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RESIDUAL RISK EVALUATION - RELEASE BLOCK D

MOUND PLANT
MIAMISBURG, OHIO

August 1996

PUBLIC REVIEW DRAFT

Department Of Energy

EG&G Mound Applied Technologies

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EXECUTIVE SUMMARY

The Mound Plant has been used as a research, development and production facility in support of the Department of Energy's (DOE) weapons and energy programs since 1948. Past operations created approximately 400 areas at the Mound where potential releases of hazardous substances may have occurred. These areas where releases may have occurred are undergoing investigation and, as deemed necessary, restoration. With the concurrence of the United States Environmental Protection Agency and the Ohio Environmental Protection Agency, the DOE will release the restored Mound property to the City of Miamisburg for economic development and commercial enterprises.

To streamline the transfer process, the Mound property has been divided into 18 "release blocks", which are contiguous tracts of property designated for release to the public. Before transfer of each release block can be completed, an evaluation will be completed of any human health risks that are associated with residual levels of contamination remaining in the release block either after removal actions (clean-ups) have occurred or have been deemed unnecessary. A Residual Risk Evaluation (RRE) will be prepared for each release block at the Mound to evaluate these residual risks. This report is the RRE for Release Block D, and it addresses residual contaminants in soil and ground water.

The residual contaminants in Release Block D were evaluated by assuming that two categories of people would come into contact with the contaminants: construction workers, who may be directly exposed to soil and ground water (used for showering and drinking) for up to five years, and site employees, such as office workers who may have minimal exposure to soil and ground water, but may be exposed for up to 25 years. Additionally, the construction worker and site employee scenarios include both a scenario for current contaminant concentrations, and a scenario for future contaminant concentrations. The future contaminant concentrations were estimated for ground water by assuming that the ground water currently being pumped from Mound Production Wells represents today's ground water exposures. In the future, additional site related contamination may enter the ground water currently in use and potentially cause different exposures than today's.

The risks associated with the naturally occurring, "background" concentrations of contaminants were calculated separately from the risks associated directly with Mound activities which constitute the "incremental" risks above background. The soil and ground water risks were added together, and the background and incremental risks were added together to produce total risks. These total risks were divided into risks associated with non-carcinogenic contaminants, termed the Overall Hazard Index, and the risks associated with carcinogenic contaminants (including radionuclides), termed Overall Risk. Summary tables of the final risks obtained during this RRE are provided below.

Construction Worker

	Current Scenario		Future Scenario		
	Overall Hazard Index	Overall Risk	Overall Hazard Index	Overall Risk	Comments
Incremental	0.038	1.6E-4	1.0	1.6E-4	Table V.7
Background	9.3E-5	3.1E-7	0.023	3.1E-7	Table V.8
Total	0.038	1.6E-4	1.0	1.6E-4	Table V.9

Site Employee

	Current Scenario		Future Scenario		
	Overall Hazard Index	Overall Risk	Overall Hazard Index	Overall Risk	Comments
Incremental	0.037	7.8E-5	1.0	8.1E-5	Table V.7
Background	7.3E-5	1.4E-6	0.023	1.4E-6	Table V.8
Total	0.037	8.0E-5	1.0	8.3E-5	Table V.9

An Overall Hazard Index of 1.0 indicates that for exposures at or below the given concentration of contaminants, no effects on humans are expected. Risks from carcinogens are expressed in scientific notation. For example, 1.0E-4 equals one cancer in 10,000 people and 1.0E-6 equals one cancer in 1,000,000 people.

The Construction Worker and the Site Employee Tables shows that, for both Hazard Index and Risk the incremental values are nearly identical to the total values (for example, the future site employee Hazard Index is 1.0 for both incremental and total, and the Overall Risk is 8.1E-5 incremental and 8.3E-5 total). This demonstrates that the majority of risk is incremental, and therefore possibly caused by former Mound activities. A comparison of the construction worker and the site worker risks show that the Overall Hazard Indices for each are essentially the same (0.038 currently for a construction worker, 0.037 currently for a site employee; 1.0 future for both construction and site employee). A comparison between construction workers and site employees of the Overall Risk shows that construction workers would be at a slightly increased risk compared to site employees (for example, 1.6 cancers in 10,000 construction workers as compared to 8.0 cancers in 100,000 site employees, current scenario) as a result of exposure in Release Block D.

Polycyclic aromatic hydrocarbons (PAH's) in soil are contributing most of the Overall Hazard Index and Overall Risk for both construction workers and site employees. These compounds are restricted in aerial extent to a small former drum storage area, and they were only measured at depths between three to five feet. The conservative approach of the RRE assumes that, despite the relatively isolated location of the PAH's, they are available for daily exposure for either five years (construction worker) or 25 years (site employee). If the PAH's were assumed to be unavailable for these exposures, the incremental Overall Hazard Indices would be zero, also reducing the total Overall Hazard Indices. Additionally, the incremental Overall Risk from remaining carcinogens and radionuclides would drop to 4.8E-7 (from 1.6E-4 for construction workers) and to 2.5E-7 (from 7.8E-5 for site employees).

1.0 INTRODUCTION

1.1 OVERVIEW

The Department of Energy's Mound Plant is located on a 306-acre parcel of land within the city of Miamisburg, Ohio, about 10 miles southwest of Dayton, Ohio. The plant is located approximately 2000 feet east of the Great Miami River. Portions of the site overlie the Great Miami Buried Valley Aquifer, which has sole source designation. The Mound Plant has been used as a research, development and production facility in support of DOE's weapons and energy programs since 1948. Past operations created over 400 areas at the Mound where potential releases of hazardous substances may have occurred. These areas where releases may have occurred are undergoing investigation and, as deemed necessary, restoration. The restored Mound property will be released for economic development and used for commercial enterprises.

To streamline the transfer process, the Mound property has been divided into 18 "release blocks", which are contiguous tracts of property designated for release at a specific time. Before transfer of each release block can be completed, any residual risks in each of the areas where releases may have occurred (called potential release sites or PRSs) in that release block must be evaluated. The locations and designations of the release blocks are shown in Figure 1.1. All preparations for the transfer of the first Release Block (block A) were completed in 1995, and are underway for the scheduled transfer of Release Block D in 1996 (the subject of this report). All of the release blocks are scheduled to be cleaned up and transferred by 2005.

A Residual Risk Evaluation (RRE) needs to be prepared for each release block to evaluate human health risks associated with residual levels of contamination that remain after removal actions have been completed or judged unnecessary. This information is necessary to show that the release block is acceptable for commercial redevelopment. This report is the RRE completed for Release Block D, which addresses residual contaminants in soil, surface water and ground water. The RRE also addresses potential cumulative risks from exposure of non-release block-specific exposure of contaminants in groundwater and air, in addition to release block-specific contaminants.

The data used to evaluate the human health risks associated with residual contaminants has been derived from many sources over a number of years. These data include, but are not limited to, background study results, soil screening samples, ground water assessments, soil gas sampling, soil confirmation sampling, ground water data from Mound production wells and air sampling data.

1.2 SCOPE OF THE RRE PERFORMED FOR A SPECIFIC RELEASE BLOCK

This report was developed using the Mound 2000 Residual Risk Evaluation Methodology or RREM (DOE, 1996). The RREM was developed through the collaborative efforts of Mound personnel, DOE, U.S. Environmental Protection Agency (U.S. EPA), and the Ohio Environmental Protection Agency (OEPA). A core team of personnel from each party participated in the development of the methodology and were supported by risk assessment experts.

Each release block RRE consists of five elements. These elements are:

1. Identification of contaminants to be evaluated,
2. Exposure assessment,
3. Toxicity assessment,
4. Risk characterization, and
5. Characterization of cumulative risks.

Figure 1.1. Mound facility location map with release blocks identified.

Identification of contaminants to be evaluated

For Release Block D, identification of contaminants to be carried through the RRE calculations was based on several types of data, including the data used to identify the PRSs, any data collected documenting remedial efforts at a PRS, and historical land use information. In general, all information that qualitatively and quantitatively describes the residual contamination within the release block was collected. Historical information describing the past usage of land and buildings within Release Block D was also required.

As described in the RREM, the process of identifying contaminants to be evaluated consists of several steps. All contaminants that were detected one or more times were listed in a contaminant summary table by media where they were detected. Such information as the maximum concentration detected was noted. These data were compared to background concentrations of the contaminants for organics, inorganics, and radionuclides. Background concentrations (95th% Upper Tolerance Limit of the background level) were developed and are presented in the RREM. Contaminants with the maximum concentration detected exceeding their background were carried to the next step of the RRE. Contaminants with the maximum concentration less than their background concentration were not quantitatively addressed further in the RRE. This approach focuses RRE evaluations to address contamination caused by Release Block D and Mound plant activities.

Soil and groundwater contaminants that exceeded the background concentration were compared to risk-based Guideline Values. Guideline Values are media-specific concentrations of contaminants that correspond to certain human health risk levels for specified exposure scenarios. As described in the RREM, Guideline Values were developed for construction worker and site employee scenarios (see HAZWRAP, 1995 for the detailed derivation of Guideline Values). The Guideline Values used in the RRE for Release Block D were developed specifically for the Mound, and were approved by the DOE, the U.S. EPA, and OEPA. Based on these exposure scenarios, the Guideline Values correspond to the 1.0E-6 risk level for carcinogens and radionuclides, and the concentration corresponding to a Hazard Quotient of one for each noncarcinogen. A 1.0E-6 risk level represents one chance in one million of contracting cancer as a result of exposure to the Guideline Value concentration. A Hazard Quotient of one indicates that from an exposure at or below the given concentration, no effects to humans are expected. Carcinogenic or radionuclide contaminants that exceeded their Guideline Values and noncarcinogenic contaminants that exceeded one-tenth of their Guideline Value were carried to the next step of the RRE. Comparison to Guideline Values insures that Release Block D related contaminants occurring at concentrations potentially detrimental to human health were included in the RRE.

Additional screening procedures were also used to evaluate release block contaminants. Contaminants with a frequency of detection less than or equal to 5% (1 detect per 20 analyses) may not indicate contamination that is site related. If a contaminant was infrequently detected in all media, was not detected at high concentrations in any media, and there was no reason to believe it was used on site, the contaminant was eliminated from further consideration. Additionally, a contaminant detected in samples and blanks but is known to be a common laboratory contaminant, and was unlikely to have been used on site, may be eliminated from further consideration if concentrations are within a factor of 10 of the detection limit (RAGS, 1989). Such laboratory contaminants may include methylene chloride, 2-butanone, and phthalate esters.

A final list was then prepared of all contaminants detected in one or more samples and in one or more media that were screened by comparison of the maximum detected value with background and Guideline Values, and considering frequency of detection and whether or not it was a laboratory contaminant. Appropriate screening values for each constituent are listed in the tables presented in Section 2, and the decision and rationale to include or exclude a contaminant from further consideration is indicated. Additionally, general water quality indicator parameters were noted as such and were not carried through the risk evaluation. Nitrogen, as an example, has been measured as nitrates, nitrites, or together as nitrates-nitrites. All are considered indicators of water quality.

Exposure Assessment

The goal of exposure assessment is to estimate the type and magnitude of contaminant exposures that may be incurred by an individual working within the release block under consideration. First, exposure scenarios were identified. DOE, U.S.EPA and OEPA core team members and the stakeholders have agreed that the site use will be commercial/industrial. Therefore, the two exposure scenarios developed for use in the RRE are the construction worker and site employee scenarios. These scenarios represent exposures that are reasonably expected to occur at the Mound property. The intake variables with which potential exposures were quantified for these two types of personnel were conservatively selected such that the exposures represent a reasonable maximum exposure.

Potential exposure pathways through which the construction worker or the site employee may be exposed were determined based on the RREM and knowledge of Release Block D. These potential exposure pathways include direct soil exposure pathways (inadvertent ingestion of soil, external radiation exposure, and dermal contact with soil), air exposure pathways (inhalation of airborne particulates and vapors), and groundwater pathways (ingestion of groundwater as drinking water, inhalation of volatiles during showering, and dermal contact with groundwater during showering). Some differences in pathways for the site employee and construction worker are noted. Construction workers are assumed to be on site for a shorter period of time and consume more soil via incidental ingestion than site employees. Site employees do not shower with groundwater at the site.

The quantification of intakes for each contaminant and each pathway for each exposure scenario were also conducted during exposure assessment. First, constituent concentrations were determined for each media. Then, separate concentrations for each contaminant were calculated for the background (if available) for the incremental portion of the contamination attributable to the Mound facility, and for the total concentration. The total concentration, which is based on the measured concentration, is comprised of both background and the increment above background. These concentrations were then used with the appropriate equations for contaminant intake for each pathway and each receptor (construction worker or site employee) as specified in the RREM. In addition, Secondary Drinking Water Standards were used to assess general quality of the potable water supply.

Toxicity Assessment

The toxicity assessment identifies potential adverse effects associated with exposure to release block-related substances. Toxicity values were taken from the U.S. EPA's Integrated Risk Information System (IRIS) and the Health Effects Assessment Summary Tables (HEAST). For contaminants without toxicity values in IRIS or HEAST, the most recent data available may be used. If no toxicity values exist for a particular contaminant, the contaminant was not quantitatively evaluated in the RRE.

Risk Characterization

Risk characterization combines information from both the exposure assessment and the toxicity assessment to characterize human health risks. This process characterizes carcinogenic and radionuclide risk separately, using standard equations as specified in the RREM. Hazard Quotients are calculated for each noncarcinogen contaminant. Potential risks were calculated for each pathway and each receptor based on the total concentration of a contaminant, its background concentration and the increment above background attributable to Mound activities. Chemical-specific risks and Hazard Quotients were then summed across pathways and across contaminants.

Evaluation of Potential Cumulative Health Effects

The exposures to contaminants located within a release block are called release block exposures. However, contaminants from outside the release block under investigation may migrate to the release

block via air pathways, surface water pathways and ground water pathways. The potential for exposure to these migrating contaminants are called cumulative exposures, and they were evaluated to complete the RRE for Release Block D.

1.3 ORGANIZATION OF THIS RRE REPORT

This RRE report is for Release Block D. Section 2.0 identifies the Release Block D contaminants by describing the available data and performing the screening with background and Guideline Values. Section 3.0 identifies exposure scenarios and exposure pathways to complete the exposure assessment. Section 4.0 is the toxicity assessment. Section 5.0 contains the residual risk evaluation for both construction workers and site employees, and considers both current exposures and potential future exposures. This section also evaluates the cumulative health effects of residual risk from multiple pathways, and discusses uncertainties.

2.0 IDENTIFICATION OF RELEASE BLOCK D POTENTIAL CONTAMINANTS

2.1 RELEASE BLOCK D SITE HISTORY

In the early 1980's, a Site Survey Project of the Mound facility was initiated to estimate the quantities and types of radionuclides, the volume and locations of contaminated soil, and the potential remediation costs. The report, published in 1988, lists 22 contaminated areas on the Mound facility property, called Areas Of Concern (AOC). One of these areas lies west of the southwestern corner of Release Block D and is a former thorium storage and redrumming area. Because there are no AOCs in Release Block D, it is considered to be a Non-AOC area.

Release Block D is considered to be part of the Operable Unit 5 (OU-5) Non-Area of Concern (Non-AOC). OU-5 comprises approximately 100 acres, and includes the SM/PP Hill, the valley to the west, and the plant drainage ditch. Release Block D is located on the south end of the SM/PP Hill, and is generally bound to the south by the "South Property", to the east by offsite residences, to the north by a parking lot and group of small buildings (numbered 39, 77, 78, 97, 95, 101), and to the west by a fenced area for storage of Investigative Derived Material (IDM) (just west of Building 100). The OU-5 Phase I Non-AOC Field Report of June, 1995 states that "The Non-AOC is comprised of many locations where daily plant activities occur. The limited historical data suggests that, except for the special areas of interest, there presently exist no known additional AOC's within this Phase I study area." (pg 1-8).

Two main structures in Release Block D include Building 105, which was built in 1990 as a machine shop, and is still used for that purpose. The other is Building 100 which is the Guard Force Precinct bunker. There is also a small guard shack near the former Contractor's Gate entrance and a small building where Mound orientations take place. Portions of Release Block D are currently used for storage of trailers, roll-off boxes, small above-ground tanks and other assorted containers. Also located on the block is a large sewer manway/dump station. Historically, the portion of the Mound facility now referred to as Release Block D had a small area known as the Old Firing Range Drum Storage Site that stored liquid chemical wastes over a four year period. No other historical uses of the area of the Mound facility referred to as Release Block D are known.

2.2 AVAILABLE DATA FOR RELEASE BLOCK D

There are three main sources of soil contaminant data available for Release Block D. The first is data related to the identification of PRS's, and consists of a compilation of historical data for many different analytes from many sampling events, including PETREX soil gas analyses, soil samples and screening techniques. The second data source consists of radiological analyses conducted by the Mound Plant Soil Screening Laboratory health physics and construction projects. The third data source consists of soil analyses conducted during the Soil Gas Confirmation Sampling in February 1996. Groundwater data consists of water analyses of the Mound Production wells and analyses of groundwater from monitoring wells screened in the bedrock aquifer on the Mound property. The source of groundwater consumed or used at Release Block D is assumed to be the Great Miami Buried Valley Aquifer (BVA) from the Mound Plant production wells. Additionally, background contamination data were gathered and used.

2.2.1 Background Data

For an analyte to be carried through the risk evaluation, the analyte must exceed both background concentrations and Guideline Value (0.1 times the Guideline value for non-carcinogens) concentrations for the soil or groundwater media in which it was detected. Background concentrations measure the amount of a chemical that is naturally occurring (like metals) or anthropogenic chemicals originating from sources other than the Mound plant. Background concentrations in soil were determined during an investigation conducted in September 1994 titled "Operable Unit 9 Background Soils Investigation Soil Chemistry Report".

Background concentrations in ground water were developed from two sources of data. For the Buried Valley Aquifer (Mound production wells source) background values were reported in the April 1995 "OU9 Hydrologic Investigation: Groundwater Sweeps Report". Background for bedrock ground water was reported in the April 1995 "OU5 New Property Remedial Investigation Report". Guideline Values were developed by the DOE and are listed in a document titled "Risk-Based Guideline Values, Mound Plant, Miamisburg, OH" December 1995. For analytes in soil or groundwater with no Guideline Values, analytes that exceeded background were carried through the RRE. Detected analytes with neither background nor Guideline Values were carried through to the next step of the RRE. The following section examines the available soil and groundwater data for Release Block D.

2.2.2 PRS Data

There are 12 Potential Release Sites (PRSs) located within Release Block D and two PRSs near the northern and western edges of Release Block D. The PRSs are numbered 279, 310, 312, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381 and 382. The PRSs are so designated based on either knowledge of historical land use considered potentially detrimental, or on actual sampling results showing elevated concentrations of contaminants. The rationale for designation of Release Block D PRSs is outlined in Table II.1. The locations of these PRSs are shown on Figure 2.1. The PRS packages prepared by Mound personnel provide available data, summaries of site uses and maps locating sampling sites. Most of these PRSs (372, 374, 375, 376, 377, 378, 380, 381, 382) were so designated based solely on soil gas readings. The soil gas study was conducted in 1994, utilizing PETREX tubes. Collector tubes measure relative ion counts of volatile and semi-volatile organic compounds; therefore, the method only provides indications of possible contamination. Four of the PRSs were identified based on radionuclide measurements. At PRS 310, elevated cesium-137 was found in a surface soil sample in 1987, and was remediated immediately upon its detection. Soil samples were again collected from this area in December 1991 after the soil removal. Of 28 samples collected, two had concentrations of cesium-137 above detection limits. In these same locations, 25 samples were analyzed for radium-226. All samples contained detectable concentrations of radium-226. In 1995, soil samples collected in this location did not detect cesium-137, or any other contaminant. At PRS 373 and PRS 379, plutonium-238 was detected in surface samples in 1994 and 1995, respectively, and found (as measured by the Mound Soil Screening Laboratory) at or slightly above the method detection limit. The surface samples with detected plutonium-238 were shown (by surrounding samples) to be isolated to the PRS location only. The analytical techniques used in the Mound Soil Screening Laboratory are not as sensitive as is possible with other methods. Mound Soil Screening Level calculations indicated that the concentrations of plutonium at these locations will not adversely affect ground water at potential drinking water sources (see the PRS data package for a detailed analysis). In PRS 312, a surface sample collected in 1993 contained thorium-232.

PRS 279 was identified based on photographs that showed possible drum storage at this location. This drum storage area had been referred to as the Old Firing Range Storage Site. Plutonium-238, cobalt-60, radium-226 and thorium-228 were measured in this sample. This former drum storage area was used between 1970 and 1974, and is located north and slightly east of PRS 279. There were no elevated soil gas measurements collected at this location. A deep (3 to 5 feet) soil sample near PRS 279 had detectable concentrations of several PAHs at a concentration of approximately 50 mg/kg. This sample was a composite of four samples collected at the corners of a 30 ft. x 30 ft. square. A second composite prepared similarly from about 100 ft. away found similar contaminants at 1 to 3 mg/kg. Other sample locations nearby did not detect any of the contaminants. A recent (February 1996) soil sample in the vicinity contained only low levels of organic or inorganic compounds. Plutonium-238, radium-226 and thorium-228 were detected in this sample.

2.2.3 Radiological Analytical Data

Radiological data provided by the Mound was compiled by Terran Corporation into four maps (Appendix A). One set of two maps shows analytical laboratory data: one for thorium-232 and one for plutonium-

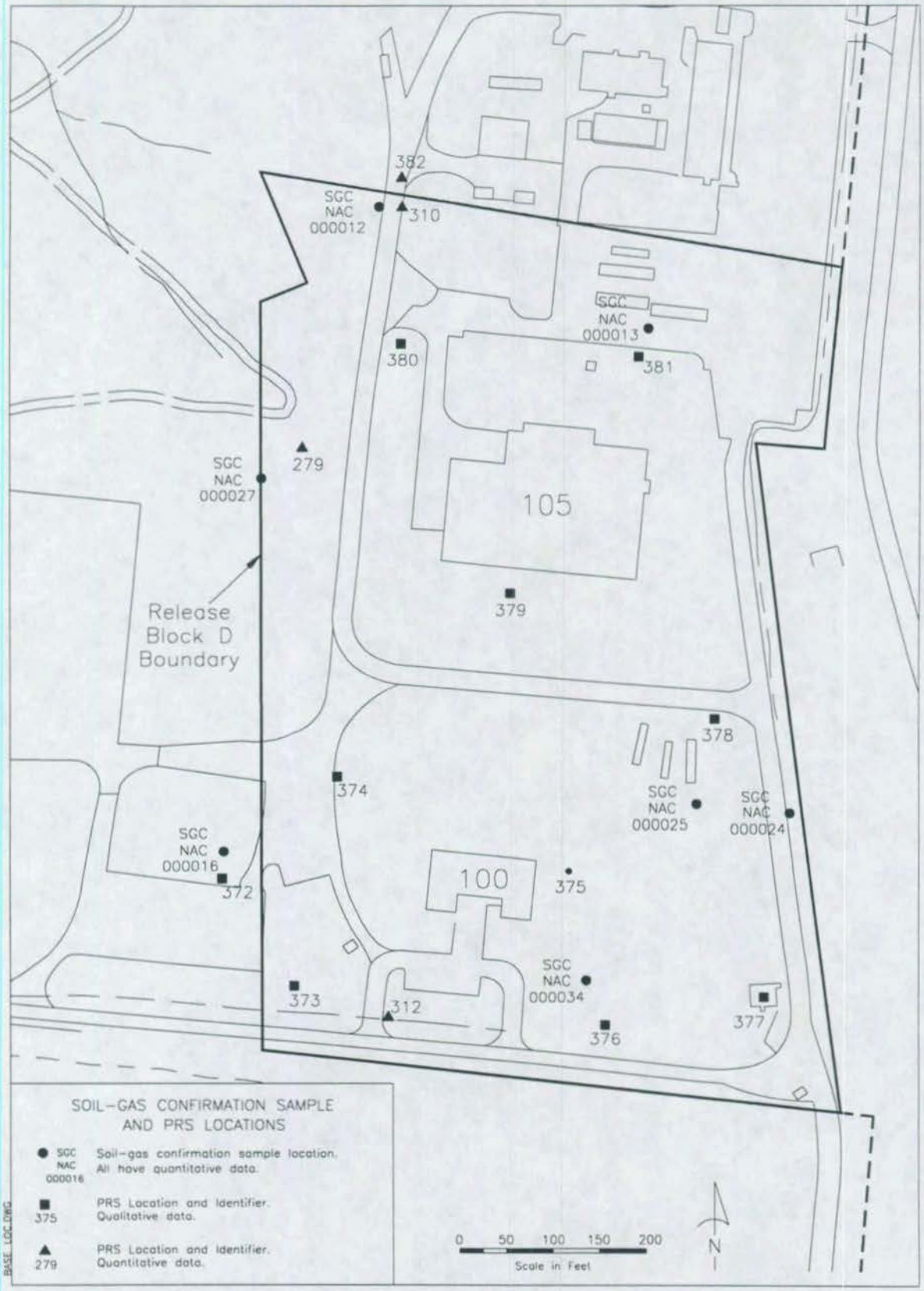

Figure 2.1. Release Block D map with potential release sites (PRSs) located. Also shows which sample locations have quantitative (analytical laboratory) chemistry data and which have qualitative (screening, PETREX tube) chemistry data.

238 concentrations. The other set of two maps shows Mound Soil Screening Laboratory data for thorium-232 and plutonium-238. The analytical laboratory and screening laboratory data were separated because of their differing detection limits.

The screening laboratory maps for thorium-232 show that of 317 samples within Release Block D, nine (or 3%) were 2 pCi/g (the detection limit) or above. Eight of these nine samples are located north of Building 105. The highest thorium-232 concentration from these nine samples was 7 pCi/g. The analytical laboratory maps show no thorium-232 values above 1.0 pCi/g.

The map showing analytical laboratory data for plutonium-238 shows one concentration located in the northeastern corner of Release Block D of 8.56 pCi/g. Maps of soil screening facility data for plutonium-238 within Release Block D show a number of samples (11% of 214 samples) which were at or above the 25 pCi/g Guideline Value detection limit. The highest concentration measured within Release Block D was 60 pCi/g. Confirmatory laboratory samples collected in the same vicinity contained only 0.574 to 0.732 pCi/g plutonium-238. Other screening samples which contained 49 and 38 pCi/g plutonium-238 showed a maximum of 0.698 pCi/g during analytical laboratory confirmatory sampling in the same vicinity. The differences between screening and analytical laboratory results were attributed to differences in analytical techniques and the sporadic nature of the contamination.

2.2.4 Soil Gas Sampling Program of February 1996

In Release Block D, seven soil samples were collected during the Soil Sampling Program of February 1996 and were analyzed using laboratory analytical methods (DOE, April 1996). Locations of these samples are shown in Figure 2.1. Each of these soil samples contained measurable concentrations of volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). Within the seven soil samples, a total of eight VOCs and 21 SVOCs were identified. A shallow sample collected at PRS 376 had a measured concentration of benzo(a)pyrene of 0.45 mg/kg. During the initial review of PRS 376 data it was determined that this concentration of benzo(a)pyrene in soil would not adversely affect the quality of ground water as a potential drinking water source.

2.2.5 Ground Water Data

Groundwater from the Great Miami Buried Valley Aquifer (BVA) Mound Plant Production Wells is a potable water supply capable of serving uses associated with Release Block D. Current BVA groundwater contamination is defined by current concentration levels in production wells 0076 and 0271 (Appendix B). There have been 57 organic, inorganic and radionuclide contaminants detected in these wells.

Future groundwater contamination is assumed to be appropriately represented by combining current contamination with additional contamination now in nearby bedrock aquifer groundwater from across the entire Mound Plant expected to eventually mix with BVA water. A detailed analysis of this approach is presented in Appendix C. There have been 75 organic, inorganic and radionuclide contaminants detected in bedrock aquifer wells.

2.3 SUMMARY OF DETECTED CONTAMINANTS IN RELEASE BLOCK D

Based on the available data, the complete list of all contaminants detected at least once within Release Block D appears in Tables II.2, II.3, and II.4 for soil, current groundwater and future groundwater, respectively. These tables present the maximum concentration of each contaminant, and also present appropriate background concentrations, Guideline Values and additional screening criteria for comparative purposes. The comparison of contaminant concentrations to background concentrations, Guideline Values and other screening criteria serves to reduce the number of contaminants to be carried through the RRE process. Only contaminants exceeding both background and a base level of potential health concerns are carried through the RRE process. The screening process is documented on these tables by listing the reason contaminants are chosen to be carried through the RRE. As described in

table footnotes, any contaminants compared to a Hazard Quotient Guideline Value were screened based on a value which is one-tenth the Hazard Quotient, as directed in the Mound 2000 Residual Risk Evaluation Methodology (RREM).

2.4 SOIL CONTAMINANT SCREENING

The complete list of all contaminants in soil contained 31 organic, 28 inorganic, and 14 radionuclide compounds. Because the organic contaminants found here are generally not naturally occurring substances, background concentrations are not available for organic compounds. The organic compounds were screened against Guideline Values, and against a frequency of detection screening factor (contaminants must have been detected at least once for every 20 samples to be carried forward in the RRE). The inorganic compounds were screened against background concentrations, Guideline Values, and whether they are common constituents of most soils, such as sodium and potassium. The radiological contaminants were screened against background and Guideline Values.

This screening reduced the number of organic contaminants from 31 to 12, the inorganic contaminants from 28 to two, and the radiological contaminants from 14 to four. The contaminants which will be carried through the RRE process for the soil media are summarized in Table II.5.

2.5 CURRENT SCENARIO GROUNDWATER SCREENING

The complete list of current groundwater contaminants contains 16 organic compounds, 28 inorganic constituents, and 12 radiological contaminants. These contaminants were screened against background, Guideline Values, and on the basis of whether they are common water quality parameters, such as alkalinity or dissolved solids.

The screening reduced the number of organic contaminants from 16 to three, the number of inorganic contaminants from 28 to three, and the number of radiological contaminants from 12 to eight. The contaminants which will be carried through the RRE process for the current groundwater scenario are summarized in Table II.6.

2.6 FUTURE GROUNDWATER SCREENING

Future groundwater contaminants are defined as those currently in the Mound production wells (the Current Groundwater list), combined with contaminants measured in Mound site bedrock monitoring wells. This assumes that all contaminants in the bedrock aquifer that exceed background, will migrate to the production well aquifer (the BVA) in the future. To create this combined list of contaminants, the bedrock contaminants were screened against bedrock background concentrations. The complete list of bedrock contaminants, the applicable background concentrations, and the screening documentation are presented in Table II.7. The screening process reduced the number of bedrock contaminants from 75 to 39. This list was combined with the current groundwater list which yielded Table II.5. This complete list of future groundwater contaminants contains 22 organic compounds, 21 inorganic contaminants, and 16 radiological contaminants. These contaminants were screened with respect to BVA background concentrations, Guideline Values, and common water quality parameters.

The screening reduced the number of future organic contaminants from 22 to three, the inorganic contaminants from 21 to eight, and the radiological contaminants from 16 to eight. The contaminants which will be carried through the RRE process for the future groundwater scenario are summarized in Table II.8.

Table II.1. Potential Release Sites Designation Information.

PRS Number	Rationale
279	Old Firing Range Drum Storage Area
310	Site Survey Project Potential Hot Spot (location S0647)
312	Site Survey Project Potential Hot Spot (location S0971)
372/374	Elevated soil gas readings based on relative ion counts (PETREX) during the OU-5 Non-AOC Phase 1 soil gas activities
373	Isolated plutonium (Pu-238) hot spot identified during the OU-5 Non-Area Of Concern (AOC) Phase 1 activities (location 01N06)
375/377/378	Elevated soil gas readings based on relative ion counts (PETREX) during the OU-5 Non-AOC Phase 1 soil gas activities
376	Low level plutonium detected during the OU-5 Non-AOC Phase 1 activities
379	Isolated plutonium (Pu-238) hot spot identified during the OU-5 Non-Area Of Concern (AOC) Phase 1 activities (location 05N04)
380/381	Elevated soil gas readings based on relative ion counts (PETREX) during the OU-5 Non-AOC Phase 1 soil gas activities
382	Elevated soil gas readings based on relative ion counts (PETREX) during the OU-5 Non-AOC Phase 1 soil gas activities

Table II.2. Summary Table of All Soil Contaminants Detected

Soil contaminants above detection limit	Maximum concentration Any Depth	Maximum concentration Shallow - only	Soil background	G.V. for construction worker	G.V. for site employee	Carried through RRE?	Reason
ORGANICS (mg/kg)							
Acenaphthene	6.8	0.130				Yes	No screening values
Acetone	0.23	---		105000[2]	200000[2]	No	Conc. < G.V.
Anthracene	15	0.360		320000[2]	610000[2]	No	Conc. < G.V.
Aroclor-1254	0.56	0.56		21.5[2]	41[2]	No	Conc. < G.V.
Benzo(a)anthracene	43	0.500		4.10[4]	7.8[4]	Yes	Conc > G.V.
Benzo(a)pyrene	35	0.450		0.41[4]	0.78[4]	Yes	Conc. > G.V.
Benzo(b)fluoranthene	59	0.360		4.10[4]	7.8[4]	Yes	Conc > G.V.
Benzo(g,h,i) perylene	19	0.220				Yes	No screening values
Benzo(k)fluoranthene	1.3	0.380		41.0[4]	78.0[4]	No	Conc < G.V.
Bis(2-ethylhexyl)phthalate	4.2	4.1		215[4]	410[4]	No	Conc < G.V.
2-Butanone	0.028	0.010		46500[1]	9300[1]	No	Conc. < G.V.
Carbazole	0.160	0.160				Yes	No screening values
Carbon Disulfide	0.004	0.004		1400[1]	280[1]	No	Conc. < G.V.
Chrysene	55	0.500		410[4]	780[4]	No	Conc. < G.V.
Di-n-octyl phthalate	0.089	0.089		21500[2]	41000[2]	No	Conc. < G.V.
Dibenz(a,h)anthracene	5.3	0.068		0.41[4]	0.78[4]	Yes	Conc. > G.V.
Dibenzofuran	4	0.095				Yes	No screening values
Dichloromethane-methylene chloride	0.011	0.008		395[4]	1000[1]	No	Conc. < G.V.
Fluoranthene	98	1.3		42500[2]	82000[2]	No	Conc. < G.V.
Fluorene	6.5	0.160				Yes	No screening values
Freon-11 - Trichlorofluoromethane	0.046	---		3650[1]	730[1]	No	Conc. < G.V.
Indeno(1,2,3-cd)pyrene	23	0.210		4.10[4]	7.8[4]	Yes	Conc. > G.V.
2-Methylnaphthalene	1.4	1.4				No	No detects in recent data
Naphthalene	1.8	0.028				Yes	No screening values
Phenanthrene	73	1.2				Yes	No screening values
Pyrene	83	1.0		32000[2]	61000[2]	No	Conc. < G.V.
Tetrachloroethene	0.015	---		10500[2]	20000[2]	No	Conc. < G.V.
Toluene	0.016	0.002		1250[1]	250[1]	No	Conc. < G.V.

Table II.2. Summary Table of All Soil Contaminants Detected (cont.)

Soil contaminants above detection limit	Maximum concentration Any Depth	Maximum concentration Shallow - only	Soil background	G.V. for construction worker	G.V. for site employee	Carried through RRE?	Reason
1,1,1-Trichloroethane	0.037	---				No	1 value (deep),all recent ND
Trichloroethene	0.013	0.007		125[3]	41[3]	No	Conc. < G.V.
Xylenes, total	0.019	---		2150000[2]	4100000[2]	No	Conc. < G.V.
INORGANICS (mg/kg)							
Aluminum	14100	14100	19000			No	Conc. < Bkgd.
Antimony	39.2	39.2		425[2]	820[2]	No	Conc. < G.V.
Arsenic (total)	7.5	7.5	8.6	320[2]	610[2]	No	Conc. < Bkgd & G.V.
Barium (total)	90.4	87.6	180	75000[1]	140000[1]	No	Conc. < Bkgd & G.V.
Beryllium	0.98	0.81	1.3	0.7[3]	1.3[3]	No	Conc. < Bkgd. > G.V.
Bismuth	0.82	0.82				Yes	No screening values
Cadmium (total)	10.2	10.2	2.1	1050[1]	2000[2]	No	Conc. < G.V. > Bkgd
Calcium (total)	222000	222000	310000			No	Conc. < Bkgd.
Chromium (total)	28.9	26.7	20	5500[2]	10000[2]	No	Conc. < G.V. > Bkgd.
Cobalt (total)	14.2	12.7	19			No	Conc. < Bkgd.
Copper (total)	30.5	30.5	26			Yes	Conc. > Bkgd.
Cyanide	1.0	1.0		21500[2]	41000[2]	No	Conc. < G.V.
Iron (total)	30800	30800	35000			No	Conc. < Bkgd.
Lead (total)	31.3	29.4	48			No	Conc. < Bkgd.
Lithium	25.3	25.3	26			No	Conc. < Bkgd.
Magnesium (total)	64500	64500	40000			No	Common soil constituent
Manganese (total)	698	659	1400	135000[1]	150000[1]	No	Conc. < G.V. & Bkgd.
Mercury (total)	0.13	0.13		320[1]	610[1]	No	Conc. < G.V.
Molybdenum	14.5	2.3	27			No	Conc. < Bkgd.
Nickel (total)	26.4	26.4	32	21500[2]	41000[2]	No	Conc. < G.V. & Bkgd.
Nitrate/Nitrite	3.7	3.7				No	Common soil constituent
Potassium (total)	2090	2090	1900			No	Common soil constituent
Silicon (total)	1100	---				No	Common soil constituent
Silver (total)	18.6	17.6	1.7	5500[2]	10000[2]	No	Conc. < G.V. > Bkgd.
Sodium (total)	2490	2490	240			No	Common soil constituent

Table II.2. Summary Table of All Soil Contaminants Detected (cont.)

Soil contaminants above detection limit	Maximum concentration Any Depth	Maximum concentration Shallow - only	Soil background	G.V. for construction worker	G.V. for site employee	Carried through RRE?	Reason
Tin	1.7	1.7	20			No	Conc. < Bkgd.
Vanadium	27	26.2	25	7500[2]	14000[2]	No	Conc. < G. V. > Bkgd.
Zinc (total)	754	109	140	320000[2]	610000[2]	No	Conc. < G. V. > Bkgd.
RADIONUCLIDES (pCi/g)							
Cesium-137	0.383	0.383	0.42	0.46[5]	0.42[5]	No	Conc. < G.V. & Bkgd.
Plutonium-238	60	60	0.13	5.50[5]	11[5]	Yes	Conc. > G.V. & Bkgd.
Plutonium-239/240	0.0142	0.0142	0.18	5.50[5]	10[5]	No	Conc. < G.V. & Bkgd.
Potassium-40	26.2	26.2	37			No	Conc. < Bkgd.
Radium-224	12.2	12.2		0.85[6]	0.83[6]	No	Th-232 decay products
Radium-226	1.50	1.50	2	0.14[5]	0.13[5]	No	Conc. < Bkgd. > G.V.
Radium-228	1.52	1.34		0.85[6]	0.83[6]	No	Th-232 decay products
Thorium-228	1.16	1.16	1.5	0.85[5]	0.83[5]	No	Conc. > G.V. < Bkgd.
Thorium-230	1.57	1.57	1.9	44.0[5]	81[5]	No	Conc. < G.V. & Bkgd.
Thorium-232	7	7	1.4	0.85[5,6]	0.83[5,6]	Yes	Conc. > G.V. & Bkgd.
Thorium-234	1.48	1.32	1.2	11.0[7]	13.0[7]	No	Conc. < G.V.
Uranium-234	1.07	1.07	1.1	37.5[5]	70[5]	No	Conc. < G.V. & Bkgd.
Uranium-235	0.0592	0.0592	0.11	3.35[5]	3.1[5]	No	Conc. < G.V. & Bkgd.
Uranium-238	1.14	1.14	1.2	11.0[5]	13.0[5]	No	Conc. < G.V. & Bkgd.

NOTE: Contaminants with no background or Guideline Value available were left blank.
--- No shallow data available.
[1] - Hazard Quotient for both Ingestion and Inhalation. (decision made on 0.1 x G.V.)
[2] - Hazard Quotient for Ingestion only. (decision made on 0.1 x G.V.)
[3] - Total Risk 10^{-6} for both Ingestion and Inhalation.
[4] - Total Risk 10^{-6} for Ingestion only.
[5] - Total Risk 10^{-6} for Ingestion, Inhalation and External.
[6] - Guideline Values from Thorium-228 + D.
[7] - Guideline values from U-238 + D.

Table II.3. Summary Table of All Current Groundwater Contaminants Detected in BVA Production Wells

Groundwater contaminants above detection limit	Maximum concentration	BVA background	G.V. for construction worker	G.V. for site employee	Carried through RRE?	Reason
ORGANICS (mg/L)						
Acetone	0.012		10[1]	10[2]	No	Conc. < G.V.
Bromodichloromethane	0.0037		0.0045[3]	0.0046[4]	No	Conc. < G.V.
2-Butanone	0.041		53[1]	61[2]	No	Conc. < G.V.
Chloroform	0.0022	0.0005	0.024[3]	0.047[4]	No	Conc. < G.V. > Bkgd.
1,1-Dichloroethane	0.0035		9.5[1]	10[2]	No	Conc. < G.V.
1,1-Dichloroethene	0.0017				Yes	No screening values
1,2-Dichloroethene	0.0047		2.0[2]	2.0[2]	No	Conc. < G.V.
1,2-cis-Dichloroethene	0.0021	0.0010	2.0[2]	2.0[2]	No	Conc. < G.V. > Bkgd.
1,2-trans-Dichloroethene	0.003		2.0[2]	2.0[2]	No	Conc. < G.V.
Dichloromethane - Methylene Chloride	0.0098		0.038[3]	0.038[4]	No	Conc. < G.V.
Isophorone	0.010		0.3[3]	0.3[4]	No	Conc. < G.V.
Tetrachloroethene	0.002		0.46[1]	1.0[2]	No	Conc. < G.V.
1,1,1-Trichloroethane	0.0018	0.0007			Yes	Conc. > Bkgd.
Trichloroethene	0.0046		0.024[3]	0.026[4]	No	Conc. < G.V.
Trichlorofluoromethane	0.0025		26[1]	31[2]	No	Conc. < G.V.
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0087				Yes	No screening values
INORGANICS (mg/L)						
Alkalinity	335				No	Water quality parameter
Aluminum	0.0737	0.0375			No	Water quality parameter
Ammonia	0.58	0.162			No	Water quality parameter
Barium	0.0884	0.3102	7.1[1]	7.2[2]	No	Conc. < G.V. & Bkgd.
Cadmium	0.0077		0.051[1]	0.051[2]	Yes	Conc. > G.V.

Table II.3. Summary Table of All Current Groundwater Contaminants Detected in BVA Production Wells (cont.)

Groundwater contaminants above detection limit	Maximum concentration	BVA background	G.V. for construction worker	G.V. for site employee	Carried through RRE?	Reason
Calcium	126	111			No	Water quality parameter
Chloride	133	106			No	Water quality parameter
Chromium	0.0249	0.0061	0.51[1]	0.51[2]	No	Conc. < G.V. > Bkgd.
Copper	0.593	0.0012			Yes	Conc. > Bkgd.
Dissolved Solids	719	603			No	Water quality parameter
Fluoride	0.18	0.419			No	Water quality parameter
Iron	0.780	4.065			No	Conc. < Bkgd.
Lead (soluble)	0.040	0.0101			Yes	Conc. > Bkgd.
Magnesium	39.6	40.43			No	Conc. < Bkgd.
Manganese	0.0248	0.2296	0.51[1]	0.51[2]	No	Conc. < G.V. & Bkgd.
Nitrate/Nitrite	4.9	5.349			No	Conc. < Bkgd.
Nitrate	2.55				No	Water quality parameter
Nitrite	0.066				No	Water quality parameter
Nitrogen	0.62	0.324			No	Water quality parameter
Organic Carbon	1.1	1.987			No	Conc. < Bkgd.
Phosphate	0.22	0.231			No	Conc. < Bkgd.
Potassium	3.8	4.461			No	Conc. < Bkgd.
Silver	0.0242		0.51[1]	0.51[2]	No	Conc. < G.V.
Sodium	82.4	62.43			No	Water quality parameter
Sulfate	83.0	142.7			No	Conc. < Bkgd.
Suspended Solids	8.0	26.44			No	Conc. < Bkgd.
Vanadium	0.0244	0.0171	0.71[1]	0.72[2]	No	Conc. < G.V. > Bkgd.
Zinc	0.0577	0.1196	31[1]	31[2]	No	Conc. < G.V. & Bkgd.

Table II.3. Summary Table of All Current Groundwater Contaminants Detected in BVA Production Wells (cont.)

Groundwater contaminants above detection limit	Maximum concentration	BVA background	G.V. for construction worker	G.V. for site employee	Carried through RRE?	Reason
RADIONUCLIDES (pCi/L)						
Actinium-227	0.335		0.26[4]	0.26[4]	Yes	Conc. > G.V.
Bismuth-210	0.39				Yes	No screening values
Plutonium-239/240	2.0	0.125	0.51[4]	0.51[4]	Yes	Conc. > G.V. & Bkgd.
Radium-226	0.4	0.996	0.54[4]	0.54[4]	No	Conc. < G.V. & Bkgd.
Strontium-85	25				No	1 detect, short 1/2 life
Strontium-90	0.3	0.975	2.9[4]	2.9[4]	No	Conc. < G.V. & Bkgd.
Thorium-228	2.17	0.779	0.69[4]	0.69[4]	No	Th-232 decay product
Thorium-230	1.99	0.289	4.3[4]	4.3[4]	No	Conc. < G.V. > Bkgd.
Thorium-232	0.1		0.69[4,5]	0.69[4,5]	No	Conc. < G.V.
Tritium	7200	1485	2200[4]	2200[4]	Yes	Conc. > G.V. & Bkgd.
Uranium-234	8.14	0.792	3.6[4]	3.6[4]	Yes	Conc. > G.V. & Bkgd.
Uranium-238	8.25	0.688	2.6[4]	2.6[4]	Yes	Conc. > G.V. & Bkgd.

[1] - Hazard Index for Ingestion + Dermal + Inhalation. (decision made on 0.1 x G.V.)
[2] - Hazard Index for Ingestion only. (decision made on 0.1 x G.V.)
[3] - Total Risk 10^{-6} for Ingestion + Dermal + Inhalation.
[4] - Total Risk 10^{-6} for Ingestion only.
[5] - Guideline values from Thorium-228+D.

Table II.4. Summary Table of All Future Groundwater Contaminants Assumed to be in Production Wells with Input from the Bedrock Aquifer

Groundwater contaminants above detection limit	Estimated maximum concentration	BVA background	G.V. for construction worker	G.V. for site employee	Carried through RRE?	Reason
ORGANICS (mg/L)						
Acetone	0.0129		10[1]	10[2]	No	Conc < G.V.
Benzene	0.0001		0.0087[3]	0.0099[4]	No	Conc < G.V.
Benzoic Acid	0.071		400[1]	410[2]	No	Conc < G.V.
Bromodichloromethane	0.0037		0.0045[3]	0.0046[4]	No	Conc < G.V.
2-Butanone	0.0543		53[1]	61[2]	No	Conc < G.V.
Carbon Tetrachloride	1.3E-5		0.002[3]	0.0022[4]	No	Conc < G.V.
Chloroform	0.0022	0.0005	0.024[3]	0.047[4]	No	Conc < G.V. > Bkgd.
1,1-Dichloroethane	0.0035		9.5[1]	10[2]	No	Conc < G.V.
1,1-Dichloroethene	0.0017				Yes	No screening values
1,2-Dichloroethene	0.0050		2.0[2]	2.0[2]	No	Conc < G.V.
1,2-cis-Dichloroethene	0.0023	0.0010	2.0[2]	2.0[2]	No	Conc < G.V. > Bkgd.
1,2-trans-Dichloroethene	0.0032		2.0[2]	2.0[2]	No	Conc < G.V.
Bis (2-ethylhexyl)phthalate	0.0153	0.0084	0.019[3]	0.02[2]	No	Conc < G.V. & Bkgd
Isophorone	0.0100		0.3[3]	0.3[4]	No	Conc < G.V.
4-Methylphenol	0.0004		0.48[1]	0.51[2]	No	Conc < G.V.
Tetrachloroethene	0.0021		0.46[1]	1.0[2]	No	Conc < G.V.
Trichloroethene	0.0050		0.024[3]	0.026[4]	No	Conc < G.V.
1,1,1-Trichloroethane	0.0065	0.0007			Yes	Conc. > Bkgd.
Trichlorofluoromethane	0.0025		26[1]	31[2]	No	Conc < G.V.
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0087				Yes	No screening values
Toluene	0.0002		16[1]	20[2]	No	Conc < G.V.
Total Xylenes	4.3E-5		200[2]	200[2]	No	Conc < G.V.
INORGANICS (mg/L)						
Antimony	0.0008	0.0006	0.041[1]	0.041[2]	No	Conc < G.V. > Bkgd.
Barium	0.0884	0.3102	7.1[1]	7.2[2]	No	Conc < G.V. & Bkgd.
Beryllium	0.0001		0.000066[3]	0.000067[4]	Yes	Conc > G.V.
Bismuth	0.0016				Yes	No screening values

Table II.4. Summary Table of All Future Groundwater Contaminants Assumed to be in Production Wells with Input from the Bedrock Aquifer (cont.)

Groundwater contaminants above detection limit	Estimated maximum concentration	BVA background	G.V. for construction worker	G.V. for site employee	Carried through RRE?	Reason
Cadmium	0.0077		0.051[1]	0.051[2]	Yes	Conc > G.V.
Chromium	0.4961	0.0061	0.51[1]	0.51[2]	Yes	Conc < G.V. > Bkgd.
Cobalt	0.0039				Yes	Conc > Bkgd.
Copper	0.5964	0.0012			Yes	Conc > Bkgd.
Cyanide	0.0001		2.0[1]	2.0[2]	No	Conc < Bkgd.
Iron	0.78	4.065			No	Conc < Bkgd.
Lead	0.04	0.0101			Yes	Conc > Bkgd.
Lithium	0.0036	0.0557			No	Conc < Bkgd.
Magnesium	43.974	40.428			No	Water quality parameter
Manganese	0.0248	0.2296	0.51[1]	0.51[2]	No	Conc < G.V. & Bkgd.
Molybdenum	0.0096	0.0056			Yes	Conc > Bkgd.
Nickel	0.1003	0.0350	2.0[1]	2.0[2]	No	Conc < G.V. > Bkgd.
Phosphate	0.3664	0.231			No	Water quality parameter
Potassium	6.0034	4.461			No	Water quality parameter
Silver	0.0242		0.51[1]	0.51[2]	No	Conc < G.V.
Vanadium	0.028	0.0171	0.71[1]	0.72[2]	No	Conc < G.V. > Bkgd.
Zinc	0.0577	0.1196	31[1]	31[2]	No	Conc < G.V. & Bkgd.
RADIONUCLIDES (pCi/L)						
Actinium-227	0.355		0.26[4]	0.26[4]	Yes	Conc. > G.V.
Bismuth-210	0.39				Yes	No screening values
Plutonium-238	0.0034	0.087	0.54[4]	0.54[4]	No	Conc < G.V. & Bkgd.
Plutonium-239/240	2.0199	0.125	0.51[4]	0.51[4]	Yes	Conc > G.V. & Bkgd.
Radium-226	0.6402	0.996	0.54[4]	0.54[4]	No	Conc < Bkgd.
Strontium-85	25				No	1 detect, short 1/2 life
Strontium-90	0.3121	0.975	2.9[4]	2.9[4]	No	Conc < G.V. & Bkgd.
Thorium-228	2.17	0.779	0.69[4]	0.69[4]	No	Th-232 decay product
Thorium-230	2.0645	0.289	4.3[4]	4.3[4]	No	Conc < G.V. > Bkgd.
Thorium-232	0.1422		0.69[4,5]	0.69[4,5]	No	Conc < G.V.

Table II.4. Summary Table of All Future Groundwater Contaminants Assumed to be in Production Wells with Input from the Bedrock Aquifer (cont.)

Groundwater contaminants above detection limit	Estimated maximum concentration	BVA background	G.V. for construction worker	G.V. for site employee	Carried through RRE?	Reason
Tritium	10427	1485	2200[4]	2200[4]	Yes	Conc > G.V. & Bkgd.
Uranium-233	0.0002		3.6[4]	3.6[4]	No	Conc < G.V.
Uranium-234	8.14	0.792	3.6[4]	3.6[4]	Yes	Conc > G.V. & Bkgd.
Uranium-235	0.0036	0.045	3.4[4]	3.4[4]	No	Conc < G.V. & Bkgd.
Uranium-235/236	0.0003		3.4[4]	3.4[4]	Yes	Conc < G.V.
Uranium-238	8.25	0.688	2.6[4]	2.6[4]	Yes	Conc > G.V. & Bkgd.

[1] - Hazard Index for Ingestion + Dermal + Inhalation. (decision made on 0.1 x G.V.)
[2] - Hazard Index for Ingestion only. (decision made on 0.1 x G.V.)
[3] - Total Risk 10^{-6} for Ingestion + Dermal + Inhalation.
[4] - Total Risk 10^{-6} for Ingestion only.
[5] - Guideline values from Thorium-228+D.

Table II.5. Soil Contaminants Carried Through RRE

Soil Constituents	Maximum concentration Any Depth	Maximum concentration Shallow (<2' deep)	Screening Concentration (either background or G.V.)	Reason for carrying through RRE
ORGANICS (mg/kg)				
Acenaphthene	6.8	0.130		Detected in recent samples
Benzo(a)anthracene	43	0.500	4.10[1]	Max Conc > G.V.
Benzo(a)pyrene	35	0.450	0.41[1]	Conc. > G.V.
Benzo(b)fluoranthene	59	0.360	4.10[1]	Max Conc > G.V.
Benzo(g,h,i) perylene	19	0.220		Detected in recent samples
Carbazole	0.160	0.160		No Bkgd. or G.V. available
Dibenz(a,h)anthracene	5.3	0.068	0.41[1]	Conc. > G.V.
Dibenzofuran	4	0.095		No Bkgd. or G.V. available
Fluorene	6.5	0.160		No Bkgd. or G.V. available
Indeno(1,2,3-cd)pyrene	23	0.210	4.10[1]	Max. Conc. > G.V.
Naphthalene	1.8	0.028		No Bkgd. or G.V. available
Phenanthrene	73	1.2		No Bkgd. or G.V. available
INORGANICS (mg/kg)				
Bismuth	0.82	0.82		No Bkgd. or G.V. available
Copper (total)	30.5	30.5	26[4]	Conc. > Bkgd.
RADIONUCLIDES (pCi/g)				
Plutonium-238	60	60	5.50[2]	Conc. > G.V.
Thorium-232	7	7	0.83[2,3]	Conc. > G.V.

[1] - Total Risk 10^{-6} for Ingestion only.
[2] - Total Risk 10^{-6} for Ingestion, Inhalation and External.
[3] - Guideline Values from Thorium-228 + D.
[4] - Background value

Table II.6. Current Groundwater Contaminants Carried Through RRE

Groundwater Constituents	Maximum concentration	Screening Concentration (either background or G.V.)	Reason for carrying through RRE
ORGANICS (mg/L)			
1,1-Dichloroethene	0.0017	---	No Bkgd. or G.V. available
1,1,1-Trichloroethane	0.0018	0.0007[3]	Conc. > Bkgd.; no G.V. available
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0087	---	No Bkgd. or G.V. available
INORGANICS (mg/L)			
Cadmium	0.0077	0.051[1]	Conc. >G.V., no Bkgd. available
Copper	0.593	0.0012[3]	Conc. > Bkgd.; no G.V. available
Lead	0.040	0.0101[3]	Conc. > Bkgd.; no G.V. available
RADIONUCLIDES (pCi/L)			
Actinium-227	0.335	0.26[2]	Conc. > G.V.; no Bkgd. available
Bismuth-210	0.39	---	No Bkgd. or G.V. available
Plutonium-239/240	2.0	0.125[3]	Conc. > Bkgd. & G.V.
Tritium	7200	1485[2]	Conc. > Bkgd. & G.V.
Uranium-234	8.14	0.792[3]	Conc. > Bkgd. & G.V.
Uranium-238	8.25	0.688[3]	Conc. > Bkgd. & G.V.

[1] - Hazard Index for Ingestion + Dermal + Inhalation. (decision made on 0.1 x G.V.)
[2] - Total Risk 10^{-6} for Ingestion only.
[3] - Background value.

Table II.7. Summary Table of All Bedrock Aquifer Contaminants

Bedrock Ground Water Compounds Above Detection	Maximum Concentration	Bedrock Background Concentration	Contribute to Future Ground Water Concentration?	Reason
ORGANICS (mg/L)				
Acetone	0.028	NA	Yes	
Alpha Chlordane	0.000069	0.00045	No	Conc. < background
Benzene	0.005	NA	Yes	
Benzoic Acid	0.99	NA	Yes	
Bis(2-ethylhexyl)phthalate	0.950	NA	Yes	
2-Butanone	0.095	NA	Yes	
Carbon Disulfide	0.005	NA	No	Common lab contaminant
Carbon Tetrachloride	0.002	NA	Yes	
Chloroform	0.0024	NA	Yes	
1,2-Dichloroethene	0.035	NA	Yes	
1,2-cis-Dichloroethene	0.017	NA	Yes	
1,2-trans-Dichloroethene	0.01	NA	Yes	
Methylene Chloride	0.0089	NA	No	Common lab contaminant
4-Methylphenol	0.061	NA	Yes	
Organic Carbon	47.9	NA	No	Indicator parameter
Tetrachloroethene	0.002	NA	Yes	
1,1,1-Trichloroethane	0.001	NA	Yes	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0022	NA	Yes	
Toluene	0.005	NA	Yes	
Trichloroethene	0.03	NA	Yes	
Trichlorofluoromethane	0.002	NA	Yes	
Xylenes, Total	0.006	NA	Yes	
INORGANICS (mg/L)				
Alkalinity	447	NA	No	Indicator parameter
Aluminum	28.5	7.82	No	
Ammonia	21.7	NA	No	Indicator parameter
Antimony	0.0128	0.0012	Yes	
Arsenic	0.0187	0.084	No	Conc. < background
Barium	0.284	0.53712	No	Conc. < background
Beryllium	0.0023	0.00065	Yes	
Bismuth	0.051	0.0296	Yes	
Cadmium	0.0131	0.0138	No	Conc. < background
Calcium	935	111	No	Indicator parameter
Chloride	4770	NA	No	Indicator parameter
Chromium	15.1	0.104	Yes	
Cobalt	0.283	0.0179	Yes	
Copper	0.277	0.19462	Yes	
Cyanide	0.0142	0.01	Yes	
Dissolved Solids	4800	NA	No	Indicator parameter

Table II.7. Summary Table of All Bedrock Aquifer Contaminants (cont.)

Bedrock Ground Water Compounds Above Detection	Maximum Concentration	Bedrock Background Concentration	Contribute to Future Ground Water Concentration?	Reason
Fluoride	2.4	1.3	No	Water quality parameter
Iron	181	526.097	No	Conc. < background
Lead	0.0404	0.230	No	Conc. < background
Lithium	0.331	0.208	Yes	
Magnesium	279	65.1	No	Water quality parameter
Manganese	3.03	4.78754	No	Conc. < background
Molybdenum	0.32	0.0743	Yes	
Nickel	7.22	0.0249	Yes	
Nitrate	2.1	NA	No	Water quality parameter
Nitrate/Nitrite	21.1	9.55	No	Water quality parameter
Nitrite	0.314	NA	No	Water quality parameter
Nitrogen	4.6	NA	No	Water quality parameter
Phosphate	10.1	NA	No	Water quality parameter
Potassium	314	7.3	No	Water quality parameter
Sodium	3790	351.63	No	Water quality parameter
Sulfate	399	NA	No	Water quality parameter
Suspended Solids	2880	NA	No	
Tin	0.0659	0.118	No	Conc. < background
Vanadium	0.0703	0.0132	Yes	
Zinc	0.399	92.83128	No	Conc. < background
RADIONUCLIDES (pCi/L)				
Americium-241	0.217	3.95	No	Conc. < background
Bismuth-210	0.26	24.94	No	Conc. < background
Plutonium-238	0.236	0.08	Yes	
Plutonium-239/240	0.378	0.18	Yes	
Potassium-40	129	455.56	No	Conc. < background
Radium-226	9.47	0.95	Yes	
Strontium-90	1.77	2.22	No	Conc. < background
Thorium-228	4.86	1.45	No	Th-232 decay product
Thorium-230	4.07	4.86	No	Conc. < background
Thorium-232	2.11	0.92	Yes	
Tritium	61020	4658	Yes	
Uranium-233	0.0272	NA	Yes	
Uranium-234	3.23	6.23	No	Conc. < background
Uranium-235	0.3	0.27	Yes	
Uranium-235/236	0.0471	NA	Yes	
Uranium-238	1.34	9.28	No	Conc. < background

Table II.8. Future Groundwater Contaminants Carried Through RRE

Groundwater Constituents	Estimated Maximum Concentration	Screening Concentration (either background or G.V.)	Reason for carrying through RRE
ORGANICS (mg/L)			
1,1-Dichloroethene	0.0017	---	No Bkgd. or G.V. available
1,1,1-Trichloroethane	0.0065	0.0007[4]	Conc > Bkgd.; no G.V. available
1,1,2,-Trichloro-1,2,2-trifluoroethane	0.0087	---	No Bkgd. or G.V. available
INORGANICS (mg/L)			
Beryllium	0.0001	6.6E-05[3]	Conc. > G.V.
Bismuth	0.0016	---	No Bkgd. or G.V. available
Cadmium	0.0077	0.051[4]	Conc > G.V.; no Bkgd. available
Chromium	0.4961	0.0061[4]	Conc > Bkgd. and G.V.
Cobalt	0.0039	0[4]	Conc > Bkgd.; no G.V. available
Copper	0.5964	0.0012[4]	Conc > Bkgd.; no G.V. available
Lead	0.04	0.010[4]	Conc > Bkgd.; no G.V. available
Molybdenum	0.0096	0.0056[4]	Conc > Bkgd.; no G.V. available
RADIONUCLIDES (pCi/L)			
Actinium-227	0.355	0.26[2]	Conc > G.V.; no Bkgd. available
Bismuth-210	0.39	---	No Bkgd. or G.V. available
Plutonium-239/240	2.020	0.125[4]	Conc > Bkgd. and G.V.
Tritium	10427	1485[4]	Conc > Bkgd. and G.V.
Uranium-234	8.14	0.792[4]	Conc > Bkgd. and G.V.
Uranium-238	8.25	0.688[4]	Conc > Bkgd. and G.V.

[1] - Hazard Index for Ingestion + Dermal + Inhalation. (decision made on 0.1 x G.V.)
[2] - Total Risk 10^{-6} for Ingestion only.
[3] - Total Risk 10^{-6} for Ingestion + Dermal + Inhalation
[4] - Background value.

3.0 EXPOSURE ASSESSMENT

The Department of Energy, Ohio EPA, the U.S. EPA and the Mound Facility stakeholders have agreed that the future use of the Mound Plant property will be commercial/industrial use. Based on the RREM guidance for the Mound facility, two receptor scenarios have been developed and will be carried through this evaluation, 1) an onsite construction worker, and 2) a site employee engaged in non-construction work activities. Several potential exposure pathways exist for each scenario. The pathway analysis will be based on either known current exposures or assumed future exposures.

3.1 IDENTIFICATION OF EXPOSURE SCENARIOS

The two exposure scenarios that were examined are the onsite construction worker and the site employee engaged in non-construction activities. The construction worker and site employee are assumed to be exposed to soil contaminated at the level described by currently available data. The workers are assumed to be exposed to the existing soil contamination both now and into the future. For the groundwater pathways, both current and future exposures are assumed. Current groundwater exposures will be estimated based on the current production well (Buried Valley Aquifer) conditions. Future BVA groundwater contamination is assumed to be made up of a mix of known bedrock aquifer contamination that will enter the BVA groundwater and become the future BVA contamination to which construction workers and site employees would be exposed.

3.1.1 Construction Worker Scenario

It is assumed that activities requiring earth-moving, such as construction of new buildings, will occur in Release Block D. These construction activities could result in worker exposure to contaminants in soil, on dust particles, in air, and in groundwater. This scenario characterizes the potential exposure of a construction worker assumed to work on the property 8 hours per day for 250 days per year over a 5 year period. The construction worker is assumed to be an adult weighing 70 kg. The amount of soil ingested is 480 mg/da and is reflective of "heavy" construction-type work. All parameters needed to calculate intakes are specified in the RREM.

3.1.2 Site Employee Scenario

It is assumed that normal work-site activities associated with light industry, small business, and general office work will occur in the Release Block D Mound property. These activities could result in worker exposures to contaminants in soil, on dust particles, in air, and in groundwater. This scenario characterizes the potential exposure of a site employee assumed to work on the property 8 hours per day for 250 days per year over a 25 year period. No exposure to potential interior building contamination is assumed or addressed here. The site employee is assumed to be an adult weighing 70 kg. The site employee is assumed to ingest 50 mg/day of contaminated soil, the amount incidentally ingested while working at the site. All parameters needed to calculate intakes are specified in the RREM.

3.2 IDENTIFICATION OF EXPOSURE PATHWAYS

An exposure pathway describes the course a chemical or radionuclide takes from a source to an exposed individual. An exposure pathway generally consists of a source and mechanism of chemical or radionuclide release, an environmental compartment in which the contaminant is retained or transported, a human or environmental receptor, and an exposure route. As an example, a source of contamination may be shallow soil that received a spill, the environmental compartment may be contaminated soil that becomes windborne, and a construction worker may be the receptor who is exposed by inhaling contaminated airborne particulates. A source may also be an exposure point, such as contaminated groundwater or soil that is directly ingested.

3.2.1 Construction Worker Exposure Pathways

Several potential exposure pathways have been identified and will be addressed for the onsite construction worker (Figure 3.1). Two airborne exposure pathways will be addressed. The first potential air exposure pathway assumes inhalation of airborne contaminated soil particulates. The second potential air pathway assumes inhalation of volatile emissions from soil. The airborne exposures are assumed to be continuous when the construction worker is onsite.

Three groundwater exposure pathways will be addressed. All groundwater is assumed to be withdrawn from the Buried Valley Aquifer (BVA). The first potential groundwater exposure pathway assumes ingestion of BVA groundwater as drinking water. The second groundwater pathway assumes inhalation of volatile contaminants from a daily shower at the site. The third groundwater pathway assumes dermal contact with BVA groundwater during showering. Calculations will be made based on both currently known and future estimated groundwater concentrations

Three soil exposure pathways will be addressed. The first potential soil exposure pathway assumes inadvertent ingestion of small amounts of contaminated soil. The second soil pathway assumes dermal contact with soil during construction activities. The third soil pathway assumes external exposure to ionizing radiation from radionuclides in soil. Incidental ingestion, dermal contact, and external exposure are assumed to occur daily.

3.2.2 Site Employee Exposure Pathways

Several potential exposure pathways have been identified and will be addressed for the site employee (Figure 3.1). Two airborne exposure pathways will be addressed. The first potential air exposure pathway assumes inhalation of airborne contaminated soil particulates. The second potential air pathway assumes inhalation of volatile emissions from soil.

A single groundwater exposure pathway will be addressed. All groundwater is assumed to be withdrawn from the Buried Valley Aquifer (BVA). The potential groundwater exposure pathway assumes ingestion of BVA groundwater as drinking water. The site employee is not assumed to shower at the site. Calculations will be made based on both currently known and future estimated groundwater concentrations.

Two soil exposure pathways will be addressed. The first potential soil exposure pathway assumes inadvertent ingestion of small amounts of contaminated soil on a daily basis. The soil pathway that assumes dermal contact with soil during daily activities is not addressed for site employees as daily soil contact is assumed to be negligible. The second soil pathway that is addressed assumes external exposure to ionizing radiation from radionuclides in soil. Incidental ingestion and external exposure are assumed to occur daily.

3.3 EXPOSURE CALCULATIONS

The calculated contaminant exposures to the construction workers and site employees were made for each of the appropriate pathways. The construction worker and site employee exposure pathways were described above and are shown in Figure 3.1. Each pathway described below is numbered one through eight as shown in the figure.

3.3.1 Exposure Pathways Intake Calculations

There are eight construction worker pathways and five site employee pathways described above. Equations describing the intake of Release Block D constituents were taken from the RREM (Appendix 4). Equations were adapted from U.S. EPA Risk Assessment Guidance for Superfund (RAGS) Parts A and B (1989, 1991) and the Dermal Exposure Assessment: Principles and Applications - Interim Guidance (1992).

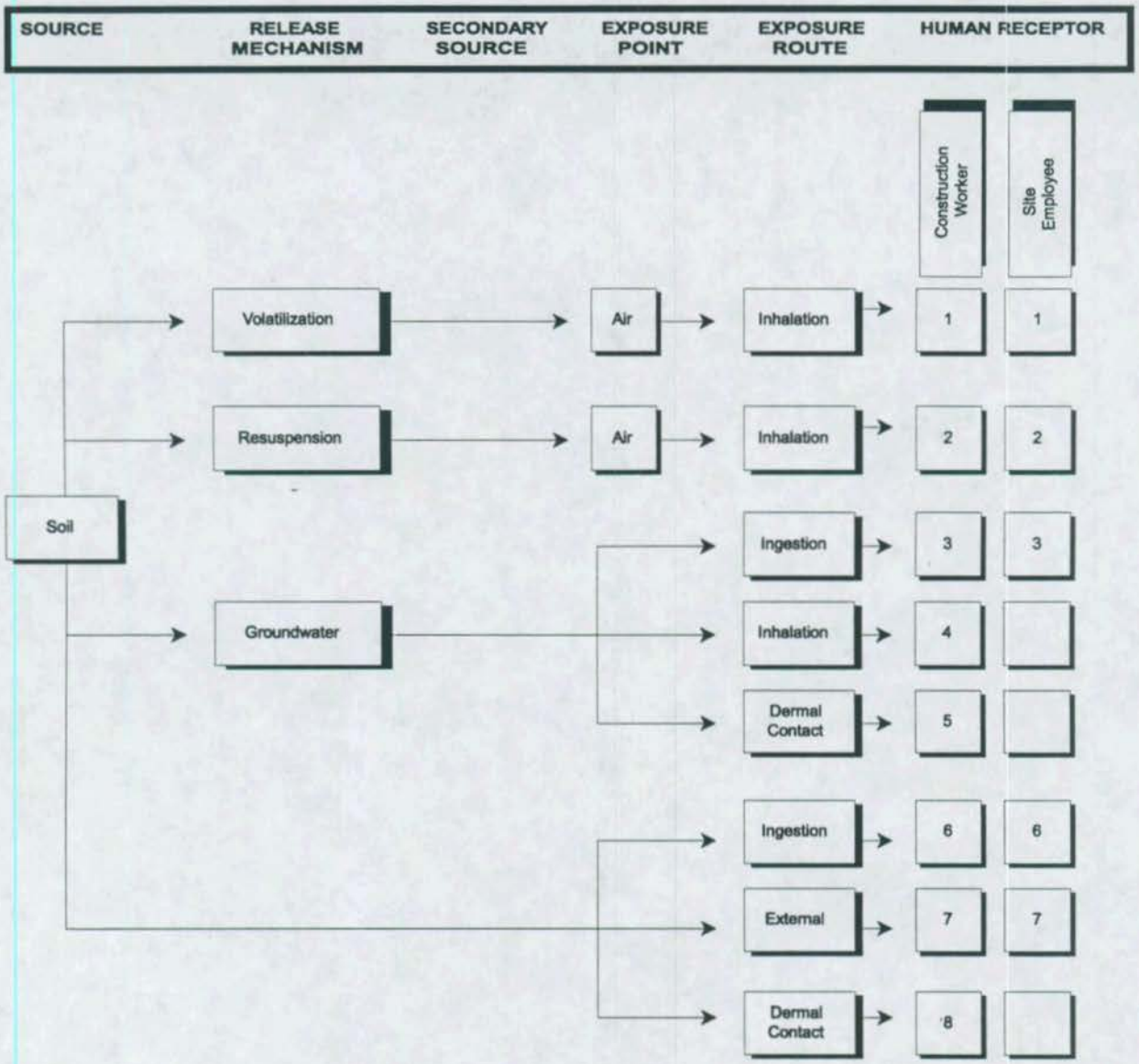

Figure 3.1. Residual Risk Evaluation Exposure Scenarios

3.3.1.1 Inhalation of Volatile Air Contaminants From Soil

Exposures of noncarcinogens and carcinogens via inhalation of volatile air contaminants were not calculated for Release Block D as no volatile compounds were detected in Release Block D soil. If volatile contaminants were present in the Release Block D soil, exposures would be calculated using the equations presented in Appendix D.

3.3.1.2 Inhalation of Dust-bound Contaminants

Exposures of noncarcinogens, carcinogens and radionuclides may occur via inhalation of soil-bound contaminants resuspended into the atmosphere attached to dust. The exposures of dust-bound contaminants inhaled by the onsite construction worker and the site employee were calculated using the intake equations shown in Appendix D.

3.3.1.3 Ingestion of Drinking Water

Exposures of noncarcinogens, carcinogens and radionuclides via ingestion of one liter of drinking water each day were calculated using the intake equations shown in Appendix D. This pathway applies to both construction workers and site employees.

3.3.1.4 Inhalation of Volatile Air Contaminants During Showering

Exposures of noncarcinogens, carcinogens and radionuclides via inhalation of volatile air contaminants derived from a 10 minute shower once daily were calculated using the intake equations shown in Appendix D. Tritium (H-3) is the only radionuclide to which this pathway applies. This pathway applies only to the construction worker.

3.3.1.5 Dermal Contact With Groundwater-derived Shower Water

Exposures of noncarcinogens, carcinogens and radionuclides via dermal contact of groundwater contaminants derived from a 10 minute shower once daily were calculated using the intake equations shown in Appendix D. Tritium (H-3) is the only radionuclide to which this pathway applies. This pathway applies only to the construction worker.

3.3.1.6 Ingestion of Soil-bound Contaminants

Exposures of noncarcinogens, carcinogens and radionuclides via ingestion of soil-bound contaminants were calculated using the intake equations shown in Appendix D. This pathway applies to both construction workers and site employees, although the amount of soil ingested through incidental contact with soil is 480 mg/day for the construction worker and only 50 mg/day for the site employee.

3.3.1.7 External Exposure to Radiation

Exposures of radionuclides during daily presence at the site were calculated using the exposure equation shown in Appendix D. This pathway applies to both construction workers and site employees.

3.3.1.8 Dermal Contact With Soil

Exposures of noncarcinogens and carcinogens via dermal contact with soil during daily activities contaminants were calculated using the intake equations shown in Appendix D. This pathway applies only to construction workers as site employees are not assumed to be engaged in work activities providing direct contact with contaminated soil.

3.3.2 Contaminant Exposures

Table III.1 lists the soil contaminants carried through the RRE process at Release Block D for all onsite construction workers and site employees. Table III.2 lists the current groundwater contaminants carried through the RRE process for Release Block D. Table III.3 lists the future groundwater contaminants carried through the Release Block D RRE. The soil and groundwater exposure concentrations (C_{soil} and C_{gw}) are listed. The total concentration was based either on the measured maximum concentration for Release Block D or the 95th UCL of the arithmetic mean or geometric mean, as appropriate. The total concentration is comprised of possible background concentrations plus any incremental additional contamination above background. The background concentration, if available, and the incremental concentration above background that is attributed to Release Block D (for soil) or Mound Facility (for groundwater) activities are also listed. Also shown are the chemical-specific parameters needed to calculate dermal exposures from soil or water (ABS, Kp, and T). The number of detected values and analyses for current groundwater contaminants are listed (Table III.2).

In soil, only plutonium-238 and thorium-232 had sufficient data (n = 20 or more) to allow a calculation of the 95th% UCL on the mean of the log transformed data. An examination of the frequency distributions for plutonium-238 and thorium-232 show them to be log normally distributed. These 95th% UCLs are considered the total concentration. Background concentrations were subtracted from the total to obtain the incremental concentration attributed to the site (Table III.1). In the case of Th-232, this resulted in an incremental concentration of effectively zero.

Similarly in groundwater (currently in the BVA), several contaminants had sufficient data to calculate credible 95th% UCL of the mean (either geometric or arithmetic). To calculate the 95% UCL (probability density distribution), the range of concentrations from a contaminant with 20 or more samples was divided into 5% increments. The number of samples which fell into each increment was counted and divided into the total number of samples of that contaminant to provide a probability distribution. The probability distributing were then added cumulatively, and the concentration at the 95% cumulative probability distribution were used in the calculations. The plotted distributions of contaminants with less than about 20 values often did not appear to be either log normal or normal distributions. Therefore, a decision was made to calculate 95th% UCL values for contaminants with a sample size of 20 or more. Contaminants for which 95th% UCL values were calculated are indicated in Table III.2. These values were considered the total concentrations, as were the maximum BVA groundwater concentrations for all contaminants with fewer than 20 data points. Background concentrations were subtracted from the total concentrations to obtain the incremental concentration attributed to the site (Table III.2). In the case of lead, this resulted in an incremental concentration of effectively zero.

Future potential groundwater concentrations were estimated by combining known bedrock aquifer contamination with known BVA contamination. The procedures for calculation of bedrock aquifer contamination and resulting BVA contamination projected for the future, are detailed in Appendix C. The resulting contaminant concentrations are considered the estimated total concentrations. Background concentrations were subtracted from the total concentrations to obtain the incremental concentration attributed to the site (Table III.3). In the case of lead, this resulted in an incremental concentration of effectively zero.

Based on the nature of the exposure pathways and characteristics of the Release Block D contaminants, some pathways need not be evaluated. In soil, all 12 organics, two inorganics and two radionuclide contaminants carried through the RRE have a low degree of volatility and hence, are not vapor-phase contaminants. Therefore, the inhalation Pathway 1 (inhalation of volatile air contaminants from soil) was not addressed at Release Block D. The soil dermal exposure pathway, which assumes direct contact with soil, is addressed only with the construction worker as the site employee is assumed to come into negligible contact with Release Block D soil. All other soil pathways will be addressed for the soil contaminants. Intakes of Release Block D soil contaminants based on the incremental concentrations attributable to the site, are shown in Table III.4 for the construction worker and in Table III.7 for the site employee. Intakes of Release Block D soil contaminants based on the total and

background concentrations at the site, are shown in Appendix F for both the construction worker and site employee.

In groundwater, contaminant exposures were calculated for all organic, inorganic, and radionuclide contaminants for the groundwater ingestion pathway with both construction workers and site employees.

For construction workers only, dermal exposures during showering were calculated for all organic and inorganic contaminants, as well as tritium. Also for construction workers only, inhalation exposures were calculated for volatile organic contaminants and tritium. Site employees are not assumed to shower at the site.

Currently, BVA groundwater, the source of potable water available for use at Release Block D, has three volatile organic, three inorganic, and six radionuclide contaminants that were carried through the RRE (Table III.2). Intakes of Release Block D current groundwater contaminants based on the incremental concentrations attributable to the site, are shown in Table III.5 for the construction worker and in Table III.8 for the site employee. Intakes of Release Block D current groundwater contaminants based on the total and background concentrations at the site, are shown in Appendix F for both the construction worker and site employee.

Future BVA groundwater has three volatile organic, eight inorganic, and six radionuclide contaminants that were carried through the RRE (Table III.3). Intakes of Release Block D future groundwater contaminants based on the incremental concentrations attributable to the site, are shown in Table III.6 for the construction worker and in Table III.9 for the site employee. Intakes of Release Block D future groundwater contaminants based on the total and background concentrations at the site, are shown in Appendix F for both the construction worker and site employee.

Table III.1. Soil Constituents Carried through Release Block D RRE

Constituent	C_{soil}			ABS
	Total[1]	BG[2]	Increment[3]	
ORGANICS (mg/kg)				
Acenaphthene	6.8	NAv	6.8	0.1
Benzo(a)anthracene	43	NAv	43	0.1
Benzo(a)pyrene	35	NAv	35	0.1
Benzo(b)fluoranthene	59	NAv	59	0.1
Benzo(g,h,i)perylene	19	NAv	19	0.1
Carbazole	0.16	NAv	0.16	0.1
Dibenz(a,h)anthracene	5.3	NAv	5.3	0.1
Dibenzofuran	4	NAv	4	0.1
Fluorene	6.5	NAv	6.5	0.1
Indeno(1,2,3-cd)pyrene	23	NAv	23	0.1
Naphthalene	1.8	NAv	1.8	0.1
Phenanthrene	73	NAv	73	0.1
INORGANICS (mg/kg)				
Bismuth	0.82	NAv	0.82	0.01
Copper	30.5	26	4.5	0.01
RADIONUCLIDES (pCi/g)				
Plutonium-238[4]	2.82	0.13	2.69	NAp
Thorium-232[4]	0.985	1.4	0	NAp

ABS - Absorption factor (unitless)
NAv - Not Available
NAp - Not Applicable

[1] Soil exposure concentration for Release Block D, based on measured data. All total values were C_{max} from Table II.1 except Th-232 and Pu-238.

[2] Soil background concentration for Mound facility (see RREM).

[3] Increment above background for Release block D soil contaminant concentrations.

[4] Th-232 and Pu-238 total concentration was based on 95th UCL of mean (by log transformed values). These contaminants were not carried through the RRE because the incremental concentration <BG.

Table III.2. Current Groundwater Constituents Carried through Release Block D RRE

Groundwater Constituent	C_{gw}			Kp	T	Detects / Analyses
	Total[1]	BG[2]	Increment[3]			
ORGANICS (mg/L)						
1,1-Dichloroethene	0.0017	NAv	0.0017	0.016	0.34	8/11
1,1,1-Trichloroethane[4]	0.0007	0.0007	0.000001	0.017	0.57	21/41
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0087	NAv	0.0087	NAv	NAv	3/3
INORGANICS (mg/L)						
Cadmium[4]	0.0019	NAv	0.0019	0.001	NAp	7/28
Copper	0.593	0.0012	0.5918	0.001	NAp	6/12
Lead[4]	0.0025	0.0101	0	0	NAp	17/28
RADIONUCLIDES (pCi/L)						
Actinium-227	0.335	NAv	0.335	NAp	NAp	1/1
Bismuth-210	0.39	NAv	0.39	NAp	NAp	2/2
Plutonium-239/240	2	0.125	1.875	NAp	NAp	3/3
Tritium[4]	2709	1485	1224	NAp	NAp	23/23
Uranium-234	8.14	0.792	7.348	NAp	NAp	11/11
Uranium-238	8.25	0.688	7.562	NAp	NAp	9/9

Kp - Permeability constant for dermal exposures.
T - Tau, a chemical specific timing constant for dermal exposures.
NAv - Not Available
NAp - Not Applicable

1 - Groundwater exposure concentrations for Release Block D, based on measured data from Production Wells 0076 and 0271. All total values were C_{max} from Table II.2. except 1,1,1-Trichloroethane, Cadmium, Lead and Tritium.
2 - Groundwater background concentrations for the BVA (see RREM).
3 - Increment above background for Release Block D groundwater contaminant concentrations.
4 - Total concentration was based on 95th UCL of mean (by log transformed values except Lead). These contaminants were carried through the RRE because C_{max} > BG and/or GV.

Table III.3. Future Groundwater Constituents Carried through Release Block D RRE

Groundwater Constituent	C_{gw}			Kp	T
	Estimated Total[1]	BG[2]	Increment[3]		
ORGANICS (mg/L)					
1,1-Dichloroethene	0.0017	NAv	0.0017	0.016	0.34
1,1,1-Trichloroethane[4]	0.0054	0.0007	0.0047	0.016	0.55
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0087	NAv	0.0087	NAv	NAv
INORGANICS (mg/L)					
Beryllium	0.0001	NAv	0.0001	0.001	NAp
Bismuth	0.0016	NAv	0.0016	0.001	NAp
Cadmium[4]	0.0019	NAv	0.0019	0.001	NAp
Chromium	0.4961	0.0061	0.49	0.002	NAp
Cobalt	0.0039	NAv	0.0039	0.0004	NAp
Copper	0.5964	0.0012	0.5952	0.001	NAp
Lead[4]	0.002509	0.01005	0	0	NAp
Molybdenum	0.0096	0.0056	0.004	0.001	NAp
RADIONUCLIDES (pCi/L)					
Actinium-227	0.355	NAv	0.355	NAp	NAp
Bismuth-210	0.39	NAv	0.39	NAp	NAp
Plutonium-239/240	2.02	0.125	1.895	NAp	NAp
Tritium[4]	5936	1485	4451	NAp	NAp
Uranium-234	8.14	0.792	7.348	NAp	NAp
Uranium-238	8.25	0.688	7.562	NAp	NAp

Kp - Permeability constant for dermal exposures.
T - Tau, a chemical specific timing constant for dermal exposures.
NAv - Not Available
NAp - Not Applicable
[1] - Estimated future groundwater exposure concentrations for Release Block D, based on measured data from Production Wells 0076 and 0271 and bedrock wells. All total values were C_{max} from Table II.3. except 1,1,1-Trichloroethane, Cadmium, Lead and Tritium.
[2] - Groundwater background concentrations for the BVA (see RREM).
[3] - Increment above background for estimated future Release Block D groundwater contaminant concentrations.
[4] - Total concentration was based on 95th UCL of mean (by log transformed values except Lead). These contaminants were carried through the RRE because C_{max} > BG and/or GV.

Table III.4. Construction Worker Calculated Constituent Intakes for Soil (Incremental*) for Release Block D

Constituent (mg/kg-da) unless otherwise noted	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 4 Shower Inhalation	Pathway 5 Groundwtr. Dermal	Pathway 6 Soil Ingestion	Pathway 7 External** Radiation	Pathway 8 Soil Dermal
Organics								
Acenaphthene	NA	3.109E-10	NA	NA	NA	3.194E-05	NA	6.654E-06
Benzo(a)anthracene	NA	1.404E-10	NA	NA	NA	1.443E-05	NA	3.005E-06
Benzo(a)pyrene	NA	1.143E-10	NA	NA	NA	1.174E-05	NA	2.446E-06
Benzo(b)fluoranthene	NA	1.927E-10	NA	NA	NA	1.979E-05	NA	4.124E-06
Benzo(g,h,i)perylene	NA	6.205E-11	NA	NA	NA	6.374E-06	NA	1.328E-06
Carbazole	NA	5.225E-13	NA	NA	NA	5.368E-08	NA	1.118E-08
Dibenz(a,h)anthracene	NA	1.731E-11	NA	NA	NA	1.778E-06	NA	3.704E-07
Dibenzofuran	NA	1.829E-10	NA	NA	NA	1.879E-05	NA	3.914E-06
Fluorene	NA	2.972E-10	NA	NA	NA	3.053E-05	NA	6.360E-06
Indeno(1,2,3-cd)pyrene	NA	7.512E-11	NA	NA	NA	7.716E-06	NA	1.607E-06
Naphthalene	NA	8.230E-11	NA	NA	NA	8.454E-06	NA	1.761E-06
Phenanthrene	NA	3.338E-09	NA	NA	NA	3.429E-04	NA	7.143E-05
Inorganics								
Bismuth	NA	3.749E-11	NA	NA	NA	3.851E-06	NA	8.023E-08
Copper	NA	2.058E-10	NA	NA	NA	2.114E-05	NA	4.403E-07
Radionuclides								
Plutonium-238 (pCi)	NA	1.571E-02	NA	NA	NA	1.614E+03	4.031E+00	NA

* - Incremental soil concentrations and resulting intakes obtained by subtracting background from total concentrations.

** - External Radiation Exposure has units of pCi-yr/gm (Pathway 7).

Intakes due to exposure to total and background concentrations presented in Appendix F.

Note: Intakes for carcinogens are calculated as average daily dose-lifetime,
Intakes for non-carcinogens are calculated as average daily doses.
Carcinogen status presented in Section 4 of this report.

NA - Not applicable.

Table III.5. Construction Worker Calculated Constituent Intakes from Groundwater (Current -Increment*) for Release Block D

Constituent (mg/kg-da) unless otherwise noted	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 4 Shower Inhalation	Pathway 5 Groundwtr. Dermal	Pathway 6 Soil Ingestion	Pathway 7 External Radiation	Pathway 8 Soil Dermal
Organics								
1,1-Dichloroethene	NA	NA	1.663E-05	8.268E-08	3.401E-06	NA	NA	NA
1,1,1-Trichloroethane	NA	NA	1.174E-08	8.170E-10	3.302E-09	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	8.513E-05	5.923E-06	NAv	NA	NA	NA
Inorganics								
Cadmium	NA	NA	1.859E-05	NA	6.023E-08	NA	NA	NA
Copper	NA	NA	5.791E-03	NA	1.876E-05	NA	NA	NA
Lead	NA	NA	0.000E+00	NA	0.000E+00	NA	NA	NA
Radionuclides								
Actinium-227 (pCi)	NA	NA	4.188E+02	NA	NA	NA	NA	NA
Bismuth-210 (pCi)	NA	NA	4.875E+02	NA	NA	NA	NA	NA
Plutonium-239/240 (pCi)	NA	NA	2.344E+03	NA	NA	NA	NA	NA
Tritium (pCi)	NA	NA	1.530E+06	1.426E+04	7.282E+03	NA	NA	NA
Uranium-234 (pCi)	NA	NA	9.185E+03	NA	NA	NA	NA	NA
Uranium-238 (pCi)	NA	NA	9.453E+03	NA	NA	NA	NA	NA

NAv - Data not available to perform this calculation.

* - Incremental groundwater concentrations and resulting intakes obtained by subtracting background from total concentrations.

Intakes due to exposure to total and background concentrations presented in Appendix F.

NA - Not applicable.

Table III.6. Construction Worker Calculated Constituent Intakes from Groundwater (Future - Incremental*) for Release Block D

Constituent (mg/kg-da) unless otherwise noted	Pathway 3 Groundwtr. Ingestion	Pathway 4 Shower Inhalation	Pathway 5 Groundwtr. Dermal
Organics			
1,1-Dichloroethene	1.663E-05	8.268E-08	3.401E-06
1,1,1-Trichloroethane	4.630E-05	3.222E-06	1.302E-05
1,1,2-Trichloro-1,2,2-trifluoroethane	8.513E-05	5.923E-06	NAv
Inorganics			
Beryllium (carcinogen)	6.989E-08	NA	2.264E-10
Beryllium (non-carcinogen)	9.785E-07	NA	3.170E-09
Bismuth	1.566E-05	NA	5.072E-08
Cadmium	1.859E-05	NA	6.023E-08
Chromium	4.795E-03	NA	3.107E-05
Cobalt	3.816E-05	NA	4.945E-08
Copper	5.824E-03	NA	1.887E-05
Lead	0.000E+00	NA	0.000E+00
Molybdenum	3.917E-05	NA	1.269E-07
Radionuclides			
Actinium-227 (pCi)	4.188E+02	NA	NA
Bismuth-210 (pCi)	4.875E+02	NA	NA
Plutonium-239/240 (pCi)	2.369E+03	NA	NA
Tritium (pCi)	5.563E+06	5.184E+04	2.648E+04
Uranium-234 (pCi)	9.185E+03	NA	NA
Uranium-238 (pCi)	9.453E+03	NA	NA

NAv - Data not available to perform this calculation.

* - Incremental groundwater concentrations and resulting intakes obtained by subtracting background from total concentrations. Intakes due to exposure to total and background concentrations presented in Appendix F.

NA - Not applicable.

Table III.7. Site Employee Calculated Constituent Intakes from Soil (Incremental*) for Release Block D

Constituent (mg/kg-da) unless otherwise noted	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 6 Soil Ingestion	Pathway 7 External** Radiation
Organics					
Acenaphthene	NA	3.109E-10	NA	3.327E-06	NA
Benzo(a)anthracene	NA	7.022E-10	NA	7.513E-06	NA
Benzo(a)pyrene	NA	5.715E-10	NA	6.115E-06	NA
Benzo(b)fluoranthene	NA	9.635E-10	NA	1.031E-05	NA
Benzo(g,h,i)perylene	NA	3.103E-10	NA	3.320E-06	NA
Carbazole	NA	2.613E-12	NA	2.796E-08	NA
Dibenz(a,h)anthracene	NA	8.655E-11	NA	9.261E-07	NA
Dibenzofuran	NA	1.829E-10	NA	1.957E-06	NA
Fluorene	NA	2.972E-10	NA	3.180E-06	NA
Indeno(1,2,3-cd)pyrene	NA	3.756E-10	NA	4.019E-06	NA
Naphthalene	NA	8.230E-11	NA	8.806E-07	NA
Phenanthrene	NA	3.338E-09	NA	3.571E-05	NA
Inorganics					
Bismuth	NA	3.749E-11	NA	4.012E-07	NA
Copper	NA	2.058E-10	NA	2.202E-06	NA
Radionuclides					
Plutonium-238 (pCi)	NA	7.856E-02	NA	8.406E+02	4.482E+00

* - Incremental soil concentrations and resulting intakes obtained by subtracting background from total concentrations.

** - External Radiation Exposure has units of pCi-yr/gm (Pathway 7).

Intakes due to exposure to total and background concentrations presented in Appendix F.

NA - Not applicable.

Table III.8. Site Employee Calculated Constituent Intakes from Groundwater (Current - Increment*) for Release Block D

Constituent (mg/kg-da) unless otherwise noted	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 6 Soil Ingestion	Pathway 7 External Radiation
Organics					
1,1-Dichloroethene	NA	NA	1.663E-05	NA	NA
1,1,1-Trichloroethane	NA	NA	1.174E-08	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	8.513E-05	NA	NA
Inorganics					
Cadmium	NA	NA	1.859E-05	NA	NA
Copper	NA	NA	5.791E-03	NA	NA
Lead	NA	NA	0.000E+00	NA	NA
Radionuclides					
Actinium-227 (pCi)	NA	NA	2.094E+03	NA	NA
Bismuth-210 (pCi)	NA	NA	2.438E+03	NA	NA
Plutonium-239/240 (pCi)	NA	NA	1.172E+04	NA	NA
Tritium (pCi)	NA	NA	7.650E+06	NA	NA
Uranium-234 (pCi)	NA	NA	4.593E+04	NA	NA
Uranium-238 (pCi)	NA	NA	4.726E+04	NA	NA

* - Incremental groundwater concentrations and resulting intakes obtained by subtracting background from total concentrations. Intakes due to exposure to total and background concentrations presented in Appendix F.
NA - Not applicable.

Table III.9. Site Employee Calculated Constituent Intakes from Groundwater (Future - Incremental*) for Release Block D

Constituent (mg/kg-da) unless otherwise noted	Pathway 3 Groundwtr. Ingestion
Organics	
1,1-Dichloroethene	1.663E-05
1,1,1-Trichloroethane	4.630E-05
1,1,2-Trichloro-1,2,2-trifluoroethane	8.513E-05
Inorganics	
Beryllium (carcinogen)	3.495E-07
Beryllium (non-carcinogen)	9.785E-07
Bismuth	1.566E-05
Cadmium	1.859E-05
Chromium	4.795E-03
Cobalt	3.816E-05
Copper	5.824E-03
Lead	0.000E+00
Molybdenum	3.917E-05
Radionuclides	
Actinium-227 (pCi)	2.094E+03
Bismuth-210 -(pCi)	2.438E+03
Plutonium-239/240 (pCi)	1.184E+04
Tritium (pCi)	2.782E+07
Uranium-234 (pCi)	4.593E+04
Uranium-238 (pCi)	4.726E+04

* - Incremental groundwater concentrations and resulting intakes obtained by subtracting background from total concentrations.
Intakes due to exposure to total and background concentrations presented in Appendix F.
NA - Not applicable.

4.0 TOXICITY ASSESSMENT

Toxicological values appropriate to use in the Release Block D RRE were assembled from various sources. The U.S. EPA's Integrated Risk Information System (IRIS) and the Health Assessment Summary Tables (HEAST) were the data sources for organics and inorganics. Radionuclide data was obtained from the DOE (HAZWRAP, 1995). Toxicity values included noncarcinogenic oral and inhalation reference doses (oral RfD or inhalation RfD). Inhalation RfDs were calculated from the inhalation RfC by assuming a $20m^3$/day inhalation volume and 70 kg body weight. A reference dose is an estimate of a route-specific exposure level that would not be expected to cause adverse effects when exposure occurs for a significant portion of a lifespan. Additional data were cancer slope factors for ingested or inhaled carcinogenic contaminants (referred to as oral and inhalation slope factors). These slope factors correlate intake of a carcinogen with an increased risk of cancer. Radionuclides are classified as known carcinogens but are discussed separately from organic and inorganic carcinogens, and have oral, inhalation, and external radiation slope factors. Toxicity data were not available for several organic and inorganic constituents. Some chemicals have no conclusive data; others are undergoing review by the U.S. EPA. Secondary drinking water standards were also obtained for those contaminants which can affect general water quality. Consistent with the approach used to develop Guideline Values, oral slope factors and oral references doses were used, unmodified by gastrointestinal absorption efficiency, for evaluation of dermal pathways. Toxicity profiles for each contaminant are presented in Appendix E.

4.1 NONCARCINOGENS

There were three organic and two inorganic soil contaminants causing potential noncarcinogenic effects addressed with the Release Block D RRE. Toxicity values for these soil noncarcinogens are shown in Table IV.1. There were two organic and four inorganic contaminants in groundwater (either current or future) causing potential noncarcinogenic effects addressed with the Release Block D RRE. Toxicity values for these groundwater noncarcinogens are shown in Table IV.2.

4.2 CARCINOGENS

There were five organic carcinogenic constituents in soil addressed in Release Block D RRE for which toxicity data were available. Toxicity values for these soil carcinogens are shown in Table IV.1. There were four organic carcinogenic constituents in current and future groundwater that were addressed in Release Block D RRE for which toxicity data were available. Toxicity values for these groundwater carcinogens are shown in Table IV.2.

4.3 RADIONUCLIDES

There were four radionuclides in soil that were addressed in the Release Block D RRE. Toxicity values (including oral, inhalation, and external slope factors) for these radionuclides are shown in Table IV.1. There were six radionuclides in current and future groundwater that were addressed in the Release Block D RRE. Toxicity values (including oral, inhalation, and external slope factors) for these radionuclides are shown in Table IV.2. Values for Th-228+D were used for Th-232 which is in the Th-228 decay chain.

4.4 OTHER CHEMICALS

Several additional constituents have been identified at the site which are water quality indicators or secondary water quality parameters. These constituents give a general indication of water quality and are naturally found in most, if not all waters. These were taken from the data introduced in Section 2. These parameters are shown in Table IV.3.

Table IV.1. Toxicity Values[1] for Soil Constituents Included in the Release Block D RRE

Soil Constituent	Oral RfD (mg/kg/da)	Inhalation RfD (mg/kg/da)	Oral Slope Factor $(mg/kg/da)^{-1}$	Inhalation Slope Factor $(mg/kg/da)^{-1}$	Carcinogenic Weight of Evidence[2]
ORGANICS					
Acenaphthene	175				D
Benzo(a)anthracene			0.73		B2
Benzo(a)pyrene			7.3		B2
Benzo(b)fluoranthene			0.73		B2
Benzo(g,h,i)perylene					B2
Carbazole					
Dibenz(a,h)anthracene			7.3		B2
Dibenzofuran					
Fluorene	0.04				D
Indeno(1,2,3-cd)pyrene			0.73		B2
Naphthalene	50				D
Phenanthrene					
INORGANICS					
Bismuth	-				
Copper					D
RADIONUCLIDES			**Oral Slope Factor (risk/pCi)**	**Inhalation Slope Factor (risk/pCi)**	**External Slope Factor (risk/yr per pCi/g)**
Plutonium-238			3.0E-10	2.7E-8	1.9E-11

[1] - Values from IRIS, HEAST and HAZWRAP (1995). No data available if left blank.

[2] A - Human Carcinogen.
B1 - Probable human carcinogen; limited human data available.
B2 - probable human carcinogen; sufficient evidence in animals, insufficient or no human data available.
C - Possible human carcinogen.
D - Not classified

Table IV.2. Toxicity Values[1] for All Groundwater Constituents Included in the Release Block D RRE

Groundwater Constituent	Oral RfD (mg/kg/da)	Inhalation RfD (mg/kg/da)	Oral Slope Factor $(mg/kg/da)^{-1}$	Inhalation Slope Factor $(mg/kg/da)^{-1}$	Carcinogenic Weight of Evidence[3]
ORGANICS					
1,1-Dichloroethene	9.0			1.2	C
1,1,1-Trichloroethane	0.09				D
1,1,2-Trichloro-1,2,2-trifluoroethane					
INORGANICS					
Beryllium	0.005		4.3	8.4	
Bismuth					
Cadmium	0.0005			6.1	B1
Chromium[2]	0.005			41	A
Cobalt					
Copper					D
Lead					B2
Molybdenum	0.005				
RADIONUCLIDES			**Oral Slope Factor (risk/pCi)**	**Inhalation Slope Factor (risk/pCi)**	**Carcinogenic Weight of Evidence[3]**
Actinium-227			6.3E-10	7.9E-8	A
Bismuth-210					A
Plutonium-239/240			3.2E-10	2.8E-8	A
Tritium			7.2E-14	9.6E-14	A
Uranium-234			4.4E-11	1.4E-8	A
Uranium-238			6.2E-11	1.2E-8	A

[1] - Values from IRIS, HEAST and HAZWRAP (1995). No data available if left blank.
[2] - Chromium assumed to be Cr-VI.
[3] A - Human Carcinogen.
B1 - Probable human carcinogen; limited human data available.
B2 - Probable human carcinogen; sufficient evidence in animals, insufficient or no human data available.
C - Possible human carcinogen.
D - Not classified

Table IV.3. Current and Future Water Quality Data for BVA

Groundwater Constituent	Current Maximum Concentration (mg/L)	Future Maximum Concentration (mg/L)	Secondary Drinking Water Standard (mg/L)
Alkalinity	335	335	---
Aluminum	0.0737	0.3495	0.05 to 0.20
Ammonia	0.58	0.58	---
Calcium	126	156	---
Chloride	133	133	250
Copper	0.593	0.596	1
Dissolved Solids	719	719	500
Fluoride	0.18	0.18	2
Iron	0.78	0.78	0.3
Magnesium	39.6	44	---
Manganese	0.0248	0.0248	0.05
Nitrate	2.55	2.55	10
Nitrate/Nitrite	4.9	4.9	10
Nitrite	0.066	0.066	---
Nitrogen	0.62	0.77	---
Organic Carbon	1.1	1.1	---
Phosphate	0.22	0.37	---
Potassium	3.8	6	---
Sodium	82.4	143.2	---
Sulfate	83	111	250
Suspended Solids	8	81.1	---

--- - No Secondary Drinking Water Standard available.

5.0 RESIDUAL RISK EVALUATION FOR RELEASE BLOCK D

The residual risks associated with use of Release Block D are characterized in this section. To accomplish this, toxicity and exposure assessment are summarized and integrated into quantitative expressions of risk. Two types of risk characterization are performed. The first is the calculation of hazard quotients (HQ) for noncarcinogens. The second is the calculation of carcinogenic risk associated with carcinogens and radionuclides. Following the calculation of hazard quotients or risks for individual chemicals and all exposure pathways, the hazards or risks can be summed across constituents and across media.

5.1 CALCULATION OF NONCARCINOGENIC HAZARD QUOTIENTS

Potential human health hazards from exposure to noncarcinogens are calculated by combining an oral Reference Dose (oral RfD) or an inhalation Reference Dose, (inhalation RfD) as presented in Section IV, with calculated intakes as presented in Section 3 to generate a ratio called a Hazard Quotient. The specific relationship between toxicity and exposure of noncarcinogens is represented as Equation 1. Chemical-specific hazard quotients may be summed to yield the hazard index (HI). As an example, a hazard quotient of one or less implies that no toxicity will occur at the specified contaminant exposure.

$$HQ = \text{intake} / \text{oral RfD or inhalation RfD} \quad (1)$$

where, intake is the pathway and chemical-specific intake (mg/kg/da)
and, oral RfD and inhalation RfD have units of (mg/kg-da).

5.2 CALCULATION OF CARCINOGENIC RISKS

Carcinogenic risks are calculated for both carcinogenic chemicals and radionuclides. A carcinogenic risk is calculated by converting calculated intakes to incremental risks by using Equation 2 or 3 and the oral slope factor (oral SF), an inhalation slope factor (inhalation SF), or external radiation slope factor. As an example, a risk of 1.0E-6, or one in a million, indicates that the exposed individual has one chance in a million of cancer occurring at the specified contaminant exposure.

$$\text{Risk} = \text{intake} \times \text{slope factor (oral or inhalation)} \quad (2)$$
$$\text{Risk} = \text{external exposure} \times \text{slope factor (external)} \quad (3)$$

where, oral and inhalation slope factors have units of $(\text{mg/kg-da})^{-1}$ and,
external slope factors have units of $(\text{pCi-yr/g})^{-1}$.

5.3 CONSTRUCTION WORKER RESIDUAL RISK EVALUATION

5.3.1 Soil Residual Risk Evaluation - Construction Worker

5.3.1.1 Soil Noncarcinogenic Hazards - Construction Worker

For soil, noncarcinogenic hazards were calculated for all relevant construction worker pathways, in this case, Pathway 6 (incidental ingestion of soil) and Pathway 8 (dermal contact with soil). Hazards were calculated for the incremental concentration above background (Table V.1) and for background and total concentrations (Appendix F).

For Pathway 6 (incidental ingestion of soil), the overall pathway hazard was 7.6E-4 and for Pathway 8 (dermal contact with soil), the overall pathway hazard was 1.6E-4. When combined, the overall construction worker incremental hazard (above background) from soil noncarcinogenic contaminants was 9.2E-4 which is substantially lower than desired upper limit of 1.0. Hazards were calculated similarly for the same pathways using intakes based on background and total concentrations

(Appendix F). The overall construction worker hazard from soil noncarcinogenic contaminants was zero based solely on background. The overall construction worker hazard from soil noncarcinogenic contaminants was 9.2E-4 as calculated from intakes based on total concentrations. The primary contaminant contributing to the calculated hazard was fluorene.

5.3.1.2 Soil Carcinogenic Risks - Construction Worker

Carcinogenic risks were calculated for all relevant construction worker pathways. Pathway 6 (incidental ingestion of soil) and Pathway 8 (dermal contact with soil) applied to non-radionuclide carcinogens. Risks were calculated for the incremental concentration above background (Table V.1) and for background and total concentrations (Appendix F).

For the carcinogenic soil contaminants, the potential risk due to exposure of non-radionuclide carcinogens to a construction worker for Pathway 6 (incidental ingestion of soil) overall was 1.3E-4, and for Pathway 8 (dermal contact with soil) overall was 2.7E-5. The combined incremental risks (above background) across all pathways and all chemicals was 1.6E-4. Risks were calculated similarly for the same pathways using intakes based on background and total concentrations (Appendix F). The overall construction worker risk from soil carcinogenic contaminants was zero based solely on background. The overall construction worker risk from carcinogenic soil contaminants was 1.6E-4 as calculated from intakes based on total concentrations. The overall incremental risk was approximately evenly divided between several contaminants, including benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, and dibenz(a,h)anthracene.

5.3.1.3 Soil Radionuclide Risks - Construction Worker

For radionuclides, the potential risk to the construction worker for Pathway 2 (inhalation of dust) was 4.2E-10, for Pathway 6 (incidental ingestion of soil) was 4.8E-7, and for Pathway 7 (external radiation) was 7.7E-11, while the combined incremental risks (above background) across all pathways was 4.8E-7. Risks were calculated similarly for the same pathways using intakes based on background and total radionuclide concentrations (Appendix F). The overall construction worker risk from soil radionuclides was 2.3E-8 based solely on background. The overall construction worker risk from soil radionuclides was 5.1E-7 as calculated from intakes based on total concentrations. Note that the total, background, and incremental risks presented here may not add up exactly due to rounding of the numbers.

5.3.2 Current Groundwater Residual Risk Evaluation - Construction Worker

5.3.2.1 Current Groundwater Noncarcinogenic Hazards - Construction Worker

For groundwater (current), noncarcinogenic hazards were calculated for all relevant pathways, in this case, Pathway 3 (groundwater ingestion), Pathway 4 (shower inhalation), and Pathway 5 (dermal contact with shower water). Hazards were calculated for the incremental concentration above background (Table V.2) and for background and total concentrations (Appendix F).

For Pathway 3 (groundwater ingestion), the overall pathway hazard was 3.7E-2, not applicable for Pathway 4, and for Pathway 5 (dermal contact with shower water), the overall pathway hazard was 1.2E-4. When combined, the overall construction worker incremental hazard (above background) from current groundwater noncarcinogenic contaminants was 3.7E-2. The primary contaminant contributing to the overall incremental hazard was cadmium. Hazards were calculated similarly for the same pathways using intakes based on background and total concentrations (Appendix F). The overall construction worker hazard from current groundwater noncarcinogenic contaminants was 9.3E-5 based solely on background. The overall construction worker hazard from current groundwater noncarcinogenic contaminants was 3.7E-2 as calculated from intakes based on total concentrations.

5.3.2.2 Current Groundwater Carcinogenic Risks - Construction Worker

Carcinogenic risks were calculated for all relevant current groundwater pathways. Pathway 4 (inhalation of volatiles from shower water) was the only applicable pathway for the one carcinogenic organic chemical in current groundwater. Risks were calculated for the incremental concentration above background (Table V.2) and for background and total concentrations (Appendix F).

For the single carcinogenic current groundwater contaminant (1,1-dichloroethene), the potential risk due to exposure to a construction worker for Pathway 4 (inhalation of shower volatile contaminants) overall was 9.9E-8 and represents the overall incremental risks (above background) for current groundwater carcinogens. Risks were calculated similarly for the same pathways using intakes based on background and total concentrations (Appendix F). The overall construction worker risk from current groundwater carcinogenic contaminants was zero based solely on background. The overall construction worker risk from carcinogenic current groundwater contaminants was 9.9E-8 as calculated from intakes based on total concentrations.

5.3.2.3 Current Groundwater Radionuclide Risks - Construction Worker

For radionuclides, the potential risk to the construction worker for Pathway 3 (groundwater ingestion) was 2.1E-6, for Pathway 4 (shower inhalation) was 1.4E-9 (based solely on tritium), and for Pathway 5 (dermal contact with shower water), was 5.2E-10 (based solely on tritium). When combined, the overall construction worker incremental risk (above background) from current groundwater radionuclides was 2.1E-6. Risks were calculated similarly for the same pathways using intakes based on current groundwater background and total radionuclide concentrations (Appendix F). The overall construction worker risk from current groundwater radionuclides was 2.9E-7 based solely on background. The overall construction worker risk from current groundwater radionuclides was 2.4E-6 as calculated from intakes based on total concentrations. Note that the total, background, and incremental risks presented here may not add up exactly due to rounding of the numbers.

5.3.3 Future Groundwater Residual Risk Evaluation - Construction Worker

5.3.3.1 Future Groundwater Noncarcinogenic Hazards - Construction Worker

For groundwater (future), noncarcinogenic hazards were calculated for all relevant pathways, in this case, Pathway 3 (groundwater ingestion), Pathway 4 (shower inhalation), and Pathway 5 (dermal contact with shower water). Hazards were calculated for the incremental concentration above background (Table V.3) and for background and total concentrations (Appendix F).

For Pathway 3 (groundwater ingestion), the overall pathway hazard was 1.0 (due primarily to chromium) not applicable for Pathway 4, and for Pathway 5 (dermal contact with shower water), the overall pathway hazard was 6.5E-3. When combined, the overall construction worker incremental hazard (above background) from future groundwater noncarcinogenic contaminants was 1.0. Hazards were calculated similarly for the same pathways using intakes based on background and total concentrations (Appendix F). The overall construction worker hazard from future groundwater noncarcinogenic contaminants was 2.3E-2 based solely on background. The overall construction worker hazard from future groundwater noncarcinogenic contaminants was 1.0 as calculated from intakes based on total concentrations.

5.3.3.2 Future Groundwater Carcinogenic Risks - Construction Worker

Carcinogenic risks were calculated for all relevant future groundwater pathways. Pathway 3 (groundwater ingestion), Pathway 4 (inhalation of volatiles from shower water), and Pathway 5 (dermal contact with shower water) were the applicable pathways. Risks were calculated for the incremental concentration above background (Table V.3) and for background and total concentrations (Appendix F).

For future groundwater contaminants, the potential risk to a construction worker for Pathway 3 (ingestion of groundwater) was 3.0E-7 (due to beryllium), for Pathway 4 (inhalation of shower volatiles) was 9.9E-8 (due to 1,1-dichloroethene), and for Pathway 5 (dermal exposure to shower water) was 9.7E-10 (due to beryllium). The overall incremental risk (above background) for future groundwater carcinogens was 4.0E-7. Risks were calculated similarly for the same pathways using intakes based on background and total concentrations (Appendix F). The overall construction worker risk from future groundwater carcinogenic contaminants was zero based solely on background. The overall construction worker risk from carcinogenic future groundwater contaminants was 4.0E-7 as calculated from intakes based on total concentrations.

5.3.3.3 Future Groundwater Radionuclide Risks - Construction Worker

For radionuclides, the potential risk to the construction worker exposed to future groundwater from Pathway 3 (groundwater ingestion) was 2.4E-6, from Pathway 4 (shower inhalation) was 5.0E-9 (based solely on tritium), and from Pathway 5 (dermal contact with shower water), was 1.9E-9 (based solely on tritium). Combined together, the overall construction worker incremental risk (above background) from future groundwater radionuclides was 2.4E-6. Risks were calculated similarly for the same pathways using intakes based on future groundwater background and total radionuclide concentrations (Appendix F). The overall construction worker risk from future groundwater radionuclides was 2.8E-7 based solely on background. The overall construction worker risk from future groundwater radionuclides was 2.7E-6 as calculated from intakes based on total concentrations. Note that the total, background, and incremental risks presented here may not add up exactly due to rounding of the numbers.

5.3.4 Summary of Hazards and Risks for the Construction Worker

Overall hazards across all pathways for soil + current groundwater, and for soil + future groundwater, were summed to provide a comprehensive Hazard Index based on the incremental exposures above background to construction workers potentially working at Release Block D (Table V.7). Comprehensive Hazard Indices were also developed based on background and total exposures (Tables V.8 and V.9). Since background exposures and hazards were very small, the Hazard Indices based on incremental and total exposures were the same, 0.038 for soil + current groundwater, and 1.0 for soil + future groundwater. The primary difference between current and future groundwater hazards was due to the potential presence of chromium in the potential future groundwater.

Overall risks from carcinogenic and radionuclide contaminants across all pathways for soil + current groundwater, and for soil + future groundwater, were summed to provide an overall risk based on the incremental exposures above background to construction workers potentially working at Release Block D (Table V.7). Overall risks were also developed based on background and total exposures (Tables V.8 and V.9). The risks based on incremental exposures were 1.6E-4 for soil + current groundwater and the same for soil + future groundwater. The risks based on background exposures were 3.1E-7 for soil + current groundwater and the same for soil + future groundwater. The risks based on total exposures were 1.6E-4 for soil + current groundwater and the same for soil + future groundwater.

Virtually all of the total risks and hazards to which a construction worker may be exposed arise from the incremental contribution of Release Block D for soil and from the incremental contribution of the Mound Plant to the BVA for groundwater. For groundwater and soil, both current and future incremental exposures contribute all of the noncarcinogenic hazard and nonradionuclide carcinogenic risks and about 88% to 91% of the radionuclide risks. For the contaminants carried through the Release Block D RRE, background concentrations of nonradionuclides are negligible. Background levels of the radionuclides are important but very small portions of the total risks.

The hypothetical construction worker would potentially be exposed to several soil and BVA groundwater contaminants that collectively may pose an incremental hazard above background of 0.038, which is much less than the maximum desired Hazard Index of 1.0. Virtually all of the potential hazard would be caused by daily consumption of BVA groundwater containing cadmium. In the future,

the construction worker would be exposed to an incremental hazard above background, from soil and BVA groundwater, of 1.0. Most of the hazard is due to chromium that was inadvertently released by the Mound facility and entered the bedrock aquifer, which then entered the BVA groundwater that is supplied to Release Block D. Long term exposure to this groundwater is likely to be less than assumed here as the hazards were calculated using only the highest concentrations of chromium detected in groundwater. The chromium is believed to have been used at the site for corrosion control in water systems.

The construction worker would also potentially be exposed to several soil and BVA groundwater organic, inorganic, and radionuclide carcinogenic contaminants both now and in the future. For current or future conditions, the overall incremental risks above background would be 1.6E-4 or potentially less than two chances in 10,000 of cancer occurring in an exposed worker. Virtually all of the risks to the construction worker are due to a series of polynuclear aromatic hydrocarbons (PAHs) that are naturally occurring products in petroleum and sometimes found in soil and are also components of asphalt.

The polynuclear aromatic hydrocarbons (PAHs) that were detected (concentrations roughly averaged 50 mg/kg or ppm) in one general area of Release Block D. This area is the location of a former liquid waste staging area. The detected PAHs were measured in a composite sample derived from four separate samples collected about 30 ft. apart at 3 to 5 ft. deep (corners of a square). A shallow (0 to 2 ft. deep) composite sample from the same location had no detectable PAHs. Several other similarly collected and composited sets of soil samples ranging in distance from about 50 ft. away to a few hundred ft. away also had no detectable PAHs. However, another similarly collected sample about 100 ft. away taken from the same depth as the sample with the detected PAHs, had several PAHs detected at about 1 to 2 mg/kg. Only one of these PAHs was detected above a Guideline Value in recent soil sampling at a different location in Release Block D. This recent single value of benzo(a)pyrene was reported at 0.45 mg/kg, slightly above its Guideline value of 0.41 mg/kg. This measured value was only an estimated value provided by the laboratory, but not positively quantified.

While these PAHs must be carried through the RRE, it should be recognized that the conservativeness of the RREM requires the assumption that, despite the relatively isolated location of the positively detected PAHs, the PAHs are assumed to be available for daily exposure to any construction worker at Release Block D and lasting for 5 years. If the PAHs were assumed to be isolated and not available for daily, long-term exposures, the overall potential incremental hazards to construction workers from exposure to the non-PAH noncarcinogenic contaminants in soil would drop to zero, and the potential carcinogenic incremental risks would drop from 1.6E-4 to 4.8E-7 for non-PAH carcinogens and radionuclides (then based solely on Pu-238).

The main contributors of risk from groundwater were several radionuclides in BVA groundwater. Virtually all contaminants contributing the most to risks and hazards were based on maximum concentrations, rather than an average, due to the limited available data. Based on the RREM, this conservative assumption of maximum concentrations applies to daily exposures occurring over 5 years. This would tend to overestimate hazards and risks.

5.4 SITE EMPLOYEE RESIDUAL RISK EVALUATION

5.4.1 Soil Residual Risk Evaluation - Site Employee

5.4.1.1 Noncarcinogenic Hazards - Site Employee

For soil, noncarcinogenic hazards were calculated for the only relevant (for site employees) pathway, Pathway 6 (incidental ingestion of soil). Hazards were calculated for the incremental concentration above background (Table V.4) and for background and total concentrations (Appendix F).

For Pathway 5 (incidental ingestion of soil), the overall pathway hazard was 8.0E-5 (primarily due to fluorene). Since only one pathway was considered, site employee incremental hazard (above

background) from soil noncarcinogenic contaminants was the same value, 8.0E-5. Hazards were calculated similarly for the same pathway using intakes based on background and total concentrations (Appendix F). The site employee hazard from soil noncarcinogenic contaminants was zero based solely on background. The site employee hazard from soil noncarcinogenic contaminants was 8.0E-5 as calculated from intakes based on total concentrations.

5.4.1.2 Soil Carcinogenic Risks Site Employee

Carcinogenic risk was calculated for the only relevant pathway for site employees, Pathway 6 (incidental ingestion of soil). The risk from Pathway 6 (incidental ingestion of soil) was calculated for the incremental concentration above background (Table V.4) and for background and total concentrations (Appendix F).

For the carcinogenic soil contaminants, the potential risk due to exposure of carcinogens to a site employee for Pathway 6 (incidental ingestion of soil) overall was 6.7E-5 (attributed to a series of polynuclear aromatic hydrocarbons). As there was only one relevant pathway, this represents the overall incremental risk above background. Risks were calculated similarly for the same pathway using intakes based on background and total concentrations (Appendix F). The overall site employee risk from soil carcinogenic contaminants was zero based solely on background. The overall site employee risk from carcinogenic soil contaminants was 6.7E-5 as calculated from intakes based on total concentrations.

5.4.1.3 Soil Radionuclide Risks - Site Employee

For radionuclides, the potential risk to the site employee for Pathway 2 (inhalation of dust) was 2.1E-9, for Pathway 6 (incidental ingestion of soil) was 2.5E-7, and for Pathway 7 (external radiation) was 8.5E-11. The combined incremental risks (above background) across all pathways and all radionuclides was 2.5E-7 based only on plutonium-238 (Table V.4). Risks were calculated similarly for the same pathways using intakes based on background and total radionuclide concentrations (Appendix F). The overall site employee risk from soil radionuclides was 1.2E-8 based solely on background. The overall site employee risk from soil radionuclides was 2.7E-7 as calculated from intakes based on total concentrations.

5.4.2 Current Groundwater Residual Risk Evaluation - Site Employee

5.4.2.1 Current Groundwater Noncarcinogenic Hazards - Site Employee

For groundwater (current), noncarcinogenic hazards were calculated for the only relevant pathway to which the site employee would be exposed, Pathway 3 (groundwater ingestion). Hazards were calculated for the incremental concentration above background (Table V.5) and for background and total concentrations (Appendix F) for this pathway.

For Pathway 3 (groundwater ingestion), the overall pathway hazard was 3.7E-2 (primarily due to cadmium). This also represents the overall hazard from noncarcinogens to a site employee based on current groundwater exposures. Hazards were calculated similarly for the same pathway using intakes based on background and total concentrations (Appendix F). The overall site employee hazard from current groundwater noncarcinogenic contaminants was 7.3E-5 based solely on background. The overall site employee hazard from current groundwater noncarcinogenic contaminants was 3.7E-2 as calculated from intakes based on total concentrations.

5.4.2.2 Current Groundwater Carcinogenic Risks - Site Employee

No current groundwater non-radionuclide carcinogenic contaminants have toxicity data available. Therefore, no risks were calculated for the incremental concentration above background (Table V.5), nor for background or total concentrations (Appendix F).

5.4.2.3 Current Groundwater Radionuclide Risks - Site Employee

For radionuclides, the potential risk to the site employee for Pathway 3 (groundwater ingestion) was 1.1E-5. As this is the only relevant pathway for current groundwater radionuclides and the site employee, the site employee incremental risk (above background) from current groundwater radionuclides was also 1.1E-5. Risks were calculated similarly for the same pathways using intakes based on current groundwater background and total radionuclide concentrations (Appendix F). The overall site employee risk from current groundwater radionuclides was 1.4E-6 based solely on background. The overall site employee risk from current groundwater radionuclides was 1.2E-5 as calculated from intakes based on total concentrations. Note that the total, background, and incremental risks presented here may not add up exactly due to rounding of the numbers.

5.4.3 Future Groundwater Residual Risk Evaluation - Site Employee

5.4.3.1 Future Groundwater Noncarcinogenic Hazards - Site Employee

For groundwater (future), noncarcinogenic hazards were calculated for the only relevant pathway, Pathway 3 (groundwater ingestion). Hazards were calculated for the incremental concentration above background (Table V.6) and for background and total concentrations (Appendix F).

For Pathway 3 (groundwater ingestion), the overall pathway hazard was 1.0 (primarily due to chromium) and represents the overall site employee incremental hazard (above background) from future groundwater noncarcinogenic contaminants. Hazards were calculated similarly for the same pathway using intakes based on background and total concentrations (Appendix F). The overall site employee hazard from future groundwater noncarcinogenic contaminants was 2.3E-2 based solely on background. The overall site employee hazard from future groundwater noncarcinogenic contaminants was 1.0 as calculated from intakes based on total concentrations.

5.4.3.2 Future Groundwater Carcinogenic Risks - Site Employee

For groundwater (future), carcinogenic risks were calculated for the only relevant pathway, Pathway 3 (groundwater ingestion). Risks were calculated for the incremental concentration above background (Table V.6) and for background and total concentrations (Appendix F).

For future groundwater contaminants, the potential risk to a site employee for Pathway 3 (ingestion of groundwater) was 1.5E-6 (due to beryllium), which also represents the overall incremental risk (above background) to a site employee from future groundwater carcinogens. Risks were calculated similarly for the same pathways using intakes based on background and total concentrations (Appendix F). The overall site employee risk from future groundwater carcinogenic contaminants was zero based solely on background. The overall construction worker risk from carcinogenic future groundwater contaminants was 1.5E-6 as calculated from intakes based on total concentrations.

5.4.3.3 Future Groundwater Radionuclide Risks - Site Employee

For radionuclides, the potential risk to the site employee exposed to future groundwater from Pathway 3 (groundwater ingestion) was 1.2E-5, which also represents the overall incremental risk (above background) from future groundwater radionuclides. Risks were calculated similarly for the same pathway using intakes based on future groundwater background and total radionuclide concentrations (Appendix F). The overall site employee risk from future groundwater radionuclides was 1.4E-6 based solely on background. The overall construction worker risk from future groundwater radionuclides was 1.3E-5 as calculated from intakes based on total concentrations. Note that the total, background, and incremental risks presented here may not add up exactly due to rounding of the numbers.

5.4.4 Summary of Hazards and Risks for the Site Employee

Overall hazards across all pathways for soil + current groundwater, and for soil + future groundwater, were summed to provide a comprehensive Hazard Index based on the incremental exposures above background to site employees potentially working at Release Block D (Table V.7). Comprehensive Hazard Indices were also developed based on background and total exposures (Tables V.8 and V.9). Since background exposures and hazards were very small, the Hazard Indices based on incremental and total exposures were the same, 0.037 for soil + current groundwater, and 1.0 for soil + future groundwater. The primary difference between current and future groundwater hazards was due to the presence of chromium in the potential future groundwater. The hazards to a site employee were the same as for a construction worker.

Overall risks from carcinogenic and radionuclide contaminants across all pathways for soil + current groundwater, and for soil + future groundwater, were summed to provide an overall risk based on the incremental exposures above background to site employees potentially working at Release Block D (Table V.7). Overall risks were also developed based on background and total exposures (Tables V.8 and V.9). The risks based on incremental exposures were 7.8E-5 for soil + current groundwater and 8.1E-5 for soil + future groundwater. The risks based on background exposures were 1.4E-6 for soil + current groundwater and the same for soil + future groundwater. The risks based on total exposures were 8E-5 for soil + current groundwater and 8.3E-5 for soil + future groundwater.

Virtually all of the total risks and hazards to which a site employee may be exposed arise from the incremental contribution of Release Block D and from the incremental contribution of the Mound Plant to the BVA for groundwater. For groundwater and soil, both current and future incremental exposures contribute all of the noncarcinogenic hazard and nonradionuclide carcinogenic risks and about 92% to 93% of the radionuclide risks. For the contaminants carried through the Release Block D RRE, background concentrations of nonradionuclides are negligible. Background levels of the radionuclides are important but very small portions of the total risks.

The hypothetical site employee would currently be potentially exposed to several soil and BVA groundwater contaminants that collectively may pose a very small incremental hazard above background of 0.037, which is much less than the maximum desired Hazard Index of 1.0. Virtually all of the potential hazard would be caused by daily consumption of BVA groundwater containing cadmium. In the future, the site employee would be exposed to an incremental hazard above background, from soil and BVA groundwater, of 1.0. Most of the hazard is due to chromium that was inadvertently released by the Mound facility and entered the bedrock aquifer, which then entered the BVA groundwater that is supplied to Release Block D. Long term exposure to this groundwater is likely to be less than assumed here as the hazards were calculated using only the highest concentrations of chromium detected in groundwater. The chromium is believed to have been used at the site for corrosion control in water systems.

The site employee would also potentially be exposed to several soil and BVA groundwater organic, inorganic, and radionuclide carcinogenic contaminants both now and in the future. For current or future conditions, the overall incremental risks above background would be 7.8 to 8.1E-5 or potentially eight chances in 100,000 of cancer occurring in an exposed site employee. The risks based on soil exposures to the site employee are lower than for the construction worker as the construction worker is assumed to ingest nearly 10 times the soil as a site employee, although the site employee remains working at the site for 25 years, as opposed to 5 years for the construction worker.

Virtually all of the risks to the site employee are due to a series of polynuclear aromatic hydrocarbons (PAHs) and a series of radionuclides. PAHs are naturally occurring products in petroleum and sometimes found in soil and are also components of asphalt. The radionuclides likely originated from Mound plant activities or are decay products of radionuclides associated with Mound plant activities. The polynuclear aromatic hydrocarbons (PAHs) were detected in one soil location. The PAHs were detected in two composite samples 3 to 5 ft. below ground, collected about 100 ft. apart. Other samples in the area

showed no detectable PAHs. The conservative nature of the RREM and the RRE require the assumption that these relatively isolated PAHs were available to cause exposure daily for 25 years. If the PAHs were assumed to be isolated and not available for daily, long-term exposures, the overall potential incremental hazards to site employees from exposure to the non-PAH noncarcinogenic contaminants in soil would drop to zero, and the potential carcinogenic incremental risks from non-PAH carcinogens and radionuclides would drop from 7.8E-5 to 2.5E-7 (then based solely on Pu-238).

The main contributors of risk from groundwater were several radionuclides in BVA groundwater. Virtually all contaminants contributing the most to risks and hazards were based on maximum concentrations, rather than an average, due to the limited available data. Based on the RREM, this conservative assumption of maximum concentrations applies to daily exposures occurring over 25 years. This would tend to overestimate hazards and risks.

5.5 EVALUATION OF POTENTIAL CUMULATIVE EXPOSURE - AIR

Potential exposure to contaminants originating from outside Release Block D that may reach a receptor at the release block are termed potential cumulative exposures. Potential cumulative exposures may come from groundwater (dealt with previously), air, or surface water. No surface water is present at or near Release Block D so only airborne emissions pose an additional potential exposure to exposures quantified already.

Airborne contaminant concentrations were measured at the Mound Facility in 1994 during various site restoration activities (DOE, 1994). Both radiological and nonradiological data were collected. It is assumed that the measured concentrations would represent an upper-bound air concentration. These data are shown in Table V.10. Risks due to inhalation of the radionuclides by construction workers and site employees were calculated (Table V.10).

The calculated risks attributable to the potential upper-bound exposure of airborne contaminants would total 2E-7 (or 2 chances in 10,000,000 of contracting cancer) for the construction worker and 9.8E-7 (or about one chance in a million of contracting cancer) for the site employee. Note that the potential exposures are based on the assumption of long-term consumption of this upper-bound concentration that was measured during site restoration activities.

5.6 UNCERTAINTIES ASSOCIATED WITH THE RELEASE BLOCK D RRE

Uncertainties are inherent in the risk assessment process. In addition to the use of many conservative assumptions and approximations, the identification and analysis of environmental conditions is difficult and inexact. A number of assumptions and interpretations were made during the preparation of this RRE which lead to some degree of uncertainty in the results. By understanding the inherent uncertainties in the assumptions and interpretations, the potential for overestimation or underestimation of potential Release Block D risks can be ascertained.

5.6.1 Uncertainties Associated with Release Block D Analytical Data

Most of the soil analytical data for Release Block D was for either a few constituents (Thorium-232 and Plutonium-238) or was obtained from the 1996 Soil Gas Confirmation Sampling. Most of the remaining Release Block D data was sporadic in coverage of the site or focused on individual radionuclides at isolated spots. The result was that long-term exposure concentrations were assumed to be equivalent to the maximum concentration detected for most constituents. The likely bias is to overestimate potential exposures. It is also possible that contaminated areas of Release Block D were not sampled, but this is considered not very likely given the well-known past uses of this portion of the Mound facility.

5.6.2 Uncertainties Associated with Toxicological Data

Toxicity data were obtained from U.S. EPA sources. Carcinogens were assumed to be human carcinogens regardless of EPA's weight-of-evidence classification (i.e., risk associated with EPA Group C carcinogens [insufficient human evidence of carcinogenicity] were weighted equally with Group A carcinogens [sufficient human evidence of carcinogenicity]). EPA develops slope factors (SFS) as the upper 95% confidence limit SFS of the range of possible SFS and are based on the linearized multistage (LMS) dose-response model, which is used to define the expected potency of a carcinogen. Animal data selected for use in this model are often obtained from the most sensitive species tested, and uses the study that gave the most severe results (if more than one study were available). These data are then scaled to potential human doses assuming that humans are even more sensitive than the most sensitive animal species. The estimate of potency incorporates conservative assumptions designed not to underestimate risks. Therefore, use of the EPA slope factors likely overestimates the risks associated with exposure to a particular chemical.

Dermal reference doses and slope factors are not available. The oral reference dose or slope factors were used for dermal pathway analysis. This likely overestimates risk but is consistent with recent DOE procedures and decisions (HAZWRAP, DOE, 1995).

To calculate potential noncarcinogenic health effects, this RRE used EPA-established route-specific RfDs. RfDs are generally derived by EPA using a No Observed Effect Level (NOEL) or a No Observed Adverse Effect Level (NOAEL), often obtained from animal studies. The extrapolation from animals to humans, and the use of specific uncertainty factors and modifying factors, produces an RfD that is conservative.

Overall, the uncertainty associated with the toxicological data leads to a conservative bias. Several contaminants have demonstrated toxicity to laboratory animals, but no toxicity values have been developed for use here. Similarly, other contaminants have had their toxicity values withdrawn by EPA for further review. For these contaminants, the previous data were used, which may be either overconservative or under conservative, pending the EPA review.

5.6.3 Uncertainties Associated with Infrequently Detected Compounds

Numerous groundwater constituents were included in the RRE that had only one detection and usually one or more non-detected value. The actual presence of these constituents is uncertain. The risks and HQs calculated for these constituents are based on the assumption that construction workers and site employees would be exposed to the detected concentration of each chemical for 5 to 25 years. This likely overestimates the groundwater risks to the construction worker and site employee both currently and in the future.

5.6.4 Uncertainties Associated with Future Groundwater Concentrations

Bedrock aquifer groundwater contamination was assumed to enter the BVA and move without mixing, through the BVA to active production wells. This likely overestimates the future groundwater contamination to which the construction worker and site employee will be exposed for 5 to 25 years. Additionally, the maximum concentrations detected in the various portions of the bedrock aquifer were assumed to be representative of long-term contamination entering the BVA groundwater. This assumption would tend to over conservatively estimate the calculated hazards and risks associated with future groundwater concentrations

5.6.5 Uncertainties Associated with Exposure Estimates

The RREM presents exposure and intake calculations based on EPA procedures that were used in this Release Block D RRE. Parameter values for calculating exposure were developed by EPA with a conservative bias. For example, it is assumed that a worker at the site is exposed to upper-bound

contaminant concentrations during every work day for 5 to 25 years, for the construction worker or site employee, respectively. An additional example of potential uncertainty is the assumption that all individuals within a particular receptor group will receive the same dose. Biological variability in absorption, ingestion rates, breathing rates, and exposure frequency and duration will exist, even in narrowly defined age group or sensitive population group. On the basis of this information, uncertainties for the intakes used in this RRE likely have a bias toward over conservatism.

5.6.6 Uncertainties Associated with Risk Characterization

To estimate hypothetical future noncarcinogenic health effects, the EPA-established RfDs were compared with the calculated exposure or intake for each contaminant for each pathway. Because conservative assumptions were used by EPA in developing RfDs, it is not expected that noncarcinogenic effects will be underestimated in this RRE, and in fact, are likely overestimated.

The extent of chemical and biological interaction of chemicals is another site-specific factor that may introduce uncertainty. The Hazard Index approach used in this RRE to evaluate the potential for adverse noncarcinogenic effects posed by exposure to multiple chemicals adds individual hazard quotients for each chemical together. When the HI exceeds 1.0, there may be concern that adverse health effects could occur from the predicted exposures. It is possible that the HI can exceed 1.0 even if no single chemical exceeds its acceptable level. Therefore, the HI approach assumes that an adverse effect could occur as a result of multiple exposures below threshold levels. In this RRE, the HIs were summed without consideration of specific toxic effects, target organs, and mechanisms of action. Thus, the potential for adverse noncarcinogenic effects is likely overestimated.

Hypothetical cancer risks were calculated by multiplying the chemical-specific route-specific SF by the calculated dose for each exposure pathway. Similar to the HI calculations conducted for noncarcinogens, the predicted health risks were summed across chemicals and pathways, without regard to specific toxic effects, target organs, and mechanisms of action. Thus, the potential for adverse carcinogenic effects is likely overestimated. Overall, there is significant potential for overestimation of potential health risks at Release Block D and a low potential for underestimation of potential health risks.

Table V.1. Characterization of Residual Risks at Release Block D - Construction Worker (Soil Pathways - Incremental)

Constituent	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 4 Shower Inhalation	Pathway 5 Groundwtr. Dermal	Pathway 6 Soil Ingestion	Pathway 7 External Radiation	Pathway 8 Soil Dermal	Construction Worker
Non-carcinogens (HQ)									
Acenaphthene	NA	***	NA	NA	NA	1.8E-07	NA	3.8E-08	
Bismuth	NA	***	NA	NA	NA	***	NA	***	
Carbazole	NA	***	NA	NA	NA	***	NA	***	
Copper	NA	***	NA	NA	NA	***	NA	***	
Dibenzofuran	NA	***	NA	NA	NA	***	NA	***	
Fluorene	NA	***	NA	NA	NA	7.6E-04	NA	1.6E-04	
Naphthalene	NA	***	NA	NA	NA	1.7E-07	NA	3.5E-08	
Phenanthrene	NA	***	NA	NA	NA	***	NA	***	Total Soil HI =
Total:						7.6E-04		1.6E-04	9.2E-04
Carcinogens (Risk)									
Benzo(a)anthracene	NA	***	NA	NA	NA	1.1E-05	NA	2.2E-06	
Benzo(a)pyrene	NA	***	NA	NA	NA	8.6E-05	NA	1.8E-05	
Benzo(b)fluoranthene	NA	***	NA	NA	NA	1.4E-05	NA	3.0E-06	
Benzo(g,h,i)perylene	NA	***	NA	NA	NA	***	NA	***	Total
Dibenz(a,h)anthracene	NA	***	NA	NA	NA	1.3E-05	NA	2.7E-06	Carcinogenic
Indeno(1,2,3-cd)pyrene	NA	***	NA	NA	NA	5.6E-06	NA	1.2E-06	Risks =
Total:						1.3E-04		2.7E-05	1.6E-04
Radionuclides (Risk)									Total Radionuclide
Plutonium-238 (pCi)	NA	4.2E-10	NA	NA	NA	4.8E-07	7.7E-11	NA	Risks =
Total:		4.2E-10				4.8E-07	7.7E-11		4.8E-07

*** - Toxicity values not available.

NA - Not applicable.

Table V.2. Characterization of Residual Risks at Release Block D - Construction Worker (Groundwater - Current - Incremental)

Constituent	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 4 Shower Inhalation	Pathway 5 Groundwtr. Dermal	Pathway 6 Soil Ingestion	Pathway 7 External Radiation	Pathway 8 Soil Dermal	Construction Worker
Non-carcinogens (HQ)									
Cadmium	NA	NA	3.7E-02	NA	1.2E-04	NA	NA	NA	
Copper	NA	NA	***	NA	***	NA	NA	NA	
1,1-Dichloroethene	NA	NA	1.8E-06	NA	3.8E-07	NA	NA	NA	
Lead	NA	NA	***	NA	***	NA	NA	NA	
1,1,1-Trichloroethane	NA	NA	1.3E-07	***	3.7E-08	NA	NA	NA	
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	***	***	***	NA	NA	NA	Total HI =
Total:			3.7E-02		1.2E-04				3.7E-02
Carcinogens (Risk)									Total Carcinogenic
1,1-Dichloroethene	NA	NA	NA	9.9E-08	NA	NA	NA	NA	Risks =
Total:				9.9E-08					9.9E-08
Radionuclides (Risk)									
Actinium-227 (pCi)	NA	NA	2.6E-07	NA	NA	NA	NA	NA	
Bismuth-210 (pCi)	NA	NA	***	NA	NA	NA	NA	NA	
Plutonium-239/240 (pCi)	NA	NA	7.5E-07	NA	NA	NA	NA	NA	
Tritium (pCi)	NA	NA	1.1E-07	1.4E-09	5.2E-10	NA	NA	NA	Total
Uranium-234 (pCi)	NA	NA	4.0E-07	NA	NA	NA	NA	NA	Radionuclide
Uranium-238 (pCi)	NA	NA	5.9E-07	NA	NA	NA	NA	NA	Risks =
Total:			2.1E-06	1.4E-09	5.2E-10				2.1E-06

*** - Toxicity values not available.
NA - Not applicable.

Table V.3. Characterization of Residual Risks at Release Block D
Construction Worker (Groundwater - Future - Incremental)

Constituent	Pathway 3 Groundwtr. Ingestion	Pathway 4 Shower Inhalation	Pathway 5 Groundwtr. Dermal	Construction Worker
Non-carcinogens (HQ)				
Beryllium	2.0E-04	NA	6.3E-07	
Bismuth	***	NA	***	
Cadmium	3.7E-02	NA	1.2E-04	
Chromium	9.6E-01	NA	6.2E-03	
Cobalt	***	NA	***	
Copper	***	NA	***	
1,1-Dichloroethene	1.8E-06	NA	3.8E-07	
Lead	***	NA	***	
Molybdenum	7.8E-03	NA	2.5E-05	
1,1,1-Trichloroethane	5.1E-04	***	1.4E-04	
1,1,2-Trichloro-1,2,2-trifluoroethane	***	***	***	Total HI =
Total:	1.0E+00		6.5E-03	1.0E+00
Carcinogens (Risk)				
Beryllium	3.0E-07	NA	9.7E-10	Total Carcinogenic
1,1-Dichloroethene	NA	9.9E-08	NA	Risks =
Total:	3.0E-07	9.9E-08	9.7E-10	4.0E-07
Radionuclides (Risk)				
Actinium-227 (pCi)	2.6E-07	NA	NA	
Bismuth-210 (pCi)	***	NA	NA	
Plutonium-239/240 (pCi)	7.6E-07	NA	NA	
Tritium (pCi)	4.0E-07	5.0E-09	1.9E-09	Total
Uranium-234 (pCi)	4.0E-07	NA	NA	Radionuclide
Uranium-238 (pCi)	5.9E-07	NA	NA	Risks =
Total:	2.4E-06	5.0E-09	1.9E-09	2.4E-06

*** - Toxicity values not available.
NA - Not applicable.

Table V.4. Characterization of Residual Risks at Release Block D - Site Employee (Soil Pathways - Incremental)

Constituent	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 6 Soil Ingestion	Pathway 7 External Radiation	Site Employee
Non-carcinogens (HQ)						
Acenaphthene	NA	***	NA	1.9E-08	NA	
Bismuth	NA	***	NA	***	NA	
Carbazole	NA	***	NA	***	NA	
Copper	NA	***	NA	***	NA	
Dibenzofuran	NA	***	NA	***	NA	
Fluorene	NA	***	NA	8.0E-05	NA	
Naphthalene	NA	***	NA	1.8E-08	NA	
Phenanthrene	NA	***	NA	***	NA	Total Soil HI =
Total:				8.0E-05		8.0E-05
Carcinogens (Risk)						
Benzo(a)anthracene	NA	***	NA	5.5E-06	NA	
Benzo(a)pyrene	NA	***	NA	4.5E-05	NA	
Benzo(b)fluoranthene	NA	***	NA	7.5E-06	NA	
Benzo(g,h,i)perylene	NA	***	NA	***	NA	Total
Dibenz(a,h)anthracene	NA	***	NA	6.8E-06	NA	Carcinogenic
Indeno(1,2,3-cd)pyrene	NA	***	NA	2.9E-06	NA	Risks =
Total:				6.7E-05		6.7E-05
Radionuclides (Risk)						Total Radionuclide
Plutonium-238 (pCi)	NA	2.1E-09	NA	2.5E-07	8.5E-11	Risks =
Total:		2.1E-09		2.5E-07	8.5E-11	2.5E-07

*** - Toxicity values not available.

NA - Not applicable.

Table V.5. Characterization of Residual Risks at Release Block D - Site Employee (Groundwater - Current - Incremental)

Constituent	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 6 Soil Ingestion	Pathway 7 External Radiation	Site Employee
Non-carcinogens (HQ)						
Cadmium	NA	NA	3.7E-02	NA	NA	
Copper	NA	NA	***	NA	NA	
1,1-Dichloroethene	NA	NA	1.8E-06	NA	NA	
Lead	NA	NA	***	NA	NA	
1,1,1-Trichloroethane	NA	NA	1.3E-07	NA	NA	
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	***	NA	NA	Total HI = 3.7E-02
Total:			3.7E-02			
Carcinogens (Risk)						
1,1-Dichloroethene	NA	NA	NA	NA	NA	Total Carcinogenic Risk = NA
Radionuclides (Risk)						
Actinium-227 (pCi)	NA	NA	1.3E-06	NA	NA	
Bismuth-210 (pCi)	NA	NA	***	NA	NA	
Plutonium-239/240 (pCi)	NA	NA	3.8E-06	NA	NA	
Tritium (pCi)	NA	NA	5.5E-07	NA	NA	Total Radionuclide Risks = 1.1E-05
Uranium-234 (pCi)	NA	NA	2.0E-06	NA	NA	
Uranium-238 (pCi)	NA	NA	2.9E-06	NA	NA	
Total:			1.1E-05			

*** - Toxicity values not available.
NA - Not applicable.

Table V.6. Characterization of Residual Risks at Release Block D Site Employee (Groundwater - Future - Incremental)

Constituent	Pathway 3 Groundwtr. Ingestion	Site Employee
Non-carcinogens (HQ)		
Beryllium	2.0E-04	
Bismuth	***	
Cadmium	3.7E-02	
Chromium	9.6E-01	
Cobalt	***	
Copper	***	
1,1-Dichloroethene	1.8E-06	
Lead	***	
Molybdenum	7.8E-03	
1,1,1-Trichloroethane	5.1E-04	
1,1,2-Trichloro-1,2,2-trifluoroethane	***	Total HI =
Total:	1.0E+00	1.0E+00
Carcinogens (Risk)		Total Carcinogenic
Beryllium	1.5E-06	Risks =
Total:	1.5E-06	1.5E-06
Radionuclides (Risk)		
Actinium-227 (pCi)	1.3E-06	
Bismuth-210 (pCi)	***	
Plutonium-239/240 (pCi)	3.8E-06	
Tritium (pCi)	2.0E-06	Total
Uranium-234 (pCi)	2.0E-06	Radionuclide
Uranium-238 (pCi)	2.9E-06	Risks =
Total:	1.2E-05	1.2E-05

*** - Toxicity values not available.

TABLE V.7. Summary of Current and Future Incremental Risks at Release Block D - Mound Facility

	Construction Worker				
	Soil	Groundwater Current	Groundwater Future	Sum of Soil and Groundwater Current	Sum of Soil and Groundwater Future
Non-carcinogenic Hazard Index for Organics & Inorganics	9.2E-04	3.7E-02	1.0E+00	HI = 3.8E-02	HI = 1.0E+00
Carcinogenic Risks for Organics & Inorganics	1.6E-04	9.9E-08	4.0E-07	Risk = 1.6E-04	Risk = 1.6E-04
Carcinogenic Risks for Radionuclides	4.8E-07	2.1E-06	2.4E-06	Risk = 2.6E-06	Risk = 2.9E-06
		Construction Worker			
			Overall HI =	3.8E-02	1.0E+00
			Overall Risk =	1.6E-04	1.6E-04

	Site Employee				
	Soil	Groundwater Current	Groundwater Future	Sum of Soil and Groundwater Current	Sum of Soil and Groundwater Future
Non-carcinogenic Hazard Index for Organics & Inorganics	8.0E-05	3.7E-02	1.0E+00	HI = 3.7E-02	HI = 1.0E+00
Carcinogenic Risks for Organics & Inorganics	6.7E-05	NA	1.5E-06	Risk = 6.7E-05	Risk = 6.9E-05
Carcinogenic Risks for Radionuclides	2.5E-07	1.1E-05	1.2E-05	Risk = 1.1E-05	Risk = 1.2E-05
		Site Employee			
			Overall HI =	3.7E-02	1.0E+00
			Overall Risk =	7.8E-05	8.1E-05

TABLE V.8. Summary of Current and Future Background Risks at Release Block D - Mound Facility

	Construction Worker				
	Soil	Groundwater Current	Groundwater Future	Sum of Soil and Groundwater Current	Sum of Soil and Groundwater Future
Non-carcinogenic Hazard Index for Organics & Inorganics	0.0E+00	9.3E-05	2.3E-02	HI = 9.3E-05	HI = 2.3E-02
Carcinogenic Risks for Organics & Inorganics	0.0E+00	0.0E+00	0.0E+00	Risk = 0.0E+00	Risk = 0.0E+00
Carcinogenic Risks for Radionuclides	2.3E-08	2.9E-07	2.8E-07	Risk = 3.1E-07	Risk = 3.1E-07
		Construction Worker			
			Overall HI =	9.3E-05	2.3E-02
			Overall Risk =	3.1E-07	3.1E-07

	Site Employee				
	Soil	Groundwater Current	Groundwater Future	Sum of Soil and Groundwater Current	Sum of Soil and Groundwater Future
Non-carcinogenic Hazard Index for Organics & Inorganics	0.0E+00	7.3E-05	2.3E-02	HI = 7.3E-05	HI = 2.3E-02
Carcinogenic Risks for Organics & Inorganics	0.0E+00	NA	0.0E+00	Risk = 0.0E+00	Risk = 0.0E+00
Carcinogenic Risks for Radionuclides	1.2E-08	1.4E-06	1.4E-06	Risk = 1.4E-06	Risk = 1.4E-06
		Site Employee			
			Overall HI =	7.3E-05	2.3E-02
			Overall Risk =	1.4E-06	1.4E-06

TABLE V.9. Summary of Current and Future Total Risks at Release Block D - Mound Facility

	Construction Worker				
	Soil	Groundwater Current	Groundwater Future	Sum of Soil and Groundwater Current	Sum of Soil and Groundwater Future
Non-carcinogenic Hazard Index for Organics & Inorganics	9.2E-04	3.7E-02	1.0E+00	HI = 3.8E-02	HI = 1.0E+00
Carcinogenic Risks for Organics & Inorganics	1.6E-04	9.9E-08	4.0E-07	Risk = 1.6E-04	Risk = 1.6E-04
Carcinogenic Risks for Radionuclides	5.1E-07	2.4E-06	2.7E-06	Risk = 2.9E-06	Risk = 3.2E-06
		Construction Worker			
			Overall HI =	3.8E-02	1.0E+00
			Overall Risk =	1.6E-04	1.6E-04

	Site Employee				
	Soil	Groundwater Current	Groundwater Future	Sum of Soil and Groundwater Current	Sum of Soil and Groundwater Future
Non-carcinogenic Hazard Index for Organics & Inorganics	8.0E-05	3.7E-02	1.0E+00	HI = 3.7E-02	HI = 1.0E+00
Carcinogenic Risks for Organics & Inorganics	6.7E-05	NA	1.5E-06	Risk = 6.7E-05	Risk = 6.9E-05
Carcinogenic Risks for Radionuclides	2.7E-07	1.2E-05	1.3E-05	Risk = 1.2E-05	Risk = 1.4E-05
		Site Employee			
			Overall HI =	3.7E-02	1.0E+00
			Overall Risk =	8.0E-05	8.3E-05

Table V.10. Concentration of Radionuclides in Air in 1994 (EG&G Mound Applied Technologies - Mound Site Environmental Report for Calendar Year 1994, pg. 4-15 to 4-17) MLM-3814

Radionuclide	Maximum Concentration* (μCi/mL)	Risks to** Construction Worker	Risks to** Site Employees
Tritium oxide (H-3)	7.54 ± 4.61E-12	1.8E-8	9.0E-8
Plutonium-238	259.65 ± 289.58E-18	1.75E-7	8.8E-7
Plutonium-239,240	3.50 ± 2.75E-18	2.5E-9	1.2E-8
SUM		2.0E-7	9.8E-7

* - Error limits are estimates of the standard error of the estimated means at the 95% confidence level. Values given are from the location on the site with the highest concentration (based on the average of two or more samples).

** - Calculated risks assumed that the maximum concentration shown here was the C_{air} value needed for Pathway 1 for inhalation of volatiles for construction workers and site employees. Intake equations shown in Appendix D (with appropriate units conversions).

6.0 REFERENCES

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APPENDIX A

MONITORING DATA PLOTS FOR PLUTONIUM-238 AND THORIUM-232

105
100
SOIL SCREENING DATA FOR BLOCK D
Plutonium-238
1996 Date sample collected
(n=1) n = number of samples at location
2.5 Concentration value below 25 pCi/g
(n=1) n = number of samples at location
35 Concentration value above 25 pCi/g
Data dated 1995 from OU-5 Non AOC Phase 1 report.
Data dated 1996 from Soil Gas Confirmation sampling.
0 50 100 150 200
Scale in Feet
N
BASE D3.DWG

DIAGRAM A

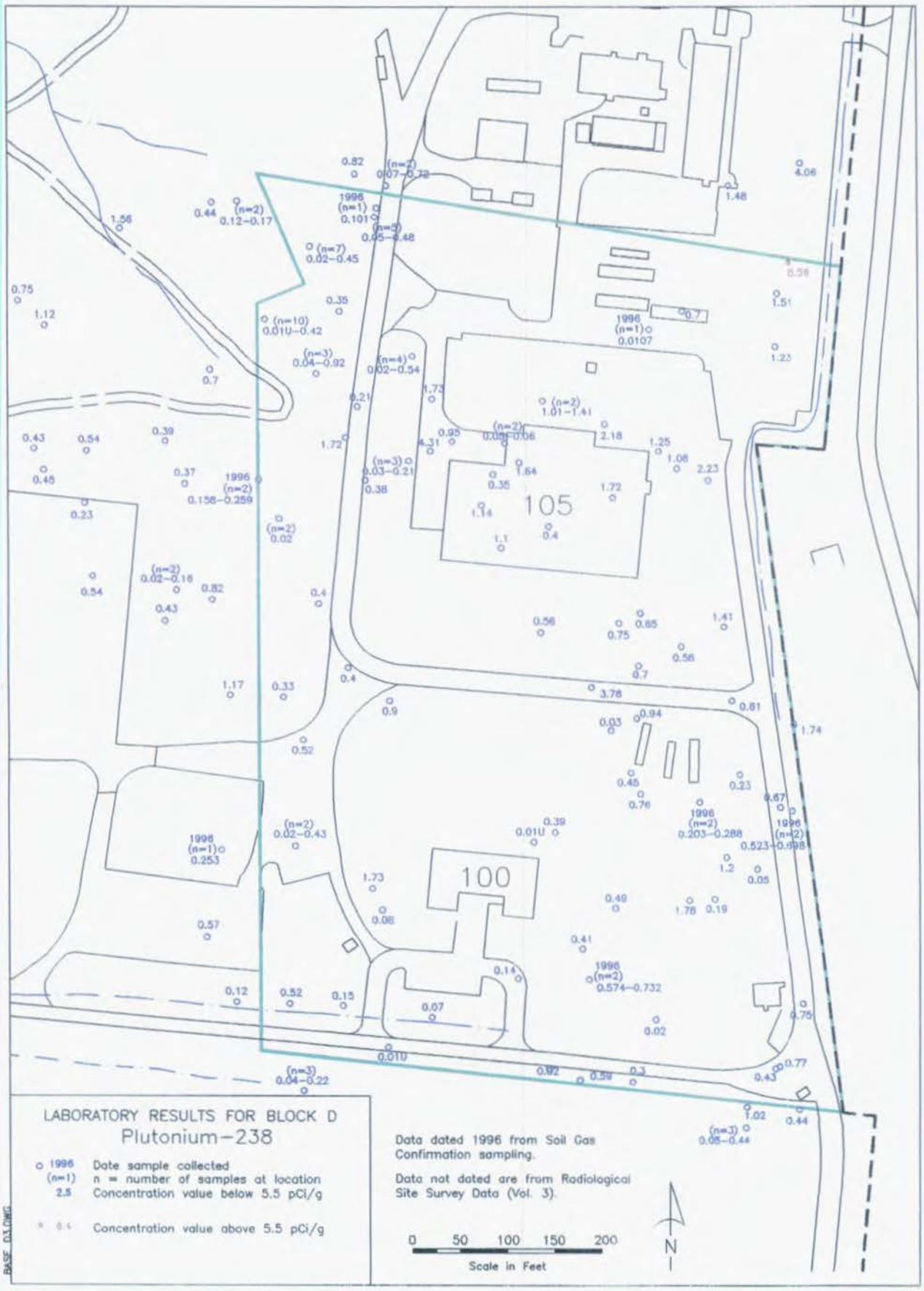
LABORATORY RESULTS FOR BLOCK D
Plutonium-238
1996 Date sample collected
(n=1) n = number of samples at location
2.5 Concentration value below 5.5 pCi/g
Concentration value above 5.5 pCi/g
Data dated 1996 from Soil Gas Confirmation sampling.
Data not dated are from Radiological Site Survey Data (Vol. 3).
0 50 100 150 200
Scale in Feet
N
105
100

DIAGRAM B

105
100
SOIL SCREENING DATA FOR BLOCK D
Thorium-232
1996 Date sample collected
(n=1) n = number of samples at location
0 Concentration value below 2 pCi/g
(n=1) n = number of samples at location
3.0 Concentration value above 2 pCi/g
Data dated 1995 from OU-5 Non AOC Phase 1 report.
Data dated 1996 from Soil Gas Confirmation sampling.
Data not dated are from Radiological Site Survey Data (Vol. 3).
0 50 100 150 200
Scale in Feet
N
BASE_D3.DWG

DIAGRAM C

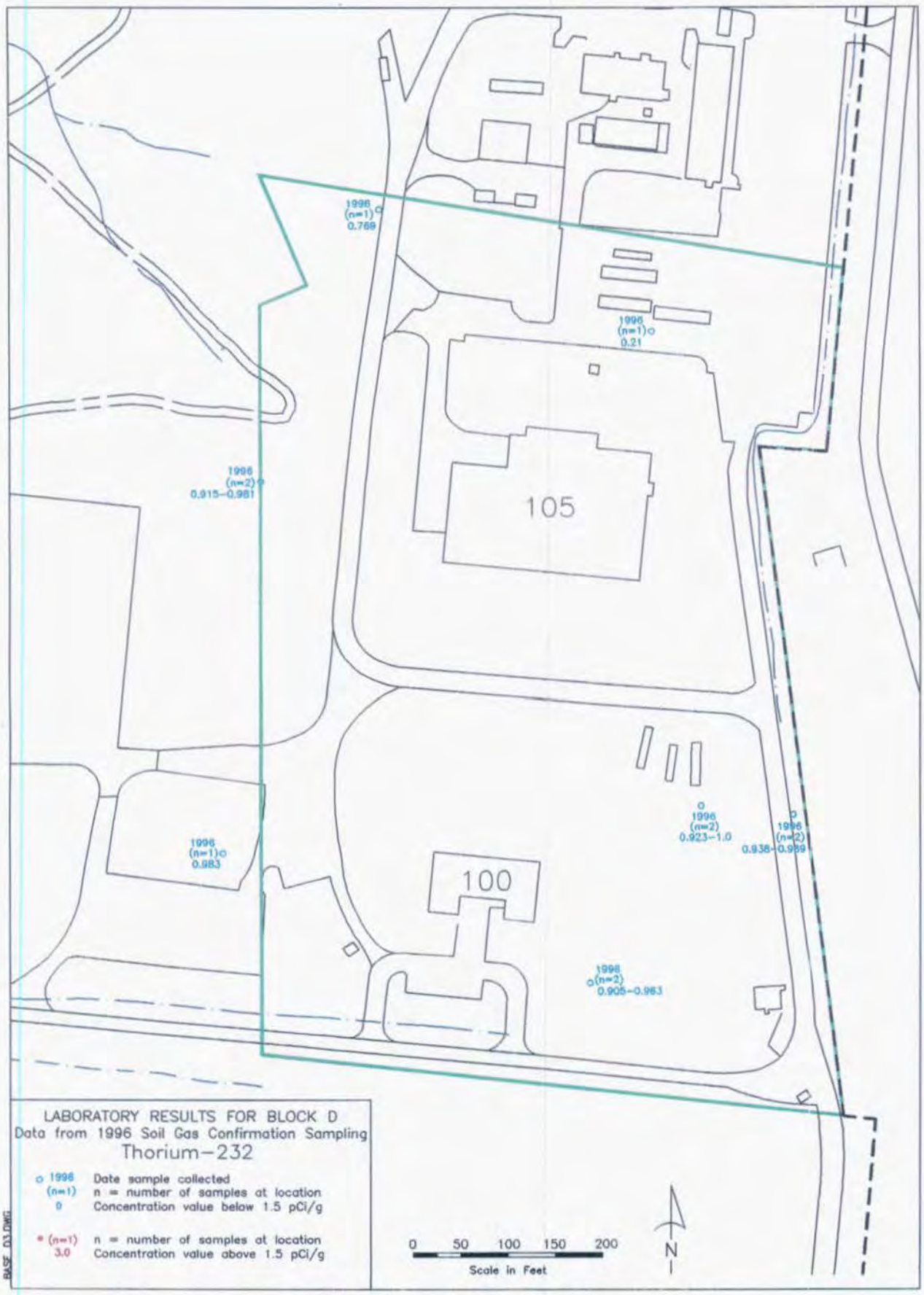
1996
(n=1)
0.769
1996
(n=1)
0.21
1996
(n=2)
0.915–0.981
105
1996
(n=2)
0.923–1.0
1996
(n=2)
0.938–0.959
1996
(n=1)
0.983
100
1996
(n=2)
0.905–0.963
LABORATORY RESULTS FOR BLOCK D
Data from 1996 Soil Gas Confirmation Sampling
Thorium–232
1996 Date sample collected
(n=1) n = number of samples at location
0 Concentration value below 1.5 pCi/g
(n=1) n = number of samples at location
3.0 Concentration value above 1.5 pCi/g
0 50 100 150 200
Scale in Feet
N
BASE D3.DWG

DIAGRAM D

APPENDIX B

ANALYTICAL DATA FORM MOUND PRODUCTION WELLS 0271 AND 0076

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	06-May-91	1,1,1,2-Tetrachloroethane	0.3	0.3	UG/L	U	UJ
0271	05-Aug-91	1,1,1,2-Tetrachloroethane	0.3	0.3	UG/L	U	UJ
0271	06-May-91	1,1,1,2-Tetrachloroethane	0.3	0.3	UG/L	U	UJ
0076	31-Jul-90	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0271	27-Feb-90	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0271	24-Jan-90	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0271	31-Jul-90	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0271	27-Feb-90	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0076	22-Jun-92	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	R
0271	11-Oct-93	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	UJ
0076	16-Dec-91	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	UJ
0271	23-Mar-90	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0271	27-Feb-90	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0076	23-Mar-92	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0271	15-Jun-90	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0076	16-Sep-92	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0076	11-Oct-93	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	UJ
0076	27-Feb-90	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0271	16-Dec-91	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	UJ
0076	07-Apr-94	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0271	01-Feb-91	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0076	15-Jun-90	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0076	24-Jan-90	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0271	06-Nov-90	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	UJ
0271	16-Sep-92	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0076	06-Nov-90	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	UJ
0076	23-Mar-90	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0271	22-Jun-92	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	R
0076	16-Jun-93	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0076	01-Feb-91	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0271	07-Apr-94	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0271	07-Apr-94	1,1,1,2-Tetrachloroethane	1	1	UG/L	U	U
0076	16-Jun-93	1,1,1-Trichloroethane	0.3	0.3	UG/L	U	U
0076	06-Nov-90	1,1,1-Trichloroethane	0.3	0.3	UG/L		UJ
0271	23-Mar-90	1,1,1-Trichloroethane	0.3	0.3	UG/L	U	U
0271	27-Feb-90	1,1,1-Trichloroethane	0.3	0.3	UG/L		
0076	23-Mar-92	1,1,1-Trichloroethane	0.3	0.3	UG/L	U	U
0271	05-Aug-91	1,1,1-Trichloroethane	0.3	0.3	UG/L	U	UJ
0271	15-Jun-90	1,1,1-Trichloroethane	0.3	0.3	UG/L	U	U
0271	24-Jan-90	1,1,1-Trichloroethane	0.3	0.3	UG/L	U	U
0271	16-Sep-92	1,1,1-Trichloroethane	0.3	0.3	UG/L	U	U
0076	22-Jun-92	1,1,1-Trichloroethane	0.3	0.3	UG/L	U	U
0076	06-May-91	1,1,1-Trichloroethane	0.3	0.3	UG/L	U	UJ
0271	01-Feb-91	1,1,1-Trichloroethane	0.3	0.3	UG/L	U	UJ
0076	16-Sep-92	1,1,1-Trichloroethane	0.3	0.3	UG/L	U	U
0271	06-Nov-90	1,1,1-Trichloroethane	0.3	0.3	UG/L	U	U
0076	01-Feb-91	1,1,1-Trichloroethane	0.3	0.3	UG/L	U	U
0271	27-Feb-90	1,1,1-Trichloroethane	0.3	0.3	UG/L		
0076	11-Oct-93	1,1,1-Trichloroethane	0.36	0.3	UG/L		J
0076	27-Feb-90	1,1,1-Trichloroethane	0.4	0.3	UG/L		
0271	27-Feb-90	1,1,1-Trichloroethane	0.4	0.3	UG/L		
0076	24-Jan-90	1,1,1-Trichloroethane	0.4	0.3	UG/L		
0076	15-Jun-90	1,1,1-Trichloroethane	0.4	0.3	UG/L		
0076	23-Mar-90	1,1,1-Trichloroethane	0.6	0.3	UG/L		
0271	31-Jul-90	1,1,1-Trichloroethane	0.7	0.3	UG/L		
0076	07-Apr-94	1,1,1-Trichloroethane	0.71	0.3	UG/L		
0271	06-May-91	1,1,1-Trichloroethane	0.9	0.3	UG/L		J
0076	16-Dec-91	1,1,1-Trichloroethane	1	1	UG/L	U	UJ
0271	16-Dec-91	1,1,1-Trichloroethane	1	1	UG/L	U	U
0076	13-Sep-88	1,1,1-Trichloroethane	1	1	UG/L	U	U
0271	13-Sep-88	1,1,1-Trichloroethane	1	1	UG/L	U	U
0271	07-Apr-94	1,1,1-Trichloroethane	1.4	0.3	UG/L		
0076	31-Jul-90	1,1,1-Trichloroethane	1.4	0.3	UG/L		
0271	07-Apr-94	1,1,1-Trichloroethane	1.7	0.3	UG/L		
0271	22-Jun-92	1,1,1-Trichloroethane	1.8	0.3	UG/L		
0271	11-Oct-93	1,1,1-Trichloroethane	1.8	0.3	UG/L		J
0271	08-Mar-88	1,1,1-Trichloroethane	5	5	UG/L	U	U
0076	13-Sep-88	1,1,1-Trichloroethane	5	5	UG/L	U	U
0271	13-Sep-88	1,1,1-Trichloroethane	5	5	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	25-Apr-90	1,1,1-Trichloroethane	5	5	UG/L	U	U
0271	24-Jun-88	1,1,1-Trichloroethane	5	5	UG/L	U	U
0076	25-Apr-90	1,1,1-Trichloroethane	5	5	UG/L	U	U
0076	24-Jun-88	1,1,1-Trichloroethane	5	5	UG/L	U	U
0076	22-Jun-92	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	R
0076	16-Sep-92	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0271	24-Jan-90	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0076	16-Jun-93	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	UJ
0076	01-Feb-91	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	UJ
0271	16-Sep-92	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0271	07-Apr-94	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	UJ
0076	06-Nov-90	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0271	22-Jun-92	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	R
0271	31-Jul-90	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0271	06-May-91	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0271	07-Apr-94	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0076	27-Feb-90	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0271	27-Feb-90	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0076	07-Apr-94	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0271	23-Mar-90	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0076	06-May-91	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0271	01-Feb-91	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	UJ
0076	11-Oct-93	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0271	11-Oct-93	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	UJ
0076	31-Jul-90	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0271	27-Feb-90	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0076	23-Mar-90	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0271	15-Jun-90	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0076	15-Jun-90	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0271	27-Feb-90	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0076	23-Mar-92	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0076	24-Jan-90	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0271	05-Aug-91	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0271	06-Nov-90	1,1,2,2-Tetrachloroethane	0.3	0.3	UG/L	U	U
0271	16-Dec-91	1,1,2,2-Tetrachloroethane	1	1	UG/L	U	UJ
0076	13-Sep-88	1,1,2,2-Tetrachloroethane	1	1	UG/L	U	U
0271	13-Sep-88	1,1,2,2-Tetrachloroethane	1	1	UG/L	U	U
0076	16-Dec-91	1,1,2,2-Tetrachloroethane	1	1	UG/L	U	UJ
0076	13-Sep-88	1,1,2,2-Tetrachloroethane	5	5	UG/L	U	U
0271	08-Mar-88	1,1,2,2-Tetrachloroethane	5	5	UG/L	U	U
0076	25-Apr-90	1,1,2,2-Tetrachloroethane	5	5	UG/L	U	U
0271	13-Sep-88	1,1,2,2-Tetrachloroethane	5	5	UG/L	U	U
0271	25-Apr-90	1,1,2,2-Tetrachloroethane	5	5	UG/L	U	U
0271	24-Jun-88	1,1,2,2-Tetrachloroethane	5	5	UG/L	U	U
0076	24-Jun-88	1,1,2,2-Tetrachloroethane	5	5	UG/L	U	U
0271	11-Oct-93	1,1,2-Trichloro-1,2,2-trifluoroethane	2	2	UG/L	U	UJ
0076	11-Oct-93	1,1,2-Trichloro-1,2,2-trifluoroethane	2	2	UG/L	U	UJ
0076	07-Apr-94	1,1,2-Trichloro-1,2,2-trifluoroethane	2	2	UG/L	U	U
0271	07-Apr-94	1,1,2-Trichloro-1,2,2-trifluoroethane	2.3	2	UG/L		J
0271	07-Apr-94	1,1,2-Trichloro-1,2,2-trifluoroethane	2.6	2	UG/L		J
0076	16-Jun-93	1,1,2-Trichloro-1,2,2-trifluoroethane	8.7	1	UG/L		J
0076	23-Mar-90	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0271	27-Feb-90	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0271	15-Jun-90	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0271	06-Nov-90	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0076	15-Jun-90	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0271	01-Feb-91	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0271	27-Feb-90	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0076	06-May-91	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0271	07-Apr-94	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	UJ
0076	22-Jun-92	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	R
0271	23-Mar-90	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0076	07-Apr-94	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0076	27-Feb-90	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0271	06-May-91	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0271	07-Apr-94	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0076	31-Jul-90	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0271	11-Oct-93	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0076	23-Mar-92	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	UJ

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	24-Jan-90	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0271	05-Aug-91	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0076	11-Oct-93	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	UJ
0271	27-Feb-90	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0076	06-Nov-90	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0076	16-Jun-93	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0271	16-Sep-92	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0271	22-Jun-92	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	R
0271	24-Jan-90	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0076	01-Feb-91	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0271	31-Jul-90	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0076	16-Sep-92	1,1,2-Trichloroethane	0.2	0.2	UG/L	U	U
0271	13-Sep-88	1,1,2-Trichloroethane	1	1	UG/L	U	U
0076	13-Sep-88	1,1,2-Trichloroethane	1	1	UG/L	U	U
0076	16-Dec-91	1,1,2-Trichloroethane	1	1	UG/L	U	U
0271	16-Dec-91	1,1,2-Trichloroethane	1	1	UG/L	U	U
0076	25-Apr-90	1,1,2-Trichloroethane	5	5	UG/L	U	U
0271	24-Jun-88	1,1,2-Trichloroethane	5	5	UG/L	U	U
0076	13-Sep-88	1,1,2-Trichloroethane	5	5	UG/L	U	U
0271	13-Dec-85	1,1,2-Trichloroethane	5	5	UG/L	U	U
0271	08-Mar-88	1,1,2-Trichloroethane	5	5	UG/L	U	U
0076	12-Dec-85	1,1,2-Trichloroethane	5	5	UG/L	U	U
0271	13-Sep-88	1,1,2-Trichloroethane	5	5	UG/L	U	U
0271	13-Mar-86	1,1,2-Trichloroethane	5	5	UG/L	U	U
0271	25-Apr-90	1,1,2-Trichloroethane	5	5	UG/L	U	U
0076	24-Jun-88	1,1,2-Trichloroethane	5	5	UG/L	U	U
0076	01-Feb-84	1,1,2-Trichloroethane	10	10	UG/L	U	U
0271	07-Apr-94	1,1-Dichloroethane	0.7	0.7	UG/L	U	UJ
0076	06-May-91	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0271	24-Jan-90	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0076	31-Jul-90	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0076	16-Sep-92	1,1-Dichloroethane	0.7	0.7	UG/L	U	UJ
0076	07-Apr-94	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0271	06-May-91	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0271	01-Feb-91	1,1-Dichloroethane	0.7	0.7	UG/L	U	UJ
0271	11-Oct-93	1,1-Dichloroethane	0.7	0.7	UG/L	U	UJ
0076	06-Nov-90	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0076	11-Oct-93	1,1-Dichloroethane	0.7	0.7	UG/L	U	UJ
0271	16-Sep-92	1,1-Dichloroethane	0.7	0.7	UG/L	U	UJ
0076	24-Jan-90	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0271	07-Apr-94	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0076	16-Jun-93	1,1-Dichloroethane	0.7	0.7	UG/L	U	UJ
0076	15-Jun-90	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0271	27-Feb-90	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0271	27-Feb-90	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0076	22-Jun-92	1,1-Dichloroethane	0.7	0.7	UG/L	U	R
0271	06-Nov-90	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0076	23-Mar-90	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0271	15-Jun-90	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0271	31-Jul-90	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0271	05-Aug-91	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0076	27-Feb-90	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0076	01-Feb-91	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0271	27-Feb-90	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0076	23-Mar-92	1,1-Dichloroethane	0.7	0.7	UG/L	U	UJ
0271	22-Jun-92	1,1-Dichloroethane	0.7	0.7	UG/L	U	R
0271	23-Mar-90	1,1-Dichloroethane	0.7	0.7	UG/L	U	U
0271	16-Dec-91	1,1-Dichloroethane	1	1	UG/L	U	U
0076	16-Dec-91	1,1-Dichloroethane	1	1	UG/L	U	U
0076	13-Sep-88	1,1-Dichloroethane	2.5	1	UG/L		
0271	13-Sep-88	1,1-Dichloroethane	3.5	1	UG/L		
0271	24-Jun-88	1,1-Dichloroethane	5	5	UG/L	U	U
0076	24-Jun-88	1,1-Dichloroethane	5	5	UG/L	U	U
0076	25-Apr-90	1,1-Dichloroethane	5	5	UG/L	U	U
0271	13-Sep-88	1,1-Dichloroethane	5	5	UG/L	U	U
0271	08-Mar-88	1,1-Dichloroethane	5	5	UG/L	U	U
0271	25-Apr-90	1,1-Dichloroethane	5	5	UG/L	U	U
0076	13-Sep-88	1,1-Dichloroethane	5	5	UG/L	U	U
0271	16-Sep-92	1,1-Dichloroethene	1	1	UG/L	U	UJ

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect Limit	Units	Lab Qual	Data Qual
0076	22-Jun-92	1,1-Dichloroethene	1	1	UG/L	U	UJ
0076	16-Dec-91	1,1-Dichloroethene	1	1	UG/L	U	UJ
0271	22-Jun-92	1,1-Dichloroethene	1	1	UG/L	U	UJ
0076	16-Jun-93	1,1-Dichloroethene	1	1	UG/L	U	UJ
0076	16-Sep-92	1,1-Dichloroethene	1	1	UG/L	U	UJ
0076	13-Sep-88	1,1-Dichloroethene	1	1	UG/L	U	U
0271	16-Dec-91	1,1-Dichloroethene	1	1	UG/L	U	UJ
0271	13-Sep-88	1,1-Dichloroethene	1	1	UG/L	U	U
0076	23-Mar-92	1,1-Dichloroethene	1	1	UG/L	U	UJ
0076	31-Jul-90	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0271	06-Nov-90	1,1-Dichloroethene	1.3	1.3	UG/L	U	UJ
0076	06-Nov-90	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0271	31-Jul-90	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0271	24-Jan-90	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0271	27-Feb-90	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0271	15-Jun-90	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0271	27-Feb-90	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0271	27-Feb-90	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0271	06-May-91	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0076	11-Oct-93	1,1-Dichloroethene	1.3	1.3	UG/L	U	UJ
0271	07-Apr-94	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0271	07-Apr-94	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0271	23-Mar-90	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0076	07-Apr-94	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0271	01-Feb-91	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0076	06-May-91	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0271	05-Aug-91	1,1-Dichloroethene	1.3	1.3	UG/L	U	UJ
0076	15-Jun-90	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0076	24-Jan-90	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0076	27-Feb-90	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0076	23-Mar-90	1,1-Dichloroethene	1.3	1.3	UG/L	U	U
0271	11-Oct-93	1,1-Dichloroethene	1.3	1.3	UG/L	U	UJ
0076	01-Feb-91	1,1-Dichloroethene	1.7	1.3	UG/L		J
0271	25-Apr-90	1,1-Dichloroethene	5	5	UG/L	U	U
0076	24-Jun-88	1,1-Dichloroethene	5	5	UG/L	U	U
0271	13-Sep-88	1,1-Dichloroethene	5	5	UG/L	U	U
0076	13-Sep-88	1,1-Dichloroethene	5	5	UG/L	U	U
0271	08-Mar-88	1,1-Dichloroethene	5	5	UG/L	U	U
0076	25-Apr-90	1,1-Dichloroethene	5	5	UG/L	U	U
0271	24-Jun-88	1,1-Dichloroethene	5	5	UG/L	U	U
0271	11-Oct-93	1,2,3-Trichloropropane	1	1	UG/L	U	U
0076	06-May-91	1,2,3-Trichloropropane	1	1	UG/L	U	UJ
0271	05-Aug-91	1,2,3-Trichloropropane	1	1	UG/L	U	UJ
0271	06-Nov-90	1,2,3-Trichloropropane	1	1	UG/L	U	UJ
0076	07-Apr-94	1,2,3-Trichloropropane	1	1	UG/L	U	U
0271	06-May-91	1,2,3-Trichloropropane	1	1	UG/L	U	UJ
0076	01-Feb-91	1,2,3-Trichloropropane	1	1	UG/L		UJ
0076	11-Oct-93	1,2,3-Trichloropropane	1	1	UG/L	U	U
0271	01-Feb-91	1,2,3-Trichloropropane	1	1	UG/L	U	UJ
0271	07-Apr-94	1,2,3-Trichloropropane	1	1	UG/L	U	U
0271	07-Apr-94	1,2,3-Trichloropropane	1	1	UG/L	U	U
0076	23-Mar-92	1,2,3-Trichloropropane	1	1	UG/L	U	UJ
0076	16-Sep-92	1,2,3-Trichloropropane	1	1	UG/L	U	UJ
0271	16-Sep-92	1,2,3-Trichloropropane	1	1	UG/L	U	UJ
0076	22-Jun-92	1,2,3-Trichloropropane	1	1	UG/L	U	U
0076	06-Nov-90	1,2,3-Trichloropropane	1	1	UG/L	U	UJ
0271	22-Jun-92	1,2,3-Trichloropropane	1	1	UG/L	U	U
0076	16-Jun-93	1,2,3-Trichloropropane	1	1	UG/L	U	U
0076	16-Dec-91	1,2,3-Trichloropropane	1	1	UG/L	U	UJ
0271	16-Dec-91	1,2,3-Trichloropropane	1	1	UG/L	U	UJ
0076	06-Nov-90	1,2,4-Trichlorobenzene	10	10	UG/L	U	U
0076	01-Feb-91	1,2,4-Trichlorobenzene	10	10	UG/L	U	U
0076	16-Sep-92	1,2,4-Trichlorobenzene	10	10	UG/L	U	U
0076	16-Dec-91	1,2,4-Trichlorobenzene	10	10	UG/L	U	U
0076	11-Oct-93	1,2,4-Trichlorobenzene	10	10	UG/L	U	U
0076	06-May-91	1,2,4-Trichlorobenzene	10	10	UG/L	U	U
0076	23-Mar-92	1,2,4-Trichlorobenzene	10	10	UG/L	U	U
0076	22-Jun-92	1,2,4-Trichlorobenzene	10	10	UG/L	U	U
0271	06-May-91	1,2,4-Trichlorobenzene	10	10	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	05-Aug-91	1,2,4-Trichlorobenzene	10	10	UG/L	U	UJ
0271	06-Nov-90	1,2,4-Trichlorobenzene	10	10	UG/L	U	U
0271	01-Feb-91	1,2,4-Trichlorobenzene	10	10	UG/L	U	U
0271	16-Sep-92	1,2,4-Trichlorobenzene	10	10	UG/L	U	U
0271	11-Oct-93	1,2,4-Trichlorobenzene	10	10	UG/L	U	U
0271	16-Dec-91	1,2,4-Trichlorobenzene	10	10	UG/L	U	U
0271	22-Jun-92	1,2,4-Trichlorobenzene	10	10	UG/L	U	U
0271	07-Apr-94	1,2,4-Trichlorobenzene	11	11	UG/L	U	U
0271	07-Apr-94	1,2,4-Trichlorobenzene	11	11	UG/L	U	U
0076	07-Apr-94	1,2,4-Trichlorobenzene	11	11	UG/L	U	U
0076	13-Sep-88	1,2-Dichlorobenzene	1	1	UG/L	U	U
0076	16-Dec-91	1,2-Dichlorobenzene	1	1	UG/L	U	U
0271	13-Sep-88	1,2-Dichlorobenzene	1	1	UG/L	U	U
0271	16-Dec-91	1,2-Dichlorobenzene	1	1	UG/L	U	U
0271	01-Feb-91	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0076	07-Apr-94	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0271	24-Jan-90	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0271	27-Feb-90	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0271	27-Feb-90	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0076	27-Feb-90	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0076	16-Sep-92	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0076	06-Nov-90	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0271	06-May-91	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0076	24-Jan-90	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0271	22-Jun-92	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	UJ
0076	23-Mar-90	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0076	16-Jun-93	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0271	16-Sep-92	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0076	11-Oct-93	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	UJ
0271	05-Aug-91	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0271	07-Apr-94	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	UJ
0271	23-Mar-90	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0271	11-Oct-93	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0271	31-Jul-90	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0076	01-Feb-91	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0271	07-Apr-94	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0271	15-Jun-90	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0076	06-May-91	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0076	22-Jun-92	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	UJ
0076	31-Jul-90	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0271	27-Feb-90	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0076	15-Jun-90	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0271	06-Nov-90	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	U
0076	23-Mar-92	1,2-Dichlorobenzene	1.5	1.5	UG/L	U	UJ
0076	06-Nov-90	1,2-Dichlorobenzene	10	10	UG/L	U	U
0076	11-Oct-93	1,2-Dichlorobenzene	10	10	UG/L	U	U
0271	05-Aug-91	1,2-Dichlorobenzene	10	10	UG/L	U	UJ
0076	01-Feb-91	1,2-Dichlorobenzene	10	10	UG/L	U	U
0076	23-Mar-92	1,2-Dichlorobenzene	10	10	UG/L	U	U
0271	01-Feb-91	1,2-Dichlorobenzene	10	10	UG/L	U	U
0271	11-Oct-93	1,2-Dichlorobenzene	10	10	UG/L	U	U
0076	06-May-91	1,2-Dichlorobenzene	10	10	UG/L	U	U
0076	16-Dec-91	1,2-Dichlorobenzene	10	10	UG/L	U	U
0271	06-Nov-90	1,2-Dichlorobenzene	10	10	UG/L	U	U
0271	22-Jun-92	1,2-Dichlorobenzene	10	10	UG/L	U	U
0271	16-Dec-91	1,2-Dichlorobenzene	10	10	UG/L	U	U
0271	16-Sep-92	1,2-Dichlorobenzene	10	10	UG/L	U	U
0076	22-Jun-92	1,2-Dichlorobenzene	10	10	UG/L	U	U
0076	16-Sep-92	1,2-Dichlorobenzene	10	10	UG/L	U	U
0271	06-May-91	1,2-Dichlorobenzene	10	10	UG/L	U	U
0271	07-Apr-94	1,2-Dichlorobenzene	11	11	UG/L	U	U
0076	07-Apr-94	1,2-Dichlorobenzene	11	11	UG/L	U	U
0271	07-Apr-94	1,2-Dichlorobenzene	11	11	UG/L	U	U
0076	22-Jun-92	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0076	23-Mar-90	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0076	07-Apr-94	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0076	24-Jan-90	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0271	06-Nov-90	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0076	01-Feb-91	1,2-Dichloroethane	0.3	0.3	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	27-Feb-90	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0076	16-Jun-93	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0076	16-Sep-92	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0271	23-Mar-90	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0271	01-Feb-91	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0271	15-Jun-90	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0271	27-Feb-90	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0271	27-Feb-90	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0271	24-Jan-90	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0271	22-Jun-92	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0271	16-Sep-92	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0271	05-Aug-91	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0271	31-Jul-90	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0271	07-Apr-94	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0076	11-Oct-93	1,2-Dichloroethane	0.3	0.3	UG/L	U	UJ
0076	06-May-91	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0271	07-Apr-94	1,2-Dichloroethane	0.3	0.3	UG/L	U	UJ
0271	11-Oct-93	1,2-Dichloroethane	0.3	0.3	UG/L	U	UJ
0076	23-Mar-92	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0076	31-Jul-90	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0076	27-Feb-90	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0076	15-Jun-90	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0271	06-May-91	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0076	06-Nov-90	1,2-Dichloroethane	0.3	0.3	UG/L	U	U
0271	16-Dec-91	1,2-Dichloroethane	1	1	UG/L	U	UJ
0076	16-Dec-91	1,2-Dichloroethane	1	1	UG/L	U	UJ
0271	13-Sep-88	1,2-Dichloroethane	1	1	UG/L	U	U
0076	13-Sep-88	1,2-Dichloroethane	1	1	UG/L	U	U
0076	12-Dec-85	1,2-Dichloroethane	2.8	2.8	UG/L	U	U
0271	13-Dec-85	1,2-Dichloroethane	2.8	2.8	UG/L	U	U
0271	13-Mar-86	1,2-Dichloroethane	2.8	2.8	UG/L	U	U
0271	24-Jun-88	1,2-Dichloroethane	5	5	UG/L	U	U
0271	13-Sep-88	1,2-Dichloroethane	5	5	UG/L	U	U
0076	24-Jun-88	1,2-Dichloroethane	5	5	UG/L	U	U
0076	13-Sep-88	1,2-Dichloroethane	5	5	UG/L	U	U
0271	08-Mar-88	1,2-Dichloroethane	5	5	UG/L	U	U
0271	25-Apr-90	1,2-Dichloroethane	5	5	UG/L	U	U
0076	25-Apr-90	1,2-Dichloroethane	5	5	UG/L	U	U
0076	01-Feb-84	1,2-Dichloroethane	10	10	UG/L	U	U
0076	06-May-91	1,2-Dichloroethene	1.3	1	UG/L		
0076	13-Sep-88	1,2-Dichloroethene	1.5	5	UG/L	J	J
0076	01-Feb-91	1,2-Dichloroethene	1.6	1	UG/L		
0076	25-Apr-90	1,2-Dichloroethene	2	5	UG/L	J	J
0271	25-Apr-90	1,2-Dichloroethene	3	5	UG/L	J	J
0271	05-Aug-91	1,2-Dichloroethene	3.2	1	UG/L		J
0271	01-Feb-91	1,2-Dichloroethene	3.7	1	UG/L		
0271	06-May-91	1,2-Dichloroethene	4.7	1	UG/L		J
0271	13-Sep-88	1,2-Dichloroethene	5	5	UG/L	U	U
0076	24-Jan-90	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0271	23-Mar-90	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0271	05-Aug-91	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0271	06-Nov-90	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0271	27-Feb-90	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0076	15-Jun-90	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0076	23-Mar-92	1,2-Dichloropropane	0.4	0.4	UG/L	U	UJ
0271	27-Feb-90	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0076	23-Mar-90	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0271	06-May-91	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0271	07-Apr-94	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0271	15-Jun-90	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0076	01-Feb-91	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0076	31-Jul-90	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0271	07-Apr-94	1,2-Dichloropropane	0.4	0.4	UG/L	U	UJ
0271	11-Oct-93	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0271	31-Jul-90	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0076	27-Feb-90	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0076	06-May-91	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0076	11-Oct-93	1,2-Dichloropropane	0.4	0.4	UG/L	U	UJ
0271	01-Feb-91	1,2-Dichloropropane	0.4	0.4	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	16-Jun-93	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0271	16-Sep-92	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0271	24-Jan-90	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0271	22-Jun-92	1,2-Dichloropropane	0.4	0.4	UG/L	U	R
0076	06-Nov-90	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0076	16-Sep-92	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0076	07-Apr-94	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0271	27-Feb-90	1,2-Dichloropropane	0.4	0.4	UG/L	U	U
0076	22-Jun-92	1,2-Dichloropropane	0.4	0.4	UG/L	U	R
0076	16-Dec-91	1,2-Dichloropropane	1	1	UG/L	U	U
0076	13-Sep-88	1,2-Dichloropropane	1	1	UG/L	U	U
0271	16-Dec-91	1,2-Dichloropropane	1	1	UG/L	U	UJ
0271	13-Sep-88	1,2-Dichloropropane	1	1	UG/L	U	U
0076	13-Sep-88	1,2-Dichloropropane	5	5	UG/L	U	U
0271	25-Apr-90	1,2-Dichloropropane	5	5	UG/L	U	U
0271	13-Sep-88	1,2-Dichloropropane	5	5	UG/L	U	U
0271	24-Jun-88	1,2-Dichloropropane	5	5	UG/L	U	U
0076	25-Apr-90	1,2-Dichloropropane	5	5	UG/L	U	U
0271	08-Mar-88	1,2-Dichloropropane	5	5	UG/L	U	U
0076	24-Jun-88	1,2-Dichloropropane	5	5	UG/L	U	U
0271	11-Oct-93	1,2-Diethylbenzene	1	1	UG/L	U	UJ
0271	07-Apr-94	1,2-Diethylbenzene	1	1	UG/L	U	U
0076	07-Apr-94	1,2-Diethylbenzene	1	1	UG/L	U	U
0076	11-Oct-93	1,2-Diethylbenzene	1	1	UG/L	U	U
0271	07-Apr-94	1,2-Diethylbenzene	1	1	UG/L	U	U
0076	23-Mar-92	1,2-cis-Dichloroethene	0.93	1	UG/L	J	J
0076	07-Apr-94	1,2-cis-Dichloroethene	1	1	UG/L	U	U
0076	16-Sep-92	1,2-cis-Dichloroethene	1	1	UG/L	U	U
0076	22-Jun-92	1,2-cis-Dichloroethene	1	1	UG/L	U	UJ
0076	11-Oct-93	1,2-cis-Dichloroethene	1.1	1	UG/L		J
0271	07-Apr-94	1,2-cis-Dichloroethene	1.2	1	UG/L		
0271	07-Apr-94	1,2-cis-Dichloroethene	1.3	1	UG/L		J
0076	16-Jun-93	1,2-cis-Dichloroethene	1.4	1	UG/L		J
0271	11-Oct-93	1,2-cis-Dichloroethene	1.5	1	UG/L		J
0271	16-Sep-92	1,2-cis-Dichloroethene	1.8	1	UG/L		UJ
0271	22-Jun-92	1,2-cis-Dichloroethene	2.1	1	UG/L		J
0076	07-Apr-94	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0271	23-Mar-90	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0076	22-Jun-92	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0271	22-Jun-92	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0271	27-Feb-90	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0076	11-Oct-93	1,2-trans-Dichloroethene	1	1	UG/L	U	UJ
0271	15-Jun-90	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0076	27-Feb-90	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0076	01-Feb-91	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0076	23-Mar-92	1,2-trans-Dichloroethene	1	1	UG/L	U	UJ
0271	07-Apr-94	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0076	16-Jun-93	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0076	16-Sep-92	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0271	11-Oct-93	1,2-trans-Dichloroethene	1	1	UG/L	U	UJ
0271	06-Nov-90	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0271	27-Feb-90	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0271	31-Jul-90	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0271	05-Aug-91	1,2-trans-Dichloroethene	1	1	UG/L	U	UJ
0271	06-May-91	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0076	24-Jan-90	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0076	06-May-91	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0271	16-Sep-92	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0271	27-Feb-90	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0271	24-Jan-90	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0271	07-Apr-94	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0271	01-Feb-91	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0076	23-Mar-90	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0076	15-Jun-90	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0076	06-Nov-90	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0076	13-Sep-88	1,2-trans-Dichloroethene	1	5	UG/L	J	J
0076	31-Jul-90	1,2-trans-Dichloroethene	1	1	UG/L	U	U
0076	12-Dec-85	1,2-trans-Dichloroethene	1.6	1.6	UG/L	U	U
0271	13-Dec-85	1,2-trans-Dichloroethene	1.6	1.6	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	16-Dec-91	1,2-trans-Dichloroethene	1.8	1	UG/L		
0271	13-Sep-88	1,2-trans-Dichloroethene	1.9	1	UG/L		
0076	24-Jun-88	1,2-trans-Dichloroethene	2	5	UG/L	J	J
0271	16-Dec-91	1,2-trans-Dichloroethene	2.1	1	UG/L		
0076	13-Sep-88	1,2-trans-Dichloroethene	2.8	1	UG/L		
0271	24-Jun-88	1,2-trans-Dichloroethene	3	5	UG/L	J	J
0271	13-Mar-86	1,2-trans-Dichloroethene	3	1.6	UG/L		
0271	13-Sep-88	1,2-trans-Dichloroethene	5	5	UG/L	U	U
0271	08-Mar-88	1,2-trans-Dichloroethene	5	5	UG/L	U	U
0076	01-Feb-84	1,2-trans-Dichloroethene	10	10	UG/L	U	U
0271	07-Apr-94	1,3,5-Trinitrobenzene	1.3	1.3	UG/L	U	U
0076	07-Apr-94	1,3,5-Trinitrobenzene	1.3	1.3	UG/L	U	U
0271	11-Oct-93	1,3,5-Trinitrobenzene	1.3	1.3	UG/L	U	R
0076	11-Oct-93	1,3,5-Trinitrobenzene	1.3	1.3	UG/L	U	R
0076	16-Dec-91	1,3-Dichlorobenzene	1	1	UG/L	U	U
0076	13-Sep-88	1,3-Dichlorobenzene	1	1	UG/L	U	U
0271	13-Sep-88	1,3-Dichlorobenzene	1	1	UG/L	U	U
0271	16-Dec-91	1,3-Dichlorobenzene	1	1	UG/L	U	U
0271	07-Apr-94	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0076	06-Nov-90	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0076	15-Jun-90	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0076	24-Jan-90	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0271	05-Aug-91	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0271	24-Jan-90	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0076	27-Feb-90	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0271	06-May-91	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0271	31-Jul-90	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0271	06-Nov-90	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0271	15-Jun-90	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0271	23-Mar-90	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0271	11-Oct-93	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	UJ
0076	11-Oct-93	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	UJ
0076	06-May-91	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0271	01-Feb-91	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0076	07-Apr-94	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0076	31-Jul-90	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0076	22-Jun-92	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	R
0271	07-Apr-94	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	UJ
0076	16-Jun-93	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	UJ
0271	27-Feb-90	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0271	22-Jun-92	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	R
0076	16-Sep-92	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0076	01-Feb-91	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0271	27-Feb-90	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0271	16-Sep-92	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0076	23-Mar-92	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	UJ
0271	27-Feb-90	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0076	23-Mar-90	1,3-Dichlorobenzene	3.2	3.2	UG/L	U	U
0271	11-Oct-93	1,3-Dichlorobenzene	10	10	UG/L	U	U
0076	01-Feb-91	1,3-Dichlorobenzene	10	10	UG/L	U	U
0076	23-Mar-92	1,3-Dichlorobenzene	10	10	UG/L	U	U
0076	16-Dec-91	1,3-Dichlorobenzene	10	10	UG/L	U	U
0076	16-Sep-92	1,3-Dichlorobenzene	10	10	UG/L	U	U
0271	22-Jun-92	1,3-Dichlorobenzene	10	10	UG/L	U	U
0271	06-May-91	1,3-Dichlorobenzene	10	10	UG/L	U	U
0076	11-Oct-93	1,3-Dichlorobenzene	10	10	UG/L	U	U
0076	22-Jun-92	1,3-Dichlorobenzene	10	10	UG/L	U	U
0271	06-Nov-90	1,3-Dichlorobenzene	10	10	UG/L	U	U
0271	05-Aug-91	1,3-Dichlorobenzene	10	10	UG/L	U	UJ
0271	16-Sep-92	1,3-Dichlorobenzene	10	10	UG/L	U	U
0076	06-May-91	1,3-Dichlorobenzene	10	10	UG/L	U	U
0271	16-Dec-91	1,3-Dichlorobenzene	10	10	UG/L	U	U
0076	06-Nov-90	1,3-Dichlorobenzene	10	10	UG/L	U	U
0271	01-Feb-91	1,3-Dichlorobenzene	10	10	UG/L	U	U
0271	07-Apr-94	1,3-Dichlorobenzene	11	11	UG/L	U	U
0076	07-Apr-94	1,3-Dichlorobenzene	11	11	UG/L	U	U
0271	07-Apr-94	1,3-Dichlorobenzene	11	11	UG/L	U	U
0076	07-Apr-94	1,3-Diethylbenzene	1	1	UG/L	U	U
0271	11-Oct-93	1,3-Diethylbenzene	1	1	UG/L	U	UJ

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect Limit	Units	Lab Qual	Data Qual
0271	07-Apr-94	1,3-Diethylbenzene	1	1	UG/L	U	U
0076	11-Oct-93	1,3-Diethylbenzene	1	1	UG/L	U	U
0271	07-Apr-94	1,3-Diethylbenzene	1	1	UG/L	U	UJ
0076	07-Apr-94	1,3-Dinitrobenzene	0.31	0.31	UG/L	U	U
0271	11-Oct-93	1,3-Dinitrobenzene	0.31	0.31	UG/L	U	UJ
0271	07-Apr-94	1,3-Dinitrobenzene	0.31	0.31	UG/L	U	U
0076	11-Oct-93	1,3-Dinitrobenzene	0.31	0.31	UG/L	U	UJ
0271	13-Sep-88	1,3-cis-Dichloropropene	1	1	UG/L	U	U
0076	13-Sep-88	1,3-cis-Dichloropropene	1	1	UG/L	U	U
0271	16-Dec-91	1,3-cis-Dichloropropene	1	1	UG/L	U	UJ
0076	16-Dec-91	1,3-cis-Dichloropropene	1	1	UG/L	U	UJ
0076	06-May-91	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0076	16-Jun-93	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0271	23-Mar-90	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0076	06-Nov-90	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0271	07-Apr-94	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0271	07-Apr-94	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0076	11-Oct-93	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	UJ
0076	22-Jun-92	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0076	16-Sep-92	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0076	23-Mar-92	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0076	24-Jan-90	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0076	07-Apr-94	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0076	27-Feb-90	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0076	31-Jul-90	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0271	27-Feb-90	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0271	11-Oct-93	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0076	23-Mar-90	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0271	15-Jun-90	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0271	06-Nov-90	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0271	31-Jul-90	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0271	22-Jun-92	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0271	27-Feb-90	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0271	27-Feb-90	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0271	06-May-91	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0271	24-Jan-90	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0271	05-Aug-91	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0076	15-Jun-90	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0271	16-Sep-92	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	U
0271	01-Feb-91	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	UJ
0076	01-Feb-91	1,3-cis-Dichloropropene	3.4	3.4	UG/L	U	UJ
0076	24-Jun-88	1,3-cis-Dichloropropene	5	5	UG/L	U	U
0076	13-Sep-88	1,3-cis-Dichloropropene	5	5	UG/L	U	U
0076	25-Apr-90	1,3-cis-Dichloropropene	5	5	UG/L	U	U
0076	13-Sep-88	1,3-cis-Dichloropropene	5	5	UG/L	U	U
0271	25-Apr-90	1,3-cis-Dichloropropene	5	5	UG/L	U	U
0271	24-Jun-88	1,3-cis-Dichloropropene	5	5	UG/L	U	U
0271	08-Mar-88	1,3-cis-Dichloropropene	5	5	UG/L	U	U
0271	13-Sep-88	1,3-cis-Dichloropropene	5	5	UG/L	U	U
0271	13-Sep-88	1,3-cis-Dichloropropene	5	5	UG/L	U	U
0076	16-Dec-91	1,3-trans-Dichloropropene	1	1	UG/L	U	UJ
0271	13-Sep-88	1,3-trans-Dichloropropene	1	1	UG/L	U	U
0076	13-Sep-88	1,3-trans-Dichloropropene	1	1	UG/L	U	U
0271	16-Dec-91	1,3-trans-Dichloropropene	1	1	UG/L	U	UJ
0271	27-Feb-90	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0076	06-May-91	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0271	24-Jan-90	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0271	22-Jun-92	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0271	27-Feb-90	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0076	24-Jan-90	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0076	22-Jun-92	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0271	05-Aug-91	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0271	16-Sep-92	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0076	23-Mar-90	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0076	16-Sep-92	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0271	07-Apr-94	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0271	27-Feb-90	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0271	07-Apr-94	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0076	23-Mar-92	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	16-Jun-93	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0076	06-Nov-90	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0076	01-Feb-91	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	UJ
0076	31-Jul-90	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0271	06-May-91	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0271	06-Nov-90	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0271	01-Feb-91	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	UJ
0271	11-Oct-93	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	UJ
0076	11-Oct-93	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	UJ
0076	07-Apr-94	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0271	31-Jul-90	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0271	15-Jun-90	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0271	23-Mar-90	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0076	15-Jun-90	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0076	27-Feb-90	1,3-trans-Dichloropropene	3.4	3.4	UG/L	U	U
0076	13-Sep-88	1,3-trans-Dichloropropene	5	5	UG/L	U	U
0271	13-Sep-88	1,3-trans-Dichloropropene	5	5	UG/L	U	U
0076	13-Sep-88	1,3-trans-Dichloropropene	5	5	UG/L	U	U
0271	24-Jun-88	1,3-trans-Dichloropropene	5	5	UG/L	U	U
0271	13-Sep-88	1,3-trans-Dichloropropene	5	5	UG/L	U	U
0271	08-Mar-88	1,3-trans-Dichloropropene	5	5	UG/L	U	U
0076	24-Jun-88	1,3-trans-Dichloropropene	5	5	UG/L	U	U
0076	25-Apr-90	1,3-trans-Dichloropropene	5	5	UG/L	U	U
0271	25-Apr-90	1,3-trans-Dichloropropene	5	5	UG/L	U	U
0271	13-Sep-88	1,4-Dichlorobenzene	1	1	UG/L	U	U
0076	13-Sep-88	1,4-Dichlorobenzene	1	1	UG/L	U	U
0076	16-Dec-91	1,4-Dichlorobenzene	1	1	UG/L	U	U
0271	16-Dec-91	1,4-Dichlorobenzene	1	1	UG/L	U	U
0271	24-Jan-90	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0076	06-May-91	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0076	22-Jun-92	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	UJ
0076	23-Mar-92	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	UJ
0271	23-Mar-90	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0076	23-Mar-90	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0271	16-Sep-92	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0271	11-Oct-93	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0271	15-Jun-90	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0271	27-Feb-90	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0076	11-Oct-93	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	UJ
0271	07-Apr-94	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	UJ
0076	16-Jun-93	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	UJ
0271	27-Feb-90	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0271	06-May-91	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0271	05-Aug-91	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0076	27-Feb-90	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0076	24-Jan-90	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0076	15-Jun-90	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0076	16-Sep-92	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0076	06-Nov-90	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0271	31-Jul-90	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0271	06-Nov-90	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0271	27-Feb-90	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0076	31-Jul-90	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0271	01-Feb-91	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0076	07-Apr-94	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0271	22-Jun-92	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	UJ
0271	07-Apr-94	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0076	01-Feb-91	1,4-Dichlorobenzene	2.4	2.4	UG/L	U	U
0076	16-Sep-92	1,4-Dichlorobenzene	10	10	UG/L	U	U
0076	22-Jun-92	1,4-Dichlorobenzene	10	10	UG/L	U	U
0271	01-Feb-91	1,4-Dichlorobenzene	10	10	UG/L	U	U
0076	11-Oct-93	1,4-Dichlorobenzene	10	10	UG/L	U	U
0076	06-Nov-90	1,4-Dichlorobenzene	10	10	UG/L	U	U
0076	01-Feb-91	1,4-Dichlorobenzene	10	10	UG/L	U	U
0076	06-May-91	1,4-Dichlorobenzene	10	10	UG/L	U	U
0076	16-Dec-91	1,4-Dichlorobenzene	10	10	UG/L	U	U
0271	16-Dec-91	1,4-Dichlorobenzene	10	10	UG/L	U	U
0271	11-Oct-93	1,4-Dichlorobenzene	10	10	UG/L	U	U
0271	16-Sep-92	1,4-Dichlorobenzene	10	10	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	05-Aug-91	1,4-Dichlorobenzene	10	10	UG/L	U	UJ
0271	06-Nov-90	1,4-Dichlorobenzene	10	10	UG/L	U	U
0076	23-Mar-92	1,4-Dichlorobenzene	10	10	UG/L	U	U
0271	06-May-91	1,4-Dichlorobenzene	10	10	UG/L	U	U
0271	22-Jun-92	1,4-Dichlorobenzene	10	10	UG/L	U	U
0076	07-Apr-94	1,4-Dichlorobenzene	11	11	UG/L	U	U
0271	07-Apr-94	1,4-Dichlorobenzene	11	11	UG/L	U	U
0271	07-Apr-94	1,4-Dichlorobenzene	11	11	UG/L	U	U
0271	07-Apr-94	1,4-Diethylbenzene	1	1	UG/L	U	UJ
0076	11-Oct-93	1,4-Diethylbenzene	1	1	UG/L	U	UJ
0271	07-Apr-94	1,4-Diethylbenzene	1	1	UG/L	U	U
0271	11-Oct-93	1,4-Diethylbenzene	1	1	UG/L	U	UJ
0076	07-Apr-94	1,4-Diethylbenzene	1	1	UG/L	U	U
0076	01-Feb-91	1-Chlorohexane	1	1	UG/L	U	UJ
0076	06-May-91	1-Chlorohexane	1	1	UG/L	U	UJ
0076	22-Jun-92	1-Chlorohexane	1	1	UG/L	U	R
0076	16-Sep-92	1-Chlorohexane	1	1	UG/L	U	UJ
0271	01-Feb-91	1-Chlorohexane	1	1	UG/L	U	UJ
0076	11-Oct-93	1-Chlorohexane	1	1	UG/L	U	UJ
0271	07-Apr-94	1-Chlorohexane	1	1	UG/L	U	UJ
0076	15-Jun-90	1-Chlorohexane	1	1	UG/L	U	U
0271	06-Nov-90	1-Chlorohexane	1	1	UG/L	U	UJ
0271	27-Feb-90	1-Chlorohexane	1	1	UG/L	U	U
0076	06-Nov-90	1-Chlorohexane	1	1	UG/L	U	UJ
0076	23-Mar-90	1-Chlorohexane	1	1	UG/L	U	U
0076	23-Mar-92	1-Chlorohexane	1	1	UG/L	U	U
0271	15-Jun-90	1-Chlorohexane	1	1	UG/L	U	U
0271	07-Apr-94	1-Chlorohexane	1	1	UG/L	U	U
0271	06-May-91	1-Chlorohexane	1	1	UG/L	U	UJ
0271	05-Aug-91	1-Chlorohexane	1	1	UG/L	U	UJ
0076	07-Apr-94	1-Chlorohexane	1	1	UG/L	U	U
0271	16-Sep-92	1-Chlorohexane	1	1	UG/L	U	UJ
0076	27-Feb-90	1-Chlorohexane	1	1	UG/L	U	U
0271	24-Jan-90	1-Chlorohexane	1	1	UG/L	U	U
0076	24-Jan-90	1-Chlorohexane	1	1	UG/L	U	U
0271	11-Oct-93	1-Chlorohexane	1	1	UG/L	U	UJ
0271	27-Feb-90	1-Chlorohexane	1	1	UG/L	U	U
0076	16-Jun-93	1-Chlorohexane	1	1	UG/L	U	U
0271	22-Jun-92	1-Chlorohexane	1	1	UG/L	U	R
0271	23-Mar-90	1-Chlorohexane	1	1	UG/L	U	U
0076	31-Jul-90	1-Chlorohexane	1	1	UG/L	U	U
0271	27-Feb-90	1-Chlorohexane	1	1	UG/L	U	U
0271	31-Jul-90	1-Chlorohexane	1	1	UG/L	U	U
0076	23-Mar-92	2,2'-oxybis(1-chloropropane)	2	2	UG/L	U	UJ
0271	16-Sep-92	2,2'-oxybis(1-chloropropane)	2	2	UG/L	U	UJ
0076	16-Jun-93	2,2'-oxybis(1-chloropropane)	2	2	UG/L	U	U
0076	22-Jun-92	2,2'-oxybis(1-chloropropane)	2	2	UG/L	U	R
0271	22-Jun-92	2,2'-oxybis(1-chloropropane)	2	2	UG/L	U	R
0076	16-Sep-92	2,2'-oxybis(1-chloropropane)	2	2	UG/L	U	UJ
0271	16-Dec-91	2,2'-oxybis(1-chloropropane)	10	10	UG/L	U	U
0076	11-Oct-93	2,2'-oxybis(1-chloropropane)	10	10	UG/L	U	U
0271	05-Aug-91	2,2'-oxybis(1-chloropropane)	10	10	UG/L	U	UJ
0271	06-Nov-90	2,2'-oxybis(1-chloropropane)	10	10	UG/L	U	UJ
0076	22-Jun-92	2,2'-oxybis(1-chloropropane)	10	10	UG/L	U	U
0076	06-May-91	2,2'-oxybis(1-chloropropane)	10	10	UG/L	U	U
0076	16-Dec-91	2,2'-oxybis(1-chloropropane)	10	10	UG/L	U	U
0076	23-Mar-92	2,2'-oxybis(1-chloropropane)	10	10	UG/L	U	U
0076	01-Feb-91	2,2'-oxybis(1-chloropropane)	10	10	UG/L	U	U
0271	16-Sep-92	2,2'-oxybis(1-chloropropane)	10	10	UG/L	U	U
0076	06-Nov-90	2,2'-oxybis(1-chloropropane)	10	10	UG/L	U	UJ
0271	11-Oct-93	2,2'-oxybis(1-chloropropane)	10	10	UG/L	U	U
0271	06-May-91	2,2'-oxybis(1-chloropropane)	10	10	UG/L	U	U
0271	22-Jun-92	2,2'-oxybis(1-chloropropane)	10	10	UG/L	U	UJ
0076	16-Sep-92	2,2'-oxybis(1-chloropropane)	10	10	UG/L	U	U
0271	01-Feb-91	2,2'-oxybis(1-chloropropane)	10	10	UG/L	U	U
0271	07-Apr-94	2,2'-oxybis(1-chloropropane)	11	11	UG/L	U	U
0271	07-Apr-94	2,2'-oxybis(1-chloropropane)	11	11	UG/L	U	U
0076	07-Apr-94	2,2'-oxybis(1-chloropropane)	11	11	UG/L	U	U
0271	23-Mar-90	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual
0271	15-Jun-90	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	U
0271	06-May-91	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	UJ
0271	05-Aug-91	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	UJ
0271	11-Oct-93	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	U
0076	27-Feb-90	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	U
0271	01-Feb-91	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	UJ
0076	11-Oct-93	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	U
0076	31-Jul-90	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	U
0271	06-Nov-90	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	UJ
0076	06-Nov-90	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	UJ
0076	07-Apr-94	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	U
0271	31-Jul-90	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	U
0076	15-Jun-90	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	U
0076	06-May-91	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	UJ
0271	27-Feb-90	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	U
0076	24-Jan-90	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	U
0271	07-Apr-94	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	UJ
0271	27-Feb-90	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	U
0076	01-Feb-91	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	UJ
0271	27-Feb-90	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	U
0271	24-Jan-90	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	U
0271	07-Apr-94	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	U
0076	23-Mar-90	2,2'-oxybis(1-chloropropane)	20	20	UG/L	U	U
0271	11-Oct-93	2,4,5-Trichlorophenol	26	26	UG/L	U	U
0076	07-Apr-94	2,4,5-Trichlorophenol	26	26	UG/L	U	U
0076	16-Sep-92	2,4,5-Trichlorophenol	26	26	UG/L	U	U
0271	07-Apr-94	2,4,5-Trichlorophenol	26	26	UG/L	U	U
0076	22-Jun-92	2,4,5-Trichlorophenol	26	26	UG/L	U	U
0076	11-Oct-93	2,4,5-Trichlorophenol	26	26	UG/L	U	U
0271	22-Jun-92	2,4,5-Trichlorophenol	26	26	UG/L	U	U
0076	23-Mar-92	2,4,5-Trichlorophenol	26	26	UG/L	U	U
0271	07-Apr-94	2,4,5-Trichlorophenol	26	26	UG/L	U	U
0271	16-Sep-92	2,4,5-Trichlorophenol	26	26	UG/L	U	U
0076	01-Feb-91	2,4,5-Trichlorophenol	50	50	UG/L	U	U
0076	06-Nov-90	2,4,5-Trichlorophenol	50	50	UG/L	U	U
0271	16-Dec-91	2,4,5-Trichlorophenol	50	50	UG/L	U	U
0271	06-Nov-90	2,4,5-Trichlorophenol	50	50	UG/L	U	U
0271	05-Aug-91	2,4,5-Trichlorophenol	50	50	UG/L	U	U
0076	16-Dec-91	2,4,5-Trichlorophenol	50	50	UG/L	U	U
0271	01-Feb-91	2,4,5-Trichlorophenol	50	50	UG/L	U	U
0076	06-May-91	2,4,5-Trichlorophenol	50	50	UG/L	U	U
0271	06-May-91	2,4,5-Trichlorophenol	50	50	UG/L	U	U
0076	11-Oct-93	2,4,6-Trichlorophenol	10	10	UG/L	U	U
0271	11-Oct-93	2,4,6-Trichlorophenol	10	10	UG/L	U	U
0076	06-Nov-90	2,4,6-Trichlorophenol	10	10	UG/L	U	U
0271	01-Feb-91	2,4,6-Trichlorophenol	10	10	UG/L	U	U
0271	06-Nov-90	2,4,6-Trichlorophenol	10	10	UG/L	U	U
0076	16-Dec-91	2,4,6-Trichlorophenol	10	10	UG/L	U	U
0271	16-Sep-92	2,4,6-Trichlorophenol	10	10	UG/L	U	U
0271	05-Aug-91	2,4,6-Trichlorophenol	10	10	UG/L	U	U
0076	23-Mar-92	2,4,6-Trichlorophenol	10	10	UG/L	U	U
0076	16-Sep-92	2,4,6-Trichlorophenol	10	10	UG/L	U	U
0271	16-Dec-91	2,4,6-Trichlorophenol	10	10	UG/L	U	U
0076	01-Feb-91	2,4,6-Trichlorophenol	10	10	UG/L	U	U
0271	22-Jun-92	2,4,6-Trichlorophenol	10	10	UG/L	U	U
0076	22-Jun-92	2,4,6-Trichlorophenol	10	10	UG/L	U	U
0271	06-May-91	2,4,6-Trichlorophenol	10	10	UG/L	U	U
0076	06-May-91	2,4,6-Trichlorophenol	10	10	UG/L	U	U
0076	07-Apr-94	2,4,6-Trichlorophenol	11	11	UG/L	U	U
0271	07-Apr-94	2,4,6-Trichlorophenol	11	11	UG/L	U	U
0271	07-Apr-94	2,4,6-Trichlorophenol	11	11	UG/L	U	U
0271	11-Oct-93	2,4,6-Trinitrotoluene	1.3	1.3	UG/L	U	R
0076	11-Oct-93	2,4,6-Trinitrotoluene	1.3	1.3	UG/L	U	R
0076	07-Apr-94	2,4,6-Trinitrotoluene	1.3	1.3	UG/L	U	U
0271	07-Apr-94	2,4,6-Trinitrotoluene	1.3	1.3	UG/L	U	U
0076	01-Feb-91	2,4-Dichlorophenol	10	10	UG/L	U	U
0271	16-Sep-92	2,4-Dichlorophenol	10	10	UG/L	U	U
0076	22-Jun-92	2,4-Dichlorophenol	10	10	UG/L	U	U
0076	23-Mar-92	2,4-Dichlorophenol	10	10	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	06-Nov-90	2,4-Dichlorophenol	10	10	UG/L	U	U
0076	06-May-91	2,4-Dichlorophenol	10	10	UG/L	U	U
0271	01-Feb-91	2,4-Dichlorophenol	10	10	UG/L	U	U
0271	22-Jun-92	2,4-Dichlorophenol	10	10	UG/L	U	U
0271	16-Dec-91	2,4-Dichlorophenol	10	10	UG/L	U	U
0076	11-Oct-93	2,4-Dichlorophenol	10	10	UG/L	U	U
0076	16-Sep-92	2,4-Dichlorophenol	10	10	UG/L	U	U
0271	11-Oct-93	2,4-Dichlorophenol	10	10	UG/L	U	U
0271	05-Aug-91	2,4-Dichlorophenol	10	10	UG/L	U	U
0076	16-Dec-91	2,4-Dichlorophenol	10	10	UG/L	U	U
0076	06-Nov-90	2,4-Dichlorophenol	10	10	UG/L	U	U
0271	06-May-91	2,4-Dichlorophenol	10	10	UG/L	U	U
0271	07-Apr-94	2,4-Dichlorophenol	11	11	UG/L	U	U
0271	07-Apr-94	2,4-Dichlorophenol	11	11	UG/L	U	U
0076	07-Apr-94	2,4-Dichlorophenol	11	11	UG/L	U	U
0076	11-Oct-93	2,4-Dimethylphenol	10	10	UG/L	U	U
0076	22-Jun-92	2,4-Dimethylphenol	10	10	UG/L	U	U
0271	05-Aug-91	2,4-Dimethylphenol	10	10	UG/L	U	U
0076	06-Nov-90	2,4-Dimethylphenol	10	10	UG/L	U	U
0271	16-Dec-91	2,4-Dimethylphenol	10	10	UG/L	U	U
0076	23-Mar-92	2,4-Dimethylphenol	10	10	UG/L	U	UJ
0271	01-Feb-91	2,4-Dimethylphenol	10	10	UG/L	U	U
0076	16-Dec-91	2,4-Dimethylphenol	10	10	UG/L	U	U
0271	11-Oct-93	2,4-Dimethylphenol	10	10	UG/L	U	U
0076	06-May-91	2,4-Dimethylphenol	10	10	UG/L	U	U
0076	16-Sep-92	2,4-Dimethylphenol	10	10	UG/L	U	U
0271	06-May-91	2,4-Dimethylphenol	10	10	UG/L	U	U
0271	16-Sep-92	2,4-Dimethylphenol	10	10	UG/L	U	U
0076	01-Feb-91	2,4-Dimethylphenol	10	10	UG/L	U	U
0271	22-Jun-92	2,4-Dimethylphenol	10	10	UG/L	U	U
0271	06-Nov-90	2,4-Dimethylphenol	10	10	UG/L	U	U
0076	07-Apr-94	2,4-Dimethylphenol	11	11	UG/L	U	U
0271	07-Apr-94	2,4-Dimethylphenol	11	11	UG/L	U	U
0271	07-Apr-94	2,4-Dimethylphenol	11	11	UG/L	U	U
0076	16-Sep-92	2,4-Dinitrophenol	26	26	UG/L	U	UJ
0076	23-Mar-92	2,4-Dinitrophenol	26	26	UG/L	U	U
0271	07-Apr-94	2,4-Dinitrophenol	26	26	UG/L	U	U
0076	22-Jun-92	2,4-Dinitrophenol	26	26	UG/L	U	U
0076	07-Apr-94	2,4-Dinitrophenol	26	26	UG/L	U	U
0076	11-Oct-93	2,4-Dinitrophenol	26	26	UG/L	U	UJ
0271	07-Apr-94	2,4-Dinitrophenol	26	26	UG/L	U	U
0271	11-Oct-93	2,4-Dinitrophenol	26	26	UG/L	U	UJ
0271	16-Sep-92	2,4-Dinitrophenol	26	26	UG/L	U	UJ
0271	22-Jun-92	2,4-Dinitrophenol	26	26	UG/L	U	U
0076	06-Nov-90	2,4-Dinitrophenol	50	50	UG/L	U	U
0271	05-Aug-91	2,4-Dinitrophenol	50	50	UG/L	U	UJ
0271	06-May-91	2,4-Dinitrophenol	50	50	UG/L	U	UJ
0076	16-Dec-91	2,4-Dinitrophenol	50	50	UG/L	U	U
0271	01-Feb-91	2,4-Dinitrophenol	50	50	UG/L	U	UJ
0271	06-Nov-90	2,4-Dinitrophenol	50	50	UG/L	U	U
0271	16-Dec-91	2,4-Dinitrophenol	50	50	UG/L	U	U
0076	06-May-91	2,4-Dinitrophenol	50	50	UG/L	U	UJ
0076	01-Feb-91	2,4-Dinitrophenol	50	50	UG/L	U	UJ
0271	07-Apr-94	2,4-Dinitrotoluene	0.31	0.31	UG/L	U	U
0076	11-Oct-93	2,4-Dinitrotoluene	0.31	0.31	UG/L	U	R
0076	07-Apr-94	2,4-Dinitrotoluene	0.31	0.31	UG/L	U	U
0271	11-Oct-93	2,4-Dinitrotoluene	0.31	0.31	UG/L	U	R
0271	06-Nov-90	2,4-Dinitrotoluene	10	10	UG/L	U	U
0076	06-Nov-90	2,4-Dinitrotoluene	10	10	UG/L	U	U
0271	11-Oct-93	2,4-Dinitrotoluene	10	10	UG/L	U	U
0271	01-Feb-91	2,4-Dinitrotoluene	10	10	UG/L	U	U
0076	16-Dec-91	2,4-Dinitrotoluene	10	10	UG/L	U	U
0271	16-Dec-91	2,4-Dinitrotoluene	10	10	UG/L	U	U
0076	22-Jun-92	2,4-Dinitrotoluene	10	10	UG/L	U	U
0076	16-Sep-92	2,4-Dinitrotoluene	10	10	UG/L	U	U
0271	22-Jun-92	2,4-Dinitrotoluene	10	10	UG/L	U	U
0076	06-May-91	2,4-Dinitrotoluene	10	10	UG/L	U	U
0271	06-May-91	2,4-Dinitrotoluene	10	10	UG/L	U	U
0076	11-Oct-93	2,4-Dinitrotoluene	10	10	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	16-Sep-92	2,4-Dinitrotoluene	10	10	UG/L	U	U
0271	05-Aug-91	2,4-Dinitrotoluene	10	10	UG/L	U	UJ
0076	01-Feb-91	2,4-Dinitrotoluene	10	10	UG/L	U	U
0076	23-Mar-92	2,4-Dinitrotoluene	10	10	UG/L	U	U
0076	07-Apr-94	2,4-Dinitrotoluene	11	11	UG/L	U	U
0271	07-Apr-94	2,4-Dinitrotoluene	11	11	UG/L	U	U
0271	07-Apr-94	2,4-Dinitrotoluene	11	11	UG/L	U	U
0076	07-Apr-94	2,6-Dinitrotoluene	0.31	0.31	UG/L	U	U
0271	11-Oct-93	2,6-Dinitrotoluene	0.31	0.31	UG/L	U	R
0271	07-Apr-94	2,6-Dinitrotoluene	0.31	0.31	UG/L	U	U
0076	11-Oct-93	2,6-Dinitrotoluene	0.31	0.31	UG/L	U	R
0076	06-Nov-90	2,6-Dinitrotoluene	10	10	UG/L	U	U
0076	23-Mar-92	2,6-Dinitrotoluene	10	10	UG/L	U	U
0076	16-Dec-91	2,6-Dinitrotoluene	10	10	UG/L	U	U
0271	06-May-91	2,6-Dinitrotoluene	10	10	UG/L	U	U
0076	11-Oct-93	2,6-Dinitrotoluene	10	10	UG/L	U	U
0076	01-Feb-91	2,6-Dinitrotoluene	10	10	UG/L	U	U
0271	01-Feb-91	2,6-Dinitrotoluene	10	10	UG/L	U	U
0271	16-Sep-92	2,6-Dinitrotoluene	10	10	UG/L	U	U
0271	06-Nov-90	2,6-Dinitrotoluene	10	10	UG/L	U	U
0076	22-Jun-92	2,6-Dinitrotoluene	10	10	UG/L	U	U
0271	22-Jun-92	2,6-Dinitrotoluene	10	10	UG/L	U	U
0271	16-Dec-91	2,6-Dinitrotoluene	10	10	UG/L	U	U
0271	11-Oct-93	2,6-Dinitrotoluene	10	10	UG/L	U	U
0076	06-May-91	2,6-Dinitrotoluene	10	10	UG/L	U	U
0271	05-Aug-91	2,6-Dinitrotoluene	10	10	UG/L	U	UJ
0076	16-Sep-92	2,6-Dinitrotoluene	10	10	UG/L	U	U
0271	07-Apr-94	2,6-Dinitrotoluene	11	11	UG/L	U	U
0076	07-Apr-94	2,6-Dinitrotoluene	11	11	UG/L	U	U
0271	07-Apr-94	2,6-Dinitrotoluene	11	11	UG/L	U	U
0076	07-Apr-94	2-Amino-4,6-dinitrotoluene	0.62	0.62	UG/L	U	U
0076	11-Oct-93	2-Amino-4,6-dinitrotoluene	0.62	0.62	UG/L	U	UJ
0271	07-Apr-94	2-Amino-4,6-dinitrotoluene	0.62	0.62	UG/L	U	U
0271	11-Oct-93	2-Amino-4,6-dinitrotoluene	0.62	0.62	UG/L	U	UJ
0076	11-Oct-93	2-Benzyl-4-Chlorophenol	10	10	UG/L	U	U
0271	11-Oct-93	2-Benzyl-4-Chlorophenol	10	10	UG/L	U	U
0271	07-Apr-94	2-Benzyl-4-Chlorophenol	11	11	UG/L	U	U
0271	07-Apr-94	2-Benzyl-4-Chlorophenol	11	11	UG/L	U	U
0076	07-Apr-94	2-Benzyl-4-Chlorophenol	11	11	UG/L	U	U
0271	25-Apr-90	2-Butanone	7	10	UG/L	JB	
0271	11-Oct-93	2-Butanone	10	10	UG/L	U	UJ
0076	24-Jun-88	2-Butanone	10	10	UG/L	U	U
0076	13-Sep-88	2-Butanone	10	10	UG/L	U	U
0076	11-Oct-93	2-Butanone	10	10	UG/L	U	UJ
0271	13-Sep-88	2-Butanone	10	10	UG/L	U	U
0271	07-Apr-94	2-Butanone	10	10	UG/L	U	UJ
0076	07-Apr-94	2-Butanone	10	10	UG/L	U	UJ
0271	24-Jun-88	2-Butanone	10	10	UG/L	U	U
0271	07-Apr-94	2-Butanone	10	10	UG/L	U	U
0076	25-Apr-90	2-Butanone	11	10	UG/L	B	
0271	08-Mar-88	2-Butanone	41	10	UG/L		
0076	13-Sep-88	2-Chloroethylvinylether	1	1	UG/L	U	U
0271	13-Sep-88	2-Chloroethylvinylether	1	1	UG/L	U	U
0271	23-Mar-90	2-Chloroethylvinylether	1.3	1.3	UG/L	U	U
0076	31-Jul-90	2-Chloroethylvinylether	1.3	1.3	UG/L	U	U
0271	05-Aug-91	2-Chloroethylvinylether	1.3	1.3	UG/L	U	U
0271	31-Jul-90	2-Chloroethylvinylether	1.3	1.3	UG/L	U	U
0271	27-Feb-90	2-Chloroethylvinylether	1.3	1.3	UG/L	U	U
0271	07-Apr-94	2-Chloroethylvinylether	1.3	1.3	UG/L	U	R
0076	06-Nov-90	2-Chloroethylvinylether	1.3	1.3	UG/L	U	UJ
0076	22-Jun-92	2-Chloroethylvinylether	1.3	1.3	UG/L	U	R
0271	22-Jun-92	2-Chloroethylvinylether	1.3	1.3	UG/L	U	R
0076	16-Jun-93	2-Chloroethylvinylether	1.3	1.3	UG/L	U	UJ
0076	23-Mar-90	2-Chloroethylvinylether	1.3	1.3	UG/L	U	U
0076	16-Sep-92	2-Chloroethylvinylether	1.3	1.3	UG/L	U	U
0271	24-Jan-90	2-Chloroethylvinylether	1.3	1.3	UG/L	U	U
0271	27-Feb-90	2-Chloroethylvinylether	1.3	1.3	UG/L	U	U
0076	07-Apr-94	2-Chloroethylvinylether	1.3	1.3	UG/L	U	R
0271	06-May-91	2-Chloroethylvinylether	1.3	1.3	UG/L	U	UJ

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	15-Jun-90	2-Chloroethylvinylether	1.3	1.3	UG/L	U	U
0076	06-May-91	2-Chloroethylvinylether	1.3	1.3	UG/L	U	UJ
0076	11-Oct-93	2-Chloroethylvinylether	1.3	1.3	UG/L	U	R
0271	16-Sep-92	2-Chloroethylvinylether	1.3	1.3	UG/L	U	U
0271	01-Feb-91	2-Chloroethylvinylether	1.3	1.3	UG/L	U	U
0076	01-Feb-91	2-Chloroethylvinylether	1.3	1.3	UG/L	U	U
0076	15-Jun-90	2-Chloroethylvinylether	1.3	1.3	UG/L	U	U
0076	23-Mar-92	2-Chloroethylvinylether	1.3	1.3	UG/L	U	UJ
0271	06-Nov-90	2-Chloroethylvinylether	1.3	1.3	UG/L	U	U
0271	11-Oct-93	2-Chloroethylvinylether	1.3	1.3	UG/L	U	R
0076	27-Feb-90	2-Chloroethylvinylether	1.3	1.3	UG/L	U	U
0076	24-Jan-90	2-Chloroethylvinylether	1.3	1.3	UG/L	U	U
0271	27-Feb-90	2-Chloroethylvinylether	1.3	1.3	UG/L	U	U
0271	07-Apr-94	2-Chloroethylvinylether	1.3	1.3	UG/L	U	R
0271	16-Dec-91	2-Chloroethylvinylether	5	5	UG/L	U	U
0076	16-Dec-91	2-Chloroethylvinylether	5	5	UG/L	U	U
0271	08-Mar-88	2-Chloroethylvinylether	10	10	UG/L	U	U
0271	24-Jun-88	2-Chloroethylvinylether	10	10	UG/L	U	U
0076	24-Jun-88	2-Chloroethylvinylether	10	10	UG/L	U	U
0076	13-Sep-88	2-Chloroethylvinylether	10	10	UG/L	U	U
0271	13-Sep-88	2-Chloroethylvinylether	10	10	UG/L	U	U
0076	16-Sep-92	2-Chloronaphthalene	10	10	UG/L	U	U
0271	22-Jun-92	2-Chloronaphthalene	10	10	UG/L	U	U
0271	01-Feb-91	2-Chloronaphthalene	10	10	UG/L	U	U
0076	11-Oct-93	2-Chloronaphthalene	10	10	UG/L	U	U
0076	01-Feb-91	2-Chloronaphthalene	10	10	UG/L	U	U
0271	06-May-91	2-Chloronaphthalene	10	10	UG/L	U	U
0271	06-Nov-90	2-Chloronaphthalene	10	10	UG/L	U	U
0076	23-Mar-92	2-Chloronaphthalene	10	10	UG/L	U	U
0271	16-Sep-92	2-Chloronaphthalene	10	10	UG/L	U	U
0271	11-Oct-93	2-Chloronaphthalene	10	10	UG/L	U	U
0076	06-May-91	2-Chloronaphthalene	10	10	UG/L	U	U
0076	22-Jun-92	2-Chloronaphthalene	10	10	UG/L	U	U
0271	16-Dec-91	2-Chloronaphthalene	10	10	UG/L	U	U
0076	06-Nov-90	2-Chloronaphthalene	10	10	UG/L	U	U
0076	16-Dec-91	2-Chloronaphthalene	10	10	UG/L	U	U
0271	05-Aug-91	2-Chloronaphthalene	10	10	UG/L	U	UJ
0076	07-Apr-94	2-Chloronaphthalene	11	11	UG/L	U	U
0271	07-Apr-94	2-Chloronaphthalene	11	11	UG/L	U	U
0271	07-Apr-94	2-Chloronaphthalene	11	11	UG/L	U	U
0271	16-Sep-92	2-Chlorophenol	10	10	UG/L	U	U
0076	22-Jun-92	2-Chlorophenol	10	10	UG/L	U	U
0271	22-Jun-92	2-Chlorophenol	10	10	UG/L	U	U
0076	23-Mar-92	2-Chlorophenol	10	10	UG/L	U	U
0076	06-May-91	2-Chlorophenol	10	10	UG/L	U	U
0076	01-Feb-91	2-Chlorophenol	10	10	UG/L	U	U
0076	16-Dec-91	2-Chlorophenol	10	10	UG/L	U	U
0271	05-Aug-91	2-Chlorophenol	10	10	UG/L	U	U
0271	06-May-91	2-Chlorophenol	10	10	UG/L	U	U
0271	06-Nov-90	2-Chlorophenol	10	10	UG/L	U	U
0271	11-Oct-93	2-Chlorophenol	10	10	UG/L	U	U
0271	01-Feb-91	2-Chlorophenol	10	10	UG/L	U	U
0076	11-Oct-93	2-Chlorophenol	10	10	UG/L	U	U
0076	06-Nov-90	2-Chlorophenol	10	10	UG/L	U	U
0271	16-Dec-91	2-Chlorophenol	10	10	UG/L	U	U
0076	16-Sep-92	2-Chlorophenol	10	10	UG/L	U	U
0271	07-Apr-94	2-Chlorophenol	11	11	UG/L	U	U
0271	07-Apr-94	2-Chlorophenol	11	11	UG/L	U	U
0076	07-Apr-94	2-Chlorophenol	11	11	UG/L	U	U
0271	16-Sep-92	2-Chlorotoluene	1	1	UG/L	U	U
0076	11-Oct-93	2-Chlorotoluene	1	1	UG/L	U	UJ
0271	07-Apr-94	2-Chlorotoluene	1	1	UG/L	U	U
0076	16-Dec-91	2-Chlorotoluene	1	1	UG/L	U	UJ
0076	07-Apr-94	2-Chlorotoluene	1	1	UG/L	U	U
0271	11-Oct-93	2-Chlorotoluene	1	1	UG/L	U	UJ
0271	07-Apr-94	2-Chlorotoluene	1	1	UG/L	U	U
0076	16-Sep-92	2-Chlorotoluene	1	1	UG/L	U	U
0076	16-Jun-93	2-Chlorotoluene	1	1	UG/L	U	U
0271	22-Jun-92	2-Chlorotoluene	1	1	UG/L	U	R

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	22-Jun-92	2-Chlorotoluene	1	1	UG/L	U	R
0076	23-Mar-92	2-Chlorotoluene	1	1	UG/L	U	U
0271	16-Dec-91	2-Chlorotoluene	1	1	UG/L	U	UJ
0271	13-Sep-88	2-Hexanone	10	10	UG/L	U	U
0271	24-Jun-88	2-Hexanone	10	10	UG/L	U	U
0076	13-Sep-88	2-Hexanone	10	10	UG/L	U	U
0271	25-Apr-90	2-Hexanone	10	10	UG/L	U	U
0076	24-Jun-88	2-Hexanone	10	10	UG/L	U	U
0271	08-Mar-88	2-Hexanone	10	10	UG/L	U	U
0076	25-Apr-90	2-Hexanone	10	10	UG/L	U	U
0271	06-May-91	2-Methylnaphthalene	10	10	UG/L	U	U
0271	01-Feb-91	2-Methylnaphthalene	10	10	UG/L	U	U
0076	16-Dec-91	2-Methylnaphthalene	10	10	UG/L	U	U
0076	06-May-91	2-Methylnaphthalene	10	10	UG/L	U	U
0271	22-Jun-92	2-Methylnaphthalene	10	10	UG/L	U	U
0271	05-Aug-91	2-Methylnaphthalene	10	10	UG/L	U	UJ
0076	11-Oct-93	2-Methylnaphthalene	10	10	UG/L	U	U
0076	06-Nov-90	2-Methylnaphthalene	10	10	UG/L	U	U
0271	11-Oct-93	2-Methylnaphthalene	10	10	UG/L	U	U
0076	01-Feb-91	2-Methylnaphthalene	10	10	UG/L	U	U
0076	22-Jun-92	2-Methylnaphthalene	10	10	UG/L	U	U
0271	16-Sep-92	2-Methylnaphthalene	10	10	UG/L	U	U
0271	16-Dec-91	2-Methylnaphthalene	10	10	UG/L	U	U
0076	16-Sep-92	2-Methylnaphthalene	10	10	UG/L	U	U
0271	06-Nov-90	2-Methylnaphthalene	10	10	UG/L	U	U
0076	23-Mar-92	2-Methylnaphthalene	10	10	UG/L	U	U
0271	07-Apr-94	2-Methylnaphthalene	11	11	UG/L	U	U
0076	07-Apr-94	2-Methylnaphthalene	11	11	UG/L	U	U
0271	07-Apr-94	2-Methylnaphthalene	11	11	UG/L	U	U
0076	06-May-91	2-Methylphenol	10	10	UG/L	U	U
0271	01-Feb-91	2-Methylphenol	10	10	UG/L	U	U
0076	16-Dec-91	2-Methylphenol	10	10	UG/L	U	U
0271	11-Oct-93	2-Methylphenol	10	10	UG/L	U	U
0271	05-Aug-91	2-Methylphenol	10	10	UG/L	U	U
0076	06-Nov-90	2-Methylphenol	10	10	UG/L	U	U
0076	22-Jun-92	2-Methylphenol	10	10	UG/L	U	U
0076	23-Mar-92	2-Methylphenol	10	10	UG/L	U	U
0271	16-Dec-91	2-Methylphenol	10	10	UG/L	U	U
0271	06-May-91	2-Methylphenol	10	10	UG/L	U	U
0271	06-Nov-90	2-Methylphenol	10	10	UG/L	U	U
0076	16-Sep-92	2-Methylphenol	10	10	UG/L	U	U
0076	01-Feb-91	2-Methylphenol	10	10	UG/L	U	U
0076	11-Oct-93	2-Methylphenol	10	10	UG/L	U	U
0271	22-Jun-92	2-Methylphenol	10	10	UG/L	U	U
0271	16-Sep-92	2-Methylphenol	10	10	UG/L	U	U
0076	07-Apr-94	2-Methylphenol	11	11	UG/L	U	U
0271	07-Apr-94	2-Methylphenol	11	11	UG/L	U	U
0271	07-Apr-94	2-Methylphenol	11	11	UG/L	U	U
0076	07-Apr-94	2-Nitroaniline	26	26	UG/L	U	U
0271	07-Apr-94	2-Nitroaniline	26	26	UG/L	U	U
0076	11-Oct-93	2-Nitroaniline	26	26	UG/L	U	UJ
0271	07-Apr-94	2-Nitroaniline	26	26	UG/L	U	U
0076	23-Mar-92	2-Nitroaniline	26	26	UG/L	U	U
0076	16-Sep-92	2-Nitroaniline	26	26	UG/L	U	U
0076	22-Jun-92	2-Nitroaniline	26	26	UG/L	U	U
0271	11-Oct-93	2-Nitroaniline	26	26	UG/L	U	UJ
0271	22-Jun-92	2-Nitroaniline	26	26	UG/L	U	UJ
0271	16-Sep-92	2-Nitroaniline	26	26	UG/L	U	U
0076	01-Feb-91	2-Nitroaniline	50	50	UG/L	U	U
0076	06-May-91	2-Nitroaniline	50	50	UG/L	U	U
0271	16-Dec-91	2-Nitroaniline	50	50	UG/L	U	U
0271	05-Aug-91	2-Nitroaniline	50	50	UG/L	U	UJ
0271	01-Feb-91	2-Nitroaniline	50	50	UG/L	U	U
0271	06-May-91	2-Nitroaniline	50	50	UG/L	U	U
0271	06-Nov-90	2-Nitroaniline	50	50	UG/L	U	U
0076	06-Nov-90	2-Nitroaniline	50	50	UG/L	U	U
0076	16-Dec-91	2-Nitroaniline	50	50	UG/L	U	U
0076	11-Oct-93	2-Nitrophenol	10	10	UG/L	U	U
0076	01-Feb-91	2-Nitrophenol	10	10	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	22-Jun-92	2-Nitrophenol	10	10	UG/L	U	U
0271	06-Nov-90	2-Nitrophenol	10	10	UG/L	U	U
0076	23-Mar-92	2-Nitrophenol	10	10	UG/L	U	U
0271	06-May-91	2-Nitrophenol	10	10	UG/L	U	U
0271	22-Jun-92	2-Nitrophenol	10	10	UG/L	U	U
0271	16-Sep-92	2-Nitrophenol	10	10	UG/L	U	U
0076	16-Sep-92	2-Nitrophenol	10	10	UG/L	U	U
0271	16-Dec-91	2-Nitrophenol	10	10	UG/L	U	U
0271	05-Aug-91	2-Nitrophenol	10	10	UG/L	U	U
0271	11-Oct-93	2-Nitrophenol	10	10	UG/L	U	U
0271	01-Feb-91	2-Nitrophenol	10	10	UG/L	U	U
0076	06-May-91	2-Nitrophenol	10	10	UG/L	U	U
0076	06-Nov-90	2-Nitrophenol	10	10	UG/L	U	U
0076	16-Dec-91	2-Nitrophenol	10	10	UG/L	U	U
0271	07-Apr-94	2-Nitrophenol	11	11	UG/L	U	U
0076	07-Apr-94	2-Nitrophenol	11	11	UG/L	U	U
0271	07-Apr-94	2-Nitrophenol	11	11	UG/L	U	U
0076	16-Sep-92	3,3'-Dichlorobenzidine	10	10	UG/L	U	UJ
0076	23-Mar-92	3,3'-Dichlorobenzidine	10	10	UG/L	U	U
0076	11-Oct-93	3,3'-Dichlorobenzidine	10	10	UG/L	U	U
0076	22-Jun-92	3,3'-Dichlorobenzidine	10	10	UG/L	U	UJ
0271	11-Oct-93	3,3'-Dichlorobenzidine	10	10	UG/L	U	U
0271	16-Sep-92	3,3'-Dichlorobenzidine	10	10	UG/L	U	UJ
0271	22-Jun-92	3,3'-Dichlorobenzidine	10	10	UG/L	U	U
0271	07-Apr-94	3,3'-Dichlorobenzidine	11	11	UG/L	U	U
0076	07-Apr-94	3,3'-Dichlorobenzidine	11	11	UG/L	U	U
0271	07-Apr-94	3,3'-Dichlorobenzidine	11	11	UG/L	U	U
0076	16-Dec-91	3,3'-Dichlorobenzidine	20	20	UG/L	U	U
0076	01-Feb-91	3,3'-Dichlorobenzidine	20	20	UG/L	U	U
0271	16-Dec-91	3,3'-Dichlorobenzidine	20	20	UG/L	U	U
0076	06-May-91	3,3'-Dichlorobenzidine	20	20	UG/L	U	U
0271	05-Aug-91	3,3'-Dichlorobenzidine	20	20	UG/L	U	UJ
0076	06-Nov-90	3,3'-Dichlorobenzidine	20	20	UG/L	U	U
0271	06-May-91	3,3'-Dichlorobenzidine	20	20	UG/L	U	U
0271	01-Feb-91	3,3'-Dichlorobenzidine	20	20	UG/L	U	U
0271	06-Nov-90	3,3'-Dichlorobenzidine	20	20	UG/L	U	U
0076	11-Oct-93	3-Nitroaniline	26	26	UG/L	U	U
0271	16-Sep-92	3-Nitroaniline	26	26	UG/L	U	U
0271	11-Oct-93	3-Nitroaniline	26	26	UG/L	U	U
0271	07-Apr-94	3-Nitroaniline	26	26	UG/L	U	U
0271	22-Jun-92	3-Nitroaniline	26	26	UG/L	U	UJ
0076	16-Sep-92	3-Nitroaniline	26	26	UG/L	U	U
0271	07-Apr-94	3-Nitroaniline	26	26	UG/L	U	U
0076	23-Mar-92	3-Nitroaniline	26	26	UG/L	U	U
0076	07-Apr-94	3-Nitroaniline	26	26	UG/L	U	U
0076	22-Jun-92	3-Nitroaniline	26	26	UG/L	U	U
0271	06-Nov-90	3-Nitroaniline	50	50	UG/L	U	U
0076	01-Feb-91	3-Nitroaniline	50	50	UG/L	U	U
0271	06-May-91	3-Nitroaniline	50	50	UG/L	U	U
0076	06-Nov-90	3-Nitroaniline	50	50	UG/L	U	U
0076	16-Dec-91	3-Nitroaniline	50	50	UG/L	U	U
0271	01-Feb-91	3-Nitroaniline	50	50	UG/L	U	U
0271	16-Dec-91	3-Nitroaniline	50	50	UG/L	U	U
0271	05-Aug-91	3-Nitroaniline	50	50	UG/L	U	UJ
0076	06-May-91	3-Nitroaniline	50	50	UG/L	U	U
0076	22-Jun-92	4,4'-DDD	0.1	0.1	UG/L	U	U
0076	16-Sep-92	4,4'-DDD	0.1	0.1	UG/L	U	U
0076	11-Oct-93	4,4'-DDD	0.1	0.1	UG/L	U	UJ
0271	07-Apr-94	4,4'-DDD	0.1	0.1	UG/L	U	U
0076	01-Feb-91	4,4'-DDD	0.1	0.1	UG/L	U	U
0076	06-May-91	4,4'-DDD	0.1	0.1	UG/L	U	U
0076	06-Nov-90	4,4'-DDD	0.1	0.1	UG/L	U	U
0271	05-Aug-91	4,4'-DDD	0.1	0.1	UG/L	U	U
0271	07-Apr-94	4,4'-DDD	0.1	0.1	UG/L	U	U
0271	01-Feb-91	4,4'-DDD	0.1	0.1	UG/L	U	U
0271	22-Jun-92	4,4'-DDD	0.1	0.1	UG/L	U	U
0271	16-Dec-91	4,4'-DDD	0.1	0.1	UG/L	U	U
0271	11-Oct-93	4,4'-DDD	0.1	0.1	UG/L	U	U
0271	06-Nov-90	4,4'-DDD	0.1	0.1	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual	Data Qual
0271	06-May-91	4,4'-DDD	0.1	0.1	UG/L	U	U
0271	16-Sep-92	4,4'-DDD	0.1	0.1	UG/L	U	U
0076	16-Dec-91	4,4'-DDD	0.1	0.1	UG/L	U	U
0076	07-Apr-94	4,4'-DDD	0.11	0.11	UG/L	U	U
0076	23-Mar-92	4,4'-DDD	0.11	0.11	UG/L	U	U
0076	06-May-91	4,4'-DDD	0.5	0.5	UG/L	U	U
0271	06-May-91	4,4'-DDD	1.5	1.5	UG/L	U	U
0271	05-Aug-91	4,4'-DDE	0.04	0.04	UG/L	U	U
0076	01-Feb-91	4,4'-DDE	0.1	0.1	UG/L	U	U
0076	06-May-91	4,4'-DDE	0.1	0.1	UG/L	U	U
0271	07-Apr-94	4,4'-DDE	0.1	0.1	UG/L	U	U
0076	11-Oct-93	4,4'-DDE	0.1	0.1	UG/L	U	UJ
0076	16-Sep-92	4,4'-DDE	0.1	0.1	UG/L	U	U
0271	01-Feb-91	4,4'-DDE	0.1	0.1	UG/L	U	U
0076	22-Jun-92	4,4'-DDE	0.1	0.1	UG/L	U	U
0271	06-May-91	4,4'-DDE	0.1	0.1	UG/L	U	U
0271	16-Dec-91	4,4'-DDE	0.1	0.1	UG/L	U	U
0271	07-Apr-94	4,4'-DDE	0.1	0.1	UG/L	U	U
0076	16-Dec-91	4,4'-DDE	0.1	0.1	UG/L	U	U
0076	06-Nov-90	4,4'-DDE	0.1	0.1	UG/L	U	U
0271	22-Jun-92	4,4'-DDE	0.1	0.1	UG/L	U	U
0271	16-Sep-92	4,4'-DDE	0.1	0.1	UG/L	U	U
0271	11-Oct-93	4,4'-DDE	0.1	0.1	UG/L	U	U
0271	06-Nov-90	4,4'-DDE	0.1	0.1	UG/L	U	U
0076	07-Apr-94	4,4'-DDE	0.11	0.11	UG/L	U	U
0076	23-Mar-92	4,4'-DDE	0.11	0.11	UG/L	U	U
0076	06-May-91	4,4'-DDE	0.5	0.5	UG/L	U	U
0271	06-May-91	4,4'-DDE	1.5	1.5	UG/L	U	U
0271	22-Jun-92	4,4'-DDT	0.1	0.1	UG/L	U	U
0271	06-May-91	4,4'-DDT	0.1	0.1	UG/L	U	U
0271	16-Dec-91	4,4'-DDT	0.1	0.1	UG/L	U	U
0076	06-Nov-90	4,4'-DDT	0.1	0.1	UG/L	U	U
0076	06-May-91	4,4'-DDT	0.1	0.1	UG/L	U	U
0076	16-Sep-92	4,4'-DDT	0.1	0.1	UG/L	U	UJ
0271	06-Nov-90	4,4'-DDT	0.1	0.1	UG/L	U	U
0271	05-Aug-91	4,4'-DDT	0.1	0.1	UG/L	U	U
0271	07-Apr-94	4,4'-DDT	0.1	0.1	UG/L	U	U
0271	07-Apr-94	4,4'-DDT	0.1	0.1	UG/L	U	U
0076	01-Feb-91	4,4'-DDT	0.1	0.1	UG/L	U	U
0076	11-Oct-93	4,4'-DDT	0.1	0.1	UG/L	U	UJ
0271	11-Oct-93	4,4'-DDT	0.1	0.1	UG/L	U	U
0271	01-Feb-91	4,4'-DDT	0.1	0.1	UG/L	U	U
0271	16-Sep-92	4,4'-DDT	0.1	0.1	UG/L	U	UJ
0076	22-Jun-92	4,4'-DDT	0.1	0.1	UG/L		U
0076	16-Dec-91	4,4'-DDT	0.1	0.1	UG/L	U	U
0076	07-Apr-94	4,4'-DDT	0.11	0.11	UG/L	U	U
0076	23-Mar-92	4,4'-DDT	0.11	0.11	UG/L	U	U
0076	06-May-91	4,4'-DDT	0.5	0.5	UG/L	U	U
0271	06-May-91	4,4'-DDT	1.5	1.5	UG/L	U	U
0271	07-Apr-94	4,6-Dinitro-o-Cresol	26	26	UG/L	U	U
0076	22-Jun-92	4,6-Dinitro-o-Cresol	26	26	UG/L	U	U
0271	07-Apr-94	4,6-Dinitro-o-Cresol	26	26	UG/L	U	U
0271	11-Oct-93	4,6-Dinitro-o-Cresol	26	26	UG/L	U	U
0076	16-Sep-92	4,6-Dinitro-o-Cresol	26	26	UG/L	U	UJ
0271	16-Sep-92	4,6-Dinitro-o-Cresol	26	26	UG/L	U	UJ
0271	22-Jun-92	4,6-Dinitro-o-Cresol	26	26	UG/L	U	U
0076	23-Mar-92	4,6-Dinitro-o-Cresol	26	26	UG/L	U	U
0076	07-Apr-94	4,6-Dinitro-o-Cresol	26	26	UG/L	U	U
0076	11-Oct-93	4,6-Dinitro-o-Cresol	26	26	UG/L	U	U
0076	01-Feb-91	4,6-Dinitro-o-Cresol	50	50	UG/L	U	U
0271	01-Feb-91	4,6-Dinitro-o-Cresol	50	50	UG/L	U	U
0076	06-May-91	4,6-Dinitro-o-Cresol	50	50	UG/L	U	U
0076	16-Dec-91	4,6-Dinitro-o-Cresol	50	50	UG/L	U	U
0271	16-Dec-91	4,6-Dinitro-o-Cresol	50	50	UG/L	U	U
0271	06-Nov-90	4,6-Dinitro-o-Cresol	50	50	UG/L	U	U
0271	06-May-91	4,6-Dinitro-o-Cresol	50	50	UG/L	U	U
0271	05-Aug-91	4,6-Dinitro-o-Cresol	50	50	UG/L	U	UJ
0076	06-Nov-90	4,6-Dinitro-o-Cresol	50	50	UG/L	U	U
0271	01-Feb-91	4-Bromophenyl-phenyl Ether	10	10	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual	Data Qual
0271	06-Nov-90	4-Bromophenyl-phenyl Ether	10	10	UG/L	U	U
0271	05-Aug-91	4-Bromophenyl-phenyl Ether	10	10	UG/L	U	UJ
0271	06-May-91	4-Bromophenyl-phenyl Ether	10	10	UG/L	U	U
0271	11-Oct-93	4-Bromophenyl-phenyl Ether	10	10	UG/L	U	U
0076	23-Mar-92	4-Bromophenyl-phenyl Ether	10	10	UG/L	U	U
0076	06-Nov-90	4-Bromophenyl-phenyl Ether	10	10	UG/L	U	U
0076	06-May-91	4-Bromophenyl-phenyl Ether	10	10	UG/L	U	U
0271	16-Sep-92	4-Bromophenyl-phenyl Ether	10	10	UG/L	U	U
0076	16-Dec-91	4-Bromophenyl-phenyl Ether	10	10	UG/L	U	U
0076	22-Jun-92	4-Bromophenyl-phenyl Ether	10	10	UG/L	U	U
0271	16-Dec-91	4-Bromophenyl-phenyl Ether	10	10	UG/L	U	U
0076	16-Sep-92	4-Bromophenyl-phenyl Ether	10	10	UG/L	U	U
0271	22-Jun-92	4-Bromophenyl-phenyl Ether	10	10	UG/L	U	U
0076	01-Feb-91	4-Bromophenyl-phenyl Ether	10	10	UG/L	U	U
0076	11-Oct-93	4-Bromophenyl-phenyl Ether	10	10	UG/L	U	U
0271	07-Apr-94	4-Bromophenyl-phenyl Ether	11	11	UG/L	U	U
0271	07-Apr-94	4-Bromophenyl-phenyl Ether	11	11	UG/L	U	U
0076	07-Apr-94	4-Bromophenyl-phenyl Ether	11	11	UG/L	U	U
0076	06-Nov-90	4-Chloroaniline	10	10	UG/L	U	U
0271	06-May-91	4-Chloroaniline	10	10	UG/L	U	U
0271	11-Oct-93	4-Chloroaniline	10	10	UG/L	U	U
0076	16-Dec-91	4-Chloroaniline	10	10	UG/L	U	U
0076	06-May-91	4-Chloroaniline	10	10	UG/L	U	U
0076	22-Jun-92	4-Chloroaniline	10	10	UG/L	U	U
0271	05-Aug-91	4-Chloroaniline	10	10	UG/L	U	UJ
0271	16-Dec-91	4-Chloroaniline	10	10	UG/L	U	U
0076	01-Feb-91	4-Chloroaniline	10	10	UG/L	U	U
0076	11-Oct-93	4-Chloroaniline	10	10	UG/L	U	U
0271	01-Feb-91	4-Chloroaniline	10	10	UG/L	U	U
0076	16-Sep-92	4-Chloroaniline	10	10	UG/L	U	U
0271	06-Nov-90	4-Chloroaniline	10	10	UG/L	U	U
0076	23-Mar-92	4-Chloroaniline	10	10	UG/L	U	U
0271	22-Jun-92	4-Chloroaniline	10	10	UG/L	U	U
0271	16-Sep-92	4-Chloroaniline	10	10	UG/L	U	U
0271	07-Apr-94	4-Chloroaniline	11	11	UG/L	U	U
0076	07-Apr-94	4-Chloroaniline	11	11	UG/L	U	U
0271	07-Apr-94	4-Chloroaniline	11	11	UG/L	U	U
0076	01-Feb-91	4-Chlorophenyl-phenylether	10	10	UG/L	U	U
0271	06-Nov-90	4-Chlorophenyl-phenylether	10	10	UG/L	U	U
0076	22-Jun-92	4-Chlorophenyl-phenylether	10	10	UG/L	U	U
0271	05-Aug-91	4-Chlorophenyl-phenylether	10	10	UG/L	U	UJ
0271	01-Feb-91	4-Chlorophenyl-phenylether	10	10	UG/L	U	U
0271	06-May-91	4-Chlorophenyl-phenylether	10	10	UG/L	U	U
0076	16-Dec-91	4-Chlorophenyl-phenylether	10	10	UG/L	U	U
0271	22-Jun-92	4-Chlorophenyl-phenylether	10	10	UG/L	U	U
0076	23-Mar-92	4-Chlorophenyl-phenylether	10	10	UG/L	U	U
0076	11-Oct-93	4-Chlorophenyl-phenylether	10	10	UG/L	U	U
0271	16-Dec-91	4-Chlorophenyl-phenylether	10	10	UG/L	U	U
0076	16-Sep-92	4-Chlorophenyl-phenylether	10	10	UG/L	U	U
0271	11-Oct-93	4-Chlorophenyl-phenylether	10	10	UG/L	U	U
0076	06-Nov-90	4-Chlorophenyl-phenylether	10	10	UG/L	U	U
0076	06-May-91	4-Chlorophenyl-phenylether	10	10	UG/L	U	U
0271	16-Sep-92	4-Chlorophenyl-phenylether	10	10	UG/L	U	U
0076	07-Apr-94	4-Chlorophenyl-phenylether	11	11	UG/L	U	U
0271	07-Apr-94	4-Chlorophenyl-phenylether	11	11	UG/L	U	U
0271	07-Apr-94	4-Chlorophenyl-phenylether	11	11	UG/L	U	U
0076	07-Apr-94	4-Chlorotoluene	1	1	UG/L	U	U
0271	11-Oct-93	4-Chlorotoluene	1	1	UG/L	U	UJ
0076	11-Oct-93	4-Chlorotoluene	1	1	UG/L	U	UJ
0271	07-Apr-94	4-Chlorotoluene	1	1	UG/L	U	U
0271	07-Apr-94	4-Chlorotoluene	1	1	UG/L	U	U
0271	11-Oct-93	4-Methyl-2-pentanone	5	5	UG/L	U	UJ
0076	11-Oct-93	4-Methyl-2-pentanone	5	5	UG/L	U	UJ
0076	07-Apr-94	4-Methyl-2-pentanone	5	5	UG/L	U	UJ
0271	07-Apr-94	4-Methyl-2-pentanone	5	5	UG/L	U	UJ
0271	07-Apr-94	4-Methyl-2-pentanone	5	5	UG/L	U	U
0271	13-Sep-88	4-Methyl-2-pentanone	10	10	UG/L	U	U
0076	25-Apr-90	4-Methyl-2-pentanone	10	10	UG/L	U	U
0271	25-Apr-90	4-Methyl-2-pentanone	10	10	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	08-Mar-88	4-Methyl-2-pentanone	10	10	UG/L	U	U
0271	24-Jun-88	4-Methyl-2-pentanone	10	10	UG/L	U	U
0076	13-Sep-88	4-Methyl-2-pentanone	10	10	UG/L	U	U
0076	24-Jun-88	4-Methyl-2-pentanone	10	10	UG/L	U	U
0271	11-Oct-93	4-Methylphenol	10	10	UG/L	U	U
0271	01-Feb-91	4-Methylphenol	10	10	UG/L	U	U
0271	06-Nov-90	4-Methylphenol	10	10	UG/L	U	U
0271	22-Jun-92	4-Methylphenol	10	10	UG/L	U	U
0271	05-Aug-91	4-Methylphenol	10	10	UG/L	U	U
0076	16-Dec-91	4-Methylphenol	10	10	UG/L	U	U
0271	16-Dec-91	4-Methylphenol	10	10	UG/L	U	U
0076	11-Oct-93	4-Methylphenol	10	10	UG/L	U	U
0076	06-Nov-90	4-Methylphenol	10	10	UG/L	U	U
0076	01-Feb-91	4-Methylphenol	10	10	UG/L	U	U
0076	16-Sep-92	4-Methylphenol	10	10	UG/L	U	U
0271	06-May-91	4-Methylphenol	10	10	UG/L	U	U
0076	22-Jun-92	4-Methylphenol	10	10	UG/L	U	U
0271	16-Sep-92	4-Methylphenol	10	10	UG/L	U	U
0076	06-May-91	4-Methylphenol	10	10	UG/L	U	U
0076	23-Mar-92	4-Methylphenol	10	10	UG/L	U	U
0076	07-Apr-94	4-Methylphenol	11	11	UG/L	U	U
0271	07-Apr-94	4-Methylphenol	11	11	UG/L	U	U
0271	07-Apr-94	4-Methylphenol	11	11	UG/L	U	U
0076	11-Oct-93	4-Nitroaniline	26	26	UG/L	U	U
0076	16-Sep-92	4-Nitroaniline	26	26	UG/L	U	UJ
0076	07-Apr-94	4-Nitroaniline	26	26	UG/L	U	UJ
0271	07-Apr-94	4-Nitroaniline	26	26	UG/L	U	UJ
0271	22-Jun-92	4-Nitroaniline	26	26	UG/L	U	U
0076	22-Jun-92	4-Nitroaniline	26	26	UG/L	U	U
0271	07-Apr-94	4-Nitroaniline	26	26	UG/L	U	UJ
0076	23-Mar-92	4-Nitroaniline	26	26	UG/L	U	U
0271	16-Sep-92	4-Nitroaniline	26	26	UG/L	U	UJ
0271	11-Oct-93	4-Nitroaniline	26	26	UG/L	U	U
0076	06-May-91	4-Nitroaniline	50	50	UG/L	U	U
0076	06-Nov-90	4-Nitroaniline	50	50	UG/L	U	U
0271	06-May-91	4-Nitroaniline	50	50	UG/L	U	U
0271	06-Nov-90	4-Nitroaniline	50	50	UG/L	U	U
0076	16-Dec-91	4-Nitroaniline	50	50	UG/L	U	U
0271	01-Feb-91	4-Nitroaniline	50	50	UG/L	U	U
0271	05-Aug-91	4-Nitroaniline	50	50	UG/L	U	UJ
0076	01-Feb-91	4-Nitroaniline	50	50	UG/L	U	U
0271	16-Dec-91	4-Nitroaniline	50	50	UG/L	U	U
0271	22-Jun-92	4-Nitrophenol	26	26	UG/L	U	U
0076	23-Mar-92	4-Nitrophenol	26	26	UG/L	U	UJ
0076	16-Sep-92	4-Nitrophenol	26	26	UG/L	U	UJ
0076	22-Jun-92	4-Nitrophenol	26	26	UG/L	U	U
0076	07-Apr-94	4-Nitrophenol	26	26	UG/L	U	U
0271	11-Oct-93	4-Nitrophenol	26	26	UG/L	U	UJ
0076	11-Oct-93	4-Nitrophenol	26	26	UG/L	U	UJ
0271	07-Apr-94	4-Nitrophenol	26	26	UG/L	U	U
0271	16-Sep-92	4-Nitrophenol	26	26	UG/L	U	UJ
0271	07-Apr-94	4-Nitrophenol	26	26	UG/L	U	U
0271	05-Aug-91	4-Nitrophenol	50	50	UG/L	U	UJ
0271	01-Feb-91	4-Nitrophenol	50	50	UG/L	U	U
0271	16-Dec-91	4-Nitrophenol	50	50	UG/L	U	U
0076	16-Dec-91	4-Nitrophenol	50	50	UG/L	U	U
0271	06-Nov-90	4-Nitrophenol	50	50	UG/L	U	U
0076	06-Nov-90	4-Nitrophenol	50	50	UG/L	U	U
0076	06-May-91	4-Nitrophenol	50	50	UG/L	U	U
0271	06-May-91	4-Nitrophenol	50	50	UG/L	U	U
0076	01-Feb-91	4-Nitrophenol	50	50	UG/L	U	U
0271	06-May-91	4-chloro-3-methylphenol	10	10	UG/L	U	U
0076	11-Oct-93	4-chloro-3-methylphenol	10	10	UG/L	U	U
0076	16-Sep-92	4-chloro-3-methylphenol	10	10	UG/L	U	U
0271	16-Sep-92	4-chloro-3-methylphenol	10	10	UG/L	U	U
0271	01-Feb-91	4-chloro-3-methylphenol	10	10	UG/L	U	U
0076	01-Feb-91	4-chloro-3-methylphenol	10	10	UG/L	U	U
0076	06-May-91	4-chloro-3-methylphenol	10	10	UG/L	U	U
0271	16-Dec-91	4-chloro-3-methylphenol	10	10	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	23-Mar-92	4-chloro-3-methylphenol	10	10	UG/L	U	U
0076	22-Jun-92	4-chloro-3-methylphenol	10	10	UG/L	U	U
0271	22-Jun-92	4-chloro-3-methylphenol	10	10	UG/L	U	U
0271	05-Aug-91	4-chloro-3-methylphenol	10	10	UG/L	U	U
0076	06-Nov-90	4-chloro-3-methylphenol	10	10	UG/L	U	U
0271	06-Nov-90	4-chloro-3-methylphenol	10	10	UG/L	U	U
0076	16-Dec-91	4-chloro-3-methylphenol	10	10	UG/L	U	U
0271	11-Oct-93	4-chloro-3-methylphenol	10	10	UG/L	U	U
0271	07-Apr-94	4-chloro-3-methylphenol	11	11	UG/L	U	U
0076	07-Apr-94	4-chloro-3-methylphenol	11	11	UG/L	U	U
0271	07-Apr-94	4-chloro-3-methylphenol	11	11	UG/L	U	U
0076	22-Jun-92	Acenaphthene	10	10	UG/L	U	U
0271	05-Aug-91	Acenaphthene	10	10	UG/L	U	UJ
0076	16-Dec-91	Acenaphthene	10	10	UG/L	U	U
0076	06-Nov-90	Acenaphthene	10	10	UG/L	U	U
0271	06-Nov-90	Acenaphthene	10	10	UG/L	U	U
0271	16-Dec-91	Acenaphthene	10	10	UG/L	U	U
0271	01-Feb-91	Acenaphthene	10	10	UG/L	U	U
0271	11-Oct-93	Acenaphthene	10	10	UG/L	U	U
0076	11-Oct-93	Acenaphthene	10	10	UG/L	U	U
0076	16-Sep-92	Acenaphthene	10	10	UG/L	U	U
0076	06-May-91	Acenaphthene	10	10	UG/L	U	U
0271	16-Sep-92	Acenaphthene	10	10	UG/L	U	U
0271	22-Jun-92	Acenaphthene	10	10	UG/L	U	U
0076	23-Mar-92	Acenaphthene	10	10	UG/L	U	U
0271	06-May-91	Acenaphthene	10	10	UG/L	U	U
0076	01-Feb-91	Acenaphthene	10	10	UG/L	U	U
0271	07-Apr-94	Acenaphthene	11	11	UG/L	U	U
0076	07-Apr-94	Acenaphthene	11	11	UG/L	U	U
0271	07-Apr-94	Acenaphthene	11	11	UG/L	U	U
0076	16-Sep-92	Acenaphthylene	10	10	UG/L	U	U
0076	06-May-91	Acenaphthylene	10	10	UG/L	U	U
0271	11-Oct-93	Acenaphthylene	10	10	UG/L	U	U
0271	16-Sep-92	Acenaphthylene	10	10	UG/L	U	U
0271	06-May-91	Acenaphthylene	10	10	UG/L	U	U
0271	05-Aug-91	Acenaphthylene	10	10	UG/L	U	UJ
0076	23-Mar-92	Acenaphthylene	10	10	UG/L	U	U
0271	01-Feb-91	Acenaphthylene	10	10	UG/L	U	U
0076	16-Dec-91	Acenaphthylene	10	10	UG/L	U	U
0076	11-Oct-93	Acenaphthylene	10	10	UG/L	U	U
0271	16-Dec-91	Acenaphthylene	10	10	UG/L	U	U
0271	22-Jun-92	Acenaphthylene	10	10	UG/L	U	U
0076	06-Nov-90	Acenaphthylene	10	10	UG/L	U	U
0076	22-Jun-92	Acenaphthylene	10	10	UG/L	U	U
0271	06-Nov-90	Acenaphthylene	10	10	UG/L	U	U
0076	01-Feb-91	Acenaphthylene	10	10	UG/L	U	U
0076	07-Apr-94	Acenaphthylene	11	11	UG/L	U	U
0271	07-Apr-94	Acenaphthylene	11	11	UG/L	U	U
0271	07-Apr-94	Acenaphthylene	11	11	UG/L	U	U
0076	13-Sep-88	Acetone	2	10	UG/L	J	J
0271	24-Jun-88	Acetone	3	10	UG/L	JB	
0271	25-Apr-90	Acetone	5	10	UG/L	JB	
0076	24-Jun-88	Acetone	5	10	UG/L	JB	
0076	25-Apr-90	Acetone	9	10	UG/L	JB	
0271	08-Mar-88	Acetone	10	10	UG/L	U	U
0271	13-Sep-88	Acetone	12	10	UG/L		
0271	07-Apr-94	Acetone	20	20	UG/L	U	U
0076	07-Apr-94	Acetone	20	20	UG/L	U	U
0271	11-Oct-93	Acetone	20	20	UG/L	U	UJ
0076	11-Oct-93	Acetone	20	20	UG/L	U	UJ
0271	07-Apr-94	Acetone	20	20	UG/L	U	U
0271	11-Oct-93	Acetonitrile	10	10	UG/L	U	U
0076	11-Oct-93	Acetonitrile	10	10	UG/L	U	U
0271	07-Apr-94	Acetonitrile	10	10	UG/L	U	UJ
0076	07-Apr-94	Acetonitrile	10	10	UG/L	U	UJ
0271	07-Apr-94	Acetonitrile	10	10	UG/L	U	U
0076	07-Apr-94	Acrylonitrile	10	10	UG/L	U	UJ
0271	07-Apr-94	Acrylonitrile	10	10	UG/L	U	U
0271	07-Apr-94	Acrylonitrile	10	10	UG/L	U	UJ

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual	Data Qual
0076	11-Oct-93	Acrylonitrile	10	10	UG/L	U	U
0271	11-Oct-93	Acrylonitrile	10	10	UG/L	U	U
0271	16-Sep-92	Actinium-227	0.355	1	PCI/L		
0076	16-Sep-92	Actinium-227	0.84	0.84	PCI/L	U	U
0076	16-Dec-91	Actinium-227	1	1	PCI/L	U	U
0271	05-Aug-91	Actinium-227	1	0	PCI/L	U	U
0076	01-Feb-91	Actinium-227	1	0	PCI/L	U	U
0271	16-Dec-91	Actinium-227	1	1	PCI/L	U	U
0271	01-Feb-91	Actinium-227	1	0	PCI/L	U	U
0076	23-Mar-92	Actinium-227	14	14	PCI/L	U	U
0271	22-Jun-92	Actinium-227	18	18	PCI/L	U	U
0076	22-Jun-92	Actinium-227	22	22	PCI/L	U	U
0271	05-Aug-91	Aldrin	0.04	0.04	UG/L	U	U
0076	11-Oct-93	Aldrin	0.05	0.05	UG/L	U	UJ
0271	16-Sep-92	Aldrin	0.05	0.05	UG/L	B	U
0271	06-May-91	Aldrin	0.05	0.05	UG/L	U	U
0076	01-Feb-91	Aldrin	0.05	0.05	UG/L	U	U
0271	07-Apr-94	Aldrin	0.05	0.05	UG/L	U	U
0271	11-Oct-93	Aldrin	0.05	0.05	UG/L	U	U
0271	01-Feb-91	Aldrin	0.05	0.05	UG/L	U	U
0076	06-Nov-90	Aldrin	0.05	0.05	UG/L	U	U
0076	06-May-91	Aldrin	0.05	0.05	UG/L	U	U
0271	06-Nov-90	Aldrin	0.05	0.05	UG/L	U	U
0076	16-Sep-92	Aldrin	0.05	0.05	UG/L	B	U
0271	22-Jun-92	Aldrin	0.051	0.051	UG/L	U	U
0076	16-Dec-91	Aldrin	0.052	0.052	UG/L	U	U
0271	07-Apr-94	Aldrin	0.052	0.052	UG/L	U	U
0076	22-Jun-92	Aldrin	0.052	0.052	UG/L	U	U
0271	16-Dec-91	Aldrin	0.052	0.052	UG/L	U	U
0076	23-Mar-92	Aldrin	0.053	0.053	UG/L	U	U
0076	07-Apr-94	Aldrin	0.055	0.055	UG/L	U	U
0076	06-May-91	Aldrin	0.25	0.25	UG/L	U	U
0271	06-May-91	Aldrin	0.75	0.75	UG/L	U	U
0076	13-Sep-88	Alkalinity	272	1	MG/L		
0076	24-Jun-88	Alkalinity	308	1	MG/L		
0271	24-Jun-88	Alkalinity	334	1	MG/L		
0271	13-Sep-88	Alkalinity	335	1	MG/L		
0271	13-Sep-88	Alkalinity	335	1	MG/L		
0271	13-Sep-88	Alkalinity	335	1	MG/L		
0271	08-Mar-88	Alkalinity	335	1	MG/L		
0271	11-Oct-93	Alpha Chlordane	0.05	0.05	UG/L	U	U
0271	07-Apr-94	Alpha Chlordane	0.05	0.05	UG/L	U	U
0271	16-Sep-92	Alpha Chlordane	0.05	0.05	UG/L	U	U
0271	05-Aug-91	Alpha Chlordane	0.05	0.05	UG/L	U	U
0076	16-Sep-92	Alpha Chlordane	0.05	0.05	UG/L	U	U
0076	11-Oct-93	Alpha Chlordane	0.05	0.05	UG/L	U	UJ
0271	22-Jun-92	Alpha Chlordane	0.051	0.051	UG/L	U	U
0076	22-Jun-92	Alpha Chlordane	0.052	0.052	UG/L	U	U
0271	07-Apr-94	Alpha Chlordane	0.052	0.052	UG/L	U	U
0076	23-Mar-92	Alpha Chlordane	0.053	0.053	UG/L	U	U
0076	07-Apr-94	Alpha Chlordane	0.055	0.055	UG/L	U	U
0076	06-Nov-90	Alpha Chlordane	0.5	0.5	UG/L	U	U
0076	06-May-91	Alpha Chlordane	0.5	0.5	UG/L	U	U
0271	01-Feb-91	Alpha Chlordane	0.5	0.5	UG/L	U	U
0271	06-Nov-90	Alpha Chlordane	0.5	0.5	UG/L	U	U
0076	01-Feb-91	Alpha Chlordane	0.5	0.5	UG/L	U	U
0271	06-May-91	Alpha Chlordane	0.5	0.5	UG/L	U	U
0076	16-Dec-91	Alpha Chlordane	0.52	0.52	UG/L	U	U
0271	16-Dec-91	Alpha Chlordane	0.52	0.52	UG/L	U	U
0076	06-May-91	Alpha Chlordane	2.5	2.5	UG/L	U	U
0271	06-May-91	Alpha Chlordane	7.5	7.5	UG/L	U	U
0271	05-Aug-91	Alpha-BHC	0.03	0.03	UG/L	U	U
0271	06-Nov-90	Alpha-BHC	0.05	0.05	UG/L	U	U
0271	16-Sep-92	Alpha-BHC	0.05	0.05	UG/L	U	U
0076	06-May-91	Alpha-BHC	0.05	0.05	UG/L	U	U
0271	11-Oct-93	Alpha-BHC	0.05	0.05	UG/L	U	U
0271	01-Feb-91	Alpha-BHC	0.05	0.05	UG/L	U	U
0076	16-Sep-92	Alpha-BHC	0.05	0.05	UG/L	U	U
0076	11-Oct-93	Alpha-BHC	0.05	0.05	UG/L	U	UJ

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	07-Apr-94	Alpha-BHC	0.05	0.05	UG/L	U	U
0076	06-Nov-90	Alpha-BHC	0.05	0.05	UG/L	U	U
0271	06-May-91	Alpha-BHC	0.05	0.05	UG/L	U	U
0076	01-Feb-91	Alpha-BHC	0.05	0.05	UG/L	U	U
0271	22-Jun-92	Alpha-BHC	0.051	0.051	UG/L	U	U
0271	16-Dec-91	Alpha-BHC	0.052	0.052	UG/L	U	U
0076	22-Jun-92	Alpha-BHC	0.052	0.052	UG/L	U	U
0271	07-Apr-94	Alpha-BHC	0.052	0.052	UG/L	U	U
0076	16-Dec-91	Alpha-BHC	0.052	0.052	UG/L	U	U
0076	23-Mar-92	Alpha-BHC	0.053	0.053	UG/L	U	U
0076	07-Apr-94	Alpha-BHC	0.055	0.055	UG/L	U	U
0076	06-May-91	Alpha-BHC	0.25	0.25	UG/L	U	U
0271	06-May-91	Alpha-BHC	0.75	0.75	UG/L	U	U
0076	11-Oct-93	Aluminum	7.1	9.3	UG/L	B	U
0076	11-Oct-93	Aluminum	9.1	9.3	UG/L	B	U
0271	11-Oct-93	Aluminum	11.8	9.3	UG/L	B	U
0271	07-Apr-94	Aluminum	13.1	4.1	UG/L	B	U
0271	07-Apr-94	Aluminum	13.2	4.1	UG/L	B	U
0271	07-Apr-94	Aluminum	13.7	4.1	UG/L	B	U
0076	07-Apr-94	Aluminum	15.3	4.1	UG/L	B	U
0076	07-Apr-94	Aluminum	15.3	4.1	UG/L	B	U
0271	11-Oct-93	Aluminum	15.8	9.3	UG/L	B	U
0271	22-Jun-92	Aluminum	17	17	UG/L	U	UJ
0076	22-Jun-92	Aluminum	17	17	UG/L	U	UJ
0271	07-Apr-94	Aluminum	17.8	4.1	UG/L	B	U
0271	16-Sep-92	Aluminum	37	37	UG/L	U	U
0076	16-Sep-92	Aluminum	37	37	UG/L	U	U
0076	23-Mar-92	Aluminum	46	200	UG/L	U	U
0271	06-Nov-90	Aluminum	60	60	UG/L	U	U
0271	05-Aug-91	Aluminum	67.911	60	UG/L		
0076	06-Nov-90	Aluminum	68.8	60	UG/L	B	
0271	05-Aug-91	Aluminum	73.7	60	UG/L		
0076	06-May-91	Aluminum	92.2	60	UG/L	B	
0271	06-May-91	Aluminum	93.5	60	UG/L	B	
0076	01-Feb-91	Aluminum	106	40	UG/L	B	
0271	01-Feb-91	Aluminum	148	40	UG/L	B	
0076	16-Dec-91	Aluminum	200	200	UG/L	U	U
0271	16-Dec-91	Aluminum	200	200	UG/L	U	U
0271	07-Apr-94	Americium-241	0.025	0.019	PCI/L		J
0271	07-Apr-94	Americium-241	0.03	0.03	PCI/L	U	UJ
0076	07-Apr-94	Americium-241	0.046	0.046	PCI/L	U	U
0076	11-Oct-93	Americium-241	0.049	0.049	PCI/L	U	U
0271	11-Oct-93	Americium-241	0.1	0.1	PCI/L	U	U
0076	06-May-91	Americium-241	24.4	1	PCI/L	U	U
0271	01-Feb-91	Americium-241	29	0	PCI/L	U	U
0271	06-May-91	Americium-241	30.5	1	PCI/L	U	U
0076	01-Feb-91	Americium-241	42	0	PCI/L	U	U
0271	07-Apr-94	Ammonia	0.1	0.1	MG/L	U	U
0271	07-Apr-94	Ammonia	0.1	0.1	MG/L	U	U
0271	11-Oct-93	Ammonia	0.1	0.1	MG/L	U	U
0076	11-Oct-93	Ammonia	0.39	0.1	MG/L		
0076	07-Apr-94	Ammonia	0.58	0.1	MG/L		
0076	22-Jun-92	Anthracene	10	10	UG/L	U	U
0271	11-Oct-93	Anthracene	10	10	UG/L	U	U
0271	16-Dec-91	Anthracene	10	10	UG/L	U	U
0271	22-Jun-92	Anthracene	10	10	UG/L	U	U
0076	06-May-91	Anthracene	10	10	UG/L	U	U
0271	01-Feb-91	Anthracene	10	10	UG/L	U	U
0076	16-Dec-91	Anthracene	10	10	UG/L	U	U
0271	16-Sep-92	Anthracene	10	10	UG/L	U	U
0076	06-Nov-90	Anthracene	10	10	UG/L	U	U
0271	06-Nov-90	Anthracene	10	10	UG/L	U	U
0271	06-May-91	Anthracene	10	10	UG/L	U	U
0076	11-Oct-93	Anthracene	10	10	UG/L	U	U
0271	05-Aug-91	Anthracene	10	10	UG/L	U	UJ
0076	16-Sep-92	Anthracene	10	10	UG/L	U	U
0076	01-Feb-91	Anthracene	10	10	UG/L	U	U
0076	23-Mar-92	Anthracene	10	10	UG/L	U	U
0076	07-Apr-94	Anthracene	11	11	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	07-Apr-94	Anthracene	11	11	UG/L	U	U
0271	07-Apr-94	Anthracene	11	11	UG/L	U	U
0076	11-Oct-93	Antimony	0.5	0.5	UG/L	U	U
0271	11-Oct-93	Antimony	0.5	0.5	UG/L	U	U
0271	07-Apr-94	Antimony	0.58	0.58	UG/L	U	U
0271	07-Apr-94	Antimony	0.58	0.58	UG/L	U	U
0271	07-Apr-94	Antimony	0.58	0.58	UG/L	U	UJ
0271	07-Apr-94	Antimony	0.58	0.58	UG/L	U	U
0076	07-Apr-94	Antimony	0.58	0.58	UG/L	U	U
0271	22-Jun-92	Antimony	2	2	UG/L	U	U
0076	22-Jun-92	Antimony	2	2	UG/L	U	U
0076	11-Oct-93	Antimony	2.8	0.5	UG/L		
0271	16-Sep-92	Antimony	5	5	UG/L	U	UJ
0076	16-Sep-92	Antimony	5	5	UG/L	U	UJ
0271	11-Oct-93	Antimony	7	0.5	UG/L		
0076	07-Apr-94	Antimony	14.4	0.58	UG/L		
0076	01-Feb-91	Antimony	30	30	UG/L	U	U
0271	05-Aug-91	Antimony	30	30	UG/L	U	U
0076	06-Nov-90	Antimony	30	30	UG/L	U	U
0271	01-Feb-91	Antimony	30	30	UG/L	U	U
0271	06-Nov-90	Antimony	30	30	UG/L	U	U
0271	05-Aug-91	Antimony	30	30	UG/L	U	U
0076	23-Mar-92	Antimony	36	60	UG/L	U	U
0271	06-May-91	Antimony	38.3	30	UG/L	B	
0076	06-May-91	Antimony	40.2	30	UG/L	B	
0271	16-Dec-91	Antimony	60	60	UG/L	U	U
0076	16-Dec-91	Antimony	60	60	UG/L	U	U
0271	01-Feb-91	Antimony-124	59	0	PCI/L	U	U
0076	01-Feb-91	Antimony-124	70	0	PCI/L	U	U
0076	01-Feb-91	Antimony-125	83	0	PCI/L	U	U
0271	01-Feb-91	Antimony-125	84	0	PCI/L	U	U
0271	06-May-91	Aroclor-1016	0.5	0.5	UG/L	U	U
0271	06-Nov-90	Aroclor-1016	0.5	0.5	UG/L	U	U
0076	01-Feb-91	Aroclor-1016	0.5	0.5	UG/L	U	U
0271	01-Feb-91	Aroclor-1016	0.5	0.5	UG/L	U	U
0271	16-Sep-92	Aroclor-1016	0.5	0.5	UG/L	U	U
0271	07-Apr-94	Aroclor-1016	0.5	0.5	UG/L	U	U
0076	11-Oct-93	Aroclor-1016	0.5	0.5	UG/L	U	UJ
0076	06-Nov-90	Aroclor-1016	0.5	0.5	UG/L	U	U
0271	11-Oct-93	Aroclor-1016	0.5	0.5	UG/L	U	U
0076	06-May-91	Aroclor-1016	0.5	0.5	UG/L	U	U
0076	16-Sep-92	Aroclor-1016	0.5	0.5	UG/L	U	U
0271	22-Jun-92	Aroclor-1016	0.51	0.51	UG/L	U	U
0076	16-Dec-91	Aroclor-1016	0.52	0.52	UG/L	U	U
0076	22-Jun-92	Aroclor-1016	0.52	0.52	UG/L	U	U
0271	07-Apr-94	Aroclor-1016	0.52	0.52	UG/L	U	U
0271	16-Dec-91	Aroclor-1016	0.52	0.52	UG/L	U	U
0076	07-Apr-94	Aroclor-1016	0.55	0.55	UG/L	U	U
0271	05-Aug-91	Aroclor-1016	1	1	UG/L	U	U
0076	23-Mar-92	Aroclor-1016	1.1	1.1	UG/L	U	U
0076	06-May-91	Aroclor-1016	2.5	2.5	UG/L	U	U
0271	06-May-91	Aroclor-1016	7.5	7.5	UG/L	U	U
0271	06-May-91	Aroclor-1221	0.5	0.5	UG/L	U	U
0271	07-Apr-94	Aroclor-1221	0.5	0.5	UG/L	U	U
0271	11-Oct-93	Aroclor-1221	0.5	0.5	UG/L	U	U
0076	16-Sep-92	Aroclor-1221	0.5	0.5	UG/L	U	U
0076	01-Feb-91	Aroclor-1221	0.5	0.5	UG/L	U	U
0271	01-Feb-91	Aroclor-1221	0.5	0.5	UG/L	U	U
0271	06-Nov-90	Aroclor-1221	0.5	0.5	UG/L	U	U
0076	06-Nov-90	Aroclor-1221	0.5	0.5	UG/L	U	U
0076	11-Oct-93	Aroclor-1221	0.5	0.5	UG/L	U	UJ
0076	06-May-91	Aroclor-1221	0.5	0.5	UG/L	U	U
0271	16-Sep-92	Aroclor-1221	0.5	0.5	UG/L	U	U
0271	22-Jun-92	Aroclor-1221	0.51	0.51	UG/L	U	U
0076	22-Jun-92	Aroclor-1221	0.52	0.52	UG/L	U	U
0076	16-Dec-91	Aroclor-1221	0.52	0.52	UG/L	U	U
0271	07-Apr-94	Aroclor-1221	0.52	0.52	UG/L	U	U
0271	16-Dec-91	Aroclor-1221	0.52	0.52	UG/L	U	U
0076	07-Apr-94	Aroclor-1221	0.55	0.55	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	05-Aug-91	Aroclor-1221	1	1	UG/L	U	U
0076	23-Mar-92	Aroclor-1221	2.1	2.1	UG/L	U	U
0076	06-May-91	Aroclor-1221	2.5	2.5	UG/L	U	U
0271	06-May-91	Aroclor-1221	7.5	7.5	UG/L	U	U
0271	01-Feb-91	Aroclor-1232	0.5	0.5	UG/L	U	U
0076	11-Oct-93	Aroclor-1232	0.5	0.5	UG/L	U	UJ
0271	11-Oct-93	Aroclor-1232	0.5	0.5	UG/L	U	U
0271	16-Sep-92	Aroclor-1232	0.5	0.5	UG/L	U	U
0076	01-Feb-91	Aroclor-1232	0.5	0.5	UG/L	U	U
0271	07-Apr-94	Aroclor-1232	0.5	0.5	UG/L	U	U
0076	16-Sep-92	Aroclor-1232	0.5	0.5	UG/L	U	U
0271	06-Nov-90	Aroclor-1232	0.5	0.5	UG/L	U	U
0076	06-May-91	Aroclor-1232	0.5	0.5	UG/L	U	U
0271	06-May-91	Aroclor-1232	0.5	0.5	UG/L	U	U
0076	06-Nov-90	Aroclor-1232	0.5	0.5	UG/L	U	U
0271	22-Jun-92	Aroclor-1232	0.51	0.51	UG/L	U	U
0271	07-Apr-94	Aroclor-1232	0.52	0.52	UG/L	U	U
0076	16-Dec-91	Aroclor-1232	0.52	0.52	UG/L	U	U
0076	22-Jun-92	Aroclor-1232	0.52	0.52	UG/L	U	U
0271	16-Dec-91	Aroclor-1232	0.52	0.52	UG/L	U	U
0076	07-Apr-94	Aroclor-1232	0.55	0.55	UG/L	U	U
0271	05-Aug-91	Aroclor-1232	1	1	UG/L	U	U
0076	23-Mar-92	Aroclor-1232	1.1	1.1	UG/L	U	U
0076	06-May-91	Aroclor-1232	2.5	2.5	UG/L	U	U
0271	06-May-91	Aroclor-1232	7.5	7.5	UG/L	U	U
0076	16-Sep-92	Aroclor-1242	0.5	0.5	UG/L	U	U
0076	11-Oct-93	Aroclor-1242	0.5	0.5	UG/L	U	UJ
0271	07-Apr-94	Aroclor-1242	0.5	0.5	UG/L	U	U
0271	01-Feb-91	Aroclor-1242	0.5	0.5	UG/L	U	U
0076	06-May-91	Aroclor-1242	0.5	0.5	UG/L	U	U
0271	16-Sep-92	Aroclor-1242	0.5	0.5	UG/L	U	U
0076	06-Nov-90	Aroclor-1242	0.5	0.5	UG/L	U	U
0271	06-Nov-90	Aroclor-1242	0.5	0.5	UG/L	U	U
0076	01-Feb-91	Aroclor-1242	0.5	0.5	UG/L	U	U
0271	06-May-91	Aroclor-1242	0.5	0.5	UG/L	U	U
0271	11-Oct-93	Aroclor-1242	0.5	0.5	UG/L	U	U
0271	22-Jun-92	Aroclor-1242	0.51	0.51	UG/L	U	U
0076	22-Jun-92	Aroclor-1242	0.52	0.52	UG/L	U	U
0271	16-Dec-91	Aroclor-1242	0.52	0.52	UG/L	U	U
0076	16-Dec-91	Aroclor-1242	0.52	0.52	UG/L	U	U
0271	07-Apr-94	Aroclor-1242	0.52	0.52	UG/L	U	U
0076	07-Apr-94	Aroclor-1242	0.55	0.55	UG/L	U	U
0271	05-Aug-91	Aroclor-1242	1	1	UG/L	U	U
0076	23-Mar-92	Aroclor-1242	1.1	1.1	UG/L	U	U
0076	06-May-91	Aroclor-1242	2.5	2.5	UG/L	U	U
0271	06-May-91	Aroclor-1242	7.5	7.5	UG/L	U	U
0271	01-Feb-91	Aroclor-1248	0.5	0.5	UG/L	U	U
0076	06-May-91	Aroclor-1248	0.5	0.5	UG/L	U	U
0076	01-Feb-91	Aroclor-1248	0.5	0.5	UG/L	U	U
0271	16-Sep-92	Aroclor-1248	0.5	0.5	UG/L	U	U
0076	16-Sep-92	Aroclor-1248	0.5	0.5	UG/L	U	U
0271	11-Oct-93	Aroclor-1248	0.5	0.5	UG/L	U	U
0271	06-Nov-90	Aroclor-1248	0.5	0.5	UG/L	U	U
0271	07-Apr-94	Aroclor-1248	0.5	0.5	UG/L	U	U
0076	11-Oct-93	Aroclor-1248	0.5	0.5	UG/L	U	UJ
0076	06-Nov-90	Aroclor-1248	0.5	0.5	UG/L	U	U
0271	06-May-91	Aroclor-1248	0.5	0.5	UG/L	U	U
0271	22-Jun-92	Aroclor-1248	0.51	0.51	UG/L	U	U
0076	22-Jun-92	Aroclor-1248	0.52	0.52	UG/L	U	U
0271	07-Apr-94	Aroclor-1248	0.52	0.52	UG/L	U	U
0271	16-Dec-91	Aroclor-1248	0.52	0.52	UG/L	U	U
0076	16-Dec-91	Aroclor-1248	0.52	0.52	UG/L	U	U
0076	07-Apr-94	Aroclor-1248	0.55	0.55	UG/L	U	U
0271	05-Aug-91	Aroclor-1248	1	1	UG/L	U	U
0076	23-Mar-92	Aroclor-1248	1.1	1.1	UG/L	U	U
0076	06-May-91	Aroclor-1248	2.5	2.5	UG/L	U	U
0271	06-May-91	Aroclor-1248	7.5	7.5	UG/L	U	U
0076	11-Oct-93	Aroclor-1254	0.5	0.5	UG/L	U	UJ
0271	11-Oct-93	Aroclor-1254	0.5	0.5	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect Limit	Units	Lab Qual.	Data Qual.
0076	16-Sep-92	Aroclor-1254	0.5	0.5	UG/L	U	U
0271	07-Apr-94	Aroclor-1254	0.5	0.5	UG/L	U	U
0271	16-Sep-92	Aroclor-1254	0.5	0.5	UG/L	U	U
0271	22-Jun-92	Aroclor-1254	0.51	0.51	UG/L	U	U
0271	07-Apr-94	Aroclor-1254	0.52	0.52	UG/L	U	U
0076	22-Jun-92	Aroclor-1254	0.52	0.52	UG/L	U	U
0076	07-Apr-94	Aroclor-1254	0.55	0.55	UG/L	U	U
0076	16-Dec-91	Aroclor-1254	1	1	UG/L	U	U
0076	06-Nov-90	Aroclor-1254	1	1	UG/L	U	U
0271	06-May-91	Aroclor-1254	1	1	UG/L	U	U
0271	01-Feb-91	Aroclor-1254	1	1	UG/L	U	U
0271	06-Nov-90	Aroclor-1254	1	1	UG/L	U	U
0271	05-Aug-91	Aroclor-1254	1	1	UG/L	U	U
0271	16-Dec-91	Aroclor-1254	1	1	UG/L	U	U
0076	01-Feb-91	Aroclor-1254	1	1	UG/L	U	U
0076	06-May-91	Aroclor-1254	1	1	UG/L	U	U
0076	23-Mar-92	Aroclor-1254	1.1	1.1	UG/L	U	U
0076	06-May-91	Aroclor-1254	5	5	UG/L	U	U
0271	06-May-91	Aroclor-1254	15	15	UG/L	U	U
0076	16-Sep-92	Aroclor-1260	0.5	0.5	UG/L	U	U
0076	11-Oct-93	Aroclor-1260	0.5	0.5	UG/L	U	UJ
0271	07-Apr-94	Aroclor-1260	0.5	0.5	UG/L	U	U
0271	11-Oct-93	Aroclor-1260	0.5	0.5	UG/L	U	U
0271	16-Sep-92	Aroclor-1260	0.5	0.5	UG/L	U	U
0271	22-Jun-92	Aroclor-1260	0.51	0.51	UG/L	U	U
0271	07-Apr-94	Aroclor-1260	0.52	0.52	UG/L	U	U
0076	22-Jun-92	Aroclor-1260	0.52	0.52	UG/L	U	U
0076	07-Apr-94	Aroclor-1260	0.55	0.55	UG/L	U	U
0076	06-Nov-90	Aroclor-1260	1	1	UG/L	U	U
0271	16-Dec-91	Aroclor-1260	1	1	UG/L	U	U
0076	06-May-91	Aroclor-1260	1	1	UG/L	U	U
0271	01-Feb-91	Aroclor-1260	1	1	UG/L	U	U
0271	05-Aug-91	Aroclor-1260	1	1	UG/L	U	U
0076	16-Dec-91	Aroclor-1260	1	1	UG/L	U	U
0076	01-Feb-91	Aroclor-1260	1	1	UG/L	U	U
0271	06-May-91	Aroclor-1260	1	1	UG/L	U	U
0271	06-Nov-90	Aroclor-1260	1	1	UG/L	U	U
0076	23-Mar-92	Aroclor-1260	1.1	1.1	UG/L	U	U
0076	06-May-91	Aroclor-1260	5	5	UG/L	U	U
0271	06-May-91	Aroclor-1260	15	15	UG/L	U	U
0076	22-Jun-92	Arsenic	2	2	UG/L	U	U
0271	07-Apr-94	Arsenic	2	2	UG/L	U	UJ
0271	07-Apr-94	Arsenic	2	2	UG/L	U	UJ
0271	22-Jun-92	Arsenic	2	2	UG/L	U	U
0271	06-Nov-90	Arsenic	2	2	UG/L	U	U
0271	07-Apr-94	Arsenic	2	2	UG/L	U	UJ
0076	23-Mar-92	Arsenic	2	10	UG/L	U	U
0076	01-Feb-91	Arsenic	2	2	UG/L	U	U
0076	07-Apr-94	Arsenic	2	2	UG/L	U	U
0271	07-Apr-94	Arsenic	2	2	UG/L	U	UJ
0076	07-Apr-94	Arsenic	2	2	UG/L	U	UJ
0076	11-Oct-93	Arsenic	2	2	UG/L	U	UJ
0076	11-Oct-93	Arsenic	2	2	UG/L	U	UJ
0271	11-Oct-93	Arsenic	2	2	UG/L	U	U
0271	11-Oct-93	Arsenic	2	2	UG/L	U	UJ
0076	16-Sep-92	Arsenic	2	2	UG/L	U	UJ
0271	05-Aug-91	Arsenic	2	2	UG/L	U	U
0076	06-Nov-90	Arsenic	2	2	UG/L	U	U
0271	01-Feb-91	Arsenic	2	2	UG/L	U	U
0271	06-May-91	Arsenic	2	2	UG/L	U	U
0271	16-Sep-92	Arsenic	2	2	UG/L	U	UJ
0271	05-Aug-91	Arsenic	2	2	UG/L	U	U
0076	06-May-91	Arsenic	2	2	UG/L	U	UJ
0076	01-Feb-84	Arsenic	5	5	UG/L	U	U
0076	16-Dec-91	Arsenic	10	10	UG/L	U	U
0271	16-Dec-91	Arsenic	10	10	UG/L	U	U
0271	13-Dec-85	Arsenic	10	10	UG/L	U	U
0076	12-Dec-85	Arsenic	10	10	UG/L	U	U
0076	16-Sep-92	Barium	75	2	UG/L		

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	16-Sep-92	Barium	78.6	2	UG/L		
0076	22-Jun-92	Barium	79.7	3	UG/L	B	
0076	07-Apr-94	Barium	81.6	1.1	UG/L	B	J
0076	07-Apr-94	Barium	81.7	1.1	UG/L	B	J
0076	11-Oct-93	Barium	82.1	0.5	UG/L	B	J
0271	22-Jun-92	Barium	82.4	3	UG/L	B	
0271	11-Oct-93	Barium	83.4	0.5	UG/L	B	J
0076	23-Mar-92	Barium	83.6	200	UG/L	B	
0271	11-Oct-93	Barium	84.3	0.5	UG/L	B	J
0076	06-May-91	Barium	84.5	2	UG/L	B	
0076	11-Oct-93	Barium	84.9	0.5	UG/L	B	J
0271	05-Aug-91	Barium	85	2	UG/L		
0076	01-Feb-91	Barium	85	2	UG/L	B	
0271	07-Apr-94	Barium	85.8	1.1	UG/L	B	J
0271	07-Apr-94	Barium	85.8	1.1	UG/L	B	J
0271	07-Apr-94	Barium	86.9	1.1	UG/L	B	J
0271	05-Aug-91	Barium	88.424	2	UG/L		
0271	06-Nov-90	Barium	95	2	UG/L	B	
0271	01-Feb-91	Barium	98.2	2	UG/L	B	
0271	07-Apr-94	Barium	98.7	1.1	UG/L	B	J
0271	06-May-91	Barium	99.7	2	UG/L	B	
0076	06-Nov-90	Barium	115	2	UG/L	B	
0271	16-Dec-91	Barium	200	200	UG/L	U	U
0076	16-Dec-91	Barium	200	200	UG/L	U	U
0271	01-Feb-91	Barium-133	19	0	PCI/L	U	U
0076	01-Feb-91	Barium-133	26	0	PCI/L	U	U
0271	01-Feb-91	Barium-140	44	0	PCI/L	U	U
0076	01-Feb-91	Barium-140	68	0	PCI/L	U	U
0271	16-Dec-91	Benzene	1	1	UG/L	U	U
0076	16-Dec-91	Benzene	1	1	UG/L	U	U
0271	16-Sep-92	Benzene	1	1	UG/L	U	UJ
0076	23-Mar-92	Benzene	1	1	UG/L	U	U
0076	16-Jun-93	Benzene	1	1	UG/L	U	U
0271	13-Sep-88	Benzene	1	1	UG/L	U	U
0076	13-Sep-88	Benzene	1	1	UG/L	U	U
0076	22-Jun-92	Benzene	1	1	UG/L	U	UJ
0076	16-Sep-92	Benzene	1	1	UG/L	U	UJ
0271	22-Jun-92	Benzene	1	1	UG/L	U	UJ
0271	15-Jun-90	Benzene	2	2	UG/L	U	U
0271	24-Jan-90	Benzene	2	2	UG/L	U	U
0271	07-Apr-94	Benzene	2	2	UG/L	U	U
0076	23-Mar-90	Benzene	2	2	UG/L	U	U
0076	06-May-91	Benzene	2	2	UG/L	U	UJ
0076	06-Nov-90	Benzene	2	2	UG/L	U	U
0271	05-Aug-91	Benzene	2	2	UG/L	U	U
0271	27-Feb-90	Benzene	2	2	UG/L	U	U
0271	31-Jul-90	Benzene	2	2	UG/L	U	U
0076	11-Oct-93	Benzene	2	2	UG/L	U	UJ
0271	01-Feb-91	Benzene	2	2	UG/L	U	U
0076	27-Feb-90	Benzene	2	2	UG/L	U	U
0076	07-Apr-94	Benzene	2	2	UG/L	U	U
0271	27-Feb-90	Benzene	2	2	UG/L	U	U
0271	11-Oct-93	Benzene	2	2	UG/L	U	UJ
0076	01-Feb-91	Benzene	2	2	UG/L	U	U
0076	15-Jun-90	Benzene	2	2	UG/L	U	U
0076	31-Jul-90	Benzene	2	2	UG/L	U	U
0271	07-Apr-94	Benzene	2	2	UG/L	U	U
0271	23-Mar-90	Benzene	2	2	UG/L	U	U
0271	06-May-91	Benzene	2	2	UG/L	U	UJ
0271	06-Nov-90	Benzene	2	2	UG/L	U	U
0271	27-Feb-90	Benzene	2	2	UG/L	U	U
0076	24-Jan-90	Benzene	2	2	UG/L	U	U
0076	13-Sep-88	Benzene	5	5	UG/L	U	U
0271	25-Apr-90	Benzene	5	5	UG/L	U	U
0271	08-Mar-88	Benzene	5	5	UG/L	U	U
0271	13-Sep-88	Benzene	5	5	UG/L	U	U
0271	24-Jun-88	Benzene	5	5	UG/L	U	U
0076	25-Apr-90	Benzene	5	5	UG/L	U	U
0076	24-Jun-88	Benzene	5	5	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	16-Dec-91	Benzo(a)anthracene	10	10	UG/L	U	U
0271	06-Nov-90	Benzo(a)anthracene	10	10	UG/L	U	U
0076	06-May-91	Benzo(a)anthracene	10	10	UG/L	U	U
0076	06-Nov-90	Benzo(a)anthracene	10	10	UG/L	U	U
0271	22-Jun-92	Benzo(a)anthracene	10	10	UG/L	U	U
0076	16-Sep-92	Benzo(a)anthracene	10	10	UG/L	U	U
0271	05-Aug-91	Benzo(a)anthracene	10	10	UG/L	U	UJ
0076	11-Oct-93	Benzo(a)anthracene	10	10	UG/L	U	U
0271	06-May-91	Benzo(a)anthracene	10	10	UG/L	U	U
0271	11-Oct-93	Benzo(a)anthracene	10	10	UG/L	U	U
0076	23-Mar-92	Benzo(a)anthracene	10	10	UG/L	U	U
0271	01-Feb-91	Benzo(a)anthracene	10	10	UG/L	U	U
0076	22-Jun-92	Benzo(a)anthracene	10	10	UG/L	U	U
0271	16-Sep-92	Benzo(a)anthracene	10	10	UG/L	U	U
0076	01-Feb-91	Benzo(a)anthracene	10	10	UG/L	U	U
0271	16-Dec-91	Benzo(a)anthracene	10	10	UG/L	U	U
0271	07-Apr-94	Benzo(a)anthracene	11	11	UG/L	U	U
0271	07-Apr-94	Benzo(a)anthracene	11	11	UG/L	U	U
0076	07-Apr-94	Benzo(a)anthracene	11	11	UG/L	U	U
0076	06-Nov-90	Benzo(a)pyrene	10	10	UG/L	U	U
0271	11-Oct-93	Benzo(a)pyrene	10	10	UG/L	U	U
0076	23-Mar-92	Benzo(a)pyrene	10	10	UG/L	U	U
0076	06-May-91	Benzo(a)pyrene	10	10	UG/L	U	U
0271	01-Feb-91	Benzo(a)pyrene	10	10	UG/L	U	U
0271	06-May-91	Benzo(a)pyrene	10	10	UG/L	U	U
0076	22-Jun-92	Benzo(a)pyrene	10	10	UG/L	U	U
0271	06-Nov-90	Benzo(a)pyrene	10	10	UG/L	U	U
0271	05-Aug-91	Benzo(a)pyrene	10	10	UG/L	U	UJ
0271	16-Sep-92	Benzo(a)pyrene	10	10	UG/L	U	U
0076	01-Feb-91	Benzo(a)pyrene	10	10	UG/L	U	U
0271	22-Jun-92	Benzo(a)pyrene	10	10	UG/L	U	U
0271	16-Dec-91	Benzo(a)pyrene	10	10	UG/L	U	U
0076	11-Oct-93	Benzo(a)pyrene	10	10	UG/L	U	U
0076	16-Dec-91	Benzo(a)pyrene	10	10	UG/L	U	U
0076	16-Sep-92	Benzo(a)pyrene	10	10	UG/L	U	U
0271	07-Apr-94	Benzo(a)pyrene	11	11	UG/L	U	U
0271	07-Apr-94	Benzo(a)pyrene	11	11	UG/L	U	U
0076	07-Apr-94	Benzo(a)pyrene	11	11	UG/L	U	U
0271	16-Sep-92	Benzo(b)fluoranthene	10	10	UG/L	U	U
0271	16-Dec-91	Benzo(b)fluoranthene	10	10	UG/L	U	U
0076	23-Mar-92	Benzo(b)fluoranthene	10	10	UG/L	U	U
0271	06-Nov-90	Benzo(b)fluoranthene	10	10	UG/L	U	U
0076	22-Jun-92	Benzo(b)fluoranthene	10	10	UG/L	U	U
0271	11-Oct-93	Benzo(b)fluoranthene	10	10	UG/L	U	U
0076	11-Oct-93	Benzo(b)fluoranthene	10	10	UG/L	U	U
0076	06-Nov-90	Benzo(b)fluoranthene	10	10	UG/L	U	U
0271	22-Jun-92	Benzo(b)fluoranthene	10	10	UG/L	U	U
0076	01-Feb-91	Benzo(b)fluoranthene	10	10	UG/L	U	U
0271	01-Feb-91	Benzo(b)fluoranthene	10	10	UG/L	U	U
0271	06-May-91	Benzo(b)fluoranthene	10	10	UG/L	U	U
0076	06-May-91	Benzo(b)fluoranthene	10	10	UG/L	U	U
0271	05-Aug-91	Benzo(b)fluoranthene	10	10	UG/L	U	UJ
0076	16-Dec-91	Benzo(b)fluoranthene	10	10	UG/L	U	U
0076	16-Sep-92	Benzo(b)fluoranthene	10	10	UG/L	U	U
0076	07-Apr-94	Benzo(b)fluoranthene	11	11	UG/L	U	U
0271	07-Apr-94	Benzo(b)fluoranthene	11	11	UG/L	U	U
0271	07-Apr-94	Benzo(b)fluoranthene	11	11	UG/L	U	U
0271	16-Sep-92	Benzo(g,h,i)perylene	10	10	UG/L	U	U
0076	16-Sep-92	Benzo(g,h,i)perylene	10	10	UG/L	U	U
0271	22-Jun-92	Benzo(g,h,i)perylene	10	10	UG/L	U	U
0271	06-May-91	Benzo(g,h,i)perylene	10	10	UG/L	U	U
0271	05-Aug-91	Benzo(g,h,i)perylene	10	10	UG/L	U	UJ
0076	06-May-91	Benzo(g,h,i)perylene	10	10	UG/L	U	U
0076	01-Feb-91	Benzo(g,h,i)perylene	10	10	UG/L	U	U
0076	11-Oct-93	Benzo(g,h,i)perylene	10	10	UG/L	U	U
0076	22-Jun-92	Benzo(g,h,i)perylene	10	10	UG/L	U	U
0271	16-Dec-91	Benzo(g,h,i)perylene	10	10	UG/L	U	U
0271	11-Oct-93	Benzo(g,h,i)perylene	10	10	UG/L	U	U
0271	06-Nov-90	Benzo(g,h,i)perylene	10	10	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	01-Feb-91	Benzo(g,h,i)perylene	10	10	UG/L	U	U
0076	23-Mar-92	Benzo(g,h,i)perylene	10	10	UG/L	U	U
0076	06-Nov-90	Benzo(g,h,i)perylene	10	10	UG/L	U	U
0076	16-Dec-91	Benzo(g,h,i)perylene	10	10	UG/L	U	U
0076	07-Apr-94	Benzo(g,h,i)perylene	11	11	UG/L	U	U
0271	07-Apr-94	Benzo(g,h,i)perylene	11	11	UG/L	U	U
0271	07-Apr-94	Benzo(g,h,i)perylene	11	11	UG/L	U	U
0271	11-Oct-93	Benzo(k)fluoranthene	10	10	UG/L	U	U
0271	16-Dec-91	Benzo(k)fluoranthene	10	10	UG/L	U	U
0271	06-May-91	Benzo(k)fluoranthene	10	10	UG/L	U	U
0271	22-Jun-92	Benzo(k)fluoranthene	10	10	UG/L	U	U
0076	16-Sep-92	Benzo(k)fluoranthene	10	10	UG/L	U	U
0076	01-Feb-91	Benzo(k)fluoranthene	10	10	UG/L	U	U
0076	11-Oct-93	Benzo(k)fluoranthene	10	10	UG/L	U	U
0076	06-Nov-90	Benzo(k)fluoranthene	10	10	UG/L	U	U
0271	16-Sep-92	Benzo(k)fluoranthene	10	10	UG/L	U	U
0271	01-Feb-91	Benzo(k)fluoranthene	10	10	UG/L	U	U
0076	16-Dec-91	Benzo(k)fluoranthene	10	10	UG/L	U	U
0271	06-Nov-90	Benzo(k)fluoranthene	10	10	UG/L	U	U
0076	22-Jun-92	Benzo(k)fluoranthene	10	10	UG/L	U	U
0271	05-Aug-91	Benzo(k)fluoranthene	10	10	UG/L	U	UJ
0076	23-Mar-92	Benzo(k)fluoranthene	10	10	UG/L	U	U
0076	06-May-91	Benzo(k)fluoranthene	10	10	UG/L	U	U
0271	07-Apr-94	Benzo(k)fluoranthene	11	11	UG/L	U	U
0076	07-Apr-94	Benzo(k)fluoranthene	11	11	UG/L	U	U
0271	07-Apr-94	Benzo(k)fluoranthene	11	11	UG/L	U	U
0271	06-May-91	Benzoic Acid	50	50	UG/L	U	UJ
0076	16-Dec-91	Benzoic Acid	50	50	UG/L	U	UJ
0271	06-Nov-90	Benzoic Acid	50	50	UG/L	U	U
0271	16-Dec-91	Benzoic Acid	50	50	UG/L	U	UJ
0271	05-Aug-91	Benzoic Acid	50	50	UG/L	U	UJ
0076	06-Nov-90	Benzoic Acid	50	50	UG/L	U	U
0076	06-May-91	Benzoic Acid	50	50	UG/L	U	UJ
0076	01-Feb-91	Benzoic Acid	50	50	UG/L	U	UJ
0271	01-Feb-91	Benzoic Acid	50	50	UG/L	U	UJ
0271	11-Oct-93	Benzoic Acid	51	51	UG/L	U	U
0076	11-Oct-93	Benzoic Acid	51	51	UG/L	U	U
0271	07-Apr-94	Benzoic Acid	53	53	UG/L	U	U
0271	07-Apr-94	Benzoic Acid	53	53	UG/L	U	U
0076	07-Apr-94	Benzoic Acid	53	53	UG/L	U	U
0271	06-May-91	Benzyl Alcohol	10	10	UG/L	U	U
0271	06-Nov-90	Benzyl Alcohol	10	10	UG/L	U	U
0271	11-Oct-93	Benzyl Alcohol	10	10	UG/L	U	U
0076	06-Nov-90	Benzyl Alcohol	10	10	UG/L	U	U
0076	01-Feb-91	Benzyl Alcohol	10	10	UG/L	U	U
0076	16-Dec-91	Benzyl Alcohol	10	10	UG/L	U	U
0271	05-Aug-91	Benzyl Alcohol	10	10	UG/L	U	UJ
0271	01-Feb-91	Benzyl Alcohol	10	10	UG/L	U	U
0076	06-May-91	Benzyl Alcohol	10	10	UG/L	U	U
0271	16-Dec-91	Benzyl Alcohol	10	10	UG/L	U	U
0076	11-Oct-93	Benzyl Alcohol	10	10	UG/L	U	U
0271	07-Apr-94	Benzyl Alcohol	11	11	UG/L	U	U
0271	07-Apr-94	Benzyl Alcohol	11	11	UG/L	U	U
0076	07-Apr-94	Benzyl Alcohol	11	11	UG/L	U	U
0271	07-Apr-94	Beryllium	0.08	0.08	UG/L	U	U
0271	07-Apr-94	Beryllium	0.08	0.08	UG/L	U	U
0271	07-Apr-94	Beryllium	0.08	0.08	UG/L	U	U
0076	07-Apr-94	Beryllium	0.08	0.08	UG/L	U	U
0076	07-Apr-94	Beryllium	0.08	0.08	UG/L	U	U
0271	07-Apr-94	Beryllium	0.08	0.08	UG/L	U	U
0271	11-Oct-93	Beryllium	0.25	0.25	UG/L	U	U
0271	11-Oct-93	Beryllium	0.25	0.25	UG/L	U	U
0076	11-Oct-93	Beryllium	0.25	0.25	UG/L	U	U
0076	11-Oct-93	Beryllium	0.25	0.25	UG/L	U	U
0076	16-Sep-92	Beryllium	1	1	UG/L	U	U
0271	01-Feb-91	Beryllium	1	1	UG/L	U	U
0271	16-Sep-92	Beryllium	1	1	UG/L	U	U
0076	23-Mar-92	Beryllium	1	5	UG/L	U	U
0271	22-Jun-92	Beryllium	1	1	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	01-Feb-91	Beryllium	1	1	UG/L	U	U
0076	22-Jun-92	Beryllium	1	1	UG/L	U	U
0271	05-Aug-91	Beryllium	2	2	UG/L	U	U
0271	06-Nov-90	Beryllium	2	2	UG/L	U	U
0271	13-Dec-85	Beryllium	2	2	UG/L	U	U
0271	06-May-91	Beryllium	2	2	UG/L	U	U
0271	05-Aug-91	Beryllium	2	2	UG/L	U	U
0076	06-Nov-90	Beryllium	2	2	UG/L	U	U
0076	06-May-91	Beryllium	2	2	UG/L	U	U
0076	12-Dec-85	Beryllium	2	2	UG/L	U	U
0076	01-Feb-84	Beryllium	5	5	UG/L	U	U
0271	16-Dec-91	Beryllium	5	5	UG/L	U	U
0076	16-Dec-91	Beryllium	5	5	UG/L	U	U
0271	01-Feb-91	Beryllium-7	96	0	PCI/L	U	U
0076	01-Feb-91	Beryllium-7	110	0	PCI/L	U	U
0076	06-Nov-90	Beta-BHC	0.05	0.05	UG/L	U	U
0271	06-Nov-90	Beta-BHC	0.05	0.05	UG/L	U	U
0271	05-Aug-91	Beta-BHC	0.05	0.05	UG/L	U	U
0076	16-Sep-92	Beta-BHC	0.05	0.05	UG/L	U	U
0271	01-Feb-91	Beta-BHC	0.05	0.05	UG/L	U	U
0271	11-Oct-93	Beta-BHC	0.05	0.05	UG/L	U	U
0271	07-Apr-94	Beta-BHC	0.05	0.05	UG/L	U	U
0271	06-May-91	Beta-BHC	0.05	0.05	UG/L	U	U
0076	11-Oct-93	Beta-BHC	0.05	0.05	UG/L	U	UJ
0076	01-Feb-91	Beta-BHC	0.05	0.05	UG/L	U	U
0076	06-May-91	Beta-BHC	0.05	0.05	UG/L	U	U
0271	16-Sep-92	Beta-BHC	0.05	0.05	UG/L	U	U
0271	22-Jun-92	Beta-BHC	0.051	0.051	UG/L		U
0076	16-Dec-91	Beta-BHC	0.052	0.052	UG/L	U	U
0271	07-Apr-94	Beta-BHC	0.052	0.052	UG/L	U	U
0271	16-Dec-91	Beta-BHC	0.052	0.052	UG/L	U	U
0076	22-Jun-92	Beta-BHC	0.052	0.052	UG/L	U	U
0076	23-Mar-92	Beta-BHC	0.053	0.053	UG/L	JB	U
0076	07-Apr-94	Beta-BHC	0.055	0.055	UG/L	U	U
0076	06-May-91	Beta-BHC	0.25	0.25	UG/L	U	U
0271	06-May-91	Beta-BHC	0.75	0.75	UG/L	U	U
0271	06-May-91	Bis(2-chloroethoxy)methane	10	10	UG/L	U	U
0271	06-Nov-90	Bis(2-chloroethoxy)methane	10	10	UG/L	U	U
0076	06-Nov-90	Bis(2-chloroethoxy)methane	10	10	UG/L	U	U
0271	16-Sep-92	Bis(2-chloroethoxy)methane	10	10	UG/L	U	U
0076	22-Jun-92	Bis(2-chloroethoxy)methane	10	10	UG/L	U	U
0076	23-Mar-92	Bis(2-chloroethoxy)methane	10	10	UG/L	U	U
0271	01-Feb-91	Bis(2-chloroethoxy)methane	10	10	UG/L	U	U
0076	01-Feb-91	Bis(2-chloroethoxy)methane	10	10	UG/L	U	U
0271	05-Aug-91	Bis(2-chloroethoxy)methane	10	10	UG/L	U	UJ
0271	11-Oct-93	Bis(2-chloroethoxy)methane	10	10	UG/L	U	U
0076	06-May-91	Bis(2-chloroethoxy)methane	10	10	UG/L	U	U
0076	16-Dec-91	Bis(2-chloroethoxy)methane	10	10	UG/L	U	U
0271	22-Jun-92	Bis(2-chloroethoxy)methane	10	10	UG/L	U	U
0076	11-Oct-93	Bis(2-chloroethoxy)methane	10	10	UG/L	U	U
0271	16-Dec-91	Bis(2-chloroethoxy)methane	10	10	UG/L	U	U
0076	16-Sep-92	Bis(2-chloroethoxy)methane	10	10	UG/L	U	U
0271	07-Apr-94	Bis(2-chloroethoxy)methane	11	11	UG/L	U	U
0271	07-Apr-94	Bis(2-chloroethoxy)methane	11	11	UG/L	U	U
0076	07-Apr-94	Bis(2-chloroethoxy)methane	11	11	UG/L	U	U
0076	23-Mar-92	Bis(2-chloroethyl)ether	10	10	UG/L	U	U
0076	11-Oct-93	Bis(2-chloroethyl)ether	10	10	UG/L	U	U
0271	01-Feb-91	Bis(2-chloroethyl)ether	10	10	UG/L	U	U
0271	11-Oct-93	Bis(2-chloroethyl)ether	10	10	UG/L	U	U
0271	06-May-91	Bis(2-chloroethyl)ether	10	10	UG/L	U	U
0271	06-Nov-90	Bis(2-chloroethyl)ether	10	10	UG/L	U	U
0271	16-Sep-92	Bis(2-chloroethyl)ether	10	10	UG/L	U	U
0076	01-Feb-91	Bis(2-chloroethyl)ether	10	10	UG/L	U	U
0076	16-Sep-92	Bis(2-chloroethyl)ether	10	10	UG/L	U	U
0271	05-Aug-91	Bis(2-chloroethyl)ether	10	10	UG/L	U	UJ
0271	16-Dec-91	Bis(2-chloroethyl)ether	10	10	UG/L	U	U
0076	06-May-91	Bis(2-chloroethyl)ether	10	10	UG/L	U	U
0076	06-Nov-90	Bis(2-chloroethyl)ether	10	10	UG/L	U	U
0076	16-Dec-91	Bis(2-chloroethyl)ether	10	10	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	22-Jun-92	Bis(2-chloroethyl)ether	10	10	UG/L	U	U
0271	22-Jun-92	Bis(2-chloroethyl)ether	10	10	UG/L	U	U
0076	07-Apr-94	Bis(2-chloroethyl)ether	11	11	UG/L	U	U
0271	07-Apr-94	Bis(2-chloroethyl)ether	11	11	UG/L	U	U
0271	07-Apr-94	Bis(2-chloroethyl)ether	11	11	UG/L	U	U
0271	16-Sep-92	Bis(2-ethylhexyl)phthalate	10	10	UG/L	JB	UJ
0076	12-Dec-85	Bis(2-ethylhexyl)phthalate	10	10	UG/L	U	U
0271	13-Dec-85	Bis(2-ethylhexyl)phthalate	10	10	UG/L	U	U
0271	05-Aug-91	Bis(2-ethylhexyl)phthalate	10	10	UG/L	U	UJ
0076	16-Dec-91	Bis(2-ethylhexyl)phthalate	10	10	UG/L	U	U
0271	16-Dec-91	Bis(2-ethylhexyl)phthalate	10	10	UG/L	U	U
0076	22-Jun-92	Bis(2-ethylhexyl)phthalate	10	10	UG/L	JB	UJ
0271	11-Oct-93	Bis(2-ethylhexyl)phthalate	10	10	UG/L	U	U
0076	23-Mar-92	Bis(2-ethylhexyl)phthalate	10	10	UG/L	JB	UJ
0271	01-Feb-91	Bis(2-ethylhexyl)phthalate	10	10	UG/L	U	U
0076	01-Feb-91	Bis(2-ethylhexyl)phthalate	10	10	UG/L	U	U
0076	06-Nov-90	Bis(2-ethylhexyl)phthalate	10	10	UG/L	U	U
0076	11-Oct-93	Bis(2-ethylhexyl)phthalate	10	10	UG/L	U	U
0076	16-Sep-92	Bis(2-ethylhexyl)phthalate	10	10	UG/L	JB	UJ
0271	06-Nov-90	Bis(2-ethylhexyl)phthalate	10	10	UG/L	U	U
0271	22-Jun-92	Bis(2-ethylhexyl)phthalate	10	10	UG/L	JB	UJ
0076	01-Feb-84	Bis(2-ethylhexyl)phthalate	10	10	UG/L	U	U
0271	06-May-91	Bis(2-ethylhexyl)phthalate	10	10	UG/L	U	U
0076	06-May-91	Bis(2-ethylhexyl)phthalate	10	10	UG/L	U	U
0076	07-Apr-94	Bis(2-ethylhexyl)phthalate	11	11	UG/L	JB	UJ
0271	07-Apr-94	Bis(2-ethylhexyl)phthalate	11	11	UG/L	JB	UJ
0271	07-Apr-94	Bis(2-ethylhexyl)phthalate	11	11	UG/L	JB	UJ
0076	11-Oct-93	Bismuth	32.2	32.2	UG/L	U	U
0076	11-Oct-93	Bismuth	32.2	32.2	UG/L	U	U
0271	11-Oct-93	Bismuth	32.2	32.2	UG/L	U	U
0271	11-Oct-93	Bismuth	32.2	32.2	UG/L	U	U
0271	07-Apr-94	Bismuth	32.5	32.5	UG/L	U	U
0076	07-Apr-94	Bismuth	32.5	32.5	UG/L	U	U
0271	07-Apr-94	Bismuth	32.5	32.5	UG/L	U	U
0271	07-Apr-94	Bismuth	32.5	32.5	UG/L	U	U
0271	07-Apr-94	Bismuth	32.5	32.5	UG/L	U	U
0076	07-Apr-94	Bismuth	32.5	32.5	UG/L	U	U
0271	07-Apr-94	Bismuth-207	1.97	1.97	PCI/L	U	U
0076	07-Apr-94	Bismuth-207	2.5	2.5	PCI/L	U	U
0271	07-Apr-94	Bismuth-207	3.86	3.86	PCI/L	U	U
0076	11-Oct-93	Bismuth-207	8.1	8.1	PCI/L	U	U
0271	11-Oct-93	Bismuth-207	9.9	9.9	PCI/L	U	U
0076	16-Sep-92	Bismuth-207	10.2	10.2	PCI/L	U	U
0271	16-Sep-92	Bismuth-207	12.1	12.1	PCI/L	U	U
0271	06-May-91	Bismuth-210	0.11	1	PCI/L		
0076	06-May-91	Bismuth-210	0.39	1	PCI/L		
0076	01-Feb-91	Bismuth-210	1	1	PCI/L	U	U
0271	01-Feb-91	Bismuth-210	1	1	PCI/L	U	U
0076	23-Mar-92	Bismuth-210	6	6	PCI/L	U	U
0271	07-Apr-94	Bismuth-210	6.67	6.67	PCI/L	U	U
0271	22-Jun-92	Bismuth-210	7	7	PCI/L	U	U
0271	07-Apr-94	Bismuth-210	7.1	7.1	PCI/L	U	U
0076	16-Dec-91	Bismuth-210	9.1	9.1	PCI/L	U	U
0076	07-Apr-94	Bismuth-210	9.82	9.82	PCI/L	U	U
0076	22-Jun-92	Bismuth-210	10	10	PCI/L	U	U
0271	05-Aug-91	Bismuth-210	10	0	PCI/L	U	U
0076	11-Oct-93	Bismuth-210	12	12	PCI/L	U	U
0271	11-Oct-93	Bismuth-210	13	13	PCI/L	U	U
0076	16-Sep-92	Bismuth-210	13.8	13.8	PCI/L	U	U
0271	16-Sep-92	Bismuth-210	14.4	14.4	PCI/L	U	U
0271	16-Dec-91	Bismuth-210	15	15	PCI/L	U	U
0076	06-Nov-90	Bismuth-210	20	0	PCI/L	U	U
0271	06-Nov-90	Bismuth-210	20	0	PCI/L	U	U
0076	06-May-91	Bismuth-211	219	1	PCI/L	U	U
0271	06-May-91	Bismuth-211	274	1	PCI/L	U	U
0076	06-May-91	Bismuth-212	187	1	PCI/L	U	U
0271	06-May-91	Bismuth-212	282	1	PCI/L	U	U
0271	06-May-91	Bismuth-214	82.5	1	PCI/L	U	U
0076	06-May-91	Bismuth-214	91.7	1	PCI/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual	Data Qual
0271	16-Dec-91	Bromobenzene	1	1	UG/L	U	UJ
0076	16-Dec-91	Bromobenzene	1	1	UG/L	U	UJ
0271	15-Jun-90	Bromobenzene	2	2	UG/L	U	U
0076	31-Jul-90	Bromobenzene	2	2	UG/L	U	U
0271	24-Jan-90	Bromobenzene	2	2	UG/L	U	U
0271	06-Nov-90	Bromobenzene	2	2	UG/L	U	UJ
0076	01-Feb-91	Bromobenzene	2	2	UG/L	U	UJ
0271	23-Mar-90	Bromobenzene	2	2	UG/L	U	U
0271	11-Oct-93	Bromobenzene	2	2	UG/L	U	U
0271	31-Jul-90	Bromobenzene	2	2	UG/L	U	U
0076	23-Mar-90	Bromobenzene	2	2	UG/L	U	U
0271	27-Feb-90	Bromobenzene	2	2	UG/L	U	U
0271	01-Feb-91	Bromobenzene	2	2	UG/L	U	UJ
0076	22-Jun-92	Bromobenzene	2	2	UG/L	U	R
0076	06-Nov-90	Bromobenzene	2	2	UG/L	U	UJ
0076	11-Oct-93	Bromobenzene	2	2	UG/L	U	UJ
0271	07-Apr-94	Bromobenzene	2	2	UG/L	U	U
0271	16-Sep-92	Bromobenzene	2	2	UG/L	U	U
0076	15-Jun-90	Bromobenzene	2	2	UG/L	U	U
0271	22-Jun-92	Bromobenzene	2	2	UG/L	U	R
0271	27-Feb-90	Bromobenzene	2	2	UG/L	U	U
0271	07-Apr-94	Bromobenzene	2	2	UG/L	U	U
0271	05-Aug-91	Bromobenzene	2	2	UG/L	U	UJ
0271	27-Feb-90	Bromobenzene	2	2	UG/L	U	U
0076	24-Jan-90	Bromobenzene	2	2	UG/L	U	U
0076	27-Feb-90	Bromobenzene	2	2	UG/L	U	U
0076	16-Jun-93	Bromobenzene	2	2	UG/L	U	U
0076	16-Sep-92	Bromobenzene	2	2	UG/L	U	U
0271	06-May-91	Bromobenzene	2	2	UG/L	U	UJ
0076	23-Mar-92	Bromobenzene	2	2	UG/L	U	U
0076	06-May-91	Bromobenzene	2	2	UG/L	U	UJ
0076	07-Apr-94	Bromobenzene	2	2	UG/L	U	U
0076	07-Apr-94	Bromodichloromethane	1	1	UG/L	U	U
0271	07-Apr-94	Bromodichloromethane	1	1	UG/L	U	UJ
0076	16-Jun-93	Bromodichloromethane	1	1	UG/L	U	U
0271	15-Jun-90	Bromodichloromethane	1	1	UG/L	U	U
0271	24-Jan-90	Bromodichloromethane	1	1	UG/L	U	U
0076	06-Nov-90	Bromodichloromethane	1	1	UG/L	U	U
0076	22-Jun-92	Bromodichloromethane	1	1	UG/L	U	U
0076	31-Jul-90	Bromodichloromethane	1	1	UG/L	U	U
0076	27-Feb-90	Bromodichloromethane	1	1	UG/L	U	U
0271	31-Jul-90	Bromodichloromethane	1	1	UG/L	U	U
0271	27-Feb-90	Bromodichloromethane	1	1	UG/L	U	U
0271	27-Feb-90	Bromodichloromethane	1	1	UG/L	U	U
0271	16-Sep-92	Bromodichloromethane	1	1	UG/L	U	U
0271	23-Mar-90	Bromodichloromethane	1	1	UG/L	U	U
0076	24-Jan-90	Bromodichloromethane	1	1	UG/L	U	U
0271	05-Aug-91	Bromodichloromethane	1	1	UG/L	U	U
0271	27-Feb-90	Bromodichloromethane	1	1	UG/L	U	U
0271	16-Dec-91	Bromodichloromethane	1	1	UG/L	U	UJ
0271	06-May-91	Bromodichloromethane	1	1	UG/L	U	U
0076	15-Jun-90	Bromodichloromethane	1	1	UG/L	U	U
0076	23-Mar-90	Bromodichloromethane	1	1	UG/L	U	U
0271	06-Nov-90	Bromodichloromethane	1	1	UG/L	U	U
0271	07-Apr-94	Bromodichloromethane	1	1	UG/L	U	U
0076	06-May-91	Bromodichloromethane	1	1	UG/L	U	U
0271	22-Jun-92	Bromodichloromethane	1	1	UG/L	U	U
0076	16-Dec-91	Bromodichloromethane	1	1	UG/L	U	UJ
0271	01-Feb-91	Bromodichloromethane	1	1	UG/L	U	U
0271	11-Oct-93	Bromodichloromethane	1	1	UG/L	U	UJ
0076	11-Oct-93	Bromodichloromethane	1	1	UG/L	U	UJ
0076	16-Sep-92	Bromodichloromethane	1	1	UG/L	U	U
0076	01-Feb-91	Bromodichloromethane	1	1	UG/L	U	U
0076	23-Mar-92	Bromodichloromethane	1	1	UG/L	U	U
0076	13-Sep-88	Bromodichloromethane	2.2	1	UG/L		
0271	13-Sep-88	Bromodichloromethane	3.7	1	UG/L		
0076	13-Sep-88	Bromodichloromethane	5	5	UG/L	U	U
0271	25-Apr-90	Bromodichloromethane	5	5	UG/L	U	U
0271	08-Mar-88	Bromodichloromethane	5	5	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	13-Sep-88	Bromodichloromethane	5	5	UG/L	U	U
0271	24-Jun-88	Bromodichloromethane	5	5	UG/L	U	U
0076	25-Apr-90	Bromodichloromethane	5	5	UG/L	U	U
0076	24-Jun-88	Bromodichloromethane	5	5	UG/L	U	U
0271	16-Dec-91	Bromoform	1	1	UG/L	U	UJ
0271	13-Sep-88	Bromoform	1	1	UG/L	U	U
0076	16-Dec-91	Bromoform	1	1	UG/L	U	UJ
0076	13-Sep-88	Bromoform	1	1	UG/L	U	U
0076	11-Oct-93	Bromoform	2	2	UG/L	U	UJ
0271	31-Jul-90	Bromoform	2	2	UG/L	U	U
0076	15-Jun-90	Bromoform	2	2	UG/L	U	U
0271	06-May-91	Bromoform	2	2	UG/L	U	U
0076	16-Sep-92	Bromoform	2	2	UG/L	U	U
0271	05-Aug-91	Bromoform	2	2	UG/L	U	UJ
0271	27-Feb-90	Bromoform	2	2	UG/L	U	U
0076	07-Apr-94	Bromoform	2	2	UG/L	U	UJ
0271	16-Sep-92	Bromoform	2	2	UG/L	U	U
0076	24-Jan-90	Bromoform	2	2	UG/L	U	U
0271	01-Feb-91	Bromoform	2	2	UG/L	U	U
0271	22-Jun-92	Bromoform	2	2	UG/L	U	UJ
0076	23-Mar-92	Bromoform	2	2	UG/L	U	U
0076	06-May-91	Bromoform	2	2	UG/L	U	U
0076	22-Jun-92	Bromoform	2	2	UG/L	U	U
0271	23-Mar-90	Bromoform	2	2	UG/L	U	U
0271	27-Feb-90	Bromoform	2	2	UG/L	U	U
0271	07-Apr-94	Bromoform	2	2	UG/L	U	UJ
0271	07-Apr-94	Bromoform	2	2	UG/L	U	UJ
0076	16-Jun-93	Bromoform	2	2	UG/L	U	U
0076	06-Nov-90	Bromoform	2	2	UG/L	U	UJ
0271	24-Jan-90	Bromoform	2	2	UG/L	U	U
0076	01-Feb-91	Bromoform	2	2	UG/L	U	U
0076	27-Feb-90	Bromoform	2	2	UG/L	U	U
0271	15-Jun-90	Bromoform	2	2	UG/L	U	U
0076	23-Mar-90	Bromoform	2	2	UG/L	U	U
0076	31-Jul-90	Bromoform	2	2	UG/L	U	U
0271	06-Nov-90	Bromoform	2	2	UG/L	U	U
0271	27-Feb-90	Bromoform	2	2	UG/L	U	U
0076	13-Sep-88	Bromoform	5	5	UG/L	U	U
0271	24-Jun-88	Bromoform	5	5	UG/L	U	U
0076	25-Apr-90	Bromoform	5	5	UG/L	U	U
0076	24-Jun-88	Bromoform	5	5	UG/L	U	U
0271	25-Apr-90	Bromoform	5	5	UG/L	U	U
0271	13-Sep-88	Bromoform	5	5	UG/L	U	U
0271	08-Mar-88	Bromoform	5	5	UG/L	U	U
0076	06-May-91	Bromomethane	1.2	1.2	UG/L	U	U
0271	05-Aug-91	Bromomethane	1.2	1.2	UG/L	U	U
0271	06-May-91	Bromomethane	1.2	1.2	UG/L	U	U
0271	16-Dec-91	Bromomethane	2	2	UG/L	U	R
0076	16-Dec-91	Bromomethane	2	2	UG/L	U	R
0271	13-Sep-88	Bromomethane	2	2	UG/L	U	U
0076	13-Sep-88	Bromomethane	2	2	UG/L	U	U
0076	24-Jun-88	Bromomethane	10	10	UG/L	U	U
0076	13-Sep-88	Bromomethane	10	10	UG/L	U	U
0271	25-Apr-90	Bromomethane	10	10	UG/L	U	U
0271	13-Sep-88	Bromomethane	10	10	UG/L	U	U
0271	24-Jun-88	Bromomethane	10	10	UG/L	U	U
0076	25-Apr-90	Bromomethane	10	10	UG/L	U	U
0271	08-Mar-88	Bromomethane	10	10	UG/L	U	U
0271	06-May-91	Butyl Benzyl Phthalate	10	10	UG/L	U	U
0076	16-Dec-91	Butyl Benzyl Phthalate	10	10	UG/L	U	U
0076	01-Feb-91	Butyl Benzyl Phthalate	10	10	UG/L	U	U
0271	06-Nov-90	Butyl Benzyl Phthalate	10	10	UG/L	U	U
0271	16-Dec-91	Butyl Benzyl Phthalate	10	10	UG/L	U	U
0271	05-Aug-91	Butyl Benzyl Phthalate	10	10	UG/L	U	UJ
0076	06-Nov-90	Butyl Benzyl Phthalate	10	10	UG/L	U	U
0076	16-Sep-92	Butyl Benzyl Phthalate	10	10	UG/L	U	UJ
0076	22-Jun-92	Butyl Benzyl Phthalate	10	10	UG/L	U	U
0271	22-Jun-92	Butyl Benzyl Phthalate	10	10	UG/L	U	UJ
0076	06-May-91	Butyl Benzyl Phthalate	10	10	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	16-Sep-92	Butyl Benzyl Phthalate	10	10	UG/L	U	UJ
0271	11-Oct-93	Butyl Benzyl Phthalate	10	10	UG/L	U	U
0076	11-Oct-93	Butyl Benzyl Phthalate	10	10	UG/L	U	U
0271	01-Feb-91	Butyl Benzyl Phthalate	10	10	UG/L	U	U
0076	23-Mar-92	Butyl Benzyl Phthalate	10	10	UG/L	U	U
0076	07-Apr-94	Butyl Benzyl Phthalate	11	11	UG/L	U	U
0271	07-Apr-94	Butyl Benzyl Phthalate	11	11	UG/L	U	U
0271	07-Apr-94	Butyl Benzyl Phthalate	11	11	UG/L	U	U
0271	11-Oct-93	Cadmium	0.5	0.5	UG/L	U	U
0271	11-Oct-93	Cadmium	0.5	0.5	UG/L	U	UJ
0076	11-Oct-93	Cadmium	0.5	0.5	UG/L	U	U
0076	11-Oct-93	Cadmium	0.5	0.5	UG/L	U	U
0076	07-Apr-94	Cadmium	0.65	0.65	UG/L	U	U
0271	07-Apr-94	Cadmium	0.65	0.65	UG/L	U	U
0271	07-Apr-94	Cadmium	0.65	0.65	UG/L	U	U
0076	07-Apr-94	Cadmium	0.65	0.65	UG/L	U	U
0271	07-Apr-94	Cadmium	0.65	0.65	UG/L	U	U
0271	07-Apr-94	Cadmium	0.65	0.65	UG/L	U	U
0076	12-Dec-85	Cadmium	1	1	UG/L	U	U
0271	13-Dec-85	Cadmium	1	1	UG/L	U	U
0271	16-Sep-92	Cadmium	3	3	UG/L	U	U
0076	16-Sep-92	Cadmium	3	3	UG/L	U	U
0271	22-Jun-92	Cadmium	4	4	UG/L	U	U
0076	23-Mar-92	Cadmium	4	5	UG/L	U	U
0076	22-Jun-92	Cadmium	4	4	UG/L	U	U
0271	05-Aug-91	Cadmium	4.6	2	UG/L		
0271	01-Feb-91	Cadmium	5	5	UG/L	U	U
0271	16-Dec-91	Cadmium	5	5	UG/L	U	U
0076	01-Feb-91	Cadmium	5	5	UG/L	U	U
0076	16-Dec-91	Cadmium	5	5	UG/L	U	U
0271	05-Aug-91	Cadmium	5.131	2	UG/L		
0271	06-Nov-90	Cadmium	5.3	2	UG/L		
0076	06-Nov-90	Cadmium	5.4	2	UG/L		
0076	06-May-91	Cadmium	6.9	2	UG/L		
0271	06-May-91	Cadmium	7.7	2	UG/L		
0076	01-Feb-84	Cadmium	30	30	UG/L	U	U
0271	05-Aug-91	Calcium	107	0.02	UG/L		
0271	05-Aug-91	Calcium	108	0.02	UG/L		
0271	05-Aug-91	Calcium	108	0.02	UG/L		
0076	23-Mar-92	Calcium	94300	5000	UG/L		J
0076	22-Jun-92	Calcium	94500	14	UG/L		
0076	16-Sep-92	Calcium	94600	30	UG/L		
0076	07-Apr-94	Calcium	95400	14	UG/L		
0076	07-Apr-94	Calcium	96100	14	UG/L		
0076	11-Oct-93	Calcium	96600	7.5	UG/L		J
0076	16-Dec-91	Calcium	98100	5000	UG/L		J
0076	06-May-91	Calcium	99300	0.05	UG/L		
0076	11-Oct-93	Calcium	99600	7.5	UG/L		J
0271	07-Apr-94	Calcium	100000	14	UG/L		
0271	05-Aug-91	Calcium	101000	20	UG/L		
0271	11-Oct-93	Calcium	102000	7.5	UG/L		J
0271	11-Oct-93	Calcium	102000	7.5	UG/L		J
0076	06-May-91	Calcium	102000	20	UG/L		
0271	22-Jun-92	Calcium	103000	14	UG/L		
0271	07-Apr-94	Calcium	103000	14	UG/L		
0271	16-Sep-92	Calcium	105000	30	UG/L		
0271	07-Apr-94	Calcium	105000	14	UG/L		
0271	06-Nov-90	Calcium	106000	20	UG/L		
0271	05-Aug-91	Calcium	106719.414	20	UG/L		
0076	06-Nov-90	Calcium	107000	20	UG/L		
0271	16-Dec-91	Calcium	108000	5000	UG/L		J
0076	01-Feb-91	Calcium	112000	30	UG/L		
0076	01-Feb-91	Calcium	113000	0	UG/L		
0271	06-May-91	Calcium	116000	0.05	UG/L		
0271	07-Apr-94	Calcium	117000	14	UG/L		
0271	06-May-91	Calcium	119000	20	UG/L		
0271	01-Feb-91	Calcium	125000	0	UG/L		
0271	01-Feb-91	Calcium	126000	30	UG/L		
0076	22-Jun-92	Carbazole	10	10	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	16-Sep-92	Carbazole	10	10	UG/L	U	UJ
0271	22-Jun-92	Carbazole	10	10	UG/L	U	U
0076	11-Oct-93	Carbazole	10	10	UG/L	U	U
0076	23-Mar-92	Carbazole	10	10	UG/L	U	U
0271	11-Oct-93	Carbazole	10	10	UG/L	U	U
0076	16-Sep-92	Carbazole	10	10	UG/L	U	UJ
0271	07-Apr-94	Carbazole	11	11	UG/L	U	U
0271	07-Apr-94	Carbazole	11	11	UG/L	U	U
0076	07-Apr-94	Carbazole	11	11	UG/L	U	U
0271	24-Jun-88	Carbon Disulfide	5	5	UG/L	U	U
0271	25-Apr-90	Carbon Disulfide	5	5	UG/L	U	U
0271	07-Apr-94	Carbon Disulfide	5	5	UG/L	U	UJ
0271	11-Oct-93	Carbon Disulfide	5	5	UG/L	U	UJ
0076	11-Oct-93	Carbon Disulfide	5	5	UG/L	U	UJ
0271	08-Mar-88	Carbon Disulfide	5	5	UG/L	U	U
0271	13-Sep-88	Carbon Disulfide	5	5	UG/L	U	U
0076	07-Apr-94	Carbon Disulfide	5	5	UG/L	U	UJ
0076	13-Sep-88	Carbon Disulfide	5	5	UG/L	U	U
0076	25-Apr-90	Carbon Disulfide	5	5	UG/L	U	U
0271	07-Apr-94	Carbon Disulfide	5	5	UG/L	U	UJ
0076	24-Jun-88	Carbon Disulfide	5	5	UG/L	U	U
0076	16-Sep-92	Carbon Tetrachloride	1	1	UG/L	U	U
0271	13-Sep-88	Carbon Tetrachloride	1	1	UG/L	U	U
0271	16-Sep-92	Carbon Tetrachloride	1	1	UG/L	U	U
0271	16-Dec-91	Carbon Tetrachloride	1	1	UG/L	U	U
0076	23-Mar-92	Carbon Tetrachloride	1	1	UG/L	U	U
0076	16-Jun-93	Carbon Tetrachloride	1	1	UG/L	U	UJ
0076	13-Sep-88	Carbon Tetrachloride	1	1	UG/L	U	U
0076	16-Dec-91	Carbon Tetrachloride	1	1	UG/L	U	U
0076	22-Jun-92	Carbon Tetrachloride	1	1	UG/L	U	UJ
0271	22-Jun-92	Carbon Tetrachloride	1	1	UG/L	U	UJ
0076	24-Jan-90	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0076	27-Feb-90	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0076	01-Feb-91	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0271	27-Feb-90	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0271	15-Jun-90	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0271	24-Jan-90	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0271	11-Oct-93	Carbon Tetrachloride	1.2	1.2	UG/L	U	UJ
0076	07-Apr-94	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0271	05-Aug-91	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0271	07-Apr-94	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0271	31-Jul-90	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0271	23-Mar-90	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0271	27-Feb-90	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0271	06-May-91	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0271	07-Apr-94	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0076	31-Jul-90	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0076	06-Nov-90	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0271	01-Feb-91	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0076	11-Oct-93	Carbon Tetrachloride	1.2	1.2	UG/L	U	UJ
0076	15-Jun-90	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0076	23-Mar-90	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0271	06-Nov-90	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0076	06-May-91	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0271	27-Feb-90	Carbon Tetrachloride	1.2	1.2	UG/L	U	U
0271	08-Mar-88	Carbon Tetrachloride	5	5	UG/L	U	U
0076	25-Apr-90	Carbon Tetrachloride	5	5	UG/L	U	U
0271	25-Apr-90	Carbon Tetrachloride	5	5	UG/L	U	U
0076	24-Jun-88	Carbon Tetrachloride	5	5	UG/L	U	U
0076	13-Sep-88	Carbon Tetrachloride	5	5	UG/L	U	U
0271	24-Jun-88	Carbon Tetrachloride	5	5	UG/L	U	U
0271	13-Sep-88	Carbon Tetrachloride	5	5	UG/L	U	U
0271	01-Feb-91	Cerium-139	11	0	PCI/L	U	U
0076	01-Feb-91	Cerium-139	16	0	PCI/L	U	U
0271	01-Feb-91	Cerium-141	18	0	PCI/L	U	U
0076	01-Feb-91	Cerium-141	25	0	PCI/L	U	U
0271	01-Feb-91	Cerium-144	88	0	PCI/L	U	U
0076	01-Feb-91	Cerium-144	100	0	PCI/L	U	U
0271	01-Feb-91	Cesium-134	12	0	PCI/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	01-Feb-91	Cesium-134	16	0	PCI/L	U	U
0076	06-May-91	Cesium-134	25	1	PCI/L	U	U
0271	06-May-91	Cesium-134	34.5	1	PCI/L	U	U
0271	07-Apr-94	Cesium-137	1.83	1.83	PCI/L	U	U
0271	07-Apr-94	Cesium-137	2.52	2.52	PCI/L	U	U
0076	23-Mar-92	Cesium-137	3	3	PCI/L	U	U
0076	22-Jun-92	Cesium-137	3	3	PCI/L	U	U
0271	22-Jun-92	Cesium-137	4	4	PCI/L	U	U
0076	07-Apr-94	Cesium-137	4.37	4.37	PCI/L	U	U
0271	11-Oct-93	Cesium-137	11	11	PCI/L	U	U
0271	01-Feb-91	Cesium-137	12	0	PCI/L	U	U
0076	16-Sep-92	Cesium-137	13	13	PCI/L	U	U
0076	01-Feb-91	Cesium-137	15	0	PCI/L	U	U
0076	11-Oct-93	Cesium-137	15	15	PCI/L	U	U
0271	16-Sep-92	Cesium-137	16.5	16.5	PCI/L	U	U
0076	06-May-91	Cesium-137	37.3	20	PCI/L	U	U
0271	06-May-91	Cesium-137	42	20	PCI/L	U	U
0076	22-Jun-92	Chloride	75.5	5	MG/L		
0076	16-Dec-91	Chloride	80.72	0.5	MG/L		
0076	16-Sep-92	Chloride	80.9	5	MG/L		
0076	11-Oct-93	Chloride	88.6	6.2	MG/L		
0076	06-May-91	Chloride	89.1	0.05	MG/L		
0076	23-Mar-92	Chloride	91.2	5	MG/L		
0076	01-Feb-91	Chloride	96.1	0	MG/L		
0076	07-Apr-94	Chloride	98.1	25	MG/L		
0271	22-Jun-92	Chloride	98.2	25	MG/L		
0271	05-Aug-91	Chloride	103	0.5	MG/L		
0271	16-Sep-92	Chloride	111	10	MG/L		
0271	16-Dec-91	Chloride	113.72	0.5	MG/L		
0271	11-Oct-93	Chloride	119	6.2	MG/L		
0271	07-Apr-94	Chloride	128	50	MG/L		
0271	01-Feb-91	Chloride	130	0	MG/L		
0271	07-Apr-94	Chloride	132	50	MG/L		
0271	06-May-91	Chloride	133	0.05	MG/L		
0076	16-Jun-93	Chlorobenzene	1	1	UG/L	U	UJ
0271	13-Sep-88	Chlorobenzene	1	1	UG/L	U	U
0076	16-Dec-91	Chlorobenzene	1	1	UG/L	U	U
0076	22-Jun-92	Chlorobenzene	1	1	UG/L	U	R
0076	13-Sep-88	Chlorobenzene	1	1	UG/L	U	U
0271	22-Jun-92	Chlorobenzene	1	1	UG/L	U	R
0076	16-Sep-92	Chlorobenzene	1	1	UG/L	U	U
0076	23-Mar-92	Chlorobenzene	1	1	UG/L	U	UJ
0271	16-Dec-91	Chlorobenzene	1	1	UG/L	U	U
0271	16-Sep-92	Chlorobenzene	1	1	UG/L	U	U
0271	23-Mar-90	Chlorobenzene	2	2	UG/L	U	U
0271	11-Oct-93	Chlorobenzene	2	2	UG/L	U	U
0076	23-Mar-90	Chlorobenzene	2	2	UG/L	U	U
0076	06-May-91	Chlorobenzene	2	2	UG/L	U	U
0271	06-May-91	Chlorobenzene	2	2	UG/L	U	U
0076	15-Jun-90	Chlorobenzene	2	2	UG/L	U	U
0076	07-Apr-94	Chlorobenzene	2	2	UG/L	U	U
0076	24-Jan-90	Chlorobenzene	2	2	UG/L	U	U
0271	06-Nov-90	Chlorobenzene	2	2	UG/L	U	U
0076	01-Feb-91	Chlorobenzene	2	2	UG/L	U	U
0271	27-Feb-90	Chlorobenzene	2	2	UG/L	U	U
0271	01-Feb-91	Chlorobenzene	2	2	UG/L	U	U
0271	05-Aug-91	Chlorobenzene	2	2	UG/L	U	U
0076	11-Oct-93	Chlorobenzene	2	2	UG/L	U	UJ
0076	31-Jul-90	Chlorobenzene	2	2	UG/L	U	U
0271	07-Apr-94	Chlorobenzene	2	2	UG/L	U	U
0076	27-Feb-90	Chlorobenzene	2	2	UG/L	U	U
0271	15-Jun-90	Chlorobenzene	2	2	UG/L	U	U
0271	24-Jan-90	Chlorobenzene	2	2	UG/L	U	U
0076	06-Nov-90	Chlorobenzene	2	2	UG/L	U	U
0271	27-Feb-90	Chlorobenzene	2	2	UG/L	U	U
0271	27-Feb-90	Chlorobenzene	2	2	UG/L	U	U
0271	07-Apr-94	Chlorobenzene	2	2	UG/L	U	U
0271	31-Jul-90	Chlorobenzene	2	2	UG/L	U	U
0271	08-Mar-88	Chlorobenzene	5	5	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	25-Apr-90	Chlorobenzene	5	5	UG/L	U	U
0271	13-Sep-88	Chlorobenzene	5	5	UG/L	U	U
0076	13-Sep-88	Chlorobenzene	5	5	UG/L	U	U
0271	25-Apr-90	Chlorobenzene	5	5	UG/L	U	U
0076	24-Jun-88	Chlorobenzene	5	5	UG/L	U	U
0271	24-Jun-88	Chlorobenzene	5	5	UG/L	U	U
0076	16-Dec-91	Chloroethane	2	2	UG/L	U	R
0076	13-Sep-88	Chloroethane	2	2	UG/L	U	U
0271	13-Sep-88	Chloroethane	2	2	UG/L	U	U
0271	16-Dec-91	Chloroethane	2	2	UG/L	U	R
0076	06-May-91	Chloroethane	5.2	5.2	UG/L	U	U
0271	05-Aug-91	Chloroethane	5.2	5.2	UG/L	U	U
0271	06-May-91	Chloroethane	5.2	5.2	UG/L	U	U
0076	24-Jun-88	Chloroethane	10	10	UG/L	U	U
0271	08-Mar-88	Chloroethane	10	10	UG/L	U	U
0076	25-Apr-90	Chloroethane	10	10	UG/L	U	U
0271	13-Sep-88	Chloroethane	10	10	UG/L	U	U
0271	24-Jun-88	Chloroethane	10	10	UG/L	U	U
0271	25-Apr-90	Chloroethane	10	10	UG/L	U	U
0076	13-Sep-88	Chloroethane	10	10	UG/L	U	U
0271	27-Feb-90	Chloroform	0.5	0.5	UG/L	U	U
0271	24-Jan-90	Chloroform	0.5	0.5	UG/L	U	U
0076	07-Apr-94	Chloroform	0.5	0.5	UG/L	U	U
0271	27-Feb-90	Chloroform	0.5	0.5	UG/L	U	U
0076	24-Jan-90	Chloroform	0.5	0.5	UG/L	U	U
0076	27-Feb-90	Chloroform	0.5	0.5	UG/L	U	U
0271	27-Feb-90	Chloroform	0.5	0.5	UG/L	U	U
0076	22-Jun-92	Chloroform	0.5	0.5	UG/L	U	UJ
0076	11-Oct-93	Chloroform	0.5	0.5	UG/L	U	UJ
0271	11-Oct-93	Chloroform	0.5	0.5	UG/L	U	UJ
0076	16-Sep-92	Chloroform	0.5	0.5	UG/L	U	U
0076	06-May-91	Chloroform	0.5	0.5	UG/L	U	U
0271	16-Sep-92	Chloroform	0.5	0.5	UG/L	U	U
0271	23-Mar-90	Chloroform	0.5	0.5	UG/L	U	U
0076	15-Jun-90	Chloroform	0.5	0.5	UG/L	U	U
0271	07-Apr-94	Chloroform	0.5	0.5	UG/L	U	UJ
0271	22-Jun-92	Chloroform	0.5	0.5	UG/L	U	UJ
0076	31-Jul-90	Chloroform	0.5	0.5	UG/L	U	U
0271	07-Apr-94	Chloroform	0.5	0.5	UG/L	U	U
0076	16-Jun-93	Chloroform	0.5	0.5	UG/L	U	U
0076	23-Mar-92	Chloroform	0.5	0.5	UG/L	U	U
0271	15-Jun-90	Chloroform	0.5	0.5	UG/L	U	U
0271	01-Feb-91	Chloroform	0.6	0.5	UG/L		UJ
0271	06-May-91	Chloroform	0.6	0.5	UG/L		J
0076	23-Mar-90	Chloroform	0.7	0.5	UG/L		
0076	01-Feb-91	Chloroform	0.8	0.5	UG/L		UJ
0271	05-Aug-91	Chloroform	0.9	0.5	UG/L		J
0076	06-Nov-90	Chloroform	0.9	0.5	UG/L		UJ
0271	13-Sep-88	Chloroform	1	1	UG/L	U	U
0076	13-Sep-88	Chloroform	1	1	UG/L	U	U
0076	16-Dec-91	Chloroform	1	1	UG/L	U	U
0271	16-Dec-91	Chloroform	1	1	UG/L	U	UJ
0271	06-Nov-90	Chloroform	1.2	0.5	UG/L		UJ
0076	12-Dec-85	Chloroform	1.6	1.6	UG/L	U	U
0271	13-Mar-86	Chloroform	1.6	1.6	UG/L	U	U
0271	13-Dec-85	Chloroform	1.6	1.6	UG/L	U	U
0271	31-Jul-90	Chloroform	2.2	0.5	UG/L		
0076	24-Jun-88	Chloroform	5	5	UG/L	U	U
0076	25-Apr-90	Chloroform	5	5	UG/L	U	U
0271	25-Apr-90	Chloroform	5	5	UG/L	U	U
0076	13-Sep-88	Chloroform	5	5	UG/L	U	U
0271	13-Sep-88	Chloroform	5	5	UG/L	U	U
0271	08-Mar-88	Chloroform	5	5	UG/L	U	U
0271	24-Jun-88	Chloroform	5	5	UG/L	U	U
0076	01-Feb-84	Chloroform	10	10	UG/L	U	U
0271	05-Aug-91	Chloromethane	0.8	0.8	UG/L	U	UJ
0271	06-May-91	Chloromethane	0.8	0.8	UG/L	U	U
0076	06-May-91	Chloromethane	0.8	0.8	UG/L	U	U
0271	13-Sep-88	Chloromethane	2	2	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	16-Dec-91	Chloromethane	2	2	UG/L	U	UJ
0076	13-Sep-88	Chloromethane	2	2	UG/L	U	U
0076	16-Dec-91	Chloromethane	2	2	UG/L	U	UJ
0076	25-Apr-90	Chloromethane	10	10	UG/L	U	U
0271	08-Mar-88	Chloromethane	10	10	UG/L	U	U
0076	24-Jun-88	Chloromethane	10	10	UG/L	U	U
0271	25-Apr-90	Chloromethane	10	10	UG/L	U	U
0076	13-Sep-88	Chloromethane	10	10	UG/L	U	U
0271	13-Sep-88	Chloromethane	10	10	UG/L	U	U
0271	24-Jun-88	Chloromethane	10	10	UG/L	U	U
0076	23-Mar-90	Chlorotoluene	1	1	UG/L	U	U
0076	31-Jul-90	Chlorotoluene	1	1	UG/L	U	U
0271	27-Feb-90	Chlorotoluene	1	1	UG/L	U	U
0271	27-Feb-90	Chlorotoluene	1	1	UG/L	U	U
0076	06-Nov-90	Chlorotoluene	1	1	UG/L	U	U
0271	31-Jul-90	Chlorotoluene	1	1	UG/L	U	U
0271	23-Mar-90	Chlorotoluene	1	1	UG/L	U	U
0271	06-May-91	Chlorotoluene	1	1	UG/L	U	U
0076	06-May-91	Chlorotoluene	1	1	UG/L	U	U
0076	15-Jun-90	Chlorotoluene	1	1	UG/L	U	U
0271	01-Feb-91	Chlorotoluene	1	1	UG/L	U	U
0271	24-Jan-90	Chlorotoluene	1	1	UG/L	U	U
0271	27-Feb-90	Chlorotoluene	1	1	UG/L	U	U
0076	24-Jan-90	Chlorotoluene	1	1	UG/L	U	U
0076	27-Feb-90	Chlorotoluene	1	1	UG/L	U	U
0271	05-Aug-91	Chlorotoluene	1	1	UG/L	U	U
0271	15-Jun-90	Chlorotoluene	1	1	UG/L	U	U
0076	01-Feb-91	Chlorotoluene	1	1	UG/L	U	U
0271	06-Nov-90	Chlorotoluene	1	1	UG/L	U	U
0076	11-Oct-93	Chromium	0.75	0.75	UG/L	U	U
0076	07-Apr-94	Chromium	0.82	0.82	UG/L	U	U
0271	07-Apr-94	Chromium	0.82	0.82	UG/L	U	U
0076	07-Apr-94	Chromium	0.82	0.82	UG/L	U	U
0271	07-Apr-94	Chromium	0.82	0.82	UG/L	U	U
0271	07-Apr-94	Chromium	0.82	0.82	UG/L	U	U
0271	07-Apr-94	Chromium	0.82	0.82	UG/L	U	U
0076	11-Oct-93	Chromium	1.4	0.75	UG/L	B	U
0271	11-Oct-93	Chromium	2	0.75	UG/L	B	U
0271	16-Sep-92	Chromium	3	3	UG/L	U	UJ
0076	16-Sep-92	Chromium	3	3	UG/L	U	UJ
0271	11-Oct-93	Chromium	3.1	0.75	UG/L	B	U
0076	23-Mar-92	Chromium	7	10	UG/L	U	U
0076	22-Jun-92	Chromium	8	8	UG/L	U	U
0271	22-Jun-92	Chromium	8	8	UG/L	U	U
0076	01-Feb-84	Chromium	9	9	UG/L	U	U
0271	01-Feb-91	Chromium	10	10	UG/L	U	U
0076	12-Dec-85	Chromium	10	10	UG/L	U	U
0271	13-Dec-85	Chromium	10	10	UG/L	U	U
0076	16-Dec-91	Chromium	10	10	UG/L	U	U
0076	01-Feb-91	Chromium	10	10	UG/L	U	U
0271	16-Dec-91	Chromium	10	10	UG/L	U	U
0271	06-Nov-90	Chromium	18.3	10	UG/L		
0076	06-Nov-90	Chromium	20.5	10	UG/L		
0271	05-Aug-91	Chromium	22	10	UG/L		
0076	06-May-91	Chromium	23.3	10	UG/L		
0271	06-May-91	Chromium	23.8	10	UG/L		
0271	05-Aug-91	Chromium	24.911	10	UG/L		
0271	01-Feb-91	Chromium-51	96	0	PCI/L	U	U
0076	01-Feb-91	Chromium-51	110	0	PCI/L	U	U
0076	06-May-91	Chrysene	10	10	UG/L	U	U
0271	16-Dec-91	Chrysene	10	10	UG/L	U	U
0271	06-May-91	Chrysene	10	10	UG/L	U	U
0076	06-Nov-90	Chrysene	10	10	UG/L	U	U
0271	05-Aug-91	Chrysene	10	10	UG/L	U	UJ
0076	22-Jun-92	Chrysene	10	10	UG/L	U	U
0076	01-Feb-91	Chrysene	10	10	UG/L	U	U
0271	06-Nov-90	Chrysene	10	10	UG/L	U	U
0271	11-Oct-93	Chrysene	10	10	UG/L	U	U
0076	23-Mar-92	Chrysene	10	10	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	22-Jun-92	Chrysene	10	10	UG/L	U	U
0271	01-Feb-91	Chrysene	10	10	UG/L	U	U
0271	16-Sep-92	Chrysene	10	10	UG/L	U	U
0076	16-Dec-91	Chrysene	10	10	UG/L	U	U
0076	11-Oct-93	Chrysene	10	10	UG/L	U	U
0076	16-Sep-92	Chrysene	10	10	UG/L	U	U
0271	07-Apr-94	Chrysene	11	11	UG/L	U	U
0271	07-Apr-94	Chrysene	11	11	UG/L	U	U
0076	07-Apr-94	Chrysene	11	11	UG/L	U	U
0076	07-Apr-94	Cobalt	0.98	0.98	UG/L	U	U
0271	07-Apr-94	Cobalt	0.98	0.98	UG/L	U	U
0076	07-Apr-94	Cobalt	0.98	0.98	UG/L	U	U
0271	07-Apr-94	Cobalt	0.98	0.98	UG/L	U	U
0271	07-Apr-94	Cobalt	0.98	0.98	UG/L	U	U
0271	07-Apr-94	Cobalt	0.98	0.98	UG/L	U	U
0076	11-Oct-93	Cobalt	1.2	1.2	UG/L	U	U
0271	11-Oct-93	Cobalt	1.2	1.2	UG/L	U	U
0271	11-Oct-93	Cobalt	1.2	1.2	UG/L	U	U
0076	11-Oct-93	Cobalt	1.2	1.2	UG/L	U	U
0076	16-Sep-92	Cobalt	4	4	UG/L	U	U
0271	16-Sep-92	Cobalt	4	4	UG/L	U	U
0271	22-Jun-92	Cobalt	6	6	UG/L	U	U
0076	22-Jun-92	Cobalt	6	6	UG/L	U	U
0076	23-Mar-92	Cobalt	7	50	UG/L	U	U
0076	06-Nov-90	Cobalt	10	10	UG/L	U	U
0271	05-Aug-91	Cobalt	10	10	UG/L	U	U
0271	06-May-91	Cobalt	10	10	UG/L	U	U
0271	06-Nov-90	Cobalt	10	10	UG/L	U	U
0076	06-May-91	Cobalt	10	10	UG/L	U	U
0271	05-Aug-91	Cobalt	10	10	UG/L	U	U
0271	01-Feb-91	Cobalt	20	20	UG/L	U	U
0076	01-Feb-91	Cobalt	20	20	UG/L	U	U
0076	16-Dec-91	Cobalt	50	50	UG/L	U	U
0271	16-Dec-91	Cobalt	50	50	UG/L	U	U
0271	01-Feb-91	Cobalt-57	11	0	PCI/L	U	U
0076	01-Feb-91	Cobalt-57	110	0	PCI/L	U	U
0076	01-Feb-91	Cobalt-58	8.2	0	PCI/L	U	U
0271	01-Feb-91	Cobalt-58	14	0	PCI/L	U	U
0076	07-Apr-94	Cobalt-60	1.74	1.74	PCI/L	U	U
0271	07-Apr-94	Cobalt-60	3.35	3.35	PCI/L	U	U
0271	07-Apr-94	Cobalt-60	4.46	4.46	PCI/L	U	U
0271	11-Oct-93	Cobalt-60	10	10	PCI/L	U	U
0076	11-Oct-93	Cobalt-60	14	14	PCI/L	U	U
0076	16-Sep-92	Cobalt-60	14.9	14.9	PCI/L	U	U
0271	01-Feb-91	Cobalt-60	17	0	PCI/L	U	U
0271	16-Sep-92	Cobalt-60	18.3	18.3	PCI/L	U	U
0271	06-May-91	Cobalt-60	22.7	20	PCI/L	U	U
0076	06-May-91	Cobalt-60	22.7	20	PCI/L	U	U
0076	01-Feb-91	Cobalt-60	32	0	PCI/L	U	U
0076	11-Oct-93	Copper	1.6	0.5	UG/L	B	
0076	11-Oct-93	Copper	1.6	0.5	UG/L	B	
0076	07-Apr-94	Copper	2.5	0.83	UG/L	B	
0271	11-Oct-93	Copper	3.9	0.5	UG/L	B	
0076	16-Sep-92	Copper	4	2	UG/L		J
0271	16-Sep-92	Copper	4	2	UG/L		J
0271	11-Oct-93	Copper	4.4	0.5	UG/L	B	
0076	22-Jun-92	Copper	5	5	UG/L	U	U
0076	23-Mar-92	Copper	7	25	UG/L	U	U
0271	13-Dec-85	Copper	7	7	UG/L	U	U
0076	12-Dec-85	Copper	7	7	UG/L	U	U
0076	07-Apr-94	Copper	7.4	0.83	UG/L	B	
0271	07-Apr-94	Copper	7.5	0.83	UG/L	B	
0271	07-Apr-94	Copper	8.7	0.83	UG/L	B	
0271	07-Apr-94	Copper	8.9	0.83	UG/L	B	
0271	07-Apr-94	Copper	9.2	0.83	UG/L	B	
0271	22-Jun-92	Copper	9.9	5	UG/L	B	
0076	01-Feb-91	Copper	10	10	UG/L	U	U
0076	01-Feb-84	Copper	10	10	UG/L	U	U
0271	16-Dec-91	Copper	11.4	25	UG/L	U	UJ

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	05-Aug-91	Copper	11.8	10	UG/L		
0271	05-Aug-91	Copper	13.458	10	UG/L		
0076	16-Dec-91	Copper	14.2	25	UG/L	U	UJ
0271	06-Nov-90	Copper	17	10	UG/L	B	
0271	06-May-91	Copper	17.6	10	UG/L	B	
0076	06-May-91	Copper	18.2	10	UG/L	B	
0271	01-Feb-91	Copper	40.4	10	UG/L		
0076	06-Nov-90	Copper	593	10	UG/L		
0076	23-Mar-92	Currrently Unknown Radioisotope	0	0.4	PCI/L		
0076	22-Jun-92	Currrently Unknown Radioisotope	0	0.4	PCI/L		
0271	22-Jun-92	Currrently Unknown Radioisotope	0	0.4	PCI/L		
0076	06-May-91	Currrently Unknown Radioisotope	1	1	PCI/L	U	U
0271	06-May-91	Currrently Unknown Radioisotope	1	1	PCI/L	U	U
0271	06-Nov-90	Currrently Unknown Radioisotope	1	0	PCI/L	U	U
0076	06-Nov-90	Currrently Unknown Radioisotope	1	0	PCI/L	U	U
0271	01-Feb-91	Currrently Unknown Radioisotope	1.4	0	PCI/L		
0076	01-Feb-91	Currrently Unknown Radioisotope	2.3	0	PCI/L		
0076	06-May-91	Currrently Unknown Radioisotope	46.1	1	PCI/L	U	U
0271	06-May-91	Currrently Unknown Radioisotope	47	1	PCI/L	U	U
0271	07-Apr-94	Cyanide	5	5	UG/L	U	U
0271	07-Apr-94	Cyanide	5	5	UG/L	U	U
0271	07-Apr-94	Cyanide	5	5	UG/L	U	U
0271	07-Apr-94	Cyanide	5	5	UG/L	U	U
0076	07-Apr-94	Cyanide	5	5	UG/L	U	U
0076	07-Apr-94	Cyanide	5	5	UG/L	U	U
0271	11-Oct-93	Cyanide	10	10	UG/L	U	U
0271	11-Oct-93	Cyanide	10	10	UG/L	U	U
0076	11-Oct-93	Cyanide	10	10	UG/L	U	U
0076	11-Oct-93	Cyanide	10	10	UG/L	U	U
0076	06-Nov-90	Delta-BHC	0.05	0.05	UG/L	U	U
0271	07-Apr-94	Delta-BHC	0.05	0.05	UG/L	U	U
0076	01-Feb-91	Delta-BHC	0.05	0.05	UG/L	U	U
0271	06-Nov-90	Delta-BHC	0.05	0.05	UG/L	U	U
0076	11-Oct-93	Delta-BHC	0.05	0.05	UG/L	U	UJ
0076	06-May-91	Delta-BHC	0.05	0.05	UG/L	U	U
0271	11-Oct-93	Delta-BHC	0.05	0.05	UG/L	U	U
0271	06-May-91	Delta-BHC	0.05	0.05	UG/L	U	U
0271	05-Aug-91	Delta-BHC	0.05	0.05	UG/L	U	U
0271	16-Sep-92	Delta-BHC	0.05	0.05	UG/L	U	U
0076	16-Sep-92	Delta-BHC	0.05	0.05	UG/L		U
0271	01-Feb-91	Delta-BHC	0.05	0.05	UG/L	U	U
0271	22-Jun-92	Delta-BHC	0.051	0.051	UG/L	J	U
0271	07-Apr-94	Delta-BHC	0.052	0.052	UG/L	U	U
0076	16-Dec-91	Delta-BHC	0.052	0.052	UG/L	U	UJ
0076	22-Jun-92	Delta-BHC	0.052	0.052	UG/L	U	U
0271	16-Dec-91	Delta-BHC	0.052	0.052	UG/L	U	UJ
0076	23-Mar-92	Delta-BHC	0.053	0.053	UG/L	U	U
0076	07-Apr-94	Delta-BHC	0.055	0.055	UG/L	U	U
0076	06-May-91	Delta-BHC	0.25	0.25	UG/L	U	U
0271	06-May-91	Delta-BHC	0.75	0.75	UG/L	U	U
0271	16-Sep-92	Di-n-butyl Phthalate	10	10	UG/L	JB	UJ
0271	06-Nov-90	Di-n-butyl Phthalate	10	10	UG/L	U	U
0076	16-Dec-91	Di-n-butyl Phthalate	10	10	UG/L	U	U
0076	01-Feb-84	Di-n-butyl Phthalate	10	10	UG/L	U	U
0076	06-Nov-90	Di-n-butyl Phthalate	10	10	UG/L	U	U
0076	12-Dec-85	Di-n-butyl Phthalate	10	10	UG/L	U	U
0076	06-May-91	Di-n-butyl Phthalate	10	10	UG/L	U	U
0271	06-May-91	Di-n-butyl Phthalate	10	10	UG/L	U	U
0271	11-Oct-93	Di-n-butyl Phthalate	10	10	UG/L	U	UJ
0271	05-Aug-91	Di-n-butyl Phthalate	10	10	UG/L	U	UJ
0076	23-Mar-92	Di-n-butyl Phthalate	10	10	UG/L	JB	UJ
0076	11-Oct-93	Di-n-butyl Phthalate	10	10	UG/L	U	UJ
0076	16-Sep-92	Di-n-butyl Phthalate	10	10	UG/L	JB	UJ
0271	22-Jun-92	Di-n-butyl Phthalate	10	10	UG/L	JB	UJ
0271	13-Dec-85	Di-n-butyl Phthalate	10	10	UG/L	U	U
0076	01-Feb-91	Di-n-butyl Phthalate	10	10	UG/L	U	U
0076	22-Jun-92	Di-n-butyl Phthalate	10	10	UG/L	JB	UJ
0271	01-Feb-91	Di-n-butyl Phthalate	10	10	UG/L	U	U
0271	16-Dec-91	Di-n-butyl Phthalate	10	10	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	07-Apr-94	Di-n-butyl Phthalate	11	11	UG/L	JB	U
0271	07-Apr-94	Di-n-butyl Phthalate	11	11	UG/L	JB	U
0271	07-Apr-94	Di-n-butyl Phthalate	11	11	UG/L	JB	U
0076	01-Feb-91	Di-n-octyl Phthalate	10	10	UG/L	U	U
0076	16-Sep-92	Di-n-octyl Phthalate	10	10	UG/L	U	U
0271	16-Dec-91	Di-n-octyl Phthalate	10	10	UG/L	U	U
0271	05-Aug-91	Di-n-octyl Phthalate	10	10	UG/L	U	UJ
0076	22-Jun-92	Di-n-octyl Phthalate	10	10	UG/L	U	U
0076	06-May-91	Di-n-octyl Phthalate	10	10	UG/L	U	U
0271	22-Jun-92	Di-n-octyl Phthalate	10	10	UG/L	U	U
0271	16-Sep-92	Di-n-octyl Phthalate	10	10	UG/L	U	U
0271	06-May-91	Di-n-octyl Phthalate	10	10	UG/L	U	U
0076	23-Mar-92	Di-n-octyl Phthalate	10	10	UG/L	U	U
0076	11-Oct-93	Di-n-octyl Phthalate	10	10	UG/L	U	U
0076	06-Nov-90	Di-n-octyl Phthalate	10	10	UG/L	U	U
0076	16-Dec-91	Di-n-octyl Phthalate	10	10	UG/L	U	U
0271	06-Nov-90	Di-n-octyl Phthalate	10	10	UG/L	U	U
0271	11-Oct-93	Di-n-octyl Phthalate	10	10	UG/L	U	U
0271	01-Feb-91	Di-n-octyl Phthalate	10	10	UG/L	U	U
0271	07-Apr-94	Di-n-octyl Phthalate	11	11	UG/L	U	UJ
0271	07-Apr-94	Di-n-octyl Phthalate	11	11	UG/L	U	UJ
0076	07-Apr-94	Di-n-octyl Phthalate	11	11	UG/L	U	UJ
0076	01-Feb-91	Dibenzo(a,h)anthracene	10	10	UG/L	U	U
0076	16-Sep-92	Dibenzo(a,h)anthracene	10	10	UG/L	U	U
0271	11-Oct-93	Dibenzo(a,h)anthracene	10	10	UG/L	U	U
0271	05-Aug-91	Dibenzo(a,h)anthracene	10	10	UG/L	U	UJ
0271	22-Jun-92	Dibenzo(a,h)anthracene	10	10	UG/L	U	U
0271	01-Feb-91	Dibenzo(a,h)anthracene	10	10	UG/L	U	U
0271	16-Dec-91	Dibenzo(a,h)anthracene	10	10	UG/L	U	U
0076	23-Mar-92	Dibenzo(a,h)anthracene	10	10	UG/L	U	U
0076	16-Dec-91	Dibenzo(a,h)anthracene	10	10	UG/L	U	U
0271	06-May-91	Dibenzo(a,h)anthracene	10	10	UG/L	U	U
0076	06-Nov-90	Dibenzo(a,h)anthracene	10	10	UG/L	U	U
0076	06-May-91	Dibenzo(a,h)anthracene	10	10	UG/L	U	U
0076	11-Oct-93	Dibenzo(a,h)anthracene	10	10	UG/L	U	U
0271	06-Nov-90	Dibenzo(a,h)anthracene	10	10	UG/L	U	U
0271	16-Sep-92	Dibenzo(a,h)anthracene	10	10	UG/L	U	U
0076	22-Jun-92	Dibenzo(a,h)anthracene	10	10	UG/L	U	U
0271	07-Apr-94	Dibenzo(a,h)anthracene	11	11	UG/L	U	U
0271	07-Apr-94	Dibenzo(a,h)anthracene	11	11	UG/L	U	U
0076	07-Apr-94	Dibenzo(a,h)anthracene	11	11	UG/L	U	U
0271	01-Feb-91	Dibenzofuran	10	10	UG/L	U	U
0076	06-Nov-90	Dibenzofuran	10	10	UG/L	U	U
0271	16-Dec-91	Dibenzofuran	10	10	UG/L	U	U
0076	23-Mar-92	Dibenzofuran	10	10	UG/L	U	U
0076	16-Dec-91	Dibenzofuran	10	10	UG/L	U	U
0271	06-May-91	Dibenzofuran	10	10	UG/L	U	U
0271	05-Aug-91	Dibenzofuran	10	10	UG/L	U	UJ
0271	06-Nov-90	Dibenzofuran	10	10	UG/L	U	U
0076	06-May-91	Dibenzofuran	10	10	UG/L	U	U
0271	16-Sep-92	Dibenzofuran	10	10	UG/L	U	U
0076	11-Oct-93	Dibenzofuran	10	10	UG/L	U	U
0076	22-Jun-92	Dibenzofuran	10	10	UG/L	U	U
0076	01-Feb-91	Dibenzofuran	10	10	UG/L	U	U
0076	16-Sep-92	Dibenzofuran	10	10	UG/L	U	U
0271	22-Jun-92	Dibenzofuran	10	10	UG/L	U	U
0271	11-Oct-93	Dibenzofuran	10	10	UG/L	U	U
0271	07-Apr-94	Dibenzofuran	11	11	UG/L	U	U
0271	07-Apr-94	Dibenzofuran	11	11	UG/L	U	U
0076	07-Apr-94	Dibenzofuran	11	11	UG/L	U	U
0271	11-Oct-93	Dibromochloromethane	0.9	0.9	UG/L	U	U
0271	22-Jun-92	Dibromochloromethane	0.9	0.9	UG/L	U	UJ
0271	27-Feb-90	Dibromochloromethane	0.9	0.9	UG/L	U	U
0271	23-Mar-90	Dibromochloromethane	0.9	0.9	UG/L	U	U
0271	06-May-91	Dibromochloromethane	0.9	0.9	UG/L	U	U
0076	06-Nov-90	Dibromochloromethane	0.9	0.9	UG/L	U	U
0271	01-Feb-91	Dibromochloromethane	0.9	0.9	UG/L	U	U
0076	06-May-91	Dibromochloromethane	0.9	0.9	UG/L	U	U
0076	15-Jun-90	Dibromochloromethane	0.9	0.9	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	31-Jul-90	Dibromochloromethane	0.9	0.9	UG/L	U	U
0076	31-Jul-90	Dibromochloromethane	0.9	0.9	UG/L	U	U
0076	11-Oct-93	Dibromochloromethane	0.9	0.9	UG/L	U	U
0076	16-Sep-92	Dibromochloromethane	0.9	0.9	UG/L	U	U
0076	07-Apr-94	Dibromochloromethane	0.9	0.9	UG/L	U	UJ
0271	07-Apr-94	Dibromochloromethane	0.9	0.9	UG/L	U	UJ
0076	22-Jun-92	Dibromochloromethane	0.9	0.9	UG/L	U	UJ
0076	23-Mar-92	Dibromochloromethane	0.9	0.9	UG/L	U	U
0076	16-Jun-93	Dibromochloromethane	0.9	0.9	UG/L	U	U
0271	06-Nov-90	Dibromochloromethane	0.9	0.9	UG/L	U	U
0271	05-Aug-91	Dibromochloromethane	0.9	0.9	UG/L	U	U
0271	16-Sep-92	Dibromochloromethane	0.9	0.9	UG/L	U	U
0076	23-Mar-90	Dibromochloromethane	0.9	0.9	UG/L	U	U
0271	27-Feb-90	Dibromochloromethane	0.9	0.9	UG/L	U	U
0271	24-Jan-90	Dibromochloromethane	0.9	0.9	UG/L	U	U
0271	27-Feb-90	Dibromochloromethane	0.9	0.9	UG/L	U	U
0076	27-Feb-90	Dibromochloromethane	0.9	0.9	UG/L	U	U
0271	07-Apr-94	Dibromochloromethane	0.9	0.9	UG/L	U	UJ
0076	24-Jan-90	Dibromochloromethane	0.9	0.9	UG/L	U	U
0076	01-Feb-91	Dibromochloromethane	0.9	0.9	UG/L	U	U
0271	15-Jun-90	Dibromochloromethane	0.9	0.9	UG/L	U	U
0076	16-Dec-91	Dibromochloromethane	1	1	UG/L	U	U
0271	16-Dec-91	Dibromochloromethane	1	1	UG/L	U	U
0076	13-Sep-88	Dibromochloromethane	1	1	UG/L	U	U
0271	13-Sep-88	Dibromochloromethane	1	1	UG/L	U	U
0076	25-Apr-90	Dibromochloromethane	5	5	UG/L	U	U
0271	08-Mar-88	Dibromochloromethane	5	5	UG/L	U	U
0076	13-Sep-88	Dibromochloromethane	5	5	UG/L	U	U
0271	25-Apr-90	Dibromochloromethane	5	5	UG/L	U	U
0076	24-Jun-88	Dibromochloromethane	5	5	UG/L	U	U
0271	24-Jun-88	Dibromochloromethane	5	5	UG/L	U	U
0271	13-Sep-88	Dibromochloromethane	5	5	UG/L	U	U
0271	16-Dec-91	Dibromomethane	1	1	UG/L	U	UJ
0076	16-Dec-91	Dibromomethane	1	1	UG/L	U	UJ
0076	11-Oct-93	Dibromomethane	2	2	UG/L	U	UJ
0076	01-Feb-91	Dibromomethane	2	2	UG/L	U	UJ
0271	27-Feb-90	Dibromomethane	2	2	UG/L	U	U
0271	15-Jun-90	Dibromomethane	2	2	UG/L	U	U
0271	11-Oct-93	Dibromomethane	2	2	UG/L	U	U
0076	24-Jan-90	Dibromomethane	2	2	UG/L	U	U
0271	07-Apr-94	Dibromomethane	2	2	UG/L	U	U
0076	16-Jun-93	Dibromomethane	2	2	UG/L	U	U
0076	06-May-91	Dibromomethane	2	2	UG/L	U	UJ
0271	27-Feb-90	Dibromomethane	2	2	UG/L	U	U
0271	06-May-91	Dibromomethane	2	2	UG/L	U	UJ
0271	23-Mar-90	Dibromomethane	2	2	UG/L	U	U
0271	01-Feb-91	Dibromomethane	2	2	UG/L	U	UJ
0076	23-Mar-92	Dibromomethane	2	2	UG/L	U	U
0076	15-Jun-90	Dibromomethane	2	2	UG/L	U	U
0271	16-Sep-92	Dibromomethane	2	2	UG/L	U	U
0076	23-Mar-90	Dibromomethane	2	2	UG/L	U	U
0271	06-Nov-90	Dibromomethane	2	2	UG/L	U	UJ
0271	24-Jan-90	Dibromomethane	2	2	UG/L	U	U
0271	31-Jul-90	Dibromomethane	2	2	UG/L	U	U
0271	27-Feb-90	Dibromomethane	2	2	UG/L	U	U
0076	31-Jul-90	Dibromomethane	2	2	UG/L	U	U
0076	06-Nov-90	Dibromomethane	2	2	UG/L	U	UJ
0271	07-Apr-94	Dibromomethane	2	2	UG/L	U	U
0271	05-Aug-91	Dibromomethane	2	2	UG/L	U	UJ
0076	07-Apr-94	Dibromomethane	2	2	UG/L	U	U
0076	16-Sep-92	Dibromomethane	2	2	UG/L	U	U
0076	27-Feb-90	Dibromomethane	2	2	UG/L	U	U
0271	22-Jun-92	Dibromomethane	2.5	2	UG/L	B	UJ
0076	22-Jun-92	Dibromomethane	2.7	2	UG/L	B	UJ
0076	06-May-91	Dichlorodifluoromethane	1.8	1.8	UG/L	U	U
0271	06-May-91	Dichlorodifluoromethane	1.8	1.8	UG/L	U	U
0271	05-Aug-91	Dichlorodifluoromethane	1.8	1.8	UG/L	U	UJ
0271	13-Sep-88	Dichlorodifluoromethane	2	2	UG/L	U	U
0076	13-Sep-88	Dichlorodifluoromethane	2	2	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	16-Dec-91	Dichlorodifluoromethane	2	2	UG/L	U	R
0076	16-Dec-91	Dichlorodifluoromethane	2	2	UG/L	U	R
0271	05-Aug-91	Dieldrin	0.02	0.02	UG/L	U	U
0271	01-Feb-91	Dieldrin	0.1	0.1	UG/L	U	U
0076	22-Jun-92	Dieldrin	0.1	0.1	UG/L	U	U
0271	16-Dec-91	Dieldrin	0.1	0.1	UG/L	U	U
0271	07-Apr-94	Dieldrin	0.1	0.1	UG/L	U	U
0271	11-Oct-93	Dieldrin	0.1	0.1	UG/L	U	U
0076	06-May-91	Dieldrin	0.1	0.1	UG/L	U	U
0271	06-Nov-90	Dieldrin	0.1	0.1	UG/L	U	U
0271	22-Jun-92	Dieldrin	0.1	0.1	UG/L	U	U
0076	01-Feb-91	Dieldrin	0.1	0.1	UG/L	U	U
0076	06-Nov-90	Dieldrin	0.1	0.1	UG/L	U	U
0076	16-Dec-91	Dieldrin	0.1	0.1	UG/L	U	U
0271	16-Sep-92	Dieldrin	0.1	0.1	UG/L	U	U
0076	16-Sep-92	Dieldrin	0.1	0.1	UG/L	U	U
0271	06-May-91	Dieldrin	0.1	0.1	UG/L	U	U
0271	07-Apr-94	Dieldrin	0.1	0.1	UG/L	U	U
0076	11-Oct-93	Dieldrin	0.1	0.1	UG/L	U	UJ
0076	23-Mar-92	Dieldrin	0.11	0.11	UG/L	U	U
0076	07-Apr-94	Dieldrin	0.11	0.11	UG/L	U	U
0076	06-May-91	Dieldrin	0.5	0.5	UG/L	U	U
0271	06-May-91	Dieldrin	1.5	1.5	UG/L	U	U
0271	16-Dec-91	Diethyl Phthalate	10	10	UG/L	U	U
0271	01-Feb-91	Diethyl Phthalate	10	10	UG/L	U	U
0076	16-Dec-91	Diethyl Phthalate	10	10	UG/L	U	U
0271	06-Nov-90	Diethyl Phthalate	10	10	UG/L	U	U
0271	06-May-91	Diethyl Phthalate	10	10	UG/L	U	U
0076	01-Feb-91	Diethyl Phthalate	10	10	UG/L	U	U
0076	11-Oct-93	Diethyl Phthalate	10	10	UG/L	U	U
0076	06-Nov-90	Diethyl Phthalate	10	10	UG/L	U	U
0271	11-Oct-93	Diethyl Phthalate	10	10	UG/L	U	U
0271	16-Sep-92	Diethyl Phthalate	10	10	UG/L	U	U
0076	16-Sep-92	Diethyl Phthalate	10	10	UG/L	U	U
0076	23-Mar-92	Diethyl Phthalate	10	10	UG/L	U	U
0076	06-May-91	Diethyl Phthalate	10	10	UG/L	U	U
0271	05-Aug-91	Diethyl Phthalate	10	10	UG/L	U	UJ
0271	22-Jun-92	Diethyl Phthalate	10	10	UG/L	U	U
0076	22-Jun-92	Diethyl Phthalate	10	10	UG/L	U	U
0271	07-Apr-94	Diethyl Phthalate	11	11	UG/L	U	U
0076	07-Apr-94	Diethyl Phthalate	11	11	UG/L	U	U
0271	07-Apr-94	Diethyl Phthalate	11	11	UG/L	U	U
0271	22-Jun-92	Dimethyl Phthalate	10	10	UG/L	U	U
0271	16-Sep-92	Dimethyl Phthalate	10	10	UG/L	U	U
0271	06-Nov-90	Dimethyl Phthalate	10	10	UG/L	U	U
0076	06-May-91	Dimethyl Phthalate	10	10	UG/L	U	U
0271	06-May-91	Dimethyl Phthalate	10	10	UG/L	U	U
0271	05-Aug-91	Dimethyl Phthalate	10	10	UG/L	U	UJ
0076	11-Oct-93	Dimethyl Phthalate	10	10	UG/L	U	U
0076	01-Feb-91	Dimethyl Phthalate	10	10	UG/L	U	U
0076	06-Nov-90	Dimethyl Phthalate	10	10	UG/L	U	U
0076	16-Dec-91	Dimethyl Phthalate	10	10	UG/L	U	U
0076	16-Sep-92	Dimethyl Phthalate	10	10	UG/L	U	U
0076	22-Jun-92	Dimethyl Phthalate	10	10	UG/L	U	U
0271	01-Feb-91	Dimethyl Phthalate	10	10	UG/L	U	U
0271	11-Oct-93	Dimethyl Phthalate	10	10	UG/L	U	U
0076	23-Mar-92	Dimethyl Phthalate	10	10	UG/L	U	U
0271	16-Dec-91	Dimethyl Phthalate	10	10	UG/L	U	U
0271	07-Apr-94	Dimethyl Phthalate	11	11	UG/L	U	U
0076	07-Apr-94	Dimethyl Phthalate	11	11	UG/L	U	U
0271	07-Apr-94	Dimethyl Phthalate	11	11	UG/L	U	U
0076	11-Oct-93	Dissolved Solids	518	4	MG/L		
0076	07-Apr-94	Dissolved Solids	562	4	MG/L		
0271	11-Oct-93	Dissolved Solids	589	4	MG/L		
0271	07-Apr-94	Dissolved Solids	685	4	MG/L		
0271	07-Apr-94	Dissolved Solids	719	4	MG/L		
0076	01-Feb-91	Endosulfan I	0.05	0.05	UG/L	U	U
0076	16-Sep-92	Endosulfan I	0.05	0.05	UG/L	U	U
0271	05-Aug-91	Endosulfan I	0.05	0.05	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect Limit	Units	Lab Qual.	Data Qual.
0076	06-May-91	Endosulfan I	0.05	0.05	UG/L	U	U
0271	16-Sep-92	Endosulfan I	0.05	0.05	UG/L	U	U
0076	11-Oct-93	Endosulfan I	0.05	0.05	UG/L	U	UJ
0076	06-Nov-90	Endosulfan I	0.05	0.05	UG/L	U	U
0271	01-Feb-91	Endosulfan I	0.05	0.05	UG/L	U	U
0271	06-Nov-90	Endosulfan I	0.05	0.05	UG/L	U	U
0271	07-Apr-94	Endosulfan I	0.05	0.05	UG/L	U	U
0271	06-May-91	Endosulfan I	0.05	0.05	UG/L	U	U
0271	11-Oct-93	Endosulfan I	0.05	0.05	UG/L	U	U
0271	22-Jun-92	Endosulfan I	0.051	0.051	UG/L	U	U
0271	16-Dec-91	Endosulfan I	0.052	0.052	UG/L	U	U
0076	22-Jun-92	Endosulfan I	0.052	0.052	UG/L	U	U
0076	16-Dec-91	Endosulfan I	0.052	0.052	UG/L	U	U
0271	07-Apr-94	Endosulfan I	0.052	0.052	UG/L	U	U
0076	23-Mar-92	Endosulfan I	0.053	0.053	UG/L	J	U
0076	07-Apr-94	Endosulfan I	0.055	0.055	UG/L	U	U
0076	06-May-91	Endosulfan I	0.25	0.25	UG/L	U	U
0271	06-May-91	Endosulfan I	0.75	0.75	UG/L	U	U
0271	05-Aug-91	Endosulfan II	0.04	0.04	UG/L	U	U
0076	06-May-91	Endosulfan II	0.1	0.1	UG/L	U	U
0076	22-Jun-92	Endosulfan II	0.1	0.1	UG/L	U	U
0271	01-Feb-91	Endosulfan II	0.1	0.1	UG/L	U	U
0271	16-Dec-91	Endosulfan II	0.1	0.1	UG/L	U	U
0076	16-Dec-91	Endosulfan II	0.1	0.1	UG/L	U	U
0076	01-Feb-91	Endosulfan II	0.1	0.1	UG/L	U	U
0271	16-Sep-92	Endosulfan II	0.1	0.1	UG/L	U	U
0271	22-Jun-92	Endosulfan II	0.1	0.1	UG/L	U	U
0271	07-Apr-94	Endosulfan II	0.1	0.1	UG/L	U	U
0076	06-Nov-90	Endosulfan II	0.1	0.1	UG/L	U	U
0271	07-Apr-94	Endosulfan II	0.1	0.1	UG/L	U	U
0076	11-Oct-93	Endosulfan II	0.1	0.1	UG/L	U	UJ
0076	16-Sep-92	Endosulfan II	0.1	0.1	UG/L	U	U
0271	11-Oct-93	Endosulfan II	0.1	0.1	UG/L	U	U
0271	06-May-91	Endosulfan II	0.1	0.1	UG/L	U	U
0271	06-Nov-90	Endosulfan II	0.1	0.1	UG/L	U	U
0076	23-Mar-92	Endosulfan II	0.11	0.11	UG/L	U	U
0076	07-Apr-94	Endosulfan II	0.11	0.11	UG/L	U	U
0076	06-May-91	Endosulfan II	0.5	0.5	UG/L	U	U
0271	06-May-91	Endosulfan II	1.5	1.5	UG/L	U	U
0271	11-Oct-93	Endosulfan Sulfate	0.1	0.1	UG/L	U	U
0271	06-May-91	Endosulfan Sulfate	0.1	0.1	UG/L	U	U
0271	16-Dec-91	Endosulfan Sulfate	0.1	0.1	UG/L	U	U
0076	01-Feb-91	Endosulfan Sulfate	0.1	0.1	UG/L	U	U
0271	01-Feb-91	Endosulfan Sulfate	0.1	0.1	UG/L	U	U
0076	22-Jun-92	Endosulfan Sulfate	0.1	0.1	UG/L	U	U
0271	05-Aug-91	Endosulfan Sulfate	0.1	0.1	UG/L	U	U
0271	16-Sep-92	Endosulfan Sulfate	0.1	0.1	UG/L	U	U
0076	06-May-91	Endosulfan Sulfate	0.1	0.1	UG/L	U	U
0076	11-Oct-93	Endosulfan Sulfate	0.1	0.1	UG/L	U	UJ
0271	06-Nov-90	Endosulfan Sulfate	0.1	0.1	UG/L	U	U
0076	16-Dec-91	Endosulfan Sulfate	0.1	0.1	UG/L	U	U
0271	22-Jun-92	Endosulfan Sulfate	0.1	0.1	UG/L	U	U
0076	16-Sep-92	Endosulfan Sulfate	0.1	0.1	UG/L	U	U
0271	07-Apr-94	Endosulfan Sulfate	0.1	0.1	UG/L	U	U
0271	07-Apr-94	Endosulfan Sulfate	0.1	0.1	UG/L	U	U
0076	06-Nov-90	Endosulfan Sulfate	0.1	0.1	UG/L	U	U
0076	07-Apr-94	Endosulfan Sulfate	0.11	0.11	UG/L	U	U
0076	23-Mar-92	Endosulfan Sulfate	0.11	0.11	UG/L	U	U
0076	06-May-91	Endosulfan Sulfate	0.5	0.5	UG/L	U	U
0271	06-May-91	Endosulfan Sulfate	1.5	1.5	UG/L	U	U
0271	05-Aug-91	Endrin	0.06	0.06	UG/L	U	U
0076	06-Nov-90	Endrin	0.1	0.1	UG/L	U	U
0271	06-Nov-90	Endrin	0.1	0.1	UG/L	U	U
0076	11-Oct-93	Endrin	0.1	0.1	UG/L	U	UJ
0271	16-Dec-91	Endrin	0.1	0.1	UG/L	U	U
0076	16-Dec-91	Endrin	0.1	0.1	UG/L	U	U
0076	16-Sep-92	Endrin	0.1	0.1	UG/L	U	U
0271	16-Sep-92	Endrin	0.1	0.1	UG/L	U	U
0271	06-May-91	Endrin	0.1	0.1	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	06-May-91	Endrin	0.1	0.1	UG/L	U	U
0076	22-Jun-92	Endrin	0.1	0.1	UG/L	U	U
0271	11-Oct-93	Endrin	0.1	0.1	UG/L	U	U
0076	01-Feb-91	Endrin	0.1	0.1	UG/L	U	U
0271	01-Feb-91	Endrin	0.1	0.1	UG/L	U	U
0271	07-Apr-94	Endrin	0.1	0.1	UG/L	U	U
0271	22-Jun-92	Endrin	0.1	0.1	UG/L	U	U
0271	07-Apr-94	Endrin	0.1	0.1	UG/L	U	U
0076	23-Mar-92	Endrin	0.11	0.11	UG/L	U	U
0076	07-Apr-94	Endrin	0.11	0.11	UG/L	U	U
0076	06-May-91	Endrin	0.5	0.5	UG/L	U	U
0271	06-May-91	Endrin	1.5	1.5	UG/L	U	U
0271	07-Apr-94	Endrin Aldehyde	0.1	0.1	UG/L	U	U
0271	05-Aug-91	Endrin Aldehyde	0.1	0.1	UG/L	U	U
0271	11-Oct-93	Endrin Aldehyde	0.1	0.1	UG/L	U	U
0076	22-Jun-92	Endrin Aldehyde	0.1	0.1	UG/L	U	U
0076	11-Oct-93	Endrin Aldehyde	0.1	0.1	UG/L	U	UJ
0271	07-Apr-94	Endrin Aldehyde	0.1	0.1	UG/L	U	U
0271	16-Sep-92	Endrin Aldehyde	0.1	0.1	UG/L	U	U
0271	22-Jun-92	Endrin Aldehyde	0.1	0.1	UG/L	U	U
0076	16-Sep-92	Endrin Aldehyde	0.1	0.1	UG/L	U	U
0076	23-Mar-92	Endrin Aldehyde	0.11	0.11	UG/L	U	U
0076	07-Apr-94	Endrin Aldehyde	0.11	0.11	UG/L	U	U
0271	16-Sep-92	Endrin Ketone	0.1	0.1	UG/L	U	U
0271	01-Feb-91	Endrin Ketone	0.1	0.1	UG/L	U	U
0076	01-Feb-91	Endrin Ketone	0.1	0.1	UG/L	U	U
0076	11-Oct-93	Endrin Ketone	0.1	0.1	UG/L	U	UJ
0271	05-Aug-91	Endrin Ketone	0.1	0.1	UG/L	U	U
0271	07-Apr-94	Endrin Ketone	0.1	0.1	UG/L	U	U
0271	22-Jun-92	Endrin Ketone	0.1	0.1	UG/L	U	U
0076	22-Jun-92	Endrin Ketone	0.1	0.1	UG/L	U	U
0076	06-May-91	Endrin Ketone	0.1	0.1	UG/L	U	U
0076	06-Nov-90	Endrin Ketone	0.1	0.1	UG/L	U	U
0271	16-Dec-91	Endrin Ketone	0.1	0.1	UG/L	U	U
0076	16-Sep-92	Endrin Ketone	0.1	0.1	UG/L	U	U
0271	11-Oct-93	Endrin Ketone	0.1	0.1	UG/L	U	U
0271	07-Apr-94	Endrin Ketone	0.1	0.1	UG/L	U	U
0076	16-Dec-91	Endrin Ketone	0.1	0.1	UG/L	U	U
0271	06-Nov-90	Endrin Ketone	0.1	0.1	UG/L	U	U
0271	06-May-91	Endrin Ketone	0.1	0.1	UG/L	U	U
0076	07-Apr-94	Endrin Ketone	0.11	0.11	UG/L	U	U
0076	23-Mar-92	Endrin Ketone	0.11	0.11	UG/L	U	U
0076	06-May-91	Endrin Ketone	0.5	0.5	UG/L	U	U
0271	06-May-91	Endrin Ketone	1.5	1.5	UG/L	U	U
0271	13-Sep-88	Ethylbenzene	1	1	UG/L	U	U
0076	16-Jun-93	Ethylbenzene	1	1	UG/L	U	U
0271	16-Dec-91	Ethylbenzene	1	1	UG/L	U	U
0076	23-Mar-92	Ethylbenzene	1	1	UG/L	U	UJ
0271	22-Jun-92	Ethylbenzene	1	1	UG/L	U	UJ
0076	16-Sep-92	Ethylbenzene	1	1	UG/L	U	UJ
0076	13-Sep-88	Ethylbenzene	1	1	UG/L	U	U
0076	22-Jun-92	Ethylbenzene	1	1	UG/L	U	UJ
0076	16-Dec-91	Ethylbenzene	1	1	UG/L	U	U
0271	16-Sep-92	Ethylbenzene	1	1	UG/L	U	UJ
0076	24-Jan-90	Ethylbenzene	2	2	UG/L	U	U
0271	06-May-91	Ethylbenzene	2	2	UG/L	U	UJ
0076	15-Jun-90	Ethylbenzene	2	2	UG/L	U	U
0271	24-Jan-90	Ethylbenzene	2	2	UG/L	U	U
0271	01-Feb-91	Ethylbenzene	2	2	UG/L	U	U
0271	23-Mar-90	Ethylbenzene	2	2	UG/L	U	U
0076	06-Nov-90	Ethylbenzene	2	2	UG/L	U	U
0271	31-Jul-90	Ethylbenzene	2	2	UG/L	U	U
0271	07-Apr-94	Ethylbenzene	2	2	UG/L	U	U
0076	23-Mar-90	Ethylbenzene	2	2	UG/L	U	U
0076	31-Jul-90	Ethylbenzene	2	2	UG/L	U	U
0271	27-Feb-90	Ethylbenzene	2	2	UG/L	U	U
0271	07-Apr-94	Ethylbenzene	2	2	UG/L	U	U
0076	01-Feb-91	Ethylbenzene	2	2	UG/L	U	U
0271	06-Nov-90	Ethylbenzene	2	2	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	15-Jun-90	Ethylbenzene	2	2	UG/L	U	U
0076	07-Apr-94	Ethylbenzene	2	2	UG/L	U	U
0076	06-May-91	Ethylbenzene	2	2	UG/L	U	UJ
0271	27-Feb-90	Ethylbenzene	2	2	UG/L	U	U
0271	11-Oct-93	Ethylbenzene	2	2	UG/L	U	U
0271	05-Aug-91	Ethylbenzene	2	2	UG/L	U	U
0076	11-Oct-93	Ethylbenzene	2	2	UG/L	U	UJ
0076	27-Feb-90	Ethylbenzene	2	2	UG/L	U	U
0271	27-Feb-90	Ethylbenzene	2	2	UG/L	U	U
0271	08-Mar-88	Ethylbenzene	5	5	UG/L	U	U
0076	25-Apr-90	Ethylbenzene	5	5	UG/L	U	U
0076	24-Jun-88	Ethylbenzene	5	5	UG/L	U	U
0271	25-Apr-90	Ethylbenzene	5	5	UG/L	U	U
0271	13-Sep-88	Ethylbenzene	5	5	UG/L	U	U
0271	24-Jun-88	Ethylbenzene	5	5	UG/L	U	U
0076	13-Sep-88	Ethylbenzene	5	5	UG/L	U	U
0271	13-Dec-85	Ethylbenzene	7.2	7.2	UG/L	U	U
0076	12-Dec-85	Ethylbenzene	7.2	7.2	UG/L	U	U
0271	13-Mar-86	Ethylbenzene	7.2	7.2	UG/L	U	U
0076	01-Feb-84	Ethylbenzene	10	10	UG/L	U	U
0076	06-May-91	Europium-152	10.8	1	PCI/L	U	U
0271	06-May-91	Europium-152	13.8	1	PCI/L	U	U
0076	01-Feb-91	Europium-152	100	0	PCI/L	U	U
0271	01-Feb-91	Europium-152	120	0	PCI/L	U	U
0271	01-Feb-91	Europium-154	26	0	PCI/L	U	U
0076	06-May-91	Europium-154	29.3	1	PCI/L	U	U
0271	06-May-91	Europium-154	35.9	1	PCI/L	U	U
0076	01-Feb-91	Europium-154	56	0	PCI/L	U	U
0271	01-Feb-91	Europium-155	33	0	PCI/L	U	U
0076	01-Feb-91	Europium-155	39	0	PCI/L	U	U
0076	06-May-91	Europium-155	71.5	1	PCI/L	U	U
0271	06-May-91	Europium-155	78.3	1	PCI/L	U	U
0271	16-Sep-92	Fluoranthene	10	10	UG/L	U	U
0271	06-Nov-90	Fluoranthene	10	10	UG/L	U	U
0076	23-Mar-92	Fluoranthene	10	10	UG/L	U	U
0271	11-Oct-93	Fluoranthene	10	10	UG/L	U	U
0271	05-Aug-91	Fluoranthene	10	10	UG/L	U	UJ
0076	22-Jun-92	Fluoranthene	10	10	UG/L	U	U
0076	16-Sep-92	Fluoranthene	10	10	UG/L	U	U
0271	22-Jun-92	Fluoranthene	10	10	UG/L	U	U
0076	06-May-91	Fluoranthene	10	10	UG/L	U	U
0076	11-Oct-93	Fluoranthene	10	10	UG/L	U	U
0076	16-Dec-91	Fluoranthene	10	10	UG/L	U	U
0076	01-Feb-91	Fluoranthene	10	10	UG/L	U	U
0076	06-Nov-90	Fluoranthene	10	10	UG/L	U	U
0271	06-May-91	Fluoranthene	10	10	UG/L	U	U
0271	01-Feb-91	Fluoranthene	10	10	UG/L	U	U
0271	16-Dec-91	Fluoranthene	10	10	UG/L	U	U
0271	07-Apr-94	Fluoranthene	11	11	UG/L	U	U
0076	07-Apr-94	Fluoranthene	11	11	UG/L	U	U
0271	07-Apr-94	Fluoranthene	11	11	UG/L	U	U
0271	16-Sep-92	Fluorene	10	10	UG/L	U	U
0076	22-Jun-92	Fluorene	10	10	UG/L	U	U
0076	06-May-91	Fluorene	10	10	UG/L	U	U
0271	06-May-91	Fluorene	10	10	UG/L	U	U
0271	01-Feb-91	Fluorene	10	10	UG/L	U	U
0076	16-Sep-92	Fluorene	10	10	UG/L	U	U
0271	06-Nov-90	Fluorene	10	10	UG/L	U	U
0271	22-Jun-92	Fluorene	10	10	UG/L	U	U
0076	01-Feb-91	Fluorene	10	10	UG/L	U	U
0076	16-Dec-91	Fluorene	10	10	UG/L	U	U
0271	11-Oct-93	Fluorene	10	10	UG/L	U	U
0076	11-Oct-93	Fluorene	10	10	UG/L	U	U
0271	16-Dec-91	Fluorene	10	10	UG/L	U	U
0076	06-Nov-90	Fluorene	10	10	UG/L	U	U
0271	05-Aug-91	Fluorene	10	10	UG/L	U	UJ
0076	23-Mar-92	Fluorene	10	10	UG/L	U	U
0271	07-Apr-94	Fluorene	11	11	UG/L	U	U
0076	07-Apr-94	Fluorene	11	11	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect Limit	Units	Lab Qual	Data Qual
0271	07-Apr-94	Fluorene	11	11	UG/L	U	U
0271	07-Apr-94	Fluoride	0.14	0.1	MG/L		
0271	07-Apr-94	Fluoride	0.15	0.1	MG/L		
0271	11-Oct-93	Fluoride	0.15	0.1	MG/L		
0076	11-Oct-93	Fluoride	0.18	0.1	MG/L		
0076	07-Apr-94	Fluoride	0.18	0.1	MG/L		
0271	01-Feb-91	Gadolinium-153	31	0	PCI/L	U	U
0076	01-Feb-91	Gadolinium-153	38	0	PCI/L	U	U
0076	16-Sep-92	Gamma Chlordane	0.05	0.05	UG/L	U	U
0271	05-Aug-91	Gamma Chlordane	0.05	0.05	UG/L	U	U
0271	11-Oct-93	Gamma Chlordane	0.05	0.05	UG/L	U	U
0076	11-Oct-93	Gamma Chlordane	0.05	0.05	UG/L	U	UJ
0271	16-Sep-92	Gamma Chlordane	0.05	0.05	UG/L	U	U
0271	07-Apr-94	Gamma Chlordane	0.05	0.05	UG/L	U	U
0271	22-Jun-92	Gamma Chlordane	0.051	0.051	UG/L	U	U
0076	22-Jun-92	Gamma Chlordane	0.052	0.052	UG/L	U	U
0271	07-Apr-94	Gamma Chlordane	0.052	0.052	UG/L	U	U
0076	23-Mar-92	Gamma Chlordane	0.053	0.053	UG/L	U	U
0076	07-Apr-94	Gamma Chlordane	0.055	0.055	UG/L	U	U
0076	01-Feb-91	Gamma Chlordane	0.5	0.5	UG/L	U	U
0271	06-Nov-90	Gamma Chlordane	0.5	0.5	UG/L	U	U
0076	06-Nov-90	Gamma Chlordane	0.5	0.5	UG/L	U	U
0271	06-May-91	Gamma Chlordane	0.5	0.5	UG/L	U	U
0271	01-Feb-91	Gamma Chlordane	0.5	0.5	UG/L	U	U
0076	06-May-91	Gamma Chlordane	0.5	0.5	UG/L	U	U
0271	16-Dec-91	Gamma Chlordane	0.52	0.52	UG/L	U	U
0076	16-Dec-91	Gamma Chlordane	0.52	0.52	UG/L	U	U
0076	06-May-91	Gamma Chlordane	2.5	2.5	UG/L	U	U
0271	06-May-91	Gamma Chlordane	7.5	7.5	UG/L	U	U
0271	05-Atug-91	Gamma-BHC (Lindane)	0.04	0.04	UG/L	U	U
0271	01-Feb-91	Gamma-BHC (Lindane)	0.05	0.05	UG/L	U	U
0271	06-Nov-90	Gamma-BHC (Lindane)	0.05	0.05	UG/L	U	U
0076	16-Sep-92	Gamma-BHC (Lindane)	0.05	0.05	UG/L	U	U
0271	16-Sep-92	Gamma-BHC (Lindane)	0.05	0.05	UG/L	U	U
0076	06-May-91	Gamma-BHC (Lindane)	0.05	0.05	UG/L	U	U
0076	01-Feb-91	Gamma-BHC (Lindane)	0.05	0.05	UG/L	U	U
0076	11-Oct-93	Gamma-BHC (Lindane)	0.05	0.05	UG/L	U	UJ
0271	11-Oct-93	Gamma-BHC (Lindane)	0.05	0.05	UG/L	U	U
0271	07-Apr-94	Gamma-BHC (Lindane)	0.05	0.05	UG/L	U	U
0271	06-May-91	Gamma-BHC (Lindane)	0.05	0.05	UG/L	U	U
0076	06-Nov-90	Gamma-BHC (Lindane)	0.05	0.05	UG/L	U	U
0271	22-Jun-92	Gamma-BHC (Lindane)	0.051	0.051	UG/L	U	U
0076	22-Jun-92	Gamma-BHC (Lindane)	0.052	0.052	UG/L	U	U
0271	16-Dec-91	Gamma-BHC (Lindane)	0.052	0.052	UG/L	U	U
0271	07-Apr-94	Gamma-BHC (Lindane)	0.052	0.052	UG/L	U	U
0076	16-Dec-91	Gamma-BHC (Lindane)	0.052	0.052	UG/L	U	U
0076	23-Mar-92	Gamma-BHC (Lindane)	0.053	0.053	UG/L	U	U
0076	07-Apr-94	Gamma-BHC (Lindane)	0.055	0.055	UG/L	U	U
0076	06-May-91	Gamma-BHC (Lindane)	0.25	0.25	UG/L	U	U
0271	06-May-91	Gamma-BHC (Lindane)	0.75	0.75	UG/L	U	U
0076	07-Apr-94	HMX	0.63	0.63	UG/L	U	U
0271	07-Apr-94	HMX	0.63	0.63	UG/L	U	U
0076	11-Oct-93	HMX	0.63	0.63	UG/L	U	UJ
0271	11-Oct-93	HMX	0.63	0.63	UG/L	U	UJ
0271	05-Aug-91	Heptachlor	0.03	0.03	UG/L	U	U
0076	11-Oct-93	Heptachlor	0.05	0.05	UG/L	U	UJ
0076	01-Feb-91	Heptachlor	0.05	0.05	UG/L	U	U
0271	11-Oct-93	Heptachlor	0.05	0.05	UG/L	U	U
0076	06-Nov-90	Heptachlor	0.05	0.05	UG/L	U	U
0076	16-Sep-92	Heptachlor	0.05	0.05	UG/L	U	U
0271	06-May-91	Heptachlor	0.05	0.05	UG/L	U	U
0271	16-Sep-92	Heptachlor	0.05	0.05	UG/L	U	U
0271	07-Apr-94	Heptachlor	0.05	0.05	UG/L	U	U
0271	06-Nov-90	Heptachlor	0.05	0.05	UG/L	U	U
0076	06-May-91	Heptachlor	0.05	0.05	UG/L	U	U
0271	01-Feb-91	Heptachlor	0.05	0.05	UG/L	U	U
0271	22-Jun-92	Heptachlor	0.051	0.051	UG/L	U	U
0076	22-Jun-92	Heptachlor	0.052	0.052	UG/L	U	U
0271	07-Apr-94	Heptachlor	0.052	0.052	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	16-Dec-91	Heptachlor	0.052	0.052	UG/L	U	U
0271	16-Dec-91	Heptachlor	0.052	0.052	UG/L	U	U
0076	23-Mar-92	Heptachlor	0.053	0.053	UG/L	U	U
0076	07-Apr-94	Heptachlor	0.055	0.055	UG/L	U	U
0076	06-May-91	Heptachlor	0.25	0.25	UG/L	U	U
0271	06-May-91	Heptachlor	0.75	0.75	UG/L	U	U
0076	01-Feb-91	Heptachlor Epoxide	0.05	0.05	UG/L	U	U
0271	06-May-91	Heptachlor Epoxide	0.05	0.05	UG/L	U	U
0076	11-Oct-93	Heptachlor Epoxide	0.05	0.05	UG/L	U	UJ
0271	01-Feb-91	Heptachlor Epoxide	0.05	0.05	UG/L	U	U
0076	16-Sep-92	Heptachlor Epoxide	0.05	0.05	UG/L	U	U
0076	06-Nov-90	Heptachlor Epoxide	0.05	0.05	UG/L	U	U
0271	16-Sep-92	Heptachlor Epoxide	0.05	0.05	UG/L	U	U
0271	07-Apr-94	Heptachlor Epoxide	0.05	0.05	UG/L	U	U
0271	05-Aug-91	Heptachlor Epoxide	0.05	0.05	UG/L	U	U
0271	06-Nov-90	Heptachlor Epoxide	0.05	0.05	UG/L	U	U
0271	11-Oct-93	Heptachlor Epoxide	0.05	0.05	UG/L	U	U
0076	06-May-91	Heptachlor Epoxide	0.05	0.05	UG/L	U	U
0271	22-Jun-92	Heptachlor Epoxide	0.051	0.051	UG/L	U	U
0271	16-Dec-91	Heptachlor Epoxide	0.052	0.052	UG/L	U	U
0076	16-Dec-91	Heptachlor Epoxide	0.052	0.052	UG/L	U	U
0271	07-Apr-94	Heptachlor Epoxide	0.052	0.052	UG/L	U	U
0076	22-Jun-92	Heptachlor Epoxide	0.052	0.052	UG/L	U	U
0076	23-Mar-92	Heptachlor Epoxide	0.053	0.053	UG/L	U	U
0076	07-Apr-94	Heptachlor Epoxide	0.055	0.055	UG/L	U	U
0076	06-May-91	Heptachlor Epoxide	0.25	0.25	UG/L	U	U
0271	06-May-91	Heptachlor Epoxide	0.75	0.75	UG/L	U	U
0076	23-Mar-92	Hexachlorobenzene	10	10	UG/L	U	U
0076	22-Jun-92	Hexachlorobenzene	10	10	UG/L	U	U
0271	11-Oct-93	Hexachlorobenzene	10	10	UG/L	U	U
0271	01-Feb-91	Hexachlorobenzene	10	10	UG/L	U	U
0076	06-May-91	Hexachlorobenzene	10	10	UG/L	U	U
0271	05-Aug-91	Hexachlorobenzene	10	10	UG/L	U	UJ
0076	11-Oct-93	Hexachlorobenzene	10	10	UG/L	U	U
0271	16-Sep-92	Hexachlorobenzene	10	10	UG/L	U	U
0271	06-May-91	Hexachlorobenzene	10	10	UG/L	U	U
0271	16-Dec-91	Hexachlorobenzene	10	10	UG/L	U	U
0076	16-Sep-92	Hexachlorobenzene	10	10	UG/L	U	U
0076	06-Nov-90	Hexachlorobenzene	10	10	UG/L	U	U
0076	16-Dec-91	Hexachlorobenzene	10	10	UG/L	U	U
0271	22-Jun-92	Hexachlorobenzene	10	10	UG/L	U	U
0076	01-Feb-91	Hexachlorobenzene	10	10	UG/L	U	U
0271	06-Nov-90	Hexachlorobenzene	10	10	UG/L	U	U
0271	07-Apr-94	Hexachlorobenzene	11	11	UG/L	U	U
0271	07-Apr-94	Hexachlorobenzene	11	11	UG/L	U	U
0076	07-Apr-94	Hexachlorobenzene	11	11	UG/L	U	U
0271	01-Feb-91	Hexachlorobutadiene	10	10	UG/L	U	U
0271	06-May-91	Hexachlorobutadiene	10	10	UG/L	U	U
0076	06-May-91	Hexachlorobutadiene	10	10	UG/L	U	U
0076	16-Sep-92	Hexachlorobutadiene	10	10	UG/L	U	U
0076	01-Feb-91	Hexachlorobutadiene	10	10	UG/L	U	U
0076	23-Mar-92	Hexachlorobutadiene	10	10	UG/L	U	U
0271	22-Jun-92	Hexachlorobutadiene	10	10	UG/L	U	UJ
0271	16-Dec-91	Hexachlorobutadiene	10	10	UG/L	U	U
0076	11-Oct-93	Hexachlorobutadiene	10	10	UG/L	U	U
0076	16-Dec-91	Hexachlorobutadiene	10	10	UG/L	U	U
0076	06-Nov-90	Hexachlorobutadiene	10	10	UG/L	U	U
0271	06-Nov-90	Hexachlorobutadiene	10	10	UG/L	U	U
0271	16-Sep-92	Hexachlorobutadiene	10	10	UG/L	U	U
0271	11-Oct-93	Hexachlorobutadiene	10	10	UG/L	U	U
0271	05-Aug-91	Hexachlorobutadiene	10	10	UG/L	U	UJ
0076	22-Jun-92	Hexachlorobutadiene	10	10	UG/L	U	U
0076	07-Apr-94	Hexachlorobutadiene	11	11	UG/L	U	U
0271	07-Apr-94	Hexachlorobutadiene	11	11	UG/L	U	U
0271	07-Apr-94	Hexachlorobutadiene	11	11	UG/L	U	U
0076	06-Nov-90	Hexachlorocyclopentadiene	10	10	UG/L	U	U
0271	01-Feb-91	Hexachlorocyclopentadiene	10	10	UG/L	U	UJ
0271	22-Jun-92	Hexachlorocyclopentadiene	10	10	UG/L	U	UJ
0076	11-Oct-93	Hexachlorocyclopentadiene	10	10	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	23-Mar-92	Hexachlorocyclopentadiene	10	10	UG/L	U	U
0076	01-Feb-91	Hexachlorocyclopentadiene	10	10	UG/L	U	UJ
0076	16-Sep-92	Hexachlorocyclopentadiene	10	10	UG/L	U	U
0271	05-Aug-91	Hexachlorocyclopentadiene	10	10	UG/L	U	UJ
0271	06-May-91	Hexachlorocyclopentadiene	10	10	UG/L	U	U
0076	06-May-91	Hexachlorocyclopentadiene	10	10	UG/L	U	U
0076	16-Dec-91	Hexachlorocyclopentadiene	10	10	UG/L	U	U
0271	16-Sep-92	Hexachlorocyclopentadiene	10	10	UG/L	U	U
0271	16-Dec-91	Hexachlorocyclopentadiene	10	10	UG/L	U	U
0271	11-Oct-93	Hexachlorocyclopentadiene	10	10	UG/L	U	U
0271	06-Nov-90	Hexachlorocyclopentadiene	10	10	UG/L	U	U
0076	22-Jun-92	Hexachlorocyclopentadiene	10	10	UG/L	U	U
0271	07-Apr-94	Hexachlorocyclopentadiene	11	11	UG/L	U	U
0076	07-Apr-94	Hexachlorocyclopentadiene	11	11	UG/L	U	U
0271	07-Apr-94	Hexachlorocyclopentadiene	11	11	UG/L	U	U
0076	22-Jun-92	Hexachloroethane	10	10	UG/L	U	U
0271	22-Jun-92	Hexachloroethane	10	10	UG/L	U	U
0076	16-Sep-92	Hexachloroethane	10	10	UG/L	U	U
0076	23-Mar-92	Hexachloroethane	10	10	UG/L	U	U
0076	01-Feb-91	Hexachloroethane	10	10	UG/L	U	U
0076	06-Nov-90	Hexachloroethane	10	10	UG/L	U	U
0271	01-Feb-91	Hexachloroethane	10	10	UG/L	U	U
0271	06-Nov-90	Hexachloroethane	10	10	UG/L	U	U
0271	11-Oct-93	Hexachloroethane	10	10	UG/L	U	U
0271	05-Aug-91	Hexachloroethane	10	10	UG/L	U	UJ
0076	06-May-91	Hexachloroethane	10	10	UG/L	U	U
0271	16-Sep-92	Hexachloroethane	10	10	UG/L	U	U
0076	11-Oct-93	Hexachloroethane	10	10	UG/L	U	U
0271	16-Dec-91	Hexachloroethane	10	10	UG/L	U	U
0076	16-Dec-91	Hexachloroethane	10	10	UG/L	U	U
0271	06-May-91	Hexachloroethane	10	10	UG/L	U	U
0271	07-Apr-94	Hexachloroethane	11	11	UG/L	U	U
0076	07-Apr-94	Hexachloroethane	11	11	UG/L	U	U
0271	07-Apr-94	Hexachloroethane	11	11	UG/L	U	U
0271	16-Sep-92	Indeno(1,2,3-cd)pyrene	10	10	UG/L	U	U
0076	06-May-91	Indeno(1,2,3-cd)pyrene	10	10	UG/L	U	U
0271	16-Dec-91	Indeno(1,2,3-cd)pyrene	10	10	UG/L	U	U
0076	23-Mar-92	Indeno(1,2,3-cd)pyrene	10	10	UG/L	U	U
0076	22-Jun-92	Indeno(1,2,3-cd)pyrene	10	10	UG/L	U	U
0271	11-Oct-93	Indeno(1,2,3-cd)pyrene	10	10	UG/L	U	U
0271	05-Aug-91	Indeno(1,2,3-cd)pyrene	10	10	UG/L	U	UJ
0271	06-May-91	Indeno(1,2,3-cd)pyrene	10	10	UG/L	U	U
0076	11-Oct-93	Indeno(1,2,3-cd)pyrene	10	10	UG/L	U	U
0076	06-Nov-90	Indeno(1,2,3-cd)pyrene	10	10	UG/L	U	U
0076	01-Feb-91	Indeno(1,2,3-cd)pyrene	10	10	UG/L	U	U
0271	01-Feb-91	Indeno(1,2,3-cd)pyrene	10	10	UG/L	U	U
0076	16-Dec-91	Indeno(1,2,3-cd)pyrene	10	10	UG/L	U	U
0076	16-Sep-92	Indeno(1,2,3-cd)pyrene	10	10	UG/L	U	U
0271	06-Nov-90	Indeno(1,2,3-cd)pyrene	10	10	UG/L	U	U
0271	22-Jun-92	Indeno(1,2,3-cd)pyrene	10	10	UG/L	U	U
0271	07-Apr-94	Indeno(1,2,3-cd)pyrene	11	11	UG/L	U	U
0076	07-Apr-94	Indeno(1,2,3-cd)pyrene	11	11	UG/L	U	U
0271	07-Apr-94	Indeno(1,2,3-cd)pyrene	11	11	UG/L	U	U
0271	01-Feb-91	Iodine-131	11	0	PCI/L	U	U
0076	01-Feb-91	Iodine-131	19	0	PCI/L	U	U
0271	01-Feb-91	Iridium-192	12	0	PCI/L	U	U
0076	01-Feb-91	Iridium-192	15	0	PCI/L	U	U
0271	05-Aug-91	Iron	0.0301	0.01	UG/L		
0271	05-Aug-91	Iron	0.0336	0.01	UG/L		
0271	07-Apr-94	Iron	7.6	4.5	UG/L	B	U
0271	05-Aug-91	Iron	10	10	UG/L	U	U
0076	07-Apr-94	Iron	10	4.5	UG/L	B	U
0271	07-Apr-94	Iron	10.5	4.5	UG/L	B	U
0076	07-Apr-94	Iron	11.6	4.5	UG/L	B	U
0076	11-Oct-93	Iron	13.2	13.2	UG/L	U	U
0271	06-May-91	Iron	17.5	0.1	UG/L		
0076	06-May-91	Iron	17.7	0.1	UG/L		
0271	11-Oct-93	Iron	18.8	2.5	UG/L	B	
0271	06-May-91	Iron	19	10	UG/L	B	

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	22-Jun-92	Iron	19.8	19	UG/L	B	
0076	06-May-91	Iron	19.9	10	UG/L	B	UJ
0076	01-Feb-91	Iron	22.9	0	UG/L		
0076	16-Sep-92	Iron	28.3	10	UG/L		UJ
0076	11-Oct-93	Iron	28.8	2.5	UG/L	B	
0271	16-Sep-92	Iron	29.1	10	UG/L		UJ
0076	23-Mar-92	Iron	30	100	UG/L	U	U
0271	11-Oct-93	Iron	31.2	2.5	UG/L	B	
0271	06-Nov-90	Iron	32.6	10	UG/L	B	
0271	07-Apr-94	Iron	40.2	4.5	UG/L	B	U
0271	07-Apr-94	Iron	47	4.5	UG/L	B	U
0271	05-Aug-91	Iron	48.2	10	UG/L		J
0271	01-Feb-91	Iron	65.4	0	UG/L		
0076	22-Jun-92	Iron	69.6	19	UG/L	B	
0076	01-Feb-91	Iron	69.7	10	UG/L	B	
0271	16-Dec-91	Iron	100	100	UG/L	U	U
0076	16-Dec-91	Iron	100	100	UG/L	U	U
0271	01-Feb-91	Iron	153	10	UG/L		
0076	06-Nov-90	Iron	780	10	UG/L		
0076	01-Feb-91	Iron-59	34	0	PCI/L	U	U
0271	01-Feb-91	Iron-59	35	0	PCI/L	U	U
0271	16-Dec-91	Isophorone	10	10	UG/L	U	U
0271	22-Jun-92	Isophorone	10	10	UG/L	U	U
0076	23-Mar-92	Isophorone	10	10	UG/L	U	U
0076	06-May-91	Isophorone	10	10	UG/L	U	U
0271	05-Aug-91	Isophorone	10	10	UG/L	U	UJ
0076	16-Sep-92	Isophorone	10	10	UG/L	U	U
0271	06-May-91	Isophorone	10	10	UG/L	U	U
0271	11-Oct-93	Isophorone	10	10	UG/L	U	U
0076	16-Dec-91	Isophorone	10	10	UG/L	U	U
0076	22-Jun-92	Isophorone	10	10	UG/L	U	U
0271	01-Feb-91	Isophorone	10	10	UG/L	U	U
0076	01-Feb-91	Isophorone	10	10	UG/L	U	U
0076	06-Nov-90	Isophorone	10	10	UG/L	U	U
0271	06-Nov-90	Isophorone	10	10	UG/L	U	U
0271	16-Sep-92	Isophorone	10	10	UG/L	U	U
0076	11-Oct-93	Isophorone	10	10	UG/L	U	U
0271	07-Apr-94	Isophorone	11	11	UG/L	U	U
0076	07-Apr-94	Isophorone	11	11	UG/L	U	U
0271	07-Apr-94	Isophorone	11	11	UG/L	U	U
0271	01-Feb-91	Lanthanum-140	20	0	PCI/L	U	U
0076	01-Feb-91	Lanthanum-140	27	0	PCI/L	U	U
0076	07-Apr-94	Lead	0.8	0.8	UG/L	U	UJ
0271	07-Apr-94	Lead	0.8	0.8	UG/L	U	UJ
0271	07-Apr-94	Lead	0.8	0.8	UG/L	U	UJ
0271	07-Apr-94	Lead	0.8	0.8	UG/L	U	UJ
0271	07-Apr-94	Lead	0.8	0.8	UG/L	U	UJ
0076	16-Sep-92	Lead	2	2	UG/L	U	UJ
0271	11-Oct-93	Lead	2	2	UG/L	U	U
0271	11-Oct-93	Lead	2	2	UG/L	U	U
0271	06-May-91	Lead	2	2	UG/L	U	UJ
0271	05-Aug-91	Lead	2	2	UG/L	U	U
0076	23-Mar-92	Lead	2	3	UG/L	U	U
0076	11-Oct-93	Lead	2	2	UG/L	U	U
0076	11-Oct-93	Lead	2	2	UG/L	U	U
0076	22-Jun-92	Lead	2	2	UG/L	U	UJ
0076	06-May-91	Lead	2	2	UG/L	U	UJ
0271	16-Sep-92	Lead	2	2	UG/L	U	UJ
0271	06-Nov-90	Lead	2	2	UG/L	U	U
0271	05-Aug-91	Lead	2	2	UG/L	U	U
0271	22-Jun-92	Lead	2	2	UG/L	U	UJ
0076	01-Feb-91	Lead	2	2	UG/L	U	U
0271	01-Feb-91	Lead	2	2	UG/L	U	U
0076	16-Dec-91	Lead	2.7	3	UG/L	U	J
0271	16-Dec-91	Lead	3.4	3	UG/L		
0076	07-Apr-94	Lead	10.5	1	UG/L		
0076	01-Feb-84	Lead	30	30	UG/L		
0076	06-Nov-90	Lead	37.9	2	UG/L		
0271	13-Dec-85	Lead	40	40	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	12-Dec-85	Lead	40	40	UG/L		
0271	06-May-91	Lead-212	70	1	PCI/L	U	U
0076	06-May-91	Lead-212	70	1	PCI/L	U	U
0076	06-May-91	Lead-214	67.7	1	PCI/L	U	U
0271	06-May-91	Lead-214	85.1	1	PCI/L	U	U
0076	11-Oct-93	Lithium	2.9	4.8	UG/L	B	
0076	11-Oct-93	Lithium	2.9	4.8	UG/L	B	
0271	11-Oct-93	Lithium	2.9	4.8	UG/L	B	
0271	11-Oct-93	Lithium	2.9	4.8	UG/L	B	
0271	07-Apr-94	Lithium	13	13	UG/L	U	UJ
0076	07-Apr-94	Lithium	13	13	UG/L	U	U
0271	07-Apr-94	Lithium	13	13	UG/L	U	UJ
0271	07-Apr-94	Lithium	13	13	UG/L	U	UJ
0271	07-Apr-94	Lithium	13	13	UG/L	U	UJ
0076	07-Apr-94	Lithium	39.8	27.2	UG/L	B	U
0271	05-Aug-91	Magnesium	34	0.05	UG/L		
0271	05-Aug-91	Magnesium	34.4	0.05	UG/L		
0271	05-Aug-91	Magnesium	34.4	0.05	UG/L		
0076	16-Sep-92	Magnesium	29100	24	UG/L		
0076	22-Jun-92	Magnesium	29200	36	UG/L		
0076	07-Apr-94	Magnesium	30300	17.9	UG/L		
0076	16-Dec-91	Magnesium	30300	5000	UG/L		
0076	23-Mar-92	Magnesium	30400	5000	UG/L		J
0076	07-Apr-94	Magnesium	30500	17.9	UG/L		J
0076	11-Oct-93	Magnesium	30900	6	UG/L		J
0076	06-May-91	Magnesium	31000	50	UG/L		
0076	06-May-91	Magnesium	31600	0.1	UG/L		
0271	22-Jun-92	Magnesium	31600	36	UG/L		
0076	11-Oct-93	Magnesium	31900	6	UG/L		J
0076	01-Feb-91	Magnesium	32300	30	UG/L		
0271	16-Sep-92	Magnesium	32500	24	UG/L		
0271	07-Apr-94	Magnesium	32900	17.9	UG/L		
0271	11-Oct-93	Magnesium	33000	6	UG/L		J
0271	11-Oct-93	Magnesium	33100	6	UG/L		J
0271	07-Apr-94	Magnesium	33200	17.9	UG/L		
0271	05-Aug-91	Magnesium	33400	50	UG/L		
0271	07-Apr-94	Magnesium	33400	17.9	UG/L		J
0076	01-Feb-91	Magnesium	34500	0	UG/L		
0271	05-Aug-91	Magnesium	34757.094	50	UG/L		
0076	06-Nov-90	Magnesium	35100	50	UG/L		
0271	16-Dec-91	Magnesium	35200	5000	UG/L		
0271	06-Nov-90	Magnesium	35200	50	UG/L		
0271	06-May-91	Magnesium	37100	50	UG/L		
0271	01-Feb-91	Magnesium	37400	30	UG/L		
0271	06-May-91	Magnesium	37500	0.1	UG/L		
0271	07-Apr-94	Magnesium	37600	17.9	UG/L		J
0271	01-Feb-91	Magnesium	39600	0	UG/L		
0271	05-Aug-91	Manganese	0.0154	0.002	UG/L		
0271	05-Aug-91	Manganese	0.0156	0.002	UG/L		
0076	23-Mar-92	Manganese	2.8	15	UG/L	B	
0076	06-May-91	Manganese	3.4	0.1	UG/L		
0076	06-May-91	Manganese	4.7	2	UG/L	B	
0076	01-Feb-91	Manganese	5.1	2	UG/L	B	
0076	22-Jun-92	Manganese	6.8	2	UG/L	B	
0076	16-Sep-92	Manganese	9.2	2	UG/L		
0076	01-Feb-91	Manganese	9.51	0	UG/L		
0076	11-Oct-93	Manganese	11.3	0.5	UG/L	B	
0271	07-Apr-94	Manganese	11.4	0.33	UG/L	B	
0271	07-Apr-94	Manganese	11.6	0.33	UG/L	B	
0271	07-Apr-94	Manganese	11.8	0.33	UG/L	B	
0271	06-May-91	Manganese	12.1	0.1	UG/L		
0076	11-Oct-93	Manganese	12.2	0.5	UG/L	B	
0076	07-Apr-94	Manganese	12.3	0.33	UG/L	B	
0271	11-Oct-93	Manganese	13	0.5	UG/L	B	
0271	22-Jun-92	Manganese	13	2	UG/L	B	
0271	06-May-91	Manganese	13.4	2	UG/L	B	
0271	07-Apr-94	Manganese	13.7	0.33	UG/L	B	
0076	07-Apr-94	Manganese	13.8	0.33	UG/L	B	
0271	05-Aug-91	Manganese	14.4	2	UG/L		

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect Limit	Units	Lab Qual	Data Qual
0076	16-Dec-91	Manganese	15	15	UG/L	U	U
0271	16-Dec-91	Manganese	15	15	UG/L	U	U
0271	11-Oct-93	Manganese	15.2	0.5	UG/L		
0271	05-Aug-91	Manganese	15.33	2	UG/L		
0271	06-Nov-90	Manganese	17	2	UG/L		
0271	16-Sep-92	Manganese	17.1	2	UG/L		
0076	06-Nov-90	Manganese	19.1	2	UG/L		
0271	01-Feb-91	Manganese	20.2	2	UG/L		
0271	01-Feb-91	Manganese	24.8	0	UG/L		
0271	01-Feb-91	Manganese-54	14	0	PCI/L	U	U
0076	01-Feb-91	Manganese-54	15	0	PCI/L	U	U
0271	07-Apr-94	Mercury	0.1	0.1	UG/L	U	U
0271	07-Apr-94	Mercury	0.1	0.1	UG/L	U	U
0076	11-Oct-93	Mercury	0.1	0.1	UG/L	U	U
0271	11-Oct-93	Mercury	0.1	0.1	UG/L	U	U
0076	11-Oct-93	Mercury	0.1	0.1	UG/L	U	U
0271	07-Apr-94	Mercury	0.1	0.1	UG/L	U	U
0271	22-Jun-92	Mercury	0.1	0.1	UG/L	U	UJ
0271	07-Apr-94	Mercury	0.1	0.1	UG/L	U	U
0076	07-Apr-94	Mercury	0.1	0.1	UG/L	U	U
0076	23-Mar-92	Mercury	0.1	0.2	UG/L	U	U
0076	07-Apr-94	Mercury	0.1	0.1	UG/L	U	U
0271	16-Sep-92	Mercury	0.1	0.1	UG/L	U	U
0271	11-Oct-93	Mercury	0.1	0.1	UG/L	U	U
0076	22-Jun-92	Mercury	0.1	0.1	UG/L	U	UJ
0076	16-Sep-92	Mercury	0.1	0.1	UG/L	U	U
0271	16-Dec-91	Mercury	0.2	0.2	UG/L	U	U
0271	05-Aug-91	Mercury	0.2	0.2	UG/L	U	U
0076	06-Nov-90	Mercury	0.2	0.2	UG/L	U	U
0271	05-Aug-91	Mercury	0.2	0.2	UG/L	U	U
0271	06-Nov-90	Mercury	0.2	0.2	UG/L	U	U
0271	06-May-91	Mercury	0.2	0.2	UG/L	U	U
0076	01-Feb-91	Mercury	0.2	0.2	UG/L	U	U
0271	01-Feb-91	Mercury	0.2	0.2	UG/L	U	U
0076	16-Dec-91	Mercury	0.2	0.2	UG/L	U	U
0076	06-May-91	Mercury	0.2	0.2	UG/L	U	U
0271	01-Feb-91	Mercury-203	10	0	PCI/L	U	U
0076	01-Feb-91	Mercury-203	15	0	PCI/L	U	U
0271	01-Feb-91	Methoxychlor	0.5	0.5	UG/L	U	U
0271	11-Oct-93	Methoxychlor	0.5	0.5	UG/L	U	U
0076	06-May-91	Methoxychlor	0.5	0.5	UG/L	U	U
0076	11-Oct-93	Methoxychlor	0.5	0.5	UG/L	U	UJ
0076	16-Sep-92	Methoxychlor	0.5	0.5	UG/L	U	U
0076	06-Nov-90	Methoxychlor	0.5	0.5	UG/L	U	U
0076	01-Feb-91	Methoxychlor	0.5	0.5	UG/L	U	U
0271	05-Aug-91	Methoxychlor	0.5	0.5	UG/L	U	U
0271	06-May-91	Methoxychlor	0.5	0.5	UG/L	U	U
0271	16-Sep-92	Methoxychlor	0.5	0.5	UG/L	U	U
0271	06-Nov-90	Methoxychlor	0.5	0.5	UG/L	U	U
0271	07-Apr-94	Methoxychlor	0.5	0.5	UG/L	U	U
0271	22-Jun-92	Methoxychlor	0.51	0.51	UG/L	U	U
0076	16-Dec-91	Methoxychlor	0.52	0.52	UG/L	U	U
0271	07-Apr-94	Methoxychlor	0.52	0.52	UG/L	U	U
0271	16-Dec-91	Methoxychlor	0.52	0.52	UG/L	U	U
0076	22-Jun-92	Methoxychlor	0.52	0.52	UG/L	U	U
0076	23-Mar-92	Methoxychlor	0.53	0.53	UG/L	U	U
0076	07-Apr-94	Methoxychlor	0.55	0.55	UG/L	U	U
0076	06-May-91	Methoxychlor	2.5	2.5	UG/L	U	U
0271	06-May-91	Methoxychlor	7.5	7.5	UG/L	U	U
0271	24-Jan-90	Methylene Chloride	2	2	UG/L	U	U
0271	31-Jul-90	Methylene Chloride	2	2	UG/L	U	U
0076	24-Jan-90	Methylene Chloride	2	2	UG/L	U	U
0076	06-Nov-90	Methylene Chloride	2	2	UG/L	U	UJ
0271	27-Feb-90	Methylene Chloride	2	2	UG/L	U	U
0076	23-Mar-90	Methylene Chloride	2	2	UG/L	U	U
0076	31-Jul-90	Methylene Chloride	2	2	UG/L	U	U
0076	15-Jun-90	Methylene Chloride	2	2	UG/L	U	U
0271	23-Mar-90	Methylene Chloride	2	2	UG/L	U	U
0271	27-Feb-90	Methylene Chloride	2	2	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	15-Jun-90	Methylene Chloride	2	2	UG/L	U	U
0076	27-Feb-90	Methylene Chloride	2	2	UG/L	U	U
0271	06-Nov-90	Methylene Chloride	2	2	UG/L	U	UJ
0271	27-Feb-90	Methylene Chloride	2	2	UG/L	U	U
0271	13-Dec-85	Methylene Chloride	2.8	2.8	UG/L	U	U
0271	13-Mar-86	Methylene Chloride	2.8	2.8	UG/L	U	U
0271	25-Apr-90	Methylene Chloride	3	5	UG/L	JB	
0271	13-Sep-88	Methylene Chloride	3	5	UG/L	JB	
0076	16-Jun-93	Methylene Chloride	4	4	UG/L	U	U
0076	16-Sep-92	Methylene Chloride	4	4	UG/L	U	UJ
0271	24-Jun-88	Methylene Chloride	4	5	UG/L	JB	
0076	23-Mar-92	Methylene Chloride	4	4	UG/L	U	UJ
0271	22-Jun-92	Methylene Chloride	4	4	UG/L	U	R
0076	13-Sep-88	Methylene Chloride	4	4	UG/L	U	U
0271	16-Dec-91	Methylene Chloride	4	4	UG/L	U	UJ
0271	16-Sep-92	Methylene Chloride	4	4	UG/L	U	UJ
0076	16-Dec-91	Methylene Chloride	4	4	UG/L	U	UJ
0076	22-Jun-92	Methylene Chloride	4	4	UG/L	U	R
0271	13-Sep-88	Methylene Chloride	4	4	UG/L	U	U
0076	24-Jun-88	Methylene Chloride	4	5	UG/L	JB	
0271	11-Oct-93	Methylene Chloride	5	5	UG/L	U	U
0271	07-Apr-94	Methylene Chloride	5	5	UG/L	U	U
0271	05-Aug-91	Methylene Chloride	5	5	UG/L	U	UJ
0076	11-Oct-93	Methylene Chloride	5	5	UG/L	U	UJ
0271	06-May-91	Methylene Chloride	5	5	UG/L	U	U
0271	07-Apr-94	Methylene Chloride	5	5	UG/L	U	UJ
0076	07-Apr-94	Methylene Chloride	5	5	UG/L	U	U
0076	06-May-91	Methylene Chloride	5	5	UG/L	U	U
0076	25-Apr-90	Methylene Chloride	6	5	UG/L	B	
0076	12-Dec-85	Methylene Chloride	7	2.8	UG/L		
0076	13-Sep-88	Methylene Chloride	9	5	UG/L	B	
0271	01-Feb-91	Methylene Chloride	9.8	2	UG/L		UJ
0076	01-Feb-84	Methylene Chloride	10	10	UG/L	U	U
0076	01-Feb-91	Methylene Chloride	10	2	UG/L		UJ
0271	08-Mar-88	Methylene Chloride	13	5	UG/L	B	
0271	07-Apr-94	Molybdenum	1.4	1.4	UG/L	U	UJ
0271	07-Apr-94	Molybdenum	1.6	1.4	UG/L	B	J
0271	11-Oct-93	Molybdenum	1.7	0.5	UG/L	B	U
0271	07-Apr-94	Molybdenum	1.7	1.4	UG/L	B	
0271	11-Oct-93	Molybdenum	1.8	0.5	UG/L	B	U
0076	07-Apr-94	Molybdenum	2	1.4	UG/L	B	
0271	07-Apr-94	Molybdenum	2	1.4	UG/L	B	
0076	11-Oct-93	Molybdenum	2	0.5	UG/L	B	U
0076	11-Oct-93	Molybdenum	2.1	0.5	UG/L	B	U
0076	07-Apr-94	Molybdenum	2.7	1.4	UG/L	B	
0076	22-Jun-92	N-Nitroso-di-n-propylamine	10	10	UG/L	U	U
0076	06-May-91	N-Nitroso-di-n-propylamine	10	10	UG/L	U	U
0271	16-Sep-92	N-Nitroso-di-n-propylamine	10	10	UG/L	U	U
0076	06-Nov-90	N-Nitroso-di-n-propylamine	10	10	UG/L	U	U
0271	06-May-91	N-Nitroso-di-n-propylamine	10	10	UG/L	U	U
0076	23-Mar-92	N-Nitroso-di-n-propylamine	10	10	UG/L	U	U
0271	06-Nov-90	N-Nitroso-di-n-propylamine	10	10	UG/L	U	U
0076	01-Feb-91	N-Nitroso-di-n-propylamine	10	10	UG/L	U	U
0271	01-Feb-91	N-Nitroso-di-n-propylamine	10	10	UG/L	U	U
0271	05-Aug-91	N-Nitroso-di-n-propylamine	10	10	UG/L	U	UJ
0076	16-Sep-92	N-Nitroso-di-n-propylamine	10	10	UG/L	U	U
0076	16-Dec-91	N-Nitroso-di-n-propylamine	10	10	UG/L	U	U
0271	11-Oct-93	N-Nitroso-di-n-propylamine	10	10	UG/L	U	U
0271	22-Jun-92	N-Nitroso-di-n-propylamine	10	10	UG/L	U	U
0271	16-Dec-91	N-Nitroso-di-n-propylamine	10	10	UG/L	U	U
0076	11-Oct-93	N-Nitroso-di-n-propylamine	10	10	UG/L	U	U
0076	07-Apr-94	N-Nitroso-di-n-propylamine	11	11	UG/L	U	U
0271	07-Apr-94	N-Nitroso-di-n-propylamine	11	11	UG/L	U	U
0271	07-Apr-94	N-Nitroso-di-n-propylamine	11	11	UG/L	U	U
0271	16-Dec-91	N-Nitrosodiphenylamine	10	10	UG/L	U	U
0271	11-Oct-93	N-Nitrosodiphenylamine	10	10	UG/L	U	U
0076	16-Sep-92	N-Nitrosodiphenylamine	10	10	UG/L	U	UJ
0271	06-Nov-90	N-Nitrosodiphenylamine	10	10	UG/L	U	U
0271	22-Jun-92	N-Nitrosodiphenylamine	10	10	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect Limit	Units	Lab Qual	Data Qual
0076	23-Mar-92	N-Nitrosodiphenylamine	10	10	UG/L	U	U
0076	22-Jun-92	N-Nitrosodiphenylamine	10	10	UG/L	U	U
0076	16-Dec-91	N-Nitrosodiphenylamine	10	10	UG/L	U	U
0271	01-Feb-91	N-Nitrosodiphenylamine	10	10	UG/L	U	U
0076	11-Oct-93	N-Nitrosodiphenylamine	10	10	UG/L	U	U
0271	05-Aug-91	N-Nitrosodiphenylamine	10	10	UG/L	U	UJ
0076	06-May-91	N-Nitrosodiphenylamine	10	10	UG/L	U	U
0271	16-Sep-92	N-Nitrosodiphenylamine	10	10	UG/L	U	UJ
0076	01-Feb-91	N-Nitrosodiphenylamine	10	10	UG/L	U	U
0271	06-May-91	N-Nitrosodiphenylamine	10	10	UG/L	U	U
0076	06-Nov-90	N-Nitrosodiphenylamine	10	10	UG/L	U	U
0076	07-Apr-94	N-Nitrosodiphenylamine	11	11	UG/L	U	U
0271	07-Apr-94	N-Nitrosodiphenylamine	11	11	UG/L	U	U
0271	07-Apr-94	N-Nitrosodiphenylamine	11	11	UG/L	U	U
0271	01-Feb-91	Naphthalene	10	10	UG/L	U	U
0271	06-Nov-90	Naphthalene	10	10	UG/L	U	U
0271	11-Oct-93	Naphthalene	10	10	UG/L	U	U
0076	06-May-91	Naphthalene	10	10	UG/L	U	U
0076	01-Feb-91	Naphthalene	10	10	UG/L	U	U
0271	06-May-91	Naphthalene	10	10	UG/L	U	U
0076	06-Nov-90	Naphthalene	10	10	UG/L	U	U
0076	16-Sep-92	Naphthalene	10	10	UG/L	U	U
0076	22-Jun-92	Naphthalene	10	10	UG/L	U	U
0076	23-Mar-92	Naphthalene	10	10	UG/L	U	U
0076	11-Oct-93	Naphthalene	10	10	UG/L	U	U
0076	16-Dec-91	Naphthalene	10	10	UG/L	U	U
0271	05-Aug-91	Naphthalene	10	10	UG/L	U	UJ
0271	16-Sep-92	Naphthalene	10	10	UG/L	U	U
0271	16-Dec-91	Naphthalene	10	10	UG/L	U	U
0271	22-Jun-92	Naphthalene	10	10	UG/L	U	U
0271	07-Apr-94	Naphthalene	11	11	UG/L	U	U
0076	07-Apr-94	Naphthalene	11	11	UG/L	U	U
0271	07-Apr-94	Naphthalene	11	11	UG/L	U	U
0076	06-May-91	Neptunium-237	145	1	PCI/L	U	U
0271	06-May-91	Neptunium-237	163	1	PCI/L	U	U
0271	11-Oct-93	Nickel	2	2	UG/L	U	U
0076	11-Oct-93	Nickel	2	2	UG/L	U	U
0076	11-Oct-93	Nickel	2.1	2.3	UG/L	B	
0271	11-Oct-93	Nickel	2.2	2.3	UG/L	B	
0076	07-Apr-94	Nickel	2.3	2.3	UG/L	U	U
0271	07-Apr-94	Nickel	2.3	2.3	UG/L	U	U
0271	07-Apr-94	Nickel	2.3	2.3	UG/L	U	U
0271	07-Apr-94	Nickel	2.3	2.3	UG/L	U	U
0271	07-Apr-94	Nickel	2.3	2.3	UG/L	U	UJ
0076	07-Apr-94	Nickel	2.3	2.3	UG/L	U	U
0076	01-Feb-84	Nickel	6	6	UG/L	U	U
0271	16-Sep-92	Nickel	9	9	UG/L	U	U
0076	16-Sep-92	Nickel	9	9	UG/L	U	U
0271	13-Dec-85	Nickel	10	10	UG/L	U	U
0076	12-Dec-85	Nickel	10	10	UG/L	U	U
0076	22-Jun-92	Nickel	18	18	UG/L	U	U
0076	23-Mar-92	Nickel	18	40	UG/L	U	U
0271	22-Jun-92	Nickel	18	18	UG/L	U	U
0271	05-Aug-91	Nickel	20	20	UG/L	U	U
0271	01-Feb-91	Nickel	20	20	UG/L	U	U
0271	06-Nov-90	Nickel	20	20	UG/L	U	U
0076	01-Feb-91	Nickel	20	20	UG/L	U	U
0271	05-Aug-91	Nickel	20	20	UG/L	U	U
0076	06-Nov-90	Nickel	21.8	20	UG/L	B	
0076	06-May-91	Nickel	24.9	20	UG/L	B	
0271	06-May-91	Nickel	27.1	20	UG/L	B	
0271	16-Dec-91	Nickel	40	40	UG/L	U	U
0076	16-Dec-91	Nickel	40	40	UG/L	U	U
0271	01-Feb-91	Niobium-95	14	0	PCI/L	U	U
0076	01-Feb-91	Niobium-95	15	0	PCI/L	U	U
0076	16-Dec-91	Nitrate	0.738	0.1	MG/L		
0271	16-Dec-91	Nitrate	2.55	0.1	MG/L		
0076	22-Jun-92	Nitrate/Nitrite	0.68	0.1	MG/L		
0076	16-Sep-92	Nitrate/Nitrite	0.84	0.1	MG/L		

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect Limit	Units	Lab Qual	Data Qual
0076	06-May-91	Nitrate/Nitrite	1.1	0.1	MG/L		
0076	07-Apr-94	Nitrate/Nitrite	1.1	0.04	MG/L		
0271	05-Aug-91	Nitrate/Nitrite	1.18	0.1	MG/L		
0076	01-Feb-91	Nitrate/Nitrite	1.79	0	MG/L		
0076	11-Oct-93	Nitrate/Nitrite	1.9	0.04	MG/L		
0271	16-Sep-92	Nitrate/Nitrite	2	1	MG/L		
0271	22-Jun-92	Nitrate/Nitrite	2.4	0.5	MG/L		
0271	07-Apr-94	Nitrate/Nitrite	2.5	0.1	MG/L		
0271	07-Apr-94	Nitrate/Nitrite	2.5	0.1	MG/L		
0271	06-May-91	Nitrate/Nitrite	2.7	0.1	MG/L		
0271	01-Feb-91	Nitrate/Nitrite	4.03	0	MG/L		
0271	11-Oct-93	Nitrate/Nitrite	4.9	0.1	MG/L		
0076	16-Dec-91	Nitrite	0.1	0.1	MG/L	U	U
0271	16-Dec-91	Nitrite	0.1	0.1	MG/L	U	U
0076	07-Apr-94	Nitrobenzene	0.31	0.31	UG/L	U	UJ
0271	11-Oct-93	Nitrobenzene	0.31	0.31	UG/L	U	UJ
0271	07-Apr-94	Nitrobenzene	0.31	0.31	UG/L	U	UJ
0076	11-Oct-93	Nitrobenzene	0.31	0.31	UG/L	U	UJ
0271	11-Oct-93	Nitrobenzene	10	10	UG/L	U	U
0076	22-Jun-92	Nitrobenzene	10	10	UG/L	U	U
0271	05-Aug-91	Nitrobenzene	10	10	UG/L	U	UJ
0076	23-Mar-92	Nitrobenzene	10	10	UG/L	U	U
0271	16-Dec-91	Nitrobenzene	10	10	UG/L	U	U
0076	16-Dec-91	Nitrobenzene	10	10	UG/L	U	U
0271	06-May-91	Nitrobenzene	10	10	UG/L	U	U
0076	11-Oct-93	Nitrobenzene	10	10	UG/L	U	U
0271	16-Sep-92	Nitrobenzene	10	10	UG/L	U	U
0076	16-Sep-92	Nitrobenzene	10	10	UG/L	U	U
0076	06-Nov-90	Nitrobenzene	10	10	UG/L	U	U
0271	01-Feb-91	Nitrobenzene	10	10	UG/L	U	U
0076	06-May-91	Nitrobenzene	10	10	UG/L	U	U
0076	01-Feb-91	Nitrobenzene	10	10	UG/L	U	U
0271	22-Jun-92	Nitrobenzene	10	10	UG/L	U	U
0271	06-Nov-90	Nitrobenzene	10	10	UG/L	U	U
0076	07-Apr-94	Nitrobenzene	11	11	UG/L	U	U
0271	07-Apr-94	Nitrobenzene	11	11	UG/L	U	U
0271	07-Apr-94	Nitrobenzene	11	11	UG/L	U	U
0271	07-Apr-94	Nitrogen	0.1	0.1	MG/L	U	U
0271	07-Apr-94	Nitrogen	0.1	0.1	MG/L	U	U
0271	11-Oct-93	Nitrogen	0.18	0.1	MG/L		
0076	07-Apr-94	Nitrogen	0.52	0.1	MG/L		
0076	11-Oct-93	Nitrogen	0.62	0.1	MG/L		
0271	07-Apr-94	Organic Carbon	0.79	0.5	MG/L		
0271	07-Apr-94	Organic Carbon	0.85	0.5	MG/L		
0076	07-Apr-94	Organic Carbon	0.94	0.5	MG/L		
0271	11-Oct-93	Organic Carbon	1.1	0.5	MG/L		
0076	11-Oct-93	Organic Carbon	1.1	0.5	MG/L		
0076	07-Apr-94	PETN	1	1	UG/L	U	U
0271	07-Apr-94	PETN	1	1	UG/L	U	U
0076	11-Oct-93	PETN	1	1	UG/L	U	R
0271	11-Oct-93	PETN	1	1	UG/L	U	UJ
0271	13-Dec-85	Pentachlorophenol	3.6	3.6	UG/L	U	U
0076	12-Dec-85	Pentachlorophenol	3.7	3.7	UG/L	U	U
0076	01-Feb-84	Pentachlorophenol	25	25	UG/L	U	U
0076	11-Oct-93	Pentachlorophenol	26	26	UG/L	U	U
0271	11-Oct-93	Pentachlorophenol	26	26	UG/L	U	U
0076	07-Apr-94	Pentachlorophenol	26	26	UG/L	U	U
0076	22-Jun-92	Pentachlorophenol	26	26	UG/L	U	U
0076	16-Sep-92	Pentachlorophenol	26	26	UG/L	U	U
0076	23-Mar-92	Pentachlorophenol	26	26	UG/L	U	U
0271	07-Apr-94	Pentachlorophenol	26	26	UG/L	U	U
0271	22-Jun-92	Pentachlorophenol	26	26	UG/L	U	U
0271	07-Apr-94	Pentachlorophenol	26	26	UG/L	U	U
0271	16-Sep-92	Pentachlorophenol	26	26	UG/L	U	U
0271	06-May-91	Pentachlorophenol	50	50	UG/L	U	U
0076	16-Dec-91	Pentachlorophenol	50	50	UG/L	U	U
0076	06-May-91	Pentachlorophenol	50	50	UG/L	U	U
0076	01-Feb-91	Pentachlorophenol	50	50	UG/L	U	U
0271	16-Dec-91	Pentachlorophenol	50	50	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	06-Nov-90	Pentachlorophenol	50	50	UG/L	U	U
0271	05-Aug-91	Pentachlorophenol	50	50	UG/L	U	U
0076	06-Nov-90	Pentachlorophenol	50	50	UG/L	U	U
0271	01-Feb-91	Pentachlorophenol	50	50	UG/L	U	U
0271	05-Aug-91	Phenanthrene	10	10	UG/L	U	UJ
0271	06-May-91	Phenanthrene	10	10	UG/L	U	U
0271	22-Jun-92	Phenanthrene	10	10	UG/L	U	U
0271	16-Dec-91	Phenanthrene	10	10	UG/L	U	U
0271	01-Feb-91	Phenanthrene	10	10	UG/L	U	U
0076	16-Dec-91	Phenanthrene	10	10	UG/L	U	U
0271	16-Sep-92	Phenanthrene	10	10	UG/L	U	U
0076	06-Nov-90	Phenanthrene	10	10	UG/L	U	U
0076	22-Jun-92	Phenanthrene	10	10	UG/L	U	U
0076	16-Sep-92	Phenanthrene	10	10	UG/L	U	U
0076	23-Mar-92	Phenanthrene	10	10	UG/L	U	U
0271	11-Oct-93	Phenanthrene	10	10	UG/L	U	UJ
0271	06-Nov-90	Phenanthrene	10	10	UG/L	U	U
0076	01-Feb-91	Phenanthrene	10	10	UG/L	U	U
0076	11-Oct-93	Phenanthrene	10	10	UG/L	U	UJ
0076	06-May-91	Phenanthrene	10	10	UG/L	U	U
0271	07-Apr-94	Phenanthrene	11	11	UG/L	U	U
0076	07-Apr-94	Phenanthrene	11	11	UG/L	U	U
0271	07-Apr-94	Phenanthrene	11	11	UG/L	U	U
0271	13-Dec-85	Phenol	1.5	1.5	UG/L	U	U
0076	12-Dec-85	Phenol	1.5	1.5	UG/L	U	U
0271	11-Oct-93	Phenol	10	10	UG/L	U	U
0076	23-Mar-92	Phenol	10	10	UG/L	U	U
0271	05-Aug-91	Phenol	10	10	UG/L	U	U
0076	06-May-91	Phenol	10	10	UG/L	U	U
0076	06-Nov-90	Phenol	10	10	UG/L	U	U
0076	16-Dec-91	Phenol	10	10	UG/L	U	U
0076	22-Jun-92	Phenol	10	10	UG/L	U	U
0271	06-Nov-90	Phenol	10	10	UG/L	U	U
0076	16-Sep-92	Phenol	10	10	UG/L	U	U
0271	01-Feb-91	Phenol	10	10	UG/L	U	U
0271	16-Dec-91	Phenol	10	10	UG/L	U	U
0271	16-Sep-92	Phenol	10	10	UG/L	U	U
0076	11-Oct-93	Phenol	10	10	UG/L	U	U
0271	06-May-91	Phenol	10	10	UG/L	U	U
0271	22-Jun-92	Phenol	10	10	UG/L	U	U
0076	01-Feb-91	Phenol	10	10	UG/L	U	U
0271	07-Apr-94	Phenol	11	11	UG/L	U	U
0271	07-Apr-94	Phenol	11	11	UG/L	U	U
0076	07-Apr-94	Phenol	11	11	UG/L	U	U
0076	01-Feb-84	Phenol	25	25	UG/L	U	U
0076	07-Apr-94	Phosphate	0.05	0.05	MG/L	U	U
0271	07-Apr-94	Phosphate	0.05	0.05	MG/L	U	UJ
0076	11-Oct-93	Phosphate	0.1	0.05	MG/L		
0271	11-Oct-93	Phosphate	0.11	0.05	MG/L		
0271	07-Apr-94	Phosphate	0.22	0.05	MG/L		J
0076	22-Jun-92	Plutonium-238	0	0.5	PCI/L		
0076	23-Mar-92	Plutonium-238	0	0.5	PCI/L		
0271	22-Jun-92	Plutonium-238	0	0.5	PCI/L		
0076	07-Apr-94	Plutonium-238	0.0013	0.0013	PCI/L	U	U
0271	07-Apr-94	Plutonium-238	0.0082	0.0082	PCI/L	U	U
0271	07-Apr-94	Plutonium-238	0.0084	0.0084	PCI/L	U	U
0271	11-Oct-93	Plutonium-238	0.049	0.049	PCI/L	U	U
0076	16-Sep-92	Plutonium-238	0.0992	0.0992	PCI/L	U	U
0271	16-Sep-92	Plutonium-238	0.1	0.1	PCI/L	U	U
0076	11-Oct-93	Plutonium-238	0.12	0.12	PCI/L	U	U
0271	05-Aug-91	Plutonium-238	1	0	PCI/L	U	U
0271	01-Feb-91	Plutonium-238	1	0	PCI/L	U	U
0271	16-Dec-91	Plutonium-238	1	1	PCI/L	U	U
0271	06-Nov-90	Plutonium-238	1	0	PCI/L	U	U
0076	16-Dec-91	Plutonium-238	1	1	PCI/L	U	U
0076	01-Feb-91	Plutonium-238	1	0	PCI/L	U	U
0076	06-Nov-90	Plutonium-238	1	0	PCI/L	U	U
0076	22-Jun-92	Plutonium-239/240	0	0.5	PCI/L		
0076	07-Apr-94	Plutonium-239/240	0.0018	0.0013	PCI/L		

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	07-Apr-94	Plutonium-239/240	0.0065	0.0024	PCI/L		J
0271	07-Apr-94	Plutonium-239/240	0.0104	0.0059	PCI/L		J
0076	16-Sep-92	Plutonium-239/240	0.0389	0.0389	PCI/L	U	U
0076	11-Oct-93	Plutonium-239/240	0.047	0.047	PCI/L	U	U
0271	11-Oct-93	Plutonium-239/240	0.049	0.049	PCI/L	U	U
0271	16-Sep-92	Plutonium-239/240	0.1	0.1	PCI/L	U	U
0076	16-Dec-91	Plutonium-239/240	1	1	PCI/L	U	U
0076	06-May-91	Plutonium-239/240	1	1	PCI/L	U	U
0076	01-Feb-91	Plutonium-239/240	1	0	PCI/L	U	U
0271	16-Dec-91	Plutonium-239/240	1	1	PCI/L	U	U
0271	06-Nov-90	Plutonium-239/240	1	0	PCI/L	U	U
0076	06-Nov-90	Plutonium-239/240	1	0	PCI/L	U	U
0271	05-Aug-91	Plutonium-239/240	1	0	PCI/L	U	U
0271	06-May-91	Plutonium-239/240	1	1	PCI/L	U	U
0271	01-Feb-91	Plutonium-239/240	1	0	PCI/L	U	U
0076	23-Mar-92	Plutonium-239/240	1.7	0.5	PCI/L		
0271	22-Jun-92	Plutonium-239/240	2	0.5	PCI/L		
0271	05-Aug-91	Potassium	3.71	0.1	UG/L		
0271	05-Aug-91	Potassium	3.8	0.1	UG/L		
0271	11-Oct-93	Potassium	2390	693	UG/L	B	
0271	11-Oct-93	Potassium	2390	693	UG/L	B	
0271	01-Feb-91	Potassium	2470	1000	UG/L	B	UJ
0076	11-Oct-93	Potassium	2530	693	UG/L	B	
0076	11-Oct-93	Potassium	2530	693	UG/L	B	
0076	23-Mar-92	Potassium	2570	5000	UG/L	B	
0271	16-Sep-92	Potassium	2780	419	UG/L		UJ
0076	06-May-91	Potassium	2800	100	UG/L	B	
0076	06-May-91	Potassium	2870	0.05	UG/L		
0271	07-Apr-94	Potassium	2930	887	UG/L	B	
0271	07-Apr-94	Potassium	2990	887	UG/L	B	
0271	07-Apr-94	Potassium	2990	887	UG/L	B	
0076	22-Jun-92	Potassium	2990	970	UG/L	B	
0076	07-Apr-94	Potassium	3000	887	UG/L	B	
0076	07-Apr-94	Potassium	3050	887	UG/L	B	
0271	07-Apr-94	Potassium	3050	887	UG/L	B	
0271	06-May-91	Potassium	3100	0.05	UG/L		
0271	22-Jun-92	Potassium	3160	970	UG/L	B	
0271	06-May-91	Potassium	3190	100	UG/L	B	
0271	06-Nov-90	Potassium	3230	100	UG/L	B	
0076	16-Sep-92	Potassium	3280	419	UG/L		UJ
0076	06-Nov-90	Potassium	3320	100	UG/L	B	
0076	01-Feb-91	Potassium	3320	0	UG/L		
0076	01-Feb-91	Potassium	3400	1000	UG/L	B	UJ
0271	01-Feb-91	Potassium	3560	0	UG/L		
0271	05-Aug-91	Potassium	3650	100	UG/L		
0271	05-Aug-91	Potassium	3761	100	UG/L		
0271	16-Dec-91	Potassium	5000	5000	UG/L	U	U
0076	16-Dec-91	Potassium	5000	5000	UG/L	U	U
0271	07-Apr-94	Potassium-40	96.1	96.1	PCI/L	U	U
0271	07-Apr-94	Potassium-40	103	103	PCI/L	U	U
0076	07-Apr-94	Potassium-40	104	104	PCI/L	U	U
0076	11-Oct-93	Potassium-40	130	130	PCI/L	U	U
0271	01-Feb-91	Potassium-40	140	0	PCI/L	U	U
0076	01-Feb-91	Potassium-40	170	0	PCI/L	U	U
0271	11-Oct-93	Potassium-40	200	200	PCI/L	U	U
0076	16-Sep-92	Potassium-40	223	223	PCI/L	U	U
0271	16-Sep-92	Potassium-40	351	351	PCI/L	U	U
0271	06-May-91	Potassium-40	800	1	PCI/L	U	U
0076	06-May-91	Potassium-40	800	1	PCI/L	U	U
0271	06-May-91	Protactinium-233	50	1	PCI/L	U	U
0076	06-May-91	Protactinium-233	51.1	1	PCI/L	U	U
0076	06-May-91	Protactinium-234 metastable	3810	1	PCI/L	U	U
0271	06-May-91	Protactinium-234 metastable	6590	1	PCI/L	U	U
0271	22-Jun-92	Pyrene	10	10	UG/L	U	U
0076	01-Feb-91	Pyrene	10	10	UG/L	U	U
0076	06-May-91	Pyrene	10	10	UG/L	U	U
0271	06-May-91	Pyrene	10	10	UG/L	U	U
0076	22-Jun-92	Pyrene	10	10	UG/L	U	U
0271	16-Dec-91	Pyrene	10	10	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect Limit	Units	Lab Qual.	Data Qual.
0076	16-Sep-92	Pyrene	10	10	UG/L	U	U
0076	06-Nov-90	Pyrene	10	10	UG/L	U	U
0271	01-Feb-91	Pyrene	10	10	UG/L	U	U
0076	11-Oct-93	Pyrene	10	10	UG/L	U	U
0271	16-Sep-92	Pyrene	10	10	UG/L	U	U
0076	16-Dec-91	Pyrene	10	10	UG/L	U	U
0271	11-Oct-93	Pyrene	10	10	UG/L	U	U
0076	23-Mar-92	Pyrene	10	10	UG/L	U	U
0271	05-Aug-91	Pyrene	10	10	UG/L	U	UJ
0271	06-Nov-90	Pyrene	10	10	UG/L	U	U
0271	07-Apr-94	Pyrene	11	11	UG/L	U	U
0271	07-Apr-94	Pyrene	11	11	UG/L	U	U
0076	07-Apr-94	Pyrene	11	11	UG/L	U	U
0271	11-Oct-93	RDX	0.63	0.63	UG/L	U	UJ
0076	07-Apr-94	RDX	0.63	0.63	UG/L	U	U
0076	11-Oct-93	RDX	0.63	0.63	UG/L	U	UJ
0271	07-Apr-94	RDX	0.63	0.63	UG/L	U	U
0076	06-May-91	Radium-223	92.9	1	PCI/L	U	U
0271	06-May-91	Radium-223	102	1	PCI/L	U	U
0076	06-May-91	Radium-225	13.3	1	PCI/L	U	U
0271	06-May-91	Radium-225	14.9	1	PCI/L	U	U
0076	23-Mar-92	Radium-226	0	0.2	PCI/L		
0271	07-Apr-94	Radium-226	0.22	0.22	PCI/L	U	U
0271	22-Jun-92	Radium-226	0.3	0.2	PCI/L		
0271	16-Sep-92	Radium-226	0.303	1	PCI/L		
0271	07-Apr-94	Radium-226	0.4	0.2	PCI/L		
0076	22-Jun-92	Radium-226	0.4	0.2	PCI/L		
0076	16-Sep-92	Radium-226	0.45	0.45	PCI/L	U	U
0076	07-Apr-94	Radium-226	0.52	0.23	PCI/L		
0076	11-Oct-93	Radium-226	0.69	0.69	PCI/L	U	U
0271	11-Oct-93	Radium-226	0.84	0.84	PCI/L	U	U
0076	16-Dec-91	Radium-226	1	1	PCI/L	U	U
0076	06-Nov-90	Radium-226	1	0	PCI/L	U	U
0076	06-May-91	Radium-226	1	1	PCI/L	U	U
0271	01-Feb-91	Radium-226	1	0	PCI/L	U	U
0271	16-Dec-91	Radium-226	1	1	PCI/L	U	U
0271	05-Aug-91	Radium-226	1	0	PCI/L	U	U
0076	01-Feb-91	Radium-226	1	0	PCI/L	U	U
0271	06-May-91	Radium-226	1	1	PCI/L	U	U
0271	06-Nov-90	Radium-226	1	0	PCI/L	U	U
0271	01-Feb-91	Ruthenium-103	11	0	PCI/L	U	U
0076	01-Feb-91	Ruthenium-103	17	0	PCI/L	U	U
0271	01-Feb-91	Ruthenium-106	140	0	PCI/L	U	U
0076	01-Feb-91	Ruthenium-106	170	0	PCI/L	U	U
0076	01-Feb-91	Scandium-46	1.3	0	PCI/L	U	U
0271	01-Feb-91	Scandium-46	17	0	PCI/L	U	U
0076	07-Apr-94	Selenium	0.9	0.9	UG/L	U	UJ
0076	07-Apr-94	Selenium	0.9	0.9	UG/L	U	UJ
0271	07-Apr-94	Selenium	0.9	0.9	UG/L	U	U
0271	07-Apr-94	Selenium	0.9	0.9	UG/L	U	UJ
0271	07-Apr-94	Selenium	0.9	0.9	UG/L	U	UJ
0076	11-Oct-93	Selenium	1	1	UG/L	U	UJ
0271	11-Oct-93	Selenium	1	1	UG/L	U	UJ
0271	11-Oct-93	Selenium	1	1	UG/L	U	UJ
0076	11-Oct-93	Selenium	1	1	UG/L	U	UJ
0271	22-Jun-92	Selenium	2	2	UG/L	U	U
0271	01-Feb-91	Selenium	2	2	UG/L	U	UJ
0076	23-Mar-92	Selenium	2	5	UG/L	U	UJ
0076	16-Dec-91	Selenium	2	5	UG/L	U	UJ
0076	01-Feb-91	Selenium	2	2	UG/L	U	UJ
0076	06-May-91	Selenium	2	2	UG/L	U	UJ
0271	16-Sep-92	Selenium	2	2	UG/L	U	UJ
0076	06-Nov-90	Selenium	2	2	UG/L	U	U
0271	05-Aug-91	Selenium	2	2	UG/L		UJ
0271	05-Aug-91	Selenium	2	2	UG/L	U	U
0076	22-Jun-92	Selenium	2	2	UG/L	U	U
0271	06-Nov-90	Selenium	2	2	UG/L	U	U
0076	16-Sep-92	Selenium	2	2	UG/L	U	UJ
0271	16-Dec-91	Selenium	2	5	UG/L	U	UJ

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	06-May-91	Selenium	2	2	UG/L	U	U
0076	01-Feb-84	Selenium	5	5	UG/L	U	U
0076	12-Dec-85	Selenium	5	5	UG/L	U	U
0271	13-Dec-85	Selenium	5	5	UG/L	U	U
0271	07-Apr-94	Selenium	9	9	UG/L	U	UJ
0271	11-Oct-93	Silver	0.75	0.75	UG/L	U	U
0271	11-Oct-93	Silver	0.75	0.75	UG/L	U	UJ
0076	11-Oct-93	Silver	0.75	0.75	UG/L	U	UJ
0076	11-Oct-93	Silver	0.75	0.75	UG/L	U	UJ
0271	07-Apr-94	Silver	1	1	UG/L	U	U
0076	07-Apr-94	Silver	1	1	UG/L	U	U
0076	07-Apr-94	Silver	1	1	UG/L	U	U
0271	07-Apr-94	Silver	1	1	UG/L	U	U
0271	07-Apr-94	Silver	1	1	UG/L	U	U
0271	07-Apr-94	Silver	1	1	UG/L	U	U
0076	16-Sep-92	Silver	3	3	UG/L	U	UJ
0271	16-Sep-92	Silver	3	3	UG/L	U	UJ
0271	01-Feb-91	Silver	5	5	UG/L	U	U
0271	22-Jun-92	Silver	6	6	UG/L	U	U
0076	22-Jun-92	Silver	6	6	UG/L	U	U
0076	01-Feb-91	Silver	7.4	5	UG/L	B	UJ
0076	23-Mar-92	Silver	8	10	UG/L	U	U
0271	16-Dec-91	Silver	10	10	UG/L	U	U
0076	16-Dec-91	Silver	10	10	UG/L	U	U
0271	06-Nov-90	Silver	16.9	10	UG/L		
0076	06-Nov-90	Silver	17.4	10	UG/L		
0271	05-Aug-91	Silver	20.9	10	UG/L		
0076	06-May-91	Silver	23.1	10	UG/L		
0271	05-Aug-91	Silver	23.198	10	UG/L		
0271	06-May-91	Silver	24.2	10	UG/L		
0271	01-Feb-91	Silver-110	49	0	PCI/L	U	U
0076	01-Feb-91	Silver-110	57	0	PCI/L	U	U
0271	05-Aug-91	Sodium	64	0.1	UG/L		
0271	05-Aug-91	Sodium	64.8	0.1	UG/L		
0271	05-Aug-91	Sodium	64.8	0.1	UG/L		
0076	16-Dec-91	Sodium	46600	5000	UG/L		
0076	22-Jun-92	Sodium	46800	51	UG/L		
0076	06-May-91	Sodium	46900	100	UG/L		
0076	16-Sep-92	Sodium	47700	18	UG/L		
0076	06-May-91	Sodium	49200	0.1	UG/L		
0076	11-Oct-93	Sodium	49300	4.5	UG/L		J
0076	11-Oct-93	Sodium	50400	4.5	UG/L		J
0076	01-Feb-91	Sodium	52000	0	UG/L		
0076	07-Apr-94	Sodium	53000	39.3	UG/L		
0076	23-Mar-92	Sodium	53100	5000	UG/L		J
0076	01-Feb-91	Sodium	53800	200	UG/L		
0076	07-Apr-94	Sodium	54900	39.3	UG/L		
0271	16-Sep-92	Sodium	61800	18	UG/L		
0271	05-Aug-91	Sodium	64400	100	UG/L		
0271	22-Jun-92	Sodium	64800	51	UG/L		
0271	06-Nov-90	Sodium	66500	100	UG/L		
0271	05-Aug-91	Sodium	66658.336	100	UG/L		
0076	06-Nov-90	Sodium	67000	100	UG/L		
0271	11-Oct-93	Sodium	68500	4.5	UG/L		J
0271	11-Oct-93	Sodium	69700	4.5	UG/L		J
0271	06-May-91	Sodium	71400	100	UG/L		
0271	16-Dec-91	Sodium	72800	5000	UG/L		
0271	06-May-91	Sodium	73200	0.1	UG/L		
0271	01-Feb-91	Sodium	78000	0	UG/L		
0271	07-Apr-94	Sodium	78600	39.3	UG/L		
0271	07-Apr-94	Sodium	81200	39.3	UG/L		
0271	01-Feb-91	Sodium	82400	200	UG/L		
0271	07-Apr-94	Sodium	84200	39.3	UG/L		
0271	07-Apr-94	Sodium	84200	39.3	UG/L		
0271	01-Feb-91	Sodium-22	9.1	0	PCI/L	U	U
0076	01-Feb-91	Sodium-22	20	0	PCI/L	U	U
0076	01-Feb-91	Strontium-85	22	0	PCI/L	U	U
0271	01-Feb-91	Strontium-85	25	0	PCI/L		
0076	06-May-91	Strontium-89	5	1	PCI/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	06-May-91	Strontium-89	5	1	PCI/L	U	U
0271	22-Jun-92	Strontium-90	0	1	PCI/L		
0076	23-Mar-92	Strontium-90	0.3	1	PCI/L		
0076	22-Jun-92	Strontium-90	0.3	1	PCI/L		
0271	16-Sep-92	Strontium-90	0.56	0.56	PCI/L	U	U
0271	11-Oct-93	Strontium-90	0.59	0.59	PCI/L	U	U
0076	16-Sep-92	Strontium-90	0.59	0.59	PCI/L	U	U
0076	11-Oct-93	Strontium-90	0.59	0.59	PCI/L	U	U
0271	05-Aug-91	Strontium-90	1	0	PCI/L	U	U
0076	07-Apr-94	Strontium-90	1.16	1.16	PCI/L	U	U
0271	07-Apr-94	Strontium-90	1.456	1.456	PCI/L	U	U
0271	07-Apr-94	Strontium-90	1.463	1.463	PCI/L	U	U
0271	01-Feb-91	Strontium-90	2	0	PCI/L	U	U
0076	01-Feb-91	Strontium-90	2	0	PCI/L	U	U
0271	06-Nov-90	Strontium-90	5	0	PCI/L	U	U
0076	16-Dec-91	Strontium-90	5	5	PCI/L	U	U
0271	06-May-91	Strontium-90	5	5	PCI/L	U	U
0076	06-May-91	Strontium-90	5	5	PCI/L	U	U
0271	16-Dec-91	Strontium-90	5	5	PCI/L	U	U
0076	06-Nov-90	Strontium-90	5	0	PCI/L	U	U
0271	08-Mar-88	Styrene	5	5	UG/L	U	U
0271	24-Jun-88	Styrene	5	5	UG/L	U	U
0076	13-Sep-88	Styrene	5	5	UG/L	U	U
0076	24-Jun-88	Styrene	5	5	UG/L	U	U
0076	25-Apr-90	Styrene	5	5	UG/L	U	U
0271	13-Sep-88	Styrene	5	5	UG/L	U	U
0271	25-Apr-90	Styrene	5	5	UG/L	U	U
0076	16-Dec-91	Sulfate	2	2	MG/L	U	U
0076	07-Apr-94	Sulfate	25	25	MG/L	U	U
0076	06-May-91	Sulfate	41.3	0.05	MG/L		
0076	22-Jun-92	Sulfate	44.2	10	MG/L		
0271	07-Apr-94	Sulfate	44.9	25	MG/L		
0271	07-Apr-94	Sulfate	54	25	MG/L		
0076	16-Sep-92	Sulfate	55.4	50	MG/L		
0076	23-Mar-92	Sulfate	56.5	25	MG/L		
0271	22-Jun-92	Sulfate	59	25	MG/L		
0271	05-Aug-91	Sulfate	62.2	2	MG/L		
0076	01-Feb-91	Sulfate	62.3	0	MG/L		
0271	16-Dec-91	Sulfate	70.1	2	MG/L		
0271	16-Sep-92	Sulfate	72.1	50	MG/L		
0271	06-May-91	Sulfate	74.5	0.05	MG/L		
0271	01-Feb-91	Sulfate	80	0	MG/L		
0076	11-Oct-93	Sulfate	81	25	MG/L		
0271	11-Oct-93	Sulfate	83	25	MG/L		
0076	11-Oct-93	Suspended Solids	4	4	MG/L	U	U
0076	07-Apr-94	Suspended Solids	5	5	MG/L	U	U
0271	07-Apr-94	Suspended Solids	5	5	MG/L	U	U
0271	07-Apr-94	Suspended Solids	5	5	MG/L	U	U
0271	11-Oct-93	Suspended Solids	8	4	MG/L		
0076	23-Mar-92	Tetrachloroethene	0.29	0.3	UG/L	J	J
0076	15-Jun-90	Tetrachloroethene	0.3	0.3	UG/L	U	U
0076	24-Jan-90	Tetrachloroethene	0.3	0.3	UG/L		
0076	22-Jun-92	Tetrachloroethene	0.3	0.3	UG/L	U	R
0076	01-Feb-91	Tetrachloroethene	0.3	0.3	UG/L		
0076	11-Oct-93	Tetrachloroethene	0.38	0.3	UG/L		J
0271	15-Jun-90	Tetrachloroethene	0.4	0.3	UG/L		
0076	16-Sep-92	Tetrachloroethene	0.4	0.3	UG/L		UJ
0076	31-Jul-90	Tetrachloroethene	0.4	0.3	UG/L		
0076	06-May-91	Tetrachloroethene	0.4	0.3	UG/L		J
0271	16-Sep-92	Tetrachloroethene	0.44	0.3	UG/L		UJ
0271	31-Jul-90	Tetrachloroethene	0.5	0.3	UG/L		
0076	07-Apr-94	Tetrachloroethene	0.51	0.3	UG/L		
0271	07-Apr-94	Tetrachloroethene	0.53	0.3	UG/L		
0271	07-Apr-94	Tetrachloroethene	0.6	0.3	UG/L		
0076	27-Feb-90	Tetrachloroethene	0.6	0.3	UG/L		
0271	22-Jun-92	Tetrachloroethene	0.6	0.3	UG/L		J
0271	27-Feb-90	Tetrachloroethene	0.7	0.3	UG/L		
0271	01-Feb-91	Tetrachloroethene	0.7	0.3	UG/L		
0271	11-Oct-93	Tetrachloroethene	0.75	0.3	UG/L		J

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	06-May-91	Tetrachloroethene	0.8	0.3	UG/L		J
0076	16-Jun-93	Tetrachloroethene	0.85	0.3	UG/L		J
0271	27-Feb-90	Tetrachloroethene	0.9	0.3	UG/L		
0076	16-Dec-91	Tetrachloroethene	1	1	UG/L	U	U
0271	16-Dec-91	Tetrachloroethene	1	1	UG/L	U	U
0271	27-Feb-90	Tetrachloroethene	1	0.3	UG/L		
0271	13-Sep-88	Tetrachloroethene	1	1	UG/L	U	U
0076	13-Sep-88	Tetrachloroethene	1	1	UG/L	U	U
0076	23-Mar-90	Tetrachloroethene	1.1	0.3	UG/L		
0271	24-Jan-90	Tetrachloroethene	1.1	0.3	UG/L		
0076	06-Nov-90	Tetrachloroethene	1.2	0.3	UG/L		J
0271	05-Aug-91	Tetrachloroethene	1.2	0.3	UG/L		J
0271	06-Nov-90	Tetrachloroethene	1.2	0.3	UG/L		J
0271	23-Mar-90	Tetrachloroethene	1.8	0.3	UG/L		
0271	24-Jun-88	Tetrachloroethene	2	5	UG/L	J	J
0271	13-Dec-85	Tetrachloroethene	4.1	4.1	UG/L	U	U
0271	13-Mar-86	Tetrachloroethene	4.1	4.1	UG/L	U	U
0076	12-Dec-85	Tetrachloroethene	4.1	4.1	UG/L	U	U
0076	13-Sep-88	Tetrachloroethene	5	5	UG/L	U	U
0271	08-Mar-88	Tetrachloroethene	5	5	UG/L	U	U
0076	24-Jun-88	Tetrachloroethene	5	5	UG/L	U	U
0271	13-Sep-88	Tetrachloroethene	5	5	UG/L	U	U
0076	25-Apr-90	Tetrachloroethene	5	5	UG/L	U	U
0271	25-Apr-90	Tetrachloroethene	5	5	UG/L	U	U
0076	01-Feb-84	Tetrachloroethene	10	10	UG/L	U	U
0271	11-Oct-93	Tetryl	3	3	UG/L	U	UJ
0076	07-Apr-94	Tetryl	3	3	UG/L	U	U
0076	11-Oct-93	Tetryl	3	3	UG/L	U	UJ
0271	07-Apr-94	Tetryl	3	3	UG/L	U	U
0271	07-Apr-94	Thallium	1.6	1.6	UG/L	U	U
0076	07-Apr-94	Thallium	1.6	1.6	UG/L	U	U
0271	07-Apr-94	Thallium	1.6	1.6	UG/L	U	U
0271	07-Apr-94	Thallium	1.6	1.6	UG/L	U	U
0271	07-Apr-94	Thallium	1.6	1.6	UG/L	U	U
0076	07-Apr-94	Thallium	1.6	1.6	UG/L	U	U
0076	22-Jun-92	Thallium	2	2	UG/L	U	U
0271	01-Feb-91	Thallium	2	2	UG/L	U	UJ
0271	16-Sep-92	Thallium	2	2	UG/L	U	UJ
0271	06-Nov-90	Thallium	2	2	UG/L	U	U
0271	16-Dec-91	Thallium	2	10	UG/L	U	UJ
0076	23-Mar-92	Thallium	2	10	UG/L	U	U
0076	01-Feb-91	Thallium	2	2	UG/L	U	UJ
0076	11-Oct-93	Thallium	2	2	UG/L	U	UJ
0076	16-Sep-92	Thallium	2	2	UG/L	U	UJ
0271	22-Jun-92	Thallium	2	2	UG/L	U	U
0271	05-Aug-91	Thallium	2	2	UG/L	U	U
0271	11-Oct-93	Thallium	2	2	UG/L	U	UJ
0076	11-Oct-93	Thallium	2	2	UG/L	U	UJ
0271	11-Oct-93	Thallium	2	2	UG/L	U	UJ
0271	05-Aug-91	Thallium	2	2	UG/L	U	U
0076	16-Dec-91	Thallium	2	10	UG/L	U	UJ
0076	06-Nov-90	Thallium	2.4	2	UG/L	B	
0076	06-May-91	Thallium	10	2	UG/L	U	U
0271	06-May-91	Thallium	10	2	UG/L	U	U
0076	06-May-91	Thallium-208	54.8	1	PCI/L	U	U
0271	06-May-91	Thallium-208	100	1	PCI/L	U	U
0271	06-May-91	Thorium-227	278	1	PCI/L	U	U
0076	06-May-91	Thorium-227	282	1	PCI/L	U	U
0271	22-Jun-92	Thorium-228	0	0.2	PCI/L		
0076	22-Jun-92	Thorium-228	0	0.2	PCI/L		
0076	23-Mar-92	Thorium-228	0	0.2	PCI/L		
0076	07-Apr-94	Thorium-228	0.05	0.05	PCI/L	U	U
0271	07-Apr-94	Thorium-228	0.061	0.061	PCI/L	U	U
0271	07-Apr-94	Thorium-228	0.072	0.072	PCI/L	U	U
0076	16-Sep-92	Thorium-228	0.15	0.15	PCI/L	U	U
0271	16-Sep-92	Thorium-228	0.2	0.2	PCI/L	U	U
0271	11-Oct-93	Thorium-228	0.635	0.29	PCI/L		
0076	11-Oct-93	Thorium-228	0.73	0.73	PCI/L	U	U
0271	01-Feb-91	Thorium-228	1	0	PCI/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	16-Dec-91	Thorium-228	1	1	PCI/L	U	U
0076	06-Nov-90	Thorium-228	1	0	PCI/L	U	U
0271	06-Nov-90	Thorium-228	1	0	PCI/L	U	U
0076	16-Dec-91	Thorium-228	1.3	1	PCI/L		
0076	01-Feb-91	Thorium-228	1.5	0	PCI/L		
0271	05-Aug-91	Thorium-228	2.17	0	PCI/L		
0076	06-May-91	Thorium-228	1940	1	PCI/L	U	U
0271	06-May-91	Thorium-228	2100	1	PCI/L	U	U
0271	22-Jun-92	Thorium-230	0	0.2	PCI/L		
0076	23-Mar-92	Thorium-230	0	0.2	PCI/L		
0076	22-Jun-92	Thorium-230	0	0.2	PCI/L		
0076	07-Apr-94	Thorium-230	0.033	0.033	PCI/L	U	U
0271	07-Apr-94	Thorium-230	0.033	0.033	PCI/L	U	U
0271	07-Apr-94	Thorium-230	0.051	0.051	PCI/L	U	U
0076	11-Oct-93	Thorium-230	0.14	0.14	PCI/L	U	UJ
0271	16-Sep-92	Thorium-230	0.142	1	PCI/L		
0271	11-Oct-93	Thorium-230	0.221	0.054	PCI/L		R
0076	16-Sep-92	Thorium-230	0.57	1	PCI/L		
0271	05-Aug-91	Thorium-230	1	0	PCI/L	U	U
0076	16-Dec-91	Thorium-230	1	1	PCI/L	U	U
0271	06-Nov-90	Thorium-230	1	0	PCI/L	U	U
0076	01-Feb-91	Thorium-230	1	0	PCI/L	U	U
0076	06-Nov-90	Thorium-230	1	0	PCI/L	U	U
0271	01-Feb-91	Thorium-230	1.5	0	PCI/L		
0271	16-Dec-91	Thorium-230	1.99	1	PCI/L		
0076	22-Jun-92	Thorium-232	0	0.2	PCI/L		
0076	23-Mar-92	Thorium-232	0	0.2	PCI/L		
0271	22-Jun-92	Thorium-232	0	0.2	PCI/L		
0076	07-Apr-94	Thorium-232	0.033	0.033	PCI/L	U	U
0271	07-Apr-94	Thorium-232	0.033	0.033	PCI/L	U	U
0271	07-Apr-94	Thorium-232	0.061	0.061	PCI/L	U	U
0076	16-Sep-92	Thorium-232	0.093	0.093	PCI/L	U	U
0271	11-Oct-93	Thorium-232	0.1	0.054	PCI/L		
0271	16-Sep-92	Thorium-232	0.14	0.14	PCI/L	U	U
0076	11-Oct-93	Thorium-232	0.28	0.28	PCI/L	U	U
0271	01-Feb-91	Thorium-232	1	0	PCI/L	U	U
0271	16-Dec-91	Thorium-232	1	1	PCI/L	U	U
0271	06-Nov-90	Thorium-232	1	0	PCI/L	U	U
0076	06-Nov-90	Thorium-232	1	0	PCI/L	U	U
0271	05-Aug-91	Thorium-232	1	0	PCI/L	U	U
0076	16-Dec-91	Thorium-232	1	1	PCI/L	U	U
0076	01-Feb-91	Thorium-232	1	0	PCI/L	U	U
0076	06-May-91	Thorium-234	341	1	PCI/L	U	U
0271	06-May-91	Thorium-234	341	1	PCI/L	U	U
0076	11-Oct-93	Tin	4.5	4.5	UG/L	U	U
0271	11-Oct-93	Tin	4.5	4.5	UG/L	U	U
0076	11-Oct-93	Tin	4.5	4.5	UG/L	U	U
0271	11-Oct-93	Tin	4.5	4.5	UG/L	U	U
0076	07-Apr-94	Tin	4.8	4.8	UG/L	U	U
0271	07-Apr-94	Tin	4.8	4.8	UG/L	U	UJ
0271	07-Apr-94	Tin	4.8	4.8	UG/L	U	U
0076	07-Apr-94	Tin	4.8	4.8	UG/L	U	U
0271	07-Apr-94	Tin	4.8	4.8	UG/L	U	U
0271	07-Apr-94	Tin	8.7	4.8	UG/L	B	J
0271	01-Feb-91	Tin-113	15	0	PCI/L	U	U
0076	01-Feb-91	Tin-113	23	0	PCI/L	U	U
0271	01-Feb-91	Tin-126	12	0	PCI/L	U	U
0076	01-Feb-91	Tin-126	46	0	PCI/L	U	U
0076	13-Sep-88	Toluene	1	1	UG/L	U	U
0271	13-Sep-88	Toluene	1	1	UG/L	U	U
0271	16-Dec-91	Toluene	1	1	UG/L	U	U
0076	16-Dec-91	Toluene	1	1	UG/L	U	U
0076	27-Feb-90	Toluene	2	2	UG/L	U	U
0271	06-Nov-90	Toluene	2	2	UG/L	U	U
0076	23-Mar-92	Toluene	2	2	UG/L	U	UJ
0271	24-Jan-90	Toluene	2	2	UG/L	U	U
0076	01-Feb-91	Toluene	2	2	UG/L	U	U
0076	24-Jan-90	Toluene	2	2	UG/L	U	U
0076	07-Apr-94	Toluene	2	2	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	31-Jul-90	Toluene	2	2	UG/L	U	U
0271	15-Jun-90	Toluene	2	2	UG/L	U	U
0076	16-Sep-92	Toluene	2	2	UG/L	U	UJ
0076	06-Nov-90	Toluene	2	2	UG/L	U	U
0271	27-Feb-90	Toluene	2	2	UG/L	U	U
0271	16-Sep-92	Toluene	2	2	UG/L	U	UJ
0271	27-Feb-90	Toluene	2	2	UG/L	U	U
0271	05-Aug-91	Toluene	2	2	UG/L	U	UJ
0271	27-Feb-90	Toluene	2	2	UG/L	U	U
0271	06-May-91	Toluene	2	2	UG/L	U	UJ
0271	23-Mar-90	Toluene	2	2	UG/L	U	U
0076	06-May-91	Toluene	2	2	UG/L	U	UJ
0271	31-Jul-90	Toluene	2	2	UG/L	U	U
0076	22-Jun-92	Toluene	2	2	UG/L	U	UJ
0271	07-Apr-94	Toluene	2	2	UG/L	U	U
0271	22-Jun-92	Toluene	2	2	UG/L	U	UJ
0271	07-Apr-94	Toluene	2	2	UG/L	U	U
0076	23-Mar-90	Toluene	2	2	UG/L	U	U
0076	15-Jun-90	Toluene	2	2	UG/L	U	U
0271	01-Feb-91	Toluene	2	2	UG/L	U	U
0076	11-Oct-93	Toluene	2	2	UG/L	U	UJ
0271	11-Oct-93	Toluene	2	2	UG/L	U	U
0076	16-Jun-93	Toluene	2	2	UG/L	U	U
0271	08-Mar-88	Toluene	3	5	UG/L	J	J
0076	13-Sep-88	Toluene	5	5	UG/L	U	U
0076	25-Apr-90	Toluene	5	5	UG/L	U	U
0271	25-Apr-90	Toluene	5	5	UG/L	U	U
0271	13-Sep-88	Toluene	5	5	UG/L	U	U
0076	24-Jun-88	Toluene	5	5	UG/L	U	U
0271	24-Jun-88	Toluene	5	5	UG/L	U	U
0076	12-Dec-85	Toluene	6	6	UG/L	U	U
0271	13-Dec-85	Toluene	6	6	UG/L	U	U
0271	13-Mar-86	Toluene	6	6	UG/L	U	U
0076	01-Feb-84	Toluene	10	10	UG/L	U	U
0271	06-May-91	Toxaphene	1	1	UG/L	U	U
0271	16-Dec-91	Toxaphene	1	1	UG/L	U	U
0271	01-Feb-91	Toxaphene	1	1	UG/L	U	U
0076	01-Feb-91	Toxaphene	1	1	UG/L	U	U
0076	06-Nov-90	Toxaphene	1	1	UG/L	U	U
0076	06-May-91	Toxaphene	1	1	UG/L	U	U
0271	06-Nov-90	Toxaphene	1	1	UG/L	U	U
0076	16-Dec-91	Toxaphene	1	1	UG/L	U	U
0271	05-Aug-91	Toxaphene	2.4	2.4	UG/L	U	U
0271	16-Sep-92	Toxaphene	5	5	UG/L	U	U
0076	16-Sep-92	Toxaphene	5	5	UG/L	U	U
0076	11-Oct-93	Toxaphene	5	5	UG/L	U	UJ
0076	06-May-91	Toxaphene	5	5	UG/L	U	U
0271	11-Oct-93	Toxaphene	5	5	UG/L	U	U
0271	07-Apr-94	Toxaphene	5	5	UG/L	U	U
0271	22-Jun-92	Toxaphene	5.1	5.1	UG/L	U	U
0076	22-Jun-92	Toxaphene	5.2	5.2	UG/L	U	U
0271	07-Apr-94	Toxaphene	5.2	5.2	UG/L	U	U
0076	23-Mar-92	Toxaphene	5.3	5.3	UG/L	U	U
0076	07-Apr-94	Toxaphene	5.5	5.5	UG/L	U	U
0271	06-May-91	Toxaphene	15	15	UG/L	U	U
0076	13-Sep-88	Trichloroethene	0.93	1	UG/L	J	J
0076	16-Dec-91	Trichloroethene	1	1	UG/L	U	U
0271	13-Sep-88	Trichloroethene	1	1	UG/L	U	U
0076	25-Apr-90	Trichloroethene	1	5	UG/L	J	J
0076	31-Jul-90	Trichloroethene	1.2	1.2	UG/L	U	U
0271	07-Apr-94	Trichloroethene	1.2	1.2	UG/L		J
0076	15-Jun-90	Trichloroethene	1.2	1.2	UG/L	U	U
0076	24-Jan-90	Trichloroethene	1.2	1.2	UG/L	U	U
0076	01-Feb-91	Trichloroethene	1.2	1.2	UG/L		
0271	07-Apr-94	Trichloroethene	1.3	1.2	UG/L		J
0076	23-Mar-92	Trichloroethene	1.4	1.2	UG/L		J
0271	31-Jul-90	Trichloroethene	1.4	1.2	UG/L		
0271	15-Jun-90	Trichloroethene	1.5	1.2	UG/L		
0076	22-Jun-92	Trichloroethene	1.6	1.2	UG/L		J

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect Limit	Units	Lab Qual	Data Qual
0076	07-Apr-94	Trichloroethene	1.6	1.2	UG/L		J
0076	06-May-91	Trichloroethene	1.7	1.2	UG/L		J
0076	16-Sep-92	Trichloroethene	1.7	1.2	UG/L		UJ
0271	16-Sep-92	Trichloroethene	1.7	1.2	UG/L		UJ
0076	11-Oct-93	Trichloroethene	1.7	1.2	UG/L		J
0271	22-Jun-92	Trichloroethene	1.8	1.2	UG/L		J
0271	13-Mar-86	Trichloroethene	1.9	1.9	UG/L	U	U
0076	12-Dec-85	Trichloroethene	1.9	1.9	UG/L	U	U
0271	13-Dec-85	Trichloroethene	1.9	1.9	UG/L	U	U
0271	25-Apr-90	Trichloroethene	2	5	UG/L	J	J
0076	27-Feb-90	Trichloroethene	2	1.2	UG/L		
0076	24-Jun-88	Trichloroethene	2	5	UG/L	J	J
0076	13-Sep-88	Trichloroethene	2	5	UG/L	J	J
0271	01-Feb-91	Trichloroethene	2.1	1.2	UG/L		
0271	11-Oct-93	Trichloroethene	2.2	1.2	UG/L		J
0271	16-Dec-91	Trichloroethene	2.4	1	UG/L		
0271	27-Feb-90	Trichloroethene	2.5	1.2	UG/L		
0076	16-Jun-93	Trichloroethene	2.6	1.2	UG/L		J
0271	24-Jun-88	Trichloroethene	3	5	UG/L	J	J
0271	27-Feb-90	Trichloroethene	3	1.2	UG/L		
0271	27-Feb-90	Trichloroethene	3.1	1.2	UG/L		
0076	23-Mar-90	Trichloroethene	3.1	1.2	UG/L		
0271	24-Jan-90	Trichloroethene	3.5	1.2	UG/L		
0076	06-Nov-90	Trichloroethene	3.8	1.2	UG/L		J
0271	06-May-91	Trichloroethene	3.8	1.2	UG/L		J
0271	06-Nov-90	Trichloroethene	3.9	1.2	UG/L		J
0271	23-Mar-90	Trichloroethene	4	1.2	UG/L		
0271	05-Aug-91	Trichloroethene	4.6	1.2	UG/L		J
0271	08-Mar-88	Trichloroethene	5	5	UG/L	U	U
0271	13-Sep-88	Trichloroethene	5	5	UG/L	U	U
0076	01-Feb-84	Trichloroethene	10	10	UG/L	U	U
0076	23-Mar-90	Trichlorofluoromethane	2	2	UG/L	U	U
0271	27-Feb-90	Trichlorofluoromethane	2	2	UG/L	U	U
0271	06-May-91	Trichlorofluoromethane	2	2	UG/L	U	U
0271	01-Feb-91	Trichlorofluoromethane	2	2	UG/L	U	U
0076	06-May-91	Trichlorofluoromethane	2	2	UG/L	U	U
0271	23-Mar-90	Trichlorofluoromethane	2	2	UG/L	U	U
0076	16-Dec-91	Trichlorofluoromethane	2	2	UG/L	U	U
0076	22-Jun-92	Trichlorofluoromethane	2	2	UG/L	U	R
0271	07-Apr-94	Trichlorofluoromethane	2	2	UG/L	U	UJ
0076	15-Jun-90	Trichlorofluoromethane	2	2	UG/L	U	U
0271	06-Nov-90	Trichlorofluoromethane	2	2	UG/L	U	U
0076	23-Mar-92	Trichlorofluoromethane	2	2	UG/L	U	UJ
0271	27-Feb-90	Trichlorofluoromethane	2	2	UG/L	U	U
0076	06-Nov-90	Trichlorofluoromethane	2	2	UG/L	U	U
0271	15-Jun-90	Trichlorofluoromethane	2	2	UG/L	U	U
0271	16-Dec-91	Trichlorofluoromethane	2	2	UG/L	U	U
0271	31-Jul-90	Trichlorofluoromethane	2	2	UG/L	U	U
0076	01-Feb-91	Trichlorofluoromethane	2	2	UG/L	U	U
0076	31-Jul-90	Trichlorofluoromethane	2	2	UG/L	U	U
0271	16-Sep-92	Trichlorofluoromethane	2	2	UG/L	U	U
0076	11-Oct-93	Trichlorofluoromethane	2	2	UG/L	U	UJ
0271	07-Apr-94	Trichlorofluoromethane	2	2	UG/L	U	UJ
0271	22-Jun-92	Trichlorofluoromethane	2	2	UG/L	U	R
0271	27-Feb-90	Trichlorofluoromethane	2	2	UG/L	U	U
0076	16-Sep-92	Trichlorofluoromethane	2	2	UG/L	U	U
0271	11-Oct-93	Trichlorofluoromethane	2	2	UG/L	U	UJ
0076	24-Jan-90	Trichlorofluoromethane	2	2	UG/L	U	U
0076	16-Jun-93	Trichlorofluoromethane	2	2	UG/L	U	UJ
0271	05-Aug-91	Trichlorofluoromethane	2	2	UG/L	U	U
0076	27-Feb-90	Trichlorofluoromethane	2	2	UG/L	U	U
0076	07-Apr-94	Trichlorofluoromethane	2	2	UG/L	U	UJ
0271	24-Jan-90	Trichlorofluoromethane	2	2	UG/L	U	U
0271	13-Sep-88	Trichlorofluoromethane	2.2	1	UG/L		
0076	13-Sep-88	Trichlorofluoromethane	2.5	1	UG/L		
0076	12-Dec-85	Trichlorofluoromethane	5	5	UG/L	U	U
0271	13-Dec-85	Trichlorofluoromethane	5	5	UG/L	U	U
0271	13-Mar-86	Trichlorofluoromethane	5	5	UG/L	U	U
0076	01-Feb-84	Trichlorofluoromethane	10	10	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	01-Feb-91	Tritium	1.7	0	PCI/ML		
0076	13-Sep-88	Tritium	1.76	500	NCI/L		
0076	13-Sep-88	Tritium	1.78	500	NCI/L		
0271	13-Sep-88	Tritium	3.34	500	NCI/L		
0271	13-Sep-88	Tritium	3.35	500	NCI/L		
0271	01-Feb-91	Tritium	7.2	0	PCI/ML		
0076	16-Dec-91	Tritium	527	5	PCI/L		
0076	11-Oct-93	Tritium	649	270	PCI/L		
0076	22-Jun-92	Tritium	1100	460	PCI/L		
0076	06-May-91	Tritium	1184	500	PCI/L		
0076	23-Mar-92	Tritium	1200	460	PCI/L		
0076	07-Apr-94	Tritium	1350	473	PCI/L		
0076	16-Sep-92	Tritium	1420	500	PCI/L		
0271	11-Oct-93	Tritium	1490	270	PCI/L		
0271	22-Jun-92	Tritium	1800	460	PCI/L		
0271	16-Sep-92	Tritium	1970	500	PCI/L		
0271	07-Apr-94	Tritium	2070	481	PCI/L		
0271	07-Apr-94	Tritium	2170	471	PCI/L		
0271	05-Aug-91	Tritium	2340	0	PCI/L		
0271	16-Dec-91	Tritium	2530	5	PCI/L		
0076	06-Nov-90	Tritium	2970	0	PCI/L		
0271	06-Nov-90	Tritium	3110	0	PCI/L		
0271	06-May-91	Tritium	3772	500	PCI/L		
0076	07-Apr-94	Uranium-234	0.2	0.086	PCI/L		
0271	07-Apr-94	Uranium-234	0.25	0.036	PCI/L		
0271	07-Apr-94	Uranium-234	0.26	0.077	PCI/L		
0271	11-Oct-93	Uranium-234	0.279	0.095	PCI/L		
0271	16-Sep-92	Uranium-234	0.33	0.33	PCI/L	U	U
0076	16-Sep-92	Uranium-234	0.394	1	PCI/L		
0076	11-Oct-93	Uranium-234	0.463	0.14	PCI/L		
0076	23-Mar-92	Uranium-234	0.5	0.4	PCI/L		
0271	22-Jun-92	Uranium-234	0.5	0.4	PCI/L		
0076	22-Jun-92	Uranium-234	0.7	0.4	PCI/L		
0271	06-Nov-90	Uranium-234	1	0	PCI/L	U	U
0076	06-Nov-90	Uranium-234	1	0	PCI/L	U	U
0271	06-May-91	Uranium-234	1	1	PCI/L	U	U
0076	06-May-91	Uranium-234	1	1	PCI/L	U	U
0271	05-Aug-91	Uranium-234	1.38	0	PCI/L		
0076	16-Dec-91	Uranium-234	1.4	1	PCI/L		
0271	01-Feb-91	Uranium-234	4.8	0	PCI/L		
0076	01-Feb-91	Uranium-234	7.7	0	PCI/L		
0271	16-Dec-91	Uranium-234	8.14	1	PCI/L		
0271	07-Apr-94	Uranium-235	0.036	0.036	PCI/L	U	U
0271	07-Apr-94	Uranium-235	0.077	0.077	PCI/L	U	U
0076	07-Apr-94	Uranium-235	0.086	0.086	PCI/L	U	U
0271	11-Oct-93	Uranium-235/236	0.096	0.096	PCI/L	U	U
0076	11-Oct-93	Uranium-235/236	0.14	0.14	PCI/L	U	U
0271	16-Sep-92	Uranium-235/236	0.19	0.19	PCI/L	U	U
0076	16-Sep-92	Uranium-235/236	0.22	0.22	PCI/L	U	U
0271	16-Dec-91	Uranium-235/236	1	1	PCI/L	U	U
0076	16-Dec-91	Uranium-235/236	1	1	PCI/L	U	U
0271	05-Aug-91	Uranium-235/236	1	0	PCI/L	U	U
0271	07-Apr-94	Uranium-238	0.131	0.036	PCI/L		
0271	07-Apr-94	Uranium-238	0.15	0.077	PCI/L		
0076	11-Oct-93	Uranium-238	0.152	0.11	PCI/L		
0076	07-Apr-94	Uranium-238	0.2	0.086	PCI/L		
0271	22-Jun-92	Uranium-238	0.2	0.4	PCI/L		
0076	16-Sep-92	Uranium-238	0.22	0.22	PCI/L	U	U
0271	11-Oct-93	Uranium-238	0.233	0.11	PCI/L		
0076	23-Mar-92	Uranium-238	0.3	0.4	PCI/L		
0271	16-Sep-92	Uranium-238	0.348	1	PCI/L		
0076	22-Jun-92	Uranium-238	0.8	0.4	PCI/L		
0271	06-May-91	Uranium-238	1	1	PCI/L	U	U
0076	16-Dec-91	Uranium-238	1	1	PCI/L	U	U
0076	06-Nov-90	Uranium-238	1	0	PCI/L	U	U
0271	05-Aug-91	Uranium-238	1	0	PCI/L	U	U
0076	06-May-91	Uranium-238	1	1	PCI/L	U	U
0271	06-Nov-90	Uranium-238	1	0	PCI/L	U	U
0076	01-Feb-91	Uranium-238	1.6	0	PCI/L		

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	01-Feb-91	Uranium-238	2	0	PCI/L		
0271	16-Dec-91	Uranium-238	8.25	1	PCI/L		
0076	11-Oct-93	Vanadium	0.75	0.75	UG/L	U	UJ
0271	11-Oct-93	Vanadium	0.75	0.75	UG/L	U	UJ
0271	11-Oct-93	Vanadium	0.75	0.75	UG/L	U	U
0076	11-Oct-93	Vanadium	0.75	0.75	UG/L	U	UJ
0076	23-Mar-92	Vanadium	7.8	50	UG/L	B	J
0271	01-Feb-91	Vanadium	10	10	UG/L	U	U
0271	06-Nov-90	Vanadium	10	10	UG/L	U	U
0076	01-Feb-91	Vanadium	10	10	UG/L	U	U
0076	06-Nov-90	Vanadium	10.2	10	UG/L	B	
0271	16-Sep-92	Vanadium	10.3	2	UG/L		UJ
0271	07-Apr-94	Vanadium	10.6	0.9	UG/L		
0076	07-Apr-94	Vanadium	10.8	0.9	UG/L		
0271	07-Apr-94	Vanadium	10.9	0.9	UG/L		
0271	07-Apr-94	Vanadium	10.9	0.9	UG/L		
0076	16-Sep-92	Vanadium	11	2	UG/L		UJ
0076	07-Apr-94	Vanadium	11.2	0.9	UG/L		
0271	07-Apr-94	Vanadium	11.2	0.9	UG/L		
0271	05-Aug-91	Vanadium	11.7	10	UG/L		
0271	05-Aug-91	Vanadium	13.214	10	UG/L		
0076	06-May-91	Vanadium	14.2	10	UG/L	B	
0271	06-May-91	Vanadium	14.6	10	UG/L	B	
0076	22-Jun-92	Vanadium	21.7	6	UG/L		UJ
0271	22-Jun-92	Vanadium	24.4	2	UG/L		UJ
0076	16-Dec-91	Vanadium	32	50	UG/L	U	UJ
0271	16-Dec-91	Vanadium	33.8	50	UG/L	U	UJ
0271	11-Oct-93	Vinyl Acetate	3	3	UG/L	U	U
0271	07-Apr-94	Vinyl Acetate	3	3	UG/L	U	UJ
0076	07-Apr-94	Vinyl Acetate	3	3	UG/L	U	UJ
0076	11-Oct-93	Vinyl Acetate	3	3	UG/L	U	UJ
0271	07-Apr-94	Vinyl Acetate	3	3	UG/L	U	UJ
0271	24-Jun-88	Vinyl Acetate	10	10	UG/L	U	U
0076	13-Sep-88	Vinyl Acetate	10	10	UG/L	U	U
0271	13-Sep-88	Vinyl Acetate	10	10	UG/L	U	U
0271	08-Mar-88	Vinyl Acetate	10	10	UG/L	U	U
0076	24-Jun-88	Vinyl Acetate	10	10	UG/L	U	U
0271	25-Apr-90	Vinyl Acetate	10	10	UG/L	U	U
0076	25-Apr-90	Vinyl Acetate	10	10	UG/L	U	U
0076	13-Sep-88	Vinyl Chloride	0.2	0.2	UG/L	U	U
0271	13-Sep-88	Vinyl Chloride	0.2	0.2	UG/L	U	U
0271	11-Oct-93	Vinyl Chloride	1	1	UG/L	U	UJ
0076	07-Apr-94	Vinyl Chloride	1	1	UG/L	U	UJ
0076	11-Oct-93	Vinyl Chloride	1	1	UG/L	U	UJ
0271	07-Apr-94	Vinyl Chloride	1	1	UG/L	U	UJ
0271	07-Apr-94	Vinyl Chloride	1	1	UG/L	U	U
0076	16-Jun-93	Vinyl Chloride	1.8	1.8	UG/L	U	U
0076	01-Feb-91	Vinyl Chloride	1.8	1.8	UG/L	U	UJ
0076	24-Jan-90	Vinyl Chloride	1.8	1.8	UG/L	U	U
0271	15-Jun-90	Vinyl Chloride	1.8	1.8	UG/L	U	U
0271	06-May-91	Vinyl Chloride	1.8	1.8	UG/L	U	U
0076	06-May-91	Vinyl Chloride	1.8	1.8	UG/L	U	U
0271	01-Feb-91	Vinyl Chloride	1.8	1.8	UG/L	U	UJ
0076	16-Sep-92	Vinyl Chloride	1.8	1.8	UG/L	U	UJ
0076	23-Mar-92	Vinyl Chloride	1.8	1.8	UG/L	U	UJ
0271	23-Mar-90	Vinyl Chloride	1.8	1.8	UG/L	U	U
0076	27-Feb-90	Vinyl Chloride	1.8	1.8	UG/L	U	U
0076	15-Jun-90	Vinyl Chloride	1.8	1.8	UG/L	U	U
0271	27-Feb-90	Vinyl Chloride	1.8	1.8	UG/L	U	U
0271	05-Aug-91	Vinyl Chloride	1.8	1.8	UG/L	U	U
0271	24-Jan-90	Vinyl Chloride	1.8	1.8	UG/L	U	U
0271	27-Feb-90	Vinyl Chloride	1.8	1.8	UG/L	U	U
0076	22-Jun-92	Vinyl Chloride	1.8	1.8	UG/L	U	UJ
0271	06-Nov-90	Vinyl Chloride	1.8	1.8	UG/L	U	U
0076	06-Nov-90	Vinyl Chloride	1.8	1.8	UG/L	U	U
0271	16-Sep-92	Vinyl Chloride	1.8	1.8	UG/L	U	UJ
0271	31-Jul-90	Vinyl Chloride	1.8	1.8	UG/L	U	U
0271	27-Feb-90	Vinyl Chloride	1.8	1.8	UG/L	U	U
0076	23-Mar-90	Vinyl Chloride	1.8	1.8	UG/L	U	U

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0076	31-Jul-90	Vinyl Chloride	1.8	1.8	UG/L	U	U
0271	22-Jun-92	Vinyl Chloride	1.8	1.8	UG/L	U	UJ
0271	16-Dec-91	Vinyl Chloride	2	2	UG/L	U	U
0076	16-Dec-91	Vinyl Chloride	2	2	UG/L	U	U
0271	25-Apr-90	Vinyl Chloride	10	10	UG/L	U	U
0076	25-Apr-90	Vinyl Chloride	10	10	UG/L	U	U
0271	13-Dec-85	Vinyl Chloride	10	10	UG/L	U	U
0076	13-Sep-88	Vinyl Chloride	10	10	UG/L	U	U
0271	13-Mar-86	Vinyl Chloride	10	10	UG/L	U	U
0271	08-Mar-88	Vinyl Chloride	10	10	UG/L	U	U
0271	13-Sep-88	Vinyl Chloride	10	10	UG/L	U	U
0076	24-Jun-88	Vinyl Chloride	10	10	UG/L	U	U
0076	01-Feb-84	Vinyl Chloride	10	10	UG/L	U	U
0076	12-Dec-85	Vinyl Chloride	10	10	UG/L	U	U
0271	24-Jun-88	Vinyl Chloride	10	10	UG/L	U	U
0271	15-Jun-90	Xylenes, Total	1	1	UG/L	U	U
0076	13-Sep-88	Xylenes, Total	1	1	UG/L	U	U
0076	23-Mar-90	Xylenes, Total	1	1	UG/L	U	U
0271	27-Feb-90	Xylenes, Total	1	1	UG/L	U	U
0271	23-Mar-90	Xylenes, Total	1	1	UG/L	U	U
0076	01-Feb-91	Xylenes, Total	1	1	UG/L	U	U
0271	06-Nov-90	Xylenes, Total	1	1	UG/L	U	U
0076	24-Jan-90	Xylenes, Total	1	1	UG/L	U	U
0271	05-Aug-91	Xylenes, Total	1	1	UG/L	U	U
0076	06-Nov-90	Xylenes, Total	1	1	UG/L	U	U
0271	27-Feb-90	Xylenes, Total	1	1	UG/L	U	U
0271	01-Feb-91	Xylenes, Total	1	1	UG/L	U	U
0076	31-Jul-90	Xylenes, Total	1	1	UG/L	U	U
0271	13-Sep-88	Xylenes, Total	1	1	UG/L	U	U
0271	27-Feb-90	Xylenes, Total	1	1	UG/L	U	U
0076	27-Feb-90	Xylenes, Total	1	1	UG/L	U	U
0271	06-May-91	Xylenes, Total	1	1	UG/L	U	UJ
0076	06-May-91	Xylenes, Total	1	1	UG/L	U	UJ
0271	31-Jul-90	Xylenes, Total	1	1	UG/L	U	U
0076	15-Jun-90	Xylenes, Total	1	1	UG/L	U	U
0271	24-Jan-90	Xylenes, Total	1	1	UG/L	U	U
0076	16-Jun-93	Xylenes, Total	2	2	UG/L	U	U
0271	07-Apr-94	Xylenes, Total	2	2	UG/L	U	U
0076	16-Dec-91	Xylenes, Total	2	2	UG/L	U	U
0076	22-Jun-92	Xylenes, Total	2	2	UG/L	U	UJ
0271	11-Oct-93	Xylenes, Total	2	2	UG/L	U	U
0076	07-Apr-94	Xylenes, Total	2	2	UG/L	U	U
0271	07-Apr-94	Xylenes, Total	2	2	UG/L	U	U
0271	16-Sep-92	Xylenes, Total	2	2	UG/L	U	UJ
0271	16-Dec-91	Xylenes, Total	2	2	UG/L	U	U
0076	23-Mar-92	Xylenes, Total	2	2	UG/L	U	UJ
0076	16-Sep-92	Xylenes, Total	2	2	UG/L	U	UJ
0271	22-Jun-92	Xylenes, Total	2	2	UG/L	U	U
0076	11-Oct-93	Xylenes, Total	2	2	UG/L	U	U
0076	25-Apr-90	Xylenes, Total	5	5	UG/L	U	U
0076	24-Jun-88	Xylenes, Total	5	5	UG/L	U	U
0271	08-Mar-88	Xylenes, Total	5	5	UG/L	U	U
0271	13-Sep-88	Xylenes, Total	5	5	UG/L	U	U
0271	25-Apr-90	Xylenes, Total	5	5	UG/L	U	U
0271	24-Jun-88	Xylenes, Total	5	5	UG/L	U	U
0076	13-Sep-88	Xylenes, Total	5	5	UG/L	U	U
0271	01-Feb-91	Yttrium-88	16	0	PCI/L	U	U
0076	01-Feb-91	Yttrium-88	23	0	PCI/L	U	U
0076	07-Apr-94	Zinc	4.5	0.55	UG/L	B	U
0076	23-Mar-92	Zinc	6	20	UG/L	U	UJ
0076	22-Jun-92	Zinc	6	6	UG/L	U	U
0076	11-Oct-93	Zinc	6.1	1.8	UG/L	B	U
0271	11-Oct-93	Zinc	6.2	1.8	UG/L	B	U
0271	11-Oct-93	Zinc	6.4	1.8	UG/L	B	U
0271	05-Aug-91	Zinc	6.667	5	UG/L		
0076	16-Dec-91	Zinc	8.3	20	UG/L	U	UJ
0076	07-Apr-94	Zinc	8.9	0.55	UG/L	B	U
0076	06-May-91	Zinc	9.2	5	UG/L	B	UJ
0271	05-Aug-91	Zinc	9.7	5	UG/L		

Mound Production Well Data

Production Well	Date Collect	Parameter	Results	Detect. Limit	Units	Lab Qual.	Data Qual.
0271	07-Apr-94	Zinc	11.4	0.55	UG/L	B	U
0271	06-May-91	Zinc	11.9	5	UG/L	B	UJ
0271	07-Apr-94	Zinc	12	0.55	UG/L	B	U
0076	11-Oct-93	Zinc	13.2	1.8	UG/L	B	U
0271	07-Apr-94	Zinc	13.3	0.55	UG/L	B	U
0271	07-Apr-94	Zinc	14.8	0.55	UG/L	B	U
0271	16-Dec-91	Zinc	20	20	UG/L	U	U
0271	06-Nov-90	Zinc	20.3	5	UG/L		
0271	22-Jun-92	Zinc	28.9	2	UG/L		
0271	16-Sep-92	Zinc	31.1	7	UG/L		UJ
0076	16-Sep-92	Zinc	33	7	UG/L		UJ
0076	12-Dec-85	Zinc	40	40	UG/L	U	U
0271	13-Dec-85	Zinc	40	40	UG/L	U	U
0076	01-Feb-84	Zinc	47	7	UG/L		
0076	06-Nov-90	Zinc	52.2	5	UG/L		
0076	01-Feb-91	Zinc	55.5	5	UG/L		J
0271	01-Feb-91	Zinc	57.7	5	UG/L		J
0271	01-Feb-91	Zinc-65	15	0	PCI/L	U	U
0076	01-Feb-91	Zinc-65	53	0	PCI/L	U	U
0271	01-Feb-91	Zirconium-95	28	0	PCI/L	U	U
0076	01-Feb-91	Zirconium-95	55	0	PCI/L	U	U

APPENDIX C

RELEASE BLOCK D CURRENT AND FUTURE GROUND WATER SCENARIOS

This Appendix describes the steps completed to estimate the potential future concentration of contaminants in the Mound Plant Production Wells. In summary, this was completed by assuming that all contaminants currently in the Bedrock Aquifer of the Mound property would migrate to the Buried Valley Aquifer (BVA), from which the Mound Plant Production Wells withdraw potable water for Mound facility use. The current bedrock contaminant concentrations were then added to the current contaminant concentrations in the Mound Plant Production Wells to obtain the estimated future contaminant concentrations.

The technique described here was designed to represent the most conservative (worst-case) future scenario possible. The steps completed to "model" the future contaminant concentrations in the Mound Plant Production Wells include:

1. A topographic map of the bedrock surface underlying the Mound facility was used to divide the bedrock surface into 20 areas termed "flow tubes." Ground water flow within the Bedrock Aquifer was assumed to generally follow the topography of the bedrock surface. The flow tubes were delineated based on drainage patterns suggested by the bedrock topographic map. Within each flow tube, therefore, ground water flows in the same general direction, on a slope of the same general gradient. Based on topography and gradient, ground water from the majority of these flow tubes will eventually flow into the BVA. Although several of the flow tubes do not appear to contribute to the BVA directly, they were considered to contribute to the BVA to make the future scenario as conservative as possible.

2. The contaminant concentration data from bedrock wells within a flow tube was examined. The maximum concentration of each analyte for any of the wells within a flow tube was assumed to be representative of the contamination within the flow tube. This maximum concentration was multiplied by the volume of water per unit time that flows within each flow tube in order to determine the mass of each contaminant that is contributed to the BVA production wells.

3. The total flow of each flow tube was determined by measuring the width and the gradient of the flow tube from the bedrock topographic map. These were multiplied by the assumed thickness of the bedrock aquifer (40 feet), and by the assumed hydraulic conductivity (0.1 feet/day). The product of these values is the volume of ground water flow per flow tube per unit time.

4. The maximum concentration of each analyte from each flow tube was applied to the total flow of each flow tube to determine a mass of contaminant entering the BVA per year per flow tube.

5. The contaminant mass from each flow tube was summed to provide the total mass of each contaminant contributed by the bedrock aquifer to the BVA per year.

6. The total mass of each contaminant was divided by an assumed Mound Plant water use of 500,000 gallons per day (182,000,000 gallons per year) to obtain the theoretical concentration of the bedrock contribution for all bedrock contaminants. Therefore, the

conservative assumption is made that the mass of contaminants that enter the BVA contribute to the production wells without any dilution from the BVA or any degradation.

7. This theoretical concentration was added to the current concentration of contaminants observed in the Mound Plant Production wells to obtain the theoretical worst case future ground water concentration.

This technique represents the most conservative scenario possible using currently available ground water data because dilution and degradation of contaminants within the bedrock and the BVA are not calculated, all the bedrock ground water is assumed to reach the BVA, and the maximum contaminant concentration are assumed to be representative.

The following table lists all analytes detected in either a bedrock well or a Mound Plant Production well, their respective concentrations, the combined estimated future maximum concentration, and the BVA background concentrations, for reference.

Estimated Future Maximum Concentrations in the BVA

Compounds in Production and Bedrock Wells	Bedrock Contrib to BVA (mg/L or pCi/L)	Prod Well Conc (mg/L or pCi/L)	Estimated Future Max. (mg/L or pCi/L)	BVA Background (mg/L or pCi/L)
1,1,1-Trichloroethane	0.004736	0.0018	0.0065	0.0007
1,1,2trichloro1,2,2-trifluoroethene	1.58E-05	0.0087	0.0087	NA
1,1-Dichloroethane	0	0.0035	0.0035	NA
1,1-Dichloroethene	0	1.7E-06	0.0017	NA
1,2-Dichloroethene	0.000314	0.0047	0.0050	NA
1,2-cis-Dichloroethene	0.000225	0.0021	0.0023	0.0010
1,2-trans-dichloroethene	0.000169	0.003	0.0032	NA
2-Butanone	0.013317	0.041	0.0543	NA
4-Methylphenol	0.000439	0	0.0004	NA
Acetone	0.000914	0.012	0.0129	NA
Actinium-227	0	0.355	0.3550	NA
Alkalinity	38.41599	335	335.0384	NA
Aluminum	0.275848	0.0737	0.3495	37.5230
Ammonia	0.285285	0.58	0.5803	0.1620
Antimony	0.000775	0	0.0008	0.0006
Barium	0	0.088424	0.0884	0.3102
Benzene	5.37E-05	0	0.0001	NA
Benzoic Acid	0.007126	0	0.0071	NA
Beryllium	8.06E-05	0	0.0001	NA
Bis(2-ethylhexyl)phthalate	0.0153	0	0.0153	0.0084
Bismuth	0.001616	0	0.0016	NA
Bismuth-210	0	0.39	0.3900	NA
Bromodichloromethane	0	0.0037	0.0037	NA
Cadmium	0	0.0077	0.0077	NA
Calcium	30.10967	126	156.1097	NA
Carbon Tetrachloride	1.29E-05	0	0.0000	NA
Chloride	99.33137	133	133.0993	105.8210
Chloroform	1.99E-05	0.0022	0.0022	0.0005
Chromium	0.496041	2.49E-05	0.4961	0.0061
Cobalt	0.003931	0	0.0039	0.0000
Copper	0.003361	0.593	0.5964	0.0012
Cyanide	0.000102	0	0.0001	NA
Dissolved Solids	163.8855	719	719.1639	603.2070
Fluoride	0.016088	0.18	0.1800	0.4190
Iron	0	0.78	0.7800	4.0649
Isophorone	0	0.01	0.0100	NA
Lead	0	0.04	0.0400	0.0101

Estimated Future Maximum Concentrations in the BVA

Compounds in Production and Bedrock Wells	Bedrock Contrib to BVA (mg/L or pCi/L)	Prod Well Conc (mg/L or pCi/L)	Estimated Future Max. (mg/L or pCi/L)	BVA Background (mg/L or pCi/L)
Lithium	0.003604	0	0.0036	0.0557
Magnesium	4.374434	39.6	43.9744	40.4281
Manganese	0	0.0248	0.0248	0.2296
Molybdenum	0.009611	0	0.0096	0.0056
Nickel	0.100253	0	0.1003	0.0350
Nitrate	0.018101	2.55	2.5500	NA
Nitrate/Nitrite	0.151874	4.9	4.9002	5.3490
Nitrite	0.000944	0.066	0.0660	NA
Nitrogen	0.153262	0.00062	0.7733	0.3240
Organic Carbon	0.720726	1.1	1.1007	1.9870
Phosphate	0.146365	0.22	0.3664	0.2310
Plutonium-238	0.003373	0	0.0034	0.0870
Plutonium-239/240	0.019913	2	2.0199	0.1250
Potassium	2.203355	3.8	6.0034	4.4611
Radium-226	0.240223	0.4	0.6402	0.9960
Silver	0	0.0242	0.0242	NA
Sodium	60.83225	82.4	143.2323	61.6459
Stronium-90	0.012059	0.3	0.3121	0.9750
Strontium-85	0	25	25.0000	NA
Sulfate	28.04066	0.083	111.0407	142.6550
Suspended Solids	73064.18	8	81.0642	26.4400
Tetrachloroethene	9.66E-05	0.002	0.0021	0.0000
Thorium-228	0.130991	2.17	2.3010	0.7790
Thorium-230	0.074547	1.99	2.0645	0.2890
Thorium-232	0.042228	0.1	0.1422	0.0000
Toluene	0.000235	0	0.0002	NA
Trichloroethene	0.000424	0.0046	0.0050	NA
Trichlorofluoromethane	4.41E-05	0.0025	0.0025	NA
Tritium	3226.755	7200	10426.7551	1485.4730
Uranium-233	0.000185	0	0.0002	NA
Uranium-234	0	8.14	8.1400	0.7920
Uranium-235	0.003634	0	0.0036	0.0450
Uranium-235/236	0.000321	0	0.0003	NA
Uranium-238	0	8.25	8.2500	0.6880
Vanadium	0.003638	0.0244	0.0280	0.0171
Xylenes, Total	4.34E-05	0	0.0000	NA
Zinc	0	0.0577	0.0577	0.1196

APPENDIX D

EXPOSURE PATHWAY INTAKE EQUATIONS

CONSTRUCTION WORKER -
PATHWAY 1: INHALATION OF VOLATILES FROM SOIL

Noncarcinogens

Intake = (mg/kg/da)

$$\frac{(C_{air} \times IR_{air} \times EF)}{(BW \times 365 \frac{da}{yr})}$$

where,

$$C_{air} = C_{soil} \times \frac{1}{VF}$$

C_{air} = airborne constituent concentration (mg/m^3)
C_{soil} = soil constituent concentration (mg/kg)
IR_{air} = inhalation rate (20 m^3/da)
EF = exposure frequency (250 da/yr)
BW = body weight (70 kg)
VF = chemical specific volatilization factor (m^3/kg)

Carcinogens

Intake = (mg/kg/da)

$$\frac{(C_{air} \times EF \times ED \times IR_{air})}{(BW \times AT \times 365 \frac{da}{yr})}$$

where,

$$C_{air} = C_{soil} \times \frac{1}{VF}$$

C_{air} = airborne constituent concentration (mg/m^3)
C_{soil} = soil constituent concentration (mg/kg)
EF = exposure frequency (250 da/yr)
ED = exposure duration (5 yr)
IR_{air} = inhalation rate (20 m^3/da)
BW = body weight (70 kg)
AT = averaging time (70 yr)
VF = chemical specific volatilization factor (m^3/kg)

Radionuclides

Intake = (pCi)

$$C_{air} \times ED \times EF \times IR_{air}$$

where,

$$C_{air} = C_{soil} \times 1000 \left(\frac{g}{kg}\right) \times \frac{1}{VF}$$

C_{air} = airborne constituent concentration (pCi/m^3)
C_{soil} = soil constituent concentration (pCi/g)
ED = exposure duration (5 yr)
EF = exposure frequency (250 da/yr)
IR_{air} = inhalation rate (20 m^3/da)
VF = chemical specific volatilization factor (m^3/kg)

CONSTRUCTION WORKER - PATHWAY 2: INHALATION OF DUST

Noncarcinogens

Intake = (mg/kg/da)

$$\frac{(C_{air} \times IR_{air} \times EF)}{(BW \times 365 \frac{da}{yr})}$$

where,

$$C_{air} = C_{soil} \times \frac{1}{PEF}$$

C_{air} = airborne constituent concentration (mg/m^3)
C_{soil} = soil constituent concentration (mg/kg)
IR_{air} = inhalation rate (20 m^3/da)
EF = exposure frequency (250 da/yr)
BW = body weight (70 kg)
PEF = particulate emission factor (4.28E+9 m^3/kg)

Carcinogens

Intake = (mg/kg/da)

$$\frac{(C_{air} \times EF \times ED \times IR_{air})}{(BW \times AT \times 365 \frac{da}{yr})}$$

where,

$$C_{air} = C_{soil} \times \frac{1}{PEF}$$

C_{air} = airborne constituent concentration (mg/m^3)
C_{soil} = soil constituent concentration (mg/kg)
EF = exposure frequency (250 da/yr)
ED = exposure duration (5 yr)
IR_{air} = inhalation rate (20 m^3/da)
BW = body weight (70 kg)
AT = averaging time (70 yr)
PEF = particulate emission factor (4.28E+9 m^3/kg)

Radionuclides

Intake = (pCi)

$$C_{air} \times ED \times EF \times IR_{air}$$

where,

$$C_{air} = C_{soil} \times 1000 \left(\frac{g}{kg}\right) \times \frac{1}{PEF}$$

C_{air} = airborne constituent concentration (pCi/m^3)
C_{soil} = soil constituent concentration (pCi/g)
ED = exposure duration (5 yr)
EF = exposure frequency (250 da/yr)
IR_{air} = inhalation rate (20 m^3/da)
PEF = particulate emission factor (4.28E+9 m^3/kg)

CONSTRUCTION WORKER - PATHWAY 3: INGESTION OF DRINKING WATER

Noncarcinogens

Intake = (mg/kg/da)

$$\frac{(C_{water} \times IR_{gw} \times EF)}{(BW \times 365 \frac{da}{yr})}$$

where,

C_{water} =	groundwater chemical concentration (mg/L)
IR_{gw} =	ingestion rate of groundwater (1.0 L/da)
EF =	exposure frequency (250 da/yr)
BW =	body weight (70 kg)

Carcinogens

Intake = (mg/kg/da)

$$\frac{(C_{water} \times IR_{gw} \times EF \times ED)}{(BW \times AT \times 365 \frac{da}{yr})}$$

where,

C_{water} =	groundwater chemical concentration (mg/L)
IR_{gw} =	ingestion rate of groundwater (1.0 L/da)
EF =	exposure frequency (250 da/yr)
ED =	exposure duration (5 yr)
BW =	body weight (70 kg)
AT =	averaging time (70 yr)

Radionuclides

Intake = (pCi)

$$C_{water} \times IR_{gw} \times EF \times ED$$

where,

C_{water} =	groundwater radionuclide level (pCi/L)
IR_{gw} =	ingestion rate of groundwater (1.0 L/da)
EF =	exposure frequency (250 da/yr)
ED =	exposure duration (5 yr)

CONSTRUCTION WORKER - PATHWAY 4: INHALATION DURING SHOWERING

Noncarcinogens

Intake = (mg/kg/da)

$$\frac{(C_{water} \times K \times IR_{air} \times EF \times ET \times \frac{1\ da}{24\ hr})}{(BW \times 365\ \frac{da}{yr})}$$

where,

C_{water} =	groundwater chemical concentration (mg/L)
K =	volatilization factor (0.0005 x 1000 L/m^3)
IR_{air} =	inhalation rate (20 m^3/da)
EF =	exposure frequency (250 da/yr)
ET =	exposure time (0.167 hr/da)
BW =	body weight (70 kg)

Carcinogens

Intake = (mg/kg/da)

$$\frac{(C_{water} \times K \times IR_{air} \times EF \times ED \times ET \times \frac{1\ da}{24\ hr})}{(BW \times AT \times 365\ \frac{da}{yr})}$$

where,

C_{water} =	groundwater chemical concentration (mg/L)
K =	volatilization factor (0.0005 x 1000 L/m^3)
IR_{air} =	inhalation rate (20 m^3/da)
EF =	exposure frequency (250 da/yr)
ED =	exposure duration (5 yr)
ET =	exposure time (0.167 hr/da)
BW =	body weight (70 kg)
AT =	averaging time (70 yr)

Radionuclides

Intake = (pCi, H^3 - only)

$$C_w \times IR_{air} \times EF \times ED \times M_{total} \times \frac{1\ L}{1000g} \times ET \times \frac{1\ da}{24\ hr}$$

where,

C_w =	tritium concentration in water (pCi/L)
IR_{air} =	inhalation rate (20 m^3/da)
EF =	exposure frequency (250 da/yr)
ED =	exposure duration (5 yr)
M_{total} =	airborne mass concentration of water in shower (66.96 g/m^3)
ET =	shower duration (0.167 hr/da)

CONSTRUCTION WORKER -
PATHWAY 5: DERMAL CONTACT WITH GROUNDWATER

Noncarcinogens

Intake (Dermally Absorbed Dose) = (mg/kg/da)

$$\frac{DA_{event} \times EV \times EF \times A}{BW \times 365 \frac{da}{yr}}$$

where,

(for organics)

$$DA_{event} = 2 \times K_p \times C_w \times 10^{-3} \frac{L}{cm^3} \times \sqrt{\frac{6 \times T \times t_{event}}{\pi}}$$

(for inorganics)

$$DA_{event} = K_p \times C_w \times t_{event} \times 10^{-3} \frac{L}{cm^3}$$

K_p =	chemical-specific permeability coefficient (cm/hr)
C_w =	groundwater concentration (mg/L)
T =	chemical-specific lag time (hr)
t_{event} =	shower duration (0.167 hr)
π =	pi (3.14159)
EV =	events/da (1 event/da)
EF =	exposure frequency (250 da/yr)
A =	body surface area (19,400 cm^2)
BW =	body weight (70 kg)

Carcinogens

Intake (Dermally Absorbed Dose) = (mg/kg/da)

$$\frac{DA_{event} \times EV \times EF \times A \times ED}{BW \times AT \times 365 \frac{da}{yr}}$$

where,

(for organics)

$$DA_{event} = 2 \times K_p \times C_w \times 10^{-3} \frac{L}{cm^3} \times \sqrt{\frac{6 \times T \times t_{event}}{\pi}}$$

(for inorganics)

$$DA_{event} = K_p \times C_w \times t_{event} \times 10^{-3} \frac{L}{cm^3}$$

K_p =	chemical-specific permeability coefficient (cm/hr)
C_w =	groundwater concentration (mg/L)
T =	chemical-specific lag time (hr)
t_{event} =	shower duration (0.167 hr)
EV =	events/da (1 event/da)
EF =	exposure frequency (250 da/yr)
A =	body surface area (19,400 cm^2)
ED =	exposure duration (5 yr)
BW =	body weight (70 kg)
AT =	averaging time (70 yr)

CONSTRUCTION WORKER -
PATHWAY 5: DERMAL CONTACT WITH GROUNDWATER (cont.)

Radionuclides

Intake = (pCi)

$$C_w \times A \times Kp_{trit} \times EF \times 1000 \frac{L}{m^3} \times ED \times ET$$

where,

C_w =	groundwater concentration (pCi/L)
A =	body surface area (1.9 m^2)
Kp_{trit} =	chemical-specific permeability coefficient (1.5E-5m/hr)
EF =	exposure frequency (250 da/yr)
ED =	exposure duration (5 yr)
ET =	shower duration (0.167 hr/da)

CONSTRUCTION WORKER - PATHWAY 6: INGESTION OF SOIL BOUND CHEMICAL

Noncarcinogens

Intake = (mg/kg/da)

$$\frac{(C_{soil} \times EF \times 10^{-6} \frac{kg}{mg} \times IR_{soil})}{(BW \times 365 \frac{da}{yr})}$$

where,
C_{soil} = soil chemical concentration (mg/kg)
EF = exposure frequency (250 da/yr)
IR_{soil} = ingestion rate (480 mg/da)
BW = body weight (70 kg)

Carcinogens

Intake = (mg/kg/da)

$$\frac{(C_{soil} \times EF \times ED \times 10^{-6} \frac{kg}{mg} \times IR_{soil})}{(AT \times BW \times 365 \frac{da}{yr})}$$

where,
C_{soil} = soil chemical concentration (mg/kg)
EF = exposure frequency (250 da/yr)
ED = exposure duration (5 yr)
IR_{soil} = ingestion rate (480 mg/da)
AT = averaging time (70 yr)
BW = body weight (70 kg)

Radionuclides

Intake = (pCi)

$$C_{soil} \times ED \times EF \times 10^{-3} \frac{g}{mg} \times IR_{soil}$$

where,
C_{soil} = soil chemical concentration (pCi/g)
ED = exposure duration (5 yr)
EF = exposure frequency (250 da/yr)
IR_{soil} = ingestion rate (480 mg/da)

CONSTRUCTION WORKER -
PATHWAY 7: EXTERNAL EXPOSURE TO RADIATION

Radionuclides

External Exposure = $C_{soil} \times T_e \times (1 - S_e) \times ED$

where,	External Exposure =	external exposure contact rate (pCi yr/g)
	C_{soil} =	radionuclide concentration in soil (pCi/g)
	T_e =	gamma shielding factor (0.333 dim.)
	S_e =	gamma exposure time factor (0.10 dim.)
	ED =	exposure duration (5 yr)

CONSTRUCTION WORKER - PATHWAY 8: DERMAL CONTACT WITH SOIL

Noncarcinogens

Intake (Dermally Absorbed Dose) = (mg/kg/da)

$$\frac{DA_{event} \times EF \times A}{BW \times 365 \frac{da}{yr}}$$

where,

$$DA_{event} = C_{soil} \times AF \times ABS \times 10^{-6} \frac{kg}{mg}$$

C_{soil} = soil concentration (mg/kg)
AF = adherence factor (0.2 mg/cm^2 - event)
ABS = chemical-specific absorption fraction (dim.)
EF = exposure frequency (250 events/yr)
A = skin surface area in contact with soil (5000 cm^2)
BW = body weight (70 kg)

Carcinogens

Intake (Dermally Absorbed Dose) = (mg/kg/da)

$$\frac{DA_{event} \times EF \times ED \times A}{BW \times AT \times 365 \frac{da}{yr}}$$

where,

$$DA_{event} = C_{soil} \times AF \times ABS \times 10^{-6} \frac{kg}{mg}$$

C_{soil} = soil concentration (mg/kg)
AF = adherence factor (0.2 mg/cm^2 - event)
ABS = chemical-specific absorption fraction (dim.)
EF = exposure frequency (250 events/yr)
ED = exposure duration (5 yr)
A = skin surface area in contact with soil (5000 cm^2)
BW = body weight (70 kg)
AT = averaging time (70 yr)

Radionuclides

Not used here

SITE EMPLOYEE -
PATHWAY 1: INHALATION OF VOLATILES FROM SOIL

Noncarcinogens

Intake = (mg/kg/da)

$$\frac{(C_{air} \times IR_{air} \times EF)}{(BW \times 365 \frac{da}{yr})}$$

where,

$$C_{air} = C_{soil} \times \frac{1}{VF}$$

C_{air} = airborne constituent concentration (mg/m^3)
C_{soil} = soil constituent concentration (mg/kg)
IR_{air} = inhalation rate (20 m^3/da)
EF = exposure frequency (250 da/yr)
BW = body weight (70 kg)
VF = chemical specific volatilization factor (m^3/kg)

Carcinogens

Intake = (mg/kg/da)

$$\frac{(C_{air} \times EF \times ED \times IR_{air})}{(BW \times AT \times 365 \frac{da}{yr})}$$

where,

$$C_{air} = C_{soil} \times \frac{1}{VF}$$

C_{air} = airborne constituent concentration (mg/m^3)
C_{soil} = soil constituent concentration (mg/kg)
EF = exposure frequency (250 da/yr)
ED = exposure duration (25 yr)
IR_{air} = inhalation rate (20 m^3/da)
BW = body weight (70 kg)
AT = averaging time (70 yr)
VF = chemical specific volatilization factor (m^3/kg)

Radionuclides

Intake = (pCi)

$$C_{air} \times ED \times EF \times IR_{air}$$

where,

$$C_{air} = C_{soil} \times 1000 (\frac{g}{kg}) \times \frac{1}{VF}$$

C_{air} = airborne constituent concentration (pCi/m^3)
C_{soil} = soil constituent concentration (pCi/g)
ED = exposure duration (25 yr)
EF = exposure frequency (250 da/yr)
IR_{air} = inhalation rate (20 m^3/da)
VF = chemical specific volatilization factor (m^3/kg)

SITE EMPLOYEE - PATHWAY 2: INHALATION OF DUST

Noncarcinogens

Intake = (mg/kg/da)

$$\frac{(C_{air} \times IR_{air} \times EF)}{(BW \times 365 \frac{da}{yr})}$$

where,

$$C_{air} = C_{soil} \times \frac{1}{PEF}$$

C_{air} = airborne constituent concentration (mg/m^3)
C_{soil} = soil constituent concentration (mg/kg)
IR_{air} = inhalation rate (20 m^3/da)
EF = exposure frequency (250 da/yr)
BW = body weight (70 kg)
PEF = particulate emission factor (4.28E+9 m^3/kg)

Carcinogens

Intake = (mg/kg/da)

$$\frac{(C_{air} \times EF \times ED \times IR_{air})}{(BW \times AT \times 365 \frac{da}{yr})}$$

where,

$$C_{air} = C_{soil} \times \frac{1}{PEF}$$

C_{air} = airborne constituent concentration (mg/m^3)
C_{soil} = soil constituent concentration (mg/kg)
EF = exposure frequency (250 da/yr)
ED = exposure duration (25 yr)
IR_{air} = inhalation rate (20 m^3/da)
BW = body weight (70 kg)
AT = averaging time (70 yr)
PEF = particulate emission factor (4.28E+9 m^3/kg)

Radionuclides

Intake = (pCi)

$$C_{air} \times ED \times EF \times IR_{air}$$

where,

$$C_{air} = C_{soil} \times 1000 (\frac{g}{kg}) \times \frac{1}{PEF}$$

C_{air} = airborne constituent concentration (pCi/m^3)
C_{soil} = soil constituent concentration (pCi/g)
ED = exposure duration (25 yr)
EF = exposure frequency (250 da/yr)
IR_{air} = inhalation rate (20 m^3/da)
PEF = particulate emission factor (4.28E+9 m^3/kg)

SITE EMPLOYEE -
PATHWAY 3: INGESTION OF DRINKING WATER

Noncarcinogens

Intake = (mg/kg/da)

$$\frac{(C_{water} \times IR_{gw} \times EF)}{(BW \times 365 \frac{da}{yr})}$$

where,

C_{water} =	groundwater chemical concentration (mg/L)
IR_{gw} =	ingestion rate of groundwater (1.0 L/da)
EF =	exposure frequency (250 da/yr)
BW =	body weight (70 kg)

Carcinogens

Intake = (mg/kg/da)

$$\frac{(C_{water} \times IR_{gw} \times EF \times ED)}{(BW \times AT \times 365 \frac{da}{yr})}$$

where,

C_{water} =	groundwater chemical concentration (mg/L)
IR_{gw} =	ingestion rate of groundwater (1.0 L/da)
EF =	exposure frequency (250 da/yr)
ED =	exposure duration (25 yr)
BW =	body weight (70 kg)
AT =	averaging time (70 yr)

Radionuclides

Intake = (pCi)

$$C_{water} \times IR_{gw} \times EF \times ED$$

where,

C_{water} =	groundwater radionuclide level (pCi/L)
IR_{gw} =	ingestion rate of groundwater (1.0 L/da)
EF =	exposure frequency (250 da/yr)
ED =	exposure duration (25 yr)

SITE EMPLOYEE -
PATHWAY 6: INGESTION OF SOIL BOUND CHEMICAL

Noncarcinogens

Intake = (mg/kg/da)

$$\frac{(C_{soil} \times EF \times 10^{-6} \frac{kg}{mg} \times IR_{soil})}{(BW \times 365 \frac{da}{yr})}$$

where,
C_{soil} = soil chemical concentration (mg/kg)
EF = exposure frequency (250 da/yr)
IR_{soil} = ingestion rate (50 mg/da)
BW = body weight (70 kg)

Carcinogens

Intake = (mg/kg/da)

$$\frac{(C_{soil} \times EF \times ED \times 10^{-6} \frac{kg}{mg} \times IR_{soil})}{(AT \times BW \times 365 \frac{da}{yr})}$$

where,
C_{soil} = soil chemical concentration (mg/kg)
EF = exposure frequency (250 da/yr)
ED = exposure duration (25 yr)
IR_{soil} = ingestion rate (50 mg/da)
AT = averaging time (70 yr)
BW = body weight (70 kg)

Radionuclides

Intake = (pCi)

$$C_{soil} \times ED \times EF \times 10^{-3} \frac{g}{mg} \times IR_{soil}$$

where,
C_{soil} = soil chemical concentration (pCi/g)
ED = exposure duration (25 yr)
EF = exposure frequency (250 da/yr)
IR_{soil} = ingestion rate (50 mg/da)

SITE EMPLOYEE -
PATHWAY 7: EXTERNAL EXPOSURE TO RADIATION

Radionuclides

External Exposure = $C_{soil} \times T_e \times (1 - S_e) \times ED$

where,	External Exposure =	external exposure contact rate (pCi yr/g)
	C_{soil} =	radionuclide concentration in soil (pCi/g)
	T_e =	gamma shielding factor (0.083 dim.)
	S_e =	gamma exposure time factor (0.2 dim.)
	ED =	exposure duration (25 yr)

SITE EMPLOYEE -
PATHWAY 8: DERMAL CONTACT WITH SOIL

Noncarcinogens

Intake
(Dermally Absorbed Dose) =
(mg/kg/da)

$$\frac{DA_{event} \times EF \times A}{BW \times 365 \frac{da}{yr}}$$

where,

$$DA_{event} = C_{soil} \times AF \times ABS \times 10^{-6} \frac{kg}{mg}$$

C_{soil} = soil concentration (mg/kg)
AF = adherence factor (0.2 mg/cm^2 - event)
ABS = chemical-specific absorption fraction (dim.)
EF = exposure frequency (250 events/yr)
A = skin surface area in contact with soil (5000 cm^2)
BW = body weight (70 kg)

Carcinogens

Intake
(Dermally Absorbed Dose) =
(mg/kg/da)

$$\frac{DA_{event} \times EF \times ED \times A}{BW \times AT \times 365 \frac{da}{yr}}$$

where,

$$DA_{event} = C_{soil} \times AF \times ABS \times 10^{-6} \frac{kg}{mg}$$

C_{soil} = soil concentration (mg/kg)
AF = adherence factor (0.2 mg/cm^2 - event)
ABS = chemical-specific absorption fraction (dim.)
EF = exposure frequency (250 events/yr)
ED = exposure duration (25 yr)
A = skin surface area in contact with soil (5000 cm^2)
BW = body weight (70 kg)
AT = averaging time (70 yr)

Radionuclides

Not used here

APPENDIX E

TOXICITY PROFILES

Table Appendix E.1. Toxicity Profiles for Release Block D Constituents*

Chemical	Acute Toxicity Summary	Chronic Toxicity Summary	Cancer Potential	Other
Acenaphthene	No information is available on short-term dermal or inhalation effects	A subchronic mouse study noted liver weight changes accompanied by microscopic alterations (cellular hypertrophy) and appeared dose-dependent. Mid- and high-dosed animals had elevated cholesterol levels. Low dose liver weight gains considered adaptive and not adverse. With chronic intertracheal administration in rats, inflammatory changes were noted in the lungs.	No information was located regarding the carcinogenicity of acenaphthene in humans or other animals. Currently under review by the U.S. EPA.	
Benzo(a) anthracene	No information is available on short-term dermal or inhalation effects with benzo(a)anthracene	No information on systemic effects. PAHs as a group may cause skin disorders and suppression of the immune system.	Classified as a B2, probable human carcinogen. Evidence exists that benzo(a)anthracene is carcinogenic to laboratory animals through dermal and ingestion exposure routes. Inhalation data is not available. May cause skin and lung cancer. No reports relating cancer in humans from exposure to benzo(a)anthracene exclusively, but exposure from PAH mixtures.	Mutagenic in laboratory experiments. Benzo(a)anthracene may be metabolized into reactive derivatives.
Benzo(a) pyrene	No information is available on short-term dermal or inhalation effects with benzo(a)pyrene (BaP)		Classified as a B2, probable human carcinogen. Evidence exists that benzo(a)pyrene is carcinogenic to laboratory animals through dermal and ingestion exposure routes. The animal data consists of dietary, gavage, inhalation, intertrachial instillation, dermal and subcutaneous studies in numerous strains of at least four species of rodents and several primates. Repeated BaP administration has been associated with increased incidences of total tumors and of tumors at the site of exposure. Distant site tumors have also been observed after BaP administration by various routes. Studies have produced tumors in the esophagus, larynx, forestomach, respiratory tract, upper and lower digestive tracts.	BaP has been shown to cause genotoxic effects in a broad range of prokaryotic and mammalian cell assay systems. In prokaryotes, BaP tested positive in DNA damage assays and in both forward and reverse mutation assays. Using mammalian cells, BaP tested positive in DNA damage assays, forward mutation assays, chromosomal effects and cell transformation assays.

Table Appendix E.1. Toxicity Profiles for Release Block D Constituents* (cont.)

Benzo(b) fluoranthene	No information is available on short-term dermal or inhalation effects with benzo(b)fluoranthene		Classified as a B2, probable human carcinogen. Benzo(b)fluoranthene produced tumors in mice after lung implantation, interperitoneal or subcutaneous injection, and skin painting. tumors were noted in the lung and thorax, in the liver of males, but not females, and in the lungs of both sexes. Skin painting produced papillomas and carcinomas in mice.	Positive results have been reported for a reverse mutation assay in Salmonella TA98 and contradictory with other similar assays.
Benzo(ghi) perylene	No information is available on short-term dermal or inhalation effects with benzo(ghi)perylene		Not classifiable as to human carcinogenicity (D). Lung implants in female rats produced no apparent increase in tumors. Dermal applications of benzo(ghi)perylene produced no tumors and a papilloma was observed in the high-dose group. Skin painting and subcutaneous injections produced no skin or subcutaneous tumors.	Benzo(ghi)perylene produced positive results in tests for reverse mutation in three strains of Salmonella and forward mutation in one strain. Chinese hamster ovary cells also yielded positive results.
Beryllium	No information is available on short-term effects with beryllium.	Lifetime exposures to beryllium caused no effects on the heart, liver, kidney, or spleen, nor were effects observed on the lifespan or blood. Reported to produce embryolethality and terata in chick embryos.	Classified as a B2, probable human carcinogen. Beryllium has been shown to induce lung cancer via inhalation in rats and monkeys and to induce osteosarcomas in rabbits via intravenous or intramedullary injection.	Beryllium salts have been shown to be nonmutagenic in bacterial and yeast gene mutation assays. Chinese hamster ovary assays were positive. Chromosomal aberrations observed in other cell culture assays.
Bismuth				
Cadmium		Substantial data exist on the chronic toxicity of Cd to animals and humans. The most sensitive endpoint appears to be exposure of the human renal cortex to sufficient Cd to cause significant proteinurea.	Classified as a B1, probable human carcinogen. Evidence of carcinogenicity based on consistent results from epidemiology studies. Inhalation of cadmium leading to lung cancer is the primary cause. Mammary tumors and other tumors noted as well.	Results of mutagenicity tests in bacteria and yeasts have been inconclusive.

Table Appendix E.1. Toxicity Profiles for Release Block D Constituents* (cont.)

Carbazole	Carbazole is moderately toxic to rats after acute exposure.	No information was located regarding the toxicity of carbazole after chronic exposure of humans or other animals.	There is limited evidence of the carcinogenicity of carbazole in animals. Classified as a Group B2 carcinogen. Neoplastic lesions were observed in the liver (neoplastic nodules, hepatocellular carcinomas), and forestomach (papillomas, squamous cell carcinomas) of mice fed carbazole. No information was located regarding the carcinogenicity of carbazole in humans.	Carbazole was not mutagenic in *Salmonella typhimurium* assays. No information was located regarding the developmental or reproductive toxicity of carbazole in humans or other animals.
Chromium	Major acute effect from oral exposure is renal tubular necrosis. Inhalation of chromate salts results in irritation and inflammation of nasal mucosa, ulceration, and perforation of nasal septum.	Chronic exposure to hexavalent chromium has resulted in kidney damage in animals and humans. Inhalation exposures to chromates in industrial settings have resulted in nasal membrane inflammation, chronic rhinitis, laryngitis, and pharyngitis. Exposures to skin can result in allergic skin reactions in sensitive individuals. Overall, hexavalent forms are more toxic than trivalent forms.	Classified as an A, human carcinogen. Excess lung cancer has been associated with chromate-producing industry workers. Chromatic salts are carcinogenic in rats exposed by inhalation.	Essential element. Toxicity is related to valence state.

Table Appendix E.1. Toxicity Profiles for Release Block D Constituents* (cont.)

Cobalt	High doses can produce decreased appetite, weight loss, and debilitation. Death can occur in animals injected intravenously with cobalt salts.	Oral exposures of humans and animals can result in polycythemia (abnormal increase in red blood cells). Vomiting, diarrhea, and flushing have been reported in humans, changes in blood pressure and tinnitus (ear ringing), and deafness in animals after I.V. injection. Severe cardiac effects including effects on contractility, conductivity, and perhaps structural changes in the heart, and congestive heart failure offered among people drinking beer containing cobalt as a foam stabilizer at levels of approximately 1.5 mg/L, apparently because of synergistic effects of alcohol and cobalt. Among some children treated with cobalt therapeutically for anemia, toxicity included goiter, decreased thyroid function, increased cardiac and respiration rate, and skin and blood pressure changes. Cobalt may pose a health hazard to humans at levels above 1 mg/kg, especially people with ailments. Workers exposed occupationally may exhibit respiratory effects from irritation. Cobalt salts may produce allergic contact dermatitis. Cobalt inhibits enzyme reactions catalyzed by cytochrome P450 and may affect metabolism of other chemicals.	Classified as a B2, probable human carcinogen. Sarcomas at injection site have been observed in animals administered cobalt powder or salts subcutaneously or intramuscularly.	Essential nutrient as part of vitamin B12 in humans; found in diet; in livestock cobalt deficiencies cause anemia, weight loss, slow growth.
Copper	Used for control of algae and other organisms. A high single dose of copper produced GI irritation in humans. No data available for mammals or other humans.		Classified as D, not classified for carcinogenicity. Several long-term assays have shown no tumors in several strains of mice and rats.	High concentrations of copper compounds have been reported to induce mitosis in rat ascites cells and recessive lethals in Drosophila.

Table Appendix E.1. Toxicity Profiles for Release Block D Constituents* (cont.)

Dibenz(ah) anthracene	No information is available on short-term dermal or inhalation effects with benzo(ghi)perylene		Classified as a B2, probable human carcinogen. Dibenz(ah)anthracene produced carcinomas in mice following oral or dermal exposure and injection site tumors in several species following subcutaneous or intramuscular administration. Orally dosed mice developed pulmonary and mammary tumors. Skin painting has produced skin tumors and subcutaneous injection has produced sarcomas at the site of injection.	Dibenzo(ah)anthracene has induced DNA damage and gene mutations in bacteria as well as gene mutations and transformations in several types of mammalian cell cultures.
Dibenzofuran	No toxicity information was located regarding the toxicity of dibenzofuran in humans or other animals after acute exposure.	Chronic exposure of rats resulted in kidney abnormalities. No information was located regarding the toxicity of dibenzofuran in humans from chronic exposure	Classified as D, not classified for carcinogenicity. No information was located regarding the carcinogenicity of dibenzofuran in humans or other animals.	Dibenzofuran is not mutagenic with or without metabolic activation in several strains of *Salmonella*. No information was located regarding the reproductive, developmental, or other effects that might be associated with exposure of humans or other animals to dibenzofuran.
1,1-Dichloroethene	Liver appears to be principal target. Biochemical changes and necrosis in liver in fasted rats have been reported to develop rapidly after inhalation. Liver damage in fasted rats can occur after one oral dose. At high concentrations, inhalation of 1,1-dichloroethene can cause central nervous system depression (CNS) in humans & unconsciousness.	Kidney injury can occur at relatively low doses. Reports of health effects on workers exposed to 1,1-dichloroethene include liver function abnormalities, headaches, vision problems, weakness, fatigue, and neurological sensory disturbances.	Classified as a C, possible human carcinogen. One group of investigators reported an increasing incidence of kidney tumors in mice exposed by inhalation and possibly mammary tumors in rats. Tumor initiator activity in mouse skin following several treatments with phorbol as promoter has been described.	Structure similar to vinyl chloride, a known human carcinogen; mutagenic in bacterial tests; may be fetotoxic in laboratory animals.

Table Appendix E.1. Toxicity Profiles for Release Block D Constituents* (cont.)

Fluorene	No information is available on short-term dermal or inhalation effects with benzo(ghi)perylene	Parameters used to assess subchronic toxicity in mice included food intake, body weight, clinical observations, and histopathological observations. Decreases in red blood cell count, packed cell volume, and hemoglobin, as well as increased serum bilirubin levels observed in most doses. Higher doses produced liver, kidney, and spleen weight increases as well. Skin painting of rats showed no positive results.	Not classifiable as to human carcinogenicity (D)	Fluorene produced no positive results in reverse mutation assays in five Salmonella strains or in on forward mutation assay.
Indeno(123cd) pyrene				
Lead	Acute inorganic lead intoxication in humans is characterized by encephalopathy, abdominal pain, hemolysis, liver damage, renal tubular necrosis, seizures, coma, and respiratory arrest.	Chronic low level exposure to lead can affect the hematopoietic system, the nervous system, and the cardiovascular system, the nervous system, and the cardiovascular system. Lead inhibits several key enzymes involved in heme-biosynthesis. One characteristic effect of chronic lead intoxication is anemia, by reduced hemoglobin production and shortened erythrocyte survival. In humans, lead exposure has resulted in nervous system injury including reduced hand-eye coordination, reaction time, visual motor performance, and nerve conduction velocity. The developing child appears especially sensitive to lead-induced nervous system injury. Lead can also affect the immune system and produce gingival lead lines. Epidemiological studies have indicated that chronic lead exposure may be associated with increased blood pressure in humans. Exposure to lead is associated with sterility, abortion, neonatal mortality, and morbidity. Organolead compounds are neurotoxic.	Classified as a B2, probable human carcinogen. Lead salts have some evidence of carcinogenicity in animals. Renal tumors found with dietary and subcutaneous exposures to various lead salts.	Children are especially sensitive to low level exposures.

Table Appendix E.1. Toxicity Profiles for Release Block D Constituents* (cont.)

Molybdenum	No information is available on short-term dermal or inhalation effects with molybdenum.	Dietary intake correlated with increased serum uric acid levels, several biochemical endpoints and a gout-like illness affecting a Russian village. Gout-like symptoms included pain, swelling, inflammation, and deformities of the joints. Illnesses of the GI tract, liver and kidneys were reported. Long-term consumption of molybdenum in drinking water produced some mineral imbalances and increased copper excretion and resulting copper deficiencies.		Molybdenum is an essential dietary nutrient which is a constituent of several mammalian enzymes.
Naphthalene	Inhalation of vapor may cause eye irritation, headache, and confusion. Ingestion may cause abdominal pain, nausea, and vomiting. Skin or eye contact may lead to systemic effects, and nemoletic effects such as anemia and decreased hemoglobin. In animal studies, bronchial necrosis was observed in rats.	Occurrence of cataracts upon naphthalene vapor and dust exposure has been observed in humans. Subchronic animal studies have shown that oral doses produced cataracts and degeneration of the retina. Dermatitis has been reported with repeated skin exposure. Two studies have reported hemolytic anemia in infants born to women exposed during pregnancy.	Not classifiable as to human carcinogenicity (D). Studies have not shown that naphthalene is carcinogenic. Naphthalene is commonly found in coal tar and epidemiological studies have shown coal tar to be carcinogenic. The role of naphthalene alone could not be determined.	Acute exposures to large doses may cause hemolytic effects (destruction of red blood cells). This effect is most pronounced in individuals with a heredity deficiency of glucose-6-phosphate dehydrogenase.
Phenanthrene	An irritant through inhalation and ingestion exposure. May also be dermally absorbed.	May be an allergin.	Not classifiable as to human carcinogenicity (D). Inadequate data for the evaluation in experimental animals.	Can cause photosensitization of the skin.
111-Trichloroethane	No information is available on short-term dermal or inhalation effects with 111-trichloroethane.	Oral exposure of 1,1,1-trichloroethane for six months produced hepatotoxicity in guinea pigs.	Not classifiable as to human carcinogenicity (D). Technical grade 111-trichloroethane is weakly mutagenic but is known to have 1,4-dioxane, a known human carcinogen, as a contaminant.	Mutagenicity testing of 1,1,1-trichloroethane has produced positive results in one Salmonella strain and negative effects in other assays.

Table Appendix E.1. Toxicity Profiles for Release Block D Constituents* (cont.)

112-Trichloro-122-trifluorethane	Exposure for 2.75 hours to 112-trichloro-122-trifluoro ethane produced slight psychomotor performance impairment at 19,161 mg/m3.	Inhalation studies with dogs, rabbits, and rats exposed to very high concentrations all reported negative results. No adverse effects were reported with long-term occupational exposures.	This substance has not been evaluated by the U.S. EPA for carcinogenic potential	

* - Note that all radionuclides are classified as A carcinogens (human carcinogens).

APPENDIX F

CALCULATED INTAKES AND RESIDUAL RISK TABLES

Table Appendix F.1. Construction Worker Calculated Constituent Intakes from Soil (Background) for Release Block D

Constituent (mg/kg-da) unless otherwise noted	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 4 Shower Inhalation	Pathway 5 Groundwtr. Dermal	Pathway 6 Soil Ingestion	Pathway 7 External** Radiation	Pathway 8 Soil Dermal
Organics								
Acenaphthene	NA	0.000E+00	NA	NA	NA	0.000E+00	NA	0.000E+00
Benzo(a)anthracene	NA	0.000E+00	NA	NA	NA	0.000E+00	NA	0.000E+00
Benzo(a)pyrene	NA	0.000E+00	NA	NA	NA	0.000E+00	NA	0.000E+00
Benzo(b)fluoranthene	NA	0.000E+00	NA	NA	NA	0.000E+00	NA	0.000E+00
Benzo(g,h,i)perylene	NA	0.000E+00	NA	NA	NA	0.000E+00	NA	0.000E+00
Carbazole	NA	NAv	NA	NA	NA	NAv	NA	NAv
Dibenz(a,h)anthracene	NA	0.000E+00	NA	NA	NA	0.000E+00	NA	0.000E+00
Dibenzofuran	NA	0.000E+00	NA	NA	NA	0.000E+00	NA	0.000E+00
Fluorene	NA	0.000E+00	NA	NA	NA	0.000E+00	NA	0.000E+00
Indeno(1,2,3-cd)pyrene	NA	0.000E+00	NA	NA	NA	0.000E+00	NA	0.000E+00
Naphthalene	NA	0.000E+00	NA	NA	NA	0.000E+00	NA	0.000E+00
Phenanthrene	NA	0.000E+00	NA	NA	NA	0.000E+00	NA	0.000E+00
Inorganics								
Bismuth	NA	NAv	NA	NA	NA	NAv	NA	NAv
Copper	NA	1.189E-09	NA	NA	NA	1.221E-04	NA	2.544E-06
Radionuclides								
Plutonium-238 (pCi)	NA	7.593E-04	NA	NA	NA	7.800E+01	1.948E-01	NA

NAv - Background value not available.

NA - Not applicable.

** - External Radiation Exposure has units of pCi-yr/gm (Pathway 7).

Note: Intakes for carcinogens are calculated as average daily dose-lifetime,
Intakes for non-carcinogens are calculated as average daily doses.
Carcinogen status presented in Section 4 of this report.

Table Appendix F.2. Construction Worker Calculated Constituent Intakes from Groundwater (Current - Background) for Release Block D

Constituent (mg/kg-da) unless otherwise noted	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 4 Shower Inhalation	Pathway 5 Groundwtr. Dermal	Pathway 6 Soil Ingestion	Pathway 7 External Radiation	Pathway 8 Soil Dermal
Organics								
1,1-Dichloroethene	NA	NA	0.000E+00	0.000E+00	0.000E+00	NA	NA	NA
1,1,1-Trichloroethane	NA	NA	6.536E-06	4.548E-07	1.838E-06	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	0.000E+00	0.000E+00	NAv	NA	NA	NA
Inorganics								
Cadmium	NA	NA	0.000E+00	NA	0.000E+00	NA	NA	NA
Copper	NA	NA	1.142E-05	NA	3.699E-08	NA	NA	NA
Lead	NA	NA	9.834E-05	NA	1.274E-09	NA	NA	NA
Radionuclides								
Actinium-227 (pCi)	NA	NA	0.000E+00	NA	NA	NA	NA	NA
Bismuth-210 (pCi)	NA	NA	0.000E+00	NA	NA	NA	NA	NA
Plutonium-239/240 (pCi)	NA	NA	1.563E+02	NA	NA	NA	NA	NA
Tritium (pCi)	NA	NA	1.857E+06	1.730E+04	8.838E+03	NA	NA	NA
Uranium-234 (pCi)	NA	NA	9.900E+02	NA	NA	NA	NA	NA
Uranium-238 (pCi)	NA	NA	8.600E+02	NA	NA	NA	NA	NA

NAv - Data not available to perform this calculation.

NA - Not applicable.

Table Appendix F.3. Construction Worker Calculated Constituent Intakes from Groundwater (Future - Background) for Release Block D

Constituent (mg/kg-da) unless otherwise noted	Pathway 3 Groundwtr. Ingestion	Pathway 4 Shower Inhalation	Pathway 5 Groundwtr. Dermal
Organics			
1,1-Dichloroethene	0.000E+00	0.000E+00	0.000E+00
1,1,1-Trichloroethane	6.536E-06	4.548E-07	1.838E-06
1,1,2-Trichloro-1,2,2-trifluoroethane	0.000E+00	0.000E+00	NAv
Inorganics			
Beryllium (carcinogen)	0.000E+00	NA	0.000E+00
Beryllium (non-carcinogen)	0.000E+00	NA	0.000E+00
Bismuth	0.000E+00	NA	0.000E+00
Cadmium	0.000E+00	NA	0.000E+00
Chromium	5.945E-05	NA	3.852E-07
Cobalt	0.000E+00	NA	0.000E+00
Copper	1.142E-05	NA	3.699E-08
Lead	9.834E-05	NA	1.274E-09
Molybdenum	5.477E-05	NA	1.774E-07
Radionuclides			
Actinium-227 (pCi)	0.000E+00	NA	NA
Bismuth-210 (pCi)	0.000E+00	NA	NA
Plutonium-239/240 (pCi)	1.563E+02	NA	NA
Tritium (pCi)	1.857E+06	1.730E+04	8.838E+03
Uranium-234 (pCi)	9.900E+02	NA	NA
Uranium-238 (pCi)	8.600E+02	NA	NA

NAv - Data not available to perform this calculation.

NA - Not applicable.

Table Appendix F.4. Site Employee Calculated Constituent Intakes from Soil (Background) for Release Block D

Constituent (mg/kg-da) unless otherwise noted	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 6 Soil Ingestion	Pathway 7 External** Radiation
Organics					
Acenaphthene	NA	0.000E+00	NA	0.000E+00	NA
Benzo(a)anthracene	NA	0.000E+00	NA	0.000E+00	NA
Benzo(a)pyrene	NA	0.000E+00	NA	0.000E+00	NA
Benzo(b)fluoranthene	NA	0.000E+00	NA	0.000E+00	NA
Benzo(g,h,i)perylene	NA	0.000E+00	NA	0.000E+00	NA
Carbazole	NA	NAv	NA	NAv	NA
Dibenz(a,h)anthracene	NA	0.000E+00	NA	0.000E+00	NA
Dibenzofuran	NA	0.000E+00	NA	0.000E+00	NA
Fluorene	NA	0.000E+00	NA	0.000E+00	NA
Indeno(1,2,3-cd)pyrene	NA	0.000E+00	NA	0.000E+00	NA
Naphthalene	NA	0.000E+00	NA	0.000E+00	NA
Phenanthrene	NA	0.000E+00	NA	0.000E+00	NA
Inorganics					
Bismuth	NA	NAv	NA	NAv	NA
Copper	NA	1.189E-09	NA	1.272E-05	NA
Radionuclides					
Plutonium-238 (pCi)	NA	3.797E-03	NA	4.063E+01	2.166E-01

NAv - Background value not available.

NA - Not applicable.

** - External Radiation Exposure has units of pCi-yr/gm (Pathway 7).

Table Appendix F.5. Site Employee Calculated Constituent Intakes from Groundwater (Current - Background) for Release Block D

Constituent (mg/kg-da) unless otherwise noted	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 6 Soil Ingestion	Pathway 7 External Radiation
Organics					
1,1-Dichloroethene	NA	NA	0.000E+00	NA	NA
1,1,1-Trichloroethane	NA	NA	6.536E-06	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	0.000E+00	NA	NA
Inorganics					
Cadmium	NA	NA	0.000E+00	NA	NA
Copper	NA	NA	1.142E-05	NA	NA
Lead	NA	NA	9.834E-05	NA	NA
Radionuclides					
Actinium-227 (pCi)	NA	NA	0.000E+00	NA	NA
Bismuth-210 (pCi)	NA	NA	0.000E+00	NA	NA
Plutonium-239/240 (pCi)	NA	NA	7.813E+02	NA	NA
Tritium (pCi)	NA	NA	9.284E+06	NA	NA
Uranium-234 (pCi)	NA	NA	4.950E+03	NA	NA
Uranium-238 (pCi)	NA	NA	4.300E+03	NA	NA

NA - Not applicable.

Table Appendix F.6. Site Employee Calculated Constituent Intakes from Groundwater (Future - Background) for Release Block D

Constituent (mg/kg-da) unless otherwise noted	Pathway 3 Groundwtr. Ingestion
Organics	
1,1-Dichloroethene	0.000E+00
1,1,1-Trichloroethane	6.536E-06
1,1,2-Trichloro-1,2,2-trifluoroethane	0.000E+00
Inorganics	
Beryllium (carcinogen)	0.000E+00
Beryllium (non-carcinogen)	0.000E+00
Bismuth	0.000E+00
Cadmium	0.000E+00
Chromium	5.945E-05
Cobalt	5.945E-05
Copper	1.142E-05
Lead	9.834E-05
Molybdenum	5.477E-05
Radionuclides	
Actinium-227 (pCi)	0.000E+00
Bismuth-210 (pCi)	0.000E+00
Plutonium-239/240 (pCi)	7.813E+02
Tritium (pCi)	9.284E+06
Uranium-234 (pCi)	4.950E+03
Uranium-238 (pCi)	4.300E+03

Table Appendix F.7. Characterization of Residual Risks at Release Block D - Construction Worker (Soil Pathways - Background)

Constituent	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 4 Shower Inhalation	Pathway 5 Groundwtr. Dermal	Pathway 6 Soil Ingestion	Pathway 7 External Radiation	Pathway 8 Soil Dermal	Construction Worker
Non-carcinogens (HQ)									
Acenaphthene	NA	***	NA	NA	NA	0.0E+00	NA	0.0E+00	
Bismuth	NA	***	NA	NA	NA	***	NA	***	
Carbazole	NA	***	NA	NA	NA	***	NA	***	
Copper	NA	***	NA	NA	NA	***	NA	***	
Dibenzofuran	NA	***	NA	NA	NA	***	NA	***	
Fluorene	NA	***	NA	NA	NA	0.0E+00	NA	0.0E+00	
Naphthalene	NA	***	NA	NA	NA	0.0E+00	NA	0.0E+00	
Phenanthrene	NA	***	NA	NA	NA	***	NA	***	Total Soil HI =
Total:						0.0E+00		0.0E+00	0.0E+00
Carcinogens (Risk)									
Benzo(a)anthracene	NA	***	NA	NA	NA	0.0E+00	NA	0.0E+00	
Benzo(a)pyrene	NA	***	NA	NA	NA	0.0E+00	NA	0.0E+00	
Benzo(b)fluoranthene	NA	***	NA	NA	NA	0.0E+00	NA	0.0E+00	
Benzo(g,h,i)perylene	NA	***	NA	NA	NA	***	NA	***	Total
Dibenz(a,h)anthracene	NA	***	NA	NA	NA	0.0E+00	NA	0.0E+00	Carcinogenic
Indeno(1,2,3-cd)pyrene	NA	***	NA	NA	NA	0.0E+00	NA	0.0E+00	Risks =
Total:						0.0E+00		0.0E+00	0.0E+00
Radionuclides (Risk)									Total Radionuclide
Plutonium-238 (pCi)	NA	2.1E-11	NA	NA	NA	2.3E-08	3.7E-12	NA	Risks =
Total:		2.1E-11				2.3E-08	3.7E-12		2.3E-08

*** - Toxicity values not available.

NAv - Background value not available.

NA - Not applicable.

Table Appendix F.8. Characterization of Residual Risks at Release Block D - Construction Worker (Groundwater - Current - Background)

Constituent	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 4 Shower Inhalation	Pathway 5 Groundwtr. Dermal	Pathway 6 Soil Ingestion	Pathway 7 External Radiation	Pathway 8 Soil Dermal	Construction Worker
Non-carcinogens (HQ)									
Cadmium	NA	NA	0.0E+00	NA	0.0E+00	NA	NA	NA	
Copper	NA	NA	***	NA	***	NA	NA	NA	
1,1-Dichloroethene	NA	NA	0.0E+00	NA	0.0E+00	NA	NA	NA	
Lead	NA	NA	***	NA	***	NA	NA	NA	
1,1,1-Trichloroethane	NA	NA	7.3E-05	***	2.0E-05	NA	NA	NA	
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	***	***	***	NA	NA	NA	Total HI =
Total:			7.3E-05		2.0E-05				9.3E-05
Carcinogens (Risk)									Total Carcinogenic
1,1-Dichloroethene	NA	NA	NA	0.0E+00	NA	NA	NA	NA	Risks =
Total:				0.0E+00					0.0E+00
Radionuclides (Risk)									
Actinium-227 (pCi)	NA	NA	0.0E+00	NA	NA	NA	NA	NA	
Bismuth-210 (pCi)	NA	NA	***	NA	NA	NA	NA	NA	
Plutonium-239/240 (pCi)	NA	NA	5.0E-08	NA	NA	NA	NA	NA	
Tritium (pCi)	NA	NA	1.3E-07	1.7E-09	6.4E-10	NA	NA	NA	Total
Uranium-234 (pCi)	NA	NA	4.4E-08	NA	NA	NA	NA	NA	Radionuclide
Uranium-238 (pCi)	NA	NA	6.1E-08	NA	NA	NA	NA	NA	Risks =
Total:			2.9E-07	1.7E-09	6.4E-10				2.9E-07

*** - Toxicity values not available.

NA - Not applicable.

Table Appendix F.9. Characterization of Residual Risks at Release Block D
Construction Worker (Groundwater - Future - Background)

Constituent	Pathway 3 Groundwtr. Ingestion	Pathway 4 Shower Inhalation	Pathway 5 Groundwtr. Dermal	Construction Worker
Non-carcinogens (HQ)				
Beryllium	0.0E+00	NA	0.0E+00	
Bismuth	***	NA	***	
Cadmium	0.0E+00	NA	0.0E+00	
Chromium	1.2E-02	NA	7.7E-05	
Cobalt	***	NA	***	
Copper	***	NA	***	
1,1-Dichloroethene	0.0E+00	NA	0.0E+00	
Lead	***	NA	***	
Molybdenum	1.1E-02	NA	3.5E-05	
1,1,1-Trichloroethane	7.3E-05	***	2.0E-05	
1,1,2-Trichloro-1,2,2-trifluoroethane	***	***	***	Total HI =
Total:	2.3E-02		1.3E-04	2.3E-02
Carcinogens (Risk)				
Beryllium	0.0E+00	NA	0.0E+00	Total Carcinogenic
1,1-Dichloroethene	NA	0.0E+00	NA	Risks =
Total:	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Radionuclides (Risk)				
Actinium-227 (pCi)	0.0E+00	NA	NA	
Bismuth-210 (pCi)	***	NA	NA	
Plutonium-239/240 (pCi)	5.0E-08	NA	NA	
Tritium (pCi)	1.3E-07	1.7E-09	6.4E-10	Total
Uranium-234 (pCi)	4.4E-08	NA	NA	Radionuclide
Uranium-238 (pCi)	5.3E-08	NA	NA	Risks =
Total:	2.8E-07	1.7E-09	6.4E-10	2.8E-07

*** - Toxicity values not available.
NA - Not applicable.

Table Appendix F.10. Characterization of Residual Risks at Release Block D - Site Employee (Soil Pathways - Background)

Constituent	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 6 Soil Ingestion	Pathway 7 External Radiation	Site Employee
Non-carcinogens (HQ)						
Acenaphthene	NA	***	NA	0.0E+00	NA	
Bismuth	NA	***	NA	***	NA	
Carbazole	NA	***	NA	***	NA	
Copper	NA	***	NA	***	NA	
Dibenzofuran	NA	***	NA	***	NA	
Fluorene	NA	***	NA	0.0E+00	NA	
Naphthalene	NA	***	NA	0.0E+00	NA	
Phenanthrene	NA	***	NA	***	NA	Total Soil HI =
Total:				0.0E+00		0.0E+00
Carcinogens (Risk)						
Benzo(a)anthracene	NA	***	NA	0.0E+00	NA	
Benzo(a)pyrene	NA	***	NA	0.0E+00	NA	
Benzo(b)fluoranthene	NA	***	NA	0.0E+00	NA	
Benzo(g,h,i)perylene	NA	***	NA	***	NA	Total
Dibenz(a,h)anthracene	NA	***	NA	0.0E+00	NA	Carcinogenic
Indeno(1,2,3-cd)pyrene	NA	***	NA	0.0E+00	NA	Risks =
Total:				0.0E+00		0.0E+00
Radionuclides (Risk)						Total Radionuclide
Plutonium-238 (pCi)	NA	1.0E-10	NA	1.2E-08	4.1E-12	Risks =
Total:		1.0E-10		1.2E-08	4.1E-12	1.2E-08

*** - Toxicity values not available.

NAv - Background value not available.

NA - Not applicable.

Table Appendix F.11. Characterization of Residual Risks at Release Block D - Site Employee (Groundwater - Current - Background)

Constituent	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 6 Soil Ingestion	Pathway 7 External Radiation	Site Employee
Non-carcinogens (HQ)						
Cadmium	NA	NA	0.0E+00	NA	NA	
Copper	NA	NA	***	NA	NA	
1,1-Dichloroethene	NA	NA	0.0E+00	NA	NA	
Lead	NA	NA	***	NA	NA	
1,1,1-Trichloroethane	NA	NA	7.3E-05	NA	NA	
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	***	NA	NA	Total HI =
Total:			7.3E-05			7.3E-05
Carcinogens (Risk)						
1,1-Dichloroethene	NA	NA	NA	NA	NA	Total Carcinogenic Risks = NA
Radionuclides (Risk)						
Actinium-227 (pCi)	NA	NA	0.0E+00	NA	NA	
Bismuth-210 (pCi)	NA	NA	***	NA	NA	
Plutonium-239/240 (pCi)	NA	NA	2.5E-07	NA	NA	
Tritium (pCi)	NA	NA	6.7E-07	NA	NA	Total
Uranium-234 (pCi)	NA	NA	2.2E-07	NA	NA	Radionuclide
Uranium-238 (pCi)	NA	NA	2.7E-07	NA	NA	Risks =
Total:			1.4E-06			1.4E-06

*** - Toxicity values not available.
NA - Not applicable.

Table Appendix F.12. Characterization of Residual Risks at Release Block D Site Employee (Groundwater - Future - Background)

Constituent	Pathway 3 Groundwtr. Ingestion	Site Employee
Non-carcinogens (HQ)		
Beryllium	0.0E+00	
Bismuth	***	
Cadmium	0.0E+00	
Chromium	1.2E-02	
Cobalt	***	
Copper	***	
1,1-Dichloroethene	0.0E+00	
Lead	***	
Molybdenum	1.1E-02	
1,1,1-Trichloroethane	7.3E-05	
1,1,2-Trichloro-1,2,2-trifluoroethane	***	Total HI =
Total:	2.3E-02	2.3E-02
Carcinogens (Risk)		Total Carcinogenic
Beryllium	0.0E+00	Risks =
Total:	0.0E+00	0.0E+00
Radionuclides (Risk)		
Actinium-227 (pCi)	0.0E+00	
Bismuth-210 (pCi)	***	
Plutonium-239/240 (pCi)	2.5E-07	
Tritium (pCi)	6.7E-07	Total
Uranium-234 (pCi)	2.2E-07	Radionuclide
Uranium-238 (pCi)	2.7E-07	Risks =
Total:	1.4E-06	1.4E-06

*** - Toxicity values not available.

Table Appendix F.13. Construction Worker Calculated Constituent Intakes from Soil (Total) for Release Block D

Constituent (mg/kg-da) unless otherwise noted	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 4 Shower Inhalation	Pathway 5 Groundwtr. Dermal	Pathway 6 Soil Ingestion	Pathway 7 External** Radiation	Pathway 8 Soil Dermal
Organics								
Acenaphthene	NA	3.109E-10	NA	NA	NA	3.194E-05	NA	6.654E-06
Benzo(a)anthracene	NA	1.404E-10	NA	NA	NA	1.443E-05	NA	3.005E-06
Benzo(a)pyrene	NA	1.143E-10	NA	NA	NA	1.174E-05	NA	2.446E-06
Benzo(b)fluoranthene	NA	1.927E-10	NA	NA	NA	1.979E-05	NA	4.124E-06
Benzo(g,h,i)perylene	NA	6.205E-11	NA	NA	NA	6.374E-06	NA	1.328E-06
Carbazole	NA	5.225E-13	NA	NA	NA	5.368E-08	NA	1.118E-08
Dibenz(a,h)anthracene	NA	1.731E-11	NA	NA	NA	1.778E-06	NA	3.704E-07
Dibenzofuran	NA	1.829E-10	NA	NA	NA	1.879E-05	NA	3.914E-06
Fluorene	NA	2.972E-10	NA	NA	NA	3.053E-05	NA	6.360E-06
Indeno(1,2,3-cd)pyrene	NA	7.512E-11	NA	NA	NA	7.716E-06	NA	1.607E-06
Naphthalene	NA	8.230E-11	NA	NA	NA	8.454E-06	NA	1.761E-06
Phenanthrene	NA	3.338E-09	NA	NA	NA	3.429E-04	NA	7.143E-05
Inorganics								
Bismuth	NA	3.749E-11	NA	NA	NA	3.851E-06	NA	8.023E-08
Copper	NA	1.395E-09	NA	NA	NA	1.432E-04	NA	2.984E-06
Radionuclides								
Plutonium-238 (pCi)	NA	1.647E-02	NA	NA	NA	1.692E+03	4.226E+00	NA

NA - Not applicable.

** - External Radiation Exposure has units of pCi-yr/gm (Pathway 7).

Table Appendix F.14. Construction Worker Calculated Constituent Intakes from Groundwater (Current - Total) for Release Block D

Constituent (mg/kg-da) unless otherwise noted	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 4 Shower Inhalation	Pathway 5 Groundwtr. Dermal	Pathway 6 Soil Ingestion	Pathway 7 External Radiation	Pathway 8 Soil Dermal
Organics								
1,1-Dichloroethene	NA	NA	1.663E-05	8.268E-08	3.401E-06	NA	NA	NA
1,1,1-Trichloroethane	NA	NA	6.548E-06	4.556E-07	1.842E-06	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	8.513E-05	5.923E-06	NAv	NA	NA	NA
Inorganics								
Cadmium	NA	NA	1.859E-05	NA	6.023E-08	NA	NA	NA
Copper	NA	NA	5.802E-03	NA	1.880E-05	NA	NA	NA
Lead	NA	NA	2.455E-05	NA	3.182E-10	NA	NA	NA
Radionuclides								
Actinium-227 (pCi)	NA	NA	4.188E+02	NA	NA	NA	NA	NA
Bismuth-210 (pCi)	NA	NA	4.875E+02	NA	NA	NA	NA	NA
Plutonium-239/240 (pCi)	NA	NA	2.500E+03	NA	NA	NA	NA	NA
Tritium (pCi)	NA	NA	3.387E+06	3.156E+04	1.612E+04	NA	NA	NA
Uranium-234 (pCi)	NA	NA	1.018E+04	NA	NA	NA	NA	NA
Uranium-238 (pCi)	NA	NA	1.031E+04	NA	NA	NA	NA	NA

NAv - Data not available to perform this calculation.

NA - Not applicable.

Table Appendix F.15. Construction Worker Calculated Constituent Intakes from Groundwater (Future - Total) for Release Block D

Constituent (mg/kg-da) unless otherwise noted	Pathway 3 Groundwtr. Ingestion	Pathway 4 Shower Inhalation	Pathway 5 Groundwtr. Dermal
Organics			
1,1-Dichloroethene	1.663E-05	8.268E-08	3.401E-06
1,1,1-Trichloroethane	5.284E-05	3.677E-06	1.486E-05
1,1,2-Trichloro-1,2,2-trifluoroethane	8.513E-05	5.923E-06	NAv
Inorganics			
Beryllium (carcinogen)	6.989E-08	NA	2.264E-10
Beryllium (non-carcinogen)	9.785E-07	NA	3.170E-09
Bismuth	1.566E-05	NA	5.072E-08
Cadmium	1.859E-05	NA	6.023E-08
Chromium	4.854E-03	NA	3.145E-05
Cobalt	3.816E-05	NA	4.945E-08
Copper	5.836E-03	NA	1.891E-05
Lead	2.455E-05	NA	3.182E-10
Molybdenum	9.393E-05	NA	3.043E-07
Radionuclides			
Actinium-227 (pCi)	4.188E+02	NA	NA
Bismuth-210 (pCi)	4.875E+02	NA	NA
Plutonium-239/240 (pCi)	2.525E+03	NA	NA
Tritium (pCi)	7.420E+06	6.915E+04	3.532E+04
Uranium-234 (pCi)	1.018E+04	NA	NA
Uranium-238 (pCi)	1.031E+04	NA	NA

NAv - Data not available to perform this calculation.

NA - Not applicable.

Table Appendix F.16. Site Employee Calculated Constituent Intakes from Soil (Total) for Release Block D

Constituent (mg/kg-da) unless otherwise noted	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 6 Soil Ingestion	Pathway 7 External** Radiation
Organics					
Acenaphthene	NA	3.109E-10	NA	3.327E-06	NA
Benzo(a)anthracene	NA	7.022E-10	NA	7.513E-06	NA
Benzo(a)pyrene	NA	5.715E-10	NA	6.115E-06	NA
Benzo(b)fluoranthene	NA	9.635E-10	NA	1.031E-05	NA
Benzo(g,h,i)perylene	NA	3.103E-10	NA	3.320E-06	NA
Carbazole	NA	2.613E-12	NA	2.796E-08	NA
Dibenz(a,h)anthracene	NA	8.655E-11	NA	9.261E-07	NA
Dibenzofuran	NA	1.829E-10	NA	1.957E-06	NA
Fluorene	NA	2.972E-10	NA	3.180E-06	NA
Indeno(1,2,3-cd)pyrene	NA	3.756E-10	NA	4.019E-06	NA
Naphthalene	NA	8.230E-11	NA	8.806E-07	NA
Phenanthrene	NA	3.338E-09	NA	3.571E-05	NA
Inorganics					
Bismuth	NA	3.749E-11	NA	4.012E-07	NA
Copper	NA	1.395E-09	NA	1.492E-05	NA
Radionuclides					
Plutonium-238 (pCi)	NA	8.236E-02	NA	8.813E+02	4.698E+00

NA - Not applicable.

** - External Radiation Exposure has units of pCi-yr/gm (Pathway 7).

Table Appendix F.17. Site Employee Calculated Constituent Intakes from Groundwater (Current - Total) for Release Block D

Constituent (mg/kg-da) unless otherwise noted	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 6 Soil Ingestion	Pathway 7 External Radiation
Organics					
1,1-Dichloroethene	NA	NA	1.663E-05	NA	NA
1,1,1-Trichloroethane	NA	NA	6.548E-06	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	8.513E-05	NA	NA
Inorganics					
Cadmium	NA	NA	1.859E-05	NA	NA
Copper	NA	NA	5.802E-03	NA	NA
Lead	NA	NA	2.455E-05	NA	NA
Radionuclides					
Actinium-227 (pCi)	NA	NA	2.094E+03	NA	NA
Bismuth-210 (pCi)	NA	NA	2.438E+03	NA	NA
Plutonium-239/240 (pCi)	NA	NA	1.250E+04	NA	NA
Tritium (pCi)	NA	NA	1.693E+07	NA	NA
Uranium-234 (pCi)	NA	NA	5.088E+04	NA	NA
Uranium-238 (pCi)	NA	NA	5.156E+04	NA	NA

NA - Not applicable.

Table Appendix F.18. Site Employee Calculated Constituent Intakes from Groundwater (Future - Total) for Release Block D

Constituent (mg/kg-da) unless otherwise noted	Pathway 3 Groundwtr. Ingestion
Organics	
1,1-Dichloroethene	1.663E-05
1,1,1-Trichloroethane	5.284E-05
1,1,2-Trichloro-1,2,2-trifluoroethane	8.513E-05
Inorganics	
Beryllium (carcinogen)	3.495E-07
Beryllium (non-carcinogen)	9.785E-07
Bismuth	1.566E-05
Cadmium	1.859E-05
Chromium	4.854E-03
Cobalt	3.816E-05
Copper	5.836E-03
Lead	2.455E-05
Molybdenum	9.393E-05
Radionuclides	
Actinium-227 (pCi)	2.094E+03
Bismuth-210 (pCi)	2.438E+03
Plutonium-239/240 (pCi)	1.262E+04
Tritium (pCi)	3.710E+07
Uranium-234 (pCi)	5.088E+04
Uranium-238 (pCi)	5.156E+04

Table Appendix F.19. Characterization of Residual Risks at Release Block D - Construction Worker (Soil Pathways - Total)

Constituent	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 4 Shower Inhalation	Pathway 5 Groundwtr. Dermal	Pathway 6 Soil Ingestion	Pathway 7 External Radiation	Pathway 8 Soil Dermal	Construction Worker
Non-carcinogens (HQ)									
Acenaphthene	NA	***	NA	NA	NA	1.8E-07	NA	3.8E-08	
Bismuth	NA	***	NA	NA	NA	***	NA	***	
Carbazole	NA	***	NA	NA	NA	***	NA	***	
Copper	NA	***	NA	NA	NA	***	NA	***	
Dibenzofuran	NA	***	NA	NA	NA	***	NA	***	
Fluorene	NA	***	NA	NA	NA	7.6E-04	NA	1.6E-04	
Naphthalene	NA	***	NA	NA	NA	1.7E-07	NA	3.5E-08	
Phenanthrene	NA	***	NA	NA	NA	***	NA	***	Total Soil HI =
Total:						7.6E-04		1.6E-04	9.2E-04
Carcinogens (Risk)									
Benzo(a)anthracene	NA	***	NA	NA	NA	1.1E-05	NA	2.2E-06	
Benzo(a)pyrene	NA	***	NA	NA	NA	8.6E-05	NA	1.8E-05	
Benzo(b)fluoranthene	NA	***	NA	NA	NA	1.4E-05	NA	3.0E-06	
Benzo(g,h,i)perylene	NA	***	NA	NA	NA	***	NA	***	Total
Dibenz(a,h)anthracene	NA	***	NA	NA	NA	1.3E-05	NA	2.7E-06	Carcinogenic
Indeno(1,2,3-cd)pyrene	NA	***	NA	NA	NA	5.6E-06	NA	1.2E-06	Risks =
Total:						1.3E-04		2.7E-05	1.6E-04
Radionuclides (Risk)									Total Radionuclide
Plutonium-238 (pCi)	NA	4.4E-10	NA	NA	NA	5.1E-07	8.0E-11	NA	Risks =
Total:		4.4E-10				5.1E-07	8.0E-11		5.1E-07

*** - Toxicity values not available.

NA - Not applicable.

Table Appendix F.20. Characterization of Residual Risks at Release Block D - Construction Worker (Groundwater - Current - Total)

Constituent	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 4 Shower Inhalation	Pathway 5 Groundwtr. Dermal	Pathway 6 Soil Ingestion	Pathway 7 External Radiation	Pathway 8 Soil Dermal	Construction Worker
Non-carcinogens (HQ)									
Cadmium	NA	NA	3.7E-02	NA	1.2E-04	NA	NA	NA	
Copper	NA	NA	***	NA	***	NA	NA	NA	
1,1-Dichloroethene	NA	NA	1.8E-06	NA	3.8E-07	NA	NA	NA	
Lead	NA	NA	***	NA	***	NA	NA	NA	
1,1,1-Trichloroethane	NA	NA	7.3E-05	***	2.0E-05	NA	NA	NA	
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	***	***	***	NA	NA	NA	Total HI =
Total:			3.7E-02		1.4E-04				3.7E-02
Carcinogens (Risk)									Total Carcinogenic
1,1-Dichloroethene	NA	NA	NA	9.9E-08	NA	NA	NA	NA	Risks =
Total:				9.9E-08					9.9E-08
Radionuclides (Risk)									
Actinium-227 (pCi)	NA	NA	2.6E-07	NA	NA	NA	NA	NA	
Bismuth-210 (pCi)	NA	NA	***	NA	NA	NA	NA	NA	
Plutonium-239/240 (pCi)	NA	NA	8.0E-07	NA	NA	NA	NA	NA	
Tritium (pCi)	NA	NA	2.4E-07	3.0E-09	1.2E-09	NA	NA	NA	Total
Uranium-234 (pCi)	NA	NA	4.5E-07	NA	NA	NA	NA	NA	Radionuclide
Uranium-238 (pCi)	NA	NA	6.4E-07	NA	NA	NA	NA	NA	Risks =
Total:			2.4E-06	3.0E-09	1.2E-09				2.4E-06

*** - Toxicity values not available.
NA - Not applicable.

Table Appendix F.21. Characterization of Residual Risks at Release Block D Construction Worker (Groundwater - Future - Total)

Constituent	Pathway 3 Groundwtr. Ingestion	Pathway 4 Shower Inhalation	Pathway 5 Groundwtr. Dermal	Construction Worker
Non-carcinogens (HQ)				
Beryllium	2.0E-04	NA	6.3E-07	
Bismuth	***	NA	***	
Cadmium	3.7E-02	NA	1.2E-04	
Chromium	9.7E-01	NA	6.3E-03	
Cobalt	***	NA	***	
Copper	***	NA	***	
1,1-Dichloroethene	1.8E-06	NA	3.8E-07	
Lead	***	NA	***	
Molybdenum	1.9E-02	NA	6.1E-05	
1,1,1-Trichloroethane	5.9E-04	***	1.7E-04	
1,1,2-Trichloro-1,2,2-trifluoroethane	***	***	***	Total HI =
Total:	1.0E+00		6.6E-03	1.0E+00
Carcinogens (Risk)				
Beryllium	3.0E-07	NA	9.7E-10	Total Carcinogenic
1,1-Dichloroethene	NA	9.9E-08	NA	Risks =
Total:	3.0E-07	9.9E-08	9.7E-10	4.0E-07
Radionuclides (Risk)				
Actinium-227 (pCi)	2.6E-07	NA	NA	
Bismuth-210 (pCi)	***	NA	NA	
Plutonium-239/240 (pCi)	8.1E-07	NA	NA	
Tritium (pCi)	5.3E-07	6.6E-09	2.5E-09	Total
Uranium-234 (pCi)	4.5E-07	NA	NA	Radionuclide
Uranium-238 (pCi)	6.4E-07	NA	NA	Risks =
Total:	2.7E-06	6.6E-09	2.5E-09	2.7E-06

*** - Toxicity values not available.
NA - Not applicable.

Table Appendix F.22. Characterization of Residual Risks at Release Block D - Site Employee (Soil Pathways - Total)

Constituent	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 6 Soil Ingestion	Pathway 7 External Radiation	Site Employee
Non-carcinogens (HQ)						
Acenaphthene	NA	***	NA	1.9E-08	NA	
Bismuth	NA	***	NA	***	NA	
Carbazole	NA	***	NA	***	NA	
Copper	NA	***	NA	***	NA	
Dibenzofuran	NA	***	NA	***	NA	
Fluorene	NA	***	NA	8.0E-05	NA	
Naphthalene	NA	***	NA	1.8E-08	NA	
Phenanthrene	NA	***	NA	***	NA	Total Soil HI =
Total:				8.0E-05		8.0E-05
Carcinogens (Risk)						
Benzo(a)anthracene	NA	***	NA	5.5E-06	NA	
Benzo(a)pyrene	NA	***	NA	4.5E-05	NA	
Benzo(b)fluoranthene	NA	***	NA	7.5E-06	NA	
Benzo(g,h,i)perylene	NA	***	NA	***	NA	Total
Dibenz(a,h)anthracene	NA	***	NA	6.8E-06	NA	Carcinogenic
Indeno(1,2,3-cd)pyrene	NA	***	NA	2.9E-06	NA	Risks =
Total:				6.7E-05		6.7E-05
Radionuclides (Risk)						Total Radionuclide
Plutonium-238 (pCi)	NA	2.2E-09	NA	2.6E-07	8.9E-11	Risks =
Total:		2.2E-09		2.6E-07	8.9E-11	2.7E-07

*** - Toxicity values not available.

NA - Not applicable.

Table Appendix F.23. Characterization of Residual Risks at Release Block D - Site Employee (Groundwater - Current - Total)

Constituent	Pathway 1 Soil VOC Inhalation	Pathway 2 Soil/Dust Inhalation	Pathway 3 Groundwtr. Ingestion	Pathway 6 Soil Ingestion	Pathway 7 External Radiation	Site Employee
Non-carcinogens (HQ)						
Cadmium	NA	NA	3.7E-02	NA	NA	
Copper	NA	NA	***	NA	NA	
1,1-Dichloroethene	NA	NA	1.8E-06	NA	NA	
Lead	NA	NA	***	NA	NA	
1,1,1-Trichloroethane	NA	NA	7.3E-05	NA	NA	
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	***	NA	NA	Total HI =
Total:			3.7E-02			3.7E-02
Carcinogens (Risk)						
1,1-Dichloroethene	NA	NA	NA	NA	NA	Total Carcinogenic Risks = NA
Radionuclides (Risk)						
Actinium-227 (pCi)	NA	NA	1.3E-06	NA	NA	
Bismuth-210 (pCi)	NA	NA	***	NA	NA	
Plutonium-239/240 (pCi)	NA	NA	4.0E-06	NA	NA	
Tritium (pCi)	NA	NA	1.2E-06	NA	NA	Total
Uranium-234 (pCi)	NA	NA	2.2E-06	NA	NA	Radionuclide
Uranium-238 (pCi)	NA	NA	3.2E-06	NA	NA	Risks =
Total:			1.2E-05			1.2E-05

*** - Toxicity values not available.
NA - Not applicable.

Table Appendix F.24. Characterization of Residual Risks at Release Block D Site Employee (Groundwater - Future - Total)

Constituent	Pathway 3 Groundwtr. Ingestion	Site Employee
Non-carcinogens (HQ)		
Beryllium	2.0E-04	
Bismuth	***	
Cadmium	3.7E-02	
Chromium	9.7E-01	
Cobalt	***	
Copper	***	
1,1-Dichloroethene	1.8E-06	
Lead	***	
Molybdenum	1.9E-02	
1,1,1-Trichloroethane	5.9E-04	
1,1,2-Trichloro-1,2,2-trifluoroethane	***	Total HI =
Total:	1.0E+00	1.0E+00
Carcinogens (Risk)		Total Carcinogenic
Beryllium	1.5E-06	Risks =
Total:	1.5E-06	1.5E-06
Radionuclides (Risk)		
Actinium-227 (pCi)	1.3E-06	
Bismuth-210 (pCi)	***	
Plutonium-239/240 (pCi)	4.0E-06	
Tritium (pCi)	2.7E-06	Total
Uranium-234 (pCi)	2.2E-06	Radionuclide
Uranium-238 (pCi)	3.2E-06	Risks =
Total:	1.3E-05	1.3E-05

*** - Toxicity values not available.