0.2								
W-865-01	31-Jan-02	0.34 F		5.9	27 DF	90 DL	<1 H	170 H	460 H	680	8
W-865-01	30-May-02		<1								
W-865-01	30-May-02	0.42		15	32 D	110 D	<1 H	170 H	460 H	690 H	8
W-865-01	31-Jul-02		27								
W-865-01	31-Jul-02	0.48 F		13 F	36 DF	110 D	<1	170	460 H	710 H	8
W-865-01	19-Feb-03		36								
W-865-01	19-Feb-03	0.37		15	13	55 D	<1 H	140 H	360	470	8
W-865-01	29-May-03		32								
W-865-01	29-May-03	0.48		12	13	60 D	<1 H	150 H	360 HO	480 H	8
W-865-01	6-Aug-03		32								
W-865-01	6-Aug-03	0.69 H		12 H	12 H	73 DH	<2 DH	150 DH	370 H	470 H	8 H

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
W-865-01	17-Nov-03		32								
W-865-01	17-Nov-03	0.3		4	14	73 D	<2 DH	150 DH	360 H	480 H	8.1
W-865-01	3-Mar-04		48								
W-865-01	3-Mar-04	0.15		26	10	76 D	<2 DH	120 DH	400 H	490 H	8.1
W-865-01	17-May-05		42								
W-865-01	17-May-05	0.15		3.7	1.8	28	<10 HLO	150 H	290 D	330 H	8
W-865-02	29-Mar-00	0.3		35	17 D	20	<1	90	320 D	330	7.7
W-865-02	28-Aug-01		<0.2								
W-865-02	28-Aug-01	0.23 L		28 D	20 D	15	<1 H	90 H	280 H	360 H	7.2
W-865-02	31-Oct-01		78								
W-865-02	31-Oct-01	0.21 L		22	16 DL	14 L	<1 H	90 H	290 DH	360 H	8 H
W-865-02	31-Jan-02		<0.2								
W-865-02	31-Jan-02	0.53 F		28	23 DF	15 L	<1 H	90 H	300 H	390	7.5
W-865-02	23-May-02		81								
W-865-02	23-May-02	0.57		38	25	20	<1 H	90 H	300 H	380 H	7.7
W-865-02	31-Jul-02		69								
W-865-02	31-Jul-02	0.45 F		36 F	22 DF	17	<1	90	320 H	390 H	7.6
W-865-02	19-Feb-03		84								
W-865-02	19-Feb-03	0.46		41	26 D	21	<1 H	90 H	300	370	7.6
W-865-02	12-Jun-03		81								
W-865-02	12-Jun-03	0.47 H		41 H	27 DH	21 H	<1 H	100 H	290 H	370 H	7.6 H
W-865-02	6-Aug-03		80								
W-865-02	6-Aug-03	0.73 H		43 H	26 DH	26 H	<2 DH	90 DH	300 H	360 H	7.4 H
W-865-02	17-Nov-03		85								
W-865-02	17-Nov-03	0.38		51 D	27 D	22	<1 H	90 H	300 H	360 H	7.6
W-865-02	24-Feb-04		83								
W-865-02	24-Feb-04	0.22		34	25 D	10	<1	90	280	350 H	7.7
W-865-03	29-Sep-00	0.49		49 D	42 D	28	<1	130	400	510	7.8
W-865-03	14-Aug-01		<0.2								
W-865-03	14-Aug-01	0.56		40 D	42 D	26	<1 H	130 H	360 H	550 H	7.9
W-865-03	30-Oct-01		63								
W-865-03	30-Oct-01	0.38 L		31	31 D	20 L	<1 H	140 H	360 H	520 H	8.3 H
W-865-03	31-Jan-02		<0.2								
W-865-03	31-Jan-02	0.74 F		32	35 DF	21 L	<1 H	130 H	380 H	560	7.8
W-865-03	30-May-02		<1								
W-865-03	30-May-02	0.65		50 D	36 D	24	<1 H	140 H	370 H	560 H	7.8
W-865-03	31-Jul-02		62								
W-865-03	31-Jul-02	0.66 F		48 DF	40 DF	24	<1	130	390 H	580 H	7.7
W-865-03	19-Feb-03		66								
W-865-03	19-Feb-03	0.72		55 D	52 D	31	<1 H	130 H	380	540	7.9
W-865-03	29-May-03		64								
W-865-03	29-May-03	0.7		49 D	50 D	20 D	<1 H	130 H	380 HO	550 H	7.9
W-865-03	6-Aug-03		65								
W-865-03	6-Aug-03	0.92 H		66 DH	52 DH	35 DH	<1 H	140 H	400 H	540 H	7.9 H
W-865-03	17-Nov-03		68								
W-865-03	17-Nov-03	0.6		65 D	54 D	33 D	<2 DH	130 DH	380 H	540 H	7.9
W-865-03	3-Mar-04		68								

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
W-865-03	3-Mar-04	0.66		42 D	52 D	35 D	<2 DH	120 DH	360 H	550 H	7.8
W-865-03	20-May-05		62								
W-865-03	20-May-05	0.72		46 D	54 D	36 D	<10 HLO	130 H	380 H	560 H	8
W-865-04	28-Sep-00	0.3		<0.1	36 D	48 D	<1	190	380	580	7.8
W-865-04	14-Aug-01		<0.2								
W-865-04	14-Aug-01	0.45		0.4	45 D	60 D	<1 H	160 H	360 H	580 H	8.1
W-865-04	30-Oct-01		27								
W-865-04	30-Oct-01	0.29 L		0.4	31 D	40 DL	<1 H	160 H	380 H	560 H	8.4 H
W-865-04	31-Jan-02		<0.2								
W-865-04	31-Jan-02	0.53 F		<0.1	37 DF	50 DL	<1 H	160 H	360 H	580	8.1
W-865-04	23-May-02		28								
W-865-04	23-May-02	0.52		11	46	62 D	<1 H	160 H	350 H	630 H	8.2
W-865-04	31-Jul-02		28								
W-865-04	31-Jul-02	0.47 F		11 F	39 DF	51 D	<1	160	360 H	590 H	8.1
W-865-04	19-Feb-03		29								
W-865-04	19-Feb-03	0.48		5.6	60 D	72 D	<1 H	160 H	360	570	8.3
W-865-04	29-May-03		29								
W-865-04	29-May-03	0.56		<0.1	40 D	60 D	<1 H	160 H	360 HO	580 H	8.2
W-865-04	6-Aug-03		29								
W-865-04	6-Aug-03	0.7 H		30 DH	45 DH	68 DH	<1 H	160 H	340 H	560 H	8.1 H
W-865-04	17-Nov-03		30								
W-865-04	17-Nov-03	0.37		18	48 D	70 D	<2 DH	150 DH	370 H	570 H	8.2
W-865-04	24-Feb-04		30								
W-865-04	24-Feb-04	0.24		3.3	45 D	45 D	<2 D	150 D	340	580 H	8.3
W-865-05	10-Apr-00	0.3		60 D	59 D	60 D	<1 LO	140	380	680	7.6
W-865-05	30-Mar-01		65								
W-865-05	11-Jun-01	0.28 H		33 L	32 DL	32 L	<1	160	460	690 H	7.9
W-865-05	22-Aug-01		78								
W-865-05	22-Aug-01	0.24 H		45 DH	55	50 H	<5 D	191 D	446 D	670	7.83
W-865-05	22-Aug-01		<0.2								
W-865-05	22-Aug-01	0.21 LO		38	38 DL	30 DL	<1 H	370 H	300 DH	700 DH	8.2 H
W-865-05	31-Oct-01		77								
W-865-05	31-Oct-01	0.36 H		56 DH	52 H	49 H	<5 DH	158 DH	426 D	622	7.82
W-865-05	31-Oct-01		74								
W-865-05	31-Oct-01	0.18 L		32	34 DL	30 DL	<1 H	150 H	430 H	620 H	8.2 H
W-865-05	28-Feb-02		<1								
W-865-05	28-Feb-02	0.42 L		41	39 DL	42 D	<1 H	150 H	460 H	700 H	7.8 H
W-865-05	30-May-02		<1								
W-865-05	30-May-02	0.48		55 D	40 D	42 D	<1 H	140 H	430 H	640 H	7.6
W-865-05	31-Jul-02		73								
W-865-05	31-Jul-02	0.5 F		53 DF	45 DF	40 D	<1	140	450 H	660 H	7.7
W-865-05	20-Jun-03		77								
W-865-05	20-Jun-03	0.48 FH		49 DH	51 DFH	40 DH	<1 H	130 H	490 FH	610 H	7.9 H
W-865-05	15-Sep-03		80								
W-865-05	15-Sep-03	0.72 H		27 DH	57 DH	54 DH	<1 H	260 H	410 H	600 H	7.6 H
W-865-05	2-Dec-03		93								
W-865-05	2-Dec-03	0.34		57 D	48 D	40 D	<2 DH	130 DH	410 DH	570 H	7.7

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
W-865-05	2-Mar-04		77								
W-865-05	2-Mar-04	0.31		49 D	56 D	50 D	<2 D	130 D	410 H	600 H	7.6
W-865-07	29-Sep-00	0.56		62 D	44 D	31	<1	130	440	590	7.6
W-865-07	14-Aug-01		<0.2								
W-865-07	14-Aug-01	0.78		59 D	47 D	20 D	<1 H	130 H	430 H	590 H	7.3
W-865-07	30-Oct-01		70								
W-865-07	30-Oct-01	0.58 L		42 D	34 D	21 L	<1 H	140 H	440 H	570 H	8.2 H
W-865-07	31-Jan-02		<0.2								
W-865-07	31-Jan-02	0.62 F		61	37 DF	20 L	<1 H	130 H	440 H	600	7.9
W-865-07	23-May-02		72								
W-865-07	23-May-02	0.84		80 D	47	30	<1 H	130 H	440 H	340 H	7.8
W-865-07	31-Jul-02		66								
W-865-07	31-Jul-02	0.69 F		66 DF	41 DF	29 D	<1	130	440 H	650 H	7.3
W-865-07	19-Feb-03		73								
W-865-07	19-Feb-03	0.8		75 D	46 D	32	<1 H	140 H	440	600	8.1
W-865-07	29-May-03		70								
W-865-07	29-May-03	0.79		76	50 D	30 D	<1 H	130 H	440 HO	620 H	7.6
W-865-07	6-Aug-03		67								
W-865-07	6-Aug-03	1.1 H		88 DH	54 DH	54 DH	<1 H	130 H	460 H	610 H	7.4 H
W-865-07	2-Dec-03		71								
W-865-07	2-Dec-03	0.64		87 D	46 D	31	<2 DH	120 DH	440 H	590 H	7.6
W-865-07	24-Feb-04		74								
W-865-07	24-Feb-04	0.27		79 D	48 D	13	<1	130	460	620 H	7.9
W-865-07	13-May-05		70								
W-865-07	13-May-05	0.76		76 D	47 D	42 D	<10 HLO	130 H	420 H	630 H	7.5
W-865-1802	27-Jun-03	0.59 H		27 DH	40 D	61 D	<5 H	130 H		550	7.66
W-865-1802	22-Dec-03	0.44		18	30 D	60 D	<1 H	120 H	400	530 H	7.8
W-865-1802	1-Mar-04	0.5		25	35 D	70 D	<2 DH	120 DH	390 H	530 H	7.8
W-865-1802	9-Jun-04			5.9							
W-865-1802	9-Jun-04		60								
W-865-1802	9-Jun-04	0.45 H		26	30 D	52 DH	<1 H	98 H	350 H	530 H	8
W-865-1802	10-May-05			32 D							
W-865-1802	10-May-05		64								
W-865-1802	10-May-05	0.67 H		30 D	41 D	63 DH	<10 HLO	130 H	360	500 H	7.7
W-865-1803	26-Jun-03	0.54 H		32 H	39 DH	50 DH	<1 H	150 H	410 H	610 H	7.7 H
W-865-1803	3-Mar-04	0.49		30	48 D	78 D	<2 DH	140 DH	440 H	600 H	7.7
W-865-1803	8-Jun-04		64								
W-865-1803	8-Jun-04	0.43 H		32	40 D	48 DH	<2 DH	150 DH	430	620 H	7.7
W-865-1803	8-Jun-04			7.2							
W-865-1803	10-Mar-05	0.43		30	40 D	67 D	<10 HLO	150 H	430 H	600 H	7.6
W-865-1803	17-May-05		63								
W-865-1803	17-May-05	0.57		30	41 D	71 D	<10 HLO	150 H	410 D	580 H	7.7
W-865-1804	23-Jun-03	0.85 H		70 DH	65 DH	50 DHL	<1 H	150 H	490 H	720 H	7.9 H
W-865-1804	9-Jun-04		59								
W-865-1804	9-Jun-04			33							
W-865-1804	10-Mar-05	0.52		29	49 D	77 D	<10 HLO	150 H	430 H	660 H	7.9
W-865-1804	17-May-05		56								

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
W-865-1804	17-May-05	0.53		26	52 D	80 D	<10 HLO	150 H	450	620 H	7.8
W-865-2002	21-Sep-04		79								
W-865-2002	21-Sep-04			47 D							
W-865-2002	17-Nov-04		79								
W-865-2002	17-Nov-04			31							
W-865-2002	10-Mar-05		79 J								
W-865-2002	10-Mar-05			32							
W-865-2002	10-Mar-05	0.34			21 D	22	<10 HLO	93 H	260 H	370 H	7.4
W-865-2002	19-May-05		81								
W-865-2002	19-May-05	0.37			29 D	22 D	<10 HLO	140 H	380 H	500 H	7.4
W-865-2002	19-Sep-05			40 D							
W-865-2002	8-Nov-05			39							
W-865-2002	19-Jan-06			35 D							
W-865-2003	16-Sep-04		75								
W-865-2003	16-Sep-04			33							
W-865-2003	17-Nov-04		73								
W-865-2003	17-Nov-04			34 D							
W-865-2003	10-Mar-05		76 J								
W-865-2003	10-Mar-05			37							
W-865-2003	10-Mar-05	0.31			26 D	31 D	<10 HLO	100 H	310 H	430 H	7.3
W-865-2003	19-May-05		79								
W-865-2003	19-May-05	0.36			30 D	29 D	<10 HLO	100 H	330 H	430 H	7.3
W-865-2003	19-Sep-05			44 D							
W-865-2003	8-Nov-05			43 D							
W-865-2003	19-Jan-06			42 D							
W-865-2004	30-Mar-05		73								
W-865-2004	30-Mar-05	0.49 H			51 D	30 DF	<10 HLO	100 H	370	530 H	7.6
W-865-2004	25-May-05		74 L								
W-865-2004	25-May-05	0.33			53 D	22 L	<10 H	120 H	370 H	510 H	7.5
W-865-2004	24-Aug-05			60 D							
W-865-2004	8-Nov-05			59 D							
W-865-2004	15-Mar-06			64 DL							
W-865-2005	21-Sep-04		69								
W-865-2005	21-Sep-04			37							
W-865-2005	17-Nov-04		68								
W-865-2005	17-Nov-04			31 D							
W-865-2005	24-Mar-05		68								
W-865-2005	24-Mar-05			37							
W-865-2005	24-Mar-05	0.66			42 D	51 D	<10 HLO	130 H	390 H	550 H	7.9
W-865-2005	16-May-05		69								
W-865-2005	16-May-05			38							
W-865-2005	16-May-05	0.57			42 D	56 D	<10 H	140 H	400 H	570 H	7.8
W-865-2005	31-Aug-05			37 D							
W-865-2005	7-Dec-05			34 D							
W-865-2121	30-Mar-05		75								
W-865-2121	30-Mar-05			50 D							
W-865-2121	30-Mar-05	0.52 H			35 D	29 DF	<10 HLO	72 H	320	420 H	7.6

Table A-21. Ground and surface water analyses for anions, TDS, specific conductance, and pH in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Fluoride (mg/L)	Silica (mg/L)	Nitrate as (NO3) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Carbonate (mg/L)	Bicar-bonate (mg/L)	TDS (mg/L)	Specific Conductance (µmhos/cm)	pH Units
W-865-2121	24-May-05		75								
W-865-2121	24-May-05	0.35		48 D	33 D	19 D	<10 H	97 H	340	430 H	7.5
W-865-2121	31-Aug-05			53 D							
W-865-2121	8-Nov-05			50 D							
W-865-2121	15-Feb-06			47 D							
W-865-2133	21-Feb-06		64								
W-865-2133	21-Feb-06			1.1							
W-865-2133	21-Feb-06	0.2			32 DL	60 D	<10 H	150 H	300	560 H	7.9
W-896-1806	14-Nov-05			<0.5							
W-896-1806	27-Mar-06	0.3 L			11 L	13 L	<10 L	63	230	270 H	7.3 H
W-PIT1-01	25-May-99			110 DS							
W-PIT1-01	21-Dec-00	0.6 H		66 D	76 D	12	<1 H	180 H	550 DH	830 H	8
W-PIT1-01	13-Mar-01	0.73 H		84 DH	100 DH	12 DH	<1 H	190 H	540 D	860 H	8.1 H
W-PIT1-02	21-Mar-01		<0.2								
W-PIT1-02	21-Mar-01	1.7 H		35 DH	27 DHL	32 DH	<1	150	750 D	530 LO	8

Notes:

mg/L = Milligrams per liter.

D = Analysis performed at a secondary dilution or concentration.
F = Analyte found in field blank, trip blank, or equipment blank.
H = Sample analyzed outside of holding time, sample results should be evaluated.
J = Analyte was postively identified; the associated numerical value is approximate concentration of the analyte.
L = Spike accuracy not within control limits.
O = Duplicate spike or sample precision not within control limits.
P = Indicates that the absence of a data qualifier flag does not mean that the data does not need qualification, but that the implementation of electronic data qualifier flags was not yet established.

pH = A measure of the acidity or alkalinity of an aqueous solution.
S = Analytical results for this sample are suspect.
TDS = Total dissolved solids.
µmhos/cm = Micro ohms per centimeter.

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-02A	28-Jan-88	<192±0
K1-02A	4-Apr-88	<252±0
K1-02A	7-Jul-88	<332±0
K1-02A	14-Oct-88	<210±0
K1-02A	25-Jan-89	<210±0
K1-02A	5-Apr-89	<332±0
K1-02A	13-Jul-89	<211±0
K1-02A	18-Oct-89	<197±0
K1-02A	9-Jan-90	<500±0 P
K1-02A	20-Apr-90	<600±0 P
K1-02A	20-Apr-90	<540±0 P
K1-02A	12-Jul-90	<500±0 P
K1-02A	12-Jul-90	<200±0 P
K1-02A	3-Oct-90	<314±0 P
K1-02A	3-Oct-90	<200±0 P
K1-02A	23-Jan-91	<200±0 P
K1-02A	8-Apr-91	<105±105 P
K1-02A	8-Apr-91	54.91±103.7 P
K1-02A	17-Jul-91	0±108.8 P
K1-02A	17-Oct-91	<130.08±94.96 P
K1-02A	30-Jan-92	<127.31±92.02 P
K1-02A	30-Apr-92	<122.54±90.45 P
K1-02A	22-Jul-92	<52.067±65.58 P
K1-02A	7-Oct-92	<195±121
K1-02A	12-Mar-93	<166±96.8
K1-02A	20-Apr-93	<41.2±100
K1-02A	23-Aug-93	<44.5±100
K1-02A	9-Dec-93	<49.4±100
K1-02A	16-Feb-94	<52.3±100
K1-02A	2-May-94	<41.7±100
K1-02A	1-Aug-94	<45.7±100
K1-02A	21-Nov-94	<46.4±100
K1-02A	27-Jan-95	<37.2±100
K1-02A	30-May-95	<46.6±100
K1-02A	18-Aug-95	<49.7±100
K1-02A	7-Nov-95	<49.1±100
K1-02A	23-May-96	<40.8±100
K1-02A	7-Nov-96	<59.4±100
K1-02A	21-May-97	<28.9±100

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-02A	8-Dec-97	<31.3±0
K1-02A	24-Jun-98	<32.6±32.6
K1-02A	16-Dec-98	<61.1±50.2
K1-02A	16-Dec-98	<61±48.2
K1-02A	21-May-99	<50±39.7
K1-02A	2-Nov-99	<76.1±60.2 H
K1-02A	24-May-00	121±63.4
K1-02A	7-Dec-00	16800±1900
K1-02A	12-Feb-01	<100±51
K1-02A	12-Apr-01	<20.6±16.6 LO
K1-02A	12-Apr-01	<100±53
K1-02A	30-May-01	<100±59
K1-02A	5-Jun-02	<100±58
K1-02A	5-Jun-02	<100±57
K1-02A	28-Oct-02	109±64
K1-02A	28-Oct-02	<101±62
K1-02B	19-Jan-88	<192±0 P
K1-02B	4-Apr-88	<268±0 P
K1-02B	27-Jun-88	<192±0 P
K1-02B	25-Jul-88	<359±0 P
K1-02B	3-Oct-88	243±170 P
K1-02B	12-Jan-89	<210±0 P
K1-02B	10-Apr-89	<186±0 P
K1-02B	19-Jul-89	211±120 P
K1-02B	31-Jul-89	241±120 P
K1-02B	24-Oct-89	<291±0 P
K1-02B	10-Jan-90	400±340 P
K1-02B	5-Jul-90	415±222 P
K1-02B	9-Jul-90	600±300 P
K1-02B	1-Oct-90	700±220 P
K1-02B	8-Oct-90	800±200 P
K1-02B	4-Jan-91	870±140 P
K1-02B	4-Jan-91	960±140 P
K1-02B	14-Jan-91	800±200 P
K1-02B	3-Apr-91	300±100 P
K1-02B	3-Apr-91	300±100 P
K1-02B	8-Apr-91	1176±140.60001 P
K1-02B	8-Jul-91	1283±153.2 P
K1-02B	10-Jul-91	1327±611

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-02B	10-Jul-91	1221±167 P
K1-02B	10-Jul-91	1300±166 P
K1-02B	9-Oct-91	910±160 P
K1-02B	15-Oct-91	1389±146.5 P
K1-02B	8-Jan-92	<124±124 P
K1-02B	15-Jan-92	1850±154.89999 P
K1-02B	14-Apr-92	2015±161.2 P
K1-02B	16-Apr-92	2100±200 P
K1-02B	6-Jul-92	1700±140 P
K1-02B	25-Jul-92	1771±132.2 P
K1-02B	26-Oct-92	2280±171 P
K1-02B	11-Nov-92	2404±314 P
K1-02B	11-Nov-92	3100±200 P
K1-02B	29-Jan-93	900±100 P
K1-02B	2-Feb-93	2010±143 P
K1-02B	2-Feb-93	2070±144 P
K1-02B	2-Feb-93	2150±145 P
K1-02B	7-Apr-93	2540±4.2
K1-02B	14-Apr-93	3300±21
K1-02B	14-Apr-93	1360±70
K1-02B	26-Jul-93	1770±5.3
K1-02B	13-Oct-93	1030±42
K1-02B	31-Jan-94	3180±3.6
K1-02B	4-May-94	2710±3.6
K1-02B	4-May-94	2740±3.6
K1-02B	7-Jun-94	2460±42
K1-02B	3-Aug-94	3080±3.5
K1-02B	13-Oct-94	3320±3.4
K1-02B	21-Nov-94	2570±58
K1-02B	11-Jan-95	3720±3.1
K1-02B	10-May-95	3930±3.1 F
K1-02B	31-Jul-95	3430±3.6
K1-02B	11-Oct-95	3670±3.5
K1-02B	17-Jan-96	4400±3.3
K1-02B	10-Apr-96	3170±3.6
K1-02B	30-Jul-96	4030±3.3 F
K1-02B	9-Oct-96	3540±3.9
K1-02B	16-Jan-97	3910±2.6
K1-02B	3-Apr-97	5270±2.5

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-02B	1-Jul-97	5330±2.5
K1-02B	13-Oct-97	5990±2.2
K1-02B	8-Jan-98	5480±126
K1-02B	9-Apr-98	5130±123
K1-02B	14-Jul-98	5330±123
K1-02B	13-Oct-98	6600±191
K1-02B	12-Jan-99	8770±237
K1-02B	12-Jan-99	8530±234
K1-02B	15-Apr-99	8490±221
K1-02B	9-Jul-99	9000±236
K1-02B	7-Oct-99	8540±223
K1-02B	7-Feb-00	6560±174
K1-02B	18-Apr-00	6480±184
K1-02B	19-Jul-00	6410±200
K1-02B	19-Oct-00	5730±590
K1-02B	18-Jan-01	5450±560
K1-02B	18-Apr-01	5060±520
K1-02B	9-Jul-01	5050±520
K1-02B	22-Oct-01	5080±520
K1-02B	16-Jan-02	4560±470
K1-02B	16-Apr-02	4440±460
K1-02B	29-Jul-02	4060±420
K1-02B	4-Dec-02	4220±440
K1-02B	30-Jan-03	4100±420
K1-02B	17-Apr-03	4010±420
K1-02B	17-Apr-03	3910±410
K1-02B	8-Sep-03	4060±420
K1-02B	4-Nov-03	4080±420
K1-02B	28-Jan-04	4060±420
K1-02B	19-May-04	4110±430
K1-02B	19-May-04	4100±420
K1-02B	20-Jul-04	3960±410
K1-02B	22-Nov-04	4010±420
K1-02B	23-Feb-05	3880±400
K1-02B	12-Apr-05	3790±390
K1-02B	12-Apr-05	3820±400
K1-02B	6-Jul-05	3980±430
K1-02B	4-Oct-05	3980±410
K1-02B	4-Oct-05	3900±410

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-02B	3-Jan-06	3930±400
K1-03	19-Jan-88	<192±0 P
K1-03	4-Apr-88	<191±0 P
K1-03	25-Jul-88	<232±0 P
K1-03	4-Oct-88	291±180 P
K1-03	12-Jan-89	<210±0 P
K1-03	11-Apr-89	<186±0 P
K1-03	24-Jul-89	<179±0 P
K1-03	24-Oct-89	<265±0 P
K1-03	10-Jan-90	<500±0 P
K1-03	5-Jul-90	<200±0 P
K1-03	9-Jul-90	<500±0 P
K1-03	1-Oct-90	<320±0 P
K1-03	8-Oct-90	<200±0 P
K1-03	8-Oct-90	<200±0 P
K1-03	4-Jan-91	<200±0 P
K1-03	14-Jan-91	<200±0 P
K1-03	3-Apr-91	<200±0 P
K1-03	8-Apr-91	167.5±106.8 P
K1-03	8-Jul-91	16.76±105.4 P
K1-03	10-Jul-91	<500±0
K1-03	10-Jul-91	<119.7±119.7 P
K1-03	9-Oct-91	<100±100 P
K1-03	15-Oct-91	<129.17±93.41 P
K1-03	15-Jan-92	<127.9±94.55 P
K1-03	14-Apr-92	<105.55±91.02 P
K1-03	16-Apr-92	<119±88 P
K1-03	25-Jul-92	95.99±70.62 P
K1-03	27-Oct-92	<115±94 P
K1-03	13-Nov-92	261±209 P
K1-03	13-Nov-92	<186±186 P
K1-03	2-Feb-93	<106±77.6
K1-03	7-Apr-93	135±33.8
K1-03	14-Apr-93	<160±50
K1-03	2-Jun-93	<160±50
K1-03	26-Jul-93	95.8±54.2
K1-03	13-Oct-93	<88±27.2
K1-03	13-Oct-93	<88.3±27.5
K1-03	31-Jan-94	159±30.5

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-03	4-May-94	149±30.5
K1-03	6-May-94	257±29 B
K1-03	3-Aug-94	147±30.8
K1-03	13-Oct-94	218±23.6
K1-03	18-Nov-94	<95±29.5
K1-03	11-Jan-95	172±27.3
K1-03	10-May-95	240±21.1 F
K1-03	31-Jul-95	209±28
K1-03	11-Oct-95	269±20.9
K1-03	11-Oct-95	230±23.9
K1-03	18-Jan-96	287±21.8 F
K1-03	10-Apr-96	297±19.1
K1-03	30-Jul-96	448±15.1 F
K1-03	10-Oct-96	405±18.7
K1-03	16-Jan-97	483±9.3
K1-03	3-Apr-97	474±11.3
K1-03	2-Jul-97	514±9.9
K1-03	14-Oct-97	525±9.1
K1-03	8-Jan-98	547±51.4
K1-03	9-Apr-98	585±50.9
K1-03	9-Apr-98	578±50.9
K1-03	15-Jul-98	556±52.8
K1-03	13-Oct-98	679±76.9
K1-03	4-Dec-98	759±80.9
K1-03	11-Dec-98	694±79.7
K1-03	12-Jan-99	553±95.7
K1-03	15-Apr-99	689±77.3
K1-03	9-Jul-99	704±94
K1-03	6-Oct-99	787±97.2
K1-03	7-Feb-00	665±66.8
K1-03	18-Apr-00	587±76.5
K1-03	19-Jul-00	710±82.6
K1-03	23-Oct-00	645±100
K1-03	23-Oct-00	723±110
K1-03	18-Jan-01	644±94
K1-03	18-Apr-01	622±93
K1-03	9-Jul-01	634±94
K1-03	9-Jul-01	632±94
K1-03	22-Oct-01	977±120

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-03	16-Jan-02	654±92
K1-03	16-Apr-02	666±95
K1-03	29-Jul-02	649±97
K1-03	4-Dec-02	668±100
K1-03	30-Jan-03	600±90
K1-03	17-Apr-03	523±91
K1-03	24-Jul-03	672±96
K1-03	4-Nov-03	616±96
K1-03	28-Jan-04	716±99
K1-03	28-Jan-04	698±97
K1-03	20-May-04	777±110
K1-03	19-Jul-04	663±92
K1-03	30-Nov-04	803±110
K1-03	22-Feb-05	824±110
K1-03	13-Apr-05	768±100
K1-03	28-Jul-05	918±120
K1-03	4-Oct-05	817±110
K1-03	3-Jan-06	891±100
K1-04	19-Jan-88	<192±0 P
K1-04	4-Apr-88	<232±0 P
K1-04	25-Jul-88	<290±0 P
K1-04	6-Oct-88	<357±0 P
K1-04	24-Jan-89	<210±0 P
K1-04	24-Jan-89	<210±0 P
K1-04	1-Feb-89	<219±0 P
K1-04	11-Apr-89	<200±0 P
K1-04	19-Jul-89	<186±0 P
K1-04	24-Oct-89	<197±0 P
K1-04	10-Jan-90	<500±0 P
K1-04	5-Jul-90	<200±0 P
K1-04	9-Jul-90	<500±0 P
K1-04	1-Oct-90	<315±0 P
K1-04	8-Oct-90	<200±0 P
K1-04	4-Jan-91	<200±0 P
K1-04	14-Jan-91	<200±0 P
K1-04	14-Jan-91	<200±0 P
K1-04	14-Jan-91	<200±0 P
K1-04	3-Apr-91	<200±0 P
K1-04	8-Apr-91	66.93±101.7 P

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-04	9-Jul-91	0±96.45 P
K1-04	10-Jul-91	<500±0
K1-04	10-Jul-91	<120.4±120.4 P
K1-04	9-Oct-91	<100±100 P
K1-04	15-Oct-91	<128.77±93.51 P
K1-04	15-Jan-92	<123.98±89.43 P
K1-04	14-Apr-92	<99.834±82.14 P
K1-04	16-Apr-92	<120±88 P
K1-04	25-Jul-92	<48.493±61.92 P
K1-04	25-Jul-92	<147.61±88.26 P
K1-04	27-Oct-92	<114±87.5 P
K1-04	13-Nov-92	697±226 S
K1-04	13-Nov-92	<188±188 P
K1-04	2-Feb-93	<107±77.4
K1-04	7-Apr-93	<40.9±100
K1-04	14-Apr-93	<170±50
K1-04	26-Jul-93	<49.2±100
K1-04	26-Jul-93	<45.5±100
K1-04	13-Oct-93	<91.5±27.3
K1-04	4-Nov-93	<48.3±100
K1-04	31-Jan-94	<39.2±100
K1-04	4-May-94	<40.3±100
K1-04	6-May-94	<88.1±27.3
K1-04	3-Aug-94	<38.2±100
K1-04	3-Aug-94	<39.7±100
K1-04	13-Oct-94	<44.5±100
K1-04	18-Nov-94	<95±28.2
K1-04	11-Jan-95	<39.9±100
K1-04	10-May-95	<42.3±100
K1-04	31-Jul-95	<50.3±100
K1-04	11-Oct-95	<46.2±100
K1-04	18-Jan-96	<52.8±100
K1-04	11-Apr-96	<47.1±100
K1-04	31-Jul-96	<55.9±100
K1-04	31-Jul-96	<54.5±100
K1-04	10-Oct-96	<62.9±100
K1-04	16-Jan-97	<30±100
K1-04	3-Apr-97	<36.5±100
K1-04	2-Jul-97	<31.7±100

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-04	14-Oct-97	<29.2±100
K1-04	8-Jan-98	<33.9±33.9
K1-04	9-Apr-98	<32.4±32.4
K1-04	15-Sep-98	<37.2±37.2
K1-04	14-Oct-98	<61.6±51.2
K1-04	13-Jan-99	<96.5±74.1
K1-04	14-Apr-99	<58.9±48.2
K1-04	9-Jul-99	<91.8±75.2
K1-04	6-Oct-99	<89.9±74.6
K1-04	7-Feb-00	54.7±41.2
K1-04	18-Apr-00	<71.7±58.8
K1-04	18-Apr-00	<68.1±54.9
K1-04	19-Jul-00	<64.5±52
K1-04	23-Oct-00	<107±67
K1-04	18-Jan-01	<100±58
K1-04	23-Apr-01	<100±57 E
K1-04	10-Jul-01	<100±57
K1-04	22-Oct-01	<105±63
K1-04	16-Jan-02	229±61
K1-04	16-Jan-02	<100±59 E
K1-04	16-Apr-02	141±61
K1-04	29-Jul-02	<102±62
K1-04	29-Jul-02	<100±62
K1-04	5-Dec-02	152±60
K1-04	29-Jan-03	<109±68
K1-04	29-Jan-03	127±62
K1-04	18-Apr-03	<105±64
K1-04	24-Jul-03	136±60
K1-04	18-Nov-03	178±63
K1-04	18-Nov-03	186±63
K1-04	29-Jan-04	156±62
K1-04	11-May-04	<100±53
K1-04	19-Jul-04	<200±55
K1-04	30-Nov-04	133±60
K1-04	24-Feb-05	167±61
K1-04	12-Apr-05	127±57
K1-04	1-Aug-05	117±57
K1-04	5-Oct-05	289±69
K1-04	10-Jan-06	189±59

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-05	21-Jan-88	<236±0 P
K1-05	4-Apr-88	<215±0 P
K1-05	15-Jul-88	<232±0 P
K1-05	6-Oct-88	<210±0 P
K1-05	11-Apr-89	<201±0 P
K1-05	19-Jul-89	<262±0 P
K1-05	25-Oct-89	<500±0 P
K1-05	11-Jan-90	<500±0 P
K1-05	5-Jul-90	<200±0 P
K1-05	10-Jul-90	<500±0 P
K1-05	10-Jul-90	<500±0 P
K1-05	1-Oct-90	<326±0 P
K1-05	9-Oct-90	<200±0 P
K1-05	4-Jan-91	<200±0 P
K1-05	15-Jan-91	<200±0 P
K1-05	3-Apr-91	<200±0 P
K1-05	9-Apr-91	80.78±105 P
K1-05	9-Jul-91	0±94.45 P
K1-05	10-Jul-91	<500±0
K1-05	10-Jul-91	<117.5±117.5 P
K1-05	9-Oct-91	<100±100 P
K1-05	16-Oct-91	<130.22±92.63 P
K1-05	16-Jan-92	<123.63±88.47 P
K1-05	14-Apr-92	<109.08±87.65 P
K1-05	16-Apr-92	<119±88 P
K1-05	25-Jul-92	<145.03±88.04 P
K1-05	27-Oct-92	<113±88.2 P
K1-05	13-Nov-92	296±209 P
K1-05	13-Nov-92	<189±189 P
K1-05	2-Feb-93	<109±83.4
K1-05	7-Apr-93	<41.1±100
K1-05	14-Apr-93	<170±50
K1-05	14-Apr-93	<170±50
K1-05	26-Jul-93	<48.5±100
K1-05	13-Oct-93	<91.5±27.4
K1-05	4-Nov-93	<49.1±100
K1-05	31-Jan-94	<42.2±100
K1-05	4-May-94	<40.7±100
K1-05	6-May-94	<86.6±26.7

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-05	5-Aug-94	<39.6±100
K1-05	13-Oct-94	<44±100
K1-05	13-Oct-94	<43±100
K1-05	18-Nov-94	<95±28.1
K1-05	9-Jan-95	<40.7±100
K1-05	10-May-95	<42.1±100
K1-05	31-Jul-95	<50.9±100
K1-05	31-Jul-95	<48.9±100
K1-05	12-Oct-95	<53.1±100
K1-05	18-Jan-96	<52.7±100
K1-05	11-Apr-96	<47.9±100
K1-05	31-Jul-96	<44.9±100
K1-05	11-Oct-96	<62.7±100
K1-05	17-Jan-97	<28.9±100
K1-05	17-Jan-97	<28.6±100
K1-05	4-Apr-97	<37.2±100
K1-05	2-Jul-97	<32.1±100
K1-05	14-Oct-97	<30±100
K1-05	12-Jan-98	<34.3±34.3
K1-05	12-Jan-98	<34.3±34.3
K1-05	15-Apr-98	<32.9±32.9
K1-05	16-Jul-98	<34.9±34.9
K1-05	14-Oct-98	<60.8±49.7
K1-05	13-Jan-99	<97.1±72.8
K1-05	14-Apr-99	<58.6±46.8
K1-05	8-Jul-99	<90.4±76
K1-05	6-Oct-99	<90.1±72.1
K1-05	6-Oct-99	<89.2±70.9
K1-05	8-Feb-00	210±48.8
K1-05	8-Mar-00	<48.4±38.2
K1-05	16-Mar-00	<49.4±38.3
K1-05	19-Apr-00	<68.3±56.1
K1-05	19-Jul-00	89.6±55.8
K1-05	24-Oct-00	<106±64
K1-05	18-Jan-01	<100±54
K1-05	20-Apr-01	<100±58
K1-05	20-Apr-01	<100±57
K1-05	10-Jul-01	<100±59
K1-05	23-Oct-01	532±87

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-05	22-Jan-02	<100±54
K1-05	18-Apr-02	<100±56
K1-05	30-Jul-02	<100±58
K1-05	6-Dec-02	123±49
K1-05	29-Jan-03	<100±59
K1-05	18-Apr-03	<108±66
K1-05	24-Jul-03	194±62
K1-05	19-Nov-03	<100±59 E
K1-05	29-Jan-04	156±60
K1-05	13-Jul-04	<100±57
K1-05	13-Jul-04	143±60
K1-05	1-Dec-04	<100±58 E
K1-05	1-Mar-05	<100±55
K1-05	13-Apr-05	<100±56
K1-05	7-Jul-05	160±53
K1-05	7-Jul-05	191±55
K1-05	5-Oct-05	264±68
K1-05	5-Jan-06	166±63
K1-07	20-Jan-88	<192±0 P
K1-07	4-Apr-88	<216±0 P
K1-07	25-Jul-88	<268±0 P
K1-07	10-Oct-88	<300±0 P
K1-07	10-Oct-88	<210±0 P
K1-07	23-Jan-89	<210±0 P
K1-07	11-Apr-89	<186±0 P
K1-07	24-Jul-89	<236±0 P
K1-07	25-Oct-89	<500±0 P
K1-07	11-Jan-90	<500±0 P
K1-07	5-Jul-90	<200±0 P
K1-07	10-Jul-90	<500±0 P
K1-07	3-Oct-90	<314±0 P
K1-07	9-Oct-90	<200±0 P
K1-07	4-Jan-91	<200±0 P
K1-07	15-Jan-91	<200±0 P
K1-07	3-Apr-91	<200±0 P
K1-07	9-Apr-91	17.47±103.1 P
K1-07	9-Jul-91	0±97.43 P
K1-07	10-Jul-91	<500±0
K1-07	10-Jul-91	<120.5±120.5 P

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-07	9-Oct-91	<100±100 P
K1-07	16-Oct-91	<131.22±94.65 P
K1-07	16-Jan-92	<118.23±85.85 P
K1-07	16-Jan-92	<122.02±85.06 P
K1-07	14-Apr-92	<100.53±83.06 P
K1-07	16-Apr-92	<120±89 P
K1-07	25-Jul-92	<144.55±85.75 P
K1-07	26-Oct-92	<115±92.6 P
K1-07	26-Oct-92	<117±95.7 P
K1-07	13-Nov-92	261±209 P
K1-07	13-Nov-92	<186±186 P
K1-07	2-Feb-93	<105±77.7
K1-07	7-Apr-93	<41.5±100
K1-07	14-Apr-93	<170±50
K1-07	26-Jul-93	<47.9±100
K1-07	13-Oct-93	<91.9±27.2
K1-07	4-Nov-93	75.1±67.5
K1-07	31-Jan-94	<41.3±100
K1-07	11-Apr-94	<82.6±24.6
K1-07	4-May-94	<38.5±100
K1-07	5-Aug-94	<40.3±100
K1-07	13-Oct-94	<43.9±100
K1-07	18-Nov-94	<95±28.3
K1-07	9-Jan-95	<40±100
K1-07	11-May-95	<41.3±100
K1-07	31-Jul-95	84.1±69.8
K1-07	12-Oct-95	<60.3±100
K1-07	18-Jan-96	<62.3±100
K1-07	12-Apr-96	<41.6±100
K1-07	31-Jul-96	<43.2±100
K1-07	11-Oct-96	<61.4±100
K1-07	17-Jan-97	<28.8±100
K1-07	4-Apr-97	<36.4±100
K1-07	3-Jul-97	<32.6±100
K1-07	16-Oct-97	<34.7±100
K1-07	12-Jan-98	<35.3±35.3
K1-07	15-Apr-98	<33.1±33.1
K1-07	16-Jul-98	<34.1±34.1
K1-07	15-Oct-98	<60.7±48

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-07	14-Jan-99	<96.3±73
K1-07	12-Apr-99	<58.9±45.5
K1-07	6-Jul-99	<91.7±73.5
K1-07	8-Oct-99	<70.9±55.4
K1-07	8-Feb-00	<48.2±38.1
K1-07	8-Feb-00	<48.3±37.4
K1-07	19-Apr-00	<68.1±54.3
K1-07	20-Jul-00	<64.7±51.2
K1-07	25-Oct-00	<108±0
K1-07	22-Jan-01	<100±54
K1-07	23-Apr-01	<100±54
K1-07	10-Jul-01	<100±56
K1-07	23-Oct-01	<104±65
K1-07	23-Oct-01	252±72
K1-07	22-Jan-02	<100±55
K1-07	18-Apr-02	<100±54
K1-07	30-Jul-02	<100±56
K1-07	6-Dec-02	<100±46
K1-07	30-Jan-03	<100±58
K1-07	1-May-03	<100±58
K1-07	28-Aug-03	<100±56
K1-07	24-Nov-03	<100±55
K1-07	4-Feb-04	<100±60
K1-07	10-May-04	<100±50
K1-07	21-Jul-04	<100±53
K1-07	2-Dec-04	<100±54
K1-07	28-Feb-05	<100±53
K1-07	6-Apr-05	<100±56
K1-07	6-Jul-05	<100±49
K1-07	17-Oct-05	<100±56
K1-07	17-Jan-06	<100±59
K1-08	21-Jan-88	<192±0 P
K1-08	6-Apr-88	<330±0 P
K1-08	15-Jul-88	<382±0 P
K1-08	6-Oct-88	<232±0 P
K1-08	24-Jan-89	<210±0 P
K1-08	4-May-89	<186±0 P
K1-08	24-Jul-89	<179±0 P
K1-08	25-Oct-89	<500±0 P

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-08	11-Jan-90	<500±0 P
K1-08	5-Jul-90	<200±0 P
K1-08	10-Jul-90	<500±0 P
K1-08	2-Oct-90	<315±0 P
K1-08	9-Oct-90	<200±0 P
K1-08	4-Jan-91	<200±0 P
K1-08	15-Jan-91	<200±0 P
K1-08	3-Apr-91	<200±0 P
K1-08	10-Apr-91	53.41±109.8 P
K1-08	10-Apr-91	50.29±110.2 P
K1-08	9-Jul-91	3.01±94.59 P
K1-08	10-Jul-91	<500±0
K1-08	10-Jul-91	<117.8±117.8 P
K1-08	9-Oct-91	<100±100 P
K1-08	16-Oct-91	<130.91±94.94 P
K1-08	16-Jan-92	<121.37±91.06 P
K1-08	14-Apr-92	<105.57±87.36 P
K1-08	16-Apr-92	<118±90 P
K1-08	25-Jul-92	<141.92±83.26 P
K1-08	27-Oct-92	<115±91.7 P
K1-08	13-Nov-92	261±209 P
K1-08	13-Nov-92	<194±194 P
K1-08	2-Feb-93	<104±76.3
K1-08	7-Apr-93	<41.9±100
K1-08	14-Apr-93	<170±50
K1-08	14-Apr-93	<170±50
K1-08	26-Jul-93	<49±100
K1-08	13-Oct-93	<91.5±27.7
K1-08	4-Nov-93	<49.2±100
K1-08	31-Jan-94	46.1±95.4
K1-08	31-Jan-94	<42.7±100
K1-08	11-Apr-94	<92.2±28
K1-08	4-May-94	<39.1±100
K1-08	5-Aug-94	<40.9±100
K1-08	13-Oct-94	<43.2±100
K1-08	18-Nov-94	<95±28.2
K1-08	9-Jan-95	<39.9±100
K1-08	9-Jan-95	<41±100
K1-08	11-May-95	<41±100

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-08	31-Jul-95	61.4±94.8
K1-08	12-Oct-95	<58.1±100
K1-08	18-Jan-96	<50.9±100
K1-08	12-Apr-96	<43±100
K1-08	12-Apr-96	<41.5±100
K1-08	31-Jul-96	<45.1±100
K1-08	11-Oct-96	<60.8±100
K1-08	11-Oct-96	<61.6±100
K1-08	17-Jan-97	<29.2±100
K1-08	4-Apr-97	<37.8±100
K1-08	3-Jul-97	<31.2±100
K1-08	3-Jul-97	<33.1±100
K1-08	16-Oct-97	<35.6±100
K1-08	12-Jan-98	<34.4±34.4
K1-08	15-Apr-98	<33.2±33.2
K1-08	15-Apr-98	127±78
K1-08	16-Jul-98	<39.7±39.7
K1-08	16-Jul-98	<34.4±34.4
K1-08	15-Oct-98	<61.3±49.6
K1-08	14-Jan-99	<96.9±73.3
K1-08	12-Apr-99	<59.2±48.6
K1-08	7-Jul-99	<91±74.2
K1-08	8-Oct-99	<70.1±58.9
K1-08	9-Feb-00	<68.8±53.3
K1-08	19-Apr-00	99.9±59.2
K1-08	20-Jul-00	145±58.6
K1-08	24-Oct-00	171±69
K1-08	22-Jan-01	106±58
K1-08	23-Apr-01	151±60
K1-08	11-Jul-01	136±62
K1-08	23-Oct-01	123±67
K1-08	22-Jan-02	125±58
K1-08	18-Apr-02	287±67
K1-08	30-Jul-02	<100±63
K1-08	13-Dec-02	196±73
K1-08	7-Feb-03	155±64 E
K1-08	2-May-03	<100±60
K1-08	4-Sep-03	226±59
K1-08	24-Nov-03	244±63

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-08	4-Feb-04	197±66
K1-08	11-May-04	209±61
K1-08	21-Jul-04	164±58
K1-08	2-Dec-04	148±58
K1-08	2-Mar-05	124±56
K1-08	2-Mar-05	<100±56
K1-08	6-Apr-05	164±60
K1-08	6-Jul-05	168±55
K1-08	13-Oct-05	202±62
K1-08	18-Jan-06	189±63
K1-08	18-Jan-06	206±65
K1-09	21-Jan-88	<192±0 P
K1-09	6-Apr-88	<191±0 P
K1-09	15-Jul-88	<232±0 P
K1-09	6-Oct-88	<303±0 P
K1-09	24-Jan-89	<210±0 P
K1-09	4-May-89	<225±0 P
K1-09	24-Jul-89	<179±0 P
K1-09	25-Oct-89	<500±0 P
K1-09	11-Jan-90	<500±0 P
K1-09	11-Jan-90	<600±0 P
K1-09	5-Jul-90	<200±0 P
K1-09	10-Jul-90	<500±0 P
K1-09	11-Jul-90	<500±0 P
K1-09	11-Jul-90	<500±0 P
K1-09	1-Oct-90	<325±0 P
K1-09	9-Oct-90	<200±0 P
K1-09	4-Jan-91	<200±0 P
K1-09	15-Jan-91	<200±0 P
K1-09	3-Apr-91	<200±0 P
K1-09	9-Apr-91	31.57±104.7 P
K1-09	9-Jul-91	0±95.18 P
K1-09	10-Jul-91	<500±0
K1-09	10-Jul-91	<123.6±123.6 P
K1-09	9-Oct-91	<100±100 P
K1-09	16-Oct-91	<133.75±94.47 P
K1-09	16-Jan-92	<123.45±91.02 P
K1-09	14-Apr-92	<104.11±83.77 P
K1-09	14-Apr-92	<104.48±84.97 P

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-09	16-Apr-92	<120±90 P
K1-09	25-Jul-92	<138.47±83.03 P
K1-09	27-Oct-92	<116±92 P
K1-09	13-Nov-92	<348±348
K1-09	13-Nov-92	<185±185 P
K1-09	2-Feb-93	<108±80.7
K1-09	7-Apr-93	43.5±96.7
K1-09	14-Apr-93	<160±50
K1-09	26-Jul-93	<47±100
K1-09	13-Oct-93	<88±26.6
K1-09	4-Nov-93	<49.1±100
K1-09	31-Jan-94	<41.9±100
K1-09	4-May-94	<38.7±100
K1-09	6-May-94	<87.2±27.1
K1-09	6-May-94	<250±140
K1-09	5-Aug-94	<37.5±100
K1-09	13-Oct-94	51.7±87.1
K1-09	18-Nov-94	<95±28.3
K1-09	9-Jan-95	<40.4±100
K1-09	10-May-95	<230±180
K1-09	10-May-95	<41±100
K1-09	31-Jul-95	<50.2±100
K1-09	12-Oct-95	<59.5±100
K1-09	18-Jan-96	109±58.8 F
K1-09	18-Jan-96	104±61.6
K1-09	12-Apr-96	<41.5±100
K1-09	31-Jul-96	<45.7±100
K1-09	11-Oct-96	<62.1±100
K1-09	17-Jan-97	<28.8±100
K1-09	4-Apr-97	<37.1±100
K1-09	4-Apr-97	<37.4±100
K1-09	3-Jul-97	<32.9±100
K1-09	16-Oct-97	<35.8±100
K1-09	16-Oct-97	<36.6±100
K1-09	17-Mar-98	<28.3±28.3
K1-09	15-Apr-98	<46±46
K1-09	16-Jul-98	<34.3±34.3
K1-09	15-Oct-98	<60.9±47.7
K1-09	15-Oct-98	<63.7±49.7

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
K1-09	13-Jan-99	<98.4±73.2
K1-09	13-Apr-99	<58.9±47.6
K1-09	13-Apr-99	<59±48
K1-09	7-Jul-99	<90.4±70.3
K1-09	8-Oct-99	<70.5±57.1
K1-09	9-Feb-00	<68.7±55.9
K1-09	19-Apr-00	<69±56
K1-09	20-Jul-00	<65.4±54
K1-09	20-Jul-00	<64.7±53.5
K1-09	24-Oct-00	<110±67
K1-09	22-Jan-01	<100±55
K1-09	20-Apr-01	<100±58
K1-09	11-Jul-01	<100±58
K1-09	23-Oct-01	<103±62
K1-09	22-Jan-02	<100±56
K1-09	18-Apr-02	<100±58
K1-09	30-Jul-02	<100±59
K1-09	6-Dec-02	128±62
K1-09	31-Jan-03	<100±60
K1-09	2-May-03	<100±57
K1-09	8-Sep-03	<100±58 E
K1-09	25-Nov-03	139±57
K1-09	4-Feb-04	152±65
K1-09	11-May-04	138±59
K1-09	20-Jul-04	<200±54
K1-09	6-Dec-04	165±57
K1-09	6-Dec-04	131±57
K1-09	24-Feb-05	113±60
K1-09	6-Apr-05	203±63
K1-09	1-Aug-05	162±59
K1-09	13-Oct-05	133±60
K1-09	19-Jan-06	150±49
W-865-01	30-Mar-99	<100±63.2
W-865-01	24-May-99	<100±50.2 L
W-865-01	24-May-99	<200±41
W-865-01	25-Aug-99	<100±56
W-865-01	9-Dec-99	<100±55
W-865-01	7-Mar-00	<100±54
W-865-01	21-Jul-00	<100±54

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
W-865-01	16-Nov-00	<100±51
W-865-01	26-Jan-01	<100±57
W-865-01	25-Apr-01	<100±55
W-865-01	14-Aug-01	<100±56
W-865-01	31-Oct-01	<100±58
W-865-01	31-Jan-02	<100±57
W-865-01	30-May-02	<100±57
W-865-01	31-Jul-02	<100±55
W-865-01	19-Feb-03	<103±61
W-865-01	29-May-03	<100±55
W-865-01	6-Aug-03	<100±55
W-865-01	17-Nov-03	<100±58
W-865-01	3-Mar-04	<100±58
W-865-01	5-May-04	<100±61
W-865-01	8-Sep-04	<100±54
W-865-01	3-Nov-04	<100±54
W-865-01	29-Jan-05	<100±57
W-865-01	17-May-05	<100±51
W-865-01	24-Aug-05	<100±55
W-865-01	19-Oct-05	<100±48
W-865-01	16-Jan-06	<100±64
W-865-02	29-Mar-00	<100±55
W-865-02	21-Jul-00	<100±46.5
W-865-02	21-Jul-00	<100±54
W-865-02	16-Nov-00	<100±52
W-865-02	30-Jan-01	<105±61
W-865-02	25-Apr-01	<100±50
W-865-02	25-Apr-01	<100±54
W-865-02	28-Aug-01	<100±58
W-865-02	31-Oct-01	<101±59
W-865-02	31-Jan-02	<100±58
W-865-02	23-May-02	<100±58
W-865-02	31-Jul-02	<100±55
W-865-02	19-Feb-03	<100±59
W-865-02	12-Jun-03	<200±92.5
W-865-02	12-Jun-03	<100±56
W-865-02	6-Aug-03	<100±55
W-865-02	17-Nov-03	<100±59
W-865-02	24-Feb-04	<100±51

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
W-865-02	24-Feb-04	<100±49
W-865-02	11-May-04	<100±51
W-865-02	8-Sep-04	<100±52
W-865-02	18-Nov-04	<100±48
W-865-02	29-Jan-05	<100±55
W-865-02	13-May-05	<200±55.5
W-865-02	13-May-05	<100±56
W-865-02	24-Aug-05	<100±55
W-865-02	10-Oct-05	<100±57
W-865-02	16-Jan-06	<200±120
W-865-02	16-Jan-06	<100±57
W-865-03	10-Apr-00	<137±82
W-865-03	29-Sep-00	<100±53
W-865-03	16-Nov-00	<100±52
W-865-03	30-Jan-01	<105±62
W-865-03	25-Apr-01	<100±55
W-865-03	14-Aug-01	<100±56
W-865-03	30-Oct-01	<100±57
W-865-03	31-Jan-02	<100±58
W-865-03	30-May-02	<101±59
W-865-03	31-Jul-02	<100±56
W-865-03	19-Feb-03	<100±60
W-865-03	29-May-03	<100±56
W-865-03	6-Aug-03	<100±55
W-865-03	17-Nov-03	<100±56
W-865-03	3-Mar-04	<100±60
W-865-03	5-May-04	<100±53
W-865-03	8-Sep-04	<100±51
W-865-03	2-Nov-04	<100±53
W-865-03	29-Jan-05	<100±55
W-865-03	20-May-05	<100±55
W-865-03	24-Aug-05	<100±54
W-865-03	19-Oct-05	<100±50
W-865-03	16-Jan-06	<100±41
W-865-04	10-Apr-00	<136±82
W-865-04	28-Sep-00	<100±51
W-865-04	16-Nov-00	<100±52
W-865-04	26-Jan-01	<100±57
W-865-04	25-Apr-01	<100±54

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
W-865-04	14-Aug-01	<100±59
W-865-04	30-Oct-01	<100±56
W-865-04	31-Jan-02	<100±59
W-865-04	23-May-02	<100±58
W-865-04	31-Jul-02	<100±55
W-865-04	19-Feb-03	<100±59
W-865-04	29-May-03	<100±56
W-865-04	6-Aug-03	<100±54
W-865-04	17-Nov-03	<100±58
W-865-04	24-Feb-04	<100±50
W-865-04	5-May-04	<100±53
W-865-04	5-May-04	<100±54
W-865-04	8-Sep-04	<100±52
W-865-04	18-Nov-04	<100±48
W-865-04	29-Jan-05	<100±54
W-865-04	13-May-05	<100±55
W-865-04	18-Aug-05	<100±52
W-865-04	6-Oct-05	<100±55
W-865-04	16-Jan-06	<100±58
W-865-05	30-Mar-01	<100±54 L
W-865-05	11-Jun-01	<100±56
W-865-05	22-Aug-01	<200±102
W-865-05	22-Aug-01	<100±53
W-865-05	31-Oct-01	<200±102
W-865-05	31-Oct-01	<100±56
W-865-05	28-Feb-02	<100±59
W-865-05	30-May-02	<102±60
W-865-05	31-Jul-02	<100±56
W-865-05	20-Jun-03	<100±49
W-865-05	15-Sep-03	<200±69.1
W-865-05	15-Sep-03	<100±51
W-865-05	2-Dec-03	<100±57
W-865-05	2-Mar-04	<100±56
W-865-05	11-May-04	<100±50
W-865-05	8-Sep-04	<200±86.4
W-865-05	8-Sep-04	<100±52
W-865-05	18-Nov-04	<100±51
W-865-05	18-Feb-05	<100±56
W-865-05	18-Feb-05	<100±56

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
W-865-05	16-May-05	<100±54
W-865-05	16-May-05	<100±55
W-865-05	24-Aug-05	<200±50.5
W-865-05	24-Aug-05	<100±55
W-865-05	10-Oct-05	<100±56
W-865-05	10-Oct-05	<100±56
W-865-05	16-Jan-06	<100±57
W-865-05	16-Jan-06	<100±58
W-865-06	10-Apr-00	<137±82
W-865-07	10-Apr-00	<138±83
W-865-07	29-Sep-00	<100±52
W-865-07	16-Nov-00	<100±52
W-865-07	26-Jan-01	<100±56
W-865-07	25-Apr-01	<100±55
W-865-07	14-Aug-01	<100±56
W-865-07	30-Oct-01	<100±57
W-865-07	31-Jan-02	<103±61
W-865-07	23-May-02	<100±58
W-865-07	31-Jul-02	<100±56
W-865-07	19-Feb-03	<100±58
W-865-07	29-May-03	<100±55
W-865-07	6-Aug-03	<100±57
W-865-07	2-Dec-03	<100±59
W-865-07	24-Feb-04	<100±51
W-865-07	5-May-04	<100±60
W-865-07	5-May-04	<100±54
W-865-07	9-Sep-04	111±57
W-865-07	18-Nov-04	<100±51
W-865-07	29-Jan-05	<100±56
W-865-07	13-May-05	<100±56
W-865-07	18-Aug-05	<100±52
W-865-07	6-Oct-05	<100±57
W-865-07	16-Jan-06	<100±57
W-865-1802	1-Jul-02	<100±57
W-865-1802	27-Jun-03	<100±51
W-865-1802	26-Aug-03	<100±52
W-865-1802	22-Dec-03	<100±52
W-865-1802	1-Mar-04	<100±60
W-865-1802	9-Jun-04	<100±54

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
W-865-1802	9-Sep-04	215±61
W-865-1802	17-Nov-04	101±51
W-865-1802	3-Mar-05	<200±59.4
W-865-1802	3-Mar-05	105±58
W-865-1802	10-May-05	<100±61
W-865-1802	24-Aug-05	186±59
W-865-1802	6-Oct-05	154±61
W-865-1802	15-Feb-06	176±58
W-865-1803	15-Jul-02	1190±140
W-865-1803	26-Jun-03	1410±160
W-865-1803	26-Aug-03	<100±52
W-865-1803	3-Mar-04	1710±190
W-865-1803	8-Jun-04	1830±200
W-865-1803	3-Nov-04	2040±220
W-865-1803	17-May-05	1990±210
W-865-1803	3-Nov-05	2480±260
W-865-1804	31-Jul-02	1710±190
W-865-1804	23-Jun-03	141±56
W-865-1804	26-Aug-03	<100±54
W-865-1804	18-Dec-03	650±90
W-865-1804	4-Mar-04	1270±150
W-865-1804	9-Jun-04	665±90
W-865-1804	9-Sep-04	1910±210
W-865-1804	3-Nov-04	555±85
W-865-1804	10-Mar-05	2150±240
W-865-1804	17-May-05	353±66
W-865-1804	30-Aug-05	1620±180
W-865-1804	3-Nov-05	2080±220
W-865-1804	22-Feb-06	2090±250 O
W-865-2004	30-Mar-05	<100±54
W-865-2004	25-May-05	<100±56
W-865-2004	24-Aug-05	<100±53
W-865-2004	8-Nov-05	<100±48
W-865-2004	15-Mar-06	<100±56
W-865-2005	24-Mar-05	<100±54
W-865-2121	30-Mar-05	<100±53
W-865-2121	24-May-05	<100±56
W-865-2121	31-Aug-05	<100±51
W-865-2121	8-Nov-05	<100±48

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
W-865-2121	15-Feb-06	<100±55
W-865-2133	21-Feb-06	<100±57
W-896-1806	26-Sep-05	<100±48
W-896-1806	14-Nov-05	<100±56
W-896-1806	27-Mar-06	9740±1000 S
W-PIT1-01	25-May-99	<200±40
W-PIT1-01	23-Aug-99	<100±55
W-PIT1-01	9-Dec-99	946±120
W-PIT1-01	15-Jun-00	<100±56
W-PIT1-01	21-Dec-00	<100±54
W-PIT1-01	13-Mar-01	<100±58 L
W-PIT1-01	17-May-01	<100±59
W-PIT1-01	13-Aug-01	<100±56
W-PIT1-01	26-Oct-01	<100±59
W-PIT1-01	28-Feb-02	<100±58
W-PIT1-01	29-May-02	<100±57
W-PIT1-01	8-Aug-02	<100±57
W-PIT1-02	25-Aug-99	<100±56
W-PIT1-02	21-Mar-01	<100±54 LO
W-PIT1-02	17-May-01	<100±59
W-PIT1-02	13-Aug-01	<100±57
W-PIT1-02	26-Oct-01	<100±59
W-PIT1-02	28-Feb-02	<100±60
W-PIT1-02	29-May-02	<100±57
W-PIT1-02	8-Aug-02	<100±57
W-PIT1-02	29-Aug-03	<100±50
W-PIT1-02	4-Nov-03	<200±62
W-PIT1-02	24-Feb-04	<100±48
W-PIT1-02	14-Jun-04	<100±54
W-PIT1-02	14-Sep-04	171±67
W-PIT1-02	13-Nov-04	<100±50
W-PIT1-02	29-Jan-05	106±58
W-PIT1-02	13-May-05	234±64
W-PIT1-02	31-Aug-05	356±67

Table A-22. Ground and surface water analyses for tritium (pCi/L) in samples collected from the Building 865 study area between January 1, 1988 and March 31, 2006.

Location	Sample Date	Tritium Activity (pCi/L)
W-PIT1-02	16-Nov-05	322±68
W-PIT1-02	3-Feb-06	467±82

Notes:

pCi/L = Picocuries per liter.
B = Analyte found in method blank.
E = The analyte was detected below LLNL reporting limit, but above analytical laboratory minimum detection limit.
F = Analyte found in field blank, trip blank, or equipment blank.
H = Sample analyzed outside of holding time, sample results should be evaluated.
L = Spike accuracy not within control limits.
O = Duplicate spike or sample precision not within control limits.
P = Indicates that the absence of a data qualifier flag does not mean that the data does not need qualification, but that the implementation of electronic data qualifier flags was not yet established.
S = Analytical results for this sample are suspect.

Table A-23. Ground and surface water analyses for total uranium and uranium isotopes (pCi/L) and 235U/238U atom ratio in samples collected from the Building 865 study area between January 1, 1988 a 2006.

Location	Sample Date	Uranium 233+234 (pCi/L)	Uranium 235+236 (pCi/L)	Uranium 238 (pCi/L)	Calculated Total Uranium** by alpha spec.	Uranium 235/238 ratio (atom ratio)	Uranium 233 by mass measurement (pCi/L)	Uranium 234 by mass measurement (pCi/L)	Uranium 235 by mass measurement (pCi/L)	Uranium 236 by mass measurement (pCi/L)	Uranium 238 by mass measurement (pCi/L)
K1-02A	27-Jan-88	0.9±0.2	<0.2	<0.2	<1.3±0.2						
K1-02A	6-Apr-88	0.3±0.1	<0.1	0.2±0.1	<0.6±0.1414						
K1-02A	7-Jul-88	0.4±0.2 P	<0.1 P	0.2±0.1 P	<0.7±0.2236						
K1-02A	14-Oct-88	<0.1 P	<0.2 P	0.2±0.1 P	<0.5±0.1						
K1-02A	25-Jan-89	0.2±0.1 P	<0.1 P	<0.1 P	<0.4±0.1						
K1-02A	5-Apr-89	0.8±0.2 P	<0.1 P	0.5±0.2 P	<1.4±0.2828						
K1-02A	13-Jul-89	1.2±0.2 P	<0.1 P	1±0.2 P	<2.3±0.2828						
K1-02A	18-Oct-89	0.7±0.2 P	<0.1 P	0.5±0.1 P	<1.3±0.2236						
K1-02A	9-Jan-90	0.2±0.1 P	<0.1 P	<0.1 P	<0.4±0.1						
K1-02A	12-Jul-90	0.2±0.1 P	<0.1 P	0.2±0.1 P	<0.5±0.1414						
K1-02A	3-Oct-90	<0.5 P	<0.6 P	<0.5 P	<1.60						
K1-02A	23-Jan-91	0.2±0.1 P	<0.1 P	0.2±0.1 P	<0.5±0.1414						
K1-02A	8-Apr-91	0.4012±0.1364 P	0.01185±0.02323 P	0.225±0.09686 P	0.63805±0.1689						
K1-02A	17-Jul-91	0.4664±0.1715 P	0±0.0292 P	0.2086±0.09729 P	0.675±0.1993						
K1-02A	17-Oct-91	0.3765±0.1054 P	<0.0601±0.03573 P	0.1205±0.05941 P	<0.5571±0.1262						
K1-02A	30-Jan-92	0.3073±0.08291 P	<0.0294±0.01236 P	0.1719±0.06178 P	<0.5086±0.1041						
K1-02A	30-Apr-92	0.1663±0.07293 P	<0.0347±0.02926 P	0.08623±0.04849 P	<0.28723±0.0923						
K1-02A	22-Jul-92	0.4476±0.1159 P	<0.0669±0.01713 P	0.1516±0.07125 P	<0.6661±0.1371						
K1-02A	7-Oct-92	0.376±0.105 P	<0.0536±0.0275	0.179±0.0692 P	<0.6086±0.1287						
K1-02A	12-Mar-93	0.276±0.106 P	<0.0824±0.0423	0.222±0.0882 P	<0.5804±0.1442						
K1-02A	20-Apr-93	0.363±0.151	<0±0.07	0.273±0.129	<0.636±0.2106						
K1-02A	23-Aug-93	0.26±0.06	<0.04±0.02	0.17±0.05	<0.47±0.0806						
K1-02A	9-Dec-93	0.6±0.05	0.07±0.02	0.44±0.04	1.11±0.0671						
K1-02A	16-Feb-94	4.7±0.19	0.23±0.04	1.28±0.1	6.21±0.2184						
K1-02A	2-May-94	0.77±0.1	<0.25±0.07	0.6±0.1	<1.62±0.1578						
K1-02A	1-Aug-94	0.56±0.06	<0.045±0.02	0.4±0.05	<1.005±0.0806						
K1-02A	21-Nov-94	1.61±0.33	0.31±0.12	0.86±0.2	2.78±0.4041						
K1-02A	21-May-97	1.105±0.099 BF	0.061±0.021	0.822±0.081 B	1.988±0.1296						
K1-02A	8-Dec-97	1.13±0.14	0.041±0.025 B	0.83±0.11	2.001±0.1798						
K1-02A	24-Jun-98	0.96±0.41 B	<0.28±0.18	1.12±0.46 B	<2.36±0.642						
K1-02A	16-Dec-98	1.37±0.3 FB	0.089±0.04 B	0.99±0.22 B	2.449±0.3742						
K1-02A	16-Dec-98	1.78±0.38 FB	0.055±0.032 B	1.34±0.29 B	3.175±0.4791						
K1-02A	21-May-99	1.42±0.19	<0.1±0.029	1.02±0.15	<2.54±0.2438						
K1-02A	2-Nov-99	0.507±0.091	<0.1±0.019 E	0.356±0.073	<0.963±0.1182						
K1-02A	24-May-00	0.723±0.16	<0.1±0.028	0.66±0.15	<1.483±0.2211						
K1-02A	7-Dec-00	2.52±0.3	<0.1±0.031 E	2.16±0.26	<4.78±0.3982						
K1-02A	30-May-01	0.411±0.065	<0.1±0.014 E	0.259±0.048	<0.77±0.082						
K1-02A	5-Jun-02	2.2±0.27	0.11±0.034	1.67±0.21	3.98±0.3437						
K1-02A	5-Jun-02	0.58±0.098	<0.1±0.017 E	0.389±0.074	<1.069±0.124						
K1-02A	28-Oct-02	1.11±0.16	<0.1±0.022 E	0.809±0.14	<2.019±0.2137						
K1-02A	28-Oct-02	1.18±0.17	<0.1±0.027 E	0.985±0.15	<2.265±0.2283						

Table A-23. Ground and surface water analyses for total uranium and uranium isotopes (pCi/L) and 235U/238U atom ratio in samples collected from the Building 865 study area between January 1, 1988 a 2006.

Location	Sample Date	Uranium 233+234 (pCi/L)	Uranium 235+236 (pCi/L)	Uranium 238 (pCi/L)	Calculated Total Uranium** by alpha spec.	Uranium 235/238 ratio (atom ratio)	Uranium 233 by mass measurement (pCi/L)	Uranium 234 by mass measurement (pCi/L)	Uranium 235 by mass measurement (pCi/L)	Uranium 236 by mass measurement (pCi/L)	Uranium 238 by mass measurement (pCi/L)
K1-02B	19-Jan-88	1.1±0.1	<0.1	0.6±0.1	<1.8±0.1414						
K1-02B	4-Apr-88	1.5±0.3	<0.1	1±0.2	<2.6±0.3606						
K1-02B	4-Apr-88	1.5±0.1	<0.1	0.9±0.1	<2.5±0.1414						
K1-02B	25-Jul-88	0.1±0.5 P	<0.1 P	0.8±0.4 P	<1±0.6403						
K1-02B	3-Oct-88	1.3±0.2 P	<0.1 P	0.2±0.1 P	<1.6±0.2236						
K1-02B	12-Jan-89	1.3±0.2 P	<0.2 P	0.5±0.2 P	<2±0.2828						
K1-02B	10-Apr-89	1.1±0.2 P	<0.1 P	0.6±0.1 P	<1.8±0.2236						
K1-02B	19-Jul-89	1±0.2 P	<0.1 P	0.6±0.2 P	<1.7±0.2828						
K1-02B	31-Jul-89	1.3±0.2 P	<0.1 P	0.9±0.2 P	<2.3±0.2828						
K1-02B	24-Oct-89	1.3±0.1 P	<0.1 P	0.8±0.1 P	<2.2±0.1414						
K1-02B	10-Jan-90	1.1±0.1 P	<0.1 P	0.8±0.1 P	<2±0.1414						
K1-02B	9-Jul-90	1.2±0.2 P	<0.1 P	0.6±0.2 P	<1.9±0.2828						
K1-02B	8-Oct-90	1.3±0.2 P	<0.1 P	0.7±0.1 P	<2.1±0.2236						
K1-02B	14-Jan-91	1.1±0.3 P	<0.1 P	0.7±0.2 P	<1.9±0.3606						
K1-02B	8-Apr-91	1.266±0.2211 P	0.0398±0.05855 P	0.6411±0.1493 P	1.9469±0.2731						
K1-02B	8-Jul-91	1.43±0.2327 P	0.06184±0.06072 P	0.7832±0.1726 P	2.27504±0.296						
K1-02B	15-Oct-91	2.135±0.2662 P	0.07431±0.04871 P	1.282±0.1993 P	3.49131±0.3361						
K1-02B	15-Jan-92	1.341±0.2536 P	<0.062±0.05223 P	0.9124±0.2034 P	<2.3154±0.3293						
K1-02B	14-Apr-92	1.325±0.2332 P	<0.0523±0.02199 P	0.6763±0.1689 P	<2.0536±0.2888						
K1-02B	25-Jul-92	2.121±0.3103 P	<0.0832±0.02132 P	0.71±0.1644 P	<2.9142±0.3518						
K1-02B	26-Oct-92	1.32±0.268 P	<0.108±0.0554 P	0.804±0.191 P	<2.232±0.3337						
K1-02B	2-Feb-93	1.35±0.213 P	<0.0904±0.037	0.749±0.159 P	<2.1894±0.2684						
K1-02B	2-Feb-93	1.52±0.239 P	<0.08±0.0411	0.777±0.176 P	<2.377±0.2996						
K1-02B	7-Apr-93	1.28±0.248	0.0453±0.0409	0.759±0.178	2.0843±0.308						
K1-02B	26-Jul-93	1.7±0.12	0.05±0.02	0.92±0.09	2.67±0.1513						
K1-02B	5-Nov-93	2.05±0.29	0.06±0.04	1.25±0.21	3.36±0.3603						
K1-02B	9-Nov-93	2.09±0.19	0.08±0.04	1.04±0.14	3.21±0.2394						
K1-02B	15-Nov-93	1.64±0.15	<0.19±0.06	0.7±0.13	<2.53±0.2074						
K1-02B	22-Nov-93	1.29±0.32	<0.15±0.06	0.74±0.24	<2.18±0.4045						
K1-02B	31-Jan-94	2.19±0.16	0.1±0.04	1.03±0.11	3.32±0.1982						
K1-02B	4-May-94	1.66±0.13	<0.24±0.07	1.2±0.12	<3.1±0.1903						
K1-02B	4-May-94	1.9±0.15	<0.12±0.04	0.92±0.11	<2.94±0.1903						
K1-02B	7-Jun-94					0.00725±0.00018		0.94±0.36	0.036±0.001		0.77±0.02
K1-02B	3-Aug-94	2.48±0.14	0.29±0.05	1.21±0.1	3.98±0.1792						
K1-02B	12-Oct-94	1.43±0.4	0.23±0.15	0.89±0.29	2.55±0.5163						
K1-02B	13-Oct-94	<1.06±0.79	<0.91±0.39	0.74±0.71	<2.71±1.1315						
K1-02B	21-Nov-94					0.00744±0.00021		1.46±0.31	0.04±0.002		0.85±0.01
K1-02B	11-Jan-95	2.01±0.45	0.13±0.09	1.05±0.28	3.19±0.5376						
K1-02B	13-Mar-95					0.00726±0.0002		1.33±0.28	0.04±0.002		0.87±0.02 B
K1-02B	10-May-95	1.96±0.56	0.09±0.11	0.71±0.29	2.76±0.6402						
K1-02B	31-Jul-95	1.53±0.31	0.149±0.095	0.74±0.21	2.419±0.3863						

Table A-23. Ground and surface water analyses for total uranium and uranium isotopes (pCi/L) and 235U/238U atom ratio in samples collected from the Building 865 study area between January 1, 1988 a 2006.

Location	Sample Date	Uranium 233+234 (pCi/L)	Uranium 235+236 (pCi/L)	Uranium 238 (pCi/L)	Calculated Total Uranium** by alpha spec.	Uranium 235/238 ratio (atom ratio)	Uranium 233 by mass measurement (pCi/L)	Uranium 234 by mass measurement (pCi/L)	Uranium 235 by mass measurement (pCi/L)	Uranium 236 by mass measurement (pCi/L)	Uranium 238 by mass measurement (pCi/L)
K1-02B	11-Oct-95	1.39±0.26 BF	0.067±0.058 B	0.78±0.19 B	2.237±0.3272						
K1-02B	17-Jan-96	2.14±0.36 S	0.39±0.15 S	1.14±0.25 S	3.67±0.4632						
K1-02B	17-Jan-96	1.77±0.15 B	0.095±0.031 S	1.03±0.11 S	2.895±0.1886						
K1-02B	10-Apr-96	1.56±0.17 B	0.054±0.033	0.81±0.12 B	2.424±0.2107						
K1-02B	30-Jul-96	3.5±0.33 FB	0.364±0.092 O	2.35±0.26 F	6.214±0.4301						
K1-02B	20-Sep-96	2.22±0.21 B	0.087±0.037 BJO	1.22±0.15 B	3.527±0.2607						
K1-02B	27-Sep-96	2.31±0.22 B	0.123±0.045 O	1.48±0.17	3.913±0.2816						
K1-02B	27-Sep-96						<9600	<6200±0	<0.22	<65	1.2
K1-02B	9-Oct-96	1.87±0.21 B	0.12±0.053 O	1.16±0.16	3.15±0.2693						
K1-02B	16-Jan-97	1.61±0.17	0.064±0.032	0.88±0.12	2.554±0.2105						
K1-02B	3-Apr-97	1.92±0.35 BJO	0.151±0.096 OB	1.16±0.27 BJO	3.231±0.4523						
K1-02B	1-Jul-97	1.85±0.18	0.078±0.032	1.3±0.14	3.228±0.2303						
K1-02B	13-Oct-97	2.14±0.23	0.092±0.044	1.18±0.16	3.412±0.2836						
K1-02B	8-Jan-98	1.8±0.26 B	<0.1±0.07	0.77±0.17	<2.67±0.3184						
K1-02B	9-Apr-98	2.5±0.87 B	<0.29±0.18	1.12±0.51	<3.91±1.0244						
K1-02B	14-Jul-98	1.61±0.51 B	<0.16±0.016	0.73±0.3 B	<2.5±0.5919						
K1-02B	13-Oct-98	1.9±0.7	<0.51±0.33	1.16±0.51	<3.57±0.9268						
K1-02B	12-Jan-99	1.99±0.42 B	0.06±0.032	1.16±0.26 B	3.21±0.495						
K1-02B	12-Jan-99	1.9±0.4 B	0.053±0.026	1.16±0.25 B	3.113±0.4724						
K1-02B	15-Apr-99	2.08±0.16	<0.1±0.031	1.13±0.11	<3.31±0.1966						
K1-02B	9-Jul-99	1.99±0.24	<0.1±0.033 E	1.12±0.16	<3.21±0.2903						
K1-02B	7-Oct-99	1.9±0.24	<0.1±0.022 E	1.05±0.15	<3.05±0.2839						
K1-02B	7-Feb-00	1.37±0.2	<0.1±0.028 E	0.77±0.13	<2.24±0.2402						
K1-02B	18-Apr-00	1.71±0.25	<0.1±0.05 E	0.914±0.16	<2.724±0.301						
K1-02B	19-Jul-00	1.52±0.19	<0.1±0.027 E	0.852±0.12 O	<2.472±0.2263						
K1-02B	19-Oct-00	1.81±0.26	<0.1±0.034 E	0.935±0.15	<2.845±0.3021						
K1-02B	18-Jan-01	1.68±0.22	<0.1±0.031 E	0.915±0.13	<2.695±0.2574						
K1-02B	18-Apr-01	1.43±0.21	<0.1±0.024 E	0.788±0.14	<2.318±0.2535						
K1-02B	9-Jul-01	1.52±0.19	<0.1±0.028 E	0.774±0.11	<2.394±0.2213						
K1-02B	22-Oct-01	1.57±0.2	<0.1±0.023 E	0.841±0.12	<2.511±0.2344						
K1-02B	16-Jan-02	1.58±0.22	<0.1±0.042 E	0.888±0.14	<2.568±0.2641						
K1-02B	16-Apr-02	1.53±0.2	<0.1±0.021 E	0.896±0.13	<2.526±0.2395						
K1-02B	29-Jul-02	1.57±0.2	<0.1±0.025 E	0.942±0.13	<2.612±0.2398						
K1-02B	4-Dec-02	1.61±0.18	<0.1±0.018 E	0.972±0.12	<2.682±0.2171						
K1-02B	30-Jan-03	1.39±0.18	<0.1±0.026 E	0.758±0.11	<2.248±0.2125						
K1-02B	17-Apr-03	1.54±0.21	<0.1±0.022 E	0.856±0.13	<2.496±0.248						
K1-02B	17-Apr-03	1.45±0.19	<0.1±0.02 E	0.788±0.12	<2.338±0.2256						
K1-02B	8-Sep-03	1.82±0.22	<0.1±0.033 E	0.955±0.13	<2.875±0.2577						
K1-02B	4-Nov-03	±	±	±		0.007260.000028		1.87±0.059	0.04523±0.00061	<0.007±0.00037	0.9688±0.0125
K1-02B	4-Nov-03	1.88±0.25	<0.1±0.03 E	0.998±0.15	<2.978±0.2931						
K1-02B	28-Jan-04	±	±	±		0.007240.000022		1.866±0.042	0.04576±0.00014	<0.00016	0.98318±0.000007

Table A-23. Ground and surface water analyses for total uranium and uranium isotopes (pCi/L) and 235U/238U atom ratio in samples collected from the Building 865 study area between January 1, 1988 a 2006.

Location	Sample Date	Uranium 233+234 (pCi/L)	Uranium 235+236 (pCi/L)	Uranium 238 (pCi/L)	Calculated Total Uranium** by alpha spec.	Uranium 235/238 ratio (atom ratio)	Uranium 233 by mass measurement (pCi/L)	Uranium 234 by mass measurement (pCi/L)	Uranium 235 by mass measurement (pCi/L)	Uranium 236 by mass measurement (pCi/L)	Uranium 238 by mass measurement (pCi/L)
K1-02B	28-Jan-04	1.72±0.22	<0.1±0.021 E	0.945±0.13	<2.765±0.2564						
K1-02B	19-May-04	1.76±0.23	<0.1±0.026 E	1.06±0.15	<2.92±0.2758						
K1-02B	19-May-04	1.76±0.22	<0.1±0.017 E	0.974±0.14	<2.834±0.2613						
K1-02B	20-Jul-04	±	±	±		0.00703±0.00014		2.051±0.179	0.05±0.002	<0.0002	1.096±0.042
K1-02B	20-Jul-04	1.65±0.21	<0.1±0.024 E	0.986±0.14	<2.736±0.2535						
K1-02B	22-Nov-04	1.88±0.25	<0.1±0.03 E	1.11±0.16	<3.09±0.2983						
K1-02B	23-Feb-05	1.77±0.23	<0.1±0.031	0.98±0.15	<2.85±0.2763						
K1-02B	12-Apr-05	2.05±0.25	<0.1±0.031	1.12±0.16	<3.27±0.2984						
K1-02B	12-Apr-05	1.87±0.25	<0.1±0.04	0.964±0.15	<2.934±0.2943						
K1-02B	6-Jul-05	2.06±0.27	<0.1±0.03	1.1±0.16	<3.26±0.3153						
K1-02B	4-Oct-05	1.93±0.32	<0.1±0.052	1.18±0.22	<3.21±0.3918						
K1-02B	4-Oct-05	2.08±0.3	<0.1±0.037	1.25±0.21	<3.43±0.3681						
K1-02B	3-Jan-06	1.94±0.26	<0.1±0.031	1.21±0.18	<3.25±0.3177						
K1-03	19-Jan-88	0.9±0.1	<0.1	0.5±0.1	<1.5±0.1414						
K1-03	4-Apr-88	0.9±0.2	<0.1	0.5±0.1	<1.5±0.2236						
K1-03	25-Jul-88	0.9±0.2 P	<0.1 P	0.5±0.2 P	<1.5±0.2828						
K1-03	4-Oct-88	0.9±0.2 P	<0.1 P	0.5±0.2 P	<1.5±0.2828						
K1-03	12-Jan-89	1±0.2 P	<0.2 P	0.5±0.2 P	<1.7±0.2828						
K1-03	11-Apr-89	1.1±0.2 P	<0.1 P	0.6±0.1 P	<1.8±0.2236						
K1-03	24-Jul-89	0.9±0.2 P	<0.1 P	0.4±0.1 P	<1.4±0.2236						
K1-03	24-Oct-89	1.4±0.2 P	<0.1 P	0.5±0.1 P	<2±0.2236						
K1-03	10-Jan-90	1±0.1 P	<0.1 P	0.5±0.1 P	<1.6±0.1414						
K1-03	9-Jul-90	0.8±0.1 P	<0.1 P	0.5±0.1 P	<1.4±0.1414						
K1-03	8-Oct-90	0.9±0.2 P	<0.1 P	0.5±0.1 P	<1.5±0.2236						
K1-03	8-Oct-90	1.4±0.2 P	<0.1 P	0.7±0.2 P	<2.2±0.2828						
K1-03	14-Jan-91	1.1±0.2 P	<0.1 P	0.6±0.2 P	<1.8±0.2828						
K1-03	8-Apr-91	0.9201±0.2168 P	0.04284±0.05606 P	0.5426±0.1658 P	1.50554±0.2786						
K1-03	8-Jul-91	0.5984±0.1243 P	0.05417±0.03993 P	0.2013±0.06644 P	0.85387±0.1465						
K1-03	15-Oct-91	0.8673±0.2058 P	<0.0569±0.04788 P	0.4135±0.141 P	<1.3377±0.254						
K1-03	15-Jan-92	0.8799±0.2399 P	<0.0827±0.06962 P	0.4986±0.1768 P	<1.4612±0.306						
K1-03	14-Apr-92	0.8963±0.2152 P	<0.0595±0.05016 P	0.464±0.148 P	<1.4198±0.266						
K1-03	25-Jul-92	5.082±0.5071 P	<0.0959±0.05894 P	0.4055±0.1161 P	<5.5834±0.5235						
K1-03	27-Oct-92	0.985±0.198 P	<0.0913±0.0468 P	0.365±0.117 P	<1.4413±0.2347						
K1-03	2-Feb-93	0.945±0.194 P	<0.0875±0.0448	0.548±0.152 P	<1.5805±0.2505						
K1-03	7-Apr-93	0.932±0.201	0.0565±0.046	0.387±0.12	1.3755±0.2386						
K1-03	26-Jul-93	1.12±0.1	0.06±0.02	0.65±0.08	1.83±0.1296						
K1-03	4-Nov-93	1.43±0.24	<0.108±0.054	0.73±0.16	<2.268±0.2935						
K1-03	9-Nov-93	0.94±0.15	0.06±0.04	0.85±0.14	1.85±0.209						
K1-03	15-Nov-93	1.17±0.11	0.1±0.03	0.48±0.08	1.75±0.1393						
K1-03	22-Nov-93	0.96±0.34	<0.28±0.13	<0.46±0.3	<1.7±0.4717						
K1-03	31-Jan-94	1.31±0.71	<0.43±0.26	1.41±0.73	<3.15±1.051						

Table A-23. Ground and surface water analyses for total uranium and uranium isotopes (pCi/L) and 235U/238U atom ratio in samples collected from the Building 865 study area between January 1, 1988 a 2006.

Location	Sample Date	Uranium 233+234 (pCi/L)	Uranium 235+236 (pCi/L)	Uranium 238 (pCi/L)	Calculated Total Uranium** by alpha spec.	Uranium 235/238 ratio (atom ratio)	Uranium 233 by mass measurement (pCi/L)	Uranium 234 by mass measurement (pCi/L)	Uranium 235 by mass measurement (pCi/L)	Uranium 236 by mass measurement (pCi/L)	Uranium 238 by mass measurement (pCi/L)
K1-03	4-May-94	1.02±0.11	<0.2±0.06	0.59±0.09	<1.81±0.1543						
K1-03	3-Aug-94	1.07±0.08	<0.04±0.02	0.49±0.05	<1.6±0.0964						
K1-03	13-Oct-94	0.86±0.63	<0.36±0	<0.29±0.31	<1.51±0.7021						
K1-03	13-Oct-94	0.67±0.22	<0.05±0	0.42±0.17	<1.14±0.278						
K1-03	11-Jan-95	1.29±0.32	0.027±0.04	0.67±0.2	1.987±0.3795						
K1-03	10-May-95	1.24±0.42	0.1±0.11	0.98±0.36	2.32±0.564						
K1-03	31-Jul-95	0.92±0.23	0.134±0.09	0.67±0.2	1.724±0.3178						
K1-03	11-Oct-95	0.95±0.21 BF	0.053±0.047 B	0.43±0.14 B	1.433±0.2567						
K1-03	11-Oct-95	1.34±0.27 BF	0.086±0.068 B	0.5±0.16 B	1.926±0.3211						
K1-03	18-Jan-96	0.96±0.23	0.074±0.064	0.46±0.16	1.494±0.2874						
K1-03	10-Apr-96	0.83±0.12 B	0.029±0.02 B	0.454±0.083 B	1.313±0.1473						
K1-03	30-Jul-96	1.24±0.16 FB	0.17±0.055 O	0.65±0.11 F	2.06±0.2018						
K1-03	10-Oct-96	1.06±0.14 B	0.083±0.037 O	0.511±0.093	1.654±0.1721						
K1-03	16-Jan-97	0.95±0.12	0.058±0.027	0.525±0.084 B	1.533±0.1489						
K1-03	3-Apr-97	0.89±0.22 BJO	<0.054±0.0082 O	0.52±0.16 BJO	<1.464±0.2722						
K1-03	2-Jul-97	0.89±0.12	0.028±0.021	0.432±0.081	1.35±0.1463						
K1-03	14-Oct-97	0.91±0.14	0.071±0.038	0.52±0.1	1.501±0.1762						
K1-03	8-Jan-98	0.83±0.16 B	<0.09±0.06	0.44±0.11	<1.36±0.2032						
K1-03	9-Apr-98	1.42±0.65 B	<0.36±0.19	0.94±0.5	<2.72±0.8418						
K1-03	9-Apr-98	1.01±0.5 B	<0.37±0.12	0.37±0.28	<1.75±0.5855						
K1-03	15-Jul-98	0.79±0.38 B	<0.31±0.107	0.43±0.25	<1.53±0.4673						
K1-03	13-Oct-98	0.75±0.35	<0.22±0.079	0.3±0.21	<1.27±0.4157						
K1-03	12-Jan-99	0.73±0.17 B	<0.03±0.022	0.42±0.11 B	<1.18±0.2037						
K1-03	15-Apr-99	0.909±0.1	<0.1±0.024	0.514±0.072	<1.523±0.1255						
K1-03	9-Jul-99	0.926±0.13	<0.1±0.017	0.477±0.082	<1.503±0.1546						
K1-03	6-Oct-99	0.845±0.13	<0.1±0.025 E	0.446±0.081	<1.391±0.1552						
K1-03	7-Feb-00	0.765±0.12	<0.1±0.032 E	0.343±0.071	<1.208±0.1431						
K1-03	18-Apr-00	0.941±0.13	<0.1±0.022 E	0.416±0.075	<1.457±0.1517						
K1-03	19-Jul-00	0.772±0.12	<0.1±0.02 E	0.53±0.087 O	<1.402±0.1496						
K1-03	23-Oct-00	0.876±0.13	<0.1±0.018 E	0.407±0.077	<1.383±0.1522						
K1-03	23-Oct-00	0.928±0.14	<0.1±0.018	0.468±0.086	<1.496±0.1653						
K1-03	18-Jan-01	0.91±0.14	<0.1±0.024 E	0.451±0.082	<1.461±0.164						
K1-03	18-Apr-01	0.867±0.13	<0.1±0.025 E	0.423±0.08	<1.39±0.1547						
K1-03	9-Jul-01	0.781±0.11	<0.1±0.018 E	0.425±0.071	<1.306±0.1322						
K1-03	9-Jul-01	0.859±0.12	<0.1±0.018 E	0.453±0.077	<1.412±0.1437						
K1-03	22-Oct-01	0.953±0.13	<0.1±0.023 E	0.401±0.07	<1.454±0.1494						
K1-03	16-Jan-02	0.958±0.14	<0.1±0.019	0.46±0.084	<1.518±0.1644						
K1-03	16-Apr-02	1.01±0.14	<0.1±0.017 E	0.507±0.086	<1.617±0.1652						
K1-03	29-Jul-02	0.933±0.13	<0.1±0.021 E	0.449±0.081	<1.482±0.1546						
K1-03	4-Dec-02	1.04±0.16	<0.1±0.03	0.427±0.087	<1.567±0.1846						
K1-03	30-Jan-03	0.868±0.13	<0.1±0.019	0.463±0.084	<1.431±0.1559						

Table A-23. Ground and surface water analyses for total uranium and uranium isotopes (pCi/L) and 235U/238U atom ratio in samples collected from the Building 865 study area between January 1, 1988 a 2006.

Location	Sample Date	Uranium 233+234 (pCi/L)	Uranium 235+236 (pCi/L)	Uranium 238 (pCi/L)	Calculated Total Uranium** by alpha spec.	Uranium 235/238 ratio (atom ratio)	Uranium 233 by mass measurement (pCi/L)	Uranium 234 by mass measurement (pCi/L)	Uranium 235 by mass measurement (pCi/L)	Uranium 236 by mass measurement (pCi/L)	Uranium 238 by mass measurement (pCi/L)
K1-03	17-Apr-03	0.805±0.13	<0.1±0.014	0.45±0.087	<1.355±0.1571						
K1-03	24-Jul-03	1.13±0.16	<0.1±0.018 E	0.45±0.083	<1.68±0.1811						
K1-03	4-Nov-03					0.00726±0.000032		1.088±0.032	0.02465±0.00028	<0.007±0.0002	0.52833±0.00564
K1-03	4-Nov-03	1.07±0.16	<0.1±0.028 E	0.512±0.092	<1.682±0.1867						
K1-03	28-Jan-04					0.00724±0.000018		1.07±0.026	0.02483±0.000062	<0.00015	0.53316±0.000006
K1-03	28-Jan-04	0.958±0.14	<0.1±0.022 E	0.534±0.09	<1.592±0.1679						
K1-03	28-Jan-04	0.951±0.14	<0.1±0.019	0.553±0.096	<1.604±0.1708						
K1-03	20-May-04	0.996±0.14	<0.1±0.016	0.561±0.09	<1.657±0.1672						
K1-03	19-Jul-04					0.00736±0.00018		1.14±0.064	0.027±0.001	<0.0001	0.578±0.018
K1-03	19-Jul-04	1.05±0.15	<0.1±0.024 E	0.513±0.087	<1.663±0.1751						
K1-03	30-Nov-04	0.973±0.15	<0.1±0.021 E	0.591±0.1	<1.664±0.1815						
K1-03	22-Feb-05	0.881±0.13	<0.1±0.021	0.54±0.097	<1.521±0.1636						
K1-03	13-Apr-05	1.05±0.17	<0.1±0.017	0.53±0.1	<1.68±0.198						
K1-03	28-Jul-05	1.05±0.26	<0.1±0.028	0.564±0.17	<1.714±0.3119						
K1-03	4-Oct-05	1.07±0.21	<0.1±0.054	0.59±0.15	<1.76±0.2637						
K1-03	3-Jan-06	1.15±0.17	<0.1±0.031	0.58±0.1	<1.83±0.1997						
K1-04	19-Jan-88	1.4±0.1	<0.1±0	0.7±0.1	<2.2±0.1414						
K1-04	4-Apr-88	1.3±0.1	0.3±0.1	0.7±0.1	2.3±0.1732						
K1-04	25-Jul-88	1.1±0.3 P	<0.1 P	0.6±0.2 P	<1.8±0.3606						
K1-04	6-Oct-88	1.1±0.3 P	<0.1 P	0.5±0.2 P	<1.7±0.3606						
K1-04	24-Jan-89	1.3±0.1 P	<0.1 P	0.6±0.1 P	<2±0.1414						
K1-04	24-Jan-89	1.1±0.1 P	<0.1 P	0.5±0.1 P	<1.7±0.1414						
K1-04	11-Apr-89	1.2±0.2 P	<0.1 P	0.6±0.1 P	<1.9±0.2236						
K1-04	19-Jul-89	1±0.3 P	<0.1 P	0.5±0.2 P	<1.6±0.3606						
K1-04	24-Oct-89	1.4±0.1 P	<0.1 P	0.8±0.1 P	<2.3±0.1414						
K1-04	10-Jan-90	1.2±0.2 P	<0.1 P	0.6±0.1 P	<1.9±0.2236						
K1-04	10-Jan-90	1.2±0.2 P	<0.1 P	0.6±0.1 P	<1.9±0.2236						
K1-04	10-Jan-90	1.1±0.2 P	<0.1 P	0.6±0.1 P	<1.8±0.2236						
K1-04	9-Jul-90	1.2±0.1 P	<0.1 P	0.6±0.1 P	<1.9±0.1414						
K1-04	8-Oct-90	0.9±0.2 P	<0.1 P	0.5±0.1 P	<1.5±0.2236						
K1-04	14-Jan-91	1.1±0.2 P	<0.1 P	0.8±0.2 P	<2±0.2828						
K1-04	14-Jan-91	1.1±0.2 P	<0.1 P	0.5±0.2 P	<1.7±0.2828						
K1-04	14-Jan-91	1±0.2 P	<0.1 P	0.6±0.2 P	<1.7±0.2828						
K1-04	8-Apr-91	1.156±0.3234 P	0.02372±0.04653 P	0.4897±0.1966 P	1.66942±0.3813						
K1-04	9-Jul-91	1.173±0.2183 P	0.06986±0.0686 P	0.577±0.1547 P	1.81986±0.2762						
K1-04	15-Oct-91	1.144±0.2158 P	<0.0534±0.06738 P	0.8322±0.1924 P	<2.0296±0.2969						
K1-04	15-Jan-92	1.298±0.272 P	<0.0732±0.06166 P	0.5842±0.1833 P	<1.9554±0.3337						
K1-04	14-Apr-92	1.111±0.2291 P	<0.057±0.04796 P	0.6764±0.1642 P	<1.8444±0.2859						
K1-04	25-Jul-92	1.22±0.25 P	<0.02±0.02 P	0.53±0.15 P	<1.77±0.2922						
K1-04	25-Jul-92	1.692±0.2436 P	<0.0706±0.05433 P	0.5791±0.1384 P	<2.3417±0.2854						
K1-04	27-Oct-92	1.22±0.197 P	<0.0692±0.0178 P	0.703±0.149 P	<1.9922±0.2476						

Table A-23. Ground and surface water analyses for total uranium and uranium isotopes (pCi/L) and 235U/238U atom ratio in samples collected from the Building 865 study area between January 1, 1988 a 2006.

Location	Sample Date	Uranium 233+234 (pCi/L)	Uranium 235+236 (pCi/L)	Uranium 238 (pCi/L)	Calculated Total Uranium** by alpha spec.	Uranium 235/238 ratio (atom ratio)	Uranium 233 by mass measurement (pCi/L)	Uranium 234 by mass measurement (pCi/L)	Uranium 235 by mass measurement (pCi/L)	Uranium 236 by mass measurement (pCi/L)	Uranium 238 by mass measurement (pCi/L)
K1-04	2-Feb-93	1.04±0.201 P	<0.0756±0.0388	0.441±0.115 P	<1.5566±0.2348						
K1-04	7-Apr-93	1.08±0.215	<0±0.00628	0.646±0.161	<1.726±0.2687						
K1-04	26-Jul-93	1.47±0.1	0.07±0.03	0.77±0.07	2.31±0.1257						
K1-04	26-Jul-93	2.03±0.16	0.17±0.05	1.15±0.12	3.35±0.2062						
K1-04	4-Nov-93	0.16±0.07	<0.065±0.033	0.09±0.06	<0.315±0.0979						
K1-04	9-Nov-93	1.49±0.18	<0.07±0.03	0.84±0.14	<2.4±0.23						
K1-04	15-Nov-93	1.48±0.11	0.14±0.04	0.87±0.09	2.49±0.1476						
K1-04	22-Nov-93	1.64±0.38	<0.13±0.09	0.84±0.27	<2.61±0.4748						
K1-04	31-Jan-94	1.69±0.14	0.22±0.05	0.9±0.1	2.81±0.1792						
K1-04	4-May-94	1.4±0.19	<0.38±0.12	0.84±0.17	<2.62±0.2818						
K1-04	3-Aug-94	1.39±0.12	<0.12±0.04	0.87±0.1	<2.38±0.1612						
K1-04	3-Aug-94	1.34±0.11	<0.16±0.06	0.66±0.08	<2.16±0.1487						
K1-04	13-Oct-94	0.96±0.62	<0.62±0.06	0.43±0.41	<2.01±0.7457						
K1-04	11-Jan-95	1.36±0.34	0.079±0.076	0.62±0.2	2.059±0.4017						
K1-04	10-May-95	1.51±0.49	<0.049±0.067	0.56±0.27	<2.119±0.5635						
K1-04	31-Jul-95	1.76±0.34	0.4±0.16	0.87±0.23	3.03±0.4406						
K1-04	11-Oct-95	1.14±0.25 BF	0.207±0.1 B	0.65±0.19 B	1.997±0.3295						
K1-04	18-Jan-96	1.24±0.25	0.085±0.067	0.6±0.17	1.925±0.3097						
K1-04	11-Apr-96	0.87±0.14 B	0.05±0.035	0.54±0.11	1.46±0.1815						
K1-04	31-Jul-96	1.06±0.15 B	0.107±0.05 O	0.64±0.12	1.807±0.1985						
K1-04	31-Jul-96	1.38±0.18 B	0.072±0.038 O	0.65±0.12	2.102±0.2196						
K1-04	10-Oct-96	1.23±0.15 B	0.081±0.035 O	0.485±0.09	1.796±0.1784						
K1-04	16-Jan-97	0.9±0.11	0.024±0.019	0.568±0.085	1.492±0.1403						
K1-04	3-Apr-97	1.41±0.3 BJO	0.081±0.075 OB	0.61±0.19 BJO	2.101±0.3629						
K1-04	2-Jul-97	0.98±0.13	0.045±0.028	0.512±0.09	1.537±0.1606						
K1-04	14-Oct-97	1.11±0.16	0.027±0.024	0.56±0.11	1.697±0.1956						
K1-04	8-Jan-98	0.91±0.17 B	0.06±0.04 F	0.47±0.11	1.44±0.2064						
K1-04	9-Apr-98	0.89±0.46 B	0.23±0.23	0.62±0.37	1.74±0.6336						
K1-04	15-Jul-98	0.91±0.39 B	<0.23±0.077	0.47±0.26	<1.61±0.475						
K1-04	14-Oct-98	0.97±0.44 B	<0.31±0.21	0.54±0.3 B	<1.82±0.5725						
K1-04	13-Jan-99	0.88±0.2 B	<0.03±0.021	0.48±0.12 B	<1.39±0.2342						
K1-04	14-Apr-99	0.881±0.1	<0.1±0.019	0.514±0.073	<1.495±0.1253						
K1-04	9-Jul-99	0.95±0.14	<0.1±0.022 E	0.469±0.084	<1.519±0.1647						
K1-04	6-Oct-99	0.842±0.13	<0.1±0.024 E	0.45±0.083	<1.392±0.1561						
K1-04	7-Feb-00	0.748±0.12	<0.1±0.025 E	0.372±0.073	<1.22±0.1427						
K1-04	18-Apr-00	0.936±0.13	<0.1±0.025 E	0.383±0.07	<1.419±0.1497						
K1-04	18-Apr-00	0.761±0.12	<0.1±0.022 E	0.384±0.071	<1.245±0.1412						
K1-04	19-Jul-00	0.974±0.14	<0.1±0.021 E	0.487±0.081 O	<1.561±0.1631						
K1-04	23-Oct-00	0.826±0.13	<0.1±0.018	0.35±0.069	<1.276±0.1483						
K1-04	18-Jan-01	0.559±0.088	<0.1±0.022 E	0.272±0.053	<0.931±0.1051						
K1-04	23-Apr-01	0.497±0.085	<0.1±0.016	0.232±0.052	<0.829±0.1009						

Table A-23. Ground and surface water analyses for total uranium and uranium isotopes (pCi/L) and 235U/238U atom ratio in samples collected from the Building 865 study area between January 1, 1988 a 2006.

Location	Sample Date	Uranium 233+234 (pCi/L)	Uranium 235+236 (pCi/L)	Uranium 238 (pCi/L)	Calculated Total Uranium** by alpha spec.	Uranium 235/238 ratio (atom ratio)	Uranium 233 by mass measurement (pCi/L)	Uranium 234 by mass measurement (pCi/L)	Uranium 235 by mass measurement (pCi/L)	Uranium 236 by mass measurement (pCi/L)	Uranium 238 by mass measurement (pCi/L)
K1-04	10-Jul-01	0.528±0.082	<0.1±0.012	0.266±0.052	<0.894±0.0978						
K1-04	22-Oct-01	0.799±0.11	<0.1±0.023 E	0.394±0.07	<1.293±0.1324						
K1-04	16-Jan-02	0.708±0.11	<0.1±0.023 E	0.35±0.068	<1.158±0.1314						
K1-04	16-Jan-02	0.725±0.11	<0.1±0.017 E	0.438±0.079	<1.263±0.1365						
K1-04	16-Apr-02	0.669±0.11	<0.1±0.011	0.339±0.067	<1.108±0.1293						
K1-04	29-Jul-02	0.735±0.11	<0.1±0.015 E	0.377±0.07	<1.212±0.1312						
K1-04	29-Jul-02	0.807±0.12	<0.1±0.016 E	0.393±0.073	<1.3±0.1414						
K1-04	5-Dec-02	0.987±0.16	<0.1±0.026	0.567±0.11	<1.654±0.1959						
K1-04	29-Jan-03	0.501±0.087	<0.1±0.011	0.28±0.059	<0.881±0.1057						
K1-04	29-Jan-03	0.474±0.082	<0.1±0.016	0.277±0.056	<0.851±0.1006						
K1-04	18-Apr-03	0.865±0.14	<0.1±0.016	0.466±0.093	<1.431±0.1688						
K1-04	24-Jul-03	1.05±0.15	<0.1±0.018	0.595±0.1	<1.745±0.1812						
K1-04	18-Nov-03					0.00729±0.000048		1.231±0.135	0.0275±0.00074	<0.007±0.00101	0.5869±0.0154
K1-04	18-Nov-03	1.08±0.16	<0.1±0.022 E	0.506±0.093	<1.686±0.1864						
K1-04	18-Nov-03	1.1±0.15	<0.1±0.02 E	0.603±0.095	<1.803±0.1787						
K1-04	29-Jan-04					0.00724±0.000027		0.96±0.024	0.02231±0.000085	<0.00025	0.47892±0.000009
K1-04	29-Jan-04	0.789±0.12	<0.1±0.018	0.415±0.077	<1.304±0.1437						
K1-04	11-May-04	0.939±0.14	<0.1±0.022 E	0.516±0.096	<1.555±0.1712						
K1-04	19-Jul-04					0.00729±0.00019		1.272±0.088	0.031±0.001	<0.0001	0.664±0.023
K1-04	19-Jul-04	1.12±0.16	<0.1±0.024 E	0.583±0.098	<1.803±0.1892						
K1-04	30-Nov-04	0.996±0.15	<0.1±0.02 E	0.493±0.091	<1.589±0.1766						
K1-04	24-Feb-05	0.95±0.15	<0.1±0.03	0.642±0.11	<1.692±0.1884						
K1-04	12-Apr-05	1.1±0.16	<0.1±0.013	0.537±0.095	<1.737±0.1865						
K1-04	1-Aug-05	1.32±0.32	<0.1±0.068	0.546±0.18	<1.966±0.3734						
K1-04	5-Oct-05	1.21±0.2	<0.1±0.038	0.687±0.14	<1.997±0.2471						
K1-04	10-Jan-06	1.1±0.15	<0.1±0.019	0.694±0.1	<1.894±0.1813						
K1-05	21-Jan-88	0.9±0.1	<0.1	0.5±0.1	<1.5±0.1414						
K1-05	4-Apr-88	1.3±0.2	<0.1	0.6±0.2	<2±0.2828						
K1-05	15-Jul-88	1.2±0.3 P	<0.1 P	0.7±0.2 P	<2±0.3606						
K1-05	15-Jul-88	1.8±0.5 P	<0.1 P	0.7±0.3 P	<2.6±0.5831						
K1-05	6-Oct-88	0.7±0.2 P	<0.1 P	0.4±0.2 P	<1.2±0.2828						
K1-05	1-Feb-89	1.5±0.4 P	<0.1 P	<0.2 P	<1.8±0.4						
K1-05	11-Apr-89	0.9±0.1 P	<0.1 P	0.5±0.1 P	<1.5±0.1414						
K1-05	19-Jul-89	1.1±0.2 P	<0.1 P	0.4±0.1 P	<1.6±0.2236						
K1-05	19-Jul-89	1.1±0.2 P	<0.1 P	0.6±0.1 P	<1.8±0.2236						
K1-05	11-Jan-90	0.1±0.1 P	<0.1 P	0.4±0.1 P	<0.6±0.1414						
K1-05	10-Jul-90	1±0.2 P	<0.1 P	0.6±0.2 P	<1.7±0.2828						
K1-05	10-Jul-90	0.8±0.2 P	<0.1 P	0.4±0.1 P	<1.3±0.2236						
K1-05	9-Oct-90	0.8±0.1 P	<0.1 P	0.5±0.1 P	<1.4±0.1414						
K1-05	15-Jan-91	1±0.2 P	<0.1 P	0.5±0.1 P	<1.6±0.2236						
K1-05	9-Apr-91	1.215±0.2366 P	0.01375±0.02697 P	0.4543±0.1587 P	1.68305±0.2862						

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Location	Sample Date	Uranium 233+234 (pCi/L)	Uranium 235+236 (pCi/L)	Uranium 238 (pCi/L)	Calculated Total Uranium** by alpha spec.	Uranium 235/238 ratio (atom ratio)	Uranium 233 by mass measurement (pCi/L)	Uranium 234 by mass measurement (pCi/L)	Uranium 235 by mass measurement (pCi/L)	Uranium 236 by mass measurement (pCi/L)	Uranium 238 by mass measurement (pCi/L)
K1-05	9-Jul-91	0.9508±0.6392 P	0±0.1509 P	0.5071±0.3814 P	1.4579±0.7595						
K1-05	16-Oct-91	0.9899±0.2003 P	<0.0547±0.04612 P	0.4755±0.1365 P	<1.5201±0.2467						
K1-05	16-Jan-92	1.05±0.2054 P	<0.051±0.04298 P	0.552±0.1459 P	<1.653±0.2556						
K1-05	14-Apr-92	1.155±0.2597 P	<0.0708±0.05958 P	0.4267±0.1508 P	<1.6525±0.3062						
K1-05	25-Jul-92	7.005±0.6096 P	<0.0727±0.03734 P	0.6282±0.143 P	<7.7059±0.6273						
K1-05	27-Oct-92	0.984±0.19 P	<0.0675±0.0346 P	0.503±0.13 P	<1.5545±0.2328						
K1-05	2-Feb-93	0.965±0.195 P	<0.0798±0.0409	0.568±0.139 P	<1.6128±0.2429						
K1-05	7-Apr-93	1.02±0.214	<0±0.0405	0.579±0.151	<1.599±0.265						
K1-05	26-Jul-93	1.7±0.13	0.08±0.03	0.7±0.08	2.48±0.1556						
K1-05	4-Nov-93	1.01±0.3	<0.19±0.12	0.44±0.22	<1.64±0.3909						
K1-05	9-Nov-93	1.26±0.07	<0.05±0.02	0.59±0.05	<1.9±0.0883						
K1-05	16-Nov-93	1.5±0.13	<0.04±0.02	0.66±0.09	<2.2±0.1594						
K1-05	22-Nov-93	1.34±0.32	<0.11±0.06	0.61±0.21	<2.06±0.3874						
K1-05	31-Jan-94	1.39±0.12	0.13±0.05	0.68±0.08	2.2±0.1526						
K1-05	4-May-94	1.47±0.11	<0.14±0.05	0.69±0.09	<2.3±0.1507						
K1-05	5-Aug-94	1.45±0.11	<0.17±0.06	0.65±0.09	<2.27±0.1543						
K1-05	13-Oct-94	1.44±0.74	<0.47±0.28	0.61±0.46	<2.52±0.9152						
K1-05	13-Oct-94	0.98±0.27	<0.12±0.066	0.67±0.22	<1.77±0.3545						
K1-05	9-Jan-95	1.52±0.36	<0.046±0.03	0.66±0.21	<2.226±0.4179						
K1-05	10-May-95	1.12±0.4	<0.047±0.065	0.78±0.32	<1.947±0.5164						
K1-05	31-Jul-95	1.94±0.35 F	0.32±0.14 F	0.73±0.22 F	2.99±0.4365						
K1-05	31-Jul-95	1.39±0.31 F	0.26±0.13 F	0.79±0.23 F	2.44±0.4073						
K1-05	12-Oct-95	1.39±0.26 B	0.114±0.074 B	0.67±0.17 B	2.174±0.3193						
K1-05	18-Jan-96	1.28±0.26	0.115±0.081	0.64±0.18	2.035±0.3264						
K1-05	11-Apr-96	1.39±0.16 B	0.104±0.04	0.593±0.099	2.087±0.1924						
K1-05	31-Jul-96	1.28±0.14 B	0.072±0.031	0.675±0.096 B	2.027±0.1726						
K1-05	11-Oct-96	1.42±0.18	0.2±0.064 O	0.78±0.13	2.4±0.2311						
K1-05	17-Jan-97	1.42±0.15	0.095±0.036	0.686±0.1	2.201±0.1838						
K1-05	17-Jan-97	1.34±0.14	0.028±0.02	0.698±0.097	2.066±0.1715						
K1-05	4-Apr-97	1.25±0.28 F	0.105±0.088 B	0.51±0.17 B	1.865±0.3392						
K1-05	2-Jul-97	1.27±0.15	0.069±0.031	0.696±0.1	2.035±0.1829						
K1-05	14-Oct-97	1.45±0.18	<0.025±0.022	0.57±0.11	<2.045±0.2121						
K1-05	12-Jan-98	1.49±0.22 B	<0.09±0.05	0.57±0.13	<2.15±0.2604						
K1-05	12-Jan-98	1.32±0.2 B	<0.1±0.06	0.73±0.14	<2.15±0.2514						
K1-05	15-Apr-98	1.48±0.55	<0.41±0.12	0.56±0.3 B	<2.45±0.6379						
K1-05	16-Jul-98	1.37±0.55	<0.38±0.18	0.67±0.37	<2.42±0.6869						
K1-05	14-Oct-98	1.39±0.49 B	0.13±0.13	0.98±0.38 B	2.5±0.6336						
K1-05	13-Jan-99	1.36±0.29 B	0.043±0.024	0.64±0.15 B	2.043±0.3274						
K1-05	14-Apr-99	1.46±0.13	<0.1±0.031	0.6±0.079	<2.16±0.1552						
K1-05	8-Jul-99	1.53±0.2	<0.1±0.028 E	0.694±0.11	<2.324±0.23						
K1-05	6-Oct-99	1.25±0.17	<0.1±0.023 E	0.557±0.096	<1.907±0.1966						

Table A-23. Ground and surface water analyses for total uranium and uranium isotopes (pCi/L) and 235U/238U atom ratio in samples collected from the Building 865 study area between January 1, 1988 a 2006.

Location	Sample Date	Uranium 233+234 (pCi/L)	Uranium 235+236 (pCi/L)	Uranium 238 (pCi/L)	Calculated Total Uranium** by alpha spec.	Uranium 235/238 ratio (atom ratio)	Uranium 233 by mass measurement (pCi/L)	Uranium 234 by mass measurement (pCi/L)	Uranium 235 by mass measurement (pCi/L)	Uranium 236 by mass measurement (pCi/L)	Uranium 238 by mass measurement (pCi/L)
K1-05	6-Oct-99	1.14±0.2	<0.1±0.025	0.511±0.11	<1.751±0.2296						
K1-05	8-Feb-00	1.35±0.17	<0.1±0.019 E	0.68±0.1	<2.13±0.1981						
K1-05	19-Apr-00	1.45±0.22	<0.1±0.048 E	0.653±0.12	<2.203±0.2552						
K1-05	19-Jul-00	1.43±0.19	<0.1±0.028 E	0.688±0.11 O	<2.218±0.2213						
K1-05	24-Oct-00	1.41±0.19	<0.1±0.023 E	0.641±0.1	<2.151±0.2159						
K1-05	18-Jan-01	1.38±0.18	<0.1±0.03 E	0.674±0.11	<2.154±0.2131						
K1-05	20-Apr-01	1.28±0.18	<0.1±0.037 E	0.658±0.11	<2.038±0.2142						
K1-05	20-Apr-01	1.4±0.18	<0.1±0.023 E	0.635±0.1	<2.135±0.2072						
K1-05	10-Jul-01	1.42±0.17	<0.1±0.02 E	0.733±0.1	<2.253±0.1982						
K1-05	23-Oct-01	1.38±0.15	<0.1±0.014 E	0.673±0.081	<2.153±0.171						
K1-05	22-Jan-02	1.48±0.19	<0.1±0.027 E	0.67±0.11	<2.25±0.2212						
K1-05	18-Apr-02	1.4±0.18	<0.1±0.023	0.645±0.1	<2.145±0.2072						
K1-05	30-Jul-02	1.4±0.18	<0.1±0.022 E	0.646±0.1	<2.146±0.2071						
K1-05	6-Dec-02	1.37±0.18	<0.1±0.019 E	0.676±0.11	<2.146±0.2118						
K1-05	29-Jan-03	0.874±0.13	<0.1±0.018	0.495±0.086	<1.469±0.1569						
K1-05	18-Apr-03	1.27±0.19	<0.1±0.017	0.575±0.11	<1.945±0.2202						
K1-05	24-Jul-03	1.54±0.21	<0.1±0.025 E	0.775±0.12	<2.415±0.2432						
K1-05	19-Nov-03					0.00725±0.000037		1.673±0.099	0.03591±0.00108	<0.007±0.00103	0.7705±0.0229
K1-05	19-Nov-03	1.68±0.21	<0.1±0.016	0.75±0.11	<2.53±0.2376						
K1-05	29-Jan-04					0.00723±0.000052		1.544±0.072	0.03595±0.00026	<0.0007	0.77284±0.000017
K1-05	29-Jan-04	1.69±0.21	<0.1±0.024 E	0.644±0.1	<2.434±0.2338						
K1-05	10-May-04	1.61±0.21	<0.1±0.024 E	0.723±0.11	<2.433±0.2383						
K1-05	13-Jul-04					0.00747±0.00016		1.667±0.122	0.039±0.001	<0.0002	0.813±0.024
K1-05	13-Jul-04	1.7±0.21	<0.1±0.024 E	0.793±0.11	<2.593±0.2383						
K1-05	13-Jul-04	1.71±0.21	<0.1±0.022 E	0.754±0.11	<2.564±0.2381						
K1-05	1-Dec-04	1.65±0.22	<0.1±0.027 E	0.881±0.13	<2.631±0.257						
K1-05	1-Mar-05	1.5±0.21	<0.1±0.032	0.668±0.12	<2.268±0.244						
K1-05	13-Apr-05	1.62±0.21	<0.1±0.021	0.8±0.13	<2.52±0.2479						
K1-05	7-Jul-05	1.89±0.25	<0.1±0.036	0.886±0.14	<2.876±0.2888						
K1-05	7-Jul-05	1.78±0.24	<0.1±0.033	0.824±0.14	<2.704±0.2798						
K1-05	5-Oct-05	1.65±0.25	<0.1±0.035	0.804±0.15	<2.554±0.2936						
K1-05	5-Jan-06	1.7±0.23	<0.1±0.022	0.966±0.15	<2.766±0.2755						
K1-07	20-Jan-88	1.6±0.2	<0.1	0.6±0.1	<2.3±0.2236						
K1-07	20-Jan-88	1.6±0.2	<0.1	0.6±0.1	<2.3±0.2236						
K1-07	20-Jan-88	1.5±0.1	<0.1	0.6±0.1	<2.2±0.1414						
K1-07	4-Apr-88	2.2±0.5	<0.2	0.9±0.3	<3.3±0.5831						
K1-07	25-Jul-88	0.6±0.2 P	<0.1 P	0.5±0.2 P	<1.2±0.2828						
K1-07	10-Oct-88	1.4±0.2 P	<0.2 P	0.7±0.2 P	<2.3±0.2828						
K1-07	10-Oct-88	1.3±0.2 P	<0.2 P	0.6±0.2 P	<2.1±0.2828						
K1-07	23-Jan-89	<0.1 P	<0.1 P	<0.1 P	<0.30						
K1-07	11-Apr-89	1.6±0.2 P	<0.1 P	0.8±0.2 P	<2.5±0.2828						

Table A-23. Ground and surface water analyses for total uranium and uranium isotopes (pCi/L) and 235U/238U atom ratio in samples collected from the Building 865 study area between January 1, 1988 a 2006.

Location	Sample Date	Uranium 233+234 (pCi/L)	Uranium 235+236 (pCi/L)	Uranium 238 (pCi/L)	Calculated Total Uranium** by alpha spec.	Uranium 235/238 ratio (atom ratio)	Uranium 233 by mass measurement (pCi/L)	Uranium 234 by mass measurement (pCi/L)	Uranium 235 by mass measurement (pCi/L)	Uranium 236 by mass measurement (pCi/L)	Uranium 238 by mass measurement (pCi/L)
K1-07	24-Jul-89	1.4±0.3 P	<0.1 P	0.7±0.2 P	<2.2±0.3606						
K1-07	11-Jan-90	1.6±0.1 P	<0.1 P	0.8±0.1 P	<2.5±0.1414						
K1-07	10-Jul-90	1.5±0.2 P	<0.1 P	0.7±0.2 P	<2.3±0.2828						
K1-07	9-Oct-90	1.5±0.2 P	<0.1 P	0.5±0.1 P	<2.1±0.2236						
K1-07	15-Jan-91	1.1±0.2 P	<0.1 P	0.5±0.2 P	<1.7±0.2828						
K1-07	9-Apr-91	1.348±0.2395 P	0.01158±0.04539 P	0.5164±0.1349 P	1.87598±0.2786						
K1-07	9-Jul-91	1.227±0.2332 P	0.04537±0.06678 P	0.6558±0.1699 P	1.92817±0.2962						
K1-07	16-Oct-91	1.381±0.2315 P	<0.0633±0.03765 P	0.6189±0.1444 P	<2.0632±0.2754						
K1-07	16-Jan-92	1.538±0.2611 P	<0.0578±0.02432 P	0.7381±0.1871 P	<2.3339±0.3221						
K1-07	16-Jan-92	1.322±0.2164 P	0.05396±0.05296 P	0.624±0.1355 P	1.99996±0.2608						
K1-07	14-Apr-92	1.506±0.2862 P	<0.0639±0.05372 P	0.7472±0.185 P	<2.3171±0.345						
K1-07	25-Jul-92	1.798±0.2276 P	0.1432±0.07056 P	0.6685±0.1319 P	2.6097±0.2724						
K1-07	26-Oct-92	1.36±0.284 P	<0.114±0.0587 P	0.69±0.2 P	<2.164±0.3523						
K1-07	26-Oct-92	1.33±0.22 P	0.0728±0.0537 P	0.549±0.137 P	1.9518±0.2647						
K1-07	2-Feb-93	1.09±0.219 P	<0.0823±0.0422	0.542±0.143 P	<1.7143±0.2649						
K1-07	7-Apr-93	1.38±0.253	0.0404±0.0382	0.53±0.141	1.9504±0.2921						
K1-07	26-Jul-93	2.14±0.14	0.15±0.04	0.81±0.09	3.1±0.1712						
K1-07	4-Nov-93	1.39±0.29	<0.1±0.06	0.61±0.19	<2.1±0.3519						
K1-07	9-Nov-93	1.54±0.08	<0.04±0.01	0.74±0.06	<2.32±0.1005						
K1-07	17-Nov-93	1.51±0.28	<0.38±0.09	<0.47±0.18	<2.36±0.3448						
K1-07	22-Nov-93	1.38±0.09	0.11±0.03	0.61±0.06	2.1±0.1122						
K1-07	31-Jan-94	1.47±0.14	0.21±0.06	0.92±0.11	2.6±0.1879						
K1-07	4-May-94	1.96±0.16	<0.09±0.04	0.76±0.1	<2.81±0.1929						
K1-07	5-Aug-94	1.9±0.14	<0.08±0.03	0.74±0.09	<2.72±0.1691						
K1-07	13-Oct-94	1.24±0.79	<0.38±0	0.68±0.57	<2.3±0.9742						
K1-07	9-Jan-95	2.04±0.46	0.033±0.047	0.68±0.22	2.753±0.5121						
K1-07	11-May-95	1.86±0.71	<0.13±0.02	0.41±0.29	<2.4±0.7672						
K1-07	31-Jul-95	1.44±0.3	0.105±0.085	0.88±0.24	2.425±0.3935						
K1-07	12-Oct-95	1.37±0.26 B	<0.069±0.061 B	0.68±0.18 B	<2.119±0.3221						
K1-07	18-Jan-96	1.75±0.33	0.23±0.12	0.97±0.24	2.95±0.4253						
K1-07	12-Apr-96	1.3±0.15 B	0.053±0.029	0.672±0.1	2.025±0.1826						
K1-07	31-Jul-96	1.47±0.15 B	0.064±0.029	0.703±0.1 B	2.237±0.1826						
K1-07	11-Oct-96	1.46±0.17 B	0.054±0.029 O	0.66±0.11	2.174±0.2046						
K1-07	17-Jan-97	1.5±0.15	0.086±0.033	0.672±0.096	2.258±0.1811						
K1-07	4-Apr-97	1.52±0.3 F	0.11±0.08 B	0.79±0.21 B	2.42±0.3748						
K1-07	3-Jul-97	1.23±0.14	0.044±0.023	0.575±0.089	1.849±0.1675						
K1-07	16-Oct-97	1.44±0.19	0.08±0.041	0.77±0.13	2.29±0.2338						
K1-07	12-Jan-98	1.24±0.2 B	<0.1±0.06	0.58±0.13	<1.92±0.246						
K1-07	15-Apr-98	1.48±0.52	0.22±0.18	0.28±0.19 B	1.98±0.5822						
K1-07	16-Jul-98	1.27±0.44 B	<0.25±0.13	0.37±0.22	<1.89±0.5088						
K1-07	15-Oct-98	1.11±0.45 B	<0.18±0.14	0.54±0.29 B	<1.83±0.5534						

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Location	Sample Date	Uranium 233+234 (pCi/L)	Uranium 235+236 (pCi/L)	Uranium 238 (pCi/L)	Calculated Total Uranium** by alpha spec.	Uranium 235/238 ratio (atom ratio)	Uranium 233 by mass measurement (pCi/L)	Uranium 234 by mass measurement (pCi/L)	Uranium 235 by mass measurement (pCi/L)	Uranium 236 by mass measurement (pCi/L)	Uranium 238 by mass measurement (pCi/L)
K1-07	14-Jan-99	1.28±0.27 B	0.037±0.024	0.61±0.14 B	1.927±0.3051						
K1-07	12-Apr-99	1.31±0.12	<0.1±0.024	0.666±0.083	<2.076±0.1479						
K1-07	6-Jul-99	1.36±0.19	<0.1±0.03	0.636±0.1	<2.096±0.2168						
K1-07	4-Oct-99	1.34±0.18	<0.1±0.023 E	0.538±0.091	<1.978±0.203						
K1-07	8-Feb-00	1.27±0.18	<0.1±0.025 E	0.611±0.1	<1.981±0.2074						
K1-07	8-Feb-00	1.17±0.17	<0.1±0.026 E	0.639±0.11	<1.909±0.2041						
K1-07	19-Apr-00	1.4±0.2	<0.1±0.027 E	0.633±0.11	<2.133±0.2298						
K1-07	20-Jul-00	1.24±0.17	<0.1±0.02 E	0.638±0.099	<1.978±0.1977						
K1-07	25-Oct-00	1.37±0.19 LO	<0.1±0.035 ELO	0.629±0.11 LO	<2.099±0.2223						
K1-07	22-Jan-01	1.3±0.16	<0.1±0.025 E	0.595±0.089	<1.995±0.1848						
K1-07	23-Apr-01	1.5±0.2	<0.1±0.033 E	0.707±0.12	<2.307±0.2356						
K1-07	10-Jul-01	1.37±0.17	<0.1±0.021 E	0.664±0.094	<2.134±0.1954						
K1-07	23-Oct-01	1.39±0.18	<0.1±0.019	0.737±0.11	<2.227±0.2118						
K1-07	23-Oct-01	1.42±0.19	<0.1±0.025 E	0.718±0.11	<2.238±0.221						
K1-07	22-Jan-02	1.32±0.18	<0.1±0.023 E	0.738±0.11	<2.158±0.2122						
K1-07	18-Apr-02	1.36±0.17	<0.1±0.022 E	0.752±0.11	<2.212±0.2037						
K1-07	30-Jul-02	1.33±0.18	<0.1±0.024 E	0.679±0.11	<2.109±0.2123						
K1-07	6-Dec-02	1.45±0.19	<0.1±0.023 E	0.677±0.11	<2.227±0.2207						
K1-07	30-Jan-03	1.19±0.17	<0.1±0.025 E	0.612±0.1	<1.902±0.1988						
K1-07	1-May-03	1.58±0.2	<0.1±0.031 E	0.736±0.11	<2.416±0.2303						
K1-07	28-Aug-03	1.6±0.22	<0.27±0.028 E	0.741±0.12	<2.611±0.2522						
K1-07	24-Nov-03					0.00726±0.000052		1.743±0.174	0.03507±0.00101	<0.007±0.0013	0.7515±0.021
K1-07	24-Nov-03	1.38±0.18	<0.1±0.024 E	0.662±0.11	<2.142±0.2123						
K1-07	4-Feb-04					0.00729±0.000056		1.643±0.094	0.03409±0.00026	<0.00133	0.72758±0.000019
K1-07	4-Feb-04	1.62±0.21	<0.1±0.022 E	0.839±0.12	<2.559±0.2429						
K1-07	10-May-04	1.42±0.19	<0.1±0.018	0.734±0.11	<2.254±0.2203						
K1-07	21-Jul-04					0.00725±0.000046		1.854±0.081	0.04±0	<0.00003	0.854±0.008
K1-07	21-Jul-04	1.76±0.22	<0.1±0.026 E	0.823±0.13	<2.683±0.2569						
K1-07	2-Dec-04	1.57±0.2	<0.1±0.019 E	0.758±0.12	<2.428±0.234						
K1-07	28-Feb-05	1.59±0.21	<0.1±0.025	0.728±0.11	<2.418±0.2384						
K1-07	6-Apr-05	1.84±0.23	<0.1±0.028	0.752±0.11	<2.692±0.2565						
K1-07	6-Jul-05	1.7±0.23	<0.1±0.028	0.766±0.12	<2.566±0.2609						
K1-07	17-Oct-05	1.92±0.24	<0.1±0.032	0.9±0.13	<2.92±0.2748						
K1-07	17-Jan-06	1.7±0.22	<0.1±0.028	0.883±0.13	<2.683±0.2571						
K1-08	21-Jan-88	1.2±0.2		0.5±0.1	1.7±0.2236						
K1-08	6-Apr-88	1.2±0.2	<0.1	0.5±0.1	<1.8±0.2236						
K1-08	15-Jul-88	0.3±0.2 P	<0.1 P	0.2±0.1 P	<0.6±0.2236						
K1-08	6-Oct-88	1.1±0.3 P	<0.1 P	0.5±0.2 P	<1.7±0.3606						
K1-08	24-Jan-89	1.1±0.1 P	<0.1 P	0.5±0.1 P	<1.7±0.1414						
K1-08	4-May-89	1±0.3 P	<0.1 P	0.5±0.2 P	<1.6±0.3606						
K1-08	24-Jul-89	1±0.2 P	<0.1 P	0.5±0.1 P	<1.6±0.2236						

Table A-23. Ground and surface water analyses for total uranium and uranium isotopes (pCi/L) and 235U/238U atom ratio in samples collected from the Building 865 study area between January 1, 1988 a 2006.

Location	Sample Date	Uranium 233+234 (pCi/L)	Uranium 235+236 (pCi/L)	Uranium 238 (pCi/L)	Calculated Total Uranium** by alpha spec.	Uranium 235/238 ratio (atom ratio)	Uranium 233 by mass measurement (pCi/L)	Uranium 234 by mass measurement (pCi/L)	Uranium 235 by mass measurement (pCi/L)	Uranium 236 by mass measurement (pCi/L)	Uranium 238 by mass measurement (pCi/L)
K1-08	11-Jan-90	1±0.1 P	<0.1 P	0.5±0.1 P	<1.6±0.1414						
K1-08	10-Jul-90	1±0.2 P	<0.1 P	0.5±0.1 P	<1.6±0.2236						
K1-08	9-Oct-90	1±0.1 P	<0.1 P	0.4±0.1 P	<1.5±0.1414						
K1-08	15-Jan-91	1±0.2 P	<0.1 P	0.3±0.1 P	<1.4±0.2236						
K1-08	10-Apr-91	1.008±0.225 P	0.0441±0.0577 P	0.425±0.1457 P	1.4771±0.2742						
K1-08	10-Apr-91	1.087±0.2323 P	0.03024±0.05931 P	0.4371±0.1498 P	1.55434±0.2827						
K1-08	9-Jul-91	1.634±0.7783 P	0±0.2154 P	0.3632±0.3628 P	1.9972±0.8853						
K1-08	16-Oct-91	0.8736±0.1939 P	0.05748±0.0452 P	0.4083±0.1327 P	1.33938±0.2393						
K1-08	16-Jan-92	0.8577±0.1931 P	<0.059±0.04971 P	0.3975±0.1258 P	<1.3142±0.2358						
K1-08	14-Apr-92	0.9603±0.2142 P	<0.0589±0.04961 P	0.3862±0.1254 P	<1.4054±0.2531						
K1-08	25-Jul-92	1.337±0.2617 P	<0.131±0.05378 P	0.5212±0.1597 P	<1.9892±0.3113						
K1-08	27-Oct-92	1.18±0.201 P	<0.0712±0.0365 P	0.454±0.122 P	<1.7052±0.2379						
K1-08	2-Feb-93	0.858±0.198 P	<0.0994±0.0255	0.558±0.152 P	<1.5154±0.2509						
K1-08	7-Apr-93	1.16±0.234	<0±0.0378	0.614±0.159	<1.774±0.2854						
K1-08	26-Jul-93	1.44±0.12	0.17±0.04	0.7±0.08	2.31±0.1497						
K1-08	4-Nov-93	1.26±0.24	<0.07±0.05	0.53±0.15	<1.86±0.2874						
K1-08	9-Nov-93	1.15±0.17	<0.14±0.06	0.65±0.13	<1.94±0.2223						
K1-08	17-Nov-93	1.55±0.22	0.24±0.1	0.78±0.17	2.57±0.2955						
K1-08	22-Nov-93	1.83±0.09	0.19±0.03	0.81±0.06	2.83±0.1122						
K1-08	31-Jan-94	1.31±0.09	0.05±0.02	0.67±0.06	2.03±0.11						
K1-08	31-Jan-94	0.51±0.08	0.08±0.03	0.32±0.06	0.91±0.1044						
K1-08	4-May-94	1.35±0.14	<0.06±0.03	0.66±0.09	<2.07±0.1691						
K1-08	5-Aug-94	1.39±0.1	0.06±0.02	0.67±0.07	2.12±0.1237						
K1-08	13-Oct-94	1.14±0.8	<0.42±0	0.5±0.52	<2.06±0.9541						
K1-08	9-Jan-95	1.38±0.35	0±0	0.64±0.21	2.02±0.4082						
K1-08	9-Jan-95	1.32±0.35	0.034±0.05	0.85±0.26	2.204±0.4389						
K1-08	11-May-95	0.79±0.31	0.024±0.049	0.41±0.2	1.224±0.3722						
K1-08	31-Jul-95	2.18±0.39	0.32±0.15	0.69±0.22	3.19±0.4722						
K1-08	12-Oct-95	1.14±0.23 B	0.095±0.065 B	0.49±0.14 B	1.725±0.277						
K1-08	18-Jan-96	1.85±0.31	0.183±0.098	0.76±0.19	2.793±0.3766						
K1-08	12-Apr-96	1.69±0.19 B	0.081±0.042	0.75±0.12	2.521±0.2286						
K1-08	12-Apr-96	1.66±0.17 B	0.126±0.043	0.99±0.13	2.776±0.2183						
K1-08	31-Jul-96	1.23±0.14 B	0.061±0.028 B	0.613±0.093 B	1.904±0.1704						
K1-08	11-Oct-96	1.49±0.18 B	0.119±0.047 O	0.83±0.13	2.439±0.227						
K1-08	11-Oct-96	1.57±0.19	0.125±0.054 O	0.76±0.13	2.455±0.2365						
K1-08	17-Jan-97	1.57±0.17	0.037±0.025	0.75±0.11 B	2.357±0.204						
K1-08	4-Apr-97	1.47±0.3 F	0.107±0.078 B	0.85±0.22 B	2.427±0.3801						
K1-08	3-Jul-97	1.58±0.17	0.094±0.037	0.85±0.12	2.524±0.2114						
K1-08	3-Jul-97	1.51±0.17	0.072±0.034	0.93±0.13	2.512±0.2167						
K1-08	16-Oct-97	1.83±0.23	0.076±0.043	0.95±0.16	2.856±0.2835						
K1-08	12-Jan-98	1.56±0.22 B	<0.12±0.08	0.55±0.13	<2.23±0.2678						

Table A-23. Ground and surface water analyses for total uranium and uranium isotopes (pCi/L) and 235U/238U atom ratio in samples collected from the Building 865 study area between January 1, 1988 a 2006.

Location	Sample Date	Uranium 233+234 (pCi/L)	Uranium 235+236 (pCi/L)	Uranium 238 (pCi/L)	Calculated Total Uranium** by alpha spec.	Uranium 235/238 ratio (atom ratio)	Uranium 233 by mass measurement (pCi/L)	Uranium 234 by mass measurement (pCi/L)	Uranium 235 by mass measurement (pCi/L)	Uranium 236 by mass measurement (pCi/L)	Uranium 238 by mass measurement (pCi/L)
K1-08	15-Apr-98	1.2±0.43	<0.2±0.024	0.86±0.34 B	<2.26±0.5487						
K1-08	16-Jul-98	1.87±0.65 B	<0.2±0.12	0.69±0.34 B	<2.76±0.7433						
K1-08	16-Jul-98	1.67±0.57 B	<0.32±0.15	0.89±0.39	<2.88±0.7068						
K1-08	15-Oct-98	1.03±0.46 B	0.18±0.19	0.73±0.37 B	1.94±0.6202						
K1-08	14-Jan-99	1.53±0.31 B	0.074±0.028	0.76±0.16 B	2.364±0.35						
K1-08	12-Apr-99	1.56±0.14	<0.1±0.031	0.748±0.091	<2.408±0.1698						
K1-08	7-Jul-99	1.61±0.21	<0.1±0.031 E	0.698±0.11	<2.408±0.2391						
K1-08	4-Oct-99	1.31±0.17	<0.1±0.031 E	0.625±0.098	<2.035±0.1987						
K1-08	9-Feb-00	1.44±0.19	<0.1±0.024 E	0.72±0.11	<2.26±0.2209						
K1-08	19-Apr-00	1.39±0.2	<0.1±0.026 E	0.635±0.12	<2.125±0.2347						
K1-08	20-Jul-00	1.52±0.19	<0.1±0.019 E	0.785±0.11 O	<2.405±0.2204						
K1-08	24-Oct-00	1.64±0.22	<0.1±0.029 E	0.743±0.12	<2.483±0.2523						
K1-08	22-Jan-01	1.39±0.18	<0.1±0.022 E	0.555±0.085	<2.045±0.2003						
K1-08	23-Apr-01	1.62±0.21	0.103±0.041	0.809±0.13	2.532±0.2504						
K1-08	11-Jul-01	1.51±0.19	<0.1±0.023 E	0.7±0.1	<2.31±0.2159						
K1-08	23-Oct-01	1.51±0.19	<0.1±0.024 E	0.725±0.11	<2.335±0.2209						
K1-08	22-Jan-02	1.59±0.21	<0.1±0.021 E	0.809±0.12	<2.499±0.2428						
K1-08	18-Apr-02	1.66±0.21	<0.1±0.025 E	0.689±0.1	<2.449±0.2339						
K1-08	30-Jul-02	1.56±0.21	<0.1±0.018 E	0.768±0.12	<2.428±0.2425						
K1-08	13-Dec-02	1.53±0.19	<0.1±0.025 E	0.775±0.11	<2.405±0.221						
K1-08	7-Feb-03	1.44±0.21	<0.1±0.046 E	0.637±0.12	<2.177±0.2462						
K1-08	2-May-03	1.54±0.22	<0.1±0.026 E	0.78±0.13	<2.42±0.2569						
K1-08	4-Sep-03	1.78±0.25	<0.1±0.031 E	0.811±0.14	<2.691±0.2882						
K1-08	24-Nov-03					0.00727±0.000067		1.843±0.132	0.03901±0.00105	<0.007±0.00192	0.8345±0.021
K1-08	24-Nov-03	1.82±0.23	<0.1±0.024 E	0.882±0.13	<2.802±0.2653						
K1-08	3-Feb-04					0.00728±0.000057		1.914±0.079	0.03889±0.0003	<0.0011	0.83124±0.000019
K1-08	4-Feb-04	1.75±0.2	<0.1±0.02 E	0.848±0.11	<2.698±0.2291						
K1-08	11-May-04	1.81±0.24	<0.1±0.03 E	0.855±0.13	<2.765±0.2746						
K1-08	21-Jul-04					0.00725±0.00019		2.128±0.102	0.045±0.002	<0.00004	0.961±0.028
K1-08	21-Jul-04	1.9±0.24	<0.1±0.023 E	0.879±0.13	<2.879±0.2739						
K1-08	2-Dec-04	1.82±0.24	<0.1±0.029 E	0.93±0.14	<2.85±0.2794						
K1-08	2-Mar-05	1.76±0.24	<0.1±0.025	0.903±0.14	<2.763±0.279						
K1-08	2-Mar-05	1.77±0.23	<0.1±0.027	0.885±0.13	<2.755±0.2656						
K1-08	6-Apr-05	1.94±0.24	<0.1±0.022	0.876±0.13	<2.916±0.2738						
K1-08	6-Jul-05	1.84±0.25	<0.1±0.034	0.976±0.15	<2.916±0.2935						
K1-08	13-Oct-05	2.04±0.28	<0.1±0.029	0.933±0.15	<3.073±0.319						
K1-08	18-Jan-06	1.93±0.24	<0.1±0.018	0.921±0.13	<2.951±0.2735						
K1-08	18-Jan-06	1.96±0.25	<0.1±0.024	0.854±0.13	<2.914±0.2828						
K1-09	21-Jan-88	0.9±0.1	<0.1	0.5±0.1	<1.5±0.1414						
K1-09	6-Apr-88	1±0.1	<0.1	0.4±0.1	<1.5±0.1414						
K1-09	15-Jul-88	0.4±0.2 P	<0.1 P	0.2±0.1 P	<0.7±0.2236						

Table A-23. Ground and surface water analyses for total uranium and uranium isotopes (pCi/L) and 235U/238U atom ratio in samples collected from the Building 865 study area between January 1, 1988 a 2006.

Location	Sample Date	Uranium 233+234 (pCi/L)	Uranium 235+236 (pCi/L)	Uranium 238 (pCi/L)	Calculated Total Uranium** by alpha spec.	Uranium 235/238 ratio (atom ratio)	Uranium 233 by mass measurement (pCi/L)	Uranium 234 by mass measurement (pCi/L)	Uranium 235 by mass measurement (pCi/L)	Uranium 236 by mass measurement (pCi/L)	Uranium 238 by mass measurement (pCi/L)
K1-09	6-Oct-88	0.9±0.2 P	<0.1 P	0.6±0.2 P	<1.6±0.2828						
K1-09	24-Jan-89	1±0.1 P	<0.1 P	0.5±0.1 P	<1.6±0.1414						
K1-09	4-May-89	0.9±0.2 P	<0.1 P	0.3±0.1 P	<1.3±0.2236						
K1-09	4-May-89	0.9±0.2 P	<0.1 P	0.4±0.1 P	<1.4±0.2236						
K1-09	24-Jul-89	1.1±0.2 P	<0.1 P	0.6±0.1 P	<1.8±0.2236						
K1-09	11-Jan-90	0.8±0.2 P	<0.1 P	0.4±0.1 P	<1.3±0.2236						
K1-09	11-Jan-90	1±0.2 P	<0.2 P	0.5±0.1 P	<1.7±0.2236						
K1-09	10-Jul-90	1±0.1 P	<0.1 P	0.5±0.1 P	<1.6±0.1414						
K1-09	11-Jul-90	1±0.1 P	<0.1 P	0.5±0.1 P	<1.6±0.1414						
K1-09	11-Jul-90	1.2±0.2 P	<0.1 P	0.5±0.1 P	<1.8±0.2236						
K1-09	9-Oct-90	0.9±0.1 P	<0.1 P	0.4±0.1 P	<1.4±0.1414						
K1-09	15-Jan-91	1±0.2 P	<0.1 P	0.3±0.1 P	<1.4±0.2236						
K1-09	9-Apr-91	0.9403±0.2089 P	0.06187±0.04867 P	0.3168±0.1219 P	1.31897±0.2467						
K1-09	9-Jul-91	0.3638±0.1512 P	0.0367±0.07201 P	0.4547±0.1816 P	0.8552±0.247						
K1-09	16-Oct-91	0.9254±0.2499 P	<0.0768±0.03238 P	0.4491±0.1635 P	<1.4513±0.3004						
K1-09	16-Jan-92	0.9395±0.2187 P	<0.0602±0.05067 P	0.4377±0.129 P	<1.4374±0.2589						
K1-09	14-Apr-92	0.9382±0.2113 P	<0.0582±0.04892 P	0.3505±0.1234 P	<1.3469±0.2495						
K1-09	14-Apr-92	0.8483±0.1748 P	<0.0439±0.03695 P	0.4903±0.1253 P	<1.3825±0.2182						
K1-09	25-Jul-92	1.165±0.2524 P	<0.112±0.02881 P	0.534±0.1709 P	<1.811±0.3062						
K1-09	27-Oct-92	1.2±0.219 P	<0.0839±0.0645 P	0.544±0.144 P	<1.8279±0.2699						
K1-09	2-Feb-93	1.16±0.17 P	0.0777±0.0555 P	0.403±0.105 P	1.6407±0.2074						
K1-09	7-Apr-93	0.989±0.202	<0±0.0338	0.463±0.128	<1.452±0.2415						
K1-09	26-Jul-93	1.29±0.09	0.13±0.03	0.64±0.07	2.06±0.1179						
K1-09	4-Nov-93	1.08±0.23	0.09±0.06	0.45±0.14	1.62±0.2759						
K1-09	9-Nov-93	1.35±0.08	0.08±0.02	0.53±0.05	1.96±0.0964						
K1-09	17-Nov-93	1.29±0.41	<0.23±0.14	0.61±0.29	<2.13±0.5213						
K1-09	22-Nov-93	1.16±0.09	<0.1±0.04	0.63±0.07	<1.89±0.1208						
K1-09	31-Jan-94	1.16±0.11	<0.05±0.02	0.79±0.09	<2±0.1435						
K1-09	4-May-94	1.28±0.1	<0.07±0.03	0.59±0.07	<1.94±0.1257						
K1-09	5-Aug-94	1.26±0.11	0.06±0.03	0.46±0.07	1.78±0.1338						
K1-09	13-Oct-94	<0.56±0.2	<0.33±0	<0.27±0.2	<1.16±0.2828						
K1-09	13-Oct-94	1.67±0.34	0.29±0.13	0.83±0.21	2.79±0.4202						
K1-09	9-Jan-95	1.28±0.34	0.032±0.048	0.74±0.23	2.052±0.4133						
K1-09	10-May-95	1.28±0.44	0±0	0.96±0.37	2.24±0.5749						
K1-09	10-May-95	1.04±0.27	<0.075±0.049	0.81±0.24	<1.925±0.3646						
K1-09	31-Jul-95	1.54±0.35	0.22±0.13	0.65±0.22	2.41±0.4334						
K1-09	12-Oct-95	1.21±0.24 B	0.167±0.085 B	0.52±0.15 B	1.897±0.2955						
K1-09	18-Jan-96	1.27±0.26	0.094±0.076	0.57±0.18	1.934±0.3252						
K1-09	18-Jan-96	1.91±0.33	0.149±0.094	0.82±0.21	2.879±0.4023						
K1-09	12-Apr-96	1.18±0.13 B	0.053±0.025	0.523±0.086	1.756±0.1579						
K1-09	31-Jul-96	1.2±0.14 B	0.081±0.036	0.62±0.099 B	1.901±0.1752						

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Location	Sample Date	Uranium 233+234 (pCi/L)	Uranium 235+236 (pCi/L)	Uranium 238 (pCi/L)	Calculated Total Uranium** by alpha spec.	Uranium 235/238 ratio (atom ratio)	Uranium 233 by mass measurement (pCi/L)	Uranium 234 by mass measurement (pCi/L)	Uranium 235 by mass measurement (pCi/L)	Uranium 236 by mass measurement (pCi/L)	Uranium 238 by mass measurement (pCi/L)
K1-09	11-Oct-96	1.29±0.17 B	0.085±0.042 O	0.62±0.11	1.995±0.2068						
K1-09	17-Jan-97	1.45±0.16	0.114±0.039	0.71±0.1	2.274±0.1927						
K1-09	4-Apr-97	1.11±0.28 F	0.14±0.11 B	0.65±0.21 B	1.9±0.3669						
K1-09	4-Apr-97	1.64±0.31 F	0.101±0.077 B	0.77±0.21 B	2.511±0.3823						
K1-09	3-Jul-97	1.23±0.14	0.063±0.028	0.606±0.092	1.899±0.1698						
K1-09	16-Oct-97	1.51±0.19	0.048±0.032	0.72±0.13	2.278±0.2324						
K1-09	16-Oct-97	1.5±0.2	0.048±0.033	0.72±0.13	2.268±0.2408						
K1-09	17-Mar-98	1.32±0.47	0.17±0.15	0.72±0.32	2.21±0.588						
K1-09	15-Apr-98	1.48±0.55	<0.46±0.13	0.38±0.25 B	<2.32±0.618						
K1-09	16-Jul-98	1.72±0.63	<0.41±0.18	0.72±0.38	<2.85±0.7574						
K1-09	15-Oct-98	1.76±0.61 B	<0.18±0.11	0.82±0.37 B	<2.76±0.7219						
K1-09	15-Oct-98	1.14±0.46 B	<0.19±0.11	0.57±0.3 B	<1.9±0.5601						
K1-09	13-Jan-99	1.38±0.32 B	<0.054±0.037	0.75±0.19 B	<2.184±0.374						
K1-09	13-Apr-99	1.54±0.13	<0.1±0.017	0.75±0.088	<2.39±0.1579						
K1-09	13-Apr-99	1.58±0.14	<0.1±0.025	0.849±0.095	<2.529±0.171						
K1-09	9-Jul-99	1.75±0.22	<0.1±0.027 E	0.853±0.12	<2.703±0.252						
K1-09	4-Oct-99	1.51±0.19	<0.1±0.03 E	0.702±0.1	<2.312±0.2168						
K1-09	9-Feb-00	1.35±0.18	<0.1±0.03 E	0.687±0.11	<2.137±0.2131						
K1-09	19-Apr-00	1.59±0.22	<0.1±0.031 E	0.758±0.13	<2.448±0.2574						
K1-09	20-Jul-00	1.4±0.18	<0.1±0.027 E	0.682±0.11 O	<2.182±0.2127						
K1-09	20-Jul-00	1.47±0.19	<0.1±0.025 E	0.774±0.11 O	<2.344±0.221						
K1-09	24-Oct-00	1.58±0.2	<0.1±0.033 E	0.732±0.11	<2.412±0.2306						
K1-09	22-Jan-01	1.38±0.18	<0.1±0.021 E	0.672±0.099	<2.152±0.2065						
K1-09	20-Apr-01	1.57±0.22	<0.1±0.035 E	0.601±0.11	<2.271±0.2484						
K1-09	11-Jul-01	1.33±0.17	<0.1±0.015 E	0.722±0.1	<2.152±0.1978						
K1-09	23-Oct-01	1.44±0.18	<0.1±0.023 E	0.667±0.097	<2.207±0.2058						
K1-09	22-Jan-02	1.45±0.19	<0.1±0.023 E	0.757±0.12	<2.307±0.2259						
K1-09	18-Apr-02	1.42±0.18	<0.1±0.022 E	0.695±0.1	<2.215±0.2071						
K1-09	30-Jul-02	1.4±0.18	<0.1±0.027 E	0.692±0.11	<2.192±0.2127						
K1-09	6-Dec-02	1.26±0.17	<0.1±0.024 E	0.67±0.11	<2.03±0.2039						
K1-09	31-Jan-03	1.22±0.17	<0.1±0.013	0.593±0.1	<1.913±0.1977						
K1-09	2-May-03	1.42±0.21	<0.1±0.028	0.783±0.14	<2.303±0.2539						
K1-09	8-Sep-03	1.36±0.19	<0.1±0.02	0.649±0.11	<2.109±0.2205						
K1-09	25-Nov-03					0.00729±0.000042		1.687±0.094	0.03583±0.00087	<0.007±0.00088	0.7639±0.018
K1-09	25-Nov-03	1.54±0.2	<0.1±0.029 E	0.695±0.11	<2.335±0.2301						
K1-09	3-Feb-04					0.00722±0.000054		1.667±0.183	0.03445±0.00026	<0.00166	0.74253±0.000018
K1-09	4-Feb-04	1.6±0.19	<0.1±0.026 E	0.712±0.096	<2.412±0.2145						
K1-09	11-May-04	1.61±0.22	<0.1±0.024 E	0.764±0.13	<2.474±0.2567						
K1-09	20-Jul-04					0.00724±0.00018		1.799±0.139	0.04±0.002	<0.0002	0.853±0.034
K1-09	20-Jul-04	1.72±0.22	<0.1±0.026 E	0.773±0.12	<2.593±0.2519						
K1-09	6-Dec-04	1.64±0.22	<0.1±0.024 E	0.732±0.11	<2.472±0.2471						

Table A-23. Ground and surface water analyses for total uranium and uranium isotopes (pCi/L) and 235U/238U atom ratio in samples collected from the Building 865 study area between January 1, 1988 a 2006.

Location	Sample Date	Uranium 233+234 (pCi/L)	Uranium 235+236 (pCi/L)	Uranium 238 (pCi/L)	Calculated Total Uranium** by alpha spec.	Uranium 235/238 ratio (atom ratio)	Uranium 233 by mass measurement (pCi/L)	Uranium 234 by mass measurement (pCi/L)	Uranium 235 by mass measurement (pCi/L)	Uranium 236 by mass measurement (pCi/L)	Uranium 238 by mass measurement (pCi/L)
K1-09	6-Dec-04	1.67±0.22	<0.1±0.026 E	0.728±0.12	<2.498±0.2519						
K1-09	24-Feb-05	1.63±0.21	<0.1±0.022	0.735±0.12	<2.465±0.2429						
K1-09	6-Apr-05	1.77±0.22	<0.1±0.022	0.855±0.12	<2.725±0.2516						
K1-09	1-Aug-05	2.07±0.42	<0.1±0.069	0.827±0.24	<2.997±0.4886						
K1-09	13-Oct-05	1.73±0.24	<0.1±0.028	0.898±0.15	<2.728±0.2844						
K1-09	19-Jan-06	1.8±0.23	<0.1±0.022	0.857±0.14	<2.757±0.2702						
W-865-01	30-Mar-99	0.647±0.111	<0.1±0.0177	0.327±0.073	<1.074±0.134						
W-865-01	17-May-05					0.00719±0.000051		0.43±0.0063	0.019±0.00015	<0.000077	0.4±0.0017
W-865-01	24-Aug-05					0.00719±0.000058		0.43±0.012	0.018±0.0002	<0.00014	0.38±0.0031
W-865-02	29-Mar-00	0.242±0.056	<0.1±0.017 E	<0.1±0.033 E	<0.442±0.0672						
W-865-03	29-Sep-00	1.16±0.16	<0.1±0.03	0.612±0.1	<1.872±0.191						
W-865-03	20-May-05					0.00723±0.000042		1.2±0.026	0.026±0.0002	<0.00011	0.57±0.0026
W-865-03	24-Aug-05					0.00715±0.000064		1.2±0.023	0.026±0.00041	<0.00011	0.57±0.0072
W-865-04	28-Sep-00	<0.1±0.025 E	<0.1±0.023	<0.1±0.013	<0.3±0.0364						
W-865-05	10-Apr-00					0.00744±0.00023		<0.062±7.445	0.02693±0.00092	<0.0007±0.02536	0.5627±0.0077
W-865-05	30-Mar-01	0.99±0.12 L	<0.1±0.015 EL	0.342±0.054 L	<1.432±0.1324						
W-865-05	11-Jun-01	1.37±0.18	<0.1±0.021 E	0.488±0.083	<1.958±0.1993						
W-865-07	29-Sep-00	1.38±0.19	<0.1±0.033 E	0.705±0.11	<2.185±0.222						
W-865-07	13-May-05					0.00737±0.00004		1.8±0.036	0.043±0.0006	<0.00017	0.9±0.012
W-865-07	18-Aug-05					0.00723±0.000088		1.5±0.047	0.034±0.00055	<0.00014	0.73±0.0077
W-865-1802	27-Jun-03					0.00734±0.00012		2.2±0.38	0.05384±0.00148	<0.0007±0.00547	1.14±0.025
W-865-1802	22-Dec-03					0.00732±0.000047		1.204±0.078	0.02534±0.00016	<0.00053	0.53844±0.000016
W-865-1802	1-Mar-04					0.00707±0.000099		1.098±0.156	0.02249±0.00032	<0.00228	0.49468±0.000033
W-865-1802	9-Jun-04					0.00724±0.000065		1.088±0.059	0.024±0	<0.0001	0.519±0.006
W-865-1802	10-May-05					0.00716±0.000044		1.1±0.02	0.024±0.00031	<0.00019	0.5318±0.0059
W-865-1803	26-Jun-03					0.00727±0.000073		2.14±0.37	0.04563±0.00112	<0.0007±0.00543	0.977±0.022
W-865-1803	3-Mar-04					0.00723±0.00011		1.886±0.269	0.04634±0.0007	<0.00241	0.99624±0.000037
W-865-1803	8-Jun-04					0.0072±0.00017		1.972±0.082	0.049±0.002	<0.0001	1.054±0.027
W-865-1803	17-May-05					0.00724±0.000042		3.9±0.049	0.098±0.0011	<0.00074	2.114±0.02
W-865-1804	23-Jun-03					0.00718±0.000093		<0.062±1.06	0.01535±0.00038	<0.0007±0.0037	0.3326±0.0071
W-865-1804	18-Dec-03					0.00728±0.000085		0.858±0.036	0.0188±0.00022	<0.00044	0.40124±0.000028
W-865-1804	4-Mar-04					0.00731±0.000068		1.031±0.04	0.02356±0.0004	<0.00022	0.50138±0.006
W-865-1804	9-Jun-04					0.00724±0.000064		1.107±0.053	0.026±0	<0.007 E	0.552±0.005
W-865-2002	19-May-05					0.0073±0.000068		1.1±0.016	0.02±0.00025	<0.000083	0.43±0.0036
W-865-2002	19-Sep-05					<0.00744		0.19±0.0053	<0.003±	<0.000015	0.063±0.00068
W-865-2002	8-Nov-05					0.00702±0.000042		0.35±0.015	0.0051±0.000045	<0.0001	0.11±0.00074
W-865-2003	19-May-05					0.00731±0.000054		0.49±0.0039	0.0096±0.000084	<0.000039	0.2±0.00097
W-865-2003	19-Sep-05					0.00722±0.000057		0.44±0.02	0.0081±0.000066	<0.00014	0.17±0.0003
W-865-2003	8-Nov-05					0.00723±0.00008		0.43±0.022	0.008±0.0001	<0.00012	0.17±0.001
W-865-2004	30-Mar-05					0.0071±0.000035		0.78±0.011	0.013±0.000091	<0.000055	0.29±0.0014
W-865-2004	25-May-05					0.00715±0.00005		0.8±0.012	0.014±0.00016	<0.000057	0.3±0.0027

Table A-23. Ground and surface water analyses for total uranium and uranium isotopes (pCi/L) and 235U/238U atom ratio in samples collected from the Building 865 study area between January 1, 1988 a 2006.

Location	Sample Date	Uranium 233+234 (pCi/L)	Uranium 235+236 (pCi/L)	Uranium 238 (pCi/L)	Calculated Total Uranium** by alpha spec.	Uranium 235/238 ratio (atom ratio)	Uranium 233 by mass measurement (pCi/L)	Uranium 234 by mass measurement (pCi/L)	Uranium 235 by mass measurement (pCi/L)	Uranium 236 by mass measurement (pCi/L)	Uranium 238 by mass measurement (pCi/L)
W-865-2004	24-Aug-05					0.00713±0.000056		0.76±0.015	0.013±0.00016	<0.000087	0.28±0.0026
W-865-2004	8-Nov-05					0.00713±0.000038		0.8±0.038	0.013±0.000096	<0.00022	0.29±0.0014
W-865-2004	15-Mar-06					0.00712±0.000027		0.89±0.022	0.015±0.0001	<0.00014	0.33±0.0019
W-865-2005	24-Mar-05					0.00721±0.000033		1.5±0.01	0.026±0.00016	<0.00011	0.57±0.0022
W-865-2005	16-May-05					0.00722±0.000073		1.7±0.041	0.029±0.0004	<0.00012	0.63±0.0058
W-865-2005	31-Aug-05					0.00707±0.00003		1.5±0.027	0.026±0.00016	<0.00018	0.58±0.0026
W-865-2005	7-Dec-05					0.0072±0.00003		1.6±0.036	0.027±0.00014	<0.00011	0.59±0.0017
W-865-2005	24-Feb-06					0.00717±0.000033		1.6±0.02	0.028±0.00017	<0.00028	0.61±0.0023
W-865-2121	30-Mar-05					0.0072±0.000025		0.71±0.0074	0.011±0.000079	<0.000045	0.24±0.0015
W-865-2121	26-May-05					0.00727±0.000064		0.76±0.013	0.012±0.00014	<0.000049	0.26±0.0019
W-865-2121	31-Aug-05					0.00718±0.000074		0.7±0.012	0.011±0.00014	<0.000046	0.24±0.0017
W-865-2121	8-Nov-05					0.00724±0.000073		0.71±0.038	0.011±0.00012	<0.00011	0.24±0.00093
W-865-2121	15-Feb-06					0.00726±0.000036		0.66±0.013	0.01±0.000087	<0.00034	0.22±0.0015
W-865-2133	21-Feb-06					0.00724±0.000014		2±0.038	0.058±0.00018	<0.00024	1.3±0.0029
W-896-1806	27-Mar-06					0.00724±0.000008		0.22±0.0092	0.0062±0.000063	<0.00013	0.13±0.0013
W-PIT1-01	21-Dec-00	3.89±0.45	<0.1±0.028 EO	1.81±0.23	<5.8±0.5061						
W-PIT1-01	13-Mar-01					0.00735±0.00008		6.4043±0.3127	0.13653±0.00209	<0.00174±0.00174	2.88997±0.0289
W-PIT1-01	13-Mar-01	4.46±0.48 L	0.126±0.029 L	2.12±0.23 L	6.706±0.533						
W-PIT1-02	25-Aug-99	<0.1±0.026	<0.1±0.01	<0.1±0.017	<0.3±0.0326						
W-PIT1-02	21-Mar-01					0.00766±0.00023		2.25193±0.29153	0.03743±0.0012	<0.0015±0.0015	0.76036±0.0076
W-PIT1-02	21-Mar-01	1.23±0.17 LO	<0.1±0.023 ELO	0.589±0.098 LO	<1.919±0.1976						

Notes:

pCi/L = Picocuries per liter.
B = Analyte found in method blank.
E = The analyte was detected below LLNL reporting limit, but above analytical laboratory minimum detection limit.
F = Analyte found in field blank, trip blank, or equipment blank.
L = Spike accuracy not within control limits.
O = Duplicate spike or sample precision not within control limits.
P = Indicates that the absence of a data qualifier flag does not mean that the data does not need qualification, but that the implementation of electronic data qualifier flags was not yet established.
but that the implementation of electronic data qualifier flags was not yet established
S = Analytical results for this sample are suspect.

** Total Uranium calculated outside of database just for this data table.

Attachment B

Attachment B

Fate and Transport of Freon 113 and Freon 11 in Ground Water

B-1. Introduction

The Department of Energy (DOE) and Lawrence Livermore National Laboratory (LLNL) conducted an evaluation to determine the fate of Freon 113 and Freon 11 in ground water at the Building 865 study area. This attachment discusses the ground water flow and contaminant transport modeling that was conducted to determine the fate of these two volatile organic compounds. The objectives of the modeling evaluation are to:

- Determine the migration pathway of Freon 113 and Freon 11 in relation to the site boundary.
- Evaluate the time necessary for Freon 113 and Freon 11 to attenuate below their analytical method detection limit of 0.5 micrograms per liter (μg/L).

DOE/LLNL developed a modeling approach that utilized the existing numerical model used in the evaluation of the Building 850 study area (Ferry et al., 2006) that already includes the northern portion of Site 300, including the Building 865 study area. This existing model was updated with recent information collected from wells drilled in the Building 865 study area that allowed DOE/LLNL to further refine the conceptual model for the area east of Building 865. The model represents the $Tnbs_1/Tnbs_0$ hydrostratigraphic unit (HSU) that is the principal water-bearing zone where Freon 113 and Freon 11 exist. This HSU is described in detail in Section 6.1 and the model details are discussed in this attachment.

B-2. Modeling Tool and the Approach

FEFLOW (Diersch, 1998) was selected as the code to simulate groundwater flow and contaminant transport in the Building 865 study area because: (1) sufficient data are available to allow a three-dimensional numerical analysis that incorporates the transport mechanisms in a heterogeneous domain with complex boundary conditions, and (2) DOE/LLNL already maintain an existing model for this area in this particular code. FEFLOW is an interactive finite element code capable of simulating many subsurface processes. FEFLOW was primarily used to model isothermal flow and contaminant transport under saturated groundwater conditions in heterogeneous porous media with complex boundary conditions. The tool is capable of handling full three-dimensional discretization, transient or steady-state flow simulation, and mass transport of contaminants such as Freon 113 and Freon 11. The code is capable of simulating the transport of volatile organic compounds (VOCs) including the primary transport mechanisms of advection, dispersion, and adsorption. The general approach used to develop the $Tnbs_1/Tnbs_0$ HSU model is outlined as follows:

- Develop a site conceptual model by defining the HSU structure, inflow/outflow boundaries, the distribution of each contaminant, and gather all relevant historical data for the Building 865 study area.
- Derive model input parameters from existing groundwater elevation and chemistry data, hydraulic tests, and well development data.
- Develop a flow model representative of unstressed conditions and calibrate to historical and current data by adjusting the hydraulic conductivity distribution and the boundary conditions within observed variations of their respective values.
- Develop a transport model by incorporating the current distribution of Freon 113 and Freon 11 and assigning transport parameters.
- Simulate the fate of the current distribution of Freon 113 and Freon 11 into the future, assuming that ground water condition remain relatively constant and additional VOCs are not introduced to ground water from any sources.
- Perform a sensitivity analysis by varying hydraulic and transport parameters within the observed or predicted variations.

The model results using the above approach and the details of the model are described below.

B-3. The $Tnbs_1/Tnbs_0$ FEFLOW Model

Ground water contamination in the Building 865 study area exists in the $Tnbs_1/Tnbs_0$ HSU ground water. More detailed descriptions of the HSU and the distribution of contamination are presented in Sections 6.1 and 7.3 of this report.

The structure of the $Tnbs_1/Tnbs_0$ HSU west of the Elk Ravine Fault is well understood and was already incorporated into the existing $Tnbs_1/Tnbs_0$ model that was used to evaluate the fate of the tritium distribution in the Building 850 study area (Ferry et al., 2006). The area east of the Elk Ravine Fault was conservatively modeled as a continuous saturated unit that extends to the northeastern site boundary prior to information obtained for this report. Although the HSU structure did not significantly change, the information from newly drilled wells allowed DOE/LLNL to better define the extent of saturation of the HSU and the ground water flow direction east of Building 865.

The $Tnbs_1/Tnbs_0$ HSU was modeled as a single-layer, three-dimensional, heterogeneous, confined HSU. Inflow to the model domain is primarily near the western boundary as recharge from Qal/WBR HSU along the drainage channel. Outflow to the model domain is from the eastern site boundary. The $Tnbs_1/Tnbs_0$ HSU also discharges near the area of Spring 24 along the Elk Ravine fault. However the discharge rate is insignificant compared to the overall flow balance, therefore it was not included as a boundary condition in the model. The ground water elevations in the $Tnbs_1/Tnbs_0$ HSU do not respond significantly to heavy rainfall events, therefore a steady-state flow assumption is used in the model. The saturated thickness of the $Tnbs_1/Tnbs_0$ HSU varies throughout the domain from less than 10 feet (ft) in the west and to more than 100 ft to the east.

The existing model structure was updated with information from new wells and the flow boundaries were redefined based on ground water elevations obtained from these wells. The model domain, the extent of saturation within the HSU and the location of flow boundaries are shown in Figure B-1(a). The model incorporates the entire extent of the $Tnbs_1/Tnbs_0$ HSU in the northern portion of Site 300. Ground water elevation differences on either side of the Elk Ravine fault suggest that the fault zone is a significant barrier to ground water flow. However, the fault was included as a semi-permeable, low conductivity zone in the model.

Specified-head boundary conditions were assigned to the inflow and outflow boundaries based on the ground water elevations obtained from nearby wells and by extrapolating the ground water elevations to the model boundary using the observed ground water gradient. Two distinct hydraulic conductivity values representing the $Tnbs_1/Tnbs_0$ HSU and the Elk Ravine Fault Zone were used to calibrate the flow model. A calibrated hydraulic conductivity value of 2.8 feet per day (ft/day) (1.0 x 10^{-3} centimeters per second [cm/sec]) for the $Tnbs_1/Tnbs_0$ HSU and a value of 1.4 ft/day (5.0 x 10^{-4} cm/sec) were used in the final flow model. These values are very similar to the average hydraulic conductivity values observed during well testing (Section 6.3).

The flow field in the model was calibrated by adjusting the specified head boundary conditions and the hydraulic conductivity of the unit until there was match with measured ground water elevations and the gradient.

The transport of Freon 113 and Freon 11 were simulated by assigning their current distributions in ground water as initial conditions (Figure B-1(a)) in the model and simulating the migration of each contaminant into the future. A retardation coefficient of 1.5 was used to represent the adsorption of Freon 113 and Freon 11 to the solid phase. A longitudinal dispersivity value of 15 ft, a transverse dispersivity value of 1.5 ft, and a porosity value of 0.25 were used in the model as transport parameters. Degradation of VOCs was not allowed in the model to conservatively predict the fate of each contaminant.

Figure B-1(b) shows the predicted distribution of Freon 113 and Freon 11 in 10 years (2015). Based on the model predictions, the Freon 113 concentrations are expected reduce below 50 μg/L and the Freon 11 concentrations will be near the detection limit of 0.5 μg/L. Figure B-1(c) shows the predicted distribution of Freon 113 in 20 years (2025). The maximum concentration of Freon 113 is predicted to be below 20 μg/L and Freon 11 concentrations will be below the detection limit. Figure B-1(d) shows the predicted distribution of Freon 113 in 60 years (2065). Based on the model predictions, the Freon 113 concentrations will be at or below the 0.5 μg/L detection limit. The current Freon 113 and Freon 11 contamination in ground water at Building 865 study area is predicted to attenuate below the 0.5 μg/L detection limit before reaching the eastern site boundary.

A sensitivity analysis was performed to examine the effect of hydraulic conductivity within the $Tnbs_1/Tnbs_0$ HSU and the Elk Ravine fault zone on the migration of Freon 113. Hydraulic conductivity values were increased to simulate conditions where the Freon 113 contamination would reach the eastern site boundary. The hydraulic conductivity values needed to be increased two orders of magnitude to observe Freon 113 at the site boundary above detection limits. However, because of the increased velocities and resulting dispersion, the Freon 113 contamination becomes much smaller in size. Similar effects are observed when the ground water gradient is increased by changing the boundary conditions. The sensitivity to transport parameters is less significant because the variations in the values of these parameters are generally much less.

The calibrated model results indicate that: (1) the Freon 113 and Freon 11 contamination at the Building 865 study area will remain onsite and will attenuate to concentration levels below the 0.5 μg/L detection limit in a reasonable time period, and (2) the plumes will not migrate offsite during this time period.

B-4. References

Ferry, L., M. Dresen, Z. Demir, V. Dibley, V. Madrid, M. Taffet, S. Gregory, J. Valett, and M. Denton, (2006) *Draft Site-Wide Remediation Evalution Summary Report for the Lawrence Livermore National Laboratory Site 300*, Lawrence Livermore National Laboratory, Livermore, Calif. (UCRL-AR-220391-DRAFT).

Diersch, H.G. (1998) Reference Manual, "*FEFLOW – Interactive, Graphics-based Finite-Element Simulation System for Modeling Groundwater Flow, Contaminant Mass and Head Transport Processes*," WASY Institute for Water Resources Planning and Systems Research Ltd., Berlin, Germany.

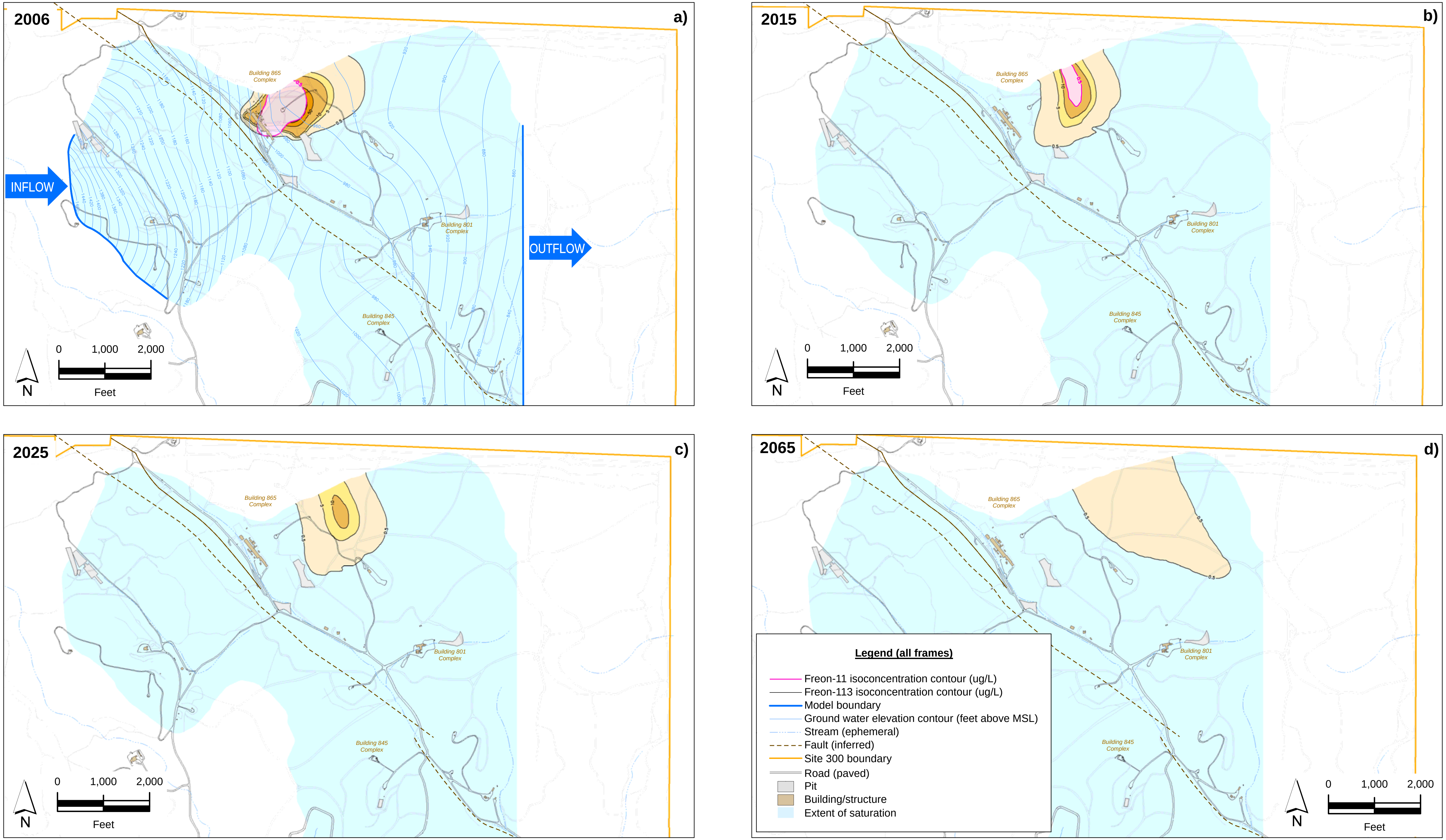

Figure B-1. Modeling of Freon-113 and Freon-11 in ground water over time at the Building 865 study area.

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