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Golder Associates Inc.
CONSULTING ENGINEERS

PRE-DESIGN INVESTIGATION
TASK GW-1
PLUME DELINEATION
INTERIM FINAL REPORT

INDUSTRI-PLEX SITE
WOBURN, MASSACHUSETTS

VOLUME 1 OF 2

Prepared for:

Industri-Plex Site Remedial Trust
800 North Lindbergh Boulevard
St. Louis, Missouri 63167

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January 1991 Project No.: 893-6255

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Golder Associates Inc.
CONSULTING ENGINEERS

January 4, 1991 Project No. 893-6255

United States Environmental Protection Agency, Region I
J.F.K. Federal Building, HRS-CAN-3
Boston, Massachusetts 02203-2211

Attn: Joseph DeCola
Remedial Project Manager

RE: INDUSTRI-PLEX SITE PRE-DESIGN INVESTIGATION
TASK GW-1 PLUME DELINEATION INTERIM FINAL REPORT

Gentlemen:

On behalf of the Industri-Plex Site Remedial Trust, we are submitting the attached Plume Delineation Interim Final Report (Volumes 1 and 2) for the Industri-Plex Site in Woburn, Massachusetts. This report is being submitted in accordance with the Pre-Design Investigation Work Plan (PDI) Task GW-1 reporting requirements (Section 3.3.3.4, p. 70 and Section 3.8.1.2.1, p. 128).

If you have any questions, please contact us.

Very truly yours,

GOLDER ASSOCIATES INC.

Kenneth R. Moser

Kenneth R. Moser, Associate
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1.0 INTRODUCTION

As specified in the Consent Decree (CD) for the Industri-Plex Site, Woburn, Massachusetts, "the remedial action for ground water shall include an interim remedy of pumping and treating "hot spot" areas of ground-water contamination and the concurrent development and implementation of a Ground-Water/Surface-Water Investigation Plan (GSIP) to evaluate Site-wide ground-water and surface-water contamination . . ."

To comply with this requirement, the Scope of Work for the Pre-Design Investigation Work Plan (PDI) was developed (as outlined in the Remedial Design Action Plan [RDAP]), and is as follows (PDI, p. 57):

> "(g)... investigation to more accurately characterize the "hot spot" areas of benzene and toluene contamination, to assess the treatability of ground water, and to provide data to be used in the development of operating parameters such as pumping rates, interceptor well locations, recharge area locations and period of system performance. Included in these ground-water investigations shall be Settlers proposed performance standards for effluent water quality".

The approach for achieving the objectives of the ground-water program of the PDI was to perform a series of field tasks to develop data to supplement the data developed during the Remedial Investigation (RI) and the GSIP. The ground-water component of the PDI consists of the following tasks:

1. GW-1 Plume Delineation;
2. GW-2 Hydrogeologic Characterization for Extraction/Recharge Design; and
3. GW-3 Ground-Water Treatability.

Task GW-1 (Plume Delineation) consists of several subtasks designed to define the areal and vertical extent of Hazardous Substances in ground water in the unconsolidated deposits at on-site and downgradient areas (Study Area). These subtasks include:

Subtask 1. Determination of Aquifer Thickness and Boundaries

Subtask 2. Installation of Pre-Design Investigation Phase 1 Monitoring Well Clusters;

Subtask 3. Sampling of Pre-Design Investigation Phase 1 Monitoring Well Clusters;

Subtask 4. Installation of Pre-Design Investigation Phase 2 Monitoring Well Clusters; and

Subtask 5. Sampling of Pre-Design Phase 2 (and Phase 1) Monitoring Well Clusters.

In accordance with the reporting requirements of the PDI (Section 3.3.3.4, p. 70 and Section 3.8.1.2.1, p. 128), an Interim Final Report must be prepared and submitted to the United States Environmental Protection Agency (USEPA) and the Massachusetts Department of Environmental Protection (MDEP) for review and approval. This Interim Final Report fulfills this reporting requirement for Task GW-1 and presents the findings and conclusions developed from an evaluation of the data. The data presented in this report meets the Data Quality Objectives identified in the PDI Work Plan. As a result, the data developed during Task GW-1 is adequate to support the design of the interim remedial action for ground water specified in the CD.

2.0 METHODS OF INVESTIGATION

The initial component of Subtask 1 (Determination of Aquifer Thickness and Boundaries) was the mapping of bedrock outcrops within the Study Area. This was accomplished by an inspection of recent aerial photographs of the study area and field mapping. The following aerial photographs were inspected to assist in mapping the bedrock outcrops.

• LIU Aerial Survey	Watertown, CT	1"=100'	November 22, 1989	Black and White
• Flight Survey and Mapping	Newbury, MA	1"=300'	January 5, 1990	Color
• Flight Survey and Mapping	Newbury, MA	1"=300'	March 27, 1990	Color

In addition, Massachusetts Department of Environmental Protection (MDEP) files were reviewed in an attempt to obtain foundation boring data for the study area. Although no data were available in the files, environmental reports (21-E) prepared for property transfers and other subsurface investigation reports were reviewed for soil boring data. However, none of these reports could confirm depth to bedrock in the Study Area.

After the bedrock outcrops were located and the isopach of the unconsolidated deposits (included in the PDI Work Plan) was revised, the locations of the proposed soil borings were re-evaluated to determine if any locations needed to be relocated to better define the thickness and boundaries of the unconsolidated aquifer. Upon reviewing the aerial photographs and field mapping data, soil borings (ATB 1 through 21) were drilled to bedrock to determine the thickness, boundaries and lithology of the unconsolidated deposits.

Subtask 2 (Installation of the Phase 1 Monitoring Wells) was performed following the completion of the majority of the Aquifer Thickness and Boundary (ATB) soil borings. Fourteen monitoring wells were installed at eight locations downgradient of the Site (Plate 1). The wells were installed to determine the extent of benzene and toluene (and other hazardous substances) in ground water as required by the RDAP. All field work was performed in accordance with the PDI Work Plan Standard Operating Procedures (SOPs).

During Subtask 3 (Sampling of Phase 1 Monitoring Wells), ground-water samples were collected from the Phase 1 monitoring wells to determine the water quality of the aquifer downgradient of the site. All samples were analyzed for the Target Compound List/Target Analyte List (TCL/TAL) organics and metals using Contract Laboratory Program - Routine

Analytical Services (CLP-RAS) Methods, by Enseco-ERCO Laboratories, Cambridge, Massachusetts. Both filtered and unfiltered TAL samples were collected.

As required by the PDI Work Plan, an Interim Report was prepared at the conclusion of Subtask 3 and submitted to the USEPA and the MDEP for review and comment. The report titled "Pre-Design Investigation, Task GW-1, Plume Delineation, Phase 1 Interim Report", summarized the data developed during the Determination of Aquifer Thickness and Boundaries (Subtask 1) and the Installation and Sampling of the Phase 1 Monitoring Wells (Subtasks 2 and 3). These data were used to develop the Phase 2 scope of work so that the data necessary to achieve the Task GW-1 data quality objectives were met.

USEPA approved the Phase 2 scope of work, conditional upon the inclusion of one additional well or well cluster in the vicinity of OW-9, in the September 17, 1990 letter from J. DeCola (USEPA) to W. Smull (ISRT). Phase 2 (Subtask 4) monitoring well clusters were installed in the Study Area to further define the extent of the benzene and toluene "hot spots". Seven monitoring wells were installed in accordance with the PDI Work Plan procedures.

After the Phase 2 wells were installed and developed, the Phase 2 well sampling program (Subtask 5) was initiated. The Phase 2 wells, selected PDI Phase 1 and RI wells were sampled for volatile organic compounds (VOCs), total and dissolved metals as specified in the Phase 1 Interim Report (Roux Associates, Inc., 1990). Samples were analyzed using CLP-RAS methods by Radian Corporation, Sacramento, California.

2.1 Aquifer Thickness Borings (Subtask 1)

Twenty one soil borings (ATB 1 through 21) were drilled to determine the thickness and boundaries of the unconsolidated deposits within the Study Area (Plate 1). The locations of many of the borings (as shown in the PDI Work Plan, Figure 24, Appendix A in this report) were relocated to the City of Woburn right-of-ways due to the lack of permission to drill on private property. The relocation of the soil borings to the right-of-ways did not affect the overall results of the task.

D.L. Maher Drilling Company (D.L. Maher), North Reading, Massachusetts was subcontracted to drill the soil borings. The soil borings were drilled with a hollow stem auger drill rig. Soil samples were collected with split-spoon samplers every five feet and the top of the bedrock was determined by coring approximately three feet into the bedrock after auger refusal. Bedrock was not reached at ATB-1 because Health and Safety monitoring precluded continued drilling in Level D. Continued drilling would have required the use of supplied air respirators (Level B). Additional work was not required at this location because sufficient data were gathered from other ATB borings in the Study Area.

Heaving sands occurred in many boreholes when the hollow stem augers were advanced below the water table. This was controlled by adding City of Woburn Public Supply Water to the borehole. Split-spoon samples were collected ahead of the lead auger into the unconsolidated deposits. The split-spoon sampler was opened and the concentration of VOCs was measured using a photoionization detector (PID). Geologic logs were prepared based upon the inspection of these samples (Appendix B). A representative portion of each split-spoon sample was retained for reference. The split-spoon samplers were cleaned between each use with detergent and water, rinsed with methanol and a final rinse with deionized or distilled water.

Grain size distribution tests were performed on selected soil samples in accordance with ASTM methods for mechanical sieving (D-421 and D-422) and hydrometer analysis (Appendix C) to estimate the areal distribution of the hydraulic conductivities of the unconsolidated deposits. The grain size data were then plotted on a graph of grain size (in inches) versus cumulative percent (Appendix C). The size of the sieve passing 10 percent of the material was then determined (Sheahan, 1965) and compared to the Rose and Smith curve (Appendix C).

To ensure that bedrock was encountered, the augers were advanced until auger refusal and approximately three feet of the bedrock was cored. To accomplish this, sections of three-inch diameter steel casing were threaded together and placed inside the annulus of the augers. The three-inch diameter casing was drilled into the bedrock to seal off the unconsolidated soil deposits. A six foot long two-inch diameter NX rock core barrel and rods were lowered into the annular space to collect the bedrock core sample.

The rock core was retrieved, photographed and described in detail (Appendix B). Rock core descriptions included the competence of the bedrock, the presence of fractures and materials that filled the fractures, and lithology. The rock cores were placed in core boxes, labeled and stored on Site for reference.

After the ATB soil borings were completed, the boreholes were backfilled with bentonite grout using the tremie method to approximately one foot below land surface. This was accomplished using a tremie pipe to fill the borehole with bentonite grout while withdrawing the augers. The remaining one foot was filled with cement or gravel and a layer of loam.

Drill cuttings and well development water were collected and transported back to the Site and placed in ISRT assigned on-site temporary disposal areas. All drilling and sampling equipment that came in contact with the borehole was cleaned with a high pressure water wash prior to relocating to the next soil boring location.

The horizontal and vertical coordinates of all soil boring locations were surveyed by a surveyor licensed in the Commonwealth of Massachusetts. Science Applications International Corporation (SAIC) Engineering, Inc. of Lakeville, Massachusetts surveyed the locations to an accuracy of ± 0.1 foot laterally and ± 0.01 foot vertically (to mean sea level).

The soil boring data (Table 1) were used to generate isopach maps and geologic cross sections to illustrate the thickness, boundaries and lithology of the unconsolidated deposits (Plates 2 through 10).

All field activities performed were consistent with the Roux Associates, Inc. and Golder Associates, Inc. Health and Safety Plan included in the PDI Work Plan. During the drilling operations, ambient air quality monitoring was measured by the Site Health and Safety Officer or an appointed representative. Continuous health and safety air monitoring was conducted with the use of a PID, flame ionization detector (OVA), and a Gastech GX-82. These instruments measure VOCs, percent oxygen, the lower explosive limit and the concentrations of hydrogen sulfide gas. The air monitoring instruments were calibrated at

the beginning of each day of field activities. Air monitoring was recorded approximately every thirty minutes during the drilling operations.

2.2 Installation of Phase 1 Monitoring Wells (Subtask 2)

Based upon the hydrogeologic and water-quality data information obtained during Phase 1 of the GSIP and data from the Aquifer Thickness and Boundary borings (PDI, Subtask 1), the locations for the Phase 1 monitoring wells were finalized (Plate 1).

During an April 17, 1990 meeting with the Industri-Plex Site Remedial Trust (ISRT), USEPA, MDEP and NUS Corporation (NUS), it was agreed that additional wells were needed to better define the thickness and boundaries of the unconsolidated deposits and ground-water quality. Approval for the additional wells under PDI Addendum 2 was provided in an April 24, 1990 letter from M. Wade (USEPA) to W. Smull (ISRT).

Eight monitoring well locations were selected based on the GSIP ground-water quality data and the results of Subtask 1 of the PDI. With the exception of OW-23 and OW-29, a two-well cluster was installed at each location. Each cluster consists of two wells (A and B), screened in the shallow and deeper unconsolidated deposits, respectively. Well clusters were installed at locations where the saturated thickness of the aquifer is greater than thirty feet and the screens are located in the most permeable portion of the aquifer. The actual depth of the screened zones was selected in the field by a hydrogeologist from Roux Associates and was biased toward zones of high permeability (based upon visual determination of the sediments) or toward zones that exhibited high concentrations of VOCs (based upon screening the sediments with a PID). The PID screening data are included on the logs in Appendix B.

D.L. Maher was subcontracted to drill and install the monitoring wells. The wells were installed with the use of either a hollow stem auger rig or dual rotary rig (Barber Rig). The Barber Rig was used at locations where it was difficult to drill with augers due to the presence of glacial till. The use of the dual rotary rig method is discussed in PDI Work Plan Addendum 2. As with the ATB borings it was sometimes necessary to add City of Woburn water to the borehole to prevent the heaving of sands inside the hollow stem augers.

As stated in PDI Addendum 2, monitoring wells at three of the locations (OW-26, OW-29 and OW-33) were installed without collecting samples of the unconsolidated deposits because data were collected during the ATB boring subtask (Subtask 1) adjacent to these wells. Soil data were collected at the remaining well cluster locations in the same manner as the ATB boring program. Split-spoon samples were collected at five-foot intervals and approximately three feet of bedrock was cored. Split- spoon samples were collected at ten-foot intervals when using the Barber Rig due to the 10 ft drilling rods required for use with the rig. The geologic logs are provided in Appendix B.

The monitoring wells were constructed of four-inch diameter Schedule 40 PVC 0.01-inch slot factory slotted screen, and four-inch diameter Schedule 40 PVC flush coupled blank casing. A gravel pack (number 20 Ottawa sand) was placed around the screen and up to a minimum of two feet above the screen. Bentonite grout was then placed in the annular space by the tremie method, to approximately two feet below land surface. A flush mounted meter box or a protective steel casing was placed over the well. A measuring point was marked on each well and a waterproof cap and locking lid were installed. Each well is marked with its designated number on the protective casing and PVC cap. A well construction diagram for each well is provided in Appendix D. Table 2 summarizes the monitoring well construction data.

The wells were surveyed from the measuring points located on the PVC casing by SAIC Engineering, Inc. The horizontal and vertical coordinates were surveyed to an accuracy of 0.1 foot and 0.01 foot, respectively. Water levels were measured on nine separate occasions April 10, 1990; May 24, 1990; May 30, 1990; June 20, 1990; June 26, 1990; July 17, 1990, August 13, 1990, September 26, 1990 and December 7, 1990. A water-table elevation map was generated using the survey data and the water-levels measured on December 7, 1990 (Figure 1). The December 7, 1990 data are considered representative of the water level data collected within the study area.

After the wells were installed, well development was accomplished by pumping the wells with a centrifugal pump or submersible pump. The wells were developed until the water was clear and sediment free. In addition, the wells were pumped until an equivalent amount of water, introduced during drilling the well, was removed.

Dedicated polypropylene hose was used during well development and purging. The hose was disposed of after each use. The development water was collected in a 250-gallon capacity storage tank mounted on a pick-up truck and transported back to the decontamination pad and pumped into the decontamination pad tanks for temporary storage.

All soil cuttings from the drilling operations were transported back to the decontamination pad and unloaded to an on-site designated area.

Health and safety monitoring was conducted in the same manner as the ATB boring program. All equipment that came in contact with the borehole was washed with high pressure hot water prior to moving to the next location in accordance with the Roux Associates SOP provided in the Field Sampling Plan (FSP).

2.3 Sampling of Phase 1 Monitoring Wells (Subtask 3)

Phase 1 Monitoring Wells OW-23 through OW-27, OW-29 through OW-33 and the City of Woburn water, at the decontamination pad, were sampled from June 4 through June 6, 1990. Ground-water samples from wells OW-24A, OW-24B, OW-31 and OW-33A were split with NUS, Wilmington, Massachusetts, the USEPA on-site representative for the Industri-Plex Site. Monitoring Wells OW-31 and OW-32 (located at the base of the West and East Hide Piles respectively), installed by Golder Associates Inc., were also sampled.

The City of Woburn public supply water was used as potable water during drilling operations and to clean all field equipment. To ensure that the ground-water quality data were not biased by the use of this water, a water sample taken from a spigot at the decontamination pad was submitted for analysis. This sample data (labeled "PUB") is included with the PDI ground-water quality data (Table 4). The ground-water samples were collected with a Teflon bailer and kept cool during delivery to the laboratory. The pH, temperature, specific conductivity, and depth to water were measured at the time of sample collection. These data are provided on the Well Sampling Forms in Appendix E.

The samples were delivered to Enseco-ERCO (ERCO) Laboratory of Cambridge, Massachusetts, a Contract Laboratory Program (CLP) laboratory for analysis. Samples were analyzed for TCL VOCs, semi-volatile organic compounds, pesticides and polychlorinated

biphenyls (PCBs), and TAL dissolved metals and total metals by CLP-RAS methods. Chain of Custody was maintained for the collected samples and documented on the Chain of Custody Forms (Appendix F).

Prior to sampling, the total depth and depth to water were measured in each monitoring well following the PDI Work Plan SOP (Appendix G). From these data the volume of water in each well was calculated. Each of the wells were subsequently purged using a centrifugal pump and dedicated 3/4-inch polypropylene hose to evacuate a minimum of three volumes of water from the well. Wells OW-31 and OW-32 were purged with a precleaned Teflon bailer due to the complications in transporting heavy equipment to the wells which are located on soft ground.

All purged water was stored in a 250-gallon storage tank mounted on a pick-up truck. The water was then transported to the decontamination pad and transferred into the on-site storage tanks.

Each bottle was prelabeled with a unique identification number. Samples collected for dissolved metals analysis were field filtered upon collection using a prefilter and 0.45 micrometer (micron) filter and peristaltic pump with disposable silicon tubing. The field sample was filtered into a laboratory supplied bottle and preserved with nitric acid.

Quality Assurance/Quality Control samples were collected as part of the well sampling program. Three trip blanks (one for each sampling day), two blind duplicate samples (OW-34 and OW-35), two field (equipment) blanks, a matrix spike, and a matrix spike duplicate sample were collected.

2.4 Installation of Phase 2 Monitoring Wells (Subtask 4)

Based upon an evaluation of the water-quality data obtained during the GSIP and PDI Phase 1 well sampling programs, the locations of additional monitoring wells (Phase 2) were selected to refine the extent of the benzene and toluene "hot spots".

The rationale for the selection of the locations of the Phase 2 monitoring wells was provided in the PDI Plume Delineation Phase 1 Interim Report.

Seven wells (OW-36 through OW-42) were installed in accordance with the PDI Work Plan (Plate 1). The saturated thickness of the aquifer at each well location was less than thirty feet thick and, in accordance with the PDI Work Plan, only one well was installed at these locations.

D.L. Maher drilling company was subcontracted to install the Phase 2 monitoring wells. As with the Phase 1 well program the borehole was advanced to bedrock and a minimum of three feet of bedrock was cored at each location, with the exception of monitoring wells OW-39 and OW-42. The borehole OW-39 was advanced until auger refusal was reached (28.0 feet below land surface) and OW-42 was advanced to 34.0 feet below land surface (Appendix B).

Although a monitoring well was installed at OW-39 and OW-42, the bedrock was not cored due to the health and safety considerations. Continued drilling would have required upgrading to Level B protection. At OW-39 and OW-42 methane gas and low concentrations (less than 10 ppm) of hydrogen sulfide were encountered in the borehole and in the area immediately outside of the borehole. In the borehole annular space, measurements recorded on the Gastech GX-82 gas recorder exceeded the lower explosive limit (LEL). An explosive environment existed above ground surface at the top of the open augers due to the release of methane gas.

The screen interval for each well location was selected in the field by a Roux Associates, Inc. hydrogeologist according to the criteria specified in the PDI Work Plan.

The Phase 2 monitoring wells were constructed of four inch diameter schedule 40 PVC with 0.01 inch slot size screen and four inch diameter schedule 40 PVC flush threaded blank casing. The monitoring wells were constructed in the same manner as the PDI Phase 1 wells. A well construction diagram for each well is provided in Appendix D.

The Phase 2 monitoring wells were surveyed at a measuring point located on the PVC casing by SAIC Engineering. The horizontal and vertical coordinates were surveyed to an accuracy of 0.1 foot and 0.01 foot, respectively. A complete round of water levels from all the wells in the Study Area was performed on December 7, 1990. A water table map was

generated using the water levels measured on December 7, 1990 to determine ground-water flow patterns (Figure 1).

2.5 Sampling of Phase 2 Monitoring Wells (Subtask 5)

The following PDI Phase 2 wells, selected PDI Phase I wells and RI monitoring wells were sampled after the Phase 2 wells were developed.

OW-9	OW-19A	OW-38
OW-10	OW-21	OW-39
OW-11	OW-22	OW-40
OW-12	OW-24A	OW-41
OW-13	OW-24B	OW-42
OW-16	OW-28	
OW-17	OW-31	
OW-18	OW-32	
OW-18A	OW-36	
OW-19	OW-37	

A total of 25 wells at 23 locations were sampled and the ground water samples were analyzed for TCL VOCs, and TAL dissolved and total metals. Ground-water samples were collected on October 15, 1990 through October 18, 1990. The VOC sample collected from OW-38 was accidently lost in the laboratory, so a new VOC was collected from OW-38 on November 7, 1990. The water samples were analyzed following CLP protocol by the Radian Corporation of Sacramento, California. Chain of Custody documentation for the samples is provided in Appendix E.

Prior to sampling, the depth to water for each well was measured. From these data the volume of water needed to be purged prior to sampling was calculated. The sampling program was performed following PDI Work Plan SOP (Appendix G). Each well was purged with polypropylene hose and centrifugal pump or a clean teflon bailer, with the exception of OW-9. OW-9 was purged with a submersible pump and a polypropylene hose. All purge water was transported to the decontamination pad and transferred into the on-site storage tanks.

All samples were collected in bottles prelabeled with a unique identification sample number. The samples collected for VOC analysis were collected in 40 milliliter (ml) glass vials preserved with hydrochloric acid, with the exception of OW-16, OW-31 and OW-38 (Appendix E) which were collected unpreserved because the ground water in these samples reacted with the hydrochloric acid.

Samples collected for total metals were placed in one liter plastic bottles preserved with nitric acid and kept cool. Samples collected for dissolved metals were filtered in the field with a prefilter and 0.45 micron filter and peristaltic pump. The filtered sample was then placed into a one liter bottle preserved with nitric acid.

Ground-water samples collected during the Phase 2 Well Sampling Program were not analyzed for pesticide/PCBs, or semi-volatile compounds as was done for the Phase 1 sampling. There were no pesticide/PCBs detected in ground water and only low concentrations of semi-volatile compounds detected on-site during the Phase 1 sampling program (Table 4).

In addition, Quality Assurance/Quality Control samples were collected. Four trip blanks (one for each day), two blind duplicate samples (OW-34 and OW-35), two field blanks, a matrix spike and a matrix spike duplicate were collected. Blind duplicates samples OW-34 and OW-35 are duplicate samples of wells OW-39 and OW-38 respectively.

As with the Phase 1 analytical data, data validation was performed by Golder Associates, Inc. Data validation documentation is provided in Appendix H.

3.0 RESULTS OF THE PHASE 1 AND PHASE 2 INVESTIGATIONS

The subsurface geology, extent of the aquifer and ground-water flow was determined through an evaluation of the RI, PDI (Phase 1 and Phase 2) and GSIP data. The subsurface geologic conditions are depicted in Plates 2 through 10. These data will be used to assist with the design of the extraction and recharge system that will be installed within the Study Area.

3.1 Geology

The Fresh Pond Buried Valley, which formed prior to the last period of glaciation of the region, has been traced from Wilmington to Boston and coincides with the course of the Aberjona River. Its limits are based upon the results of a study by the United States Geological Survey (USGS) of seismic traverse records and borehole data (Chute, 1959). The geometry of the buried valley is depicted in geologic cross sections within the Study Area (Plates 2 and 3). In the southern portion of the Industri-Plex Site Study Area it measures approximately 2 miles across, and in places exceeds 100 feet in depth. Glacial deposits form stratified drift sequences of unconsolidated sediments within the entire buried valley and thin discontinuous till layers cover highlands in and around the valley. The presence of an inner gorge incised into the floor of an older broader valley, suggests at least one significant uplift of the land or lowering of sea level during the formation of the Fresh Pond Buried Valley. Uplift may have resulted from isostatic rebound after early glaciers retreated from the area.

Deposition began within the Fresh Pond Buried Valley during Pleistocene time with the advance of glaciers and deposition of ground moraines. Thrusting in sand and gravel beds within the buried valley indicate that the direction of glacial movement was towards S-30°-E (Chute, 1959). Till (Qgm) comprised of clay, sand and gravel was deposited over and around remnants of glacial ice. As the next ice front advanced, outwash of clay with some interbedded sand and gravel was deposited in ponded water or marine embayments. This sequence (Qo2) is interpreted to represent lake deposits and associated stream deposits. The retreat of this ice sheet was the source of the outwash deposits (Qo3) which are interpreted as deposited mainly by braided streams which deeply incised the earlier broader valley. The final retreat of the glaciers produced the last outwash deposition (Qo4) which is thought to represent lake or pond sediments and alluvial fans. Late glacial streams

eroded the valley where present streams, such as the Aberjona River, now flow. Since the last of the glacial ice melted some clay, silt, sand, gravel and peat (Qsd) were deposited in lows occupied by streams, ponds and marshes.

The bedrock is comprised of igneous units (granodiorite and gabbro) which have undergone low grade metamorphism and several periods of deformation. The unit is known locally as the Salem Gabbro-Diorite (Barosh, et al. 1977). In many locations the bedrock encountered during drilling (upper three feet) was fractured, becoming more competent with depth. The fractures in the upper portion of the bedrock were filled with either calcite (effectively sealing the fractures) or with sand. The presence of filled fractures is consistent with the observation that the yields of the bedrock wells are generally less than 3 gallons per minute (Stauffer Chemical Company, 1983).

The unconsolidated deposits underlying the Site are comprised of Pleistocene and Holocene age deposits. The Pleistocene deposits consist of glacial stratified drift consisting of mostly well to poorly sorted sand and gravel with interbedded boulders, cobbles, silt and clay. The more recent Holocene deposits are comprised of stream swamp deposits which consist of sand and silt, with interbedded gravel, organic matter, silt and peat. Based on the geologic boring data collected in the Study Area and published lithologic maps from Chute (1959) a surficial geology map was produced of the Study Area (Plate 4). Five depositional cycles have been identified in the surficial and subsurface geology in the Study Area. These cycles from oldest to youngest are:

1) Glacial (Qgm) lodgement till deposited at the base of the glacier;
2) Lake and stream deposits (Qo2) occurring in ponded water or marine embayments and associated stream deposits;
3) Outwash deposits (Qo3) from braided streams in front of the glacier during the retreat of the glaciers;
4) Alluvial and pond or lake deposits (Qo4) occurred as the glaciers continued to retreat and streams eroded the valley and:
5) Recent (Holocene) stream and swamp deposits (Qsd) occurring since the glaciers melted.

These cycles are shown in a surficial geology map (Plate 4) and the geologic cross sections of the Study Area (Plate 3).

3.1.1 Aquifer Thickness and Boundaries

The aquifer thickness and boundaries of the unconsolidated aquifer was determined through an evaluation of the RI, PDI (Phases 1 and 2), GSIP and data developed by Goldberg-Zoino Associates, Inc. (GZA) of Upper Newton Falls, Massachusetts. Proprietary data regarding the thickness of the aquifer was summarized by GZA in the maps provided in Appendix J. The GZA data were considered in the development of the isopachs of the unconsolidated deposits (total thickness and saturated thickness) and the elevation of the bedrock surface (Plates 5, 6, and 7).

Based upon the field mapping of the outcrops of the crystalline bedrock and the evaluation of soil boring data, the crystalline bedrock is shallow (subcrops) at the northern portion of the Site (less than 2 feet below grade). Bedrock outcrops occur to the south of the Site, both west of the Massachusetts Bay Transportation Authority (MBTA) tracks and east of Commerce Way (Plate 5). These two outcrop areas located south of the Site are separated by a buried valley. This buried valley extends north from OW-16, and south to OW-27. A minor buried valley is also present extending from OW-6 south to OW-29. These buried valleys deepen to the South.

The presence of this bedrock valley results in the unconsolidated deposits and, in turn, the water table aquifer, being thinner to the north (on-site) and thicker to the south towards Mishawum Road (Plates 5 and 6).

North of the Boston Edison Right-of-Way Number 9 the water table aquifer is relatively thin to absent, ranging in thickness from 0 to 42 feet (Plate 6). The aquifer is also relatively thin along the western and eastern boundaries of the Study Area. However, the thickness generally increases towards the south, coincident with the axis of the buried valley, as shown in cross section E-E' (Plate 10). The thickest portion of the aquifer is located immediately south and east of Hall's Brook holding area near Wells OW-20 and OW-27B.

3.1.2 Hydraulic Conductivity

Ten soil samples from the Site were submitted to Golder Associates Inc. for grain size distribution analyses during the Phase 1 program. The purpose of these analyses was to estimate hydraulic conductivities of the unconsolidated deposits and, in turn, compare these data to the hydraulic conductivities to be developed during the aquifer testing (Task GW-2). In this manner, the areal variability of hydraulic conductivities could be determined. Hydraulic conductivities were to be estimated from the grain size distribution data (Appendix C) using a graphical method developed by Rose and Smith (1957) and modified by Sheahan (1965). This method was designed to estimate hydraulic conductivities of coarse grained (sand size or larger) deposits. A requirement of this method is that the effective grain size be larger than 4×10^{-3} inches (an approximately 140 sieve size [Appendix C]). The effective grain size is determined by the intersection of the grain size curve with the 10 percent passing (90 percent retained) of the grain size graph. None of the grain size distribution analyses yielded an effective grain size greater than 4×10^{-3} inches (the 140 sieve size). Therefore, hydraulic conductivities could not be determined. Most effective grain sizes were 200 sieve size or smaller, thereby falling into the silt and clay range.

A summary of the hydraulic conductivities of the unconsolidated deposits was presented in the report titled "Hydrogeologic Characterization for the Extraction/Recharge System, Interim Final Report-2" (Roux Associates, Inc., December 14, 1990). In summary, the unconsolidated deposits have hydraulic conductivities of 280 to 2,600 gallons per day per square foot (gpd/ft^2).

3.2 Ground-Water Flow

Ground-flow patterns were determined from an evaluation of the water level data obtained from April 10, 1990 to December 7, 1990. These water level data were used to determine lateral flow directions and vertical gradients.

3.2.1 Lateral Ground-Water Flow

Water elevations were measured in all the monitoring wells on nine occasions (Table 3). Water-level data were contoured to evaluate ground-water flow conditions at the Site. All nine sets of contoured water-level data depicted similar flow conditions. A representative water-table elevation map (December 7, 1990) is provided as Figure 1.

The depth to ground-water ranges from approximately 4 to 19 feet below land surface. Ground-water flow in the water table aquifer is generally to the south (Figure 1) and is strongly controlled by the orientation of the buried valley. In the southern half of the Study Area, groundwater flows towards the axis of the aquifer (buried valley) and then south (Figure 1). Hydraulic gradients are approximately 0.002 to 0.13 ft/ft.

3.2.2 Vertical Flow

A comparison of water elevations in clustered monitoring wells within the unconsolidated deposits at the Site show hydraulic head differences of 0.64 ft/ft or less between the shallow and deeper portions of the water-table aquifer, with the exception of well cluster OW-27. These very low gradients indicate that there is no tendency for upward or downward flow within the unconsolidated deposit aquifer.

Well cluster 27 (OW-27A and OW-27B) shows a measurable difference in heads between the shallow and deeper unconsolidated deposits. Head differences measured during the three water-level rounds range from 2.14 feet (August 13, 1990 round) and 1.00 feet (July 17, 1990 round), with the shallower well exhibiting a somewhat higher water-level elevation on all occasions. Based upon these data, a downward flow gradient of between 0.040 foot per foot (ft/ft) and 0.019 ft/ft is present at this location. The probable reason for the moderate downward gradient at this location is because OW-27B is screened within a lower hydraulic conductivity, sandy to silty clay lens (Plate 3).

3.3 Ground-Water Quality

The ground-water quality data from the PDI Phase 1 and Phase 2 sampling are summarized in Table 4. The GSIP ground-water quality data are provided in Appendix I. The ground-water analytical results were validated by Golder Associates Inc. (Appendix H). Results validated as unusable (R) were not used. A summary of the ground-water quality data from both the PDI Phase 1 and GSIP sampling programs are shown in Figure 2, Plates 11 and 13. PDI Phase 2 ground-water quality data are summarized in Figure 3, Plates 12 and 14.

3.3.1 Extent of Benzene and Toluene

Benzene and toluene concentrations detected during the Phase 1 and GSIP ground-water sampling are shown in Figure 2. Benzene was detected in five monitoring wells (four on-site

and one off-site). Benzene was detected in two discrete areas: 1) near the East and West Hide Piles (OW-31 and OW-32); and 2) at monitoring wells OW-17, (2,000 ppb), OW-12 (46 ppb) and OW-13 (4 ppb). The highest concentrations were detected in monitoring wells OW-31 (48,000 ppb) located at the base of the West Hide Pile, and OW-17 (2,000 ppb) located on the northeastern side of Halls Brook Holding Area.

During the Phase 2 Well Sampling Program, benzene was detected in eight monitoring wells (seven on-site and one off-site). Benzene was detected in the same two discrete "hot spot" areas during the Phase 2 program. These areas are downgradient of OW-16 and near the East and West hide piles. The highest concentration was detected in well OW-31 (36,000 ppb) during the Phase 2 program.

Toluene was detected in Phase 1 and GSIP ground-water samples in 12 monitoring wells (five on-site and seven off-site wells) in the Study Area. Detected concentrations ranged from 29,000 ppb (OW-16) to 1 ppb (OW-30B, OW-33B, OW-24B, and OW-22). It should be noted that toluene was detected in wells OW-23, OW-24B, OW-27B, OW-30B OW-32, and OW-33B at concentrations below the CLP Contract Required Quantitation Limit of 5 ppb; therefore, these concentrations are considered estimated (Table 4). Toluene was also detected south of Mishawum Road at well OW-27B at a concentration of 2 ppb.

In the Phase 2 sampling round, toluene was detected in seven wells (six on-site and one off-site). The distribution was similar to the PDI Phase 1 and GSIP sampling results. Toluene was detected in the vicinity and downgradient (south) of OW-16. OW-16 contained the highest concentration of toluene (32,000 ppb).

These benzene/toluene "hot spots" are located on Site (OW-31 and OW-16 area) and 250 feet south of the Site (OW-17). Monitoring well OW-31 is located at the eastern flank of the West Hide Pile. This well contained benzene, at a concentration of 48,000 ppb, as well as semi-volatile organic compounds (Plate 9). Monitoring well OW-16 is located on Site and adjacent to the East Central Hide Pile and contains the highest detected concentration of toluene (29,000 ppb). Monitoring well OW-17 is located off Site and adjacent to the Hall's Brook Holding Area. Ground-water at this location contains benzene at a concentration of 2,000 ppb. Chlorinated hydrocarbons were also detected at this location.

Based upon the Phase 1 PDI and GSIP data, "hot spots" have not migrated as far downgradient as the OW-19 well cluster.

To assist in the evaluation of the extent of the benzene and toluene "hot spots", a comparison was made between the concentrations and extent of benzene and toluene developed by the PDI/GSIP with that developed during the RI and the numerical modeling of benzene (Roux, 1988). During the 1983 and 1984 RI ground-water sampling, benzene and toluene were detected upgradient of Monitoring Well OW-19 at wells OW-12, OW-14, OW-16 and OW-17. In addition, sixty-one temporary monitoring wells were sampled for benzene and toluene. This analytical data indicated benzene was detected in an area bounded to the north by Atlantic Avenue and the south by OW-17 (Roux 1988, Figure 3; PDI Work Plan, Appendix B).

The results of the numerical modeling of benzene indicated that the predicted (simulated) extent of benzene after 5 years (1988) could be as far downgradient as OW-19. The predicted extent after 10 years (1993) was as far downgradient as OW-20 (PDI Work Plan, Appendix B).

The extent of benzene and toluene is similar (excluding the OW-31 area) to that determined during the RI program (1983 and 1984). The numerical modeling predicted that benzene could be as far downgradient as OW-19 after 5 years. However, benzene was not detected at OW-19 after a period greater than 5 years (1984 to 1990).

3.3.2 Types and Extent of Other Hazardous Substances

Organics - During the PDI Phase 1 and GSIP Sampling, the following TCL organic compounds (excluding benzene and toluene) were detected.

Compound	Compound Type	Location Detected	Greatest Concentration Detected (in ppb)/ (Monitoring Well)
ethylbenzene	VOC	on Site	1/(OW-32, OW-41)
2-methylphenol	semi volatile	on Site	9/(OW-31)
4-methylphenol	semi volatile	on Site	41/(OW-31)
benzoic acid	semi volatile	on Site	62/(OW-31)
n-nitrosodiphenylamine	semi volatile	on Site	3/(OW-10, OW-11 and OW-12)
1,3 dichlorobenzene	semi volatile	on Site/ off Site	4/(OW-30A)
total xylenes	VOC	on Site/ off Site	3/(OW-20)
bis(2-ethylhexyl)phthalate	semi volatile	on Site/ off Site	64/(OW-16)
phenol	semi volatile	on Site/ off Site	430/(OW-27A)
methylene chloride	VOC	off Site	23/(OW-27A)
chloroethane	VOC	off Site	3/(OW-1)
chlorobenzene	VOC	off Site	25/(OW-1)
trichloroethene	VOC	off Site	110/(OW-26B)
1,1,1-trichloroethane	VOC	off Site	26/(OW-26B)
1,1-dichloroethene	VOC	off Site	8/(OW-26B)
1,1-dichloroethane	VOC	off Site	5/(OW-20)
1,2-dichloroethene	VOC	off Site	3/(OW-26B)
benzyl alcohol	semi volatile	off Site	4/(OW-1)
acenaphthene	semi volatile	off Site	3/(OW-26A)
diethylphthalate	semi volatile	off Site	3/(OW-27B)

The above suite of constituents are similar to those detected during the RI study (Stauffer Chemical Company, 1983).

Organic compounds exhibiting the greatest concentrations (above 100 ppb) included trichloroethene (110 ppb at OW-26B) and phenol (430 ppb at OW-27A). All other organic compounds were detected at concentrations less than 100 ppb.

The distribution of these organic compounds (Plates 11 and 12) indicate that only three constituents (bis(2-ethylhexyl)phthalate, xylenes and phenol) were detected in both on-site and off-site ground water. Moreover, most of the off-site constituents are chlorinated compounds, none of which were detected on Site.

During the Phase 2 program, the following volatile organic compounds (excluding benzene and toluene) were detected in the monitoring wells: acetone, chloroform, 1,2-dichloroethane, ethylbenzene, trichlorethene and total xylenes. These Phase 2 data are consistent with the results of the Phase 1 analyses. These constituents have been detected in previous sampling programs. The highest concentration was acetone, detected in Well OW-39 (298 ppb). The other constituents were all detected at concentrations less than 40 ppb.

The RI data indicated that, in general, detected concentrations of total organic priority pollutant compounds ranged from 14 ppb to 53 ppb along the northern edge of the Site and from 10 ppb to 17 ppb along the southern edge of the Site. The Phase 1 PDI and GSIP data indicate that the detected total concentrations of TCL organics (excluding benzene and toluene) ranged from 5 ppb to 302 ppb along the northern edge of the Site to 6 ppb to 7 ppb along the southern edge of the Site.

Metals - The concentrations of dissolved arsenic, chromium and lead detected are shown in Plates 13 and 14. The mobility of these metals (and mercury) in the ground water is being evaluated as part of the GSIP. The distribution of these dissolved metals indicates that their concentrations are higher on Site.

Two discrete plumes have been identified (Plate 14) based upon the results of the PDI Phase 1 and Phase 2, and GSIP analyses. The first plume contains only arsenic and extends from the West Hide Pile to OW-38 in the direction of ground-water flow. Benzene is not migrating to the southwest away from the West Hide Pile as indicated by the concentrations

of benzene in monitoring wells OW-31 (36,000 ppb), OW-36 (<5 ppb), OW-37 (<5 ppb), and OW-38 (<5 ppb).

It appears that benzene has not migrated away from the hide pile due to the presence of a ground-water mound beneath the West Hide Pile. The presence of this mound was identified by Golder Associates Inc. during the performance of the PDI Task S-2 Stability of Hide Piles Task (Golder Associates Inc., September 1990). The presence of this mound coupled with the absence of benzene in wells OW-36, OW-37 and OW-38 suggests that benzene is limited to the northeastern portion of the hide pile. If benzene was present throughout the hide pile the benzene should have been detected in these other downgradient monitoring wells.

In contrast, arsenic was detected in monitoring wells OW-36, OW-37 and OW-38 downgradient of the West Hide Pile. These concentrations indicate that a discrete plume of arsenic has migrated from the hide pile with ground-water flow towards OW-14 and OW-40. Based upon the arsenic concentrations detected in OW-14 (7.5 ppb during the GSIP March and April 1990 sampling) and OW-40 (<3 ppb during the PDI October 1990 sampling) the arsenic plume associated with the West Hide Pile has only migrated to an area between OW-38 and OW-14 (Plate 14).

A discrete plume of chromium is also associated with the West Hide Pile based upon the concentrations of chromium in OW-36 (121 ppb), and OW-37 (449 ppb). Although the chromium plume has the same configuration as the arsenic plume it does not extend as far downgradient as OW-38 (15.6 ppb).

The second plume includes arsenic, benzene and toluene and extends from the East-Central Hide Pile to OW-17. The plume follows the orientation of ground-water flow (Figure 1) as it is channeled down the buried valley (Plate 7). This plume is defined by arsenic concentrations in monitoring wells OW-16 (2,300 ppb), OW-39 (29.3 ppb), OW-13 (25.2 ppb), OW-41 (34.4 ppb), OW-12 (556 ppb), OW-42 (500 ppb), and OW-17 (164 ppb) (Plate 14). Benzene/toluene concentrations are detected in a similar pattern as the arsenic in monitoring wells OW-16 (<1000 ppb/32,000 ppb), OW-39 (<10 ppb/140 ppb), OW-13

(14 ppb/<5 ppb), OW-41 (27 ppb/9 ppb), OW-12 (300 ppb/180 ppb), OW-42 (14 ppb/82 ppb) and OW-17 (180 ppb/11 ppb) (Figure 3).

Chromium is also associated with the plume downgradient of the East Central Hide Pile based upon the concentration of chromium in OW-16 (252 ppb).

Other TCL Analyses

No PCBs or pesticides were detected in PDI and GSIP ground-water samples.

4.0 FINDINGS AND CONCLUSIONS

1. The thickness and boundaries of the unconsolidated deposits aquifer have been adequately defined to support the design of the interim ground-water remedy. No additional delineation of the unconsolidated deposits is required.

2. Water-level data are adequate to characterize current ground-water flow conditions in the unconsolidated deposits so that the interim ground-water remedy can be designed.

3. Vertical gradients are low, ranging from slightly upward to slightly downward within the unconsolidated deposits.

4. Most of the off-site constituents are chlorinated compounds, none of which were detected on Site. This suggests that downgradient/off-Site sources of these compounds are present.

5. Inorganic hazardous substances (lead and chrome) were detected off Site but do not form a distinct plume.

6. Two discrete plumes were identified based upon the results of the PDI Phase 1, Phase 2, and GSIP analyses. The first plume containing arsenic extends from the West Hide Pile to OW-38 in the direction of ground-water flow. The second plume containing arsenic/benzene/toluene extends from the East-Central Hide Pile to OW-17. The extent of these plumes has been defined in sufficient detail to support the design of the interim ground-water remedy.

Respectfully Submitted,
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TABLES

Table 1. Summary of Aquifer Thickness Boring Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Soil Boring Designation	Date Drilled	Total Depth (ft below land surface)	Measuring Point Elevation (1) (ft above mean sea level)	Depth to Bedrock (ft below land surface)	Elevation of Bedrock (ft above mean sea level)	Depth to Till (ft below land surface)	Elevation of Till (ft above mean sea level)
ATB-1	2/28/90	8.0	64.5	--	--	--	--
ATB-2	2/27/90	54.0	64.5	41.5	23.0	--	--
ATB-3	2/28/90	50.0	61.7	46.0	15.7	--	--
ATB-4	3/5/90	49.5	57.2	45.0	12.2	--	--
ATB-5	3/7/90	10.0	74.1	7.0	67.1	--	--
ATB-6	3/7/90	50.0	65.7	40.25	25.45	--	--
ATB-7	3/12/90	14.0	68.0	9.5	58.5	--	--
ATB-8	3/12/90	53.5	84.4	46.0	38.4	15.0	69.4
ATB-9	3/19/90	43.5	62.7	39.0	23.7	30.5	32.2
ATB-10	3/20/90	73.5	62.0	69.5	-7.5	38.5	23.5
ATB-11	3/20/90	46.5	62.6	39.0	23.6	25.0	37.6
ATB-12	3/21/90	11.0	120.7	7.0	113.7	6.0	114.7
ATB-13	4/4/90	98.5	54.0	92.5	-38.5	--	--
ATB-14	4/9/90	47.3	54.1	43.0	11.1	--	--
ATB-15	4/11/90	116.0	54.2	108.0	-53.8	--	--
ATB-16	4/16/90	74.0	53.7	68.0	-14.3	65.0	-11.3
ATB-17	5/3/90	71.0	63.0	68.0	-5.0	--	--
ATB-18	4/24/90	21.0	72.5	17.0	55.5	15.0	57.5
ATB-19	6/27/90	21.0	93.5	17.0	76.5	--	--
ATB-20	6/28/90	40.5	80.1	36.0	44.1	35.0	45.1
ATB-21	7/2/90	19.0	94.2	16.0	78.2	--	--

Notes:

(1) Measuring point at land surface.

-- Not encountered.

Table 2. Well Construction Data for the Industri-Plex Site Remedial Trust, Woburn, Massachusetts.

Well Number		Well Diameter/ Well Material	Total Depth of Well (ft below land surface)	Elevation of Measuring Point (ft above mean sea level)	Screened Interval* (ft below land surface)	Formation
OW-1	RI/FS	6" steel	108.03	80.32	24.03 - 108.03	bedrock
OW-1A	RI/FS	4" PVC	24.32	79.72	4.32 - 24.32	overburden
OW-4	RI/FS	6" steel	42.76	71.54	22.76 - 42.76	bedrock
OW-6	RI/FS	4" PVC	16.85	62.67	6.85 - 16.85	overburden
OW-7	RI/FS	4" PVC	31.49	57.88	1.49 - 31.49	overburden
OW-9	RI/FS	6" steel	127.31	68.88	32.31 - 127.31	bedrock
OW-10	RI/FS	4" PVC	31.42	64.63	1.42 - 31.42	overburden
OW-11	RI/FS	4" PVC	41.11	71.22	1.11 - 41.11	overburden
OW-12	RI/FS	4" PVC	50.67	63.74	10.67 - 50.67	overburden
OW-13	RI/FS	4" PVC	32.15	64.99	7.15 - 32.15	overburden
OW-14	RI/FS	4" PVC	47.39	65.54	2.39 - 47.39	overburden
OW-15	RI/FS	6" steel	25.82	64.60	5.82 - 25.82	overburden
OW-16	RI/FS	4" PVC	35.83	67.29	15.83 - 35.83	overburden
OW-17	RI/FS	4" PVC	25.27	57.86	5.27 - 25.27	overburden
OW-18	RI/FS	6" PVC	55.15	62.76	15.15 - 55.15	overburden
OW-18A	RI/FS	4" PVC	15.20	62.08	5.20 - 15.20	overburden
OW-19	RI/FS	6" PVC	67.00	55.97	37.00 - 67.00	overburden
OW-19A	RI/FS	4" PVC	38.60	55.87	3.60 - 38.60	overburden
OW-20	RI/FS	4" PVC	90.72	57.33	40.72 - 90.72	overburden
OW-21	GSIP	4" PVC	15.04	76.28	5.04 - 15.04	overburden
OW-22	GSIP	2" PVC	13.52	81.76	3.52 - 13.52	overburden
OW-23	PDI	4" PVC	27.00	68.54	16.85 - 27.00	overburden
OW-24A	PDI	4" PVC	24.97	57.47	14.82 - 24.97	overburden
OW-24B	PDI	4" PVC	59.65	57.26	49.50 - 59.65	overburden
OW-25A	PDI	4" PVC	23.00	66.00	12.85 - 23.00	overburden
OW-25B	PDI	4" PVC	39.42	65.34	29.22 - 39.42	overburden

* Bedrock wells are finished as unscreened boreholes.
GSIP Well installed as part of GSIP program.
PDI Well installed as part of PDI program.
RI/FS Well installed as part of RI/FS program.

Table 2. Well Construction Data for the Industri-Plex Site Remedial Trust, Woburn, Massachusetts.

Well Number		Well Diameter/ Well Material	Total Depth of Well (ft below land surface)	Elevation of Measuring Point (ft above mean sea level)	Screened Interval* (ft below land surface)	Formation
OW-26A	PDI	4" PVC	23.20	64.15	13.05 - 23.20	overburden
OW-26B	PDI	4" PVC	41.46	63.80	31.31 - 41.46	overburden
OW-27A	PDI	4" PVC	40.32	70.84	30.17 - 40.32	overburden
OW-27B	PDI	4" PVC	94.57	70.52	84.42 - 94.57	overburden
OW-28	GSIP	4" PVC	8.92	77.195	3.92 - 8.92	overburden
OW-29	PDI	4" PVC	25.70	61.17	15.55 - 25.70	overburden
OW-30A	PDI	4" PVC	18.72	65.90	8.57 - 18.72	overburden
OW-30B	PDI	4" PVC	57.83	65.60	47.68 - 57.83	overburden
OW-31	PDI	4" PVC	14.00	74.35	8.40 - 13.40	overburden
OW-32	PDI	4" PVC	8.00	75.47	5.50 - 7.70	overburden
OW-33A	PDI	4" PVC	44.40	56.83	34.20 - 44.40	overburden
OW-33B	PDI	4" PVC	84.01	56.66	73.86 - 84.01	overburden
OW-36	PDI	4" PVC	12.9	74.86	2.9 - 12.9	overburden
OW-37	PDI	4" PVC	15.72	72.60	5.52 - 15.72	overburden
OW-38	PDI	4" PVC	15.5	71.40	5.3 - 15.5	overburden
OW-39	PDI	4" PVC	15.1	74.14	5.1 - 15.1	overburden
OW-40	PDI	4" PVC	17.0	71.64	6.8 - 17.0	overburden
OW-41	PDI	4" PVC	16.0	66.95	5.8 - 16.0	overburden
OW-42	PDI	4" PVC	34.0	69.80	23.8 - 34.0	overburden

* Bedrock wells are finished as unscreened boreholes.
GSIP Well installed as part of GSIP program.
PDI Well installed as part of PDI program.
RI/FS Well installed as part of RI/FS program.

Table 3. Ground-Water Elevation Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Well Number	Elevation of Measuring Point (ft above mean sea level)	April 10, 1990		May 24, 1990		May 30, 1990	
		Depth to Water from Measuring Point (ft below measuring point)	Elevation of Piezometric Surface (ft above mean sea level)	Depth to Water from Measuring Point (ft below measuring point)	Elevation of Piezometric Surface (ft above mean sea level)	Depth to Water from Measuring Point (ft below measuring point)	Elevation of Piezometric Surface (ft above mean sea level)
OW-1*	80.32	7.15	73.17	6.95	73.37	6.27	74.05
OW-1A	79.72	5.45	74.27	5.20	74.52	4.35	75.37
OW-4*	71.54	4.88	66.66	4.90	66.64	5.14	66.40
OW-6	62.67	8.00	54.67	8.09	54.58	7.86	54.81
OW-7	57.88	--	--	6.28	51.60	6.16	51.72
OW-9*	68.88	9.25	59.63	9.09	59.79	9.20	59.68
OW-10	64.63	4.18	60.45	4.16	60.47	3.91	60.72
OW-11	71.22	4.01	67.21	4.04	67.18	3.55	67.67
OW-12	63.74	6.60	57.14	6.60	57.14	6.49	57.25
OW-13	64.99	3.76	61.23	3.85	61.14	3.50	61.49
OW-14	65.54	6.49	59.05	6.53	59.01	6.49	59.05
OW-15	64.60	3.90	60.70	4.80	59.80	3.23	61.37
OW-16	67.29	3.34	63.95	3.54	63.75	3.18	64.11
OW-17	57.86	5.64	52.22	5.70	52.16	4.93	52.93
OW-18	62.76	8.45	54.31	8.47	54.29	7.93	54.83
OW-18A	62.08	7.77	54.31	7.84	54.24	7.29	54.79
OW-19	55.97	3.88	52.09	3.99	51.98	3.20	52.77
OW-19A	55.87	3.80	52.07	3.91	51.96	3.09	52.78
OW-20	57.33	5.93	51.40	5.97	51.36	5.54	51.79
OW-21	76.28	4.86	71.42	4.88	71.40	4.57	71.71
OW-22	81.76	7.98	73.78	7.89	73.87	7.65	74.11
OW-23	68.54	**	**	**	**	**	**
OW-24A	57.47	**	**	**	**	**	**
OW-24B	57.26	**	**	**	**	**	**
OW-25A	66.00	**	**	14.18	51.82	--	--
OW-25B	65.34	**	**	13.66	51.68	--	--
OW-26A	64.15	**	**	**	**	**	**
OW-26B	63.80	**	**	**	**	**	**
OW-27A	70.84	**	**	**	**	**	**
OW-27B	70.52	**	**	**	**	**	**
OW-28	77.195	7.23	69.97	9.35	67.85	9.75	67.45
OW-29	61.17	**	**	5.18	55.99	--	--
OW-30A	65.90	**	**	**	**	**	**
OW-30B	65.60	**	**	**	**	**	**
OW-33A	56.83	**	**	**	**	**	**
OW-33B	56.66	**	**	4.74	51.92	**	**

NOTES:
* Bedrock well.
** Well not yet installed.
-- No measurement taken.

Table 3. Ground-Water Elevation Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Well Number	Elevation of Measuring Point (ft above mean sea level)	June 20, 1990		June 26, 1990		July 17, 1990	
		Depth to Water from Measuring Point (ft below measuring point)	Elevation of Piezometric Surface (ft above mean sea level)	Depth to Water from Measuring Point (ft below measuring point)	Elevation of Piezometric Surface (ft above mean sea level)	Depth to Water from Measuring Point (ft below measuring point)	Elevation of Piezometric Surface (ft above mean sea level)
OW-1*	80.32	7.62	72.70	7.86	72.46	8.24	72.08
OW-1A	79.72	6.50	73.22	6.79	72.93	7.36	72.36
OW-4*	71.54	6.91	64.63	7.40	64.14	8.75	62.79
OW-6	62.67	8.70	53.97	8.92	53.75	9.05	53.62
OW-7	57.88	6.93	50.95	7.09	50.79	7.35	50.53
OW-9*	68.88	10.00	58.88	10.33	58.55	11.03	57.85
OW-10	64.63	5.22	59.41	5.58	59.05	6.38	58.25
OW-11	71.22	4.50	66.72	4.71	66.51	4.99	66.23
OW-12	63.74	7.49	56.25	7.75	55.99	8.31	55.43
OW-13	64.99	4.74	60.25	5.00	59.99	5.42	59.57
OW-14	65.54	7.54	58.00	7.87	57.67	8.56	56.98
OW-15	64.60	4.43	60.17	4.64	59.96	5.06	59.54
OW-16	67.29	4.21	63.08	4.40	62.89	5.01	62.28
OW-17	57.86	6.04	51.82	6.21	51.65	6.35	51.51
OW-18	62.76	9.06	53.70	9.30	53.46	9.55	53.21
OW-18A	62.08	8.40	53.68	8.66	53.42	8.89	53.19
OW-19	55.97	4.53	51.44	4.68	51.29	5.02	50.95
OW-19A	55.87	4.45	51.42	4.74	51.13	4.95	50.92
OW-20	57.33	6.57	50.76	6.72	50.61	6.97	50.36
OW-21	76.28	5.44	70.84	5.79	70.49	6.19	70.09
OW-22	81.76	9.16	72.60	9.52	72.24	10.82	70.94
OW-23	68.54	14.62	53.92	15.66	52.88	15.34	53.20
OW-24A	57.47	5.15	52.32	5.35	52.12	5.70	51.77
OW-24B	57.26	5.04	52.22	5.24	52.02	5.59	51.67
OW-25A	66.00	14.87	51.13	15.10	50.90	15.31	50.69
OW-25B	65.34	14.19	51.15	14.44	50.90	14.65	50.69
OW-26A	64.15	9.37	54.78	9.68	54.47	10.22	53.93
OW-26B	63.80	9.09	54.71	9.39	54.41	9.81	53.99
OW-27A	70.84	18.34	52.50	18.53	52.31	18.88	51.96
OW-27B	70.52	19.15	51.37	19.32	51.20	19.56	50.96
OW-28	77.195	11.51	65.685	11.51	65.685	dry	dry
OW-29	61.17	5.05	55.67	5.62	55.55	5.93	55.24
OW-30A	65.90	11.80	54.10	12.52	53.38	12.85	53.05
OW-30B	65.60	12.14	53.46	12.36	53.24	12.65	52.95
OW-33A	56.83	5.83	51.00	6.02	50.81	6.27	50.56
OW-33B	56.66	5.63	51.03	5.77	50.89	6.10	50.56

NOTES:
* Bedrock well.

Table 3. Ground-Water Elevation Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Well Number	Elevation of Measuring Point (ft above mean sea level)	August 13, 1990		September 26, 1990	
		Depth to Water from Measuring Point (ft below measuring point)	Elevation of Piezometric Surface (ft above mean sea level)	Depth to Water from Measuring Point (ft below measuring point)	Elevation of Piezometric Surface (ft above mean sea level)
OW-1*	80.32	7.19	73.13	8.28	72.04
OW-1A	79.72	6.01	73.71	7.50	72.22
OW-4*	71.54	4.99	66.55	8.11	63.43
OW-6	62.67	7.52	55.15	8.80	53.87
OW-7	57.88	5.97	51.91	7.13	50.75
OW-9*	68.88	10.06	58.82	10.91	57.97
OW-10	64.63	4.26	60.37	6.03	58.60
OW-11	71.22	3.88	67.34	4.84	66.38
OW-12	63.74	6.68	57.06	8.20	55.54
OW-13	64.99	3.54	61.45	5.11	59.88
OW-14	65.54	6.69	58.85	8.37	57.17
OW-15	64.60	3.88	60.72	4.74	59.86
OW-16	67.29	3.32	63.97	3.42	63.87
OW-17	57.86	5.58	52.28	6.25	51.61
OW-18	62.76	8.36	54.40	9.45	53.31
OW-18A	62.08	7.74	54.34	8.82	53.26
OW-19	55.97	3.46	52.51	4.75	51.22
OW-19A	55.87	3.37	52.50	4.67	51.20
OW-20	57.33	5.70	51.63	6.78	50.55
OW-21	76.28	5.01	71.27	5.90	70.38
OW-22	81.76	9.23	72.53	11.34	70.42
OW-23	68.54	--	--	14.97	53.57
OW-24A	57.47	4.07	53.40	5.43	52.04
OW-24B	57.26	3.86	53.40	5.30	51.96
OW-25A	66.00	13.42	52.58	15.10	50.90
OW-25B	65.34	12.88	52.46	14.43	50.91
OW-26A	64.15	8.33	55.82	9.76	54.39
OW-26B	63.80	7.91	55.89	9.31	54.49
OW-27A	70.84	16.64	54.20	18.67	52.17
OW-27B	70.52	18.46	52.06	19.42	51.10
OW-28	77.195	9.25	67.95	dry	--
OW-29	61.17	5.34	55.83	5.92	55.25
OW-30A	65.90	11.79	54.11	12.78	53.12
OW-30B	65.60	11.64	53.96	12.48	53.12
OW-33A	56.83	4.64	52.19	5.99	50.84
OW-33B	56.66	4.55	52.11	5.93	50.73

NOTES:
* Bedrock well.
-- Well not located.

Table 3. Ground-Water Elevation Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

		December 7, 1990	
Well Number	Elevation of Measuring Point (ft above mean sea level)	Depth to Water from Measuring Point (ft below measuring point)	Elevation of Groundwater (ft above mean sea level)
OW-1*	80.32	7.43	72.89
OW-1A	79.72	6.29	73.43
OW-4*	71.54	5.83	65.71
OW-6	62.67	8.23	54.44
OW-7	57.88	6.44	51.44
OW-9*	68.88	9.97	58.91
OW-10	64.63	4.68	59.95
OW-11	71.22	4.20	67.02
OW-12	63.74	7.25	56.49
OW-13	64.99	4.50	60.49
OW-14	65.54	7.33	58.21
OW-15	64.60	4.07	60.53
OW-16	67.29	4.06	63.23
OW-17	57.86	5.76	52.10
OW-18	62.76	8.76	54.00
OW-18A	62.08	7.82	54.26
OW-19	55.97	4.05	51.92
OW-19A	55.87	3.96	51.91
OW-20	57.33	6.13	51.20
OW-21	76.28	4.93	71.35
OW-22	81.76	8.97	72.79
OW-23	68.54	14.19	54.35
OW-24A	57.47	5.69	51.78
OW-24B	57.26	4.56	52.70
OW-25A	66.00	14.27	51.73
OW-25B	65.34	13.64	51.70
OW-26A	64.15	8.84	55.31
OW-26B	63.80	8.54	55.26
OW-27A	70.84	18.11	52.73
OW-27B	70.52	18.98	51.54
OW-28	77.20	dry	--
OW-29	61.17	5.52	55.65
OW-30A	65.90	12.20	53.70
OW-30B	65.60	12.05	53.55
OW-31	74.35	3.29	71.06
OW-32	75.47	3.86	71.61

NOTES:
* Bedrock well.

Table 3. Ground-Water Elevation Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

		December 7, 1990	
Well Number	Elevation of Measuring Point (ft above mean sea level)	Depth to Water from Measuring Point (ft below measuring point)	Elevation of Groundwater (ft above mean sea level)
OW-33A	56.83	5.31	51.52
OW-33B	56.66	5.13	51.53
OW-36	74.86	4.51	70.35
OW-37	72.60	4.78	67.82
OW-38	71.40	6.96	64.44
OW-39	74.14	9.28	64.86
OW-40	71.64	12.04	59.60
OW-41	66.95	7.02	59.93
OW-42	69.80	16.92	52.88

TABLE 4

Summary of PDI Phase 1 and Phase 2
Ground-Water Quality Data

TABLE 4

Summary of PDI Phase 1 and Phase 2
Ground-Water Quality Data

Volatile Organic Compounds

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-9

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/18/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	3.0 J
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	6.0 A
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	25.0 A
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	35.0 A

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-10

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/16/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-11

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/16/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-12

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/15/90	10/15/90 Duplicate
Acetone, ug/L	10.0	33.0 J	47.0 J
Benzene, ug/L	5.0	300.0 J	260.0 A
Bromodichloromethane, ug/L	5.0	< 5.0 U	< 10.0 U
Bromoform, ug/L	5.0	< 5.0 U	< 10.0 U
Bromomethane, ug/L	10.0	< 10.0 U	< 20.0 U
2-Butanone, ug/L	10.0	< 10.0 U	< 20.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U	< 10.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U	< 10.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U	< 10.0 U
Chloroethane, ug/L	10.0	< 10.0 U	< 20.0 U
Chloroform, ug/L	5.0	< 5.0 U	< 10.0 U
Chloromethane, ug/L	10.0	< 10.0 U	< 20.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U	< 10.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U	< 10.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U	< 10.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U	< 10.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U	< 10.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U	< 10.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U	< 10.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U	< 10.0 U
Ethylbenzene, ug/L	5.0	3.0 J	2.0 J
2-Hexanone, ug/L	10.0	< 10.0 U	< 20.0 U
Methylene chloride, ug/L	5.0	< 5.0 U	< 10.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U	< 20.0 U
Styrene, ug/L	5.0	< 5.0 U	< 10.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 UJ	< 10.0 UJ
Tetrachloroethene, ug/L	5.0	< 5.0 U	< 10.0 U
Toluene, ug/L	5.0	180.0 A	170.0 A
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U	< 10.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U	< 10.0 U
Trichloroethene, ug/L	5.0	< 5.0 U	< 10.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U	< 20.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U	< 20.0 U
Xylenes, total, ug/L	5.0	13.0 A	11.0 A

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-13

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/15/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	4.0 J
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 UJ
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-16

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/18/90
Acetone, ug/L	10.0	< 2000.0 U
Benzene, ug/L	5.0	< 1000.0 U
Bromodichloromethane, ug/L	5.0	< 1000.0 U
Bromoform, ug/L	5.0	< 1000.0 U
Bromomethane, ug/L	10.0	< 2000.0 U
2-Butanone, ug/L	10.0	< 2000.0 U
Carbon disulfide, ug/L	5.0	< 1000.0 U
Carbon tetrachloride, ug/L	5.0	< 1000.0 U
Chlorobenzene, ug/L	5.0	< 1000.0 U
Chloroethane, ug/L	10.0	< 2000.0 U
Chloroform, ug/L	5.0	< 1000.0 U
Chloromethane, ug/L	10.0	< 2000.0 U
Dibromochloromethane, ug/L	5.0	< 1000.0 U
1,1-Dichloroethane, ug/L	5.0	< 1000.0 U
1,2-Dichloroethane, ug/L	5.0	< 1000.0 U
1,1-Dichloroethene, ug/L	5.0	< 1000.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 1000.0 U
1,2-Dichloropropane, ug/L	5.0	< 1000.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 1000.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 1000.0 U
Ethylbenzene, ug/L	5.0	< 1000.0 U
2-Hexanone, ug/L	10.0	< 2000.0 U
Methylene chloride, ug/L	5.0	< 1000.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 2000.0 U
Styrene, ug/L	5.0	< 1000.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 1000.0 U
Tetrachloroethene, ug/L	5.0	< 1000.0 U
Toluene, ug/L	5.0	32000.0 A
1,1,1-Trichloroethane, ug/L	5.0	< 1000.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 1000.0 U
Trichloroethene, ug/L	5.0	< 1000.0 U
Vinyl acetate, ug/L	10.0	< 2000.0 U
Vinyl chloride, ug/L	10.0	< 2000.0 U
Xylenes, total, ug/L	5.0	< 1000.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-17

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/16/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	180.0 J
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	2.0 J
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	1.0 J
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	3.0 J

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-18

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/16/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-18A

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/16/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-19

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/16/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	1.0 J
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-19A

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/16/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-21

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/18/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-22

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/17/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-23

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	5.0 R
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	22.0 J
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	2.0 J
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-24A

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	06/04/90	10/16/90
Acetone, ug/L	10.0	< 10.0 U	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-24B

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	06/04/90	10/16/90
Acetone, ug/L	10.0	< 10.0 U	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U	< 10.0 U
Chloroform, ug/L	5.0	14.0 R	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U	< 10.0 U
Methylene chloride, ug/L	5.0	5.0 R	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U	< 5.0 U
Toluene, ug/L	5.0	1.0 J	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-25A

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	5.0 R
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-25B

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	11.0 R
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-26A

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-26B

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	2.0 J
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	8.0 A
1,2-Dichloroethene, total, ug/L	5.0	3.0 J
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	5.0 R
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	26.0 A
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	110.0 A
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-27A

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	5.0 R
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	23.0 J
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-27B

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	5.0 R
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	19.0 J
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	2.0 J
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-28

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/17/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-29

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	06/04/90	06/04/90 Replicate
Acetone, ug/L	10.0	< 10.0 U	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U	< 10.0 U
Methylene chloride, ug/L	5.0	5.0 R	5.0 R
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-30A

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90	06/05/90 Replicate	10/17/90
Acetone, ug/L	10.0	< 10.0 U	< 10.0 U	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U	< 10.0 U	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U	< 10.0 U	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U	< 10.0 U	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U	< 10.0 U	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	2.0 J	< 5.0 U	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
1,1-Dichloroethene, ug/L.	5.0	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U	< 10.0 U	< 10.0 U
Methylene chloride, ug/L	5.0	5.0 R	5.0 R	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U	< 10.0 U	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U	1.0 J	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U	< 10.0 U	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U	< 10.0 U	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U	< 5.0 U	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-308

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90	10/17/90
Acetone, ug/L	10.0	< 10.0 U	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U	< 10.0 U
Chloroform, ug/L	5.0	6.0 R	4.0 J
Chloromethane, ug/L	10.0	< 10.0 U	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U	< 10.0 U
Methylene chloride, ug/L	5.0	5.0 R	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U	< 5.0 U
Toluene, ug/L	5.0	1.0 A	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-31

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	06/06/90	10/18/90
Acetone, ug/L	10.0	< 5000.0 U	< 3200.0 U
Benzene, ug/L	5.0	48000.0 A	36000.0 A
Bromodichloromethane, ug/L	5.0	< 2500.0 U	< 1600.0 U
Bromoform, ug/L	5.0	< 2500.0 U	< 1600.0 U
Bromomethane, ug/L	10.0	< 5000.0 U	< 3200.0 U
2-Butanone, ug/L	10.0	< 5000.0 U	< 3200.0 U
Carbon disulfide, ug/L	5.0	< 2500.0 U	< 1600.0 U
Carbon tetrachloride, ug/L	5.0	< 2500.0 U	< 1600.0 U
Chlorobenzene, ug/L	5.0	< 2500.0 U	< 1600.0 U
Chloroethane, ug/L	10.0	< 5000.0 U	< 3200.0 U
Chloroform, ug/L	5.0	< 2500.0 U	< 1600.0 U
Chloromethane, ug/L	10.0	< 5000.0 U	< 3200.0 U
Dibromochloromethane, ug/L	5.0	< 2500.0 U	< 1600.0 U
1,1-Dichloroethane, ug/L	5.0	< 2500.0 U	< 1600.0 U
1,2-Dichloroethane, ug/L	5.0	< 2500.0 U	< 1600.0 U
1,1-Dichloroethene, ug/L	5.0	< 2500.0 U	< 1600.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 2500.0 U	< 1600.0 U
1,2-Dichloropropane, ug/L	5.0	< 2500.0 U	< 1600.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 2500.0 U	< 1600.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 2500.0 U	< 1600.0 U
Ethylbenzene, ug/L	5.0	< 2500.0 U	< 1600.0 U
2-Hexanone, ug/L	10.0	< 5000.0 U	< 3200.0 U
Methylene chloride, ug/L	5.0	< 2500.0 U	< 1600.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 5000.0 U	< 3200.0 U
Styrene, ug/L	5.0	< 2500.0 U	< 1600.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 2500.0 U	< 1600.0 U
Tetrachloroethene, ug/L	5.0	< 2500.0 U	< 1600.0 U
Toluene, ug/L	5.0	< 2500.0 U	< 1600.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 2500.0 U	< 1600.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 2500.0 U	< 1600.0 U
Trichloroethene, ug/L	5.0	< 2500.0 U	< 1600.0 U
Vinyl acetate, ug/L	10.0	< 5000.0 U	< 3200.0 U
Vinyl chloride, ug/L	10.0	< 5000.0 U	< 3200.0 U
Xylenes, total, ug/L	5.0	< 2500.0 U	< 1600.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-32

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	06/06/90	10/17/90
Acetone, ug/L	10.0	< 10.0 U	< 10.0 U
Benzene, ug/L	5.0	41.0 J	14.0 A
Bromodichloromethane, ug/L	5.0	< 5.0 U	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U	< 5.0 U
Ethylbenzene, ug/L	5.0	1.0 J	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U	< 5.0 U
Toluene, ug/L	5.0	2.0 J	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U	< 10.0 U
Xylenes, total, ug/L	5.0	1.0 J	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-33A

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	06/04/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-33B

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	06/04/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	5.0 R
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	3.0 J
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	2.0 J
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	5.0 R
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	1.0 J
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	92.0 A
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-36

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/18/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-37

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/18/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-38

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	11/07/90	11/07/90 Replicate
Acetone, ug/L	10.0	< 10.0 U	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 UJ	< 10.0 UJ
Vinyl chloride, ug/L	10.0	< 10.0 U	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-39

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/15/90	10/15/90 Replicate	10/15/90 Duplicate
Acetone, ug/L	10.0	290.0 J	250.0 J	260.0 J
Benzene, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
Bromodichloromethane, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
Bromoform, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
Bromomethane, ug/L	10.0	< 20.0 U	< 10.0 U	< 20.0 U
2-Butanone, ug/L	10.0	< 20.0 U	< 10.0 U	< 20.0 U
Carbon disulfide, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
Carbon tetrachloride, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
Chlorobenzene, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
Chloroethane, ug/L	10.0	< 20.0 U	< 10.0 U	< 20.0 U
Chloroform, ug/L	5.0	4.0 J	4.0 J	4.0 J
Chloromethane, ug/L	10.0	< 20.0 U	< 10.0 U	< 20.0 U
Dibromochloromethane, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
1,1-Dichloroethane, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
1,2-Dichloroethane, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
1,1-Dichloroethene, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
1,2-Dichloropropane, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
Ethylbenzene, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
2-Hexanone, ug/L	10.0	< 20.0 U	< 10.0 U	< 20.0 U
Methylene chloride, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 20.0 U	< 10.0 U	< 20.0 U
Styrene, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 10.0 UJ	< 5.0 UJ	< 10.0 U
Tetrachloroethene, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
Toluene, ug/L	5.0	140.0 A	120.0 A	110.0 A
1,1,1-Trichloroethane, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
Trichloroethene, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U
Vinyl acetate, ug/L	10.0	< 20.0 U	< 10.0 U	< 20.0 U
Vinyl chloride, ug/L	10.0	< 20.0 U	< 10.0 U	< 20.0 U
Xylenes, total, ug/L	5.0	< 10.0 U	< 5.0 U	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-40

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/15/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 UJ
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-41

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/15/90
Acetone, ug/L	10.0	36.0 J
Benzene, ug/L	5.0	27.0 A
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	1.0 J
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 UJ
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	9.0 A
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	6.0 A

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-42

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/15/90
Acetone, ug/L	10.0	< 46.0 U
Benzene, ug/L	5.0	14.0 A
Bromodichloromethane, ug/L	5.0	< 5.0 U
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	< 5.0 U
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	< 5.0 U
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	82.0 A
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: PUB

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	06/04/90
Acetone, ug/L	10.0	< 10.0 U
Benzene, ug/L	5.0	< 5.0 U
Bromodichloromethane, ug/L	5.0	5.0 A
Bromoform, ug/L	5.0	< 5.0 U
Bromomethane, ug/L	10.0	< 10.0 U
2-Butanone, ug/L	10.0	< 10.0 U
Carbon disulfide, ug/L	5.0	< 5.0 U
Carbon tetrachloride, ug/L	5.0	< 5.0 U
Chlorobenzene, ug/L	5.0	< 5.0 U
Chloroethane, ug/L	10.0	< 10.0 U
Chloroform, ug/L	5.0	23.0 R
Chloromethane, ug/L	10.0	< 10.0 U
Dibromochloromethane, ug/L	5.0	1.0 J
1,1-Dichloroethane, ug/L	5.0	< 5.0 U
1,2-Dichloroethane, ug/L	5.0	< 5.0 U
1,1-Dichloroethene, ug/L	5.0	< 5.0 U
1,2-Dichloroethene, total, ug/L	5.0	< 5.0 U
1,2-Dichloropropane, ug/L	5.0	< 5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	< 5.0 U
Ethylbenzene, ug/L	5.0	< 5.0 U
2-Hexanone, ug/L	10.0	< 10.0 U
Methylene chloride, ug/L	5.0	5.0 R
4-Methyl-2-pentanone, ug/L	10.0	< 10.0 U
Styrene, ug/L	5.0	< 5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	< 5.0 U
Tetrachloroethene, ug/L	5.0	< 5.0 U
Toluene, ug/L	5.0	< 5.0 U
1,1,1-Trichloroethane, ug/L	5.0	< 5.0 U
1,1,2-Trichloroethane, ug/L	5.0	< 5.0 U
Trichloroethene, ug/L	5.0	< 5.0 U
Vinyl acetate, ug/L	10.0	< 10.0 U
Vinyl chloride, ug/L	10.0	< 10.0 U
Xylenes, total, ug/L	5.0	< 5.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

TABLE 4

Summary of PDI Phase 1 and Phase 2
Ground-Water Quality Data

Semi-Volatile Organic Compounds

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-23

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Acenaphthene, ug/L	10.0	< 10.0 U
Acenaphthylene, ug/L	10.0	< 10.0 U
Anthracene, ug/L	10.0	< 10.0 U
Benzo (a) anthracene, ug/L	10.0	< 10.0 U
Benzo (a) pyrene, ug/L	10.0	< 10.0 U
Benzo (b) fluoranthene, ug/L	10.0	< 10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	< 10.0 U
Benzoic acid, ug/L	50.0	< 50.0 U
Benzo (k) fluoranthene, ug/L	10.0	< 10.0 U
Benzyl alcohol, ug/L	10.0	< 10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	< 10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	< 10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	< 10.0 U
Butylbenzylphthalate, ug/L	10.0	< 10.0 U
4-Chloroaniline, ug/L	10.0	< 10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	< 10.0 U
2-Chloronaphthalene, ug/L	10.0	< 10.0 U
2-Chlorophenol, ug/L	10.0	< 10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	< 10.0 U
Chrysene, ug/L	10.0	< 10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	< 10.0 U
Dibenzofuran, ug/L	10.0	< 10.0 U
1,2-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,3-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,4-Dichlorobenzene, ug/L	10.0	< 10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	< 20.0 U
2,4-Dichlorophenol, ug/L	10.0	< 10.0 U
Diethylphthalate, ug/L	10.0	< 10.0 U
2,4-Dimethylphenol, ug/L	10.0	< 10.0 U
Dimethyl phthalate, ug/L	10.0	< 10.0 U
Di-n-butylphthalate, ug/L	10.0	< 10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	< 50.0 U
2,4-Dinitrophenol, ug/L	50.0	< 50.0 U
2,4-Dinitrotoluene, ug/L	10.0	< 10.0 U
2,6-Dinitrotoluene, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-23

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Di-n-octyl phthalate, ug/L	10.0	< 10.0 U
Fluoranthene, ug/L	10.0	< 10.0 U
Fluorene, ug/L	10.0	< 10.0 U
Hexachlorobenzene, ug/L	10.0	< 10.0 U
Hexachlorobutadiene, ug/L	10.0	< 10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	< 10.0 U
Hexachloroethane, ug/L	10.0	< 10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	< 10.0 U
Isophorone, ug/L	10.0	< 10.0 U
2-Methylnaphthalene, ug/L	10.0	< 10.0 U
2-Methylphenol, ug/L	10.0	< 10.0 U
4-Methylphenol, ug/L	10.0	< 10.0 U
Naphthalene, ug/L	10.0	< 10.0 U
2-Nitroaniline, ug/L	50.0	< 50.0 U
3-Nitroaniline, ug/L	50.0	< 50.0 U
4-Nitroaniline, ug/L	50.0	< 50.0 U
Nitrobenzene, ug/L	10.0	< 10.0 U
2-Nitrophenol, ug/L	10.0	< 10.0 U
4-Nitrophenol, ug/L	50.0	< 50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	< 10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	< 10.0 U
Pentachlorophenol, ug/L	50.0	< 50.0 U
Phenanthrene, ug/L	10.0	< 10.0 U
Phenol, ug/L	10.0	< 10.0 U
Pyrene, ug/L	10.0	< 10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	< 10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	< 50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-24A

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/04/90
Acenaphthene, ug/L	10.0	< 10.0 U
Acenaphthylene, ug/L	10.0	< 10.0 U
Anthracene, ug/L	10.0	< 10.0 U
Benzo (a) anthracene, ug/L	10.0	< 10.0 U
Benzo (a) pyrene, ug/L	10.0	< 10.0 U
Benzo (b) fluoranthene, ug/L	10.0	< 10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	< 10.0 U
Benzoic acid, ug/L	50.0	< 50.0 U
Benzo (k) fluoranthene, ug/L	10.0	< 10.0 U
Benzyl alcohol, ug/L	10.0	< 10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	< 10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	< 10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	< 10.0 U
Butylbenzylphthalate, ug/L	10.0	< 10.0 U
4-Chloroaniline, ug/L	10.0	< 10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	< 10.0 U
2-Chloronaphthalene, ug/L	10.0	< 10.0 U
2-Chlorophenol, ug/L	10.0	< 10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	< 10.0 U
Chrysene, ug/L	10.0	< 10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	< 10.0 U
Dibenzofuran, ug/L	10.0	< 10.0 U
1,2-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,3-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,4-Dichlorobenzene, ug/L	10.0	< 10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	< 20.0 U
2,4-Dichlorophenol, ug/L	10.0	< 10.0 U
Diethylphthalate, ug/L	10.0	< 10.0 U
2,4-Dimethylphenol, ug/L	10.0	< 10.0 U
Dimethyl phthalate, ug/L	10.0	< 10.0 U
Di-n-butylphthalate, ug/L	10.0	< 10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	< 50.0 U
2,4-Dinitrophenol, ug/L	50.0	< 50.0 U
2,4-Dinitrotoluene, ug/L	10.0	< 10.0 U
2,6-Dinitrotoluene, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-24A

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/04/90
Di-n-octyl phthalate, ug/L	10.0	< 10.0 U
Fluoranthene, ug/L	10.0	< 10.0 U
Fluorene, ug/L	10.0	< 10.0 U
Hexachlorobenzene, ug/L	10.0	< 10.0 U
Hexachlorobutadiene, ug/L	10.0	< 10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	< 10.0 U
Hexachloroethane, ug/L	10.0	< 10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	< 10.0 U
Isophorone, ug/L	10.0	< 10.0 U
2-Methylnaphthalene, ug/L	10.0	< 10.0 U
2-Methylphenol, ug/L	10.0	< 10.0 U
4-Methylphenol, ug/L	10.0	< 10.0 U
Naphthalene, ug/L	10.0	< 10.0 U
2-Nitroaniline, ug/L	50.0	< 50.0 U
3-Nitroaniline, ug/L	50.0	< 50.0 U
4-Nitroaniline, ug/L	50.0	< 50.0 U
Nitrobenzene, ug/L	10.0	< 10.0 U
2-Nitrophenol, ug/L	10.0	< 10.0 U
4-Nitrophenol, ug/L	50.0	< 50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	< 10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	< 10.0 U
Pentachlorophenol, ug/L	50.0	< 50.0 U
Phenanthrene, ug/L	10.0	< 10.0 U
Phenol, ug/L	10.0	< 10.0 U
Pyrene, ug/L	10.0	< 10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	< 10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	< 50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-24B

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/04/90
Acenaphthene, ug/L	10.0	< 10.0 U
Acenaphthylene, ug/L	10.0	< 10.0 U
Anthracene, ug/L	10.0	< 10.0 U
Benzo (a) anthracene, ug/L	10.0	< 10.0 U
Benzo (a) pyrene, ug/L	10.0	< 10.0 U
Benzo (b) fluoranthene, ug/L	10.0	< 10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	< 10.0 U
Benzoic acid, ug/L	50.0	< 50.0 U
Benzo (k) fluoranthene, ug/L	10.0	< 10.0 U
Benzyl alcohol, ug/L	10.0	< 10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	< 10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	< 10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	< 10.0 U
Butylbenzylphthalate, ug/L	10.0	< 10.0 U
4-Chloroaniline, ug/L	10.0	< 10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	< 10.0 U
2-Chloronaphthalene, ug/L	10.0	< 10.0 U
2-Chlorophenol, ug/L	10.0	< 10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	< 10.0 U
Chrysene, ug/L	10.0	< 10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	< 10.0 U
Dibenzofuran, ug/L	10.0	< 10.0 U
1,2-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,3-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,4-Dichlorobenzene, ug/L	10.0	< 10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	< 20.0 U
2,4-Dichlorophenol, ug/L	10.0	< 10.0 U
Diethylphthalate, ug/L	10.0	< 10.0 U
2,4-Dimethylphenol, ug/L	10.0	< 10.0 U
Dimethyl phthalate, ug/L	10.0	< 10.0 U
Di-n-butylphthalate, ug/L	10.0	< 10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	< 50.0 U
2,4-Dinitrophenol, ug/L	50.0	< 50.0 U
2,4-Dinitrotoluene, ug/L	10.0	< 10.0 U
2,6-Dinitrotoluene, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-24B

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/04/90
Di-n-octyl phthalate, ug/L	10.0	< 10.0 U
Fluoranthene, ug/L	10.0	< 10.0 U
Fluorene, ug/L	10.0	< 10.0 U
Hexachlorobenzene, ug/L	10.0	< 10.0 U
Hexachlorobutadiene, ug/L	10.0	< 10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	< 10.0 U
Hexachloroethane, ug/L	10.0	< 10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	< 10.0 U
Isophorone, ug/L	10.0	< 10.0 U
2-Methylnaphthalene, ug/L	10.0	< 10.0 U
2-Methylphenol, ug/L	10.0	< 10.0 U
4-Methylphenol, ug/L	10.0	< 10.0 U
Naphthalene, ug/L	10.0	< 10.0 U
2-Nitroaniline, ug/L	50.0	< 50.0 U
3-Nitroaniline, ug/L	50.0	< 50.0 U
4-Nitroaniline, ug/L	50.0	< 50.0 U
Nitrobenzene, ug/L	10.0	< 10.0 U
2-Nitrophenol, ug/L	10.0	< 10.0 U
4-Nitrophenol, ug/L	50.0	< 50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	< 10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	< 10.0 U
Pentachlorophenol, ug/L	50.0	< 50.0 U
Phenanthrene, ug/L	10.0	< 10.0 U
Phenol, ug/L	10.0	< 10.0 U
Pyrene, ug/L	10.0	< 10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	< 10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	< 50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-25A

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Acenaphthene, ug/L	10.0	< 10.0 U
Acenaphthylene, ug/L	10.0	< 10.0 U
Anthracene, ug/L	10.0	< 10.0 U
Benzo (a) anthracene, ug/L	10.0	< 10.0 U
Benzo (a) pyrene, ug/L	10.0	< 10.0 U
Benzo (b) fluoranthene, ug/L	10.0	< 10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	< 10.0 U
Benzoic acid, ug/L	50.0	< 50.0 U
Benzo (k) fluoranthene, ug/L	10.0	< 10.0 U
Benzyl alcohol, ug/L	10.0	< 10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	< 10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	< 10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	< 10.0 U
Butylbenzylphthalate, ug/L	10.0	< 10.0 U
4-Chloroaniline, ug/L	10.0	< 10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	< 10.0 U
2-Chloronaphthalene, ug/L	10.0	< 10.0 U
2-Chlorophenol, ug/L	10.0	< 10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	< 10.0 U
Chrysene, ug/L	10.0	< 10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	< 10.0 U
Dibenzofuran, ug/L	10.0	< 10.0 U
1,2-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,3-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,4-Dichlorobenzene, ug/L	10.0	< 10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	< 20.0 U
2,4-Dichlorophenol, ug/L	10.0	< 10.0 U
Diethylphthalate, ug/L	10.0	< 10.0 U
2,4-Dimethylphenol, ug/L	10.0	< 10.0 U
Dimethyl phthalate, ug/L	10.0	< 10.0 U
Di-n-butylphthalate, ug/L	10.0	< 10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	< 50.0 U
2,4-Dinitrophenol, ug/L	50.0	< 50.0 U
2,4-Dinitrotoluene, ug/L	10.0	< 10.0 U
2,6-Dinitrotoluene, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-25A

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Di-n-octyl phthalate, ug/L	10.0	< 10.0 U
Fluoranthene, ug/L	10.0	< 10.0 U
Fluorene, ug/L	10.0	< 10.0 U
Hexachlorobenzene, ug/L	10.0	< 10.0 U
Hexachlorobutadiene, ug/L	10.0	< 10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	< 10.0 U
Hexachloroethane, ug/L	10.0	< 10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	< 10.0 U
Isophorone, ug/L	10.0	< 10.0 U
2-Methylnaphthalene, ug/L	10.0	< 10.0 U
2-Methylphenol, ug/L	10.0	< 10.0 U
4-Methylphenol, ug/L	10.0	< 10.0 U
Naphthalene, ug/L	10.0	< 10.0 U
2-Nitroaniline, ug/L	50.0	< 50.0 U
3-Nitroaniline, ug/L	50.0	< 50.0 U
4-Nitroaniline, ug/L	50.0	< 50.0 U
Nitrobenzene, ug/L	10.0	< 10.0 U
2-Nitrophenol, ug/L	10.0	< 10.0 U
4-Nitrophenol, ug/L	50.0	< 50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	< 10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	< 10.0 U
Pentachlorophenol, ug/L	50.0	< 50.0 U
Phenanthrene, ug/L	10.0	< 10.0 U
Phenol, ug/L	10.0	< 10.0 U
Pyrene, ug/L	10.0	< 10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	< 10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	< 50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-25B

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Acenaphthene, ug/L	10.0	< 10.0 U
Acenaphthylene, ug/L	10.0	< 10.0 U
Anthracene, ug/L	10.0	< 10.0 U
Benzo (a) anthracene, ug/L	10.0	< 10.0 U
Benzo (a) pyrene, ug/L	10.0	< 10.0 U
Benzo (b) fluoranthene, ug/L	10.0	< 10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	< 10.0 U
Benzoic acid, ug/L	50.0	< 50.0 U
Benzo (k) fluoranthene, ug/L	10.0	< 10.0 U
Benzyl alcohol, ug/L	10.0	< 10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	< 10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	< 10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	< 10.0 U
Butylbenzylphthalate, ug/L	10.0	< 10.0 U
4-Chloroaniline, ug/L	10.0	< 10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	< 10.0 U
2-Chloronaphthalene, ug/L	10.0	< 10.0 U
2-Chlorophenol, ug/L	10.0	< 10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	< 10.0 U
Chrysene, ug/L	10.0	< 10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	< 10.0 U
Dibenzofuran, ug/L	10.0	< 10.0 U
1,2-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,3-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,4-Dichlorobenzene, ug/L	10.0	< 10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	< 20.0 U
2,4-Dichlorophenol, ug/L	10.0	< 10.0 U
Diethylphthalate, ug/L	10.0	< 10.0 U
2,4-Dimethylphenol, ug/L	10.0	< 10.0 U
Dimethyl phthalate, ug/L	10.0	< 10.0 U
Di-n-butylphthalate, ug/L	10.0	< 10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	< 50.0 U
2,4-Dinitrophenol, ug/L	50.0	< 50.0 U
2,4-Dinitrotoluene, ug/L	10.0	< 10.0 U
2,6-Dinitrotoluene, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-25B

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Di-n-octyl phthalate, ug/L	10.0	< 10.0 U
Fluoranthene, ug/L	10.0	< 10.0 U
Fluorene, ug/L	10.0	< 10.0 U
Hexachlorobenzene, ug/L	10.0	< 10.0 U
Hexachlorobutadiene, ug/L	10.0	< 10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	< 10.0 U
Hexachloroethane, ug/L	10.0	< 10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	< 10.0 U
Isophorone, ug/L	10.0	< 10.0 U
2-Methylnaphthalene, ug/L	10.0	< 10.0 U
2-Methylphenol, ug/L	10.0	< 10.0 U
4-Methylphenol, ug/L	10.0	< 10.0 U
Naphthalene, ug/L	10.0	< 10.0 U
2-Nitroaniline, ug/L	50.0	< 50.0 U
3-Nitroaniline, ug/L	50.0	< 50.0 U
4-Nitroaniline, ug/L	50.0	< 50.0 U
Nitrobenzene, ug/L	10.0	< 10.0 U
2-Nitrophenol, ug/L	10.0	< 10.0 U
4-Nitrophenol, ug/L	50.0	< 50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	< 10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	< 10.0 U
Pentachlorophenol, ug/L	50.0	< 50.0 U
Phenanthrene, ug/L	10.0	< 10.0 U
Phenol, ug/L	10.0	< 10.0 U
Pyrene, ug/L	10.0	< 10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	< 10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	< 50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-26A

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Acenaphthene, ug/L	10.0	3.0 J
Acenaphthylene, ug/L	10.0	< 10.0 U
Anthracene, ug/L	10.0	< 10.0 U
Benzo (a) anthracene, ug/L	10.0	< 10.0 U
Benzo (a) pyrene, ug/L	10.0	< 10.0 U
Benzo (b) fluoranthene, ug/L	10.0	< 10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	< 10.0 U
Benzoic acid, ug/L	50.0	< 50.0 U
Benzo (k) fluoranthene, ug/L	10.0	< 10.0 U
Benzyl alcohol, ug/L	10.0	< 10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	< 10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	< 10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	< 10.0 U
Butylbenzylphthalate, ug/L	10.0	< 10.0 U
4-Chloroaniline, ug/L	10.0	< 10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	< 10.0 U
2-Chloronaphthalene, ug/L	10.0	< 10.0 U
2-Chlorophenol, ug/L	10.0	< 10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	< 10.0 U
Chrysene, ug/L	10.0	< 10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	< 10.0 U
Dibenzofuran, ug/L	10.0	< 10.0 U
1,2-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,3-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,4-Dichlorobenzene, ug/L	10.0	< 10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	< 20.0 U
2,4-Dichlorophenol, ug/L	10.0	< 10.0 U
Diethylphthalate, ug/L	10.0	< 10.0 U
2,4-Dimethylphenol, ug/L	10.0	< 10.0 U
Dimethyl phthalate, ug/L	10.0	< 10.0 U
Di-n-butylphthalate, ug/L	10.0	< 10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	< 50.0 U
2,4-Dinitrophenol, ug/L	50.0	< 50.0 U
2,4-Dinitrotoluene, ug/L	10.0	< 10.0 U
2,6-Dinitrotoluene, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit.

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-26A

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Di-n-octyl phthalate, ug/L	10.0	< 10.0 U
Fluoranthene, ug/L	10.0	< 10.0 U
Fluorene, ug/L	10.0	< 10.0 U
Hexachlorobenzene, ug/L	10.0	< 10.0 U
Hexachlorobutadiene, ug/L	10.0	< 10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	< 10.0 U
Hexachloroethane, ug/L	10.0	< 10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	< 10.0 U
Isophorone, ug/L	10.0	< 10.0 U
2-Methylnaphthalene, ug/L	10.0	< 10.0 U
2-Methylphenol, ug/L	10.0	< 10.0 U
4-Methylphenol, ug/L	10.0	< 10.0 U
Naphthalene, ug/L	10.0	< 10.0 U
2-Nitroaniline, ug/L	50.0	< 50.0 U
3-Nitroaniline, ug/L	50.0	< 50.0 U
4-Nitroaniline, ug/L	50.0	< 50.0 U
Nitrobenzene, ug/L	10.0	< 10.0 U
2-Nitrophenol, ug/L	10.0	< 10.0 U
4-Nitrophenol, ug/L	50.0	< 50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	< 10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	< 10.0 U
Pentachlorophenol, ug/L	50.0	< 50.0 U
Phenanthrene, ug/L	10.0	< 10.0 U
Phenol, ug/L	10.0	< 10.0 U
Pyrene, ug/L	10.0	< 10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	< 10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	< 50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-26B

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Acenaphthene, ug/L	10.0	< 10.0 U
Acenaphthylene, ug/L	10.0	< 10.0 U
Anthracene, ug/L	10.0	< 10.0 U
Benzo (a) anthracene, ug/L	10.0	< 10.0 U
Benzo (a) pyrene, ug/L	10.0	< 10.0 U
Benzo (b) fluoranthene, ug/L	10.0	< 10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	< 10.0 U
Benzoic acid, ug/L	50.0	< 50.0 U
Benzo (k) fluoranthene, ug/L	10.0	< 10.0 U
Benzyl alcohol, ug/L	10.0	< 10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	< 10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	< 10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	< 10.0 U
Butylbenzylphthalate, ug/L	10.0	< 10.0 U
4-Chloroaniline, ug/L	10.0	< 10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	< 10.0 U
2-Chloronaphthalene, ug/L	10.0	< 10.0 U
2-Chlorophenol, ug/L	10.0	< 10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	< 10.0 U
Chrysene, ug/L	10.0	< 10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	< 10.0 U
Dibenzofuran, ug/L	10.0	< 10.0 U
1,2-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,3-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,4-Dichlorobenzene, ug/L	10.0	< 10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	< 20.0 U
2,4-Dichlorophenol, ug/L	10.0	< 10.0 U
Diethylphthalate, ug/L	10.0	< 10.0 U
2,4-Dimethylphenol, ug/L	10.0	< 10.0 U
Dimethyl phthalate, ug/L	10.0	< 10.0 U
Di-n-butylphthalate, ug/L	10.0	< 10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	< 50.0 U
2,4-Dinitrophenol, ug/L	50.0	< 50.0 U
2,4-Dinitrotoluene, ug/L	10.0	< 10.0 U
2,6-Dinitrotoluene, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-26B

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Di-n-octyl phthalate, ug/L	10.0	< 10.0 U
Fluoranthene, ug/L	10.0	< 10.0 U
Fluorene, ug/L	10.0	< 10.0 U
Hexachlorobenzene, ug/L	10.0	< 10.0 U
Hexachlorobutadiene, ug/L	10.0	< 10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	< 10.0 U
Hexachloroethane, ug/L	10.0	< 10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	< 10.0 U
Isophorone, ug/L	10.0	< 10.0 U
2-Methylnaphthalene, ug/L	10.0	< 10.0 U
2-Methylphenol, ug/L	10.0	< 10.0 U
4-Methylphenol, ug/L	10.0	< 10.0 U
Naphthalene, ug/L	10.0	< 10.0 U
2-Nitroaniline, ug/L	50.0	< 50.0 U
3-Nitroaniline, ug/L	50.0	< 50.0 U
4-Nitroaniline, ug/L	50.0	< 50.0 U
Nitrobenzene, ug/L	10.0	< 10.0 U
2-Nitrophenol, ug/L	10.0	< 10.0 U
4-Nitrophenol, ug/L	50.0	< 50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	< 10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	< 10.0 U
Pentachlorophenol, ug/L	50.0	< 50.0 U
Phenanthrene, ug/L	10.0	< 10.0 U
Phenol, ug/L	10.0	< 10.0 U
Pyrene, ug/L	10.0	< 10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	< 10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	< 50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-27A

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Acenaphthene, ug/L	10.0	< 50.0 U
Acenaphthylene, ug/L	10.0	< 50.0 U
Anthracene, ug/L	10.0	< 50.0 U
Benzo (a) anthracene, ug/L	10.0	< 50.0 U
Benzo (a) pyrene, ug/L	10.0	< 50.0 U
Benzo (b) fluoranthene, ug/L	10.0	< 50.0 U
Benzo (g,h,i) perylene, ug/L	10.0	< 50.0 U
Benzoic acid, ug/L	50.0	< 250.0 U
Benzo (k) fluoranthene, ug/L	10.0	< 50.0 U
Benzyl alcohol, ug/L	10.0	< 50.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	< 50.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	< 50.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	< 50.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	< 50.0 U
4-Bromophenyl-phenylether, ug/L	10.0	< 50.0 U
Butylbenzylphthalate, ug/L	10.0	< 50.0 U
4-Chloroaniline, ug/L	10.0	< 50.0 U
4-Chloro-3-methylphenol, ug/L	10.0	< 50.0 U
2-Chloronaphthalene, ug/L	10.0	< 50.0 U
2-Chlorophenol, ug/L	10.0	< 50.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	< 50.0 U
Chrysene, ug/L	10.0	< 50.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	< 50.0 U
Dibenzofuran, ug/L	10.0	< 50.0 U
1,2-Dichlorobenzene, ug/L	10.0	< 50.0 U
1,3-Dichlorobenzene, ug/L	10.0	< 50.0 U
1,4-Dichlorobenzene, ug/L	10.0	< 50.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	< 100.0 U
2,4-Dichlorophenol, ug/L	10.0	< 50.0 U
Diethylphthalate, ug/L	10.0	< 50.0 U
2,4-Dimethylphenol, ug/L	10.0	< 50.0 U
Dimethyl phthalate, ug/L	10.0	< 50.0 U
Di-n-butylphthalate, ug/L	10.0	< 50.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	< 250.0 U
2,4-Dinitrophenol, ug/L	50.0	< 250.0 U
2,4-Dinitrotoluene, ug/L	10.0	< 50.0 U
2,6-Dinitrotoluene, ug/L	10.0	< 50.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-27A

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Di-n-octyl phthalate, ug/L	10.0	< 50.0 U
Fluoranthene, ug/L	10.0	< 50.0 U
Fluorene, ug/L	10.0	< 50.0 U
Hexachlorobenzene, ug/L	10.0	< 50.0 U
Hexachlorobutadiene, ug/L	10.0	< 50.0 U
Hexachlorocyclopentadiene, ug/L	10.0	< 50.0 U
Hexachloroethane, ug/L	10.0	< 50.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	< 50.0 U
Isophorone, ug/L	10.0	< 50.0 U
2-Methylnaphthalene, ug/L	10.0	< 50.0 U
2-Methylphenol, ug/L	10.0	< 50.0 U
4-Methylphenol, ug/L	10.0	< 50.0 U
Naphthalene, ug/L	10.0	< 50.0 U
2-Nitroaniline, ug/L	50.0	< 250.0 U
3-Nitroaniline, ug/L	50.0	< 250.0 U
4-Nitroaniline, ug/L	50.0	< 250.0 U
Nitrobenzene, ug/L	10.0	< 50.0 U
2-Nitrophenol, ug/L	10.0	< 50.0 U
4-Nitrophenol, ug/L	50.0	< 250.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	< 50.0 U
N-Nitrosodiphenylamine, ug/L	10.0	< 50.0 U
Pentachlorophenol, ug/L	50.0	< 250.0 U
Phenanthrene, ug/L	10.0	< 50.0 U
Phenol, ug/L	10.0	430.0 A
Pyrene, ug/L	10.0	< 50.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	< 50.0 U
2,4,5-Trichlorophenol, ug/L	50.0	< 250.0 U
2,4,6-Trichlorophenol, ug/L	10.0	< 50.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-278

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Acenaphthene, ug/L	10.0	< 10.0 U
Acenaphthylene, ug/L	10.0	< 10.0 U
Anthracene, ug/L	10.0	< 10.0 U
Benzo (a) anthracene, ug/L	10.0	< 10.0 U
Benzo (a) pyrene, ug/L	10.0	< 10.0 U
Benzo (b) fluoranthene, ug/L	10.0	< 10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	< 10.0 U
Benzoic acid, ug/L	50.0	< 50.0 U
Benzo (k) fluoranthene, ug/L	10.0	< 10.0 U
Benzyl alcohol, ug/L	10.0	< 10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	< 10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	< 10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	< 10.0 U
Butylbenzylphthalate, ug/L	10.0	< 10.0 U
4-Chloroaniline, ug/L	10.0	< 10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	< 10.0 U
2-Chloronaphthalene, ug/L	10.0	< 10.0 U
2-Chlorophenol, ug/L	10.0	< 10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	< 10.0 U
Chrysene, ug/L	10.0	< 10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	< 10.0 U
Dibenzofuran, ug/L	10.0	< 10.0 U
1,2-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,3-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,4-Dichlorobenzene, ug/L	10.0	< 10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	< 20.0 U
2,4-Dichlorophenol, ug/L	10.0	< 10.0 U
Diethylphthalate, ug/L	10.0	3.0 A
2,4-Dimethylphenol, ug/L	10.0	< 10.0 U
Dimethyl phthalate, ug/L	10.0	< 10.0 U
Di-n-butylphthalate, ug/L	10.0	< 10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	< 50.0 U
2,4-Dinitrophenol, ug/L	50.0	< 50.0 U
2,4-Dinitrotoluene, ug/L	10.0	< 10.0 U
2,6-Dinitrotoluene, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-27B

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Di-n-octyl phthalate, ug/L	10.0	< 10.0 U
Fluoranthene, ug/L	10.0	< 10.0 U
Fluorene, ug/L	10.0	< 10.0 U
Hexachlorobenzene, ug/L	10.0	< 10.0 U
Hexachlorobutadiene, ug/L	10.0	< 10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	< 10.0 U
Hexachloroethane, ug/L	10.0	< 10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	< 10.0 U
Isophorone, ug/L	10.0	< 10.0 U
2-Methylnaphthalene, ug/L	10.0	< 10.0 U
2-Methylphenol, ug/L	10.0	< 10.0 U
4-Methylphenol, ug/L	10.0	< 10.0 U
Naphthalene, ug/L	10.0	< 10.0 U
2-Nitroaniline, ug/L	50.0	< 50.0 U
3-Nitroaniline, ug/L	50.0	< 50.0 U
4-Nitroaniline, ug/L	50.0	< 50.0 U
Nitrobenzene, ug/L	10.0	< 10.0 U
2-Nitrophenol, ug/L	10.0	< 10.0 U
4-Nitrophenol, ug/L	50.0	< 50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	< 10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	< 10.0 U
Pentachlorophenol, ug/L	50.0	< 50.0 U
Phenanthrene, ug/L	10.0	< 10.0 U
Phenol, ug/L	10.0	< 10.0 U
Pyrene, ug/L	10.0	< 10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	< 10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	< 50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-29

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/04/90	06/04/90 Replicate
Acenaphthene, ug/L	10.0	< 10.0 U	< 10.0 U
Acenaphthylene, ug/L	10.0	< 10.0 U	< 10.0 U
Anthracene, ug/L	10.0	< 10.0 U	< 10.0 U
Benzo (a) anthracene, ug/L	10.0	< 10.0 U	< 10.0 U
Benzo (a) pyrene, ug/L	10.0	< 10.0 U	< 10.0 U
Benzo (b) fluoranthene, ug/L	10.0	< 10.0 U	< 10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	< 10.0 U	< 10.0 U
Benzoic acid, ug/L	50.0	< 50.0 U	< 50.0 U
Benzo (k) fluoranthene, ug/L	10.0	< 10.0 U	< 10.0 U
Benzyl alcohol, ug/L	10.0	< 10.0 U	< 10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	< 10.0 U	< 10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	< 10.0 U	< 10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	< 10.0 U	< 10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	< 10.0 U	< 10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	< 10.0 U	< 10.0 U
Butylbenzylphthalate, ug/L	10.0	< 10.0 U	< 10.0 U
4-Chloroaniline, ug/L	10.0	< 10.0 U	< 10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	< 10.0 U	< 10.0 U
2-Chloronaphthalene, ug/L	10.0	< 10.0 U	< 10.0 U
2-Chlorophenol, ug/L	10.0	< 10.0 U	< 10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	< 10.0 U	< 10.0 U
Chrysene, ug/L	10.0	< 10.0 U	< 10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	< 10.0 U	< 10.0 U
Dibenzofuran, ug/L	10.0	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene, ug/L	10.0	< 10.0 U	< 10.0 U
1,3-Dichlorobenzene, ug/L	10.0	< 10.0 U	< 10.0 U
1,4-Dichlorobenzene, ug/L	10.0	< 10.0 U	< 10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	< 20.0 U	< 20.0 U
2,4-Dichlorophenol, ug/L	10.0	< 10.0 U	< 10.0 U
Diethylphthalate, ug/L	10.0	< 10.0 U	< 10.0 U
2,4-Dimethylphenol, ug/L	10.0	< 10.0 U	< 10.0 U
Dimethyl phthalate, ug/L	10.0	< 10.0 U	< 10.0 U
Di-n-butylphthalate, ug/L	10.0	< 10.0 U	< 10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	< 50.0 U	< 50.0 U
2,4-Dinitrophenol, ug/L	50.0	< 50.0 U	< 50.0 U
2,4-Dinitrotoluene, ug/L	10.0	< 10.0 U	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-29

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/04/90	06/04/90 Replicate
2,6-Dinitrotoluene, ug/L	10.0	< 10.0 U	< 10.0 U
Di-n-octyl phthalate, ug/L	10.0	< 10.0 U	< 10.0 U
Fluoranthene, ug/L	10.0	< 10.0 U	< 10.0 U
Fluorene, ug/L	10.0	< 10.0 U	< 10.0 U
Hexachlorobenzene, ug/L	10.0	< 10.0 U	< 10.0 U
Hexachlorobutadiene, ug/L	10.0	< 10.0 U	< 10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	< 10.0 U	< 10.0 U
Hexachloroethane, ug/L	10.0	< 10.0 U	< 10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	< 10.0 U	< 10.0 U
Isophorone, ug/L	10.0	< 10.0 U	< 10.0 U
2-Methylnaphthalene, ug/L	10.0	< 10.0 U	< 10.0 U
2-Methylphenol, ug/L	10.0	< 10.0 U	< 10.0 U
4-Methylphenol, ug/L	10.0	< 10.0 U	< 10.0 U
Naphthalene, ug/L	10.0	< 10.0 U	< 10.0 U
2-Nitroaniline, ug/L	50.0	< 50.0 U	< 50.0 U
3-Nitroaniline, ug/L	50.0	< 50.0 U	< 50.0 U
4-Nitroaniline, ug/L	50.0	< 50.0 U	< 50.0 U
Nitrobenzene, ug/L	10.0	< 10.0 U	< 10.0 U
2-Nitrophenol, ug/L	10.0	< 10.0 U	< 10.0 U
4-Nitrophenol, ug/L	50.0	< 50.0 U	< 50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	< 10.0 U	< 10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	< 10.0 U	< 10.0 U
Pentachlorophenol, ug/L	50.0	< 50.0 U	< 50.0 U
Phenanthrene, ug/L	10.0	< 10.0 U	< 10.0 U
Phenol, ug/L	10.0	< 10.0 U	< 10.0 U
Pyrene, ug/L	10.0	< 10.0 U	< 10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	< 10.0 U	< 10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	< 50.0 U	< 50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	< 10.0 U	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-30A

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90	06/05/90 Replicate
Acenaphthene, ug/L	10.0	< 10.0 U	< 10.0 U
Acenaphthylene, ug/L	10.0	< 10.0 U	< 10.0 U
Anthracene, ug/L	10.0	< 10.0 U	< 10.0 U
Benzo (a) anthracene, ug/L	10.0	< 10.0 U	< 10.0 U
Benzo (a) pyrene, ug/L	10.0	< 10.0 U	< 10.0 U
Benzo (b) fluoranthene, ug/L	10.0	< 10.0 U	< 10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	< 10.0 U	< 10.0 U
Benzoic acid, ug/L	50.0	< 50.0 U	< 50.0 U
Benzo (k) fluoranthene, ug/L	10.0	< 10.0 U	< 10.0 U
Benzyl alcohol, ug/L	10.0	< 10.0 U	< 10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	< 10.0 U	< 10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	< 10.0 U	< 10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	< 10.0 U	< 10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	< 10.0 U	< 10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	< 10.0 U	< 10.0 U
Butylbenzylphthalate, ug/L	10.0	< 10.0 U	< 10.0 U
4-Chloroaniline, ug/L	10.0	< 10.0 U	< 10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	< 10.0 U	< 10.0 U
2-Chloronaphthalene, ug/L	10.0	< 10.0 U	< 10.0 U
2-Chlorophenol, ug/L	10.0	< 10.0 U	< 10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	< 10.0 U	< 10.0 U
Chrysene, ug/L	10.0	< 10.0 U	< 10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	< 10.0 U	< 10.0 U
Dibenzofuran, ug/L	10.0	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene, ug/L	10.0	< 10.0 U	< 10.0 U
1,3-Dichlorobenzene, ug/L	10.0	4.0 J	2.0 J
1,4-Dichlorobenzene, ug/L	10.0	< 10.0 U	< 10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	< 20.0 U	< 20.0 U
2,4-Dichlorophenol, ug/L	10.0	< 10.0 U	< 10.0 U
Diethylphthalate, ug/L	10.0	< 10.0 U	< 10.0 U
2,4-Dimethylphenol, ug/L	10.0	< 10.0 U	< 10.0 U
Dimethyl phthalate, ug/L	10.0	< 10.0 U	< 10.0 U
Di-n-butylphthalate, ug/L	10.0	< 10.0 U	< 10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	< 50.0 U	< 50.0 U
2,4-Dinitrophenol, ug/L	50.0	< 50.0 U	< 50.0 U
2,4-Dinitrotoluene, ug/L	10.0	< 10.0 U	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-30A

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90	06/05/90 Replicate
2,6-Dinitrotoluene, ug/L	10.0	< 10.0 U	< 10.0 U
Di-n-octyl phthalate, ug/L	10.0	< 10.0 U	< 10.0 U
Fluoranthene, ug/L	10.0	< 10.0 U	< 10.0 U
Fluorene, ug/L	10.0	< 10.0 U	< 10.0 U
Hexachlorobenzene, ug/L	10.0	< 10.0 U	< 10.0 U
Hexachlorobutadiene, ug/L	10.0	< 10.0 U	< 10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	< 10.0 U	< 10.0 U
Hexachloroethane, ug/L	10.0	< 10.0 U	< 10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	< 10.0 U	< 10.0 U
Isophorone, ug/L	10.0	< 10.0 U	< 10.0 U
2-Methylnaphthalene, ug/L	10.0	< 10.0 U	< 10.0 U
2-Methylphenol, ug/L	10.0	< 10.0 U	< 10.0 U
4-Methylphenol, ug/L	10.0	< 10.0 U	< 10.0 U
Naphthalene, ug/L	10.0	< 10.0 U	< 10.0 U
2-Nitroaniline, ug/L	50.0	< 50.0 U	< 50.0 U
3-Nitroaniline, ug/L	50.0	< 50.0 U	< 50.0 U
4-Nitroaniline, ug/L	50.0	< 50.0 U	< 50.0 U
Nitrobenzene, ug/L	10.0	< 10.0 U	< 10.0 U
2-Nitrophenol, ug/L	10.0	< 10.0 U	< 10.0 U
4-Nitrophenol, ug/L	50.0	< 50.0 U	< 50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	< 10.0 U	< 10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	< 10.0 U	< 10.0 U
Pentachlorophenol, ug/L	50.0	< 50.0 U	< 50.0 U
Phenanthrene, ug/L	10.0	< 10.0 U	< 10.0 U
Phenol, ug/L	10.0	< 10.0 U	< 10.0 U
Pyrene, ug/L	10.0	< 10.0 U	< 10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	< 10.0 U	< 10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	< 50.0 U	< 50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	< 10.0 U	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-30B

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Acenaphthene, ug/L	10.0	< 10.0 U
Acenaphthylene, ug/L	10.0	< 10.0 U
Anthracene, ug/L	10.0	< 10.0 U
Benzo (a) anthracene, ug/L	10.0	< 10.0 U
Benzo (a) pyrene, ug/L	10.0	< 10.0 U
Benzo (b) fluoranthene, ug/L	10.0	< 10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	< 10.0 U
Benzoic acid, ug/L	50.0	< 50.0 U
Benzo (k) fluoranthene, ug/L	10.0	< 10.0 U
Benzyl alcohol, ug/L	10.0	< 10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	< 10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	< 10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	< 10.0 U
Butylbenzylphthalate, ug/L	10.0	< 10.0 U
4-Chloroaniline, ug/L	10.0	< 10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	< 10.0 U
2-Chloronaphthalene, ug/L	10.0	< 10.0 U
2-Chlorophenol, ug/L	10.0	< 10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	< 10.0 U
Chrysene, ug/L	10.0	< 10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	< 10.0 U
Dibenzofuran, ug/L	10.0	< 10.0 U
1,2-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,3-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,4-Dichlorobenzene, ug/L	10.0	< 10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	< 20.0 U
2,4-Dichlorophenol, ug/L	10.0	< 10.0 U
Diethylphthalate, ug/L	10.0	< 10.0 U
2,4-Dimethylphenol, ug/L	10.0	< 10.0 U
Dimethyl phthalate, ug/L	10.0	< 10.0 U
Di-n-butylphthalate, ug/L	10.0	< 10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	< 50.0 U
2,4-Dinitrophenol, ug/L	50.0	< 50.0 U
2,4-Dinitrotoluene, ug/L	10.0	< 10.0 U
2,6-Dinitrotoluene, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-30B

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/05/90
Di-n-octyl phthalate, ug/L	10.0	< 10.0 U
Fluoranthene, ug/L	10.0	< 10.0 U
Fluorene, ug/L	10.0	< 10.0 U
Hexachlorobenzene, ug/L	10.0	< 10.0 U
Hexachlorobutadiene, ug/L	10.0	< 10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	< 10.0 U
Hexachloroethane, ug/L	10.0	< 10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	< 10.0 U
Isophorone, ug/L	10.0	< 10.0 U
2-Methylnaphthalene, ug/L	10.0	< 10.0 U
2-Methylphenol, ug/L	10.0	< 10.0 U
4-Methylphenol, ug/L	10.0	< 10.0 U
Naphthalene, ug/L	10.0	< 10.0 U
2-Nitroaniline, ug/L	50.0	< 50.0 U
3-Nitroaniline, ug/L	50.0	< 50.0 U
4-Nitroaniline, ug/L	50.0	< 50.0 U
Nitrobenzene, ug/L	10.0	< 10.0 U
2-Nitrophenol, ug/L	10.0	< 10.0 U
4-Nitrophenol, ug/L	50.0	< 50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	< 10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	< 10.0 U
Pentachlorophenol, ug/L	50.0	< 50.0 U
Phenanthrene, ug/L	10.0	< 10.0 U
Phenol, ug/L	10.0	< 10.0 U
Pyrene, ug/L	10.0	< 10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	< 10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	< 50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-31

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/06/90
Acenaphthene, ug/L	10.0	< 10.0 U
Acenaphthylene, ug/L	10.0	< 10.0 U
Anthracene, ug/L	10.0	< 10.0 U
Benzo (a) anthracene, ug/L	10.0	< 10.0 U
Benzo (a) pyrene, ug/L	10.0	< 10.0 U
Benzo (b) fluoranthene, ug/L	10.0	< 10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	< 10.0 U
Benzoic acid, ug/L	50.0	62.0 A
Benzo (k) fluoranthene, ug/L	10.0	< 10.0 U
Benzyl alcohol, ug/L	10.0	< 10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	< 10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	< 10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	< 10.0 U
Butylbenzylphthalate, ug/L	10.0	< 10.0 U
4-Chloroaniline, ug/L	10.0	< 10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	< 10.0 U
2-Chloronaphthalene, ug/L	10.0	< 10.0 U
2-Chlorophenol, ug/L	10.0	< 10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	< 10.0 U
Chrysene, ug/L	10.0	< 10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	< 10.0 U
Dibenzofuran, ug/L	10.0	< 10.0 U
1,2-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,3-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,4-Dichlorobenzene, ug/L	10.0	< 10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	< 20.0 U
2,4-Dichlorophenol, ug/L	10.0	< 10.0 U
Diethylphthalate, ug/L	10.0	< 10.0 U
2,4-Dimethylphenol, ug/L	10.0	< 10.0 U
Dimethyl phthalate, ug/L	10.0	< 10.0 U
Di-n-butylphthalate, ug/L	10.0	< 10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	< 50.0 U
2,4-Dinitrophenol, ug/L	50.0	< 50.0 U
2,4-Dinitrotoluene, ug/L	10.0	< 10.0 U
2,6-Dinitrotoluene, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-31

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/06/90
Di-n-octyl phthalate, ug/L	10.0	< 10.0 U
Fluoranthene, ug/L	10.0	< 10.0 U
Fluorene, ug/L	10.0	< 10.0 U
Hexachlorobenzene, ug/L	10.0	< 10.0 U
Hexachlorobutadiene, ug/L	10.0	< 10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	< 10.0 U
Hexachloroethane, ug/L	10.0	< 10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	< 10.0 U
Isophorone, ug/L	10.0	< 10.0 U
2-Methylnaphthalene, ug/L	10.0	< 10.0 U
2-Methylphenol, ug/L	10.0	9.0 J
4-Methylphenol, ug/L	10.0	41.0 A
Naphthalene, ug/L	10.0	< 10.0 U
2-Nitroaniline, ug/L	50.0	< 50.0 U
3-Nitroaniline, ug/L	50.0	< 50.0 U
4-Nitroaniline, ug/L	50.0	< 50.0 U
Nitrobenzene, ug/L	10.0	< 10.0 U
2-Nitrophenol, ug/L	10.0	< 10.0 U
4-Nitrophenol, ug/L	50.0	< 50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	< 10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	< 10.0 U
Pentachlorophenol, ug/L	50.0	< 50.0 U
Phenanthrene, ug/L	10.0	< 10.0 U
Phenol, ug/L	10.0	190.0 A
Pyrene, ug/L	10.0	< 10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	< 10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	< 50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-32

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/06/90
Acenaphthene, ug/L	10.0	< 10.0 U
Acenaphthylene, ug/L	10.0	< 10.0 U
Anthracene, ug/L	10.0	< 10.0 U
Benzo (a) anthracene, ug/L	10.0	< 10.0 U
Benzo (a) pyrene, ug/L	10.0	< 10.0 U
Benzo (b) fluoranthene, ug/L	10.0	< 10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	< 10.0 U
Benzoic acid, ug/L	50.0	< 50.0 U
Benzo (k) fluoranthene, ug/L	10.0	< 10.0 U
Benzyl alcohol, ug/L	10.0	< 10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	< 10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	< 10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	< 10.0 U
Butylbenzylphthalate, ug/L	10.0	< 10.0 U
4-Chloroaniline, ug/L	10.0	< 10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	< 10.0 U
2-Chloronaphthalene, ug/L	10.0	< 10.0 U
2-Chlorophenol, ug/L	10.0	< 10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	< 10.0 U
Chrysene, ug/L	10.0	< 10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	< 10.0 U
Dibenzofuran, ug/L	10.0	< 10.0 U
1,2-Dichlorobenzene, ug/L	10.0	3.0 J
1,3-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,4-Dichlorobenzene, ug/L	10.0	< 10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	< 20.0 U
2,4-Dichlorophenol, ug/L	10.0	< 10.0 U
Diethylphthalate, ug/L	10.0	< 10.0 U
2,4-Dimethylphenol, ug/L	10.0	< 10.0 U
Dimethyl phthalate, ug/L	10.0	< 10.0 U
Di-n-butylphthalate, ug/L	10.0	< 10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	< 50.0 U
2,4-Dinitrophenol, ug/L	50.0	< 50.0 U
2,4-Dinitrotoluene, ug/L	10.0	< 10.0 U
2,6-Dinitrotoluene, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-32

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/06/90
Di-n-octyl phthalate, ug/L	10.0	< 10.0 U
Fluoranthene, ug/L	10.0	< 10.0 U
Fluorene, ug/L	10.0	< 10.0 U
Hexachlorobenzene, ug/L	10.0	< 10.0 U
Hexachlorobutadiene, ug/L	10.0	< 10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	< 10.0 U
Hexachloroethane, ug/L	10.0	< 10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	< 10.0 U
Isophorone, ug/L	10.0	< 10.0 U
2-Methylnaphthalene, ug/L	10.0	< 10.0 U
2-Methylphenol, ug/L	10.0	< 10.0 U
4-Methylphenol, ug/L	10.0	< 10.0 U
Naphthalene, ug/L	10.0	< 10.0 U
2-Nitroaniline, ug/L	50.0	< 50.0 U
3-Nitroaniline, ug/L	50.0	< 50.0 U
4-Nitroaniline, ug/L	50.0	< 50.0 U
Nitrobenzene, ug/L	10.0	< 10.0 U
2-Nitrophenol, ug/L	10.0	< 10.0 U
4-Nitrophenol, ug/L	50.0	< 50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	< 10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	< 10.0 U
Pentachlorophenol, ug/L	50.0	< 50.0 U
Phenanthrene, ug/L	10.0	< 10.0 U
Phenol, ug/L	10.0	< 10.0 U
Pyrene, ug/L	10.0	< 10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	< 10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	< 50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-33A

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/04/90
Acenaphthene, ug/L	10.0	< 10.0 U
Acenaphthylene, ug/L	10.0	< 10.0 U
Anthracene, ug/L	10.0	< 10.0 U
Benzo.(a) anthracene, ug/L	10.0	< 10.0 U
Benzo (a) pyrene, ug/L	10.0	< 10.0 U
Benzo (b) fluoranthene, ug/L	10.0	< 10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	< 10.0 U
Benzoic acid, ug/L	50.0	< 50.0 U
Benzo (k) fluoranthene, ug/L	10.0	< 10.0 U
Benzyl alcohol, ug/L	10.0	< 10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	< 10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	< 10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	< 10.0 U
Butylbenzylphthalate, ug/L	10.0	< 10.0 U
4-Chloroaniline, ug/L	10.0	< 10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	< 10.0 U
2-Chloronaphthalene, ug/L	10.0	< 10.0 U
2-Chlorophenol, ug/L	10.0	< 10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	< 10.0 U
Chrysene, ug/L	10.0	< 10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	< 10.0 U
Dibenzofuran, ug/L	10.0	< 10.0 U
1,2-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,3-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,4-Dichlorobenzene, ug/L	10.0	< 10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	< 20.0 U
2,4-Dichlorophenol, ug/L	10.0	< 10.0 U
Diethylphthalate, ug/L	10.0	< 10.0 U
2,4-Dimethylphenol, ug/L	10.0	< 10.0 U
Dimethyl phthalate, ug/L	10.0	< 10.0 U
Di-n-butylphthalate, ug/L	10.0	< 10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	< 50.0 U
2,4-Dinitrophenol, ug/L	50.0	< 50.0 U
2,4-Dinitrotoluene, ug/L	10.0	< 10.0 U
2,6-Dinitrotoluene, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-33A

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/04/90
Di-n-octyl phthalate, ug/L	10.0	< 10.0 U
Fluoranthene, ug/L	10.0	< 10.0 U
Fluorene, ug/L	10.0	< 10.0 U
Hexachlorobenzene, ug/L	10.0	< 10.0 U
Hexachlorobutadiene, ug/L	10.0	< 10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	< 10.0 U
Hexachloroethane, ug/L	10.0	< 10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	< 10.0 U
Isophorone, ug/L	10.0	< 10.0 U
2-Methylnaphthalene, ug/L	10.0	< 10.0 U
2-Methylphenol, ug/L	10.0	< 10.0 U
4-Methylphenol, ug/L	10.0	< 10.0 U
Naphthalene, ug/L	10.0	< 10.0 U
2-Nitroaniline, ug/L	50.0	< 50.0 U
3-Nitroaniline, ug/L	50.0	< 50.0 U
4-Nitroaniline, ug/L	50.0	< 50.0 U
Nitrobenzene, ug/L	10.0	< 10.0 U
2-Nitrophenol, ug/L	10.0	< 10.0 U
4-Nitrophenol, ug/L	50.0	< 50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	< 10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	< 10.0 U
Pentachlorophenol, ug/L	50.0	< 50.0 U
Phenanthrene, ug/L	10.0	< 10.0 U
Phenol, ug/L	10.0	< 10.0 U
Pyrene, ug/L	10.0	< 10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	< 10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	< 50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-338

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/04/90
Acenaphthene, ug/L	10.0	< 10.0 U
Acenaphthylene, ug/L	10.0	< 10.0 U
Anthracene, ug/L	10.0	< 10.0 U
Benzo (a) anthracene, ug/L	10.0	< 10.0 U
Benzo (a) pyrene, ug/L	10.0	< 10.0 U
Benzo (b) fluoranthene, ug/L	10.0	< 10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	< 10.0 U
Benzoic acid, ug/L	50.0	< 50.0 U
Benzo (k) fluoranthene, ug/L	10.0	< 10.0 U
Benzyl alcohol, ug/L	10.0	< 10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	< 10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	< 10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	< 10.0 U
Butylbenzylphthalate, ug/L	10.0	< 10.0 U
4-Chloroaniline, ug/L	10.0	< 10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	< 10.0 U
2-Chloronaphthalene, ug/L	10.0	< 10.0 U
2-Chlorophenol, ug/L	10.0	< 10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	< 10.0 U
Chrysene, ug/L	10.0	< 10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	< 10.0 U
Dibenzofuran, ug/L	10.0	< 10.0 U
1,2-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,3-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,4-Dichlorobenzene, ug/L	10.0	< 10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	< 20.0 U
2,4-Dichlorophenol, ug/L	10.0	< 10.0 U
Diethylphthalate, ug/L	10.0	< 10.0 U
2,4-Dimethylphenol, ug/L	10.0	< 10.0 U
Dimethyl phthalate, ug/L	10.0	< 10.0 U
Di-n-butylphthalate, ug/L	10.0	< 10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	< 50.0 U
2,4-Dinitrophenol, ug/L	50.0	< 50.0 U
2,4-Dinitrotoluene, ug/L	10.0	< 10.0 U
2,6-Dinitrotoluene, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-33B

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/04/90
Di-n-octyl phthalate, ug/L	10.0	< 10.0 U
Fluoranthene, ug/L	10.0	< 10.0 U
Fluorene, ug/L	10.0	< 10.0 U
Hexachlorobenzene, ug/L	10.0	< 10.0 U
Hexachlorobutadiene, ug/L	10.0	< 10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	< 10.0 U
Hexachloroethane, ug/L	10.0	< 10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	< 10.0 U
Isophorone, ug/L	10.0	< 10.0 U
2-Methylnaphthalene, ug/L	10.0	< 10.0 U
2-Methylphenol, ug/L	10.0	< 10.0 U
4-Methylphenol, ug/L	10.0	< 10.0 U
Naphthalene, ug/L	10.0	< 10.0 U
2-Nitroaniline, ug/L	50.0	< 50.0 U
3-Nitroaniline, ug/L	50.0	< 50.0 U
4-Nitroaniline, ug/L	50.0	< 50.0 U
Nitrobenzene, ug/L	10.0	< 10.0 U
2-Nitrophenol, ug/L	10.0	< 10.0 U
4-Nitrophenol, ug/L	50.0	< 50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	< 10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	< 10.0 U
Pentachlorophenol, ug/L	50.0	< 50.0 U
Phenanthrene, ug/L	10.0	< 10.0 U
Phenol, ug/L	10.0	< 10.0 U
Pyrene, ug/L	10.0	< 10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	< 10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	< 50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: PUB

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/04/90
Acenaphthene, ug/L	10.0	< 10.0 U
Acenaphthylene, ug/L	10.0	< 10.0 U
Anthracene, ug/L	10.0	< 10.0 U
Benzo (a) anthracene, ug/L	10.0	< 10.0 U
Benzo (a) pyrene, ug/L	10.0	< 10.0 U
Benzo (b) fluoranthene, ug/L	10.0	< 10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	< 10.0 U
Benzoic acid, ug/L	50.0	< 50.0 U
Benzo (k) fluoranthene, ug/L	10.0	< 10.0 U
Benzyl alcohol, ug/L	10.0	< 10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	< 10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	< 10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	< 10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	< 10.0 U
Butylbenzylphthalate, ug/L	10.0	< 10.0 U
4-Chloroaniline, ug/L	10.0	< 10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	< 10.0 U
2-Chloronaphthalene, ug/L	10.0	< 10.0 U
2-Chlorophenol, ug/L	10.0	< 10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	< 10.0 U
Chrysene, ug/L	10.0	< 10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	< 10.0 U
Dibenzofuran, ug/L	10.0	< 10.0 U
1,2-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,3-Dichlorobenzene, ug/L	10.0	< 10.0 U
1,4-Dichlorobenzene, ug/L	10.0	< 10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	< 20.0 U
2,4-Dichlorophenol, ug/L	10.0	< 10.0 U
Diethylphthalate, ug/L	10.0	< 10.0 U
2,4-Dimethylphenol, ug/L	10.0	< 10.0 U
Dimethyl phthalate, ug/L	10.0	< 10.0 U
Di-n-butylphthalate, ug/L	10.0	< 10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	< 50.0 U
2,4-Dinitrophenol, ug/L	50.0	< 50.0 U
2,4-Dinitrotoluene, ug/L	10.0	< 10.0 U
2,6-Dinitrotoluene, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: PUB

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	06/04/90
Di-n-octyl phthalate, ug/L	10.0	< 10.0 U
Fluoranthene, ug/L	10.0	< 10.0 U
Fluorene, ug/L	10.0	< 10.0 U
Hexachlorobenzene, ug/L	10.0	< 10.0 U
Hexachlorobutadiene, ug/L	10.0	< 10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	< 10.0 U
Hexachloroethane, ug/L	10.0	< 10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	< 10.0 U
Isophorone, ug/L	10.0	< 10.0 U
2-Methylnaphthalene, ug/L	10.0	< 10.0 U
2-Methylphenol, ug/L	10.0	< 10.0 U
4-Methylphenol, ug/L	10.0	< 10.0 U
Naphthalene, ug/L	10.0	< 10.0 U
2-Nitroaniline, ug/L	50.0	< 50.0 U
3-Nitroaniline, ug/L	50.0	< 50.0 U
4-Nitroaniline, ug/L	50.0	< 50.0 U
Nitrobenzene, ug/L	10.0	< 10.0 U
2-Nitrophenol, ug/L	10.0	< 10.0 U
4-Nitrophenol, ug/L	50.0	< 50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	< 10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	< 10.0 U
Pentachlorophenol, ug/L	50.0	< 50.0 U
Phenanthrene, ug/L	10.0	< 10.0 U
Phenol, ug/L	10.0	< 10.0 U
Pyrene, ug/L	10.0	< 10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	< 10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	< 50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	< 10.0 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

TABLE 4

Summary of PDI Phase 1 and Phase 2
Ground-Water Quality Data

Pesticides and
Poly-Chlorinated Biphenyls

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-23

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	06/05/90
Aldrin, ug/L	0.05	< 0.05 U
alpha-BHC, ug/L	0.05	< 0.05 U
beta-BHC, ug/L	0.05	< 0.05 U
delta-BHC, ug/L	0.05	< 0.05 U
gamma-BHC (Lindane), ug/L	0.05	< 0.05 U
alpha-Chlordane, ug/L	0.5	< 0.5 U
gamma-Chlordane, ug/L	0.5	< 0.5 U
4,4'-DDD, ug/L	0.1	< 0.1 U
4,4'-DDE, ug/L	0.1	< 0.1 U
4,4'-DDT, ug/L	0.1	< 0.1 U
Dieldrin, ug/L	0.1	< 0.1 U
Endosulfan I, ug/L	0.05	< 0.05 U
Endosulfan II, ug/L	0.1	< 0.1 U
Endosulfan sulfate, ug/L	0.1	< 0.1 U
Endrin, ug/L	0.1	< 0.1 U
Endrin ketone, ug/L	0.1	< 0.1 U
Heptachlor, ug/L	0.05	< 0.05 U
Heptachlor epoxide, ug/L	0.05	< 0.05 U
Methoxychlor, ug/L	0.05	< 0.05 U
Toxaphene, ug/L	1.0	< 1.0 U

Chemical Compound Class: Poly-Chlorinated Biphenyls

Chemical Parameter	CRQL	06/05/90
Aroclor-1016, ug/L	0.5	< 0.5 U
Aroclor-1221, ug/L	0.5	< 0.5 U
Aroclor-1232, ug/L	0.5	< 0.5 U
Aroclor-1242, ug/L	0.5	< 0.5 U
Aroclor-1248, ug/L	0.5	< 0.5 U
Aroclor-1254, ug/L	0.5	< 0.5 U
Aroclor-1260, ug/L	0.5	< 0.5 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-24A

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	06/04/90
Aldrin, ug/L	0.05	< 0.05 U
alpha-BHC, ug/L	0.05	< 0.05 U
beta-BHC, ug/L	0.05	< 0.05 U
delta-BHC, ug/L	0.05	< 0.05 U
gamma-BHC (Lindane), ug/L	0.05	< 0.05 U
alpha-Chlordane, ug/L	0.5	< 0.5 U
gamma-Chlordane, ug/L	0.5	< 0.5 U
4,4'-DDD, ug/L	0.1	< 0.1 U
4,4'-DDE, ug/L	0.1	< 0.1 U
4,4'-DDT, ug/L	0.1	< 0.1 U
Dieldrin, ug/L	0.1	< 0.1 U
Endosulfan I, ug/L	0.05	< 0.05 U
Endosulfan II, ug/L	0.1	< 0.1 U
Endosulfan sulfate, ug/L	0.1	< 0.1 U
Endrin, ug/L	0.1	< 0.1 U
Endrin ketone, ug/L	0.1	< 0.1 U
Heptachlor, ug/L	0.05	< 0.05 U
Heptachlor epoxide, ug/L	0.05	< 0.05 U
Methoxychlor, ug/L	0.05	< 0.05 U
Toxaphene, ug/L	1.0	< 1.0 U

Chemical Compound Class: Poly-Chlorinated Biphenyls

Chemical Parameter	CRQL	06/04/90
Aroclor-1016, ug/L	0.5	< 0.5 U
Aroclor-1221, ug/L	0.5	< 0.5 U
Aroclor-1232, ug/L	0.5	< 0.5 U
Aroclor-1242, ug/L	0.5	< 0.5 U
Aroclor-1248, ug/L	0.5	< 0.5 U
Aroclor-1254, ug/L	0.5	< 0.5 U
Aroclor-1260, ug/L	0.5	< 0.5 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-24B

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	06/04/90
Aldrin, ug/L	0.05	< 0.05 U
alpha-BHC, ug/L	0.05	< 0.05 U
beta-BHC, ug/L	0.05	< 0.05 U
delta-BHC, ug/L	0.05	< 0.05 U
gamma-BHC (Lindane), ug/L	0.05	< 0.05 U
alpha-Chlordane, ug/L	0.5	< 0.5 U
gamma-Chlordane, ug/L	0.5	< 0.5 U
4,4'-DDD, ug/L	0.1	< 0.1 U
4,4'-DDE, ug/L	0.1	< 0.1 U
4,4'-DDT, ug/L	0.1	< 0.1 U
Dieldrin, ug/L	0.1	< 0.1 U
Endosulfan I, ug/L	0.05	< 0.05 U
Endosulfan II, ug/L	0.1	< 0.1 U
Endosulfan sulfate, ug/L	0.1	< 0.1 U
Endrin, ug/L	0.1	< 0.1 U
Endrin ketone, ug/L	0.1	< 0.1 U
Heptachlor, ug/L	0.05	< 0.05 U
Heptachlor epoxide, ug/L	0.05	< 0.05 U
Methoxychlor, ug/L	0.05	< 0.05 U
Toxaphene, ug/L	1.0	< 1.0 U

Chemical Compound Class: Poly-Chlorinated Biphenyls

Chemical Parameter	CRQL	06/04/90
Aroclor-1016, ug/L	0.5	< 0.5 U
Aroclor-1221, ug/L	0.5	< 0.5 U
Aroclor-1232, ug/L	0.5	< 0.5 U
Aroclor-1242, ug/L	0.5	< 0.5 U
Aroclor-1248, ug/L	0.5	< 0.5 U
Aroclor-1254, ug/L	0.5	< 0.5 U
Aroclor-1260, ug/L	0.5	< 0.5 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-25A

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	06/05/90
Aldrin, ug/L	0.05	< 0.05 U
alpha-BHC, ug/L	0.05	< 0.05 U
beta-BHC, ug/L	0.05	< 0.05 U
delta-BHC, ug/L	0.05	< 0.05 U
gamma-BHC (Lindane), ug/L	0.05	< 0.05 U
alpha-Chlordane, ug/L	0.5	< 0.5 U
gamma-Chlordane, ug/L	0.5	< 0.5 U
4,4'-DDD, ug/L	0.1	< 0.1 U
4,4'-DDE, ug/L	0.1	< 0.1 U
4,4'-DDT, ug/L	0.1	< 0.1 U
Dieldrin, ug/L	0.1	< 0.1 U
Endosulfan I, ug/L	0.05	< 0.05 U
Endosulfan II, ug/L	0.1	< 0.1 U
Endosulfan sulfate, ug/L	0.1	< 0.1 U
Endrin, ug/L	0.1	< 0.1 U
Endrin ketone, ug/L	0.1	< 0.1 U
Heptachlor, ug/L	0.05	< 0.05 U
Heptachlor epoxide, ug/L	0.05	< 0.05 U
Methoxychlor, ug/L	0.05	< 0.05 U
Toxaphene, ug/L	1.0	< 1.0 U

Chemical Compound Class: Poly-Chlorinated Biphenyls

Chemical Parameter	CRQL	06/05/90
Aroclor-1016, ug/L	0.5	< 0.5 U
Aroclor-1221, ug/L	0.5	< 0.5 U
Aroclor-1232, ug/L	0.5	< 0.5 U
Aroclor-1242, ug/L	0.5	< 0.5 U
Aroclor-1248, ug/L	0.5	< 0.5 U
Aroclor-1254, ug/L	0.5	< 0.5 U
Aroclor-1260, ug/L	0.5	< 0.5 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-25B

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	06/05/90
Aldrin, ug/L	0.05	< 0.05 U
alpha-BHC, ug/L	0.05	< 0.05 U
beta-BHC, ug/L	0.05	< 0.05 U
delta-BHC, ug/L	0.05	< 0.05 U
gamma-BHC (Lindane), ug/L	0.05	< 0.05 U
alpha-Chlordane, ug/L	0.5	< 0.5 U
gamma-Chlordane, ug/L	0.5	< 0.5 U
4,4'-DDD, ug/L	0.1	< 0.1 U
4,4'-DDE, ug/L	0.1	< 0.1 U
4,4'-DDT, ug/L	0.1	< 0.1 U
Dieldrin, ug/L	0.1	< 0.1 U
Endosulfan I, ug/L	0.05	< 0.05 U
Endosulfan II, ug/L	0.1	< 0.1 U
Endosulfan sulfate, ug/L	0.1	< 0.1 U
Endrin, ug/L	0.1	< 0.1 U
Endrin ketone, ug/L	0.1	< 0.1 U
Heptachlor, ug/L	0.05	< 0.05 U
Heptachlor epoxide, ug/L	0.05	< 0.05 U
Methoxychlor, ug/L	0.05	< 0.05 U
Toxaphene, ug/L	1.0	< 1.0 U

Chemical Compound Class: Poly-Chlorinated Biphenyls

Chemical Parameter	CRQL	06/05/90
Aroclor-1016, ug/L	0.5	< 0.5 U
Aroclor-1221, ug/L	0.5	< 0.5 U
Aroclor-1232, ug/L	0.5	< 0.5 U
Aroclor-1242, ug/L	0.5	< 0.5 U
Aroclor-1248, ug/L	0.5	< 0.5 U
Aroclor-1254, ug/L	0.5	< 0.5 U
Aroclor-1260, ug/L	0.5	< 0.5 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-26A

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	06/05/90
Aldrin, ug/L	0.05	< 0.05 U
alpha-BHC, ug/L	0.05	< 0.05 U
beta-BHC, ug/L	0.05	< 0.05 U
delta-BHC, ug/L	0.05	< 0.05 U
gamma-BHC (Lindane), ug/L	0.05	< 0.05 U
alpha-Chlordane, ug/L	0.5	< 0.5 U
gamma-Chlordane, ug/L	0.5	< 0.5 U
4,4'-DDD, ug/L	0.1	< 0.1 U
4,4'-DDE, ug/L	0.1	< 0.1 U
4,4'-DDT, ug/L	0.1	< 0.1 U
Dieldrin, ug/L	0.1	< 0.1 U,
Endosulfan I, ug/L	0.05	< 0.05 U
Endosulfan II, ug/L	0.1	< 0.1 U
Endosulfan sulfate, ug/L	0.1	< 0.1 U
Endrin, ug/L	0.1	< 0.1 U
Endrin ketone, ug/L	0.1	< 0.1 U
Heptachlor, ug/L	0.05	< 0.05 U
Heptachlor epoxide, ug/L	0.05	< 0.05 U
Methoxychlor, ug/L	0.05	< 0.05 U
Toxaphene, ug/L	1.0	< 1.0 U

Chemical Compound Class: Poly-Chlorinated Biphenyls

Chemical Parameter	CRQL	06/05/90
Aroclor-1016, ug/L	0.5	< 0.5 U
Aroclor-1221, ug/L	0.5	< 0.5 U
Aroclor-1232, ug/L	0.5	< 0.5 U
Aroclor-1242, ug/L	0.5	< 0.5 U
Aroclor-1248, ug/L	0.5	< 0.5 U
Aroclor-1254, ug/L	0.5	< 0.5 U
Aroclor-1260, ug/L	0.5	< 0.5 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-26B

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	06/05/90
Aldrin, ug/L	0.05	< 0.05 U
alpha-BHC, ug/L	0.05	< 0.05 U
beta-BHC, ug/L	0.05	< 0.05 U
delta-BHC, ug/L	0.05	< 0.05 U
gamma-BHC (Lindane), ug/L	0.05	< 0.05 U
alpha-Chlordane, ug/L	0.5	< 0.5 U
gamma-Chlordane, ug/L	0.5	< 0.5 U
4,4'-DDD, ug/L	0.1	< 0.1 U
4,4'-DDE, ug/L	0.1	< 0.1 U
4,4'-DDT, ug/L	0.1	< 0.1 U
Dieldrin, ug/L	0.1	< 0.1 U
Endosulfan I, ug/L	0.05	< 0.05 U
Endosulfan II, ug/L	0.1	< 0.1 U
Endosulfan sulfate, ug/L	0.1	< 0.1 U
Endrin, ug/L	0.1	< 0.1 U
Endrin ketone, ug/L	0.1	< 0.1 U
Heptachlor, ug/L	0.05	< 0.05 U
Heptachlor epoxide, ug/L	0.05	< 0.05 U
Methoxychlor, ug/L	0.05	< 0.05 U
Toxaphene, ug/L	1.0	< 1.0 U

Chemical Compound Class: Poly-Chlorinated Biphenyls

Chemical Parameter	CRQL	06/05/90
Aroclor-1016, ug/L	0.5	< 0.5 U
Aroclor-1221, ug/L	0.5	< 0.5 U
Aroclor-1232, ug/L	0.5	< 0.5 U
Aroclor-1242, ug/L	0.5	< 0.5 U
Aroclor-1248, ug/L	0.5	< 0.5 U
Aroclor-1254, ug/L	0.5	< 0.5 U
Aroclor-1260, ug/L	0.5	< 0.5 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-27A

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	06/05/90
Aldrin, ug/L	0.05	< 0.05 U
alpha-BHC, ug/L	0.05	< 0.05 U
beta-BHC, ug/L	0.05	< 0.05 U
delta-BHC, ug/L	0.05	< 0.05 U
gamma-BHC (Lindane), ug/L	0.05	< 0.05 U
alpha-Chlordane, ug/L	0.5	< 0.5 U
gamma-Chlordane, ug/L	0.5	< 0.5 U
4,4'-DDD, ug/L	0.1	< 0.1 U
4,4'-DDE, ug/L	0.1	< 0.1 U
4,4'-DDT, ug/L	0.1	< 0.1 U
Dieldrin, ug/L	0.1	< 0.1 U
Endosulfan I, ug/L	0.05	< 0.05 U
Endosulfan II, ug/L	0.1	< 0.1 U
Endosulfan sulfate, ug/L	0.1	< 0.1 U
Endrin, ug/L	0.1	< 0.1 U
Endrin ketone, ug/L	0.1	< 0.1 U
Heptachlor, ug/L	0.05	< 0.05 U
Heptachlor epoxide, ug/L	0.05	< 0.05 U
Methoxychlor, ug/L	0.05	< 0.05 U
Toxaphene, ug/L	1.0	< 1.0 U

Chemical Compound Class: Poly-Chlorinated Biphenyls

Chemical Parameter	CRQL	06/05/90
Aroclor-1016, ug/L	0.5	< 0.5 U
Aroclor-1221, ug/L	0.5	< 0.5 U
Aroclor-1232, ug/L	0.5	< 0.5 U
Aroclor-1242, ug/L	0.5	< 0.5 U
Aroclor-1248, ug/L	0.5	< 0.5 U
Aroclor-1254, ug/L	0.5	< 0.5 U
Aroclor-1260, ug/L	0.5	< 0.5 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-27B

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	06/05/90
Aldrin, ug/L	0.05	< 0.05 U
alpha-BHC, ug/L	0.05	< 0.05 U
beta-BHC, ug/L	0.05	< 0.05 U
delta-BHC, ug/L	0.05	< 0.05 U
gamma-BHC (Lindane), ug/L	0.05	< 0.05 U
alpha-Chlordane, ug/L	0.5	< 0.5 U
gamma-Chlordane, ug/L	0.5	< 0.5 U
4,4'-DDD, ug/L	0.1	< 0.1 U
4,4'-DDE, ug/L	0.1	< 0.1 U
4,4'-DDT, ug/L	0.1	< 0.1 U
Dieldrin, ug/L	0.1	< 0.1 U
Endosulfan I, ug/L	0.05	< 0.05 U
Endosulfan II, ug/L	0.1	< 0.1 U
Endosulfan sulfate, ug/L	0.1	< 0.1 U
Endrin, ug/L	0.1	< 0.1 U
Endrin ketone, ug/L	0.1	< 0.1 U
Heptachlor, ug/L	0.05	< 0.05 U
Heptachlor epoxide, ug/L	0.05	< 0.05 U
Methoxychlor, ug/L	0.05	< 0.05 U
Toxaphene, ug/L	1.0	< 1.0 U

Chemical Compound Class: Poly-Chlorinated Biphenyls

Chemical Parameter	CRQL	06/05/90
Aroclor-1016, ug/L	0.5	< 0.5 U
Aroclor-1221, ug/L	0.5	< 0.5 U
Aroclor-1232, ug/L	0.5	< 0.5 U
Aroclor-1242, ug/L	0.5	< 0.5 U
Aroclor-1248, ug/L	0.5	< 0.5 U
Aroclor-1254, ug/L	0.5	< 0.5 U
Aroclor-1260, ug/L	0.5	< 0.5 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-29

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	06/04/90	06/04/90 Replicate
Aldrin, ug/L	0.05	< 0.05 U	< 0.05 U
alpha-BHC, ug/L	0.05	< 0.05 U	< 0.05 U
beta-BHC, ug/L	0.05	< 0.05 U	< 0.05 U
delta-BHC, ug/L	0.05	< 0.05 U	< 0.05 U
gamma-BHC (Lindane), ug/L	0.05	< 0.05 U	< 0.05 U
alpha-Chlordane, ug/L	0.5	< 0.5 U	< 0.5 U
gamma-Chlordane, ug/L	0.5	< 0.5 U	< 0.5 U
4,4'-DDD, ug/L	0.1	< 0.1 U	< 0.1 U
4,4'-DDE, ug/L	0.1	< 0.1 U	< 0.1 U
4,4'-DDT, ug/L	0.1	< 0.1 U	< 0.1 U
Dieldrin, ug/L	0.1	< 0.1 U	< 0.1 U
Endosulfan I, ug/L	0.05	< 0.05 U	< 0.05 U
Endosulfan II, ug/L	0.1	< 0.1 U	< 0.1 U
Endosulfan sulfate, ug/L	0.1	< 0.1 U	< 0.1 U
Endrin, ug/L	0.1	< 0.1 U	< 0.1 U
Endrin ketone, ug/L	0.1	< 0.1 U	< 0.1 U
Heptachlor, ug/L	0.05	< 0.05 U	< 0.05 U
Heptachlor epoxide, ug/L	0.05	< 0.05 U	< 0.05 U
Methoxychlor, ug/L	0.05	< 0.05 U	< 0.05 U
Toxaphene, ug/L	1.0	< 1.0 U	< 1.0 U

Chemical Compound Class: Poly-Chlorinated Biphenyls

Chemical Parameter	CRQL	06/04/90	06/04/90 Replicate
Aroclor-1016, ug/L	0.5	< 0.5 U	< 0.5 U
Aroclor-1221, ug/L	0.5	< 0.5 U	< 0.5 U
Aroclor-1232, ug/L	0.5	< 0.5 U	< 0.5 U
Aroclor-1242, ug/L	0.5	< 0.5 U	< 0.5 U
Aroclor-1248, ug/L	0.5	< 0.5 U	< 0.5 U
Aroclor-1254, ug/L	0.5	< 0.5 U	< 0.5 U
Aroclor-1260, ug/L	0.5	< 0.5 U	< 0.5 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-30A

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	06/05/90	06/05/90 Replicate
Aldrin, ug/L	0.05	< 0.05 U	< 0.05 U
alpha-BHC, ug/L	0.05	< 0.05 U	< 0.05 U
beta-BHC, ug/L	0.05	< 0.05 U	< 0.05 U
delta-BHC, ug/L	0.05	< 0.05 U	< 0.05 U
gamma-BHC (Lindane), ug/L	0.05	< 0.05 U	< 0.05 U
alpha-Chlordane, ug/L	0.5	< 0.5 U	< 0.5 U
gamma-Chlordane, ug/L	0.5	< 0.5 U	< 0.5 U
4,4'-DDD, ug/L	0.1	< 0.1 U	< 0.1 U
4,4'-DDE, ug/L	0.1	< 0.1 U	< 0.1 U
4,4'-DDT, ug/L	0.1	< 0.1 U	< 0.1 U
Dieldrin, ug/L	0.1	< 0.1 U	< 0.1 U
Endosulfan I, ug/L	0.05	< 0.05 U	< 0.05 U
Endosulfan II, ug/L	0.1	< 0.1 U	< 0.1 U
Endosulfan sulfate, ug/L	0.1	< 0.1 U	< 0.1 U
Endrin, ug/L	0.1	< 0.1 U	< 0.1 U
Endrin ketone, ug/L	0.1	< 0.1 U	< 0.1 U
Heptachlor, ug/L	0.05	< 0.05 U	< 0.05 U
Heptachlor epoxide, ug/L	0.05	< 0.05 U	< 0.05 U
Methoxychlor, ug/L	0.05	< 0.05 U	< 0.05 U
Toxaphene, ug/L	1.0	< 1.0 U	< 1.0 U

Chemical Compound Class: Poly-Chlorinated Biphenyls

Chemical Parameter	CRQL	06/05/90	06/05/90 Replicate
Aroclor-1016, ug/L	0.5	< 0.5 U	< 0.5 U
Aroclor-1221, ug/L	0.5	< 0.5 U	< 0.5 U
Aroclor-1232, ug/L	0.5	< 0.5 U	< 0.5 U
Aroclor-1242, ug/L	0.5	< 0.5 U	< 0.5 U
Aroclor-1248, ug/L	0.5	< 0.5 U	< 0.5 U
Aroclor-1254, ug/L	0.5	< 0.5 U	< 0.5 U
Aroclor-1260, ug/L	0.5	< 0.5 U	< 0.5 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-30B

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	06/05/90
Aldrin, ug/L	0.05	< 0.05 U
alpha-BHC, ug/L	0.05	< 0.05 U
beta-BHC, ug/L	0.05	< 0.05 U
delta-BHC, ug/L	0.05	< 0.05 U
gamma-BHC (Lindane), ug/L	0.05	< 0.05 U
alpha-Chlordane, ug/L	0.5	< 0.5 U
gamma-Chlordane, ug/L	0.5	< 0.5 U
4,4'-DDD, ug/L	0.1	< 0.1 U
4,4'-DDE, ug/L	0.1	< 0.1 U
4,4'-DDT, ug/L	0.1	< 0.1 U
Dieldrin, ug/L	0.1	< 0.1 U
Endosulfan I, ug/L	0.05	< 0.05 U
Endosulfan II, ug/L	0.1	< 0.1 U
Endosulfan sulfate, ug/L	0.1	< 0.1 U
Endrin, ug/L	0.1	< 0.1 U
Endrin ketone, ug/L	0.1	< 0.1 U
Heptachlor, ug/L	0.05	< 0.05 U
Heptachlor epoxide, ug/L	0.05	< 0.05 U
Methoxychlor, ug/L	0.05	< 0.05 U
Toxaphene, ug/L	1.0	< 1.0 U

Chemical Compound Class: Poly-Chlorinated Biphenyls

Chemical Parameter	CRQL	06/05/90
Aroclor-1016, ug/L	0.5	< 0.5 U
Aroclor-1221, ug/L	0.5	< 0.5 U
Aroclor-1232, ug/L	0.5	< 0.5 U
Aroclor-1242, ug/L	0.5	< 0.5 U
Aroclor-1248, ug/L	0.5	< 0.5 U
Aroclor-1254, ug/L	0.5	< 0.5 U
Aroclor-1260, ug/L	0.5	< 0.5 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-31

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	06/06/90
Aldrin, ug/L	0.05	< 0.05 U
alpha-BHC, ug/L	0.05	< 0.05 U
beta-BHC, ug/L	0.05	< 0.05 U
delta-BHC, ug/L	0.05	< 0.05 U
gamma-BHC (Lindane), ug/L	0.05	< 0.05 U
alpha-Chlordane, ug/L	0.5	< 0.5 U
gamma-Chlordane, ug/L	0.5	< 0.5 U
4,4'-DDD, ug/L	0.1	< 0.1 U
4,4'-DDE, ug/L	0.1	< 0.1 U
4,4'-DDT, ug/L	0.1	< 0.1 U
Dieldrin, ug/L	0.1	< 0.1 U
Endosulfan I, ug/L	0.05	< 0.05 U
Endosulfan II, ug/L	0.1	< 0.1 U
Endosulfan sulfate, ug/L	0.1	< 0.1 U
Endrin, ug/L	0.1	< 0.1 U
Endrin ketone, ug/L	0.1	< 0.1 U
Heptachlor, ug/L	0.05	< 0.05 U
Heptachlor epoxide, ug/L	0.05	< 0.05 U
Methoxychlor, ug/L	0.05	< 0.05 U
Toxaphene, ug/L	1.0	< 1.0 U

Chemical Compound Class: Poly-Chlorinated Biphenyls

Chemical Parameter	CRQL	06/06/90
Aroclor-1016, ug/L	0.5	< 0.5 U
Aroclor-1221, ug/L	0.5	< 0.5 U
Aroclor-1232, ug/L	0.5	< 0.5 U
Aroclor-1242, ug/L	0.5	< 0.5 U
Aroclor-1248, ug/L	0.5	< 0.5 U
Aroclor-1254, ug/L	0.5	< 0.5 U
Aroclor-1260, ug/L	0.5	< 0.5 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-32

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	06/06/90
Aldrin, ug/L	0.05	< 0.05 U
alpha-BHC, ug/L	0.05	< 0.05 U
beta-BHC, ug/L	0.05	< 0.05 U
delta-BHC, ug/L	0.05	< 0.05 U
gamma-BHC (Lindane), ug/L	0.05	< 0.05 U
alpha-Chlordane, ug/L	0.5	< 0.5 U
gamma-Chlordane, ug/L	0.5	< 0.5 U
4,4'-DDD, ug/L	0.1	< 0.1 U
4,4'-DDE, ug/L	0.1	< 0.1 U
4,4'-DDT, ug/L	0.1	< 0.1 U
Dieldrin, ug/L	0.1	< 0.1 U
Endosulfan I, ug/L	0.05	< 0.05 U
Endosulfan II, ug/L	0.1	< 0.1 U
Endosulfan sulfate, ug/L	0.1	< 0.1 U
Endrin, ug/L	0.1	< 0.1 U
Endrin ketone, ug/L	0.1	< 0.1 U
Heptachlor, ug/L	0.05	< 0.05 U
Heptachlor epoxide, ug/L	0.05	< 0.05 U
Methoxychlor, ug/L	0.05	< 0.05 U
Toxaphene, ug/L	1.0	< 1.0 U

Chemical Compound Class: Poly-Chlorinated Biphenyls

Chemical Parameter	CRQL	06/06/90
Aroclor-1016, ug/L	0.5	< 0.5 U
Aroclor-1221, ug/L	0.5	< 0.5 U
Aroclor-1232, ug/L	0.5	< 0.5 U
Aroclor-1242, ug/L	0.5	< 0.5 U
Aroclor-1248, ug/L	0.5	< 0.5 U
Aroclor-1254, ug/L	0.5	< 0.5 U
Aroclor-1260, ug/L	0.5	< 0.5 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-33A

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	06/04/90
Aldrin, ug/L	0.05	< 0.05 U
alpha-BHC, ug/L	0.05	< 0.05 U
beta-BHC, ug/L	0.05	< 0.05 U
delta-BHC, ug/L	0.05	< 0.05 U
gamma-BHC (Lindane), ug/L	0.05	< 0.05 U
alpha-Chlordane, ug/L	0.5	< 0.5 U
gamma-Chlordane, ug/L	0.5	< 0.5 U
4,4'-DDD, ug/L	0.1	< 0.1 U
4,4'-DDE, ug/L	0.1	< 0.1 U
4,4'-DDT, ug/L	0.1	< 0.1 U
Dieldrin, ug/L	0.1	< 0.1 U
Endosulfan I, ug/L	0.05	< 0.05 U
Endosulfan II, ug/L	0.1	< 0.1 U
Endosulfan sulfate, ug/L	0.1	< 0.1 U
Endrin, ug/L	0.1	< 0.1 U
Endrin ketone, ug/L	0.1	< 0.1 U
Heptachlor, ug/L	0.05	< 0.05 U
Heptachlor epoxide, ug/L	0.05	< 0.05 U
Methoxychlor, ug/L	0.05	< 0.05 U
Toxaphene, ug/L	1.0	< 1.0 U

Chemical Compound Class: Poly-Chlorinated Biphenyls

Chemical Parameter	CRQL	06/04/90
Aroclor-1016, ug/L	0.5	< 0.5 U
Aroclor-1221, ug/L	0.5	< 0.5 U
Aroclor-1232, ug/L	0.5	< 0.5 U
Aroclor-1242, ug/L	0.5	< 0.5 U
Aroclor-1248, ug/L	0.5	< 0.5 U
Aroclor-1254, ug/L	0.5	< 0.5 U
Aroclor-1260, ug/L	0.5	< 0.5 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-33B

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	06/04/90
Aldrin, ug/L	0.05	< 0.05 U
alpha-BHC, ug/L	0.05	< 0.05 U
beta-BHC, ug/L	0.05	< 0.05 U
delta-BHC, ug/L	0.05	< 0.05 U
gamma-BHC (Lindane), ug/L	0.05	< 0.05 U
alpha-Chlordane, ug/L	0.5	< 0.5 U
gamma-Chlordane, ug/L	0.5	< 0.5 U
4,4'-DDD, ug/L	0.1	< 0.1 U
4,4'-DDE, ug/L	0.1	< 0.1 U
4,4'-DDT, ug/L	0.1	< 0.1 U
Dieldrin, ug/L	0.1	< 0.1 U
Endosulfan I, ug/L	0.05	< 0.05 U
Endosulfan II, ug/L	0.1	< 0.1 U
Endosulfan sulfate, ug/L	0.1	< 0.1 U
Endrin, ug/L	0.1	< 0.1 U
Endrin ketone, ug/L	0.1	< 0.1 U
Heptachlor, ug/L	0.05	< 0.05 U
Heptachlor epoxide, ug/L	0.05	< 0.05 U
Methoxychlor, ug/L	0.05	< 0.05 U
Toxaphene, ug/L	1.0	< 1.0 U

Chemical Compound Class: Poly-Chlorinated Biphenyls

Chemical Parameter	CRQL	06/04/90
Aroclor-1016, ug/L	0.5	< 0.5 U
Aroclor-1221, ug/L	0.5	< 0.5 U
Aroclor-1232, ug/L	0.5	< 0.5 U
Aroclor-1242, ug/L	0.5	< 0.5 U
Aroclor-1248, ug/L	0.5	< 0.5 U
Aroclor-1254, ug/L	0.5	< 0.5 U
Aroclor-1260, ug/L	0.5	< 0.5 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: PUB

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	06/04/90
Aldrin, ug/L	0.05	< 0.05 U
alpha-BHC, ug/L	0.05	< 0.05 U
beta-BHC, ug/L	0.05	< 0.05 U
delta-BHC, ug/L	0.05	< 0.05 U
gamma-BHC (Lindane), ug/L	0.05	< 0.05 U
alpha-Chlordane, ug/L	0.5	< 0.5 U
gamma-Chlordane, ug/L	0.5	< 0.5 U
4,4'-DDD, ug/L	0.1	< 0.1 U
4,4'-DDE, ug/L	0.1	< 0.1 U
4,4'-DDT, ug/L	0.1	< 0.1 U
Dieldrin, ug/L	0.1	< 0.1 U
Endosulfan I, ug/L	0.05	< 0.05 U
Endosulfan II, ug/L	0.1	< 0.1 U
Endosulfan sulfate, ug/L	0.1	< 0.1 U
Endrin, ug/L	0.1	< 0.1 U
Endrin ketone, ug/L	0.1	< 0.1 U
Heptachlor, ug/L	0.05	< 0.05 U
Heptachlor epoxide, ug/L	0.05	< 0.05 U
Methoxychlor, ug/L	0.05	< 0.05 U
Toxaphene, ug/L	1.0	< 1.0 U

Chemical Compound Class: Poly-Chlorinated Biphenyls

Chemical Parameter	CRQL	06/04/90
Aroclor-1016, ug/L	0.5	< 0.5 U
Aroclor-1221, ug/L	0.5	< 0.5 U
Aroclor-1232, ug/L	0.5	< 0.5 U
Aroclor-1242, ug/L	0.5	< 0.5 U
Aroclor-1248, ug/L	0.5	< 0.5 U
Aroclor-1254, ug/L	0.5	< 0.5 U
Aroclor-1260, ug/L	0.5	< 0.5 U

Explanation

CRQL Contract Required Quantitation Limit

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

TABLE 4

Summary of PDI Phase 1 and Phase 2
Ground-Water Quality Data

Dissolved Metals

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-9

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/18/90
Aluminum, dissolved, mg/L	0.2	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	0.0535 A (0.0096)
Arsenic, dissolved, mg/L	0.01	0.0078 A (0.003)
Barium, dissolved, mg/L	0.2	0.0078 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0004 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.0017 UJ (0.0017)
Calcium, dissolved, mg/L	5.0	195.0 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.455 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.0095 U (0.0017)
Copper, dissolved, mg/L	0.025	< 0.0316 U (0.0045)
Iron, dissolved, mg/L	0.1	1.71 A (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	15.7 A (0.0301)
Manganese, dissolved, mg/L	0.015	0.167 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, dissolved, mg/L	0.04	0.347 A (0.0107)
Potassium, dissolved, mg/L	5.0	1.2 J (0.97)
Selenium, dissolved, mg/L	0.005	< 0.003 U (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	22.3 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 U (0.002)
Vanadium, dissolved, mg/L	0.05	0.0029 A (0.002)
Zinc, dissolved, mg/L	0.02	< 0.0188 U (0.0019)

Explanation

CRDL Contract Required Detection Limit
N/R Not Reported
- Not Analyzed

Validation Codes

A Quantitative Data
J Qualitative Data
R Unusable Data
U Chemical Parameter Not Detected
UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-10

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/16/90
Aluminum, dissolved, mg/L	0.2	< 0.0647 U (0.0385)
Antimony, dissolved, mg/L	0.06	< 0.0096 U (0.0096)
Arsenic, dissolved, mg/L	0.01	< 0.003 UJ (0.003)
Barium, dissolved, mg/L	0.2	0.0459 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	0.0159 A (0.0017)
Calcium, dissolved, mg/L	5.0	17.3 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.0981 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.0079 U (0.0017)
Copper, dissolved, mg/L	0.025	< 0.852 U (0.0045)
Iron, dissolved, mg/L	0.1	0.52 A (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	2.52 A (0.0301)
Manganese, dissolved, mg/L	0.015	0.118 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 U (0.1)
Nickel, dissolved, mg/L	0.04	0.0512 A (0.0107)
Potassium, dissolved, mg/L	5.0	< 2.14 U (0.97)
Selenium, dissolved, mg/L	0.005	0.0032 J (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	41.6 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 U (0.002)
Vanadium, dissolved, mg/L	0.05	< 0.002 U (0.002)
Zinc, dissolved, mg/L	0.02	7.25 A (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-11

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/16/90
Aluminum, dissolved, mg/L	0.2	0.691 A (0.0385)
Antimony, dissolved, mg/L	0.06	0.0144 A (0.0096)
Arsenic, dissolved, mg/L	0.01	0.0984 A (0.003)
Barium, dissolved, mg/L	0.2	0.0407 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.0017 U (0.0017)
Calcium, dissolved, mg/L	5.0	36.9 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.0091 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.0022 U (0.0017)
Copper, dissolved, mg/L	0.025	< 0.0045 UJ (0.0045)
Iron, dissolved, mg/L	0.1	7.41 A (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	3.78 A (0.0301)
Manganese, dissolved, mg/L	0.015	0.627 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 U (0.1)
Nickel, dissolved, mg/L	0.04	< 0.0107 U (0.0107)
Potassium, dissolved, mg/L	5.0	1.15 J (0.97)
Selenium, dissolved, mg/L	0.005	< 0.003 U (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	21.9 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 U (0.002)
Vanadium, dissolved, mg/L	0.05	< 0.002 U (0.002)
Zinc, dissolved, mg/L	0.02	0.942 A (0.0019)

Explanation

CRDL Contract Required Detection Limit
N/R Not Reported
\- Not Analyzed

Validation Codes

A Quantitative Data
J Qualitative Data
R Unusable Data
U Chemical Parameter Not Detected
UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-12

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/15/90
Aluminum, dissolved, mg/L	0.2	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	0.0508 J (0.0096)
Arsenic, dissolved, mg/L	0.01	0.556 A (0.003)
Barium, dissolved, mg/L	0.2	0.0944 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.0034 U (0.0017)
Calcium, dissolved, mg/L	5.0	344.0 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.0498 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.0041 U (0.0017)
Copper, dissolved, mg/L	0.025	< 0.059 U (0.0045)
Iron, dissolved, mg/L	0.1	< 0.12 U (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	130.0 A (0.0301)
Manganese, dissolved, mg/L	0.015	0.224 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, dissolved, mg/L	0.04	< 0.0107 UJ (0.0107)
Potassium, dissolved, mg/L	5.0	10.4 J (0.97)
Selenium, dissolved, mg/L	0.005	< 0.003 UJ (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	220.0 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 U (0.002)
Vanadium, dissolved, mg/L	0.05	0.0424 A (0.002)
Zinc, dissolved, mg/L	0.02	< 0.0323 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-13

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/15/90
Aluminum, dissolved, mg/L	0.2	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	0.045 J (0.0096)
Arsenic, dissolved, mg/L	0.01	0.0252 A (0.003)
Barium, dissolved, mg/L	0.2	0.0193 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.0017 U (0.0017)
Calcium, dissolved, mg/L	5.0	93.9 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.0018 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.0017 U (0.0017)
Copper, dissolved, mg/L	0.025	< 0.0045 UJ (0.0045)
Iron, dissolved, mg/L	0.1	1.27 A (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	9.95 A (0.0301)
Manganese, dissolved, mg/L	0.015	1.49 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, dissolved, mg/L	0.04	< 0.0107 UJ (0.0107)
Potassium, dissolved, mg/L	5.0	5.06 J (0.97)
Selenium, dissolved, mg/L	0.005	< 0.003 UJ (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	19.7 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 UJ (0.002)
Vanadium, dissolved, mg/L	0.05	< 0.002 U (0.002)
Zinc, dissolved, mg/L	0.02	< 0.008 U (0.0019)

Explanation

CRDL Contract Required Detection Limit
N/R Not Reported
\- Not Analyzed

Validation Codes

A Quantitative Data
J Qualitative Data
R Unusable Data
U Chemical Parameter Not Detected
UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-16

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/18/90
Aluminum, dissolved, mg/L	0.2	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	0.0098 A (0.0096)
Arsenic, dissolved, mg/L	0.01	2.3 A (0.003)
Barium, dissolved, mg/L	0.2	0.193 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0007 U (0.0003)
Cadmium, dissolved, mg/L	0.005	0.0061 J (0.0017)
Calcium, dissolved, mg/L	5.0	17.8 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.252 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.0073 U (0.0017)
Copper, dissolved, mg/L	0.025	< 0.0555 U (0.0045)
Iron, dissolved, mg/L	0.1	1.29 A (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	231.0 A (0.0301)
Manganese, dissolved, mg/L	0.015	< 0.0184 U (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, dissolved, mg/L	0.04	0.0877 A (0.0107)
Potassium, dissolved, mg/L	5.0	75.9 J (0.97)
Selenium, dissolved, mg/L	0.005	< 0.003 UJ (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	162.0 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 UJ (0.002)
Vanadium, dissolved, mg/L	0.05	0.145 A (0.002)
Zinc, dissolved, mg/L	0.02	< 0.0311 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-17

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/16/90
Aluminum, dissolved, mg/L	0.2	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	0.0305 A (0.0096)
Arsenic, dissolved, mg/L	0.01	0.164 A (0.003)
Barium, dissolved, mg/L	0.2	0.0317 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	0.0033 A (0.0017)
Calcium, dissolved, mg/L	5.0	108.0 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.0213 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.0044 U (0.0017)
Copper, dissolved, mg/L	0.025	< 0.188 U (0.0045)
Iron, dissolved, mg/L	0.1	< 0.149 U (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	68.3 A (0.0301)
Manganese, dissolved, mg/L	0.015	0.186 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 U (0.1)
Nickel, dissolved, mg/L	0.04	0.0173 A (0.0107)
Potassium, dissolved, mg/L	5.0	11.5 A (0.97)
Selenium, dissolved, mg/L	0.005	< 0.003 U (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	197.0 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 UJ (0.002)
Vanadium, dissolved, mg/L	0.05	0.126 A (0.002)
Zinc, dissolved, mg/L	0.02	< 0.037 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-18

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/16/90
Aluminum, dissolved, mg/L	0.2	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	0.0231 A (0.0096)
Arsenic, dissolved, mg/L	0.01	< 0.003 U (0.003)
Barium, dissolved, mg/L	0.2	0.0174 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	0.0267 A (0.0017)
Calcium, dissolved, mg/L	5.0	78.8 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.0201 J (0.0017)
Cobalt, dissolved, mg/L	0.05	0.0131 A (0.0017)
Copper, dissolved, mg/L	0.025	< 0.137 U (0.0045)
Iron, dissolved, mg/L	0.1	0.96 A (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	7.49 A (0.0301)
Manganese, dissolved, mg/L	0.015	0.526 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 U (0.1)
Nickel, dissolved, mg/L	0.04	0.0166 A (0.0107)
Potassium, dissolved, mg/L	5.0	3.19 J (0.97)
Selenium, dissolved, mg/L	0.005	< 0.003 U (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	75.5 A (0.0116)
Thallium, dissolved, mg/L	0.01	0.0027 J (0.002)
Vanadium, dissolved, mg/L	0.05	< 0.002 U (0.002)
Zinc, dissolved, mg/L	0.02	7.3 A (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-18A

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/16/90
Aluminum, dissolved, mg/L	0.2	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	0.031 A (0.0096)
Arsenic, dissolved, mg/L	0.01	< 0.003 U (0.003)
Barium, dissolved, mg/L	0.2	0.0246 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.0073 U (0.0017)
Calcium, dissolved, mg/L	5.0	80.9 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.0148 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.0069 U (0.0017)
Copper, dissolved, mg/L	0.025	< 0.0268 U (0.0045)
Iron, dissolved, mg/L	0.1	< 0.185 U (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	4.83 A (0.0301)
Manganese, dissolved, mg/L	0.015	0.151 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 U (0.1)
Nickel, dissolved, mg/L	0.04	0.0114 A (0.0107)
Potassium, dissolved, mg/L	5.0	2.56 J (0.97)
Selenium, dissolved, mg/L	0.005	0.0058 J (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	28.3 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 U (0.002)
Vanadium, dissolved, mg/L	0.05	< 0.002 U (0.002)
Zinc, dissolved, mg/L	0.02	2.15 A (0.0019)

Explanation

CRDL Contract Required Detection Limit
N/R Not Reported
\- Not Analyzed

Validation Codes

A Quantitative Data
J Qualitative Data
R Unusable Data
U Chemical Parameter Not Detected
UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-19

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/16/90
Aluminum, dissolved, mg/L	0.2	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	< 0.0096 U (0.0096)
Arsenic, dissolved, mg/L	0.01	< 0.003 U (0.003)
Barium, dissolved, mg/L	0.2	< 0.0032 U (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.0017 U (0.0017)
Calcium, dissolved, mg/L	5.0	3.15 A (0.0327)
Chromium, dissolved, mg/L	0.01	< 0.0017 UJ (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.0017 U (0.0017)
Copper, dissolved, mg/L	0.025	< 0.0045 UJ (0.0045)
Iron, dissolved, mg/L	0.1	< 0.0115 U (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	0.666 A (0.0301)
Manganese, dissolved, mg/L	0.015	0.138 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 U (0.1)
Nickel, dissolved, mg/L	0.04	< 0.0107 U (0.0107)
Potassium, dissolved, mg/L	5.0	1.89 J (0.97)
Selenium, dissolved, mg/L	0.005	< 0.003 U (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	6.8 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 U (0.002)
Vanadium, dissolved, mg/L	0.05	< 0.002 U (0.002)
Zinc, dissolved, mg/L	0.02	< 0.0615 U (0.0019)

Explanation

CRDL Contract Required Detection Limit
N/R Not Reported
\- Not Analyzed

Validation Codes

A Quantitative Data
J Qualitative Data
R Unusable Data
U Chemical Parameter Not Detected
UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-19A

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/16/90
Aluminum, dissolved, mg/L	0.2	0.0597 A (0.0385)
Antimony, dissolved, mg/L	0.06	0.0112 A (0.0096)
Arsenic, dissolved, mg/L	0.01	0.0354 A (0.003)
Barium, dissolved, mg/L	0.2	0.0153 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.0017 U (0.0017)
Calcium, dissolved, mg/L	5.0	20.0 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.0219 J (0.0017)
Cobalt, dissolved, mg/L	0.05	0.0261 A (0.0017)
Copper, dissolved, mg/L	0.025	< 0.0045 UJ (0.0045)
Iron, dissolved, mg/L	0.1	1.91 A (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	3.38 A (0.0301)
Manganese, dissolved, mg/L	0.015	0.897 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 U (0.1)
Nickel, dissolved, mg/L	0.04	< 0.0107 U (0.0107)
Potassium, dissolved, mg/L	5.0	3.48 J (0.97)
Selenium, dissolved, mg/L	0.005	< 0.003 U (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	24.1 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 U (0.002)
Vanadium, dissolved, mg/L	0.05	< 0.002 U (0.002)
Zinc, dissolved, mg/L	0.02	0.12 A (0.0019)

Explanation

CRDL Contract Required Detection Limit
N/R Not Reported
\- Not Analyzed

Validation Codes

A Quantitative Data
J Qualitative Data
R Unusable Data
U Chemical Parameter Not Detected
UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-21

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/18/90
Aluminum, dissolved, mg/L	0.2	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	0.0187 A (0.0096)
Arsenic, dissolved, mg/L	0.01	< 0.003 UJ (0.003)
Barium, dissolved, mg/L	0.2	0.0212 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.0017 UJ (0.0017)
Calcium, dissolved, mg/L	5.0	54.4 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.0098 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.0037 U (0.0017)
Copper, dissolved, mg/L	0.025	< 0.0411 U (0.0045)
Iron, dissolved, mg/L	0.1	< 0.0753 U (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	5.78 A (0.0301)
Manganese, dissolved, mg/L	0.015	1.22 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, dissolved, mg/L	0.04	< 0.0107 U (0.0107)
Potassium, dissolved, mg/L	5.0	2.35 J (0.97)
Selenium, dissolved, mg/L	0.005	< 0.003 U (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	13.7 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 U (0.002)
Vanadium, dissolved, mg/L	0.05	< 0.002 U (0.002)
Zinc, dissolved, mg/L	0.02	< 0.0251 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-22

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/17/90
Aluminum, dissolved, mg/L	0.2	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	0.0618 A (0.0096)
Arsenic, dissolved, mg/L	0.01	< 0.003 U (0.003)
Barium, dissolved, mg/L	0.2	0.0886 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.0017 U (0.0017)
Calcium, dissolved, mg/L	5.0	305.0 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.0186 J (0.0017)
Cobalt, dissolved, mg/L	0.05	0.019 A (0.0017)
Copper, dissolved, mg/L	0.025	< 0.0357 U (0.0045)
Iron, dissolved, mg/L	0.1	0.336 A (0.0114)
Lead, dissolved, mg/L	0.003	< 0.002 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	62.5 A (0.0301)
Manganese, dissolved, mg/L	0.015	2.54 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, dissolved, mg/L	0.04	0.042 A (0.0107)
Potassium, dissolved, mg/L	5.0	15.2 A (0.97)
Selenium, dissolved, mg/L	0.005	< 0.003 U (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	22.0 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 U (0.002)
Vanadium, dissolved, mg/L	0.05	< 0.002 U (0.002)
Zinc, dissolved, mg/L	0.02	< 0.0611 U (0.0019)

Explanation

CRDL Contract Required Detection Limit
N/R Not Reported
\- Not Analyzed

Validation Codes

A Quantitative Data
J Qualitative Data
R Unusable Data
U Chemical Parameter Not Detected
UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-23

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	06/05/90
Aluminum, dissolved, mg/L	0.2	0.242 J (0.027)
Antimony, dissolved, mg/L	0.06	< 0.037 U (0.037)
Arsenic, dissolved, mg/L	0.01	< 0.002 U (0.002)
Barium, dissolved, mg/L	0.2	0.0797 J (0.002)
Beryllium, dissolved, mg/L	0.005	< 0.001 U (0.001)
Cadmium, dissolved, mg/L	0.005	< 0.005 U (0.005)
Calcium, dissolved, mg/L	5.0	19.3 J (0.02)
Chromium, dissolved, mg/L	0.01	0.0098 J (0.003)
Cobalt, dissolved, mg/L	0.05	< 0.007 U (0.007)
Copper, dissolved, mg/L	0.025	0.0075 J (0.006)
Iron, dissolved, mg/L	0.1	0.0186 J (0.003)
Lead, dissolved, mg/L	0.005	< 0.002 U (0.002)
Magnesium, dissolved, mg/L	5.0	13.1 A (0.037)
Manganese, dissolved, mg/L	0.015	0.297 J (0.001)
Mercury, dissolved, ug/L	0.2	< 0.2 U (0.2)
Nickel, dissolved, mg/L	0.04	< 0.012 U (0.012)
Potassium, dissolved, mg/L	5.0	15.3 A (0.9)
Selenium, dissolved, mg/L	0.005	< 0.002 U (0.002)
Silver, dissolved, mg/L	0.01	< 0.003 U (0.003)
Sodium, dissolved, mg/L	5.0	102.0 J (0.038)
Thallium, dissolved, mg/L	0.01	< 0.004 U (0.004)
Vanadium, dissolved, mg/L	0.05	< 0.006 U (0.006)
Zinc, dissolved, mg/L	0.02	0.0648 J (0.008)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-24A

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	06/04/90	10/16/90
Aluminum, dissolved, mg/L	0.2	0.263 J (0.027)	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	< 0.037 U (0.037)	0.0186 A (0.0096)
Arsenic, dissolved, mg/L	0.01	< 0.002 U (0.002)	< 0.003 U (0.003)
Barium, dissolved, mg/L	0.2	0.0343 J (0.002)	0.0116 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.001 U (0.001)	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.005 U (0.005)	< 0.0017 U (0.0017)
Calcium, dissolved, mg/L	5.0	46.9 J (0.02)	41.3 A (0.0327)
Chromium, dissolved, mg/L	0.01	< 0.003 U (0.003)	0.0679 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.007 U (0.007)	< 0.0023 U (0.0017)
Copper, dissolved, mg/L	0.025	0.0076 J (0.006)	< 0.0045 UJ (0.0045)
Iron, dissolved, mg/L	0.1	0.0148 J (0.003)	< 0.263 U (0.0114)
Lead, dissolved, mg/L	0.003	< 0.002 U (0.002)	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	9.41 J (0.037)	7.75 A (0.0301)
Manganese, dissolved, mg/L	0.015	0.0604 J (0.001)	0.0327 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.2 U (0.2)	< 0.1 U (0.1)
Nickel, dissolved, mg/L	0.04	< 0.012 U (0.012)	0.0265 A (0.0107)
Potassium, dissolved, mg/L	5.0	1.93 J (0.9)	< 0.97 UJ (0.97)
Selenium, dissolved, mg/L	0.005	< 0.002 U (0.002)	< 0.003 U (0.003)
Silver, dissolved, mg/L	0.01	< 0.003 U (0.003)	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	21.3 J (0.038)	22.6 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.004 U (0.004)	< 0.002 U (0.002)
Vanadium, dissolved, mg/L	0.05	< 0.006 U (0.006)	< 0.002 U (0.002)
Zinc, dissolved, mg/L	0.02	0.0509 J (0.008)	< 0.0174 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-24B

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	06/04/90	10/16/90
Aluminum, dissolved, mg/L	0.2	0.277 J (0.027)	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	< 0.037 U (0.037)	< 0.0096 U (0.0096)
Arsenic, dissolved, mg/L	0.01	0.0029 J (0.002)	< 0.003 U (0.003)
Barium, dissolved, mg/L	0.2	0.0482 J (0.002)	0.025 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.001 U (0.001)	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.005 U (0.005)	< 0.0017 U (0.0017)
Calcium, dissolved, mg/L	5.0	22.4 J (0.02)	24.5 A (0.0327)
Chromium, dissolved, mg/L	0.01	< 0.003 U (0.003)	0.023 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.007 U (0.007)	< 0.0073 U (0.0017)
Copper, dissolved, mg/L	0.025	0.0103 J (0.006)	< 0.0045 UJ (0.0045)
Iron, dissolved, mg/L	0.1	1.22 J (0.003)	1.5 A (0.0114)
Lead, dissolved, mg/L	0.003	< 0.002 U (0.002)	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	4.8 J (0.037)	5.54 A (0.0301)
Manganese, dissolved, mg/L	0.015	1.2 J (0.001)	1.28 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.2 U (0.2)	< 0.1 U (0.1)
Nickel, dissolved, mg/L	0.04	< 0.012 U (0.012)	< 0.0107 U (0.0107)
Potassium, dissolved, mg/L	5.0	5.18 A (0.9)	3.4 J (0.97)
Selenium, dissolved, mg/L	0.005	< 0.002 U (0.002)	< 0.003 U (0.003)
Silver, dissolved, mg/L	0.01	0.0031 J (0.003)	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	61.9 J (0.038)	71.6 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.004 U (0.004)	< 0.002 UJ (0.002)
Vanadium, dissolved, mg/L	0.05	< 0.006 U (0.006)	< 0.002 U (0.002)
Zinc, dissolved, mg/L	0.02	0.0409 J (0.008)	< 0.0176 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-25A

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	06/05/90
Aluminum, dissolved, mg/L	0.2	0.0509 J (0.027)
Antimony, dissolved, mg/L	0.06	< 0.037 U (0.037)
Arsenic, dissolved, mg/L	0.01	< 0.002 U (0.002)
Barium, dissolved, mg/L	0.2	0.0858 J (0.002)
Beryllium, dissolved, mg/L	0.005	< 0.001 U (0.001)
Cadmium, dissolved, mg/L	0.005	< 0.005 U (0.005)
Calcium, dissolved, mg/L	5.0	4.04 J (0.02)
Chromium, dissolved, mg/L	0.01	< 0.003 U (0.003)
Cobalt, dissolved, mg/L	0.05	< 0.007 U (0.007)
Copper, dissolved, mg/L	0.025	< 0.006 U (0.006)
Iron, dissolved, mg/L	0.1	0.0888 J (0.003)
Lead, dissolved, mg/L	0.005	< 0.002 U (0.002)
Magnesium, dissolved, mg/L	5.0	0.467 J (0.037)
Manganese, dissolved, mg/L	0.015	0.0512 J (0.001)
Mercury, dissolved, ug/L	0.2	< 0.2 U (0.2)
Nickel, dissolved, mg/L	0.04	< 0.012 U (0.012)
Potassium, dissolved, mg/L	5.0	< 0.9 U (0.9)
Selenium, dissolved, mg/L	0.005	< 0.002 U (0.002)
Silver, dissolved, mg/L	0.01	< 0.003 U (0.003)
Sodium, dissolved, mg/L	5.0	13.5 J (0.038)
Thallium, dissolved, mg/L	0.01	< 0.004 U (0.004)
Vanadium, dissolved, mg/L	0.05	< 0.006 U (0.006)
Zinc, dissolved, mg/L	0.02	0.0259 J (0.008)

Explanation

CRDL Contract Required Detection Limit
N/R Not Reported
\- Not Analyzed

Validation Codes

A Quantitative Data
J Qualitative Data
R Unusable Data
U Chemical Parameter Not Detected
UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-25B

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	06/05/90
Aluminum, dissolved, mg/L	0.2	0.28 J (0.027)
Antimony, dissolved, mg/L	0.06	< 0.037 U (0.037)
Arsenic, dissolved, mg/L	0.01	< 0.002 U (0.002)
Barium, dissolved, mg/L	0.2	0.106 J (0.002)
Beryllium, dissolved, mg/L	0.005	< 0.001 U (0.001)
Cadmium, dissolved, mg/L	0.005	< 0.005 U (0.005)
Calcium, dissolved, mg/L	5.0	33.3 J (0.02)
Chromium, dissolved, mg/L	0.01	< 0.003 U (0.003)
Cobalt, dissolved, mg/L	0.05	< 0.007 U (0.007)
Copper, dissolved, mg/L	0.025	0.0099 J (0.006)
Iron, dissolved, mg/L	0.1	0.0644 J (0.003)
Lead, dissolved, mg/L	0.005	< 0.002 U (0.002)
Magnesium, dissolved, mg/L	5.0	4.92 J (0.037)
Manganese, dissolved, mg/L	0.015	0.796 J (0.001)
Mercury, dissolved, ug/L	0.2	< 0.2 U (0.2)
Nickel, dissolved, mg/L	0.04	< 0.012 U (0.012)
Potassium, dissolved, mg/L	5.0	15.1 A (0.9)
Selenium, dissolved, mg/L	0.005	< 0.002 U (0.002)
Silver, dissolved, mg/L	0.01	< 0.003 U (0.003)
Sodium, dissolved, mg/L	5.0	40.3 A (0.038)
Thallium, dissolved, mg/L	0.01	< 0.004 U (0.004)
Vanadium, dissolved, mg/L	0.05	< 0.006 U (0.006)
Zinc, dissolved, mg/L	0.02	0.0401 J (0.008)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-26A

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	06/05/90
Aluminum, dissolved, mg/L	0.2	0.138 J (0.027)
Antimony, dissolved, mg/L	0.06	< 0.037 U (0.037)
Arsenic, dissolved, mg/L	0.01	0.0171 A (0.002)
Barium, dissolved, mg/L	0.2	0.114 J (0.002)
Beryllium, dissolved, mg/L	0.005	< 0.001 U (0.001)
Cadmium, dissolved, mg/L	0.005	< 0.005 U (0.005)
Calcium, dissolved, mg/L	5.0	29.2 J (0.02)
Chromium, dissolved, mg/L	0.01	< 0.003 U (0.003)
Cobalt, dissolved, mg/L	0.05	< 0.007 U (0.007)
Copper, dissolved, mg/L	0.025	0.0121 J (0.006)
Iron, dissolved, mg/L	0.1	5.27 J (0.003)
Lead, dissolved, mg/L	0.005	< 0.002 U (0.002)
Magnesium, dissolved, mg/L	5.0	7.2 J (0.037)
Manganese, dissolved, mg/L	0.015	1.07 J (0.001)
Mercury, dissolved, ug/L	0.2	< 0.2 U (0.2)
Nickel, dissolved, mg/L	0.04	< 0.012 U (0.012)
Potassium, dissolved, mg/L	5.0	3.45 J (0.9)
Selenium, dissolved, mg/L	0.005	< 0.002 U (0.002)
Silver, dissolved, mg/L	0.01	< 0.003 U (0.003)
Sodium, dissolved, mg/L	5.0	12.3 J (0.038)
Thallium, dissolved, mg/L	0.01	< 0.004 U (0.004)
Vanadium, dissolved, mg/L	0.05	< 0.006 U (0.006)
Zinc, dissolved, mg/L	0.02	0.0505 J (0.008)

Explanation

CRDL Contract Required Detection Limit
N/R Not Reported
\- Not Analyzed

Validation Codes

A Quantitative Data
J Qualitative Data
R Unusable Data
U Chemical Parameter Not Detected
UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-26B

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	06/05/90
Aluminum, dissolved, mg/L	0.2	0.0492 J (0.027)
Antimony, dissolved, mg/L	0.06	< 0.037 U (0.037)
Arsenic, dissolved, mg/L	0.01	< 0.002 U (0.002)
Barium, dissolved, mg/L	0.2	0.105 J (0.002)
Beryllium, dissolved, mg/L	0.005	< 0.001 U (0.001)
Cadmium, dissolved, mg/L	0.005	< 0.005 U (0.005)
Calcium, dissolved, mg/L	5.0	41.0 J (0.02)
Chromium, dissolved, mg/L	0.01	< 0.003 U (0.003)
Cobalt, dissolved, mg/L	0.05	< 0.007 U (0.007)
Copper, dissolved, mg/L	0.025	< 0.006 U (0.006)
Iron, dissolved, mg/L	0.1	0.19 J (0.003)
Lead, dissolved, mg/L	0.005	< 0.002 U (0.002)
Magnesium, dissolved, mg/L	5.0	11.1 J (0.037)
Manganese, dissolved, mg/L	0.015	0.37 A (0.001)
Mercury, dissolved, ug/L	0.2	< 0.2 U (0.2)
Nickel, dissolved, mg/L	0.04	< 0.012 U (0.012)
Potassium, dissolved, mg/L	5.0	3.26 J (0.9)
Selenium, dissolved, mg/L	0.005	< 0.002 U (0.002)
Silver, dissolved, mg/L	0.01	< 0.003 U (0.003)
Sodium, dissolved, mg/L	5.0	39.5 J (0.038)
Thallium, dissolved, mg/L	0.01	< 0.004 U (0.004)
Vanadium, dissolved, mg/L	0.05	< 0.006 U (0.006)
Zinc, dissolved, mg/L	0.02	0.0648 J (0.008)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-27A

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	06/05/90
Aluminum, dissolved, mg/L	0.2	0.199 J (0.027)
Antimony, dissolved, mg/L	0.06	< 0.037 U (0.037)
Arsenic, dissolved, mg/L	0.01	0.0022 J (0.002)
Barium, dissolved, mg/L	0.2	0.0865 J (0.002)
Beryllium, dissolved, mg/L	0.005	< 0.001 U (0.001)
Cadmium, dissolved, mg/L	0.005	< 0.005 U (0.005)
Calcium, dissolved, mg/L	5.0	203.0 J (0.02)
Chromium, dissolved, mg/L	0.01	0.0117 A (0.003)
Cobalt, dissolved, mg/L	0.05	< 0.007 U (0.007)
Copper, dissolved, mg/L	0.025	0.0093 J (0.006)
Iron, dissolved, mg/L	0.1	0.0219 J (0.003)
Lead, dissolved, mg/L	0.005	< 0.002 U (0.002)
Magnesium, dissolved, mg/L	5.0	13.8 A (0.037)
Manganese, dissolved, mg/L	0.015	0.304 J (0.001)
Mercury, dissolved, ug/L	0.2	< 0.2 U (0.2)
Nickel, dissolved, mg/L	0.04	< 0.012 U (0.012)
Potassium, dissolved, mg/L	5.0	16.2 A (0.9)
Selenium, dissolved, mg/L	0.005	0.0141 J (0.002)
Silver, dissolved, mg/L	0.01	< 0.003 U (0.003)
Sodium, dissolved, mg/L	5.0	109.0 J (0.038)
Thallium, dissolved, mg/L	0.01	< 0.004 U (0.004)
Vanadium, dissolved, mg/L	0.05	< 0.006 U (0.006)
Zinc, dissolved, mg/L	0.02	0.0616 J (0.008)

Explanation

CRDL Contract Required Detection Limit
N/R Not Reported
\- Not Analyzed

Validation Codes

A Quantitative Data
J Qualitative Data
R Unusable Data
U Chemical Parameter Not Detected
UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-27B

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	06/05/90
Aluminum, dissolved, mg/L	0.2	0.178 J (0.027)
Antimony, dissolved, mg/L	0.06	< 0.037 U (0.037)
Arsenic, dissolved, mg/L	0.01	< 0.002 U (0.002)
Barium, dissolved, mg/L	0.2	0.0527 J (0.002)
Beryllium, dissolved, mg/L	0.005	< 0.001 U (0.001)
Cadmium, dissolved, mg/L	0.005	< 0.005 U (0.005)
Calcium, dissolved, mg/L	5.0	28.1 J (0.02)
Chromium, dissolved, mg/L	0.01	< 0.003 U (0.003)
Cobalt, dissolved, mg/L	0.05	< 0.007 U (0.007)
Copper, dissolved, mg/L	0.025	< 0.006 U (0.006)
Iron, dissolved, mg/L	0.1	3.55 J (0.003)
Lead, dissolved, mg/L	0.005	< 0.002 U (0.002)
Magnesium, dissolved, mg/L	5.0	4.23 J (0.037)
Manganese, dissolved, mg/L	0.015	0.269 J (0.001)
Mercury, dissolved, ug/L	0.2	< 0.2 U (0.2)
Nickel, dissolved, mg/L	0.04	< 0.012 U (0.012)
Potassium, dissolved, mg/L	5.0	3.9 J (0.9)
Selenium, dissolved, mg/L	0.005	< 0.002 UJ (0.002)
Silver, dissolved, mg/L	0.01	< 0.003 U (0.003)
Sodium, dissolved, mg/L	5.0	30.9 J (0.038)
Thallium, dissolved, mg/L	0.01	< 0.004 U (0.004)
Vanadium, dissolved, mg/L	0.05	< 0.006 U (0.006)
Zinc, dissolved, mg/L	0.02	0.0314 J (0.008)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-28

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/17/90
Aluminum, dissolved, mg/L	0.2	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	< 0.0096 U (0.0096)
Arsenic, dissolved, mg/L	0.01	< 0.003 U (0.003)
Barium, dissolved, mg/L	0.2	0.014 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.0017 U (0.0017)
Calcium, dissolved, mg/L	5.0	7.65 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.0186 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.0053 U (0.0017)
Copper, dissolved, mg/L	0.025	< 0.0172 U (0.0045)
Iron, dissolved, mg/L	0.1	< 0.0942 U (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	0.95 A (0.0301)
Manganese, dissolved, mg/L	0.015	0.0624 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, dissolved, mg/L	0.04	0.0122 A (0.0107)
Potassium, dissolved, mg/L	5.0	3.05 A (0.97)
Selenium, dissolved, mg/L	0.005	< 0.003 U (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	6.12 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 U (0.002)
Vanadium, dissolved, mg/L	0.05	< 0.002 U (0.002)
Zinc, dissolved, mg/L	0.02	< 0.0164 U (0.0019)

Explanation

CRDL Contract Required Detection Limit
N/R Not Reported
- Not Analyzed

Validation Codes

A Quantitative Data
J Qualitative Data
R Unusable Data
U Chemical Parameter Not Detected
UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-29

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	06/04/90	06/04/90 Replicate
Aluminum, dissolved, mg/L	0.2	0.149 J (0.027)	0.156 J (0.027)
Antimony, dissolved, mg/L	0.06	< 0.037 U (0.037)	< 0.037 U (0.037)
Arsenic, dissolved, mg/L	0.01	< 0.002 U (0.002)	< 0.002 U (0.002)
Barium, dissolved, mg/L	0.2	0.132 J (0.002)	0.118 J (0.002)
Beryllium, dissolved, mg/L	0.005	< 0.001 U (0.001)	< 0.001 U (0.001)
Cadmium, dissolved, mg/L	0.005	< 0.005 U (0.005)	< 0.005 U (0.005)
Calcium, dissolved, mg/L	5.0	76.1 J (0.02)	76.4 J (0.02)
Chromium, dissolved, mg/L	0.01	< 0.003 U (0.003)	< 0.003 U (0.003)
Cobalt, dissolved, mg/L	0.05	< 0.007 U (0.007)	< 0.007 U (0.007)
Copper, dissolved, mg/L	0.025	0.0099 J (0.006)	< 0.006 U (0.006)
Iron, dissolved, mg/L	0.1	0.0215 J (0.003)	0.0846 J (0.003)
Lead, dissolved, mg/L	0.005	< 0.002 U (0.002)	< 0.002 U (0.002)
Magnesium, dissolved, mg/L	5.0	10.1 J (0.037)	10.0 J (0.037)
Manganese, dissolved, mg/L	0.015	0.547 J (0.001)	0.554 J (0.001)
Mercury, dissolved, ug/L	0.2	< 0.2 U (0.2)	< 0.2 U (0.2)
Nickel, dissolved, mg/L	0.04	< 0.012 U (0.012)	< 0.012 U (0.012)
Potassium, dissolved, mg/L	5.0	5.8 A (0.9)	5.54 A (0.9)
Selenium, dissolved, mg/L	0.005	< 0.002 U (0.002)	< 0.002 U (0.002)
Silver, dissolved, mg/L	0.01	< 0.003 U (0.003)	< 0.003 U (0.003)
Sodium, dissolved, mg/L	5.0	252.0 J (0.038)	250.0 J (0.038)
Thallium, dissolved, mg/L	0.01	< 0.004 U (0.004)	< 0.004 U (0.004)
Vanadium, dissolved, mg/L	0.05	< 0.006 U (0.006)	< 0.006 U (0.006)
Zinc, dissolved, mg/L	0.02	0.0729 J (0.008)	0.0376 J (0.008)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-30A

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	06/05/90	06/05/90 Replicate	10/17/90
Aluminum, dissolved, mg/L	0.2	0.164 J (0.027)	0.239 J (0.027)	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	< 0.037 U (0.037)	< 0.037 U (0.037)	< 0.0096 U (0.0096)
Arsenic, dissolved, mg/L	0.01	0.047 A (0.002)	0.0414 J (0.002)	0.0273 A (0.003)
Barium, dissolved, mg/L	0.2	0.069 J (0.002)	0.0807 J (0.002)	0.0506 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.001 U (0.001)	< 0.001 U (0.001)	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.005 U (0.005)	< 0.005 U (0.005)	< 0.0017 U (0.0017)
Calcium, dissolved, mg/L	5.0	64.5 J (0.02)	60.9 J (0.02)	45.9 A (0.0327)
Chromium, dissolved, mg/L	0.01	< 0.003 U (0.003)	< 0.003 U (0.003)	< 0.0017 UJ (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.007 U (0.007)	< 0.007 U (0.007)	< 0.0059 U (0.0017)
Copper, dissolved, mg/L	0.025	< 0.006 U (0.006)	< 0.006 U (0.006)	< 0.0045 UJ (0.0045)
Iron, dissolved, mg/L	0.1	15.6 J (0.003)	14.7 J (0.003)	14.8 A (0.0114)
Lead, dissolved, mg/L	0.003	< 0.002 U (0.002)	< 0.002 U (0.002)	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	5.71 A (0.037)	5.31 A (0.037)	3.35 A (0.0301)
Manganese, dissolved, mg/L	0.015	2.4 J (0.001)	2.33 J (0.001)	1.8 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.2 U (0.2)	< 0.2 U (0.2)	< 0.1 UJ (0.1)
Nickel, dissolved, mg/L	0.04	< 0.012 U (0.012)	< 0.012 U (0.012)	< 0.0107 U (0.0107)
Potassium, dissolved, mg/L	5.0	8.06 J (0.9)	7.51 A (0.9)	6.28 A (0.97)
Selenium, dissolved, mg/L	0.005	< 0.002 U (0.002)	< 0.002 U (0.002)	< 0.003 U (0.003)
Silver, dissolved, mg/L	0.01	< 0.003 U (0.003)	< 0.003 U (0.003)	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	30.5 A (0.038)	28.6 J (0.038)	18.5 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.004 U (0.004)	< 0.004 U (0.004)	< 0.002 U (0.002)
Vanadium, dissolved, mg/L	0.05	< 0.006 U (0.006)	< 0.006 U (0.006)	0.0024 A (0.002)
Zinc, dissolved, mg/L	0.02	0.1 J (0.008)	0.128 J (0.008)	0.107 A (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-30B

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	06/05/90	10/17/90
Aluminum, dissolved, mg/L	0.2	0.34 J (0.027)	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	< 0.037 U (0.037)	0.0119 A (0.0096)
Arsenic, dissolved, mg/L	0.01	0.0164 A (0.002)	0.0109 A (0.003)
Barium, dissolved, mg/L	0.2	0.0929 J (0.002)	0.0197 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.001 U (0.001)	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.005 U (0.005)	< 0.0017 U (0.0017)
Calcium, dissolved, mg/L	5.0	48.6 J (0.02)	47.0 A (0.0327)
Chromium, dissolved, mg/L	0.01	< 0.003 U (0.003)	0.0225 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.007 U (0.007)	< 0.0029 U (0.0017)
Copper, dissolved, mg/L	0.025	0.0088 J (0.006)	< 0.0095 U (0.0045)
Iron, dissolved, mg/L	0.1	0.679 J (0.003)	< 0.235 U (0.0114)
Lead, dissolved, mg/L	0.003	< 0.002 U (0.002)	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	8.33 A (0.037)	8.06 A (0.0301)
Manganese, dissolved, mg/L	0.015	1.47 J (0.001)	1.41 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.2 U (0.2)	< 0.1 UJ (0.1)
Nickel, dissolved, mg/L	0.04	< 0.012 U (0.012)	0.0152 A (0.0107)
Potassium, dissolved, mg/L	5.0	5.74 A (0.9)	< 4.89 U (0.97)
Selenium, dissolved, mg/L	0.005	< 0.002 U (0.002)	< 0.003 U (0.003)
Silver, dissolved, mg/L	0.01	< 0.003 U (0.003)	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	39.2 J (0.038)	34.0 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.004 U (0.004)	< 0.002 U (0.002)
Vanadium, dissolved, mg/L	0.05	< 0.006 U (0.006)	< 0.002 U (0.002)
Zinc, dissolved, mg/L	0.02	0.0582 J (0.008)	< 0.0151 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-31

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	06/06/90	10/18/90
Aluminum, dissolved, mg/L	0.2	0.147 J (0.027)	0.121 A (0.0385)
Antimony, dissolved, mg/L	0.06	0.0584 J (0.037)	0.0669 A (0.0096)
Arsenic, dissolved, mg/L	0.01	0.518 A (0.002)	0.63 A (0.003)
Barium, dissolved, mg/L	0.2	0.231 J (0.002)	0.229 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.001 U (0.001)	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.005 U (0.005)	< 0.0017 UJ (0.0017)
Calcium, dissolved, mg/L	5.0	305.0 J (0.02)	299.0 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.028 A (0.003)	0.0371 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.007 U (0.007)	< 0.0047 U (0.0017)
Copper, dissolved, mg/L	0.025	< 0.006 U (0.006)	< 0.0045 UJ (0.0045)
Iron, dissolved, mg/L	0.1	0.397 J (0.003)	1.23 A (0.0114)
Lead, dissolved, mg/L	0.003	< 0.002 U (0.002)	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	141.0 J (0.037)	153.0 A (0.0301)
Manganese, dissolved, mg/L	0.015	4.98 J (0.001)	4.8 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.2 U (0.2)	< 0.1 UJ (0.1)
Nickel, dissolved, mg/L	0.04	< 0.012 U (0.012)	< 0.0107 U (0.0107)
Potassium, dissolved, mg/L	5.0	37.5 J (0.9)	41.7 J (0.97)
Selenium, dissolved, mg/L	0.005	0.0031 J (0.002)	0.0035 J (0.003)
Silver, dissolved, mg/L	0.01	< 0.003 U (0.003)	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	94.0 J (0.038)	104.0 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.004 U (0.004)	< 0.002 UJ (0.002)
Vanadium, dissolved, mg/L	0.05	0.0256 J (0.006)	0.0295 A (0.002)
Zinc, dissolved, mg/L	0.02	0.0272 J (0.008)	< 0.0098 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-32

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	06/06/90	10/17/90
Aluminum, dissolved, mg/L	0.2	0.0425 J (0.027)	0.107 A (0.0385)
Antimony, dissolved, mg/L	0.06	0.0451 J (0.037)	0.0551 A (0.0096)
Arsenic, dissolved, mg/L	0.01	0.023 A (0.002)	0.0218 A (0.003)
Barium, dissolved, mg/L	0.2	0.206 J (0.002)	0.164 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.001 U (0.001)	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.005 U (0.005)	0.0027 A (0.0017)
Calcium, dissolved, mg/L	5.0	249.0 J (0.02)	217.0 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.01 A (0.003)	0.0511 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.007 U (0.007)	< 0.0068 U (0.0017)
Copper, dissolved, mg/L	0.025	< 0.006 U (0.006)	< 0.161 U (0.0045)
Iron, dissolved, mg/L	0.1	5.0 J (0.003)	4.89 A (0.0114)
Lead, dissolved, mg/L	0.003	< 0.002 U (0.002)	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	46.8 A (0.037)	40.2 A (0.0301)
Manganese, dissolved, mg/L	0.015	8.13 J (0.001)	6.9 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.2 U (0.2)	< 0.1 UJ (0.1)
Nickel, dissolved, mg/L	0.04	< 0.012 U (0.012)	0.0263 A (0.0107)
Potassium, dissolved, mg/L	5.0	10.5 J (0.9)	9.32 A (0.97)
Selenium, dissolved, mg/L	0.005	< 0.002 U (0.002)	< 0.003 U (0.003)
Silver, dissolved, mg/L	0.01	< 0.003 UJ (0.003)	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	21.3 J (0.038)	20.6 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.004 U (0.004)	< 0.002 U (0.002)
Vanadium, dissolved, mg/L	0.05	< 0.006 U (0.006)	0.0027 A (0.002)
Zinc, dissolved, mg/L	0.02	0.0264 J (0.008)	< 0.0479 U (0.0019)

ion

L Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-33A

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	06/04/90
Aluminum, dissolved, mg/L	0.2	0.298 J (0.027)
Antimony, dissolved, mg/L	0.06	< 0.037 U (0.037)
Arsenic, dissolved, mg/L	0.01	< 0.002 U (0.002)
Barium, dissolved, mg/L	0.2	0.054 J (0.002)
Beryllium, dissolved, mg/L	0.005	< 0.001 U (0.001)
Cadmium, dissolved, mg/L	0.005	< 0.005 U (0.005)
Calcium, dissolved, mg/L	5.0	8.83 J (0.02)
Chromium, dissolved, mg/L	0.01	< 0.003 U (0.003)
Cobalt, dissolved, mg/L	0.05	< 0.007 U (0.007)
Copper, dissolved, mg/L	0.025	0.0101 J (0.006)
Iron, dissolved, mg/L	0.1	0.0484 J (0.003)
Lead, dissolved, mg/L	0.005	< 0.002 U (0.002)
Magnesium, dissolved, mg/L	5.0	1.16 J (0.037)
Manganese, dissolved, mg/L	0.015	0.636 J (0.001)
Mercury, dissolved, ug/L	0.2	< 0.2 U (0.2)
Nickel, dissolved, mg/L	0.04	< 0.012 U (0.012)
Potassium, dissolved, mg/L	5.0	0.935 J (0.9)
Selenium, dissolved, mg/L	0.005	< 0.002 U (0.002)
Silver, dissolved, mg/L	0.01	< 0.003 U (0.003)
Sodium, dissolved, mg/L	5.0	13.4 J (0.038)
Thallium, dissolved, mg/L	0.01	< 0.004 U (0.004)
Vanadium, dissolved, mg/L	0.05	< 0.006 U (0.006)
Zinc, dissolved, mg/L	0.02	0.0547 J (0.008)

Explanation

CRDL Contract Required Detection Limit
N/R Not Reported
\- Not Analyzed

Validation Codes

A Quantitative Data
J Qualitative Data
R Unusable Data
U Chemical Parameter Not Detected
UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-33B

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	06/04/90
Aluminum, dissolved, mg/L	0.2	0.437 J (0.027)
Antimony, dissolved, mg/L	0.06	< 0.037 U (0.037)
Arsenic, dissolved, mg/L	0.01	0.0031 J (0.002)
Barium, dissolved, mg/L	0.2	0.0518 J (0.002)
Beryllium, dissolved, mg/L	0.005	< 0.001 U (0.001)
Cadmium, dissolved, mg/L	0.005	< 0.005 U (0.005)
Calcium, dissolved, mg/L	5.0	26.5 J (0.02)
Chromium, dissolved, mg/L	0.01	< 0.003 U (0.003)
Cobalt, dissolved, mg/L	0.05	< 0.007 U (0.007)
Copper, dissolved, mg/L	0.025	0.0084 J (0.006)
Iron, dissolved, mg/L	0.1	1.21 J (0.003)
Lead, dissolved, mg/L	0.005	< 0.002 U (0.002)
Magnesium, dissolved, mg/L	5.0	6.51 A (0.037)
Manganese, dissolved, mg/L	0.015	1.15 J (0.001)
Mercury, dissolved, ug/L	0.2	< 0.2 U (0.2)
Nickel, dissolved, mg/L	0.04	< 0.012 U (0.012)
Potassium, dissolved, mg/L	5.0	4.02 J (0.9)
Selenium, dissolved, mg/L	0.005	< 0.002 U (0.002)
Silver, dissolved, mg/L	0.01	< 0.003 U (0.003)
Sodium, dissolved, mg/L	5.0	45.3 J (0.038)
Thallium, dissolved, mg/L	0.01	< 0.004 U (0.004)
Vanadium, dissolved, mg/L	0.05	< 0.006 U (0.006)
Zinc, dissolved, mg/L	0.02	0.0682 J (0.008)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-36

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/18/90
Aluminum, dissolved, mg/L	0.2	0.0818 A (0.0385)
Antimony, dissolved, mg/L	0.06	< 0.0096 U (0.0096)
Arsenic, dissolved, mg/L	0.01	0.256 A (0.003)
Barium, dissolved, mg/L	0.2	< 0.0019 U (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0007 U (0.0003)
Cadmium, dissolved, mg/L	0.005	0.0027 J (0.0017)
Calcium, dissolved, mg/L	5.0	12.2 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.121 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.0029 U (0.0017)
Copper, dissolved, mg/L	0.025	< 0.164 U (0.0045)
Iron, dissolved, mg/L	0.1	0.671 A (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	2.93 A (0.0301)
Manganese, dissolved, mg/L	0.015	< 0.0255 U (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, dissolved, mg/L	0.04	0.0887 A (0.0107)
Potassium, dissolved, mg/L	5.0	< 0.97 UJ (0.97)
Selenium, dissolved, mg/L	0.005	0.0036 J (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	320.0 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 UJ (0.002)
Vanadium, dissolved, mg/L	0.05	0.318 A (0.002)
Zinc, dissolved, mg/L	0.02	< 0.042 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-37

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/18/90
Aluminum, dissolved, mg/L	0.2	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	0.0187 A (0.0096)
Arsenic, dissolved, mg/L	0.01	0.343 A (0.003)
Barium, dissolved, mg/L	0.2	0.0245 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.0017 UJ (0.0017)
Calcium, dissolved, mg/L	5.0	49.7 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.449 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.0091 U (0.0017)
Copper, dissolved, mg/L	0.025	< 0.0927 U (0.0045)
Iron, dissolved, mg/L	0.1	2.1 A (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	6.31 A (0.0301)
Manganese, dissolved, mg/L	0.015	0.538 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, dissolved, mg/L	0.04	0.32 A (0.0107)
Potassium, dissolved, mg/L	5.0	2.8 J (0.97)
Selenium, dissolved, mg/L	0.005	< 0.003 U (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	29.3 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 U (0.002)
Vanadium, dissolved, mg/L	0.05	0.003 A (0.002)
Zinc, dissolved, mg/L	0.02	< 0.0267 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-38

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/17/90	10/17/90 Replicate
Aluminum, dissolved, mg/L	0.2	< 0.0385 U (0.0385)	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	0.0459 A (0.0096)	0.0509 A (0.0096)
Arsenic, dissolved, mg/L	0.01	0.12 A (0.003)	0.132 A (0.003)
Barium, dissolved, mg/L	0.2	0.0117 A (0.0006)	0.012 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0003 U (0.0003)	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.0017 U (0.0017)	0.0018 A (0.0017)
Calcium, dissolved, mg/L	5.0	126.7 A (0.0327)	133.0 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.0156 J (0.0017)	0.042 J (0.0017)
Cobalt, dissolved, mg/L	0.05	0.0269 A (0.0017)	0.0291 A (0.0017)
Copper, dissolved, mg/L	0.025	< 0.0416 U (0.0045)	< 0.0732 U (0.0045)
Iron, dissolved, mg/L	0.1	0.632 A (0.0114)	0.724 A (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	5.01 A (0.0301)	5.21 A (0.0301)
Manganese, dissolved, mg/L	0.015	0.41 A (0.0005)	0.43 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 UJ (0.1)	< 0.1 UJ (0.1)
Nickel, dissolved, mg/L	0.04	0.0717 A (0.0107)	0.0863 A (0.0107)
Potassium, dissolved, mg/L	5.0	6.9 A (0.97)	7.67 A (0.97)
Selenium, dissolved, mg/L	0.005	0.003 J (0.003)	0.0053 J (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	28.1 A (0.0116)	28.7 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 U (0.002)	0.0042 A (0.002)
Vanadium, dissolved, mg/L	0.05	0.0098 A (0.002)	0.0101 A (0.002)
Zinc, dissolved, mg/L	0.02	0.275 A (0.0019)	0.291 A (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-39

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/15/90	10/15/90 Replicate
Aluminum, dissolved, mg/L	0.2	< 0.0385 U (0.0385)	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	0.035 J (0.0096)	0.0137 J (0.0096)
Arsenic, dissolved, mg/L	0.01	0.0293 A (0.003)	0.0303 A (0.003)
Barium, dissolved, mg/L	0.2	0.0146 A (0.0006)	0.022 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0003 U (0.0003)	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.0017 U (0.0017)	< 0.0017 U (0.0017)
Calcium, dissolved, mg/L	5.0	55.3 A (0.0327)	68.7 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.0235 J (0.0017)	0.027 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.008 U (0.0017)	< 0.0104 U (0.0017)
Copper, dissolved, mg/L	0.025	< 0.0045 UJ (0.0045)	< 0.0045 UJ (0.0045)
Iron, dissolved, mg/L	0.1	7.47 A (0.0114)	9.25 A (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	18.3 A (0.0301)	22.7 A (0.0301)
Manganese, dissolved, mg/L	0.015	0.471 A (0.0005)	0.596 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 UJ (0.1)	< 0.1 UJ (0.1)
Nickel, dissolved, mg/L	0.04	< 0.0107 UJ (0.0107)	< 0.0107 UJ (0.0107)
Potassium, dissolved, mg/L	5.0	6.8 J (0.97)	8.12 J (0.97)
Selenium, dissolved, mg/L	0.005	< 0.003 U (0.003)	< 0.003 UJ (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	34.8 A (0.0116)	43.4 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 U (0.002)	< 0.002 UJ (0.002)
Vanadium, dissolved, mg/L	0.05	< 0.002 U (0.002)	< 0.002 U (0.002)
Zinc, dissolved, mg/L	0.02	< 0.0146 U (0.0019)	< 0.0113 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-40

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/15/90
Aluminum, dissolved, mg/L	0.2	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	0.122 J (0.0096)
Arsenic, dissolved, mg/L	0.01	< 0.003 U (0.003)
Barium, dissolved, mg/L	0.2	0.0319 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.0017 U (0.0017)
Calcium, dissolved, mg/L	5.0	662.0 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.0027 J (0.0017)
Cobalt, dissolved, mg/L	0.05	0.0259 A (0.0017)
Copper, dissolved, mg/L	0.025	< 0.124 U (0.0045)
Iron, dissolved, mg/L	0.1	< 0.0375 U (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	7.53 A (0.0301)
Manganese, dissolved, mg/L	0.015	0.0758 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, dissolved, mg/L	0.04	< 0.0107 UJ (0.0107)
Potassium, dissolved, mg/L	5.0	3.73 J (0.97)
Selenium, dissolved, mg/L	0.005	0.0634 A (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	11.8 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 UJ (0.002)
Vanadium, dissolved, mg/L	0.05	< 0.002 U (0.002)
Zinc, dissolved, mg/L	0.02	0.132 A (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-41

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/15/90
Aluminum, dissolved, mg/L	0.2	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	0.066 J (0.0096)
Arsenic, dissolved, mg/L	0.01	0.0344 A (0.003)
Barium, dissolved, mg/L	0.2	0.0495 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.0017 U (0.0017)
Calcium, dissolved, mg/L	5.0	166.0 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.0234 J (0.0017)
Cobalt, dissolved, mg/L	0.05	< 0.0054 U (0.0017)
Copper, dissolved, mg/L	0.025	< 0.0075 U (0.0045)
Iron, dissolved, mg/L	0.1	0.822 A (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	19.0 A (0.0301)
Manganese, dissolved, mg/L	0.015	0.71 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, dissolved, mg/L	0.04	< 0.0107 UJ (0.0107)
Potassium, dissolved, mg/L	5.0	1.41 J (0.97)
Selenium, dissolved, mg/L	0.005	< 0.003 U (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	< 58.3 U (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 UJ (0.002)
Vanadium, dissolved, mg/L	0.05	< 0.002 U (0.002)
Zinc, dissolved, mg/L	0.02	< 0.0125 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-42

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/15/90
Aluminum, dissolved, mg/L	0.2	< 0.0385 U (0.0385)
Antimony, dissolved, mg/L	0.06	< 0.0096 UJ (0.0096)
Arsenic, dissolved, mg/L	0.01	0.5 A (0.003)
Barium, dissolved, mg/L	0.2	0.193 A (0.0006)
Beryllium, dissolved, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, dissolved, mg/L	0.005	< 0.003 U (0.0017)
Calcium, dissolved, mg/L	5.0	45.4 A (0.0327)
Chromium, dissolved, mg/L	0.01	0.0042 J (0.0017)
Cobalt, dissolved, mg/L	0.05	0.0263 A (0.0017)
Copper, dissolved, mg/L	0.025	< 0.0063 U (0.0045)
Iron, dissolved, mg/L	0.1	24.5 A (0.0114)
Lead, dissolved, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, dissolved, mg/L	5.0	31.0 A (0.0301)
Manganese, dissolved, mg/L	0.015	1.73 A (0.0005)
Mercury, dissolved, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, dissolved, mg/L	0.04	< 0.0107 UJ (0.0107)
Potassium, dissolved, mg/L	5.0	13.8 J (0.97)
Selenium, dissolved, mg/L	0.005	< 0.003 UJ (0.003)
Silver, dissolved, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, dissolved, mg/L	5.0	38.3 A (0.0116)
Thallium, dissolved, mg/L	0.01	< 0.002 UJ (0.002)
Vanadium, dissolved, mg/L	0.05	0.0045 A (0.002)
Zinc, dissolved, mg/L	0.02	< 0.0185 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: PUB

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	06/04/90
Aluminum, dissolved, mg/L	0.2	0.158 J (0.027)
Antimony, dissolved, mg/L	0.06	< 0.037 U (0.037)
Arsenic, dissolved, mg/L	0.01	< 0.002 U (0.002)
Barium, dissolved, mg/L	0.2	0.236 J (0.002)
Beryllium, dissolved, mg/L	0.005	< 0.001 U (0.001)
Cadmium, dissolved, mg/L	0.005	< 0.005 U (0.005)
Calcium, dissolved, mg/L	5.0	13.7 J (0.02)
Chromium, dissolved, mg/L	0.01	< 0.003 U (0.003)
Cobalt, dissolved, mg/L	0.05	< 0.007 U (0.007)
Copper, dissolved, mg/L	0.025	0.0184 J (0.006)
Iron, dissolved, mg/L	0.1	0.114 J (0.003)
Lead, dissolved, mg/L	0.005	0.0022 J (0.002)
Magnesium, dissolved, mg/L	5.0	2.07 J (0.037)
Manganese, dissolved, mg/L	0.015	0.0105 J (0.001)
Mercury, dissolved, ug/L	0.2	< 0.2 U (0.2)
Nickel, dissolved, mg/L	0.04	< 0.012 U (0.012)
Potassium, dissolved, mg/L	5.0	0.9 A (0.9)
Selenium, dissolved, mg/L	0.005	< 0.002 U (0.002)
Silver, dissolved, mg/L	0.01	< 0.003 U (0.003)
Sodium, dissolved, mg/L	5.0	37.3 J (0.038)
Thallium, dissolved, mg/L	0.01	< 0.004 U (0.004)
Vanadium, dissolved, mg/L	0.05	< 0.006 U (0.006)
Zinc, dissolved, mg/L	0.02	0.0465 J (0.008)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

TABLE 4

Summary of PDI Phase 1 and Phase 2
Ground-Water Quality Data

Total Metals

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-9

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/18/90
Aluminum, total, mg/L	0.2	0.0988 J (0.0385)
Antimony, total, mg/L	0.06	0.05 A (0.0096)
Arsenic, total, mg/L	0.01	0.0367 A (0.003)
Barium, total, mg/L	0.2	< 0.0064 U (0.0006)
Beryllium, total, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	< 0.0017 U (0.0017)
Calcium, total, mg/L	5.0	197.0 A (0.0327)
Chromium, total, mg/L	0.01	0.428 J (0.0017)
Cobalt, total, mg/L	0.05	< 0.009 U (0.0017)
Copper, total, mg/L	0.025	< 0.0275 U (0.0045)
Iron, total, mg/L	0.1	5.97 J (0.0114)
Lead, total, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, total, mg/L	5.0	16.2 A (0.0301)
Manganese, total, mg/L	0.015	0.222 J (0.0005)
Mercury, total, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, total, mg/L	0.04	0.322 J (0.0107)
Potassium, total, mg/L	5.0	< 0.97 UJ (0.97)
Selenium, total, mg/L	0.005	0.03 J (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	20.0 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 U (0.002)
Vanadium, total, mg/L	0.05	0.0043 A (0.002)
Zinc, total, mg/L	0.02	< 0.0068 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-10

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/16/90
Aluminum, total, mg/L	0.2	3.92 J (0.0385)
Antimony, total, mg/L	0.06	0.0173 A (0.0096)
Arsenic, total, mg/L	0.01	0.0316 A (0.003)
Barium, total, mg/L	0.2	0.0414 A (0.0006)
Beryllium, total, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	0.0201 A (0.0017)
Calcium, total, mg/L	5.0	17.3 A (0.0327)
Chromium, total, mg/L	0.01	0.0766 J (0.0017)
Cobalt, total, mg/L	0.05	< 0.0085 U (0.0017)
Copper, total, mg/L	0.025	1.35 J (0.0045)
Iron, total, mg/L	0.1	1.98 J (0.0114)
Lead, total, mg/L	0.003	< 0.0012 U (0.001)
Magnesium, total, mg/L	5.0	2.83 A (0.0301)
Manganese, total, mg/L	0.015	0.146 J (0.0005)
Mercury, total, ug/L	0.2	< 0.1 U (0.1)
Nickel, total, mg/L	0.04	0.0382 J (0.0107)
Potassium, total, mg/L	5.0	< 0.97 UJ (0.97)
Selenium, total, mg/L	0.005	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	39.2 A (0.0116)
Thallium, total, mg/L	0.01	0.0024 J (0.002)
Vanadium, total, mg/L	0.05	0.003 A (0.002)
Zinc, total, mg/L	0.02	9.47 J (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-11

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/16/90
Aluminum, total, mg/L	0.2	0.958 J (0.0385)
Antimony, total, mg/L	0.06	0.0151 A (0.0096)
Arsenic, total, mg/L	0.01	0.15 A (0.003)
Barium, total, mg/L	0.2	0.0434 A (0.0006)
Beryllium, total, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	< 0.004 U (0.0017)
Calcium, total, mg/L	5.0	36.0 A (0.0327)
Chromium, total, mg/L	0.01	0.0089 J (0.0017)
Cobalt, total, mg/L	0.05	< 0.0028 U (0.0017)
Copper, total, mg/L	0.025	< 0.0054 U (0.0045)
Iron, total, mg/L	0.1	10.1 J (0.0114)
Lead, total, mg/L	0.003	< 0.0042 U (0.001)
Magnesium, total, mg/L	5.0	3.66 A (0.0301)
Manganese, total, mg/L	0.015	0.617 A (0.0005)
Mercury, total, ug/L	0.2	< 0.1 U (0.1)
Nickel, total, mg/L	0.04	< 0.0107 U (0.0107)
Potassium, total, mg/L	5.0	< 0.97 UJ (0.97)
Selenium, total, mg/L	0.005	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	18.2 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 U (0.002)
Vanadium, total, mg/L	0.05	< 0.002 U (0.002)
Zinc, total, mg/L	0.02	1.06 J (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-12

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/15/90
Aluminum, total, mg/L	0.2	0.0516 J (0.0385)
Antimony, total, mg/L	0.06	0.0547 J (0.0096)
Arsenic, total, mg/L	0.01	0.507 A (0.003)
Barium, total, mg/L	0.2	0.105 A (0.0006)
Beryllium, total, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	< 0.0023 U (0.0017)
Calcium, total, mg/L	5.0	363.0 A (0.0327)
Chromium, total, mg/L	0.01	0.0522 J (0.0017)
Cobalt, total, mg/L	0.05	< 0.0033 U (0.0017)
Copper, total, mg/L	0.025	< 0.026 U (0.0045)
Iron, total, mg/L	0.1	4.47 J (0.0114)
Lead, total, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, total, mg/L	5.0	128.0 A (0.0301)
Manganese, total, mg/L	0.015	0.259 J (0.0005)
Mercury, total, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, total, mg/L	0.04	0.0182 J (0.0107)
Potassium, total, mg/L	5.0	10.9 J (0.97)
Selenium, total, mg/L	0.005	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	215.0 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 U (0.002)
Vanadium, total, mg/L	0.05	0.0433 A (0.002)
Zinc, total, mg/L	0.02	< 0.0199 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-13

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/15/90
Aluminum, total, mg/L	0.2	0.0459 J (0.0385)
Antimony, total, mg/L	0.06	0.0341 J (0.0096)
Arsenic, total, mg/L	0.01	0.0358 A (0.003)
Barium, total, mg/L	0.2	< 0.0252 U (0.0006)
Beryllium, total, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	< 0.0058 U (0.0017)
Calcium, total, mg/L	5.0	81.7 A (0.0327)
Chromium, total, mg/L	0.01	0.0094 J (0.0017)
Cobalt, total, mg/L	0.05	< 0.0027 U (0.0017)
Copper, total, mg/L	0.025	< 0.0045 UJ (0.0045)
Iron, total, mg/L	0.1	4.32 J (0.0114)
Lead, total, mg/L	0.003	< 0.0016 U (0.001)
Magnesium, total, mg/L	5.0	8.66 A (0.0301)
Manganese, total, mg/L	0.015	1.36 J (0.0005)
Mercury, total, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, total, mg/L	0.04	< 0.0107 UJ (0.0107)
Potassium, total, mg/L	5.0	2.84 J (0.97)
Selenium, total, mg/L	0.005	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	14.1 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 UJ (0.002)
Vanadium, total, mg/L	0.05	0.0037 A (0.002)
Zinc, total, mg/L	0.02	0.163 J (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-16

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/18/90
Aluminum, total, mg/L	0.2	0.159 J (0.0385)
Antimony, total, mg/L	0.06	< 0.0096 U (0.0096)
Arsenic, total, mg/L	0.01	1.87 A (0.003)
Barium, total, mg/L	0.2	0.299 A (0.0006)
Beryllium, total, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	0.0127 A (0.0017)
Calcium, total, mg/L	5.0	16.6 A (0.0327)
Chromium, total, mg/L	0.01	0.307 J (0.0017)
Cobalt, total, mg/L	0.05	< 0.0091 U (0.0017)
Copper, total, mg/L	0.025	< 0.0481 U (0.0045)
Iron, total, mg/L	0.1	4.84 J (0.0114)
Lead, total, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, total, mg/L	5.0	224.0 A (0.0301)
Manganese, total, mg/L	0.015	0.0183 J (0.0005)
Mercury, total, ug/L	0.2	< 0.2 UJ (0.1)
Nickel, total, mg/L	0.04	0.0157 J (0.0107)
Potassium, total, mg/L	5.0	74.8 J (0.97)
Selenium, total, mg/L	0.005	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	159.0 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 UJ (0.002)
Vanadium, total, mg/L	0.05	0.143 A (0.002)
Zinc, total, mg/L	0.02	< 0.017 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-17

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/16/90
Aluminum, total, mg/L	0.2	< 0.284 U (0.0385)
Antimony, total, mg/L	0.06	0.0215 A (0.0096)
Arsenic, total, mg/L	0.01	0.209 A (0.003)
Barium, total, mg/L	0.2	0.0407 A (0.0006)
Beryllium, total, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	0.0047 A (0.0017)
Calcium, total, mg/L	5.0	100.0 A (0.0327)
Chromium, total, mg/L	0.01	0.0251 J (0.0017)
Cobalt, total, mg/L	0.05	0.0265 A (0.0017)
Copper, total, mg/L	0.025	< 0.202 U (0.0045)
Iron, total, mg/L	0.1	8.58 J (0.0114)
Lead, total, mg/L	0.003	< 0.004 U (0.001)
Magnesium, total, mg/L	5.0	61.3 A (0.0301)
Manganese, total, mg/L	0.015	0.214 J (0.0005)
Mercury, total, ug/L	0.2	< 0.1 U (0.1)
Nickel, total, mg/L	0.04	0.0222 J (0.0107)
Potassium, total, mg/L	5.0	< 8.4 U (0.97)
Selenium, total, mg/L	0.005	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	153.0 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 UJ (0.002)
Vanadium, total, mg/L	0.05	0.0169 A (0.002)
Zinc, total, mg/L	0.02	0.143 J (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-18

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/16/90
Aluminum, total, mg/L	0.2	0.0964 J (0.0385)
Antimony, total, mg/L	0.06	0.0231 A (0.0096)
Arsenic, total, mg/L	0.01	< 0.003 U (0.003)
Barium, total, mg/L	0.2	< 0.0167 U (0.0006)
Beryllium, total, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	0.0265 A (0.0017)
Calcium, total, mg/L	5.0	80.7 A (0.0327)
Chromium, total, mg/L	0.01	0.0163 J (0.0017)
Cobalt, total, mg/L	0.05	0.0141 A (0.0017)
Copper, total, mg/L	0.025	< 0.152 U (0.0045)
Iron, total, mg/L	0.1	1.21 J (0.0114)
Lead, total, mg/L	0.003	< 0.001 UJ (0.001)
Magnesium, total, mg/L	5.0	7.65 A (0.0301)
Manganese, total, mg/L	0.015	0.541 J (0.0005)
Mercury, total, ug/L	0.2	< 0.1 U (0.1)
Nickel, total, mg/L	0.04	0.0146 J (0.0107)
Potassium, total, mg/L	5.0	3.13 J (0.97)
Selenium, total, mg/L	0.005	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	74.1 A (0.0116)
Thallium, total, mg/L	0.01	0.0027 J (0.002)
Vanadium, total, mg/L	0.05	< 0.002 U (0.002)
Zinc, total, mg/L	0.02	7.35 J (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-18A

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/16/90
Aluminum, total, mg/L	0.2	0.207 J (0.0385)
Antimony, total, mg/L	0.06	0.0274 A (0.0096)
Arsenic, total, mg/L	0.01	< 0.003 U (0.003)
Barium, total, mg/L	0.2	< 0.0234 U (0.0006)
Beryllium, total, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	< 0.0065 U (0.0017)
Calcium, total, mg/L	5.0	72.7 A (0.0327)
Chromium, total, mg/L	0.01	< 0.0026 U (0.0017)
Cobalt, total, mg/L	0.05	< 0.0046 U (0.0017)
Copper, total, mg/L	0.025	< 0.0422 U (0.0045)
Iron, total, mg/L	0.1	2.99 J (0.0114)
Lead, total, mg/L	0.003	< 0.002 U (0.001)
Magnesium, total, mg/L	5.0	4.18 A (0.0301)
Manganese, total, mg/L	0.015	0.117 J (0.0005)
Mercury, total, ug/L	0.2	< 0.1 U (0.1)
Nickel, total, mg/L	0.04	< 0.0107 U (0.0107)
Potassium, total, mg/L	5.0	2.13 J (0.97)
Selenium, total, mg/L	0.005	0.005 J (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	19.6 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 U (0.002)
Vanadium, total, mg/L	0.05	< 0.002 U (0.002)
Zinc, total, mg/L	0.02	1.8 J (0.0019)

Explanation

CRDL Contract Required Detection Limit
N/R Not Reported
\- Not Analyzed

Validation Codes

A Quantitative Data
J Qualitative Data
R Unusable Data
U Chemical Parameter Not Detected
UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-19

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/16/90
Aluminum, total, mg/L	0.2	0.0489 J (0.0385)
Antimony, total, mg/L	0.06	0.0104 A (0.0096)
Arsenic, total, mg/L	0.01	< 0.003 U (0.003)
Barium, total, mg/L	0.2	< 0.0262 U (0.0006)
Beryllium, total, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	< 0.003 U (0.0017)
Calcium, total, mg/L	5.0	24.7 A (0.0327)
Chromium, total, mg/L	0.01	< 0.0017 U (0.0017)
Cobalt, total, mg/L	0.05	0.018 A (0.0017)
Copper, total, mg/L	0.025	< 0.0086 U (0.0045)
Iron, total, mg/L	0.1	0.356 J (0.0114)
Lead, total, mg/L	0.003	< 0.0015 U (0.001)
Magnesium, total, mg/L	5.0	5.32 A (0.0301)
Manganese, total, mg/L	0.015	1.18 J (0.0005)
Mercury, total, ug/L	0.2	0.59 A (0.1)
Nickel, total, mg/L	0.04	< 0.0107 U (0.0107)
Potassium, total, mg/L	5.0	3.23 J (0.97)
Selenium, total, mg/L	0.005	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	52.0 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 U (0.002)
Vanadium, total, mg/L	0.05	< 0.002 U (0.002)
Zinc, total, mg/L	0.02	0.423 J (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-19A

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/16/90
Aluminum, total, mg/L	0.2	0.446 J (0.0385)
Antimony, total, mg/L	0.06	0.0127 A (0.0096)
Arsenic, total, mg/L	0.01	0.0765 A (0.003)
Barium, total, mg/L	0.2	< 0.022 U (0.0006)
Beryllium, total, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	< 0.0023 U (0.0017)
Calcium, total, mg/L	5.0	20.69 A (0.0327)
Chromium, total, mg/L	0.01	< 0.0053 U (0.0017)
Cobalt, total, mg/L	0.05	0.0304 A (0.0017)
Copper, total, mg/L	0.025	< 0.0045 UJ (0.0045)
Iron, total, mg/L	0.1	5.8 J (0.0114)
Lead, total, mg/L	0.003	< 0.0011 U (0.001)
Magnesium, total, mg/L	5.0	3.68 A (0.0301)
Manganese, total, mg/L	0.015	0.993 J (0.0005)
Mercury, total, ug/L	0.2	< 0.1 U (0.1)
Nickel, total, mg/L	0.04	< 0.0107 U (0.0107)
Potassium, total, mg/L	5.0	3.83 J (0.97)
Selenium, total, mg/L	0.005	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	21.9 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 U (0.002)
Vanadium, total, mg/L	0.05	0.0024 A (0.002)
Zinc, total, mg/L	0.02	0.237 J (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-21

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/18/90
Aluminum, total, mg/L	0.2	0.0661 J (0.0385)
Antimony, total, mg/L	0.06	0.0173 A (0.0096)
Arsenic, total, mg/L	0.01	< 0.003 U (0.003)
Barium, total, mg/L	0.2	< 0.0254 U (0.0006)
Beryllium, total, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	< 0.0017 U (0.0017)
Calcium, total, mg/L	5.0	51.2 A (0.0327)
Chromium, total, mg/L	0.01	0.019 J (0.0017)
Cobalt, total, mg/L	0.05	< 0.0049 U (0.0017)
Copper, total, mg/L	0.025	< 0.0384 U (0.0045)
Iron, total, mg/L	0.1	0.912 J (0.0114)
Lead, total, mg/L	0.003	< 0.0013 U (0.001)
Magnesium, total, mg/L	5.0	5.7 A (0.0301)
Manganese, total, mg/L	0.015	1.2 J (0.0005)
Mercury, total, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, total, mg/L	0.04	< 0.0107 U (0.0107)
Potassium, total, mg/L	5.0	< 0.97 UJ (0.97)
Selenium, total, mg/L	0.005	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	10.2 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 U (0.002)
Vanadium, total, mg/L	0.05	< 0.002 U (0.002)
Zinc, total, mg/L	0.02	< 0.0094 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-22

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/17/90
Aluminum, total, mg/L	0.2	2.27 J (0.0385)
Antimony, total, mg/L	0.06	0.0517 A (0.0096)
Arsenic, total, mg/L	0.01	< 0.003 U (0.003)
Barium, total, mg/L	0.2	0.0902 A (0.0006)
Beryllium, total, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	< 0.0017 U (0.0017)
Calcium, total, mg/L	5.0	231.0 A (0.0327)
Chromium, total, mg/L	0.01	< 0.0134 U (0.0017)
Cobalt, total, mg/L	0.05	0.0192 A (0.0017)
Copper, total, mg/L	0.025	< 0.198 U (0.0045)
Iron, total, mg/L	0.1	14.5 J (0.0114)
Lead, total, mg/L	0.003	< 0.0014 U (0.001)
Magnesium, total, mg/L	5.0	44.1 A (0.0301)
Manganese, total, mg/L	0.015	1.68 J (0.0005)
Mercury, total, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, total, mg/L	0.04	0.0472 J (0.0107)
Potassium, total, mg/L	5.0	12.4 A (0.97)
Selenium, total, mg/L	0.005	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	0.0212 J (0.0084)
Sodium, total, mg/L	5.0	16.0 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 U (0.002)
Vanadium, total, mg/L	0.05	0.0073 A (0.002)
Zinc, total, mg/L	0.02	0.0976 J (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-23

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	06/05/90
Aluminum, total, mg/L	0.2	4.55 J (0.027)
Antimony, total, mg/L	0.06	0.103 A (0.037)
Arsenic, total, mg/L	0.01	0.009 J (0.002)
Barium, total, mg/L	0.2	0.0728 J (0.002)
Beryllium, total, mg/L	0.005	< 0.001 U (0.001)
Cadmium, total, mg/L	0.005	< 0.005 U (0.005)
Calcium, total, mg/L	5.0	310.0 J (0.02)
Chromium, total, mg/L	0.01	0.0428 A (0.003)
Cobalt, total, mg/L	0.05	0.0504 A (0.007)
Copper, total, mg/L	0.025	0.0182 J (0.006)
Iron, total, mg/L	0.1	10.0 J (0.003)
Lead, total, mg/L	0.005	0.018 J (0.002)
Magnesium, total, mg/L	5.0	47.5 A (0.037)
Manganese, total, mg/L	0.015	28.7 J (0.001)
Mercury, total, ug/L	0.2	< 0.2 U (0.2)
Nickel, total, mg/L	0.04	0.0314 A (0.012)
Potassium, total, mg/L	5.0	11.0 A (0.9)
Selenium, total, mg/L	0.005	< 0.002 U (0.002)
Silver, total, mg/L	0.01	0.0049 J (0.003)
Sodium, total, mg/L	5.0	24.4 J (0.038)
Thallium, total, mg/L	0.01	< 0.004 U (0.004)
Vanadium, total, mg/L	0.05	0.0096 A (0.006)
Zinc, total, mg/L	0.02	0.057 J (0.008)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-24A

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	06/04/90	10/16/90
Aluminum, total, mg/L	0.2	0.896 J (0.027)	0.227 J (0.0385)
Antimony, total, mg/L	0.06	< 0.037 U (0.037)	0.0216 A (0.0096)
Arsenic, total, mg/L	0.01	< 0.002 U (0.002)	< 0.003 U (0.003)
Barium, total, mg/L	0.2	0.0143 J (0.002)	< 0.0125 U (0.0006)
Beryllium, total, mg/L	0.005	< 0.001 U (0.001)	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	< 0.005 U (0.005)	< 0.0017 U (0.0017)
Calcium, total, mg/L	5.0	42.2 J (0.02)	45.8 A (0.0327)
Chromium, total, mg/L	0.01	< 0.003 U (0.003)	0.0216 J (0.0017)
Cobalt, total, mg/L	0.05	< 0.007 U (0.007)	< 0.0017 U (0.0017)
Copper, total, mg/L	0.025	< 0.006 U (0.006)	< 0.0045 UJ (0.0045)
Iron, total, mg/L	0.1	1.1 J (0.003)	0.396 J (0.0114)
Lead, total, mg/L	0.003	0.0034 J (0.002)	< 0.001 UJ (0.001)
Magnesium, total, mg/L	5.0	8.65 A (0.037)	8.91 A (0.0301)
Manganese, total, mg/L	0.015	0.0704 J (0.001)	0.0443 J (0.0005)
Mercury, total, ug/L	0.2	< 0.2 U (0.2)	< 0.1 U (0.1)
Nickel, total, mg/L	0.04	< 0.012 U (0.012)	< 0.0107 U (0.0107)
Potassium, total, mg/L	5.0	1.98 A (0.9)	0.976 J (0.97)
Selenium, total, mg/L	0.005	< 0.002 U (0.002)	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.003 U (0.003)	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	16.8 J (0.038)	19.0 A (0.0116)
Thallium, total, mg/L	0.01	< 0.004 U (0.004)	< 0.002 U (0.002)
Vanadium, total, mg/L	0.05	< 0.006 U (0.006)	< 0.002 U (0.002)
Zinc, total, mg/L	0.02	0.0352 J (0.008)	< 0.0323 U (0.0019)

Explanation

CRDL Contract Required Detection Limit
N/R Not Reported
\- Not Analyzed

Validation Codes

A Quantitative Data
J Qualitative Data
R Unusable Data
U Chemical Parameter Not Detected
UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-24B

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	06/04/90	10/16/90
Aluminum, total, mg/L	0.2	1.57 J (0.027)	0.137 J (0.0385)
Antimony, total, mg/L	0.06	< 0.037 U (0.037)	< 0.0096 U (0.0096)
Arsenic, total, mg/L	0.01	0.0034 A (0.002)	< 0.003 U (0.003)
Barium, total, mg/L	0.2	0.0298 R (0.002)	< 0.0259 U (0.0006)
Beryllium, total, mg/L	0.005	< 0.001 U (0.001)	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	< 0.005 U (0.005)	< 0.0017 U (0.0017)
Calcium, total, mg/L	5.0	20.9 R (0.02)	24.5 A (0.0327)
Chromium, total, mg/L	0.01	0.0039 A (0.003)	0.0135 J (0.0017)
Cobalt, total, mg/L	0.05	< 0.007 U (0.007)	< 0.007 U (0.0017)
Copper, total, mg/L	0.025	0.0091 J (0.006)	< 0.005 U (0.0045)
Iron, total, mg/L	0.1	3.22 R (0.003)	2.52 J (0.0114)
Lead, total, mg/L	0.003	0.0031 J (0.002)	< 0.001 UJ (0.001)
Magnesium, total, mg/L	5.0	4.85 A (0.037)	5.56 A (0.0301)
Manganese, total, mg/L	0.015	1.16 R (0.001)	1.28 J (0.0005)
Mercury, total, ug/L	0.2	< 0.2 U (0.2)	< 0.1 U (0.1)
Nickel, total, mg/L	0.04	0.016 A (0.012)	0.0107 J (0.0107)
Potassium, total, mg/L	5.0	5.28 A (0.9)	5.8 J (0.97)
Selenium, total, mg/L	0.005	< 0.002 U (0.002)	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.003 U (0.003)	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	56.2 R (0.038)	65.7 A (0.0116)
Thallium, total, mg/L	0.01	< 0.004 U (0.004)	< 0.002 U (0.002)
Vanadium, total, mg/L	0.05	< 0.006 U (0.006)	< 0.002 U (0.002)
Zinc, total, mg/L	0.02	0.0283 J (0.008)	< 0.0462 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-25A

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	06/05/90
Aluminum, total, mg/L	0.2	5.13 J (0.027)
Antimony, total, mg/L	0.06	< 0.037 U (0.037)
Arsenic, total, mg/L	0.01	0.0068 J (0.002)
Barium, total, mg/L	0.2	0.0365 J (0.002)
Beryllium, total, mg/L	0.005	< 0.001 U (0.001)
Cadmium, total, mg/L	0.005	< 0.005 U (0.005)
Calcium, total, mg/L	5.0	3.81 J (0.02)
Chromium, total, mg/L	0.01	0.0098 J (0.003)
Cobalt, total, mg/L	0.05	< 0.007 U (0.007)
Copper, total, mg/L	0.025	0.0153 J (0.006)
Iron, total, mg/L	0.1	6.08 J (0.003)
Lead, total, mg/L	0.005	0.0052 J (0.002)
Magnesium, total, mg/L	5.0	1.94 J (0.037)
Manganese, total, mg/L	0.015	0.15 J (0.001)
Mercury, total, ug/L	0.2	< 0.2 U (0.2)
Nickel, total, mg/L	0.04	0.0136 J (0.012)
Potassium, total, mg/L	5.0	2.02 J (0.9)
Selenium, total, mg/L	0.005	< 0.002 U (0.002)
Silver, total, mg/L	0.01	< 0.003 U (0.003)
Sodium, total, mg/L	5.0	9.96 J (0.038)
Thallium, total, mg/L	0.01	< 0.004 U (0.004)
Vanadium, total, mg/L	0.05	0.0119 J (0.006)
Zinc, total, mg/L	0.02	0.0221 J (0.008)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-25B

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	06/05/90
Aluminum, total, mg/L	0.2	0.468 J (0.027)
Antimony, total, mg/L	0.06	< 0.037 U (0.037)
Arsenic, total, mg/L	0.01	0.002 A (0.002)
Barium, total, mg/L	0.2	0.0109 J (0.002)
Beryllium, total, mg/L	0.005	< 0.001 U (0.001)
Cadmium, total, mg/L	0.005	< 0.005 U (0.005)
Calcium, total, mg/L	5.0	25.2 J (0.02)
Chromium, total, mg/L	0.01	0.0034 J (0.003)
Cobalt, total, mg/L	0.05	< 0.007 U (0.007)
Copper, total, mg/L	0.025	< 0.006 U (0.006)
Iron, total, mg/L	0.1	1.08 J (0.003)
Lead, total, mg/L	0.005	0.002 A (0.002)
Magnesium, total, mg/L	5.0	3.72 J (0.037)
Manganese, total, mg/L	0.015	0.0721 J (0.001)
Mercury, total, ug/L	0.2	< 0.2 U (0.2)
Nickel, total, mg/L	0.04	< 0.012 U (0.012)
Potassium, total, mg/L	5.0	15.2 J (0.9)
Selenium, total, mg/L	0.005	< 0.002 U (0.002)
Silver, total, mg/L	0.01	< 0.003 U (0.003)
Sodium, total, mg/L	5.0	35.3 J (0.038)
Thallium, total, mg/L	0.01	< 0.004 U (0.004)
Vanadium, total, mg/L	0.05	< 0.006 U (0.006)
Zinc, total, mg/L	0.02	0.0124 J (0.008)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-26A

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	06/05/90
Aluminum, total, mg/L	0.2	3.73 J (0.027)
Antimony, total, mg/L	0.06	< 0.037 U (0.037)
Arsenic, total, mg/L	0.01	0.0243 A (0.002)
Barium, total, mg/L	0.2	0.0338 J (0.002)
Beryllium, total, mg/L	0.005	< 0.001 U (0.001)
Cadmium, total, mg/L	0.005	< 0.005 U (0.005)
Calcium, total, mg/L	5.0	28.6 J (0.02)
Chromium, total, mg/L	0.01	0.0054 J (0.003)
Cobalt, total, mg/L	0.05	0.0078 J (0.007)
Copper, total, mg/L	0.025	0.0139 J (0.006)
Iron, total, mg/L	0.1	9.82 J (0.003)
Lead, total, mg/L	0.005	0.0043 J (0.002)
Magnesium, total, mg/L	5.0	7.67 A (0.037)
Manganese, total, mg/L	0.015	1.08 J (0.001)
Mercury, total, ug/L	0.2	< 0.2 U (0.2)
Nickel, total, mg/L	0.04	< 0.012 U (0.012)
Potassium, total, mg/L	5.0	3.8 J (0.9)
Selenium, total, mg/L	0.005	< 0.002 U (0.002)
Silver, total, mg/L	0.01	< 0.003 U (0.003)
Sodium, total, mg/L	5.0	8.21 J (0.038)
Thallium, total, mg/L	0.01	< 0.004 U (0.004)
Vanadium, total, mg/L	0.05	0.0076 J (0.006)
Zinc, total, mg/L	0.02	0.0164 J (0.008)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-26B

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	06/05/90
Aluminum, total, mg/L	0.2	4.7 J (0.027)
Antimony, total, mg/L	0.06	< 0.037 U (0.037)
Arsenic, total, mg/L	0.01	0.0054 J (0.002)
Barium, total, mg/L	0.2	0.049 J (0.002)
Beryllium, total, mg/L	0.005	< 0.001 U (0.001)
Cadmium, total, mg/L	0.005	< 0.005 U (0.005)
Calcium, total, mg/L	5.0	39.7 J (0.02)
Chromium, total, mg/L	0.01	0.0044 J (0.003)
Cobalt, total, mg/L	0.05	< 0.007 U (0.007)
Copper, total, mg/L	0.025	0.0121 J (0.006)
Iron, total, mg/L	0.1	5.72 J (0.003)
Lead, total, mg/L	0.005	0.0043 J (0.002)
Magnesium, total, mg/L	5.0	12.0 A (0.037)
Manganese, total, mg/L	0.015	0.418 J (0.001)
Mercury, total, ug/L	0.2	< 0.2 U (0.2)
Nickel, total, mg/L	0.04	< 0.012 U (0.012)
Potassium, total, mg/L	5.0	3.84 J (0.9)
Selenium, total, mg/L	0.005	< 0.002 U (0.002)
Silver, total, mg/L	0.01	< 0.003 U (0.003)
Sodium, total, mg/L	5.0	32.8 J (0.038)
Thallium, total, mg/L	0.01	< 0.004 U (0.004)
Vanadium, total, mg/L	0.05	0.007 J (0.006)
Zinc, total, mg/L	0.02	0.0223 J (0.008)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-27A

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	06/05/90
Aluminum, total, mg/L	0.2	29.1 J (0.027)
Antimony, total, mg/L	0.06	< 0.037 U (0.037)
Arsenic, total, mg/L	0.01	0.0404 A (0.002)
Barium, total, mg/L	0.2	0.176 J (0.002)
Beryllium, total, mg/L	0.005	0.0016 J (0.001)
Cadmium, total, mg/L	0.005	< 0.005 U (0.005)
Calcium, total, mg/L	5.0	211.0 J (0.02)
Chromium, total, mg/L	0.01	0.0665 A (0.003)
Cobalt, total, mg/L	0.05	0.0161 J (0.007)
Copper, total, mg/L	0.025	0.0699 J (0.006)
Iron, total, mg/L	0.1	31.4 J (0.003)
Lead, total, mg/L	0.005	0.0312 J (0.002)
Magnesium, total, mg/L	5.0	22.4 A (0.037)
Manganese, total, mg/L	0.015	0.678 J (0.001)
Mercury, total, ug/L	0.2	< 0.2 U (0.2)
Nickel, total, mg/L	0.04	0.038 J (0.012)
Potassium, total, mg/L	5.0	20.6 A (0.9)
Selenium, total, mg/L	0.005	0.0158 J (0.002)
Silver, total, mg/L	0.01	< 0.003 U (0.003)
Sodium, total, mg/L	5.0	104.0 A (0.038)
Thallium, total, mg/L	0.01	< 0.004 U (0.004)
Vanadium, total, mg/L	0.05	0.0514 A (0.006)
Zinc, total, mg/L	0.02	0.215 J (0.008)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-27B

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	06/05/90
Aluminum, total, mg/L	0.2	2.27 J (0.027)
Antimony, total, mg/L	0.06	< 0.037 U (0.037)
Arsenic, total, mg/L	0.01	0.003 J (0.002)
Barium, total, mg/L	0.2	0.0332 J (0.002)
Beryllium, total, mg/L	0.005	< 0.001 U (0.001)
Cadmium, total, mg/L	0.005	< 0.005 U (0.005)
Calcium, total, mg/L	5.0	28.3 J (0.02)
Chromium, total, mg/L	0.01	0.0071 J (0.003)
Cobalt, total, mg/L	0.05	< 0.007 U (0.007)
Copper, total, mg/L	0.025	0.0122 J (0.006)
Iron, total, mg/L	0.1	9.1 J (0.003)
Lead, total, mg/L	0.005	0.007 J (0.002)
Magnesium, total, mg/L	5.0	4.79 J (0.037)
Manganese, total, mg/L	0.015	0.302 J (0.001)
Mercury, total, ug/L	0.2	< 0.2 U (0.2)
Nickel, total, mg/L	0.04	< 0.012 U (0.012)
Potassium, total, mg/L	5.0	4.1 A (0.9)
Selenium, total, mg/L	0.005	< 0.002 UJ (0.002)
Silver, total, mg/L	0.01	< 0.003 U (0.003)
Sodium, total, mg/L	5.0	27.4 J (0.038)
Thallium, total, mg/L	0.01	< 0.004 U (0.004)
Vanadium, total, mg/L	0.05	< 0.006 U (0.006)
Zinc, total, mg/L	0.02	0.0363 J (0.008)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-28

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/17/90
Aluminum, total, mg/L	0.2	0.462 J (0.0385)
Antimony, total, mg/L	0.06	< 0.0096 U (0.0096)
Arsenic, total, mg/L	0.01	< 0.003 U (0.003)
Barium, total, mg/L	0.2	< 0.0225 U (0.0006)
Beryllium, total, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	< 0.0017 U (0.0017)
Calcium, total, mg/L	5.0	8.04 A (0.0327)
Chromium, total, mg/L	0.01	< 0.0017 U (0.0017)
Cobalt, total, mg/L	0.05	< 0.0051 U (0.0017)
Copper, total, mg/L	0.025	< 0.0248 U (0.0045)
Iron, total, mg/L	0.1	0.322 J (0.0114)
Lead, total, mg/L	0.003	< 0.0052 U (0.001)
Magnesium, total, mg/L	5.0	1.11 A (0.0301)
Manganese, total, mg/L	0.015	0.0777 J (0.0005)
Mercury, total, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, total, mg/L	0.04	< 0.0107 U (0.0107)
Potassium, total, mg/L	5.0	2.53 A (0.97)
Selenium, total, mg/L	0.005	< 0.003 U (0.003)
Silver, total, mg/L	0.01	< 0.0084 U (0.0084)
Sodium, total, mg/L	5.0	3.47 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 UJ (0.002)
Vanadium, total, mg/L	0.05	< 0.002 U (0.002)
Zinc, total, mg/L	0.02	< 0.0192 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-29

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	06/04/90	06/04/90 Replicate
Aluminum, total, mg/L	0.2	9.73 J (0.027)	8.39 J (0.027)
Antimony, total, mg/L	0.06	< 0.037 U (0.037)	< 0.037 U (0.037)
Arsenic, total, mg/L	0.01	0.03 A (0.002)	0.0232 A (0.002)
Barium, total, mg/L	0.2	0.124 J (0.002)	0.116 J (0.002)
Beryllium, total, mg/L	0.005	< 0.001 U (0.001)	< 0.001 U (0.001)
Cadmium, total, mg/L	0.005	< 0.005 U (0.005)	< 0.005 U (0.005)
Calcium, total, mg/L	5.0	77.2 J (0.02)	76.9 J (0.02)
Chromium, total, mg/L	0.01	0.0184 A (0.003)	0.016 A (0.003)
Cobalt, total, mg/L	0.05	0.0097 J (0.007)	0.0078 J (0.007)
Copper, total, mg/L	0.025	0.0437 J (0.006)	0.0388 J (0.006)
Iron, total, mg/L	0.1	13.5 J (0.003)	12.0 J (0.003)
Lead, total, mg/L	0.005	0.0142 J (0.002)	0.0121 J (0.002)
Magnesium, total, mg/L	5.0	12.8 A (0.037)	12.6 A (0.037)
Manganese, total, mg/L	0.015	0.741 J (0.001)	0.709 J (0.001)
Mercury, total, ug/L	0.2	< 0.2 U (0.2)	< 0.2 U (0.2)
Nickel, total, mg/L	0.04	0.0195 J (0.012)	0.0195 J (0.012)
Potassium, total, mg/L	5.0	6.8 J (0.9)	6.62 A (0.9)
Selenium, total, mg/L	0.005	0.0022 J (0.002)	< 0.002 U (0.002)
Silver, total, mg/L	0.01	< 0.003 U (0.003)	< 0.003 U (0.003)
Sodium, total, mg/L	5.0	244.0 J (0.038)	245.0 J (0.038)
Thallium, total, mg/L	0.01	< 0.004 U (0.004)	< 0.004 U (0.004)
Vanadium, total, mg/L	0.05	0.0188 J (0.006)	0.0173 J (0.006)
Zinc, total, mg/L	0.02	0.0491 J (0.008)	0.0474 J (0.008)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-30A

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	06/05/90	06/05/90 Replicate	10/17/90
Aluminum, total, mg/L	0.2	1.9 J (0.027)	1.59 J (0.027)	0.358 J (0.0385)
Antimony, total, mg/L	0.06	< 0.037 U (0.037)	< 0.037 U (0.037)	0.0242 A (0.0096)
Arsenic, total, mg/L	0.01	0.0639 A (0.002)	0.0586 A (0.002)	0.036 A (0.003)
Barium, total, mg/L	0.2	0.0525 J (0.002)	0.0484 J (0.002)	0.062 A (0.0006)
Beryllium, total, mg/L	0.005	< 0.001 U (0.001)	< 0.001 U (0.001)	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	< 0.005 U (0.005)	< 0.005 U (0.005)	< 0.0017 U (0.0017)
Calcium, total, mg/L	5.0	60.8 J (0.02)	60.4 J (0.02)	49.4 A (0.0327)
Chromium, total, mg/L	0.01	0.0037 J (0.003)	< 0.003 UJ (0.003)	< 0.0017 U (0.0017)
Cobalt, total, mg/L	0.05	< 0.007 U (0.007)	< 0.007 U (0.007)	< 0.0055 U (0.0017)
Copper, total, mg/L	0.025	0.0085 J (0.006)	0.0067 J (0.006)	< 0.0045 UJ (0.0045)
Iron, total, mg/L	0.1	20.0 J (0.003)	19.7 J (0.003)	23.4 J (0.0114)
Lead, total, mg/L	0.003	0.0036 J (0.002)	0.0035 J (0.002)	< 0.0013 U (0.001)
Magnesium, total, mg/L	5.0	5.58 A (0.037)	5.46 A (0.037)	3.62 A (0.0301)
Manganese, total, mg/L	0.015	2.33 J (0.001)	2.32 J (0.001)	1.97 J (0.0005)
Mercury, total, ug/L	0.2	< 0.2 U (0.2)	< 0.2 U (0.2)	< 0.1 UJ (0.1)
Nickel, total, mg/L	0.04	< 0.012 U (0.012)	< 0.012 U (0.012)	< 0.0107 U (0.0107)
Potassium, total, mg/L	5.0	8.16 A (0.9)	7.98 A (0.9)	6.3 A (0.97)
Selenium, total, mg/L	0.005	< 0.002 U (0.002)	< 0.002 U (0.002)	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.003 U (0.003)	< 0.003 U (0.003)	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	25.0 J (0.038)	24.3 J (0.038)	17.3 A (0.0116)
Thallium, total, mg/L	0.01	< 0.004 U (0.004)	< 0.004 U (0.004)	< 0.002 U (0.002)
Vanadium, total, mg/L	0.05	< 0.006 U (0.006)	< 0.006 U (0.006)	0.0038 A (0.002)
Zinc, total, mg/L	0.02	0.0951 J (0.008)	0.102 J (0.008)	0.131 J (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-308

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	06/05/90	10/17/90
Aluminum, total, mg/L	0.2	0.515 J (0.027)	0.171 J (0.0385)
Antimony, total, mg/L	0.06	< 0.037 U (0.037)	0.0259 A (0.0096)
Arsenic, total, mg/L	0.01	0.0359 A (0.002)	0.0275 A (0.003)
Barium, total, mg/L	0.2	0.0201 J (0.002)	< 0.0191 U (0.0006)
Beryllium, total, mg/L	0.005	< 0.001 U (0.001)	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	< 0.005 U (0.005)	< 0.0017 U (0.0017)
Calcium, total, mg/L	5.0	45.4 J (0.02)	48.1 A (0.0327)
Chromium, total, mg/L	0.01	< 0.003 U (0.003)	0.16 J (0.0017)
Cobalt, total, mg/L	0.05	< 0.007 U (0.007)	< 0.0076 U (0.0017)
Copper, total, mg/L	0.025	0.0072 J (0.006)	< 0.0147 U (0.0045)
Iron, total, mg/L	0.1	1.65 J (0.003)	2.05 J (0.0114)
Lead, total, mg/L	0.003	< 0.002 U (0.002)	< 0.0012 U (0.001)
Magnesium, total, mg/L	5.0	7.98 A (0.037)	8.28 A (0.0301)
Manganese, total, mg/L	0.015	1.47 J (0.001)	1.52 J (0.0005)
Mercury, total, ug/L	0.2	< 0.2 U (0.2)	< 0.1 UJ (0.1)
Nickel, total, mg/L	0.04	< 0.012 U (0.012)	0.0834 J (0.0107)
Potassium, total, mg/L	5.0	5.65 A (0.9)	4.8 A (0.97)
Selenium, total, mg/L	0.005	< 0.002 U (0.002)	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.003 U (0.003)	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	32.3 A (0.038)	32.0 A (0.0116)
Thallium, total, mg/L	0.01	< 0.004 U (0.004)	< 0.002 U (0.002)
Vanadium, total, mg/L	0.05	< 0.006 U (0.006)	< 0.002 U (0.002)
Zinc, total, mg/L	0.02	0.0174 J (0.008)	< 0.0312 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-31

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	06/06/90	10/18/90
Aluminum, total, mg/L	0.2	0.479 J (0.027)	0.13 J (0.0385)
Antimony, total, mg/L	0.06	0.0406 J (0.037)	0.0596 A (0.0096)
Arsenic, total, mg/L	0.01	0.449 A (0.002)	0.621 A (0.003)
Barium, total, mg/L	0.2	0.23 J (0.002)	0.235 A (0.0006)
Beryllium, total, mg/L	0.005	< 0.001 U (0.001)	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	< 0.005 U (0.005)	0.0041 A (0.0017)
Calcium, total, mg/L	5.0	317.0 J (0.02)	286.0 A (0.0327)
Chromium, total, mg/L	0.01	0.033 A (0.003)	0.0353 J (0.0017)
Cobalt, total, mg/L	0.05	< 0.007 U (0.007)	< 0.005 U (0.0017)
Copper, total, mg/L	0.025	0.0109 J (0.006)	< 0.0045 UJ (0.0045)
Iron, total, mg/L	0.1	5.37 J (0.003)	4.99 J (0.0114)
Lead, total, mg/L	0.003	0.0104 J (0.002)	< 0.0012 U (0.001)
Magnesium, total, mg/L	5.0	146.0 A (0.037)	150.0 A (0.0301)
Manganese, total, mg/L	0.015	4.62 J (0.001)	4.79 J (0.0005)
Mercury, total, ug/L	0.2	< 0.2 U (0.2)	< 0.1 UJ (0.1)
Nickel, total, mg/L	0.04	0.0146 A (0.012)	< 0.0107 U (0.0107)
Potassium, total, mg/L	5.0	38.8 A (0.9)	41.2 J (0.97)
Selenium, total, mg/L	0.005	0.0021 J (0.002)	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.003 UJ (0.003)	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	93.4 J (0.038)	101.0 A (0.0116)
Thallium, total, mg/L	0.01	< 0.004 U (0.004)	< 0.002 U (0.002)
Vanadium, total, mg/L	0.05	0.0304 J (0.006)	0.0295 A (0.002)
Zinc, total, mg/L	0.02	0.0316 J (0.008)	< 0.0077 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-32

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	06/06/90	10/17/90
Aluminum, total, mg/L	0.2	6.67 J (0.027)	2.1 J (0.0385)
Antimony, total, mg/L	0.06	0.0403 J (0.037)	0.0543 A (0.0096)
Arsenic, total, mg/L	0.01	0.0318 A (0.002)	0.0228 A (0.003)
Barium, total, mg/L	0.2	0.234 J (0.002)	0.204 A (0.0006)
Beryllium, total, mg/L	0.005	< 0.001 U (0.001)	< 0.0004 U (0.0003)
Cadmium, total, mg/L	0.005	< 0.005 U (0.005)	< 0.0017 U (0.0017)
Calcium, total, mg/L	5.0	239.0 J (0.02)	232.0 A (0.0327)
Chromium, total, mg/L	0.01	0.028 A (0.003)	0.377 J (0.0017)
Cobalt, total, mg/L	0.05	< 0.007 U (0.007)	< 0.0101 U (0.0017)
Copper, total, mg/L	0.025	0.0271 J (0.006)	< 0.223 U (0.0045)
Iron, total, mg/L	0.1	14.5 J (0.003)	11.2 J (0.0114)
Lead, total, mg/L	0.003	0.009 J (0.002)	< 0.002 U (0.001)
Magnesium, total, mg/L	5.0	46.1 A (0.037)	43.7 A (0.0301)
Manganese, total, mg/L	0.015	7.92 J (0.001)	7.48 J (0.0005)
Mercury, total, ug/L	0.2	< 0.2 U (0.2)	< 0.1 UJ (0.1)
Nickel, total, mg/L	0.04	< 0.012 U (0.012)	0.203 J (0.0107)
Potassium, total, mg/L	5.0	11.8 A (0.9)	9.98 A (0.97)
Selenium, total, mg/L	0.005	< 0.002 U (0.002)	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.003 UJ (0.003)	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	17.6 J (0.038)	17.7 A (0.0116)
Thallium, total, mg/L	0.01	< 0.004 U (0.004)	< 0.002 U (0.002)
Vanadium, total, mg/L	0.05	0.0179 J (0.006)	0.0129 A (0.002)
Zinc, total, mg/L	0.02	0.0547 J (0.008)	< 0.0684 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-33A

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	06/04/90
Aluminum, total, mg/L	0.2	1.19 J (0.027)
Antimony, total, mg/L	0.06	< 0.037 U (0.037)
Arsenic, total, mg/L	0.01	0.0042 J (0.002)
Barium, total, mg/L	0.2	0.0181 J (0.002)
Beryllium, total, mg/L	0.005	< 0.001 U (0.001)
Cadmium, total, mg/L	0.005	< 0.005 U (0.005)
Calcium, total, mg/L	5.0	7.81 J (0.02)
Chromium, total, mg/L	0.01	0.0036 J (0.003)
Cobalt, total, mg/L	0.05	< 0.007 U (0.007)
Copper, total, mg/L	0.025	0.01 J (0.006)
Iron, total, mg/L	0.1	1.27 J (0.003)
Lead, total, mg/L	0.005	0.0031 J (0.002)
Magnesium, total, mg/L	5.0	1.16 J (0.037)
Manganese, total, mg/L	0.015	0.666 J (0.001)
Mercury, total, ug/L	0.2	< 0.2 U (0.2)
Nickel, total, mg/L	0.04	< 0.012 U (0.012)
Potassium, total, mg/L	5.0	0.923 J (0.9)
Selenium, total, mg/L	0.005	< 0.002 U (0.002)
Silver, total, mg/L	0.01	< 0.003 U (0.003)
Sodium, total, mg/L	5.0	9.77 J (0.038)
Thallium, total, mg/L	0.01	< 0.004 U (0.004)
Vanadium, total, mg/L	0.05	< 0.006 U (0.006)
Zinc, total, mg/L	0.02	0.0293 J (0.008)

Explanation

CRDL Contract Required Detection Limit
N/R Not Reported
\- Not Analyzed

Validation Codes

A Quantitative Data
J Qualitative Data
R Unusable Data
U Chemical Parameter Not Detected
UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-33B

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	06/04/90
Aluminum, total, mg/L	0.2	3.72 J (0.027)
Antimony, total, mg/L	0.06	< 0.037 U (0.037)
Arsenic, total, mg/L	0.01	0.01 A (0.002)
Barium, total, mg/L	0.2	0.0372 J (0.002)
Beryllium, total, mg/L	0.005	< 0.001 U (0.001)
Cadmium, total, mg/L	0.005	< 0.005 U (0.005)
Calcium, total, mg/L	5.0	24.3 J (0.02)
Chromium, total, mg/L	0.01	0.0099 J (0.003)
Cobalt, total, mg/L	0.05	0.0074 J (0.007)
Copper, total, mg/L	0.025	0.0273 J (0.006)
Iron, total, mg/L	0.1	7.24 J (0.003)
Lead, total, mg/L	0.005	0.0061 J (0.002)
Magnesium, total, mg/L	5.0	7.18 A (0.037)
Manganese, total, mg/L	0.015	1.08 J (0.001)
Mercury, total, ug/L	0.2	< 0.2 U (0.2)
Nickel, total, mg/L	0.04	0.0139 J (0.012)
Potassium, total, mg/L	5.0	5.39 A (0.9)
Selenium, total, mg/L	0.005	< 0.002 U (0.002)
Silver, total, mg/L	0.01	< 0.003 U (0.003)
Sodium, total, mg/L	5.0	37.4 J (0.038)
Thallium, total, mg/L	0.01	< 0.004 U (0.004)
Vanadium, total, mg/L	0.05	0.0084 J (0.006)
Zinc, total, mg/L	0.02	0.0466 J (0.008)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-36

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/18/90
Aluminum, total, mg/L	0.2	3.24 J (0.0385)
Antimony, total, mg/L	0.06	< 0.0096 U (0.0096)
Arsenic, total, mg/L	0.01	0.247 A (0.003)
Barium, total, mg/L	0.2	< 0.0075 U (0.0006)
Beryllium, total, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	< 0.0017 U (0.0017)
Calcium, total, mg/L	5.0	8.91 A (0.0327)
Chromium, total, mg/L	0.01	0.0215 J (0.0017)
Cobalt, total, mg/L	0.05	< 0.004 U (0.0017)
Copper, total, mg/L	0.025	< 0.0124 U (0.0045)
Iron, total, mg/L	0.1	1.65 J (0.0114)
Lead, total, mg/L	0.003	0.039 J (0.001)
Magnesium, total, mg/L	5.0	2.23 A (0.0301)
Manganese, total, mg/L	0.015	0.0408 J (0.0005)
Mercury, total, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, total, mg/L	0.04	< 0.0107 U (0.0107)
Potassium, total, mg/L	5.0	< 0.97 UJ (0.97)
Selenium, total, mg/L	0.005	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	238.0 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 U (0.002)
Vanadium, total, mg/L	0.05	0.242 A (0.002)
Zinc, total, mg/L	0.02	< 0.0377 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-37

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/18/90
Aluminum, total, mg/L	0.2	0.419 J (0.0385)
Antimony, total, mg/L	0.06	0.0202 A (0.0096)
Arsenic, total, mg/L	0.01	0.614 A (0.003)
Barium, total, mg/L	0.2	< 0.0326 U (0.0006)
Beryllium, total, mg/L	0.005	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	0.003 A (0.0017)
Calcium, total, mg/L	5.0	48.6 A (0.0327)
Chromium, total, mg/L	0.01	0.0048 J (0.0017)
Cobalt, total, mg/L	0.05	< 0.0049 U (0.0017)
Copper, total, mg/L	0.025	< 0.0942 U (0.0045)
Iron, total, mg/L	0.1	2.48 J (0.0114)
Lead, total, mg/L	0.003	< 0.0043 U (0.001)
Magnesium, total, mg/L	5.0	6.44 A (0.0301)
Manganese, total, mg/L	0.015	0.537 J (0.0005)
Mercury, total, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, total, mg/L	0.04	< 0.0107 U (0.0107)
Potassium, total, mg/L	5.0	2.54 J (0.97)
Selenium, total, mg/L	0.005	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	26.2 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 U (0.002)
Vanadium, total, mg/L	0.05	< 0.002 U (0.002)
Zinc, total, mg/L	0.02	< 0.025 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-38

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/17/90	10/17/90 Replicate
Aluminum, total, mg/L	0.2	2.5 J (0.0385)	1.15 J (0.0385)
Antimony, total, mg/L	0.06	0.0426 A (0.0096)	0.0334 A (0.0096)
Arsenic, total, mg/L	0.01	0.222 A (0.003)	0.173 A (0.003)
Barium, total, mg/L	0.2	0.0528 A (0.0006)	< 0.0307 U (0.0006)
Beryllium, total, mg/L	0.005	< 0.0003 U (0.0003)	< 0.0003 U (0.0003)
Cadmium, total, mg/L	0.005	0.003 A (0.0017)	< 0.0017 U (0.0017)
Calcium, total, mg/L	5.0	120.0 A (0.0327)	122.0 A (0.0327)
Chromium, total, mg/L	0.01	< 0.009 U (0.0017)	0.0045 J (0.0017)
Cobalt, total, mg/L	0.05	0.0264 A (0.0017)	< 0.0329 U (0.0017)
Copper, total, mg/L	0.025	< 0.072 U (0.0045)	< 0.092 U (0.0045)
Iron, total, mg/L	0.1	6.81 J (0.0114)	3.71 J (0.0114)
Lead, total, mg/L	0.003	0.0262 J (0.001)	0.0093 J (0.001)
Magnesium, total, mg/L	5.0	5.63 A (0.0301)	5.05 A (0.0301)
Manganese, total, mg/L	0.015	0.431 J (0.0005)	0.389 J (0.0005)
Mercury, total, ug/L	0.2	0.23 J (0.1)	0.14 J (0.1)
Nickel, total, mg/L	0.04	0.0626 J (0.0107)	0.0809 J (0.0107)
Potassium, total, mg/L	5.0	6.82 A (0.97)	5.91 A (0.97)
Selenium, total, mg/L	0.005	0.0052 J (0.003)	0.0053 J (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	24.9 A (0.0116)	21.7 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 U (0.002)	< 0.002 U (0.002)
Vanadium, total, mg/L	0.05	0.0253 A (0.002)	0.0191 A (0.002)
Zinc, total, mg/L	0.02	0.321 J (0.0019)	< 0.0415 U (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-39

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/15/90	10/15/90 Replicate
Aluminum, total, mg/L	0.2	10.7 J (0.0385)	11.5 J (0.0385)
Antimony, total, mg/L	0.06	0.058 J (0.0096)	0.031 J (0.0096)
Arsenic, total, mg/L	0.01	0.0375 A (0.003)	0.0357 A (0.003)
Barium, total, mg/L	0.2	0.0721 A (0.0006)	0.078 A (0.0006)
Beryllium, total, mg/L	0.005	0.0004 A (0.0003)	0.0004 A (0.0003)
Cadmium, total, mg/L	0.005	< 0.0017 U (0.0017)	< 0.0017 U (0.0017)
Calcium, total, mg/L	5.0	54.7 A (0.0327)	61.7 A (0.0327)
Chromium, total, mg/L	0.01	0.361 J (0.0017)	0.385 J (0.0017)
Cobalt, total, mg/L	0.05	0.0197 A (0.0017)	0.0222 A (0.0017)
Copper, total, mg/L	0.025	< 0.0345 U (0.0045)	< 0.153 U (0.0045)
Iron, total, mg/L	0.1	25.3 J (0.0114)	27.3 J (0.0114)
Lead, total, mg/L	0.003	0.0087 J (0.001)	0.0074 J (0.001)
Magnesium, total, mg/L	5.0	22.3 A (0.0301)	25.1 A (0.0301)
Manganese, total, mg/L	0.015	0.617 J (0.0005)	0.684 J (0.0005)
Mercury, total, ug/L	0.2	< 0.1 UJ (0.1)	< 0.1 UJ (0.1)
Nickel, total, mg/L	0.04	0.0193 J (0.0107)	0.0235 J (0.0107)
Potassium, total, mg/L	5.0	8.38 J (0.97)	10.2 J (0.97)
Selenium, total, mg/L	0.005	< 0.003 UJ (0.003)	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	29.8 A (0.0116)	11.9 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 UJ (0.002)	< 0.002 UJ (0.002)
Vanadium, total, mg/L	0.05	0.0264 A (0.002)	0.0288 A (0.002)
Zinc, total, mg/L	0.02	0.0762 J (0.0019)	0.13 J (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-40

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/15/90
Aluminum, total, mg/L	0.2	13.1 J (0.0385)
Antimony, total, mg/L	0.06	0.143 J (0.0096)
Arsenic, total, mg/L	0.01	0.09 A (0.003)
Barium, total, mg/L	0.2	0.17 A (0.0006)
Beryllium, total, mg/L	0.005	0.0032 A (0.0003)
Cadmium, total, mg/L	0.005	< 0.0035 U (0.0017)
Calcium, total, mg/L	5.0	491.0 A (0.0327)
Chromium, total, mg/L	0.01	0.196 J (0.0017)
Cobalt, total, mg/L	0.05	0.0517 A (0.0017)
Copper, total, mg/L	0.025	< 0.298 U (0.0045)
Iron, total, mg/L	0.1	15.4 J (0.0114)
Lead, total, mg/L	0.003	0.0994 J (0.001)
Magnesium, total, mg/L	5.0	10.4 A (0.0301)
Manganese, total, mg/L	0.015	0.243 J (0.0005)
Mercury, total, ug/L	0.2	1.6 A (0.1)
Nickel, total, mg/L	0.04	0.0371 J (0.0107)
Potassium, total, mg/L	5.0	5.9 J (0.97)
Selenium, total, mg/L	0.005	0.0336 J (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	12.0 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 UJ (0.002)
Vanadium, total, mg/L	0.05	0.0465 A (0.002)
Zinc, total, mg/L	0.02	0.312 J (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-41

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/15/90
Aluminum, total, mg/L	0.2	18.1 J (0.0385)
Antimony, total, mg/L	0.06	0.061 J (0.0096)
Arsenic, total, mg/L	0.01	< 0.0436 U (0.003)
Barium, total, mg/L	0.2	0.121 A (0.0006)
Beryllium, total, mg/L	0.005	0.001 A (0.0003)
Cadmium, total, mg/L	0.005	< 0.0017 U (0.0017)
Calcium, total, mg/L	5.0	136.0 A (0.0327)
Chromium, total, mg/L	0.01	0.111 J (0.0017)
Cobalt, total, mg/L	0.05	0.0211 A (0.0017)
Copper, total, mg/L	0.025	< 0.0663 U (0.0045)
Iron, total, mg/L	0.1	24.6 J (0.0114)
Lead, total, mg/L	0.003	0.0112 J (0.001)
Magnesium, total, mg/L	5.0	24.3 A (0.0301)
Manganese, total, mg/L	0.015	0.827 J (0.0005)
Mercury, total, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, total, mg/L	0.04	0.035 J (0.0107)
Potassium, total, mg/L	5.0	4.4 J (0.97)
Selenium, total, mg/L	0.005	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	44.2 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 UJ (0.002)
Vanadium, total, mg/L	0.05	0.0469 A (0.002)
Zinc, total, mg/L	0.02	0.072 J (0.0019)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-42

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/15/90
Aluminum, total, mg/L	0.2	15.1 J (0.0385)
Antimony, total, mg/L	0.06	0.0127 J (0.0096)
Arsenic, total, mg/L	0.01	0.482 A (0.003)
Barium, total, mg/L	0.2	0.287 A (0.0006)
Beryllium, total, mg/L	0.005	0.0007 A (0.0003)
Cadmium, total, mg/L	0.005	< 0.0034 U (0.0017)
Calcium, total, mg/L	5.0	47.3 A (0.0327)
Chromium, total, mg/L	0.01	0.0352 J (0.0017)
Cobalt, total, mg/L	0.05	0.0373 A (0.0017)
Copper, total, mg/L	0.025	< 0.0284 U (0.0045)
Iron, total, mg/L	0.1	47.3 J (0.0114)
Lead, total, mg/L	0.003	0.0165 J (0.001)
Magnesium, total, mg/L	5.0	34.8 A (0.0301)
Manganese, total, mg/L	0.015	1.87 J (0.0005)
Mercury, total, ug/L	0.2	< 0.1 UJ (0.1)
Nickel, total, mg/L	0.04	0.0332 J (0.0107)
Potassium, total, mg/L	5.0	15.1 J (0.97)
Selenium, total, mg/L	0.005	< 0.003 UJ (0.003)
Silver, total, mg/L	0.01	< 0.0084 UJ (0.0084)
Sodium, total, mg/L	5.0	35.4 A (0.0116)
Thallium, total, mg/L	0.01	< 0.002 UJ (0.002)
Vanadium, total, mg/L	0.05	0.0352 A (0.002)
Zinc, total, mg/L	0.02	0.071 J (0.0019)

Explanation

CRDL Contract Required Detection Limit
N/R Not Reported
\- Not Analyzed

Validation Codes

A Quantitative Data
J Qualitative Data
R Unusable Data
U Chemical Parameter Not Detected
UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: PU8

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	06/04/90
Aluminum, total, mg/L	0.2	0.0551 J (0.027)
Antimony, total, mg/L	0.06	< 0.037 U (0.037)
Arsenic, total, mg/L	0.01	< 0.002 U (0.002)
Barium, total, mg/L	0.2	0.0122 J (0.002)
Beryllium, total, mg/L	0.005	< 0.001 U (0.001)
Cadmium, total, mg/L	0.005	< 0.005 U (0.005)
Calcium, total, mg/L	5.0	12.4 J (0.02)
Chromium, total, mg/L	0.01	< 0.003 U (0.003)
Cobalt, total, mg/L	0.05	< 0.007 U (0.007)
Copper, total, mg/L	0.025	0.0656 J (0.006)
Iron, total, mg/L	0.1	0.188 J (0.003)
Lead, total, mg/L	0.005	0.0034 J (0.002)
Magnesium, total, mg/L	5.0	1.82 J (0.037)
Manganese, total, mg/L	0.015	0.0233 J (0.001)
Mercury, total, ug/L	0.2	< 0.2 U (0.2)
Nickel, total, mg/L	0.04	< 0.012 U (0.012)
Potassium, total, mg/L	5.0	2.03 J (0.9)
Selenium, total, mg/L	0.005	< 0.002 U (0.002)
Silver, total, mg/L	0.01	< 0.003 U (0.003)
Sodium, total, mg/L	5.0	23.2 J (0.038)
Thallium, total, mg/L	0.01	< 0.004 U (0.004)
Vanadium, total, mg/L	0.05	< 0.006 U (0.006)
Zinc, total, mg/L	0.02	0.0122 J (0.008)

Explanation

CRDL Contract Required Detection Limit

N/R Not Reported

\- Not Analyzed

Validation Codes

A Quantitative Data

J Qualitative Data

R Unusable Data

U Chemical Parameter Not Detected

UJ Chemical Parameter Not Detected, Detection Level Estimated

Values in parentheses are the Instrument Detection Limits for the respective analyses

TABLE 4

Summary of PDI Phase 1 and Phase 2
Ground-Water Quality Data

Semi-Volatile Organic Compounds

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-9

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/18/90
pH, field, s.u.	6.13 F (0.01)
Specific conductance, field, umhos/cm	1020.0 F (N/R)
Temperature, field, Celsius	9.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-10

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/16/90
pH, field, s.u.	6.02 F (0.01)
Specific conductance, field, umhos/cm	420.0 F (N/R)
Temperature, field, Celsius	12.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-11

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/16/90
pH, field, s.u.	6.33 F (0.01)
Specific conductance, field, umhos/cm	360.0 F (N/R)
Temperature, field, Celsius	11.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-12

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/15/90
pH, field, s.u.	8.19 F (0.01)
Specific conductance, field, umhos/cm	5800.0 F (N/R)
Temperature, field, Celsius	12.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-13

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/15/90
pH, field, s.u.	7.58 F (0.01)
Specific conductance, field, umhos/cm	755.0 F (N/R)
Temperature, field, Celsius	18.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-16

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/18/90
pH, field, s.u.	6.88 F (0.01)
Specific conductance, field, umhos/cm	16990.0 F (N/R)
Temperature, field, Celsius	13.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-17

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/16/90
pH, field, s.u.	6.95 F (0.01)
Specific conductance, field, umhos/cm	470.0 F (N/R)
Temperature, field, Celsius	11.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-18

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/16/90
pH, field, s.u.	5.48 F (0.01)
Specific conductance, field, umhos/cm	966.0 F (N/R)
Temperature, field, Celsius	11.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-18A

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/16/90
pH, field, s.u.	5.83 F (0.01)
Specific conductance, field, umhos/cm	590.0 F (N/R)
Temperature, field, Celsius	13.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-19

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/16/90
pH, field, s.u.	5.83 F (0.01)
Specific conductance, field, umhos/cm	460.0 F (N/R)
Temperature, field, Celsius	13.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-19A

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/16/90
pH, field, s.u.	6.32 F (0.01)
Specific conductance, field, umhos/cm	250.0 F (N/R)
Temperature, field, Celsius	13.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-21

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/18/90
pH, field, s.u.	5.87 F (0.01)
Specific conductance, field, umhos/cm	340.0 F (N/R)
Temperature, field, Celsius	14.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-22

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/17/90
pH, field, s.u.	6.15 F (0.01)
Specific conductance, field, umhos/cm	2100.0 F (N/R)
Temperature, field, Celsius	14.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-24A

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/16/90
pH, field, s.u.	5.74 F (0.01)
Specific conductance, field, umhos/cm	410.0 F (N/R)
Temperature, field, Celsius	15.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-24B

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/16/90
pH, field, s.u.	6.0 F (0.01)
Specific conductance, field, umhos/cm	540.0 F (N/R)
Temperature, field, Celsius	14.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-28

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/17/90
pH, field, s.u.	5.78 F (0.01)
Specific conductance, field, umhos/cm	80.0 F (N/R)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-30A

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/17/90
Temperature, field, Celsius	13.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-30B

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/17/90
Temperature, field, Celsius	13.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-31

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/18/90
pH, field, s.u.	6.61 F (0.01)
Specific conductance, field, umhos/cm	537.0 F (N/R)
Temperature, field, Celsius	13.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-32

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/17/90
Temperature, field, Celsius	12.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-36

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/18/90
pH, field, s.u.	6.86 F (0.01)
Specific conductance, field, umhos/cm	1250.0 F (N/R)
Temperature, field, Celsius	15.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-37

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/18/90
pH, field, s.u.	6.09 F (0.01)
Specific conductance, field, umhos/cm	600.0 F (N/R)
Temperature, field, Celsius	13.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-38

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/17/90
pH, field, s.u.	5.78 F (0.01)
Specific conductance, field, umhos/cm	780.0 F (N/R)
Temperature, field, Celsius	15.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-39

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/15/90
pH, field, s.u.	6.72 F (0.01)
Specific conductance, field, umhos/cm	1150.0 F (N/R)
Temperature, field, Celsius	13.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-40

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/15/90
pH, field, s.u.	6.8 F (0.01)
Specific conductance, field, umhos/cm	1980.0 F (N/R)
Temperature, field, Celsius	12.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-41

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/15/90
pH, field, s.u.	7.48 F (0.01)
Specific conductance, field, umhos/cm	1608.0 F (N/R)
Temperature, field, Celsius	14.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Monitoring Well: OW-42

Chemical Compound Class: Physical Measurements

Chemical Parameter	10/15/90
pH, field, s.u.	8.21 F (0.01)
Specific conductance, field, umhos/cm	3360.0 F (N/R)
Temperature, field, Celsius	9.0 F (0.1)

Explanation

N/R Not Reported

\- Not Analyzed

Validation Code

F Field Measurement

Values in parentheses are the Instrument Detection Limits for the respective analyses

TABLE 4

Summary of PDI Phase 1 and Phase 2
Ground-Water Quality Data

Quality Assurance/Quality Control Samples

TABLE 4

Summary of PDI Phase 1 and Phase 2
Ground-Water Quality Data

Phase 1
Quality Assurance/Quality Control Samples

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Trip Blank 6339

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	6/4/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	4.0 J
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	16.0
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Trip Blank A

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	6/5/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	13.0 B
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Trip Blank B

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	6/5/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	12.0 B
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Trip Blank C

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	6/6/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	<5.0 U
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Field Blank A

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	6/5/90
Acetone, ug/L	10.0	19
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	23
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	9.0
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Field Blank B

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	6/6/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	9.0 B
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: OW-33 Matrix Spike

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	6/4/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	3.0 J
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: OW-33 Matrix Spike Duplicate

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	6/4/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	8.0 B
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Field Blank A

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	6/5/90
Acenaphthene, ug/L	10.0	<10.0 U
Acenaphthylene, ug/L	10.0	<10.0 U
Anthracene, ug/L	10.0	<10.0 U
Benzo (a) anthracene, ug/L	10.0	<10.0 U
Benzo (a) pyrene, ug/L	10.0	<10.0 U
Benzo (a) fluoranthene, ug/L	10.0	<10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	<10.0 U
Benzoic acid, ug/L	50.0	<50.0 U
Benzo (k) fluoranthene, ug/L	10.0	<10.0 U
Benzyl alcohol, ug/L	10.0	<10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	<10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	<10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	<10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	<10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	<10.0 U
Butylbenzylphthalate, ug/L	10.0	<10.0 U
4-Chloroaniline, ug/L	10.0	<10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	<10.0 U
2-Chloronaphthalene, ug/L	10.0	<10.0 U
2-Chlorophenol, ug/L	10.0	<10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	<10.0 U
Chrysene, ug/L	10.0	<10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	<10.0 U
Dibenzofuran, ug/L	10.0	<10.0 U
1,2-Dichlorobenzene, ug/L	10.0	<10.0 U
1,3-Dichlorobenzene, ug/L	10.0	<10.0 U
1,4-Dichlorobenzene, ug/L	10.0	<10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	<20.0 U
2,4-Dichlorophenol, ug/L	10.0	<10.0 U
Diethylphthalate, ug/L	10.0	<10.0 U
2,4-Dimethylphenol, ug/L	10.0	<10.0 U
Dimethyl phthalate, ug/L	10.0	<10.0 U
Di-n-butylphthalate, ug/L	10.0	<10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	<50.0 U
2,4-Dinitrophenol, ug/L	50.0	<50.0 U
2,4-Dinitrotoluene, ug/L	10.0	<10.0 U
2,6-Dinitrotoluene, ug/L	10.0	<10.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Field Blank A

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	6/5/90
Di-n-octyl phthalate, ug/L	10.0	<10.0 U
Fluoranthene, ug/L	10.0	<10.0 U
Fluorene, ug/L	10.0	<10.0 U
Hexachlorobenzene, ug/L	10.0	<10.0 U
Hexachlorobutadiene, ug/L	10.0	<10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	<10.0 U
Hexachloroethane, ug/L	10.0	<10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	<10.0 U
Isophorone, ug/L	10.0	<10.0 U
2-Methylnaphthalene, ug/L	10.0	<10.0 U
2-Methylphenol, ug/L	10.0	<10.0 U
4-Methylphenol, ug/L	10.0	<10.0 U
Naphthalene, ug/L	10.0	<10.0 U
2-Nitroaniline, ug/L	50.0	<50.0 U
3-Nitroaniline, ug/L	50.0	<50.0 U
4-Nitroaniline, ug/L	50.0	<50.0 U
Nitrobenzene, ug/L	10.0	<10.0 U
2-Nitrophenol, ug/L	10.0	<10.0 U
4-Nitrophenol, ug/L	50.0	<50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	<10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	<10.0 U
Pentachloropehnol, ug/L	50.0	<50.0 U
Phenanthrene, ug/L	10.0	<10.0 U
Phenol, ug/L	10.0	<10.0 U
Pyrene, ug/L	10.0	<10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	<10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	<50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	<10.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Field Blank B

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	6/6/90
Acenaphthene, ug/L	10.0	<10.0 U
Acenaphthylene, ug/L	10.0	<10.0 U
Anthracene, ug/L	10.0	<10.0 U
Benzo (a) anthracene, ug/L	10.0	<10.0 U
Benzo (a) pyrene, ug/L	10.0	<10.0 U
Benzo (a) fluoranthene, ug/L	10.0	<10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	<10.0 U
Benzoic acid, ug/L	50.0	<50.0 U
Benzo (k) fluoranthene, ug/L	10.0	<10.0 U
Benzyl alcohol, ug/L	10.0	<10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	<10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	<10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	<10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	<10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	<10.0 U
Butylbenzylphthalate, ug/L	10.0	<10.0 U
4-Chloroaniline, ug/L	10.0	<10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	<10.0 U
2-Chloronaphthalene, ug/L	10.0	<10.0 U
2-Chlorophenol, ug/L	10.0	<10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	<10.0 U
Chrysene, ug/L	10.0	<10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	<10.0 U
Dibenzofuran, ug/L	10.0	<10.0 U
1,2-Dichlorobenzene, ug/L	10.0	<10.0 U
1,3-Dichlorobenzene, ug/L	10.0	<10.0 U
1,4-Dichlorobenzene, ug/L	10.0	<10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	<20.0 U
2,4-Dichlorophenol, ug/L	10.0	<10.0 U
Diethylphthalate, ug/L	10.0	<10.0 U
2,4-Dimethylphenol, ug/L	10.0	<10.0 U
Dimethyl phthalate, ug/L	10.0	<10.0 U
Di-n-butylphthalate, ug/L	10.0	<10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	<50.0 U
2,4-Dinitrophenol, ug/L	50.0	<50.0 U
2,4-Dinitrotoluene, ug/L	10.0	<10.0 U
2,6-Dinitrotoluene, ug/L	10.0	<10.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Field Blank B

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	6/6/90
Di-n-octyl phthalate, ug/L	10.0	<10.0 U
Fluoranthene, ug/L	10.0	<10.0 U
Fluorene, ug/L	10.0	<10.0 U
Hexachlorobenzene, ug/L	10.0	<10.0 U
Hexachlorobutadiene, ug/L	10.0	<10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	<10.0 U
Hexachloroethane, ug/L	10.0	<10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	<10.0 U
Isophorone, ug/L	10.0	<10.0 U
2-Methylnaphthalene, ug/L	10.0	<10.0 U
2-Methylphenol, ug/L	10.0	<10.0 U
4-Methylphenol, ug/L	10.0	<10.0 U
Naphthalene, ug/L	10.0	<10.0 U
2-Nitroaniline, ug/L	50.0	<50.0 U
3-Nitroaniline, ug/L	50.0	<50.0 U
4-Nitroaniline, ug/L	50.0	<50.0 U
Nitrobenzene, ug/L	10.0	<10.0 U
2-Nitrophenol, ug/L	10.0	<10.0 U
4-Nitrophenol, ug/L	50.0	<50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	<10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	<10.0 U
Pentachlorophenol, ug/L	50.0	<50.0 U
Phenanthrene, ug/L	10.0	<10.0 U
Phenol, ug/L	10.0	<10.0 U
Pyrene, ug/L	10.0	<10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	<10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	<50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	<10.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: OW-33 Matrix Spike

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	6/4/90
Acenaphthene, ug/L	10.0	<10.0 U
Acenaphthylene, ug/L	10.0	<10.0 U
Anthracene, ug/L	10.0	<10.0 U
Benzo (a) anthracene, ug/L	10.0	<10.0 U
Benzo (a) pyrene, ug/L	10.0	<10.0 U
Benzo (a) fluoranthene, ug/L	10.0	<10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	<10.0 U
Benzoic acid, ug/L	50.0	<50.0 U
Benzo (k) fluoranthene, ug/L	10.0	<10.0 U
Benzyl alcohol, ug/L	10.0	<10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	<10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	<10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	<10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	<10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	<10.0 U
Butylbenzylphthalate, ug/L	10.0	<10.0 U
4-Chloroaniline, ug/L	10.0	<10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	<10.0 U
2-Chloronaphthalene, ug/L	10.0	<10.0 U
2-Chlorophenol, ug/L	10.0	<10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	<10.0 U
Chrysene, ug/L	10.0	<10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	<10.0 U
Dibenzofuran, ug/L	10.0	<10.0 U
1,2-Dichlorobenzene, ug/L	10.0	<10.0 U
1,3-Dichlorobenzene, ug/L	10.0	<10.0 U
1,4-Dichlorobenzene, ug/L	10.0	<10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	<20.0 U
2,4-Dichlorophenol, ug/L	10.0	<10.0 U
Diethylphthalate, ug/L	10.0	<10.0 U
2,4-Dimethylphenol, ug/L	10.0	<10.0 U
Dimethyl phthalate, ug/L	10.0	<10.0 U
Di-n-butylphthalate, ug/L	10.0	<10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	<50.0 U
2,4-Dinitrophenol, ug/L	50.0	<50.0 U
2,4-Dinitrotoluene, ug/L	10.0	<10.0 U
2,6-Dinitrotoluene, ug/L	10.0	<10.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: OW-33 Matrix Spike

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	6/4/90
Di-n-octyl phthalate, ug/L	10.0	<10.0 U
Fluoranthene, ug/L	10.0	<10.0 U
Fluorene, ug/L	10.0	<10.0 U
Hexachlorobenzene, ug/L	10.0	<10.0 U
Hexachlorobutadiene, ug/L	10.0	<10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	<10.0 U
Hexachloroethane, ug/L	10.0	<10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	<10.0 U
Isophorone, ug/L	10.0	<10.0 U
2-Methylnaphthalene, ug/L	10.0	<10.0 U
2-Methylphenol, ug/L	10.0	<10.0 U
4-Methylphenol, ug/L	10.0	<10.0 U
Naphthalene, ug/L	10.0	<10.0 U
2-Nitroaniline, ug/L	50.0	<50.0 U
3-Nitroaniline, ug/L	50.0	<50.0 U
4-Nitroaniline, ug/L	50.0	<50.0 U
Nitrobenzene, ug/L	10.0	<10.0 U
2-Nitrophenol, ug/L	10.0	<10.0 U
4-Nitrophenol, ug/L	50.0	<50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	<10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	<10.0 U
Pentachlorophenol, ug/L	50.0	<50.0 U
Phenanthrene, ug/L	10.0	<10.0 U
Phenol, ug/L	10.0	<10.0 U
Pyrene, ug/L	10.0	<10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	<10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	<50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	<10.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: OW-33 Matrix Spike Duplicate

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	6/4/90
Acenaphthene, ug/L	10.0	<10.0 U
Acenaphthylene, ug/L	10.0	<10.0 U
Anthracene, ug/L	10.0	<10.0 U
Benzo (a) anthracene, ug/L	10.0	<10.0 U
Benzo (a) pyrene, ug/L	10.0	<10.0 U
Benzo (a) fluoranthene, ug/L	10.0	<10.0 U
Benzo (g,h,i) perylene, ug/L	10.0	<10.0 U
Benzoic acid, ug/L	50.0	<50.0 U
Benzo (k) fluoranthene, ug/L	10.0	<10.0 U
Benzyl alcohol, ug/L	10.0	<10.0 U
Bis (2-Chloroethoxy) methane, ug/L	10.0	<10.0 U
Bis (2-Chloroethyl) ether, ug/L	10.0	<10.0 U
Bis (2-Chloroisopropyl) ether, ug/L	10.0	<10.0 U
Bis (2-Ethylhexyl) phthalate, ug/L	10.0	<10.0 U
4-Bromophenyl-phenylether, ug/L	10.0	<10.0 U
Butylbenzylphthalate, ug/L	10.0	<10.0 U
4-Chloroaniline, ug/L	10.0	<10.0 U
4-Chloro-3-methylphenol, ug/L	10.0	<10.0 U
2-Chloronaphthalene, ug/L	10.0	<10.0 U
2-Chlorophenol, ug/L	10.0	<10.0 U
4-Chlorophenyl-phenylether, ug/L	10.0	<10.0 U
Chrysene, ug/L	10.0	<10.0 U
Dibenzo (a,h) anthracene, ug/L	10.0	<10.0 U
Dibenzofuran, ug/L	10.0	<10.0 U
1,2-Dichlorobenzene, ug/L	10.0	<10.0 U
1,3-Dichlorobenzene, ug/L	10.0	<10.0 U
1,4-Dichlorobenzene, ug/L	10.0	<10.0 U
3,3'-Dichlorobenzidine, ug/L	20.0	<20.0 U
2,4-Dichlorophenol, ug/L	10.0	<10.0 U
Diethylphthalate, ug/L	10.0	<10.0 U
2,4-Dimethylphenol, ug/L	10.0	<10.0 U
Dimethyl phthalate, ug/L	10.0	<10.0 U
Di-n-butylphthalate, ug/L	10.0	<10.0 U
4,6-Dinitro-2-methylphenol, ug/L	50.0	<50.0 U
2,4-Dinitrophenol, ug/L	50.0	<50.0 U
2,4-Dinitrotoluene, ug/L	10.0	<10.0 U
2,6-Dinitrotoluene, ug/L	10.0	<10.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: OW-33 Matrix Spike Duplicate

Chemical Compound Class: Semi-Volatile Organic Compounds

Chemical Parameter	CRQL	6/4/90
Di-n-octyl phthalate, ug/L	10.0	<10.0 U
Fluoranthene, ug/L	10.0	<10.0 U
Fluorene, ug/L	10.0	<10.0 U
Hexachlorobenzene, ug/L	10.0	<10.0 U
Hexachlorobutadiene, ug/L	10.0	<10.0 U
Hexachlorocyclopentadiene, ug/L	10.0	<10.0 U
Hexachloroethane, ug/L	10.0	<10.0 U
Indeno (1,2,3-cd) pyrene, ug/L	10.0	<10.0 U
Isophorone, ug/L	10.0	<10.0 U
2-Methylnaphthalene, ug/L	10.0	<10.0 U
2-Methylphenol, ug/L	10.0	<10.0 U
4-Methylphenol, ug/L	10.0	<10.0 U
Naphthalene, ug/L	10.0	<10.0 U
2-Nitroaniline, ug/L	50.0	<50.0 U
3-Nitroaniline, ug/L	50.0	<50.0 U
4-Nitroaniline, ug/L	50.0	<50.0 U
Nitrobenzene, ug/L	10.0	<10.0 U
2-Nitrophenol, ug/L	10.0	<10.0 U
4-Nitrophenol, ug/L	50.0	<50.0 U
N-Nitroso-di-n-propylamine, ug/L	10.0	<10.0 U
N-Nitrosodiphenylamine, ug/L	10.0	<10.0 U
Pentachlorophenol, ug/L	50.0	<50.0 U
Phenanthrene, ug/L	10.0	<10.0 U
Phenol, ug/L	10.0	<10.0 U
Pyrene, ug/L	10.0	<10.0 U
1,2,4-Trichlorobenzene, ug/L	10.0	<10.0 U
2,4,5-Trichlorophenol, ug/L	50.0	<50.0 U
2,4,6-Trichlorophenol, ug/L	10.0	<10.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Field Blank A

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	6/5/90
Aldrin, ug/L	0.050	<0.050 U
alpha-BHC, ug/L	0.050	<0.050 U
beta-BHC, ug/L	0.050	<0.050 U
delta-BHC, ug/L	0.050	<0.050 U
gamma-BHC (Lindane), ug/L	0.050	<0.050 U
alpha-Chlordane, ug/L	0.50	<0.50 U
gamma-Chlordane, ug/L	0.50	<0.50 U
4,4'-DDD, ug/L	0.10	<0.10 U
4,4'-DDE, ug/L	0.10	<0.10 U
4,4'-DDT, ug/L	0.10	<0.10 U
Dieldrin, ug/L	0.10	<0.10 U
Endosulfan I, ug/L	0.050	<0.050 U
Endosulfan II, ug/L	0.10	<0.10 U
Endosulfan sulfate, ug/L	0.10	<0.10 U
Endrin, ug/L	0.10	<0.10 U
Endrin ketone, ug/L	0.10	<0.10 U
Heptachlor, ug/L	0.050	<0.050 U
Heptachlor epoxide, ug/L	0.050	<0.050 U
Methoxychlor, ug/L	0.050	<0.050 U
Toxaphene, ug/L	1.0	<1.0 U

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	6/5/90
Aroclor-1016, ug/L	0.50	<0.50 U
Aroclor-1221, ug/L	0.50	<0.50 U
Aroclor-1232, ug/L	0.50	<0.50 U
Aroclor-1242, ug/L	0.50	<0.50 U
Aroclor-1248, ug/L	0.50	<0.50 U
Aroclor-1254, ug/L	0.50	<0.50 U
Aroclor-1260, ug/L	0.50	<0.50 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Field Blank B

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	6/6/90
Aldrin, ug/L	0.050	<0.050 U
alpha-BHC, ug/L	0.050	<0.050 U
beta-BHC, ug/L	0.050	<0.050 U
delta-BHC, ug/L	0.050	<0.050 U
gamma-BHC (Lindane), ug/L	0.050	<0.050 U
alpha-Chlordane, ug/L	0.50	<0.50 U
gamma-Chlordane, ug/L	0.50	<0.50 U
4,4'-DDD, ug/L	0.10	<0.10 U
4,4'-DDE, ug/L	0.10	<0.10 U
4,4'-DDT, ug/L	0.10	<0.10 U
Dieldrin, ug/L	0.10	<0.10 U
Endosulfan I, ug/L	0.050	<0.050 U
Endosulfan II, ug/L	0.10	<0.10 U
Endosulfan sulfate, ug/L	0.10	<0.10 U
Endrin, ug/L	0.10	<0.10 U
Endrin ketone, ug/L	0.10	<0.10 U
Heptachlor, ug/L	0.050	<0.050 U
Heptachlor epoxide, ug/L	0.050	<0.050 U
Methoxychlor, ug/L	0.050	<0.050 U
Toxaphene, ug/L	1.0	<1.0 U

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	6/6/90
Aroclor-1016, ug/L	0.50	<0.50 U
Aroclor-1221, ug/L	0.50	<0.50 U
Aroclor-1232, ug/L	0.50	<0.50 U
Aroclor-1242, ug/L	0.50	<0.50 U
Aroclor-1248, ug/L	0.50	<0.50 U
Aroclor-1254, ug/L	0.50	<0.50 U
Aroclor-1260, ug/L	0.50	<0.50 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: OW-33A Matrix Spike

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	6/4/90
Aldrin, ug/L	0.050	<0.050 U
alpha-BHC, ug/L	0.050	<0.050 U
beta-BHC, ug/L	0.050	<0.050 U
delta-BHC, ug/L	0.050	<0.050 U
gamma-BHC (Lindane), ug/L	0.050	<0.050 U
alpha-Chlordane, ug/L	0.50	<0.50 U
gamma-Chlordane, ug/L	0.50	<0.50 U
4,4'-DDD, ug/L	0.10	<0.10 U
4,4'-DDE, ug/L	0.10	<0.10 U
4,4'-DDT, ug/L	0.10	<0.10 U
Dieldrin, ug/L	0.10	<0.10 U
Endosulfan I, ug/L	0.050	<0.050 U
Endosulfan II, ug/L	0.10	<0.10 U
Endosulfan sulfate, ug/L	0.10	<0.10 U
Endrin, ug/L	0.10	<0.10 U
Endrin ketone, ug/L	0.10	<0.10 U
Heptachlor, ug/L	0.050	<0.050 U
Heptachlor epoxide, ug/L	0.050	<0.050 U
Methoxychlor, ug/L	0.050	<0.050 U
Toxaphene, ug/L	1.0	<1.0 U

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	6/4/90
Aroclor-1016, ug/L	0.50	<0.50 U
Aroclor-1221, ug/L	0.50	<0.50 U
Aroclor-1232, ug/L	0.50	<0.50 U
Aroclor-1242, ug/L	0.50	<0.50 U
Aroclor-1248, ug/L	0.50	<0.50 U
Aroclor-1254, ug/L	0.50	<0.50 U
Aroclor-1260, ug/L	0.50	<0.50 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: OW-33A Matrix Spike Duplicate

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	6/4/90
Aldrin, ug/L	0.050	<0.050 U
alpha-BHC, ug/L	0.050	<0.050 U
beta-BHC, ug/L	0.050	<0.050 U
delta-BHC, ug/L	0.050	<0.050 U
gamma-BHC (Lindane), ug/L	0.050	<0.050 U
alpha-Chlordane, ug/L	0.50	<0.50 U
gamma-Chlordane, ug/L	0.50	<0.50 U
4,4'-DDD, ug/L	0.10	<0.10 U
4,4'-DDE, ug/L	0.10	<0.10 U
4,4'-DDT, ug/L	0.10	<0.10 U
Dieldrin, ug/L	0.10	<0.10 U
Endosulfan I, ug/L	0.050	<0.050 U
Endosulfan II, ug/L	0.10	<0.10 U
Endosulfan sulfate, ug/L	0.10	<0.10 U
Endrin, ug/L	0.10	<0.10 U
Endrin ketone, ug/L	0.10	<0.10 U
Heptachlor, ug/L	0.050	<0.050 U
Heptachlor epoxide, ug/L	0.050	<0.050 U
Methoxychlor, ug/L	0.050	<0.050 U
Toxaphene, ug/L	1.0	<1.0 U

Chemical Compound Class: Pesticide Compounds

Chemical Parameter	CRQL	6/4/90
Aroclor-1016, ug/L	0.50	<0.50 U
Aroclor-1221, ug/L	0.50	<0.50 U
Aroclor-1232, ug/L	0.50	<0.50 U
Aroclor-1242, ug/L	0.50	<0.50 U
Aroclor-1248, ug/L	0.50	<0.50 U
Aroclor-1254, ug/L	0.50	<0.50 U
Aroclor-1260, ug/L	0.50	<0.50 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Field Blank B

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	6/6/90	
Aluminum, dissolved, mg/L	0.2	0.028 B	(0.027)
Antimony, dissolved, mg/L	0.060	0.037 U	(0.037)
Arsenic, dissolved, mg/L	0.010	0.002 U	(0.002)
Barium, dissolved, mg/L	0.2	0.012 B	(0.002)
Beryllium, dissolved, mg/L	0.005	0.001 U	(0.001)
Cadmium, dissolved, mg/L	0.005	0.005 U	(0.005)
Calcium, dissolved, mg/L	5.0	0.649 B	(0.02)
Chromium, dissolved, mg/L	0.010	0.003 U	(0.003)
Cobalt, dissolved, mg/L	0.050	0.007 U	(0.007)
Copper, dissolved, mg/L	0.025	0.006 U	(0.006)
Iron, dissolved, mg/L	0.1	0.0644 B	(0.003)
Lead, dissolved, mg/L	0.005	0.002 U	(0.029)
Magnesium dissolved, mg/L	5.0	0.107 B	(0.037)
Manganese, dissolved, mg/L	0.015	0.013 B	(0.001)
Mercury, dissolved, ug/L	0.2	0.2 U	(0.2)
Nickel, dissolved, mg/L	0.04	0.012 U	(0.012)
Potassium, dissolved, mg/L	5.0	0.9 U	(0.9)
Selenium, dissolved, mg/L	0.005	0.002 U	(0.002)
Silver, dissolved, mg/L	0.01	0.003 U	(0.003)
Sodium, dissolved, mg/L	5.0	3.14 B	(0.038)
Thallium, dissolved, mg/L	0.010	0.004 U	(0.004)
Vanadium, dissolved, mg/L	0.050	0.006 U	(0.006)
Zinc, dissolved, mg/L	0.020	0.0115 B	(0.008)

Explanation

CRDL Contract Required Detection Limit
QA/QC Data is used for validation purposes only, and not validated.
Values in parentheses are the instrument detection limits for the respective analysis.

Inorganic Result Qualifiers

B Value is less than the CRDL but greater than the IDL
U Parameter was analyzed for but not detected

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Field Blank B

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	6/6/90	
Aluminum, total, mg/L	0.2	0.027 U	(0.027)
Antimony, total, mg/L	0.060	0.037 U	(0.037)
Arsenic, total, mg/L	0.010	0.002 U	(0.002)
Barium, total, mg/L	0.2	0.0021 B	(0.002)
Beryllium, total, mg/L	0.005	0.001 U	(0.001)
Cadmium, total, mg/L	0.005	0.005 U	(0.005)
Calcium, total, mg/L	5.0	0.292 B	(0.02)
Chromium, total, mg/L	0.010	0.003 U	(0.003)
Cobalt, total, mg/L	0.050	0.007 U	(0.007)
Copper, total, mg/L	0.025	0.006 U	(0.006)
Iron, total, mg/L	0.1	0.018 B	(0.003)
Lead, total, mg/L	0.005	0.002 U	(0.029)
Magnesium total, mg/L	5.0	0.037 U	(0.037)
Manganese, total, mg/L	0.015	0.0011 B	(0.001)
Mercury, total, ug/L	0.2	0.2 U	(0.2)
Nickel, total, mg/L	0.04	0.012 U	(0.012)
Potassium, total, mg/L	5.0	0.9 U	(0.9)
Selenium, total, mg/L	0.005	0.002 U	(0.002)
Silver, total, mg/L	0.01	0.003 U	(0.003)
Sodium, total, mg/L	5.0	0.35 B	(0.038)
Thallium, total, mg/L	0.010	0.004 U	(0.004)
Vanadium, total, mg/L	0.050	0.006 U	(0.006)
Zinc, total, mg/L	0.020	0.0089 B	(0.008)

Explanation

CRDL Contract Required Detection Limit
QA/QC Data is used for validation purposes only, and not validated.
Values in parentheses are the instrument detection limits for the respective analysis.

Inorganic Result Qualifiers

B Value is less than the CRDL but greater than the IDL
U Parameter was analyzed for but not detected

TABLE 4

Summary of PDI Phase 1 and Phase 2
Ground-Water Quality Data

Phase 2
Quality Assurance/Quality Control Samples

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Trip Blank A

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/15/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	<5.0 U
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Trip Blank B

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/16/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	<5.0 U
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Trip Blank C

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/17/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	<5.0 U
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Trip Blank D

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/18/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	<5.0 U
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Trip Blank E

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	11/7/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	<5.0 U
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Field Blank A

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/15/90
Acetone, ug/L	10.0	11.0 B
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	34.0
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Field Blank B

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/17/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	<5.0 U
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: OW-13 Matrix Spike

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/15/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	<5.0 U
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: OW-13 Matrix Spike Duplicate

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/15/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	<5.0 U
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: OW-17 Matrix Spike

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/16/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	<5.0 U
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	3.0 J

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: OW-17 Matrix Spike Duplicate

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/16/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	<5.0 U
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	3.0 J

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: OW-22 Matrix Spike

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/17/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	<5.0 U
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: OW-22 Matrix Spike Duplicate

Chemical Compound Class: Volatile Organic Compounds

Chemical Parameter	CRQL	10/17/90
Acetone, ug/L	10.0	<10.0 U
Benzene, ug/L	5.0	<5.0 U
Bromodichloromethane, ug/L	5.0	<5.0 U
Bromoform, ug/L	5.0	<5.0 U
Bromomethane, ug/L	10.0	<10.0 U
2-Butanone, ug/L	10.0	<10.0 U
Carbon disulfide, ug/L	5.0	<5.0 U
Carbon tetrachloride, ug/L	5.0	<5.0 U
Chlorobenzene, ug/L	5.0	<5.0 U
Chloroethane, ug/L	10.0	<10.0 U
Chloroform, ug/L	5.0	<5.0 U
Chloromethane, ug/L	10.0	<5.0 U
Dibromochloromethane, ug/L	5.0	<5.0 U
1,1-Dichloroethane, ug/L	5.0	<5.0 U
1,2-Dichloroethane, ug/L	5.0	<5.0 U
1,1-Dichloroethene, ug/L	5.0	<5.0 U
1,2-Dichloroethene, total, ug/L	5.0	<5.0 U
1,2-Dichloropropane, ug/L	5.0	<5.0 U
cis-1,3-Dichloropropene, ug/L	5.0	<5.0 U
trans-1,3-Dichloropropene, ug/L	5.0	<5.0 U
Ethylbenzene, ug/L	5.0	<5.0 U
2-Hexanone, ug/L	10.0	<10.0 U
Methylene chloride, ug/L	5.0	<5.0 U
4-Methyl-2-pentanone, ug/L	10.0	<10.0 U
Styrene, ug/l	5.0	<5.0 U
1,1,2,2-Tetrachloroethane, ug/L	5.0	<5.0 U
Tetrachloroethane, ug/L	5.0	<5.0 U
Toluene, ug/L	5.0	<5.0 U
1,1,1-Trichloroethane, ug/L	5.0	<5.0 U
1,1,2-Trichloroethane, ug/L	5.0	<5.0 U
Trichloroethene, ug/L	5.0	<5.0 U
Vinyl acetate, ug/L	10.0	<10.0 U
Vinyl chloride, ug/L	10.0	<10.0 U
Xylenes, total, ug/L	5.0	<5.0 U

Explanation

CRQL Contract Required Quantitation Limit
QA/QC Data is used for validation purposes only, and not validated.

Organic Data Reporting Qualifiers

U Compound was analyzed for but not detected
J Value is estimated
B Compound detected in associated blank and sample

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Field Blank B

Chemical Compound Class: Dissolved Metals

Chemical Parameter	CRDL	10/17/90	
Aluminum, dissolved, mg/L	0.0385	0.0385 U	(0.0385)
Antimony, dissolved, mg/L	0.0096	0.0096 U	(0.0096)
Arsenic, dissolved, mg/L	0.003	0.003 U	(0.003)
Barium, dissolved, mg/L	0.0006	0.001 B	(0.0006)
Beryllium, dissolved, mg/L	0.0003	0.0003 B	(0.0003)
Cadmium, dissolved, mg/L	0.0017	0.0017 U	(0.0017)
Calcium, dissolved, mg/L	0.0327	0.231 B	(0.0327)
Chromium, dissolved, mg/L	0.0017	0.0017 U	(0.0017)
Cobalt, dissolved, mg/L	0.0017	0.0024 B	(0.0017)
Copper, dissolved, mg/L	0.0045	0.0573	(0.0045)
Iron, dissolved, mg/L	0.0114	0.0601 B	(0.00114)
Lead, dissolved, mg/L	0.001	0.001 U	(0.001)
Magnesium dissolved, mg/L	0.0301	0.0499 B	(0.0301)
Manganese, dissolved, mg/L	0.0005	0.0061 B	(0.0005)
Mercury, dissolved, ug/L	0.1	0.1 U	(0.1)
Nickel, dissolved, mg/L	0.0107	0.0107 U	(0.0107)
Potassium, dissolved, mg/L	0.97	0.970 U	(0.970)
Selenium, dissolved, mg/L	0.003	0.003 U	(0.003)
Silver, dissolved, mg/L	0.0084	0.0084 U	(0.0084)
Sodium, dissolved, mg/L	0.0116	0.13 B	(0.0116)
Thallium, dissolved, mg/L	0.002	0.002 U	(0.002)
Vanadium, dissolved, mg/L	0.002	0.002 U	(0.002)
Zinc, dissolved, mg/L	0.0019	0.014 B	(0.0019)

Explanation

CRDL Contract Required Detection Limit
QA/QC Data is used for validation purposes only, and not validated.
Values in parentheses are the instrument detection limits for the respective analysis.

Inorganic Result Qualifiers

B Value is less than the CRDL but greater than the IDL
U Parameter was analyzed for but not detected

Table 4. Summary of PDI Phase 1 and Phase 2 Ground-Water Quality Data, Pre-Design Investigation, Industri-Plex Site, Woburn, Massachusetts.

Quality Assurance/Quality Control Sample: Field Blank B

Chemical Compound Class: Total Metals

Chemical Parameter	CRDL	10/17/90	
Aluminum, total, mg/L	0.0385	0.0385 U	(0.0385)
Antimony, total, mg/L	0.0096	0.0096 U	(0.0096)
Arsenic, total, mg/L	0.003	0.003 U	(0.003)
Barium, total, mg/L	0.0006	0.0007 B	(0.0006)
Beryllium, total, mg/L	0.0003	0.0003 U	(0.0003)
Cadmium, total, mg/L	0.0017	0.0017 U	(0.0017)
Calcium, total, mg/L	0.0327	0.0619 B	(0.0327)
Chromium, total, mg/L	0.0017	0.0017 U	(0.0017)
Cobalt, total, mg/L	0.0017	0.0017 U	(0.0017)
Copper, total, mg/L	0.0045	0.086	(0.0045)
Iron, total, mg/L	0.0114	0.0499 B	(0.00114)
Lead, total, mg/L	0.001	0.001 U	(0.001)
Magnesium total, mg/L	0.0301	0.0301 U	(0.0301)
Manganese, total, mg/L	0.0005	0.0005 U	(0.0005)
Mercury, total, ug/L	0.1	0.1 U	(0.1)
Nickel, total, mg/L	0.0107	0.0107 U	(0.0107)
Potassium, total, mg/L	0.970	0.97 U	(0.970)
Selenium, total, mg/L	0.003	0.003 U	(0.003)
Silver, total, mg/L	0.0084	0.0084 U	(0.0084)
Sodium, total, mg/L	0.0116	0.0481 B	(0.0116)
Thallium, total, mg/L	0.002	0.002 U	(0.002)
Vanadium, total, mg/L	0.002	0.002 U	(0.002)
Zinc, total, mg/L	0.0019	0.0138 B	(0.0019)

Explanation

CRDL Contract Required Detection Limit
QA/QC Data is used for validation purposes only, and not validated.
Values in parentheses are the instrument detection limits for the respective analysis.

Inorganic Result Qualifiers

B Value is less than the CRDL but greater than the IDL
U Parameter was analyzed for but not detected

FIGURES

EXPLANATION

OW-36 • OBSERVATION WELL LOCATION AND DESIGNATION

60 —— LINE OF EQUAL ELEVATION OF THE WATER TABLE IN FEET ABOVE MEAN SEA LEVEL, DASHED WHERE INFERRED

← GROUND-WATER FLOW DIRECTION

— INDUSTRI-PLEX SITE PROPERTY BOUNDARY

▨ EXTENT OF HIDE PILES

NOTE: GROUND-WATER ELEVATION DATA ARE LISTED IN TABLE 3.

0 750 1500 FEET

Title

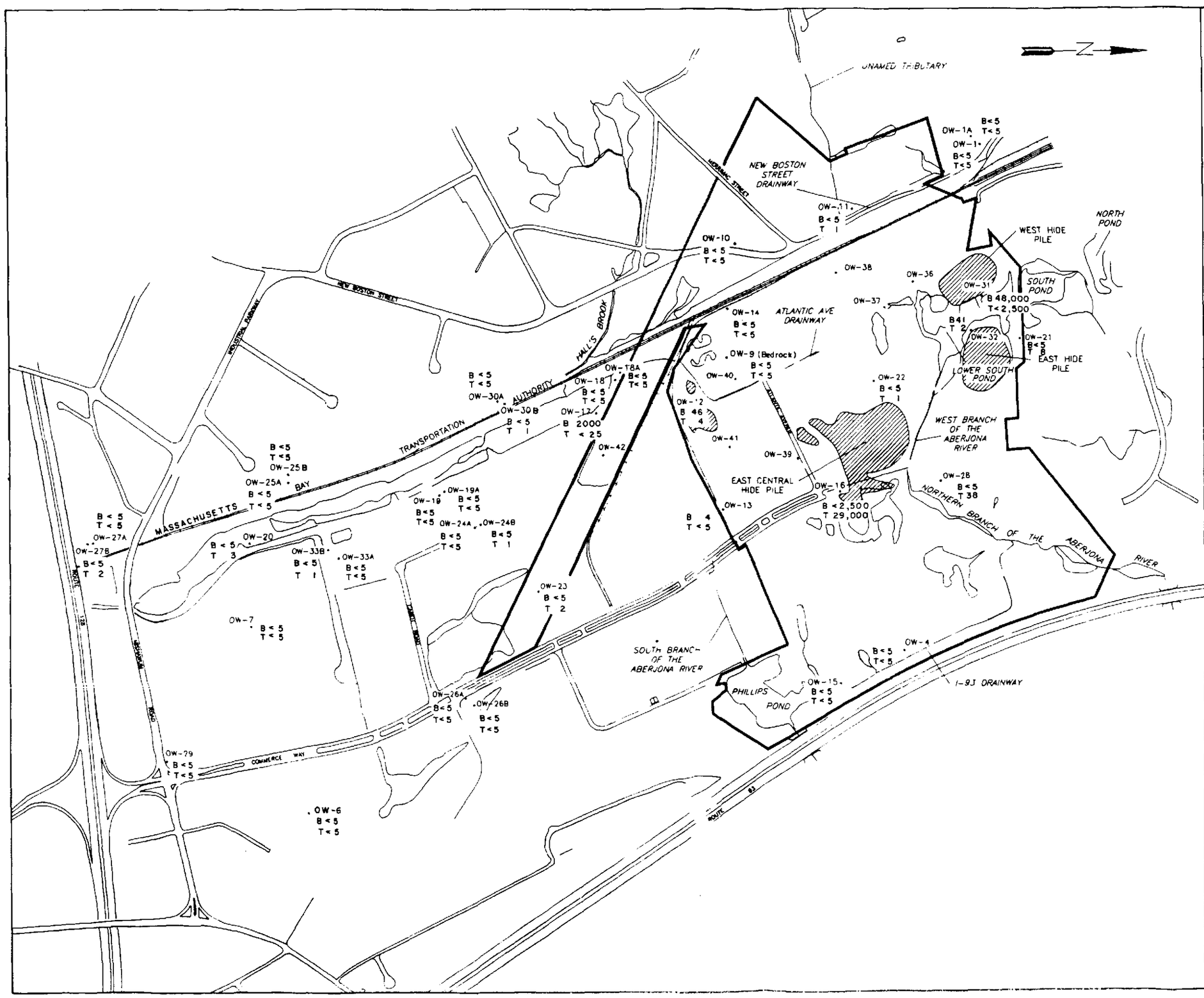
ELEVATION OF THE WATER TABLE, DECEMBER 7, 1990

Prepared for

INDUSTRI-PLEX SITE REMEDIAL TRUST

ROUX
ROUX ASSOCIATES INC
Consulting Ground Water Geologists & Engineers

Compiled by J.Y.	Date 12/90	Figure
Prepared by C.R.	Scale SHOWN	1
Project Mgr W.S.	Revision 0	
File No 16101D		



EXPLANATION

OW-21	OBSERVATION WELL LOCATION AND DESIGNATION
B < 5	BENZENE CONCENTRATIONS IN PARTS PER BILLION
T 8	TOLUENE CONCENTRATIONS IN PARTS PER BILLION
	INDUSTRI-PLEX SITE PROPERTY BOUNDARY
	EXTENT OF HIDE PILES

0 750 1500 FEET

Title

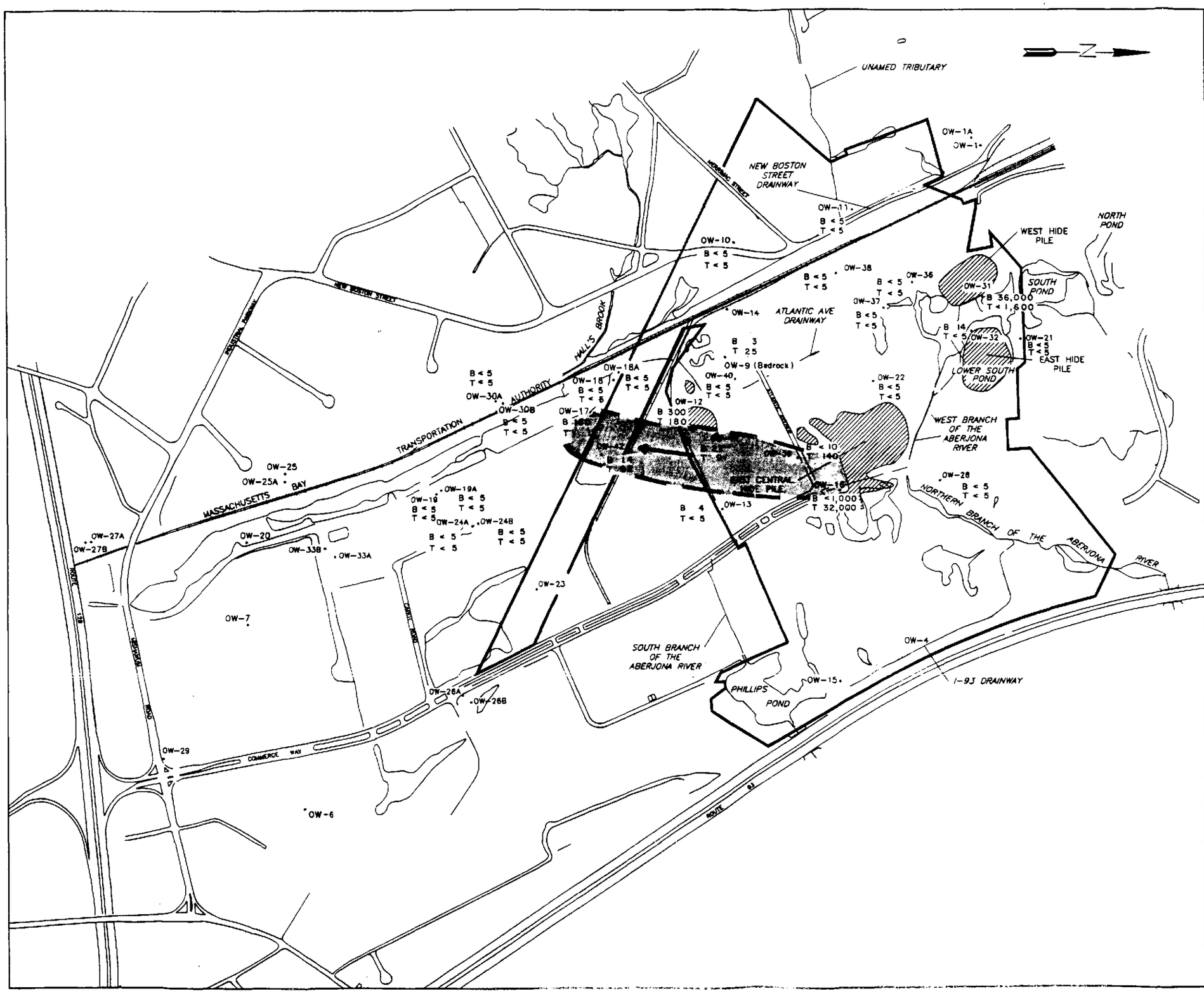
CONCENTRATIONS OF BENZENE AND TOLUENE DETECTED IN GROUND WATER JUNE 4 TO JUNE 6, 1990

Prepared for

INDUSTRI-PLEX SITE REMEDIAL TRUST

ROUX ASSOCIATES INC
Consulting Ground Water Geologists & Engineers

Compiled by J.Y.	Date 12/90	Figure
Prepared by C.R.	Scale SHOWN	2
Project Mgr W.S.	Revision 0	
File No 161010		



EXPLANATION

OW-21 •	OBSERVATION WELL LOCATION AND DESIGNATION
B < 5	BENZENE CONCENTRATIONS IN PARTS PER BILLION
T < 5	TOLUENE CONCENTRATIONS IN PARTS PER BILLION
	INDUSTRI-PLEX SITE PROPERTY BOUNDARY
	EXTENT OF HIDE PILES
	INFERRED EXTENT OF BENZENE/TOLUENE PLUME
	FLOW DIRECTION OF PLUME

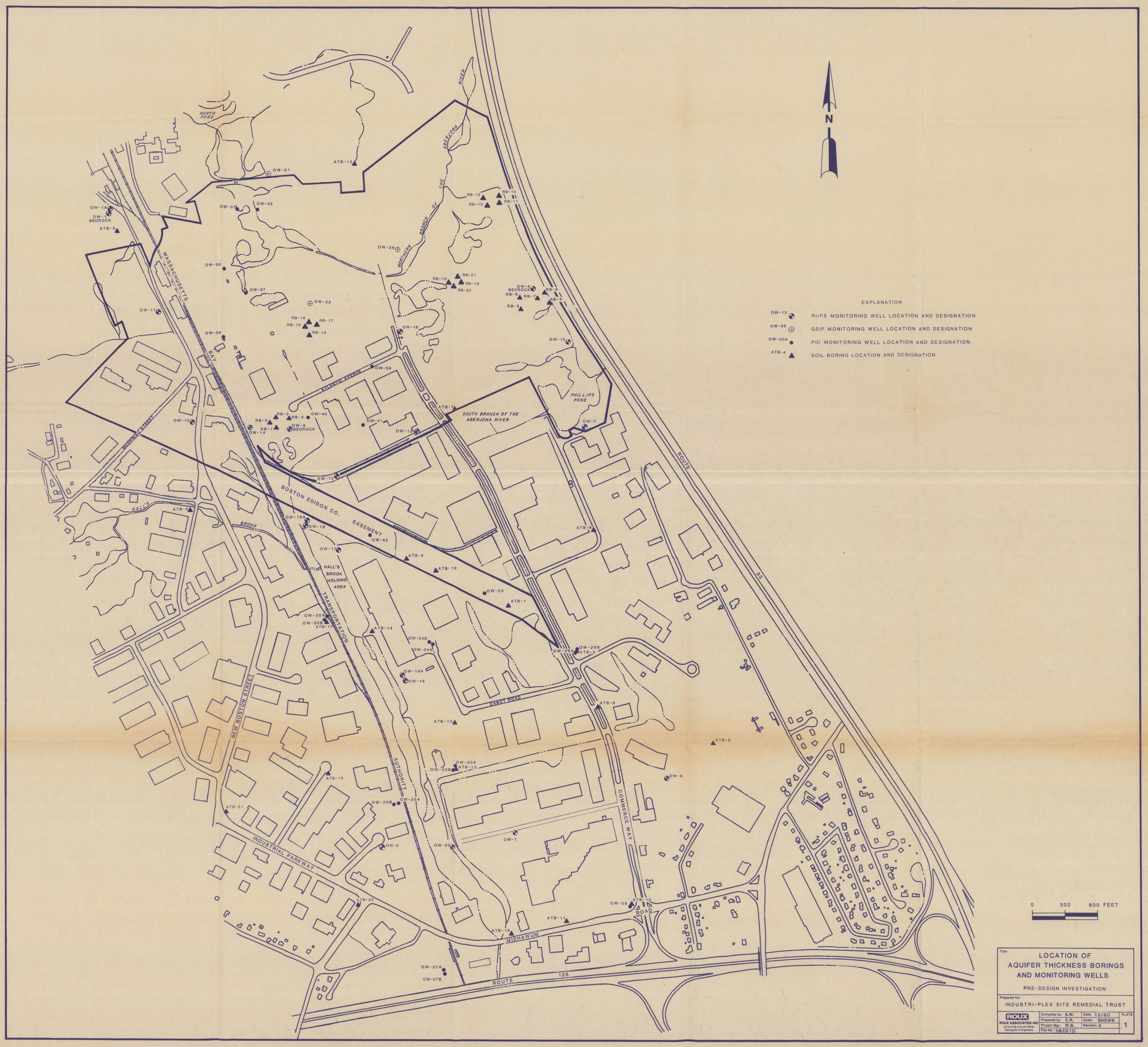
0 750 1500 FEET

Title: CONCENTRATIONS OF BENZENE AND TOLUENE DETECTED IN GROUND WATER ON OCTOBER 15 TO 18 AND NOVEMBER 7, 1990

Prepared for: INDUSTRI-PLEX SITE REMEDIAL TRUST

ROUX
ROUX ASSOCIATES INC
Consulting Ground-Water Geologists & Engineers

Compiled by: J. Y.	Date: 12/90	Figure
Prepared by: C. R.	Scale: SHOWN	3
Project Mgr: W. S.	Revision: 0	
File No: 1610ID		



Title:

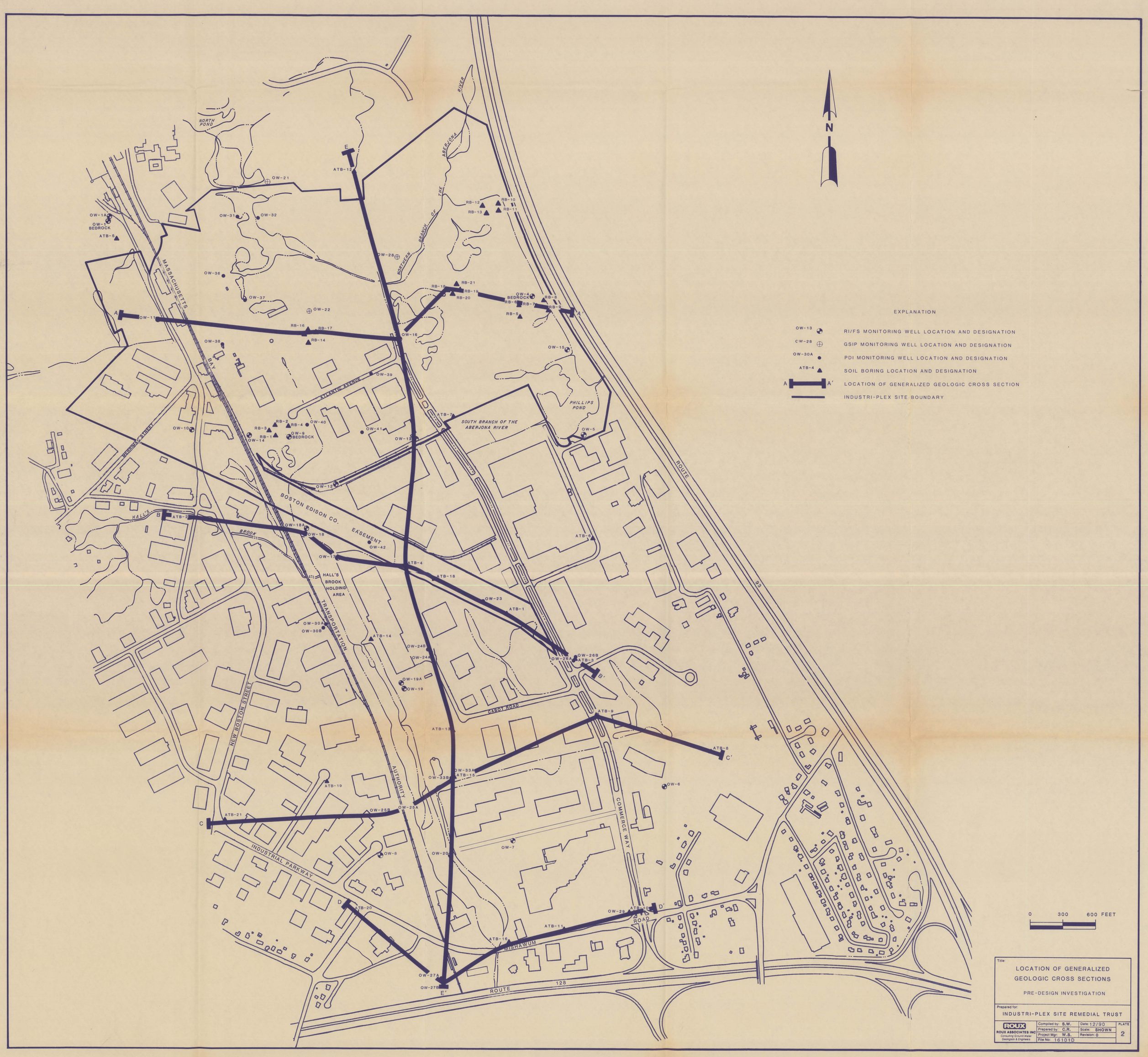
LOCATION OF AQUIFER THICKNESS BORINGS AND MONITORING WELLS

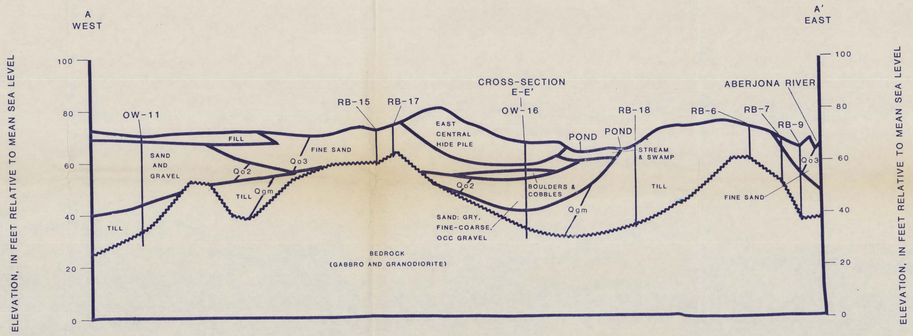
PRE-DESIGN INVESTIGATION

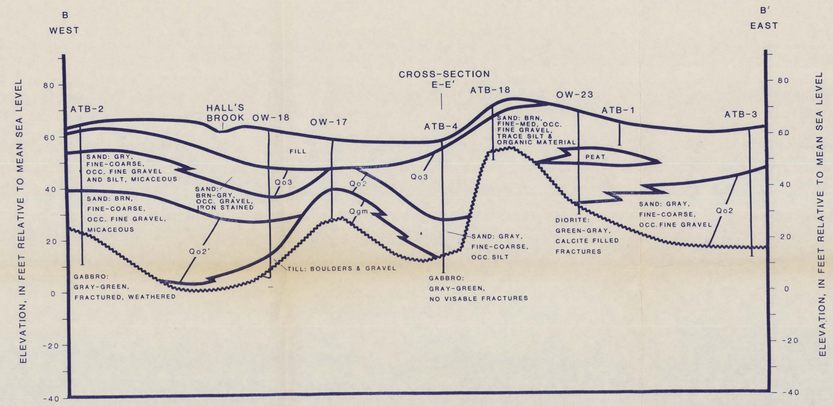
Prepared for:

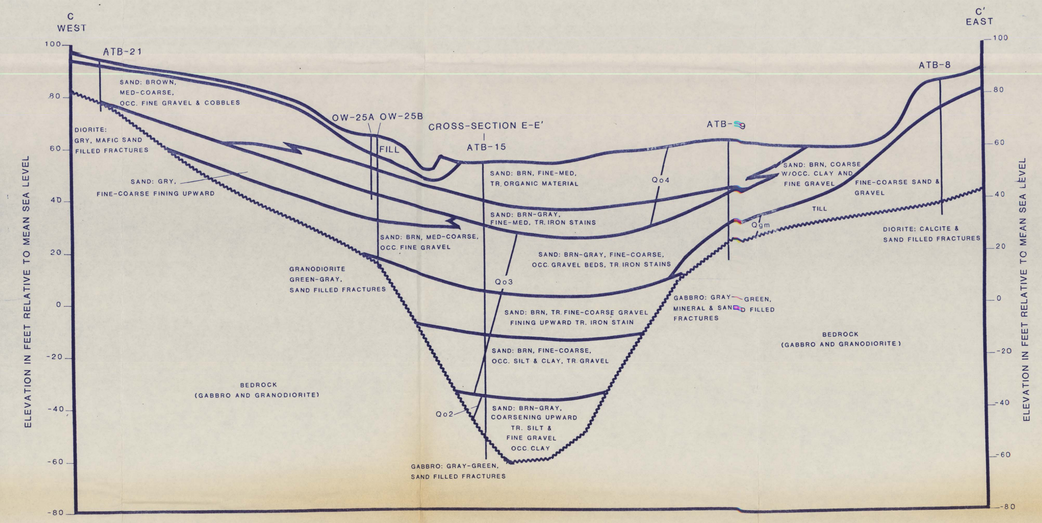
INDUSTRI-PLEX SITE REMEDIAL TRUST

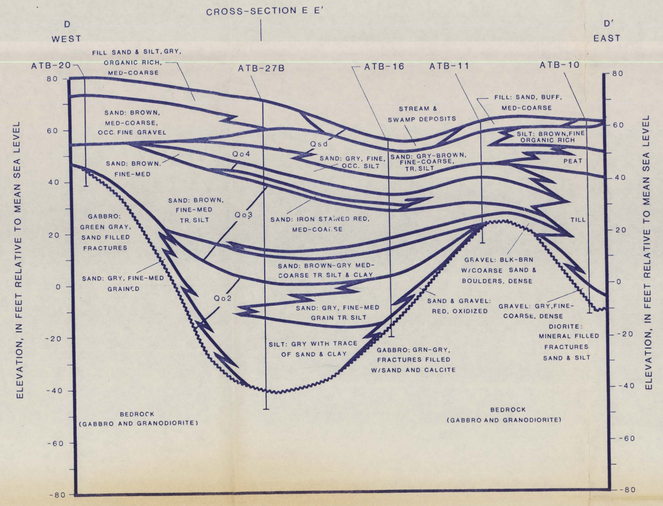
ROUX ASSOCIATES INC Consulting Ground-Water Geologists & Engineers	Compiled by: S.W.	Date: 12/90	PLATE
	Prepared by: C.R.	Scale: SHOWN	1
	Project Mgr: W.S.	Revision: 0	
	File No: 16101D		


N
EXPLANATION
OW-13 RI/FS MONITORING WELL LOCATION AND DESIGNATION
CW-28 GSIP MONITORING WELL LOCATION AND DESIGNATION
OW-30A PDI MONITORING WELL LOCATION AND DESIGNATION
ATB-4 SOIL BORING LOCATION AND DESIGNATION
A A' LOCATION OF GENERALIZED GEOLOGIC CROSS SECTION
INDUSTRI-PLEX SITE BOUNDARY
0 300 600 FEET
NORTH POND
ABERJONA RIVER
NORTHERN BRANCH OF THE ABERJONA
MASSACHUSETTS BAY
MERRIMAC STREET
ATLANTIC AVENUE
SOUTH BRANCH OF THE ABERJONA RIVER
PHILLIPS POND
ROUTE 93
BOSTON EDISON CO. EASEMENT
HALL'S BROOK
HALL'S BROOK HOLDING AREA
TRANSPORTATION AUTHORITY
NEW BOSTON STREET
CABOT ROAD
COMMERCE WAY
INDUSTRIAL PARKWAY
MISHAWUM ROAD
ROUTE 128
A A'
B B'
C C'
D D'
E E'
Title:
LOCATION OF GENERALIZED GEOLOGIC CROSS SECTIONS
PRE-DESIGN INVESTIGATION
Prepared for:
INDUSTRI-PLEX SITE REMEDIAL TRUST
ROUX
ROUX ASSOCIATES INC
Consulting Ground-Water Geologists & Engineers
Compiled by: S.W.
Prepared by: C.R.
Project Mgr: W.S.
File No.: 16101D
Date: 12/90
Scale: SHOWN
Revision: 0
PLATE 2









EXPLANATION

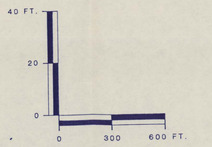
OW-16 — OBSERVATION WELL DESIGNATION

ATB-21 — SOIL BORING DESIGNATION

LAND SURFACE

GEOLOGIC CONTACT

RECENT	FILL	FILL
	Qsd	STREAM AND SWAMP DEPOSITS
PLEISTOCENE (WISCONSIN STAGE)	Qo4	GLACIAL OUTWASH: COARSE CLASTICS
	Qo3	GLACIAL OUTWASH: COARSE CLASTICS
	Qo2	GLACIAL OUTWASH: COARSE CLASTICS AND SAND
	Qgm	GROUND MORAINE: TILL
	Qou	GLACIAL OUTWASH: COARSE CLASTICS



VERTICAL EXAGGERATION EQUALS 15X

Title:

GENERALIZED GEOLOGIC CROSS-SECTIONS

PRE-DESIGN INVESTIGATION

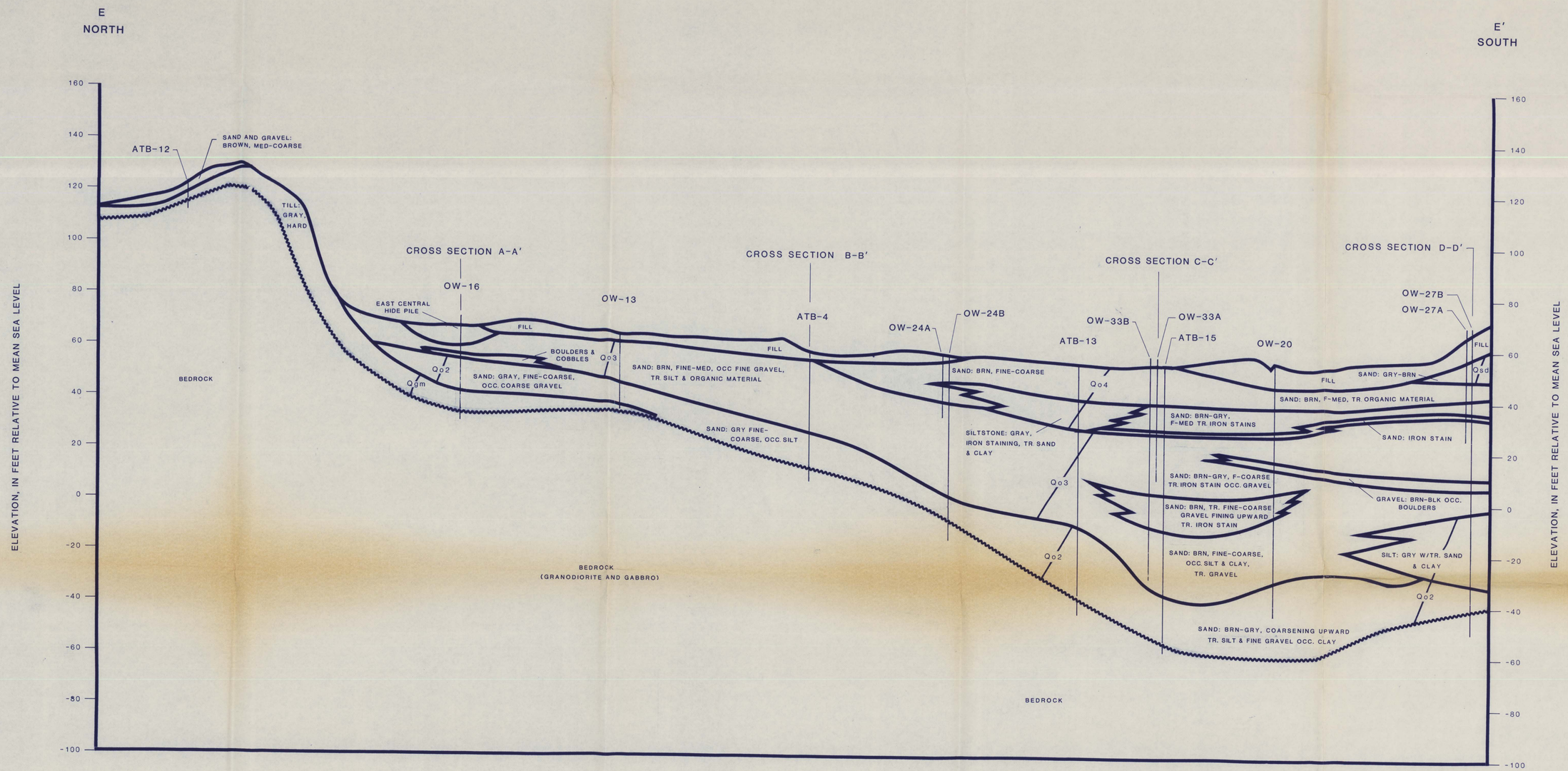
PART 1 OF 2

Prepared for:

INDUSTRI-PLEX SITE REMEDIAL TRUST

ROUX

Compiled by: L.O.	Date: 12/90	Plate
Prepared by: V.M./S.W.	Scale: SHOWN	2



EXPLANATION

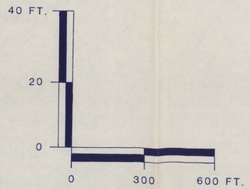
OW-16 — OBSERVATION WELL DESIGNATION

ATB-4 — SOIL BORING DESIGNATION

LAND SURFACE

GEOLOGIC CONTACT

RECENT	FILL	FILL
RECENT	Qsd	STREAM AND SWAMP DEPOSITS
PLEISTOCENE (WISCONSIN STAGE)	Qo4	GLACIAL OUTWASH: COARSE CLASTICS
PLEISTOCENE (WISCONSIN STAGE)	Qo3	GLACIAL OUTWASH: COARSE CLASTICS
PLEISTOCENE (WISCONSIN STAGE)	Qo2	GLACIAL OUTWASH: COARSE CLASTICS AND SAND
PLEISTOCENE (WISCONSIN STAGE)	Qgm	GROUND MORAINE: TILL
PLEISTOCENE (WISCONSIN STAGE)	Qou	GLACIAL OUTWASH: COARSE CLASTICS



VERTICAL EXAGGERATION EQUALS 15x

Title: **GENERALIZED GEOLOGIC CROSS-SECTIONS**

PRE-DESIGN INVESTIGATION

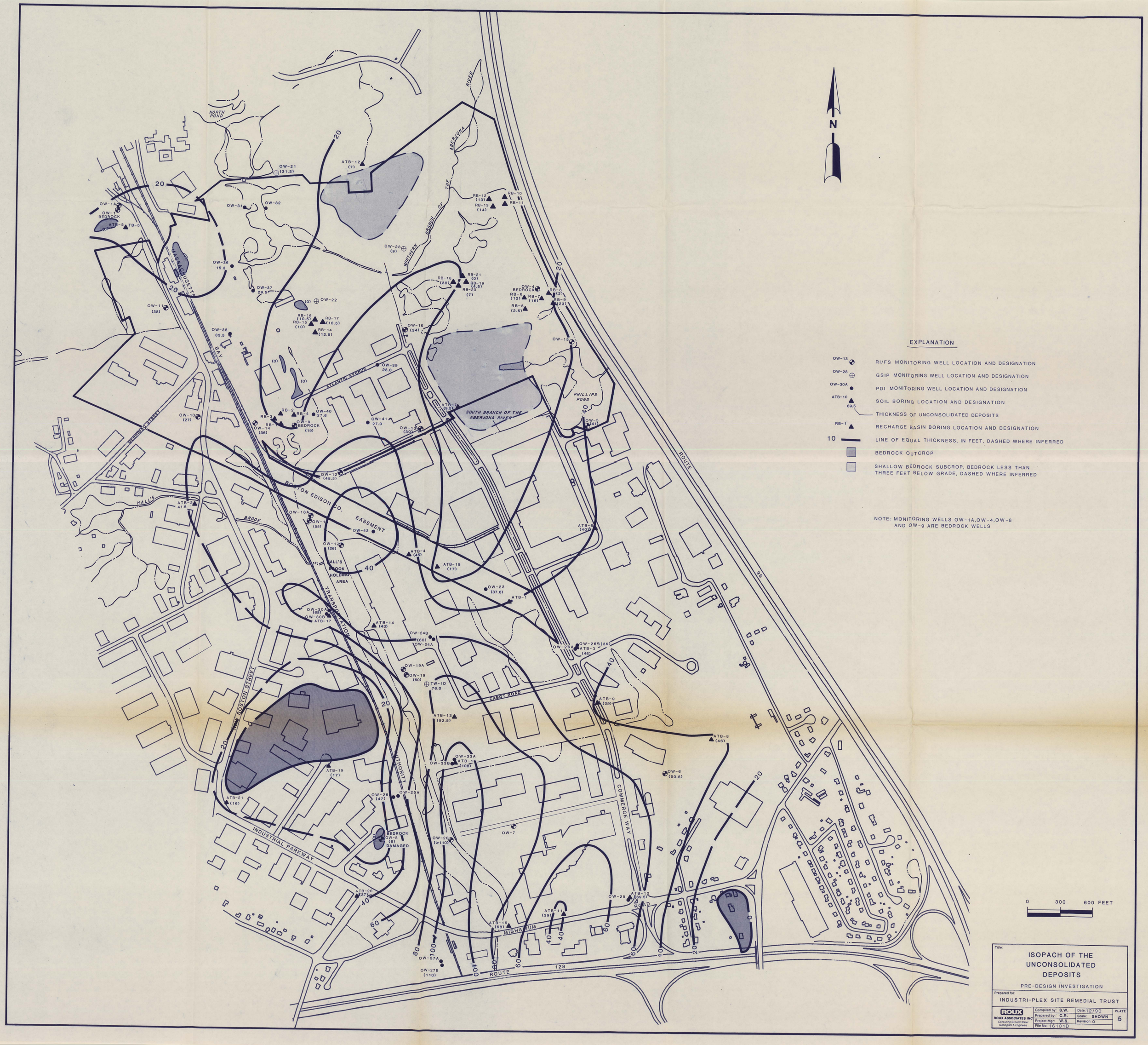
PART 2 OF 2

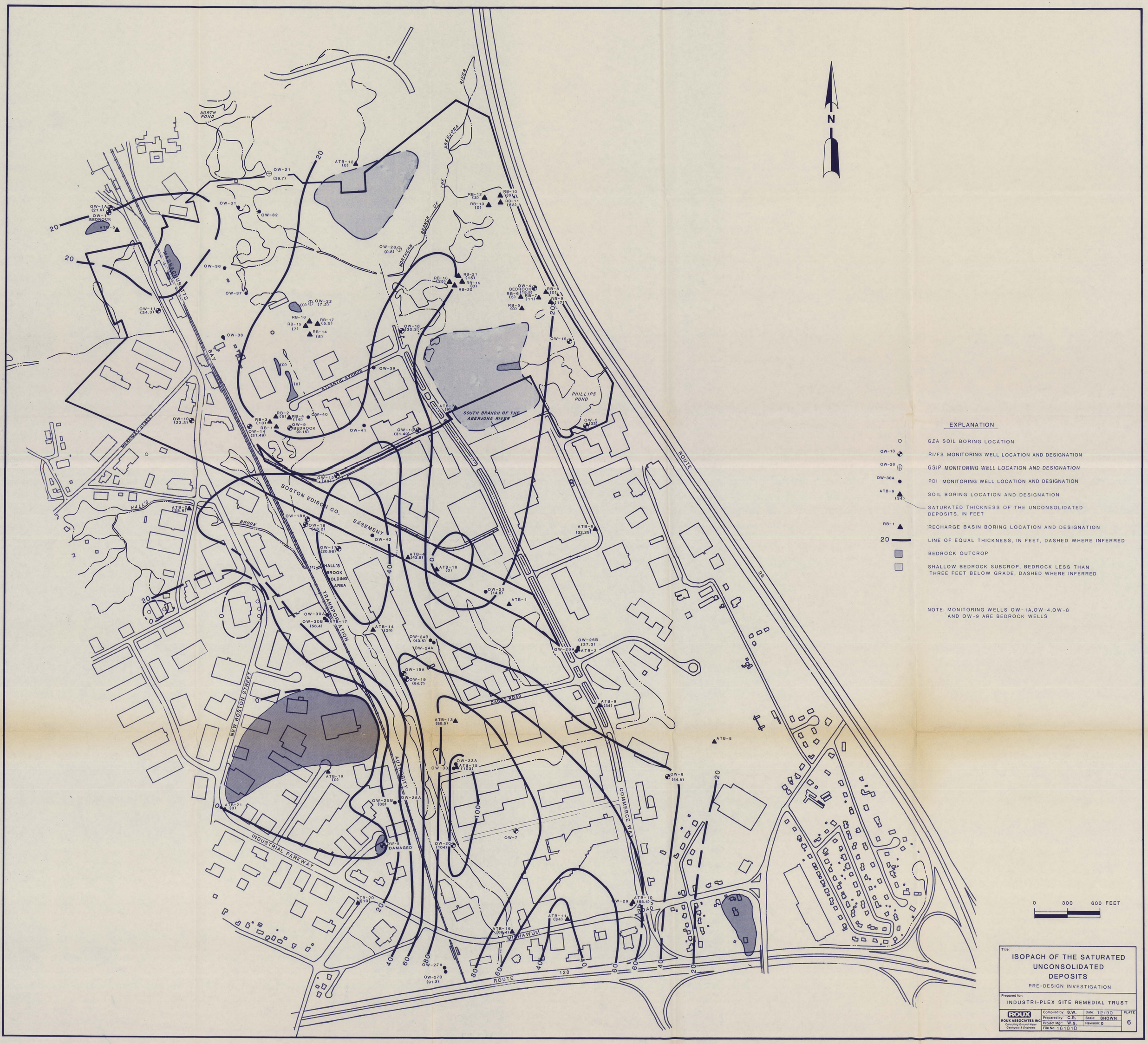
Prepared for: INDUSTRI-PLEX SITE REMEDIAL TRUST

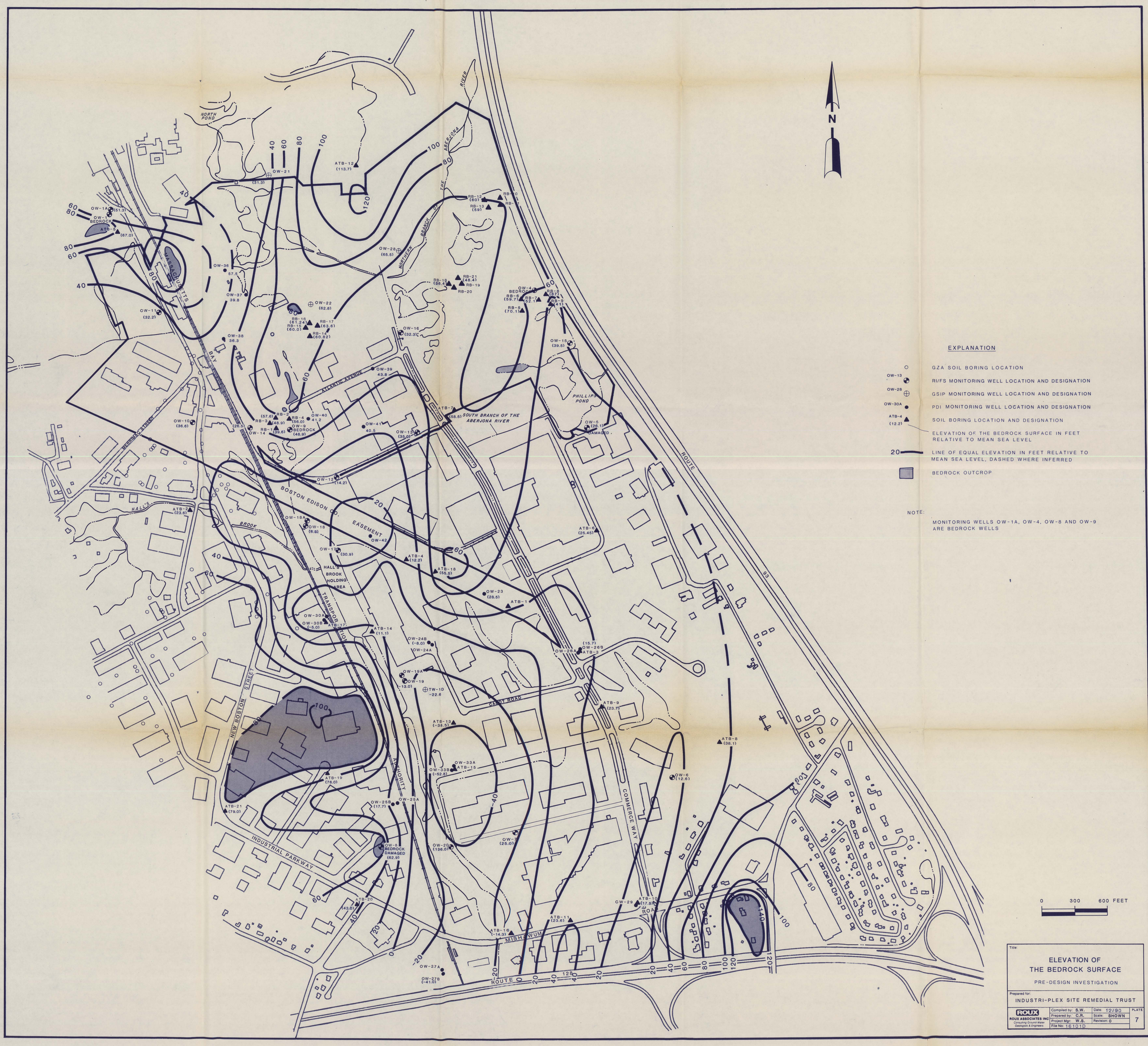
ROUX ASSOCIATES INC
Consulting Ground Water Geologists & Engineers

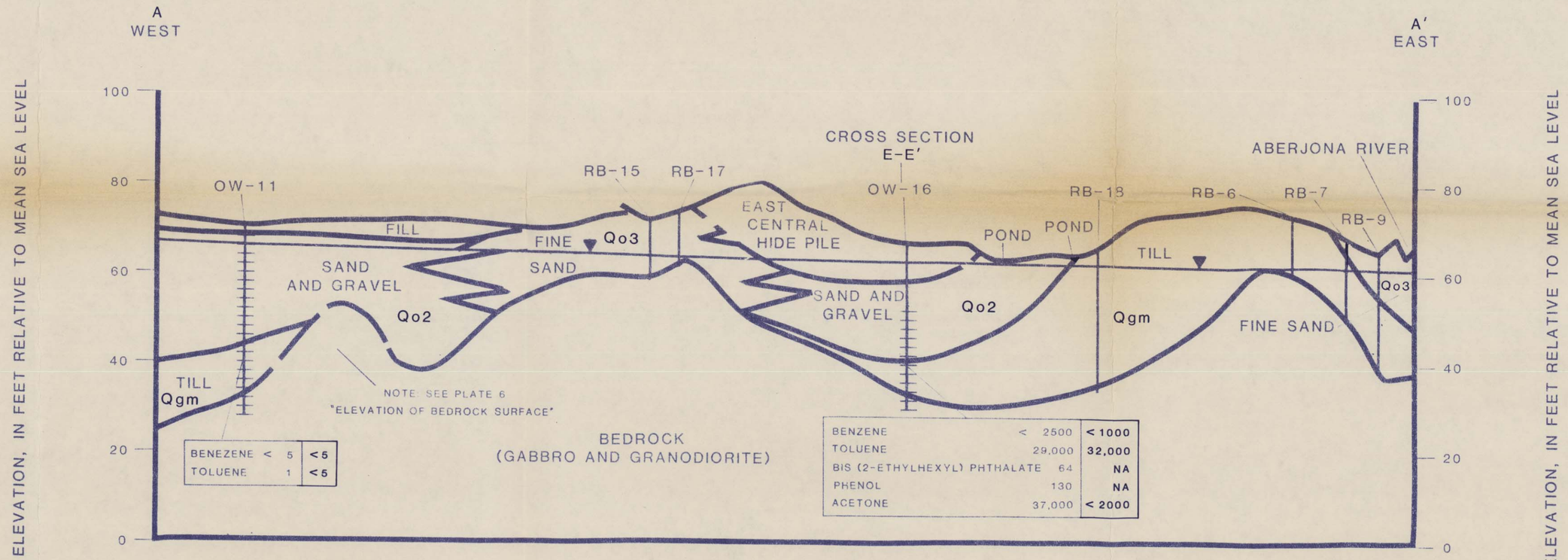
Compiled by: L.O	Date: 12/90	PLATE	
Prepared by: C.R.	Scale: SHOWN	3	
Project Mgr: W.S.	Revision: 0		
File No: 16101D			

N
EXPLANATION
RECENT
FILL
CONSTRUCTION DEBRIS
FINE SANDS
BLASTED BEDROCK FRAGMENTS
ANIMAL HIDES
Qsd
STREAM AND SWAMP DEPOSITS
FINE-MED-COARSE SAND
ORGANIC DEBRIS & MATERIAL
FINE-COARSE GRAVEL
OCCASSIONAL SILT & CLAY
PLEISTOCENE (WISCONSIN STAGE)
Qo4
GLACIAL OUTWASH: COARSE CLASTICS
FINE-MED-COARSE SAND
FINE-COARSE GRAVEL
TRACE SILT, CLAY & ORGANIC MATERIAL
Qo3
GLACIAL OUTWASH: COARSE CLASTICS
FINE-MED SAND
COARSE GRAVEL
LITTLE SILT ORGANIC MATERIAL & CLAY LENSES
Qo2
GLACIAL OUTWASH: COARSE CLASTICS AND SAND
FINE-MED-COARSE SAND
FINE COARSE GRAVEL
ORGANIC DEBRIS
OCCASSIONAL CLAY & SILT
Qgm
GROUND MORAINE: TILL
FINE-MED-COARSE SAND
SANDY LAMINATED ORGANIC MATERIAL
FINE-COARSE GRAVEL
OCCASIONAL SILT
LARGE COBBLES AND BOULDERS
Qou
GLACIAL OUTWASH: COARSE CLASTICS
FINE-MED-COARSE SAND
FINE-MED GRAVEL
TRACE LARGE COBBLES & SILT
GEOLOGIC CONTACT (MODIFIED FROM CHUTE (1959) BASED ON SITE BOREHOLE DATA)
INDUSTRI-PLEX SITE BOUNDARY
OW-13 RI/FS MONITORING WELL LOCATION AND DESIGNATION
OW-28 GSIP MONITORING WELL LOCATION AND DESIGNATION
OW30A PDI MONITORING WELL LOCATION AND DESIGNATION
RB-1 RECHARGE BASIN BORING LOCATION AND DESIGNATION
ATB-9 SOIL BORING LOCATION AND DESIGNATION
BEDROCK OUTCROP
SHALLOW BEDROCK SUBCROP, BEDROCK LESS THAN THREE FEET BELOW GRADE, DASHED WHERE INFERRED
NOTE MONITORING WELLS OW-1A, OW-4, OW-8 AND OW-9 ARE BEDROCK WELLS
0 300 600 FEET
SOUTH BRANCH OF THE ABERJONA RIVER
PHILLIPS POND
NORTH POND
ROUTE 93
ROUTE 128
INDUSTRIAL PARKWAY
COMMERCE WAY
TRANSPORTATION AUTHORITY
MISHAWUM ROAD
EASTON ROAD
HALLS BROOK HOLDING AREA
BOSTON EDISON CO. EASEMENT
Title:
SURFICIAL GEOLOGIC MAP
PRE-DESIGN INVESTIGATION
Prepared for:
INDUSTRI-PLEX SITE REMEDIAL TRUST
ROUX ASSOCIATES INC
Consulting Ground Water Geologists & Engineers
Compiled by: S.W.
Date: 12/90
Prepared by: C.R.
Scale: SHOWN
Project Mgr: W.S.
Revision: 0
File No: 16101D
PLATE 4

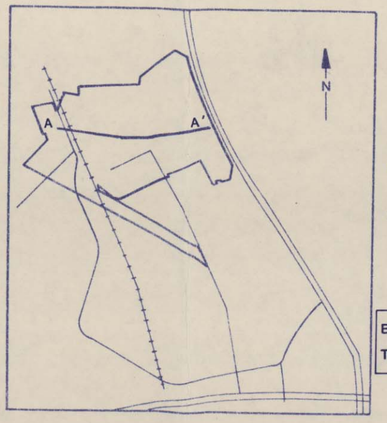

N
EXPLANATION
OW-13 RI/FS MONITORING WELL LOCATION AND DESIGNATION
OW-28 GSIP MONITORING WELL LOCATION AND DESIGNATION
OW-30A PDI MONITORING WELL LOCATION AND DESIGNATION
ATB-10 69.5 SOIL BORING LOCATION AND DESIGNATION
THICKNESS OF UNCONSOLIDATED DEPOSITS
RB-1 RECHARGE BASIN BORING LOCATION AND DESIGNATION
10 LINE OF EQUAL THICKNESS, IN FEET, DASHED WHERE INFERRED
BEDROCK OUTCROP
SHALLOW BEDROCK SUBCROP, BEDROCK LESS THAN THREE FEET BELOW GRADE, DASHED WHERE INFERRED
NOTE: MONITORING WELLS OW-1A, OW-4, OW-8 AND OW-9 ARE BEDROCK WELLS
0 300 600 FEET
NORTH POND
SOUTH BRANCH OF THE ABERJONA RIVER
NORTHERN BRANCH OF THE ABERJONA RIVER
PHILLIPS POND
ATLANTIC AVENUE
MERRIMACK STREET
MASSACHUSETTS BAY
HALL'S BROOK
BOSTON EDISON CO. EASEMENT
HALL'S BROOK HOLDING AREA
TRANSPORTATION AUTHORITY
NEW BOSTON STREET
INDUSTRIAL PARKWAY
CABOT ROAD
COMMERCE WAY
MISHAWUM ROAD
ROUTE 128
ROUTE 93
Title:
ISOPACH OF THE UNCONSOLIDATED DEPOSITS
PRE-DESIGN INVESTIGATION
Prepared for:
INDUSTRI-PLEX SITE REMEDIAL TRUST
ROUX
ROUX ASSOCIATES INC
Consulting Ground-Water Geologists & Engineers
Compiled by: S.W.
Prepared by: C.R.
Project Mgr: W.S.
File No: 16101D
Date: 12/90
Scale: SHOWN
Revision: 0
PLATE 5


N
NORTH POND
PHILLIPS POND
SOUTH BRANCH OF THE ABERJONA RIVER
NORTHERN BRANCH OF THE ABERJONA RIVER
MASSACHUSETTS BAY
ATLANTIC AVENUE
MERRIMAC STREET
HALL'S BROOK
BOSTON EDISON CO. EASEMENT
HALL'S BROOK HOLDING AREA
TRANSPORTATION AUTHORITY
NEW BOSTON STREET
INDUSTRIAL PARKWAY
CABOT ROAD
COMMERCE WAY
MISHAWUM ROAD
ROUTE 128
ROUTE 93
OW-1A (21.9)
OW-1 BEDROCK
ATB-5
OW-21 (39.7)
OW-31
OW-32
OW-36
OW-37
OW-11 (34.3)
OW-38
OW-22 (7.2)
OW-28 (0.8)
OW-16 (30.3)
OW-39
OW-40
OW-41
OW-13 (31.49)
OW-10 (23.3)
OW-12 (42)
OW-18A
OW-18 (48.2)
OW-42
OW-17 (20.98)
OW-23 (14.8)
OW-30A
OW-30B (56.4)
OW-24B (43.5)
OW-24A
OW-19A
OW-19 (64.7)
OW-26B (37.3)
OW-26A
OW-33A
OW-33
OW-25B (33)
OW-25A
OW-8 DAMAGED
OW-20 (104)
OW-7
OW-6 (44.5)
OW-29
OW-27A
OW-27B (91.3)
OW-4 BEDROCK
OW-5 (33)
OW-15
ATB-12 (0)
ATB-7 (9)
ATB-6 (32.25)
ATB-4 (42.8)
ATB-18 (0)
ATB-1
ATB-14 (39)
ATB-3
ATB-9 (34)
ATB-8
ATB-13 (88.5)
ATB-15 (103)
ATB-19 (0)
ATB-21 (0)
ATB-20 (10)
ATB-16 (68.4)
ATB-11 (34)
ATB-10 (65.4)
ATB-2 (38.6)
ATB-17
RB-1
RB-2 (5)
RB-3 (13)
RB-4 (16)
RB-5 (0)
RB-6 (5)
RB-7 (11)
RB-8 (0)
RB-9 (17)
RB-10 (6)
RB-11 (53)
RB-12 (3)
RB-13 (0)
RB-14 (5)
RB-15 (7)
RB-16
RB-17 (5.5)
RB-18 (25)
RB-19 (0)
RB-20
RB-21 (15)
OW-9 BEDROCK (9.15)
OW-14 (31.49)
20
40
60
80
100
0 300 600 FEET
EXPLANATION
GZA SOIL BORING LOCATION
OW-13 RI/FS MONITORING WELL LOCATION AND DESIGNATION
OW-28 GSIP MONITORING WELL LOCATION AND DESIGNATION
OW-30A PDI MONITORING WELL LOCATION AND DESIGNATION
ATB-9 (34) SOIL BORING LOCATION AND DESIGNATION
SATURATED THICKNESS OF THE UNCONSOLIDATED DEPOSITS, IN FEET
RB-1 RECHARGE BASIN BORING LOCATION AND DESIGNATION
20 LINE OF EQUAL THICKNESS, IN FEET, DASHED WHERE INFERRED
BEDROCK OUTCROP
SHALLOW BEDROCK SUBCROP, BEDROCK LESS THAN THREE FEET BELOW GRADE, DASHED WHERE INFERRED
NOTE: MONITORING WELLS OW-1A, OW-4, OW-8 AND OW-9 ARE BEDROCK WELLS
Title:
ISOPACH OF THE SATURATED UNCONSOLIDATED DEPOSITS
PRE-DESIGN INVESTIGATION
Prepared for:
INDUSTRI-PLEX SITE REMEDIAL TRUST
ROUX
ROUX ASSOCIATES INC
Consulting Ground-Water Geologists & Engineers
Compiled by: S.W.
Prepared by: C.R.
Project Mgr: W.S.
File No: 16101D
Date: 12/90
Scale: SHOWN
Revision: 0
PLATE 6


N
NORTH POND
MASSACHUSETTS BAY
ATLANTIC AVENUE
MERRIMAC STREET
HALL'S BROOK
BOSTON EDISON CO. EASEMENT
HALL'S BROOK HOLDING AREA
TRANSPORTATION AUTHORITY
NEW BOSTON STREET
INDUSTRIAL PARKWAY
CABOT ROAD
COMMERCE WAY
MISHAWUM ROAD
ROUTE 93
ROUTE 128
NORTHERN BRANCH OF THE ABERJONA RIVER
SOUTH BRANCH OF THE ABERJONA RIVER
PHILLIPS POND
BEDROCK DAMAGED
EXPLANATION
GZA SOIL BORING LOCATION
OW-13 RI/FS MONITORING WELL LOCATION AND DESIGNATION
OW-28 GSIP MONITORING WELL LOCATION AND DESIGNATION
OW-30A PDI MONITORING WELL LOCATION AND DESIGNATION
ATB-4 (12.2) SOIL BORING LOCATION AND DESIGNATION
ELEVATION OF THE BEDROCK SURFACE IN FEET RELATIVE TO MEAN SEA LEVEL
20 LINE OF EQUAL ELEVATION IN FEET RELATIVE TO MEAN SEA LEVEL, DASHED WHERE INFERRED
BEDROCK OUTCROP
NOTE:
MONITORING WELLS OW-1A, OW-4, OW-8 AND OW-9 ARE BEDROCK WELLS
0 300 600 FEET
Title:
ELEVATION OF THE BEDROCK SURFACE
PRE-DESIGN INVESTIGATION
Prepared for:
INDUSTRI-PLEX SITE REMEDIAL TRUST
ROUX
ROUX ASSOCIATES INC
Consulting Ground-Water Geologists & Engineers
Compiled by: S.W.
Prepared by: C.R.
Project Mgr: W.S.
File No: 16101D
Date: 12/90
Scale: SHOWN
Revision: 0
PLATE 7



EXPLANATION



OW-11 — OBSERVATION WELL DESIGNATION

RB-15 — SOIL BORING DESIGNATION

— LAND SURFACE

— GEOLOGIC CONTACT

— WATER-TABLE ELEVATION, JUNE 1990, DASHED WHERE INFERRED

— WELL SCREEN ZONES

BENZENE	< 5	< 5
TOLUENE	1	< 5

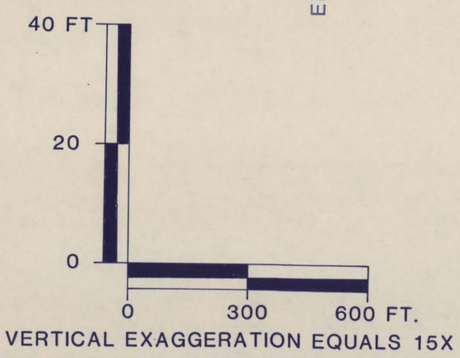
— CONCENTRATION IN ppb

— RESULTS OF PHASE II SAMPLING, OCTOBER 15 AND 18, 1990

— RESULTS OF PHASE I SAMPLING, JUNE 4 TO 6, 1990

NA — NOT ANALYZED

RECENT	FILL	FILL
	Qsd	STREAM AND SWAMP DEPOSITS
PLEISTOCENE (WISCONSIN STAGE)	Qo4	GLACIAL OUTWASH: COARSE CLASTICS
	Qo3	GLACIAL OUTWASH: COARSE CLASTICS
	Qo2	GLACIAL OUTWASH: COARSE CLASTS AND SAND
	Qgm	GROUND MORAINE: TILL
	Qou	GLACIAL OUTWASH: COARSE CLASTICS



VERTICAL EXAGGERATION EQUALS 15X

Title:

GENERALIZED HYDROGEOLOGIC CROSS SECTION A-A'

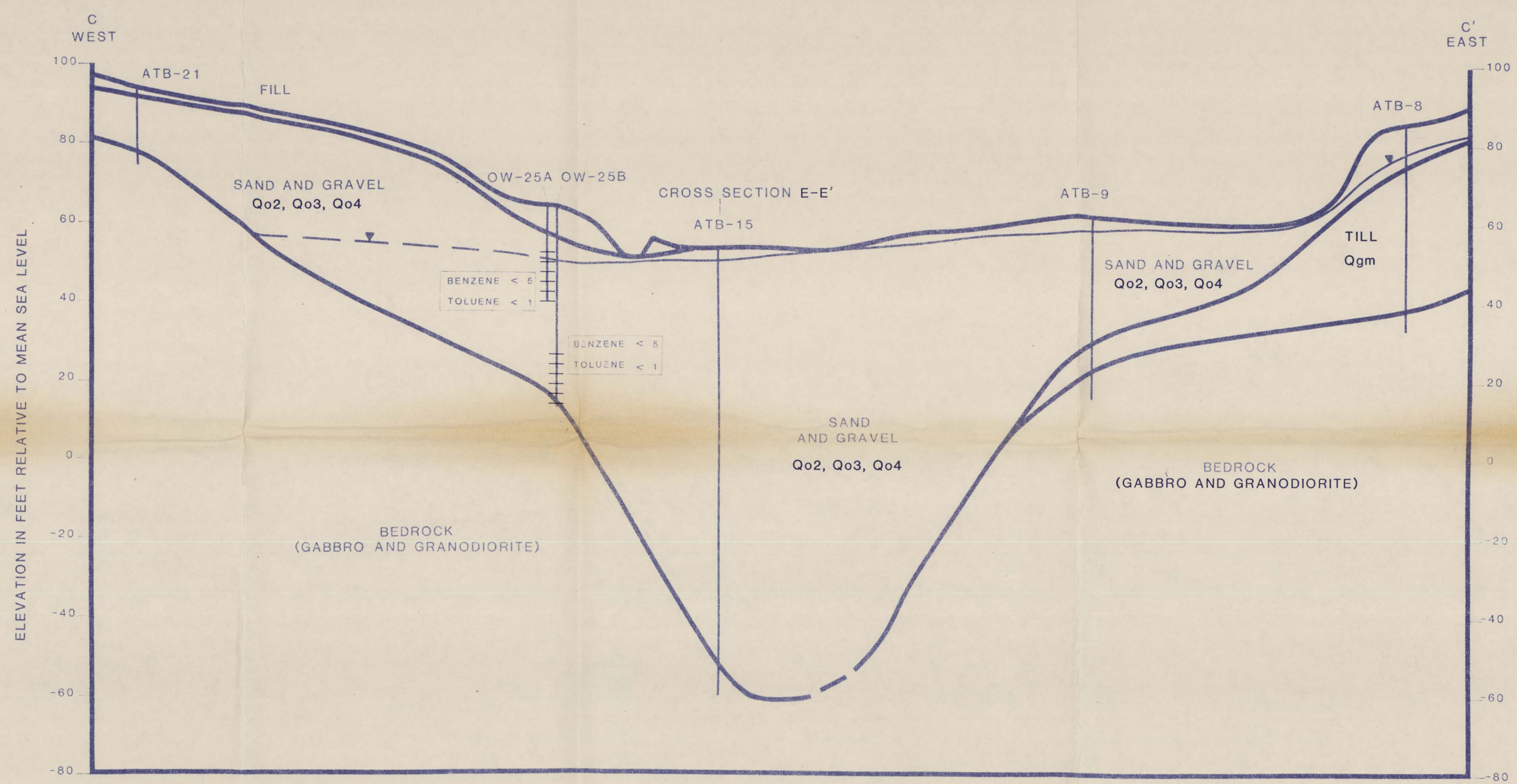
PRE-DESIGN INVESTIGATION

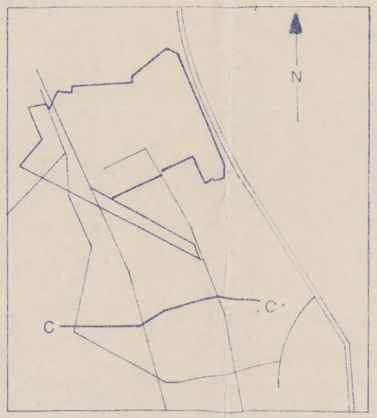
Prepared for:

INDUSTRI-PLEX SITE REMEDIAL TRUST

ROUX ASSOCIATES INC
Consulting Ground-Water Geologists & Engineers

Compiled by: B.T.	Date: 12/90	PLATE	
Prepared by: V.M.	Scale: SHOWN	8	
Project Mgr.: W.S.	Revision: 0		
File No.: 16101D			





EXPLANATION

OW-25A — OBSERVATION WELL DESIGNATION

ATB-15 — SOIL BORING DESIGNATION

LAND SURFACE

GEOLOGIC CONTACT

WATER-TABLE ELEVATION, JUNE 1990, DASHED WHERE INFERRED

WELL SCREEN ZONES

BENZENE < 5
TOLUENE < 1

CONCENTRATION IN ppb

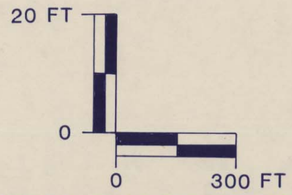
RESULTS OF PHASE I SAMPLING, JUNE 4 TO 6, 1990

RECENT

- FILL — FILL
- Qsd — STREAM AND SWAMP DEPOSITS

PLEISTOCENE (WISCONSIN STAGE)

- Qo4 — GLACIAL OUTWASH: COARSE CLASTICS
- Qo3 — GLACIAL OUTWASH: COARSE CLASTICS
- Qo2 — GLACIAL OUTWASH: COARSE CLASTICS AND SAND
- Qgm — GROUND MORAINE: TILL
- Qou — GLACIAL OUTWASH: COARSE CLASTICS



VERTICAL EXAGGERATION EQUALS 15X

Title

GENERALIZED HYDROGEOLOGIC CROSS SECTION C-C'

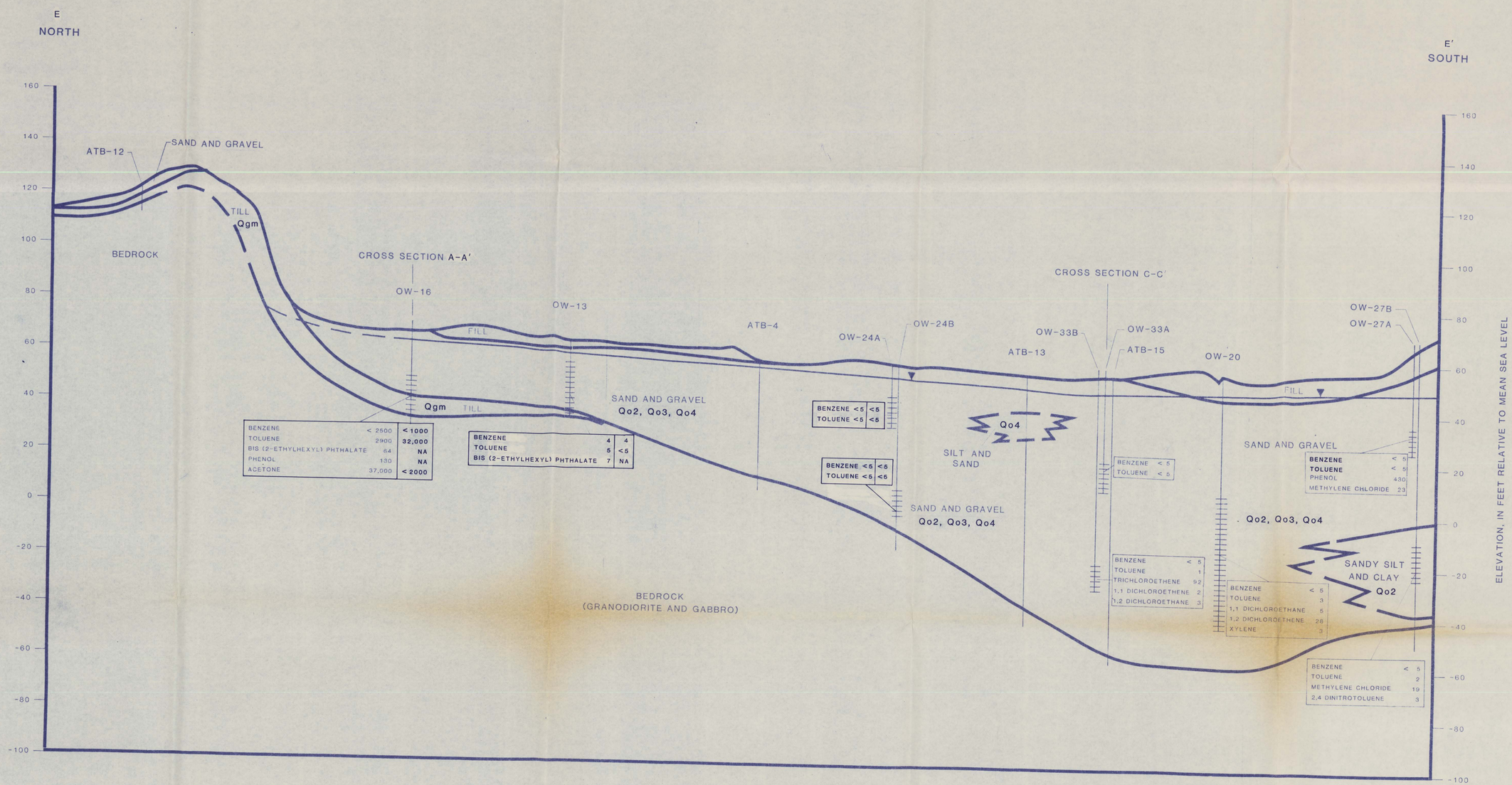
PRE-DESIGN INVESTIGATION

Prepared for

INDUSTRI-PLEX SITE REMEDIAL TRUST

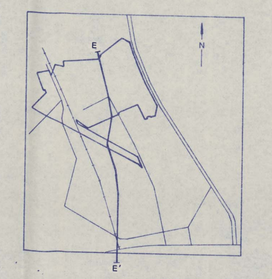
ROUX ASSOCIATES INC.

Compiled by	B.T.	Date	12/90	PLATE
Prepared by	V.M.	Scale	SHOWN	9
Project Mgr	W.S.	Revision	0	
File No	16101D			



NOTE: OBSERVATION WELL OW-20, OW-27A, OW-27B, OW-33A AND OW-33B WERE NOT SAMPLED DURING PHASE II SAMPLING ROUND (OCTOBER 15 AND 18, 1990)

RECENT	FILL	FILL
RECENT	Qsd	STREAM AND SWAMP DEPOSITS
PLEISTOCENE (WISCONSIN STAGE)	Qo4	GLACIAL OUTWASH: COARSE CLASTICS
PLEISTOCENE (WISCONSIN STAGE)	Qo3	GLACIAL OUTWASH: COARSE CLASTICS
PLEISTOCENE (WISCONSIN STAGE)	Qo2	GLACIAL OUTWASH: COARSE CLASTICS AND SAND
PLEISTOCENE (WISCONSIN STAGE)	Qgm	GROUND MORAINE: TILL
PLEISTOCENE (WISCONSIN STAGE)	Qou	GLACIAL OUTWASH: COARSE CLASTICS



EXPLANATION

OW-16 — OBSERVATION WELL DESIGNATION

ATB-4 — SOIL BORING DESIGNATION

LAND SURFACE

WATER-TABLE ELEVATION, JUNE 1990, DASHED WHERE INFERRED

GEOLOGIC CONTACT

WELL SCREEN ZONES

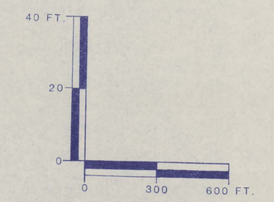
BENZENE < 5 | < 5
TOLUENE 1 | < 5

CONCENTRATIONS IN ppb

RESULTS OF PHASE II SAMPLING, OCTOBER 15 AND 18, 1990

RESULTS OF PHASE I SAMPLING, JUNE 4 TO 6, 1990

NA — NOT ANALYZED



VERTICAL EXAGGERATION EQUALS 15x

Title:
GENERALIZED HYDROGEOLOGIC CROSS SECTION E-E'

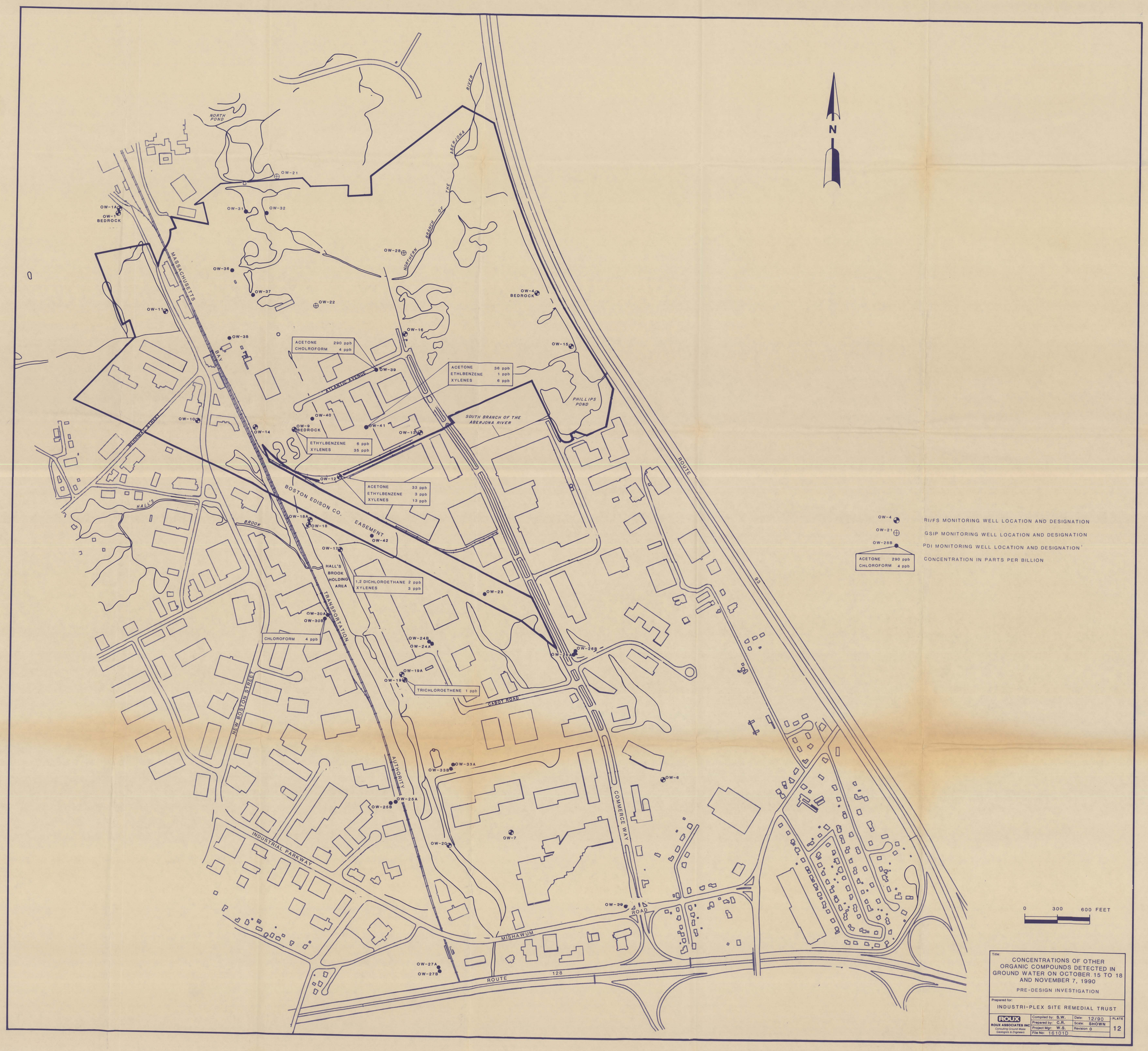
PRE-DESIGN INVESTIGATION

Prepared for:
INDUSTRI-PLEX SITE REMEDIAL TRUST

ROUX
ROUX ASSOCIATES INC
Consulting Scientists Water Geologists & Engineers

Compiled by: B. T.	Date: 12/90	Plate	
Prepared by: V. M.	Scale: SHOWN		
Project Mgr.: W. S.	Revision: 0	10	
File No: 16101D			

N
NORTH POND
CHLOROFORM 2
OW-21
BIS (2-ETHYLHEXYL) PHTHALATE 4
OW-1A
OW-1 (BEDROCK)
CHLOROETHANE 3
CHLOROBENZENE 25
BENZYL ALCOHOL 4
CHLOROMETHANE 1
OW-31
OW-32
ETHYLBENZENE 1
XYLENE 1
1,2 DICHLOROBENZENE 3
PHENOL 190
2-METHYL PHENOL 9
4-METHYL PHENOL 41
BENZOIC ACID 62
CHLOROFORM 2
OW-28
NORTHERN BRANCH OF THE ABERJONA RIVER
BIS (2-ETHYLHEXYL) PHTHALATE 4
ACETONE 6
OW-4 (BEDROCK)
OW-22
OW-11
N-NITROSODIPHENYLAMINE 2
CHLOROFORM 6
OW-16
BIS (2-ETHYLHEXYL) PHTHALATE 64
PHENOL 130
4-METHYL PHENOL 3400
BENZOIC ACID 2000
OW-15
PHILLIPS POND
MASSACHUSETTS BAY STREET
ATLANTIC AVENUE
SOUTH BRANCH OF THE ABERJONA RIVER
OW-10
BIS (2-ETHYLHEXYL) PHTHALATE 3
OW-14
OW-9 (BEDROCK)
OW-13
BIS (2-ETHYLHEXYL) PHTHALATE 7
PHENOL 3
N-NITROSODIPHENYLAMINE 3
OW-12
ROUTE 93
BOSTON EDISON EASEMENT
HALL'S BROOK
OW-18A
OW-18
1,1 DICHLOROETHANE 2
1,1 DICHLOROETHANE 2
OW-17
PHENOL 6
XYLENE 13
HALL'S BROOK HOLDING AREA
1,3-DICHLOROBENZENE 4
1,1 DICHLOROETHANE 2
1,1,1 TRICHLOROETHANE 1
(REPLICATE)
OW-30A
OW-30B
TRANSPORTATION
OW-23
METHYLENE CHLORIDE 22
1,1 DICHLOROETHENE 8
1,1 DICHLOROETHANE 2
1,2 DICHLOROETHENE 3
1,1,1 TRICHLOROETHANE 26
TRICHLOROETHENE 110
OW-24B
OW-24A
OW-26A
OW-26B
ACENAPTHALENE 3
OW-19A
OW-19
TRICHLOROETHENE 1
CABOT ROAD
NEW BOSTON STREET
AUTHORITY
OW-33A
OW-33B
TRICHLOROETHENE 92
1,1 DICHLOROETHENE 2
1,2 DICHLOROETHANE 3
OW-6
1,1,1 TRICHLOROETHANE 3
OW-25B
OW-25A
TRICHLOROETHENE 36
1,1,1-TRICHLOROETHANE 15
1,1 DICHLOROETHANE 6
1,1 DICHLOROETHENE 3
1,2 DICHLOROETHENE 2
OW-7
OW-20
1,1 DICHLOROETHANE 5
TRANS-1,2-DICHLOROETHENE 28
XYLENE 3
INDUSTRIAL PARKWAY
OW-5
MISHAWUM ROAD
PHENOL 430
METHYLENE CHLORIDE 23
OW-27A
OW-27B
METHYLENE CHLORIDE 19
DIETHYLPHTHALATE 3
ROUTE 128
ROUTE 93
EXPLANATION
OW-4 RI/FS MONITORING WELL LOCATION AND DESIGNATION
OW-21 GSIP MONITORING WELL LOCATION AND DESIGNATION
OW-27A PDI MONITORING WELL LOCATION AND DESIGNATION
PHENOL 430
METHYLENE CHLORIDE 23
CONCENTRATIONS IN PARTS PER BILLION
0 300 600 FEET
Title
CONCENTRATIONS OF OTHER ORGANIC COMPOUNDS DETECTED IN GROUND WATER ON MARCH 15 TO 20,1990, APRIL 25, 1990 AND JUNE 4 TO 6, 1990
PRE-DESIGN INVESTIGATION
Prepared for
INDUSTRI-PLEX SITE REMEDIAL TRUST
ROUX
ROUX ASSOCIATES INC
Compiled by S.W.
Prepared by C.R.
Project Mgr. W.S.
File No. 16101D
Date 12/90
Scale SHOWN
Revision 0
PLATE 11



Title:

CONCENTRATIONS OF OTHER ORGANIC COMPOUNDS DETECTED IN GROUND WATER ON OCTOBER 15 TO 18 AND NOVEMBER 7, 1990

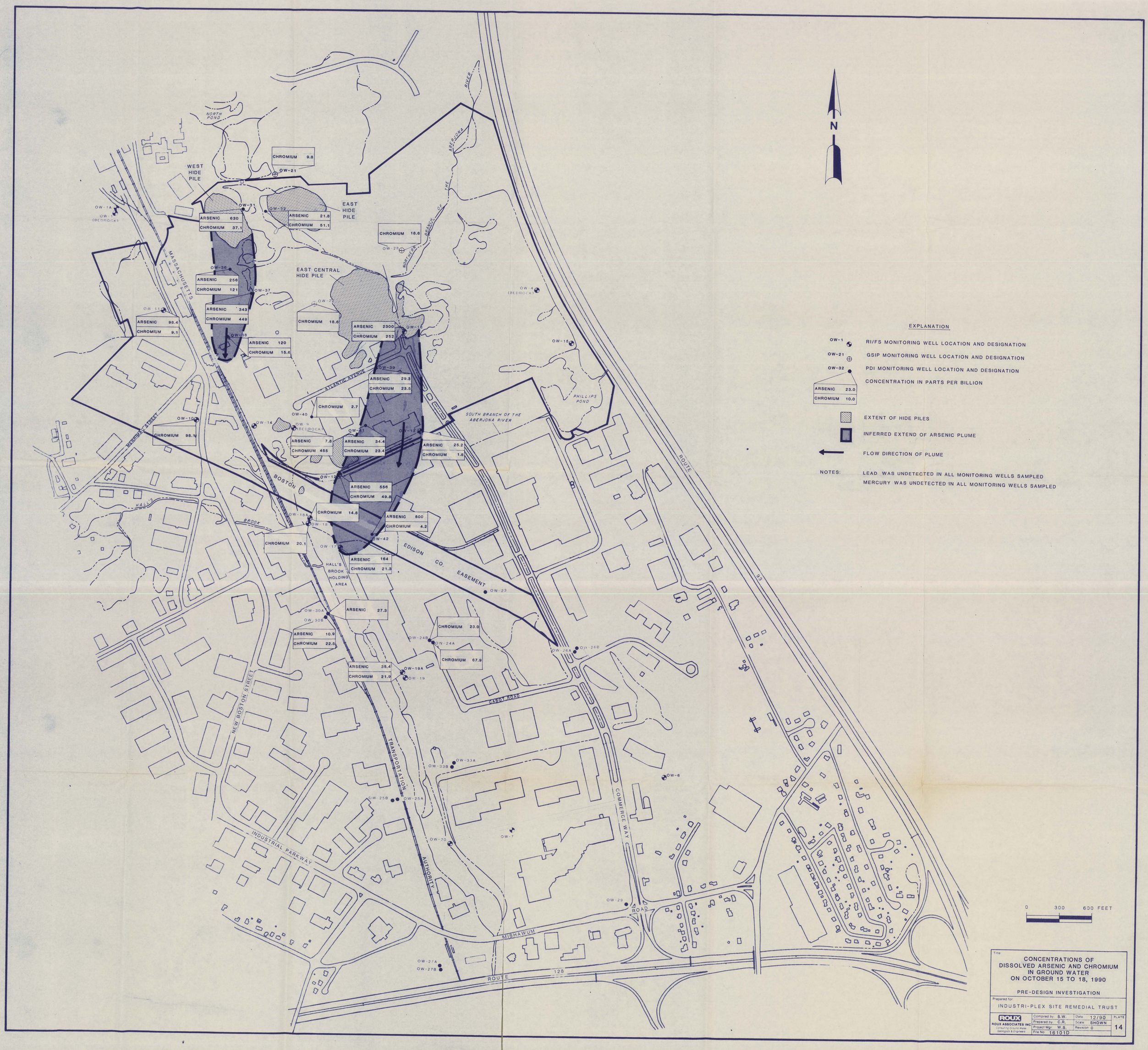
PRE-DESIGN INVESTIGATION

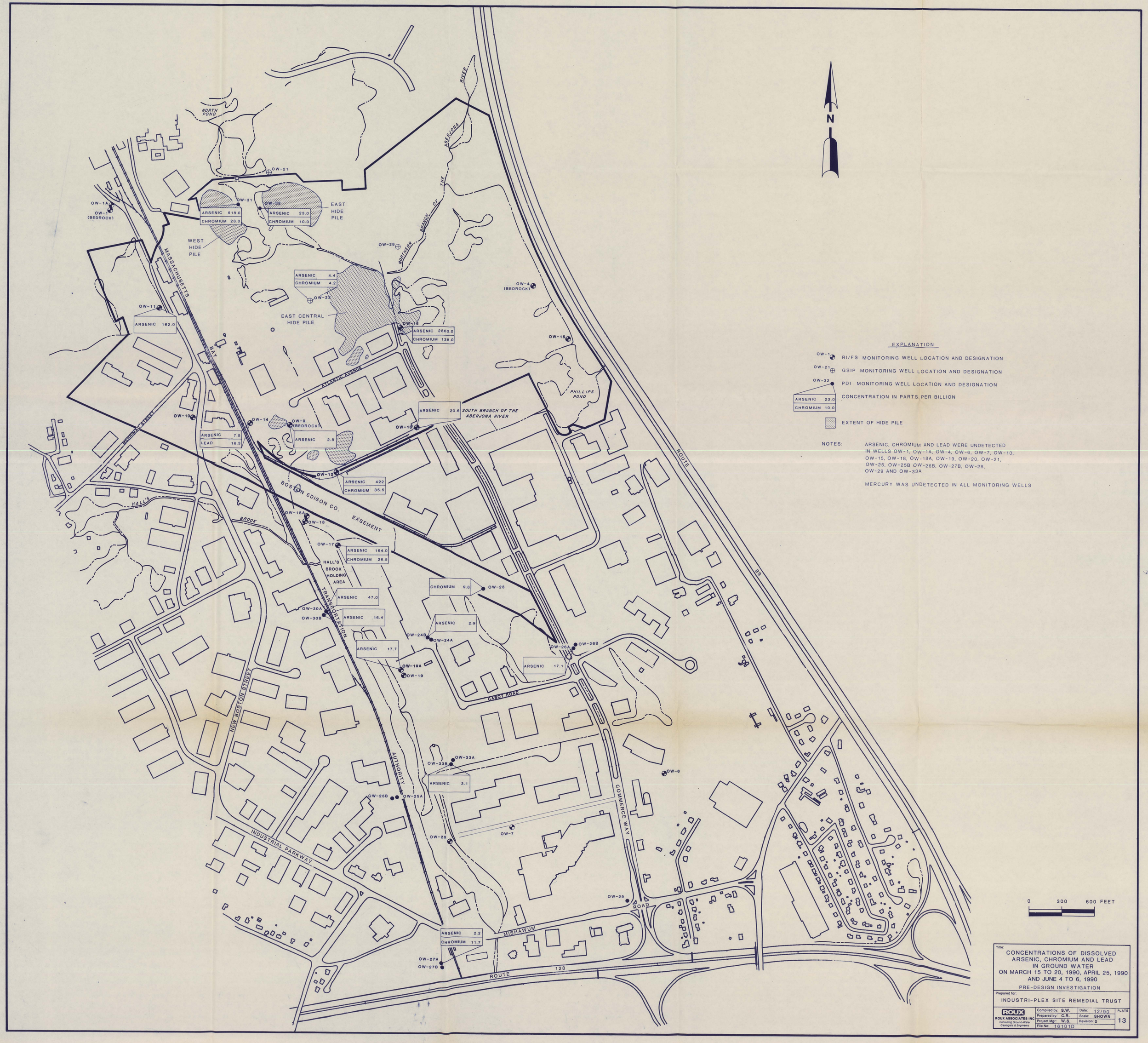
Prepared for:

INDUSTRI-PLEX SITE REMEDIAL TRUST

ROUX ASSOCIATES INC
Consulting Ground-Water Geologists & Engineers

Compiled by: S.W.	Date: 12/90	PLATE	
Prepared by: C.R.	Scale: SHOWN	12	
Project Mgr: W.S.	Revision 0		
File No: 16101D			


N
EXPLANATION
OW-1 RI/FS MONITORING WELL LOCATION AND DESIGNATION
OW-21 GSIP MONITORING WELL LOCATION AND DESIGNATION
OW-32 PDI MONITORING WELL LOCATION AND DESIGNATION
ARSENIC 23.0
CHROMIUM 10.0
CONCENTRATION IN PARTS PER BILLION
EXTENT OF HIDE PILES
INFERRED EXTEND OF ARSENIC PLUME
FLOW DIRECTION OF PLUME
NOTES: LEAD WAS UNDETECTED IN ALL MONITORING WELLS SAMPLED
MERCURY WAS UNDETECTED IN ALL MONITORING WELLS SAMPLED
0 300 600 FEET
NORTH POND
WEST HIDE PILE
EAST HIDE PILE
EAST CENTRAL HIDE PILE
CHROMIUM 9.8
OW-21
ARSENIC 630
CHROMIUM 37.1
OW-31
OW-32
ARSENIC 21.8
CHROMIUM 51.1
CHROMIUM 18.6
OW-28
OW-36
ARSENIC 256
CHROMIUM 121
OW-37
ARSENIC 343
CHROMIUM 449
OW-38
ARSENIC 120
CHROMIUM 15.6
CHROMIUM 18.6
ARSENIC 2300
CHROMIUM 252
OW-39
ARSENIC 29.3
CHROMIUM 23.5
OW-11
ARSENIC 96.4
CHROMIUM 9.1
OW-10
CHROMIUM 98.1
OW-40
CHROMIUM 2.7
OW-14
OW-9 (BEDROCK)
ARSENIC 7.8
CHROMIUM 455
ARSENIC 34.4
CHROMIUM 23.4
OW-13
ARSENIC 25.2
CHROMIUM 1.8
OW-12
ARSENIC 556
CHROMIUM 49.8
OW-18A
CHROMIUM 14.8
OW-18
ARSENIC 500
CHROMIUM 4.2
OW-42
CHROMIUM 20.1
OW-17
ARSENIC 164
CHROMIUM 21.3
HALL'S BROOK HOLDING AREA
OW-30A
OW-30B
ARSENIC 27.3
ARSENIC 10.9
CHROMIUM 22.5
OW-24B
OW-24A
CHROMIUM 23.0
CHROMIUM 67.9
ARSENIC 35.4
CHROMIUM 21.9
OW-19A
OW-19
OW-26A
OW-26B
OW-23
OW-33B
OW-33A
OW-25B
OW-25A
OW-20
OW-7
OW-6
OW-29
OW-27A
OW-27B
OW-1A
OW-1 (BEDROCK)
OW-4 (BEDROCK)
OW-15
PHILLIPS POND
SOUTH BRANCH OF THE ABERJONA RIVER
NORTHERN BRANCH OF THE ABERJONA RIVER
MASSACHUSETTS
MERRIMAC STREET
ATLANTIC AVENUE
BOSTON
HALL'S BROOK
EDISON CO. EASEMENT
CABOT ROAD
NEW BOSTON STREET
INDUSTRIAL PARKWAY
TRANSPORTATION AUTHORITY
COMMERCE WAY
MISHAWUM ROAD
ROUTE 128
ROUTE 93
Title
CONCENTRATIONS OF DISSOLVED ARSENIC AND CHROMIUM IN GROUND WATER ON OCTOBER 15 TO 18, 1990
PRE-DESIGN INVESTIGATION
Prepared for
INDUSTRI-PLEX SITE REMEDIAL TRUST
ROUX
ROUX ASSOCIATES INC
Consulting Ground-Water Geologists & Engineers
Compiled by: S.W.
Prepared by: C.R.
Project Mgr: W.S.
File No 16101D
Date 12/90
Scale SHOWN
Revision: 0
PLATE
14


N
NORTH POND
OW-21
OW-1A
OW-1
(BEDROCK)
OW-31
ARSENIC 518.0
CHROMIUM 28.0
OW-32
ARSENIC 23.0
CHROMIUM 10.0
EAST HIDE PILE
WEST HIDE PILE
OW-28
NORTHERN BRANCH OF THE ABERJONA RIVER
ARSENIC 4.4
CHROMIUM 4.2
OW-22
EAST CENTRAL HIDE PILE
OW-4
(BEDROCK)
OW-11
ARSENIC 162.0
OW-16
ARSENIC 2860.0
CHROMIUM 138.0
OW-15
MASSACHUSETTS BAY
ATLANTIC AVENUE
PHILLIPS POND
ARSENIC 20.6
SOUTH BRANCH OF THE ABERJONA RIVER
OW-13
OW-10
ARSENIC 7.5
LEAD 16.3
OW-14
OW-9
(BEDROCK)
ARSENIC 2.8
MERRIMAC STREET
OW-12
ARSENIC 422
CHROMIUM 35.5
BOSTON EDISON CO. EASEMENT
ROUTE 93
HALL'S BROOK
OW-18A
OW-18
OW-17
ARSENIC 164.0
CHROMIUM 26.5
HALL'S BROOK HOLDING AREA
CHROMIUM 9.6
OW-23
ARSENIC 47.0
OW-30A
OW-30B
ARSENIC 16.4
TRANSPORTATION AUTHORITY
ARSENIC 2.9
OW-24B
OW-24A
ARSENIC 17.7
OW-26A
OW-26B
ARSENIC 17.1
OW-19A
OW-19
CABOT ROAD
NEW BOSTON STREET
OW-33A
OW-33B
ARSENIC 3.1
OW-6
OW-25B
OW-25A
COMMERCE WAY
OW-7
OW-20
INDUSTRIAL PARKWAY
OW-29
MISHAWUM ROAD
ARSENIC 2.2
CHROMIUM 11.7
OW-27A
OW-27B
ROUTE 128
0 300 600 FEET
EXPLANATION
OW-1 RI/FS MONITORING WELL LOCATION AND DESIGNATION
OW-21 GSIP MONITORING WELL LOCATION AND DESIGNATION
OW-32 PDI MONITORING WELL LOCATION AND DESIGNATION
ARSENIC 23.0
CHROMIUM 10.0
CONCENTRATION IN PARTS PER BILLION
EXTENT OF HIDE PILE
NOTES: ARSENIC, CHROMIUM AND LEAD WERE UNDETECTED IN WELLS OW-1, OW-1A, OW-4, OW-6, OW-7, OW-10, OW-15, OW-18, OW-18A, OW-19, OW-20, OW-21, OW-25, OW-25B OW-26B, OW-27B, OW-28, OW-29 AND OW-33A
MERCURY WAS UNDETECTED IN ALL MONITORING WELLS
Title:
CONCENTRATIONS OF DISSOLVED ARSENIC, CHROMIUM AND LEAD IN GROUND WATER ON MARCH 15 TO 20, 1990, APRIL 25, 1990 AND JUNE 4 TO 6, 1990
PRE-DESIGN INVESTIGATION
Prepared for:
INDUSTRI-PLEX SITE REMEDIAL TRUST
ROUX
ROUX ASSOCIATES INC
Consulting Ground-Water Geologists & Engineers
Compiled by: S.W.
Prepared by: C.R.
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13