PURGEABLE ORGANIC COMPOUNDS IN GROUND WATER AT THE IDAHO NATIONAL ENGINEERING LABORATORY, IDAHO--1990 AND 1991

by Michael J. Liszewski and Larry J. Mann

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CONVERSION FACTORS AND ABBREVIATED UNITS

Multiply	By	To obtain
inch (in.)	25.40	millimeter
foot (ft)	0.3048	meter
mile (mi)	1.609	kilometer
square mile (mi^2)	2.590	square kilometer
gallon (gal)	3.785	liter

For temperature, degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) by using the formula °F = (1.8) (°C) + 32.

Abbreviated units used in reports: microgram per liter (µg/L), milliliter (mL)

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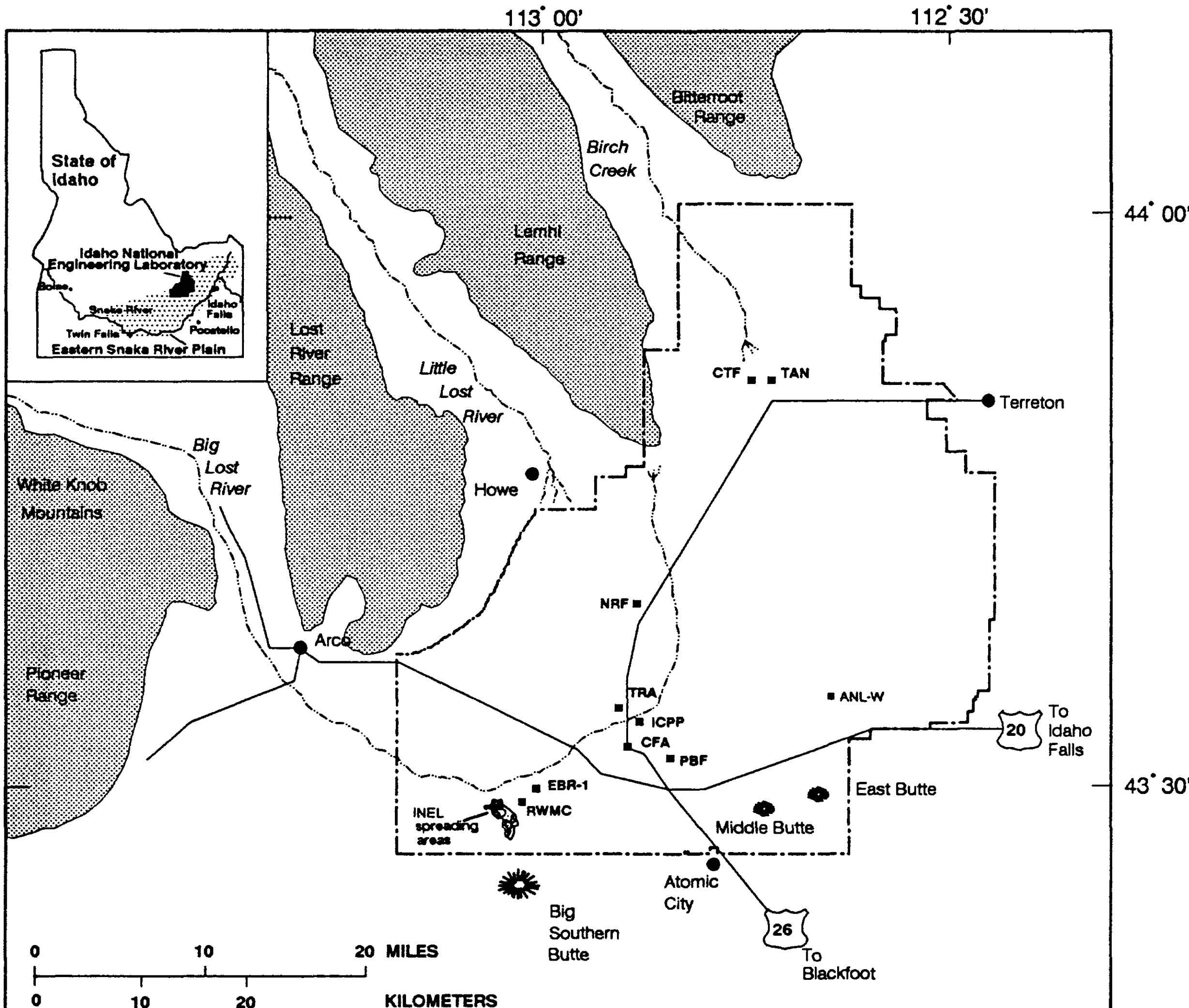
ABSTRACT

Ground-water samples from 76 wells and 1 hot spring at or near the Idaho National Engineering Laboratory were analyzed for 36 purgeable organic compounds during 1990-91. The samples were collected and analyzed as a continuation of a water-quality program initiated in 1987, and as part of studies conducted by the U.S. Geological Survey. Most of the wells obtain water from the Snake River Plain aquifer. Samples were collected from these wells using dedicated or portable pumps.

Water samples from 31 wells completed in the Snake River Plain aquifer contained detectable concentrations of at least 1 of 14 purgeable organic compounds. Most commonly detected were carbon tetrachloride, 1,1,1-trichloroethane, and trichloroethylene. The maximum concentrations of specific compounds in ground water were 5.0 micrograms per liter (µg/L) or less; the concentrations of most compounds were less than the reporting level of 0.2 µg/L. In addition, water from three wells contained detectable concentrations of one of two tentatively identified organic compounds, trimethylbenzene and isopropylbenzene.

INTRODUCTION

The Idaho National Engineering Laboratory (INEL) includes about 890 mi^2 of the eastern Snake River Plain in southeastern Idaho (fig. 1). The INEL was established in 1949 and is used by the U.S. Department of Energy to test different types of nuclear reactors and for nuclear fuel reprocessing. The INEL is one of the main centers in the United States for developing peacetime uses of atomic energy, nuclear safety research, defense programs, and development of advanced energy concepts.



EXPLANATION

—·—· BOUNDARY OF IDAHO NATIONAL ENGINEERING LABORATORY

▪ SELECTED FACILITIES AT THE IDAHO NATIONAL ENGINEERING LABORATORY

ANL-W	ARGONNE NATIONAL LABORATORY-WEST	NRF	NAVAL REACTORS FACILITY
CFA	CENTRAL FACILITIES AREA	PBF	POWER BURST FACILITY
CTF	CONTAINED TEST FACILITY (formerly called Loss of Fluid Test Facility--LOFT)	RWMC	RADIOACTIVE WASTE MANAGEMENT COMPLEX
EBR-1	EXPERIMENTAL BREEDER REACTOR NO. 1	TAN	TEST AREA NORTH
ICPP	IDAHO CHEMICAL PROCESSING PLANT	TRA	TEST REACTORS AREA

Figure 1.--Location of the Idaho National Engineering Laboratory and selected facilities.

Organic compounds historically have been used for degreasing, decontamination, and construction and maintenance in conjunction with activities at the INEL. In addition, an estimated 88,400 gal of organic waste were disposed of prior to 1970 at the Subsurface Disposal Area at the Radioactive Waste Management Complex (RWMC) (D.E. Kudera, EG&G Idaho, Inc., written commun., 1987). The buried waste included an estimated 24,400 gal of carbon tetrachloride. The remaining volume consisted of about 39,000 gal of lubricating oil used in machinery processes and about 25,000 gal of other organic compounds including trichloroethane, trichloroethylene, perchloroethylene, toluene, and benzene.

During June to November 1987, a reconnaissance-level sampling program was conducted to document concentrations of purgeable organic compounds in ground water at the INEL. The sampling program was conducted by the U.S. Geological Survey in cooperation with the U.S. Department of Energy. Water samples were collected from 82 wells; 81 of the wells obtain water from the Snake River Plain aquifer and 1 well obtains water from a perched ground-water zone. In 1987, water samples from a disposal well at the Test Area North (TAN) contained 35,000 μg/L of trichloroethylene and lesser amounts of other purgeable organic compounds (Mann and Knobel, 1987, table 2). Production wells TAN-1 and -2 also contained detectable concentrations of trichloroethylene and tetrachloroethylene.

In 1988 and 1989, 10 wells that were not sampled in 1987 were equipped with portable or dedicated submersible pumps to obtain water samples from the Snake River Plain aquifer; 1 well not sampled in 1987 was sampled with a thief sampler. Samples also were obtained from 27 wells that yielded water that contained purgeable organic compounds in 1987. Production wells TAN-1 and -2 were not sampled by the U.S. Geological Survey during 1988-91; samples were collected and analyzed by EG&G Idaho, Inc., the operating contractor for the U.S. Department of Energy (Mann, 1990).

In 1990 and 1991, routine monitoring samples were collected from eight wells in and around the RWMC, including the RWMC production well. Multiple samples were collected from three of these wells as part of a pump-comparison study. Samples were collected from 20 INEL wells that were equipped with dedicated submersible pumps but that had not previously been sampled. Additional samples were collected from 37 wells and a hot spring as part of a geochemical characterization study. Water samples were collected from five wells as part of the Naval Reactors Facility (NRF) study, three of which recently were drilled and two of which had new submersible pumps installed. Additionally, samples were collected from NRF 1 - 4, Atomic City, and Highway 3 wells.

This report describes the methods of water-sample collection and the quality assurance instituted for the sampling program, and summarizes the concentrations of purgeable organic compounds detected in water samples collected during 1990-91 from 76 wells and 1 hot spring. Many of the wells were sampled several times during 1990-91, including the RWMC wells selected for the pump-comparison study. A total of 239 water samples were collected for analyses of purgeable organic compounds.

Geohydrologic Setting

The eastern Snake River Plain is a northeast-trending structural basin about 200 mi long and 50 to 70 mi wide. The plain is underlain by a layered sequence of basaltic lava flows and cinder beds intercalated with alluvial and lakebed deposits. Individual flows range from 10 to 50 ft in thickness, although the average thickness may be from 20 to 25 ft (Mundorff and others, 1964, p. 143). The sedimentary deposits consist mainly of lenticular beds of sand, silt, and clay with lesser amounts of gravel. Locally, rhyolitic lava flows and tuffs are exposed at the land surface or occur at depth. The basaltic lava flows and intercalated sedimentary deposits combine to form the Snake River Plain aquifer, which is the main source of ground water on the plain. The depth to water in the aquifer ranges from about 200 ft below land surface in the northern part of the INEL to more than 900 ft in the southern part (Orr and Cecil, 1991).

The INEL obtains its entire water supply from the Snake River Plain aquifer. Aqueous chemical and radioactive wastes generated at the INEL were discharged to ponds and wells from 1952 to 1983. Much of the waste was injected directly into the aquifer through deep injection wells. Since 1983, most of the aqueous wastes have been discharged to unlined infiltration ponds. Many of the waste constituents enter the aquifer indirectly following percolation from the ponds through the unsaturated zone (Pittman and others, 1989).

Previous Investigations

The U.S. Geological Survey has conducted geologic, hydrologic, and water-quality investigations at the INEL since it was selected as a reactor testing area in 1949. Ground-water quality studies routinely include analyses of selected common ions, trace elements, and radionuclides. Organic compounds in ground water were investigated by Leenheer and Bagby (1982), Mann and Knobel (1987), and Mann (1990).

METHODS AND QUALITY ASSURANCE

The methodology used in sampling for purgeable organic compounds generally followed guidelines established by the U.S. Geological Survey's Organic Substances Task Group (W.L. Bradford, U.S. Geological Survey, written commun., 1985). Field methods and quality assurance practices are outlined in following sections.

Sample Containers

Baked 40-mL amber glass vials with inert septum caps, supplied by the U.S. Geological Survey's National Water Quality Laboratory (NWQL) in Arvada, Colo., were used to collect the water samples. The vials are specialty containers cleaned in compliance with U.S. Environmental Protection Agency Federal Regulations 40-136 and 40-141 (U.S. Environmental Protection Agency, 1989). Four vials of water were collected at each site and care was taken to exclude air bubbles from the samples. The samples were protected from direct sunlight and were sealed and chilled at about 4°C to minimize the loss of purgeable organic compounds through the septum caps during transport to the laboratory.

Sampling Locations and Decontamination Procedures

Nine production wells were sampled from either special sample delivery lines at the well head or from water spigots downstream from pressure tanks. One irrigation well was sampled directly from the discharge line near the well head. Five domestic wells were sampled from hydrants near the well head. Ground-water quality monitoring wells were sampled using dedicated submersible pumps or dedicated piston pumps. The hot spring was sampled from a faucet connected to a pipe used to divert the spring water. The production, irrigation, and domestic wells are equipped with dedicated pumps and supply lines and did not require decontamination. To divert excess flow and facilitate sample collection, monitoring wells equipped with dedicated submersible pumps were fitted with a portable discharge line about 2.5 ft long. The discharge line was 1.5-in. inside diameter (I.D.) galvanized-steel pipe equipped with a brass valve to control the flow rate. A galvanized T-joint was inserted into the line between the well head and the control valve, and a series of galvanized pipes, a brass valve to control the flow rate at the sampling port, and galvanized connectors were attached to the T-joint to reduce the diameter so that a 9/32-in. I.D. stainless-steel delivery pipe could be attached as the sampling point. The 9/32-in. I.D. stainless-steel pipe was bent 90 degrees to facilitate sample collection. All fittings and pipes were rinsed with deionized water before installation at the well head. Dedicated piston pumps were sampled from a Teflon[1] hose attached at a discharge port. Subsequent flushing by several hundred to thousands of gallons of water pumped from the well minimized cross-contamination from previously sampled wells. A detailed discussion of techniques used for obtaining samples from wells that represent aquifer water chemistry was presented by Claassen (1982).

Sample Collection

To ensure that water representative of the Snake River Plain aquifer was sampled, a volume of water equivalent to a minimum of three well-bore volumes was pumped from each well; at some wells, 5 to 10 well-bore volumes were pumped prior to collecting the samples. The diameter of the well bore, rather than the diameter of the casing, was used to calculate the minimum volume because of the potentially large difference between the two. In addition, temperature, specific conductance, and pH were monitored during pumping using methods described by Wood (1981). When these properties of the water stabilized, which suggested that a steady-state water quality had been reached, a water sample was collected using the following protocol:

1. Field person responsible for collecting the water sample wore disposable vinyl gloves and stood where neither the field person nor the sample could be contaminated.

2. The outside of the sample delivery line was rinsed thoroughly with well water.

3. The sample delivery line was inserted to the bottom of the sample vial and a minimum of three vial volumes was allowed to overflow.

4. The vial was lowered gently; care was taken to ensure that air bubbles did not form in the vial.

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[1] Use of trade names in this paper is for identification purposes only and does not constitute endorsement by the U.S. Geological Survey.

5. The vial immediately was capped and inspected for air bubbles; if bubbles were detected, the vial was drained, reflushed, and refilled.

6. The exterior of the vial was dried, sealed with laboratory film, labeled, and stored in an ice chest.

7. Steps 3 through 6 were repeated until the required number of vials was collected successfully.

8. The vials were transferred to a secured refrigerator until they could be transported to the NWQL for analyses. Samples were transported in a sealed ice chest by overnight-delivery mail and usually were received by the laboratory a few days after collection. Quality control procedures for the laboratory require a maximum holding time--the time from the date of sampling to date of analysis--of 14 days (Jones, 1987, p. 5); all samples were analyzed within 14 days after collection.

The ground-water samples were collected in accordance with a draft quality assurance plan which was implemented in 1988 and finalized in June 1989. Conditions at the well during sample collection were recorded in a field logbook and a chain-of-custody record was used to track samples from the time of collection until delivery to the NWQL. The quality assurance plan, field logbooks, and chain-of-custody records are available for inspection at the U.S. Geological Survey Project Office at the INEL.

Quality Assurance

A detailed description of the overall quality assurance practices and of the internal quality control used by the NWQL was provided by Friedman and Erdmann (1982) and Jones (1987). Additional quality assurance instituted during 1990-91 included: 13 blind replicates--duplicate samples with a different sample identification number sent to the same laboratory--and 4 trip-blank samples prepared at the NWQL from boiled deionized water and stored in a sample cooler throughout the duration of the sampling trip. Ground-water and quality-assurance samples were analyzed by the NWQL using a method that conforms to the U.S. Environmental Protection Agency's method 524 (Wershaw and others, 1987; Pritt and Jones, 1989). The reporting level for most analyses was 0.2 µg/L; a reporting level is the lowest measured concentration of a constituent that may be reliably reported using a given analytical method (Pritt and Jones, 1989).

Some of the blank samples have in the past contained small concentrations of one or more of the following compounds: methylene chloride; 1,2-dichloroethane; bromoform; dibromochloromethane; chloroform; toluene; and combined xylene (Mann, 1990, table 2). Some of these compounds are common environmental contaminants and frequently occur in small concentrations in deionized water (L.D. Becker, U.S. Geological Survey, oral commun., 1987). Others of these compounds may be contained in or inadvertently introduced into the deionized water during handling in the field or laboratory. However, none of four trip-blank samples analyzed during 1990-91 contained detectable concentrations of the 36 purgeable organic compounds tested.

PURGEABLE ORGANIC COMPOUNDS IN GROUND WATER

The 36 purgeable organic compounds for which analyses were performed are shown in table 1; the locations of sampling sites are shown on figure 2. The concentrations of selected purgeable organic compounds are shown in table 2 at the end of this report. Purgeable organic compounds listed in table 1, but not in table 2, had concentrations less than the reporting level of 0.2 μg/L.

Water samples from 31 wells completed in the Snake River Plain aquifer contained detectable concentrations of at least 1 of 14 purgeable organic compounds (table 2). The most commonly detected compounds were carbon tetrachloride, 1,1,1-trichloroethane, and trichloroethylene. Toluene, dichlorodifluoromethane, 1,1-dichloroethylene, chloroform, 1,1-dichloroethane, dichlorobromomethane, tetrachloroethylene, styrene, and combined xylenes also were detected in some ground-water samples. The maximum concentrations of specific compounds in ground water were 5.0 μg/L (chloroform in CFA 1) or less; the concentrations of most compounds were less than the reporting level of 0.2 μg/L. In addition, water from three wells contained detectable concentrations of one of two tentatively identified organic compounds (TIOC's), 1,2,4-trimethylbenzene and isopropylbenzene. Data for TIOC's in this report are based on comparison of sample spectra with library spectra followed by visual examination by gas chromatography/mass spectrometry analysts. Data have not been confirmed by direct comparison with reference standards. Therefore, TIOC identification is tentative, and reported concentrations are semiquantitative. None of the purgeable organic compounds exceeded maximum contaminant levels or proposed maximum contaminant levels established by the U.S. Environmental Protection Agency (table 1).

Table 1. --*Purgeable organic compounds for which water samples were analyzed and their maximum contaminant levels*

[Analyses were performed by the U.S. Geological Survey's National Water Quality Laboratory using an analytical method equivalent to U.S. Environmental Protection Agency method 524 (Pritt and Jones, 1989). Concentrations are expressed in micrograms per liter (μg/L). The reporting level for all compounds is 0.2 μg/L (Pritt and Jones, 1989). Maximum contaminant level: * indicates that total trihalomethanes--which include bromoform, chloroform, dibromochloromethane, and dichlorobromomethane--in community water systems serving 10,000 or more persons cannot exceed 100 μg/L (U.S. Environmental Protection Agency, 1989, p. 548). Symbols: -- indicates that a maximum contaminant level has not been established or proposed for that compound. Proposed maximum contaminant levels--shown in parentheses--are from J. Rodin (U.S. Environmental Protection Agency, written commun., 1989) and U.S. Environmental Protection Agency (1990). Maximum contaminant levels are in μg/L]

Compound	Maximum contam-inant level	Compound	Maximum contam-inant level
Benzene	5.0	Cis-1,3-dichloropropene	--
Bromoform	*	Trans-1,3-dichloropropene	--
Carbon tetrachloride	5.0	1,3-Dichloropropene	--
Chlorobenzene	(100)	Ethylbenzene	(70)
Chloroethane	--	Methyl bromide	--
2-Chloroethyl vinyl ether	--	Styrene	(5/100)
Chloroform	*	Methylene chloride	--
Chloromethane	--	1,1,2,2-Tetrachloroethane	--
Dibromochloromethane	*	Tetrachloroethylene	(5.0)
Dichlorobromomethane	*	Toluene	(2,000)
1,2-Dichlorobenzene	(600)	Trichlorofluoromethane	--
1,3-Dichlorobenzene	--	1,1,1-Trichloroethane	200
1,4-Dichlorobenzene	75	1,1,2-Trichloroethane	--
Dichlorodifluoromethane	--	Trichloroethylene	5.0
1,2-Dibromoethane	--	Vinyl chloride	2.0
1,1-Dichloroethane	--	Xylenes, combined	(10,000)
1,2-Dichloroethane	5.0		
1,1-Dichloroethylene	7.0		
1,2-Trans-dichloroethylene	(100)		
1,2-Dichloropropane	(5.0)		

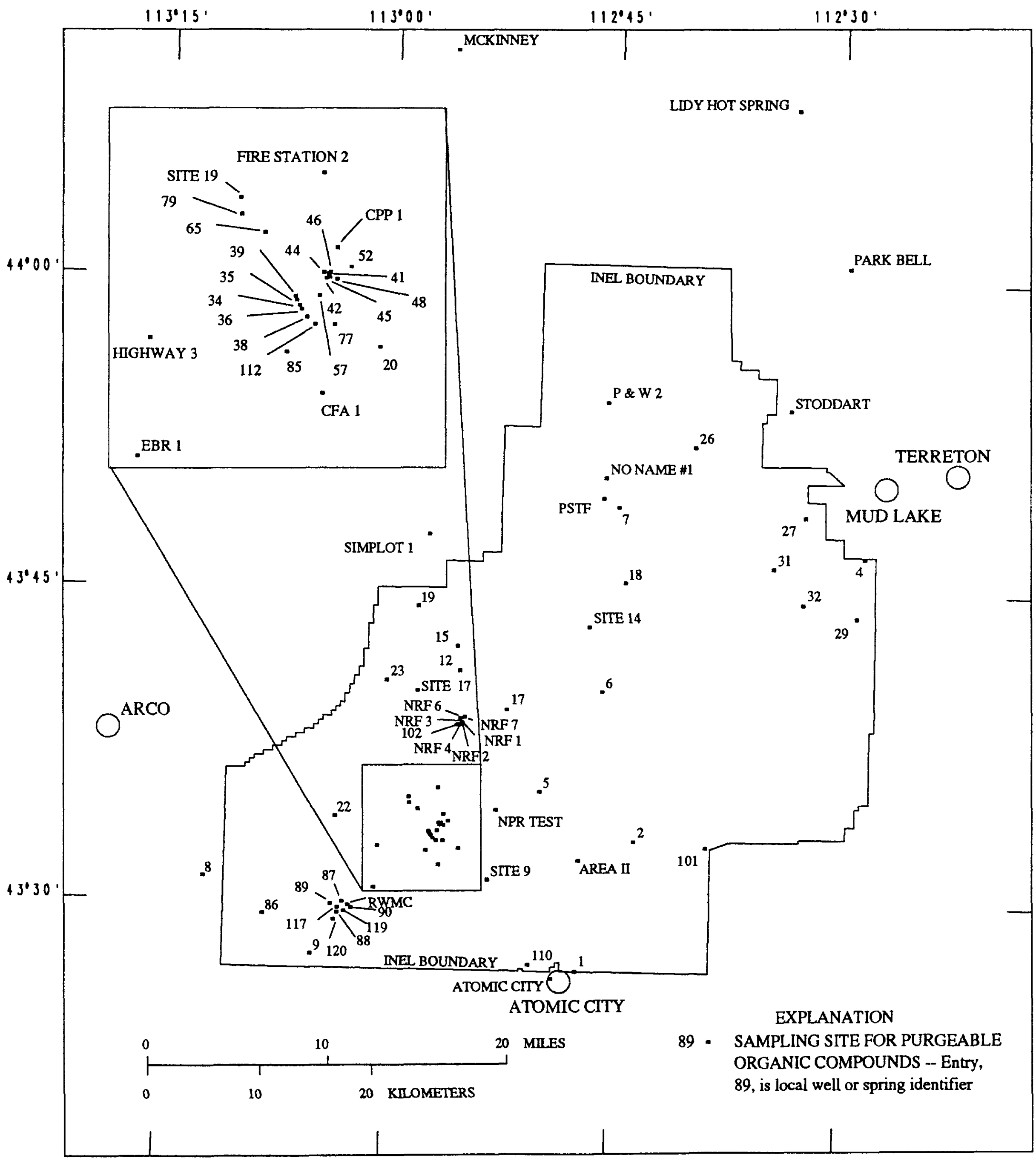

Figure 2.--Location of ground-water sites sampled for purgeable organic compounds, 1990 and 1991.

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Table 2. --*Concentrations of selected purgeable organic compounds in ground water*

[Analyses were performed by the U.S. Geological Survey's National Water Quality Laboratory using an analytical method that conforms to U.S. Environmental Protection Agency method 524 (Pritt and Jones, 1989). Concentrations are expressed in micrograms per liter (µg/L). <0.2 indicates the concentration was less than the reporting level of 0.2 µg/L. Well identifiers: see figure 2 for locations of wells and spring. Blank - indicates sample vial contained boiled deionized water. Remarks: Replicate - indicates a second sample submitted for analysis using a different identifier]

Site identifier	Date sampled	Time sampled	Carbon tetra-chloride	Chloro-form	1,1,1-Trichloro-ethane	Trichloro-ethylene	Tetra-chloro-ethylene	Dichloro-difluoro-methane	Toluene	1,1-Di-chloro-ethane	1,1-Di-chloro-ethylene	Remarks
1	05/30/91	1015	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
2	05/28/91	1145	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	05/28/91	1200	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Replicate: 1,2,4-Trimethylbenzene, [1]0.2
4	06/04/91	1010	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Isopropylbenzene, [1]0.7
	06/04/91	1200	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Replicate: Isopropylbenzene, [1]0.2
5	09/26/90	1040	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
6	09/26/90	1410	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
7	05/20/91	1130	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	05/20/91	1200	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Replicate
8	05/31/91	1405	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
9	05/31/91	0935	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
12	06/14/90	1400	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	Replicate
	06/15/90	1145	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	
15	06/06/90	1350	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
17	06/06/91	1305	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
18	10/12/90	0950	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
19	05/21/91	1015	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
20	05/30/91	1250	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
22	10/24/90	1320	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
23	05/21/91	1315	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
26	05/23/91	0950	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Isopropylbenzene, [1]0.3
27	05/23/91	1225	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
29	06/12/91	1515	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
31	06/12/91	1235	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
32	06/12/91	1800	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
34	10/02/90	1430	<0.2	<0.2	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
35	10/25/90	1050	<0.2	<0.2	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
36	10/25/90	1145	<0.2	<0.2	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
38	10/05/90	1450	<0.2	<0.2	0.6	<0.2	<0.2	<0.2	0.3	<0.2	0.2	

[1] Tentatively identified organic compound: the reported concentration generally is accurate to one order of magnitude.

Table 2. --*Concentrations of selected purgeable organic compounds in ground water*--Continued

Site identifier	Date sampled	Time sampled	Carbon tetra-chloride	Chloro-form	1,1,1-Trichloro-ethane	Trichloro-ethylene	Tetra-chloro-ethylene	Dichloro-difluoro-methane	Toluene	1,1-Di-chloro-ethane	1,1-Di-chloro-ethylene	Remarks
39	10/25/90	0950	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
41	10/16/90	1215	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
42	10/16/90	1350	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
44	10/26/90	1250	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	10/26/90	1300	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Replicate
45	10/26/90	1115	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
46	10/26/90	1430	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
48	10/31/90	1245	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
52	10/16/90	1525	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
57	05/13/91	1410	<0.2	<0.2	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
65	05/16/91	1020	<0.2	<0.2	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
77	10/25/90	1430	<0.2	<0.2	0.6	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	
79	10/01/90	1510	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
85	06/04/91	1400	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	0.9	<0.2	<0.2	
86	05/31/91	1145	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
87	01/03/90	1305	0.8	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	04/04/90	1231	0.9	<0.2	0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	07/09/90	1340	0.8	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	10/23/90	1545	0.8	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	01/03/91	1230	0.9	<0.2	0.2	0.2	<0.2	0.2	<0.2	<0.2	<0.2	
	04/02/91	1235	0.9	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	07/24/91	1105	0.7	<0.2	<0.2	0.2	<0.2	0.2	<0.2	<0.2	<0.2	
	10/15/91	1118	1.0	<0.2	0.2	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	
88	01/23/90	1223	0.9	0.5	0.2	0.6	<0.2	2.5	0.3	<0.2	<0.2	Styrene, 0.2
	04/10/90	1300	0.5	0.6	0.2	0.5	<0.2	2.6	<0.2	<0.2	<0.2	
	07/19/90	1040	2.1	0.8	0.5	1.0	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	07/19/90	1055	2.7	0.5	0.5	1.1	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/28/90	1155	1.9	0.7	0.4	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/28/90	1156	1.9	0.6	0.4	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/28/90	1157	2.9	0.4	0.5	1.0	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/28/90	1158	2.1	0.3	0.3	0.7	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/28/90	1201	2.0	0.7	0.4	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/28/90	1202	2.0	0.7	0.4	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/28/90	1203	3.4	0.5	0.5	1.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/28/90	1206	2.6	0.4	0.4	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/28/90	1207	1.9	0.6	0.4	0.7	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/28/90	1209	3.9	0.5	0.6	1.3	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/28/90	1210	1.9	0.6	0.4	0.8	<0.2	0.3	<0.2	<0.2	<0.2	Submersible pump

Table 2. --*Concentrations of selected purgeable organic compounds in ground water*--Continued

Site identifier	Date sampled	Time sampled	Carbon tetra-chloride	Chloro-form	1,1,1-Trichloro-ethane	Trichloro-ethylene	Tetra-chloro-ethylene	Dichloro-difluoro-methane	Toluene	1,1-Di-chloro-ethane	1,1-Di-chloro-ethylene	Remarks
88	08/28/90	1212	2.6	0.3	0.4	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/28/90	1215	2.2	0.6	0.4	0.9	<0.2	0.3	<0.2	<0.2	<0.2	Submersible pump
	08/28/90	1216	1.9	0.6	0.4	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/28/90	1217	2.7	0.4	0.4	1.0	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/28/90	1218	2.8	0.4	0.4	1.0	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/28/90	1219	2.0	0.6	0.4	0.8	<0.2	0.2	<0.2	<0.2	<0.2	Submersible pump
	08/28/90	1220	2.1	0.5	0.4	0.8	<0.2	0.2	<0.2	<0.2	<0.2	Submersible pump
	08/28/90	1221	3.4	0.4	0.5	1.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/28/90	1222	2.6	0.4	0.4	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/28/90	1225	2.1	0.6	0.4	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/28/90	1226	2.1	0.6	0.4	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/28/90	1227	2.9	0.4	0.4	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/28/90	1228	3.0	0.4	0.5	1.1	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/28/90	1231	2.0	0.6	0.4	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/28/90	1232	2.0	0.6	0.4	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/28/90	1233	3.5	0.4	0.5	1.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/28/90	1234	3.3	0.5	0.5	1.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/28/90	1235	2.1	0.6	0.4	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/28/90	1237	3.1	0.4	0.5	1.1	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	09/25/90	1115	1.5	0.4	0.3	0.6	<0.2	<0.2	<0.2	<0.2	<0.2	
	01/02/91	1245	2.1	0.5	0.3	0.9	<0.2	0.2	0.2	<0.2	<0.2	
	02/05/91	1402	2.2	0.5	0.3	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	02/05/91	1403	2.0	0.3	0.3	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	02/05/91	1405	2.0	0.6	0.3	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	02/05/91	1406	2.0	0.3	0.3	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	02/05/91	1407	2.1	0.5	0.3	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	02/05/91	1408	2.0	0.3	0.3	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	02/05/91	1409	2.0	0.5	0.3	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	02/05/91	1410	2.0	0.3	0.2	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	02/05/91	1411	2.0	0.5	0.3	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	02/05/91	1412	2.0	0.3	0.3	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	02/05/91	1413	2.0	0.6	0.3	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	02/05/91	1414	1.9	0.3	0.3	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	02/05/91	1415	2.0	0.6	0.3	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	02/05/91	1416	1.9	0.3	0.2	0.7	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	02/05/91	1417	2.0	0.5	0.3	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	02/05/91	1418	1.8	0.3	0.3	0.7	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	02/05/91	1419	2.1	0.5	0.3	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump

Table 2. --*Concentrations of selected purgeable organic compounds in ground water*--Continued

Site identifier	Date sampled	Time sampled	Carbon tetra-chloride	Chloro-form	1,1,1-Trichloro-ethane	Trichloro-ethylene	Tetra-chloro-ethylene	Dichloro-difluoro-methane	Toluene	1,1-Di-chloro-ethane	1,1-Di-chloro-ethylene	Remarks
88	02/05/91	1420	2.1	0.3	0.3	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	02/05/91	1421	2.0	0.5	0.3	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	02/05/91	1422	1.8	0.3	0.3	0.7	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	04/17/91	1425	2.0	0.5	<0.2	0.9	<0.2	<0.2	<0.2	<0.2	0.3	
	07/16/91	1030	1.6	0.4	0.3	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	
	07/16/91	1100	1.8	0.4	0.3	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	Replicate
	10/15/91	1550	1.4	0.4	0.2	0.6	<0.2	<0.2	<0.2	<0.2	<0.2	
89	04/10/90	1523	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	
	10/12/90	1400	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	0.2	<0.2	Combined xylenes, 0.3
	04/17/91	1015	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	10/16/91	1130	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Replicate
	10/16/91	1225	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	
90	01/23/90	1625	1.0	<0.2	0.2	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	
	01/23/90	1500	0.9	<0.2	<0.2	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	Replicate
	04/10/90	1351	1.0	<0.2	0.2	0.4	<0.2	0.3	<0.2	<0.2	<0.2	
	07/02/90	1010	1.3	<0.2	0.3	0.5	<0.2	2.4	0.2	<0.2	<0.2	Styrene, 0.2
	10/24/90	1050	1.0	<0.2	0.2	0.4	<0.2	0.3	<0.2	<0.2	<0.2	Combined xylenes, 0.2
	01/03/91	1040	1.2	<0.2	0.2	0.4	<0.2	0.6	<0.2	<0.2	<0.2	
	04/18/91	1500	1.0	<0.2	0.2	0.4	<0.2	0.3	<0.2	<0.2	<0.2	
	07/16/91	1515	1.3	<0.2	0.3	0.5	<0.2	0.5	<0.2	<0.2	<0.2	
	10/16/91	1520	1.2	<0.2	0.3	0.4	<0.2	0.8	<0.2	<0.2	<0.2	
101	05/15/91	1240	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
102	06/08/90	0955	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
110	05/08/91	1400	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
112	05/13/91	1015	<0.2	<0.2	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
117	04/10/90	1152	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	08/29/90	1120	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/29/90	1122	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/29/90	1123	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/29/90	1130	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/29/90	1133	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/29/90	1134	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/29/90	1135	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/29/90	1137	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/29/90	1140	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/29/90	1141	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	09/25/90	1500	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	04/18/91	1125	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	

Table 2. --*Concentrations of selected purgeable organic compounds in ground water*--Continued

Site identifier	Date sampled	Time sampled	Carbon tetra-chloride	Chloro-form	1,1,1-Trichloro-ethane	Trichloro-ethylene	Tetra-chloro-ethylene	Dichloro-difluoro-methane	Toluene	1,1-Di-chloro-ethane	1,1-Di-chloro-ethylene	Remarks
117	04/18/91	1145	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Replicate
	10/16/91	1005	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
119	04/09/90	0900	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Replicate
	04/09/90	1435	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	09/27/90	1200	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	04/19/91	1330	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	10/15/91	1320	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
120	01/22/90	1430	1.0	<0.2	0.2	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	
	04/09/90	1535	0.8	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	07/19/90	1200	1.1	<0.2	0.2	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	Replicate
	07/19/90	1245	1.0	<0.2	0.2	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	
	07/19/90	1410	1.2	<0.2	0.3	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	
	08/27/90	1326	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/27/90	1327	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/27/90	1328	0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/27/90	1329	0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/27/90	1332	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/27/90	1333	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/27/90	1335	0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/27/90	1336	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/27/90	1338	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/27/90	1340	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/27/90	1354	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/27/90	1355	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/27/90	1356	0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/27/90	1357	0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/27/90	1400	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/27/90	1401	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/27/90	1405	0.7	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/27/90	1406	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/27/90	1409	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/27/90	1410	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/27/90	1411	0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/27/90	1413	0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/27/90	1417	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/27/90	1418	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/27/90	1419	0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/27/90	1421	0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump

Table 2. --*Concentrations of selected purgeable organic compounds in ground water*--Continued

Site identifier	Date sampled	Time sampled	Carbon tetra-chloride	Chloro-form	1,1,1-Trichloro-ethane	Trichloro-ethylene	Tetra-chloro-ethylene	Dichloro-difluoro-methane	Toluene	1,1-Di-chloro-ethane	1,1-Di-chloro-ethylene	Remarks
120	08/27/90	1428	0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/27/90	1429	0.7	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	08/27/90	1434	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Submersible pump
	08/27/90	1435	0.7	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Piston pump
	09/25/90	1300	0.8	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	01/16/91	1030	0.8	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	04/17/91	1200	0.7	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	07/12/91	1000	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	10/25/91	0935	1.0	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
AREA II	09/20/90	1530	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
ATOMIC CITY	04/06/90	1225	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
Blank	08/27/90	1500	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Trip blank
	08/28/90	1200	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Trip blank
	08/29/90	1100	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Trip blank
	02/05/91	1400	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Trip blank
CFA 1	06/19/91	0925	<0.2	5.0	0.4	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	Dichlorobromomethane, 0.2
CPP 1	06/06/91	0930	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
EBR I	06/19/91	1110	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
FIRE STATION 2	06/19/91	1325	<0.2	<0.2	2.0	0.2	<0.2	<0.2	<0.2	<0.2	0.2	
HIGHWAY 3	10/08/91	1350	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
LIDY HOT SPRING	11/05/90	1255	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
MCKINNEY	06/13/91	1125	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
NO NAME #1	05/22/91	1140	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
NPR TEST	06/20/91	1110	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
NRF 1	12/06/90	1030	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
NRF 2	12/05/90	1010	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
NRF 3	12/06/90	1150	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
NRF 4	12/05/90	1145	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
NRF 6	09/09/91	1330	<0.2	0.4	<0.2	<0.2	0.5	<0.2	0.6	<0.2	<0.2	Dichloromethane, <0.3
NRF 7	09/10/91	1300	<0.2	<0.2	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Dichloromethane, <0.3
P & W 2	05/22/91	1405	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
PARK BELL	06/11/91	1140	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
PSTF	09/27/90	1210	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
RWMC	01/03/90	1415	1.5	<0.2	0.4	0.7	<0.2	<0.2	<0.2	<0.2	<0.2	
	04/05/90	1015	1.8	0.2	0.4	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	
	07/11/90	0910	1.7	0.2	0.3	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	
	08/30/90	1409	1.3	<0.2	0.3	0.6	<0.2	<0.2	<0.2	<0.2	<0.2	

Table 2. --*Concentrations of selected purgeable organic compounds in ground water*--Continued

Site identifier	Date sampled	Time sampled	Carbon tetra-chloride	Chloro-form	1,1,1-Trichloro-ethane	Trichloro-ethylene	Tetra-chloro-ethylene	Dichloro-difluoro-methane	Toluene	1,1-Di-chloro-ethane	1,1-Di-chloro-ethylene	Remarks
RWMC	09/24/90	0933	1.9	0.3	0.4	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	
	10/30/90	0935	1.7	<0.2	0.4	0.8	0.2	<0.2	<0.2	<0.2	<0.2	
	10/30/90	1200	1.7	<0.2	0.4	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	Replicate
	11/28/90	1345	2.0	0.2	0.4	0.8	0.2	<0.2	<0.2	<0.2	<0.2	
	12/19/90	1337	1.7	0.2	0.4	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	
	01/03/91	1045	2.3	0.2	0.5	1.1	<0.2	<0.2	<0.2	<0.2	<0.2	
	02/13/91	1335	1.8	0.2	0.4	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	
	03/19/91	0857	2.3	0.2	0.5	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	
	04/04/91	1500	2.1	0.2	0.4	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	
	05/09/91	1355	1.7	0.2	0.4	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	
	05/29/91	1358	1.9	0.2	0.4	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	
	07/24/91	0955	2.3	0.2	0.5	1.0	<0.2	<0.2	<0.2	<0.2	<0.2	
	08/22/91	1400	1.8	0.2	0.4	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	
	09/24/91	1525	2.0	0.2	0.4	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	
	10/15/91	1018	2.2	0.3	0.4	1.0	<0.2	<0.2	<0.2	<0.2	<0.2	
	11/12/91	1420	2.1	0.3	0.4	1.1	<0.2	<0.2	<0.2	<0.2	<0.2	
	12/16/91	1400	2.2	0.2	0.4	1.0	0.2	<0.2	<0.2	<0.2	<0.2	
SIMPLOT 1	05/10/91	1100	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
SITE 9	10/23/90	1500	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.4	<0.2	<0.2	
	06/25/91	1430	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
SITE 14	06/13/91	1430	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
SITE 17	06/18/91	1420	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	06/18/91	1500	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Replicate
SITE 19	05/09/91	1345	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
STODDART	06/12/91	0915	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	