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Groundwater Screening Evaluation/Monitoring Plan -- 200 Area Treated Effluent Disposal Facility (Project W-049H)

Prepared for the U.S. Department of Energy
Office of Environmental Restoration and
Waste Management

Westinghouse
Hanford Company Richland, Washington

Hanford Operations and Engineering Contractor for the
U.S. Department of Energy under Contract DE-AC06-87RL10930

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Groundwater Screening Evaluation/Monitoring Plan -- 200 Area Treated Effluent Disposal Facility (Project W-049H)

D. B. Barnett
J. D. Davis
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Page 1 of 2

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ABSTRACT

This groundwater screening evaluation/monitoring plan provides information that supports the U.S. Department of Energy's waste water Discharge Permit No. ST-4502 from the State of Washington, under the auspices of Washington Administrative Code 173-216. This report consists of the groundwater screening evaluation required by Section S.8 of the State Waste Discharge Permit for the 200 Area Treated Effluent Disposal Facility. Additionally, the report describes the groundwater evaluation program that is required by Sections S.7 and S.9 of the same permit. A separate submittal will be prepared to comply with the effluent requirements of Sections S.6 and S.9, "Effluent Variability Study," and "Monitor to Demonstrate Permit Compliance," respectively.

Three wells were drilled to define the stratigraphy, evaluate sediment characteristics, and establish a groundwater monitoring network for the discharge facility. These wells monitor groundwater quality upgradient and downgradient in the uppermost aquifer. This report proposes plans for continuing the monitoring of groundwater quality and groundwater levels after waste water discharges begin.

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ACRONYMS/ABBREVIATIONS

AKART	all known, available, and reasonable methods of prevention, control, and treatment
amsl	above mean sea level
BAT	best available technology
CDL	contract detection limit
DAF	dilution/attenuation factor
DOE	U.S. Department of Energy
Ecology	Washington State Department of Ecology
EII	environmental investigations instructions
EPA	U.S. Environmental Protection Agency
ERDA	Energy Research and Development Agency
FADE	factor of attenuation and dilution efficacy
HSDB	Hazardous Substances Data Bank
msl	mean sea level
NTU	nephelometric turbidity units
PCB	polychlorinated biphenyl
PQL	practical quantitation limit
QC	quality control
RCRA	<i>Resource Conservation and Recovery Act of 1976</i>
RL	U.S. Department of Energy, Richland Operations Office
SC	specific conductance
TC	total carbon
TDS	total dissolved solids
TEDF	Treated Effluent Disposal Facility
TIC	total inorganic carbon
TL	tolerance limit
TOC	total organic carbon
TOX	total organic halides
USGS	U.S. Geological Survey
WAC	Washington Administrative Code
WHC	Westinghouse Hanford Company

1.0 INTRODUCTION

This groundwater monitoring plan provides information supporting the U.S. Department of Energy, Richland Operations Office (RL) State Waste Water Discharge Permit No. ST-4502 (Chapter 173, Section 216, of the Washington Administrative Code [WAC]) (Ecology 1990). With the permission of the Washington State Department of Ecology (Ecology), RL will operate a facility designed to discharge treated effluent consisting primarily of cooling water. The Treated Effluent Disposal Facility (TEDF) consists of a pair of contiguous basins constructed to infiltrate treated waste water originating from the 200 Area of the Hanford Site into the soil column. The generators will subject the waste water, as required, to the best available technology (BAT), considering all known, available, and reasonable methods of prevention, control, and treatment (AKART). The facility is located approximately 4 km (2-1/2 mi) east of the 200 East Area (Figure 1-1).

This report consists of the groundwater screening evaluation required by Section S.8 of the State Waste Discharge Permit for the 200 Area TEDF. Additionally, the report describes the groundwater evaluation program that is required by Sections S.7 and S.9 of the same permit. A separate submittal will be prepared to comply with the effluent requirements of Sections S.6 and S.9, "Effluent Variability Study" and "Monitor to Demonstrate Permit Compliance."

1.1 DESCRIPTION OF CONTENTS

Chapter 1.0 describes the purpose of the groundwater monitoring plan. The information in Chapter 2.0 establishes a water quality baseline for the facility and is the groundwater screening evaluation. Chapter 2.0 summarizes detailed hydrogeologic information previously reported by Davis et al. (1993) on the geology, hydrology, and current water quality at the TEDF. The following information is included in Chapter 2.0:

- Facility description
- Well locations, construction, and development data
- Geologic and hydrologic description of the site and affected area
- Ambient groundwater quality and current use
- Water balance information
- Hydrologic parameters
- Potentiometric map, hydraulic gradients, and flow velocities
- Results of infiltration and hydraulic tests
- Groundwater and soils chemistry sampling and analysis data
- Statistical evaluation of groundwater background data
- Projected effects of facility operation on groundwater flow and water quality.

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Figure 1-1. Location of Facility for Disposal of Treated Effluent from the 200 Area.

Chapter 3.0 defines, based on the information in Chapter 2.0, how effects of the TEDF on the environment will be evaluated and how compliance with groundwater quality standards will be documented in accordance with the terms and conditions of the permit. Chapter 3.0 provides information needed to demonstrate that the monitoring wells were properly located and constructed, and that representative groundwater samples will be collected to document the status of compliance with water quality laws and the operating permit conditions. Chapter 3.0 contains the following information:

- Media to be monitored
- Wells proposed as the point of compliance in the uppermost aquifer
- Basis for monitoring well network and evidence of monitoring adequacy
- Contingency planning approach for vadose zone monitoring wells
- Which field parameters will be measured and how measurements will be made
- Specification of constituents to be sampled and analyzed
- Specification of the sampling and analysis procedures that will be used.

Chapter 4.0 provides information on how the monitoring results will be reported and the proposed frequency of monitoring and reporting. Chapter 5.0 lists all the references cited in this monitoring plan. These references should be consulted for additional or more detailed information.

1.2 OBJECTIVES OF FACILITY

The TEDF was designed and constructed to provide a means to dispose of treated waste water from the 200 Area of the Hanford Site. Unlike past waste water disposal facilities at the Hanford Site, the TEDF will receive no untreated effluents or sanitary system water. All effluents routed to the facility for disposal will have been processed, as required, by BAT/AKART. The BAT/AKART for the effluent streams are described by Brown (1993).

1.3 SCOPE OF FACILITY

The TEDF consists of: (1) a pipeline that will receive and transport treated effluent streams from sources in the 200 Area and (2) infiltration basins designed to dispose of the water to the soil column. Included in these effluent streams are cooling water, steam condensate, raw water, and waste waters from various processes. The disposal facility consists of two adjacent, 2-hectare (5-acre) infiltration basins. The paired-basin design was chosen to permit operation in alternating wetting and drying cycles. Cyclic operation will help inhibit the growth of algae and permit periodic removal of silt and precipitation products that may reduce infiltration rates.

2.0 BACKGROUND INFORMATION

Chapter 2.0 describes the effluent disposal facility, summarizes information from Davis et al. (1993), and provides projections of the effects of the TEDF on groundwater flow and water quality in the uppermost aquifer. The information in this chapter corresponds to that requested by the "Hydrogeologic Study" portion of the *Implementation Guidance for Ground Water Quality Standards* (Ecology 1994). This information is used to assess current groundwater quality and provides the basis for the groundwater monitoring plan proposed in Chapter 3.0.

2.1 FACILITY DESCRIPTION

The design capacity of the 200 Area TEDF was based on maximum expected flow rates of treated effluent. The annualized average monthly rate of discharge will be $\leq 2,400$ L/min (640 gal/min) from existing sources, with an additional 420 L/min (110 gal/min) from potential future sources, for a total of 2,820 L/min (750 gal/min) (Table 2-1). The design provides sufficient flexibility to accommodate potential future needs, as required by DOE Order 6430.1A, § 0110-3 (DOE 1989).

Table 2-1. Sources of Waste Water and Rates of Flow to the Treated Effluent Disposal Facility.

Generators (Effluent Sources)	Allowable Average Monthly Flow Rate in L/min (gal/min)
<u>200 East Area</u> B Plant chemical sewer, PUREX plant chemical sewer, 242-A-81 Water Services Building waste water <u>200 West Area</u> Plutonium Finishing Plant waste water, T Plant Laboratory waste water, T Plant waste water, 222-S Laboratory waste water, 284-W Power Plant	2,400 (640)
Future (potential) sources	420 (110)
TOTAL OF ALL CURRENT AND FUTURE SOURCES	2,820 (750)

The design of the disposal basins (Figures 2-1 and 2-2) is characterized by the following features (Crane 1994):

- A stabilized finished grade
- Side slopes that allow humans or animals to easily escape from the ponds
- Security fences according to Hanford plant standards
- Environmental and groundwater monitoring systems
- Revegetation or restabilization of disturbed ground
- Monitoring and recording of the discharge flow volume
- Automated, representative sampling of the discharge to the disposal basins.

Figure 2-1. Plan View of Disposal Basins Design.

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Figure 2-2. Elevation View of Disposal Basins Design.

(A) Section
 1" = 100' HORIZ
 1" = 10' VERT

2.2 RESULTS FROM SUBSURFACE BASELINE CHARACTERIZATION

Section 2.2 summarizes current knowledge (Davis et al. 1993) of the geology, soil chemistry, hydrology, and current groundwater quality at the TEDF site. Section 2.2 also summarizes detailed information provided by Barnett et al. (1994) on groundwater elevations and flow velocities measured at the three site characterization/monitoring wells. Information from all known wells within ~1.6 km (1 mi) of the TEDF is used for subsurface interpretation. Details of the drilling, construction, development, and aquifer testing of the three wells proposed to monitor the effects of facility operation on the uppermost aquifer are described in Sweeney (1993). This section also summarizes the results of chemical analyses of subsurface sediments from the three wells that were reported in detail by Westinghouse Hanford Company ([WHC] 1993).

2.2.1 Groundwater Monitoring/Site Characterization Wells

To determine site stratigraphy, evaluate sediment characteristics, and establish a groundwater monitoring network, three wells (699-40-36, 699-41-35, and 699-42-37) were drilled and developed during characterization activities at the TEDF site (see Figure 1-1). In addition to providing water quality baseline data for the TEDF, these wells were incorporated into the 216-B-3 Pond groundwater monitoring network to augment groundwater chemistry data for that facility (Section 2.2.4).

The three wells were constructed in compliance with requirements of the *Resource Conservation and Recovery Act of 1976 (RCRA)*. All three wells were installed with a 10-cm by 3-m (4-in. by 10-ft) stainless steel, continuous-slot screen. Additional details on well construction are provided in Chapter 3.0. Two of the wells (699-40-36 and 699-41-35) are hydraulically downgradient of the TEDF; the third well (699-42-37) is upgradient (Figure 1-1). The wells were drilled through surficial sediments to basalt bedrock. Lithologic samples were collected at a minimum of every 1.5 m (~5 ft). In addition, split-spoon samples were taken at selected intervals to evaluate physical and chemical properties of the sediments. Summary lithologic logs and a depiction of major design features of the three wells are provided in Sweeney (1993). Soil chemistry is discussed in Davis et al. (1993) and presented in detail by WHC (1993).

The wells were constructed to monitor the uppermost aquifer below the TEDF. Data from drilling of the wells indicate that the aquifer is confined at this location (Section 2.2.3.2). Pumping and slug tests were conducted in the completed wells. Dedicated Hydrostar (a trademark of Instrumentation Northwest, Inc.) pumps were installed to allow routine groundwater sampling.

Lithologic and hydrologic data from nearby wells were used to complement the information acquired from the three wells drilled at the TEDF. Information from all of these wells was then used to interpret the stratigraphy, geologic structure, and groundwater hydrology in the vicinity of the TEDF site.

2.2.2 Geology

This section briefly describes the geologic setting of the TEDF site and summarizes the stratigraphy of the sediments overlying the Columbia River Basalt.

The geology of the Pasco Basin and Hanford Site has been summarized by Myers et al. (1979), Delaney et al. (1991), and Reidel et al. (1992). The geology of the 200 Area was discussed

by Tallman et al. (1979). Lindsey et al. (1992) discussed the origin of the sediments overlying basalt bedrock and provided a detailed description of their stratigraphic relationships. More recently, Lindsey et al. (1992) nomenclature for stratigraphy was modified somewhat by Thorne et al. (1994), based on overall hydraulic characteristics of these sediments. The geology and hydrology of the TEDF site were described by Davis and Delaney (1992) and Davis et al. (1993).

2.2.2.1 Hanford Site Geology. The Hanford Site is underlain by sediments of Pliocene to Holocene age. These sediments are, in turn, underlain by a thick sequence of tholeiitic basalt flows of Miocene age (Columbia River Basalt Group [Figure 2-3]). In the upper part of the basalt sequence, relatively thin Miocene-age sediments, collectively known as the Ellensburg Formation, occur between basalt flows. The Elephant Mountain Member of the Saddle Mountains Basalt Formation is the uppermost basalt flow beneath the TEDF and the immediate vicinity.

Sediments overlying the basalt are the late Miocene-to-Pliocene Ringold Formation, relatively thin and discontinuous sediments of Pliocene-Pleistocene age (limited to the western part of the Hanford Site), the Pleistocene-age Hanford formation, and surficial alluvium and dune sand of Holocene age (Figure 2-4).

Sediments of the Ringold Formation are fluvio-lacustrine in origin and are grouped into units according to facies (Figure 2-4). The Ringold Formation is absent from portions of the northeastern part of the Hanford Site, but is up to 185 m (~600 ft) thick in the west-central part of the Hanford Site (Reidel et al. 1992). The dominant facies of the Ringold Formation are fluvial sand and gravel, fine-grained sand, silt and clay of stream overbank and lacustrine origin, and alluvial fan deposits. Variable amounts of CaCO_3 cementation occur in the Ringold Formation.

The Hanford formation consists of cataclysmic flood deposits of sand and gravel with interbedded silt that are up to 110 m (~350 ft) thick. Hanford formation sediments typically are less consolidated than Ringold Formation sediments and open-framework gravels are common (Reidel et al. 1992). The Hanford formation is informally subdivided into three principal facies: gravel-dominated (pebble to boulder in size), sand-dominated, and silty.

2.2.2.2 Geology of the Treated Effluent Disposal Facility. The stratigraphy beneath the TEDF site is shown in Figure 2-5. Figure 2-6 shows the locations of two cross sections through the TEDF site stratigraphy. Cross-section A-A' (Figure 2-7) illustrates the change in relative thickness of the Ringold Formation and the absence of the lower mud sequence immediately north-northwest of the 216-B-3 Pond complex. Cross-section B-B' (Figure 2-8) depicts the stratigraphy of the northern portion of the TEDF and the southern part of the 216-B-3C Expansion Pond of the B Pond complex.

Basalt of the Elephant Mountain Member is present ~76 to 82 m (~250 to 270 ft) beneath the land surface at the TEDF. The upper surface of the Elephant Mountain Member slopes approximately 0.5° to the southwest.

Figure 2-3. Generalized Stratigraphic Column for the Hanford Site.

TERTIARY		QUATERNARY		Period	Epoch	Group	Formation	Isotopic Age Dates Years x 10 ⁶	Member (Formal and Informal)	Sediment Stratigraphy or Basalt Flows						
Miocene		Pliocene	Pleistocene	Holocene	Columbia River Basalt Group						Ellensburg Formation					
					Saddle Mountains Basalt						Ringold Formation					
					Wanapum Basalt						Plio-Pleistocene unit					
					Grande Ronde Basalt*						Pasco gravels					
Miocene		Pliocene	Pleistocene	Holocene	Columbia River Basalt Group						Ellensburg Formation					
					Saddle Mountains Basalt						Ringold Formation					
					Wanapum Basalt						Plio-Pleistocene unit					
					Grande Ronde Basalt*						Pasco gravels					
					Imnaha						Surficial Units					
					Imnaha						Touchet beds					
					Imnaha						Pasco gravels					
					Imnaha						Plio-Pleistocene unit					
					Imnaha						Ringold Formation					
					Imnaha						basalt of Goose Island					
					Imnaha						basalt of Martindale					
					Imnaha						basalt of Basin City					
					Imnaha						Levey interbed					
					Imnaha						basalt of Ward Gap					
					Imnaha						basalt of Elephant Mountain					
					Imnaha						Rattlesnake Ridge interbed					
					Imnaha						basalt of Pomona					
					Imnaha						Selah interbed					
					Imnaha						basalt of Gable Mountain					
					Imnaha						Cold Creek interbed					
					Imnaha						basalt of Huntzinger					
					Imnaha						basalt of Lapwai					
					Imnaha						basalt of Wahluke					
Imnaha						basalt of Sillusi										
Imnaha						basalt of Umatilla										
Imnaha						Mabton interbed										
Imnaha						basalt of Lolo										
Imnaha						basalt of Rosalia										
Imnaha						Quincy interbed										
Imnaha						basalt of Roza										
Imnaha						Squaw Creek interbed										
Imnaha						basalt of Lyons Ferry										
Imnaha						basalt of Sentinel Gap										
Imnaha						basalt of Sand Hollow										
Imnaha						basalt of Silver Falls										
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Imnaha						basalt of Benson Ranch										
Imnaha						Grouse Creek Unit										
Imnaha						Wapshilla Ridge Unit										
Imnaha						Mt. Horrible Unit										
Imnaha						China Creek Unit										
Imnaha						Teepee Butte Unit										
Imnaha						Buckhorn Springs Unit										
Imnaha						Rock Creek Unit										
Imnaha						American Bar Unit										

*The Grande Ronde Basalt consists of at least 120 major basalt flows. Only a few flows have been named.

N₂, R₂, N₁ and R₁ are magnetostratigraphic units.

Figure 2-4. Generalized Stratigraphy of Sediments Above Basalt at the Hanford Site.

H9112007.1

After Lindsey et al. 1992.

Figure 2-5. Stratigraphy at the Treated Effluent Disposal Facility Site.

39412075.3

Basalt

Sand

Silt/Clay

Gravel

Potentiometric Surface (6/94)

Potential perching horizon (localized perched groundwater may also be associated with fine-grained sediments of the Hanford formation)

Lithology and stratigraphy based on data from Lindsey et al. (1991), and Delaney et al. (1991).

Figure 2-6. Locations of Stratigraphic Cross Sections.

Figure 2-7. Cross Section A-A'.

The only Ringold Formation sediments present at the TEDF are the unit A gravel and the lower mud sequence. At this location the unit A gravel is mostly a pebble-to-cobble sized gravel with intercalated sand and silt and local cementation. The lower mud sequence is largely silt, clay and very fine sand. The unit A gravel thickens from 32 m (~75 ft) at the southeast corner of the TEDF to 37 m (~120 ft) at the northwest corner. However, the lower mud sequence thins in this same direction from 24 m (~80 ft) to 12 m (~40 ft). The lower mud sequence of the Ringold Formation thins to the northwest of the TEDF and pinches out in the vicinity of the main pond of the 216-B-3 Pond complex. The upper surface of the lower mud sequence dips approximately 0.3° to the southeast (Davis et al. 1993).

Beneath the TEDF the Hanford formation is composed of a coarse-grained sequence of gravel and sandy gravel (see Figures 2-7 and 2-8). The thickness of the Hanford formation ranges from slightly more than 30 m (~100 ft) at the south edge to approximately 27 m (~90 ft) at the north edge of the TEDF. The bottom of the Hanford formation here is also approximately the bottom of the unsaturated zone.

The May Junction fault (see Figure 2-6) is located approximately 900 m (3,000 ft) east of the eastern edge of the TEDF (Reidel and Fecht 1994). This fault is well defined by a gravity anomaly and cuts sediments possibly as young as early Pleistocene (K. A. Lindsey, personal communication), but has no apparent effect on water level elevations in the vicinity. Numerical simulations of the potential effects of the fault on groundwater movement are described in Section 2.3.1.1.

2.2.3 Groundwater Hydrology

This section summarizes the findings of work to determine what controls the occurrence and movement of groundwater beneath the TEDF and vicinity. The summary includes information first presented in Davis et al. (1993) and additional information subsequently gathered as part of a continuing assessment of groundwater quality and conditions beneath the TEDF. Since the time that the three wells were drilled to characterize the hydrogeology of the TEDF site and to determine current groundwater quality, water levels in the wells have been measured monthly and groundwater chemistry has been analyzed quarterly in conjunction with 216-B-3 Pond RCRA groundwater monitoring (e.g., Barnett 1994 in DOE-RL 1994b).

2.2.3.1 Precipitation and Groundwater Recharge. Average annual precipitation at the Hanford Site from 1961 to 1990 was 159 mm (6.26 in.) (Hoitink and Burk 1994). Of this total, only 5 to 10 mm (0.2 to 0.4 in.) is estimated to contribute to groundwater recharge in the vicinity of the TEDF (Dresel et al. 1994).

2.2.3.2 Uppermost Aquifer. Data gathered during drilling of the three site characterization and monitoring wells and subsequent water level measurements in these wells indicate that the uppermost aquifer resides principally within the Ringold unit A gravel. The Ringold lower mud sequence is likely saturated, but it has very low hydraulic conductivity. Consequently, significant groundwater was not encountered until the lower mud sequence was penetrated during drilling. Once the lower mud sequence was penetrated by the three wells, water levels in the wells rose to approximately the top of the lower mud sequence, indicating that groundwater in the Ringold unit A is confined in the vicinity of the TEDF.

Based on evaluation of the most recently available (September 1994) water level measurements, the potentiometric surface beneath the TEDF approximately coincides with the contact between the Hanford formation and the Ringold lower mud sequence. The potentiometric surface for June 1994 is shown in Figure 2-9.

The composite hydrograph of Figure 2-10 shows that water levels in the three wells have not changed significantly from early 1993 to late 1994. For the first year of monitoring (early 1993 to early 1994), a noticeable decrease occurred. Since late 1993, there has been a net change in water level of only +0.07 m (0.23 ft) in well 699-42-37, +0.02 m (0.07 ft) in well 699-41-35, and -0.009 m (0.03 ft) (i.e., about the same as the error range of the measurements) in well 699-40-36. Appendix A lists water level measurements for the three wells since monitoring began in late 1992.

2.2.3.3 Results of Aquifer Testing. After completion of the three site characterization wells, slug-injection/withdrawal tests and constant-rate single-well pumping tests were performed in each well. These tests were conducted from March 18 through March 30, 1993. The testing and analysis approach and the results of analysis are discussed in detail by Swanson in Davis et al. (1993).

Significant results of the aquifer testing and analyses are provided in Table 2-2. Aquifer thicknesses used in pumping-test calculations were assumed to be ~9 m (30 ft) in well 699-40-36, ~14 m (47 ft) in well 699-42-37, and ~17 m (55 ft) in well 699-41-35. Aquifer thickness for slug-test calculations was assumed to be ~3 m (10 ft) in all three wells. Discharge rates for the constant-rate pumping tests were 0.05 L/sec (0.85 gal/min) for well 699-40-36 and 0.21 L/sec (3.3 gal/min) for wells 699-41-35 and 699-42-37.

In Davis et al. (1993), Swanson indicated that the best estimates of transmissivity for the uppermost aquifer (Ringold unit A) are those derived from constant-rate pumping tests; 2.1 m²/d (23 ft²/d) for well 699-40-36, 18.6 m²/d (200 ft²/d) for well 699-41-35, and 39.1 m²/d (420 ft²/d) for well 699-42-37. Swanson cautions that transmissivities and storativities derived from slug testing may be spurious but notes that the storativities of 10⁻³ to 10⁻⁵ are within the expected range for confined aquifers. Hydraulic conductivities calculated from constant-rate pumping tests and slug tests average 1.2 x 10⁻² cm/sec (3.3 ft/d).

Barometric efficiencies were calculated for all three wells from baseline hydrographs and barographs constructed prior to aquifer tests. These numbers range from 20% to 23% in well 699-40-36 to 54% to 65% in well 699-42-37. Tidal efficiency, a measure of potentiometric response to external loading, is related to barometric efficiency thus:

$$C = 1 - B,$$

where C is tidal efficiency and B is barometric efficiency (Todd 1980).

Tidal efficiencies at the TEDF are calculated to range between 35% and 80%, based on the barometric efficiencies given above. It follows that the amplitudes of potentiometric responses in the three wells at the TEDF due to effluent discharges would be expected to range from 0.35 to 0.80 times the average head produced in the Hanford formation from those discharges. However, the buildup of water beneath the TEDF will be gradual. The observed potentiometric response to this loading may be less than that indicated by tidal efficiencies.

Figure 2-9. Potentiometric Surface for June 1994.

Figure 2-10. Hydrographs of Treated Effluent Disposal Facility Wells.

Table 2-2. Aquifer Test Results for Treated Effluent Disposal Facility Wells.

Well	K (ft/d)	T (ft ² /d)	Drawdown (pumping tests) (ft)	Specific capacity (gal/min/ft)	S	Barometric efficiency (%)
699-40-36	2.2 ^s 1.3 ^s 2.3	22 ^s 13 ^s 23	9.6	0.089	7.4E-4 ⁱ 4.2E-4 ^w	20-23
699-41-35	2.9 ^s 2.3 ^s 3.7 ^s 3.0 ^s 1.8 3.6	29 ^s 23 ^s 37 ^s 30 ^s 100 200	16.5	0.2	4.6E-4 ⁱ 1.4E-3 ^w 1.6E-5 ⁱ 1.2E-4 ^w	30-39
699-42-37	3.8 ^s 3.2 ^s 3.4 ^s 3.4-10.6 8.9	38 ^s 32 ^s 34 ^s 160-500 420	10.7	0.31	1.1E-3 ⁱ 2.0E-3 ^w 5.4E-4 ^w	54-65

K Hydraulic conductivity.

T Transmissivity.

S Storativity.

s Results derived from slug injection or withdrawal tests. All other data are derived from water-level measurements or constant-rate pumping tests.

i Data from injection slug test.

w Data from withdrawal slug test.

2.2.3.4 Groundwater Flow Velocity. The hydraulic gradient within the uppermost aquifer beneath the TEDF is 0.002, calculated from June 1994 groundwater levels (Figure 2-9). Contours of the potentiometric surface for this same time indicate that in the vicinity of the TEDF, groundwater flow direction in the Ringold unit A aquifer is toward the southeast. Estimates of groundwater flow rates in the area now occupied by the TEDF were originally based on the numerical modeling and simple tracking of tritium migration from the 200 East Area operations to the Columbia River (Freshley and Graham 1988; Freshley and Thorne 1992). Average horizontal groundwater velocity estimated by these methods ranges from 0.2 to 2.7 m/d (0.6 to 9.0 ft/d).

Average linear groundwater flow velocities in the vicinity of the TEDF were also calculated by Barnett in Davis et al. (1993) using hydraulic conductivities from pumping tests, the June 1993 hydraulic gradient, and effective porosities determined by laboratory testing of soil samples. Using these data, flow velocities ranged from ~0.002 m/d (0.005 ft/d) to ~0.02 m/d (0.08 ft/d) at an azimuth of 160°.

During January and February 1994, direct measurements of horizontal groundwater velocity (both magnitude and direction) were made in each of the three TEDF site characterization wells using a heat-pulse flowmeter (Barnett et al. 1994). From four to eight measurements were made in each well at different levels within the screened sections of the wells. Averaged magnitudes and directions of groundwater flow measured with this instrument were 0.14 m/d (0.46 ft/d) at 181° azimuth in well 699-40-36, 0.53 m/d (1.75 ft/d) at 150° azimuth in well 699-41-35, and 0.57 m/d (1.88 ft/d) at 92° azimuth in well 699-42-37. The magnitudes were assigned an error of ±17%; directional error was approximately ±12°. The measured magnitudes may be too high by as much as a factor of two

because groundwater flow is focused by the presence of the well (Drost et al. 1968; Kearl and Gardner 1994). Thus, for example, the flow magnitude in well 699-40-36 may actually range from 0.07 m/d (0.23 ft/d) to 0.14 m/d (0.46 ft/d) (the measured value).

Calculation of these flow magnitudes from flowmeter data assumed a 20% effective porosity for the Ringold unit A formation. This value approximates the lowest effective porosity determined by laboratory tests on soils (Davis et al. 1993). It should be stressed however, that laboratory estimates of formational porosities from drilling samples may be subject to significant error. The porosity of 20%, used here, is considered more of an assumed value rather than a reliable analytical result.

Use of this same effective porosity, a hydraulic gradient of 0.002, and the *average* hydraulic conductivity calculated from slug and pumping tests (see Section 2.2.3.3) yields a flow magnitude estimate of 0.01 m/d (0.03 ft/d). This flow magnitude is roughly 10 times lower than the lowest magnitude determined by direct flowmeter measurement.

However, the average hydraulic conductivity used in the calculations above incorporates the results from slug testing which, as suggested by Swanson in Davis et al. (1993), may be unreliable. If the highest value of hydraulic conductivity determined by the constant-rate pumping test (3.2 m/d [10.6 ft/d]) (see Table 2-2) is used to calculate the magnitude of velocity, a value of 0.03 m/d (0.11 ft/d) is derived. This value compares more favorably with the lowest magnitude determined from flowmeter results, 0.07 m/d (0.23 ft/d). It is likely that magnitudes of groundwater velocities vary by a factor of 10 or more (i.e., roughly 0.03 to 0.6 m/d [0.1 to 2.0 ft/d]), depending on specific stratigraphic and lithologic conditions in the aquifer and other ambient conditions.

2.2.4 Groundwater Chemistry and Related Parameters

This section describes the results of chemical analyses of groundwater sampled in the three TEDF site characterization/monitoring wells and is organized in parallel with Section 3.4 to aid in comparing the pre-operations groundwater screening evaluation data with proposed monitoring parameters. The results cover the period from December 1992 to August 1994. Appendix B contains all groundwater chemistry data reported for that time period. These results were also reported in RCRA quarterly groundwater monitoring reports (e.g., Barnett 1994 in DOE-RL 1994b).

The various methods used to evaluate data from the TEDF wells indicate that the data are of acceptable quality. However, groundwater sample collection and analysis are subject to anomalies and errors. The following sections discuss these sampling and analytical errors, as well as the analytical results.

Groundwater in wells 699-40-36, 699-41-35, and 699-42-37 has been sampled quarterly, eight times since the wells were completed and developed in December 1992. The results of this sampling have been used to determine baseline (prior to facility operation) water quality. Table 2-3 lists the sampling dates and corresponding purge rates.

Table 2-3. Sampling Dates and Corresponding Purge Rates for Monitoring Wells.

699-40-36	Purge rate (gal/min)*	699-41-35	Purge rate (gal/min)*	699-42-37	Purge rate (gal/min)*
Aquifer test	0.9	Aquifer test	3.3	Aquifer test	3.3
12/21/92	2.61	12/21/92	4	12/22/92	4
02/22/93	6	02/22/93	1	02/23/93	3
05/13/93	6	05/13/93	6	05/13/93	5
08/09/93	6	08/09/93	6	08/30/93	4.6
10/08/93	5	10/08/93	5	10/08/93	5
01/05/94	1.5	01/19/94	6	01/07/94	7.8
04/14/94	6	04/14/94	6	04/11/94	6
08/01/94	5	08/03/94	4.3	07/29/94	6.6

*To convert gal/min to L/sec, multiply gal/min by 6.308×10^{-2} .

As noted in the table, the purge rates for all sampling dates were not consistent. When purge rates exceeded the sampling rates, analytical results for some constituents of these samples may not be fully representative of the aquifer. Potential anomalies introduced by variable purging and sampling rates were taken into consideration during evaluation of the data and are discussed later in this section. Future groundwater sample collections from these wells will use a consistent purge rate and a sampling rate that is less than or equal to the rate of pumping used for well development (see Section 3.5.1).

2.2.4.1 Turbidity and Other Field Parameters. Measurements of turbidity are used to determine the relative amount of particulate matter in water. High particulate content of water samples interferes with analytical methods and may cause analytical results to be erroneously high or low, depending on the analyte and the analytical method used. Consequently, groundwater samples with low turbidity are sought. Turbidity values are known to be influenced by the pumping rates during purging and sampling. For all TEDF groundwater samples collected to date, turbidity was measured in the laboratory, rather than at the well site. Hence, samples were collected without prior knowledge of the turbidity of the water. Had turbidity been known to be high at the time of sampling, the well could have been purged longer to achieve a lower turbidity, thus helping eliminate potential laboratory interferences.

Well 699-40-36 had turbidities ranging from 10 to 15 nephelometric turbidity units (NTU) at purge rates of 19 to 23 L/min (5 to 6 gal/min). These values are at the high end of the acceptable range. During the January 5, 1994 sampling date, an NTU of 0.60 was reported. This value is well within the range of acceptability and correlates to the lowest purge rate. This well had an outlier turbidity value of 750 NTU for the sample collected on April 14, 1994. Analytical results associated with that sample date may be affected by interference from high turbidity. Well 699-41-35 had turbidities ranging from 7.4 to 4.6 NTU at purge rates of 19 to 23 L/min (5 to 6 gal/min). Those turbidities are at the high end of the acceptable range due to the high purge rate. This well had two outlier turbidity values of 42 and 28 NTU for samples collected on January 19, 1994 and April 14, 1994, respectively. The chemical analyses associated with these samples may be affected by

purge rates of 19 to 27 L/min (5 to 7 gal/min). During the April 11, 1994 and July 29, 1994 sample collections, turbidity was 63 and 44 NTU, respectively. Consequently, the analytical results for some constituents in these samples may be affected by interference due to the relatively high turbidities.

The other field parameters; specific conductance (SC), pH, temperature, and water level, were measured in each of the three wells. Water level was measured monthly and is discussed in Section 2.2.3.2. The other field parameters were measured quarterly. The field parameter values measured in samples from the eight sampling dates were extremely consistent at each well and provide a reliable baseline for groundwater quality.

2.2.4.2 Cations and Anions. Ammonia/nitrogen was detected in all three wells, but laboratory quality control (QC) checks of the data indicated that the detections could not be confirmed. Hydrazine was detected once (5/13/93) in well 699-40-36. All of these detections are in the low-level range and are consistent with data reported from wells upgradient from the TEDF. Consequently, they are considered to be baseline values for the TEDF. Sulfide and coliform bacteria were not detected.

Samples were collected for analysis of cations, anions, alkalinity, total carbon (TC), total dissolved solids (TDS), and SC to provide information for evaluating water quality parameters and charge-balance equations. Charge balance can be used to verify sampling and laboratory analysis precision and accuracy. Therefore, attempts were made to assess the relationships of charge balance to TDS and SC. However, these attempts did not consistently indicate correlations.

The relationship of TDS to major cations and anions is as follows:

$$TDS (\mu g/L) = \Sigma (cations + alkalinity (0.6) + anion) \mu g/L.$$

If alkalinity analyses are not available, then TC and total organic carbon (TOC) may be used to calculate alkalinity indirectly by the relationship:

$$(TC-TOC) \times 4 = Alkalinity.$$

This relationship is based on the assumption that total inorganic carbon (TIC) is equal to TC minus TOC. TIC is expressed as an equivalent concentration of calcium carbonate ($CaCO_3$).

The relationship of TDS to SC is as follows:

$$TDS (\mu g/L) = SC (\mu mhos/cm) \div 1.7.$$

Charge balance, the calculated percent deviation between the observed total cations and anions (each measured in milliequivalents (meq)/L), can be determined by using the following equation:

$$Charge\ balance = \frac{total\ cations - total\ anions}{total\ cations + total\ anions} \times 100\%$$

where:

$$Total\ cations\ (meq/L) = \frac{[NA^+]}{22.9898} + \frac{[K^+]}{39.102} + \frac{[Ca^{+2}]}{20.04} + \frac{[Mg^{+2}]}{12.156}$$

and

$$\text{Total anions (meq/L)} = \frac{\text{alkalinity}}{50} + \frac{[\text{Cl}^-]}{35.453} + \frac{[\text{F}^-]}{18.9984} + \frac{[\text{NO}_3^-]}{62.0049} + \frac{[\text{SO}_4^{2-}]}{48.0308}$$

The concentration units in these equations are milligrams per liter; the divisors are the equivalent weights of the respective species. A charge balance can be computed provided that data for all of the key components are available. Key components include sodium, potassium, calcium, magnesium, alkalinity, chloride, fluoride, nitrate, and sulfate. If results for nitrate are available, they are included in the charge-balance calculation but are not believed to be quantitatively significant. Consequently, a charge balance typically is determined whether nitrate analyses are available or not.

Alkalinity was not measured nor was it calculable from TC because TDS was not analyzed on the same date as TC. Based on evaluation of the relationship of SC to TDS, a $\pm 25\%$ difference was observed between analyzed and calculated TDS. No conclusions are reached at this time with respect to the relationship of SC to TDS for the three TEDF wells.

Evaluation of the chemical analysis data, based on cation and anion information, indicates that the analyses are of acceptable quality and that the groundwater in all three site characterization wells currently complies with all primary drinking water standards. Nevertheless, some outlier values were noted for cations in which the result for the analysis of the unfiltered sample differed significantly from the result for the filtered sample. These outliers indicate sampling or laboratory error, because the constituents for which outlying values were reported readily dissolve in water, and a filter would not catch dissolved particulates. Samples analyzed for anions are not filtered; consequently, identification of outlying analytical results for anions is based on values that are not within historical trends.

In well 699-40-36, calcium was approximately two times higher in the unfiltered than in the filtered sample taken on April 14, 1994; magnesium was three times higher in the unfiltered than in the filtered sample taken on April 14, 1994; nitrate in the sample collected on May 13, 1993, was three times lower than in historical samples; potassium in the unfiltered sample taken on April 14, 1994, was two times higher than in the filtered sample; and sulfate in samples collected on February 22, 1993 and August 8, 1993, were two times higher than in historical samples. In well 699-41-35, magnesium in the unfiltered sample was 0.25 that of the filtered sample taken on February 22, 1993. In well 699-42-37, nitrate in the sample collected on August 30, 1993, was four times that of historical samples. By comparing sample collection dates with well purging rates, a correlation is apparent between high purge rates and outlier data.

2.2.4.3 Metals and Cyanide. Evaluation of metals analyses was also in terms of the comparability of results for filtered and unfiltered samples. If the results agreed within 20%, the data were considered to be good. If the results did not agree within the limits of this criterion, the disagreement could be attributed to high turbidity resulting from high purge rates.

For results from the eight sampling dates, the following outlier values for metals were noted. In well 699-40-36, barium in the unfiltered sample was five times higher than in the filtered sample taken on April 14, 1994; cobalt in the unfiltered samples was two times higher than in the filtered samples taken on August 9, 1993 and April 14, 1994; copper was seven to eight times higher in the unfiltered than in the filtered samples collected on May 13, 1993 and April 14, 1994; manganese was five times higher in the unfiltered than in the filtered sample collected on April 14, 1994; nickel was two to three times higher in the unfiltered than in the filtered samples taken on August 9, 1993,

October 8, 1993 and April 14, 1994; and tin was two times higher in the unfiltered than in the filtered sample taken on August 9, 1993. In well 699-42-37, barium was two times higher in the unfiltered than in the filtered sample taken on April 11, 1994, and manganese was two times higher in the unfiltered than in the filtered sample taken on April 11, 1994. As with anions, a correlation exists between high purge rates and outlier data for metals.

Data from each well showed no correlation between aluminum, chromium, iron, and zinc values for filtered versus unfiltered samples. This same lack of correlation is seen for groundwater samples from throughout the Hanford Site and can be attributed to well construction and to sampling and analytical errors. Consequently, both filtered and unfiltered samples will be used in evaluating future analytical data for metals.

Cyanide was not detected in any of the three wells at any sampling date.

2.2.4.4 Organic Compounds. Analyses of organic compounds focused on both specific constituents and broad-based indicators. Analyses were made of total organic halides (TOX), TOC, volatile organic compounds, semivolatile organic compounds, phenols, pesticides, polychlorinated biphenyl (PCB), and organophosphates. The relationships between the detection of specific constituents, TOC, and/or TOX were reviewed. Audits of laboratory data analyses and reporting suggest that the results of TOX analyses from December 1992 to December 1993, should be treated as suspect. After December 1993, TOX was analyzed by a different laboratory for which audit results have been more satisfactory.

For the eight sampling dates, all detections of organic compounds were below the laboratory contractual reporting limits. The following are the only detections of organic compounds. The number in parentheses after the name of the organic compound indicates the number of detections (if more than one) or the type of laboratory error. In well 699-40-36, heptachlor epoxide (3), methylene chloride (blank contaminated), and tris-2-chloroethyl phosphate were detected. In well 699-41-35, methylene chloride (blank contaminated), 4,4'-DDD, beta-BHC, tris-2-chloroethyl phosphate (2), and bis(2-ethylhexyl) phthalate were detected. In well 699-42-37, 2,4,5-T, methylene chloride (blank contaminated), tris-2-chloroethyl phosphate, cis-1,2, dichloroethylene, and heptachlor were detected.

2.2.4.5 Radionuclides. Radionuclides are being monitored in the three TEDF wells to establish baseline values for groundwater. All results to date for each well are below contractual reporting limits. Iodine-129 and tritium, among the most mobile of radionuclides found in groundwater elsewhere beneath the Hanford Site, were not detected. Gross alpha and gross beta are being monitored in all wells but are very sensitive to interferences from dissolved solids (see Sections 2.2.4.1 and 2.2.4.2). Well 699-40-36 had outliers for gross alpha (three times the mean value on April 14, 1994) and gross beta (2 to 5 times the mean values on April 14, 1994 and August 1, 1994, respectively). Gross gamma was analyzed in all wells and detected in well 699-41-35 on October 8, 1993, and in well 699-42-37 on October 8, 1993. Radium was analyzed for all wells and detected only in well 699-40-36 on May 13, 1994.

2.2.5 Statistical Evaluation of Groundwater Background Data

Seven quarters of monitoring data from the three wells were statistically evaluated to derive values representative of background groundwater characteristics for the TEDF. Background groundwater concentration, for a particular constituent of concern, is statistically defined as the 95% upper tolerance interval, with 95% confidence. These background concentrations represent conditions

present in the uppermost aquifer prior to the onset of discharges to the TEDF. The assumptions, objectives, and approach used for the statistical evaluation are described below.

2.2.5.1 Assumptions. Certain assumptions concerning the statistical model or methods are required to properly determine and interpret background groundwater characteristics at the TEDF. These assumptions are stated below.

- Groundwater monitoring data are representative of actual groundwater conditions in the uppermost aquifer beneath the site.
- Groundwater chemistry data, except for pH and conductivity, are log-normally distributed. The use of a log-normal distribution as a default statistical model is justified because: (1) most groundwater monitoring data are positively skewed and are restricted to positive values, (2) all of the available statistical tests for distributional assumptions are inadequate when the sample size is small, and (3) the U.S. Environmental Protection Agency's (EPA) experience with contaminant concentration data, and groundwater monitoring data in particular, suggests that a log-normal distribution is generally more appropriate as a default statistical model than a normal distribution (EPA 1992b). For field-measured pH and conductivity data, normal distributions are assumed because each data point is the average of quadruplicate measurements (i.e., the central limit theorem applies in this case).
- Seasonal or temporal variations are insignificant. The test for seasonality generally requires a minimum of 2 yr of monitoring data. The existing data are insufficient to test and/or to adjust for seasonal variation.

2.2.5.2 Objectives. Objectives of the statistical evaluation were to: (1) establish baseline values (at each monitoring well) for constituents of potential concern, and (2) provide information to enable Ecology to determine enforcement limits for specific constituents in groundwater. Enforcement limits are established for specific constituents of concern to delineate groundwater contamination. Enforcement limits are determined on a site-specific basis and are based in part on background concentrations of these constituents in groundwater.

2.2.5.3 Statistical Approach. In general, background groundwater data were statistically evaluated following procedures outlined by the EPA (1989, 1992b).

Groundwater chemistry data from the three monitoring wells (699-42-37, 699-41-35, and 699-40-36) were obtained from the Geosciences Data Analysis Toolkit (GeoDAT) database. Analytical results were reviewed under the aegis of the RCRA QC program. The QC program that supports the sampling and analysis of groundwater from the TEDF is described in the quarterly RCRA groundwater monitoring report (DOE-RL 1994b). Data flagged with 'B' (contaminated blank) or 'H' (holding time exceeded) qualifiers were eliminated from further statistical evaluation because the validity of such data is in doubt. However, the usefulness of any data flagged with a 'Q' (suspect QC data) qualifier was evaluated based on consistency with the historical trend.

Additionally, concentrations of iron, manganese, barium, calcium, magnesium, copper, zinc, gross alpha, and gross beta in the unfiltered samples collected on 4/14/94 from well 699-40-36 were not used to calculate background levels because they are higher than values reported for prior quarters (i.e., are not representative of groundwater quality conditions). These elevated concentrations are probably related to the high turbidity (750 NTU) from this well on those same sample dates.

Groundwater chemistry data from each monitoring well were visually screened and tested at the 5% level of significance for outlier(s) using Box-and-Whisker plots and the Grubbs method, respectively (EPA 1989). Data were not used to calculate background concentrations if they were determined to be outliers.

Groundwater monitoring data are often reported as "not detected" and a value (such as the appropriate method detection limit) is given. Statistical treatment of nondetects depends on the percentage of nondetects in the database. When the percentage of nondetects was small (less than 15%), a replacement value of 1/2 the detection limit was used for the not detected data point. When the percentage of nondetects was between 15 and 50%, Cohen's method was applied to the log-transformed data values to calculate estimates of the true mean and standard deviation (EPA 1989). For example, Cohen's method was used for chromium (well 699-41-35) and nitrate (wells 699-40-36 and 699-41-35) data. When the percentage of nondetects was larger than 50%, summary statistics (sample mean and standard deviation) were not calculated.

An upper tolerance limit (TL) with a coverage of 95% and a confidence level of 95% based on log-normal distribution was used to calculate background concentrations. For pH, a two-sided TL based on normal distribution was calculated. For conductivity, a one-sided TL, based on normal distribution, was calculated. These TLs are of the form:

$$\bar{X} + ks \text{ (one-sided)}$$

$$\bar{X} \pm ks \text{ (two-sided);}$$

where $\bar{X}$ is the sample mean, s is the sample standard deviation, and k is a multiplier based on the coverage, the confidence level, and sample size. Values of k can be obtained from EPA (1989).

The tolerance interval is designed to cover only a specific proportion (e.g., 95%) of the population of interest. Therefore, 1 of every 20 samples could be expected to exceed the upper TL, even when no contamination has occurred (EPA 1992b). In such cases, a well should be resampled in order to verify the presence or absence of contamination.

2.2.5.4 Results of Groundwater Statistical Evaluation. Background groundwater characteristics were evaluated for each well using data collected from December 1992 to April 1994. A summary of the status of all constituents of potential concern is provided in Appendix C. Additional statistics and conditional statements associated with computation of the TLs listed in Appendix C.1 are provided in Appendix C.2.

Of the 39 constituents of potential concern, total trihalomethanes, methylene chloride, total suspended solids, biological oxygen demand (5 day), orthophosphate, and radium-226 were not analyzed. In addition, insufficient data (from only one quarter) inhibited calculating background values for total radium. An additional 13 analytes were essentially nondetects.

For arsenic, the percentage of nondetects was between 15 and 50%. The replacement method was used instead of Cohen's method because: (1) the range of data values was very narrow (from 1.38 to 5 parts per billion [ppb]) and (2) Cohen's method produces a nonconservative background value (i.e., 74 ppb rather than 21 ppb for well 699-40-36).

2.2.6 Sediment Characterization

Eleven split-spoon samples were collected from sediments beneath the TEDF during drilling of the three site characterization/monitoring wells. Physical properties and chemistry of these samples were analyzed in the laboratory. Results of physical properties analyses were used in numerical modeling of groundwater flow. Laboratory chemical analyses were used to verify the absence of contamination. Tests also were made to determine the initial infiltration capacity of the near-surface Hanford formation gravels. The results were used to help determine the size of the infiltration basins. A brief summary of the analytical results is given below. A more complete discussion of these tests and analyses can be found in Davis and Delaney (1992) and Davis et al. (1993).

2.2.6.1 Physical Properties of Sediments. Laboratory tests were performed on 11 split-spoon samples to determine specific gravity, moisture content, grain-size distribution, vertical saturated hydraulic conductivity, porosity, and calcium carbonate content. The lower mud sequence of the Ringold Formation was found to have an extremely low average saturated hydraulic conductivity, approximately 10^{-8} cm/sec. Samples from the Ringold unit A had an average saturated hydraulic conductivity of approximately 10^{-7} cm/sec. Hanford formation saturated hydraulic conductivities averaged approximately 10^{-2} cm/sec.

2.2.6.2 Infiltration Tests. Two constant-head tests and one falling-head test were conducted in a vertically emplaced culvert with an annular seal. The culvert was emplaced within Hanford formation sediments in a 1.2-m (4-ft) deep excavation in the bottom of a 2.7-m (9-ft) deep borrow pit at the site of the TEDF. The test results suggest that the vertical hydraulic conductivity at this depth and location ranges from 0.5 to 5.0 cm/sec (1 to 10 ft/min).

2.2.6.3 Sediment Chemistry. In addition to samples for physical properties testing, 20 split-spoon samples from the three site characterization wells were collected to determine background values for sediment chemistry to verify that no contamination was present. Thirteen of those samples were taken from the vadose zone in the Hanford formation. Seven samples were taken from the saturated zone in the lower mud sequence and unit A of the Ringold Formation.

The samples were analyzed for metals (including hexavalent chromium), anions, cyanide, pH, gross alpha, gross beta, gamma energy, and volatile and semivolatile organic compounds. The results were compared to cleanup standards of the WAC 173-340, *Model Toxics Control Act -- Cleanup*, and background values for the Hanford Site (DOE-RL 1993). Data from these analyses and documentation of data validation are in WHC (1993).

Appendix D contains the results of analyses for inorganic constituents (i.e., metals, anions, cyanide, radionuclides, and pH). All results are either below detection limits or are below concentration levels for which cleanup is required by WAC 173-340.

The results of analyses for volatile and semivolatile organic compounds are below detection limits for most samples; the results for all samples are well below applicable cleanup levels of WAC 173-340. Those compounds that were above the detection limits are listed in Appendix D.

2.3 PROJECTED EFFECTS OF FACILITY OPERATION ON GROUNDWATER FLOW AND CONTAMINANT TRANSPORT

This section summarizes the results of numerical simulations of: (1) the potential effects on groundwater flow in the uppermost aquifer from operating the TEDF, and (2) the transport of residual constituents of the waste water through the vadose zone and uppermost aquifer.

2.3.1 Flow Modeling

Numerical simulations of groundwater flow focused on the question of whether facility operation at an average annualized discharge rate of 2,270 L/min (600 gal/min) would result in a rise in the water table or change of flow direction in the uppermost aquifer sufficient to potentially remobilize known vadose zone contamination associated with parts of the 200 East Area and the 216-B-3 Pond complex. Details of the flow modeling were reported in Section 4.6 of Davis et al. (1993). This work is summarized in Sections 2.3.1.1 through 2.3.1.4.

2.3.1.1 Conceptual Flow Model. Information from the TEDF site characterization work and 216-B-3 Pond monitoring activities provided the basis for the conceptual model of the hydrogeology in the area potentially affected by the TEDF. The domain of the flow model covered an area of 17,200 hectare (42,500 acres); its dimensions were 15,400 m (50,525 ft) north-south and 11,200 m (36,745 ft) east-west.

In addition to unconfined flow in gravels of the Hanford formation in the immediate vicinity of the 216-B-3 Pond complex, the conceptual model accounted for confined or semiconfined flow in unit A of the Ringold Formation and unconfined flow in the silty-sandy gravel of the Hanford formation south and east of the facility. In those areas to the south and east of the TEDF, the uppermost aquifer was considered to be in the sandy or silty-sandy gravel of the Hanford formation immediately above the lower mud unit of the Ringold Formation. In the part of the conceptual model pertaining to the TEDF and vicinity, the Ringold lower mud separated the Ringold unit A aquifer from the overlying Hanford formation gravels.

To limit the model to a manageable size, its eastern boundary was terminated at the eastern tip of the basalt outcrop that comprises Gable Mountain. Gable Mountain and Gable Butte formed the north edge of the conceptual model. West of the TEDF, groundwater of the uppermost aquifer was considered to be a hydrologic plateau. To the south, basalt comprising Rattlesnake Mountain formed the closest natural hydraulic boundary to the TEDF.

The boundaries and areas in which basalt is above the water table within the model domain were treated as no-flow boundaries. The boundaries beyond the area known to be influenced by past and current discharges to the 216-B-3 Pond complex, and not otherwise defined as no-flow boundaries because of the presence of basalt above the water table, were defined as constant-head boundaries.

The location of the bottom of the model domain depended on the elevations of the tops of the Elephant Mountain Basalt and lower mud unit of the Ringold Formation. The top of basalt was the bottom of the model domain where the elevation of basalt was above mean sea level (amsl). Where neither the top of the basalt nor the top of the Ringold lower mud exceeded mean sea level (msl), the top of the Ringold lower mud served as the bottom of the model domain. Where the top of the basalt was below and the top of the Ringold lower mud was amsl, the bottom of the model domain was defined as msl.

Five geologic strata were included in the conceptual model. From top to bottom of the model domain these were: (1) the Pasco gravels of the Hanford formation, (2) sandy or silty-sandy gravel of the Hanford formation, (3) the lower mud unit, (4) unit A of the Ringold Formation, and (5) the Elephant Mountain Basalt. For purposes of modeling, the geologic strata of interest were generally considered to be continuous throughout the domain unless information was available that indicated otherwise. Elevations of the top of the two Ringold Formation units and the Elephant Mountain Basalt were determined from their respective structure contour maps. Data for precisely locating the contact between the two Hanford formation units were not available for most of the model domain.

The conceptual model accounted for the apparent absence of the Ringold lower mud unit beneath much of the 216-B-3 Pond complex. East and south of the 216-B-3 Pond complex, flow in the uppermost aquifer was considered to be confined or semiconfined by the lower mud unit. The effect of the May Junction Fault (Figure 2-6) on groundwater flow downgradient from the TEDF is not known but, for purposes of the numerical simulation, the fault was conservatively assumed to hydraulically connect the semiconfined aquifer of the Ringold A unit west of the fault with the unconfined aquifer of the Hanford formation east of the fault.

In general, the unconfined aquifer above the Ringold lower mud unit was initially assumed to occur in the Pasco gravels sequence of the Hanford formation where the top of basalt served as the bottom of the model. Elsewhere, the unconfined aquifer was initially assumed to occur in the sandy or silty-sandy gravel of the Hanford formation. Refinements of these assumptions were subsequently made based on results from calibration of the model.

2.3.1.2 Numerical Model. VAM3DCG, a finite-element numerical model for single- or multi-dimensional solution of Darcy's flow equation, was used to simulate the effects of facility operation on groundwater flow. A three-dimensional finite-element grid was superimposed on the conceptual model. Grid nodes were distributed in four horizontal layers to portray the four transmissive strata. The planar coordinates of grid nodes were consistently spaced 200 m (656 ft) apart for each stratum depicted.

The vertical coordinates of grid nodes depended on the local stratigraphy. The distance between two vertically adjacent nodes represented the thickness of the specified stratum between that pair of nodes. The lower mud and/or A unit of the Ringold Formation were considered to be present only if their respective thicknesses were more than 6 m (20 ft). To prevent introducing aspect-ratio instabilities into the model because of local thinning or absence of the lower mud and A units of the Ringold Formation, each vertical coordinate was assigned a numerical value which ensured that the minimum distance between two vertical nodes was 20 m (66 ft).

The finite elements were constructed from the horizontal and vertical lines that connected adjacent nodes. The elements thus were defined by the eight line segments connecting the eight nodes forming the corners of each element. The elements were assigned material properties of the stratigraphic units present in each area defined by the four vertical-line segments of each element.

Hydraulic input parameters required for each of the four transmissive units were the vertical and horizontal hydraulic conductivities, the water contents of saturated strata, and storativities. The hydraulic data used in the model were based on laboratory analyses, field determinations of near-surface infiltration rates, and aquifer testing (see Section 3.4 and Chapter 4.0 of Davis et al. [1993]). These values were subsequently adjusted during model calibration.

The primary objective of the model calibration was to evaluate whether the values and distribution of hydraulic properties used in the model adequately represented the flow system and to adjust the model as needed to achieve adequate representation. Because of the relatively large size of the model domain and the scale-dependent uncertainties in the hydraulic input parameters and hydrogeology, the calibration focused on demonstrating general agreement between model-generated results and results from monitoring well measurements.

First, VAM3DCG was run for steady-state conditions using only the boundary conditions. The result was a simulation of the hydrologic conditions within the model domain prior to effluent discharges to the 216-B-3 Pond complex. These results were compared to the hindcast water table map (Figure II.3-D-14 of the Energy Research and Development Agency [ERDA] 1975). This comparison indicated that the boundary conditions were suitable; hence, the calibration proceeded to a simulation of the transient effects of 45 yr of discharges to the 216-B-3 Pond.

The results from this second calibration were compared to the water table map of Kasza and Schatz (1989). The comparison indicated that the model-generated water table adequately depicted the results of measurements in monitoring wells. The calibrated output from this step was used as the initial conditions of subsequent simulations to predict the transient effects on the uppermost aquifer of operating the TEDF at different rates of discharge.

Because of the heterogeneity of hydraulic properties, the variations in thickness or continuity of modeled strata within the model domain, and an assumed hydraulic interconnection along the May Junction Fault between the Ringold unit A and the sandy or silty-sandy gravels of the Hanford formation, the hydrology was categorized strictly for purposes of modeling in terms of an "upper" and a "lower" aquifer. The upper aquifer was defined to include the Pasco gravels of the Hanford formation and the upper portion of the Hanford formation sandy or silty-sandy gravels. The lower aquifer was defined to include the Ringold unit A and the lower portion of the Hanford formation sandy or silty-sandy gravels.

2.3.1.3 Results of Flow Modeling. Predictive simulations were made of a 40-yr period to determine the effects on the uppermost aquifer during a 30-yr TEDF operating period and a 10-yr period of aquifer re-equilibration. Simulations were made for an annualized average discharge of 2,270 L/min (600 gal/min) to the TEDF facility and an assumed annualized average discharge of 265 L/min (70 gal/min) to the 216-B-3 Pond complex.

At those average rates of discharge to the two facilities during the 30-yr period, the hydraulic head appears to reach an approximate steady state between 10 and 20 yr after discharges begin. The results of the simulation additionally indicate that the mound in the water table beneath the 216-B-3 Pond complex will rapidly recede from the current level, becoming unrecognizable within 10 yr, while a new but much smaller mound develops beneath the TEDF (Figures 2-11 and 2-12).

At these annualized average rates of discharge, waste water can be expected to accumulate in the Pasco gravels of the Hanford formation above the lower mud sequence. However, the high transmissivity of this unit prevents a prominent mound in the water table from forming by rapidly conveying water laterally. Flow from the TEDF, as well as from the decaying mound in the water table beneath the 216-B-3 Pond complex, is shown by modeling results to continue laterally until the Ringold lower mud unit is not present and the water has the opportunity to recharge either the Ringold unit A or the silty-sandy gravels of the Hanford formation underlying the Pasco gravels.

Figure 2-11. Elevation of the Top of the "Upper Aquifer System" after 10-Year Intervals from the Initiation of Discharge.

Simulated rate of discharge to the B Pond complex is 70 gpm.
Simulated rate of discharge to the TEDB is 600 gpm.

Figure 2-12. Elevation of the Top of the "Lower Aquifer System" after 10-Year Intervals from the Initiation of Discharge.

Simulated rate of discharge to the B Pond complex is 70 gpm.
Simulated rate of discharge to the TEDB is 600 gpm.

Formation of an approximately 2-m (6.5-ft) high mound in the water table beneath the TEDF with broad, gently sloping flanks is indicated (Figure 2-11). Except for a slight increase relative to pre-discharge conditions in the elevation of the water table north of the 216-B-3 Pond complex, the results suggest that the water table will return to a pre-discharge steady-state condition within approximately 10 yr after discharges to the facilities end.

2.3.1.4 Estimates of Travel Time. Estimates of the time needed for waste water from the TEDF to migrate to the Columbia River are based on various types of information. Groundwater travel time in the vicinity of the TEDF is based on the results of computer modeling, aquifer testing, and direct measurements (see Section 2.2.3.4). In areas more distant from the TEDF, calculated travel time is based on the prevailing regional gradient in the Hanford formation.

Average linear velocity in the uppermost aquifer (mostly for the lower part of the Hanford formation) of approximately 3 to 4 m/d (~ 10 to 13 ft/d) from the 200 Area to the Columbia River was estimated based on the observed migration rate of tritium (U.S. Geological Survey [USGS] 1987). At the site of the TEDF, the average linear flow velocity was estimated to be 0.03 to 0.6 m/d (0.1 to 2 ft/d) (see Section 2.2.3.4). Based on these kinds of information, the time estimated for waste water discharged at the facility to reach the Columbia River will be on the order of 10 to 20 yr. Refinement of these estimates based on more detailed modeling of groundwater flow is advisable.

2.3.2 Contaminant Transport Modeling

This section discusses the transport by groundwater of residual constituents potentially present as trace concentrations in treated effluents discharged to the TEDF. Predictions of the transport of these constituents were made by combining the VAM3DCG groundwater flow model (Section 2.3.1.2) with constituent transport information. The numerical modeling of residual constituent transport focused on estimation of the projected efficacy of attenuation and dilution in reducing concentrations of residual constituents discharged to the TEDF at an annualized average rate of 2,270 L/min (600 gal/min).

2.3.2.1 Definition and Determination of Dilution/Attenuation Factors. Dilution/attenuation factors (DAF) represent the relative reduction in concentration of a specified constituent due to physical, chemical, and biological processes. Dilution, sorption, and decay typically are the dominant determinants of DAF values. A DAF can be expressed as the ratio of concentration at the discharge location (C_D) to concentration at the field location of a potential receptor (C_F) as follows:

$$DAF = \frac{C_D}{C_F} .$$

A DAF and the processes it represents depend on location, time and discharge conditions (e.g., rate, duration, concentration, and pH), and geohydrologic conditions (e.g., geology, hydrology, and geochemistry). The EPA has applied simplifying assumptions to stochastic analyses by using the EPA's numerical model to determine DAFs for scenarios involving groundwater contaminated by leachate from landfills. The EPA analyses assume the following:

- Absence of a vadose zone
- A 3-m (~ 10-ft) thick zone of mixing in the aquifer

- A low, constant rate of leaching based on the rate of recharge to the aquifer, with recharge occurring over the entire surface area of the landfill
- A well or receptor point located 100 m (~300 ft) downgradient from the landfill
- Steady-state conditions.

Conditions at the TEDF differ significantly from those at a landfill idealized by the EPA's numerical model. The principal differences are as follow:

- A substantial vadose zone (~30-m [~100-ft] thick) is present at the TEDF
- A 27-m (~90-ft) thick aquifer is present that is capable of providing mixing over a thickness of more than 3 m (~10 ft)
- The discharge rate will exceed the recharge rate used by the numerical model by many orders of magnitude
- The receptor location is not predetermined because there is no predefined groundwater production well
- True steady-state concentrations of the groundwater constituents of interest would likely not be reached for centuries. Obtaining steady-state conditions would require that the rate of treated effluent migration become constant and not be impeded by the lower mud; additionally, the TEDF and 216-B-3 Pond will cease operation before steady-state transport conditions would occur.

Because of these differences, a true DAF cannot be calculated for the TEDF. Consequently, a closely related factor of attenuation and dilution efficacy (FADE) has been calculated for the TEDF constituents. The FADE represents transient, site-specific conditions. Like the DAF, the FADE is expressed as the ratio of the concentration at the discharge location (C_D) to the concentration at the field location of a potential receptor (C_F):

$$FADE = \frac{C_D}{C_F} .$$

The C_F and FADE terms are functions of distance and time from the source:

$$C_F = C_F(x, y, z, t)$$

and

$$FADE = FADE(x, y, z, t) .$$

The minimum FADE at any specified location occurs when the C_F at that point is a maximum for an assumed constant C_D .

The C_F term can be determined empirically or by modeling. However, numerical modeling is typically more appropriate than direct measurements in predicting FADEs because of the long durations of interest. After data from measurements in monitoring wells subsequently become

available, they can be used to check the results of model predictions and calibrate the model to improve future predictions. For this report, the same conceptual and VAM3DCG numerical models that previously were used to model the effects of the TEDF on groundwater flow (see Sections 2.3.1.1 and 2.3.1.2) were used to model transport of potential residual constituents.

2.3.2.2 Transport Conceptual Model. Conceptual models simplify actual hydrogeologic conditions and processes. The simplifications are necessary to simulate these conditions and processes by numerical analysis methods. The conceptual model used to simulate transport of potential waste water constituents was summarized in Section 2.3.1.1. This conceptual model was used to predict FADEs at locations described in the following sections.

2.3.2.3 Attenuation and Dilution in the Vadose Zone. Vadose zone FADEs were determined by simulating expected TEDF operating conditions. The scenario simulated was for 2,270 L/min (600 gal/min) discharge to the TEDF and 265 L/min (70 gal/min) discharge to the 216-B-3 Pond complex (Davis et al. 1993). These discharges were simulated for a 30-yr period.

Unit concentrations of potential residual constituents in the treated effluent were applied to both TEDF and 216-B-3 Pond discharges. Hence, modeling results are reported as relative concentrations. Results of the simulations were monitored at specified locations within the model domain to determine relative constituent concentrations and minimum FADEs at those locations during and after TEDF operations.

2.3.2.4 Attenuation and Dilution in the Uppermost Aquifer. If the discharge scenario used for the vadose zone analysis were applied to evaluate FADEs in the uppermost aquifer, the time required for strongly sorbed constituents to penetrate the lower mud sequence and enter the uppermost aquifer would extend far beyond any reasonable time of interest. Consequently, a different scenario was adopted to accelerate the simulated penetration.

The simulation was first brought to a steady-state groundwater flow condition that would result from TEDF operation (a condition that is likely to occur only if water were discharged for a duration of hundreds of years). Then, discharges of treated effluent with a unit constituent concentration were simulated. Discharges were continued until the concentration of the constituent at the top of the uppermost aquifer was indicated to be approximately 0.1% of the concentration at the point of discharge. The time at which this occurred was defined as the "breakthrough time." After breakthrough, the simulated discharges were discontinued; however, monitoring of the concentrations was continued until peak concentrations at specified monitoring points were detected.

This approach is highly conservative because it greatly enhances the simulated downward movement of constituents into and through the lower mud sequence. Consequently, it greatly increases the concentrations and decreases the FADEs that actually would be expected.

2.3.2.5 Input Values. The input values for the grid and the flow equation were identical to those used in the groundwater flow simulations previously reported in Davis et al. (1993). The inputs for the transport equation included:

- Initial conditions
- Boundary conditions
- Nonsolute-specific transport properties of hydrogeologic units
- Solute-specific transport properties of hydrogeologic units.

Initial constituent concentrations were assumed to be zero. The boundary conditions were specified as follow:

- At the 216-B-3 Pond complex and the TEF, the mass influx of each constituent was specified to have a concentration of unity
- At all other water influx locations, a concentration of zero was assigned
- At all locations where no influx of water was assumed to occur, a zero dispersive flux was assigned (advective flux was not affected).

Nonsolute-specific transport properties that were assumed to be independent of the hydrogeologic unit were assigned as follows:

- Longitudinal dispersivity: 100 m (~328 ft)
- Horizontal transverse dispersivity: 10 m (~33 ft)
- Vertical transverse dispersivity: 0.5 m (~1.6 ft)
- Apparent molecular diffusion coefficient: $3.15 \times 10^{-3} \text{ m}^2$ ($1 \times 10^{-10} \text{ m}^2$).

The dispersivities were assigned based on recommendations in Gelhar et al. (1985). The diffusion coefficient was based on Freeze and Cherry (1979).

Nonsolute-specific transport properties that were assumed to depend on the hydrogeologic unit are porosity and bulk density. Porosity values used in the transport simulations were based on sample data from the three TEF wells and were the same as were used for the flow equation inputs. Bulk densities were determined by averaging values from the same samples. A bulk density for each sample was first calculated by multiplying the solid fraction (1-porosity) by the particle density:

$$\rho_b = \rho_s (1 - n)$$

Porosities and bulk densities, respectively, were as follow (also see Table 5; Davis et al. 1993):

- Upper Hanford formation gravel: 0.235 cc/cc; 2.04 g/cc
- Lower Hanford formation sandy gravel: 0.287 cc/cc; 1.94 g/cc
- Lower mud sequence: 0.351 cc/cc; 1.70 g/cc
- Ringold unit A gravel: 0.339 cc/cc; 2.00 g/cc.

Two transport properties are solute specific, the coefficient of distribution (K_d) and half-life. The coefficient of a constituent's distribution between the geologic media through which flow occurs and the groundwater depends on the constituent and its environment. The recommended K_d of each constituent, a referenced basis for the values selected, and the K_d value actually assigned are shown in Table 2-4. The K_d values of inorganic compounds listed in the table are based, in part, on data specific to the Hanford Site (Ames and Serne 1991; Serne and Wood 1990), but assignment of appropriate K_d values for Hanford Site sediments is somewhat problematic.

Table 2-4. Input Values for Distribution Coefficients.

Constituent	K_d (mL/g)
Organics	
chloroform	0.0031 ^a
methylene chloride	0 ^b
bromodichloromethane	0 ^b
Bis (2-ethylhexyl) phthalate	6 ^{a,c}
phenol	0 ^b
Inorganics	
arsenic	6 ^c
mercury	30 ^d
cadmium	30 ^d
nitrate	0 ^d
radium	30 ^{e,f}
cyanide	0 ^f
iron	30 ^{d,g}
manganese	30 ^{d,g}
chromium (VI)	0 ^d
chloride	0 ^d
calcium	30 ^{d,g}
magnesium	30 ^{d,g}
sulfate	0 ^d
barium	30 ^{d,h}
lead	30 ^d

^aStreng and Peterson (1989); K_{oc} provided for organic compounds.

^bNo reference available, 0 assigned.

^cReferenced value 8.7; 6 assigned to reduce the number of computer runs needed.

^dAmes and Serne (1991).

^eReferenced value 20; 30 assigned to reduce the number of computer runs needed.

^fSerne and Wood (1990).

^gReferenced value 50; 30 assigned to reduce the number of computer runs needed.

^hReferenced value 25; 30 assigned to reduce the number of computer runs needed.

For radionuclides, half-life depends only on the constituent. Half-life for organic compounds depends on both the constituent and the environment. For purposes of this analysis, chloroform was the only constituent to which a half-life was assigned. Howard et al. (1991) recommend assigning a half-life of approximately 5 yr to chloroform in groundwater. However, a more conservative value of 50 yr was used because model output velocities appeared to be low when compared with the observed rate of migration of a tritium plume that is present to the south-southeast of the 216-B-3 Pond complex (USGS 1987, Freshley and Graham 1988).

The fraction of organic carbon (f_{oc}) present in sediments generally controls the adsorption of organic compounds. This adsorption is expressed by the organic partition coefficient (K_{oc}), which is defined as $K_{oc} = K_d/f_{oc}$. The K_{oc} can be estimated from the octanol-water partition coefficient (K_{ow}), which has been measured and reported for many organic compounds. This K_{oc} formula was developed for agricultural soils and sewage sludge and is applicable only to soils with organic carbon contents of $\geq 1\%$ (Ames and Serne 1991; Fetter 1993). According to Fetter (1993) "Below this critical level of f_{oc} , the organic molecules will be primarily sorbed onto the mineral surfaces."

The organic carbon content is $\leq 1\%$ in most Hanford Site sands and gravels, but it is likely to be $\geq 1\%$ in Hanford Site paleosols and muds. For purposes of this analysis, an organic carbon content of 0.01 for all sediments was assumed and the K_{oc} relationship previously defined was employed.

Except for carbon tetrachloride, distribution coefficients of organic compounds have not empirically been determined for Hanford Site sediments. Non-zero K_d values were assigned only to chloroform and phthalate. Chloroform was assigned a very small K_d that had only a slight effect on its FADE, compared to the effects of its decay rate. For the phthalate K_d , the Hazardous Substances Data Bank (HSDB 1993-1994) states:

"DEHP bis(2-ethylhexyl) phthalate has a strong tendency to adsorb to soil and sediments (Syracuse Research Corporation)."

"Experimental evidence demonstrates strong partitioning to clays and sediments."

These statements strongly suggest that significant sorption may occur in soils with low organic content, such as are present at the Hanford Site. This sorption may be strongly affected by the type and amount of clay present in the sediments.

Best estimates for contaminant input parameters used in this analysis may be slightly nonconservative in some instances. However, when considered in the overall context of the analysis, the resultant FADEs are nevertheless believed to be conservative estimates.

2.3.2.6 Program Execution Control. Three metrics, the Peclet number for evaluating the appropriateness of the grid size of the numerical model, the Courant number for evaluating the appropriateness of the time steps, and mass balance error for evaluating how well mass was conserved were monitored while analyzing time-dependent transport processes to help control program execution. Use of a 200-m (~600-ft) grid spacing, in conjunction with a dispersivity of 100 m (~300 ft), resulted in an acceptable Peclet number of 2. The maximum Courant number was restricted to < 1 during early time periods of the simulations by using time steps of < 1 yr for maximum velocities of approximately 100 m/yr (~300 ft/yr) assigned to the 200-m (~600-ft) grid spacing.

Mass balance errors typically were kept below 10% by monitoring the simulation results and adjusting the size of time steps, as needed. For the vadose zone model, mass balance errors typically were 99%. However, this seemingly large error was the result of comparing minor storage errors with essentially zero net influx. The total change in storage was <0.1% of the original constituent mass in the modeling domain. This value is well within the bounds of acceptability.

2.3.2.7 Results. Results were monitored at observation points specified within the model domain for durations that depended on the constituent being monitored and the conceptual model. Results were determined at each observation point for the K_d values shown in Table 2-4 (i.e., $K_d = 0$, $K_d = 6$, $K_d = 30$, and $K_d = 0.0031$). The minimum FADE values found for each K_d are listed below. The K_d for chloroform reflects relatively rapid decay.

K_d (mL/g)	Aquifer FADE	Vadose Zone FADE
0	3.8	1
6	3.8	1.7
30	3.8	3.6
0.0031	42	1.03

The observation points were specified to help determine the location of a potential vadose zone monitoring well and to study the response of the aquifer directly below the TEDF. The area covered by the observation points is the quadrant southeast of and downgradient from the TEDF. Three observation points were selected along each of three lines (Figure 2-13). The observation points were spaced 200 m (~600 ft) apart in the X (east) and Y (north) directions of the numerical model grid. Consequently, the southeast observation line, at approximately 45° to the orthogonal grid spacing, had points spaced approximately 282 m (~925 ft) apart.

In the vertical dimension, observation locations were selected to evaluate constituent concentrations at the top and bottom of the vadose zone and the top and bottom of the uppermost aquifer. The model had four nodes at every location defined in the horizontal plane. These nodes were at the following locations:

- Top of vadose zone in the Hanford formation (top of model domain)
- Bottom of vadose zone in the Hanford formation (top of lower mud sequence)
- Top of uppermost aquifer in Ringold unit A (bottom of lower mud sequence)
- Bottom of uppermost aquifer in Ringold unit A (bottom of model domain).

Results at the observation points are shown in Table 2-5. The "top" and "bottom" headings in Table 2-5 refer to either the vadose zone or the uppermost aquifer, as defined by the description of the observation point.

In Table 2-5, "breakthrough" is defined for purposes of this analysis to have occurred when C_F first exceeded 0.1% of the C_D . A 1,000-yr monitoring time span was chosen for the $K_d = 0$ case (for both vadose zone and aquifer observation points), because breakthrough at the bottom of the aquifer occurred by 1,000 yr after initiation of discharges. The same time interval was used to analyze the FADE for chloroform, because a response similar to that of $K_d = 0$ was expected.

A 2,000-yr duration after initiation of operations at the TEDF was chosen for all vadose zone analyses, except $K_d = 0$, because breakthrough for $K_d = 6$ had occurred by then at the two nodes at the top of the vadose zone, along all three monitoring lines.

Figure 2-13. Observation Points in Horizontal Plane.

Table 2-5. Factors of Attenuation and Dilution Efficacy.

TOP							BOTTOM				
POINT	X (m)	Y (m)	BREAK- THROUGH (year)	MAXIMUM RELATIVE CONC.	MINIMUM FADE	TIME (year)	BREAK- THROUGH (year)	MAXIMUM RELATIVE CONC.	MINIMUM FADE	TIME AT MAX. CONC. (year)	
Kd = 0 mL/g											
1-AQ	-200	0	42	0.26	3.8	492	1000	.01	> 3.80	1000	
1E-VZ	0	200	0	1	1	30	0	1	1	30	
2E-VZ	200	200	0	1	1	30	0	1	1	30	
3E-VZ	400	200	0.5	1	1	30	3	1	1	30	
1S-VZ	0	0	0	1	1	30	0	1	1	30	
2S-VZ	0	-200	0	1	1	30	0	1	1	30	
3S-VZ	0	-400	2	1	1	30	7	1	1	50	
1SE-VZ	0	0	0	1	1	30	0	1	1	30	
2SE-VZ	200	-200	0	1	1	30	2	1	1	30	
3SE-VZ	400	-400	3	1	1	34	7	1	1	80	
Kd = 6 mL/g											
1-AQ	-200	0	1470	< 0.26	> 3.8	1470	> 2000	0	> 3.8	2000	
1E-VZ	0	200	0.3	0.46	2.1	30	675	0.04	> 2.1	2000	
2E-VZ	200	200	116	0.19	5.2	1450	> 2000	0	> 5.2	2000	
3E-VZ	400	200	735	0.09	> 5.2	2000	> 2000	0	> 5.2	2000	
1S-VZ	0	0	0.2	0.58	1.7	30	850	0.034	> 1.7	2000	
2S-VZ	0	-200	216	0.04	> 1.7	1410	> 2000	0	> 1.7	2000	
3S-VZ	0	-400	> 2000	0	> 1.7	2000	> 2000	0	> 1.7	2000	
1SE-VZ	0	0	0.2	0.58	1.7	30	850	0.034	> 1.7	2000	
2SE-VZ	200	-200	208	0.04	> 1.7	2000	> 2000	0	> 1.7	2000	
3SE-VZ	400	-400	> 2000	0	> 1.7	2000	> 2000	0	> 1.7	2000	
Kd = 30 mL/g											
1-AQ	-200	0	7200	< 0.26	> 3.8	7200	> 7200	0	> 3.8	7200	
1E-VZ	0	200	1.5	0.19	5.4	30	> 2000	0	> 5.4	2000	
2E-VZ	200	200	1490	0.02	> 5.4	2000	> 2000	0	> 5.4	2000	
3E-VZ	400	200	> 2000	0	> 5.4	2000	> 2000	0	> 5.4	2000	
1S-VZ	0	0	1	0.28	3.6	30	> 2000	0	> 3.6	2000	
2S-VZ	0	-200	> 2000	0	> 3.6	2000	> 2000	0	> 3.6	2000	
3S-VZ	0	-400	> 2000	0	> 3.6	2000	> 2000	0	> 3.6	2000	
1SE-VZ	0	0	1	0.28	3.6	30	> 2000	0	> 3.6	2000	
2SE-VZ	200	-200	> 2000	0	> 3.6	2000	> 2000	0	> 3.6	2000	
3SE-VZ	400	-400	> 2000	0	> 3.6	2000	> 2000	0	> 3.6	2000	
CHLOROFORM: Kd = .0031 mL/g, T1/2 = 50 years											
1-AQ	200	0	70	0.024	42.	150	> 1000	0	> 42.	1000	
1E-VZ	0	200	0	0.97	1.03	30	0	.95	1.05	30	
2E-VZ	200	200	0	0.96	1.04	30	0	.94	1.06	30	
3E-VZ	400	200	0.5	0.95	1.05	30	3	.89	1.12	30	
1S-VZ	0	0	0	0.97	1.03	30	0	.95	1.06	30	
2S-VZ	0	-200	0	0.94	1.06	30	0	.93	1.08	30	
3S-VZ	0	-400	2	0.91	1.10	30	7	.79	1.3	30	
1SE-VZ	0	0	0	0.97	1.03	30	0	.95	1.06	30	
2SE-VZ	200	-200	0	0.93	1.07	30	2	.90	1.1	30	
3SE-VZ	400	-400	3	0.84	1.20	32	7	.65	1.5	33	

AQ: aquifer VZ: vadose zone E: east S: south SE: southeast

The $K_d = 6$ aquifer model also used a 2,000-yr duration after initiation of operations because breakthrough had occurred by then at the top of the aquifer. A 7,200-yr duration was used for $K_d = 30$ because breakthrough had occurred by then at the top of the aquifer.

In the "maximum relative concentration" columns of Table 2-5, "<" symbols were assigned to published results of others. These assignments were made for cases in which simulations were not made for times beyond breakthrough. Otherwise, the maximum observed concentration was reported, along with its corresponding year of occurrence.

In the "FADE" columns, ">" symbols were assigned for instances in which a maximum concentration peak was not observed; i.e., the concentration of a constituent had not yet begun to decline by the end of the simulation. For these cases, the FADE values were conservatively assigned to equal the FADE at points nearer the source, because concentrations of constituents could only remain constant or decrease with increasing distance from the source. The FADEs in the aquifer point ("I-AQ") for $K_d = 6$ and $K_d = 30$ were made equal to the FADE from the $K_d = 0$ case, because of the length of the breakthrough times and the conservative assumptions built into the model.

Results for chloroform in the vadose zone were adjusted to account for simulated water in the vadose zone before the start of operations. The VAM3DCG software has a flaw that prohibits a dry element within the model from becoming wet. To overcome this problem, the base of each affected element was lowered to ensure that water would be present before the startup of TEDF operations. This water artificially reduced the concentration and is reflected by the relative concentration results for the $K_d = 0$ case. Dividing the concentration by the relative concentration determined for the $K_d = 0$ case provides a more realistic result. No adjustments were made for the $K_d = 6$ and $K_d = 30$ cases, because the maximum concentrations will occur only after large volumes of treated effluent have moved through each simulated location and most of the water previously at those locations has been displaced.

2.3.2.8 Summary and Conclusions. Modeling scenarios were developed to analyze the pre-operations aquifer and the vadose zone. The aquifer scenario represents a worst case, while the vadose zone scenario is intended to be prudently conservative.

In the vadose zone, any initial dilution in the immediate vicinity of the TEDF will be insignificant, because the only dilutive water available will be the vadose zone moisture, assuming that recent waste water discharges to the 216-B-3C Expansion Pond have not affected the vadose zone soils beneath the TEDF. However, attenuation by decay and sorption will still occur, and will increase with the distance from the TEDF, as shown in Table 2-5.

Assuming steady-state conditions, but ignoring decay effects, a constituent with a large sorption-distribution coefficient (K_d) will be retarded the most. A constituent with a large K_d will display a higher concentration and a lower FADE near the TEDF than will a constituent with a small K_d . This relationship will become reversed at greater distance from the TEDF, and is constituent specific.

With no decay, a nearby vadose zone monitoring well will detect both high K_d and low K_d constituents, although the high K_d constituents will take longer to arrive. In contrast, a vadose zone monitoring well at an appreciable distance from the TEDF will detect the low K_d constituents, but the high K_d constituents might never reach the well at detectable levels, depending on the location and the particular constituent of interest. Because of the wide variety of constituent properties, reference should be made to Table 2-5 to estimate the detection potential for constituents of interest at a

proposed well location. The accuracies of such estimates will diminish with increasing distance from the edge of the modeled area of Figure 2-13.

The typical time for peak concentrations to appear will be about 30 yr, as indicated for the locations shown in Table 2-5. At each location, simulated breakthrough can be determined for each constituent. No constituents will initially be detected; then the concentrations will increase to their peaks, after which the concentrations will decrease. In many cases the peaks will not occur until after cessation of discharges to the TEDF.

The measure of aquifer protection is described numerically by the minimum aquifer FADE. For constituents that do not sorb onto soil, and using the very conservative assumption of initial steady-state flow conditions, the FADE is 3.8. For constituents that sorb, the FADE is much larger. The FADE values indicate that Hanford soils provide significant protection of the existing aquifer. If a more realistic scenario were considered by modeling transient conditions, the FADEs would likely be orders of magnitude larger, indicating that the peak constituent concentrations reaching the aquifer (hundreds of years in the future) would pose little risk and would possibly be below current detection limits.

3.0 GROUNDWATER MONITORING PLAN

Chapter 3.0 describes how the impacts on the environment of operating the TEDF will be assessed and identifies the documentation that will be provided to help ensure that the facility is operating in compliance with groundwater quality standards and operating permit conditions, as identified in Chapter 4.0. Section 3.1 addresses the objectives and scope of the monitoring. Section 3.2 identifies the media that will be monitored. Section 3.3 describes the monitoring well network and its basis. Section 3.4 identifies the constituents that will be monitored and the analytical methods that will be used. Section 3.5 describes the sampling and analysis protocol.

3.1 MONITORING OBJECTIVES AND SCOPE

The objectives and scope of groundwater monitoring at the TEDF derive from operating permit requirements, the geology and hydrology of the site, and discharge composition and volume.

The principal groundwater quality regulations applicable to the TEDF (WAC 173-200) emphasize the nondegradation of current groundwater quality. These regulations require "establishment of an enforcement limit as near the natural groundwater quality as practical," and establishment of the point of compliance in the groundwater "...as near the source as technically, hydrogeologically, and geographically feasible." Ecology may allow an "alternative point of compliance" under some circumstances.

Chapter 3.0 describes the groundwater quality evaluation program proposed for operation of the 200 Area TEDF. The program was designed to comply with the WAC 173-200 requirements and operating permit conditions.

3.2 MEDIA TO BE MONITORED

Waste water discharged to the TEDF will be sampled in accordance with conditions of the State Waste Discharge Permit ST-4502. Monitoring will include "end-of-pipe" sampling at the TEDF, as well as continued groundwater monitoring in three existing monitoring wells. Groundwater will be sampled and analyzed in accordance with the permit conditions, as described by Sections 3.4 and 3.5.

Sampling and analysis of groundwater from the three existing wells will be performed routinely to evaluate potential impacts of TEDF operation on the uppermost aquifer. If new wells are to be installed (Section 3.3), samples of the intercepted sediments will be collected at specified intervals or locations. Water samples from any additional wells will also be collected and analyzed on a regular basis in accordance with Sections 3.4 and 3.5.

3.3 DESIGN OF MONITORING WELL NETWORK

Three wells (699-40-36, 699-41-35, and 699-42-37) currently exist at the TEDF site (see Figure 1-1). Well 699-42-37 is the upgradient monitoring point for groundwater. Wells 699-40-36 and 699-41-35 are located hydraulically downgradient from the TEDF. These wells were constructed to address three needs (Davis and Delaney 1992): (1) Acquire site-specific stratigraphic and

hydrogeologic information, (2) collect samples of the intercepted sediments for physical and chemical analyses, and (3) provide background information on the baseline quality of groundwater and establish monitoring capabilities for future assessments of groundwater quality in the uppermost aquifer. Information from these wells will permit early warning of potential problems and verification of permit compliance.

3.4 CONSTITUENTS TO BE SAMPLED

As described in Section 2.2.4, the analyses of groundwater from the monitoring wells will be used to determine if groundwater quality has changed from the baseline pre-operations condition as described in Section 2.0. The constituents to be monitored are based on residual constituents potentially contained in the waste water discharged to the TEDF. These constituents are compared in the sections that follow with results of background groundwater monitoring, as discussed in Section 2.2.4. Also discussed are the constituents that will be sought and the methods that will be used to evaluate results of the analyses. Constituents to be sought and the corresponding analytical methods are those approved by Ecology and are listed in Table 3-1. Groundwater will be sampled and analyzed quarterly for the constituents of Table 3-1 for 2 yr unless Ecology agrees, after review of two quarters of data, to reduce the frequency of analysis and/or number of constituents sought in the analyses.

3.4.1 Turbidity and Other Field Parameters

Sample turbidity will be assessed in the field to ensure consistent sample quality (see Section 2.2.4.1). Quadruplicate measurements of pH, SC, temperature, alkalinity, and turbidity will be made. These measurements will aid in determining if groundwater quality is changing from the baseline pre-operations condition.

3.4.2 Cations and Anions

Total cation milliequivalents (calcium, magnesium, potassium, and sodium), total anion milliequivalents (nitrate, sulfate, chloride, and alkalinity), SC, and TDS will be evaluated by means of the equations noted in Section 2.2.4.2. The results of the evaluation of anion and cation analyses will be used to confirm the results of SC measurements. The differences between water quality in the upgradient well (699-42-37) and the two downgradient wells (699-41-35 and 699-40-36), as well as differences in each monitoring well for different sampling dates, will be evaluated based on the results of the anionic and cationic analyses.

Based on the data evaluation in Sections 2.2.4 and 2.2.5, groundwater chemistry in the upgradient well (699-42-37) differs from that in the two downgradient wells (699-41-35 and 699-40-36). These differences are higher concentration of sulfate and chloride and a higher SC in the upgradient well. These differences, as well as the potential residual constituents discharged from the TEDF, will continue to be monitored.

Table 3-1. Analytes to be Monitored in the Treated Effluent Disposal Facility Wells.
(5 sheets)

Part 1A. Volatile Organic Constituents			
Constituent ID	Constituent Name	Group ¹	PQL(ug/L) ²
71-55-6	1,1,1-Trichloroethane	SW-846 8240/8260	5
79-00-5	1,1,2-Trichloroethane	SW-846 8240/8260	5
75-34-3	1,1-Dichloroethane	SW-846 8240/8260	5
75-35-4	1,1-Dichloroethylene	SW-846 8240/8260	5
106-93-4	1,2-Dibromoethane	SW-846 8240/8260	5
107-06-2	1,2-Dichloroethane	SW-846 8240/8260	5
78-87-5	1,2-Dichloropropane	SW-846 8240/8260	5
591-78-6	2-Hexanone	SW-846 8240/8260	5
108-10-1	4-Methyl-2-pentanone	SW-846 8240/8260	5
67-64-1	Acetone	SW-846 8240/8260	5
107-13-1	Acrylonitrile	SW-846 8240/8260	5
71-43-2	Benzene	SW-846 8240/8260	5
75-27-4	Bromodichloromethane	SW-846 8240/8260	5
75-25-2	Bromoform	SW-846 8240/8260	5
56-23-5	Carbon tetrachloride	SW-846 8240/8260	5
108-90-7	Chlorobenzene	SW-846 8240/8260	5
67-66-3	Chloroform	SW-846 8240/8260	5
124-48-1	Dibromochloromethane	SW-846 8240/8260	5
100-41-4	Ethylbenzene	SW-846 8240/8260	5
78-83-1	Isobutyl alcohol	SW-846 8240/8260	5
74-87-3	Methyl chloride	SW-846 8240/8260	5
78-93-3	Methyl ethyl ketone	SW-846 8240/8260	5
80-62-6	Methyl methacrylate	SW-846 8240/8260	5
75-09-2	Methylene chloride	SW-846 8240/8260	5
110-86-1	Pyridine	SW-846 8240/8260	5
100-42-5	Styrene	SW-846 8240/8260	5
127-18-4	Tetrachloroethylene	SW-846 8240/8260	5
108-88-3	Toluene	SW-846 8240/8260	5
79-01-6	Trichloroethene	SW-846 8240/8260	5
75-01-4	Vinyl chloride	SW-846 8240/8260	5
1330-20-7	Xylenes (total)	SW-846 8240/8260	5
10061-01-5	cis-1,3-Dichloropropene	SW-846 8240/8260	5
109-99-9	Tetrahydrofuran	SW-846 8240/8260	100
156-60-5	trans-1,2-Dichloroethylene	SW-846 8240/8260	5
10061-02-6	trans-1,3-Dichloropropene	SW-846 8240/8260	5
Part 1B. Non-Halogenated Volatile Organic Constituents			
Constituent ID	Constituent Name	Group ¹	PQL(ug/L) ²
123-91-1	1,4-Dioxane	Super SW-846 8015	150
71-36-3	1-Butanol	Super SW-846 8015	50,000
141-78-6	Ethyl acetate	Super SW-846 8015	50,000

Table 3-1. Analytes to be Monitored in the Treated Effluent Disposal Facility Wells.
(5 sheets)

60-29-7	Diethyl ether	Super SW-846 8015	50,000
78-83-1	Isobutyl alcohol	Super SW-846-8015	50,000
78-93-3	Methyl ethyl ketone	Super SW-846 8015	100,000
64-17-5	Ethyl alcohol	Super SW-846 8015	5,000,000
107-21-1	Ethylene Glycol	Super SW-846 8015	100,000
--	WTPH-G	SW-846 8015 (modified)	1,000

Part 2. Semivolatile Organic Constituents			
Constituent ID	Constituent Name	Group ¹	PQL(ug/L) ²
130-15-4	1,4-Naphthoquinone	SW-946 8270 Appx IX	10
134-32-7	1-Naphthylamine	SW-946 8270 Appx IX	10
88-06-2	2,4,6-Trichlorophenol	SW-946 8270 Appx IX	10
121-14-2	2,4-Dinitrotoluene	SW-946 8270 Appx IX	10
606-20-2	2,6-Dinitrotoluene	SW-946 8270 Appx IX	10
95-57-8	2-Chlorophenol	SW-946 8270 Appx IX	10
91-59-8	2-Naphthylamine	SW-946 8270 Appx IX	10
91-94-1	3,3'-Dichlorobenzidine	SW-946 8270 Appx IX	20
119-93-7	3,3'-Dimethylbenzidine	SW-946 8270 Appx IX	10
106-44-5	4-Methylphenol	SW-946 8270 Appx IX	10
98-86-2	Acetophenone	SW-946 8270 Appx IX	10
62-53-3	Aniline	SW-946 8270 Appx IX	10
140-57-8	Aramite	SW-946 8270 Appx IX	20
50-32-8	Benzo(a)pyrene	SW-946 8270 Appx IX	10
100-51-6	Benzyl alcohol	SW-946 8270 Appx IX	20
111-44-4	Bis(2-chloroethyl) ether	SW-946 8270 Appx IX	10
117-81-7	Bis(2-ethylhexyl) phthalate	SW-946 8270 Appx IX	10
85-68-7	Butylbenzylphthalate	SW-946 8270 Appx IX	10
510-15-6	Chlorobenzilate	SW-946 8270 Appx IX	10
218-01-9	Chrysene	SW-946 8270 Appx IX	10
84-74-2	Di-n-butylphthalate	SW-946 8270 Appx IX	10
117-84-0	Di-n-octylphthalate	SW-946 8270 Appx IX	10
2303-16-4	Diallate	SW-946 8270 Appx IX	10
84-66-2	Diethyl phthalate	SW-946 8270 Appx IX	10
131-11-3	Dimethyl phthalate	SW-946 8270 Appx IX	10
118-74-1	Hexachlorobenzene	SW-946 8270 Appx IX	10
67-72-1	Hexachloroethane	SW-946 8270 Appx IX	10
78-59-1	Isophorone	SW-946 8270 Appx IX	10
72-43-5	Methoxychlor	SW-946 8270 Appx IX	10
108-39-4	m-Cresol	SW-946 8270 Appx IX	10
924-16-3	N-Nitrosodi-n-butylamine	SW-946 8270 Appx IX	10

Table 3-1. Analytes to be Monitored in the Treated Effluent Disposal Facility Wells. (5 sheets)

Part 2. Semivolatile Organics (continued)			
Constituent ID	Constituent Name	Group ¹	PQL(ug/L) ²
55-18-5	N-Nitrosodiethylamine	SW-946 8270 Appx IX	10
62-75-9	N-Nitrosodimethylamine	SW-956 8270 Appx IX	10
86-30-6	N-Nitrosodiphenylamine	SW-946 8270 Appx IX	10
10595-95-6	N-Nitrosomethylethylamine	SW-946 8270 Appx IX	20
91-20-3	Naphthalene	SW-946 8270 Appx IX	10
98-95-3	Nitrobenzene	SW-946 8270 Appx IX	10
87-86-5	Pentachlorophenol	SW-946 8270 Appx IX	50
108-95-2	Phenol	SW-946 8270 Appx IX	10
106-50-3	o-Phenylenediamine	SW-946 8270 Appx IX	10
110-86-1	Pyridine	SW-946 8270 Appx IX	10
126-73-8	Tributyl Phosphate ³	SW-946 8270 Appx IX	NA
629-50-5	Tridecane	SW-946 8270 Appx IX	10

Part 3. Pesticide, Herbicide, and PCB Constituents			
Constituent ID	Constituent Name	Group	PQL (ug/L)
72-54-8	4,4'-DDD	SW-846 8080	50
72-55-9	4,4'-DDE	SW-846 8080	10
50-29-3	4,4'-DDT	SW-846 8080	2
319-84-6	Alpha-BHC	SW-846 8080	2
12674-11-2	Aroclor-1016	SW-846 8080	50
11104-28-2	Aroclor-1221	SW-846 8080	50
11141-16-5	Aroclor-1232	SW-846 8080	50
53469-21-9	Aroclor-1242	SW-846 8080	50
12672-29-6	Aroclor-1248	SW-846 8080	50
11097-69-1	Aroclor-1254	SW-846 8080	50
11096-82-5	Aroclor-1260	SW-846 8080	50
57-74-9	Chlordane	SW-846 8080	50
319-86-8	Delta-BHC	SW-846 8080	2
959-98-8	Endosulfan I	SW-846 8080	2
33213-65-9	Endosulfan II	SW-846 8080	10
1031-07-8	Endosulfan sulfate	SW-846 8080	10
72-20-8	Endrin	SW-846 8080	10
7421-93-4	Endrin Aldehyde	SW-846 8080	2
72-43-5	Methoxychlor	SW-846 8080	2
8001-35-2	Toxaphene	SW-846 8080	50
58-89-9	gamma-BHC (Lindane)	SW-846 8080	2
93-72-1	2,4,5-TP	SW-846 8150	2
94-75-7	2,4-D	SW-846 8150	12

Table 3-1. Analytes to be Monitored in the Treated Effluent Disposal Facility Wells. (5 sheets)

Part 4. Metallic Constituents (total and dissolved)			
Constituent ID	Constituent Name	Group	PQL (ug/L)
7429-90-5	Aluminum	SW-846 6010	500
7440-36-0	Antimony	SW-846 6010	300
7440-39-3	Barium	SW-846 6010	20
7440-41-7	Beryllium	SW-846 6010	10
7440-42-8	Boron	SW-846 6010	100
7440-43-9	Cadmium	SW-846 7131A	5
7440-70-2	Calcium	SW-846 6010	500
7440-47-3	Chromium	SW-846 7191/EPA 200.8	20
7440-48-4	Cobalt	SW-846 6010	70
7440-50-8	Copper	SW-846 6010	60
7439-89-6	Iron	SW-846 6010	100
7439-93-2	Lithium	SW-846 6010	100
7439-95-4	Magnesium	SW-846 6010	1,000
7439-96-5	Manganese	SW-846 6010	50
7439-98-7	Molybdenum	SW-846 6010	100
7440-02-0	Nickel	SW-846 6010	75
7440-09-7	Potassium	SW-846 6010	5,000
7440-21-3	Silicon	SW-846 6010	450
7440-22-4	Silver	SW-846 6010	70
7440-23-5	Sodium	SW-846 6010	1,000
7440-62-2	Vanadium	SW-846 6010	80
7440-66-6	Zinc	SW-846 6010	20
7440-67-7	Zirconium	SW-846 6010	100
7440-31-5	Tin	SW-846 7870	8,000
7439-92-1	Lead	SW-846 7421	10
7439-97-6	Mercury	SW-846 7470/7471	2
7440-38-2	Arsenic	SW-846 7060	15
7782-49-2	Selenium	SW-846 7740	20
Part 5. Miscellaneous Indicators and Inorganic and Organic Constituents			
Constituent ID	Constituent Name	Group	PQL(ug/L) ²
14798-03-09	Ammonia	40 CFR 136 350.1/2/3	50
57-12-5	Cyanide	40 CFR 136 335.1/2/3	50
ALKALINITY	Alkalinity	FIELD ANALYSIS	500
CONDUCTANCE	Specific conductance (in μ mohs/cm)	SW-846 9050/EPA 120.1	10
NTU	Turbidity in NTU	Std. Methods 214A	1
pH	pH in pH units	SW-846 9040A/EPA 150.1	0.1
TDS	Total Dissolved solids	40 CFR 136 160.1	10,000
TOX	Total Organic Halogen	SW-846 9020	50
TOC	Total Organic Carbon	SW-846 9060	1,000
—	Anions by ion chromatograph per anion	EPA 300.0	500

Table 3-1. Analytes to be Monitored in the Treated Effluent Disposal Facility Wells. (5 sheets)

---	Nitrate/Nitrate as N	EPA 353.1/2/3	50
12595-89-0	Chloride	EPA 300.0	1,000
14265-44-2	Phosphorus as PO ₄	EPA 300.0	500
14797-55-8	Nitrate as N	EPA 300.0	100
14808-79-8	Sulfate	EPA 300.0	10,000
16984-48-8	Fluoride	EPA 300.0	500
24959-67-9	Bromide	EPA 300.0	500
TEMPERATURE	Temperature in degrees Celsius	EPA 170.1	0.1
18496-25-8	Sulfide	SW-846 9030	1,000
---	Oil and Grease-Gasoline range	SW-846 9070	10,000
TSS	Total Suspended Solids	40 CFR 160.2	4,000
Part 6. Radionuclides			
Constituent ID	Constituent Name	Group	CDL pCi/L ⁴
10028-17-8	Tritium	LAB SPECIFIC	400
10098-97-2	Strontium-90	LAB SPECIFIC	2
15046-84-1	Iodine-129	LAB SPECIFIC	5
7440-14-4	Radium-228+226 (total)	LAB SPECIFIC	5
13982-63-3	Radium-226	LAB SPECIFIC	1
7440-61-1	Uranium (gross) ug/L	LAB SPECIFIC	0.1
ALPHA	Gross alpha	LAB SPECIFIC	3
BETA	Gross beta	LAB SPECIFIC	4
15117-48-3	Plutonium-239/240	LAB SPECIFIC	1
10045-97-3	Gamma Energy Analysis Cesium-137	LAB SPECIFIC	15
14683-23-9	Gamma Energy Analysis Europium-152	LAB SPECIFIC	50
15585-10-1	Gamma Energy Analysis Europium-154	LAB SPECIFIC	50
14391-16-3	Gamma Energy Analysis Europium-155	LAB SPECIFIC	50
13967-48-1	Gamma Energy Analysis Ruthenium-106	LAB SPECIFIC	75

¹ Tentatively Identified Compound (TIC)s will be reported.

² PQL-Practical Quantitation Limit per 40 CFR 264, Appendix IX. Note: where no PQL was available, value was established at 10 times method detection limit. Values are expressed as micrograms per liter (µg/L) unless otherwise noted.

³ Constituent must be specifically requested on analysis request forms.

⁴ CDL-Contract Detection Limit which is expressed in pico curies per liter (pCi/L).

3.4.3 Metals and Cyanide

Total dissolved metals and cyanide will be analyzed in groundwater samples from each well. The metals that will be sought are listed in Table 3-1. Although the permit requires the analysis only of unfiltered samples, both filtered and unfiltered samples will be analyzed for metals. There are two reasons why both types of samples will be analyzed. First, the baseline water quality data reported in Section 2.2.4 show considerable sensitivity to well construction or sampling variability when comparisons are made between filtered and unfiltered samples. Analyses of both types of samples will aid in identifying these sensitivities. Second, strict criteria for consistency in the maximum

allowable purging and sampling rates will be imposed to ensure that the sampling rate is commensurate with the pumping rate used during well development. These criteria must be imposed to limit sample turbidity to acceptable values (see Chapter 2.0). Analytical data for metals and cyanide sought in samples of groundwater collected during facility operation will be compared with pre-operation data to evaluate changes, if any, in groundwater quality.

3.4.4 Organic Compounds

Analyses will be made both for gross indicators of organic compounds and specific organic compounds. Samples for TOX will be collected and analyzed in quadruplicate because of the large known variability in analytical results for TOX. These data will be compared with the baseline data collected before TEDF operations begin to assess changes, if any, in groundwater quality. Specific organic compounds that will be sought are listed in Table 3-1.

3.4.5 Radionuclides

No radionuclides have been identified as potential residual constituents of waste water discharged to the TEDF. Nevertheless, analyses will be made for gross indicators and specific isotopes (listed in Table 3-1). These data will be compared with the baseline data collected before TEDF operations begin to assess changes, if any, in groundwater quality.

3.5 SAMPLING AND ANALYTICAL PROTOCOL

This section describes or references procedures for well purging, documentation of sample collection methods, chain-of-custody requirements, and laboratory analyses. Detailed descriptions of standard sampling and analysis procedures for specific analytes are provided by reference to the specific Environmental Investigations Instructions (EII) (WHC 1988). Subcontractors will be contractually required to perform work according to preapproved standard operating procedures.

3.5.1 Well Purging

All sampling activities performed at the well sites will be recorded in the proper field logbook, as specified by EII 1.5, Field Log Books. Hydrostar pumps will continue to be used in existing monitoring wells for purging and sampling. Prior to sampling each well, the static water level will be measured and recorded as specified by EII 10.2, Measurement of Groundwater Levels. Based on the measured water level and well construction specifications, the volume of water in the well will be calculated and documented in the well sampling form and field notebook. As specified by EII 5.8, Groundwater Sampling, each well will be purged prior to sampling until the approved criteria are met. Purge water will be managed according to EII 10.3, Purgewater Management. For instances in which the well is pumped dry because of very slow recharge, the sample will be collected after recharge. Samples will be collected and preserved in the field as specified by EII 5.8, Groundwater Sampling. Sampling personnel have the option not to decontaminate equipment if either single-use or dedicated sampling equipment is used.

The purge and sample collection rates of the three monitoring wells will be limited in accordance with the following criteria (see also Section 2.2.4). The monitoring wells were constructed to RCRA standards (WHC 1992) and were developed to a turbidity of less than 5 NTU. Hence, the pumping rate will be sufficiently slow and/or the pumping duration lengthened to achieve ≤ 5 NTU before samples are collected. Well 699-40-36 will be purged and samples collected at a pumping rate no greater than 3.2 L/min (0.85 gal/min). Wells 699-42-37 and 699-41-35 will be purged and samples collected at a pumping rate no greater than 12.5 L/min (3.3 gal/min).

During the purging process, several water quality parameters will be monitored to provide indicators of groundwater stabilization. Stability of measured values of specific conductivity, pH, and temperature will be required prior to sample collection, as discussed by EII 5.8, Groundwater Sampling. Turbidity and alkalinity will be monitored at the well site during purging and prior to sampling.

3.5.2 Sample Collection

After the wells are purged in accordance with the turbidity criteria described in Section 3.5.1, quadruplicate measurements of pH, SC, and temperature will be made to verify stability of the groundwater during sampling in compliance with the permit terms and conditions as implemented by internal WHC procedures accessible at the facility. These procedures are in accordance with the "Manchester Environmental Laboratory, Lab User's Manual, Washington State Department of Ecology, 4th Edition, January 1994 and SW 846, Volume 2, Section 1.2. The four replicate measurements will allow statistical evaluation of these indicator parameters to be made for subsequent use in evaluating water quality. After sample bottles are filled, they will be placed in an insulated cooler containing ice for transport to the laboratory.

3.5.3 Sample Analysis

Table 3-1 identifies constituents of concern, the corresponding analytical methods, and PQLs that will be used in groundwater monitoring at the TEDF. Analytical methods were selected from those listed in SW-846 (EPA 1992a), for analytes covered by SW-846. Reference analytical methods, based on appropriate EPA guidance documents, are specified for analytes not covered by SW-846 (see Table 3-1, "Group" column). Where options for alternative analytical methods are suggested or implied, the methods generally recognized to be the most reliable are specified. Analytical methods or procedures based on the reference methods identified in Table 3-1 will be selected and approved prior to use, in compliance with appropriate permit conditions, WHC procedures, work orders, and/or procurement requirements.

Approved analytical procedures will require the use of reporting techniques and units consistent with the EPA reference methods listed in Table 3-1 to facilitate the comparability of data sets in terms of precision and accuracy. The analyses will be performed in a Washington State accredited laboratory. The laboratory quality assurance requirements will, as a minimum, comply with the Hanford Analytical Services Quality Assurance Plan (DOE-RL 1994a).

3.5.4 Quality Control

The QC program is based on Chapter One, "Quality Control" (SW-846) (EPA 1992a) and will be in compliance with the terms and conditions of the permit. Analytical samples are subject to in-process QC measures in both the field and laboratory.

The QC samples prepared without the knowledge of the analytical laboratory are called "external" QC samples; QC samples prepared by the analytical laboratory and used to establish and continue the quality of the analytical laboratory are called "internal" QC samples. Two types of external QC samples will be collected and used to evaluate quality in the field and laboratory: (1) a field duplicate sample, and (2) two different types of blank samples. One duplicate (dup) sample will be collected during each sampling event and will consist of all the constituents listed in Table 3-1. A daily trip blank sample will be collected for each day that wells are sampled and one transfer blank sample will be collected during each sampling event. Both blank samples will be collected and analyzed only for part 1 of Table 3-1.

The internal QC samples analyzed in the laboratory will consist of the following: Matrix duplicate or matrix-spike duplicate samples, laboratory control samples, surrogate compound-spiked samples, reagent-blank samples, and calibration-check samples. These QC samples meet the minimum requirements, as applicable, for each analytical method specified in Table 3-1.

If the integrity of laboratory data is compromised, the analytical laboratory will notify the data user via nonconformance reports and/or records of decision.

4.0 REPORTING OF MONITORING RESULTS

The monitoring wells associated with the TEDF initially will be sampled quarterly, starting in early 1995 (Table 4-1). WHC will issue a Groundwater Screening Evaluation Report to meet the requirements specified in the State Waste Discharge Permit (permit) for this facility. This report will be issued quarterly and will report all analytical data from the previous quarter's groundwater monitoring, as required by permit Section S.8. Quarterly Discharge Monitoring Reports will be prepared and submitted as per Sections S.1, S.5, and G.11 of the permit. The groundwater monitoring data will be updated per the statistical methods identified in the permit.

Table 4-1. Schedule for Well Monitoring at the 200 Area Treated Effluent Disposal Facility.

Well	Aquifer	Sampling frequency ¹	Water level measurement	Well construction standard
699-40-36 ²	uppermost	quarterly	monthly	RCRA
699-41-35 ²	uppermost	quarterly	monthly	RCRA
699-42-37	uppermost	quarterly	monthly	RCRA

¹ Quarters are defined as January through March, April through June, July through September, and October through December.

² Enforcement Limits and Early Warning Values will be met in groundwater collected from the points of compliance in these wells.

The applicable data in these quarterly reports will be compared to the Enforcement Limits and Early Warning Values in groundwater as described, respectively, by Sections S.1, S.4, G.11, and G.21 of the permit. Any additional monitoring of pollutants using test procedures specified by the permit will be included in calculation and reporting of data submitted in the discharge monitoring report, as required by Section G.17 of the permit. All reports submitted will be signed and certified in accordance with Section G.18 of the permit.

All associated records will be maintained in accordance with Section G.12 of the permit, and as specified by WHC implementation procedures. The reports will be maintained in various forms and locations that will be accessible at the 200 Area TEDF offices.

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APPENDIX A

WATER LEVEL MEASUREMENTS

WHC-SD-EN-WP-012, Rev. 1

GeoDAT Report - 11/18/94

Groundwater Data Report

Well	Sample Date	Sample Number	Constituent Name	Result	Qualifiers	Error	Units
699-40-36	12/21/92	N/A	Hydraulic Head	-117.84			ft
	2/05/93	N/A	Hydraulic Head				ft
	2/22/93	N/A	Hydraulic Head	411.05			ft
	2/23/93	N/A	Hydraulic Head	411.06			ft
	3/22/93	N/A	Hydraulic Head	411.13			ft
	4/08/93	N/A	Hydraulic Head	411.04			ft
	5/06/93	N/A	Hydraulic Head	410.94			ft
	5/13/93	N/A	Hydraulic Head	411.08			ft
	6/21/93	N/A	Hydraulic Head	411.06			ft
	7/08/93	N/A	Hydraulic Head	410.88			ft
	8/06/93	N/A	Hydraulic Head	410.84			ft
	8/09/93	N/A	Hydraulic Head	410.77			ft
	9/03/93	N/A	Hydraulic Head	410.63			ft
	10/04/93	N/A	Hydraulic Head	410.69			ft
	10/08/93	N/A	Hydraulic Head	410.55			ft
	11/15/93	N/A	Hydraulic Head	410.67			ft
	12/13/93	N/A	Hydraulic Head	410.80			ft
	1/03/94	N/A	Hydraulic Head	410.66			ft
	1/05/94	N/A	Hydraulic Head	410.87			ft
	2/07/94	N/A	Hydraulic Head	410.78			ft
	3/21/94	N/A	Hydraulic Head	410.68			ft
	4/14/94	N/A	Hydraulic Head	410.49			ft
				410.63			ft
	5/23/94	N/A	Hydraulic Head	410.76			ft
	6/20/94	N/A	Hydraulic Head	410.92			ft

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Groundwater Data Report

Well	Sample Date	Sample Number	Constituent Name	Result	Qualifiers	Error	Units
699-40-36	7/22/94	N/A	Hydraulic Head	410.94			ft
	8/01/94	N/A	Hydraulic Head	410.79			ft
	8/08/94	N/A	Hydraulic Head	410.86			ft
	9/06/94	N/A	Hydraulic Head	410.70			ft
	10/27/94	N/A	Hydraulic Head	411.02			ft
699-41-35	12/21/92	N/A	Hydraulic Head	-108.24			ft
	2/05/93	N/A	Hydraulic Head				ft
	2/22/93	N/A	Hydraulic Head	412.01			ft
	2/23/93	N/A	Hydraulic Head	412.03			ft
	3/22/93	N/A	Hydraulic Head	412.25			ft
	4/08/93	N/A	Hydraulic Head	412.13			ft
	5/06/93	N/A	Hydraulic Head	412.03			ft
	5/13/93	N/A	Hydraulic Head	412.09			ft
	6/21/93	N/A	Hydraulic Head	412.11			ft
	7/08/93	N/A	Hydraulic Head	411.90			ft
	8/06/93	N/A	Hydraulic Head	411.90			ft
	8/09/93	N/A	Hydraulic Head	411.79			ft
	9/03/93	N/A	Hydraulic Head	411.63			ft
	10/04/93	N/A	Hydraulic Head	411.75			ft
	10/08/93	N/A	Hydraulic Head	411.52			ft
	11/15/93	N/A	Hydraulic Head	411.71			ft
	12/13/93	N/A	Hydraulic Head	411.75			ft
	1/03/94	N/A	Hydraulic Head	411.63			ft
	1/19/94	N/A	Hydraulic Head	411.62			ft

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifiers	Error	Units
699-41-35	2/07/94	N/A	Hydraulic Head	411.87			ft
	3/21/94	N/A	Hydraulic Head	411.74			ft
	4/14/94	N/A	Hydraulic Head	411.43			ft
				411.67			ft
	5/23/94	N/A	Hydraulic Head	411.68			ft
	6/20/94	N/A	Hydraulic Head	411.85			ft
	7/22/94	N/A	Hydraulic Head	411.98			ft
	8/03/94	N/A	Hydraulic Head	411.91			ft
	8/08/94	N/A	Hydraulic Head	411.86			ft
	9/06/94	N/A	Hydraulic Head	411.74			ft
	10/27/94	N/A	Hydraulic Head	412.08			ft
699-42-37	12/22/92	N/A	Hydraulic Head	-104.68			ft
	2/05/93	N/A	Hydraulic Head				ft
	2/23/93	N/A	Hydraulic Head	414.57			ft
				414.92			ft
	3/22/93	N/A	Hydraulic Head	415.16			ft
	4/09/93	N/A	Hydraulic Head	414.86			ft
	5/06/93	N/A	Hydraulic Head	414.78			ft
	5/13/93	N/A	Hydraulic Head	414.79			ft
	6/21/93	N/A	Hydraulic Head	415.00			ft
	7/08/93	N/A	Hydraulic Head	414.66			ft
	8/06/93	N/A	Hydraulic Head	414.55			ft
	8/30/93	N/A	Hydraulic Head	414.22			ft
	9/03/93	N/A	Hydraulic Head	414.22			ft
	10/04/93	N/A	Hydraulic Head	414.30			ft

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GeoDAT Report - 11/18/94

Groundwater Data Report

Well	Sample Date	Sample Number	Constituent Name	Result	Qualifiers	Error	Units
699-42-37	10/08/93	N/A	Hydraulic Head	413.50			ft
	11/15/93	N/A	Hydraulic Head	414.30			ft
	12/13/93	N/A	Hydraulic Head	414.33			ft
	1/03/94	N/A	Hydraulic Head	414.26			ft
	1/07/94	N/A	Hydraulic Head	414.32			ft
	2/07/94	N/A	Hydraulic Head	414.67			ft
	3/21/94	N/A	Hydraulic Head	414.46			ft
	4/11/94	N/A	Hydraulic Head	414.17			ft
	4/14/94	N/A	Hydraulic Head	414.19			ft
	5/23/94	N/A	Hydraulic Head	414.75			ft
	6/20/94	N/A	Hydraulic Head	414.99			ft
	7/22/94	N/A	Hydraulic Head	415.06			ft
	7/29/94	N/A	Hydraulic Head	413.21			ft
	8/08/94	N/A	Hydraulic Head	414.93			ft
	9/06/94	N/A	Hydraulic Head	414.80			ft

APPENDIX B

GROUNDWATER CHEMISTRY DATA

CONTENTS

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B.3	ORGANICS	B.3-1
B.4	RADIONUCLIDES	B.4-1

This appendix is divided into four sections which parallel Sections 2.2.4 and 3.4. Section B.1 contains all the data discussed in the turbidity and field parameters sections. Section B.2 contains all the data discussed in the cations, anions, metals and cyanide sections with one exception, SC is found in Appendix B.1. Section B.3 contains all the data discussed in the organics sections. Section B.4 contains all the data discussed in the radionuclides sections.

The appendix displays the data by well, sample date, sample number, constituent name, result, qualifiers, error (radionuclide section only) and units. The qualifiers column contains qualifiers and flags assigned by the laboratory and WHC personnel, respectively. Qualifiers reflect conditions occurring in the laboratory relating to the analytical procedure. Flags serve a wider function of alerting the data user to the limitations of the reported value. Qualifiers and flags can be appended to each other to form a string of letters when several factors apply to a result. The qualifiers and flags used are as follows:

Laboratory qualifiers:

- B - Blank associated with analyte is contaminated
- D - Analyzed sample is diluted
- E - Concentration is out of instrument calibration range
- J - Concentration is estimated
- L - Concentration is below the Contractually required quantification limits but above the Method Detection Limit
- U - Concentration is below the indicated value.

Data flags:

- F - Suspect data currently under review
- H - Laboratory holding time exceeded
- G - Reviewed data that are considered valid
- P - Potential problem; see text associated with table
- Q - Result associated with suspect Quality control data
- R - Reviewed data that have been rejected
- Y - Reviewed data that continue to be suspect.

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	21-Dec-92	B07TB1	Specific conductance	310			umhos
699-40-36	21-Dec-92	B07TB1	pH	7.92			
699-40-36	21-Dec-92	B07TB3	Specific conductance	310			umhos
699-40-36	21-Dec-92	B07TB3	pH	7.92			
699-40-36	21-Dec-92	B07TB5	Specific conductance	309			umhos
699-40-36	21-Dec-92	B07TB5	pH	7.92			
699-40-36	21-Dec-92	B07TB7	Specific conductance	308			umhos
699-40-36	21-Dec-92	B07TB7	pH	7.92			
699-40-36	22-Feb-93	B08717	Specific conductance	310			umhos
699-40-36	22-Feb-93	B08717	pH	7.85			
699-40-36	22-Feb-93	B08718	Specific conductance	312			umhos
699-40-36	22-Feb-93	B08718	pH	7.85			
699-40-36	22-Feb-93	B08719	Specific conductance	310			umhos
699-40-36	22-Feb-93	B08719	pH	7.84			
699-40-36	22-Feb-93	B08720	Specific conductance	313			umhos
699-40-36	22-Feb-93	B08720	pH	7.84			
699-40-36	13-May-93	B08JD7	Specific conductance	320			umhos
699-40-36	13-May-93	B08JD7	Specific conductance	313			umhos
699-40-36	13-May-93	B08JD7	pH	8.2			
699-40-36	13-May-93	B08JD7	pH	7.55			
699-40-36	13-May-93	B08JD7	Turbidity	10.5			NTU
699-40-36	13-May-93	B08JD8	Specific conductance	320			umhos
699-40-36	13-May-93	B08JD8	Specific conductance	313			umhos
699-40-36	13-May-93	B08JD8	pH	8.2			
699-40-36	13-May-93	B08JD8	pH	7.55			
699-40-36	13-May-93	B08JD8	Turbidity	10.4			NTU
699-40-36	13-May-93	B08JD9	Specific conductance	314			umhos
699-40-36	13-May-93	B08JD9	pH	7.56			
699-40-36	13-May-93	B08JF0	Specific conductance	313			umhos
699-40-36	13-May-93	B08JF0	pH	7.56			

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	09-Aug-93	B090V1	Specific conductance	330			umhos
699-40-36	09-Aug-93	B090V1	Specific conductance	324			umhos
699-40-36	09-Aug-93	B090V1	pH	7.6			
699-40-36	09-Aug-93	B090V1	pH	7.72			
699-40-36	09-Aug-93	B090V2	Specific conductance	321			umhos
699-40-36	09-Aug-93	B090V2	pH	7.74			
699-40-36	09-Aug-93	B090V3	Specific conductance	329			umhos
699-40-36	09-Aug-93	B090V3	pH	7.74			
699-40-36	09-Aug-93	B090V4	Specific conductance	333			umhos
699-40-36	09-Aug-93	B090V4	pH	7.76			
699-40-36	08-Oct-93	B099T7	Specific conductance	330			umhos
699-40-36	08-Oct-93	B099T7	Specific conductance	332			umhos
699-40-36	08-Oct-93	B099T7	pH	8.03			
699-40-36	08-Oct-93	B099T7	Turbidity	15			NTU
699-40-36	08-Oct-93	B099T8	Specific conductance	330			umhos
699-40-36	08-Oct-93	B099T8	Specific conductance	328			umhos
699-40-36	08-Oct-93	B099T8	pH	8.01			
699-40-36	08-Oct-93	B099T9	Specific conductance	330			umhos
699-40-36	08-Oct-93	B099T9	Specific conductance	327			umhos
699-40-36	08-Oct-93	B099T9	pH	8.01			
699-40-36	08-Oct-93	B099V0	Specific conductance	330			umhos
699-40-36	08-Oct-93	B099V0	Specific conductance	329			umhos
699-40-36	08-Oct-93	B099V0	pH	8			
699-40-36	05-Jan-94	B09Q92	Specific conductance	320			umhos
699-40-36	05-Jan-94	B09Q92	Specific conductance	304			umhos
699-40-36	05-Jan-94	B09Q92	pH	7.97			
699-40-36	05-Jan-94	B09Q92	Turbidity	0.6			NTU
699-40-36	05-Jan-94	B09Q93	Specific conductance	320			umhos
699-40-36	05-Jan-94	B09Q93	Specific conductance	305			umhos
699-40-36	05-Jan-94	B09Q93	pH	7.97			

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	05-Jan-94	B09Q94	Specific conductance	320			umhos
699-40-36	05-Jan-94	B09Q94	Specific conductance	305			umhos
699-40-36	05-Jan-94	B09Q94	pH	7.98			
699-40-36	05-Jan-94	B09Q95	Specific conductance	320			umhos
699-40-36	05-Jan-94	B09Q95	Specific conductance	306			umhos
699-40-36	05-Jan-94	B09Q95	pH	7.98			
699-40-36	14-Apr-94	B0BRG2	Specific conductance	330			umhos
699-40-36	14-Apr-94	B0BRG2	Specific conductance	331			umhos
699-40-36	14-Apr-94	B0BRG2	pH	8.2			
699-40-36	14-Apr-94	B0BRG2	pH	7.77			
699-40-36	14-Apr-94	B0BRG2	Turbidity	750			NTU
699-40-36	14-Apr-94	B0BRG3	Specific conductance	333			umhos
699-40-36	14-Apr-94	B0BRG3	pH	7.77			
699-40-36	14-Apr-94	B0BRG4	Specific conductance	331			umhos
699-40-36	14-Apr-94	B0BRG4	pH	7.77			
699-40-36	14-Apr-94	B0BRG5	Specific conductance	333			umhos
699-40-36	14-Apr-94	B0BRG5	pH	7.78			
699-40-36	01-Aug-94	B0C6S2	Specific conductance	330			umhos
699-40-36	01-Aug-94	B0C6S2	Specific conductance	297			umhos
699-40-36	01-Aug-94	B0C6S2	pH	8.1			
699-40-36	01-Aug-94	B0C6S2	pH	8.06			
699-40-36	01-Aug-94	B0C6S2	Temperature, field	18.3			
699-40-36	01-Aug-94	B0C6S2	Turbidity	15			NTU
699-40-36	01-Aug-94	B0C6S4	Specific conductance	293			umhos
699-40-36	01-Aug-94	B0C6S4	pH	8.03			
699-40-36	01-Aug-94	B0C6S5	Specific conductance	292			umhos
699-40-36	01-Aug-94	B0C6S5	pH	8.01			
699-40-36	01-Aug-94	B0C6S6	Specific conductance	293			umhos
699-40-36	01-Aug-94	B0C6S6	pH	8			
699-41-35	21-Dec-92	B07TB9	Specific conductance	325			umhos

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-41-35	21-Dec-92	B07TB9	pH	7.95			
699-41-35	21-Dec-92	B07TC0	Specific conductance	323			umhos
699-41-35	21-Dec-92	B07TC0	pH	7.94			
699-41-35	21-Dec-92	B07TC1	Specific conductance	323			umhos
699-41-35	21-Dec-92	B07TC1	pH	7.94			
699-41-35	21-Dec-92	B07TC2	Specific conductance	322			umhos
699-41-35	21-Dec-92	B07TC2	pH	7.94			
699-41-35	22-Feb-93	B08707	Specific conductance	324			umhos
699-41-35	22-Feb-93	B08707	pH	7.44			
699-41-35	22-Feb-93	B08708	Specific conductance	323			umhos
699-41-35	22-Feb-93	B08708	pH	7.44			
699-41-35	22-Feb-93	B08709	Specific conductance	322			umhos
699-41-35	22-Feb-93	B08709	pH	7.45			
699-41-35	22-Feb-93	B08710	Specific conductance	321			umhos
699-41-35	22-Feb-93	B08710	pH	7.46			
699-41-35	13-May-93	B08JF7	Specific conductance	320			umhos
699-41-35	13-May-93	B08JF7	Specific conductance	322			umhos
699-41-35	13-May-93	B08JF7	pH	8.2			
699-41-35	13-May-93	B08JF7	pH	7.83			
699-41-35	13-May-93	B08JF7	Turbidity	7.4			NTU
699-41-35	13-May-93	B08JF8	Specific conductance	321			umhos
699-41-35	13-May-93	B08JF8	pH	7.82			
699-41-35	13-May-93	B08JF9	Specific conductance	321			umhos
699-41-35	13-May-93	B08JF9	pH	7.82			
699-41-35	13-May-93	B08JG0	Specific conductance	319			umhos
699-41-35	13-May-93	B08JG0	pH	7.82			
699-41-35	09-Aug-93	B090V6	Specific conductance	320			umhos
699-41-35	09-Aug-93	B090V6	Specific conductance	314			umhos
699-41-35	09-Aug-93	B090V6	pH	7.6			
699-41-35	09-Aug-93	B090V6	pH	7.87			

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-41-35	09-Aug-93	B090V7	Specific conductance	319			umhos
699-41-35	09-Aug-93	B090V7	pH	7.86			
699-41-35	09-Aug-93	B090V8	Specific conductance	317			umhos
699-41-35	09-Aug-93	B090V8	pH	7.85			
699-41-35	09-Aug-93	B090V9	Specific conductance	318			umhos
699-41-35	09-Aug-93	B090V9	pH	7.84			
699-41-35	08-Oct-93	B099W3	Specific conductance	330			umhos
699-41-35	08-Oct-93	B099W3	Specific conductance	330			umhos
699-41-35	08-Oct-93	B099W3	pH	7.99			
699-41-35	08-Oct-93	B099W3	Turbidity	1.3			NTU
699-41-35	08-Oct-93	B099W4	Specific conductance	330			umhos
699-41-35	08-Oct-93	B099W4	Specific conductance	328			umhos
699-41-35	08-Oct-93	B099W4	pH	7.98			
699-41-35	08-Oct-93	B099W5	Specific conductance	330			umhos
699-41-35	08-Oct-93	B099W5	Specific conductance	328			umhos
699-41-35	08-Oct-93	B099W5	pH	7.96			
699-41-35	08-Oct-93	B099W6	Specific conductance	330			umhos
699-41-35	08-Oct-93	B099W6	Specific conductance	328			umhos
699-41-35	08-Oct-93	B099W6	pH	7.96			
699-41-35	19-Jan-94	B09Q96	Specific conductance	320			umhos
699-41-35	19-Jan-94	B09Q96	Specific conductance	331			umhos
699-41-35	19-Jan-94	B09Q96	pH	7.91			
699-41-35	19-Jan-94	B09Q96	Turbidity	42			NTU
699-41-35	19-Jan-94	B09Q97	Specific conductance	320			umhos
699-41-35	19-Jan-94	B09Q97	Specific conductance	333			umhos
699-41-35	19-Jan-94	B09Q97	pH	7.94			
699-41-35	19-Jan-94	B09Q98	Specific conductance	320			umhos
699-41-35	19-Jan-94	B09Q98	Specific conductance	331			umhos
699-41-35	19-Jan-94	B09Q98	pH	7.91			
699-41-35	19-Jan-94	B09Q99	Specific conductance	320			umhos

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-41-35	19-Jan-94	B09Q99	Specific conductance	331			umhos
699-41-35	19-Jan-94	B09Q99	pH	7.9			
699-41-35	14-Apr-94	B0BRG7	Specific conductance	330			umhos
699-41-35	14-Apr-94	B0BRG7	Specific conductance	320			umhos
699-41-35	14-Apr-94	B0BRG7	pH	8.1			
699-41-35	14-Apr-94	B0BRG7	pH	7.97			
699-41-35	14-Apr-94	B0BRG7	Turbidity	28			NTU
699-41-35	14-Apr-94	B0BRG8	Specific conductance	319			umhos
699-41-35	14-Apr-94	B0BRG8	pH	7.98			
699-41-35	14-Apr-94	B0BRG9	Specific conductance	319			umhos
699-41-35	14-Apr-94	B0BRG9	pH	7.98			
699-41-35	14-Apr-94	B0BRH0	Specific conductance	320			umhos
699-41-35	14-Apr-94	B0BRH0	pH	7.98			
699-41-35	03-Aug-94	B0C6T9	Specific conductance	320			umhos
699-41-35	03-Aug-94	B0C6T9	Specific conductance	327			umhos
699-41-35	03-Aug-94	B0C6T9	pH	7.9			
699-41-35	03-Aug-94	B0C6T9	pH	8.57			
699-41-35	03-Aug-94	B0C6T9	Temperature, field	17.1			
699-41-35	03-Aug-94	B0C6T9	Turbidity	4.6			NTU
699-41-35	03-Aug-94	B0C6V0	Specific conductance	327			umhos
699-41-35	03-Aug-94	B0C6V0	pH	8.47			
699-41-35	03-Aug-94	B0C6V0	Temperature, field	17.1			
699-41-35	03-Aug-94	B0C6V1	Specific conductance	327			umhos
699-41-35	03-Aug-94	B0C6V1	pH	8.39			
699-41-35	03-Aug-94	B0C6V1	Temperature, field	17.2			
699-41-35	03-Aug-94	B0C6V2	Specific conductance	328			umhos
699-41-35	03-Aug-94	B0C6V2	pH	8.38			
699-41-35	03-Aug-94	B0C6V2	Temperature, field	17.1			
699-42-37	22-Dec-92	B07TC4	Specific conductance	361			umhos
699-42-37	22-Dec-92	B07TC4	pH	8.11			

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	22-Dec-92	B07TC5	Specific conductance	360			umhos
699-42-37	22-Dec-92	B07TC5	pH	8.1			
699-42-37	22-Dec-92	B07TC6	Specific conductance	359			umhos
699-42-37	22-Dec-92	B07TC6	pH	8.08			
699-42-37	22-Dec-92	B07TC7	Specific conductance	356			umhos
699-42-37	22-Dec-92	B07TC7	pH	8.09			
699-42-37	23-Feb-93	B08712	Specific conductance	381			umhos
699-42-37	23-Feb-93	B08712	pH	8.1			
699-42-37	23-Feb-93	B08713	Specific conductance	382			umhos
699-42-37	23-Feb-93	B08713	pH	8.1			
699-42-37	23-Feb-93	B08714	Specific conductance	382			umhos
699-42-37	23-Feb-93	B08714	pH	8.1			
699-42-37	23-Feb-93	B08715	Specific conductance	382			umhos
699-42-37	23-Feb-93	B08715	pH	8.1			
699-42-37	13-May-93	B08JG2	Specific conductance	350			umhos
699-42-37	13-May-93	B08JG2	Specific conductance	378			umhos
699-42-37	13-May-93	B08JG2	pH	8.2			
699-42-37	13-May-93	B08JG2	pH	7.64			
699-42-37	13-May-93	B08JG2	Turbidity	10.9			NTU
699-42-37	13-May-93	B08JG3	Specific conductance	367			umhos
699-42-37	13-May-93	B08JG3	pH	7.64			
699-42-37	13-May-93	B08JG4	Specific conductance	363			umhos
699-42-37	13-May-93	B08JG4	pH	7.66			
699-42-37	13-May-93	B08JG5	Specific conductance	362			umhos
699-42-37	13-May-93	B08JG5	pH	7.67			
699-42-37	30-Aug-93	B090W1	Specific conductance	360			umhos
699-42-37	30-Aug-93	B090W1	Specific conductance	364			umhos
699-42-37	30-Aug-93	B090W1	pH	8			
699-42-37	30-Aug-93	B090W1	pH	8.05			
699-42-37	30-Aug-93	B090W2	Specific conductance	360			umhos

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	30-Aug-93	B090W2	Specific conductance	363			umhos
699-42-37	30-Aug-93	B090W2	pH	8			
699-42-37	30-Aug-93	B090W2	pH	8.04			
699-42-37	30-Aug-93	B090W3	Specific conductance	361			umhos
699-42-37	30-Aug-93	B090W3	pH	8.03			
699-42-37	30-Aug-93	B090W4	Specific conductance	360			umhos
699-42-37	30-Aug-93	B090W4	pH	8.03			
699-42-37	08-Oct-93	B099X5	Specific conductance	360			umhos
699-42-37	08-Oct-93	B099X5	Specific conductance	353			umhos
699-42-37	08-Oct-93	B099X5	pH	8			
699-42-37	08-Oct-93	B099X5	Turbidity	3			NTU
699-42-37	08-Oct-93	B099X6	Specific conductance	360			umhos
699-42-37	08-Oct-93	B099X6	Specific conductance	357			umhos
699-42-37	08-Oct-93	B099X6	pH	8			
699-42-37	08-Oct-93	B099X7	Specific conductance	360			umhos
699-42-37	08-Oct-93	B099X7	Specific conductance	354			umhos
699-42-37	08-Oct-93	B099X7	pH	7.98			
699-42-37	08-Oct-93	B099X8	Specific conductance	360			umhos
699-42-37	08-Oct-93	B099X8	Specific conductance	355			umhos
699-42-37	08-Oct-93	B099X8	pH	7.96			
699-42-37	07-Jan-94	B09QB0	Specific conductance	360			umhos
699-42-37	07-Jan-94	B09QB0	Specific conductance	351			umhos
699-42-37	07-Jan-94	B09QB0	pH	8.06			
699-42-37	07-Jan-94	B09QB0	Turbidity	20			NTU
699-42-37	07-Jan-94	B09QB1	Specific conductance	360			umhos
699-42-37	07-Jan-94	B09QB1	Specific conductance	350			umhos
699-42-37	07-Jan-94	B09QB1	pH	8.05			
699-42-37	07-Jan-94	B09QB2	Specific conductance	360			umhos
699-42-37	07-Jan-94	B09QB2	Specific conductance	350			umhos
699-42-37	07-Jan-94	B09QB2	pH	8.04			

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	07-Jan-94	B09QB3	Specific conductance	360			umhos
699-42-37	07-Jan-94	B09QB3	Specific conductance	351			umhos
699-42-37	07-Jan-94	B09QB3	pH	8.04			
699-42-37	11-Apr-94	B0BRH2	Specific conductance	360			umhos
699-42-37	11-Apr-94	B0BRH2	Specific conductance	393			umhos
699-42-37	11-Apr-94	B0BRH2	pH	8.1			
699-42-37	11-Apr-94	B0BRH2	pH	7.71			
699-42-37	11-Apr-94	B0BRH2	Turbidity	63			NTU
699-42-37	11-Apr-94	B0BRH3	Specific conductance	391			umhos
699-42-37	11-Apr-94	B0BRH3	pH	7.71			
699-42-37	11-Apr-94	B0BRH4	Specific conductance	394			umhos
699-42-37	11-Apr-94	B0BRH4	pH	7.72			
699-42-37	11-Apr-94	B0BRH5	Specific conductance	393			umhos
699-42-37	11-Apr-94	B0BRH5	pH	7.72			
699-42-37	29-Jul-94	B0C6W8	Specific conductance	360			umhos
699-42-37	29-Jul-94	B0C6W8	Specific conductance	336			umhos
699-42-37	29-Jul-94	B0C6W8	pH	8			
699-42-37	29-Jul-94	B0C6W8	pH	7.99			
699-42-37	29-Jul-94	B0C6W8	Temperature, field	17.6			
699-42-37	29-Jul-94	B0C6W8	Turbidity	44			NTU
699-42-37	29-Jul-94	B0C6W9	Specific conductance	332			umhos
699-42-37	29-Jul-94	B0C6W9	pH	7.98			
699-42-37	29-Jul-94	B0C6W9	Temperature, field	17.3			
699-42-37	29-Jul-94	B0C6X0	Specific conductance	333			umhos
699-42-37	29-Jul-94	B0C6X0	pH	7.97			
699-42-37	29-Jul-94	B0C6X0	Temperature, field	17.3			
699-42-37	29-Jul-94	B0C6X1	Specific conductance	332			umhos
699-42-37	29-Jul-94	B0C6X1	pH	7.96			
699-42-37	29-Jul-94	B0C6X1	Temperature, field	17.2			

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Appendix B.2 - Cation, Anion, Metals, and Cyanide

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	21-Dec-92	B07TB1	Chloride	3100			ppb
699-40-36	21-Dec-92	B07TB1	Phosphate	400	U		ppb
699-40-36	21-Dec-92	B07TB1	Nitrate	200	U		ppb
699-40-36	21-Dec-92	B07TB1	Nitrite	200	U		ppb
699-40-36	21-Dec-92	B07TB1	Ammonium ion	100	U		ppb
699-40-36	21-Dec-92	B07TB1	Sulfate	7300			ppb
699-40-36	21-Dec-92	B07TB1	Fluoride	900			ppb
699-40-36	21-Dec-92	B07TB1	Bromide	500	U		ppb
699-40-36	21-Dec-92	B07TB1	Hydrazine	30	U		ppb
699-40-36	21-Dec-92	B07TB1	Cyanide	20	U		ppb
699-40-36	21-Dec-92	B07TB1	Iron	550			ppb
699-40-36	21-Dec-92	B07TB1	Lead	5	U		ppb
699-40-36	21-Dec-92	B07TB1	Magnesium	5300			ppb
699-40-36	21-Dec-92	B07TB1	Manganese	120			ppb
699-40-36	21-Dec-92	B07TB1	Mercury	0.2	U		ppb
699-40-36	21-Dec-92	B07TB1	Nickel	30	U		ppb
699-40-36	21-Dec-92	B07TB1	Potassium	7100			ppb
699-40-36	21-Dec-92	B07TB1	Silver	20	U		ppb
699-40-36	21-Dec-92	B07TB1	Sodium	45000			ppb
699-40-36	21-Dec-92	B07TB1	Tin	100	U		ppb
699-40-36	21-Dec-92	B07TB1	Antimony	200	U		ppb
699-40-36	21-Dec-92	B07TB1	Arsenic	5	U		ppb
699-40-36	21-Dec-92	B07TB1	Barium	80			ppb
699-40-36	21-Dec-92	B07TB1	Beryllium	3	U		ppb
699-40-36	21-Dec-92	B07TB1	Cadmium	10	U		ppb
699-40-36	21-Dec-92	B07TB1	Chromium	30			ppb
699-40-36	21-Dec-92	B07TB1	Cobalt	20	U		ppb
699-40-36	21-Dec-92	B07TB1	Copper	20	U		ppb
699-40-36	21-Dec-92	B07TB1	Vanadium	30	U		ppb
699-40-36	21-Dec-92	B07TB1	Zinc	100			ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	21-Dec-92	B07TB1	Calcium	15000			ppb
699-40-36	21-Dec-92	B07TB1	Selenium	10	U		ppb
699-40-36	21-Dec-92	B07TB8	Iron, filtered	80			ppb
699-40-36	21-Dec-92	B07TB8	Lead, filtered	5	U		ppb
699-40-36	21-Dec-92	B07TB8	Magnesium, filtered	5300			ppb
699-40-36	21-Dec-92	B07TB8	Manganese, filtered	110			ppb
699-40-36	21-Dec-92	B07TB8	Mercury, filtered	0.2	U		ppb
699-40-36	21-Dec-92	B07TB8	Nickel, filtered	30	U		ppb
699-40-36	21-Dec-92	B07TB8	Potassium, filtered	7400			ppb
699-40-36	21-Dec-92	B07TB8	Silver, filtered	20	U		ppb
699-40-36	21-Dec-92	B07TB8	Sodium, filtered	48000			ppb
699-40-36	21-Dec-92	B07TB8	Tin, filtered	100	U		ppb
699-40-36	21-Dec-92	B07TB8	Antimony, filtered	200	U		ppb
699-40-36	21-Dec-92	B07TB8	Arsenic, filtered	5	U		ppb
699-40-36	21-Dec-92	B07TB8	Barium, filtered	80			ppb
699-40-36	21-Dec-92	B07TB8	Beryllium, filtered	3	U		ppb
699-40-36	21-Dec-92	B07TB8	Cadmium, filtered	10	U		ppb
699-40-36	21-Dec-92	B07TB8	Chromium, filtered	20	U		ppb
699-40-36	21-Dec-92	B07TB8	Cobalt, filtered	20	U		ppb
699-40-36	21-Dec-92	B07TB8	Copper, filtered	20	U		ppb
699-40-36	21-Dec-92	B07TB8	Vanadium, filtered	30	U		ppb
699-40-36	21-Dec-92	B07TB8	Zinc, filtered	10			ppb
699-40-36	21-Dec-92	B07TB8	Calcium, filtered	15000			ppb
699-40-36	21-Dec-92	B07TB8	Selenium, filtered	10	U		ppb
699-40-36	22-Feb-93	B08717	Chloride	3400			ppb
699-40-36	22-Feb-93	B08717	Phosphate	400	U		ppb
699-40-36	22-Feb-93	B08717	Nitrate	200	U		ppb
699-40-36	22-Feb-93	B08717	Nitrite	200	U		ppb
699-40-36	22-Feb-93	B08717	Ammonium ion	100	U		ppb
699-40-36	22-Feb-93	B08717	Sulfate	17000			ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	22-Feb-93	B08717	Fluoride	900			ppb
699-40-36	22-Feb-93	B08717	Bromide	500	U		ppb
699-40-36	22-Feb-93	B08717	Hydrazine	30	U		ppb
699-40-36	22-Feb-93	B08717	Cyanide	20	U		ppb
699-40-36	22-Feb-93	B08717	Iron	580			ppb
699-40-36	22-Feb-93	B08717	Lead	5	U		ppb
699-40-36	22-Feb-93	B08717	Magnesium	5200			ppb
699-40-36	22-Feb-93	B08717	Manganese	170			ppb
699-40-36	22-Feb-93	B08717	Mercury	0.2	U		ppb
699-40-36	22-Feb-93	B08717	Nickel	30	U		ppb
699-40-36	22-Feb-93	B08717	Potassium	7700			ppb
699-40-36	22-Feb-93	B08717	Silver	20	U		ppb
699-40-36	22-Feb-93	B08717	Sodium	47000			ppb
699-40-36	22-Feb-93	B08717	Tin	100	U		ppb
699-40-36	22-Feb-93	B08717	Antimony	200	U		ppb
699-40-36	22-Feb-93	B08717	Arsenic	5	U		ppb
699-40-36	22-Feb-93	B08717	Barium	80			ppb
699-40-36	22-Feb-93	B08717	Beryllium	3	U		ppb
699-40-36	22-Feb-93	B08717	Cadmium	10	U		ppb
699-40-36	22-Feb-93	B08717	Chromium	30			ppb
699-40-36	22-Feb-93	B08717	Cobalt	20	U		ppb
699-40-36	22-Feb-93	B08717	Copper	20	U		ppb
699-40-36	22-Feb-93	B08717	Vanadium	30	U		ppb
699-40-36	22-Feb-93	B08717	Zinc	690			ppb
699-40-36	22-Feb-93	B08717	Calcium	15000			ppb
699-40-36	22-Feb-93	B08717	Selenium	10	U		ppb
699-40-36	22-Feb-93	B08717	Coliforms	1	U		COL
699-40-36	22-Feb-93	B08721	Iron, filtered	40			ppb
699-40-36	22-Feb-93	B08721	Lead, filtered	5	U		ppb
699-40-36	22-Feb-93	B08721	Magnesium, filtered	5800			ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	22-Feb-93	B08721	Manganese, filtered	150			ppb
699-40-36	22-Feb-93	B08721	Mercury, filtered	0.2	U		ppb
699-40-36	22-Feb-93	B08721	Nickel, filtered	30	U		ppb
699-40-36	22-Feb-93	B08721	Potassium, filtered	8800			ppb
699-40-36	22-Feb-93	B08721	Silver, filtered	20	U		ppb
699-40-36	22-Feb-93	B08721	Sodium, filtered	54000			ppb
699-40-36	22-Feb-93	B08721	Tin, filtered	100	U		ppb
699-40-36	22-Feb-93	B08721	Antimony, filtered	200	U		ppb
699-40-36	22-Feb-93	B08721	Arsenic, filtered	5	U		ppb
699-40-36	22-Feb-93	B08721	Barium, filtered	80			ppb
699-40-36	22-Feb-93	B08721	Beryllium, filtered	3	U		ppb
699-40-36	22-Feb-93	B08721	Cadmium, filtered	10	U		ppb
699-40-36	22-Feb-93	B08721	Chromium, filtered	20	U		ppb
699-40-36	22-Feb-93	B08721	Cobalt, filtered	20	U		ppb
699-40-36	22-Feb-93	B08721	Copper, filtered	20	U		ppb
699-40-36	22-Feb-93	B08721	Vanadium, filtered	30	U		ppb
699-40-36	22-Feb-93	B08721	Zinc, filtered	10	U		ppb
699-40-36	22-Feb-93	B08721	Calcium, filtered	17000			ppb
699-40-36	22-Feb-93	B08721	Selenium, filtered	10	U		ppb
699-40-36	13-May-93	B08JD7	Chloride	3300			ppb
699-40-36	13-May-93	B08JD7	Phosphate	147	U		ppb
699-40-36	13-May-93	B08JD7	Nitrate	44.4	U		ppb
699-40-36	13-May-93	B08JD7	Nitrite	38.3	U		ppb
699-40-36	13-May-93	B08JD7	Ammonium ion	38.5	U		ppb
699-40-36	13-May-93	B08JD7	Sulfate	8100			ppb
699-40-36	13-May-93	B08JD7	Fluoride	1100			ppb
699-40-36	13-May-93	B08JD7	Sulfide	300	U		ppb
699-40-36	13-May-93	B08JD7	Bromide	52.8	U		ppb
699-40-36	13-May-93	B08JD7	Hydrazine	5	L		ppb
699-40-36	13-May-93	B08JD7	Cyanide	1.24	U		ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	13-May-93	B08JD7	Aluminum	180	L		ppb
699-40-36	13-May-93	B08JD7	Iron	330			ppb
699-40-36	13-May-93	B08JD7	Lead	1	L		ppb
699-40-36	13-May-93	B08JD7	Magnesium	5100			ppb
699-40-36	13-May-93	B08JD7	Manganese	130			ppb
699-40-36	13-May-93	B08JD7	Mercury	0.158	U		ppb
699-40-36	13-May-93	B08JD7	Nickel	17.9	U		ppb
699-40-36	13-May-93	B08JD7	Potassium	8000			ppb
699-40-36	13-May-93	B08JD7	Silver	2.87	U		ppb
699-40-36	13-May-93	B08JD7	Sodium	45000			ppb
699-40-36	13-May-93	B08JD7	Thallium	1.02	U		ppb
699-40-36	13-May-93	B08JD7	Tin	51.1	U		ppb
699-40-36	13-May-93	B08JD7	Antimony	69.4	U		ppb
699-40-36	13-May-93	B08JD7	Arsenic	2	L		ppb
699-40-36	13-May-93	B08JD7	Barium	60			ppb
699-40-36	13-May-93	B08JD7	Beryllium	0.814	U		ppb
699-40-36	13-May-93	B08JD7	Cadmium	4.7	U		ppb
699-40-36	13-May-93	B08JD7	Chromium	5.7	L		ppb
699-40-36	13-May-93	B08JD7	Cobalt	4.05	U		ppb
699-40-36	13-May-93	B08JD7	Copper	14	L		ppb
699-40-36	13-May-93	B08JD7	Vanadium	8	L		ppb
699-40-36	13-May-93	B08JD7	Zinc	130			ppb
699-40-36	13-May-93	B08JD7	Calcium	15000			ppb
699-40-36	13-May-93	B08JD7	Selenium	1.21	U		ppb
699-40-36	13-May-93	B08JD7	Coliforms	1	U		COL
699-40-36	13-May-93	B08JD7	Total Carbon	38000			ppb
699-40-36	13-May-93	B08JD8	Chloride	3300			ppb
699-40-36	13-May-93	B08JD8	Phosphate	147	U		ppb
699-40-36	13-May-93	B08JD8	Nitrate	60	L		ppb
699-40-36	13-May-93	B08JD8	Nitrite	38.3	U		ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	13-May-93	B08JD8	Ammonium ion	38.5	U		ppb
699-40-36	13-May-93	B08JD8	Sulfate	8100			ppb
699-40-36	13-May-93	B08JD8	Fluoride	1100			ppb
699-40-36	13-May-93	B08JD8	Sulfide	300	U		ppb
699-40-36	13-May-93	B08JD8	Bromide	52.8	U		ppb
699-40-36	13-May-93	B08JD8	Hydrazine	3	L		ppb
699-40-36	13-May-93	B08JD8	Cyanide	1.24	U		ppb
699-40-36	13-May-93	B08JD8	Aluminum	500			ppb
699-40-36	13-May-93	B08JD8	Iron	670			ppb
699-40-36	13-May-93	B08JD8	Lead	2	L		ppb
699-40-36	13-May-93	B08JD8	Magnesium	5300			ppb
699-40-36	13-May-93	B08JD8	Manganese	140			ppb
699-40-36	13-May-93	B08JD8	Mercury	0.158	U		ppb
699-40-36	13-May-93	B08JD8	Nickel	17.9	U		ppb
699-40-36	13-May-93	B08JD8	Potassium	8000			ppb
699-40-36	13-May-93	B08JD8	Silver	2.87	U		ppb
699-40-36	13-May-93	B08JD8	Sodium	46000			ppb
699-40-36	13-May-93	B08JD8	Thallium	1.02	U		ppb
699-40-36	13-May-93	B08JD8	Tin	51.1	U		ppb
699-40-36	13-May-93	B08JD8	Antimony	69.4	U		ppb
699-40-36	13-May-93	B08JD8	Arsenic	2	L		ppb
699-40-36	13-May-93	B08JD8	Barium	70			ppb
699-40-36	13-May-93	B08JD8	Beryllium	0.814	U		ppb
699-40-36	13-May-93	B08JD8	Cadmium	4.7	U		ppb
699-40-36	13-May-93	B08JD8	Chromium	20			ppb
699-40-36	13-May-93	B08JD8	Cobalt	4.05	U		ppb
699-40-36	13-May-93	B08JD8	Copper	2.65	U		ppb
699-40-36	13-May-93	B08JD8	Vanadium	6.9	L		ppb
699-40-36	13-May-93	B08JD8	Zinc	140			ppb
699-40-36	13-May-93	B08JD8	Calcium	15000			ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	13-May-93	B08JD8	Selenium	1.21	U		ppb
699-40-36	13-May-93	B08JD8	Coliforms	1	U		COL
699-40-36	13-May-93	B08JD8	Total Carbon	37000			ppb
699-40-36	13-May-93	B08JF5	Aluminum, filtered	44	L		ppb
699-40-36	13-May-93	B08JF5	Iron, filtered	80			ppb
699-40-36	13-May-93	B08JF5	Lead, filtered	0.508	U		ppb
699-40-36	13-May-93	B08JF5	Magnesium, filtered	5000			ppb
699-40-36	13-May-93	B08JF5	Manganese, filtered	100			ppb
699-40-36	13-May-93	B08JF5	Mercury, filtered	0.158	U		ppb
699-40-36	13-May-93	B08JF5	Nickel, filtered	17.9	U		ppb
699-40-36	13-May-93	B08JF5	Potassium, filtered	8000			ppb
699-40-36	13-May-93	B08JF5	Silver, filtered	2.87	U		ppb
699-40-36	13-May-93	B08JF5	Sodium, filtered	46000			ppb
699-40-36	13-May-93	B08JF5	Thallium, filtered	1.02	U		ppb
699-40-36	13-May-93	B08JF5	Tin, filtered	51.1	U		ppb
699-40-36	13-May-93	B08JF5	Antimony, filtered	69.4	U		ppb
699-40-36	13-May-93	B08JF5	Arsenic, filtered	3	L		ppb
699-40-36	13-May-93	B08JF5	Barium, filtered	60			ppb
699-40-36	13-May-93	B08JF5	Beryllium, filtered	0.814	U		ppb
699-40-36	13-May-93	B08JF5	Cadmium, filtered	4.7	U		ppb
699-40-36	13-May-93	B08JF5	Chromium, filtered	8.2	L		ppb
699-40-36	13-May-93	B08JF5	Cobalt, filtered	4.05	U		ppb
699-40-36	13-May-93	B08JF5	Copper, filtered	2.65	U		ppb
699-40-36	13-May-93	B08JF5	Vanadium, filtered	7.2	L		ppb
699-40-36	13-May-93	B08JF5	Zinc, filtered	3.44	U		ppb
699-40-36	13-May-93	B08JF5	Calcium, filtered	14000			ppb
699-40-36	13-May-93	B08JF5	Selenium, filtered	1.21	U		ppb
699-40-36	13-May-93	B08JF6	Aluminum, filtered	37	L		ppb
699-40-36	13-May-93	B08JF6	Iron, filtered	50			ppb
699-40-36	13-May-93	B08JF6	Lead, filtered	0.508	U		ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	13-May-93	B08JF6	Magnesium, filtered	5000			ppb
699-40-36	13-May-93	B08JF6	Manganese, filtered	100			ppb
699-40-36	13-May-93	B08JF6	Mercury, filtered	0.158	U		ppb
699-40-36	13-May-93	B08JF6	Nickel, filtered	17.9	U		ppb
699-40-36	13-May-93	B08JF6	Potassium, filtered	8000			ppb
699-40-36	13-May-93	B08JF6	Silver, filtered	2.87	U		ppb
699-40-36	13-May-93	B08JF6	Sodium, filtered	45000			ppb
699-40-36	13-May-93	B08JF6	Thallium, filtered	1.02	U		ppb
699-40-36	13-May-93	B08JF6	Tin, filtered	51.1	U		ppb
699-40-36	13-May-93	B08JF6	Antimony, filtered	69.4	U		ppb
699-40-36	13-May-93	B08JF6	Arsenic, filtered	2	L		ppb
699-40-36	13-May-93	B08JF6	Barium, filtered	60			ppb
699-40-36	13-May-93	B08JF6	Beryllium, filtered	0.814	U		ppb
699-40-36	13-May-93	B08JF6	Cadmium, filtered	4.7	U		ppb
699-40-36	13-May-93	B08JF6	Chromium, filtered	5.42	U		ppb
699-40-36	13-May-93	B08JF6	Cobalt, filtered	4.05	U		ppb
699-40-36	13-May-93	B08JF6	Copper, filtered	2.65	U		ppb
699-40-36	13-May-93	B08JF6	Vanadium, filtered	9.8	L		ppb
699-40-36	13-May-93	B08JF6	Zinc, filtered	3.44	U		ppb
699-40-36	13-May-93	B08JF6	Calcium, filtered	14000			ppb
699-40-36	13-May-93	B08JF6	Selenium, filtered	1.21	U		ppb
699-40-36	09-Aug-93	B090V1	Chloride	3600			ppb
699-40-36	09-Aug-93	B090V1	Phosphate	147	U		ppb
699-40-36	09-Aug-93	B090V1	Nitrate	200	L		ppb
699-40-36	09-Aug-93	B090V1	Nitrite	38.3	U		ppb
699-40-36	09-Aug-93	B090V1	Ammonium ion	38.5	U		ppb
699-40-36	09-Aug-93	B090V1	Sulfate	12000			ppb
699-40-36	09-Aug-93	B090V1	Fluoride	1000			ppb
699-40-36	09-Aug-93	B090V1	Bromide	52.8	U		ppb
699-40-36	09-Aug-93	B090V1	Hydrazine	1.89	U		ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	09-Aug-93	B090V1	Cyanide	1.24	U		ppb
699-40-36	09-Aug-93	B090V1	Aluminum	710			ppb
699-40-36	09-Aug-93	B090V1	Iron	1200			ppb
699-40-36	09-Aug-93	B090V1	Lead	0.89	L		ppb
699-40-36	09-Aug-93	B090V1	Magnesium	5200			ppb
699-40-36	09-Aug-93	B090V1	Manganese	150			ppb
699-40-36	09-Aug-93	B090V1	Mercury	0.158	U		ppb
699-40-36	09-Aug-93	B090V1	Nickel	43			ppb
699-40-36	09-Aug-93	B090V1	Potassium	5800			ppb
699-40-36	09-Aug-93	B090V1	Silver	3.3	L		ppb
699-40-36	09-Aug-93	B090V1	Sodium	50000			ppb
699-40-36	09-Aug-93	B090V1	Tin	51.1	U		ppb
699-40-36	09-Aug-93	B090V1	Antimony	69.4	U		ppb
699-40-36	09-Aug-93	B090V1	Arsenic	1.38	U		ppb
699-40-36	09-Aug-93	B090V1	Barium	72			ppb
699-40-36	09-Aug-93	B090V1	Beryllium	0.814	U		ppb
699-40-36	09-Aug-93	B090V1	Cadmium	4.7	U		ppb
699-40-36	09-Aug-93	B090V1	Chromium	77			ppb
699-40-36	09-Aug-93	B090V1	Cobalt	8.7	L		ppb
699-40-36	09-Aug-93	B090V1	Copper	6	L		ppb
699-40-36	09-Aug-93	B090V1	Vanadium	13	L		ppb
699-40-36	09-Aug-93	B090V1	Zinc	15			ppb
699-40-36	09-Aug-93	B090V1	Calcium	16000			ppb
699-40-36	09-Aug-93	B090V1	Selenium	1.21	U		ppb
699-40-36	09-Aug-93	B090V1	Coliforms	1	U		COL
699-40-36	09-Aug-93	B090V1	Total Dissolved Solids	220			ppm
699-40-36	09-Aug-93	B090V5	Aluminum, filtered	32.5	U		ppb
699-40-36	09-Aug-93	B090V5	Iron, filtered	51			ppb
699-40-36	09-Aug-93	B090V5	Lead, filtered	0.508	U		ppb
699-40-36	09-Aug-93	B090V5	Magnesium, filtered	5000			ppb

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699-40-36	09-Aug-93	B090V5	Manganese, filtered	130			ppb
699-40-36	09-Aug-93	B090V5	Mercury, filtered	0.158	U		ppb
699-40-36	09-Aug-93	B090V5	Nickel, filtered	17.9	U		ppb
699-40-36	09-Aug-93	B090V5	Potassium, filtered	7200			ppb
699-40-36	09-Aug-93	B090V5	Silver, filtered	3.5	L		ppb
699-40-36	09-Aug-93	B090V5	Sodium, filtered	49000			ppb
699-40-36	09-Aug-93	B090V5	Tin, filtered	130			ppb
699-40-36	09-Aug-93	B090V5	Antimony, filtered	69.4	U		ppb
699-40-36	09-Aug-93	B090V5	Arsenic, filtered	2.3	L		ppb
699-40-36	09-Aug-93	B090V5	Barium, filtered	68			ppb
699-40-36	09-Aug-93	B090V5	Beryllium, filtered	0.814	U		ppb
699-40-36	09-Aug-93	B090V5	Cadmium, filtered	4.7	U		ppb
699-40-36	09-Aug-93	B090V5	Chromium, filtered	8.4	L		ppb
699-40-36	09-Aug-93	B090V5	Cobalt, filtered	4.05	U		ppb
699-40-36	09-Aug-93	B090V5	Copper, filtered	2.65	U		ppb
699-40-36	09-Aug-93	B090V5	Vanadium, filtered	10	L		ppb
699-40-36	09-Aug-93	B090V5	Zinc, filtered	3.44	U		ppb
699-40-36	09-Aug-93	B090V5	Calcium, filtered	15000			ppb
699-40-36	09-Aug-93	B090V5	Selenium, filtered	1.21	U		ppb
699-40-36	08-Oct-93	B099T7	Ammonium ion	80	L		ppb
699-40-36	08-Oct-93	B099T7	Hydrazine	1.89	U		ppb
699-40-36	08-Oct-93	B099T7	Aluminum	880			ppb
699-40-36	08-Oct-93	B099T7	Iron	1300			ppb
699-40-36	08-Oct-93	B099T7	Magnesium	5300			ppb
699-40-36	08-Oct-93	B099T7	Manganese	140			ppb
699-40-36	08-Oct-93	B099T7	Nickel	62			ppb
699-40-36	08-Oct-93	B099T7	Potassium	7400			ppb
699-40-36	08-Oct-93	B099T7	Silver	2.87	U		ppb
699-40-36	08-Oct-93	B099T7	Sodium	47000			ppb
699-40-36	08-Oct-93	B099T7	Tin	51.1	U		ppb

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699-40-36	08-Oct-93	B099T7	Antimony	69.4	U		ppb
699-40-36	08-Oct-93	B099T7	Barium	69			ppb
699-40-36	08-Oct-93	B099T7	Beryllium	0.814	U		ppb
699-40-36	08-Oct-93	B099T7	Cadmium	4.7	U		ppb
699-40-36	08-Oct-93	B099T7	Chromium	97			ppb
699-40-36	08-Oct-93	B099T7	Cobalt	4.05	U		ppb
699-40-36	08-Oct-93	B099T7	Copper	3	L		ppb
699-40-36	08-Oct-93	B099T7	Vanadium	14	L		ppb
699-40-36	08-Oct-93	B099T7	Zinc	17			ppb
699-40-36	08-Oct-93	B099T7	Calcium	15000			ppb
699-40-36	08-Oct-93	B099T7	Total Dissolved Solids	220			ppm
699-40-36	05-Jan-94	B09Q92	Chloride	3400			ppb
699-40-36	05-Jan-94	B09Q92	Phosphate	70	U		ppb
699-40-36	05-Jan-94	B09Q92	Nitrate	100	L		ppb
699-40-36	05-Jan-94	B09Q92	Nitrite	30	U		ppb
699-40-36	05-Jan-94	B09Q92	Ammonium ion	38.5	U		ppb
699-40-36	05-Jan-94	B09Q92	Sulfate	6400			ppb
699-40-36	05-Jan-94	B09Q92	Fluoride	1000			ppb
699-40-36	05-Jan-94	B09Q92	Bromide	30	U		ppb
699-40-36	05-Jan-94	B09Q92	Hydrazine	2	U		ppb
699-40-36	05-Jan-94	B09Q92	Cyanide	1.24	U		ppb
699-40-36	05-Jan-94	B09Q92	Aluminum	40	U		ppb
699-40-36	05-Jan-94	B09Q92	Iron	120	B		ppb
699-40-36	05-Jan-94	B09Q92	Magnesium	4800			ppb
699-40-36	05-Jan-94	B09Q92	Manganese	87			ppb
699-40-36	05-Jan-94	B09Q92	Nickel	20	U		ppb
699-40-36	05-Jan-94	B09Q92	Potassium	7800			ppb
699-40-36	05-Jan-94	B09Q92	Silver	4	U		ppb
699-40-36	05-Jan-94	B09Q92	Sodium	46000	B		ppb
699-40-36	05-Jan-94	B09Q92	Tin	20	U		ppb

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699-40-36	05-Jan-94	B09Q92	Antimony	40	U		ppb
699-40-36	05-Jan-94	B09Q92	Arsenic	2.4	L		ppb
699-40-36	05-Jan-94	B09Q92	Barium	55	B		ppb
699-40-36	05-Jan-94	B09Q92	Beryllium	2	U		ppb
699-40-36	05-Jan-94	B09Q92	Cadmium	2	U		ppb
699-40-36	05-Jan-94	B09Q92	Chromium	18	L		ppb
699-40-36	05-Jan-94	B09Q92	Cobalt	5	U		ppb
699-40-36	05-Jan-94	B09Q92	Copper	6	U		ppb
699-40-36	05-Jan-94	B09Q92	Vanadium	11	L		ppb
699-40-36	05-Jan-94	B09Q92	Zinc	2.1	L		ppb
699-40-36	05-Jan-94	B09Q92	Calcium	14000	B		ppb
699-40-36	05-Jan-94	B09Q92	Selenium	1	U		ppb
699-40-36	05-Jan-94	B09Q92	Coliforms	1	U		COL
699-40-36	05-Jan-94	B09Q92	Total Dissolved Solids	220			ppm
699-40-36	14-Apr-94	B0BRG2	Chloride	3200			ppb
699-40-36	14-Apr-94	B0BRG2	Phosphate	470	U		ppb
699-40-36	14-Apr-94	B0BRG2	Nitrate	100	L		ppb
699-40-36	14-Apr-94	B0BRG2	Nitrite	110	U		ppb
699-40-36	14-Apr-94	B0BRG2	Sulfate	9900			ppb
699-40-36	14-Apr-94	B0BRG2	Fluoride	1200			ppb
699-40-36	14-Apr-94	B0BRG2	Bromide	110	U		ppb
699-40-36	14-Apr-94	B0BRG2	Cyanide	0.94	U		ppb
699-40-36	14-Apr-94	B0BRG2	Aluminum	27000			ppb
699-40-36	14-Apr-94	B0BRG2	Iron	38000			ppb
699-40-36	14-Apr-94	B0BRG2	Magnesium	13000			ppb
699-40-36	14-Apr-94	B0BRG2	Manganese	780			ppb
699-40-36	14-Apr-94	B0BRG2	Nickel	83			ppb
699-40-36	14-Apr-94	B0BRG2	Potassium	12000			ppb
699-40-36	14-Apr-94	B0BRG2	Silver	3.4	U		ppb
699-40-36	14-Apr-94	B0BRG2	Sodium	49000			ppb

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699-40-36	14-Apr-94	B0BRG2	Tin	24	U		ppb
699-40-36	14-Apr-94	B0BRG2	Antimony	26	U		ppb
699-40-36	14-Apr-94	B0BRG2	Arsenic	4.6	L		ppb
699-40-36	14-Apr-94	B0BRG2	Barium	310			ppb
699-40-36	14-Apr-94	B0BRG2	Beryllium	1.8	L		ppb
699-40-36	14-Apr-94	B0BRG2	Cadmium	3	U		ppb
699-40-36	14-Apr-94	B0BRG2	Chromium	120			ppb
699-40-36	14-Apr-94	B0BRG2	Cobalt	17	L		ppb
699-40-36	14-Apr-94	B0BRG2	Copper	30			ppb
699-40-36	14-Apr-94	B0BRG2	Vanadium	87			ppb
699-40-36	14-Apr-94	B0BRG2	Zinc	640			ppb
699-40-36	14-Apr-94	B0BRG2	Calcium	24000			ppb
699-40-36	14-Apr-94	B0BRG2	Selenium	1.4	U		ppb
699-40-36	14-Apr-94	B0BRG2	Coliforms	1	U		COL
699-40-36	14-Apr-94	B0BRG2	Total Dissolved Solids	240			ppm
699-40-36	14-Apr-94	B0BRG6	Aluminum, filtered	310			ppb
699-40-36	14-Apr-94	B0BRG6	Iron, filtered	720			ppb
699-40-36	14-Apr-94	B0BRG6	Magnesium, filtered	5200			ppb
699-40-36	14-Apr-94	B0BRG6	Manganese, filtered	160			ppb
699-40-36	14-Apr-94	B0BRG6	Nickel, filtered	16	U		ppb
699-40-36	14-Apr-94	B0BRG6	Potassium, filtered	8000			ppb
699-40-36	14-Apr-94	B0BRG6	Silver, filtered	3.4	U		ppb
699-40-36	14-Apr-94	B0BRG6	Sodium, filtered	49000			ppb
699-40-36	14-Apr-94	B0BRG6	Tin, filtered	24	U		ppb
699-40-36	14-Apr-94	B0BRG6	Antimony, filtered	26	U		ppb
699-40-36	14-Apr-94	B0BRG6	Barium, filtered	65			ppb
699-40-36	14-Apr-94	B0BRG6	Beryllium, filtered	1.5	U		ppb
699-40-36	14-Apr-94	B0BRG6	Cadmium, filtered	3	U		ppb
699-40-36	14-Apr-94	B0BRG6	Chromium, filtered	14	L		ppb
699-40-36	14-Apr-94	B0BRG6	Cobalt, filtered	8.2	L		ppb

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699-40-36	14-Apr-94	B0BRG6	Copper, filtered	2.6	U		ppb
699-40-36	14-Apr-94	B0BRG6	Vanadium, filtered	10	L		ppb
699-40-36	14-Apr-94	B0BRG6	Zinc, filtered	24			ppb
699-40-36	14-Apr-94	B0BRG6	Calcium, filtered	15000			ppb
699-40-36	01-Aug-94	B0C6S2	Chloride	3300			ppb
699-40-36	01-Aug-94	B0C6S2	Phosphate	470	U		ppb
699-40-36	01-Aug-94	B0C6S2	Nitrate	100	L		ppb
699-40-36	01-Aug-94	B0C6S2	Nitrite	110	U		ppb
699-40-36	01-Aug-94	B0C6S2	Sulfate	9100	D		ppb
699-40-36	01-Aug-94	B0C6S2	Fluoride	1200			ppb
699-40-36	01-Aug-94	B0C6S2	Bromide	110	U		ppb
699-40-36	01-Aug-94	B0C6S2	Cyanide	0.94	U		ppb
699-40-36	01-Aug-94	B0C6S2	Coliforms	1	U		COL
699-40-36	01-Aug-94	B0C6S2	Total Dissolved Solids	230			ppm
699-41-35	21-Dec-92	B07TB9	Chloride	3400			ppb
699-41-35	21-Dec-92	B07TB9	Phosphate	400	U		ppb
699-41-35	21-Dec-92	B07TB9	Nitrate	500			ppb
699-41-35	21-Dec-92	B07TB9	Nitrite	200	U		ppb
699-41-35	21-Dec-92	B07TB9	Ammonium ion	100	U		ppb
699-41-35	21-Dec-92	B07TB9	Sulfate	8500			ppb
699-41-35	21-Dec-92	B07TB9	Fluoride	800			ppb
699-41-35	21-Dec-92	B07TB9	Bromide	500	U		ppb
699-41-35	21-Dec-92	B07TB9	Hydrazine	30	U		ppb
699-41-35	21-Dec-92	B07TB9	Cyanide	20	U		ppb
699-41-35	21-Dec-92	B07TB9	Iron	300			ppb
699-41-35	21-Dec-92	B07TB9	Lead	5	U		ppb
699-41-35	21-Dec-92	B07TB9	Magnesium	6900			ppb
699-41-35	21-Dec-92	B07TB9	Manganese	180			ppb
699-41-35	21-Dec-92	B07TB9	Mercury	0.2	U		ppb
699-41-35	21-Dec-92	B07TB9	Nickel	30	U		ppb

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699-41-35	21-Dec-92	B07TB9	Potassium	6500			ppb
699-41-35	21-Dec-92	B07TB9	Silver	20	U		ppb
699-41-35	21-Dec-92	B07TB9	Sodium	47000			ppb
699-41-35	21-Dec-92	B07TB9	Tin	100	U		ppb
699-41-35	21-Dec-92	B07TB9	Antimony	200	U		ppb
699-41-35	21-Dec-92	B07TB9	Arsenic	5	U		ppb
699-41-35	21-Dec-92	B07TB9	Barium	130			ppb
699-41-35	21-Dec-92	B07TB9	Beryllium	3	U		ppb
699-41-35	21-Dec-92	B07TB9	Cadmium	10	U		ppb
699-41-35	21-Dec-92	B07TB9	Chromium	20	U		ppb
699-41-35	21-Dec-92	B07TB9	Cobalt	20	U		ppb
699-41-35	21-Dec-92	B07TB9	Copper	20	U		ppb
699-41-35	21-Dec-92	B07TB9	Vanadium	30	U		ppb
699-41-35	21-Dec-92	B07TB9	Zinc	20			ppb
699-41-35	21-Dec-92	B07TB9	Calcium	18000			ppb
699-41-35	21-Dec-92	B07TB9	Selenium	10	U		ppb
699-41-35	21-Dec-92	B07TC3	Iron, filtered	20	U		ppb
699-41-35	21-Dec-92	B07TC3	Lead, filtered	5	U		ppb
699-41-35	21-Dec-92	B07TC3	Magnesium, filtered	6400			ppb
699-41-35	21-Dec-92	B07TC3	Manganese, filtered	170			ppb
699-41-35	21-Dec-92	B07TC3	Mercury, filtered	0.2	U		ppb
699-41-35	21-Dec-92	B07TC3	Nickel, filtered	30	U		ppb
699-41-35	21-Dec-92	B07TC3	Potassium, filtered	5100			ppb
699-41-35	21-Dec-92	B07TC3	Silver, filtered	20	U		ppb
699-41-35	21-Dec-92	B07TC3	Sodium, filtered	39000			ppb
699-41-35	21-Dec-92	B07TC3	Tin, filtered	100	U		ppb
699-41-35	21-Dec-92	B07TC3	Antimony, filtered	200	U		ppb
699-41-35	21-Dec-92	B07TC3	Arsenic, filtered	5	U		ppb
699-41-35	21-Dec-92	B07TC3	Barium, filtered	120			ppb
699-41-35	21-Dec-92	B07TC3	Beryllium, filtered	3	U		ppb

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699-41-35	21-Dec-92	B07TC3	Cadmium, filtered	10	U		ppb
699-41-35	21-Dec-92	B07TC3	Chromium, filtered	20	U		ppb
699-41-35	21-Dec-92	B07TC3	Cobalt, filtered	20	U		ppb
699-41-35	21-Dec-92	B07TC3	Copper, filtered	20	U		ppb
699-41-35	21-Dec-92	B07TC3	Vanadium, filtered	30	U		ppb
699-41-35	21-Dec-92	B07TC3	Zinc, filtered	10	U		ppb
699-41-35	21-Dec-92	B07TC3	Calcium, filtered	18000			ppb
699-41-35	21-Dec-92	B07TC3	Selenium, filtered	10	U		ppb
699-41-35	22-Feb-93	B08707	Chloride	3600			ppb
699-41-35	22-Feb-93	B08707	Phosphate	400	U		ppb
699-41-35	22-Feb-93	B08707	Nitrate	200	U		ppb
699-41-35	22-Feb-93	B08707	Nitrite	200	U		ppb
699-41-35	22-Feb-93	B08707	Ammonium ion	100	U		ppb
699-41-35	22-Feb-93	B08707	Sulfate	7500			ppb
699-41-35	22-Feb-93	B08707	Fluoride	1000			ppb
699-41-35	22-Feb-93	B08707	Bromide	500	U		ppb
699-41-35	22-Feb-93	B08707	Hydrazine	30	U		ppb
699-41-35	22-Feb-93	B08707	Cyanide	20	U		ppb
699-41-35	22-Feb-93	B08707	Iron	270			ppb
699-41-35	22-Feb-93	B08707	Lead	5	U		ppb
699-41-35	22-Feb-93	B08707	Magnesium	6600			ppb
699-41-35	22-Feb-93	B08707	Manganese	150			ppb
699-41-35	22-Feb-93	B08707	Mercury	0.2	U		ppb
699-41-35	22-Feb-93	B08707	Nickel	30	U		ppb
699-41-35	22-Feb-93	B08707	Potassium	6500			ppb
699-41-35	22-Feb-93	B08707	Silver	20	U		ppb
699-41-35	22-Feb-93	B08707	Sodium	45000			ppb
699-41-35	22-Feb-93	B08707	Tin	100	U		ppb
699-41-35	22-Feb-93	B08707	Antimony	200	U		ppb
699-41-35	22-Feb-93	B08707	Arsenic	5	U		ppb

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699-41-35	22-Feb-93	B08707	Barium	140			ppb
699-41-35	22-Feb-93	B08707	Beryllium	3	U		ppb
699-41-35	22-Feb-93	B08707	Cadmium	10	U		ppb
699-41-35	22-Feb-93	B08707	Chromium	20	U		ppb
699-41-35	22-Feb-93	B08707	Cobalt	20	U		ppb
699-41-35	22-Feb-93	B08707	Copper	20	U		ppb
699-41-35	22-Feb-93	B08707	Vanadium	30	U		ppb
699-41-35	22-Feb-93	B08707	Zinc	40			ppb
699-41-35	22-Feb-93	B08707	Calcium	18000			ppb
699-41-35	22-Feb-93	B08707	Selenium	10	U		ppb
699-41-35	22-Feb-93	B08707	Coliforms	1	U		COL
699-41-35	22-Feb-93	B08711	Iron, filtered	30			ppb
699-41-35	22-Feb-93	B08711	Lead, filtered	5	U		ppb
699-41-35	22-Feb-93	B08711	Magnesium, filtered	8300			ppb
699-41-35	22-Feb-93	B08711	Manganese, filtered	170			ppb
699-41-35	22-Feb-93	B08711	Mercury, filtered	0.2	U		ppb
699-41-35	22-Feb-93	B08711	Nickel, filtered	30	U		ppb
699-41-35	22-Feb-93	B08711	Potassium, filtered	8000			ppb
699-41-35	22-Feb-93	B08711	Silver, filtered	20	U		ppb
699-41-35	22-Feb-93	B08711	Sodium, filtered	53000			ppb
699-41-35	22-Feb-93	B08711	Tin, filtered	100	U		ppb
699-41-35	22-Feb-93	B08711	Antimony, filtered	200	U		ppb
699-41-35	22-Feb-93	B08711	Arsenic, filtered	5	U		ppb
699-41-35	22-Feb-93	B08711	Barium, filtered	170			ppb
699-41-35	22-Feb-93	B08711	Beryllium, filtered	3	U		ppb
699-41-35	22-Feb-93	B08711	Cadmium, filtered	10	U		ppb
699-41-35	22-Feb-93	B08711	Chromium, filtered	20	U		ppb
699-41-35	22-Feb-93	B08711	Cobalt, filtered	20	U		ppb
699-41-35	22-Feb-93	B08711	Copper, filtered	20	U		ppb
699-41-35	22-Feb-93	B08711	Vanadium, filtered	30	U		ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-41-35	22-Feb-93	B08711	Zinc, filtered	10	U		ppb
699-41-35	22-Feb-93	B08711	Calcium, filtered	23000			ppb
699-41-35	22-Feb-93	B08711	Selenium, filtered	10	U		ppb
699-41-35	13-May-93	B08JF7	Chloride	3500			ppb
699-41-35	13-May-93	B08JF7	Phosphate	147	U		ppb
699-41-35	13-May-93	B08JF7	Nitrate	500			ppb
699-41-35	13-May-93	B08JF7	Nitrite	38.3	U		ppb
699-41-35	13-May-93	B08JF7	Ammonium ion	38.5	U		ppb
699-41-35	13-May-93	B08JF7	Sulfate	8800			ppb
699-41-35	13-May-93	B08JF7	Fluoride	1000			ppb
699-41-35	13-May-93	B08JF7	Sulfide	300	U		ppb
699-41-35	13-May-93	B08JF7	Bromide	52.8	U		ppb
699-41-35	13-May-93	B08JF7	Hydrazine	1.89	U		ppb
699-41-35	13-May-93	B08JF7	Cyanide	1.24	U		ppb
699-41-35	13-May-93	B08JF7	Aluminum	110	L		ppb
699-41-35	13-May-93	B08JF7	Iron	280			ppb
699-41-35	13-May-93	B08JF7	Lead	1	L		ppb
699-41-35	13-May-93	B08JF7	Magnesium	6500			ppb
699-41-35	13-May-93	B08JF7	Manganese	140			ppb
699-41-35	13-May-93	B08JF7	Mercury	0.158	U		ppb
699-41-35	13-May-93	B08JF7	Nickel	17.9	U		ppb
699-41-35	13-May-93	B08JF7	Potassium	6000			ppb
699-41-35	13-May-93	B08JF7	Silver	2.87	U		ppb
699-41-35	13-May-93	B08JF7	Sodium	40000			ppb
699-41-35	13-May-93	B08JF7	Thallium	1.02	U		ppb
699-41-35	13-May-93	B08JF7	Tin	51.1	U		ppb
699-41-35	13-May-93	B08JF7	Antimony	69.4	U		ppb
699-41-35	13-May-93	B08JF7	Arsenic	3	L		ppb
699-41-35	13-May-93	B08JF7	Barium	120			ppb
699-41-35	13-May-93	B08JF7	Beryllium	0.814	U		ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-41-35	13-May-93	B08JF7	Cadmium	4.7	U		ppb
699-41-35	13-May-93	B08JF7	Chromium	30			ppb
699-41-35	13-May-93	B08JF7	Cobalt	4.05	U		ppb
699-41-35	13-May-93	B08JF7	Copper	2.65	U		ppb
699-41-35	13-May-93	B08JF7	Vanadium	6.1	L		ppb
699-41-35	13-May-93	B08JF7	Zinc	40			ppb
699-41-35	13-May-93	B08JF7	Calcium	18000			ppb
699-41-35	13-May-93	B08JF7	Selenium	1.21	U		ppb
699-41-35	13-May-93	B08JF7	Coliforms	1	U		COL
699-41-35	13-May-93	B08JF7	Total Carbon	38000			ppb
699-41-35	13-May-93	B08JG1	Aluminum, filtered	44	L		ppb
699-41-35	13-May-93	B08JG1	Iron, filtered	50			ppb
699-41-35	13-May-93	B08JG1	Lead, filtered	1	L		ppb
699-41-35	13-May-93	B08JG1	Magnesium, filtered	6700			ppb
699-41-35	13-May-93	B08JG1	Manganese, filtered	130			ppb
699-41-35	13-May-93	B08JG1	Mercury, filtered	0.158	U		ppb
699-41-35	13-May-93	B08JG1	Nickel, filtered	17.9	U		ppb
699-41-35	13-May-93	B08JG1	Potassium, filtered	6000			ppb
699-41-35	13-May-93	B08JG1	Silver, filtered	2.87	U		ppb
699-41-35	13-May-93	B08JG1	Sodium, filtered	41000			ppb
699-41-35	13-May-93	B08JG1	Thallium, filtered	1.02	U		ppb
699-41-35	13-May-93	B08JG1	Tin, filtered	51.1	U		ppb
699-41-35	13-May-93	B08JG1	Antimony, filtered	69.4	U		ppb
699-41-35	13-May-93	B08JG1	Arsenic, filtered	3	L		ppb
699-41-35	13-May-93	B08JG1	Barium, filtered	120			ppb
699-41-35	13-May-93	B08JG1	Beryllium, filtered	0.814	U		ppb
699-41-35	13-May-93	B08JG1	Cadmium, filtered	4.7	U		ppb
699-41-35	13-May-93	B08JG1	Chromium, filtered	5.42	U		ppb
699-41-35	13-May-93	B08JG1	Cobalt, filtered	4.05	U		ppb
699-41-35	13-May-93	B08JG1	Copper, filtered	20			ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-41-35	13-May-93	B08JG1	Vanadium, filtered	4.4	L		ppb
699-41-35	13-May-93	B08JG1	Zinc, filtered	3.44	U		ppb
699-41-35	13-May-93	B08JG1	Calcium, filtered	18000			ppb
699-41-35	13-May-93	B08JG1	Selenium, filtered	1.21	U		ppb
699-41-35	09-Aug-93	B090V6	Chloride	3300			ppb
699-41-35	09-Aug-93	B090V6	Phosphate	147	U		ppb
699-41-35	09-Aug-93	B090V6	Nitrate	200			ppb
699-41-35	09-Aug-93	B090V6	Nitrite	38.3	U		ppb
699-41-35	09-Aug-93	B090V6	Ammonium ion	38.5	U		ppb
699-41-35	09-Aug-93	B090V6	Sulfate	8800			ppb
699-41-35	09-Aug-93	B090V6	Fluoride	700			ppb
699-41-35	09-Aug-93	B090V6	Bromide	52.8	U		ppb
699-41-35	09-Aug-93	B090V6	Hydrazine	1.89	U		ppb
699-41-35	09-Aug-93	B090V6	Cyanide	1.24	U		ppb
699-41-35	09-Aug-93	B090V6	Aluminum	74	L		ppb
699-41-35	09-Aug-93	B090V6	Iron	290			ppb
699-41-35	09-Aug-93	B090V6	Lead	1.2	L		ppb
699-41-35	09-Aug-93	B090V6	Magnesium	6600			ppb
699-41-35	09-Aug-93	B090V6	Manganese	130			ppb
699-41-35	09-Aug-93	B090V6	Mercury	0.158	U		ppb
699-41-35	09-Aug-93	B090V6	Nickel	23	L		ppb
699-41-35	09-Aug-93	B090V6	Potassium	7300			ppb
699-41-35	09-Aug-93	B090V6	Silver	2.87	U		ppb
699-41-35	09-Aug-93	B090V6	Sodium	42000			ppb
699-41-35	09-Aug-93	B090V6	Tin	51.1	U		ppb
699-41-35	09-Aug-93	B090V6	Antimony	69.4	U		ppb
699-41-35	09-Aug-93	B090V6	Arsenic	3.2	L		ppb
699-41-35	09-Aug-93	B090V6	Barium	130			ppb
699-41-35	09-Aug-93	B090V6	Beryllium	0.814	U		ppb
699-41-35	09-Aug-93	B090V6	Cadmium	4.7	U		ppb

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699-41-35	09-Aug-93	B090V6	Chromium	35			ppb
699-41-35	09-Aug-93	B090V6	Cobalt	6.9	L		ppb
699-41-35	09-Aug-93	B090V6	Copper	4.6	L		ppb
699-41-35	09-Aug-93	B090V6	Vanadium	3.84	U		ppb
699-41-35	09-Aug-93	B090V6	Zinc	79			ppb
699-41-35	09-Aug-93	B090V6	Calcium	18000			ppb
699-41-35	09-Aug-93	B090V6	Selenium	1.21	U		ppb
699-41-35	09-Aug-93	B090V6	Coliforms	1	U		COL
699-41-35	09-Aug-93	B090V6	Total Dissolved Solids	210			ppm
699-41-35	09-Aug-93	B090W0	Aluminum, filtered	32.5	U		ppb
699-41-35	09-Aug-93	B090W0	Iron, filtered	69			ppb
699-41-35	09-Aug-93	B090W0	Lead, filtered	0.508	U		ppb
699-41-35	09-Aug-93	B090W0	Magnesium, filtered	6400			ppb
699-41-35	09-Aug-93	B090W0	Manganese, filtered	160			ppb
699-41-35	09-Aug-93	B090W0	Mercury, filtered	0.158	U		ppb
699-41-35	09-Aug-93	B090W0	Nickel, filtered	17.9	U		ppb
699-41-35	09-Aug-93	B090W0	Potassium, filtered	5900			ppb
699-41-35	09-Aug-93	B090W0	Silver, filtered	2.87	U		ppb
699-41-35	09-Aug-93	B090W0	Sodium, filtered	43000			ppb
699-41-35	09-Aug-93	B090W0	Tin, filtered	51.1	U		ppb
699-41-35	09-Aug-93	B090W0	Antimony, filtered	69.4	U		ppb
699-41-35	09-Aug-93	B090W0	Arsenic, filtered	3.1	L		ppb
699-41-35	09-Aug-93	B090W0	Barium, filtered	130			ppb
699-41-35	09-Aug-93	B090W0	Beryllium, filtered	1.3	L		ppb
699-41-35	09-Aug-93	B090W0	Cadmium, filtered	4.7	U		ppb
699-41-35	09-Aug-93	B090W0	Chromium, filtered	8.6	L		ppb
699-41-35	09-Aug-93	B090W0	Cobalt, filtered	7.8	L		ppb
699-41-35	09-Aug-93	B090W0	Copper, filtered	6	L		ppb
699-41-35	09-Aug-93	B090W0	Vanadium, filtered	5.8	L		ppb
699-41-35	09-Aug-93	B090W0	Zinc, filtered	3.44	U		ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-41-35	09-Aug-93	B090W0	Calcium, filtered	19000			ppb
699-41-35	09-Aug-93	B090W0	Selenium, filtered	1.21	U		ppb
699-41-35	08-Oct-93	B099W3	Ammonium ion	80	L		ppb
699-41-35	08-Oct-93	B099W3	Hydrazine	1.89	U		ppb
699-41-35	08-Oct-93	B099W3	Aluminum	32.5	U		ppb
699-41-35	08-Oct-93	B099W3	Iron	140			ppb
699-41-35	08-Oct-93	B099W3	Magnesium	6800			ppb
699-41-35	08-Oct-93	B099W3	Manganese	130			ppb
699-41-35	08-Oct-93	B099W3	Nickel	17.9	U		ppb
699-41-35	08-Oct-93	B099W3	Potassium	5700			ppb
699-41-35	08-Oct-93	B099W3	Silver	2.87	U		ppb
699-41-35	08-Oct-93	B099W3	Sodium	41000			ppb
699-41-35	08-Oct-93	B099W3	Tin	51.1	U		ppb
699-41-35	08-Oct-93	B099W3	Antimony	69.4	U		ppb
699-41-35	08-Oct-93	B099W3	Barium	130			ppb
699-41-35	08-Oct-93	B099W3	Beryllium	0.814	U		ppb
699-41-35	08-Oct-93	B099W3	Cadmium	4.7	U		ppb
699-41-35	08-Oct-93	B099W3	Chromium	19	L		ppb
699-41-35	08-Oct-93	B099W3	Cobalt	4.05	U		ppb
699-41-35	08-Oct-93	B099W3	Copper	4	L		ppb
699-41-35	08-Oct-93	B099W3	Vanadium	5.5	L		ppb
699-41-35	08-Oct-93	B099W3	Zinc	29			ppb
699-41-35	08-Oct-93	B099W3	Calcium	18000			ppb
699-41-35	08-Oct-93	B099W3	Total Dissolved Solids	200			ppm
699-41-35	19-Jan-94	B09Q96	Chloride	3200			ppb
699-41-35	19-Jan-94	B09Q96	Phosphate	147	U		ppb
699-41-35	19-Jan-94	B09Q96	Nitrate	300			ppb
699-41-35	19-Jan-94	B09Q96	Nitrite	38.3	U		ppb
699-41-35	19-Jan-94	B09Q96	Ammonium ion	38.5	U		ppb
699-41-35	19-Jan-94	B09Q96	Sulfate	6900			ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-41-35	19-Jan-94	B09Q96	Fluoride	900			ppb
699-41-35	19-Jan-94	B09Q96	Bromide	70	L		ppb
699-41-35	19-Jan-94	B09Q96	Hydrazine	1.89	U		ppb
699-41-35	19-Jan-94	B09Q96	Cyanide	1.24	U		ppb
699-41-35	19-Jan-94	B09Q96	Aluminum	2800			ppb
699-41-35	19-Jan-94	B09Q96	Iron	4100			ppb
699-41-35	19-Jan-94	B09Q96	Magnesium	7300			ppb
699-41-35	19-Jan-94	B09Q96	Manganese	210			ppb
699-41-35	19-Jan-94	B09Q96	Nickel	52			ppb
699-41-35	19-Jan-94	B09Q96	Potassium	6700			ppb
699-41-35	19-Jan-94	B09Q96	Silver	2.87	U		ppb
699-41-35	19-Jan-94	B09Q96	Sodium	42000	B		ppb
699-41-35	19-Jan-94	B09Q96	Tin	51.1	U		ppb
699-41-35	19-Jan-94	B09Q96	Antimony	69.4	U		ppb
699-41-35	19-Jan-94	B09Q96	Arsenic	3.7	L		ppb
699-41-35	19-Jan-94	B09Q96	Barium	150			ppb
699-41-35	19-Jan-94	B09Q96	Beryllium	0.814	U		ppb
699-41-35	19-Jan-94	B09Q96	Cadmium	4.7	U		ppb
699-41-35	19-Jan-94	B09Q96	Chromium	110			ppb
699-41-35	19-Jan-94	B09Q96	Cobalt	4.05	U		ppb
699-41-35	19-Jan-94	B09Q96	Copper	4.4	L		ppb
699-41-35	19-Jan-94	B09Q96	Vanadium	14	L		ppb
699-41-35	19-Jan-94	B09Q96	Zinc	150			ppb
699-41-35	19-Jan-94	B09Q96	Calcium	19000			ppb
699-41-35	19-Jan-94	B09Q96	Selenium	1.21	U		ppb
699-41-35	19-Jan-94	B09Q96	Coliforms	1	U		COL
699-41-35	19-Jan-94	B09Q96	Total Dissolved Solids	210			ppm
699-41-35	14-Apr-94	B0BRG7	Chloride	3100			ppb
699-41-35	14-Apr-94	B0BRG7	Phosphate	470	U		ppb
699-41-35	14-Apr-94	B0BRG7	Nitrate	300			ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-41-35	14-Apr-94	B0BRG7	Nitrite	110	U		ppb
699-41-35	14-Apr-94	B0BRG7	Sulfate	8200			ppb
699-41-35	14-Apr-94	B0BRG7	Fluoride	1100			ppb
699-41-35	14-Apr-94	B0BRG7	Bromide	110	U		ppb
699-41-35	14-Apr-94	B0BRG7	Cyanide	0.94	U		ppb
699-41-35	14-Apr-94	B0BRG7	Aluminum	1600			ppb
699-41-35	14-Apr-94	B0BRG7	Iron	2900			ppb
699-41-35	14-Apr-94	B0BRG7	Magnesium	7200			ppb
699-41-35	14-Apr-94	B0BRG7	Manganese	160			ppb
699-41-35	14-Apr-94	B0BRG7	Nickel	55			ppb
699-41-35	14-Apr-94	B0BRG7	Potassium	6600			ppb
699-41-35	14-Apr-94	B0BRG7	Silver	3.4	U		ppb
699-41-35	14-Apr-94	B0BRG7	Sodium	41000			ppb
699-41-35	14-Apr-94	B0BRG7	Tin	24	U		ppb
699-41-35	14-Apr-94	B0BRG7	Antimony	26	U		ppb
699-41-35	14-Apr-94	B0BRG7	Arsenic	3.6	L		ppb
699-41-35	14-Apr-94	B0BRG7	Barium	140			ppb
699-41-35	14-Apr-94	B0BRG7	Beryllium	1.5	U		ppb
699-41-35	14-Apr-94	B0BRG7	Cadmium	3	U		ppb
699-41-35	14-Apr-94	B0BRG7	Chromium	92			ppb
699-41-35	14-Apr-94	B0BRG7	Cobalt	6.5	U		ppb
699-41-35	14-Apr-94	B0BRG7	Copper	5	L		ppb
699-41-35	14-Apr-94	B0BRG7	Vanadium	12	L		ppb
699-41-35	14-Apr-94	B0BRG7	Zinc	70			ppb
699-41-35	14-Apr-94	B0BRG7	Calcium	19000			ppb
699-41-35	14-Apr-94	B0BRG7	Selenium	1.4	U		ppb
699-41-35	14-Apr-94	B0BRG7	Coliforms	1	U		COL
699-41-35	14-Apr-94	B0BRG7	Total Dissolved Solids	220			ppm
699-41-35	14-Apr-94	B0BRH1	Aluminum, filtered	200	L		ppb
699-41-35	14-Apr-94	B0BRH1	Iron, filtered	400			ppb

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699-41-35	14-Apr-94	B0BRH1	Magnesium, filtered	6600			ppb
699-41-35	14-Apr-94	B0BRH1	Manganese, filtered	110			ppb
699-41-35	14-Apr-94	B0BRH1	Nickel, filtered	17	L		ppb
699-41-35	14-Apr-94	B0BRH1	Potassium, filtered	6200			ppb
699-41-35	14-Apr-94	B0BRH1	Silver, filtered	3.4	U		ppb
699-41-35	14-Apr-94	B0BRH1	Sodium, filtered	40000			ppb
699-41-35	14-Apr-94	B0BRH1	Tin, filtered	24	U		ppb
699-41-35	14-Apr-94	B0BRH1	Antimony, filtered	26	U		ppb
699-41-35	14-Apr-94	B0BRH1	Barium, filtered	120			ppb
699-41-35	14-Apr-94	B0BRH1	Beryllium, filtered	1.5	U		ppb
699-41-35	14-Apr-94	B0BRH1	Cadmium, filtered	3	U		ppb
699-41-35	14-Apr-94	B0BRH1	Chromium, filtered	11	U		ppb
699-41-35	14-Apr-94	B0BRH1	Cobalt, filtered	6.5	U		ppb
699-41-35	14-Apr-94	B0BRH1	Copper, filtered	2.6	U		ppb
699-41-35	14-Apr-94	B0BRH1	Vanadium, filtered	9.4	L		ppb
699-41-35	14-Apr-94	B0BRH1	Zinc, filtered	23			ppb
699-41-35	14-Apr-94	B0BRH1	Calcium, filtered	18000			ppb
699-41-35	03-Aug-94	B0C6T9	Chloride	3400			ppb
699-41-35	03-Aug-94	B0C6T9	Phosphate	470	U		ppb
699-41-35	03-Aug-94	B0C6T9	Nitrate	300			ppb
699-41-35	03-Aug-94	B0C6T9	Nitrite	110	U		ppb
699-41-35	03-Aug-94	B0C6T9	Sulfate	7100			ppb
699-41-35	03-Aug-94	B0C6T9	Fluoride	1100			ppb
699-41-35	03-Aug-94	B0C6T9	Bromide	110	U		ppb
699-41-35	03-Aug-94	B0C6T9	Cyanide	0.94	U		ppb
699-41-35	03-Aug-94	B0C6T9	Coliforms	1	U		COL
699-41-35	03-Aug-94	B0C6T9	Total Dissolved Solids	200			ppm
699-41-35	03-Aug-94	B0C6V3	Aluminum, filtered	27	L		ppb
699-41-35	03-Aug-94	B0C6V3	Iron, filtered	50			ppb
699-41-35	03-Aug-94	B0C6V3	Magnesium, filtered	6800			ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-41-35	03-Aug-94	B0C6V3	Manganese, filtered	89			ppb
699-41-35	03-Aug-94	B0C6V3	Nickel, filtered	16	U		ppb
699-41-35	03-Aug-94	B0C6V3	Potassium, filtered	6100			ppb
699-41-35	03-Aug-94	B0C6V3	Silver, filtered	3.4	U		ppb
699-41-35	03-Aug-94	B0C6V3	Sodium, filtered	41000			ppb
699-41-35	03-Aug-94	B0C6V3	Tin, filtered	24	U		ppb
699-41-35	03-Aug-94	B0C6V3	Antimony, filtered	26	U		ppb
699-41-35	03-Aug-94	B0C6V3	Barium, filtered	130			ppb
699-41-35	03-Aug-94	B0C6V3	Beryllium, filtered	1.5	U		ppb
699-41-35	03-Aug-94	B0C6V3	Cadmium, filtered	3	U		ppb
699-41-35	03-Aug-94	B0C6V3	Chromium, filtered	11	U		ppb
699-41-35	03-Aug-94	B0C6V3	Cobalt, filtered	6.5	U		ppb
699-41-35	03-Aug-94	B0C6V3	Copper, filtered	2.6	U		ppb
699-41-35	03-Aug-94	B0C6V3	Vanadium, filtered	7.4	L		ppb
699-41-35	03-Aug-94	B0C6V3	Zinc, filtered	6.4	LB		ppb
699-41-35	03-Aug-94	B0C6V3	Calcium, filtered	18000			ppb
699-42-37	22-Dec-92	B07TC4	Chloride	7800			ppb
699-42-37	22-Dec-92	B07TC4	Phosphate	400	U		ppb
699-42-37	22-Dec-92	B07TC4	Nitrate	4300			ppb
699-42-37	22-Dec-92	B07TC4	Nitrite	200	U		ppb
699-42-37	22-Dec-92	B07TC4	Ammonium ion	100	U		ppb
699-42-37	22-Dec-92	B07TC4	Sulfate	25000			ppb
699-42-37	22-Dec-92	B07TC4	Fluoride	700			ppb
699-42-37	22-Dec-92	B07TC4	Bromide	500	U		ppb
699-42-37	22-Dec-92	B07TC4	Hydrazine	30	U		ppb
699-42-37	22-Dec-92	B07TC4	Cyanide	20	U		ppb
699-42-37	22-Dec-92	B07TC4	Iron	1200			ppb
699-42-37	22-Dec-92	B07TC4	Lead	5	U		ppb
699-42-37	22-Dec-92	B07TC4	Magnesium	9800			ppb
699-42-37	22-Dec-92	B07TC4	Manganese	140			ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	22-Dec-92	B07TC4	Mercury	0.2	U		ppb
699-42-37	22-Dec-92	B07TC4	Nickel	30			ppb
699-42-37	22-Dec-92	B07TC4	Potassium	4600			ppb
699-42-37	22-Dec-92	B07TC4	Silver	20	U		ppb
699-42-37	22-Dec-92	B07TC4	Sodium	35000			ppb
699-42-37	22-Dec-92	B07TC4	Tin	100	U		ppb
699-42-37	22-Dec-92	B07TC4	Antimony	200	U		ppb
699-42-37	22-Dec-92	B07TC4	Arsenic	5	U		ppb
699-42-37	22-Dec-92	B07TC4	Barium	70			ppb
699-42-37	22-Dec-92	B07TC4	Beryllium	3	U		ppb
699-42-37	22-Dec-92	B07TC4	Cadmium	10	U		ppb
699-42-37	22-Dec-92	B07TC4	Chromium	30			ppb
699-42-37	22-Dec-92	B07TC4	Cobalt	20	U		ppb
699-42-37	22-Dec-92	B07TC4	Copper	20	U		ppb
699-42-37	22-Dec-92	B07TC4	Vanadium	30	U		ppb
699-42-37	22-Dec-92	B07TC4	Zinc	60			ppb
699-42-37	22-Dec-92	B07TC4	Calcium	23000			ppb
699-42-37	22-Dec-92	B07TC4	Selenium	10	U		ppb
699-42-37	22-Dec-92	B07TC8	Iron, filtered	60			ppb
699-42-37	22-Dec-92	B07TC8	Lead, filtered	5	U		ppb
699-42-37	22-Dec-92	B07TC8	Magnesium, filtered	9400			ppb
699-42-37	22-Dec-92	B07TC8	Manganese, filtered	120			ppb
699-42-37	22-Dec-92	B07TC8	Mercury, filtered	0.2	U		ppb
699-42-37	22-Dec-92	B07TC8	Nickel, filtered	30	U		ppb
699-42-37	22-Dec-92	B07TC8	Potassium, filtered	4800			ppb
699-42-37	22-Dec-92	B07TC8	Silver, filtered	20	U		ppb
699-42-37	22-Dec-92	B07TC8	Sodium, filtered	35000			ppb
699-42-37	22-Dec-92	B07TC8	Tin, filtered	100	U		ppb
699-42-37	22-Dec-92	B07TC8	Antimony, filtered	200	U		ppb
699-42-37	22-Dec-92	B07TC8	Arsenic, filtered	5	U		ppb

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699-42-37	22-Dec-92	B07TC8	Barium, filtered	60			ppb
699-42-37	22-Dec-92	B07TC8	Beryllium, filtered	3	U		ppb
699-42-37	22-Dec-92	B07TC8	Cadmium, filtered	10	U		ppb
699-42-37	22-Dec-92	B07TC8	Chromium, filtered	20	U		ppb
699-42-37	22-Dec-92	B07TC8	Cobalt, filtered	20	U		ppb
699-42-37	22-Dec-92	B07TC8	Copper, filtered	20	U		ppb
699-42-37	22-Dec-92	B07TC8	Vanadium, filtered	30	U		ppb
699-42-37	22-Dec-92	B07TC8	Zinc, filtered	10	U		ppb
699-42-37	22-Dec-92	B07TC8	Calcium, filtered	23000			ppb
699-42-37	22-Dec-92	B07TC8	Selenium, filtered	10	U		ppb
699-42-37	23-Feb-93	B08712	Chloride	7900			ppb
699-42-37	23-Feb-93	B08712	Phosphate	400	U		ppb
699-42-37	23-Feb-93	B08712	Nitrate	3900			ppb
699-42-37	23-Feb-93	B08712	Nitrite	200	U		ppb
699-42-37	23-Feb-93	B08712	Ammonium ion	100	U		ppb
699-42-37	23-Feb-93	B08712	Sulfate	25000			ppb
699-42-37	23-Feb-93	B08712	Fluoride	900			ppb
699-42-37	23-Feb-93	B08712	Bromide	500	U		ppb
699-42-37	23-Feb-93	B08712	Hydrazine	30	U		ppb
699-42-37	23-Feb-93	B08712	Cyanide	20	U		ppb
699-42-37	23-Feb-93	B08712	Iron	870			ppb
699-42-37	23-Feb-93	B08712	Lead	5	U		ppb
699-42-37	23-Feb-93	B08712	Magnesium	10000			ppb
699-42-37	23-Feb-93	B08712	Manganese	130			ppb
699-42-37	23-Feb-93	B08712	Mercury	0.2	U		ppb
699-42-37	23-Feb-93	B08712	Nickel	50			ppb
699-42-37	23-Feb-93	B08712	Potassium	5100			ppb
699-42-37	23-Feb-93	B08712	Silver	20	U		ppb
699-42-37	23-Feb-93	B08712	Sodium	38000			ppb
699-42-37	23-Feb-93	B08712	Tin	100	U		ppb

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699-42-37	23-Feb-93	B08712	Antimony	200	U		ppb
699-42-37	23-Feb-93	B08712	Arsenic	5	U		ppb
699-42-37	23-Feb-93	B08712	Barium	70			ppb
699-42-37	23-Feb-93	B08712	Beryllium	3	U		ppb
699-42-37	23-Feb-93	B08712	Cadmium	10	U		ppb
699-42-37	23-Feb-93	B08712	Chromium	50			ppb
699-42-37	23-Feb-93	B08712	Cobalt	20	U		ppb
699-42-37	23-Feb-93	B08712	Copper	20	U		ppb
699-42-37	23-Feb-93	B08712	Vanadium	30	U		ppb
699-42-37	23-Feb-93	B08712	Zinc	60			ppb
699-42-37	23-Feb-93	B08712	Calcium	24000			ppb
699-42-37	23-Feb-93	B08712	Selenium	10	U		ppb
699-42-37	23-Feb-93	B08712	Coliforms	1	U		COL
699-42-37	23-Feb-93	B08716	Iron, filtered	40			ppb
699-42-37	23-Feb-93	B08716	Lead, filtered	5	U		ppb
699-42-37	23-Feb-93	B08716	Magnesium, filtered	10000			ppb
699-42-37	23-Feb-93	B08716	Manganese, filtered	120			ppb
699-42-37	23-Feb-93	B08716	Mercury, filtered	0.2	U		ppb
699-42-37	23-Feb-93	B08716	Nickel, filtered	30	U		ppb
699-42-37	23-Feb-93	B08716	Potassium, filtered	4600			ppb
699-42-37	23-Feb-93	B08716	Silver, filtered	20	U		ppb
699-42-37	23-Feb-93	B08716	Sodium, filtered	40000			ppb
699-42-37	23-Feb-93	B08716	Tin, filtered	100	U		ppb
699-42-37	23-Feb-93	B08716	Antimony, filtered	200	U		ppb
699-42-37	23-Feb-93	B08716	Arsenic, filtered	5	U		ppb
699-42-37	23-Feb-93	B08716	Barium, filtered	70			ppb
699-42-37	23-Feb-93	B08716	Beryllium, filtered	3	U		ppb
699-42-37	23-Feb-93	B08716	Cadmium, filtered	10	U		ppb
699-42-37	23-Feb-93	B08716	Chromium, filtered	20	U		ppb
699-42-37	23-Feb-93	B08716	Cobalt, filtered	20	U		ppb

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699-42-37	23-Feb-93	B08716	Copper, filtered	20	U		ppb
699-42-37	23-Feb-93	B08716	Vanadium, filtered	30	U		ppb
699-42-37	23-Feb-93	B08716	Zinc, filtered	10	U		ppb
699-42-37	23-Feb-93	B08716	Calcium, filtered	25000			ppb
699-42-37	23-Feb-93	B08716	Selenium, filtered	10	U		ppb
699-42-37	13-May-93	B08JG2	Chloride	7900			ppb
699-42-37	13-May-93	B08JG2	Phosphate	147	U		ppb
699-42-37	13-May-93	B08JG2	Nitrate	4300			ppb
699-42-37	13-May-93	B08JG2	Nitrite	38.3	U		ppb
699-42-37	13-May-93	B08JG2	Ammonium ion	38.5	U		ppb
699-42-37	13-May-93	B08JG2	Sulfate	22000			ppb
699-42-37	13-May-93	B08JG2	Fluoride	900			ppb
699-42-37	13-May-93	B08JG2	Sulfide	300	U		ppb
699-42-37	13-May-93	B08JG2	Bromide	80	L		ppb
699-42-37	13-May-93	B08JG2	Hydrazine	1.89	U		ppb
699-42-37	13-May-93	B08JG2	Cyanide	1.24	U		ppb
699-42-37	13-May-93	B08JG2	Aluminum	800			ppb
699-42-37	13-May-93	B08JG2	Iron	2100			ppb
699-42-37	13-May-93	B08JG2	Lead	1	L		ppb
699-42-37	13-May-93	B08JG2	Magnesium	11000			ppb
699-42-37	13-May-93	B08JG2	Manganese	140			ppb
699-42-37	13-May-93	B08JG2	Mercury	0.158	U		ppb
699-42-37	13-May-93	B08JG2	Nickel	80			ppb
699-42-37	13-May-93	B08JG2	Potassium	6000			ppb
699-42-37	13-May-93	B08JG2	Silver	3.4	L		ppb
699-42-37	13-May-93	B08JG2	Sodium	36000			ppb
699-42-37	13-May-93	B08JG2	Thallium	1.02	U		ppb
699-42-37	13-May-93	B08JG2	Tin	51.1	U		ppb
699-42-37	13-May-93	B08JG2	Antimony	69.4	U		ppb
699-42-37	13-May-93	B08JG2	Arsenic	3	L		ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	13-May-93	B08JG2	Barium	70			ppb
699-42-37	13-May-93	B08JG2	Beryllium	0.814	U		ppb
699-42-37	13-May-93	B08JG2	Cadmium	4.7	U		ppb
699-42-37	13-May-93	B08JG2	Chromium	150			ppb
699-42-37	13-May-93	B08JG2	Cobalt	4.05	U		ppb
699-42-37	13-May-93	B08JG2	Copper	5.1	L		ppb
699-42-37	13-May-93	B08JG2	Vanadium	21	L		ppb
699-42-37	13-May-93	B08JG2	Zinc	100			ppb
699-42-37	13-May-93	B08JG2	Calcium	26000			ppb
699-42-37	13-May-93	B08JG2	Selenium	1.21	U		ppb
699-42-37	13-May-93	B08JG2	Coliforms	1	U		COL
699-42-37	13-May-93	B08JG2	Total Carbon	32000			ppb
699-42-37	13-May-93	B08JG6	Aluminum, filtered	32.5	U		ppb
699-42-37	13-May-93	B08JG6	Iron, filtered	40			ppb
699-42-37	13-May-93	B08JG6	Lead, filtered	1	L		ppb
699-42-37	13-May-93	B08JG6	Magnesium, filtered	9800			ppb
699-42-37	13-May-93	B08JG6	Manganese, filtered	100			ppb
699-42-37	13-May-93	B08JG6	Mercury, filtered	0.158	U		ppb
699-42-37	13-May-93	B08JG6	Nickel, filtered	17.9	U		ppb
699-42-37	13-May-93	B08JG6	Potassium, filtered	5000			ppb
699-42-37	13-May-93	B08JG6	Silver, filtered	3.7	L		ppb
699-42-37	13-May-93	B08JG6	Sodium, filtered	33000			ppb
699-42-37	13-May-93	B08JG6	Thallium, filtered	1.02	U		ppb
699-42-37	13-May-93	B08JG6	Tin, filtered	51.1	U		ppb
699-42-37	13-May-93	B08JG6	Antimony, filtered	69.4	U		ppb
699-42-37	13-May-93	B08JG6	Arsenic, filtered	3	L		ppb
699-42-37	13-May-93	B08JG6	Barium, filtered	60			ppb
699-42-37	13-May-93	B08JG6	Beryllium, filtered	0.814	U		ppb
699-42-37	13-May-93	B08JG6	Cadmium, filtered	4.7	U		ppb
699-42-37	13-May-93	B08JG6	Chromium, filtered	5.42	U		ppb

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699-42-37	13-May-93	B08JG6	Cobalt, filtered	4.05	U		ppb
699-42-37	13-May-93	B08JG6	Copper, filtered	2.65	U		ppb
699-42-37	13-May-93	B08JG6	Vanadium, filtered	12	L		ppb
699-42-37	13-May-93	B08JG6	Zinc, filtered	3.44	U		ppb
699-42-37	13-May-93	B08JG6	Calcium, filtered	23000			ppb
699-42-37	13-May-93	B08JG6	Selenium, filtered	1.21	U		ppb
699-42-37	30-Aug-93	B090W1	Chloride	8500			ppb
699-42-37	30-Aug-93	B090W1	Phosphate	147	U		ppb
699-42-37	30-Aug-93	B090W1	Nitrate	17000	D		ppb
699-42-37	30-Aug-93	B090W1	Nitrite	38.3	U		ppb
699-42-37	30-Aug-93	B090W1	Ammonium ion	50	L		ppb
699-42-37	30-Aug-93	B090W1	Sulfate	32000	D		ppb
699-42-37	30-Aug-93	B090W1	Fluoride	900			ppb
699-42-37	30-Aug-93	B090W1	Bromide	90	L		ppb
699-42-37	30-Aug-93	B090W1	Hydrazine	1.89	U		ppb
699-42-37	30-Aug-93	B090W1	Cyanide	1.24	U		ppb
699-42-37	30-Aug-93	B090W1	Aluminum	150	L		ppb
699-42-37	30-Aug-93	B090W1	Iron	460			ppb
699-42-37	30-Aug-93	B090W1	Lead	0.77	L		ppb
699-42-37	30-Aug-93	B090W1	Magnesium	9900			ppb
699-42-37	30-Aug-93	B090W1	Manganese	71			ppb
699-42-37	30-Aug-93	B090W1	Mercury	0.158	U		ppb
699-42-37	30-Aug-93	B090W1	Nickel	35			ppb
699-42-37	30-Aug-93	B090W1	Potassium	4700			ppb
699-42-37	30-Aug-93	B090W1	Silver	3.1	L		ppb
699-42-37	30-Aug-93	B090W1	Sodium	36000			ppb
699-42-37	30-Aug-93	B090W1	Tin	51.1	U		ppb
699-42-37	30-Aug-93	B090W1	Antimony	69.4	U		ppb
699-42-37	30-Aug-93	B090W1	Arsenic	3.7	L		ppb
699-42-37	30-Aug-93	B090W1	Barium	56			ppb

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699-42-37	30-Aug-93	B090W1	Beryllium	0.814	U		ppb
699-42-37	30-Aug-93	B090W1	Cadmium	4.7	U		ppb
699-42-37	30-Aug-93	B090W1	Chromium	67			ppb
699-42-37	30-Aug-93	B090W1	Cobalt	4.05	U		ppb
699-42-37	30-Aug-93	B090W1	Copper	2.65	U		ppb
699-42-37	30-Aug-93	B090W1	Vanadium	21	L		ppb
699-42-37	30-Aug-93	B090W1	Zinc	18			ppb
699-42-37	30-Aug-93	B090W1	Calcium	23000			ppb
699-42-37	30-Aug-93	B090W1	Selenium	4.9	BL		ppb
699-42-37	30-Aug-93	B090W1	Coliforms	1	U		COL
699-42-37	30-Aug-93	B090W1	Total Dissolved Solids	240			ppm
699-42-37	30-Aug-93	B090W2	Chloride	8200			ppb
699-42-37	30-Aug-93	B090W2	Phosphate	147	U		ppb
699-42-37	30-Aug-93	B090W2	Nitrate	5700			ppb
699-42-37	30-Aug-93	B090W2	Nitrite	38.3	U		ppb
699-42-37	30-Aug-93	B090W2	Ammonium ion	40	L		ppb
699-42-37	30-Aug-93	B090W2	Sulfate	27000	D		ppb
699-42-37	30-Aug-93	B090W2	Fluoride	900			ppb
699-42-37	30-Aug-93	B090W2	Bromide	90	L		ppb
699-42-37	30-Aug-93	B090W2	Hydrazine	1.89	U		ppb
699-42-37	30-Aug-93	B090W2	Cyanide	1.24	U		ppb
699-42-37	30-Aug-93	B090W2	Aluminum	190	L		ppb
699-42-37	30-Aug-93	B090W2	Iron	460			ppb
699-42-37	30-Aug-93	B090W2	Lead	0.508	U		ppb
699-42-37	30-Aug-93	B090W2	Magnesium	10000			ppb
699-42-37	30-Aug-93	B090W2	Manganese	65			ppb
699-42-37	30-Aug-93	B090W2	Mercury	0.158	U		ppb
699-42-37	30-Aug-93	B090W2	Nickel	35			ppb
699-42-37	30-Aug-93	B090W2	Potassium	4600			ppb
699-42-37	30-Aug-93	B090W2	Silver	2.9	L		ppb

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Appendix B.2 - Cation, Anion, Metals, and Cyanide

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	30-Aug-93	B090W2	Sodium	36000			ppb
699-42-37	30-Aug-93	B090W2	Tin	51.1	U		ppb
699-42-37	30-Aug-93	B090W2	Antimony	69.4	U		ppb
699-42-37	30-Aug-93	B090W2	Arsenic	2.9	L		ppb
699-42-37	30-Aug-93	B090W2	Barium	55			ppb
699-42-37	30-Aug-93	B090W2	Beryllium	0.814	U		ppb
699-42-37	30-Aug-93	B090W2	Cadmium	4.7	U		ppb
699-42-37	30-Aug-93	B090W2	Chromium	66			ppb
699-42-37	30-Aug-93	B090W2	Cobalt	4.05	U		ppb
699-42-37	30-Aug-93	B090W2	Copper	2.65	U		ppb
699-42-37	30-Aug-93	B090W2	Vanadium	26	L		ppb
699-42-37	30-Aug-93	B090W2	Zinc	14			ppb
699-42-37	30-Aug-93	B090W2	Calcium	23000			ppb
699-42-37	30-Aug-93	B090W2	Selenium	1.21	U		ppb
699-42-37	30-Aug-93	B090W2	Coliforms	1	U		COL
699-42-37	30-Aug-93	B090W2	Total Dissolved Solids	270			ppm
699-42-37	30-Aug-93	B090W9	Aluminum, filtered	39	L		ppb
699-42-37	30-Aug-93	B090W9	Iron, filtered	20	L		ppb
699-42-37	30-Aug-93	B090W9	Lead, filtered	0.508	U		ppb
699-42-37	30-Aug-93	B090W9	Magnesium, filtered	10000			ppb
699-42-37	30-Aug-93	B090W9	Manganese, filtered	62			ppb
699-42-37	30-Aug-93	B090W9	Mercury, filtered	0.158	U		ppb
699-42-37	30-Aug-93	B090W9	Nickel, filtered	17.9	U		ppb
699-42-37	30-Aug-93	B090W9	Potassium, filtered	5200			ppb
699-42-37	30-Aug-93	B090W9	Silver, filtered	2.87	U		ppb
699-42-37	30-Aug-93	B090W9	Sodium, filtered	36000			ppb
699-42-37	30-Aug-93	B090W9	Tin, filtered	51.1	U		ppb
699-42-37	30-Aug-93	B090W9	Antimony, filtered	69.4	U		ppb
699-42-37	30-Aug-93	B090W9	Arsenic, filtered	2	L		ppb
699-42-37	30-Aug-93	B090W9	Barium, filtered	54			ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	30-Aug-93	B090W9	Beryllium, filtered	0.814	U		ppb
699-42-37	30-Aug-93	B090W9	Cadmium, filtered	4.7	U		ppb
699-42-37	30-Aug-93	B090W9	Chromium, filtered	5.42	U		ppb
699-42-37	30-Aug-93	B090W9	Cobalt, filtered	4.05	U		ppb
699-42-37	30-Aug-93	B090W9	Copper, filtered	2.65	U		ppb
699-42-37	30-Aug-93	B090W9	Vanadium, filtered	21	L		ppb
699-42-37	30-Aug-93	B090W9	Zinc, filtered	3.44	U		ppb
699-42-37	30-Aug-93	B090W9	Calcium, filtered	23000			ppb
699-42-37	30-Aug-93	B090W9	Selenium, filtered	1.21	U		ppb
699-42-37	30-Aug-93	B090X0	Aluminum, filtered	88	L		ppb
699-42-37	30-Aug-93	B090X0	Iron, filtered	23			ppb
699-42-37	30-Aug-93	B090X0	Lead, filtered	0.508	U		ppb
699-42-37	30-Aug-93	B090X0	Magnesium, filtered	10000			ppb
699-42-37	30-Aug-93	B090X0	Manganese, filtered	63			ppb
699-42-37	30-Aug-93	B090X0	Mercury, filtered	0.158	U		ppb
699-42-37	30-Aug-93	B090X0	Nickel, filtered	17.9	U		ppb
699-42-37	30-Aug-93	B090X0	Potassium, filtered	5000			ppb
699-42-37	30-Aug-93	B090X0	Silver, filtered	4	L		ppb
699-42-37	30-Aug-93	B090X0	Sodium, filtered	36000			ppb
699-42-37	30-Aug-93	B090X0	Tin, filtered	51.1	U		ppb
699-42-37	30-Aug-93	B090X0	Antimony, filtered	69.4	U		ppb
699-42-37	30-Aug-93	B090X0	Arsenic, filtered	1.38	U		ppb
699-42-37	30-Aug-93	B090X0	Barium, filtered	57			ppb
699-42-37	30-Aug-93	B090X0	Beryllium, filtered	0.814	U		ppb
699-42-37	30-Aug-93	B090X0	Cadmium, filtered	4.7	U		ppb
699-42-37	30-Aug-93	B090X0	Chromium, filtered	5.42	U		ppb
699-42-37	30-Aug-93	B090X0	Cobalt, filtered	4.9	L		ppb
699-42-37	30-Aug-93	B090X0	Copper, filtered	2.65	U		ppb
699-42-37	30-Aug-93	B090X0	Vanadium, filtered	27	L		ppb
699-42-37	30-Aug-93	B090X0	Zinc, filtered	3.44	U		ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	30-Aug-93	B090X0	Calcium, filtered	23000			ppb
699-42-37	30-Aug-93	B090X0	Selenium, filtered	1.21	U		ppb
699-42-37	08-Oct-93	B099X5	Ammonium ion	80	L		ppb
699-42-37	08-Oct-93	B099X5	Hydrazine	1.89	U		ppb
699-42-37	08-Oct-93	B099X5	Aluminum	69	L		ppb
699-42-37	08-Oct-93	B099X5	Iron	350			ppb
699-42-37	08-Oct-93	B099X5	Magnesium	10000			ppb
699-42-37	08-Oct-93	B099X5	Manganese	65			ppb
699-42-37	08-Oct-93	B099X5	Nickel	21	L		ppb
699-42-37	08-Oct-93	B099X5	Potassium	4400			ppb
699-42-37	08-Oct-93	B099X5	Silver	2.87	U		ppb
699-42-37	08-Oct-93	B099X5	Sodium	36000			ppb
699-42-37	08-Oct-93	B099X5	Tin	51.1	U		ppb
699-42-37	08-Oct-93	B099X5	Antimony	69.4	U		ppb
699-42-37	08-Oct-93	B099X5	Barium	58			ppb
699-42-37	08-Oct-93	B099X5	Beryllium	0.814	U		ppb
699-42-37	08-Oct-93	B099X5	Cadmium	4.7	U		ppb
699-42-37	08-Oct-93	B099X5	Chromium	45			ppb
699-42-37	08-Oct-93	B099X5	Cobalt	4.05	U		ppb
699-42-37	08-Oct-93	B099X5	Copper	2.65	U		ppb
699-42-37	08-Oct-93	B099X5	Vanadium	20	L		ppb
699-42-37	08-Oct-93	B099X5	Zinc	17			ppb
699-42-37	08-Oct-93	B099X5	Calcium	24000			ppb
699-42-37	08-Oct-93	B099X5	Total Dissolved Solids	220			ppm
699-42-37	07-Jan-94	B09QB0	Chloride	7900			ppb
699-42-37	07-Jan-94	B09QB0	Phosphate	70	U		ppb
699-42-37	07-Jan-94	B09QB0	Nitrate	3600	B		ppb
699-42-37	07-Jan-94	B09QB0	Nitrite	30	U		ppb
699-42-37	07-Jan-94	B09QB0	Ammonium ion	60	L		ppb
699-42-37	07-Jan-94	B09QB0	Sulfate	27000	BD		ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	07-Jan-94	B09QB0	Fluoride	1100			ppb
699-42-37	07-Jan-94	B09QB0	Bromide	80	L		ppb
699-42-37	07-Jan-94	B09QB0	Hydrazine	2	U		ppb
699-42-37	07-Jan-94	B09QB0	Cyanide	1.24	U		ppb
699-42-37	07-Jan-94	B09QB0	Aluminum	1000			ppb
699-42-37	07-Jan-94	B09QB0	Iron	1900	B		ppb
699-42-37	07-Jan-94	B09QB0	Magnesium	9800			ppb
699-42-37	07-Jan-94	B09QB0	Manganese	68			ppb
699-42-37	07-Jan-94	B09QB0	Nickel	33			ppb
699-42-37	07-Jan-94	B09QB0	Potassium	4700			ppb
699-42-37	07-Jan-94	B09QB0	Silver	4	U		ppb
699-42-37	07-Jan-94	B09QB0	Sodium	35000	B		ppb
699-42-37	07-Jan-94	B09QB0	Tin	20	U		ppb
699-42-37	07-Jan-94	B09QB0	Antimony	40	U		ppb
699-42-37	07-Jan-94	B09QB0	Arsenic	3.9	L		ppb
699-42-37	07-Jan-94	B09QB0	Barium	61	B		ppb
699-42-37	07-Jan-94	B09QB0	Beryllium	2	U		ppb
699-42-37	07-Jan-94	B09QB0	Cadmium	2	U		ppb
699-42-37	07-Jan-94	B09QB0	Chromium	72			ppb
699-42-37	07-Jan-94	B09QB0	Cobalt	5	U		ppb
699-42-37	07-Jan-94	B09QB0	Copper	6	U		ppb
699-42-37	07-Jan-94	B09QB0	Vanadium	22	L		ppb
699-42-37	07-Jan-94	B09QB0	Zinc	70			ppb
699-42-37	07-Jan-94	B09QB0	Calcium	24000	B		ppb
699-42-37	07-Jan-94	B09QB0	Selenium	1	U		ppb
699-42-37	07-Jan-94	B09QB0	Coliforms	1	U		COL
699-42-37	07-Jan-94	B09QB0	Total Dissolved Solids	220			ppm
699-42-37	11-Apr-94	B0BRH2	Chloride	7800			ppb
699-42-37	11-Apr-94	B0BRH2	Phosphate	470	U		ppb
699-42-37	11-Apr-94	B0BRH2	Nitrate	4500			ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	11-Apr-94	B0BRH2	Nitrite	110	U		ppb
699-42-37	11-Apr-94	B0BRH2	Sulfate	24000	D		ppb
699-42-37	11-Apr-94	B0BRH2	Fluoride	1100			ppb
699-42-37	11-Apr-94	B0BRH2	Bromide	110	U		ppb
699-42-37	11-Apr-94	B0BRH2	Cyanide	0.94	U		ppb
699-42-37	11-Apr-94	B0BRH2	Aluminum	3500			ppb
699-42-37	11-Apr-94	B0BRH2	Iron	5800	B		ppb
699-42-37	11-Apr-94	B0BRH2	Magnesium	11000			ppb
699-42-37	11-Apr-94	B0BRH2	Manganese	170			ppb
699-42-37	11-Apr-94	B0BRH2	Nickel	40			ppb
699-42-37	11-Apr-94	B0BRH2	Potassium	5100			ppb
699-42-37	11-Apr-94	B0BRH2	Silver	3.4	U		ppb
699-42-37	11-Apr-94	B0BRH2	Sodium	35000			ppb
699-42-37	11-Apr-94	B0BRH2	Tin	24	U		ppb
699-42-37	11-Apr-94	B0BRH2	Antimony	26	U		ppb
699-42-37	11-Apr-94	B0BRH2	Arsenic	4.3	L		ppb
699-42-37	11-Apr-94	B0BRH2	Barium	85			ppb
699-42-37	11-Apr-94	B0BRH2	Beryllium	1.5	U		ppb
699-42-37	11-Apr-94	B0BRH2	Cadmium	3	U		ppb
699-42-37	11-Apr-94	B0BRH2	Chromium	56			ppb
699-42-37	11-Apr-94	B0BRH2	Cobalt	6.5	U		ppb
699-42-37	11-Apr-94	B0BRH2	Copper	3.8	L		ppb
699-42-37	11-Apr-94	B0BRH2	Vanadium	31			ppb
699-42-37	11-Apr-94	B0BRH2	Zinc	140			ppb
699-42-37	11-Apr-94	B0BRH2	Calcium	25000			ppb
699-42-37	11-Apr-94	B0BRH2	Selenium	2	L		ppb
699-42-37	11-Apr-94	B0BRH2	Coliforms	1	U		COL
699-42-37	11-Apr-94	B0BRH2	Total Dissolved Solids	260			ppm
699-42-37	11-Apr-94	B0BRH6	Aluminum, filtered	19	U		ppb
699-42-37	11-Apr-94	B0BRH6	Iron, filtered	72	B		ppb

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Well	Sample date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	11-Apr-94	B0BRH6	Magnesium, filtered	9900			ppb
699-42-37	11-Apr-94	B0BRH6	Manganese, filtered	96			ppb
699-42-37	11-Apr-94	B0BRH6	Nickel, filtered	21	L		ppb
699-42-37	11-Apr-94	B0BRH6	Potassium, filtered	4700			ppb
699-42-37	11-Apr-94	B0BRH6	Silver, filtered	3.4	U		ppb
699-42-37	11-Apr-94	B0BRH6	Sodium, filtered	34000			ppb
699-42-37	11-Apr-94	B0BRH6	Tin, filtered	24	U		ppb
699-42-37	11-Apr-94	B0BRH6	Antimony, filtered	26	U		ppb
699-42-37	11-Apr-94	B0BRH6	Barium, filtered	57			ppb
699-42-37	11-Apr-94	B0BRH6	Beryllium, filtered	1.5	U		ppb
699-42-37	11-Apr-94	B0BRH6	Cadmium, filtered	3	U		ppb
699-42-37	11-Apr-94	B0BRH6	Chromium, filtered	11	U		ppb
699-42-37	11-Apr-94	B0BRH6	Cobalt, filtered	6.5	U		ppb
699-42-37	11-Apr-94	B0BRH6	Copper, filtered	2.6	U		ppb
699-42-37	11-Apr-94	B0BRH6	Vanadium, filtered	18	L		ppb
699-42-37	11-Apr-94	B0BRH6	Zinc, filtered	18			ppb
699-42-37	11-Apr-94	B0BRH6	Calcium, filtered	23000			ppb
699-42-37	29-Jul-94	B0C6W8	Chloride	7900			ppb
699-42-37	29-Jul-94	B0C6W8	Phosphate	470	U		ppb
699-42-37	29-Jul-94	B0C6W8	Nitrate	4500			ppb
699-42-37	29-Jul-94	B0C6W8	Nitrite	110	U		ppb
699-42-37	29-Jul-94	B0C6W8	Sulfate	23000	D		ppb
699-42-37	29-Jul-94	B0C6W8	Fluoride	1100			ppb
699-42-37	29-Jul-94	B0C6W8	Bromide	110	U		ppb
699-42-37	29-Jul-94	B0C6W8	Cyanide	0.94	U		ppb
699-42-37	29-Jul-94	B0C6W8	Coliforms	1	U		COL
699-42-37	29-Jul-94	B0C6W8	Total Dissolved Solids	240			ppm

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Appendix B.3 - Organics

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	21-Dec-92	B07TB1	Total Organic Carbon	1000	U		ppb
699-40-36	21-Dec-92	B07TB3	Total Organic Carbon	1000	U		ppb
699-40-36	21-Dec-92	B07TB5	Total Organic Carbon	1000	U		ppb
699-40-36	21-Dec-92	B07TB7	Total Organic Carbon	1000	U		ppb
699-40-36	21-Dec-92	B07TB1	4,4'-DDD	0.1	U		ppb
699-40-36	21-Dec-92	B07TB1	4,4'-DDE	0.05	U		ppb
699-40-36	21-Dec-92	B07TB1	4,4'-DDT	0.1	U		ppb
699-40-36	21-Dec-92	B07TB1	Aldrin	0.05	U		ppb
699-40-36	21-Dec-92	B07TB1	Alpha-BHC	0.05	U		ppb
699-40-36	21-Dec-92	B07TB1	Beta-BHC	0.05	U		ppb
699-40-36	21-Dec-92	B07TB1	Chlordane	0.1	U		ppb
699-40-36	21-Dec-92	B07TB1	Delta-BHC	0.1	U		ppb
699-40-36	21-Dec-92	B07TB1	Dieldrin	0.05	U		ppb
699-40-36	21-Dec-92	B07TB1	Endosulfan I	0.1	U		ppb
699-40-36	21-Dec-92	B07TB1	Endosulfan II	0.05	U		ppb
699-40-36	21-Dec-92	B07TB1	Endosulfan sulfate	0.5	U		ppb
699-40-36	21-Dec-92	B07TB1	Endrin	0.1	U		ppb
699-40-36	21-Dec-92	B07TB1	Endrin Aldehyde	0.2	U		ppb
699-40-36	21-Dec-92	B07TB1	Heptachlor	0.05	U		ppb
699-40-36	21-Dec-92	B07TB1	Heptachlor epoxide	1	U		ppb
699-40-36	21-Dec-92	B07TB1	Methoxychlor	2	U		ppb
699-40-36	21-Dec-92	B07TB1	Toxaphene	2	U		ppb
699-40-36	21-Dec-92	B07TB1	gamma-BHC (Lindane)	0.05	U		ppb
699-40-36	21-Dec-92	B07TB1	2-Methylphenol	10	U		ppb
699-40-36	21-Dec-92	B07TB1	4-Methylphenol	10	U		ppb
699-40-36	21-Dec-92	B07TB1	Decane	1000	U		ppb
699-40-36	21-Dec-92	B07TB1	Dodecane	1000	U		ppb
699-40-36	21-Dec-92	B07TB1	Naphthalene	10	U		ppb
699-40-36	21-Dec-92	B07TB1	Pentachlorophenol	50	U		ppb
699-40-36	21-Dec-92	B07TB1	Phenol	10	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	21-Dec-92	B07TB1	Tetradecane	1000	U		ppb
699-40-36	21-Dec-92	B07TB1	Tributyl Phosphate	10	U		ppb
699-40-36	21-Dec-92	B07TB1	m-Cresol	10	U		ppb
699-40-36	21-Dec-92	B07TB1	Total Organic Halogen	150			ppb
699-40-36	21-Dec-92	B07TB1	Total Organic Halogen	180			ppb
699-40-36	21-Dec-92	B07TB3	Total Organic Halogen	160			ppb
699-40-36	21-Dec-92	B07TB3	Total Organic Halogen	180			ppb
699-40-36	21-Dec-92	B07TB5	Total Organic Halogen	100			ppb
699-40-36	21-Dec-92	B07TB5	Total Organic Halogen	140			ppb
699-40-36	21-Dec-92	B07TB7	Total Organic Halogen	130			ppb
699-40-36	21-Dec-92	B07TB7	Total Organic Halogen	140			ppb
699-40-36	22-Feb-93	B08717	Total Organic Carbon	1000	U		ppb
699-40-36	22-Feb-93	B08718	Total Organic Carbon	1000	U		ppb
699-40-36	22-Feb-93	B08719	Total Organic Carbon	1000	U		ppb
699-40-36	22-Feb-93	B08720	Total Organic Carbon	1000	U		ppb
699-40-36	22-Feb-93	B08717	4,4'-DDD	0.1	U		ppb
699-40-36	22-Feb-93	B08717	4,4'-DDE	0.05	U		ppb
699-40-36	22-Feb-93	B08717	4,4'-DDT	0.1	U		ppb
699-40-36	22-Feb-93	B08717	Aldrin	0.05	U		ppb
699-40-36	22-Feb-93	B08717	Alpha-BHC	0.05	U		ppb
699-40-36	22-Feb-93	B08717	Beta-BHC	0.05	U		ppb
699-40-36	22-Feb-93	B08717	Chlordane	0.1	U		ppb
699-40-36	22-Feb-93	B08717	Delta-BHC	0.1	U		ppb
699-40-36	22-Feb-93	B08717	Dieldrin	0.05	U		ppb
699-40-36	22-Feb-93	B08717	Endosulfan I	0.1	U		ppb
699-40-36	22-Feb-93	B08717	Endosulfan II	0.05	U		ppb
699-40-36	22-Feb-93	B08717	Endosulfan sulfate	0.5	U		ppb
699-40-36	22-Feb-93	B08717	Endrin	0.1	U		ppb
699-40-36	22-Feb-93	B08717	Endrin Aldehyde	0.2	U		ppb
699-40-36	22-Feb-93	B08717	Heptachlor	0.05	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	22-Feb-93	B08717	Heptachlor epoxide	1	U		ppb
699-40-36	22-Feb-93	B08717	Methoxychlor	2	U		ppb
699-40-36	22-Feb-93	B08717	Toxaphene	2	U		ppb
699-40-36	22-Feb-93	B08717	gamma-BHC (Lindane)	0.05	U		ppb
699-40-36	22-Feb-93	B08717	2-Methylphenol	10	U		ppb
699-40-36	22-Feb-93	B08717	4-Methylphenol	10	U		ppb
699-40-36	22-Feb-93	B08717	Decane	10	U		ppb
699-40-36	22-Feb-93	B08717	Dodecane	10	U		ppb
699-40-36	22-Feb-93	B08717	Naphthalene	10	U		ppb
699-40-36	22-Feb-93	B08717	Pentachlorophenol	50	U		ppb
699-40-36	22-Feb-93	B08717	Phenol	10	U		ppb
699-40-36	22-Feb-93	B08717	Tetradecane	10	U		ppb
699-40-36	22-Feb-93	B08717	Tributyl Phosphate	10	U		ppb
699-40-36	22-Feb-93	B08717	m-Cresol	10	U		ppb
699-40-36	22-Feb-93	B08717	1,1,1-Trichloroethane	0.5	U		ppb
699-40-36	22-Feb-93	B08717	1,1,2-Trichloroethane	0.5	U		ppb
699-40-36	22-Feb-93	B08717	1,1-Dichloroethane	1	U		ppb
699-40-36	22-Feb-93	B08717	1,2-Dichloroethane	0.5	U		ppb
699-40-36	22-Feb-93	B08717	1,4-Dichlorobenzene	2	U		ppb
699-40-36	22-Feb-93	B08717	Benzene	2	U		ppb
699-40-36	22-Feb-93	B08717	Carbon tetrachloride	1	U		ppb
699-40-36	22-Feb-93	B08717	Chloroform	0.5	U		ppb
699-40-36	22-Feb-93	B08717	Ethylbenzene	2	U		ppb
699-40-36	22-Feb-93	B08717	Methylene chloride	5	U		ppb
699-40-36	22-Feb-93	B08717	Tetrachloroethene	0.5	U		ppb
699-40-36	22-Feb-93	B08717	Toluene	2	U		ppb
699-40-36	22-Feb-93	B08717	Trichloroethene	1	U		ppb
699-40-36	22-Feb-93	B08717	Vinyl chloride	2	U		ppb
699-40-36	22-Feb-93	B08717	Xylenes (total)	5	U		ppb
699-40-36	22-Feb-93	B08717	cis-1,2-Dichloroethylene	1	U		ppb

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699-40-36	22-Feb-93	B08717	trans-1,2-Dichloroethylen e	1	U		ppb
699-40-36	22-Feb-93	B08717	Total Organic Halogen	220			ppb
699-40-36	22-Feb-93	B08717	Total Organic Halogen	230			ppb
699-40-36	22-Feb-93	B08718	Total Organic Halogen	210			ppb
699-40-36	22-Feb-93	B08718	Total Organic Halogen	230			ppb
699-40-36	22-Feb-93	B08719	Total Organic Halogen	160			ppb
699-40-36	22-Feb-93	B08719	Total Organic Halogen	230			ppb
699-40-36	22-Feb-93	B08720	Total Organic Halogen	230			ppb
699-40-36	22-Feb-93	B08720	Total Organic Halogen	250			ppb
699-40-36	13-May-93	B08JD7	Total Organic Carbon	300	L		ppb
699-40-36	13-May-93	B08JD8	Total Organic Carbon	400	L		ppb
699-40-36	13-May-93	B08JD9	Total Organic Carbon	400	L		ppb
699-40-36	13-May-93	B08JF0	Total Organic Carbon	400	L		ppb
699-40-36	13-May-93	B08JF1	Total Organic Carbon	300	L		ppb
699-40-36	13-May-93	B08JF2	Total Organic Carbon	600	L		ppb
699-40-36	13-May-93	B08JF3	Total Organic Carbon	500	L		ppb
699-40-36	13-May-93	B08JF4	Total Organic Carbon	600	L		ppb
699-40-36	13-May-93	B08JD7	1,1,1,2-Tetrachloroethane	0.31	U		ppb
699-40-36	13-May-93	B08JD7	1,1,1-Trichloroethane	0.64	U		ppb
699-40-36	13-May-93	B08JD7	1,1,2,2-Tetrachloroethane	0.3	U		ppb
699-40-36	13-May-93	B08JD7	1,1,2-Trichloroethane	0.25	U		ppb
699-40-36	13-May-93	B08JD7	1,1-Dichloroethane	0.61	U		ppb
699-40-36	13-May-93	B08JD7	1,1-Dichloroethene	1.03	U		ppb
699-40-36	13-May-93	B08JD7	1,2,3-Trichloropropane	0.52	U		ppb
699-40-36	13-May-93	B08JD7	1,2-Dibromo-3-chloropro pane	0.83	U		ppb
699-40-36	13-May-93	B08JD7	1,2-Dibromoethane	0.14	U		ppb
699-40-36	13-May-93	B08JD7	1,2-Dichloroethane	0.45	U		ppb
699-40-36	13-May-93	B08JD7	1,2-Dichloroethene	1.2	U		ppb
699-40-36	13-May-93	B08JD7	1,2-Dichloropropane	0.5	U		ppb

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699-40-36	13-May-93	B08JD7	1,4-Dioxane	43.6	U		ppb
699-40-36	13-May-93	B08JD7	1-Butanol	13.1	U		ppb
699-40-36	13-May-93	B08JD7	2-Hexanone	0.75	U		ppb
699-40-36	13-May-93	B08JD7	4-Methyl-2-pentanone	0.85	U		ppb
699-40-36	13-May-93	B08JD7	Acetone	13.4	U		ppb
699-40-36	13-May-93	B08JD7	Acetonitrile	19.4	U		ppb
699-40-36	13-May-93	B08JD7	Acrolein	9.72	U		ppb
699-40-36	13-May-93	B08JD7	Acrylonitrile	4.28	U		ppb
699-40-36	13-May-93	B08JD7	Benzene	0.65	U		ppb
699-40-36	13-May-93	B08JD7	Bromodichloromethane	0.26	U		ppb
699-40-36	13-May-93	B08JD7	Bromoform	0.19	U		ppb
699-40-36	13-May-93	B08JD7	Carbon disulfide	0.95	U		ppb
699-40-36	13-May-93	B08JD7	Carbon tetrachloride	0.87	U		ppb
699-40-36	13-May-93	B08JD7	Chlorobenzene	0.53	U		ppb
699-40-36	13-May-93	B08JD7	Chloroethane	0.71	U		ppb
699-40-36	13-May-93	B08JD7	Chloroform	0.4	U		ppb
699-40-36	13-May-93	B08JD7	Chloroprene	0.77	U		ppb
699-40-36	13-May-93	B08JD7	Dibromochloromethane	0.29	U		ppb
699-40-36	13-May-93	B08JD7	Dibromomethane	0.36	U		ppb
699-40-36	13-May-93	B08JD7	Dichlorodifluoromethane	1	U		ppb
699-40-36	13-May-93	B08JD7	Ethyl cyanide	4.34	U		ppb
699-40-36	13-May-93	B08JD7	Ethyl methacrylate	0.29	U		ppb
699-40-36	13-May-93	B08JD7	Ethylbenzene	0.49	U		ppb
699-40-36	13-May-93	B08JD7	Isobutyl alcohol	26.9	U		ppb
699-40-36	13-May-93	B08JD7	Methacrylonitrile	0.74	U		ppb
699-40-36	13-May-93	B08JD7	Methyl Iodide	0.51	U		ppb
699-40-36	13-May-93	B08JD7	Methyl bromide	0.58	U		ppb
699-40-36	13-May-93	B08JD7	Methyl chloride	0.57	U		ppb
699-40-36	13-May-93	B08JD7	Methyl ethyl ketone	4.25	U		ppb
699-40-36	13-May-93	B08JD7	Methyl methacrylate	0.18	U		ppb

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699-40-36	13-May-93	B08JD7	Methylene chloride	2.4	BL		ppb
699-40-36	13-May-93	B08JD7	Pentachloroethane	0.67	U		ppb
699-40-36	13-May-93	B08JD7	Styrene	0.43	U		ppb
699-40-36	13-May-93	B08JD7	Tetrachloroethene	1.1	U		ppb
699-40-36	13-May-93	B08JD7	Tetrahydrofuran	3.67	U		ppb
699-40-36	13-May-93	B08JD7	Toluene	0.73	U		ppb
699-40-36	13-May-93	B08JD7	Trichloroethene	0.77	U		ppb
699-40-36	13-May-93	B08JD7	Trichloromonofluoromethane	1.41	U		ppb
699-40-36	13-May-93	B08JD7	Vinyl acetate	0.3	U		ppb
699-40-36	13-May-93	B08JD7	Vinyl chloride	0.78	U		ppb
699-40-36	13-May-93	B08JD7	Xylenes (total)	1.7	U		ppb
699-40-36	13-May-93	B08JD7	allylchloride	0.84	U		ppb
699-40-36	13-May-93	B08JD7	cis-1,3-Dichloropropene	0.65	U		ppb
699-40-36	13-May-93	B08JD7	trans-1,3-Dichloropropene	0.41	U		ppb
699-40-36	13-May-93	B08JD7	trans-1,4-dichloro-2-butene	0.7	U		ppb
699-40-36	13-May-93	B08JD8	1,1,1,2-Tetrachloroethane	0.31	U		ppb
699-40-36	13-May-93	B08JD8	1,1,1-Trichloroethane	0.64	U		ppb
699-40-36	13-May-93	B08JD8	1,1,2,2-Tetrachloroethane	0.3	U		ppb
699-40-36	13-May-93	B08JD8	1,1,2-Trichloroethane	0.25	U		ppb
699-40-36	13-May-93	B08JD8	1,1-Dichloroethane	0.61	U		ppb
699-40-36	13-May-93	B08JD8	1,1-Dichloroethene	1.03	U		ppb
699-40-36	13-May-93	B08JD8	1,2,3-Trichloropropane	0.52	U		ppb
699-40-36	13-May-93	B08JD8	1,2-Dibromo-3-chloropropane	0.83	U		ppb
699-40-36	13-May-93	B08JD8	1,2-Dibromoethane	0.14	U		ppb
699-40-36	13-May-93	B08JD8	1,2-Dichloroethane	0.45	U		ppb
699-40-36	13-May-93	B08JD8	1,2-Dichloroethene	1.2	U		ppb
699-40-36	13-May-93	B08JD8	1,2-Dichloropropane	0.5	U		ppb
699-40-36	13-May-93	B08JD8	1,4-Dioxane	43.6	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	13-May-93	B08JD8	1-Butanol	13.1	U		ppb
699-40-36	13-May-93	B08JD8	2-Hexanone	0.75	U		ppb
699-40-36	13-May-93	B08JD8	4-Methyl-2-pentanone	0.85	U		ppb
699-40-36	13-May-93	B08JD8	Acetone	13.4	U		ppb
699-40-36	13-May-93	B08JD8	Acetonitrile	19.4	U		ppb
699-40-36	13-May-93	B08JD8	Acrolein	9.72	U		ppb
699-40-36	13-May-93	B08JD8	Acrylonitrile	4.28	U		ppb
699-40-36	13-May-93	B08JD8	Benzene	0.65	U		ppb
699-40-36	13-May-93	B08JD8	Bromodichloromethane	0.26	U		ppb
699-40-36	13-May-93	B08JD8	Bromoform	0.19	U		ppb
699-40-36	13-May-93	B08JD8	Carbon disulfide	0.95	U		ppb
699-40-36	13-May-93	B08JD8	Carbon tetrachloride	0.87	U		ppb
699-40-36	13-May-93	B08JD8	Chlorobenzene	0.53	U		ppb
699-40-36	13-May-93	B08JD8	Chloroethane	0.71	U		ppb
699-40-36	13-May-93	B08JD8	Chloroform	0.4	U		ppb
699-40-36	13-May-93	B08JD8	Chloroprene	0.77	U		ppb
699-40-36	13-May-93	B08JD8	Dibromochloromethane	0.29	U		ppb
699-40-36	13-May-93	B08JD8	Dibromomethane	0.36	U		ppb
699-40-36	13-May-93	B08JD8	Dichlorodifluoromethane	1	U		ppb
699-40-36	13-May-93	B08JD8	Ethyl cyanide	4.34	U		ppb
699-40-36	13-May-93	B08JD8	Ethyl methacrylate	0.29	U		ppb
699-40-36	13-May-93	B08JD8	Ethylbenzene	0.49	U		ppb
699-40-36	13-May-93	B08JD8	Isobutyl alcohol	26.9	U		ppb
699-40-36	13-May-93	B08JD8	Methacrylonitrile	0.74	U		ppb
699-40-36	13-May-93	B08JD8	Methyl Iodide	0.51	U		ppb
699-40-36	13-May-93	B08JD8	Methyl bromide	0.58	U		ppb
699-40-36	13-May-93	B08JD8	Methyl chloride	0.57	U		ppb
699-40-36	13-May-93	B08JD8	Methyl ethyl ketone	4.25	U		ppb
699-40-36	13-May-93	B08JD8	Methyl methacrylate	0.18	U		ppb
699-40-36	13-May-93	B08JD8	Methylene chloride	2	BL		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	13-May-93	B08JD8	Pentachloroethane	0.67	U		ppb
699-40-36	13-May-93	B08JD8	Styrene	0.43	U		ppb
699-40-36	13-May-93	B08JD8	Tetrachloroethene	1.1	U		ppb
699-40-36	13-May-93	B08JD8	Tetrahydrofuran	3.67	U		ppb
699-40-36	13-May-93	B08JD8	Toluene	0.73	U		ppb
699-40-36	13-May-93	B08JD8	Trichloroethene	0.77	U		ppb
699-40-36	13-May-93	B08JD8	Trichloromonofluoromethane	1.41	U		ppb
699-40-36	13-May-93	B08JD8	Vinyl acetate	0.3	U		ppb
699-40-36	13-May-93	B08JD8	Vinyl chloride	0.78	U		ppb
699-40-36	13-May-93	B08JD8	Xylenes (total)	1.7	U		ppb
699-40-36	13-May-93	B08JD8	allylchloride	0.84	U		ppb
699-40-36	13-May-93	B08JD8	cis-1,3-Dichloropropene	0.65	U		ppb
699-40-36	13-May-93	B08JD8	trans-1,3-Dichloropropene	0.41	U		ppb
699-40-36	13-May-93	B08JD8	trans-1,4-dichloro-2-butene	0.7	U		ppb
699-40-36	13-May-93	B08JD7	4,4'-DDD	0.0005	U		ppb
699-40-36	13-May-93	B08JD7	4,4'-DDE	0.0009	U		ppb
699-40-36	13-May-93	B08JD7	4,4'-DDT	0.011	U		ppb
699-40-36	13-May-93	B08JD7	Aldrin	0.05	U		ppb
699-40-36	13-May-93	B08JD7	Alpha-BHC	0.012	U		ppb
699-40-36	13-May-93	B08JD7	Aroclor-1016	0.19	U		ppb
699-40-36	13-May-93	B08JD7	Aroclor-1221	0.14	U		ppb
699-40-36	13-May-93	B08JD7	Aroclor-1232	0.11	U		ppb
699-40-36	13-May-93	B08JD7	Aroclor-1242	0.11	U		ppb
699-40-36	13-May-93	B08JD7	Aroclor-1248	0.04	U		ppb
699-40-36	13-May-93	B08JD7	Aroclor-1254	0.1	U		ppb
699-40-36	13-May-93	B08JD7	Aroclor-1260	0.11	U		ppb
699-40-36	13-May-93	B08JD7	Beta-BHC	0.0026	U		ppb
699-40-36	13-May-93	B08JD7	Chlordane	0.0057	U		ppb
699-40-36	13-May-93	B08JD7	Delta-BHC	0.0014	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	13-May-93	B08JD7	Dieldrin	0.019	U		ppb
699-40-36	13-May-93	B08JD7	Endosulfan I	0.0029	U		ppb
699-40-36	13-May-93	B08JD7	Endosulfan II	0.004	U		ppb
699-40-36	13-May-93	B08JD7	Endosulfan sulfate	0.0072	U		ppb
699-40-36	13-May-93	B08JD7	Endrin	0.008	U		ppb
699-40-36	13-May-93	B08JD7	Endrin Aldehyde	0.011	U		ppb
699-40-36	13-May-93	B08JD7	Heptachlor	0.023	L		ppb
699-40-36	13-May-93	B08JD7	Heptachlor epoxide	0.012	L		ppb
699-40-36	13-May-93	B08JD7	Methoxychlor	0.1	U		ppb
699-40-36	13-May-93	B08JD7	Toxaphene	0.89	U		ppb
699-40-36	13-May-93	B08JD7	gamma-BHC (Lindane)	0.0021	U		ppb
699-40-36	13-May-93	B08JD8	4,4'-DDD	0.0005	U		ppb
699-40-36	13-May-93	B08JD8	4,4'-DDE	0.0009	U		ppb
699-40-36	13-May-93	B08JD8	4,4'-DDT	0.011	U		ppb
699-40-36	13-May-93	B08JD8	Aldrin	0.05	U		ppb
699-40-36	13-May-93	B08JD8	Alpha-BHC	0.012	U		ppb
699-40-36	13-May-93	B08JD8	Aroclor-1016	0.19	U		ppb
699-40-36	13-May-93	B08JD8	Aroclor-1221	0.14	U		ppb
699-40-36	13-May-93	B08JD8	Aroclor-1232	0.11	U		ppb
699-40-36	13-May-93	B08JD8	Aroclor-1242	0.11	U		ppb
699-40-36	13-May-93	B08JD8	Aroclor-1248	0.04	U		ppb
699-40-36	13-May-93	B08JD8	Aroclor-1254	0.1	U		ppb
699-40-36	13-May-93	B08JD8	Aroclor-1260	0.11	U		ppb
699-40-36	13-May-93	B08JD8	Beta-BHC	0.0026	U		ppb
699-40-36	13-May-93	B08JD8	Chlordane	0.0057	U		ppb
699-40-36	13-May-93	B08JD8	Delta-BHC	0.0014	U		ppb
699-40-36	13-May-93	B08JD8	Dieldrin	0.019	U		ppb
699-40-36	13-May-93	B08JD8	Endosulfan I	0.0029	U		ppb
699-40-36	13-May-93	B08JD8	Endosulfan II	0.004	U		ppb
699-40-36	13-May-93	B08JD8	Endosulfan sulfate	0.0072	U		ppb

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699-40-36	13-May-93	B08JD8	Endrin	0.008	U		ppb
699-40-36	13-May-93	B08JD8	Endrin Aldehyde	0.011	U		ppb
699-40-36	13-May-93	B08JD8	Heptachlor	0.0019	U		ppb
699-40-36	13-May-93	B08JD8	Heptachlor epoxide	0.002	L		ppb
699-40-36	13-May-93	B08JD8	Methoxychlor	0.1	U		ppb
699-40-36	13-May-93	B08JD8	Toxaphene	0.89	U		ppb
699-40-36	13-May-93	B08JD8	gamma-BHC (Lindane)	0.0021	U		ppb
699-40-36	13-May-93	B08JD7	1,2,4,5-Tetrachlorobenzene	4.39	U		ppb
699-40-36	13-May-93	B08JD7	1,2,4-Trichlorobenzene	4.14	U		ppb
699-40-36	13-May-93	B08JD7	1,2-Dichlorobenzene	3.77	U		ppb
699-40-36	13-May-93	B08JD7	1,3-Dichlorobenzene	7.85	U		ppb
699-40-36	13-May-93	B08JD7	1,4-Dichlorobenzene	4.64	U		ppb
699-40-36	13-May-93	B08JD7	1,4-Napthoquinone	10	U		ppb
699-40-36	13-May-93	B08JD7	1-Naphthylamine	25.3	U		ppb
699-40-36	13-May-93	B08JD7	2,3,4,6-Tetrachlorophenol	4.77	U		ppb
699-40-36	13-May-93	B08JD7	2,4,5-Trichlorophenol	4.01	U		ppb
699-40-36	13-May-93	B08JD7	2,4,6-Trichlorophenol	2.54	U		ppb
699-40-36	13-May-93	B08JD7	2,4-Dichlorophenol	2.8	U		ppb
699-40-36	13-May-93	B08JD7	2,4-Dimethylphenol	5.88	U		ppb
699-40-36	13-May-93	B08JD7	2,4-Dinitrophenol	4.46	U		ppb
699-40-36	13-May-93	B08JD7	2,4-Dinitrotoluene	2.59	U		ppb
699-40-36	13-May-93	B08JD7	2,6-Dichlorophenol	3.47	U		ppb
699-40-36	13-May-93	B08JD7	2,6-Dinitrotoluene	2.85	U		ppb
699-40-36	13-May-93	B08JD7	2-Acetylaminofluorene	2.83	U		ppb
699-40-36	13-May-93	B08JD7	2-Chloronaphthalene	3.02	U		ppb
699-40-36	13-May-93	B08JD7	2-Chlorophenol	1.91	U		ppb
699-40-36	13-May-93	B08JD7	2-Methylnaphthalene	2.76	U		ppb
699-40-36	13-May-93	B08JD7	2-Methylphenol	1.8	U		ppb
699-40-36	13-May-93	B08JD7	2-Naphthylamine	15.6	U		ppb
699-40-36	13-May-93	B08JD7	2-Nitroaniline	7.82	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	13-May-93	B08JD7	2-Nitrophenol	3.96	U		ppb
699-40-36	13-May-93	B08JD7	2-Picoline	5.83	U		ppb
699-40-36	13-May-93	B08JD7	3,3'-Dichlorobenzidine	3.88	U		ppb
699-40-36	13-May-93	B08JD7	3,3'-Dimethylbenzidine	10.4	U		ppb
699-40-36	13-May-93	B08JD7	3-Methylcholanthrene	2.63	U		ppb
699-40-36	13-May-93	B08JD7	3-Nitroaniline	9.52	U		ppb
699-40-36	13-May-93	B08JD7	4,6-Dinitro-2-methylphenol	5.54	U		ppb
699-40-36	13-May-93	B08JD7	4-Aminobiphenyl	3.83	U		ppb
699-40-36	13-May-93	B08JD7	4-Bromophenylphenyl ether	2.34	U		ppb
699-40-36	13-May-93	B08JD7	4-Chloro-3-methylphenol	7.41	U		ppb
699-40-36	13-May-93	B08JD7	4-Chloroaniline	13.2	U		ppb
699-40-36	13-May-93	B08JD7	4-Chlorophenylphenyl ether	3.04	U		ppb
699-40-36	13-May-93	B08JD7	4-Methylphenol	3.54	U		ppb
699-40-36	13-May-93	B08JD7	4-Nitroaniline	21.4	U		ppb
699-40-36	13-May-93	B08JD7	4-Nitrophenol	1.52	U		ppb
699-40-36	13-May-93	B08JD7	4-Nitroquinoline-1-oxide	6	U		ppb
699-40-36	13-May-93	B08JD7	5-Nitro-o-toluidine	5.25	U		ppb
699-40-36	13-May-93	B08JD7	7,12-Dimethylbenz[a]anthracene	1.82	U		ppb
699-40-36	13-May-93	B08JD7	Acenaphthene	2.88	U		ppb
699-40-36	13-May-93	B08JD7	Acenaphthylene	3.96	U		ppb
699-40-36	13-May-93	B08JD7	Acetophenone	2.38	U		ppb
699-40-36	13-May-93	B08JD7	Alpha, alpha-Dimethylphenethylamine	37.8	U		ppb
699-40-36	13-May-93	B08JD7	Aniline	3.53	U		ppb
699-40-36	13-May-93	B08JD7	Anthracene	2.95	U		ppb
699-40-36	13-May-93	B08JD7	Aramite	8.6	U		ppb
699-40-36	13-May-93	B08JD7	Benzo(a)anthracene	2.34	U		ppb
699-40-36	13-May-93	B08JD7	Benzo(a)pyrene	1.7	U		ppb

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699-40-36	13-May-93	B08JD7	Benzo(b)fluoranthene	4.41	U		ppb
699-40-36	13-May-93	B08JD7	Benzo(ghi)perylene	3.65	U		ppb
699-40-36	13-May-93	B08JD7	Benzo(k)fluoranthene	2.21	U		ppb
699-40-36	13-May-93	B08JD7	Benzothiazole	2.55	U		ppb
699-40-36	13-May-93	B08JD7	Benzyl alcohol	5.16	U		ppb
699-40-36	13-May-93	B08JD7	Bis(2-Chloroethoxy)methane	7.13	U		ppb
699-40-36	13-May-93	B08JD7	Bis(2-chloroethyl) ether	2.9	U		ppb
699-40-36	13-May-93	B08JD7	Bis(2-chloroisopropyl) ether	3.35	U		ppb
699-40-36	13-May-93	B08JD7	Bis(2-ethylhexyl) phthalate	4.07	U		ppb
699-40-36	13-May-93	B08JD7	Butylbenzylphthalate	5.94	U		ppb
699-40-36	13-May-93	B08JD7	Chlorobenzilate	8.69	U		ppb
699-40-36	13-May-93	B08JD7	Chrysene	1.7	U		ppb
699-40-36	13-May-93	B08JD7	Di-n-butylphthalate	4.34	U		ppb
699-40-36	13-May-93	B08JD7	Di-n-octylphthalate	2.98	U		ppb
699-40-36	13-May-93	B08JD7	Diallate	3.15	U		ppb
699-40-36	13-May-93	B08JD7	Dibenz[a,h]anthracene	1.92	U		ppb
699-40-36	13-May-93	B08JD7	Dibenzofuran	2.54	U		ppb
699-40-36	13-May-93	B08JD7	Diethyl phthalate	8.94	U		ppb
699-40-36	13-May-93	B08JD7	Dimethoate	10	U		ppb
699-40-36	13-May-93	B08JD7	Dimethyl phthalate	5.55	U		ppb
699-40-36	13-May-93	B08JD7	Diphenylamine	2.86	U		ppb
699-40-36	13-May-93	B08JD7	Ethyl methanesulfonate	2.07	U		ppb
699-40-36	13-May-93	B08JD7	Famphur	12.8	U		ppb
699-40-36	13-May-93	B08JD7	Fluoranthene	4.62	U		ppb
699-40-36	13-May-93	B08JD7	Fluorene	2.56	U		ppb
699-40-36	13-May-93	B08JD7	Hexachlorobenzene	2.38	U		ppb
699-40-36	13-May-93	B08JD7	Hexachlorobutadiene	4.29	U		ppb
699-40-36	13-May-93	B08JD7	Hexachlorocyclopentadiene	2.62	U		ppb

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699-40-36	13-May-93	B08JD7	Hexachloroethane	4.73	U		ppb
699-40-36	13-May-93	B08JD7	Hexachlorophene	19.6	U		ppb
699-40-36	13-May-93	B08JD7	Hexachloropropene	3.68	U		ppb
699-40-36	13-May-93	B08JD7	Indeno(1,2,3-cd)pyrene	3.21	U		ppb
699-40-36	13-May-93	B08JD7	Isodrin	1.44	U		ppb
699-40-36	13-May-93	B08JD7	Isophorone	3.29	U		ppb
699-40-36	13-May-93	B08JD7	Isosafrole	2.25	U		ppb
699-40-36	13-May-93	B08JD7	Kepone	9.59	U		ppb
699-40-36	13-May-93	B08JD7	Kerosene	4.03	U		ppb
699-40-36	13-May-93	B08JD7	Methapyrilene	8.45	U		ppb
699-40-36	13-May-93	B08JD7	Methyl methanesulfonate	1.61	U		ppb
699-40-36	13-May-93	B08JD7	N-Nitroso-di-n-dipropylamine	3.67	U		ppb
699-40-36	13-May-93	B08JD7	N-Nitrosodi-n-butylamine	3.22	U		ppb
699-40-36	13-May-93	B08JD7	N-Nitrosodiethylamine	2.9	U		ppb
699-40-36	13-May-93	B08JD7	N-Nitrosodimethylamine	3.81	U		ppb
699-40-36	13-May-93	B08JD7	N-Nitrosodiphenylamine	2.11	U		ppb
699-40-36	13-May-93	B08JD7	N-Nitrosomethylethylamine	2.83	U		ppb
699-40-36	13-May-93	B08JD7	N-Nitrosomorpholine	3.27	U		ppb
699-40-36	13-May-93	B08JD7	N-Nitrosopiperidine	4.35	U		ppb
699-40-36	13-May-93	B08JD7	Naphthalene	6.5	U		ppb
699-40-36	13-May-93	B08JD7	Nitrobenzene	3.16	U		ppb
699-40-36	13-May-93	B08JD7	Nitrosopyrrolidine	2.78	U		ppb
699-40-36	13-May-93	B08JD7	O,O,O-Triethyl phosphorothioate	5.19	U		ppb
699-40-36	13-May-93	B08JD7	O,O-diethylO-2-pyrazinyl phosphor..	3.04	U		ppb
699-40-36	13-May-93	B08JD7	Parathion	3.9	U		ppb
699-40-36	13-May-93	B08JD7	Pentachlorobenzene	3.99	U		ppb
699-40-36	13-May-93	B08JD7	Pentachloronitrobenzene (PCNB)	2.49	U		ppb

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699-40-36	13-May-93	B08JD7	Pentachlorophenol	8.07	U		ppb
699-40-36	13-May-93	B08JD7	Phenacetin	4.78	U		ppb
699-40-36	13-May-93	B08JD7	Phenanthrene	5.27	U		ppb
699-40-36	13-May-93	B08JD7	Phenol	0.833	U		ppb
699-40-36	13-May-93	B08JD7	Pronamide	3.42	U		ppb
699-40-36	13-May-93	B08JD7	Pyrene	3.69	U		ppb
699-40-36	13-May-93	B08JD7	Pyridine	4.57	U		ppb
699-40-36	13-May-93	B08JD7	Safrol	3.22	U		ppb
699-40-36	13-May-93	B08JD7	Tetraethyldithiopyrophosphate	2.81	U		ppb
699-40-36	13-May-93	B08JD7	Tributyl Phosphate	4.42	U		ppb
699-40-36	13-May-93	B08JD7	Tris-2-chloroethyl phosphate	2.88	U		ppb
699-40-36	13-May-93	B08JD7	m-Cresol	1.44	U		ppb
699-40-36	13-May-93	B08JD7	m-dinitrobenzene	9.35	U		ppb
699-40-36	13-May-93	B08JD7	o-Toluidine	2.27	U		ppb
699-40-36	13-May-93	B08JD7	p-Dimethylaminoazobenzene	3.36	U		ppb
699-40-36	13-May-93	B08JD7	p-Phenylenediamine	3.09	U		ppb
699-40-36	13-May-93	B08JD7	sym-Trinitrobenzene	3.74	U		ppb
699-40-36	13-May-93	B08JD8	1,2,4,5-Tetrachlorobenzene	4.39	U		ppb
699-40-36	13-May-93	B08JD8	1,2,4-Trichlorobenzene	4.14	U		ppb
699-40-36	13-May-93	B08JD8	1,2-Dichlorobenzene	3.77	U		ppb
699-40-36	13-May-93	B08JD8	1,3-Dichlorobenzene	7.85	U		ppb
699-40-36	13-May-93	B08JD8	1,4-Dichlorobenzene	4.64	U		ppb
699-40-36	13-May-93	B08JD8	1,4-Naphtoquinone	10	U		ppb
699-40-36	13-May-93	B08JD8	1-Naphthylamine	25.3	U		ppb
699-40-36	13-May-93	B08JD8	2,3,4,6-Tetrachlorophenol	4.77	U		ppb
699-40-36	13-May-93	B08JD8	2,4,5-Trichlorophenol	4.01	U		ppb
699-40-36	13-May-93	B08JD8	2,4,6-Trichlorophenol	2.54	U		ppb
699-40-36	13-May-93	B08JD8	2,4-Dichlorophenol	2.8	U		ppb

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699-40-36	13-May-93	B08JD8	2,4-Dimethylphenol	5.88	U		ppb
699-40-36	13-May-93	B08JD8	2,4-Dinitrophenol	4.46	U		ppb
699-40-36	13-May-93	B08JD8	2,4-Dinitrotoluene	2.59	U		ppb
699-40-36	13-May-93	B08JD8	2,6-Dichlorophenol	3.47	U		ppb
699-40-36	13-May-93	B08JD8	2,6-Dinitrotoluene	2.85	U		ppb
699-40-36	13-May-93	B08JD8	2-Acetylaminofluorene	2.83	U		ppb
699-40-36	13-May-93	B08JD8	2-Chloronaphthalene	3.02	U		ppb
699-40-36	13-May-93	B08JD8	2-Chlorophenol	1.91	U		ppb
699-40-36	13-May-93	B08JD8	2-Methylnaphthalene	2.76	U		ppb
699-40-36	13-May-93	B08JD8	2-Methylphenol	1.8	U		ppb
699-40-36	13-May-93	B08JD8	2-Naphthylamine	15.6	U		ppb
699-40-36	13-May-93	B08JD8	2-Nitroaniline	7.82	U		ppb
699-40-36	13-May-93	B08JD8	2-Nitrophenol	3.96	U		ppb
699-40-36	13-May-93	B08JD8	2-Picoline	5.83	U		ppb
699-40-36	13-May-93	B08JD8	3,3'-Dichlorobenzidine	3.88	U		ppb
699-40-36	13-May-93	B08JD8	3,3'-Dimethylbenzidine	10.4	U		ppb
699-40-36	13-May-93	B08JD8	3-Methylcholanthrene	2.63	U		ppb
699-40-36	13-May-93	B08JD8	3-Nitroaniline	9.52	U		ppb
699-40-36	13-May-93	B08JD8	4,6-Dinitro-2-methylphenol	5.54	U		ppb
699-40-36	13-May-93	B08JD8	4-Aminobiphenyl	3.83	U		ppb
699-40-36	13-May-93	B08JD8	4-Bromophenylphenyl ether	2.34	U		ppb
699-40-36	13-May-93	B08JD8	4-Chloro-3-methylphenol	7.41	U		ppb
699-40-36	13-May-93	B08JD8	4-Chloroaniline	13.2	U		ppb
699-40-36	13-May-93	B08JD8	4-Chlorophenylphenyl ether	3.04	U		ppb
699-40-36	13-May-93	B08JD8	4-Methylphenol	3.54	U		ppb
699-40-36	13-May-93	B08JD8	4-Nitroaniline	21.4	U		ppb
699-40-36	13-May-93	B08JD8	4-Nitrophenol	1.52	U		ppb
699-40-36	13-May-93	B08JD8	4-Nitroquinoline-1-oxide	6	U		ppb

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699-40-36	13-May-93	B08JD8	5-Nitro-o-toluidine	5.25	U		ppb
699-40-36	13-May-93	B08JD8	7,12-Dimethylbenz[a]anthracene	1.82	U		ppb
699-40-36	13-May-93	B08JD8	Acenaphthene	2.88	U		ppb
699-40-36	13-May-93	B08JD8	Acenaphthylene	3.96	U		ppb
699-40-36	13-May-93	B08JD8	Acetophenone	2.38	U		ppb
699-40-36	13-May-93	B08JD8	Alpha,alpha-Dimethylphenethylamine	37.8	U		ppb
699-40-36	13-May-93	B08JD8	Aniline	3.53	U		ppb
699-40-36	13-May-93	B08JD8	Anthracene	2.95	U		ppb
699-40-36	13-May-93	B08JD8	Aramite	8.6	U		ppb
699-40-36	13-May-93	B08JD8	Benzo(a)anthracene	2.34	U		ppb
699-40-36	13-May-93	B08JD8	Benzo(a)pyrene	1.7	U		ppb
699-40-36	13-May-93	B08JD8	Benzo(b)fluoranthene	4.41	U		ppb
699-40-36	13-May-93	B08JD8	Benzo(ghi)perylene	3.65	U		ppb
699-40-36	13-May-93	B08JD8	Benzo(k)fluoranthene	2.21	U		ppb
699-40-36	13-May-93	B08JD8	Benzothiazole	2.55	U		ppb
699-40-36	13-May-93	B08JD8	Benzyl alcohol	5.16	U		ppb
699-40-36	13-May-93	B08JD8	Bis(2-Chloroethoxy)methane	7.13	U		ppb
699-40-36	13-May-93	B08JD8	Bis(2-chloroethyl) ether	2.9	U		ppb
699-40-36	13-May-93	B08JD8	Bis(2-chloroisopropyl) ether	3.35	U		ppb
699-40-36	13-May-93	B08JD8	Bis(2-ethylhexyl) phthalate	4.07	U		ppb
699-40-36	13-May-93	B08JD8	Butylbenzylphthalate	5.94	U		ppb
699-40-36	13-May-93	B08JD8	Chlorobenzilate	8.69	U		ppb
699-40-36	13-May-93	B08JD8	Chrysene	1.7	U		ppb
699-40-36	13-May-93	B08JD8	Di-n-butylphthalate	4.34	U		ppb
699-40-36	13-May-93	B08JD8	Di-n-octylphthalate	2.98	U		ppb
699-40-36	13-May-93	B08JD8	Diallate	3.15	U		ppb
699-40-36	13-May-93	B08JD8	Dibenz[a,h]anthracene	1.92	U		ppb

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699-40-36	13-May-93	B08JD8	Dibenzofuran	2.54	U		ppb
699-40-36	13-May-93	B08JD8	Diethyl phthalate	8.94	U		ppb
699-40-36	13-May-93	B08JD8	Dimethoate	10	U		ppb
699-40-36	13-May-93	B08JD8	Dimethyl phthalate	5.55	U		ppb
699-40-36	13-May-93	B08JD8	Diphenylamine	2.86	U		ppb
699-40-36	13-May-93	B08JD8	Ethyl methanesulfonate	2.07	U		ppb
699-40-36	13-May-93	B08JD8	Famphur	12.8	U		ppb
699-40-36	13-May-93	B08JD8	Fluoranthene	4.62	U		ppb
699-40-36	13-May-93	B08JD8	Fluorene	2.56	U		ppb
699-40-36	13-May-93	B08JD8	Hexachlorobenzene	2.38	U		ppb
699-40-36	13-May-93	B08JD8	Hexachlorobutadiene	4.29	U		ppb
699-40-36	13-May-93	B08JD8	Hexachlorocyclopentadiene	2.62	U		ppb
699-40-36	13-May-93	B08JD8	Hexachloroethane	4.73	U		ppb
699-40-36	13-May-93	B08JD8	Hexachlorophene	19.6	U		ppb
699-40-36	13-May-93	B08JD8	Hexachloropropene	3.68	U		ppb
699-40-36	13-May-93	B08JD8	Indeno(1,2,3-cd)pyrene	3.21	U		ppb
699-40-36	13-May-93	B08JD8	Isodrin	1.44	U		ppb
699-40-36	13-May-93	B08JD8	Isophorone	3.29	U		ppb
699-40-36	13-May-93	B08JD8	Isosafrole	2.25	U		ppb
699-40-36	13-May-93	B08JD8	Kepone	9.59	U		ppb
699-40-36	13-May-93	B08JD8	Kerosene	4.03	U		ppb
699-40-36	13-May-93	B08JD8	Methapyrilene	8.45	U		ppb
699-40-36	13-May-93	B08JD8	Methyl methanesulfonate	1.61	U		ppb
699-40-36	13-May-93	B08JD8	N-Nitroso-di-n-dipropylamine	3.67	U		ppb
699-40-36	13-May-93	B08JD8	N-Nitrosodi-n-butylamine	3.22	U		ppb
699-40-36	13-May-93	B08JD8	N-Nitrosodiethylamine	2.9	U		ppb
699-40-36	13-May-93	B08JD8	N-Nitrosodimethylamine	3.81	U		ppb
699-40-36	13-May-93	B08JD8	N-Nitrosodiphenylamine	2.11	U		ppb

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699-40-36	13-May-93	B08JD8	N-Nitrosomethylethylamine	2.83	U		ppb
699-40-36	13-May-93	B08JD8	N-Nitrosomorpholine	3.27	U		ppb
699-40-36	13-May-93	B08JD8	N-Nitrosopiperidine	4.35	U		ppb
699-40-36	13-May-93	B08JD8	Naphthalene	6.5	U		ppb
699-40-36	13-May-93	B08JD8	Nitrobenzene	3.16	U		ppb
699-40-36	13-May-93	B08JD8	Nitrosopyrrolidine	2.78	U		ppb
699-40-36	13-May-93	B08JD8	O,O,O-Triethyl phosphorothioate	5.19	U		ppb
699-40-36	13-May-93	B08JD8	O,O-diethylO-2-pyrazinyl phosphor..	3.04	U		ppb
699-40-36	13-May-93	B08JD8	Parathion	3.9	U		ppb
699-40-36	13-May-93	B08JD8	Pentachlorobenzene	3.99	U		ppb
699-40-36	13-May-93	B08JD8	Pentachloronitrobenzene (PCNB)	2.49	U		ppb
699-40-36	13-May-93	B08JD8	Pentachlorophenol	8.07	U		ppb
699-40-36	13-May-93	B08JD8	Phenacetin	4.78	U		ppb
699-40-36	13-May-93	B08JD8	Phenanthrene	5.27	U		ppb
699-40-36	13-May-93	B08JD8	Phenol	0.833	U		ppb
699-40-36	13-May-93	B08JD8	Pronamide	3.42	U		ppb
699-40-36	13-May-93	B08JD8	Pyrene	3.69	U		ppb
699-40-36	13-May-93	B08JD8	Pyridine	4.57	U		ppb
699-40-36	13-May-93	B08JD8	Safrol	3.22	U		ppb
699-40-36	13-May-93	B08JD8	Tetraethyldithiopyrophosphate	2.81	U		ppb
699-40-36	13-May-93	B08JD8	Tributyl Phosphate	4.42	U		ppb
699-40-36	13-May-93	B08JD8	Tris-2-chloroethyl phosphate	2.88	U		ppb
699-40-36	13-May-93	B08JD8	m-Cresol	1.44	U		ppb
699-40-36	13-May-93	B08JD8	m-dinitrobenzene	9.35	U		ppb
699-40-36	13-May-93	B08JD8	o-Toluidine	2.27	U		ppb
699-40-36	13-May-93	B08JD8	p-Dimethylaminoazobenzene	3.36	U		ppb

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699-40-36	13-May-93	B08JD8	p-Phenylenediamine	3.09	U		ppb
699-40-36	13-May-93	B08JD8	sym-Trinitrobenzene	3.74	U		ppb
699-40-36	13-May-93	B08JD7	Disulfoton	0.12	U		ppb
699-40-36	13-May-93	B08JD7	Methyl parathion	0.24	U		ppb
699-40-36	13-May-93	B08JD7	Phorate	0.1	U		ppb
699-40-36	13-May-93	B08JD8	Disulfoton	0.12	U		ppb
699-40-36	13-May-93	B08JD8	Methyl parathion	0.24	U		ppb
699-40-36	13-May-93	B08JD8	Phorate	0.1	U		ppb
699-40-36	13-May-93	B08JD7	2,4,5-T	0.384	U		ppb
699-40-36	13-May-93	B08JD7	2,4,5-TP	0.408	U		ppb
699-40-36	13-May-93	B08JD7	2,4-D	0.186	U		ppb
699-40-36	13-May-93	B08JD7	2-sec-Butyl-4,6-dinitrophenol(DNBP)	0.269	U		ppb
699-40-36	13-May-93	B08JD8	2,4,5-T	0.384	U		ppb
699-40-36	13-May-93	B08JD8	2,4,5-TP	0.408	U		ppb
699-40-36	13-May-93	B08JD8	2,4-D	0.186	U		ppb
699-40-36	13-May-93	B08JD8	2-sec-Butyl-4,6-dinitrophenol(DNBP)	0.269	U		ppb
699-40-36	13-May-93	B08JD7	2,3,7,8-TCDD	0.00128	U		ppb
699-40-36	13-May-93	B08JD7	PCDDs	0.00196	U		ppb
699-40-36	13-May-93	B08JD7	PCDFs	0.00153	U		ppb
699-40-36	13-May-93	B08JD8	2,3,7,8-TCDD	0.00128	U		ppb
699-40-36	13-May-93	B08JD8	PCDDs	0.00196	U		ppb
699-40-36	13-May-93	B08JD8	PCDFs	0.00153	U		ppb
699-40-36	13-May-93	B08JD7	Total Organic Halogen	8	U		ppb
699-40-36	13-May-93	B08JD8	Total Organic Halogen	8	U		ppb
699-40-36	13-May-93	B08JD9	Total Organic Halogen	8	U		ppb
699-40-36	13-May-93	B08JF0	Total Organic Halogen	8	U		ppb

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699-40-36	13-May-93	B08JF1	Total Organic Halogen	8	U		ppb
699-40-36	13-May-93	B08JF2	Total Organic Halogen	8	U		ppb
699-40-36	13-May-93	B08JF3	Total Organic Halogen	8	U		ppb
699-40-36	13-May-93	B08JF4	Total Organic Halogen	8	U		ppb
699-40-36	09-Aug-93	B090V1	Total Organic Carbon	400	L		ppb
699-40-36	09-Aug-93	B090V2	Total Organic Carbon	400	L		ppb
699-40-36	09-Aug-93	B090V3	Total Organic Carbon	200	U		ppb
699-40-36	09-Aug-93	B090V4	Total Organic Carbon	200	U		ppb
699-40-36	09-Aug-93	B090V1	4,4'-DDD	0.0005	U		ppb
699-40-36	09-Aug-93	B090V1	4,4'-DDE	0.0009	U		ppb
699-40-36	09-Aug-93	B090V1	4,4'-DDT	0.011	U		ppb
699-40-36	09-Aug-93	B090V1	Aldrin	0.05	U		ppb
699-40-36	09-Aug-93	B090V1	Alpha-BHC	0.012	U		ppb
699-40-36	09-Aug-93	B090V1	Beta-BHC	0.0026	U		ppb
699-40-36	09-Aug-93	B090V1	Chlordane	0.0057	U		ppb
699-40-36	09-Aug-93	B090V1	Delta-BHC	0.0014	U		ppb
699-40-36	09-Aug-93	B090V1	Dieldrin	0.019	U		ppb
699-40-36	09-Aug-93	B090V1	Endosulfan I	0.0029	U		ppb
699-40-36	09-Aug-93	B090V1	Endosulfan II	0.004	U		ppb
699-40-36	09-Aug-93	B090V1	Endosulfan sulfate	0.0072	U		ppb
699-40-36	09-Aug-93	B090V1	Endrin	0.008	U		ppb
699-40-36	09-Aug-93	B090V1	Endrin Aldehyde	0.011	U		ppb
699-40-36	09-Aug-93	B090V1	Heptachlor	0.0019	U		ppb
699-40-36	09-Aug-93	B090V1	Heptachlor epoxide	0.0008	U		ppb
699-40-36	09-Aug-93	B090V1	Methoxychlor	0.1	U		ppb
699-40-36	09-Aug-93	B090V1	Toxaphene	0.89	U		ppb
699-40-36	09-Aug-93	B090V1	gamma-BHC (Lindane)	0.0021	U		ppb
699-40-36	09-Aug-93	B090V1	2,4-Dichlorophenol	2.8	U		ppb
699-40-36	09-Aug-93	B090V1	2-Methylphenol	1.8	U		ppb
699-40-36	09-Aug-93	B090V1	2-Nitrophenol	3.96	U		ppb

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699-40-36	09-Aug-93	B090V1	4-Methylphenol	3.54	U		ppb
699-40-36	09-Aug-93	B090V1	Benzothiazole	2.55	U		ppb
699-40-36	09-Aug-93	B090V1	Bis(2-ethylhexyl) phthalate	4.07	U		ppb
699-40-36	09-Aug-93	B090V1	Decane	4.03	U		ppb
699-40-36	09-Aug-93	B090V1	Dodecane	3.62	U		ppb
699-40-36	09-Aug-93	B090V1	Naphthalene	6.5	U		ppb
699-40-36	09-Aug-93	B090V1	Pentachlorophenol	8.07	U		ppb
699-40-36	09-Aug-93	B090V1	Phenol	0.833	U		ppb
699-40-36	09-Aug-93	B090V1	Tetradecane	2.43	U		ppb
699-40-36	09-Aug-93	B090V1	Tributyl Phosphate	4.42	U		ppb
699-40-36	09-Aug-93	B090V1	Tris-2-chloroethyl phosphate	18			ppb
699-40-36	09-Aug-93	B090V1	m-Cresol	1.44	XU		ppb
699-40-36	09-Aug-93	B090V1	1,1,1-Trichloroethane	0.072	U		ppb
699-40-36	09-Aug-93	B090V1	1,1,2-Trichloroethane	0.043	U		ppb
699-40-36	09-Aug-93	B090V1	1,1-Dichloroethane	0.337	U		ppb
699-40-36	09-Aug-93	B090V1	1,2-Dichloroethane	0.139	U		ppb
699-40-36	09-Aug-93	B090V1	1,4-Dichlorobenzene	0.107	U		ppb
699-40-36	09-Aug-93	B090V1	Benzene	0.105	U		ppb
699-40-36	09-Aug-93	B090V1	Carbon tetrachloride	0.121	U		ppb
699-40-36	09-Aug-93	B090V1	Chloroform	0.043	U		ppb
699-40-36	09-Aug-93	B090V1	Ethylbenzene	0.046	U		ppb
699-40-36	09-Aug-93	B090V1	Methylene chloride	0.056	U		ppb
699-40-36	09-Aug-93	B090V1	Tetrachloroethene	0.049	U		ppb
699-40-36	09-Aug-93	B090V1	Toluene	0.056	U		ppb
699-40-36	09-Aug-93	B090V1	Trichloroethene	0.065	U		ppb
699-40-36	09-Aug-93	B090V1	Vinyl chloride	0.266	U		ppb
699-40-36	09-Aug-93	B090V1	Xylenes (total)	0.202	U		ppb
699-40-36	09-Aug-93	B090V1	cis-1,2-Dichloroethylene	0.127	U		ppb

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699-40-36	09-Aug-93	B090V1	trans-1,2-Dichloroethylene	0.149	U		ppb
699-40-36	09-Aug-93	B090V1	Total Organic Halogen	8	U		ppb
699-40-36	09-Aug-93	B090V1MD	Total Organic Halogen	8	U		ppb
699-40-36	09-Aug-93	B090V2	Total Organic Halogen	20			ppb
699-40-36	09-Aug-93	B090V2MD	Total Organic Halogen	8	U		ppb
699-40-36	09-Aug-93	B090V3	Total Organic Halogen	10			ppb
699-40-36	09-Aug-93	B090V3MD	Total Organic Halogen	8	L		ppb
699-40-36	09-Aug-93	B090V4	Total Organic Halogen	30			ppb
699-40-36	09-Aug-93	B090V4MD	Total Organic Halogen	20			ppb
699-40-36	08-Oct-93	B099T7	Total Organic Carbon	200	U		ppb
699-40-36	08-Oct-93	B099T8	Total Organic Carbon	400	L		ppb
699-40-36	08-Oct-93	B099T9	Total Organic Carbon	200	U		ppb
699-40-36	08-Oct-93	B099V0	Total Organic Carbon	300	L		ppb
699-40-36	08-Oct-93	B099T7	Total Organic Halogen	40			ppb
699-40-36	08-Oct-93	B099T7MD	Total Organic Halogen	40			ppb
699-40-36	08-Oct-93	B099T8	Total Organic Halogen	30			ppb
699-40-36	08-Oct-93	B099T8MD	Total Organic Halogen	40			ppb
699-40-36	08-Oct-93	B099T9	Total Organic Halogen	9	L		ppb
699-40-36	08-Oct-93	B099T9MD	Total Organic Halogen	10			ppb
699-40-36	08-Oct-93	B099V0	Total Organic Halogen	8	U		ppb
699-40-36	08-Oct-93	B099V0MD	Total Organic Halogen	6	U		ppb
699-40-36	05-Jan-94	B09Q92	Total Organic Carbon	200	U		ppb
699-40-36	05-Jan-94	B09Q93	Total Organic Carbon	200	U		ppb
699-40-36	05-Jan-94	B09Q94	Total Organic Carbon	200	U		ppb
699-40-36	05-Jan-94	B09Q95	Total Organic Carbon	200	U		ppb
699-40-36	05-Jan-94	B09Q92	1,1,1-Trichloroethane	0.64	U		ppb
699-40-36	05-Jan-94	B09Q92	1,1,2-Trichloroethane	0.25	U		ppb
699-40-36	05-Jan-94	B09Q92	1,1-Dichloroethane	0.61	U		ppb
699-40-36	05-Jan-94	B09Q92	1,2-Dichloroethane	0.45	U		ppb
699-40-36	05-Jan-94	B09Q92	1,2-Dichloroethene	1.2	U		ppb

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699-40-36	05-Jan-94	B09Q92	1,4-Dichlorobenzene	0.63	U		ppb
699-40-36	05-Jan-94	B09Q92	1-Butanol	13.1	U		ppb
699-40-36	05-Jan-94	B09Q92	4-Methyl-2-pentanone	0.85	U		ppb
699-40-36	05-Jan-94	B09Q92	Acetone	13.4	U		ppb
699-40-36	05-Jan-94	B09Q92	Benzene	0.65	U		ppb
699-40-36	05-Jan-94	B09Q92	Carbon disulfide	0.95	U		ppb
699-40-36	05-Jan-94	B09Q92	Carbon tetrachloride	0.87	U		ppb
699-40-36	05-Jan-94	B09Q92	Chloroform	0.4	U		ppb
699-40-36	05-Jan-94	B09Q92	Ethyl cyanide	4.34	U		ppb
699-40-36	05-Jan-94	B09Q92	Methyl ethyl ketone	4.25	U		ppb
699-40-36	05-Jan-94	B09Q92	Methylene chloride	0.61	U		ppb
699-40-36	05-Jan-94	B09Q92	Tetrachloroethene	1.1	U		ppb
699-40-36	05-Jan-94	B09Q92	Tetrahydrofuran	3.67	U		ppb
699-40-36	05-Jan-94	B09Q92	Toluene	0.73	U		ppb
699-40-36	05-Jan-94	B09Q92	Trichloroethene	0.77	U		ppb
699-40-36	05-Jan-94	B09Q92	Vinyl chloride	0.78	U		ppb
699-40-36	05-Jan-94	B09Q92	Xylenes (total)	1.7	U		ppb
699-40-36	05-Jan-94	B09Q92	4,4'-DDD	0.009	U		ppb
699-40-36	05-Jan-94	B09Q92	4,4'-DDE	0.008	U		ppb
699-40-36	05-Jan-94	B09Q92	4,4'-DDT	0.01	U		ppb
699-40-36	05-Jan-94	B09Q92	Aldrin	0.03	U		ppb
699-40-36	05-Jan-94	B09Q92	Alpha-BHC	0.005	U		ppb
699-40-36	05-Jan-94	B09Q92	Beta-BHC	0.004	U		ppb
699-40-36	05-Jan-94	B09Q92	Chlordane	0.09	U		ppb
699-40-36	05-Jan-94	B09Q92	Delta-BHC	0.006	U		ppb
699-40-36	05-Jan-94	B09Q92	Dieldrin	0.007	U		ppb
699-40-36	05-Jan-94	B09Q92	Endosulfan I	0.007	U		ppb
699-40-36	05-Jan-94	B09Q92	Endosulfan II	0.008	U		ppb
699-40-36	05-Jan-94	B09Q92	Endosulfan sulfate	0.009	U		ppb
699-40-36	05-Jan-94	B09Q92	Endrin	0.004	U		ppb

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699-40-36	05-Jan-94	B09Q92	Endrin Aldehyde	0.009	U		ppb
699-40-36	05-Jan-94	B09Q92	Heptachlor	0.02	U		ppb
699-40-36	05-Jan-94	B09Q92	Heptachlor epoxide	0.007	U		ppb
699-40-36	05-Jan-94	B09Q92	Methoxychlor	0.08	U		ppb
699-40-36	05-Jan-94	B09Q92	Toxaphene	0.9	U		ppb
699-40-36	05-Jan-94	B09Q92	gamma-BHC (Lindane)	0.008	U		ppb
699-40-36	05-Jan-94	B09Q92	2,4-Dichlorophenol	4.6	U		ppb
699-40-36	05-Jan-94	B09Q92	2-Methylphenol	4.3	U		ppb
699-40-36	05-Jan-94	B09Q92	2-Nitrophenol	5	U		ppb
699-40-36	05-Jan-94	B09Q92	4-Methylphenol	4.1	U		ppb
699-40-36	05-Jan-94	B09Q92	Benzothiazole	2.8	U		ppb
699-40-36	05-Jan-94	B09Q92	Bis(2-ethylhexyl) phthalate	6.5	U		ppb
699-40-36	05-Jan-94	B09Q92	Decane	7.3	U		ppb
699-40-36	05-Jan-94	B09Q92	Dodecane	8.2	U		ppb
699-40-36	05-Jan-94	B09Q92	Naphthalene	4.1	U		ppb
699-40-36	05-Jan-94	B09Q92	Pentachlorophenol	5.3	U		ppb
699-40-36	05-Jan-94	B09Q92	Phenol	2.8	U		ppb
699-40-36	05-Jan-94	B09Q92	Tetradecane	9.3	U		ppb
699-40-36	05-Jan-94	B09Q92	Tributyl Phosphate	8.7	U		ppb
699-40-36	05-Jan-94	B09Q92	Tris-2-chloroethyl phosphate	8.9	U		ppb
699-40-36	05-Jan-94	B09Q92	m-Cresol	2.4	U		ppb
699-40-36	14-Apr-94	B0BRG2	Total Organic Carbon	320	U		ppb
699-40-36	14-Apr-94	B0BRG3	Total Organic Carbon	320	U		ppb
699-40-36	14-Apr-94	B0BRG4	Total Organic Carbon	320	U		ppb
699-40-36	14-Apr-94	B0BRG5	Total Organic Carbon	320	U		ppb
699-40-36	14-Apr-94	B0BRG2	4,4'-DDD	0.004	U		ppb
699-40-36	14-Apr-94	B0BRG2	4,4'-DDE	0.002	U		ppb
699-40-36	14-Apr-94	B0BRG2	4,4'-DDT	0.001	U		ppb
699-40-36	14-Apr-94	B0BRG2	Aldrin	0.002	U		ppb

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699-40-36	14-Apr-94	B0BRG2	Alpha-BHC	0.003	U		ppb
699-40-36	14-Apr-94	B0BRG2	Aroclor-1016	0.059	U		ppb
699-40-36	14-Apr-94	B0BRG2	Aroclor-1221	0.06	U		ppb
699-40-36	14-Apr-94	B0BRG2	Aroclor-1232	0.094	U		ppb
699-40-36	14-Apr-94	B0BRG2	Aroclor-1242	0.17	U		ppb
699-40-36	14-Apr-94	B0BRG2	Aroclor-1248	0.047	U		ppb
699-40-36	14-Apr-94	B0BRG2	Aroclor-1254	0.092	U		ppb
699-40-36	14-Apr-94	B0BRG2	Aroclor-1260	0.079	U		ppb
699-40-36	14-Apr-94	B0BRG2	Beta-BHC	0.001	U		ppb
699-40-36	14-Apr-94	B0BRG2	Chlordane	0.042	U		ppb
699-40-36	14-Apr-94	B0BRG2	Delta-BHC	0.002	U		ppb
699-40-36	14-Apr-94	B0BRG2	Dieldrin	0.002	U		ppb
699-40-36	14-Apr-94	B0BRG2	Endosulfan I	0.002	U		ppb
699-40-36	14-Apr-94	B0BRG2	Endosulfan II	0.001	U		ppb
699-40-36	14-Apr-94	B0BRG2	Endosulfan sulfate	0.002	U		ppb
699-40-36	14-Apr-94	B0BRG2	Endrin	0.004	U		ppb
699-40-36	14-Apr-94	B0BRG2	Endrin Aldehyde	0.004	U		ppb
699-40-36	14-Apr-94	B0BRG2	Heptachlor	0.002	U		ppb
699-40-36	14-Apr-94	B0BRG2	Heptachlor epoxide	0.003	L		ppb
699-40-36	14-Apr-94	B0BRG2	Methoxychlor	0.022	U		ppb
699-40-36	14-Apr-94	B0BRG2	Toxaphene	0.7	U		ppb
699-40-36	14-Apr-94	B0BRG2	gamma-BHC (Lindane)	0.002	U		ppb
699-40-36	14-Apr-94	B0BRG2	2,4,6-Trichlorophenol	1.6	U		ppb
699-40-36	14-Apr-94	B0BRG2	2,4-Dichlorophenol	1.5	U		ppb
699-40-36	14-Apr-94	B0BRG2	2,4-Dimethylphenol	1.5	U		ppb
699-40-36	14-Apr-94	B0BRG2	2,4-Dinitrophenol	1.8	U		ppb
699-40-36	14-Apr-94	B0BRG2	2,6-Dichlorophenol	2.2	U		ppb
699-40-36	14-Apr-94	B0BRG2	2-Chlorophenol	1.5	U		ppb
699-40-36	14-Apr-94	B0BRG2	2-Nitrophenol	1.7	U		ppb
699-40-36	14-Apr-94	B0BRG2	2-sec-Butyl-4,6-dinitrophenol(DNBP)	1.7	U		ppb

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699-40-36	14-Apr-94	B0BRG2	4,6-Dinitro-2-methylphenol	1.6	U		ppb
699-40-36	14-Apr-94	B0BRG2	4-Chloro-3-methylphenol	1.5	U		ppb
699-40-36	14-Apr-94	B0BRG2	4-Nitrophenol	1.4	U		ppb
699-40-36	14-Apr-94	B0BRG2	Cresols (methylphenols)	4.8	U		ppb
699-40-36	14-Apr-94	B0BRG2	Pentachlorophenol	1.7	U		ppb
699-40-36	14-Apr-94	B0BRG2	Phenol	0.57	U		ppb
699-40-36	14-Apr-94	B0BRG2	Tetrachlorophenols	1.4	U		ppb
699-40-36	14-Apr-94	B0BRG2	Trichlorophenols	2.1	U		ppb
699-40-36	14-Apr-94	B0BRG2	2,4,5-T	0.018	U		ppb
699-40-36	14-Apr-94	B0BRG2	2,4,5-TP	0.015	U		ppb
699-40-36	14-Apr-94	B0BRG2	2,4-D	0.052	U		ppb
699-40-36	14-Apr-94	B0BRG2	2-sec-Butyl-4,6-dinitrophenol(DNBP)	0.24	U		ppb
699-40-36	14-Apr-94	B0BRG2	Total Organic Halogen	7.7	U		ppb
699-40-36	14-Apr-94	B0BRG3	Total Organic Halogen	8			ppb
699-40-36	14-Apr-94	B0BRG4	Total Organic Halogen	14.8			ppb
699-40-36	14-Apr-94	B0BRG5	Total Organic Halogen	9.6			ppb
699-40-36	01-Aug-94	B0C6S2	Total Organic Carbon	320	U		ppb
699-40-36	01-Aug-94	B0C6S4	Total Organic Carbon	320	U		ppb
699-40-36	01-Aug-94	B0C6S5	Total Organic Carbon	320	U		ppb
699-40-36	01-Aug-94	B0C6S6	Total Organic Carbon	400	L		ppb
699-40-36	01-Aug-94	B0C6S2	4,4'-DDD	0.004	U		ppb
699-40-36	01-Aug-94	B0C6S2	4,4'-DDE	0.002	U		ppb
699-40-36	01-Aug-94	B0C6S2	4,4'-DDT	0.001	U		ppb
699-40-36	01-Aug-94	B0C6S2	Aldrin	0.002	U		ppb
699-40-36	01-Aug-94	B0C6S2	Alpha-BHC	0.003	U		ppb
699-40-36	01-Aug-94	B0C6S2	Aroclor-1016	0.059	U		ppb
699-40-36	01-Aug-94	B0C6S2	Aroclor-1221	0.06	U		ppb
699-40-36	01-Aug-94	B0C6S2	Aroclor-1232	0.094	U		ppb
699-40-36	01-Aug-94	B0C6S2	Aroclor-1242	0.17	U		ppb

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699-40-36	01-Aug-94	B0C6S2	Aroclor-1248	0.047	U		ppb
699-40-36	01-Aug-94	B0C6S2	Aroclor-1254	0.092	U		ppb
699-40-36	01-Aug-94	B0C6S2	Aroclor-1260	0.079	U		ppb
699-40-36	01-Aug-94	B0C6S2	Beta-BHC	0.001	U		ppb
699-40-36	01-Aug-94	B0C6S2	Chlordane	0.042	U		ppb
699-40-36	01-Aug-94	B0C6S2	Delta-BHC	0.002	U		ppb
699-40-36	01-Aug-94	B0C6S2	Dieldrin	0.002	U		ppb
699-40-36	01-Aug-94	B0C6S2	Endosulfan I	0.002	U		ppb
699-40-36	01-Aug-94	B0C6S2	Endosulfan II	0.001	U		ppb
699-40-36	01-Aug-94	B0C6S2	Endosulfan sulfate	0.002	U		ppb
699-40-36	01-Aug-94	B0C6S2	Endrin	0.004	U		ppb
699-40-36	01-Aug-94	B0C6S2	Endrin Aldehyde	0.004	U		ppb
699-40-36	01-Aug-94	B0C6S2	Heptachlor	0.002	U		ppb
699-40-36	01-Aug-94	B0C6S2	Heptachlor epoxide	0.001	U		ppb
699-40-36	01-Aug-94	B0C6S2	Methoxychlor	0.022	U		ppb
699-40-36	01-Aug-94	B0C6S2	Toxaphene	0.7	U		ppb
699-40-36	01-Aug-94	B0C6S2	gamma-BHC (Lindane)	0.002	U		ppb
699-40-36	01-Aug-94	B0C735	2,4-Dichlorophenol	1.3	U		ppb
699-40-36	01-Aug-94	B0C735	2-Methylphenol	1.9	U		ppb
699-40-36	01-Aug-94	B0C735	2-Nitrophenol	1.6	U		ppb
699-40-36	01-Aug-94	B0C735	4-Methylphenol	1.3	U		ppb
699-40-36	01-Aug-94	B0C735	Benzothiazole	1.9	U		ppb
699-40-36	01-Aug-94	B0C735	Bis(2-ethylhexyl) phthalate	1.1	U		ppb
699-40-36	01-Aug-94	B0C735	Decane	2.9	U		ppb
699-40-36	01-Aug-94	B0C735	Dodecane	2.4	U		ppb
699-40-36	01-Aug-94	B0C735	Naphthalene	1.2	U		ppb
699-40-36	01-Aug-94	B0C735	Pentachlorophenol	1.7	U		ppb
699-40-36	01-Aug-94	B0C735	Phenol	0.5	U		ppb
699-40-36	01-Aug-94	B0C735	Tetradecane	3	U		ppb
699-40-36	01-Aug-94	B0C735	Tributyl Phosphate	3.9	U		ppb

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699-40-36	01-Aug-94	B0C735	Tris-2-chloroethyl phosphate	2.2	U		ppb
699-40-36	01-Aug-94	B0C735	m-Cresol	6.3	XU		ppb
699-40-36	01-Aug-94	B0C6S2	2,4,6-Trichlorophenol	1.6	U		ppb
699-40-36	01-Aug-94	B0C6S2	2,4-Dichlorophenol	1.5	U		ppb
699-40-36	01-Aug-94	B0C6S2	2,4-Dimethylphenol	1.5	U		ppb
699-40-36	01-Aug-94	B0C6S2	2,4-Dinitrophenol	1.8	U		ppb
699-40-36	01-Aug-94	B0C6S2	2,6-Dichlorophenol	2.2	U		ppb
699-40-36	01-Aug-94	B0C6S2	2-Chlorophenol	1.5	U		ppb
699-40-36	01-Aug-94	B0C6S2	2-Nitrophenol	1.7	U		ppb
699-40-36	01-Aug-94	B0C6S2	2-sec-Butyl-4,6-dinitrophenol(DNBP)	1.7	U		ppb
699-40-36	01-Aug-94	B0C6S2	4,6-Dinitro-2-methylphenol	1.6	U		ppb
699-40-36	01-Aug-94	B0C6S2	4-Chloro-3-methylphenol	1.5	U		ppb
699-40-36	01-Aug-94	B0C6S2	4-Nitrophenol	1.4	U		ppb
699-40-36	01-Aug-94	B0C6S2	Cresols (methylphenols)	4.8	U		ppb
699-40-36	01-Aug-94	B0C6S2	Pentachlorophenol	1.7	U		ppb
699-40-36	01-Aug-94	B0C6S2	Phenol	0.57	U		ppb
699-40-36	01-Aug-94	B0C6S2	Tetrachlorophenols	1.4	U		ppb
699-40-36	01-Aug-94	B0C6S2	Trichlorophenols	2.1	U		ppb
699-40-36	01-Aug-94	B0C6S2	2,4,5-T	0.018	U		ppb
699-40-36	01-Aug-94	B0C6S2	2,4,5-TP	0.015	U		ppb
699-40-36	01-Aug-94	B0C6S2	2,4-D	0.052	U		ppb
699-40-36	01-Aug-94	B0C6S2	2-sec-Butyl-4,6-dinitrophenol(DNBP)	0.24	U		ppb
699-40-36	01-Aug-94	B0C6S2	Total Organic Halogen	11.3			ppb
699-40-36	01-Aug-94	B0C6S4	Total Organic Halogen	8.6			ppb
699-40-36	01-Aug-94	B0C6S5	Total Organic Halogen	5.5			ppb
699-40-36	01-Aug-94	B0C6S6	Total Organic Halogen	5	U		ppb
699-41-35	21-Dec-92	B07TB9	Total Organic Carbon	1000	U		ppb
699-41-35	21-Dec-92	B07TC0	Total Organic Carbon	1000	U		ppb

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699-41-35	21-Dec-92	B07TC1	Total Organic Carbon	1000	U		ppb
699-41-35	21-Dec-92	B07TC2	Total Organic Carbon	1000	U		ppb
699-41-35	21-Dec-92	B07TB9	4,4'-DDD	0.1	U		ppb
699-41-35	21-Dec-92	B07TB9	4,4'-DDE	0.05	U		ppb
699-41-35	21-Dec-92	B07TB9	4,4'-DDT	0.1	U		ppb
699-41-35	21-Dec-92	B07TB9	Aldrin	0.05	U		ppb
699-41-35	21-Dec-92	B07TB9	Alpha-BHC	0.05	U		ppb
699-41-35	21-Dec-92	B07TB9	Beta-BHC	0.05	U		ppb
699-41-35	21-Dec-92	B07TB9	Chlordane	0.1	U		ppb
699-41-35	21-Dec-92	B07TB9	Delta-BHC	0.1	U		ppb
699-41-35	21-Dec-92	B07TB9	Dieldrin	0.05	U		ppb
699-41-35	21-Dec-92	B07TB9	Endosulfan I	0.1	U		ppb
699-41-35	21-Dec-92	B07TB9	Endosulfan II	0.05	U		ppb
699-41-35	21-Dec-92	B07TB9	Endosulfan sulfate	0.5	U		ppb
699-41-35	21-Dec-92	B07TB9	Endrin	0.1	U		ppb
699-41-35	21-Dec-92	B07TB9	Endrin Aldehyde	0.2	U		ppb
699-41-35	21-Dec-92	B07TB9	Heptachlor	0.05	U		ppb
699-41-35	21-Dec-92	B07TB9	Heptachlor epoxide	1	U		ppb
699-41-35	21-Dec-92	B07TB9	Methoxychlor	2	U		ppb
699-41-35	21-Dec-92	B07TB9	Toxaphene	2	U		ppb
699-41-35	21-Dec-92	B07TB9	gamma-BHC (Lindane)	0.05	U		ppb
699-41-35	21-Dec-92	B07TB9	2-Methylphenol	10	U		ppb
699-41-35	21-Dec-92	B07TB9	4-Methylphenol	10	U		ppb
699-41-35	21-Dec-92	B07TB9	Decane	1000	U		ppb
699-41-35	21-Dec-92	B07TB9	Dodecane	1000	U		ppb
699-41-35	21-Dec-92	B07TB9	Naphthalene	10	U		ppb
699-41-35	21-Dec-92	B07TB9	Pentachlorophenol	50	U		ppb
699-41-35	21-Dec-92	B07TB9	Phenol	10	U		ppb
699-41-35	21-Dec-92	B07TB9	Tetradecane	1000	U		ppb
699-41-35	21-Dec-92	B07TB9	Tributyl Phosphate	10	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-41-35	21-Dec-92	B07TB9	m-Cresol	10	U		ppb
699-41-35	21-Dec-92	B07TB9	Total Organic Halogen	150			ppb
699-41-35	21-Dec-92	B07TB9	Total Organic Halogen	160			ppb
699-41-35	21-Dec-92	B07TC0	Total Organic Halogen	90			ppb
699-41-35	21-Dec-92	B07TC0	Total Organic Halogen	110			ppb
699-41-35	21-Dec-92	B07TC1	Total Organic Halogen	100			ppb
699-41-35	21-Dec-92	B07TC1	Total Organic Halogen	110			ppb
699-41-35	21-Dec-92	B07TC2	Total Organic Halogen	100			ppb
699-41-35	21-Dec-92	B07TC2	Total Organic Halogen	130			ppb
699-41-35	22-Feb-93	B08707	Total Organic Carbon	1000	U		ppb
699-41-35	22-Feb-93	B08708	Total Organic Carbon	1000	U		ppb
699-41-35	22-Feb-93	B08709	Total Organic Carbon	1000	U		ppb
699-41-35	22-Feb-93	B08710	Total Organic Carbon	1000	U		ppb
699-41-35	22-Feb-93	B08707	4,4'-DDD	0.1	U		ppb
699-41-35	22-Feb-93	B08707	4,4'-DDE	0.05	U		ppb
699-41-35	22-Feb-93	B08707	4,4'-DDT	0.1	U		ppb
699-41-35	22-Feb-93	B08707	Aldrin	0.05	U		ppb
699-41-35	22-Feb-93	B08707	Alpha-BHC	0.05	U		ppb
699-41-35	22-Feb-93	B08707	Beta-BHC	0.05	U		ppb
699-41-35	22-Feb-93	B08707	Chlordane	0.1	U		ppb
699-41-35	22-Feb-93	B08707	Delta-BHC	0.1	U		ppb
699-41-35	22-Feb-93	B08707	Dieldrin	0.05	U		ppb
699-41-35	22-Feb-93	B08707	Endosulfan I	0.1	U		ppb
699-41-35	22-Feb-93	B08707	Endosulfan II	0.05	U		ppb
699-41-35	22-Feb-93	B08707	Endosulfan sulfate	0.5	U		ppb
699-41-35	22-Feb-93	B08707	Endrin	0.1	U		ppb
699-41-35	22-Feb-93	B08707	Endrin Aldehyde	0.2	U		ppb
699-41-35	22-Feb-93	B08707	Heptachlor	0.05	U		ppb
699-41-35	22-Feb-93	B08707	Heptachlor epoxide	1	U		ppb
699-41-35	22-Feb-93	B08707	Methoxychlor	2	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-41-35	22-Feb-93	B08707	Toxaphene	2	U		ppb
699-41-35	22-Feb-93	B08707	gamma-BHC (Lindane)	0.05	U		ppb
699-41-35	22-Feb-93	B08707	2-Methylphenol	10	U		ppb
699-41-35	22-Feb-93	B08707	4-Methylphenol	10	U		ppb
699-41-35	22-Feb-93	B08707	Decane	10	U		ppb
699-41-35	22-Feb-93	B08707	Dodecane	10	U		ppb
699-41-35	22-Feb-93	B08707	Naphthalene	10	U		ppb
699-41-35	22-Feb-93	B08707	Pentachlorophenol	50	U		ppb
699-41-35	22-Feb-93	B08707	Phenol	10	U		ppb
699-41-35	22-Feb-93	B08707	Tetradecane	10	U		ppb
699-41-35	22-Feb-93	B08707	Tributyl Phosphate	10	U		ppb
699-41-35	22-Feb-93	B08707	m-Cresol	10	U		ppb
699-41-35	22-Feb-93	B08707	1,1,1-Trichloroethane	0.5	U		ppb
699-41-35	22-Feb-93	B08707	1,1,2-Trichloroethane	0.5	U		ppb
699-41-35	22-Feb-93	B08707	1,1-Dichloroethane	1	U		ppb
699-41-35	22-Feb-93	B08707	1,2-Dichloroethane	0.5	U		ppb
699-41-35	22-Feb-93	B08707	1,4-Dichlorobenzene	2	U		ppb
699-41-35	22-Feb-93	B08707	Benzene	2	U		ppb
699-41-35	22-Feb-93	B08707	Carbon tetrachloride	1	U		ppb
699-41-35	22-Feb-93	B08707	Chloroform	0.5	U		ppb
699-41-35	22-Feb-93	B08707	Ethylbenzene	2	U		ppb
699-41-35	22-Feb-93	B08707	Methylene chloride	5	U		ppb
699-41-35	22-Feb-93	B08707	Tetrachloroethene	0.5	U		ppb
699-41-35	22-Feb-93	B08707	Toluene	2	U		ppb
699-41-35	22-Feb-93	B08707	Trichloroethene	1	U		ppb
699-41-35	22-Feb-93	B08707	Vinyl chloride	2	U		ppb
699-41-35	22-Feb-93	B08707	Xylenes (total)	5	U		ppb
699-41-35	22-Feb-93	B08707	cis-1,2-Dichloroethylene	1	U		ppb
699-41-35	22-Feb-93	B08707	trans-1,2-Dichloroethylene	1	U		ppb
699-41-35	22-Feb-93	B08707	Total Organic Halogen	600			ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-41-35	22-Feb-93	B08708	Total Organic Halogen	430			ppb
699-41-35	22-Feb-93	B08708	Total Organic Halogen	480			ppb
699-41-35	22-Feb-93	B08709	Total Organic Halogen	350			ppb
699-41-35	22-Feb-93	B08710	Total Organic Halogen	310			ppb
699-41-35	22-Feb-93	B08710	Total Organic Halogen	400			ppb
699-41-35	13-May-93	B08JF7	Total Organic Carbon	300	L		ppb
699-41-35	13-May-93	B08JF8	Total Organic Carbon	300	L		ppb
699-41-35	13-May-93	B08JF9	Total Organic Carbon	300	L		ppb
699-41-35	13-May-93	B08JG0	Total Organic Carbon	200	L		ppb
699-41-35	13-May-93	B08JF7	1,1,1,2-Tetrachloroethane	0.31	U		ppb
699-41-35	13-May-93	B08JF7	1,1,1-Trichloroethane	0.64	U		ppb
699-41-35	13-May-93	B08JF7	1,1,2,2-Tetrachloroethane	0.3	U		ppb
699-41-35	13-May-93	B08JF7	1,1,2-Trichloroethane	0.25	U		ppb
699-41-35	13-May-93	B08JF7	1,1-Dichloroethane	0.61	U		ppb
699-41-35	13-May-93	B08JF7	1,1-Dichloroethene	1.03	U		ppb
699-41-35	13-May-93	B08JF7	1,2,3-Trichloropropane	0.52	U		ppb
699-41-35	13-May-93	B08JF7	1,2-Dibromo-3-chloropropane	0.83	U		ppb
699-41-35	13-May-93	B08JF7	1,2-Dibromoethane	0.14	U		ppb
699-41-35	13-May-93	B08JF7	1,2-Dichloroethane	0.45	U		ppb
699-41-35	13-May-93	B08JF7	1,2-Dichloroethene	1.2	U		ppb
699-41-35	13-May-93	B08JF7	1,2-Dichloropropane	0.5	U		ppb
699-41-35	13-May-93	B08JF7	1,4-Dioxane	43.6	U		ppb
699-41-35	13-May-93	B08JF7	1-Butanol	13.1	U		ppb
699-41-35	13-May-93	B08JF7	2-Hexanone	0.75	U		ppb
699-41-35	13-May-93	B08JF7	4-Methyl-2-pentanone	0.85	U		ppb
699-41-35	13-May-93	B08JF7	Acetone	13.4	U		ppb
699-41-35	13-May-93	B08JF7	Acetonitrile	19.4	U		ppb
699-41-35	13-May-93	B08JF7	Acrolein	9.72	U		ppb
699-41-35	13-May-93	B08JF7	Acrylonitrile	4.28	U		ppb
699-41-35	13-May-93	B08JF7	Benzene	0.65	U		ppb

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699-41-35	13-May-93	B08JF7	Bromodichloromethane	0.26	U		ppb
699-41-35	13-May-93	B08JF7	Bromoform	0.19	U		ppb
699-41-35	13-May-93	B08JF7	Carbon disulfide	0.95	U		ppb
699-41-35	13-May-93	B08JF7	Carbon tetrachloride	0.87	U		ppb
699-41-35	13-May-93	B08JF7	Chlorobenzene	0.53	U		ppb
699-41-35	13-May-93	B08JF7	Chloroethane	0.71	U		ppb
699-41-35	13-May-93	B08JF7	Chloroform	0.4	U		ppb
699-41-35	13-May-93	B08JF7	Chloroprene	0.77	U		ppb
699-41-35	13-May-93	B08JF7	Dibromochloromethane	0.29	U		ppb
699-41-35	13-May-93	B08JF7	Dibromomethane	0.36	U		ppb
699-41-35	13-May-93	B08JF7	Dichlorodifluoromethane	1	U		ppb
699-41-35	13-May-93	B08JF7	Ethyl cyanide	4.34	U		ppb
699-41-35	13-May-93	B08JF7	Ethyl methacrylate	0.29	U		ppb
699-41-35	13-May-93	B08JF7	Ethylbenzene	0.49	U		ppb
699-41-35	13-May-93	B08JF7	Isobutyl alcohol	26.9	U		ppb
699-41-35	13-May-93	B08JF7	Methacrylonitrile	0.74	U		ppb
699-41-35	13-May-93	B08JF7	Methyl Iodide	0.51	U		ppb
699-41-35	13-May-93	B08JF7	Methyl bromide	0.58	U		ppb
699-41-35	13-May-93	B08JF7	Methyl chloride	0.57	U		ppb
699-41-35	13-May-93	B08JF7	Methyl ethyl ketone	4.25	U		ppb
699-41-35	13-May-93	B08JF7	Methyl methacrylate	0.18	U		ppb
699-41-35	13-May-93	B08JF7	Methylene chloride	2.5	BL		ppb
699-41-35	13-May-93	B08JF7	Pentachloroethane	0.67	U		ppb
699-41-35	13-May-93	B08JF7	Styrene	0.43	U		ppb
699-41-35	13-May-93	B08JF7	Tetrachloroethene	1.1	U		ppb
699-41-35	13-May-93	B08JF7	Tetrahydrofuran	3.67	U		ppb
699-41-35	13-May-93	B08JF7	Toluene	0.73	U		ppb
699-41-35	13-May-93	B08JF7	Trichloroethene	0.77	U		ppb
699-41-35	13-May-93	B08JF7	Trichloromonofluoromethane	1.41	U		ppb
699-41-35	13-May-93	B08JF7	Vinyl acetate	0.3	U		ppb

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699-41-35	13-May-93	B08JF7	Vinyl chloride	0.78	U		ppb
699-41-35	13-May-93	B08JF7	Xylenes (total)	1.7	U		ppb
699-41-35	13-May-93	B08JF7	allylchloride	0.84	U		ppb
699-41-35	13-May-93	B08JF7	cis-1,3-Dichloropropene	0.65	U		ppb
699-41-35	13-May-93	B08JF7	trans-1,3-Dichloropropene	0.41	U		ppb
699-41-35	13-May-93	B08JF7	trans-1,4-dichloro-2-buten e	0.7	U		ppb
699-41-35	13-May-93	B08JF7	4,4'-DDD	0.0005	U		ppb
699-41-35	13-May-93	B08JF7	4,4'-DDE	0.0009	U		ppb
699-41-35	13-May-93	B08JF7	4,4'-DDT	0.011	U		ppb
699-41-35	13-May-93	B08JF7	Aldrin	0.05	U		ppb
699-41-35	13-May-93	B08JF7	Alpha-BHC	0.012	U		ppb
699-41-35	13-May-93	B08JF7	Aroclor-1016	0.19	U		ppb
699-41-35	13-May-93	B08JF7	Aroclor-1221	0.14	U		ppb
699-41-35	13-May-93	B08JF7	Aroclor-1232	0.11	U		ppb
699-41-35	13-May-93	B08JF7	Aroclor-1242	0.11	U		ppb
699-41-35	13-May-93	B08JF7	Aroclor-1248	0.04	U		ppb
699-41-35	13-May-93	B08JF7	Aroclor-1254	0.1	U		ppb
699-41-35	13-May-93	B08JF7	Aroclor-1260	0.11	U		ppb
699-41-35	13-May-93	B08JF7	Beta-BHC	0.0026	U		ppb
699-41-35	13-May-93	B08JF7	Chlordane	0.0057	U		ppb
699-41-35	13-May-93	B08JF7	Delta-BHC	0.0014	U		ppb
699-41-35	13-May-93	B08JF7	Dieldrin	0.019	U		ppb
699-41-35	13-May-93	B08JF7	Endosulfan I	0.0029	U		ppb
699-41-35	13-May-93	B08JF7	Endosulfan II	0.004	U		ppb
699-41-35	13-May-93	B08JF7	Endosulfan sulfate	0.0072	U		ppb
699-41-35	13-May-93	B08JF7	Endrin	0.008	U		ppb
699-41-35	13-May-93	B08JF7	Endrin Aldehyde	0.011	U		ppb
699-41-35	13-May-93	B08JF7	Heptachlor	0.0019	U		ppb
699-41-35	13-May-93	B08JF7	Heptachlor epoxide	0.0008	U		ppb
699-41-35	13-May-93	B08JF7	Methoxychlor	0.1	U		ppb

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699-41-35	13-May-93	B08JF7	Toxaphene	0.89	U		ppb
699-41-35	13-May-93	B08JF7	gamma-BHC (Lindane)	0.0021	U		ppb
699-41-35	13-May-93	B08JF7	1,2,4,5-Tetrachlorobenzene	4.39	U		ppb
699-41-35	13-May-93	B08JF7	1,2,4-Trichlorobenzene	4.14	U		ppb
699-41-35	13-May-93	B08JF7	1,2-Dichlorobenzene	3.77	U		ppb
699-41-35	13-May-93	B08JF7	1,3-Dichlorobenzene	7.85	U		ppb
699-41-35	13-May-93	B08JF7	1,4-Dichlorobenzene	4.64	U		ppb
699-41-35	13-May-93	B08JF7	1,4-Naphthoquinone	10	U		ppb
699-41-35	13-May-93	B08JF7	1-Naphthylamine	25.3	U		ppb
699-41-35	13-May-93	B08JF7	2,3,4,6-Tetrachlorophenol	4.77	U		ppb
699-41-35	13-May-93	B08JF7	2,4,5-Trichlorophenol	4.01	U		ppb
699-41-35	13-May-93	B08JF7	2,4,6-Trichlorophenol	2.54	U		ppb
699-41-35	13-May-93	B08JF7	2,4-Dichlorophenol	2.8	U		ppb
699-41-35	13-May-93	B08JF7	2,4-Dimethylphenol	5.88	U		ppb
699-41-35	13-May-93	B08JF7	2,4-Dinitrophenol	4.46	U		ppb
699-41-35	13-May-93	B08JF7	2,4-Dinitrotoluene	2.59	U		ppb
699-41-35	13-May-93	B08JF7	2,6-Dichlorophenol	3.47	U		ppb
699-41-35	13-May-93	B08JF7	2,6-Dinitrotoluene	2.85	U		ppb
699-41-35	13-May-93	B08JF7	2-Acetylaminofluorene	2.83	U		ppb
699-41-35	13-May-93	B08JF7	2-Chloronaphthalene	3.02	U		ppb
699-41-35	13-May-93	B08JF7	2-Chlorophenol	1.91	U		ppb
699-41-35	13-May-93	B08JF7	2-Methylnaphthalene	2.76	U		ppb
699-41-35	13-May-93	B08JF7	2-Methylphenol	1.8	U		ppb
699-41-35	13-May-93	B08JF7	2-Naphthylamine	15.6	U		ppb
699-41-35	13-May-93	B08JF7	2-Nitroaniline	7.82	U		ppb
699-41-35	13-May-93	B08JF7	2-Nitrophenol	3.96	U		ppb
699-41-35	13-May-93	B08JF7	2-Picoline	5.83	U		ppb
699-41-35	13-May-93	B08JF7	3,3'-Dichlorobenzidine	3.88	U		ppb
699-41-35	13-May-93	B08JF7	3,3'-Dimethylbenzidine	10.4	U		ppb
699-41-35	13-May-93	B08JF7	3-Methylcholanthrene	2.63	U		ppb

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699-41-35	13-May-93	B08JF7	3-Nitroaniline	9.52	U		ppb
699-41-35	13-May-93	B08JF7	4,6-Dinitro-2-methylphenol	5.54	U		ppb
699-41-35	13-May-93	B08JF7	4-Aminobiphenyl	3.83	U		ppb
699-41-35	13-May-93	B08JF7	4-Bromophenylphenyl ether	2.34	U		ppb
699-41-35	13-May-93	B08JF7	4-Chloro-3-methylphenol	7.41	U		ppb
699-41-35	13-May-93	B08JF7	4-Chloroaniline	13.2	U		ppb
699-41-35	13-May-93	B08JF7	4-Chlorophenylphenyl ether	3.04	U		ppb
699-41-35	13-May-93	B08JF7	4-Methylphenol	3.54	U		ppb
699-41-35	13-May-93	B08JF7	4-Nitroaniline	21.4	U		ppb
699-41-35	13-May-93	B08JF7	4-Nitrophenol	1.52	U		ppb
699-41-35	13-May-93	B08JF7	4-Nitroquinoline-1-oxide	6	U		ppb
699-41-35	13-May-93	B08JF7	5-Nitro-o-toluidine	5.25	U		ppb
699-41-35	13-May-93	B08JF7	7,12-Dimethylbenz[a]anthracene	1.82	U		ppb
699-41-35	13-May-93	B08JF7	Acenaphthene	2.88	U		ppb
699-41-35	13-May-93	B08JF7	Acenaphthylene	3.96	U		ppb
699-41-35	13-May-93	B08JF7	Acetophenone	2.38	U		ppb
699-41-35	13-May-93	B08JF7	Alpha,alpha-Dimethylphenethylamine	37.8	U		ppb
699-41-35	13-May-93	B08JF7	Aniline	3.53	U		ppb
699-41-35	13-May-93	B08JF7	Anthracene	2.95	U		ppb
699-41-35	13-May-93	B08JF7	Aramite	8.6	U		ppb
699-41-35	13-May-93	B08JF7	Benzo(a)anthracene	2.34	U		ppb
699-41-35	13-May-93	B08JF7	Benzo(a)pyrene	1.7	U		ppb
699-41-35	13-May-93	B08JF7	Benzo(b)fluoranthene	4.41	U		ppb
699-41-35	13-May-93	B08JF7	Benzo(ghi)perylene	3.65	U		ppb
699-41-35	13-May-93	B08JF7	Benzo(k)fluoranthene	2.21	U		ppb
699-41-35	13-May-93	B08JF7	Benzothiazole	2.55	U		ppb
699-41-35	13-May-93	B08JF7	Benzyl alcohol	5.16	U		ppb

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699-41-35	13-May-93	B08JF7	Bis(2-Chloroethoxy)methane	7.13	U		ppb
699-41-35	13-May-93	B08JF7	Bis(2-chloroethyl) ether	2.9	U		ppb
699-41-35	13-May-93	B08JF7	Bis(2-chloroisopropyl) ether	3.35	U		ppb
699-41-35	13-May-93	B08JF7	Bis(2-ethylhexyl) phthalate	4.07	U		ppb
699-41-35	13-May-93	B08JF7	Butylbenzylphthalate	5.94	U		ppb
699-41-35	13-May-93	B08JF7	Chlorobenzilate	8.69	U		ppb
699-41-35	13-May-93	B08JF7	Chrysene	1.7	U		ppb
699-41-35	13-May-93	B08JF7	Di-n-butylphthalate	4.34	U		ppb
699-41-35	13-May-93	B08JF7	Di-n-octylphthalate	2.98	U		ppb
699-41-35	13-May-93	B08JF7	Diallate	3.15	U		ppb
699-41-35	13-May-93	B08JF7	Dibenz[a,h]anthracene	1.92	U		ppb
699-41-35	13-May-93	B08JF7	Dibenzofuran	2.54	U		ppb
699-41-35	13-May-93	B08JF7	Diethyl phthalate	8.94	U		ppb
699-41-35	13-May-93	B08JF7	Dimethoate	10	U		ppb
699-41-35	13-May-93	B08JF7	Dimethyl phthalate	5.55	U		ppb
699-41-35	13-May-93	B08JF7	Diphenylamine	2.86	U		ppb
699-41-35	13-May-93	B08JF7	Ethyl methanesulfonate	2.07	U		ppb
699-41-35	13-May-93	B08JF7	Famphur	12.8	U		ppb
699-41-35	13-May-93	B08JF7	Fluoranthene	4.62	U		ppb
699-41-35	13-May-93	B08JF7	Fluorene	2.56	U		ppb
699-41-35	13-May-93	B08JF7	Hexachlorobenzene	2.38	U		ppb
699-41-35	13-May-93	B08JF7	Hexachlorobutadiene	4.29	U		ppb
699-41-35	13-May-93	B08JF7	Hexachlorocyclopentadiene	2.62	U		ppb
699-41-35	13-May-93	B08JF7	Hexachloroethane	4.73	U		ppb
699-41-35	13-May-93	B08JF7	Hexachlorophene	19.6	U		ppb
699-41-35	13-May-93	B08JF7	Hexachloropropene	3.68	U		ppb
699-41-35	13-May-93	B08JF7	Indeno(1,2,3-cd)pyrene	3.21	U		ppb
699-41-35	13-May-93	B08JF7	Isodrin	1.44	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-41-35	13-May-93	B08JF7	Isophorone	3.29	U		ppb
699-41-35	13-May-93	B08JF7	Isosafrole	2.25	U		ppb
699-41-35	13-May-93	B08JF7	Kepone	9.59	U		ppb
699-41-35	13-May-93	B08JF7	Kerosene	4.03	U		ppb
699-41-35	13-May-93	B08JF7	Methapyrilene	8.45	U		ppb
699-41-35	13-May-93	B08JF7	Methyl methanesulfonate	1.61	U		ppb
699-41-35	13-May-93	B08JF7	N-Nitroso-di-n-dipropylamine	3.67	U		ppb
699-41-35	13-May-93	B08JF7	N-Nitrosodi-n-butylamine	3.22	U		ppb
699-41-35	13-May-93	B08JF7	N-Nitrosodiethylamine	2.9	U		ppb
699-41-35	13-May-93	B08JF7	N-Nitrosodimethylamine	3.81	U		ppb
699-41-35	13-May-93	B08JF7	N-Nitrosodiphenylamine	2.11	U		ppb
699-41-35	13-May-93	B08JF7	N-Nitrosomethylethylamine	2.83	U		ppb
699-41-35	13-May-93	B08JF7	N-Nitrosomorpholine	3.27	U		ppb
699-41-35	13-May-93	B08JF7	N-Nitrosopiperidine	4.35	U		ppb
699-41-35	13-May-93	B08JF7	Naphthalene	6.5	U		ppb
699-41-35	13-May-93	B08JF7	Nitrobenzene	3.16	U		ppb
699-41-35	13-May-93	B08JF7	Nitrosopyrrolidine	2.78	U		ppb
699-41-35	13-May-93	B08JF7	O,O,O-Triethyl phosphorothioate	5.19	U		ppb
699-41-35	13-May-93	B08JF7	O,O-diethylO-2-pyrazinyl phosphor..	3.04	U		ppb
699-41-35	13-May-93	B08JF7	Parathion	3.9	U		ppb
699-41-35	13-May-93	B08JF7	Pentachlorobenzene	3.99	U		ppb
699-41-35	13-May-93	B08JF7	Pentachloronitrobenzene (PCNB)	2.49	U		ppb
699-41-35	13-May-93	B08JF7	Pentachlorophenol	8.07	U		ppb
699-41-35	13-May-93	B08JF7	Phenacetin	4.78	U		ppb
699-41-35	13-May-93	B08JF7	Phenanthrene	5.27	U		ppb
699-41-35	13-May-93	B08JF7	Phenol	0.833	U		ppb
699-41-35	13-May-93	B08JF7	Pronamide	3.42	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-41-35	13-May-93	B08JF7	Pyrene	3.69	U		ppb
699-41-35	13-May-93	B08JF7	Pyridine	4.57	U		ppb
699-41-35	13-May-93	B08JF7	Safrol	3.22	U		ppb
699-41-35	13-May-93	B08JF7	Tetraethyldithiopyrophosphate	2.81	U		ppb
699-41-35	13-May-93	B08JF7	Tributyl Phosphate	4.42	U		ppb
699-41-35	13-May-93	B08JF7	Tris-2-chloroethyl phosphate	2.88	U		ppb
699-41-35	13-May-93	B08JF7	m-Cresol	1.44	U		ppb
699-41-35	13-May-93	B08JF7	m-dinitrobenzene	9.35	U		ppb
699-41-35	13-May-93	B08JF7	o-Toluidine	2.27	U		ppb
699-41-35	13-May-93	B08JF7	p-Dimethylaminoazobenzene	3.36	U		ppb
699-41-35	13-May-93	B08JF7	p-Phenylenediamine	3.09	U		ppb
699-41-35	13-May-93	B08JF7	sym-Trinitrobenzene	3.74	U		ppb
699-41-35	13-May-93	B08JF7	Disulfoton	0.12	U		ppb
699-41-35	13-May-93	B08JF7	Methyl parathion	0.24	U		ppb
699-41-35	13-May-93	B08JF7	Phorate	0.1	U		ppb
699-41-35	13-May-93	B08JF7	2,4,5-T	0.384	U		ppb
699-41-35	13-May-93	B08JF7	2,4,5-TP	0.408	U		ppb
699-41-35	13-May-93	B08JF7	2,4-D	0.186	U		ppb
699-41-35	13-May-93	B08JF7	2-sec-Butyl-4,6-dinitrophenol(DNBP)	0.269	U		ppb
699-41-35	13-May-93	B08JF7	2,3,7,8-TCDD	0.00128	U		ppb
699-41-35	13-May-93	B08JF7	PCDDs	0.00196	U		ppb
699-41-35	13-May-93	B08JF7	PCDFs	0.00153	U		ppb
699-41-35	13-May-93	B08JF7	Total Organic Halogen	10			ppb
699-41-35	13-May-93	B08JF8	Total Organic Halogen	8	U		ppb
699-41-35	13-May-93	B08JF9	Total Organic Halogen	8	U		ppb
699-41-35	13-May-93	B08JG0	Total Organic Halogen	8	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-41-35	09-Aug-93	B090V6	Total Organic Carbon	200	U		ppb
699-41-35	09-Aug-93	B090V7	Total Organic Carbon	200	U		ppb
699-41-35	09-Aug-93	B090V8	Total Organic Carbon	200	U		ppb
699-41-35	09-Aug-93	B090V9	Total Organic Carbon	200	U		ppb
699-41-35	09-Aug-93	B090V6	4,4'-DDD	0.006	L		ppb
699-41-35	09-Aug-93	B090V6	4,4'-DDE	0.0009	U		ppb
699-41-35	09-Aug-93	B090V6	4,4'-DDT	0.011	U		ppb
699-41-35	09-Aug-93	B090V6	Aldrin	0.05	U		ppb
699-41-35	09-Aug-93	B090V6	Alpha-BHC	0.012	U		ppb
699-41-35	09-Aug-93	B090V6	Beta-BHC	0.003	L		ppb
699-41-35	09-Aug-93	B090V6	Chlordane	0.0057	U		ppb
699-41-35	09-Aug-93	B090V6	Delta-BHC	0.0014	U		ppb
699-41-35	09-Aug-93	B090V6	Dieldrin	0.019	U		ppb
699-41-35	09-Aug-93	B090V6	Endosulfan I	0.0029	U		ppb
699-41-35	09-Aug-93	B090V6	Endosulfan II	0.004	U		ppb
699-41-35	09-Aug-93	B090V6	Endosulfan sulfate	0.0072	U		ppb
699-41-35	09-Aug-93	B090V6	Endrin	0.008	U		ppb
699-41-35	09-Aug-93	B090V6	Endrin Aldehyde	0.011	U		ppb
699-41-35	09-Aug-93	B090V6	Heptachlor	0.0019	U		ppb
699-41-35	09-Aug-93	B090V6	Heptachlor epoxide	0.0008	U		ppb
699-41-35	09-Aug-93	B090V6	Methoxychlor	0.1	U		ppb
699-41-35	09-Aug-93	B090V6	Toxaphene	0.89	U		ppb
699-41-35	09-Aug-93	B090V6	gamma-BHC (Lindane)	0.0021	U		ppb
699-41-35	09-Aug-93	B090V6	2,4-Dichlorophenol	2.8	U		ppb
699-41-35	09-Aug-93	B090V6	2-Methylphenol	1.8	U		ppb
699-41-35	09-Aug-93	B090V6	2-Nitrophenol	3.96	U		ppb
699-41-35	09-Aug-93	B090V6	4-Methylphenol	3.54	U		ppb
699-41-35	09-Aug-93	B090V6	Benzothiazole	2.55	U		ppb
699-41-35	09-Aug-93	B090V6	Bis(2-ethylhexyl) phthalate	4.07	U		ppb
699-41-35	09-Aug-93	B090V6	Decane	4.03	U		ppb

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699-41-35	09-Aug-93	B090V6	Dodecane	3.62	U		ppb
699-41-35	09-Aug-93	B090V6	Naphthalene	6.5	U		ppb
699-41-35	09-Aug-93	B090V6	Pentachlorophenol	8.07	U		ppb
699-41-35	09-Aug-93	B090V6	Phenol	0.833	U		ppb
699-41-35	09-Aug-93	B090V6	Tetradecane	2.43	U		ppb
699-41-35	09-Aug-93	B090V6	Tributyl Phosphate	4.42	U		ppb
699-41-35	09-Aug-93	B090V6	Tris-2-chloroethyl phosphate	25			ppb
699-41-35	09-Aug-93	B090V6	m-Cresol	1.44	U		ppb
699-41-35	09-Aug-93	B090V6	1,1,1-Trichloroethane	0.072	U		ppb
699-41-35	09-Aug-93	B090V6	1,1,2-Trichloroethane	0.043	U		ppb
699-41-35	09-Aug-93	B090V6	1,1-Dichloroethane	0.337	U		ppb
699-41-35	09-Aug-93	B090V6	1,2-Dichloroethane	0.139	U		ppb
699-41-35	09-Aug-93	B090V6	1,4-Dichlorobenzene	0.107	U		ppb
699-41-35	09-Aug-93	B090V6	Benzene	0.105	U		ppb
699-41-35	09-Aug-93	B090V6	Carbon tetrachloride	0.121	U		ppb
699-41-35	09-Aug-93	B090V6	Chloroform	0.043	U		ppb
699-41-35	09-Aug-93	B090V6	Ethylbenzene	0.046	U		ppb
699-41-35	09-Aug-93	B090V6	Methylene chloride	0.056	U		ppb
699-41-35	09-Aug-93	B090V6	Tetrachloroethene	0.049	U		ppb
699-41-35	09-Aug-93	B090V6	Toluene	0.056	U		ppb
699-41-35	09-Aug-93	B090V6	Trichloroethene	0.065	U		ppb
699-41-35	09-Aug-93	B090V6	Vinyl chloride	0.266	U		ppb
699-41-35	09-Aug-93	B090V6	Xylenes (total)	0.202	U		ppb
699-41-35	09-Aug-93	B090V6	cis-1,2-Dichloroethylene	0.127	U		ppb
699-41-35	09-Aug-93	B090V6	trans-1,2-Dichloroethylene	0.149	U		ppb
699-41-35	09-Aug-93	B090V6	Total Organic Halogen	20			ppb
699-41-35	09-Aug-93	B090V6MD	Total Organic Halogen	10			ppb
699-41-35	09-Aug-93	B090V7	Total Organic Halogen	8	U		ppb
699-41-35	09-Aug-93	B090V7MD	Total Organic Halogen	8	U		ppb

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699-41-35	09-Aug-93	B090V8	Total Organic Halogen	8	U		ppb
699-41-35	09-Aug-93	B090V8MD	Total Organic Halogen	8	U		ppb
699-41-35	09-Aug-93	B090V9	Total Organic Halogen	20			ppb
699-41-35	09-Aug-93	B090V9MD	Total Organic Halogen	10			ppb
699-41-35	08-Oct-93	B099W3	Total Organic Carbon	200	L		ppb
699-41-35	08-Oct-93	B099W4	Total Organic Carbon	200	U		ppb
699-41-35	08-Oct-93	B099W5	Total Organic Carbon	200	U		ppb
699-41-35	08-Oct-93	B099W6	Total Organic Carbon	200	U		ppb
699-41-35	08-Oct-93	B099W3	Total Organic Halogen	8	U		ppb
699-41-35	08-Oct-93	B099W3MD	Total Organic Halogen	6	U		ppb
699-41-35	08-Oct-93	B099W4	Total Organic Halogen	8	U		ppb
699-41-35	08-Oct-93	B099W4MD	Total Organic Halogen	6	U		ppb
699-41-35	08-Oct-93	B099W5	Total Organic Halogen	10			ppb
699-41-35	08-Oct-93	B099W5MD	Total Organic Halogen	6	U		ppb
699-41-35	08-Oct-93	B099W6	Total Organic Halogen	8	U		ppb
699-41-35	08-Oct-93	B099W6MD	Total Organic Halogen	6	U		ppb
699-41-35	19-Jan-94	B09Q96	Total Organic Carbon	200	U		ppb
699-41-35	19-Jan-94	B09Q97	Total Organic Carbon	200	U		ppb
699-41-35	19-Jan-94	B09Q98	Total Organic Carbon	200	U		ppb
699-41-35	19-Jan-94	B09Q99	Total Organic Carbon	300	L		ppb
699-41-35	19-Jan-94	B09Q96	1,1,1-Trichloroethane	0.64	U		ppb
699-41-35	19-Jan-94	B09Q96	1,1,2-Trichloroethane	0.25	U		ppb
699-41-35	19-Jan-94	B09Q96	1,1-Dichloroethane	0.61	U		ppb
699-41-35	19-Jan-94	B09Q96	1,2-Dichloroethane	0.45	U		ppb
699-41-35	19-Jan-94	B09Q96	1,2-Dichloroethene	1.2	U		ppb
699-41-35	19-Jan-94	B09Q96	1,4-Dichlorobenzene	0.63	U		ppb
699-41-35	19-Jan-94	B09Q96	1-Butanol	13.1	U		ppb
699-41-35	19-Jan-94	B09Q96	4-Methyl-2-pentanone	0.85	U		ppb
699-41-35	19-Jan-94	B09Q96	Acetone	13.4	U		ppb
699-41-35	19-Jan-94	B09Q96	Benzene	0.65	U		ppb

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699-41-35	19-Jan-94	B09Q96	Carbon disulfide	0.95	U		ppb
699-41-35	19-Jan-94	B09Q96	Carbon tetrachloride	0.87	U		ppb
699-41-35	19-Jan-94	B09Q96	Chloroform	0.4	U		ppb
699-41-35	19-Jan-94	B09Q96	Ethyl cyanide	4.34	U		ppb
699-41-35	19-Jan-94	B09Q96	Methyl ethyl ketone	4.25	U		ppb
699-41-35	19-Jan-94	B09Q96	Methylene chloride	0.61	U		ppb
699-41-35	19-Jan-94	B09Q96	Tetrachloroethene	1.1	U		ppb
699-41-35	19-Jan-94	B09Q96	Tetrahydrofuran	3.67	U		ppb
699-41-35	19-Jan-94	B09Q96	Toluene	0.73	U		ppb
699-41-35	19-Jan-94	B09Q96	Trichloroethene	0.77	U		ppb
699-41-35	19-Jan-94	B09Q96	Vinyl chloride	0.78	U		ppb
699-41-35	19-Jan-94	B09Q96	Xylenes (total)	1.7	U		ppb
699-41-35	19-Jan-94	B09Q96	4,4'-DDD	0.001	U		ppb
699-41-35	19-Jan-94	B09Q96	4,4'-DDE	0.001	U		ppb
699-41-35	19-Jan-94	B09Q96	4,4'-DDT	0.011	U		ppb
699-41-35	19-Jan-94	B09Q96	Aldrin	0.05	U		ppb
699-41-35	19-Jan-94	B09Q96	Alpha-BHC	0.012	U		ppb
699-41-35	19-Jan-94	B09Q96	Beta-BHC	0.003	U		ppb
699-41-35	19-Jan-94	B09Q96	Chlordane	0.006	U		ppb
699-41-35	19-Jan-94	B09Q96	Delta-BHC	0.001	U		ppb
699-41-35	19-Jan-94	B09Q96	Dieldrin	0.019	U		ppb
699-41-35	19-Jan-94	B09Q96	Endosulfan I	0.003	U		ppb
699-41-35	19-Jan-94	B09Q96	Endosulfan II	0.004	U		ppb
699-41-35	19-Jan-94	B09Q96	Endosulfan sulfate	0.007	U		ppb
699-41-35	19-Jan-94	B09Q96	Endrin	0.008	U		ppb
699-41-35	19-Jan-94	B09Q96	Endrin Aldehyde	0.011	U		ppb
699-41-35	19-Jan-94	B09Q96	Heptachlor	0.002	U		ppb
699-41-35	19-Jan-94	B09Q96	Heptachlor epoxide	0.001	U		ppb
699-41-35	19-Jan-94	B09Q96	Methoxychlor	0.1	U		ppb
699-41-35	19-Jan-94	B09Q96	Toxaphene	0.89	U		ppb

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699-41-35	19-Jan-94	B09Q96	gamma-BHC (Lindane)	0.002	U		ppb
699-41-35	19-Jan-94	B09Q96	2,4-Dichlorophenol	2.8	U		ppb
699-41-35	19-Jan-94	B09Q96	2-Methylphenol	1.8	U		ppb
699-41-35	19-Jan-94	B09Q96	2-Nitrophenol	3.96	U		ppb
699-41-35	19-Jan-94	B09Q96	4-Methylphenol	3.54	U		ppb
699-41-35	19-Jan-94	B09Q96	Benzothiazole	2.55	U		ppb
699-41-35	19-Jan-94	B09Q96	Bis(2-ethylhexyl) phthalate	100	J		ppb
699-41-35	19-Jan-94	B09Q96	Decane	4.03	U		ppb
699-41-35	19-Jan-94	B09Q96	Dodecane	3.62	U		ppb
699-41-35	19-Jan-94	B09Q96	Naphthalene	6.5	U		ppb
699-41-35	19-Jan-94	B09Q96	Pentachlorophenol	8.07	U		ppb
699-41-35	19-Jan-94	B09Q96	Phenol	0.833	U		ppb
699-41-35	19-Jan-94	B09Q96	Tetradecane	2.43	U		ppb
699-41-35	19-Jan-94	B09Q96	Tributyl Phosphate	4.42	U		ppb
699-41-35	19-Jan-94	B09Q96	Tris-2-chloroethyl phosphate	30			ppb
699-41-35	19-Jan-94	B09Q96	m-Cresol	1.44	U		ppb
699-41-35	19-Jan-94	B09Q96	Total Organic Halogen	17.9			ppb
699-41-35	19-Jan-94	B09Q97	Total Organic Halogen	8.7			ppb
699-41-35	19-Jan-94	B09Q98	Total Organic Halogen	11.8			ppb
699-41-35	19-Jan-94	B09Q99	Total Organic Halogen	9.3			ppb
699-41-35	14-Apr-94	B0BRG7	Total Organic Carbon	320	U		ppb
699-41-35	14-Apr-94	B0BRG8	Total Organic Carbon	320	U		ppb
699-41-35	14-Apr-94	B0BRG9	Total Organic Carbon	320	U		ppb
699-41-35	14-Apr-94	B0BRH0	Total Organic Carbon	320	U		ppb
699-41-35	14-Apr-94	B0BRG7	4,4'-DDD	0.004	U		ppb
699-41-35	14-Apr-94	B0BRG7	4,4'-DDE	0.002	U		ppb
699-41-35	14-Apr-94	B0BRG7	4,4'-DDT	0.001	U		ppb
699-41-35	14-Apr-94	B0BRG7	Aldrin	0.002	U		ppb
699-41-35	14-Apr-94	B0BRG7	Alpha-BHC	0.003	U		ppb

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699-41-35	14-Apr-94	B0BRG7	Aroclor-1016	0.059	U		ppb
699-41-35	14-Apr-94	B0BRG7	Aroclor-1221	0.06	U		ppb
699-41-35	14-Apr-94	B0BRG7	Aroclor-1232	0.094	U		ppb
699-41-35	14-Apr-94	B0BRG7	Aroclor-1242	0.17	U		ppb
699-41-35	14-Apr-94	B0BRG7	Aroclor-1248	0.047	U		ppb
699-41-35	14-Apr-94	B0BRG7	Aroclor-1254	0.092	U		ppb
699-41-35	14-Apr-94	B0BRG7	Aroclor-1260	0.079	U		ppb
699-41-35	14-Apr-94	B0BRG7	Beta-BHC	0.001	U		ppb
699-41-35	14-Apr-94	B0BRG7	Chlordane	0.042	U		ppb
699-41-35	14-Apr-94	B0BRG7	Delta-BHC	0.002	U		ppb
699-41-35	14-Apr-94	B0BRG7	Dieldrin	0.002	U		ppb
699-41-35	14-Apr-94	B0BRG7	Endosulfan I	0.002	U		ppb
699-41-35	14-Apr-94	B0BRG7	Endosulfan II	0.001	U		ppb
699-41-35	14-Apr-94	B0BRG7	Endosulfan sulfate	0.002	U		ppb
699-41-35	14-Apr-94	B0BRG7	Endrin	0.004	U		ppb
699-41-35	14-Apr-94	B0BRG7	Endrin Aldehyde	0.004	U		ppb
699-41-35	14-Apr-94	B0BRG7	Heptachlor	0.002	U		ppb
699-41-35	14-Apr-94	B0BRG7	Heptachlor epoxide	0.001	U		ppb
699-41-35	14-Apr-94	B0BRG7	Methoxychlor	0.022	U		ppb
699-41-35	14-Apr-94	B0BRG7	Toxaphene	0.7	U		ppb
699-41-35	14-Apr-94	B0BRG7	gamma-BHC (Lindane)	0.002	U		ppb
699-41-35	14-Apr-94	B0BRG7	2,4,6-Trichlorophenol	1.6	U		ppb
699-41-35	14-Apr-94	B0BRG7	2,4-Dichlorophenol	1.5	U		ppb
699-41-35	14-Apr-94	B0BRG7	2,4-Dimethylphenol	1.5	U		ppb
699-41-35	14-Apr-94	B0BRG7	2,4-Dinitrophenol	1.8	U		ppb
699-41-35	14-Apr-94	B0BRG7	2,6-Dichlorophenol	2.2	U		ppb
699-41-35	14-Apr-94	B0BRG7	2-Chlorophenol	1.5	U		ppb
699-41-35	14-Apr-94	B0BRG7	2-Nitrophenol	1.7	U		ppb
699-41-35	14-Apr-94	B0BRG7	2-sec-Butyl-4,6-dinitrophenol(DNBP)	1.7	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-41-35	14-Apr-94	B0BRG7	4,6-Dinitro-2-methylphenol	1.6	U		ppb
699-41-35	14-Apr-94	B0BRG7	4-Chloro-3-methylphenol	1.5	U		ppb
699-41-35	14-Apr-94	B0BRG7	4-Nitrophenol	1.4	U		ppb
699-41-35	14-Apr-94	B0BRG7	Cresols (methylphenols)	4.8	U		ppb
699-41-35	14-Apr-94	B0BRG7	Pentachlorophenol	1.7	U		ppb
699-41-35	14-Apr-94	B0BRG7	Phenol	0.57	U		ppb
699-41-35	14-Apr-94	B0BRG7	Tetrachlorophenols	1.4	U		ppb
699-41-35	14-Apr-94	B0BRG7	Trichlorophenols	2.1	U		ppb
699-41-35	14-Apr-94	B0BRG7	2,4,5-T	0.018	U		ppb
699-41-35	14-Apr-94	B0BRG7	2,4,5-TP	0.015	U		ppb
699-41-35	14-Apr-94	B0BRG7	2,4-D	0.052	U		ppb
699-41-35	14-Apr-94	B0BRG7	2-sec-Butyl-4,6-dinitrophenol(DNBP)	0.24	U		ppb
699-41-35	14-Apr-94	B0BRG7	Total Organic Halogen	9.7			ppb
699-41-35	14-Apr-94	B0BRG8	Total Organic Halogen	15.9			ppb
699-41-35	14-Apr-94	B0BRG9	Total Organic Halogen	8.5			ppb
699-41-35	14-Apr-94	B0BRH0	Total Organic Halogen	12.1			ppb
699-41-35	03-Aug-94	B0C6T9	Total Organic Carbon	320	U		ppb
699-41-35	03-Aug-94	B0C6V0	Total Organic Carbon	320	U		ppb
699-41-35	03-Aug-94	B0C6V1	Total Organic Carbon	320	U		ppb
699-41-35	03-Aug-94	B0C6V2	Total Organic Carbon	320	U		ppb
699-41-35	03-Aug-94	B0C6T9	4,4'-DDD	0.004	U		ppb
699-41-35	03-Aug-94	B0C6T9	4,4'-DDE	0.002	U		ppb
699-41-35	03-Aug-94	B0C6T9	4,4'-DDT	0.001	U		ppb
699-41-35	03-Aug-94	B0C6T9	Aldrin	0.002	U		ppb
699-41-35	03-Aug-94	B0C6T9	Alpha-BHC	0.003	U		ppb
699-41-35	03-Aug-94	B0C6T9	Aroclor-1016	0.059	U		ppb
699-41-35	03-Aug-94	B0C6T9	Aroclor-1221	0.06	U		ppb
699-41-35	03-Aug-94	B0C6T9	Aroclor-1232	0.094	U		ppb
699-41-35	03-Aug-94	B0C6T9	Aroclor-1242	0.17	U		ppb

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699-41-35	03-Aug-94	B0C6T9	Aroclor-1248	0.047	U		ppb
699-41-35	03-Aug-94	B0C6T9	Aroclor-1254	0.092	U		ppb
699-41-35	03-Aug-94	B0C6T9	Aroclor-1260	0.079	U		ppb
699-41-35	03-Aug-94	B0C6T9	Beta-BHC	0.001	U		ppb
699-41-35	03-Aug-94	B0C6T9	Chlordane	0.042	U		ppb
699-41-35	03-Aug-94	B0C6T9	Delta-BHC	0.002	U		ppb
699-41-35	03-Aug-94	B0C6T9	Dieldrin	0.002	U		ppb
699-41-35	03-Aug-94	B0C6T9	Endosulfan I	0.002	U		ppb
699-41-35	03-Aug-94	B0C6T9	Endosulfan II	0.001	U		ppb
699-41-35	03-Aug-94	B0C6T9	Endosulfan sulfate	0.002	U		ppb
699-41-35	03-Aug-94	B0C6T9	Endrin	0.004	U		ppb
699-41-35	03-Aug-94	B0C6T9	Endrin Aldehyde	0.004	U		ppb
699-41-35	03-Aug-94	B0C6T9	Heptachlor	0.002	U		ppb
699-41-35	03-Aug-94	B0C6T9	Heptachlor epoxide	0.001	U		ppb
699-41-35	03-Aug-94	B0C6T9	Methoxychlor	0.022	U		ppb
699-41-35	03-Aug-94	B0C6T9	Toxaphene	0.7	U		ppb
699-41-35	03-Aug-94	B0C6T9	gamma-BHC (Lindane)	0.002	U		ppb
699-41-35	03-Aug-94	B0C736	2,4-Dichlorophenol	1.3	U		ppb
699-41-35	03-Aug-94	B0C736	2-Methylphenol	1.9	U		ppb
699-41-35	03-Aug-94	B0C736	2-Nitrophenol	1.6	U		ppb
699-41-35	03-Aug-94	B0C736	4-Methylphenol	1.3	U		ppb
699-41-35	03-Aug-94	B0C736	Benzothiazole	1.9	U		ppb
699-41-35	03-Aug-94	B0C736	Bis(2-ethylhexyl) phthalate	1.1	U		ppb
699-41-35	03-Aug-94	B0C736	Decane	2.9	U		ppb
699-41-35	03-Aug-94	B0C736	Dodecane	2.4	U		ppb
699-41-35	03-Aug-94	B0C736	Naphthalene	1.2	U		ppb
699-41-35	03-Aug-94	B0C736	Pentachlorophenol	1.7	U		ppb
699-41-35	03-Aug-94	B0C736	Phenol	0.5	U		ppb
699-41-35	03-Aug-94	B0C736	Tetradecane	3	U		ppb
699-41-35	03-Aug-94	B0C736	Tributyl Phosphate	3.9	U		ppb

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699-41-35	03-Aug-94	B0C736	Tris-2-chloroethyl phosphate	2.2	U		ppb
699-41-35	03-Aug-94	B0C736	m-Cresol	6.3	XU		ppb
699-41-35	03-Aug-94	B0C6T9	2,4,6-Trichlorophenol	1.6	U		ppb
699-41-35	03-Aug-94	B0C6T9	2,4-Dichlorophenol	1.5	U		ppb
699-41-35	03-Aug-94	B0C6T9	2,4-Dimethylphenol	1.5	U		ppb
699-41-35	03-Aug-94	B0C6T9	2,4-Dinitrophenol	1.8	U		ppb
699-41-35	03-Aug-94	B0C6T9	2,6-Dichlorophenol	2.2	U		ppb
699-41-35	03-Aug-94	B0C6T9	2-Chlorophenol	1.5	U		ppb
699-41-35	03-Aug-94	B0C6T9	2-Nitrophenol	1.7	U		ppb
699-41-35	03-Aug-94	B0C6T9	2-sec-Butyl-4,6-dinitrophenol(DNBP)	1.7	U		ppb
699-41-35	03-Aug-94	B0C6T9	4,6-Dinitro-2-methylphenol	1.6	U		ppb
699-41-35	03-Aug-94	B0C6T9	4-Chloro-3-methylphenol	1.5	U		ppb
699-41-35	03-Aug-94	B0C6T9	4-Nitrophenol	1.4	U		ppb
699-41-35	03-Aug-94	B0C6T9	Cresols (methylphenols)	4.8	U		ppb
699-41-35	03-Aug-94	B0C6T9	Pentachlorophenol	1.7	U		ppb
699-41-35	03-Aug-94	B0C6T9	Phenol	0.57	U		ppb
699-41-35	03-Aug-94	B0C6T9	Tetrachlorophenols	1.4	U		ppb
699-41-35	03-Aug-94	B0C6T9	Trichlorophenols	2.1	U		ppb
699-41-35	03-Aug-94	B0C6T9	2,4,5-T	0.018	U		ppb
699-41-35	03-Aug-94	B0C6T9	2,4,5-TP	0.015	U		ppb
699-41-35	03-Aug-94	B0C6T9	2,4-D	0.052	U		ppb
699-41-35	03-Aug-94	B0C6T9	2-sec-Butyl-4,6-dinitrophenol(DNBP)	0.24	U		ppb
699-41-35	03-Aug-94	B0C6T9	Total Organic Halogen	11.9			ppb
699-41-35	03-Aug-94	B0C6V0	Total Organic Halogen	9.3			ppb
699-41-35	03-Aug-94	B0C6V1	Total Organic Halogen	12.2			ppb
699-41-35	03-Aug-94	B0C6V2	Total Organic Halogen	9.3			ppb
699-42-37	22-Dec-92	B07TC4	Total Organic Carbon	1000	U		ppb
699-42-37	22-Dec-92	B07TC5	Total Organic Carbon	1000	U		ppb

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699-42-37	22-Dec-92	B07TC6	Total Organic Carbon	1000	U		ppb
699-42-37	22-Dec-92	B07TC7	Total Organic Carbon	1000	U		ppb
699-42-37	22-Dec-92	B07TC4	1,1,1-Trichloroethane	5	U		ppb
699-42-37	22-Dec-92	B07TC4	1,1,2-Trichloroethane	5	U		ppb
699-42-37	22-Dec-92	B07TC4	1,1-Dichloroethane	5	U		ppb
699-42-37	22-Dec-92	B07TC4	1,2-Dichloroethane	5	U		ppb
699-42-37	22-Dec-92	B07TC4	1,4-Dichlorobenzene	5	U		ppb
699-42-37	22-Dec-92	B07TC4	1-Butanol	1000	U		ppb
699-42-37	22-Dec-92	B07TC4	4-Methyl-2-pentanone	50	U		ppb
699-42-37	22-Dec-92	B07TC4	Acetone	100	U		ppb
699-42-37	22-Dec-92	B07TC4	Benzene	5	U		ppb
699-42-37	22-Dec-92	B07TC4	Carbon tetrachloride	5	U		ppb
699-42-37	22-Dec-92	B07TC4	Chloroform	5	U		ppb
699-42-37	22-Dec-92	B07TC4	Methyl ethyl ketone	100	U		ppb
699-42-37	22-Dec-92	B07TC4	Methylene chloride	5	U		ppb
699-42-37	22-Dec-92	B07TC4	Tetrachloroethene	5	U		ppb
699-42-37	22-Dec-92	B07TC4	Tetrahydrofuran	10	U		ppb
699-42-37	22-Dec-92	B07TC4	Toluene	5	U		ppb
699-42-37	22-Dec-92	B07TC4	Trichloroethene	5	U		ppb
699-42-37	22-Dec-92	B07TC4	Vinyl chloride	10	U		ppb
699-42-37	22-Dec-92	B07TC4	Xylenes (total)	5	U		ppb
699-42-37	22-Dec-92	B07TC4	trans-1,2-Dichloroethylen e	5	U		ppb
699-42-37	22-Dec-92	B07TC4	4,4'-DDD	0.1	U		ppb
699-42-37	22-Dec-92	B07TC4	4,4'-DDE	0.05	U		ppb
699-42-37	22-Dec-92	B07TC4	4,4'-DDT	0.1	U		ppb
699-42-37	22-Dec-92	B07TC4	Aldrin	0.05	U		ppb
699-42-37	22-Dec-92	B07TC4	Alpha-BHC	0.05	U		ppb
699-42-37	22-Dec-92	B07TC4	Beta-BHC	0.05	U		ppb
699-42-37	22-Dec-92	B07TC4	Chlordane	0.1	U		ppb
699-42-37	22-Dec-92	B07TC4	Delta-BHC	0.1	U		ppb

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699-42-37	22-Dec-92	B07TC4	Dieldrin	0.05	U		ppb
699-42-37	22-Dec-92	B07TC4	Endosulfan I	0.1	U		ppb
699-42-37	22-Dec-92	B07TC4	Endosulfan II	0.05	U		ppb
699-42-37	22-Dec-92	B07TC4	Endosulfan sulfate	0.5	U		ppb
699-42-37	22-Dec-92	B07TC4	Endrin	0.1	U		ppb
699-42-37	22-Dec-92	B07TC4	Endrin Aldehyde	0.2	U		ppb
699-42-37	22-Dec-92	B07TC4	Heptachlor	0.05	U		ppb
699-42-37	22-Dec-92	B07TC4	Heptachlor epoxide	1	U		ppb
699-42-37	22-Dec-92	B07TC4	Methoxychlor	2	U		ppb
699-42-37	22-Dec-92	B07TC4	Toxaphene	2	U		ppb
699-42-37	22-Dec-92	B07TC4	gamma-BHC (Lindane)	0.05	U		ppb
699-42-37	22-Dec-92	B07TC4	2-Methylphenol	10	U		ppb
699-42-37	22-Dec-92	B07TC4	4-Methylphenol	10	U		ppb
699-42-37	22-Dec-92	B07TC4	Decane	10	U		ppb
699-42-37	22-Dec-92	B07TC4	Dodecane	10	U		ppb
699-42-37	22-Dec-92	B07TC4	Naphthalene	10	U		ppb
699-42-37	22-Dec-92	B07TC4	Pentachlorophenol	50	U		ppb
699-42-37	22-Dec-92	B07TC4	Phenol	10	U		ppb
699-42-37	22-Dec-92	B07TC4	Tetradecane	10	U		ppb
699-42-37	22-Dec-92	B07TC4	Tributyl Phosphate	10	U		ppb
699-42-37	22-Dec-92	B07TC4	m-Cresol	10	U		ppb
699-42-37	22-Dec-92	B07TC4	Total Organic Halogen	10			ppb
699-42-37	22-Dec-92	B07TC4	Total Organic Halogen	10	U		ppb
699-42-37	22-Dec-92	B07TC5	Total Organic Halogen	30			ppb
699-42-37	22-Dec-92	B07TC5	Total Organic Halogen	40			ppb
699-42-37	22-Dec-92	B07TC6	Total Organic Halogen	10	U		ppb
699-42-37	22-Dec-92	B07TC6	Total Organic Halogen	20			ppb
699-42-37	22-Dec-92	B07TC7	Total Organic Halogen	20			ppb
699-42-37	23-Feb-93	B08712	Total Organic Carbon	1000	U		ppb
699-42-37	23-Feb-93	B08713	Total Organic Carbon	1000	U		ppb

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699-42-37	23-Feb-93	B08714	Total Organic Carbon	1000	U		ppb
699-42-37	23-Feb-93	B08715	Total Organic Carbon	1000	U		ppb
699-42-37	23-Feb-93	B08712	4,4'-DDD	0.1	U		ppb
699-42-37	23-Feb-93	B08712	4,4'-DDE	0.05	U		ppb
699-42-37	23-Feb-93	B08712	4,4'-DDT	0.1	U		ppb
699-42-37	23-Feb-93	B08712	Aldrin	0.05	U		ppb
699-42-37	23-Feb-93	B08712	Alpha-BHC	0.05	U		ppb
699-42-37	23-Feb-93	B08712	Beta-BHC	0.05	U		ppb
699-42-37	23-Feb-93	B08712	Chlordane	0.1	U		ppb
699-42-37	23-Feb-93	B08712	Delta-BHC	0.1	U		ppb
699-42-37	23-Feb-93	B08712	Dieldrin	0.05	U		ppb
699-42-37	23-Feb-93	B08712	Endosulfan I	0.1	U		ppb
699-42-37	23-Feb-93	B08712	Endosulfan II	0.05	U		ppb
699-42-37	23-Feb-93	B08712	Endosulfan sulfate	0.5	U		ppb
699-42-37	23-Feb-93	B08712	Endrin	0.1	U		ppb
699-42-37	23-Feb-93	B08712	Endrin Aldehyde	0.2	U		ppb
699-42-37	23-Feb-93	B08712	Heptachlor	0.05	U		ppb
699-42-37	23-Feb-93	B08712	Heptachlor epoxide	1	U		ppb
699-42-37	23-Feb-93	B08712	Methoxychlor	2	U		ppb
699-42-37	23-Feb-93	B08712	Toxaphene	2	U		ppb
699-42-37	23-Feb-93	B08712	gamma-BHC (Lindane)	0.05	U		ppb
699-42-37	23-Feb-93	B08712	2-Methylphenol	10	U		ppb
699-42-37	23-Feb-93	B08712	4-Methylphenol	10	U		ppb
699-42-37	23-Feb-93	B08712	Decane	10	U		ppb
699-42-37	23-Feb-93	B08712	Dodecane	10	U		ppb
699-42-37	23-Feb-93	B08712	Naphthalene	10	U		ppb
699-42-37	23-Feb-93	B08712	Pentachlorophenol	50	U		ppb
699-42-37	23-Feb-93	B08712	Phenol	10	U		ppb
699-42-37	23-Feb-93	B08712	Tetradecane	10	U		ppb
699-42-37	23-Feb-93	B08712	Tributyl Phosphate	10	U		ppb

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699-42-37	23-Feb-93	B08712	m-Cresol	10	U		ppb
699-42-37	23-Feb-93	B08712	1,1,1-Trichloroethane	0.5	U		ppb
699-42-37	23-Feb-93	B08712	1,1,2-Trichloroethane	0.5	U		ppb
699-42-37	23-Feb-93	B08712	1,1-Dichloroethane	1	U		ppb
699-42-37	23-Feb-93	B08712	1,2-Dichloroethane	0.5	U		ppb
699-42-37	23-Feb-93	B08712	1,4-Dichlorobenzene	2	U		ppb
699-42-37	23-Feb-93	B08712	Benzene	2	U		ppb
699-42-37	23-Feb-93	B08712	Carbon tetrachloride	1	U		ppb
699-42-37	23-Feb-93	B08712	Chloroform	0.5	U		ppb
699-42-37	23-Feb-93	B08712	Ethylbenzene	2	U		ppb
699-42-37	23-Feb-93	B08712	Methylene chloride	5	U		ppb
699-42-37	23-Feb-93	B08712	Tetrachloroethene	0.5	U		ppb
699-42-37	23-Feb-93	B08712	Toluene	2	U		ppb
699-42-37	23-Feb-93	B08712	Trichloroethene	1	U		ppb
699-42-37	23-Feb-93	B08712	Vinyl chloride	2	U		ppb
699-42-37	23-Feb-93	B08712	Xylenes (total)	5	U		ppb
699-42-37	23-Feb-93	B08712	cis-1,2-Dichloroethylene	1	U		ppb
699-42-37	23-Feb-93	B08712	trans-1,2-Dichloroethylene	1	U		ppb
699-42-37	23-Feb-93	B08712	Total Organic Halogen	10	U		ppb
699-42-37	23-Feb-93	B08713	Total Organic Halogen	10			ppb
699-42-37	23-Feb-93	B08713	Total Organic Halogen	10			ppb
699-42-37	23-Feb-93	B08714	Total Organic Halogen	10	U		ppb
699-42-37	23-Feb-93	B08714	Total Organic Halogen	20			ppb
699-42-37	23-Feb-93	B08715	Total Organic Halogen	10	U		ppb
699-42-37	13-May-93	B08JG2	Total Organic Carbon	200	U		ppb
699-42-37	13-May-93	B08JG3	Total Organic Carbon	400	L		ppb
699-42-37	13-May-93	B08JG4	Total Organic Carbon	200	L		ppb
699-42-37	13-May-93	B08JG5	Total Organic Carbon	200	L		ppb
699-42-37	13-May-93	B08JG2	1,1,1,2-Tetrachloroethane	0.31	U		ppb
699-42-37	13-May-93	B08JG2	1,1,1-Trichloroethane	0.64	U		ppb

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699-42-37	13-May-93	B08JG2	1,1,2,2-Tetrachloroethane	0.3	U		ppb
699-42-37	13-May-93	B08JG2	1,1,2-Trichloroethane	0.25	U		ppb
699-42-37	13-May-93	B08JG2	1,1-Dichloroethane	0.61	U		ppb
699-42-37	13-May-93	B08JG2	1,1-Dichloroethene	1.03	U		ppb
699-42-37	13-May-93	B08JG2	1,2,3-Trichloropropane	0.52	U		ppb
699-42-37	13-May-93	B08JG2	1,2-Dibromo-3-chloropropane	0.83	U		ppb
699-42-37	13-May-93	B08JG2	1,2-Dibromoethane	0.14	U		ppb
699-42-37	13-May-93	B08JG2	1,2-Dichloroethane	0.45	U		ppb
699-42-37	13-May-93	B08JG2	1,2-Dichloroethene	1.2	U		ppb
699-42-37	13-May-93	B08JG2	1,2-Dichloropropane	0.5	U		ppb
699-42-37	13-May-93	B08JG2	1,4-Dioxane	43.6	U		ppb
699-42-37	13-May-93	B08JG2	1-Butanol	13.1	U		ppb
699-42-37	13-May-93	B08JG2	2-Hexanone	0.75	U		ppb
699-42-37	13-May-93	B08JG2	4-Methyl-2-pentanone	0.85	U		ppb
699-42-37	13-May-93	B08JG2	Acetone	13.4	U		ppb
699-42-37	13-May-93	B08JG2	Acetonitrile	19.4	U		ppb
699-42-37	13-May-93	B08JG2	Acrolein	9.72	U		ppb
699-42-37	13-May-93	B08JG2	Acrylonitrile	4.28	U		ppb
699-42-37	13-May-93	B08JG2	Benzene	0.65	U		ppb
699-42-37	13-May-93	B08JG2	Bromodichloromethane	0.26	U		ppb
699-42-37	13-May-93	B08JG2	Bromoform	0.19	U		ppb
699-42-37	13-May-93	B08JG2	Carbon disulfide	0.95	U		ppb
699-42-37	13-May-93	B08JG2	Carbon tetrachloride	0.87	U		ppb
699-42-37	13-May-93	B08JG2	Chlorobenzene	0.53	U		ppb
699-42-37	13-May-93	B08JG2	Chloroethane	0.71	U		ppb
699-42-37	13-May-93	B08JG2	Chloroform	0.4	U		ppb
699-42-37	13-May-93	B08JG2	Chloroprene	0.77	U		ppb
699-42-37	13-May-93	B08JG2	Dibromochloromethane	0.29	U		ppb
699-42-37	13-May-93	B08JG2	Dibromomethane	0.36	U		ppb
699-42-37	13-May-93	B08JG2	Dichlorodifluoromethane	1	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	13-May-93	B08JG2	Ethyl cyanide	4.34	U		ppb
699-42-37	13-May-93	B08JG2	Ethyl methacrylate	0.29	U		ppb
699-42-37	13-May-93	B08JG2	Ethylbenzene	0.49	U		ppb
699-42-37	13-May-93	B08JG2	Isobutyl alcohol	26.9	U		ppb
699-42-37	13-May-93	B08JG2	Methacrylonitrile	0.74	U		ppb
699-42-37	13-May-93	B08JG2	Methyl Iodide	0.51	U		ppb
699-42-37	13-May-93	B08JG2	Methyl bromide	0.58	U		ppb
699-42-37	13-May-93	B08JG2	Methyl chloride	0.57	U		ppb
699-42-37	13-May-93	B08JG2	Methyl ethyl ketone	4.25	U		ppb
699-42-37	13-May-93	B08JG2	Methyl methacrylate	0.18	U		ppb
699-42-37	13-May-93	B08JG2	Methylene chloride	3	BL		ppb
699-42-37	13-May-93	B08JG2	Pentachloroethane	0.67	U		ppb
699-42-37	13-May-93	B08JG2	Styrene	0.43	U		ppb
699-42-37	13-May-93	B08JG2	Tetrachloroethene	1.1	U		ppb
699-42-37	13-May-93	B08JG2	Tetrahydrofuran	3.67	U		ppb
699-42-37	13-May-93	B08JG2	Toluene	0.73	U		ppb
699-42-37	13-May-93	B08JG2	Trichloroethene	0.77	U		ppb
699-42-37	13-May-93	B08JG2	Trichloromonofluoromethane	1.41	U		ppb
699-42-37	13-May-93	B08JG2	Vinyl acetate	0.3	U		ppb
699-42-37	13-May-93	B08JG2	Vinyl chloride	0.78	U		ppb
699-42-37	13-May-93	B08JG2	Xylenes (total)	1.7	U		ppb
699-42-37	13-May-93	B08JG2	allylchloride	0.84	U		ppb
699-42-37	13-May-93	B08JG2	cis-1,3-Dichloropropene	0.65	U		ppb
699-42-37	13-May-93	B08JG2	trans-1,3-Dichloropropene	0.41	U		ppb
699-42-37	13-May-93	B08JG2	trans-1,4-dichloro-2-butene	0.7	U		ppb
699-42-37	13-May-93	B08JG2	4,4'-DDD	0.0005	U		ppb
699-42-37	13-May-93	B08JG2	4,4'-DDE	0.0009	U		ppb
699-42-37	13-May-93	B08JG2	4,4'-DDT	0.011	U		ppb
699-42-37	13-May-93	B08JG2	Aldrin	0.05	U		ppb

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699-42-37	13-May-93	B08JG2	Alpha-BHC	0.012	U		ppb
699-42-37	13-May-93	B08JG2	Aroclor-1016	0.19	U		ppb
699-42-37	13-May-93	B08JG2	Aroclor-1221	0.14	U		ppb
699-42-37	13-May-93	B08JG2	Aroclor-1232	0.11	U		ppb
699-42-37	13-May-93	B08JG2	Aroclor-1242	0.11	U		ppb
699-42-37	13-May-93	B08JG2	Aroclor-1248	0.04	U		ppb
699-42-37	13-May-93	B08JG2	Aroclor-1254	0.1	U		ppb
699-42-37	13-May-93	B08JG2	Aroclor-1260	0.11	U		ppb
699-42-37	13-May-93	B08JG2	Beta-BHC	0.0026	U		ppb
699-42-37	13-May-93	B08JG2	Chlordane	0.0057	U		ppb
699-42-37	13-May-93	B08JG2	Delta-BHC	0.0014	U		ppb
699-42-37	13-May-93	B08JG2	Dieldrin	0.019	U		ppb
699-42-37	13-May-93	B08JG2	Endosulfan I	0.0029	U		ppb
699-42-37	13-May-93	B08JG2	Endosulfan II	0.004	U		ppb
699-42-37	13-May-93	B08JG2	Endosulfan sulfate	0.0072	U		ppb
699-42-37	13-May-93	B08JG2	Endrin	0.008	U		ppb
699-42-37	13-May-93	B08JG2	Endrin Aldehyde	0.011	U		ppb
699-42-37	13-May-93	B08JG2	Heptachlor	0.0019	U		ppb
699-42-37	13-May-93	B08JG2	Heptachlor epoxide	0.0008	U		ppb
699-42-37	13-May-93	B08JG2	Methoxychlor	0.1	U		ppb
699-42-37	13-May-93	B08JG2	Toxaphene	0.89	U		ppb
699-42-37	13-May-93	B08JG2	gamma-BHC (Lindane)	0.0021	U		ppb
699-42-37	13-May-93	B08JG2	1,2,4,5-Tetrachlorobenzene	4.39	U		ppb
699-42-37	13-May-93	B08JG2	1,2,4-Trichlorobenzene	4.14	U		ppb
699-42-37	13-May-93	B08JG2	1,2-Dichlorobenzene	3.77	U		ppb
699-42-37	13-May-93	B08JG2	1,3-Dichlorobenzene	7.85	U		ppb
699-42-37	13-May-93	B08JG2	1,4-Dichlorobenzene	4.64	U		ppb
699-42-37	13-May-93	B08JG2	1,4-Naphtoquinone	10	U		ppb
699-42-37	13-May-93	B08JG2	1-Naphthylamine	25.3	U		ppb
699-42-37	13-May-93	B08JG2	2,3,4,6-Tetrachlorophenol	4.77	U		ppb

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699-42-37	13-May-93	B08JG2	2,4,5-Trichlorophenol	4.01	U		ppb
699-42-37	13-May-93	B08JG2	2,4,6-Trichlorophenol	2.54	U		ppb
699-42-37	13-May-93	B08JG2	2,4-Dichlorophenol	2.8	U		ppb
699-42-37	13-May-93	B08JG2	2,4-Dimethylphenol	5.88	U		ppb
699-42-37	13-May-93	B08JG2	2,4-Dinitrophenol	4.46	U		ppb
699-42-37	13-May-93	B08JG2	2,4-Dinitrotoluene	2.59	U		ppb
699-42-37	13-May-93	B08JG2	2,6-Dichlorophenol	3.47	U		ppb
699-42-37	13-May-93	B08JG2	2,6-Dinitrotoluene	2.85	U		ppb
699-42-37	13-May-93	B08JG2	2-Acetylaminofluorene	2.83	U		ppb
699-42-37	13-May-93	B08JG2	2-Chloronaphthalene	3.02	U		ppb
699-42-37	13-May-93	B08JG2	2-Chlorophenol	1.91	U		ppb
699-42-37	13-May-93	B08JG2	2-Methylnaphthalene	2.76	U		ppb
699-42-37	13-May-93	B08JG2	2-Methylphenol	1.8	U		ppb
699-42-37	13-May-93	B08JG2	2-Naphthylamine	15.6	U		ppb
699-42-37	13-May-93	B08JG2	2-Nitroaniline	7.82	U		ppb
699-42-37	13-May-93	B08JG2	2-Nitrophenol	3.96	U		ppb
699-42-37	13-May-93	B08JG2	2-Picoline	5.83	U		ppb
699-42-37	13-May-93	B08JG2	3,3'-Dichlorobenzidine	3.88	U		ppb
699-42-37	13-May-93	B08JG2	3,3'-Dimethylbenzidine	10.4	U		ppb
699-42-37	13-May-93	B08JG2	3-Methylcholanthrene	2.63	U		ppb
699-42-37	13-May-93	B08JG2	3-Nitroaniline	9.52	U		ppb
699-42-37	13-May-93	B08JG2	4,6-Dinitro-2-methylphenol	5.54	U		ppb
699-42-37	13-May-93	B08JG2	4-Aminobiphenyl	3.83	U		ppb
699-42-37	13-May-93	B08JG2	4-Bromophenylphenyl ether	2.34	U		ppb
699-42-37	13-May-93	B08JG2	4-Chloro-3-methylphenol	7.41	U		ppb
699-42-37	13-May-93	B08JG2	4-Chloroaniline	13.2	U		ppb
699-42-37	13-May-93	B08JG2	4-Chlorophenylphenyl ether	3.04	U		ppb
699-42-37	13-May-93	B08JG2	4-Methylphenol	3.54	U		ppb

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699-42-37	13-May-93	B08JG2	4-Nitroaniline	21.4	U		ppb
699-42-37	13-May-93	B08JG2	4-Nitrophenol	1.52	U		ppb
699-42-37	13-May-93	B08JG2	4-Nitroquinoline-1-oxide	6	U		ppb
699-42-37	13-May-93	B08JG2	5-Nitro-o-toluidine	5.25	U		ppb
699-42-37	13-May-93	B08JG2	7,12-Dimethylbenz[a]anthracene	1.82	U		ppb
699-42-37	13-May-93	B08JG2	Acenaphthene	2.88	U		ppb
699-42-37	13-May-93	B08JG2	Acenaphthylene	3.96	U		ppb
699-42-37	13-May-93	B08JG2	Acetophenone	2.38	U		ppb
699-42-37	13-May-93	B08JG2	Alpha, alpha-Dimethylphenethylamine	37.8	U		ppb
699-42-37	13-May-93	B08JG2	Aniline	3.53	U		ppb
699-42-37	13-May-93	B08JG2	Anthracene	2.95	U		ppb
699-42-37	13-May-93	B08JG2	Aramite	8.6	U		ppb
699-42-37	13-May-93	B08JG2	Benzo(a)anthracene	2.34	U		ppb
699-42-37	13-May-93	B08JG2	Benzo(a)pyrene	1.7	U		ppb
699-42-37	13-May-93	B08JG2	Benzo(b)fluoranthene	4.41	U		ppb
699-42-37	13-May-93	B08JG2	Benzo(ghi)perylene	3.65	U		ppb
699-42-37	13-May-93	B08JG2	Benzo(k)fluoranthene	2.21	U		ppb
699-42-37	13-May-93	B08JG2	Benzothiazole	2.55	U		ppb
699-42-37	13-May-93	B08JG2	Benzyl alcohol	5.16	U		ppb
699-42-37	13-May-93	B08JG2	Bis(2-Chloroethoxy)methane	7.13	U		ppb
699-42-37	13-May-93	B08JG2	Bis(2-chloroethyl) ether	2.9	U		ppb
699-42-37	13-May-93	B08JG2	Bis(2-chloroisopropyl) ether	3.35	U		ppb
699-42-37	13-May-93	B08JG2	Bis(2-ethylhexyl) phthalate	4.07	U		ppb
699-42-37	13-May-93	B08JG2	Butylbenzylphthalate	5.94	U		ppb
699-42-37	13-May-93	B08JG2	Chlorobenzilate	8.69	U		ppb
699-42-37	13-May-93	B08JG2	Chrysene	1.7	U		ppb
699-42-37	13-May-93	B08JG2	Di-n-butylphthalate	4.34	U		ppb

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699-42-37	13-May-93	B08JG2	Di-n-octylphthalate	2.98	U		ppb
699-42-37	13-May-93	B08JG2	Diallate	3.15	U		ppb
699-42-37	13-May-93	B08JG2	Dibenz[a,h]anthracene	1.92	U		ppb
699-42-37	13-May-93	B08JG2	Dibenzofuran	2.54	U		ppb
699-42-37	13-May-93	B08JG2	Diethyl phthalate	8.94	U		ppb
699-42-37	13-May-93	B08JG2	Dimethoate	10	U		ppb
699-42-37	13-May-93	B08JG2	Dimethyl phthalate	5.55	U		ppb
699-42-37	13-May-93	B08JG2	Diphenylamine	2.86	U		ppb
699-42-37	13-May-93	B08JG2	Ethyl methanesulfonate	2.07	U		ppb
699-42-37	13-May-93	B08JG2	Famphur	12.8	U		ppb
699-42-37	13-May-93	B08JG2	Fluoranthene	4.62	U		ppb
699-42-37	13-May-93	B08JG2	Fluorene	2.56	U		ppb
699-42-37	13-May-93	B08JG2	Hexachlorobenzene	2.38	U		ppb
699-42-37	13-May-93	B08JG2	Hexachlorobutadiene	4.29	U		ppb
699-42-37	13-May-93	B08JG2	Hexachlorocyclopentadiene	2.62	U		ppb
699-42-37	13-May-93	B08JG2	Hexachloroethane	4.73	U		ppb
699-42-37	13-May-93	B08JG2	Hexachlorophene	19.6	U		ppb
699-42-37	13-May-93	B08JG2	Hexachloropropene	3.68	U		ppb
699-42-37	13-May-93	B08JG2	Indeno(1,2,3-cd)pyrene	3.21	U		ppb
699-42-37	13-May-93	B08JG2	Isodrin	1.44	U		ppb
699-42-37	13-May-93	B08JG2	Isophorone	3.29	U		ppb
699-42-37	13-May-93	B08JG2	Isosafrole	2.25	U		ppb
699-42-37	13-May-93	B08JG2	Kepone	9.59	U		ppb
699-42-37	13-May-93	B08JG2	Kerosene	4.03	U		ppb
699-42-37	13-May-93	B08JG2	Methapyrilene	8.45	U		ppb
699-42-37	13-May-93	B08JG2	Methyl methanesulfonate	1.61	U		ppb
699-42-37	13-May-93	B08JG2	N-Nitroso-di-n-dipropylamine	3.67	U		ppb
699-42-37	13-May-93	B08JG2	N-Nitrosodi-n-butylamine	3.22	U		ppb
699-42-37	13-May-93	B08JG2	N-Nitrosodiethylamine	2.9	U		ppb

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699-42-37	13-May-93	B08JG2	N-Nitrosodimethylamine	3.81	U		ppb
699-42-37	13-May-93	B08JG2	N-Nitrosodiphenylamine	2.11	U		ppb
699-42-37	13-May-93	B08JG2	N-Nitrosomethylethylamine	2.83	U		ppb
699-42-37	13-May-93	B08JG2	N-Nitrosomorpholine	3.27	U		ppb
699-42-37	13-May-93	B08JG2	N-Nitrosopiperidine	4.35	U		ppb
699-42-37	13-May-93	B08JG2	Naphthalene	6.5	U		ppb
699-42-37	13-May-93	B08JG2	Nitrobenzene	3.16	U		ppb
699-42-37	13-May-93	B08JG2	Nitrosopyrrolidine	2.78	U		ppb
699-42-37	13-May-93	B08JG2	O,O,O-Triethyl phosphorothioate	5.19	U		ppb
699-42-37	13-May-93	B08JG2	O,O-diethylO-2-pyrazinyl phosphor..	3.04	U		ppb
699-42-37	13-May-93	B08JG2	Parathion	3.9	U		ppb
699-42-37	13-May-93	B08JG2	Pentachlorobenzene	3.99	U		ppb
699-42-37	13-May-93	B08JG2	Pentachloronitrobenzene (PCNB)	2.49	U		ppb
699-42-37	13-May-93	B08JG2	Pentachlorophenol	8.07	U		ppb
699-42-37	13-May-93	B08JG2	Phenacetin	4.78	U		ppb
699-42-37	13-May-93	B08JG2	Phenanthrene	5.27	U		ppb
699-42-37	13-May-93	B08JG2	Phenol	0.833	U		ppb
699-42-37	13-May-93	B08JG2	Pronamide	3.42	U		ppb
699-42-37	13-May-93	B08JG2	Pyrene	3.69	U		ppb
699-42-37	13-May-93	B08JG2	Pyridine	4.57	U		ppb
699-42-37	13-May-93	B08JG2	Safrol	3.22	U		ppb
699-42-37	13-May-93	B08JG2	Tetraethyldithiopyrophosphate	2.81	U		ppb
699-42-37	13-May-93	B08JG2	Tributyl Phosphate	4.42	U		ppb
699-42-37	13-May-93	B08JG2	Tris-2-chloroethyl phosphate	18			ppb
699-42-37	13-May-93	B08JG2	m-Cresol	1.44	U		ppb
699-42-37	13-May-93	B08JG2	m-dinitrobenzene	9.35	U		ppb
699-42-37	13-May-93	B08JG2	o-Toluidine	2.27	U		ppb

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699-42-37	13-May-93	B08JG2	p-Dimethylaminoazobenzene	3.36	U		ppb
699-42-37	13-May-93	B08JG2	p-Phenylenediamine	3.09	U		ppb
699-42-37	13-May-93	B08JG2	sym-Trinitrobenzene	3.74	U		ppb
699-42-37	13-May-93	B08JG2	Disulfoton	0.12	U		ppb
699-42-37	13-May-93	B08JG2	Methyl parathion	0.24	U		ppb
699-42-37	13-May-93	B08JG2	Phorate	0.1	U		ppb
699-42-37	13-May-93	B08JG2	2,4,5-T	0.038	L		ppb
699-42-37	13-May-93	B08JG2	2,4,5-TP	0.408	U		ppb
699-42-37	13-May-93	B08JG2	2,4-D	0.186	U		ppb
699-42-37	13-May-93	B08JG2	2-sec-Butyl-4,6-dinitrophenol(DNBP)	0.269	U		ppb
699-42-37	13-May-93	B08JG2	2,3,7,8-TCDD	0.00128	U		ppb
699-42-37	13-May-93	B08JG2	PCDDs	0.00196	U		ppb
699-42-37	13-May-93	B08JG2	PCDFs	0.00153	U		ppb
699-42-37	13-May-93	B08JG2	Total Organic Halogen	30			ppb
699-42-37	13-May-93	B08JG3	Total Organic Halogen	20			ppb
699-42-37	13-May-93	B08JG4	Total Organic Halogen	20			ppb
699-42-37	13-May-93	B08JG5	Total Organic Halogen	30			ppb
699-42-37	30-Aug-93	B090W1	Total Organic Carbon	200	L		ppb
699-42-37	30-Aug-93	B090W2	Total Organic Carbon	200	U		ppb
699-42-37	30-Aug-93	B090W3	Total Organic Carbon	200	U		ppb
699-42-37	30-Aug-93	B090W4	Total Organic Carbon	200	U		ppb
699-42-37	30-Aug-93	B090W5	Total Organic Carbon	300	L		ppb
699-42-37	30-Aug-93	B090W6	Total Organic Carbon	200	U		ppb
699-42-37	30-Aug-93	B090W7	Total Organic Carbon	200	U		ppb
699-42-37	30-Aug-93	B090W8	Total Organic Carbon	300	L		ppb
699-42-37	30-Aug-93	B090W1	4,4'-DDD	0.0005	U		ppb
699-42-37	30-Aug-93	B090W1	4,4'-DDE	0.0009	U		ppb

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699-42-37	30-Aug-93	B090W1	4,4'-DDT	0.011	U		ppb
699-42-37	30-Aug-93	B090W1	Aldrin	0.05	U		ppb
699-42-37	30-Aug-93	B090W1	Alpha-BHC	0.012	U		ppb
699-42-37	30-Aug-93	B090W1	Beta-BHC	0.0026	U		ppb
699-42-37	30-Aug-93	B090W1	Chlordane	0.0057	U		ppb
699-42-37	30-Aug-93	B090W1	Delta-BHC	0.0014	U		ppb
699-42-37	30-Aug-93	B090W1	Dieldrin	0.019	U		ppb
699-42-37	30-Aug-93	B090W1	Endosulfan I	0.0029	U		ppb
699-42-37	30-Aug-93	B090W1	Endosulfan II	0.004	U		ppb
699-42-37	30-Aug-93	B090W1	Endosulfan sulfate	0.0072	U		ppb
699-42-37	30-Aug-93	B090W1	Endrin	0.008	U		ppb
699-42-37	30-Aug-93	B090W1	Endrin Aldehyde	0.011	U		ppb
699-42-37	30-Aug-93	B090W1	Heptachlor	0.0019	U		ppb
699-42-37	30-Aug-93	B090W1	Heptachlor epoxide	0.0008	U		ppb
699-42-37	30-Aug-93	B090W1	Methoxychlor	0.1	U		ppb
699-42-37	30-Aug-93	B090W1	Toxaphene	0.89	U		ppb
699-42-37	30-Aug-93	B090W1	gamma-BHC (Lindane)	0.0021	U		ppb
699-42-37	30-Aug-93	B090W2	4,4'-DDD	0.0005	U		ppb
699-42-37	30-Aug-93	B090W2	4,4'-DDE	0.0009	U		ppb
699-42-37	30-Aug-93	B090W2	4,4'-DDT	0.011	U		ppb
699-42-37	30-Aug-93	B090W2	Aldrin	0.05	U		ppb
699-42-37	30-Aug-93	B090W2	Alpha-BHC	0.012	U		ppb
699-42-37	30-Aug-93	B090W2	Beta-BHC	0.0026	U		ppb
699-42-37	30-Aug-93	B090W2	Chlordane	0.0057	U		ppb
699-42-37	30-Aug-93	B090W2	Delta-BHC	0.0014	U		ppb
699-42-37	30-Aug-93	B090W2	Dieldrin	0.019	U		ppb
699-42-37	30-Aug-93	B090W2	Endosulfan I	0.0029	U		ppb
699-42-37	30-Aug-93	B090W2	Endosulfan II	0.004	U		ppb
699-42-37	30-Aug-93	B090W2	Endosulfan sulfate	0.0072	U		ppb
699-42-37	30-Aug-93	B090W2	Endrin	0.008	U		ppb

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699-42-37	30-Aug-93	B090W2	Endrin Aldehyde	0.011	U		ppb
699-42-37	30-Aug-93	B090W2	Heptachlor	0.0019	U		ppb
699-42-37	30-Aug-93	B090W2	Heptachlor epoxide	0.0008	U		ppb
699-42-37	30-Aug-93	B090W2	Methoxychlor	0.1	U		ppb
699-42-37	30-Aug-93	B090W2	Toxaphene	0.89	U		ppb
699-42-37	30-Aug-93	B090W2	gamma-BHC (Lindane)	0.0021	U		ppb
699-42-37	30-Aug-93	B090W1	2,4-Dichlorophenol	2.8	U		ppb
699-42-37	30-Aug-93	B090W1	2-Methylphenol	1.8	U		ppb
699-42-37	30-Aug-93	B090W1	2-Nitrophenol	3.96	U		ppb
699-42-37	30-Aug-93	B090W1	4-Methylphenol	3.54	U		ppb
699-42-37	30-Aug-93	B090W1	Benzothiazole	2.55	U		ppb
699-42-37	30-Aug-93	B090W1	Bis(2-ethylhexyl) phthalate	4.07	U		ppb
699-42-37	30-Aug-93	B090W1	Decane	4.03	U		ppb
699-42-37	30-Aug-93	B090W1	Dodecane	3.62	U		ppb
699-42-37	30-Aug-93	B090W1	Naphthalene	6.5	U		ppb
699-42-37	30-Aug-93	B090W1	Pentachlorophenol	8.07	U		ppb
699-42-37	30-Aug-93	B090W1	Phenol	0.833	U		ppb
699-42-37	30-Aug-93	B090W1	Tetradecane	2.43	U		ppb
699-42-37	30-Aug-93	B090W1	Tributyl Phosphate	4.42	U		ppb
699-42-37	30-Aug-93	B090W1	Tris-2-chloroethyl phosphate	2.88	U		ppb
699-42-37	30-Aug-93	B090W1	m-Cresol	1.44	XU		ppb
699-42-37	30-Aug-93	B090W2	2,4-Dichlorophenol	2.8	U		ppb
699-42-37	30-Aug-93	B090W2	2-Methylphenol	1.8	U		ppb
699-42-37	30-Aug-93	B090W2	2-Nitrophenol	3.96	U		ppb
699-42-37	30-Aug-93	B090W2	4-Methylphenol	3.54	U		ppb
699-42-37	30-Aug-93	B090W2	Benzothiazole	2.55	U		ppb
699-42-37	30-Aug-93	B090W2	Bis(2-ethylhexyl) phthalate	4.07	U		ppb
699-42-37	30-Aug-93	B090W2	Decane	4.03	U		ppb

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699-42-37	30-Aug-93	B090W2	Dodecane	3.62	U		ppb
699-42-37	30-Aug-93	B090W2	Naphthalene	6.5	U		ppb
699-42-37	30-Aug-93	B090W2	Pentachlorophenol	8.07	U		ppb
699-42-37	30-Aug-93	B090W2	Phenol	0.833	U		ppb
699-42-37	30-Aug-93	B090W2	Tetradecane	2.43	U		ppb
699-42-37	30-Aug-93	B090W2	Tributyl Phosphate	4.42	U		ppb
699-42-37	30-Aug-93	B090W2	Tris-2-chloroethyl phosphate	2.88	U		ppb
699-42-37	30-Aug-93	B090W2	m-Cresol	1.44	XU		ppb
699-42-37	30-Aug-93	B090W1	1,1,1-Trichloroethane	0.072	U		ppb
699-42-37	30-Aug-93	B090W1	1,1,2-Trichloroethane	0.043	U		ppb
699-42-37	30-Aug-93	B090W1	1,1-Dichloroethane	0.337	U		ppb
699-42-37	30-Aug-93	B090W1	1,2-Dichloroethane	0.139	U		ppb
699-42-37	30-Aug-93	B090W1	1,4-Dichlorobenzene	0.107	U		ppb
699-42-37	30-Aug-93	B090W1	Benzene	0.105	U		ppb
699-42-37	30-Aug-93	B090W1	Carbon tetrachloride	0.121	U		ppb
699-42-37	30-Aug-93	B090W1	Chloroform	0.043	U		ppb
699-42-37	30-Aug-93	B090W1	Ethylbenzene	0.046	U		ppb
699-42-37	30-Aug-93	B090W1	Methylene chloride	0.056	U		ppb
699-42-37	30-Aug-93	B090W1	Tetrachloroethene	0.049	U		ppb
699-42-37	30-Aug-93	B090W1	Toluene	0.056	U		ppb
699-42-37	30-Aug-93	B090W1	Trichloroethene	0.065	U		ppb
699-42-37	30-Aug-93	B090W1	Vinyl chloride	0.266	U		ppb
699-42-37	30-Aug-93	B090W1	Xylenes (total)	0.202	U		ppb
699-42-37	30-Aug-93	B090W1	cis-1,2-Dichloroethylene	0.127	U		ppb
699-42-37	30-Aug-93	B090W1	trans-1,2-Dichloroethylene	0.149	U		ppb
699-42-37	30-Aug-93	B090W2	1,1,1-Trichloroethane	0.072	U		ppb
699-42-37	30-Aug-93	B090W2	1,1,2-Trichloroethane	0.043	U		ppb
699-42-37	30-Aug-93	B090W2	1,1-Dichloroethane	0.337	U		ppb
699-42-37	30-Aug-93	B090W2	1,2-Dichloroethane	0.139	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	30-Aug-93	B090W2	1,4-Dichlorobenzene	0.107	U		ppb
699-42-37	30-Aug-93	B090W2	Benzene	0.105	U		ppb
699-42-37	30-Aug-93	B090W2	Carbon tetrachloride	0.121	U		ppb
699-42-37	30-Aug-93	B090W2	Chloroform	0.043	U		ppb
699-42-37	30-Aug-93	B090W2	Ethylbenzene	0.046	U		ppb
699-42-37	30-Aug-93	B090W2	Methylene chloride	0.056	U		ppb
699-42-37	30-Aug-93	B090W2	Tetrachloroethene	0.049	U		ppb
699-42-37	30-Aug-93	B090W2	Toluene	0.056	U		ppb
699-42-37	30-Aug-93	B090W2	Trichloroethene	0.065	U		ppb
699-42-37	30-Aug-93	B090W2	Vinyl chloride	0.266	U		ppb
699-42-37	30-Aug-93	B090W2	Xylenes (total)	0.202	U		ppb
699-42-37	30-Aug-93	B090W2	cis-1,2-Dichloroethylene	0.56	L		ppb
699-42-37	30-Aug-93	B090W2	trans-1,2-Dichloroethylene	0.149	U		ppb
699-42-37	30-Aug-93	B090W1	Total Organic Halogen	10			ppb
699-42-37	30-Aug-93	B090W2	Total Organic Halogen	8	U		ppb
699-42-37	30-Aug-93	B090W3	Total Organic Halogen	8	L		ppb
699-42-37	30-Aug-93	B090W4	Total Organic Halogen	8	U		ppb
699-42-37	30-Aug-93	B090W5	Total Organic Halogen	8	U		ppb
699-42-37	30-Aug-93	B090W6	Total Organic Halogen	8	U		ppb
699-42-37	30-Aug-93	B090W7	Total Organic Halogen	10			ppb
699-42-37	30-Aug-93	B090W8	Total Organic Halogen	20			ppb
699-42-37	08-Oct-93	B099X5	Total Organic Carbon	200	U		ppb
699-42-37	08-Oct-93	B099X6	Total Organic Carbon	200	U		ppb
699-42-37	08-Oct-93	B099X7	Total Organic Carbon	200	U		ppb
699-42-37	08-Oct-93	B099X8	Total Organic Carbon	300	LB		ppb
699-42-37	08-Oct-93	B099X5	Total Organic Halogen	8	U		ppb
699-42-37	08-Oct-93	B099X5MD	Total Organic Halogen	20			ppb
699-42-37	08-Oct-93	B099X6	Total Organic Halogen	8	U		ppb
699-42-37	08-Oct-93	B099X6MD	Total Organic Halogen	6	U		ppb
699-42-37	08-Oct-93	B099X7	Total Organic Halogen	8	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	08-Oct-93	B099X7MD	Total Organic Halogen	20			ppb
699-42-37	08-Oct-93	B099X8	Total Organic Halogen	20			ppb
699-42-37	08-Oct-93	B099X8MD	Total Organic Halogen	20			ppb
699-42-37	07-Jan-94	B09QB0	Total Organic Carbon	200	U		ppb
699-42-37	07-Jan-94	B09QB1	Total Organic Carbon	200	U		ppb
699-42-37	07-Jan-94	B09QB2	Total Organic Carbon	200	U		ppb
699-42-37	07-Jan-94	B09QB3	Total Organic Carbon	800	L		ppb
699-42-37	07-Jan-94	B09QB0	1,1,1-Trichloroethane	4.2	U		ppb
699-42-37	07-Jan-94	B09QB0	1,1,2-Trichloroethane	0.5	U		ppb
699-42-37	07-Jan-94	B09QB0	1,1-Dichloroethane	0.4	U		ppb
699-42-37	07-Jan-94	B09QB0	1,2-Dichloroethane	0.3	U		ppb
699-42-37	07-Jan-94	B09QB0	1,2-Dichloroethene	0.7	U		ppb
699-42-37	07-Jan-94	B09QB0	1,4-Dichlorobenzene	1	U		ppb
699-42-37	07-Jan-94	B09QB0	1-Butanol	17	U		ppb
699-42-37	07-Jan-94	B09QB0	4-Methyl-2-pentanone	0.6	U		ppb
699-42-37	07-Jan-94	B09QB0	Acetone	4.5	U		ppb
699-42-37	07-Jan-94	B09QB0	Benzene	0.2	U		ppb
699-42-37	07-Jan-94	B09QB0	Carbon disulfide	1.8	U		ppb
699-42-37	07-Jan-94	B09QB0	Carbon tetrachloride	0.1	U		ppb
699-42-37	07-Jan-94	B09QB0	Chloroform	0.3	U		ppb
699-42-37	07-Jan-94	B09QB0	Ethyl cyanide	10	U		ppb
699-42-37	07-Jan-94	B09QB0	Methyl ethyl ketone	100	U		ppb
699-42-37	07-Jan-94	B09QB0	Methylene chloride	0.3	U		ppb
699-42-37	07-Jan-94	B09QB0	Tetrachloroethene	2.6	U		ppb
699-42-37	07-Jan-94	B09QB0	Tetrahydrofuran	0.6	U		ppb
699-42-37	07-Jan-94	B09QB0	Toluene	0.3	U		ppb
699-42-37	07-Jan-94	B09QB0	Trichloroethene	0.9	U		ppb
699-42-37	07-Jan-94	B09QB0	Vinyl chloride	1.1	U		ppb
699-42-37	07-Jan-94	B09QB0	Xylenes (total)	0.5	U		ppb
699-42-37	07-Jan-94	B09QB0	4,4'-DDD	0.009	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	07-Jan-94	B09QB0	4,4'-DDE	0.008	U		ppb
699-42-37	07-Jan-94	B09QB0	4,4'-DDT	0.01	U		ppb
699-42-37	07-Jan-94	B09QB0	Aldrin	0.03	U		ppb
699-42-37	07-Jan-94	B09QB0	Alpha-BHC	0.005	U		ppb
699-42-37	07-Jan-94	B09QB0	Beta-BHC	0.004	U		ppb
699-42-37	07-Jan-94	B09QB0	Chlordane	0.09	U		ppb
699-42-37	07-Jan-94	B09QB0	Delta-BHC	0.006	U		ppb
699-42-37	07-Jan-94	B09QB0	Dieldrin	0.007	U		ppb
699-42-37	07-Jan-94	B09QB0	Endosulfan I	0.007	U		ppb
699-42-37	07-Jan-94	B09QB0	Endosulfan II	0.008	U		ppb
699-42-37	07-Jan-94	B09QB0	Endosulfan sulfate	0.009	U		ppb
699-42-37	07-Jan-94	B09QB0	Endrin	0.004	U		ppb
699-42-37	07-Jan-94	B09QB0	Endrin Aldehyde	0.009	U		ppb
699-42-37	07-Jan-94	B09QB0	Heptachlor	0.02	U		ppb
699-42-37	07-Jan-94	B09QB0	Heptachlor epoxide	0.007	U		ppb
699-42-37	07-Jan-94	B09QB0	Methoxychlor	0.08	U		ppb
699-42-37	07-Jan-94	B09QB0	Toxaphene	0.9	U		ppb
699-42-37	07-Jan-94	B09QB0	gamma-BHC (Lindane)	0.008	U		ppb
699-42-37	07-Jan-94	B09QB0	2,4-Dichlorophenol	4.6	U		ppb
699-42-37	07-Jan-94	B09QB0	2-Methylphenol	4.3	U		ppb
699-42-37	07-Jan-94	B09QB0	2-Nitrophenol	5	U		ppb
699-42-37	07-Jan-94	B09QB0	4-Methylphenol	4.1	U		ppb
699-42-37	07-Jan-94	B09QB0	Benzothiazole	2.8	U		ppb
699-42-37	07-Jan-94	B09QB0	Bis(2-ethylhexyl) phthalate	6.5	U		ppb
699-42-37	07-Jan-94	B09QB0	Decane	7.3	U		ppb
699-42-37	07-Jan-94	B09QB0	Dodecane	8.2	U		ppb
699-42-37	07-Jan-94	B09QB0	Naphthalene	4.1	U		ppb
699-42-37	07-Jan-94	B09QB0	Pentachlorophenol	5.3	U		ppb
699-42-37	07-Jan-94	B09QB0	Phenol	2.8	U		ppb
699-42-37	07-Jan-94	B09QB0	Tetradecane	9.3	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	07-Jan-94	B09QB0	Tributyl Phosphate	8.7	U		ppb
699-42-37	07-Jan-94	B09QB0	Tris-2-chloroethyl phosphate	8.9	U		ppb
699-42-37	07-Jan-94	B09QB0	m-Cresol	2.4	U		ppb
699-42-37	11-Apr-94	B0BRH2	Total Organic Carbon	320	U		ppb
699-42-37	11-Apr-94	B0BRH3	Total Organic Carbon	320	U		ppb
699-42-37	11-Apr-94	B0BRH4	Total Organic Carbon	320	U		ppb
699-42-37	11-Apr-94	B0BRH5	Total Organic Carbon	320	U		ppb
699-42-37	11-Apr-94	B0BRH2	4,4'-DDD	0.0039	U		ppb
699-42-37	11-Apr-94	B0BRH2	4,4'-DDE	0.0015	U		ppb
699-42-37	11-Apr-94	B0BRH2	4,4'-DDT	0.0012	U		ppb
699-42-37	11-Apr-94	B0BRH2	Aldrin	0.0018	U		ppb
699-42-37	11-Apr-94	B0BRH2	Alpha-BHC	0.003	U		ppb
699-42-37	11-Apr-94	B0BRH2	Aroclor-1016	0.059	U		ppb
699-42-37	11-Apr-94	B0BRH2	Aroclor-1221	0.06	U		ppb
699-42-37	11-Apr-94	B0BRH2	Aroclor-1232	0.094	U		ppb
699-42-37	11-Apr-94	B0BRH2	Aroclor-1242	0.17	U		ppb
699-42-37	11-Apr-94	B0BRH2	Aroclor-1248	0.047	U		ppb
699-42-37	11-Apr-94	B0BRH2	Aroclor-1254	0.092	U		ppb
699-42-37	11-Apr-94	B0BRH2	Aroclor-1260	0.079	U		ppb
699-42-37	11-Apr-94	B0BRH2	Beta-BHC	0.0013	U		ppb
699-42-37	11-Apr-94	B0BRH2	Chlordane	0.042	U		ppb
699-42-37	11-Apr-94	B0BRH2	Delta-BHC	0.0018	U		ppb
699-42-37	11-Apr-94	B0BRH2	Dieldrin	0.0021	U		ppb
699-42-37	11-Apr-94	B0BRH2	Endosulfan I	0.0018	U		ppb
699-42-37	11-Apr-94	B0BRH2	Endosulfan II	0.0012	U		ppb
699-42-37	11-Apr-94	B0BRH2	Endosulfan sulfate	0.0018	U		ppb
699-42-37	11-Apr-94	B0BRH2	Endrin	0.0042	U		ppb
699-42-37	11-Apr-94	B0BRH2	Endrin Aldehyde	0.0039	U		ppb
699-42-37	11-Apr-94	B0BRH2	Heptachlor	0.0015	U		ppb
699-42-37	11-Apr-94	B0BRH2	Heptachlor epoxide	0.0012	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	11-Apr-94	B0BRH2	Methoxychlor	0.022	U		ppb
699-42-37	11-Apr-94	B0BRH2	Toxaphene	0.7	U		ppb
699-42-37	11-Apr-94	B0BRH2	gamma-BHC (Lindane)	0.0015	U		ppb
699-42-37	11-Apr-94	B0BRH2	2,4,6-Trichlorophenol	1.6	U		ppb
699-42-37	11-Apr-94	B0BRH2	2,4-Dichlorophenol	1.5	U		ppb
699-42-37	11-Apr-94	B0BRH2	2,4-Dimethylphenol	1.5	U		ppb
699-42-37	11-Apr-94	B0BRH2	2,4-Dinitrophenol	1.8	U		ppb
699-42-37	11-Apr-94	B0BRH2	2,6-Dichlorophenol	2.2	U		ppb
699-42-37	11-Apr-94	B0BRH2	2-Chlorophenol	1.5	U		ppb
699-42-37	11-Apr-94	B0BRH2	2-Nitrophenol	1.7	U		ppb
699-42-37	11-Apr-94	B0BRH2	2-sec-Butyl-4,6-dinitrophenol(DNBP)	1.7	U		ppb
699-42-37	11-Apr-94	B0BRH2	4,6-Dinitro-2-methylphenol	1.6	U		ppb
699-42-37	11-Apr-94	B0BRH2	4-Chloro-3-methylphenol	1.5	U		ppb
699-42-37	11-Apr-94	B0BRH2	4-Nitrophenol	1.4	U		ppb
699-42-37	11-Apr-94	B0BRH2	Cresols (methylphenols)	4.8	U		ppb
699-42-37	11-Apr-94	B0BRH2	Pentachlorophenol	1.7	U		ppb
699-42-37	11-Apr-94	B0BRH2	Phenol	0.57	U		ppb
699-42-37	11-Apr-94	B0BRH2	Tetrachlorophenols	1.4	U		ppb
699-42-37	11-Apr-94	B0BRH2	Trichlorophenols	2.1	U		ppb
699-42-37	11-Apr-94	B0BRH2	2,4,5-T	0.018	U		ppb
699-42-37	11-Apr-94	B0BRH2	2,4,5-TP	0.015	U		ppb
699-42-37	11-Apr-94	B0BRH2	2,4-D	0.052	U		ppb
699-42-37	11-Apr-94	B0BRH2	2-sec-Butyl-4,6-dinitrophenol(DNBP)	0.24	U		ppb
699-42-37	11-Apr-94	B0BRH2	Total Organic Halogen	7.7			ppb
699-42-37	11-Apr-94	B0BRH3	Total Organic Halogen	5.8			ppb
699-42-37	11-Apr-94	B0BRH4	Total Organic Halogen	8.6			ppb
699-42-37	11-Apr-94	B0BRH5	Total Organic Halogen	11.5			ppb
699-42-37	29-Jul-94	B0C6W8	Total Organic Carbon	320	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	29-Jul-94	B0C6W9	Total Organic Carbon	320	U		ppb
699-42-37	29-Jul-94	B0C6X0	Total Organic Carbon	320	U		ppb
699-42-37	29-Jul-94	B0C6X1	Total Organic Carbon	320	U		ppb
699-42-37	29-Jul-94	B0C6W8	4,4'-DDD	0.004	U		ppb
699-42-37	29-Jul-94	B0C6W8	4,4'-DDE	0.002	U		ppb
699-42-37	29-Jul-94	B0C6W8	4,4'-DDT	0.001	U		ppb
699-42-37	29-Jul-94	B0C6W8	Aldrin	0.002	U		ppb
699-42-37	29-Jul-94	B0C6W8	Alpha-BHC	0.003	U		ppb
699-42-37	29-Jul-94	B0C6W8	Aroclor-1016	0.059	U		ppb
699-42-37	29-Jul-94	B0C6W8	Aroclor-1221	0.06	U		ppb
699-42-37	29-Jul-94	B0C6W8	Aroclor-1232	0.094	U		ppb
699-42-37	29-Jul-94	B0C6W8	Aroclor-1242	0.17	U		ppb
699-42-37	29-Jul-94	B0C6W8	Aroclor-1248	0.047	U		ppb
699-42-37	29-Jul-94	B0C6W8	Aroclor-1254	0.092	U		ppb
699-42-37	29-Jul-94	B0C6W8	Aroclor-1260	0.079	U		ppb
699-42-37	29-Jul-94	B0C6W8	Beta-BHC	0.001	U		ppb
699-42-37	29-Jul-94	B0C6W8	Chlordane	0.042	U		ppb
699-42-37	29-Jul-94	B0C6W8	Delta-BHC	0.002	U		ppb
699-42-37	29-Jul-94	B0C6W8	Dieldrin	0.002	U		ppb
699-42-37	29-Jul-94	B0C6W8	Endosulfan I	0.002	U		ppb
699-42-37	29-Jul-94	B0C6W8	Endosulfan II	0.001	U		ppb
699-42-37	29-Jul-94	B0C6W8	Endosulfan sulfate	0.002	U		ppb
699-42-37	29-Jul-94	B0C6W8	Endrin	0.004	U		ppb
699-42-37	29-Jul-94	B0C6W8	Endrin Aldehyde	0.004	U		ppb
699-42-37	29-Jul-94	B0C6W8	Heptachlor	0.018	L		ppb
699-42-37	29-Jul-94	B0C6W8	Heptachlor epoxide	0.001	U		ppb
699-42-37	29-Jul-94	B0C6W8	Methoxychlor	0.022	U		ppb
699-42-37	29-Jul-94	B0C6W8	Toxaphene	0.7	U		ppb
699-42-37	29-Jul-94	B0C6W8	gamma-BHC (Lindane)	0.002	U		ppb
699-42-37	29-Jul-94	B0C738	2,4-Dichlorophenol	1.3	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	29-Jul-94	B0C738	2-Methylphenol	1.9	U		ppb
699-42-37	29-Jul-94	B0C738	2-Nitrophenol	1.6	U		ppb
699-42-37	29-Jul-94	B0C738	4-Methylphenol	1.3	U		ppb
699-42-37	29-Jul-94	B0C738	Benzothiazole	1.9	U		ppb
699-42-37	29-Jul-94	B0C738	Bis(2-ethylhexyl) phthalate	1.1	U		ppb
699-42-37	29-Jul-94	B0C738	Decane	2.9	U		ppb
699-42-37	29-Jul-94	B0C738	Dodecane	2.4	U		ppb
699-42-37	29-Jul-94	B0C738	Naphthalene	1.2	U		ppb
699-42-37	29-Jul-94	B0C738	Pentachlorophenol	1.7	U		ppb
699-42-37	29-Jul-94	B0C738	Phenol	0.5	U		ppb
699-42-37	29-Jul-94	B0C738	Tetradecane	3	U		ppb
699-42-37	29-Jul-94	B0C738	Tributyl Phosphate	3.9	U		ppb
699-42-37	29-Jul-94	B0C738	Tris-2-chloroethyl phosphate	2.2	U		ppb
699-42-37	29-Jul-94	B0C738	m-Cresol	6.3	XU		ppb
699-42-37	29-Jul-94	B0C6W8	2,4,6-Trichlorophenol	1.6	U		ppb
699-42-37	29-Jul-94	B0C6W8	2,4-Dichlorophenol	1.5	U		ppb
699-42-37	29-Jul-94	B0C6W8	2,4-Dimethylphenol	1.5	U		ppb
699-42-37	29-Jul-94	B0C6W8	2,4-Dinitrophenol	1.8	U		ppb
699-42-37	29-Jul-94	B0C6W8	2,6-Dichlorophenol	2.2	U		ppb
699-42-37	29-Jul-94	B0C6W8	2-Chlorophenol	1.5	U		ppb
699-42-37	29-Jul-94	B0C6W8	2-Nitrophenol	1.7	U		ppb
699-42-37	29-Jul-94	B0C6W8	2-sec-Butyl-4,6-dinitrophenol(DNBP)	1.7	U		ppb
699-42-37	29-Jul-94	B0C6W8	4,6-Dinitro-2-methylphenol	1.6	U		ppb
699-42-37	29-Jul-94	B0C6W8	4-Chloro-3-methylphenol	1.5	U		ppb
699-42-37	29-Jul-94	B0C6W8	4-Nitrophenol	1.4	U		ppb
699-42-37	29-Jul-94	B0C6W8	Cresols (methylphenols)	4.8	U		ppb
699-42-37	29-Jul-94	B0C6W8	Pentachlorophenol	1.7	U		ppb
699-42-37	29-Jul-94	B0C6W8	Phenol	0.57	U		ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	29-Jul-94	B0C6W8	Tetrachlorophenols	1.4	U		ppb
699-42-37	29-Jul-94	B0C6W8	Trichlorophenols	2.1	U		ppb
699-42-37	29-Jul-94	B0C6W8	2,4,5-T	0.018	U		ppb
699-42-37	29-Jul-94	B0C6W8	2,4,5-TP	0.015	U		ppb
699-42-37	29-Jul-94	B0C6W8	2,4-D	0.052	U		ppb
699-42-37	29-Jul-94	B0C6W8	2-sec-Butyl-4,6-dinitrophenol(DNBP)	0.24	U		ppb
699-42-37	29-Jul-94	B0C6W8	Total Organic Halogen	7			ppb
699-42-37	29-Jul-94	B0C6W9	Total Organic Halogen	6.8			ppb
699-42-37	29-Jul-94	B0C6X0	Total Organic Halogen	6.1			ppb
699-42-37	29-Jul-94	B0C6X1	Total Organic Halogen	6.8			ppb

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	21-Dec-92	B07TB1	Gross alpha	4.44		2.087	pCi/L
699-40-36	21-Dec-92	B07TB1	Gross beta	8.24		2.886	pCi/L
699-40-36	21-Dec-92	B07TB1	Iodine-129	0.013	U	0.377	pCi/L
699-40-36	21-Dec-92	B07TB1	Tritium	26.8	U	231.1	pCi/L
699-40-36	22-Feb-93	B08717	Gross alpha	1.47	U	1.314	pCi/L
699-40-36	22-Feb-93	B08717	Gross beta	8.77		2.923	pCi/L
699-40-36	22-Feb-93	B08717	Tritium	-86.5	U	217.6	pCi/L
699-40-36	13-May-93	B08JD7	Gross alpha	2.87		1.811	pCi/L
699-40-36	13-May-93	B08JD8	Gross alpha	4.15		2.145	pCi/L
699-40-36	13-May-93	B08JD7	Gross beta	9.09		2.963	pCi/L
699-40-36	13-May-93	B08JD8	Gross beta	9.78		3.067	pCi/L
699-40-36	13-May-93	B08JD7	Radium	0.308		0.192	pCi/L
699-40-36	13-May-93	B08JD8	Radium	0.172		0.153	pCi/L
699-40-36	13-May-93	B08JD7	Tritium	-10.2	U	195.7	pCi/L
699-40-36	13-May-93	B08JD8	Tritium	-29.8	U	195	pCi/L
699-40-36	09-Aug-93	B090V1	Gross alpha	3.67		2.015	pCi/L
699-40-36	09-Aug-93	B090V1	Gross beta	8.86		2.969	pCi/L
699-40-36	09-Aug-93	B090V1	Iodine-129	-0.323	U	0.374	pCi/L
699-40-36	09-Aug-93	B090V1	Tritium	38.8	U	217.6	pCi/L
699-40-36	08-Oct-93	B099T7	Gross alpha	5.45		2.525	pCi/L
699-40-36	08-Oct-93	B099T7	Gross beta	8.8		2.937	pCi/L
699-40-36	08-Oct-93	B099T7	Antimony-125	-8.66	U	17.4	pCi/L
699-40-36	08-Oct-93	B099T7	Cesium-137	1.1	U	7.44	pCi/L
699-40-36	08-Oct-93	B099T7	Cobalt-60	3.71	U	6.942	pCi/L
699-40-36	08-Oct-93	B099T7	Ruthenium-106	43.5	U	59.94	pCi/L
699-40-36	08-Oct-93	B099T7	Tritium	174	U	203.9	pCi/L
699-40-36	05-Jan-94	B09Q92	Gross alpha	2.45			pCi/L
699-40-36	05-Jan-94	B09Q92	Gross beta	7.94			pCi/L
699-40-36	05-Jan-94	B09Q92	Iodine-129, Low level	-0.133	U		pCi/L
699-40-36	05-Jan-94	B09Q92	Tritium	9.27	U		pCi/L

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Appendix B.4 - Radionuclides

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Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-40-36	14-Apr-94	B0BRG2	Gross alpha	21		7.469	pCi/L
699-40-36	14-Apr-94	B0BRG2	Gross beta	36.5		5.506	pCi/L
699-40-36	14-Apr-94	B0BRG2	Iodine-129, Low level	1	U		pCi/L
699-40-36	14-Apr-94	B0BRG2	Tritium	-46.4	U	187	pCi/L
699-40-36	01-Aug-94	B0C6S2	Gross alpha	8.92		3.486	pCi/L
699-40-36	01-Aug-94	B0C6S2	Gross beta	13.9		3.442	pCi/L
699-40-36	01-Aug-94	B0C6S2	Tritium	1.03	U	326.8	pCi/L
699-41-35	21-Dec-92	B07TB9	Gross alpha	7.4		2.856	pCi/L
699-41-35	21-Dec-92	B07TB9	Gross beta	8.37		2.918	pCi/L
699-41-35	21-Dec-92	B07TB9	Iodine-129	-0.03	U	0.277	pCi/L
699-41-35	21-Dec-92	B07TB9	Tritium	-15.7	U	228.9	pCi/L
699-41-35	22-Feb-93	B08707	Gross alpha	1.88	U	1.043	pCi/L
699-41-35	22-Feb-93	B08707	Gross beta	4.47	U	2.516	pCi/L
699-41-35	22-Feb-93	B08707	Tritium	-63.4	U	218.8	pCi/L
699-41-35	13-May-93	B08JF7	Gross alpha	5.21		2.507	pCi/L
699-41-35	13-May-93	B08JF7	Gross beta	7.26		2.871	pCi/L
699-41-35	13-May-93	B08JF7	Radium	0.119	U	0.132	pCi/L
699-41-35	13-May-93	B08JF7	Tritium	-15.8	U	195.4	pCi/L
699-41-35	09-Aug-93	B090V6	Gross alpha	3.45		1.863	pCi/L
699-41-35	09-Aug-93	B090V6	Gross beta	8.59		2.921	pCi/L
699-41-35	09-Aug-93	B090V6	Iodine-129	-0.254	U	0.405	pCi/L
699-41-35	09-Aug-93	B090V6	Tritium	-116	U	210.1	pCi/L
699-41-35	08-Oct-93	B099W3	Gross alpha	3.87		1.984	pCi/L
699-41-35	08-Oct-93	B099W3	Gross beta	7.07		2.823	pCi/L
699-41-35	08-Oct-93	B099W3	Antimony-125	-5.29	U	16.8	pCi/L
699-41-35	08-Oct-93	B099W3	Cesium-137	7.13		5.4	pCi/L
699-41-35	08-Oct-93	B099W3	Cobalt-60	0.294	U	6.98	pCi/L
699-41-35	08-Oct-93	B099W3	Ruthenium-106	-2.19	U	62.14	pCi/L
699-41-35	08-Oct-93	B099W3	Tritium	95.5	U	199.7	pCi/L
699-41-35	19-Jan-94	B09Q96	Gross alpha	5.67			pCi/L

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Appendix B.4 - Radionuclides

Groundwater Data Report 12/20/94

Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-41-35	19-Jan-94	B09Q96	Gross beta	8.08			pCi/L
699-41-35	19-Jan-94	B09Q96	Iodine-129, Low level	0.034	U	0.362	pCi/L
699-41-35	19-Jan-94	B09Q96	Tritium	82.5	U		pCi/L
699-41-35	14-Apr-94	B0BRG7	Gross alpha	6.63		2.943	pCi/L
699-41-35	14-Apr-94	B0BRG7	Gross beta	11.4		3.23	pCi/L
699-41-35	14-Apr-94	B0BRG7	Iodine-129, Low level	0.141	U	0.352	pCi/L
699-41-35	14-Apr-94	B0BRG7	Tritium	-23.2	U	188.2	pCi/L
699-41-35	03-Aug-94	B0C6T9	Tritium	66.9	U	186.9	pCi/L
699-42-37	22-Dec-92	B07TC4	Gross alpha	6.09		2.62	pCi/L
699-42-37	22-Dec-92	B07TC4	Gross beta	4.32	U	2.52	pCi/L
699-42-37	22-Dec-92	B07TC4	Iodine-129	0.431	U	0.313	pCi/L
699-42-37	22-Dec-92	B07TC4	Tritium	186	U	239.4	pCi/L
699-42-37	23-Feb-93	B08712	Gross alpha	4.03		2.107	pCi/L
699-42-37	23-Feb-93	B08712	Gross beta	5.23	U	2.58	pCi/L
699-42-37	23-Feb-93	B08712	Tritium	-18.2	U	220.9	pCi/L
699-42-37	13-May-93	B08JG2	Gross alpha	3.27		1.787	pCi/L
699-42-37	13-May-93	B08JG2	Gross beta	5.05		2.61	pCi/L
699-42-37	13-May-93	B08JG2	Radium	0.12	U	0.13	pCi/L
699-42-37	13-May-93	B08JG2	Tritium	-71.6	U	192.2	pCi/L
699-42-37	30-Aug-93	B090W1	Gross alpha	4.74		2.364	pCi/L
699-42-37	30-Aug-93	B090W2	Gross alpha	5.27		2.315	pCi/L
699-42-37	30-Aug-93	B090W1	Gross beta	4.39		2.538	pCi/L
699-42-37	30-Aug-93	B090W2	Gross beta	4.37		2.63	pCi/L
699-42-37	30-Aug-93	B090W1	Iodine-129, Low level	0.143	U		pCi/L
699-42-37	30-Aug-93	B090W2	Iodine-129, Low level	-0.253	U		pCi/L
699-42-37	30-Aug-93	B090W1	Tritium	-99.3	U	193.8	pCi/L
699-42-37	30-Aug-93	B090W2	Tritium	14.9	U	199.2	pCi/L
699-42-37	08-Oct-93	B099X5	Gross alpha	5.33		2.476	pCi/L
699-42-37	08-Oct-93	B099X5	Gross beta	7.48		2.788	pCi/L
699-42-37	08-Oct-93	B099X5	Antimony-125	15.2		14.85	pCi/L

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Appendix B.4 - Radionuclides

Groundwater Data Report 12/20/94

Well	Sample Date	Sample Number	Constituent Name	Result	Qualifier	Error	Units
699-42-37	08-Oct-93	B099X5	Cesium-137	2.43	U	5.446	pCi/L
699-42-37	08-Oct-93	B099X5	Cobalt-60	5.39	U	6.53	pCi/L
699-42-37	08-Oct-93	B099X5	Ruthenium-106	-17.4	U	47.78	pCi/L
699-42-37	08-Oct-93	B099X5	Tritium	105	U	200.1	pCi/L
699-42-37	07-Jan-94	B09QB0	Gross alpha	5.47			pCi/L
699-42-37	07-Jan-94	B09QB0	Gross beta	7.32			pCi/L
699-42-37	07-Jan-94	B09QB0	Iodine-129, Low level	0.2	U		pCi/L
699-42-37	07-Jan-94	B09QB0	Tritium	70.2	U		pCi/L
699-42-37	11-Apr-94	B0BRH2	Gross alpha	8.16		3.095	pCi/L
699-42-37	11-Apr-94	B0BRH2	Gross beta	7.74		2.83	pCi/L
699-42-37	11-Apr-94	B0BRH2	Iodine-129, Low level	0.091	U	0.229	pCi/L
699-42-37	11-Apr-94	B0BRH2	Tritium	-41.8	U	186.7	pCi/L
699-42-37	29-Jul-94	B0C6W8	Gross alpha	6.73		2.891	pCi/L
699-42-37	29-Jul-94	B0C6W8	Gross beta	6.7		2.818	pCi/L
699-42-37	29-Jul-94	B0C6W8	Tritium	-22.3	U	182.5	pCi/L

APPENDIX C

BACKGROUND GROUNDWATER CHEMISTRY CHARACTERISTICS

CONTENTS

C.1	Status Summary of Background Groundwater Characteristics for the 200 Area Treated Effluent Disposal Facility	C-3
C.2	Background Values for the Anticipated Constituents of Concern for the 200 Area Treated Effluent Disposal Facility	C-5

**Appendix C.1. Status Summary of Background Groundwater Characteristics for the 200 Area
Treated Effluent Disposal Facility.**

Constituent ^a or Characteristic	Well 699-42-37	Well 699-41-35	Well 699-40-36
Total trihalomethanes	No data	No data	No data
Bis (2-ethylhexyl) phthalate	ND	ND	ND
Methylene chloride	No data	No data	No data
Phenol	ND	ND	ND
Carbon tetrachloride	ND	ND	ND
1,1,1 trichloroethane	ND	ND	ND
Cyanide	ND	ND	ND
Conductivity, field (μ mho/cm)	415	340	352
pH (in pH units)	7.31-8.59	6.90-8.94	7.26-8.46
Temperature (°C)	18.5	18.9	18.6
Total dissolved solids	332,000	246,000	266,000
Total suspended solids	No data	No data	No data
Nitrate (as NO ₃ ⁻)	8,167	1,168	1,085
Arsenic, unfiltered	7	6	21
Barium, unfiltered	119	171	107
Mercury, unfiltered	ND	ND	ND
Cadmium, unfiltered	ND	ND	ND
Chromium, unfiltered	165	781	776
Lead, unfiltered	ND	ND	ND
Iron, unfiltered	16,941	948	5,243
Manganese, unfiltered	431	283	307
Chloride	8,702	4,117	3,903
Sulfate	47,661	12,919	23,803
Calcium, unfiltered	28,834	20,003	17,148
Magnesium, unfiltered	12,166	7,965	5,925

^aUnits in parts per billion (ppb) unless otherwise noted.

ND = essentially not detected.

**Appendix C.1. Status Summary of Background Groundwater Characteristics for the 200 Area
Treated Effluent Disposal Facility.**

Constituent ^a or Characteristic	Well 699-42-37	Well 699-41-35	Well 699-40-36
Biological oxygen demand (5 day)	No data	No data	No data
Orthophosphate	No data	No data	No data
Total phosphate	ND	ND	ND
Sodium, unfiltered	40,206	53,778	54,965
Fluoride	1,495	1,795	1,623
Selenium, unfiltered	ND	ND	ND
Silver, unfiltered	ND	ND	ND
Copper, unfiltered	ND	ND	ND
Zinc, unfiltered	877	501	27,415
radium, 226 (pCi/L)	No data	No data	No data
radium, total (pCi/L)	Insufficient data	Insufficient data	Insufficient data
Gross alpha (pCi/L)	13.27	23.96	18.27
Gross beta (pCi/L)	12.79	20.01	17.51
Tritium (pCi/L)	ND	ND	ND

^aUnits in parts per billion (ppb) unless otherwise noted.

ND = essentially not detected.

**Appendix C.2. Background Values for the Anticipated Constituents of Concern
for the 200 Area Treated Effluent Disposal Facility.**

Constituent or Characteristic	Well 699-42-37 (Upgradient)	Well 699-41-35 (Downgradient)	Well 699-40-36 (Downgradient)
Arsenic			
n	6	6	6
GT	4	4	3
LT	2	2	3
Mean (ppb)	0.5027	0.4838	0.3298
Std. Dev. (ppb)	0.0977	0.0743	0.2700
k	3.707	3.707	3.707
TL (ppb)	7	6	21
Nitrate			
n	5	6	6
GT	5	5	4
LT	0	1	2
Mean ^a	3.6574	2.4394 ^b	2.2000 ^b
Std. Dev. ^a	0.0606	0.1694 ^b	0.2254 ^b
k	4.202	3.707	3.707
TL (ppb)	8,167	1,168	1,085
pH (field)			
n	8	8	8
GT	8	8	8
LT	0	0	0
Mean (in pH unit)	7.95	7.92	7.86
Std. Dev. (pH unit)	0.1717	0.2744	0.1616
k	3.732	3.732	3.732
TL (in pH unit)	[7.31, 8.59]	[6.90, 8.94]	[7.26, 8.46]
Iron, unfiltered			
n	5	5	5
GT	5	5	5
LT	0	0	0
Mean ^a	2.9095	2.3928	2.8792
Std. Dev. ^a	0.3140	0.1390	0.2000
k	4.202	4.202	4.202
TL (ppb)	16,941	948	5,243

n = total number of samples.

GT = number of samples greater than the detection limit.

LT = number of samples less than or equal to the detection limit.

TL = tolerance limit.

^aIn log unit.

^bDetermined by Cohen's method.

**Appendix C.2. Background Values for the Anticipated Constituents of Concern
for the 200 Area Treated Effluent Disposal Facility.**

Constituent or Characteristic	Well 699-42-37 (Upgradient)	Well 699-41-35 (Downgradient)	Well 699-40-36 (Downgradient)
Manganese, unfiltered			
n	7	7	6
GT	7	7	6
LT	0	0	0
Mean ^a	2.016	2.190	2.117
Std. Dev. ^a	0.182	0.077	0.100
k	3.399	3.399	3.707
TL (ppb)	431	283	307
TDS			
n	5	5	5
GT	5	5	5
LT	0	0	0
Mean ^a	2.3773	2.3178	2.3538
Std. Dev. ^a	0.0343	0.0174	0.0170
k	4.202	4.202	4.202
TL (ppm)	332	246	266
Barium, unfiltered			
n	6	7	5
GT	6	7	5
LT	0	0	0
Mean ^a	1.8287	2.1271	1.8631
Std. Dev. ^a	0.0668	0.0315	0.0398
k	3.707	3.399	4.202
TL (ppb)	119	171	107
Chromium, unfiltered			
n	6	7	7
GT	6	5	7
LT	0	2	0
Mean ^a	1.7096	1.4794 ^b	1.6101
Std. Dev. ^a	0.1367	0.4158 ^b	0.3766
k	3.707	3.399	3.399
TL (ppb)	165	781	776

n = total number of samples.

GT = number of samples greater than the detection limit.

LT = number of samples less than or equal to the detection limit.

TL = tolerance limit.

^aIn log unit.

^bDetermined by Cohen's method.

**Appendix C.2. Background Values for the Anticipated Constituents of Concern
for the 200 Area Treated Effluent Disposal Facility.**

Constituent or Characteristic	Well 699-42-37 (Upgradient)	Well 699-41-35 (Downgradient)	Well 699-40-36 (Downgradient)
Chloride			
n	6	6	6
GT	6	6	6
LT	0	0	0
Mean ^a	3.9007	3.5245	3.5269
Std. Dev ^a .	0.0105	0.0243	0.0174
k	3.707	3.707	3.707
TL (ppb)	8,702	4,117	3,903
Sulfate			
n	4 ^b	5 ^b	5 ^b
GT	4	5	5
LT	0	0	0
Mean ^a	4.3885	3.8986	3.9497
Std. Dev ^a .	0.0563	0.0506	0.1016
k	5.145	4.202	4.202
TL (ppb)	47,661	12,919	23,803
Calcium, unfiltered n			
GT	6	7	5
LT	6	7	5
Mean ^a	0	0	0
Std. Dev ^a .	4.3828	4.262	4.1817
k	0.0208	0.0115	0.0125
TL	3.707	3.399	4.202
	28,834	20,003	17,148
Magnesium, unfiltered			
n	7	7	6
GT	7	7	6
LT	0	0	0
Mean ^a	4.0090	3.8349	3.7130
Std. Dev ^a .	0.0224	0.0195	0.0161
k	3.399	3.399	3.707
TL (ppb)	12,166	7,965	5,925

n = total number of samples.

GT = number of samples greater than the detection limit.

LT = number of samples less than or equal to the detection limit.

TL = tolerance limit.

^aIn log unit.

^bExcluding measurements taken on February 1993 due to large analytical errors.

**Appendix C.2. Background Values for the Anticipated Constituents of Concern
for the 200 Area Treated Effluent Disposal Facility.**

Constituent or Characteristic	Well 699-42-37 (Upgradient)	Well 699-41-35 (Downgradient)	Well 699-40-36 (Downgradient)
Sodium, unfiltered			
n	6	6	6
GT	6	6	6
LT	0	0	0
Mean ^a	4.5561	4.6294	4.6741
Std. Dev. ^a	0.0130	0.0273	0.0178
k	3.707	3.707	3.707
TL (ppb)	40,206	53,778	54,965
Fluoride			
n	6	6	6
GT	6	6	6
LT	0	0	0
Mean ^a	2.9978	2.9804	3.0257
Std. Dev. ^a	0.0477	0.0738	0.0498
k	3.707	3.707	3.707
TL (ppb)	1,495	1,795	1,623
Zinc, unfiltered			
n	7	7	5
GT	7	7	5
LT	0	0	0
Mean ^a	1.7117	1.6981	1.3718
Std. Dev. ^a	0.3623	0.2948	0.7297
k	3.399	3.399	4.202
TL (ppb)	877	501	27,415
Temperature			
n	8	9	9
GT	8	9	9
LT	0	0	0
Mean (°C)	17.06	16.89	17.66
Std. Dev. (°C)	0.442	0.655	0.324
k	3.188	3.031	3.031
TL (°C)	18.5	18.9	18.6

n = total number of samples.

GT = number of samples greater than the detection limit.

LT = number of samples less than or equal to the detection limit.

TL = tolerance limit.

^aIn log unit.

**Appendix C.2. Background Values for the Anticipated Constituents of Concern
for the 200 Area Treated Effluent Disposal Facility.**

Constituent or Characteristic	Well 699-42-37 (Upgradient)	Well 699-41-35 (Downgradient)	Well 699-40-36 (Downgradient)
Conductivity, field			
n	9	9	9
GT	9	9	9
LT	0	0	0
Mean ($\mu\text{mho/cm}$)	361.1	322.6	314.8
Std. Dev. ($\mu\text{mho/cm}$)	17.8934	5.8893	12.3350
k	3.031	3.031	3.031
TL ($\mu\text{mho/cm}$)	415	340	352
Gross Alpha			
n	8	8	6
GT	8	8	6
LT	0	0	0
Mean ^a	0.7260	0.6889	0.5084
Std. Dev. ^a	0.1245	0.2166	0.2032
k	3.188	3.188	3.707
TL (pCi/L)	13.27	23.96	18.27
Gross Beta			
n	8	7	7
GT	8	7	7
LT	0	0	0
Mean ^a	0.7690	0.8831	0.9669
Std. Dev. ^a	0.1060	0.1230	0.0813
k	3.188	3.399	3.399
TL (pCi/L)	12.79	20.01	17.51

n = total number of samples.

GT = number of samples greater than the detection limit.

LT = number of samples less than or equal to the detection limit.

TL = tolerance limit.

^aIn log unit.

APPENDIX D

BACKGROUND SOILS CHEMISTRY

SAMPLE NUMBER	B075C2	B075C3	B075C4	B075C5	B075C8	B075D6
METALS						
aluminum	6360	5940	5270	5910	9770	4770
antimony	4.0	6.4	3.5	4.5	3.2u	4.1
arsenic	3.2	2.8	2.0	1.8	1.0	1.5
barium	75.4	75.4	70.8	73.7	33.8	54.0
beryllium	0.37	0.33	0.33	0.29	0.60	0.38
cadmium	0.29u	0.31u	0.31u	0.30u	0.33	0.33u
calcium	6910	6750	6260	6800	3780	5000
chromium	9.3	17.0	4.7	24.7	9.5	8.8
hexavalent Cr	<0.49 *	<0.50 *	<0.50 *	<0.50 *	<0.50 *	<0.50 *
cobalt	12.8	12.4	11.2	13.0	5.3	8.6
copper	19.6	15.3	13.4	16.2	10.0	10.7
iron	23800	24400	22200	22700	8070e	12200
lead	9.1	3.6	3.4	3.6	6.7	2.9
magnesium	4570	4130	3680	4090	3700	2980
manganese	297	288	275	304	193	200
mercury	0.05u	0.05u	0.05u	0.05u	0.05u	0.06u
nickel	8.8	12.3	5.8	16.1	5.4	8.9
potassium	882	925	842	805	1860	730
selenium	0.55u	0.58u	0.58u	0.60u	0.82	0.65u
silver	2.1	1.8	1.7	2.2	0.78u	1.5
sodium	291	352	323	478	89.4	226
thallium	0.25u	0.26u	0.26u	0.27u	0.88u	0.86u
vanadium	58.2	62.6	57.4	60.0	13.9	36.6
zinc	43.7	42.1	39.8	41.5	19.2	28.4

SAMPLE NUMBER	B075C2	B075C3	B075C4	B075C5	B075C8	B075D6
ANIONS						
chloride	11	10	13	17	15	7
fluoride	3	2	3	2	2	2
phosphate	<4	<4	<4	<4	<4	<4
sulfate	30	35	34	38	54	25
nitrate/nitrite (as N)	<2.50	<2.49	<2.42	<2.40	<2.44	<2.42
OTHER CONSTITUENTS						
cyanide	0.51u	0.52u	0.49u	0.49u	0.59	0.56u
pH	8.10	8.28	8.29	8.50	7.27	8.67
RADIONUCLIDES (picocuries/gram)						
gross alpha	5.5 *	1.9 *	7.4 *	5.2 *	3.5 *	7.8 *
gross beta	11	6.8	9.4	15	16	17
⁴⁰ K	7.7	6.6	8.0	7.0	10	6.5
²²⁶ Ra	0.28	0.27	0.40	0.27	0.45	0.48
²²⁸ Th	0.45	0.38	0.48	0.55	0.93	0.99
²³² Th	0.74	0.45	0.73	0.35	1.0	0.90

u - The constituent was analyzed for, but not detected. The value shown is the method detection limit or the sample quantitation limit.

• - Reported value is designated unusable (see text).

e - The value given is suspected of error.

SAMPLE NUMBER	B075D2	B075D3	B075D4 ^d	B075D5	B075D7	B075D9	B075F2 ^d	B075F3
METALS								
aluminum	6160	5540	5530	5260	4900	12700	16600	4210
antimony	4.6	4.4	3.6u	4.4	5.6	3.7u	3.7u	3.9u
arsenic	2.9	2.8	2.6	2.1	1.1	0.69	0.90	1.3
barium	64.9	60.3	57.3	72.3	64.7	30.5	32.6	67.9
beryllium	0.30	0.36	0.33	0.30	0.33	0.86	0.87	0.09u
cadmium	0.30u	0.32u	0.31u	0.31u	0.28u	0.22u	0.22u	0.23u
calcium	14500	7890	8400	5750	5830	10600	14400	2290
chromium	7.1	6.2	6.4	6.5	10.3	15.9	19.4	10.6
hexavalent Cr	<0.50 *	<0.50 *	<0.50 *	<0.50 *	<0.50 *	<0.50 *	<0.50 *	<0.50 *
cobalt	12.1	12.2	12.2	12.8	13.8	8.2	8.7	4.9
copper	17.3	16.4	16.3	16.6	15.0	14.1	17.1	9.7
iron	22500	22700	22700	21900	23300	12300	17600	10100
lead	3.5	3.8	3.9	3.4	2.5	15.5	14.9	2.4
magnesium	4720	4480	4830	3950	3870	7220	8260	2110
manganese	331	289	288	260	284	302	326	159
mercury	0.05u	0.05u	0.05u	0.05u	0.05u	0.06u	0.06u	0.06u
nickel	7.9	7.5	7.5	7.4	9.9	19.3	21.8	6.5
potassium	911	956	887	785	764	1480	1700	786
selenium	0.60u	0.60u	0.60u	0.59u	0.57u	0.70	1.3	0.82
silver	1.2	1.5	1.7	1.1	1.2	0.55	0.64	0.57u
sodium	399	318	320	459	446	117	143	178
thallium	0.79u	0.78u	0.79u	0.77u	0.74u	0.30u	0.29u	0.29u
vanadium	58.2	55.3	56.0	58.9	67.9	13.7	18.2	28.1
zinc	43.3	44.8	45.1	41.1	43.7	48.3	56.7	19.4

SAMPLE NUMBER	B075D2	B075D3	B075D4 ^d	B075D5	B075D7	B075D9	B075F2 ^d	B075F3
ANIONS								
chloride	5	5	5	6	5	10	10	6
fluoride	3	2	3	3	3	5	4	2
phosphate	<4u	<4u	<4u	<4u	<4u	<4u	<4u	<4u
sulfate	26	23	23	33	28	63	60	22
nitrate/nitrite (as N)	3.66	<2.58u	<2.46u	<2.53u	<2.47u	<2.53u	<2.51u	NR
OTHER CONSTITUENTS								
cyanide	0.50u	0.50u	0.50u	0.50u	0.50u	0.58u	0.60u	0.59u
pH	8.80	8.80	8.87	8.79	8.91	8.36	8.31	8.91
RADIONUCLIDES (picocuries/gram)								
gross alpha	4.0 *	6.0 *	3.1 *	4.8 *	0.87 *	14 *	6.4 *	3.8 *
gross beta	1.0	16	6.3	3.6	4.4	25	21	17
⁴⁰ K	5.9	8.3	8.8	9.3	7.0	15	13	7.2
²²⁶ Ra	0.28	0.39	0.28	0.38	0.34	0.34	0.65	0.33
²²⁸ Th	0.45	0.44	0.39	0.63	0.37	1.1	1.4	0.28
²³² Th	0.34	0.46	0.70	u	0.29	1.2	1.0	0.33

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* - Reported value is designated unusable (see text).

NR - Analysis not requested.

^d - Duplicate sample

SAMPLE NUMBER	B075C6	B075C7	B075C9	B075D0	B075F4	B07HG0
METALS						
aluminum	5110	5560	5630	4960	16500	5280
antimony	7.0	7.2	3.6	3.7	3.7u	3.5u
arsenic	2.7	2.5	2.9	2.4	1.3	1.3
barium	60.7	59.9	61.9	64.3	110e	68.6
beryllium	0.22	0.26	0.33	0.24	1.2	0.57
cadmium	0.31u	0.31u	0.30u	0.29u	0.38u	0.21u
calcium	9450	7010	6720	7030	5300	5740
chromium	7.5	8.3	6.4	6.7	19.1	8.7
hexavalent Cr	<0.50 *	<0.50 *	<0.50 *	<0.50 *	<0.50 *	<0.50 *
cobalt	13.6	12.9	12.3	12.0	5.6	7.6
copper	18.9	16.8	15.8	14.0	28.3	16.4
iron	24400	22900	23800	23300	20200	13200
lead	3.6	3.6	4.1	3.9	14.0	4.5
magnesium	4280	3760	4040	4120	4700	2990
manganese	293	303	288	291	417	210
mercury	0.05u	0.05u	0.05u	0.05u	0.06u	0.06u
nickel	7.8	8.0	6.3	7.2	8.0	7.6
potassium	769	827	899	783	1760	639
selenium	0.56u	0.64	0.71	0.67	0.87u	0.76u
silver	1.4	1.2	1.2	1.5	0.90u	0.52u
sodium	441	490	394	332	176	296
thallium	0.33u	0.33u	0.76u	0.77u	0.31u	0.36u
vanadium	68.0	67.8	65.4	59.2	25.5	32.7
zinc	45.8	45.1	43.0	41.1	51.8	29.4

SAMPLE NUMBER	B075C6	B075C7	B075C9	B075D0	B075F4	B07HG0
ANIONS						
chloride	14	11	11	14	11	3.7
fluoride	4	3	3	3	3	0.8
phosphate	<4u	<4u	<4u	<4u	<4u	<1u
sulfate	40	30	29	38	53	9
nitrate/nitrite (as N)	<2.49u	<2.47u	<2.42	<2.52	<2.45	<2.46
OTHER CONSTITUENTS						
cyanide	0.52	0.52u	0.50u	0.51u	0.63u	0.54u
pH	8.62	8.81	8.27	8.35	7.93	8.84
RADIONUCLIDES (picocuries/gram)						
gross alpha	2.6*	2.9*	11*	4.7*	8.9*	5.0*
gross beta	11	2.8	14	4.2	14	14
⁴⁰ K	8.5	8.0	10	7.3	16	8.4
²²⁶ Ra	0.36	0.33	0.31	0.35	0.65	0.52
²²⁸ Th	0.54	0.46	0.38	0.49	1.7	0.80
²³² Th	0.46	0.50	0.45	u	1.3	0.58

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e - The value given is suspected of error.

Detected VOC and Semi-VOC in Sediments at Project W-049H

Detected Volatile Organic Compounds - Maximum Concentrations

Compound	Max. Concentration (ug/kg)	Sample Number
Methylene Chloride*	91	B075F4
Acetone*	130	B075F3
4-Methyl-2-pentanone	36	B075D6
Tentatively Identified Compound(s)	81	B075D4

* Probable lab contamination

Detected Semi-volatile Organic Compounds - Maximum Concentrations

Compound	Max. Concentration (ug/kg)	Sample Number
Di-n-butylphthalate	110	B075F4
Diethylphthalate	80	B075F4
Tentatively Identified Compounds:		
2-pentanone, 4-hydroxy-4-methyl	48,000	B07HGO
3-pentanone-2-one, 4 methyl	1,800	B075G0
furan, 2, 5-dimethyl	1,500	B07HGO
formamide, N, N-dimethyl	370	B07HGO