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Volume XI of XIII

Appendices D17 through D22

Waste Isolation Pilot Plant
Carlsbad, New Mexico

APPENDIX D17

BACKGROUND WATER QUALITY CHARACTERIZATION REPORT FOR THE WASTE ISOLATION PILOT PLANT

BACKGROUND WATER QUALITY CHARACTERIZATION REPORT FOR THE WASTE ISOLATION PILOT PLANT (WIPP)

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List of Abbreviations/Acronyms

Bendix	Bendix Field Engineering Services
BSEP	Brine Sampling and Evaluation Program
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
ft^2/day	square feet per day
gpm	gallons per minute
ITAS	IT Analytical Services
m^2/s	square meters per second
MCL	maximum contaminant level
MDL	method detection limit
µg/ℓ	micrograms per liter
mg/ℓ	milligrams per liter
PCB	polychlorinated biphenyl
RCRA	Resource Conservation and Recovery Act
SDWA	Safe Drinking Water Act
SMCL	secondary maximum contaminant level
SNL	Sandia National Laboratories
TDS	total dissolved solids
TOC	total organic carbon
TOX	total organic halogen
TRU	transuranic
UNC	United Nuclear Corporation
VOC	volatile organic compound
WAESD	Westinghouse Advanced Energy Systems Division
WIPP	Waste Isolation Pilot Plant
WQSP	Water Quality Sampling Program

1.0 Introduction

This report presents water-quality data collected during the preoperational period at the Waste Isolation Pilot Plant (WIPP). The Water Quality Sampling Program (WQSP) has collected groundwater quality data from numerous wells in the vicinity of the WIPP for more than six years to establish the background for the area prior to waste receipt at the WIPP. This report has been prepared to establish the background for numerous water quality parameters including general chemistry, trace metals, and volatile and semi-volatile organic compounds.

1.1 Waste Isolation Pilot Plant

The WIPP, located in southeastern New Mexico, is a research and development facility with the mission to demonstrate the safe and environmentally-sound disposal of radioactive and mixed wastes resulting from defense activities and research programs of the United States government (Figure 1-1). The facility was authorized by the U.S. Department of Energy (DOE) National Security and Military Applications of Nuclear Energy Authorization Act of 1980 (Public Law 96-164).

The WIPP is designed to receive, handle, and emplace defense-generated transuranic (TRU) waste. This waste, generated at other DOE facilities, will be shipped to the WIPP. Waste will be stored 2150 feet underground at the WIPP in the bedded salt deposits of the Salado Formation.

1.2 Water Quality Sampling Program

The WQSP has been responsible for the collection of groundwater samples from wells drilled and completed specifically for WIPP studies, as well as from privately owned water-supply wells located in the WIPP area. The program has been operational since January 1985. Groundwater quality data developed by the WQSP was used to establish the WIPP water quality background characterization.

1.3 Report Organization

Chapter 2.0 discusses the WQSP; monitoring well locations are presented, along with well construction and groundwater sampling procedures. The list of WQSP analytes is also presented in Chapter 2.0. Chapter 3.0 presents the geologic and hydrologic setting of the WIPP Site. Chapter 4.0 provides the methodology used to evaluate the WQSP data; this includes the methods employed to evaluate trends and outliers. Statistical procedures, as well

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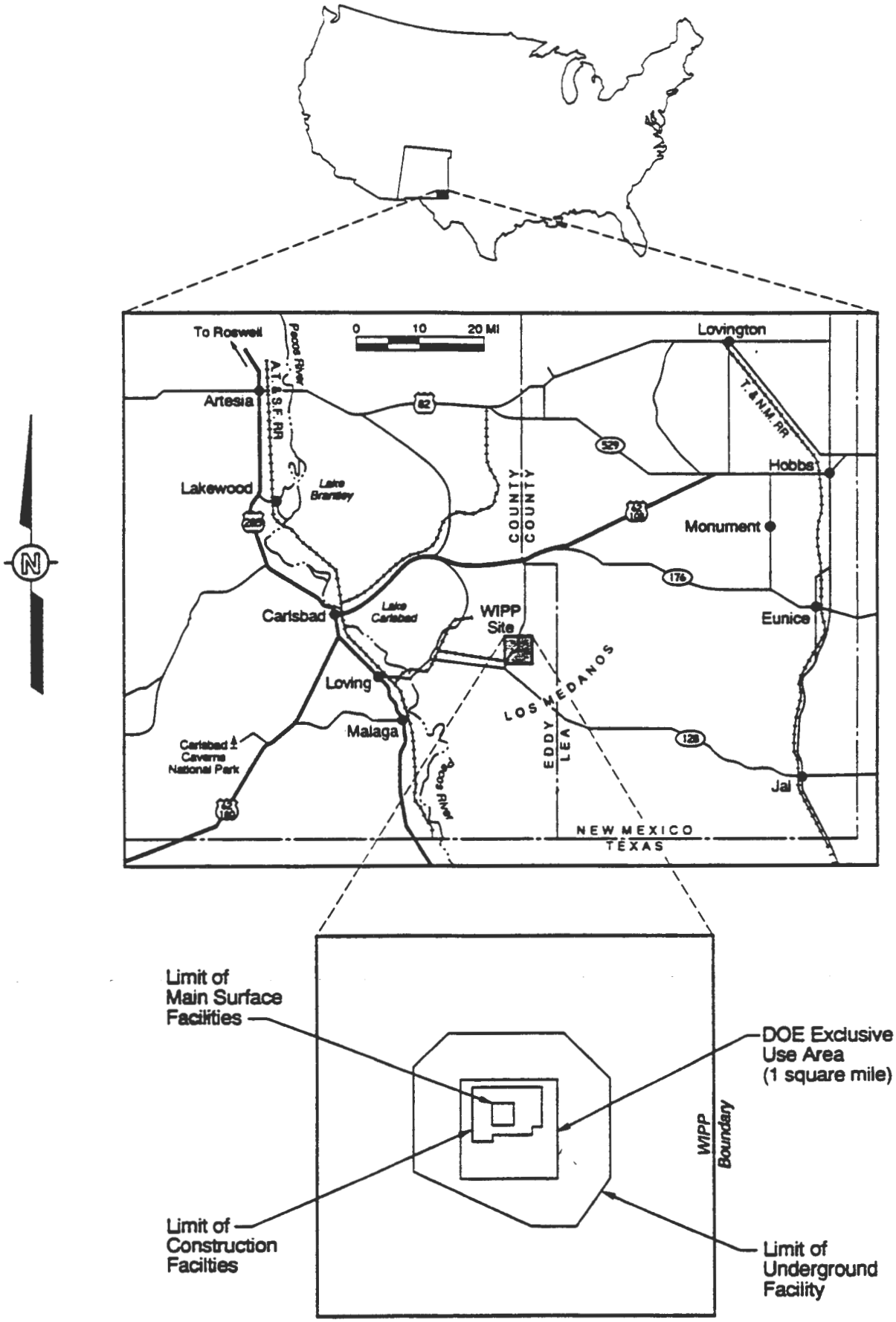

FIGURE 1-1 LOCATION OF WIPP SITE

as, factors that influence data usability are also discussed in Chapter 4.0. Chapter 5.0 presents the results of the WQSP background evaluation, including tabulated background groundwater chemistry data for 28 monitoring wells. Chapter 6.0 is a comparison of WQSP groundwater chemistry to appropriate water quality standards. Finally, Chapter 7.0 provides a summary of findings and conclusions. A compilation of WQSP outlier data and a tabulation of all WQSP data used in this report are included as appendices.

2.0 Water Quality Sampling Program

The WQSP was initiated in January 1985. The objectives of the program have been to collect representative and reproducible groundwater samples from water-bearing zones in the area of the WIPP Site. A program plan initially developed by Colton and Morse (1985) defined the basic structure and operational activities for the program. The monitoring plan was revised in 1987, and the "Waste Isolation Pilot Plant Water Quality Sampling Manual," *WP 7-2*, Revision 1 (Westinghouse, 1987) became the governing document for the program in 1988. This document was subsequently revised (Westinghouse, 1991a). This manual describes the specific monitoring techniques used, lists the specific WQSP monitoring wells to be sampled, and identifies the types of analyses required for the program. Specific procedures detailing sample collection techniques and methods for field analyses have also been prepared and were followed during all groundwater sampling activities. These procedures can be found in the "Waste Isolation Pilot Plant Groundwater Monitoring Program Plan and Procedures Manual," *WP 02-1* (Westinghouse, 1991b).

2.1 Programs Supported by the Water Quality Sampling Program

The water-quality analytical data generated by the WQSP have directly supported five major programs at the WIPP. These programs include site characterization, performance assessment (compliance with 40 CFR 191), the Radiological Baseline Program, Operational Environmental Monitoring Program, and the Ecological Monitoring Program. Additionally, the Environmental Evaluation Group has been provided with water samples from each sampling site for independent analysis. The WIPP WQSP was not designed as a Resource Conservation and Recovery Act (RCRA) groundwater monitoring program in accordance with 40 CFR 264 or 265. A brief description of each of the supported programs is given below to illustrate the role of the WQSP at WIPP.

Site Characterization. The geologic and hydrogeologic characteristics of the WIPP area have been studied by Sandia National Laboratories (SNL) for several years. One of the main goals of these studies has been to better understand the flow of groundwater within water-bearing units of the Rustler Formation. The WQSP provided samples to SNL for use in evaluating the flow regimes in the Culebra and Magenta Dolomite Members of the Rustler Formation. These rock units are considered to be the most feasible pathways for radionuclide transport in hypothetical repository breach scenarios. Data from the WQSP were used in

evaluating present groundwater flow directions and the hydrologic evolution of the Rustler Formation in the northern Delaware Basin.

Performance Assessment. The WIPP is required to comply with the U.S. Environmental Protection Agency's (EPA) Environmental Standards for the management and disposal of spent nuclear fuel, high level, and TRU wastes (40 CFR 191). The WQSP supported this effort by providing water chemistry data for use in predictive modeling of the potential solubility and transport of radionuclides and mixed waste components along potential flow pathways.

Radiological Baseline Program. The Radiological Baseline Program was established in 1985 to measure key radiological parameters in a variety of environmental media in and around the WIPP Site during the preoperational period. The WQSP provided groundwater samples to the Westinghouse Advanced Energy Systems Division (WAESD) for the analysis of a suite of radionuclides as part of the Radiological Baseline Program. The results from these analyses were published yearly in the WIPP Annual Site Environmental Report, Reith et al. (1986), Banz et al. (1987), Flynn et al. (1988, 1989). In 1989, the Radiological Baseline Program was superceded by the Operational Environmental Monitoring Program, which continues the monitoring of groundwater for both radiological and nonradiological parameters.

Ecological Monitoring Program. The Ecological Monitoring Program was established in 1984 to monitor the nonradiological impacts of WIPP construction activities on the surrounding ecosystem. The WQSP provided water-quality data on key environmental parameters for groundwater near the WIPP. Samples were routinely analyzed for general-chemical parameters, metals, and EPA-listed hazardous organic substances. In 1989, the Ecological Monitoring Program was superceded by the Operational Environmental Monitoring Program.

2.2 Water Quality Monitoring Locations

The WQSP has sampled 28 separate WIPP monitoring wells since the program began in 1985. Of these 28 wells, 24 were identified for repeated sampling to establish the preoperational baseline at the WIPP. The additional wells have been sampled occasionally upon the request of various WIPP programs. At the time of completion of this report, 24 wells had been sampled a minimum of three separate times. Eleven of the wells have

been sampled three times, six wells sampled four times, and seven wells sampled five times. Table 2-1 lists the WIPP monitoring wells sampled by the WQSP, the formation in which each well is located, and the number of times each well has been sampled. In addition to the WIPP monitoring wells, the WQSP has sampled 11 privately owned wells in the general vicinity of the WIPP. Ten of these wells provide water for livestock; 1 well provides water for human consumption. The same information for these wells is also presented in Table 2-1. The WIPP monitoring wells and the private wells were selected for sampling because of their areal coverage of the WIPP Site (Figure 2-1). The type of well completion and well-production flow rates were also considered. Together, these factors increase the likelihood of obtaining representative water samples from the formations of interest.
Groundwater quality data from the WQSP have been published in annual data reports and in the "Annual Site Environmental Monitoring Report for Calendar Year 1989 and 1990." The data from previous samplings can be found in several publications including: Uhland and Randall (1986), Uhland et al. (1987), Randall et al. (1988), Lyon (1989), and the "Annual Site Environmental Monitoring Reports for Calendar Years 1989 and 1990" (DOE, 1990a, and DOE, 1991).

WIPP monitoring wells are completed in two main water-bearing units at the site, the Culebra and Magenta Dolomite Members of the Rustler Formation. Of the 24 wells sampled as part of the baseline program, 20 of these wells produce water from the Culebra Dolomite and 4 from the Magenta Dolomite.

The privately owned wells are completed in three main water-bearing units. The water-bearing units include the Permian Dewey Lake Redbeds, the Permian Culebra Dolomite, and the Triassic Dockum Group, Undivided. Of the 11 privately owned wells sampled, 4 are completed in the Culebra Dolomite, 5 are completed in the Dewey Lake Redbeds, and 2 in the Dockum Group.

2.3 Monitoring Well Construction

Many of the WIPP monitoring wells were drilled and completed prior to 1980. As the WIPP Project advanced, additional monitoring wells were completed in the vicinity of the site. Drilling of WIPP monitoring wells began in 1976 and continued into 1988. Table 2-2 details the dates of drilling and completion of all WIPP monitoring wells included in the WQSP. Detailed information on monitoring well drilling and completion can be found in Winstanley and Carrasco (1986).

Table 2-1
Wells Sampled by the Water Quality Sampling Program

Well	Formation	Samples
DOE-1	Culebra	3
DOE-2	Culebra	3
DOE-2	Bell Canyon	1
H-02a	Culebra	3
H-02c	Culebra	1
H-03b1	Magenta	5
H-03b3	Culebra	5
H-04b	Culebra	5
H-04c	Magenta	5
H-05b	Culebra	5
H-05c	Magenta	5
H-06b	Culebra	5
H-06c	Magenta	5
H-07b1	Culebra	5
H-08b	Culebra	3
H-09b	Culebra	4
H-11b3	Culebra	5
H-12	Culebra	3
H-14	Culebra	3
H-15	Culebra	3
H-17	Culebra	1
H-18	Culebra	3
P-14	Culebra	3
P-17	Culebra	3
WIPP-13	Culebra	1
WIPP-19	Culebra	5
WIPP-25	Culebra	4
WIPP-26	Culebra	3
WIPP-29	Culebra	2
Private Wells Sampled		
Barn Well	Dewey Lake	4
Clifton Well	Dockum	2
Comanche Well	Dockum	2
Engle Well	Culebra	3
Fairview Well	Dewey Lake	2
Mobley Well	Culebra	2
Poker Trap	Culebra	2
Ranch Well	Dewey Lake	5
Twin Wells - Pasture Well	Dewey Lake	4
Unger Well	Dewey Lake	2
USGS-1	Culebra	2

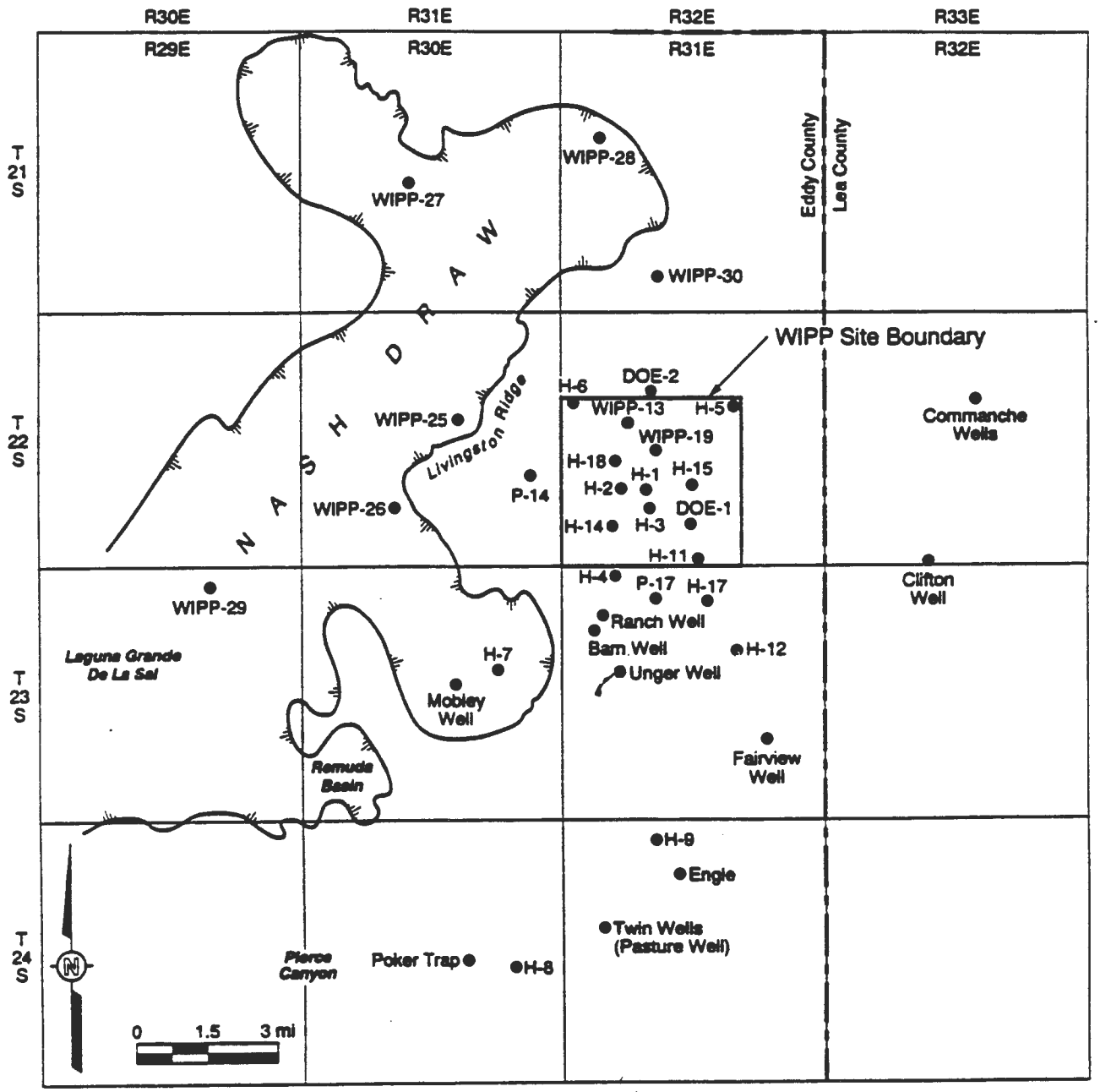

FIGURE 2-1 LOCATION OF WELLS SAMPLED AS PART OF THE WATER QUALITY SAMPLING PROGRAM

Table 2-2
Monitor Well Drilling and Completion Dates

Well	Formation	Completion Type	Date Completed
DOE-1*	Culebra	Perforated	07/82
DOE-2*	Culebra	Perforated	09/84
H-02a	Culebra	Screened	02/77
H-02c	Culebra	Perforated	02/77
H-03b1	Magenta	Perforated	08/76
H-03b3*	Culebra	Open Hole	01/84
H-04b	Culebra	Open Hole	05/78
H-04c	Magenta	Perforated	05/78
H-05b	Culebra	Open Hole	06/78
H-05c	Magenta	Perforated	06/78
H-06b*	Culebra	Open Hole	07/78
H-06c	Magenta	Perforated	06/78
H-07b1*	Culebra	Open Hole	09/79
H-08b	Culebra	Open Hole	08/79
H-09b	Culebra	Open Hole	08/79
H-11b3*	Culebra	Open Hole	01/84
H-12	Culebra	Open Hole	10/83
H-14	Culebra	Open Hole	10/86
H-15	Culebra	Open Hole	11/86
H-17	Culebra	Open Hole	11/87
H-18*	Culebra	Open Hole	11/87
P-14	Culebra	Perforated	10/76
P-17	Culebra	Perforated	10/76
WIPP-13*	Culebra	Perforated	08/78
WIPP-19	Culebra	Perforated	05/78
WIPP-25*	Culebra	Perforated	09/78
WIPP-26	Culebra	Perforated	09/78
WIPP-29*	Culebra	Perforated	10/78

*Sampled using an electric submersible pump.
Source: Winstanley and Carrasco (1986), Beauheim (1987), and Lyon (1989).

In general, all WIPP monitoring wells were drilled as part of the geologic site characterization and resource evaluation programs. Most WIPP monitoring wells were drilled and completed using oil field techniques. Monitoring wells at the site have been completed, generally, in two styles. One type of installation includes drilling the well to some depth below the base of the Culebra Dolomite and then casing the well to the bottom of the hole. The interval of the Culebra or the Magenta Dolomite is then perforated to allow access to the formation for testing or sampling purposes. The second type of completion consists of drilling the hole to a depth just above the top of the Culebra Dolomite, installing well casing to the bottom of the drilled hole, and then coring or drilling through the Culebra Dolomite interval, leaving the interval open to the well. The two types of well completion are shown in Figure 2-2.

These types of well completions presented problems in collecting undisturbed and representative samples from the water-bearing units. The open-hole completions have, in some cases, resulted in sediments below the Culebra Dolomite being exposed in the sampling interval. In some cases, these sediments are rich in halite or other evaporite minerals, causing the water chemistry in the well bore and in the water-bearing unit surrounding the well to be altered. Often, during drilling and completion of monitoring wells, fluids containing fresh water, saturated brines, or other drilling fluids have been introduced into the holes. In some cases, these fluids were left standing in the well bore for extended periods of time resulting in contamination of the surrounding formation (Crawley, 1988).

Well drilling and completion techniques such as those described above are usually not used for installation of monitoring wells employed in RCRA or other groundwater sampling programs, due to the likelihood of aquifer contamination. These practices required that the WQSP utilize extensive groundwater pumping in order to obtain uncontaminated water samples.

Standard oil-field steel well casing was used during completion of the WIPP monitoring wells. This type of casing is easily corroded by the brackish to brine water found in the WIPP area. Based on serial sampling results, it appears that the products of well-casing corrosion migrate from the well bore into the formation, resulting in a halo or plume of groundwater with altered chemistry surrounding the monitoring wells. Obtaining a representative sample has required that the monitoring wells be pumped for long periods of time to remove the contamination.

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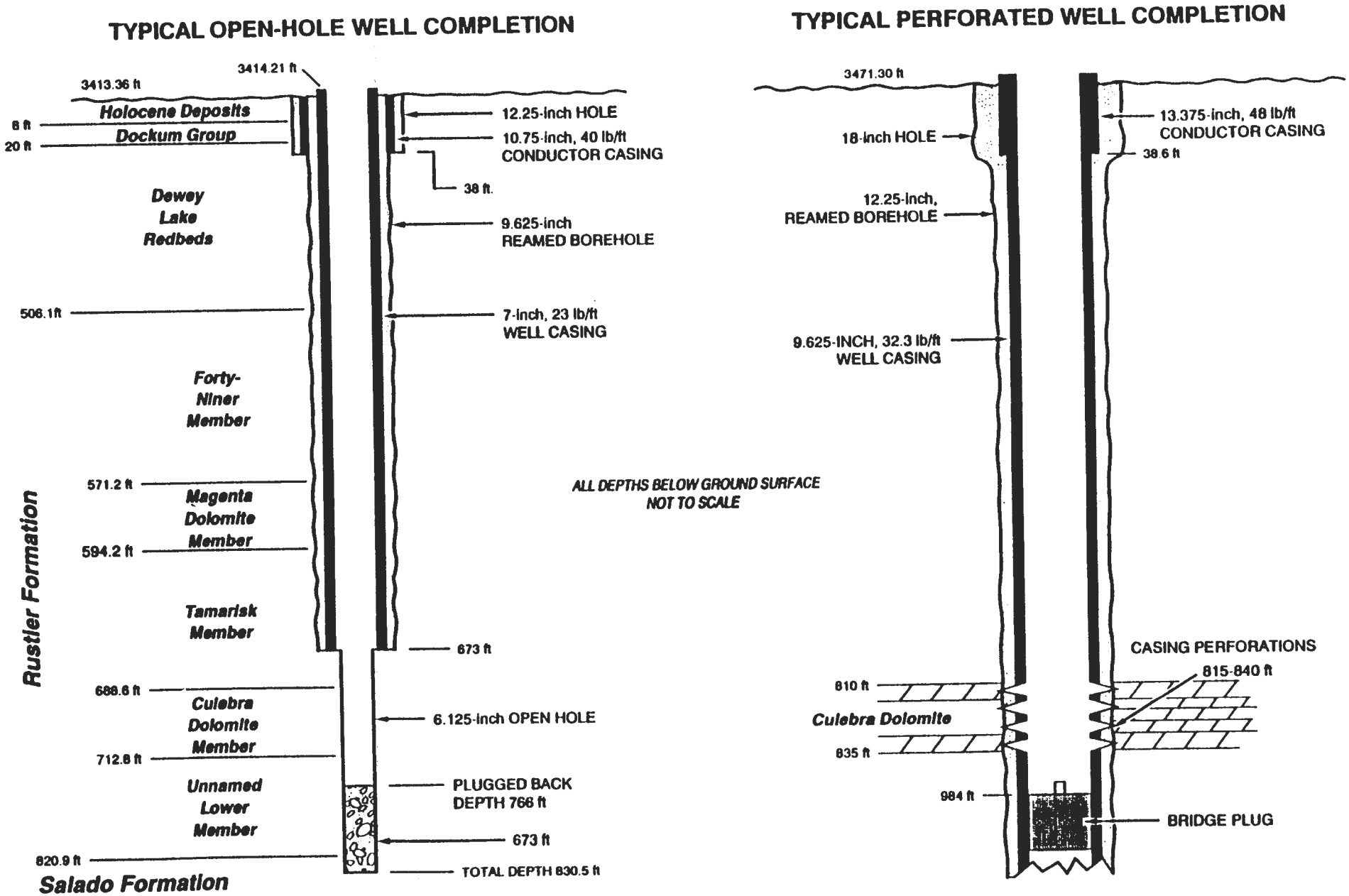

FIGURE 2-2 SCHEMATIC OF THE TWO TYPICAL TYPES OF WIPP MONITOR WELL CONSTRUCTION

The difficulty in obtaining representative groundwater samples, due to the design of the wells used by the WQSP, necessitated use of a serial sampling technique. Serial sampling and the associated equipment are discussed below.

2.4 Sampling Program Description

The WQSP has employed two types of sampling procedures at WIPP: serial sampling and final sampling.

2.4.1 Serial Sampling

Serial sampling is the collection of sequential samples for the purpose of determining when the water chemistry stabilizes or reaches steady state. Ideally, when the water chemistry stabilizes, it is assumed that the chemistry is representative of the native formation fluid, and a final sample is collected. However, in reality, serial sampling leads to the collection of water samples with reproducible chemistries which may or may not be representative of undisturbed groundwater. The water samples may still be impacted by well construction practices and effects from the installation of downhole pumping and sampling equipment. The WQSP generally monitored serial sampling parameters on a daily frequency in a mobile field laboratory that was located at the well site during pumping operations.

The field analytical parameters found to be the most useful in identifying a steady-state condition of the water chemistry include chloride, divalent cations (hardness), and alkalinity, which are analyzed by classic wet chemistry bench methods (titrations). Total and ferrous iron have also been found to be useful indicators and are analyzed using spectrophotometric methods. Other serial sampling parameters analyzed in the field include measurement of pH, Eh, temperature, specific conductance, and specific gravity. The field serial sampling parameters and the frequency at which they are analyzed are as follows:

Field Parameter	Approximate Frequency
Temperature	Daily
pH	Daily
Eh	Daily
Iron (total and ferrous)	Daily
Divalent Cations	Daily
Chloride	Daily
Alkalinity	Daily
Specific Conductance	First and Final Serial Sample
Specific Gravity	First and Final Serial Sample

The three field parameters temperature, Eh, and pH were generally determined using an inline technique that employed a self-contained flow cell. The flow cell was used to isolate the sample from the atmosphere and to maintain sample pressure. The iron, divalent cations, chloride, alkalinity, specific conductance, and specific gravity samples were collected from a nylon sample line running from the pumping equipment at atmospheric pressure. Additional detail on the serial sampling technique is given in the "WIPP Water Quality Sampling Manual," *WP 07-2* (Westinghouse, 1991a).

Serial sampling data will not be presented in the WQSP baseline report. However, all of the serial sampling data collected prior to January 1989 are presented in the Annual Water Quality Data Reports: Uhland and Randall (1986), Uhland et al. (1987), Randall et al. (1988), and Lyon (1989).

2.4.2 Collection of Final Samples

Final groundwater samples were collected once evidence from serial sampling indicated that the pumped groundwater had reached a chemical steady state. Final samples were forwarded to a contract analytical laboratory for analysis of a long list of parameters (Section 2.6). Final samples were collected in the appropriate type of container for the specific analysis to be performed. For each parameter analyzed, a sufficient volume of sample was collected to satisfy the volume requirements of the analytical laboratory. This included an additional volume of sample water necessary for maintaining quality control standards. All final samples were treated, handled, and preserved as required for the specific type of analysis to be performed. Details on the sample preservation methods and sample volumes required for individual types of analyses are given in the "WIPP Water Quality Sampling Manual," *WP 07-2* (Westinghouse, 1991a).

2.5 Groundwater Pumping and Sampling Equipment

The water-bearing units at the WIPP are highly variable in their ability to yield water to monitoring wells. The Culebra Dolomite, which is the most transmissive hydrologic unit in the WIPP area, exhibits transmissivities that range many orders of magnitude across the site area (Section 3.2) and has been the primary focus of the WQSP. The Magenta Dolomite, which has a lower transmissivity, yields very small quantities of water to wells. Because the water-yielding characteristics of the hydrologic units at the WIPP are variable, different types of pumping equipment were required during the WQSP.

The groundwater pumping and sampling systems at each site were designed to provide continuous and adequate production of water so that a repeatable sample could be obtained. The wells listed in Table 2-1 vary in flow rate, production interval depth, and pumping lift. These factors affected the duration of pumping and the equipment required at each well.

2.5.1 High- and Medium-Flow Rate Wells

The groundwater pumping and sampling system for high- and medium-flow rate wells (greater than 1 gallon per minute [gpm]) generally utilized a submersible pump, downhole packer, a main water discharge line, and a separate sample collection line. Submersible pumps generally produced much more water than was required for sampling. The surplus water was stored in portable oil field storage tanks for off-site disposal by oil field service companies. The high-flow wells are restricted to the Culebra Dolomite and include H-03b3, H-06b, H-07b1, H-11b3, H-18, DOE-1, DOE-2, WIPP-13, WIPP-25, and WIPP-29 (Table 2-2).

The submersible pump was set in the production zone and was then isolated from the stagnant water in the well casing above or below (or both) using a packer, straddle packer, and/or bridge plug combination. The general procedure was to install the pump, packer, and sampling assembly in the well and then inflate the packer(s). A general diagram of the submersible pump and sampling assembly is shown in Figure 2-3.

During pumping, the pressure above and below the packer were continuously monitored using pressure transducers and dataloggers. The pressure below the packer was monitored to determine the fluid level in the well during pumping in order to prevent dewatering of the well or adverse effects on the surrounding formation. The pressure above the packer was measured to monitor packer performance. The pressure above the packer remained constant if the packer was properly seated and did not leak.

2.5.2 Low-Flow Rate Wells

The low-flow rate wells produced less than 1 gpm. These wells are completed in both the Culebra and the Magenta Dolomites (Table 2-2). The low-volume wells required the use of a gas-driven piston pump capable of varying the flow rate from 0.1 to 1.0 gpm. The gas-driven pump was constructed of inert, noncontaminating materials and was operated using an air compressor. Figure 2-4 shows a schematic of the gas-driven piston pump sampling assembly.

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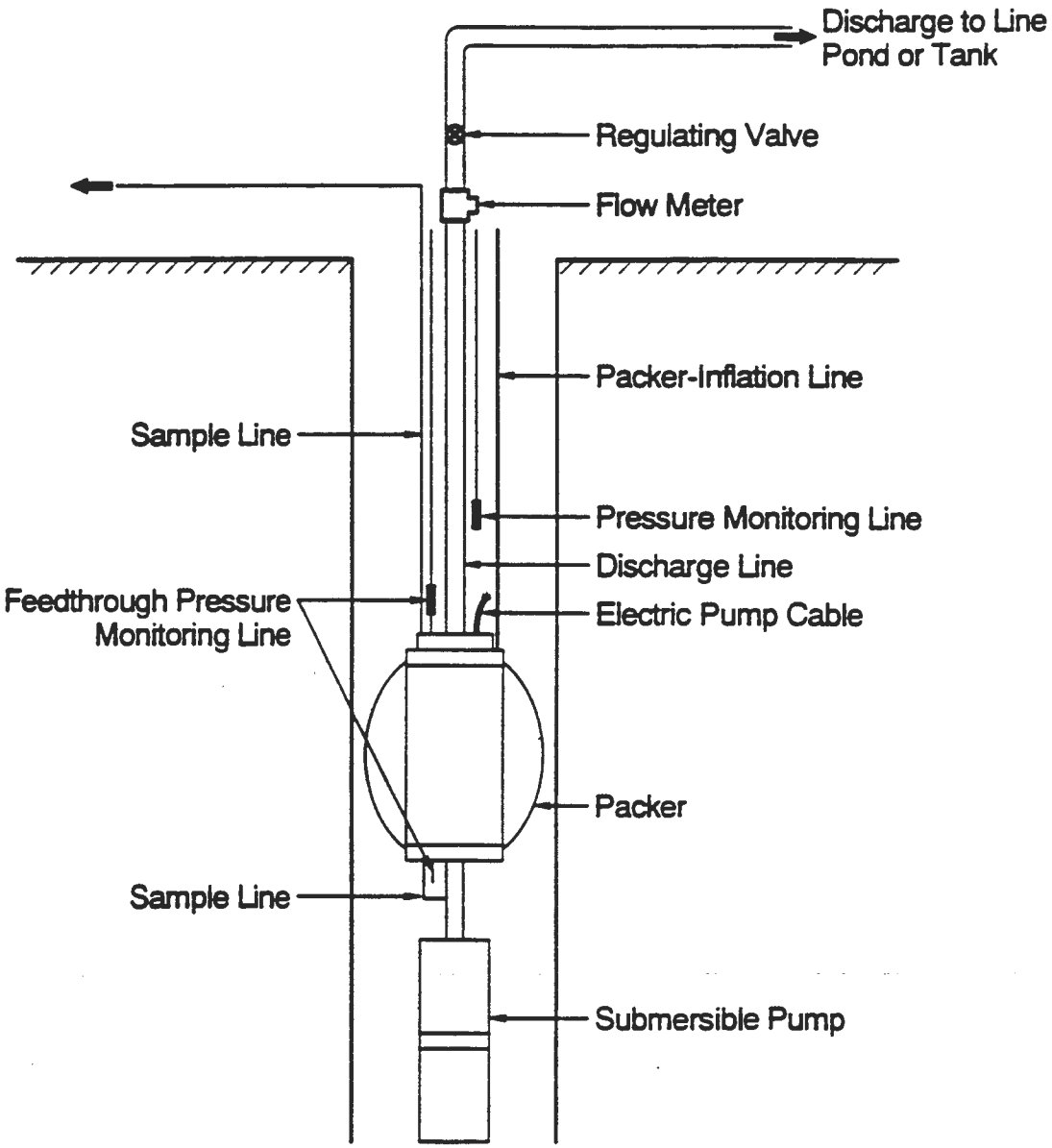
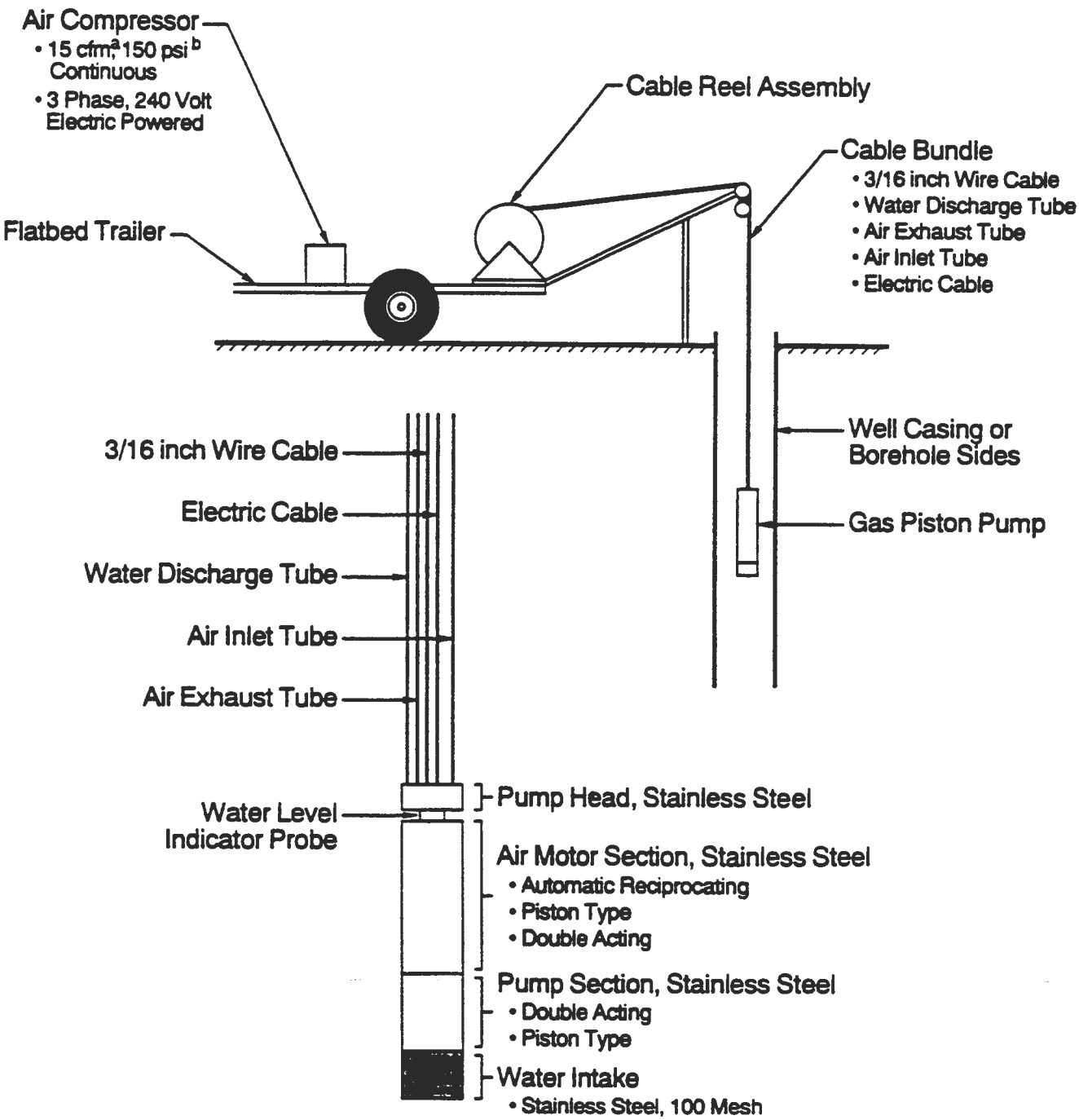


Source: Westinghouse, 1987

FIGURE 2-3 DOWNHOLE PUMP, PACKER, AND SAMPLING SYSTEM



Source: Westinghouse, 1987

a Cubic feet per minute
b Pounds per square inch

FIGURE 2-4 SCHEMATIC OF GAS-DRIVEN PISTON PUMP (Bennett Model 1800) WITH EXPLODED VIEW OF CABLE BUNDLE

The pump intake was set at a predetermined depth near or in the production interval. The low-volume wells were purged, as needed, prior to installation of the low-volume sampling system. The pumping rate and pump intake were routinely adjusted to maintain the water level in the well above the pump intake.

For the low-flow rate wells, the total amount of water produced from the pump was directed through the portable field laboratory for sample collection and operation of the constant temperature bath. An inflatable packer was generally used to isolate the production interval from overlying stagnant water in the well bore. When a packer was used, pressures above and below the packer were continuously monitored to determine the water level in the well and the performance of the packer, as discussed in Section 2.5.1. Note that the packer assembly is not shown in Figure 2-4. Excess water not used for sampling was routed from the field laboratory and disposed of in either a lined pit or storage tank.

2.6 Water Quality Analytical Parameters

Groundwater samples collected as final samples were shipped to contract laboratories for analysis at the conclusion of the serial sampling episode. The laboratories responsible for sample analyses included IT Analytical Services (ITAS), which analyzed the largest list of parameters; Bendix Field Engineering Services (Bendix); United Nuclear Corporation (UNC); and WAESD for radionuclides. Bendix was purchased by UNC during the second sampling round, and these two organizations actually represent the same laboratory. The complete analytical suite consists of six separate parameter groups. These include:

- General chemistry
- Metals
- Hazardous organic compounds
- Dissolved gases
- Redox couples
- Radionuclides.

Radionuclide analyses are performed in support of the Radiological Baseline Program and Operational Environmental Monitoring Program at the WIPP and are not reported as part of the WQSP. Radionuclides, dissolved gases, and redox couples are not considered in this baseline report. Radionuclide analyses are reported in WIPP Annual Site Environmental Reports: Reith et al. (1986), Banz et al. (1987), Flynn et al. (1988, 1989), DOE (1990a), and DOE (1991). Dissolved gases and redox couple data are presented in the WIPP Annual Water Quality Data Reports: Uhland and Randall (1986), Uhland et al. (1987), Randall et al.

(1988), and Lyon (1989). Redox couple data are also presented in Seigel et al. (1991). Table 2-3 lists the analytical parameters analyzed by the contract laboratories for the majority of the samples collected by the WQSP. Table 2-4 details the specific hazardous organic parameters included in the "Organics" category of Table 2-3. However, analysis of all the parameters listed in Tables 2-3 and 2-4 were not performed continuously for all sampling rounds.

Initially, the list of metals analysis for many Round 1 and several Round 2 samples did not include the trace metals antimony, cadmium, lithium, silver, or thallium. In addition, the major cations calcium, magnesium, potassium, and sodium were not included in the initial metals parameter list. The complete list of metals as shown in Table 2-3 was not adopted until late 1986, when these parameters were added to the list.

For the first eight wells sampled during Round 1 of the WQSP, the major cations and anions were analyzed by Bendix for SNL. Beginning with Well H-12, major cations and anions were analyzed by both Bendix and ITAS for a short period of time. For the first eight wells sampled, the baseline data set includes only the preliminary data from the Bendix analyses. For all subsequent samples, the data set for the major cations and anions is from analyses by ITAS.

During the early part of the 1989 sampling year, the analyses by UNC for redox couples and dissolved gases were dropped from the analytical schedule. Therefore, only three rounds of analyses for these parameters are available for most wells. In addition, analyses for the hazardous organic parameters were omitted from the program beginning in the middle of the 1990 sampling year. However, all wells included in the background data collection program have at least three rounds of organic analyses.

2.7 Problems with Laboratory Analyses

As reported in Randall et al. (1988), evaluation of laboratory analytical results have shown that reported concentrations of trace metals exhibit a high degree of uncertainty. In a groundwater sample collected in a given sampling round, several trace metals would be reported at concentrations that exceed the expected values for these metals in natural waters (Hem, 1985). However, in samples from the same well collected during previous or subsequent rounds, concentrations of the same trace metals would be below the detection limit, suggesting that the reported high concentrations were not accurate.

Table 2-3

Contracted Analytical Laboratories Water Quality Analyses

International Technology Analytical Services		Sandia National Laboratories	United Nuclear Corporation	Environmental Evaluation Group	Westinghouse Advanced Energy Systems Division
General Chemistry	**Metals**	Isotopes	**Dissolved Gases**	General Chemistry	**Radionuclides**
Alkalinity	Aluminum Magnesium	Radiocarbon	Argon	Radionuclides	Co-60
Bromide	Antimony Mercury	Major Ions	Oxygen		Cs-137
Chloride	Arsenic Molybdenum	Trace Elements	Nitrogen		H-3
Cyanide	Barium Nickel		Carbon Monoxide		K-40
Fluoride	Beryllium Potassium		Carbon Dioxide		Np-237
Iodide	Boron Selenium		Methane		Pu-238
Nitrate	Cadmium Silica		Ethane		Pu-239/Pu-240
pH	Calcium Silver		C-3		Pu-241
Phenolics	Cesium Sodium		C-4		Pu-242
Phosphate, Total	Chromium Strontium		C-5		Ra-226
Filterable Residue	Cobalt Thallium		C-6		Ra-228
Nonfilterable Residue	Copper Titanium		Sum of CO_2		Sr-90/Yt-90
Specific Conductance	Iron Vanadium		Total Gas		Th-228
Sulfate	Lead Zinc				Th-230
Total Organic Carbon	Lithium		**Redox Couples**		Th-232
Total Organic Halogen			Ammonia		U-233
			Nitrate		U-234
Organic Compounds			Total Iron		U-235
Volatile Hazardous Substance List			Ferrous Iron		U-238
Semi-volatile Hazardous Substance List			Arsenic III		
PCB			Total Arsenic		
			Selenium IV		
			Total Selenium		
			Iodide		
			Iodate		

Source: Lyon, 1989

Table 2-4
List of Organic Analytical Parameters

Volatile Hazardous Substances Parameter	Semivolatile Hazardous Substances Parameter	
Acetone	Acenaphthene	2,6-Dinitrotoluene
Benzene	Acenaphthylene	Di-N-octyl phthalate
2-Butanone	Anthracene	Fluoranthene
Bromoform	Benzo(A)anthracene	Fluorene
Carbon disulfide	Benzo(A)pyrene	Hexachlorobenzene
Carbon tetrachloride	3,4-Benzofluoranthene	Hexachlorobutadiene
Chlorobenzene	Benzo(G,H,I)perylene	Hexachlorocyclopentadiene
Chlorodibromomethane	Benzoic acid	Hexachloroethane
Chloromethane	Benzo(K)fluoranthene	Indeno(1,2,3-CD)pyrene
2-Chloroethylvinyl ether	Benzyl alcohol	Isophorone
Chloroform	Bis(2-chloroethoxy)methane	2-Methylnaphthalene
cis-1,3-Dichloropropene	Bis(2-chloroethyl)ether	2-Methylphenol
Dichlorobromomethane	Bis(2-chloroisopropyl)ether	4-Methylphenol
1,1-Dichloroethane	Bis(2-ethylhexyl)phthalate	Naphthalene
1,2-Dichloroethane	4-Bromophenyl phenyl ether	2-Nitroaniline
1,1-Dichloroethylene	Butyl benzyl phthalate	3-Nitroaniline
1,2-Dichloropropane	4-Chloroaniline	4-Nitroaniline
Ethylbenzene	2-Chloronaphthalene	Nitrobenzene
2-Hexanone	2-Chlorophenol	2-Nitrophenol
Methyl bromide	4-Chlorophenyl phenyl ether	4-Nitrophenol
Methyl chloride	Chrysene	N-Nitrosodi-N-propylamine
4-Methyl-2-pentanone	Dibenzo(A,H)anthracene	N-Nitrosodiphenylamine
Methylene chloride	Dibenzofuran	P-Chloro-M-cresol
Styrene	1,2-Dichlorobenzene	Pentachlorophenol
1,1,2,2-Tetrachloroethane	1,3-Dichlorobenzene	Phenanthrene
Tetrachloroethylene	1,4-Dichlorobenzene	Phenol
Toluene	3,3-Dichlorobenzidine	Pyrene
trans-1,2-Dichloroethylene	2,4-Dichlorophenol	1,2,4-Trichlorobenzene
trans-1,3-Dichloropropene	Diethyl phthalate	2,4,5-Trichlorophenol
1,1,1-Trichloroethane	2,4-Dimethylphenol	2,4,6-Trichlorophenol
1,1,2-Trichloroethane	4,6-Dinitro-o-cresol	Polychlorinated biphenyls
Trichloroethylene	2,4-Dinitrophenol	
Vinyl Acetate	Dimethylphthalate	
Vinyl Chloride	Di-n-butyl phthalate	
Total Xylenes	2,4-Dinitrotoluene	

Source: Lyon, 1989

The high concentrations of dissolved solids in many of the WQSP wells at the WIPP Site, coupled with the relatively low concentration of trace elements, appear to have resulted in analytical error due to enhancements or interferences. In many cases reported trace element concentrations are probably much higher than actual concentrations.

Detection limits for trace elements were affected by the high total dissolved solids (TDS) load of many samples due to the need for multiple dilutions of samples prior to analysis. Equipment limitations have required that many samples be diluted up to 1000 to 1, raising the lower limit of detection for trace elements into the milligram-per-liter (mg/ℓ) range. Unfortunately, the high detection limits and erroneous concentrations reported for trace metals are not useful in establishing a baseline for these parameters.

As reported in Lyon (1989), an alternative method for analysis of trace metals was attempted by the WQSP and the ITAS laboratory. This method adapted an ion-exchange technique that separates and concentrates transition-metal elements from alkali and alkaline-earth elements in seawater (Kingston et al., 1978). Fifteen trace metals from the WQSP parameter list were selected for study. Preliminary testing and method development began in the spring of 1988 using water from Well H-05b as the test matrix. After the preliminary testing was completed, samples from three wells (H-05b [round three], H-08b [round three], and WIPP-19 [round three]) were analyzed for the 15 trace metals using the separation technique. These three wells were selected to test the separation technique on the range of groundwater types found in the Culebra Dolomite across the WIPP area. The detailed procedure for conducting this trace-metal analysis is described in Appendix A.

In general, the ITAS results for hazardous organic compounds have shown no detectable concentrations in the majority of samples analyzed. As described in Randall et al. (1988), some organic compounds were occasionally reported for a few wells. The compounds were chiefly acetone, methylene chloride, and phthalate compounds. In the majority of cases, the compounds were not detected in either previous or subsequent samples, suggesting that the reported detection was due to contamination. Acetone, methylene chloride, and phthalates are common laboratory contaminants due to their abundance in the typical laboratory environment. The detections of hazardous organic compounds are discussed in Chapter 5.0.

3.0 Geologic and Hydrologic Setting of the WIPP Site

The geology and hydrology of the WIPP area have been extensively characterized since 1975. Site characterization and performance assessment studies have developed a large data base of hydrogeologic information for the WIPP Site region of the Delaware Basin in southeastern New Mexico. A general overview of site geology and hydrology as well as the major guiding factors used to characterize the background water quality are presented below.

3.1 Local Geology

The WIPP Site is located in the northern portion of the Delaware Basin of southeastern New Mexico (Figure 1-1). The Delaware Basin is the westernmost basin of the sedimentary basins collectively known as the Permian Basin.

The northern Delaware Basin is surrounded by the Capitan Reef complex of Permian Age, which is the only major source of potable groundwater in the Delaware Basin. Within the basin, and in the WIPP vicinity, a thick sequence of Permian sedimentary rocks were deposited. These rock units are shown in the stratigraphic column presented in Figure 3-1. These eight rock units are important to the hydrogeology at the WIPP. A generalized geologic cross section is shown in Figure 3-2.

3.1.1 Delaware Mountain Group

The Delaware Mountain Group is part of the Guadalupian Series deposited during the Permian Period and consists of fine-grained clastic rocks with occasional limestones and shale beds (Mercer, 1983). The group is divided in ascending order into the Brushy Canyon, Cherry Canyon, and the Bell Canyon Formations. The Delaware Mountain Group is overlain by the Ochoan Series of Permian Age. The Bell Canyon Formation is the first water-bearing formation beneath the Ochoan evaporite sequence in which the WIPP is located. The WQSP sampled water from the Bell Canyon Formation one time, at Well DOE-2. The results of this sampling are not considered in the WQSP baseline report.

3.1.2 Ochoan Series

The Ochoan Series generally consists of evaporites with increasing quantities of siltstones and mudstones in the younger rocks. The Ochoan Series is represented in ascending order by the Castile, Salado, the Rustler Formations, and the Dewey Lake Redbeds. Each of these units is discussed below.

SYSTEM	SERIES	GROUP	FORMATION	MEMBER
RECENT	RECENT		SURFICIAL DEPOSITS	
QUATER-NARY	PLEISTO-CENE		MESCALERO CALICHE	
			GATUNA	
TRIASSIC		DOCKUM	SANTA ROSA	
PERMIAN	OCHOAN		DEWEY LAKE REDBEDS	
			RUSTLER	FORTY-NINER
				MAGENTA DOLOMITE
				TAMARISK
				CULEBRA DOLOMITE
				UNNAMED
			SALADO	
			CASTILE	
	GUADALUPIAN	DELAWARE MOUNTAIN	BELL CANYON	
			CHERRY CANYON	
			BRUSHY CANYON	

Source: Beauheim, 1987

FIGURE 3-1 GENERALIZED STRATIGRAPHIC COLUMN OF THE DELAWARE MOUNTAIN GROUP AND YOUNGER SEDIMENTARY ROCKS AT AND NEAR THE WIPP SITE

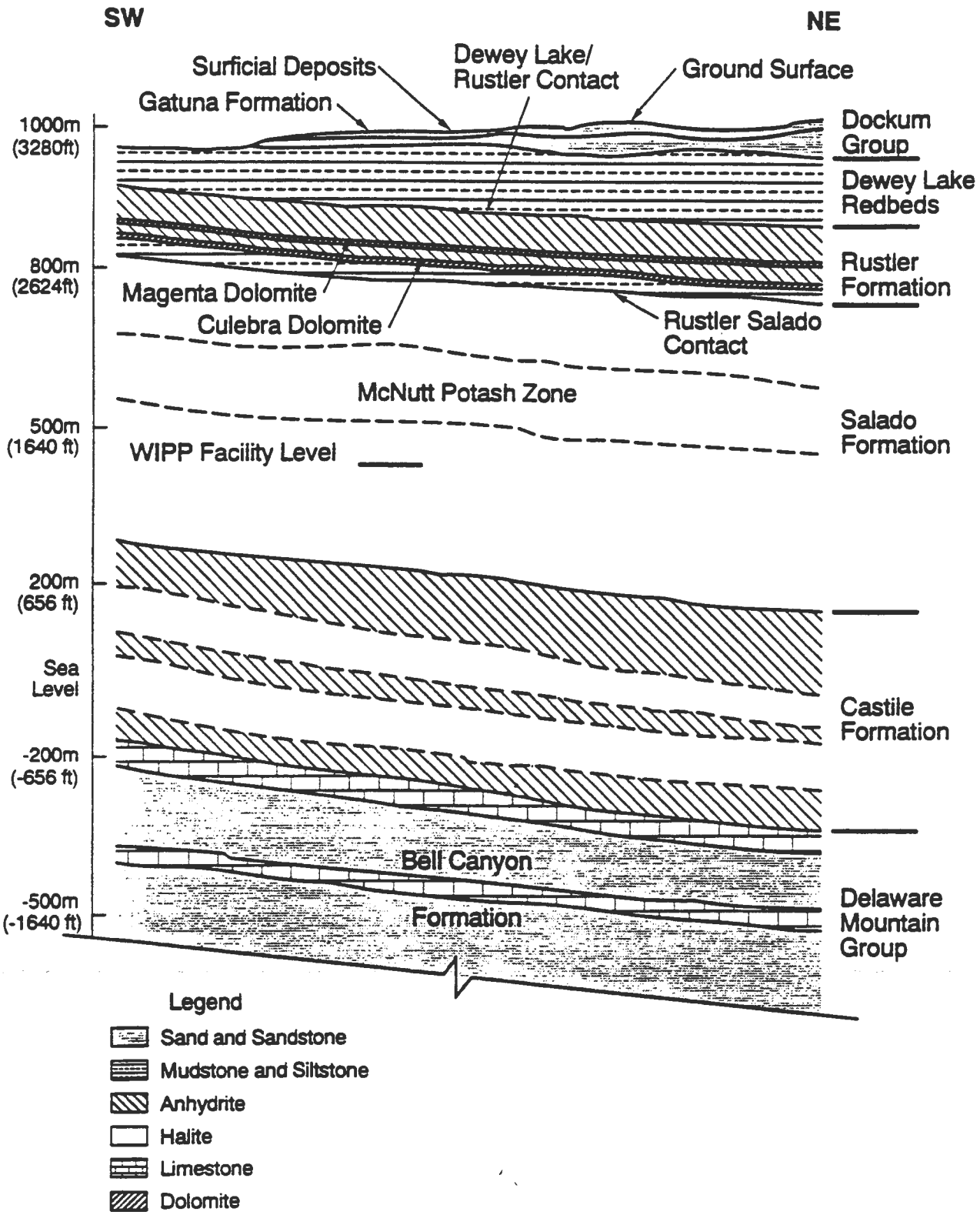


FIGURE 3-2 GENERALIZED STRATIGRAPHIC CROSS SECTION

Castile Formation. The Castile Formation consists mainly of anhydrite, calcite-banded anhydrite, and halite with some limestone and sandstone (Mercer, 1983). The Castile Formation is considered a hydrologic barrier and regional aquiclude between the overlying Salado Formation and the underlying and water-bearing Bell Canyon Formation. The WQSP has not attempted to collect water samples from the Castile Formation, and thus, this formation is not considered in the water-quality baseline.

Salado Formation. The Salado Formation is the host unit for the WIPP facility repository. The formation is approximately 2,000 feet thick in the vicinity of the WIPP. The Salado Formation is an evaporite unit consisting predominantly of halite with minor amounts of anhydrite, polyhalite, and other potash or potassium-bearing minerals. Due to a slight eastward tilting of the Delaware Basin, the Salado Formation has been exposed and erosionally removed from the west and south sides of the basin, leaving a horseshoe-shaped rim of brecciated insoluble material. The Salado Formation does not contain circulating groundwater and is considered a major regional confining unit in the Delaware Basin. Small brine seeps have been observed in the WIPP underground and have been characterized by the WIPP Brine Sampling and Evaluation Program (BSEP). The WQSP has not sampled Salado Formation brines, and the water chemistry of the Salado is not considered in this baseline report. Results from BSEP sampling and analyses can be found in the annual BSEP reports (Deal and Case, 1987; Deal et al., 1987; Deal et al., 1989; Deal et al., 1991; Deal et al., 1992).

Rustler Formation. The Rustler Formation is the youngest of the Ochoan evaporite-bearing formations in the Delaware Basin and directly overlies the Salado Formation. The Rustler Formation is significant to the WIPP because it contains the most significant water-bearing zones in the WIPP area (Figures 3-1 and 3-2). The Rustler Formation in the WIPP area consists of a variable lithologic mixture of interbedded sulfates, carbonates, clastics, and halite. The Rustler was divided by Vine (1963) into five main subdivisions: (1) at the base, an unnamed unit of clayey siltstone and very fine-grained sandstone with thin interbeds of anhydrite and halite in its upper part; (2) the Culebra Dolomite Member, a unit of thin-bedded, finely crystalline dolomite; (3) the Tamarisk Member, chiefly anhydrite; (4) the Magenta Dolomite Member, a unit of thinly cross-laminated, fine-grained dolomite; and (5) the Forty-Niner Member, anhydrite with a single thin interbed of siltstone. The two dolomite members are hydrologically important to the WIPP area and also serve as distinctive subsurface marker beds across the Delaware Basin (Adams, 1944).

The Culebra and Magenta Dolomite Members are the principal water-bearing units at the WIPP and have been studied extensively during site characterization and performance assessment investigations. The WQSP has focused primarily on sampling the Culebra Dolomite. The WQSP baseline at WIPP is generally limited to the Culebra and Magenta Dolomite Members of the Rustler Formation.

Dewey Lake Redbeds. The Dewey Lake Redbeds are the uppermost of the four Ochoan formations and represents the close of the Paleozoic Era in the Delaware Basin. The Dewey Lake Redbeds are important to WIPP hydrogeology because they act as a barrier to downward infiltration of groundwater into the evaporite section overlying the WIPP facility repository. The Dewey Lake conformably overlies the Rustler Formation and unconformably underlies the Triassic Dockum Group and younger sediments. The Dewey Lake Redbeds consists almost entirely of mudstone, claystone, siltstone, and interbedded sandstone. Much of the Dewey Lake Redbeds is characterized by gypsum-filled fractures that are the result of unloading (Holt and Powers, 1988) and indicate that for the general WIPP area no fresh groundwater has moved through the Dewey Lake Redbeds since they were formed. However, to the south of the WIPP there is an area where local recharge may be occurring and the upper part of the formation is saturated. The WQSP has sampled groundwater from the Dewey Lake Redbeds through the private well sampling effort. Some of these data are included in this report.

3.1.3 Post-Permian Deposits

In the WIPP area, the only Triassic unit present is the Santa Rosa Sandstone, part of the Dockum Group. The Santa Rosa Sandstone is present to the east of the WIPP, having been removed by erosion west of the site. It consists of sandstone and conglomerate with interbeds of siltstone and mudstone. The WQSP has collected samples from private wells believed to be completed in the Santa Rosa Sandstone; however, the data are insufficient to establish background water quality.

Tertiary and Quaternary deposits in the WIPP facility area include the Ogallala Formation of Miocene age; the Gatuna Formation of Pleistocene age; and sands, playa deposits, caliche, and alluvium of Holocene age. These deposits cover most of the region and lie unconformably on older rocks. In the WIPP area, these Tertiary and Quaternary deposits are not water-bearing, and no attempt has been made to collect groundwater-quality samples from them.

3.2 Groundwater Hydrology

At the WIPP, the Culebra and Magenta Dolomite Members of the Rustler Formation are the most significant water-bearing units. Sampling and analysis of groundwater by the WQSP have focused on these two rock units, and the water-quality background will generally be established only for the Culebra and Magenta Dolomite Members. The WQSP has also sampled a few wells completed in the Dewey Lake Redbeds, and the results from wells that have been sampled three or more times will be reported. Therefore, the following discussion of site groundwater hydrology is limited to the Rustler Formation, with a brief summary for the Dewey Lake Redbeds.

The groundwater hydrology at the WIPP has been characterized in great detail and has been reported in several publications. The reader is referred to the following publications: (1) "Geological Characterization Report for the Waste Isolation Pilot Plant (WIPP) Site, Southeastern New Mexico" (Powers et al., 1978); (2) "Geohydrology of the Proposed Waste Isolation Pilot Plant Site, Los Medanos Area, Southeastern New Mexico" (Mercer, 1983); (3) "Summary of Site-Characterization Studies Conducted from 1983 Through 1987 at the Waste Isolation Pilot Plant (WIPP) Site, Southeastern New Mexico" (Lappin, 1988); (4) "Final Safety Analysis Report, Waste Isolation Pilot Plant" (DOE, 1990b); (5) "Waste Isolation Pilot Plant No-Migration Variance Petition" (DOE, 1990c); and (6) "Conceptual Hydrogeologic Model of the Rustler Formation in the Vicinity of the Waste Isolation Pilot Plant Site, Southeastern New Mexico" (Holt et al., 1992).

3.2.1 Dewey Lake Redbeds

The Dewey Lake Redbeds comprise the youngest rocks in the Ochoan sequence at the WIPP Site and mark an abrupt change in the depositional environment (Figure 3-1). In general, the Dewey Lake Redbeds consist almost entirely of mudstone, claystone, siltstone, and some lenticular interbeds of fine-grained sandstone. Nearly all of the siltstone and mudstone are veined with selenite gypsum as seen in core. Because of its characteristically minimal permeability, it does not contain significant quantities of groundwater (Mercer, 1983).

Holt and Powers (1990) report that the upper portion of the Dewey Lake Redbeds are cemented with carbonate. Based on observations made in the WIPP air intake shaft, the researchers report that this carbonate-cemented upper portion is moist. Holt and Powers also report that an abrupt change in cement type, from carbonate to a much harder, unidentified material, occurs in the section of Dewey Lake Redbeds studied in the shaft. Below the

change in cement type, fractures were filled with gypsum, and the formation was no longer moist.

Drilling during hydrogeologic evaluation did not reveal a continuous zone of saturation within the Dewey Lake Redbeds; however, localized permeable zones were detected. Detailed data collected during drilling of test holes with air identified minor zones of saturation, particularly in several of the thin lenticular sands in the upper part of the Dewey Lake Redbeds at test holes H-01, H-02, and H-03 (Mercer and Orr, 1979). Geologic data from the wells at the WIPP Site indicate that the sands pinch out laterally. Where water is present, it probably is perched or semiperched and its occurrence is localized, depending to a great extent on locally favorable conditions for recharge.

Four intervals of the Dewey Lake Redbeds were tested in foundation boreholes at the WIPP facility. Although saturated conditions were not detected, ten of these boreholes were completed as observation wells. Water levels were measured monthly over an 18-month period to determine if a transient zone of saturation might develop. Water levels measured in these wells were always below the level of the deepest perforations, indicating that any water encountered was from well completion.

In the immediate WIPP area, the Dewey Lake Redbeds are not saturated and do not yield water to wells. However, to the south of the WIPP Site several private wells completed in the Dewey Lake Redbeds supply water for domestic and livestock use. These wells include two wells at the Mills Ranch (Ranch Well and Barn Well), Fairview Windmill, Unger Windmill, and Twin Wells-Pasture Well. The two wells at the Mills Ranch may be completed in one of the lenticular sands. Geologic data indicate that the wells are completed in the upper part of the Dewey Lake Redbeds (Mercer, 1983). These wells have either saline water or small yields. In the vicinity of these two wells is an extensive area of thick, active sand dunes, which could be an area of recharge for the upper Dewey Lake Redbeds in this area.

Recharge of sand units in the Dewey Lake Redbeds is probably an unusual and localized phenomenon dependent on local geological conditions, such as those at the Mills Ranch. Recharge may also occur by downward percolation of water through fractures or along bedding planes in mudstone and siltstone. Discharge towards deeper zones through existing fractures or through dissolution of gypsum veinlets is minor. Generally, in the WIPP Site

area the Dewey Lake Redbeds act as an unsaturated confining layer over the Rustler Formation (Mercer, 1983).

The WQSP collected groundwater samples from the Dewey Lake Redbeds using the private wells discussed above. The private wells that are completed in the Dewey Lake Redbeds and have been sampled three or more times (see Table 2-1) include Barn Well, Ranch Well, and Twin Wells-Pasture Well. The results from these three wells are included in the water-quality background characterization for the WIPP.

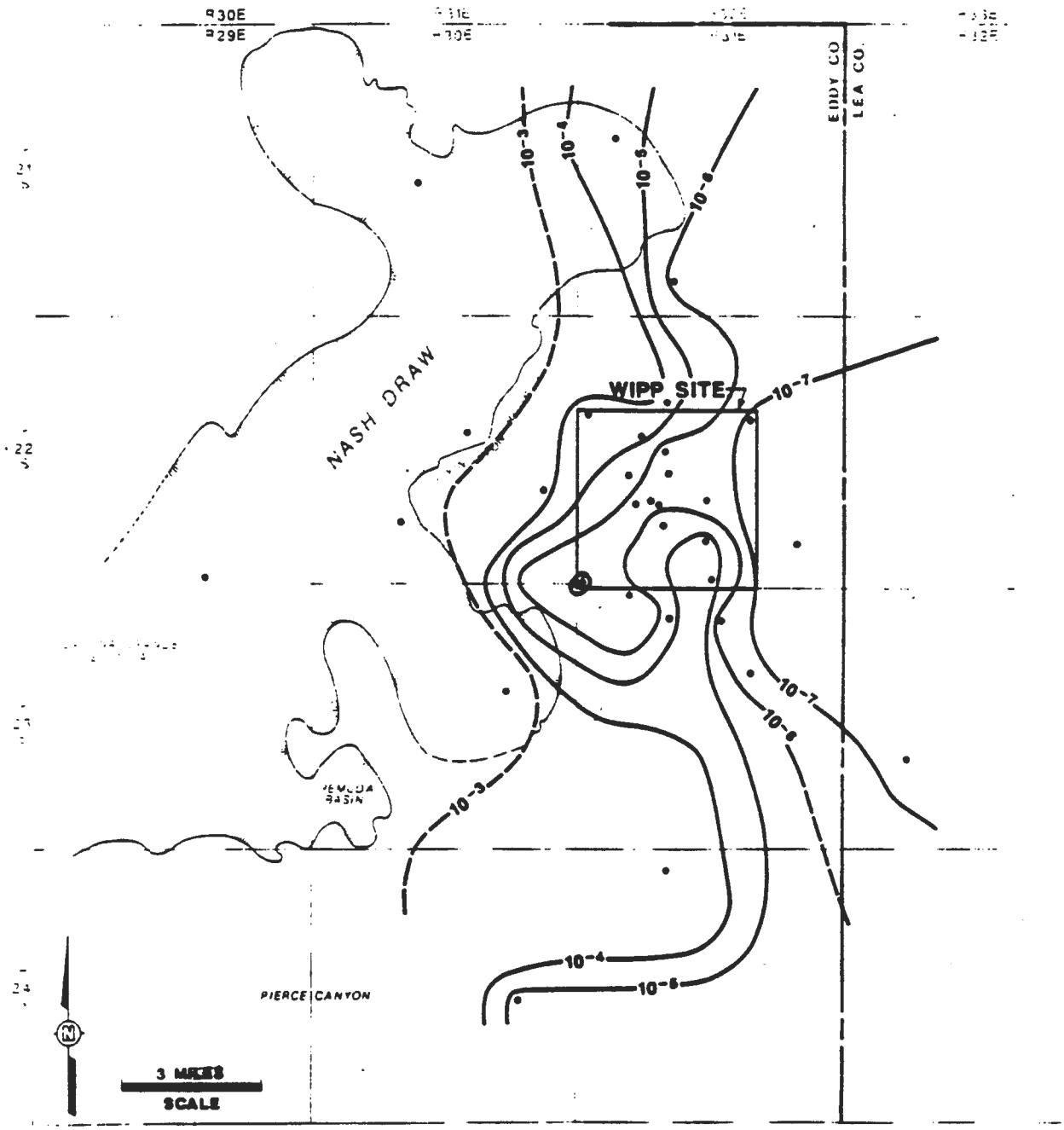
3.2.2 Rustler Formation

The Rustler Formation contains the most transmissive water-bearing units in the WIPP area. The Culebra Dolomite Member of the Rustler Formation is the first continuous water-bearing zone above the Salado Formation (waste repository horizon) and is the most transmissive hydrologic unit in the WIPP area (Figure 3-2). Water in the Culebra Dolomite is usually present in fractures and is confined by the overlying gypsum or anhydrite and underlying clay and anhydrite beds of the other Rustler members. The Magenta Dolomite Member, also a confined water-bearing unit in the WIPP area, is a distinctive clastic carbonate bed with thin interbeds of anhydrite. The Magenta Dolomite is the uppermost water-producing zone in the Rustler Formation (Figure 3-2). Where the Magenta Dolomite is saturated, water usually occurs in the thin silt beds or silty dolomite but also has been found along bedding planes and in fractures.

Water chemistry and hydrogeologic characteristics of the Culebra and Magenta Dolomites are highly variable across the site area. Results of site characterization studies have shown that water-quality variability in the Culebra Dolomite may be a function of the local variability in hydrogeologic conditions. The groundwater hydrology and water-quality characteristics of the Culebra and Magenta Dolomite Members of the Rustler Formation are discussed in detail below.

3.2.2.1 Culebra Dolomite Member of the Rustler Formation

Hydraulic properties of the Culebra Dolomite vary considerably from place to place across the site (LaVenue et al., 1988). In general, transmissivity appears to be a function of the size and number of fractures and openings. The transmissivity of the Culebra Dolomite across the WIPP region varies by six orders of magnitude (Figure 3-3). The higher transmissivity values have been measured in Nash Draw, a highly fractured area caused by dissolution of Rustler and Salado Formation evaporites. The highest value of transmissivity reported for the



Source: LaVenue et al., 1988

EXPLANATION

• WELLS TESTED

—10⁻⁵— TRANSMISSIVITY CONTOUR SQUARE METERS PER SECOND

FIGURE 3-3 CALCULATED CULEBRA DOLOMITE TRANSMISSIVITIES

Culebra is 1.25 x 10^3 square feet per day (ft^2/day) or 1.34 x 10^{-3} square meters per second (m^2/s) at Well WIPP-26 within Nash Draw. The transmissivity of the Culebra Dolomite generally decreases from west to east across the site area (Figure 3-3). The lowest transmissivity reported is $\leq$ 0.004 ft^2/day (2.15 x 10^{-9} m^2/s) at Well P-18 east of the WIPP Site. As shown in the contour map in Figure 3-3, Culebra Dolomite transmissivities are relatively high in a wide region south of the WIPP Site and east of Nash Draw. A narrow linear zone of high transmissivity extends north into the WIPP area from the southern high transmissivity region. A zone of higher transmissivity occurs north of, but does not penetrate, the WIPP Site area.

Groundwater flow in the Culebra Dolomite exhibits considerable variability in both direction and gradient across the WIPP Site area. This variability may be the result of lateral variation in Culebra Dolomite permeability and differences in fracture orientation as discussed by Mercer (1983). Culebra Dolomite water levels in the WIPP Site vicinity have been impacted by continuous drainage into one or more of the WIPP shafts since construction of the original exploratory shaft and by large-scale pumping during numerous aquifer tests and WQSP sampling. LaVenue et al. (1988) reviewed Culebra Dolomite water-level data, borehole-fluid density data, and WIPP-related hydraulic stresses and derived estimates of the undisturbed freshwater equivalent heads at 31 wells (Figure 3-4). The contours on Figure 3-4 show that the estimated flow direction in the Culebra Dolomite prior to WIPP-related effects was generally to the south and southwest. Flow directions presented by Crawley (1988) and Lappin (1988) also indicate a general southerly flow direction across the WIPP Site area (Figure 3-4). The flow directions shown by the arrows on Figure 3-4 were developed considering the variability of formation- fluid density and the local geologic structure of the Culebra Dolomite. Davies (1989) and Crawley (1988) suggest that flow directions south of the WIPP Site may have a larger easterly, down-dip component than is predicted considering only freshwater heads.

Figure 3-5 shows the recent (post-WIPP-related stresses) potentiometric surface of the Culebra Dolomite based on the results of the Pressure-Density Survey Program (Crawley, 1988). Figure 3-5 indicates that there is considerable variability in gradient and flow direction within the WIPP Site area. The hydraulic gradient in the immediate WIPP Site vicinity is approximately 20 feet per mile, while the gradient south and southwest of the site is much flatter. The gradient between Wells H-07b and H-09b is less than 5 feet per mile, while the gradient between Wells H-07b and H-08b is less than 1 foot per mile (Crawley, 1988). The broad area south of the WIPP, where the gradient appears to be extremely flat, may represent

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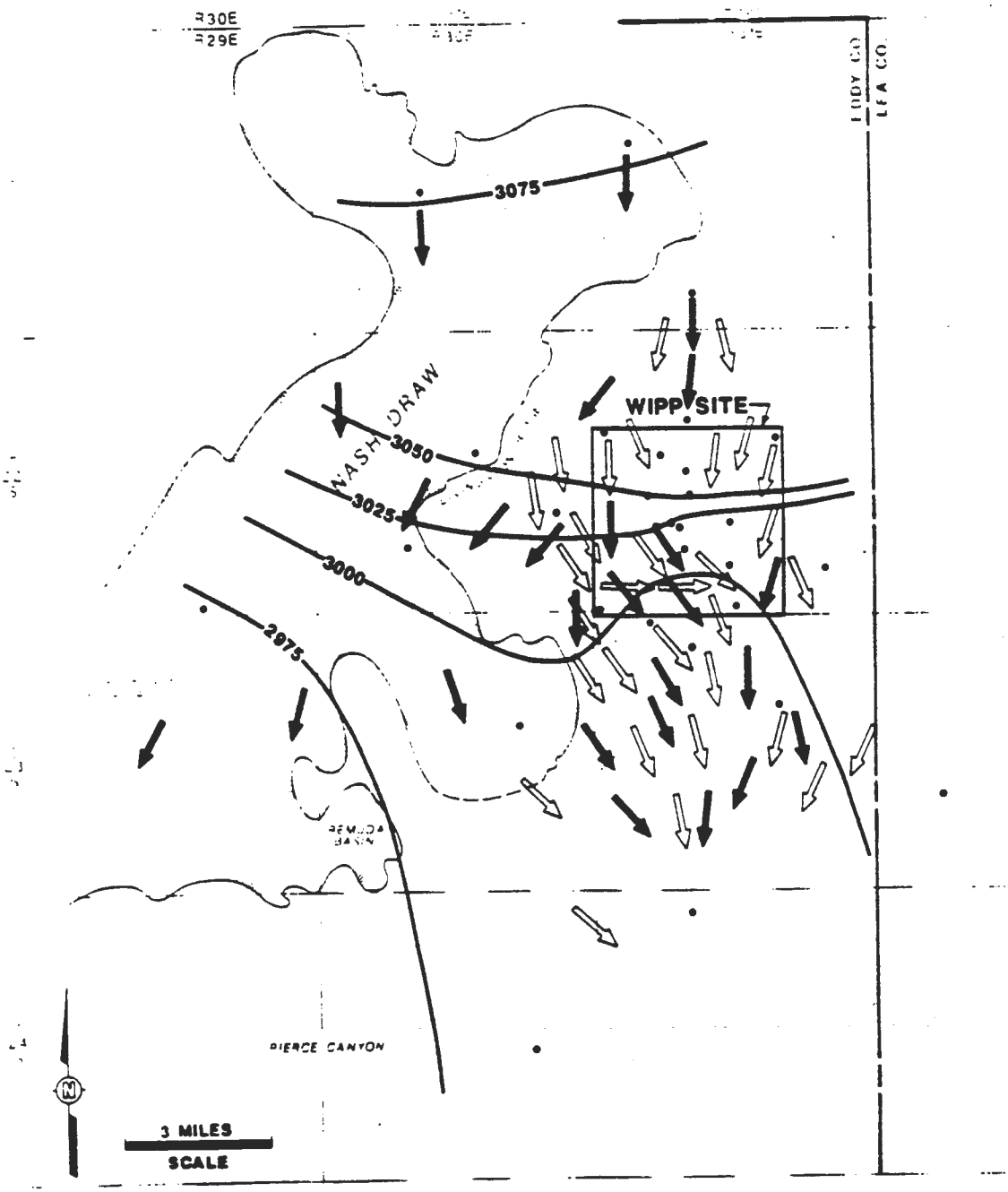


Source: Holt et al., 1992

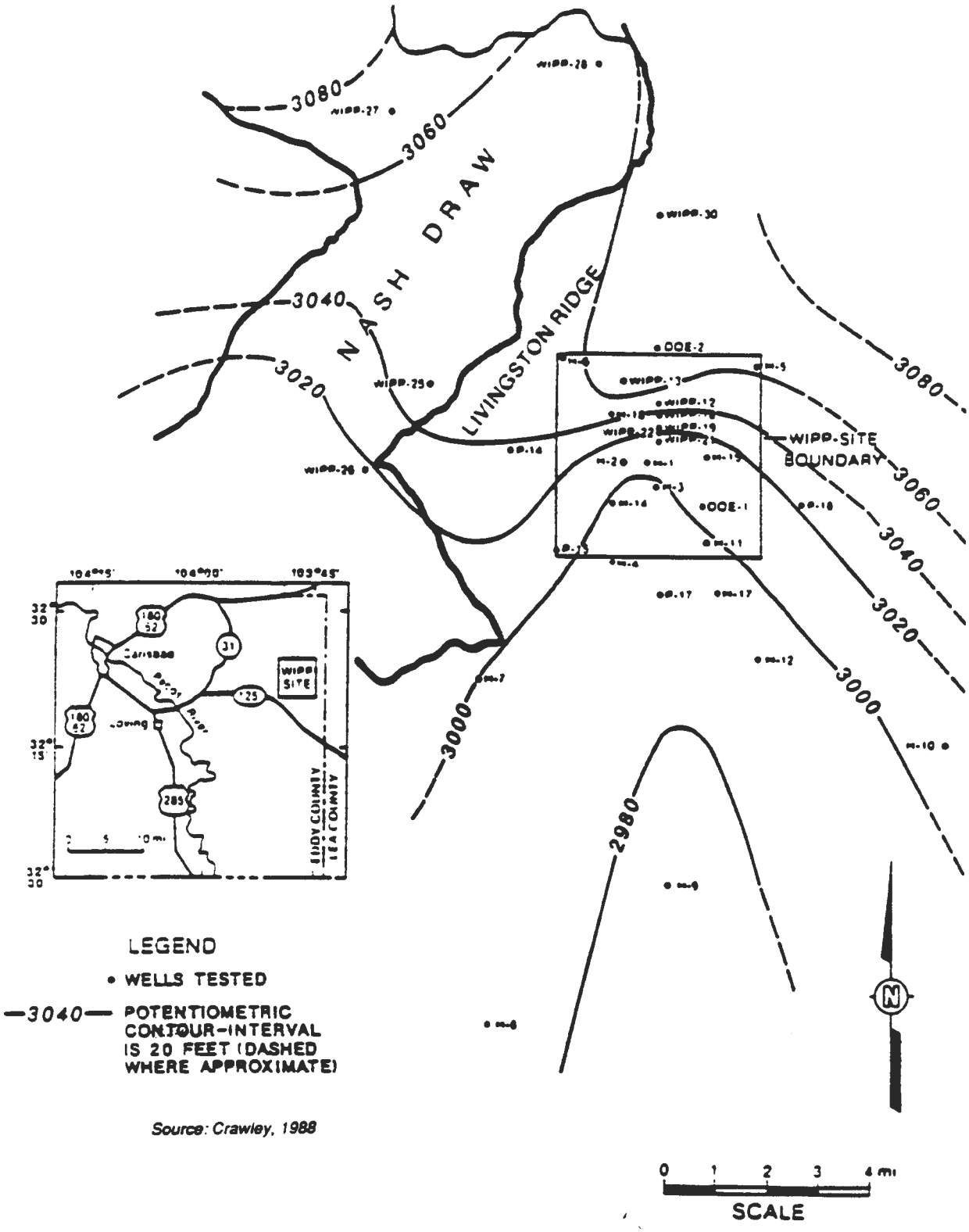
EXPLANATION

—3000— FRESHWATER-HEAD ELEVATION CONTOUR, CONTOUR INTERVAL = 25 FEET FROM LA VENUE, ET AL., 1988

• WELLS TESTED

GENERAL DIRECTION OF GROUNDWATER FLOW
⇨ FROM CRAWLEY, 1988
➡ FROM LAPPIN, 1988

FIGURE 3-4 ESTIMATED CULEBRA DOLOMITE FRESHWATER HEADS AND FLOW DIRECTIONS



Source: Crawley, 1988

FIGURE 3-5 CULEBRA DOLOMITE FRESHWATER HEAD POTENTIOMETRIC SURFACE

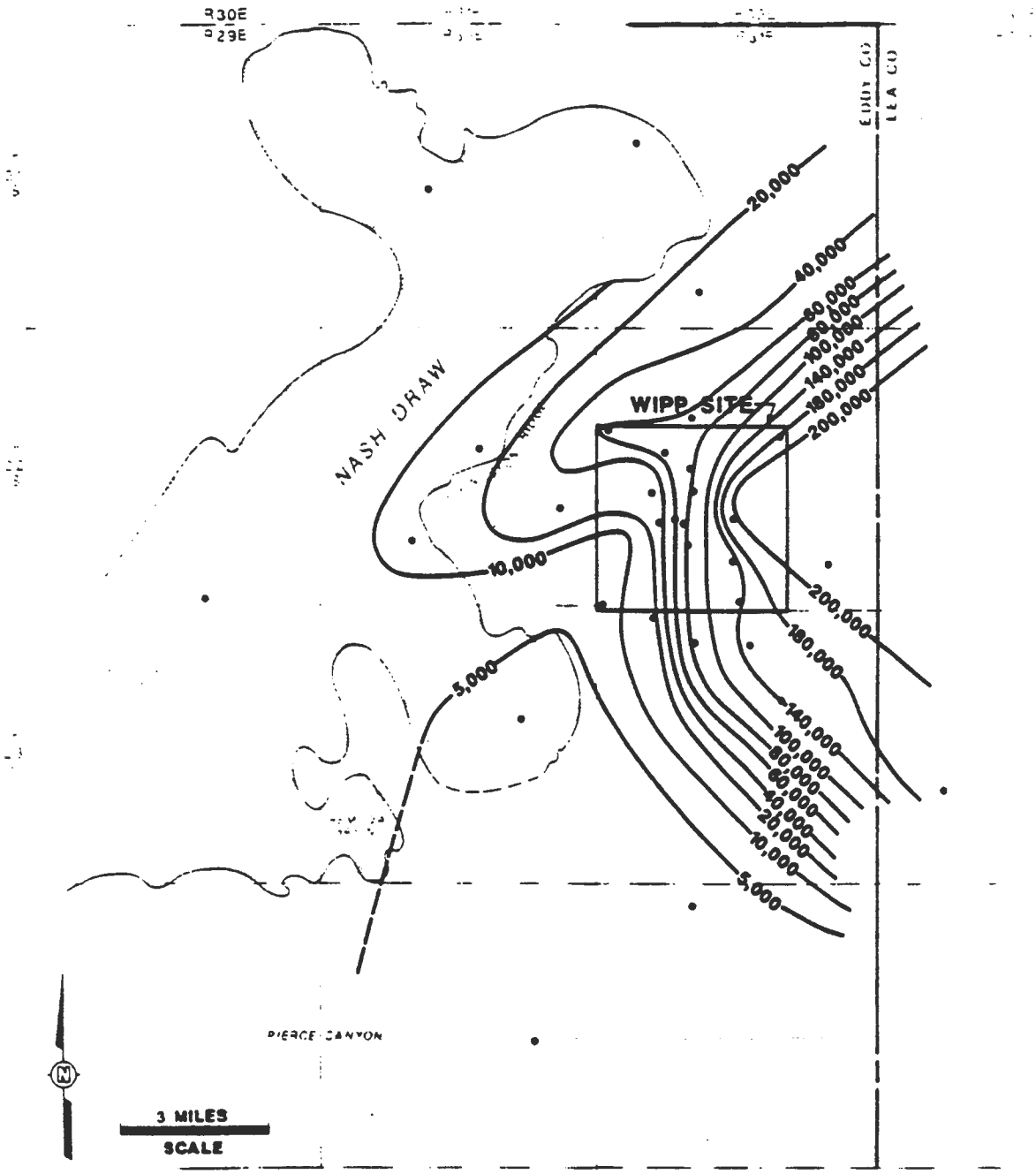
the transition from an area of fractured dolomite to that of a fractured and disrupted unit created by the extensive dissolution in Nash Draw area.

Culebra Groundwater Chemistry. The groundwater chemistry of the Culebra Dolomite across the WIPP Site area is extremely variable. The TDS within the Culebra Dolomite ranges from less than 5,000 mg/ℓ southwest of the WIPP to greater than 200,000 mg/ℓ east of the site (Figure 3-6) (Crawley, 1988; Holt et al., 1992; Siegel et al., 1991). Culebra Dolomite water chemistry also varies from a slightly brackish calcium sulfate type southwest of the site to a predominantly sodium chloride water east of the WIPP.

The great variability in water quality in the WIPP vicinity can be characterized on the basis of TDS, major element concentrations, and major element ratios. The water quality of the Culebra Dolomite has been divided into "type areas" based on these chemical characteristics. Siegel et al. (1991) and Holt et al. (1992) show four coinciding type areas of Culebra Dolomite water quality (Figure 3-7). These types of areas are similar to those described by Ramey (1985) and are briefly summarized below.

The easternmost type area (Type Area 1) is characterized by a highly saline sodium-chloride brine with TDS greater than 100,000 mg/ℓ and high concentrations of magnesium, calcium, and potassium. Type Area 2, located southwest of the WIPP Site, contains water which is relatively fresh with calcium and sulfate as the dominant solute species. Type Area 3 is an intermediate zone of variable composition dominated by sodium chloride, with TDS increasing to the east. This type area may represent a mixing zone between the sodium-chloride brine of Type Area 1 and the fresher calcium-sulfate water of Type Area 2 (Holt et al., 1992). In all Culebra Dolomite hydrochemical type areas, groundwater is at or near saturation with respect to gypsum ($CaSO_4 \cdot 2H_2O$). The distinction between Type Areas 1, 2, and 3 is primarily due to the amount of sodium and chloride in the groundwater. Located in the western half of Nash Draw, anomalously high salinities and potassium contents characterize the groundwater of Type Area 4 (Siegel et al., 1991; Holt et al., 1992). The water in Type Area 4 appears to be contaminated by effluent from potash mining operations in the area (Siegel et al., 1991; Holt et al., 1992).

The division of the Culebra Dolomite in the WIPP area into hydrochemical type areas shows that there are distinct populations of water chemistry. Area-wide background values for the water-chemistry parameters cannot be established due to their highly variable nature.



Source: Holt et al., 1992

EXPLANATION

• WELLS TESTED

—10,000— EQUAL CONCENTRATION CONTOUR LINE, MILLIGRAMS PER LITER

FIGURE 3-6 DISTRIBUTION OF TOTAL DISSOLVED SOLIDS (TDS) IN THE CULEBRA DOLOMITE GROUNDWATER

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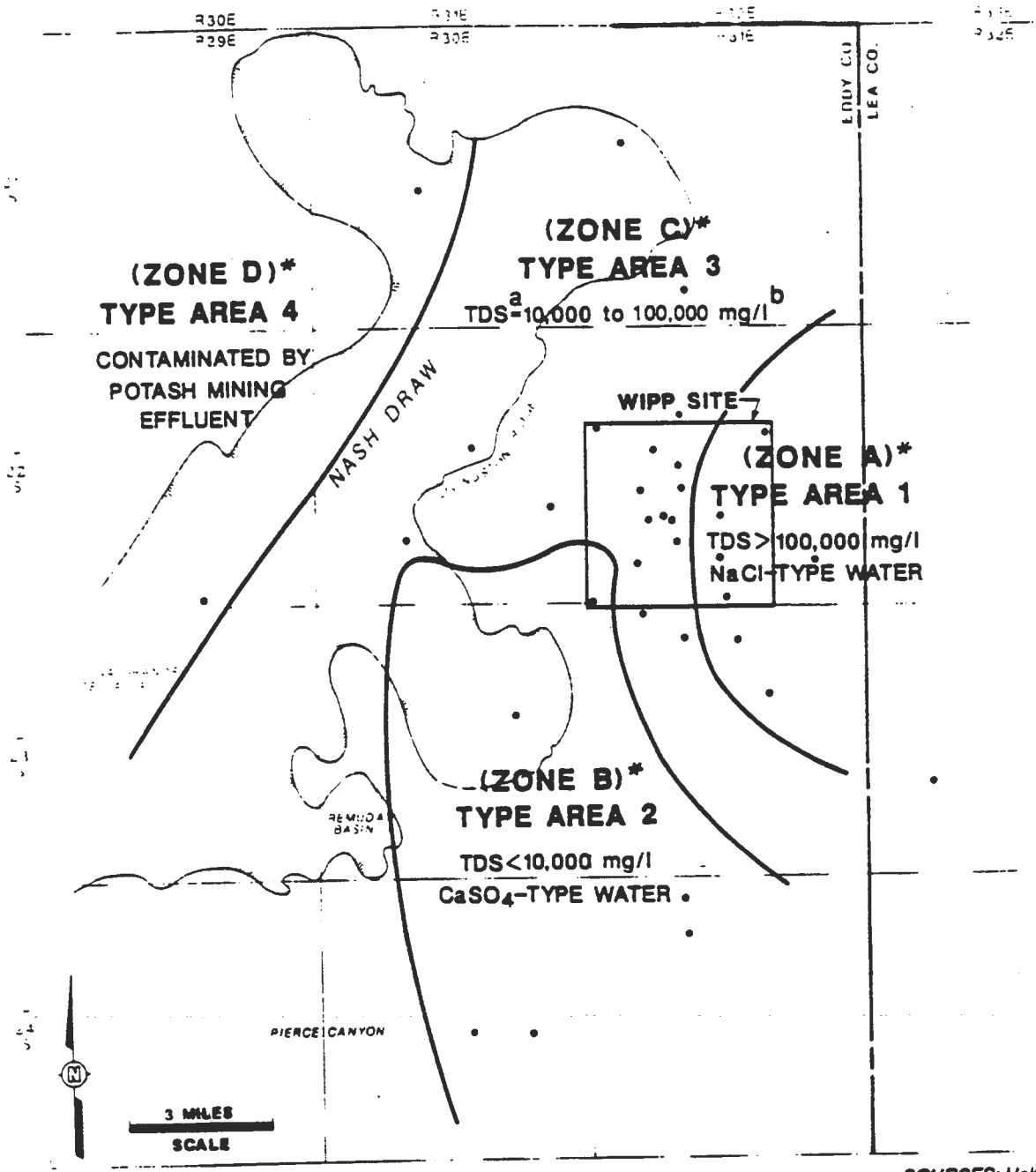

*NOTE: Zones from Seigel et al., 1991

SOURCES: Holt et al., 1992
Seigel et al., 1991

EXPLANATION

a TOTAL DISSOLVED SOLIDS

b MILLIGRAMS PER LITER

• WELLS TESTED

FIGURE 3-7 CULEBRA DOLOMITE HYDROCHEMICAL TYPE AREAS

Concentrations of the major cations and anions often differ by more than an order of magnitude in wells separated by less than 2 miles (such as between H-02 and H-15) in the immediate WIPP area. Considering this great variability, the background must be established on an individual well-by-well basis and not characterized on an area-wide relationship. The background mean concentration or range of concentrations for given analytical parameters must be defined at each well in order to be useful for future comparisons in determining changes in local water quality.

Ramey (1985) was first to note that modern groundwater flow directions within the Culebra Dolomite do not appear consistent with the modern solute distribution. When compared with groundwater flow directions, the distribution of TDS within the Culebra Dolomite generally decreases down gradient in the direction of flow which is an unusual relationship. As summarized in Lappin (1988) and Holt et al. (1992), isotopic evidence (Lambert and Harvey, 1987), as well as modern Culebra Dolomite transmissivity and head distribution, preclude modern vertical recharge to the Culebra Dolomite . Modern vertical recharge cannot account for the modern flow/salinity distribution relationship. One possible mechanism that may account for the modern relationship between flow direction and solute distribution involves paleo fluid flow to the northeast during past periods of higher recharge followed by a reversal in flow direction to that seen today (Lambert and Harvey, 1987; Holt et al., 1992). This relationship is consistent with the interpretation of Lambert and Harvey (1987) that suggests a transient, rather than steady state, hydrologic setting, and no present active recharge to the Culebra Dolomite in the immediate WIPP area.

Mercer (1983) noted an increase in TDS in the Culebra Dolomite from west to east and defined a line to the east, where the sum of the potassium plus magnesium concentrations exceed 100 milliequivalents per liter. Mercer indicates that this line approximates the dividing line between regions of higher transmissivity to the west and lower transmissivity to the east, possibly indicating a stagnant flow system east of the site.

Chapman (1988) indicates that there is a clear linear correlation between TDS and chloride, and the almost one-to-one molar correlation between sodium and chloride is strong evidence that the salinity increase is due to halite dissolution. Chapman also proposes that the increase in magnesium and potassium concentrations eastward across the site is the result of dissolution of other evaporite minerals associated with the halite and that there is no obvious reason to relate the high potassium and magnesium concentrations to low aquifer transmissivity and long residence times as described by Mercer (1983).

Holt et al. (1992) present the argument that there is a clear correlation between Culebra Dolomite transmissivity and water chemistry. The presence of high-TDS groundwater with high concentrations of magnesium and potassium in the eastern WIPP area may reflect the record of a past flow system where the Culebra Dolomite received recharge from the west or southwest with groundwater flow to the east, which supports the nonsteady state hypothesis of Lambert and Harvey (1987). The present very low transmissivity found in the Culebra Dolomite in the eastern section of the project area may have restricted the redistribution of solute back toward the southwestern part of the project area.

The magnesium/calcium molar ratio (Holt et al., 1992) increases from southwest to northeast from 0.3 at Well H-09 and the Poker Trap Windmill to 3.1 at Well H-15. The high magnesium concentrations to the east may be the result of long-term dissolution of evaporite minerals with little, if any, input of fresh water. This fluid may result from very long residence times in a stagnant flow system as suggested by Mercer (1983) and Holt et al. (1992). The existence of low TDS water with a fundamentally distinct chemical composition and relatively high transmissivity in the southwestern region may indicate that this area acts as a separate and active flow system within the Culebra Dolomite. These data suggest that the southwestern area may have a limited hydrologic connection to the Culebra Dolomite in the eastern and northeastern sections of the project area.

Chapman (1988) notes that as groundwater moves from north to south, TDS decreases by an order of magnitude and the overall water chemistry changes from sodium-chloride-dominant to calcium-sulfate-dominant. Chapman proposes that the only plausible mechanism for this change is the input of a large quantity of low TDS water, or recharge. The possibility of recharge in the southern area is enhanced by the presence of solution and fill features such as gypsum caves in the Forty-Niner Member of the Rustler Formation near the Gnome Site. Chapman (1988) indicates that these features could act as conduits, supplying fresh water to deeper Rustler Formation units.

The observations of many investigators support the concept that the Culebra Dolomite may have experienced changes in groundwater flow directions and that it has received recharge at different periods of time in the past and may be receiving recharge locally in the western and southwestern parts of the WIPP area today. All of these conditions have influenced the water chemistry of the Culebra Dolomite as seen today.

3.2.2.2 Magenta Dolomite Member of the Rustler Formation

The Magenta Dolomite Member of the Rustler Formation is the uppermost of two regionally persistent dolomite units within the Rustler Formation (Figure 3-2). The Magenta Dolomite is typically a fine-grained, gypsiferous, arenaceous dolomite (Holt and Powers, 1988).

The Magenta Dolomite was tested hydrologically at 16 locations in the vicinity of the WIPP Site (Mercer, 1983; Beauheim, 1986, 1987). The measured transmissivity values from these tests are shown on Figure 3-8. Most of these values are less than or equal to 0.1 ft^2/day (1.1×10^{-7} m^2/s). Higher values of transmissivity have been measured at some wells including H-06a and H-09a (0.3 and 1.0 ft^2/day [3.2×10^{-7} and 1.0×10^{-6} m^2/s], respectively). The transmissivity of the Magenta Dolomite has been enhanced in Nash Draw, where dissolution of the Salado and Rustler Formations has produced significant fracturing of the unit. The two highest transmissivities measured in the Magenta Dolomite, 375 ft^2/day (4.0×10^{-4} m^2/s) and 53 ft^2/day (5.7×10^{-5} m^2/s), were found in Nash Draw at Wells WIPP-25 and WIPP-27, respectively.

Water levels have been measured in the Magenta Dolomite since 1979. Figure 3-9 shows the elevations of these water levels along with equivalent freshwater-head elevations calculated using borehole-fluid density data presented in Mercer et al. (1981), Dennehy and Mercer (1982), Mercer (1983), Lambert and Robinson (1984), and Richey (1986, 1987). The contours on Figure 3-9 indicate a general westerly flow across the WIPP Site area toward Nash Draw, where groundwater probably flows through fractures and drains into lower units. In the northeast end of Nash Draw, the water flow is generally to the southwest, probably moving down through fractures into lower units in the central part of the draw.

The potentiometric surface map in Figure 3-9 suggests some variability in permeability across the WIPP Site area. The hydrologic gradient across the site varies from 16 to 20 feet per mile on the eastern side, steepening to about 32 feet per mile along the western side near Nash Draw. This steepening may reflect drainage of groundwater from the Magenta Dolomite into lower units through fractures associated with dissolution or may only reflect a decrease in permeability.

If modern recharge to the Magenta Dolomite is occurring, it probably takes place outside of the WIPP area, in areas such as Bear Grass Draw or possibly Clayton Basin (Holt et al., 1992, and Hunter, 1985). The potentiometric contour map seems to indicate that recharge may be occurring to the east of the WIPP Site. However, it is believed that the apparent

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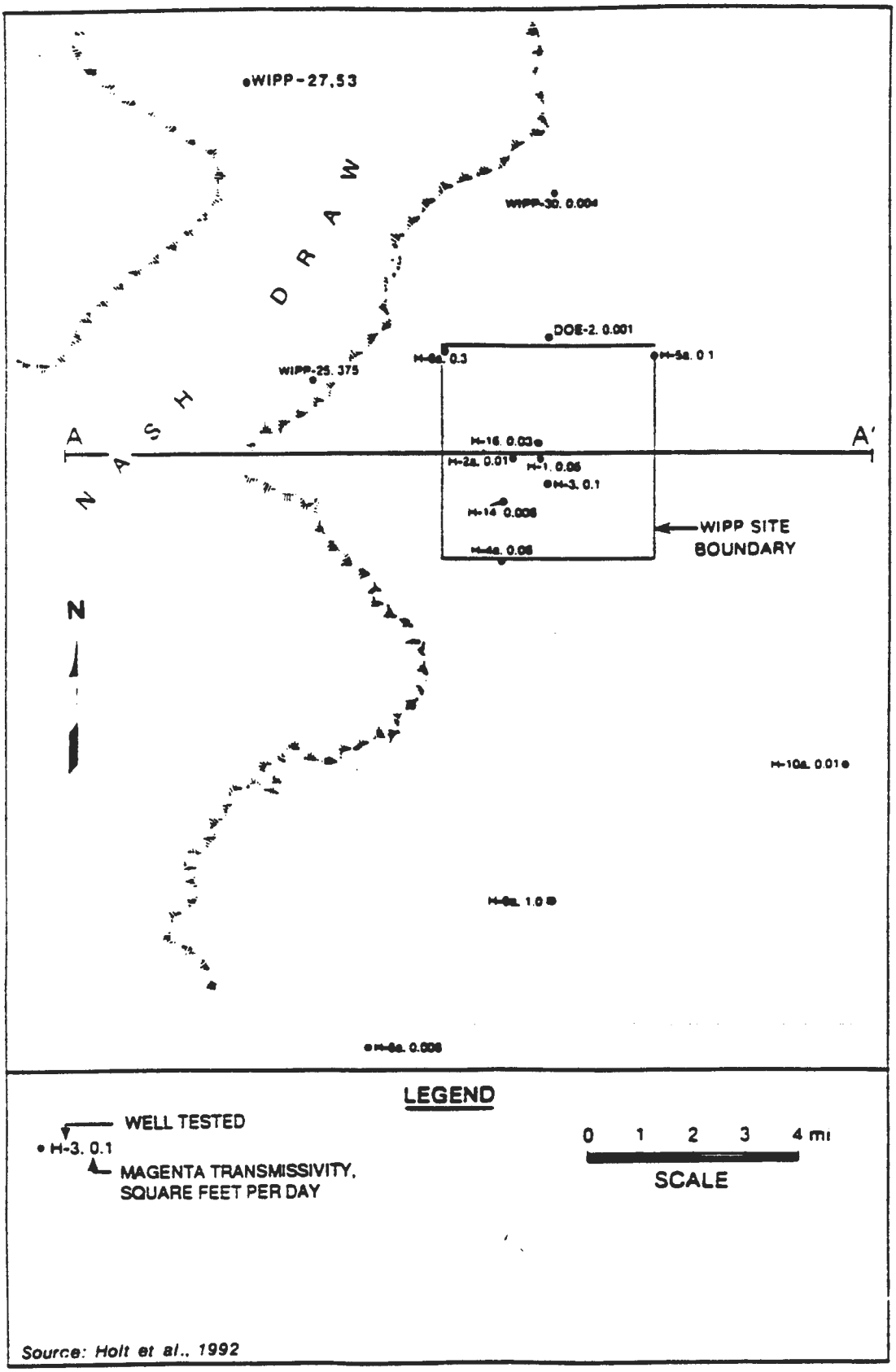
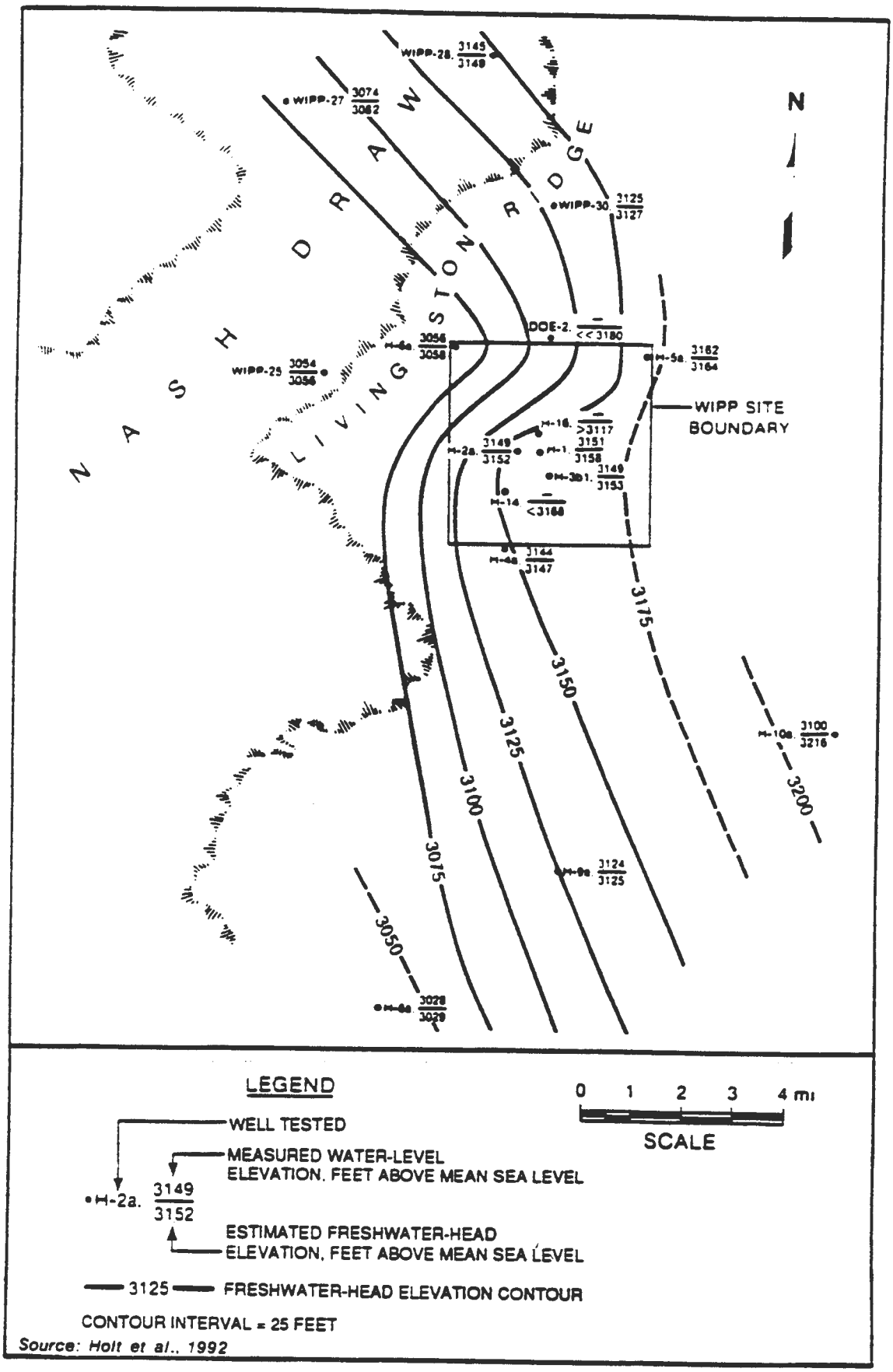


Source: Holt et al., 1992

FIGURE 3-8 MAGENTA DOLOMITE TRANSMISSIVITY



Source: Holt et al., 1992

FIGURE 3-9 MEASURED WATER LEVEL AND ESTIMATED FRESHWATER HEAD ELEVATION, MAGENTA DOLOMITE MEMBER

recharge is either from the effect of corrections made for variable water quality (density corrections) or the locally steep gradients that result from decreased permeability to the east.

The TDS in Magenta Dolomite groundwater range in concentration from 5,460 mg/ℓ in Well H-09a to 270,000 mg/ℓ in Well H-10a (see Figure 3-9 for the location of Well H-10a). The water is considered saline to briny. The Magenta Dolomite has not been sampled with the same density as the Culebra Dolomite, due to the fewer number of wells completed in the Magenta Dolomite and the fact that much more emphasis was placed on characterizing the Culebra Dolomite in past investigations. The WQSP has routinely sampled only four wells completed in this unit. Groundwater-quality data were collected from Wells H-03b1, H-04c, H-05c, and H-06c.

In general, the chemistry of Magenta Dolomite water is variable. Groundwater types range from a predominantly sodium-chloride type at Well H-04c to a calcium-magnesium-sodium-sulfate type at Well H-06c. Water-quality data do not indicate a clear trend or definitive groupings of water chemistry in the Magenta Dolomite. Groundwater at Well H-04c appears to be anomalously high in TDS concentration (23,500 mg/ℓ) and sodium (7,100 mg/ℓ). The TDS concentration for the other three wells sampled by the WQSP are in the range of 4,800 to 8,100 mg/ℓ and sodium concentrations from 650 to 1,500 mg/ℓ. The water chemistry at Well H-04c may indicate a general overall increase in TDS concentrations to the south and southwest, away from the WIPP Site, and a potential change to a predominantly sodium-chloride type water in that area.

In the WIPP area, the general water quality of the Magenta Dolomite is better than that of the Culebra Dolomite. However, water from the Magenta Dolomite is not used anywhere in the vicinity of the WIPP.

4.0 Background Groundwater Quality - Methodology

The main objective in characterizing background water-quality for the area around a waste management facility is to develop a tool that can be used to assess future changes in water quality as related to activities conducted at that facility. The characterization of the WIPP water-quality represents a best estimate of the naturally occurring background water chemistry in the area of the WIPP. The background water chemistry will be used as the standard to which future analyses will be compared to determine if changes in water quality have occurred.

As discussed in Section 3.2.2, the water quality of the Culebra and Magenta Dolomite Members of the Rustler Formation is highly variable between individual wells across the WIPP Site area; therefore, background water-quality values could not be defined for the WIPP area as a whole. The variable nature of water quality required that background concentration values for the individual chemical parameters be defined at each individual well.

WIPP water-quality data for each well included in the background characterization program were evaluated for general data quality, accuracy, precision, and repeatability to develop a useful and reliable data set. The data were then evaluated for apparent trends, such as general increases or decreases in parameter concentration with time. Finally, the data were tested for outliers, and where possible, background mean concentrations, concentration ranges, and confidence intervals were established. These concentrations and ranges represent the background values for the chemical parameters evaluated at the individual well sites. The results of this evaluation are presented in Chapter 5.0.

The following sections describe in more detail the methodology employed to determine background groundwater quality.

4.1 Preliminary Data Evaluation

For the purpose of establishing background water quality, analytical parameters were divided into the following groups:

- ***Major Cation and Anions*** - The major cations and anions include calcium, sodium, magnesium, potassium, chloride, sulfate, and bicarbonate. Together these are the bulk (greater than 99 percent) of the dissolved constituents in WIPP area groundwaters. The concentrations of these parameters were generally well above the method detection limit (MDL). A background concentration range

was established for each of these parameters at each well using standard statistical methods.

- ***Minor Cations, Anions, and Indicator Parameters*** - These include, for example, trace metals, phosphorus, and total organic carbon (TOC). In general, concentrations of these parameters were very close to or below the MDL. A background concentration range based on statistical methods could not be established for these parameters, as discussed in Section 4.5. However, a background range, based on detections and MDLs, was established for the minor constituents at each well.

- ***Organic Compounds*** - These parameters include selected volatile and semi-volatile organic compounds (VOCs and Semi-VOCs, respectively), pesticides, and polychlorinated biphenyls (PCBs). Very few of these compounds were detected in WQSP groundwater samples. Because of the extremely small number of detections, each detection is listed in the appropriate table for each well in Chapter 5.0.

4.2 Evaluation of Trends

An important objective of groundwater-quality monitoring is to detect changes or trends in parameter concentrations over time. In a hydrologic system such as the Rustler Formation at the WIPP, which presently exhibits great areal variability in water chemistry and appears to be in a transient state, natural water-quality changes may occur over long periods of time. Large-scale pumping of groundwater during testing and sampling activities may act to enhance water-quality changes by promoting migration of water with different chemistries toward pumping centers. In addition, water quality at a particular well may change with pumping due to the removal of contaminants introduced during well construction.

If trends in chemical parameter concentrations exist, representative background values may be difficult to establish. Future parameter concentrations at individual well sites may differ from the estimated background concentrations due to natural changes, which could make evaluation of the impact from the WIPP facility difficult.

Water-quality data for separate parameters from individual wells were plotted on concentration versus time graphs as described by Gilbert (1987). The graphs were visually examined for apparent temporal trends in concentration over time. In general, temporal trends in groundwater chemistry for most parameters at most wells were not observed (or were relatively weak). Apparent trends were further evaluated using the Mann-Kendall Nonparametric Test for Trends (Gilbert, 1987). In all cases, the test results indicated that the

probability of an actual trend was very low, at least based on the small data set available for analysis. Long-term temporal trends may exist but could not be identified with the small number of data points available for evaluation (3 to 5) and the variability of the data.

The main conclusion from the trend evaluation is that no significant temporal trends can be identified from the available data. Based on this conclusion, the statistical methods selected for data analysis are appropriate. Statistically-determined background concentration mean values and associated confidence intervals can be determined and are probably not influenced by trending data. Detail on potential trends at individual wells is provided in Chapter 5.0 and summarized in Chapter 7.0.

4.3 Evaluation of Outliers

Prior to the statistical analysis and the construction of confidence intervals, the WQSP data were evaluated to identify potential outliers. Outliers are values that do not fall within an expected range or whose deviation from a mean is greater than expected (Kennedy and Neville, 1986). The procedure employed to identify outliers included the following:

- Potential outliers were visually identified on the concentration versus time plots.

- Each of these potential outliers was tested using the Q Test (Fritz and Schenk, 1966). The Q Test is applicable when the number of observations is small. The test was conducted at a confidence level of 90 percent, indicating that a questionable value may be rejected with 90 percent confidence that it is significantly different from the other results in the sample. The Q Test involves dividing the difference between the value of the potential outlier and the nearest neighboring value by the range to obtain a quotient, Q. The range includes the potential outlier. If the calculated Q is greater than a rejection quotient, $Q_{0.90}$, the questionable value is labeled as an outlier.

- An additional test was performed on the values labeled as outliers by the Q Test to ensure that the outliers were not due to a routine and acceptable level of analytical error. It was assumed that an acceptable relative accuracy for WQSP data was $\pm$ 20 percent. For each Q Test outlier and its nearest neighbor, the $\pm$ 20 percent interval was calculated. If the intervals overlapped, the difference between the two values was ascribed to acceptable analytical error, and the questionable value was considered to be valid. Conversely, if the intervals did not overlap, the questionable value was considered to be a true outlier.

Concentration values determined to be outliers by the above procedure were removed from the data set used to construct background confidence intervals for the major cations and

anions. Outliers identified by this procedure were also removed from the minor constituent data sets before preparing background concentration ranges. Appendix B presents a list of all of the outliers that were removed from the WQSP data set prior to the background determination. These outliers amount to approximately two percent of the WQSP cations, anions, and indicator analytes data.

4.4 Statistical Methods

Background concentration ranges, represented by 95 percent confidence intervals, were established for major cations and anions. The major cations and anions are listed in Section 4.1. Confidence intervals were constructed for each parameter at each well using the Student's t distribution following standard methodology presented in Khazanie (1986). The t distribution was selected because the number of samples available from each well was small, i.e., 3 to 5. The construction of confidence intervals based on the t distribution assumes that the data are normally distributed. As discussed in Section 4.2, temporal trends in groundwater chemistry were not generally observed (or were relatively weak). The lack of temporal trends indicated that the use of the Student's t distribution was appropriate. This, combined with the observation that concentrations of major constituents were generally well above detection limits, indicates that the assumption of normality is warranted.

The 95 percent confidence level was selected because the 99 percent level produced unrealistically wide background concentration ranges when only three samples were available. The 90 percent confidence level was not selected because it produced very narrow ranges when five samples were available. The 95 percent confidence level implies that there is 0.95 probability that a "true" mean background concentration is within the computed concentration range represented by the 95 percent confidence interval.

Table 4-1 lists the number of observations used to construct confidence intervals for the major cations and anions. It is apparent from Table 4-1 that the number of observations at a given well varies. This variation was due to changes in the analytical program from one sampling round to the next and was also due to the removal of outliers. Table 4-1 explains why confidence intervals were not computed for some major cations and anions at certain wells. Confidence interval construction for a specific parameter at a given well requires the following:

Table 4-1
Number of Observations Used to Construct Confidence Intervals

Well	Boron	Calcium	Iron	Lithium	Magnesium	Manganese	Potassium	Sodium	Strontium
Barn Well	3	3	4[a]	3	3	4[a]	3[a]	3	3
DOE-1	2[b]	3	3	1[c]	3	3	3	3	3
DOE-2	3	3	2[b]	1[c]	3	3	3	3	3
Engle Well	3	3	3	2[c]	3	3	3	3	3
H-02a	3	3	3	2[c]	3	3	3	3	3
H-03b1	5	5	5[a]	2[b]	5	5[a]	5	4[d]	5
H-03b3	5	5	5	3	5	5	5	5	5
H-04b	5	4[d]	5	4	5	5	5	5	5
H-04c	5	4[d]	5	5	5	5	5	4[d]	5
H-05b	5	5	5	3	5	5	5	5	5
H-05c	5	5	5	5	5	5[a]	5	5	5
H-06b	5	5	5	3	5	5	5	5	5
H-06c	5	5	5	5	5	5[a]	5	4[d]	5
H-07b1	5	5	4[e]	4	5	5	4[d]	5	5
H-08b	3	3	3	2[c]	3	3[a]	3	3	3
H-09b	3[d]	4	4[a]	3	4	4	4	4	4
H-11b3	4[d]	5	5[a]	2[b]	5	5	5	5	5
H-12	3	3	3	2[c]	3	3	3	3	3
H-14	3	3	3	3	3	3	3	3	3
H-15	3	3	2[b]	3	3	3[a]	3	3	3
H-18	3	3	3	3	3	3	3	3	3
P-14	3	3	3	2[c]	3	3	3	3	3
P-17	3	3	3	2[c]	3	3	3	3	3
Ranch Well	4	3[d]	5[a]	2[b]	4	5[a]	4	4	4
Twin Wells	3	3	4[a]	2[c]	3	4[a]	3[a]	3	3
WIPP-19	5	5	4[e]	4[d]	5	5	5	5	5
WIPP-25	4	4	4	3	4	4	4	4	4
WIPP-26	3	3	3[a]	2[c]	3	3[a]	3	3	3

Refer to footnotes at the end of this table.

Table 4-1 *(Continued)*
Number of Observations Used to Construct Confidence Intervals

Well	Alkalinity	Bromide	Chloride	Fluoride	pH	Sulfate	Total Dissolved Solids
Barn Well	3	3[a]	4	4	4	4	4
DOE-1	2[b]	3	3	3	3	3	3
DOE-2	2[b]	3	3	3	3	3	3
Engle Well	2[b]	3[a]	3	3	3	3	3
H-02a	3	3	3	2[b]	3	3	3
H-03b1	4	4[d]	5	5	5	5	5
H-03b3	4	5	5	5	5	5	5
H-04b	4	5	5	5	5	5	5
H-04c	5	5	5	5	4[d]	5	5
H-05b	5	5	5	5	4[d]	5	5
H-05c	5	5	4[d]	5	5	5	5
H-06b	5	5	5	5	5	5	5
H-06c	5	5[a]	5	5	5	5	5
H-07b1	5	5[a]	4[d]	5	5	5	5
H-08b	3	3[a]	3	2[b]	3	3	3
H-09b	4	4	4	4	4	4	4
H-11b3	4	5	5	5	5	5	5
H-12	3	3	3	3	3	3	3
H-14	3	3	3	3	3	3	3
H-15	3	3	3	3	3	3	3
H-18	3	3	3	3	3	3	3
P-14	3	3	3	3	3	3	3
P-17	3	3	3	3	2[b]	3	3
Ranch Well	4	4	5	5	5	5	5
Twin Wells	3	3	4	4	4	3[d]	4
WIPP-19	5	5	5	5	5	5	5
WIPP-25	4	4	4	4	4	4	4
WIPP-26	3	3	3	3	3	3	3

Refer to footnotes at the end of this table.

Table 4-1 *(Continued)*
Number of Observations Used to Construct Confidence Intervals

FOOTNOTES:

[a]Confidence interval not constructed because greater than 50 percent of observations were below the method detection limit.
[b]Outlier removed, confidence interval not constructed because only two observations remain.
[c]Confidence interval not constructed because there are less than three observations.
[d]Outlier removed, confidence interval was constructed.
[e]Outlier removed, confidence interval not constructed because greater than 50 percent of remaining observations were below the method detection limit.

- At least three observations.
- At least 50 percent of the observations must be greater than the MDL.

The t statistic varies inversely as a function of the number of observations. This means that confidence interval widths are related to the number of observations, as well as, the sample standard deviation. Thus, at a given well, the relative variability in width of confidence intervals is due to both the sample standard deviation and the number of observations used to construct the confidence intervals.

4.5 Factors Influencing Data Usability

As described in Section 2.7, the TDS content (filterable residue) of groundwater samples from many WQSP wells was relatively high. High TDS samples required dilution prior to analysis, and the dilution factors apparently varied during the WQSP. The variable dilution factors resulted in MDLs that were not consistent from sampling round to round. Variable MDLs affected the use of the minor constituent data in establishing background concentrations. For example, the MDLs for many of the trace metal analyses were relatively high (often from 1.0 to 10 mg/ℓ), preventing quantification of trace metal concentrations. Large dilutions and the resulting high MDLs, in effect, reduced the sensitivity of the analysis of samples for minor constituents. The numerous nondetections at high MDLs made establishing background concentrations difficult for many trace metals.

Large sample dilution probably magnified spurious, near-MDL detections. For example, if the MDL for chromium is 0.010 mg/ℓ, detections of 0.011 and 0.012 mg/ℓ are typically observed. However, if samples are diluted 100 to 1, the MDL becomes 1.0 mg/ℓ, and the same low-level detections become 1.1 and 1.2 mg/ℓ, respectively. In this manner, spurious detections can appear to be very significant. Considering the reasons discussed above, confidence intervals were not calculated for minor cations, anions, and indicator analytes.

5.0 Background Groundwater Quality - Results

This chapter presents the results of the analysis of WIPP WQSP background groundwater chemistry. For each well, background groundwater chemistry is listed in a summary table and major cation and anion concentrations are plotted as a function of time. Also, temporal trends in groundwater chemistry are discussed. The results presented below do not include outliers. The procedure used to identify outliers is given in Section 4.3, and the resulting outliers are tabulated in Appendix B. Appendix C contains the WIPP WQSP groundwater quality data set used to produce this report. Chapter 5.0 is divided into sections that correspond to individual wells.

5.1 Barn Well

Samples of groundwater from the Dewey Lake Redbeds were collected at the Barn Well. The Barn Well was sampled four times; the first groundwater sample was collected in November 1987, and the most recent was collected in June 1990. Samples collected in April 1988 were analyzed for an abbreviated suite of metal and general chemical parameters. Volatile organic compounds, semi-VOCs, and total PCBs were analytes in the November 1987 sampling event. Pesticides and a limited suite of VOCs were analytes in the April 1988 sampling. Consequently, groundwater from the Barn Well was tested only once for most hazardous organic compounds.

Background concentrations for constituents in Barn Well groundwater are listed in Table 5-1. Table 5-1 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-1 are the concentration ranges of minor constituents. Hazardous organic constituents were not detected in groundwater samples from the Barn Well.

Sodium is the dominant cation in Barn Well groundwater, followed by calcium and magnesium; bicarbonate and sulfate are the dominant anions (Table 5-1). Groundwater collected from Barn Well is classified as fresh, because the TDS concentration is less than 1000 mg/ℓ (Freeze and Cherry, 1979).

Figure 5-1 shows the temporal variation in the concentration of six major constituents of Barn Well groundwater. Though concentrations fluctuate, no temporal trends are observed in these or any other constituents of Barn Well groundwater.

Table 5-1
Background Groundwater Chemistry
Barn Well

Major Constituents[a]	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	0.36	0.03	0.28 - 0.44
Calcium	66	8	47 - 85
Iron	NC[b]	NC	<0.1[c]
Lithium	0.05	0.01	0.03 - 0.06
Magnesium	34	3	26 - 41
Manganese	NC	NC	<0.015[c]
Potassium	NC	NC	<5[c]
Sodium	108	14	74 - 142
Strontium	0.9	0.1	0.6 - 1.2
General Chemistry			
Alkalinity (as HCO_3^-)	277	6	262 - 291
Bromide	NC	NC	<2[c]
Chloride	41	5	32 - 49
Fluoride	2.6	0.1	2.5 - 2.7
pH (s.u.)[d]	7.27	0.57	6.37 - 8.17
Sulfate	206	25	167 - 246
Total Dissolved Solids	668	39	606 - 729

See footnotes at end of table.

Table 5-1 *(Continued)*
Background Groundwater Chemistry
Barn Well

Minor Constituents[a]	Concentration Range
Metals	
Aluminum	<2
Antimony	<0.06
Arsenic	<0.05
Barium	<0.2
Beryllium	<0.005
Cadmium	<0.005
Cesium	<0.2
Chromium	≤0.02
Cobalt	<0.05
Copper	≤0.03
Lead	<0.05
Mercury	<0.0002
Molybdenum	<0.02
Nickel	<0.04
Selenium	<0.05
Silica	24 - 54
Silver	<0.01
Thallium	<0.05
Titanium	<0.03
Vanadium	0.06
Zinc	≤0.03
General Chemistry	
Cyanide	<0.02
Iodide	<2
Nitrate (as N)	7.1 - 9.6
Phenolics	<0.008
Phosphate (as P)	≤0.04
Total Organic Carbon	≤4
Total Organic Halogen	≤0.15

See footnotes at end of table.

Table 5-1 *(Continued)*
Background Groundwater Chemistry
Barn Well

Hazardous Organic Constituents

None Detected

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.

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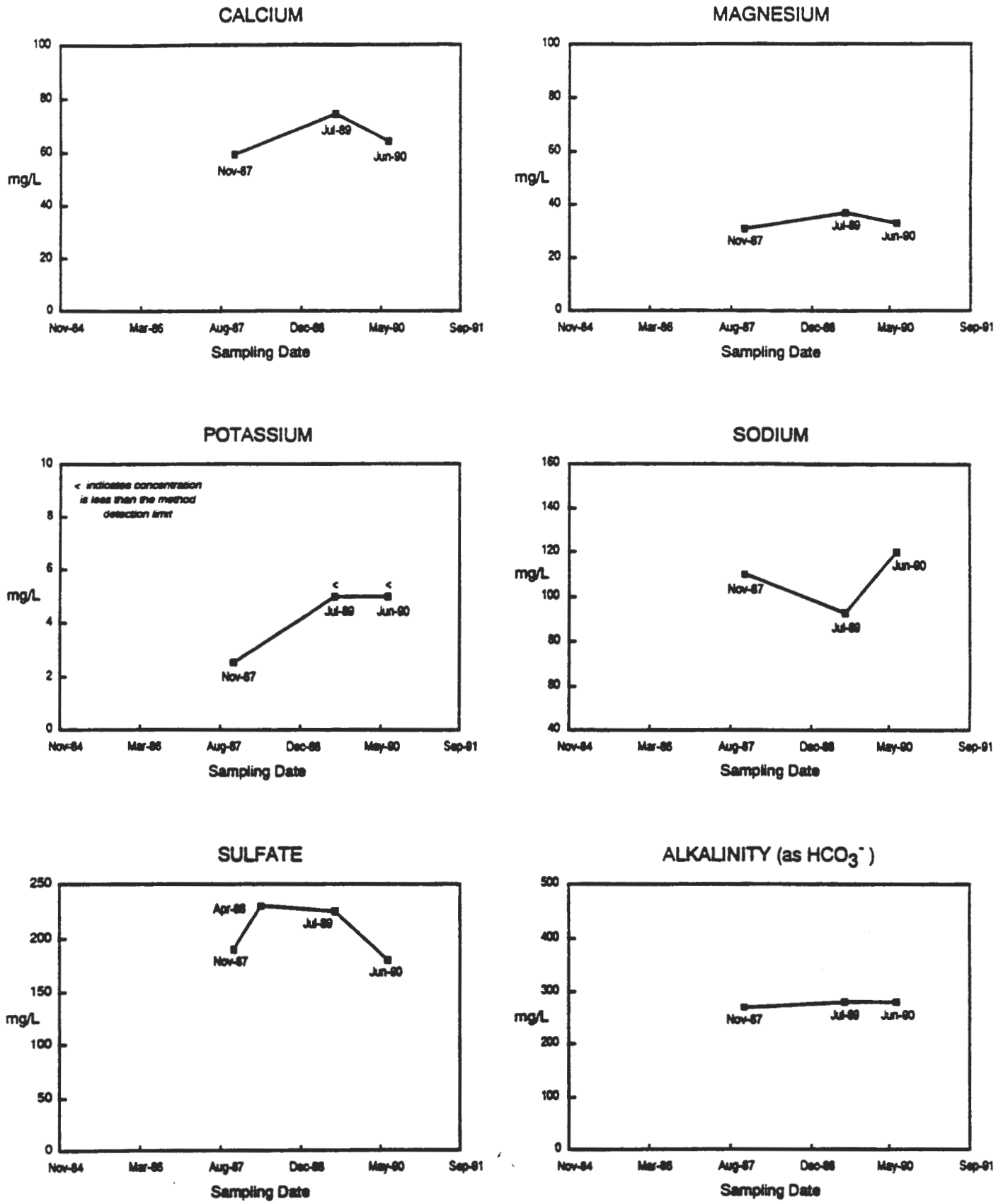

FIGURE 5-1 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF BARN WELL GROUNDWATER

5.2 Well DOE-1

Groundwater samples from the Culebra Dolomite were collected at Well DOE-1. Well DOE-1 was sampled three times; the first sampling occurred in April 1985, and the most recent sampling took place in July 1987. Groundwater collected during each sampling event was analyzed for VOCs, semi-VOCs, metals, and general chemical parameters. Samples collected during the July 1986 and July 1987 rounds were also analyzed for total PCBs. Analytical results for major constituents from the April 1985 sampling event were provided by Bendix (Uhland and Randall, 1986). All other results were provided by ITAS.

Background concentrations for constituents in groundwater from Well DOE-1 are listed in Table 5-2. Table 5-2 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-2 are the concentration ranges of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from Well DOE-1.

Sodium is the dominant cation in groundwater at Well DOE-1, followed by calcium, magnesium, and potassium; chloride is the dominant anion, followed by sulfate (Table 5-2). Groundwater in Well DOE-1 is classified as brine (Freeze and Cherry, 1979), because TDS exceed 100,000 mg/ℓ. Well DOE-1 lies within hydrochemical Type Area 1 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. Groundwater in Type Area 1 contains TDS greater than 100,000 mg/ℓ, and sodium and chloride are the dominant dissolved constituents. Several trace metals were detected in groundwater samples from Well DOE-1. Cesium, chromium, cobalt, copper, lead, and titanium were repeatedly detected at concentrations generally less than 1 mg/ℓ (Table 5-2). However, as discussed in Section 4.5, the validity of trace constituent data is uncertain, due to the problems associated with the analysis of high-TDS solutions.

Several hazardous organic constituents were detected in samples of groundwater from Well DOE-1 (Table 5-2). The majority of the detections occurred in the April 1985 sample, and the only compound repeatedly detected was acetone (Table 5-2). According to an EPA risk assessment guidance document (EPA, 1989), all of the organic compounds detected, with the exception of n-nitroso-di-methylamine, could be attributed to laboratory contamination.

Figure 5-2 shows the temporal variation in the concentration of the six major constituents of Well DOE-1 groundwater. The calcium concentration appears to decrease with time, while

Table 5-2
Background Groundwater Chemistry
Well DOE-1

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	NC[b]	NC	34 - 35[c]
Calcium	1,567	153	1,187 - 1,946
Iron	1.1	0.4	0.2 - 2.1
Lithium	NC	NC	3.2[c]
Magnesium	1,533	116	1,247 - 1,820
Manganese	0.27	0.10	0.02 - 0.53
Potassium	1,000	100	752 - 1,248
Sodium	46,000	0	46,000
Strontium	18.1	13.5	0 - 51.5
General Chemistry			
Alkalinity (as HCO_3^-)	NC	NC	44 - 57[c]
Bromide	61	3	55 - 68
Chloride	77,333	3,512	68,609 - 86,058
Fluoride	1.0	0.1	0.6 - 1.3
pH (s.u.)[d]	6.84	0.32	6.06 - 7.62
Sulfate	6,883	454	5,756 - 8,010
Total Dissolved Solids	131,667	2,887	124,495 - 138,838

See footnotes at end of table.

Table 5-2 *(Continued)*
Background Groundwater Chemistry
Well DOE-1

Minor Constituents[a]	Concentration Range
Metals	
Aluminum	≤1.4
Antimony	1.3
Arsenic	<0.5
Barium	≤0.07
Beryllium	≤0.24
Cadmium	0.07
Cesium	0.4 - 0.48
Chromium	0.38 - 0.4
Cobalt	0.1 - 0.30
Copper	0.1 - 0.18
Lead	0.6 - 1.3
Mercury	≤0.0008
Molybdenum	<0.05
Nickel	<0.3
Selenium	<0.5
Silica	11 - 21
Silver	0.1
Thallium	<0.5
Titanium	≤0.69
Vanadium	0.2
Zinc	<0.1
General Chemistry	
Cyanide	<0.02
Iodide	<2
Nitrate (as N)	≤0.1
Phenolics	0.012
Phosphate (as P)	≤0.01
Total Organic Carbon	≤1
Total Organic Halogen	0.84 - 9.7

See footnotes at end of table.

Table 5-2 *(Continued)*
Background Groundwater Chemistry
Well DOE-1

Hazardous Organic Constituents[e]

	Sample Date	Concentration
2-Butanone[f]	25-Apr-85	97
Acetone[f]	25-Apr-85	29
Acetone[f]	28-Jul-87	44
Bis(2-ethylhexyl)phthalate[f]	28-Jul-87	33
Butyl Benzyl Phthalate[f]	25-Apr-85	1.9
Di-n-butyl Phthalate[f]	25-Apr-85	2.6
Methylene Chloride[f]	03-Jul-86	10
N-nitroso-di-methylamine	25-Apr-85	2.4
Toluene[f]	25-Apr-85	2.1

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.
[e] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[f] Suspected laboratory contaminant.

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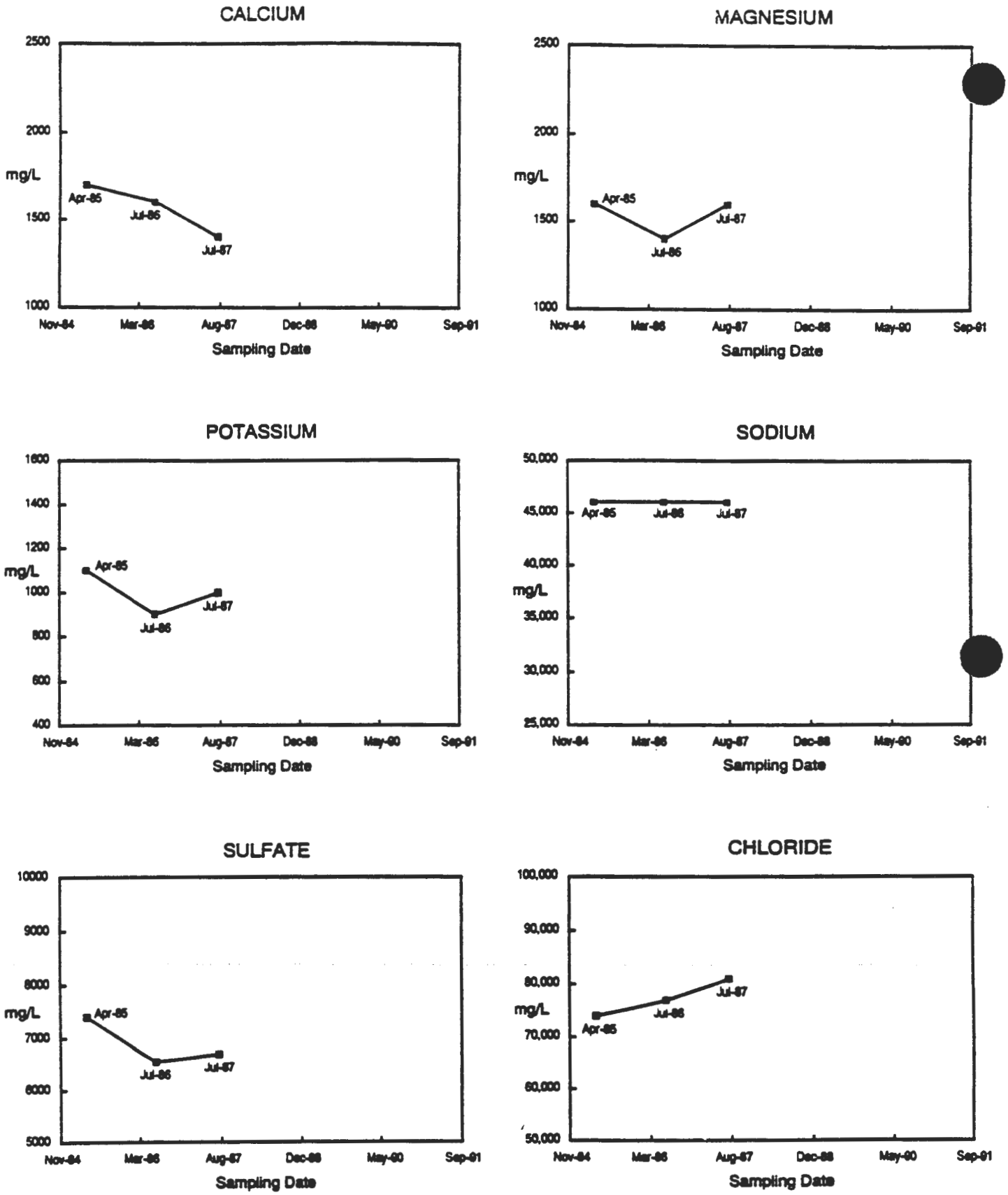

FIGURE 5-2 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL DOE-1 GROUNDWATER

chloride and strontium (not shown on Figure 5-2) concentrations appear to increase. Based on charge balance considerations, the calcium and chloride concentration trends do not appear to be real. Thus, it is likely that the observed trends are due to sampling and analytical variability, rather than actual changes in Well DOE-1 groundwater chemistry.

5.3 Well DOE-2

Groundwater samples from both the Culebra Dolomite and the Bell Canyon Formation were collected at Well DOE-2. The following discussion pertains only to samples collected from the Culebra Dolomite. Well DOE-2 was sampled three times; the first sampling occurred in March 1985, and the most recent sampling took place in May 1988. Groundwater samples were analyzed for metals and general chemical parameters; however, only August 1986 and May 1988 samples were analyzed for VOCs, semi-VOCs, and total PCBs. Analytical results for major constituents from the March 1985 sampling event were provided by Bendix (Uhland and Randall, 1986). All other results were provided by ITAS.

Background concentrations for constituents in groundwater from Well DOE-2 are presented in Table 5-3. Table 5-3 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-3 are the concentration ranges of minor constituents. Hazardous organic constituents were not detected in groundwater samples from Well DOE-2.

Sodium is the dominant cation in groundwater at Well DOE-2, followed by calcium, magnesium, and potassium; chloride is the dominant anion, followed by sulfate (Table 5-3). Groundwater collected from Well DOE-2 is classified as saline, because the TDS are approximately 50,000 mg/ℓ (Freeze and Cherry, 1979). Well DOE-2 lies within hydrochemical Type Area 3 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. Groundwater in Type Area 3 contains TDS ranging from 10,000 to 100,000 mg/ℓ. The MDLs for trace metals in Well DOE-2 groundwater were relatively high, due to the requirement that high-TDS samples must be diluted prior to analysis.

Figure 5-3 shows the temporal variation in the concentration of the six major dissolved constituents of Well DOE-2. Calcium and chloride concentrations and pH (not shown on Figure 5-3) appear to have decreased during the WQSP, while the potassium concentration appears to have increased. Based on charge balance considerations, the large decrease in chloride concentration is not likely. Although the calcium concentration also appears to have decreased, the change is not great enough to counter the decrease in the chloride

Table 5-3
Background Groundwater Chemistry
Well DOE-2

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	18	6	4 - 31
Calcium	1,867	153	1,487 - 2,246
Iron	NC[b]	NC	0.35 - 0.4[c]
Lithium	NC	NC	0.51[c]
Magnesium	1,052	84	844 - 1,260
Manganese	0.49	0.12	0.20 - 0.77
Potassium	430	27	364 - 496
Sodium	17,500	500	16,258 - 18,742
Strontium	28	6	13 - 43
General Chemistry			
Alkalinity (as HCO_3^-)	NC	NC	130 - 160[c]
Bromide	41	6	21 - 61
Chloride	32,233	2,909	25,006 - 39,461
Fluoride	1.3	0.1	1.0 - 1.6
pH (s.u.)[d]	6.74	0.31	5.98 - 7.51
Sulfate	4,067	404	3,063 - 5,071
Total Dissolved Solids	56,500	2,179	51,086 - 61,915

See footnotes at end of table.

Table 5-3 *(Continued)*
Background Groundwater Chemistry
Well DOE-2

Minor Constituents[a]	Concentration Range
Metals	
Aluminum	<10
Antimony	0.6
Arsenic	<0.05
Barium	<0.5
Beryllium	<0.5
Cadmium	<0.05
Cesium	0.03 - 1.7
Chromium	<1
Cobalt	<1
Copper	<1
Lead	<5
Mercury	≤0.0017
Molybdenum	0.03 - 0.09
Nickel	<3
Selenium	<0.5
Silica	6.5 - 24
Silver	<0.1
Thallium	<0.05
Titanium	<3
Vanadium	0.1
Zinc	<1
General Chemistry	
Cyanide	≤0.02
Iodide	<2
Nitrate (as N)	<0.1
Phenolics	≤0.01
Phosphate (as P)	≤0.01
Total Organic Carbon	≤5
Total Organic Halogen	0.61 - 2

See footnotes at end of table.

Table 5-3 *(Continued)*
Background Groundwater Chemistry
Well DOE-2

Hazardous Organic Constituents

None Detected

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.

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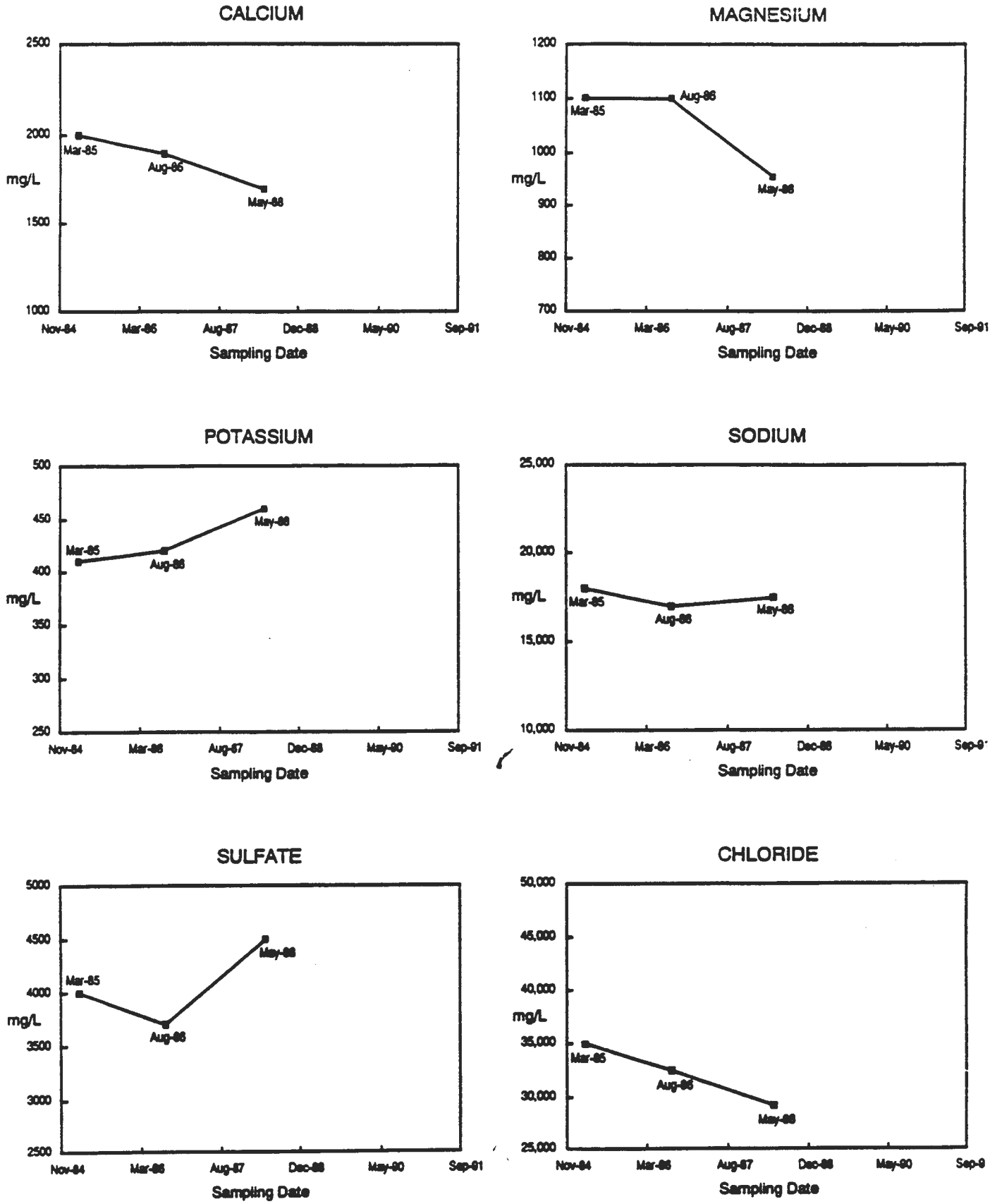

FIGURE 5-3 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL DOE-2 GROUNDWATER

shown in Figure 5-3. Seigel et al. (1991) report that the alkalinity concentration observed at Well DOE-2 increased from the March 1985 to the August 1986 sampling event. They attribute this increase to acidification of the well in 1985.

5.4 Engle Well

Samples of groundwater from the Culebra Dolomite were collected from the Engle Well. The Engle Well was sampled three times-March 1985, December 1987, and January 1990. During all three rounds, samples were analyzed for metals and general chemical parameters. Groundwater samples collected in March 1985 and January 1990 were analyzed for VOCs and semi-VOCs. An abbreviated suite of VOCs were analytes in the December 1987 sampling event. Pesticides were analytes in the December 1987 and January 1990 sampling events. Analytical results for major constituents from the March 1985 sampling event were provided by Bendix (Uhland and Randall, 1986). All other results were provided by ITAS.

Background concentrations for constituents in Engle Well groundwater are listed in Table 5-4. Table 5-4 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-4 are the concentration ranges of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from the Engle Well.

Calcium is the dominant cation in Engle Well groundwater, followed by sodium and magnesium; sulfate is the dominant anion, followed by chloride and bicarbonate (Table 5-4). Engle Well groundwater is classified as brackish, because the TDS are approximately 3,500 mg/ℓ (Freeze and Cherry, 1979). Engle Well lies within hydrochemical Type Area 2 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. Groundwater in Type Area 2 contains TDS less than 10,000 mg/ℓ, and calcium and sulfate are the dominant dissolved constituents.

Several detections of hazardous organic constituents were observed in samples of Engle Well groundwater (Table 5-4). None of the compounds were repeatedly detected, and according to an EPA risk assessment guidance document (EPA, 1989), acetone and diethyl phthalate are common laboratory contaminants.

Figure 5-4 shows the temporal variation in the concentration of the six major constituents of Engle Well groundwater. While concentrations fluctuate, no temporal trends are observed in these or any other dissolved constituents of Engle Well groundwater. Both sodium and

Table 5-4
Background Groundwater Chemistry
Engle Well

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	1.49	0.87	0 - 3.64
Calcium	590	20	540 - 640
Iron	1.31	1.99	0 - 6.25
Lithium	NC[b]	NC	0.16 - 0.2[c]
Magnesium	153	6	139 - 168
Manganese	0.055	0.058	0 - 0.200
Potassium	8	2	2 - 13
Sodium	285	130	0 - 609
Strontium	7.8	0.7	6.1 - 9.4
General Chemistry			
Alkalinity (as HCO_3^-)	NC	NC	74 - 110[c]
Bromide	NC	NC	<2[c]
Chloride	290	140	0 - 638
Fluoride	2.5	0.5	1.4 - 3.7
pH (s.u.)[d]	6.65	0.41	5.64 - 7.65
Sulfate	1,983	29	1,912 - 2,055
Total Dissolved Solids	3,685	282	2,984 - 4,386

See footnotes at end of table.

Table 5-4 *(Continued)*
Background Groundwater Chemistry
Engle Well

Minor Constituents[a]	Concentration Range
Metals	
Aluminum	≤0.2
Antimony	0.11 - 0.17
Arsenic	<0.005
Barium	<0.05
Beryllium	<0.005
Cadmium	0.012 - 0.013
Cesium	<0.2
Chromium	≤0.08
Cobalt	0.02
Copper	<0.1
Lead	≤0.14
Mercury	<0.0002
Molybdenum	0.032 - 0.08
Nickel	≤0.04
Selenium	<0.2
Silica	12 - 25
Silver	≤0.03
Thallium	<0.5
Titanium	≤0.22
Vanadium	0.04
Zinc	0.2 - 2.2
General Chemistry	
Cyanide	<0.02
Iodide	<2
Nitrate (as N)	≤0.5
Phenolics	0.006
Phosphate (as P)	≤0.16
Total Organic Carbon	≤3
Total Organic Halogen	<0.1

See footnotes at end of table.

Table 5-4 *(Continued)*
Background Groundwater Chemistry
Engle Well

Hazardous Organic Constituents[e]

	Sample Date	Concentration
2-Nitroaniline	31-Jan-90	50
Acetone[f]	04-Mar-85	31
Diethyl Phthalate[f]	04-Mar-85	3.9
N-nitroso-di-phenylamine	04-Mar-85	5.9

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.
[e] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[f] Suspected laboratory contaminant.

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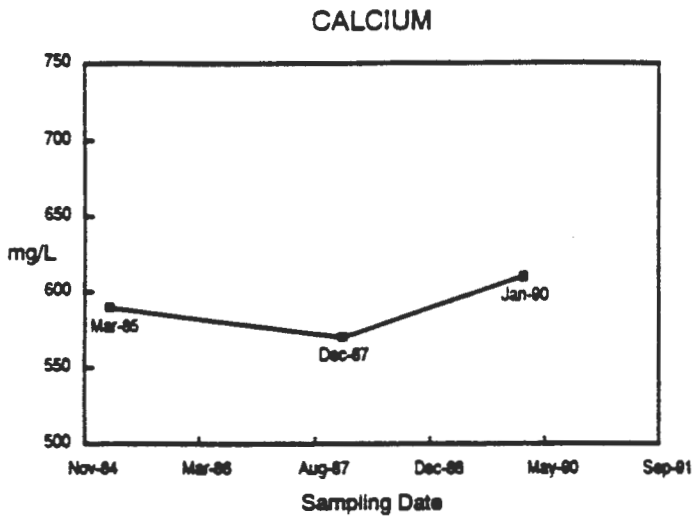

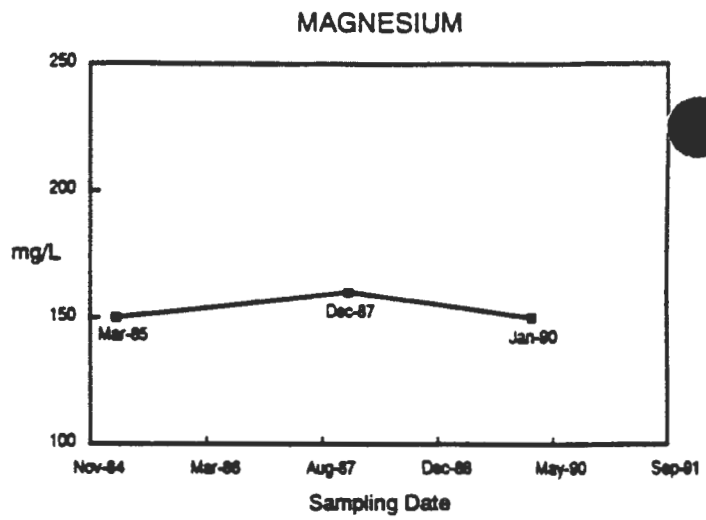

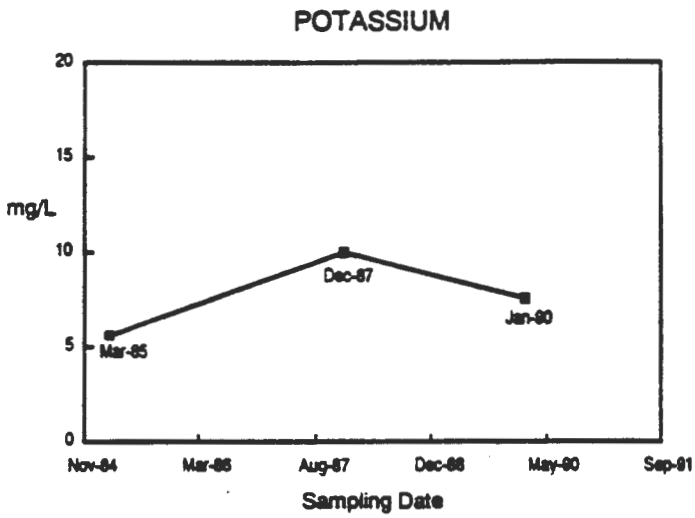

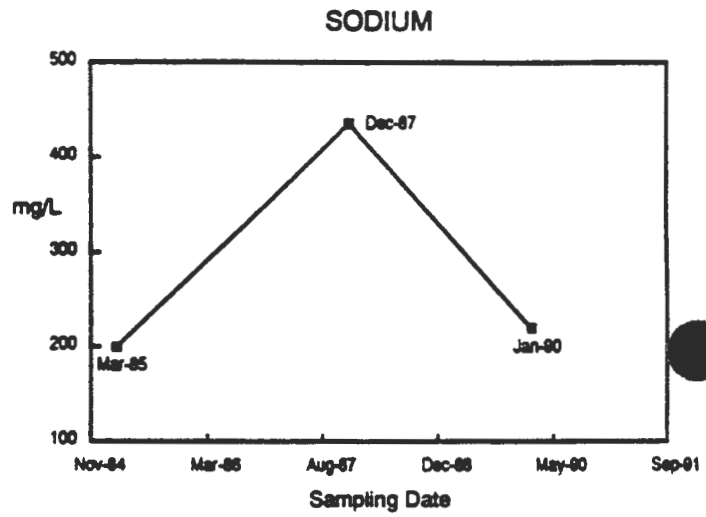

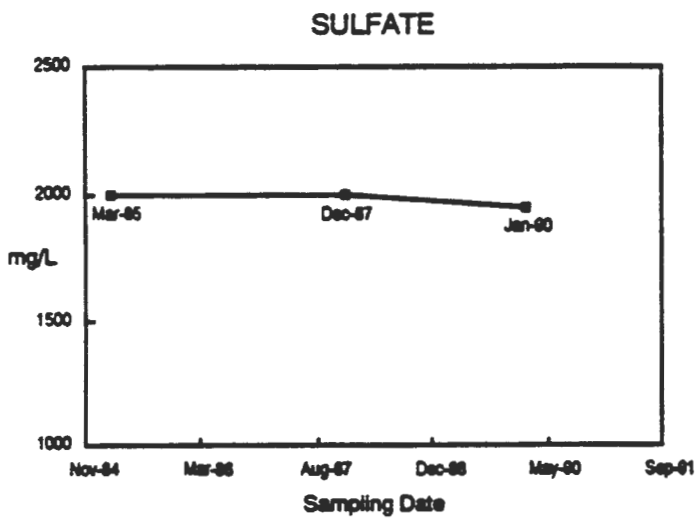

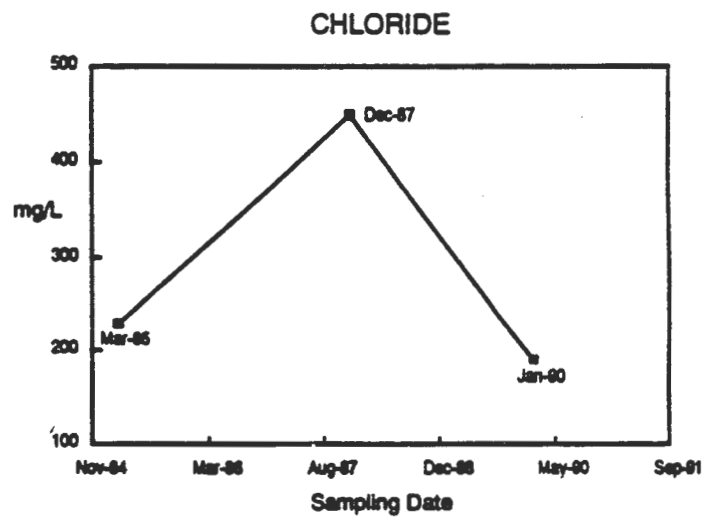

FIGURE 5-4 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF ENGLE WELL GROUNDWATER

chloride concentrations were elevated in December 1987, relative to other sampling rounds (Figure 5-4).

5.5 Well H-02a

Groundwater samples from the Culebra Dolomite were collected at Well H-02a. Well H-02a was sampled three times; the first groundwater sample was collected in April 1986, and the most recent was collected in January 1989. During all three rounds, samples were analyzed for VOCs, semi-VOCs, metals, and general chemical parameters. A sample collected in August 1987 was analyzed for total PCBs.

Background concentrations for constituents in groundwater from Well H-02a are presented in Table 5-5. Table 5-5 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-5 are the concentration ranges of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from Well H-02a.

Sodium is the dominant cation in groundwater from Well H-02a, followed by calcium, magnesium, and potassium; chloride is the dominant anion, followed by sulfate (Table 5-5). Well H-02a groundwater is classified as borderline brackish to saline, because the TDS are approximately 11,000 mg/ℓ (Freeze and Cherry, 1979). Well H-02a lies within hydrochemical Type Area 3 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. Groundwater in Type Area 3 contains TDS ranging from 10,000 to 100,000 mg/ℓ and may be a mixture of Type Area 1 and 2 groundwater. Several trace metals were detected in Well H-02a groundwater at concentrations below 1 mg/ℓ (Table 5-5). However, with the exception of molybdenum, the detections are one-time occurrences, not repeated in other sampling rounds.

Several detections of hazardous organic compounds were observed in samples of groundwater from Well H-02a (Table 5-5). All of the detections could be due to laboratory contamination, according to a tabulation of common laboratory contaminants listed in an EPA risk assessment guidance document (EPA, 1989). Only acetone was detected during more than one sampling round (Table 5-5). The poor agreement between the acetone concentration detected in the January 1989 sample and its laboratory duplicate, i.e., 27 versus 1200 micrograms per liter (µg/ℓ) (Table 5-5), combined with the detection of acetone in a sample blank, questions the validity of the acetone detection. Similarly, methylene chloride was detected in the January 1989 sample blank.

Table 5-5
Background Groundwater Chemistry
Well H-02a

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	10	1	9 - 12
Calcium	715	51	589 - 841
Iron	0.75	0.45	0 - 1.9
Lithium	NC[b]	NC	0.26 - 0.72[c]
Magnesium	167	6	152 - 181
Manganese	0.06	0.03	0 - 0.13
Potassium	103	7	86 - 119
Sodium	2,533	1,102	0 - 5,270
Strontium	8.4	1.5	4.7 - 12
General Chemistry			
Alkalinity (as HCO_3^-)	56	2	52 - 60
Bromide	2	1	0 - 5
Chloride	4,567	874	2,396 - 6,737
Fluoride	NC	NC	2.1 - 2.2[c]
pH (s.u.)[d]	7.71	0.13	7.38 - 8.04
Sulfate	2,933	351	2,061 - 3,806
Total Dissolved Solids	11,650	1,626	7,612 - 15,689

See footnotes at end of table.

Table 5-5 *(Continued)*
Background Groundwater Chemistry
Well H-02a

Minor Constituents[a]	Concentration Range
Metals	
Aluminum	<1
Antimony	<0.5
Arsenic	≤0.014
Barium	<0.05
Beryllium	<0.05
Cadmium	≤0.08
Cesium	≤0.1
Chromium	≤0.4
Cobalt	<0.1
Copper	<0.11
Lead	≤0.5
Mercury	<0.0002
Molybdenum	≤0.07
Nickel	<0.3
Selenium	<0.05
Silica	6.1 - 14
Silver	≤0.2
Thallium	<0.5
Titanium	<0.3
Vanadium	≤0.1
Zinc	<0.1
General Chemistry	
Cyanide	<0.04
Iodide	1 - 9
Nitrate (as N)	≤0.3
Phenolics	≤0.097
Phosphate (as P)	≤0.03
Total Organic Carbon	5 - 7
Total Organic Halogen	≤0.14

See footnotes at end of table.

Table 5-5 *(Continued)*
Background Groundwater Chemistry
Well H-02a

Hazardous Organic Constituents[e]

	Sample Date	Concentration
Acetone[f]	12-Aug-87	1400
Acetone[f]	19-Jan-89	27 (1200)[g]
Bis(2-ethylhexyl)phthalate[f]	19-Jan-89	20
Methylene Chloride[f]	19-Jan-89	16 (45)[g]

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.
[e] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[f] Suspected laboratory contaminant.
[g] Duplicate analysis in parentheses.

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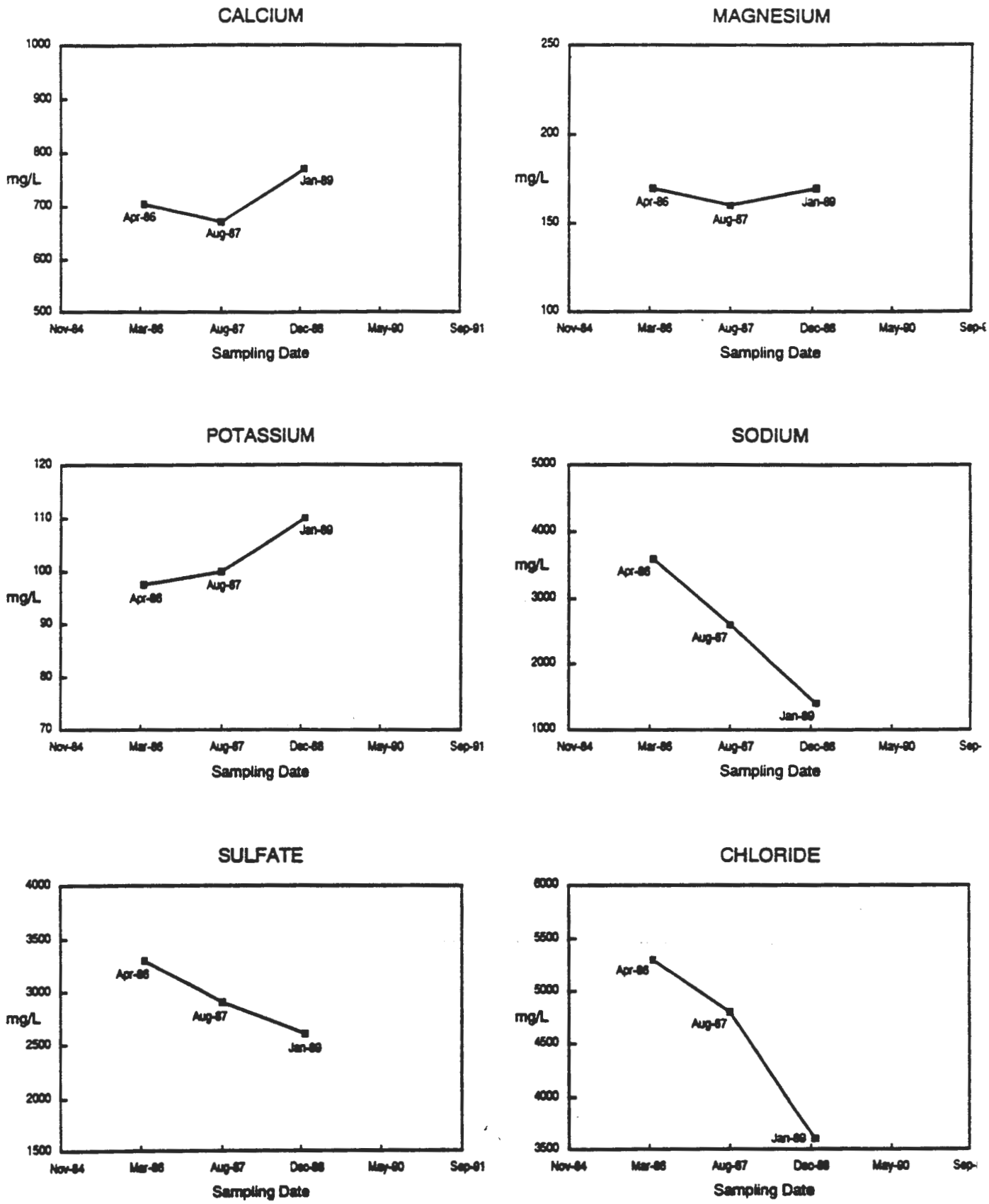

FIGURE 5-5 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL H-02a GROUNDWATER

Figure 5-5 shows the temporal variation in the concentration of the six major constituents of Well H-02a groundwater. Sodium, chloride, and sulfate concentrations appear to have decreased with time, while the potassium concentration may have increased. Based on charge balance considerations, the observed concentration decreases are possible, with the loss of sodium cations being countered by the decrease in chloride and sulfate anions. The potassium concentration trend is relatively minor and may be due to sampling and analytical variability. Siegel et al. (1991) reported that sodium and chloride concentrations are changing with time at Well H-02a. They questioned the representativeness of all samples from the well.

5.6 Well H-03b1

Groundwater samples from the Magenta Dolomite were collected at Well H-03b1. Well H-03b1 was sampled five times; the first sampling occurred in July 1985, and the most recent sampling took place in August 1990. Groundwater collected during each sampling event was analyzed for metals and general chemical parameters. Samples were analyzed for VOCs and semi-VOCs during four of the five sampling rounds; the August 1990 samples were not analyzed for hazardous organic constituents. Total PCB analyses were performed on samples collected in September 1986 and September 1987; and individual PCBs (e.g., Aroclor 1242) were analytes in the March 1989 sampling event. Analytical results for major constituents from the July 1985 sampling event were provided by Bendix (Uhland and Randall, 1986). All other results were provided by ITAS.

Background concentrations for dissolved constituents in groundwater from Well H-03b1 are listed in Table 5-6. Table 5-6 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-6 are the concentration ranges of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from Well H-03b1.

Sodium is the dominant cation in groundwater at Well H-03b1, followed by calcium, magnesium, and potassium. Chloride is the dominant anion, followed by sulfate and bicarbonate (Table 5-6). Groundwater in Well H-03b1 is classified as brackish, because the TDS are approximately 8,500 mg/ℓ (Freeze and Cherry, 1979).

Several hazardous organic constituents were detected in samples of groundwater from Well H-03b1 (Table 5-6). Only toluene was detected during more than one sampling round. With the exception of benzo(a)pyrene and n-nitroso-di-phenylamine, the organic compounds

Table 5-6
Background Groundwater Chemistry
Well H-03b1

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	3.6	0.5	3.0 - 4.2
Calcium	1,005	62	928 - 1,082
Iron	NC[b]	NC	≤0.3[c]
Lithium	NC	NC	0.3 - 0.33[c]
Magnesium	296	22	269 - 323
Manganese	NC	NC	<0.05[c]
Potassium	34	2	31 - 37
Sodium	1,525	126	1,325 - 1,725
Strontium	16	2	14 - 18
General Chemistry			
Alkalinity (as HCO_3^-)	43	8	30 - 56
Bromide	6	0	6
Chloride	3,360	108	3,225 - 3,495
Fluoride	1.9	0.2	1.7 - 2.2
pH (s.u.)[d]	6.97	0.41	6.45 - 7.48
Sulfate	2,130	234	1,840 - 2,420
Total Dissolved Solids	8,690	513	8,053 - 9,327

See footnotes at end of table.

Table 5-6 *(Continued)*
Background Groundwater Chemistry
Well H-03b1

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<1
Antimony	<0.5
Arsenic	<0.05
Barium	<0.2
Beryllium	<0.05
Cadmium	<0.05
Cesium	≤0.2
Chromium	≤0.2
Cobalt	<0.1
Copper	<0.1
Lead	<0.5
Mercury	<0.0004
Molybdenum	<0.1
Nickel	<0.3
Selenium	≤0.09
Silica	4.5 - 12
Silver	<0.1
Thallium	<1
Titanium	≤0.3
Vanadium	<0.1
Zinc	<0.1
General Chemistry	
Cyanide	<0.02
Iodide	≤2
Nitrate (as N)	<0.1
Phenolics	≤0.053
Phosphate (as P)	≤0.03
Total Organic Carbon	≤4
Total Organic Halogen	≤0.85

See footnotes at end of table.

Table 5-6 *(Continued)*
Background Groundwater Chemistry
Well H-03b1

Hazardous Organic Constituents[e]

	Sample Date	Concentration
Benzo(a)pyrene	01-Jul-85	6.5
Bis(2-ethylhexyl)phthalate[f]	16-Mar-89	11
Methylene Chloride[f]	16-Sep-86	14
N-nitroso-di-phenylamine	16-Sep-86	24
Toluene[f]	01-Jul-85	2
Toluene[f]	16-Sep-86	32

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.
[e] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[f] Suspected laboratory contaminant.

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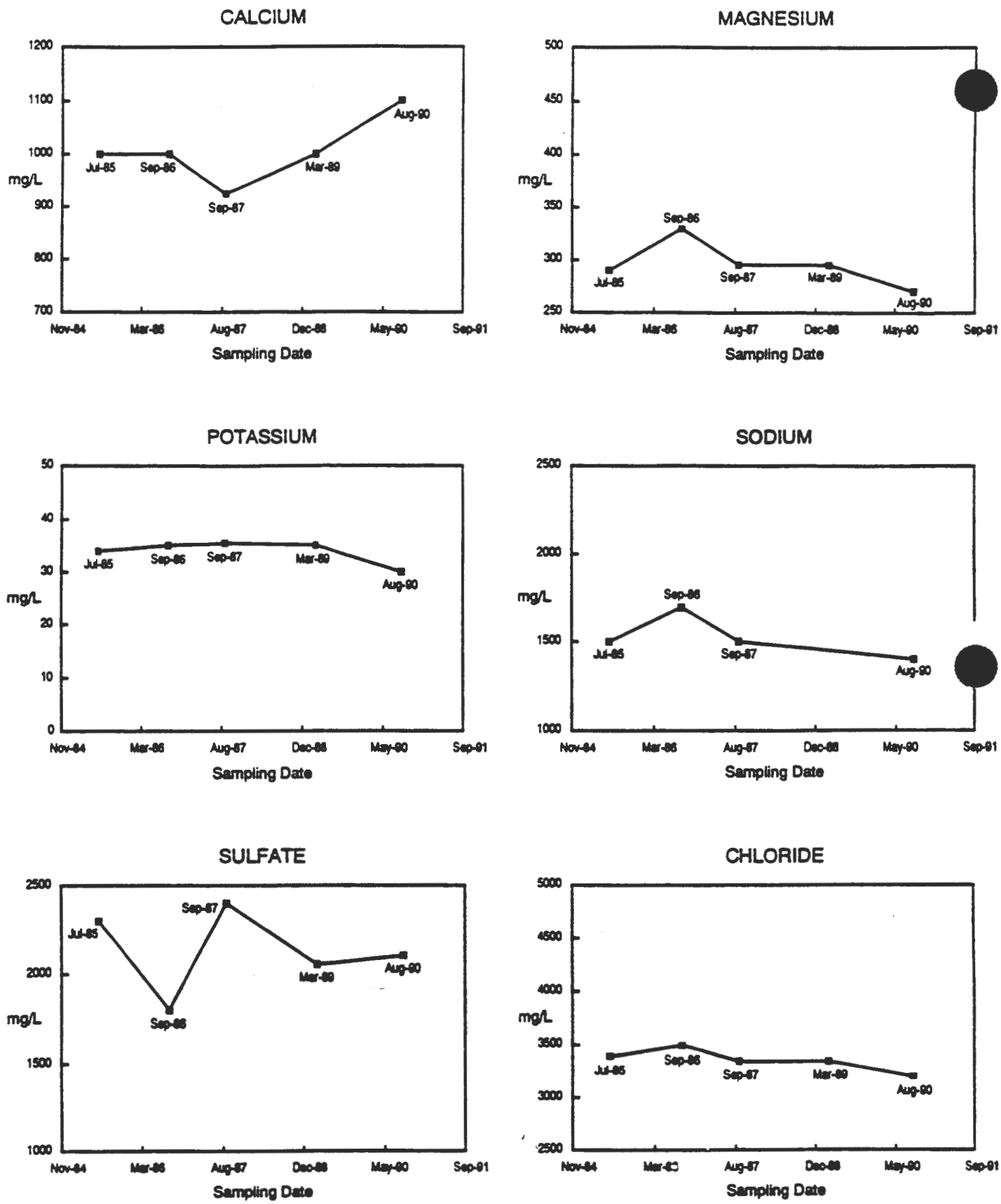

FIGURE 5-6 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL H-03b1 GROUNDWATER

detected in Well H-03b1 samples are common laboratory contaminants, according to an EPA risk assessment guidance document (EPA, 1989).

Figure 5-6 shows the temporal variation in the concentration of the six major constituents of Well H-03b1 groundwater. Chloride concentrations exhibit a weak decrease with time; however, the concentration change is no greater than the analytical uncertainty. Though concentrations fluctuate, no temporal trends are observed in the constituents shown in Figure 5-6 or any other dissolved constituent of Well H-03b1 groundwater.

5.7 Well H-03b3

Groundwater samples from the Culebra Dolomite were collected from Well H-03b3. The sampling history of this well is very similar to that of Well H-03b1. Well H-03b3 was sampled five times; the first sample was collected in February 1985, and the most recent was collected in August 1990. Groundwater collected during each sampling event was analyzed for metals and general chemical parameters. Samples were analyzed for VOCs and semi-VOCs during four of the five sampling rounds; the August 1990 samples were not analyzed for hazardous organic constituents. Total PCB analyses were performed on samples collected in May 1986 and August 1987; and individual PCBs (e.g., Aroclor 1242) were analytes in the March 1989 sampling event. Analytical results for major constituents from the February 1985 sampling event were provided by Bendix (Uhland and Randall, 1986). All other results were provided by ITAS.

Background concentrations for constituents in groundwater from Well H-03b3 are presented in Table 5-7. Table 5-7 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-7 are the concentration ranges of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from Well H-03b3.

Sodium is the dominant cation in groundwater from Well H-03b3, followed by calcium, magnesium, and potassium; chloride is the dominant anion, followed by sulfate (Table 5-7). Well H-03b3 groundwater is classified as saline, because the TDS concentration is approximately 54,000 mg/ℓ (Freeze and Cherry, 1979). Well H-03b3 lies within hydrochemical Type Area 3 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. Groundwater in Type Area 3 contains TDS ranging from 10,000 to 100,000 mg/ℓ and may be a mixture of Type Area 1 and 2 groundwater. Low concentrations, i.e., less than 1 mg/ℓ, of several trace metals were detected in samples from Well H-03b3 (Table 5-7).

Table 5-7
Background Groundwater Chemistry
Well H-03b3

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	25	5	19 - 32
Calcium	1,360	134	1,193 - 1,527
Iron	0.30	0.13	0.14 - 0.47
Lithium	0.48	0.14	0.15 - 0.82
Magnesium	768	46	710 - 826
Manganese	0.13	0.04	0.08 - 0.18
Potassium	453	65	372 - 534
Sodium	17,020	709	16,140 - 17,900
Strontium	25	4	21 - 30
General Chemistry			
Alkalinity (as HCO_3)	50	3	46 - 54
Bromide	24	14	7 - 41
Chloride	28,790	1,649	26,742 - 30,838
Fluoride	1.5	0.1	1.5 - 1.6
pH (s.u.)[b]	7.26	0.33	6.85 - 7.66
Sulfate	4,680	115	4537 - 4823
Total Dissolved Solids	54,150	822	53,130 - 55,170

See footnotes at end of table.

Table 5-7 *(Continued)*
Background Groundwater Chemistry
Well H-03b3

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<2
Antimony	≤0.8
Arsenic	<0.1
Barium	≤0.06
Beryllium	≤0.15
Cadmium	≤0.07
Cesium	<0.2
Chromium	0.007 - 0.4
Cobalt	<0.5
Copper	≤0.26
Lead	≤0.5
Mercury	≤0.001
Molybdenum	≤0.2
Nickel	≤0.44
Selenium	<0.5
Silica	4.5 - 13
Silver	≤0.1
Thallium	<10
Titanium	≤0.8
Vanadium	<0.5
Zinc	≤0.2
General Chemistry	
Cyanide	≤0.11
Iodide	<2
Nitrate (as N)	<0.2
Phenolics	≤0.033
Phosphate (as P)	≤0.06
Total Organic Carbon	≤2
Total Organic Halogen	0.14 - 0.42

See footnotes at end of table.

Table 5-7 *(Continued)*
Background Groundwater Chemistry
Well H-03b3

Hazardous Organic Constituents[c]

	Sample Date	Concentration
Acetone[d]	05-May-86	11
Benzoic Acid	04-Feb-85	17
Bis(2-ethylhexyl)phthalate[d]	04-Feb-85	20
N-nitroso-di-phenylamine	04-Feb-85	6.5
Pentachlorophenol	04-Feb-85	5.6

[a] All concentrations in milligrams per liter, except where noted.
[b] s.u. = standard pH units.
[c] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[d] Suspected laboratory contaminant.

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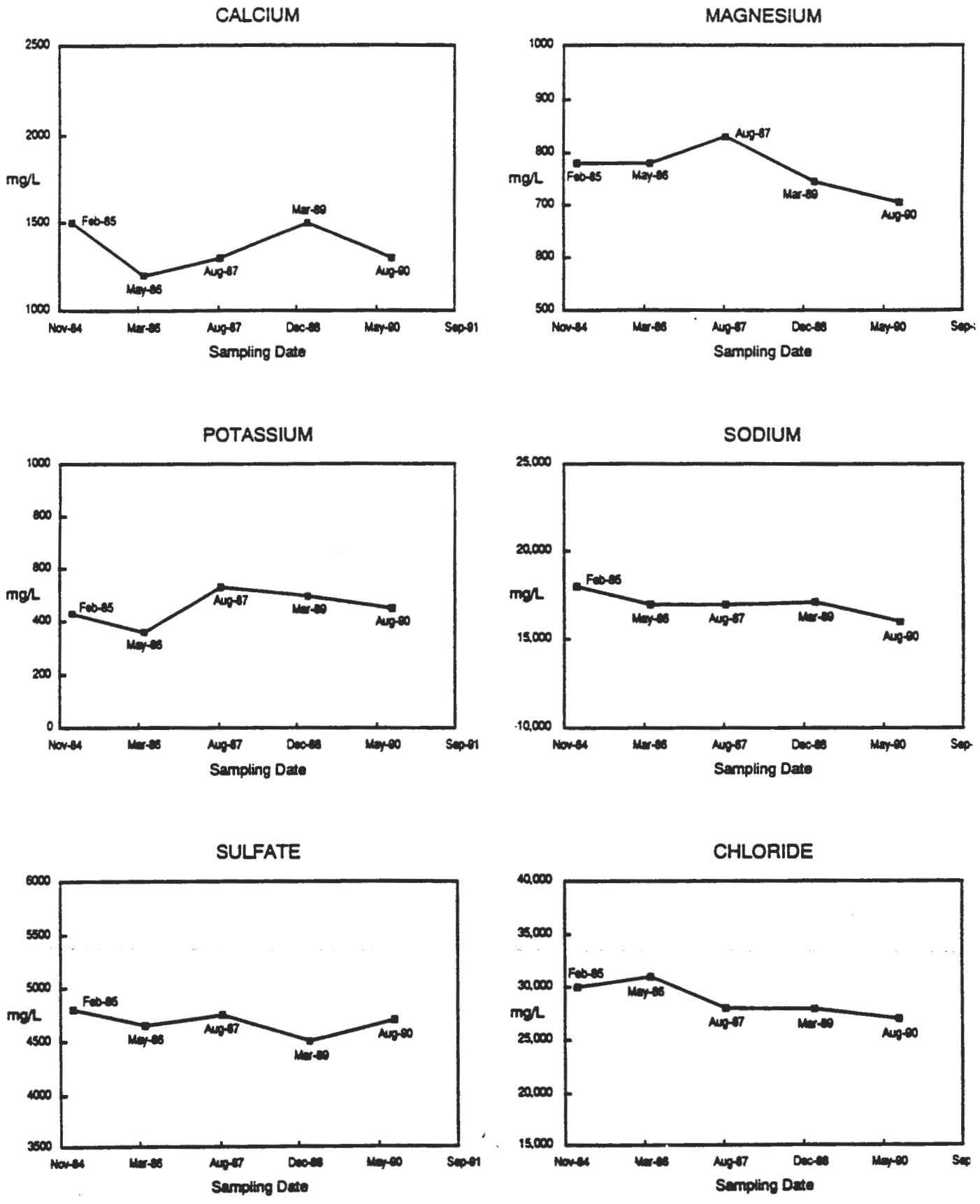

FIGURE 5-7 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL H-03b3 GROUNDWATER

However, only chromium, copper, molybdenum, and zinc were repeatedly detected above respective MDLs.

Several detections of hazardous organic compounds were observed in samples of groundwater from Well H-03b3 (Table 5-7). Four of the five detections occurred in the February 1985 sample. The detection of acetone and bis(2-ethylhexyl)phthalate could be due to laboratory contamination, based on a tabulation of common laboratory contaminants listed in an EPA risk assessment guidance document (EPA, 1989).

Figure 5-7 shows the temporal variation in the concentration of the six major constituents of Well H-03b3 groundwater. Magnesium, chloride, and sulfate concentrations appear to have decreased during the WQSP (Figure 5-7). However, the trends are relatively weak; the concentration decreases are of the same magnitude as the analytical uncertainty. Also, a corresponding weak decrease in the TDS is not observed. Thus, the composition of groundwater at Well H-03b3 has probably remained relatively constant throughout the WQSP.

5.8 Well H-04b

Groundwater samples from the Culebra Dolomite were collected at Well H-04b. Well H-04b was sampled five times; the first sampling occurred in July 1985, and the most recent sampling took place in September 1990. Groundwater collected during each sampling event was analyzed for metals and general chemical parameters. Samples were analyzed for VOCs and semi-VOCs during four of the five sampling rounds; the September 1990 samples were not analyzed for hazardous organic constituents. Total PCB analyses were performed on samples collected in November 1986 and September 1987; and individual PCBs (e.g., Aroclor 1242) were analytes in the April 1989 sampling event. Analytical results for major constituents from the July 1985 sampling event were provided by Bendix (Uhland and Randall, 1986). All other results were provided by ITAS.

Background concentrations for constituents in Well H-04b groundwater are presented in Table 5-8. Table 5-8 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-8 are the concentration ranges of minor constituents and a list of the hazardous organic constituents that were detected in groundwater samples from Well H-04b.

Sodium is the dominant cation in groundwater from Well H-04b, followed by calcium, magnesium, and potassium. Chloride is the dominant anion, followed by sulfate (Table 5-8).

Table 5-8
Background Groundwater Chemistry
Well H-04b

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	18	3	14 - 21
Calcium	673	43	604 - 741
Iron	0.48	0.06	0.40 - 0.55
Lithium	0.42	0.10	0.25 - 0.58
Magnesium	426	33	385 - 468
Manganese	0.13	0.03	0.09 - 0.17
Potassium	220	33	179 - 261
Sodium	5,940	254	5,625 - 6,255
Strontium	14	1	13 - 16
General Chemistry			
Alkalinity (as HCO_3^-)	61	7	51 - 72
Bromide	57	21	31 - 83
Chloride	7,033	4,080	1,968 - 12,099
Fluoride	1.9	0.2	1.7 - 2.2
pH (s.u.)[b]	7.06	0.61	6.30 - 7.82
Sulfate	5,480	832	4,447 - 6,513
Total Dissolved Solids	20,030	2,433	17,010 - 23,050

See footnotes at end of table.

Table 5-8 *(Continued)*
Background Groundwater Chemistry
Well H-04b

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<2
Antimony	<0.6
Arsenic	<0.1
Barium	<0.1
Beryllium	<0.05
Cadmium	<0.05
Cesium	≤0.2
Chromium	≤0.3
Cobalt	<0.5
Copper	<0.25
Lead	<0.5
Mercury	≤0.0017
Molybdenum	≤0.2
Nickel	<0.4
Selenium	<0.05
Silica	5.6 - 14
Silver	<0.1
Thallium	<0.5
Titanium	≤0.5
Vanadium	<0.5
Zinc	≤0.4
General Chemistry	
Cyanide	<0.02
Iodide	≤2
Nitrate (as N)	<0.1
Phenolics	≤0.026
Phosphate (as P)	≤0.03
Total Organic Carbon	3 - 5
Total Organic Halogen	0.06 - 0.64

See footnotes at end of table.

Table 5-8 *(Continued)*
Background Groundwater Chemistry
Well H-04b

Hazardous Organic Constituents[c]

	Sample Date	Concentration
Benzo(a)pyrene	20-Jul-85	6.5

[a] All concentrations in milligrams per liter, except where noted.
[b] s.u. = standard pH units.
[c] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.

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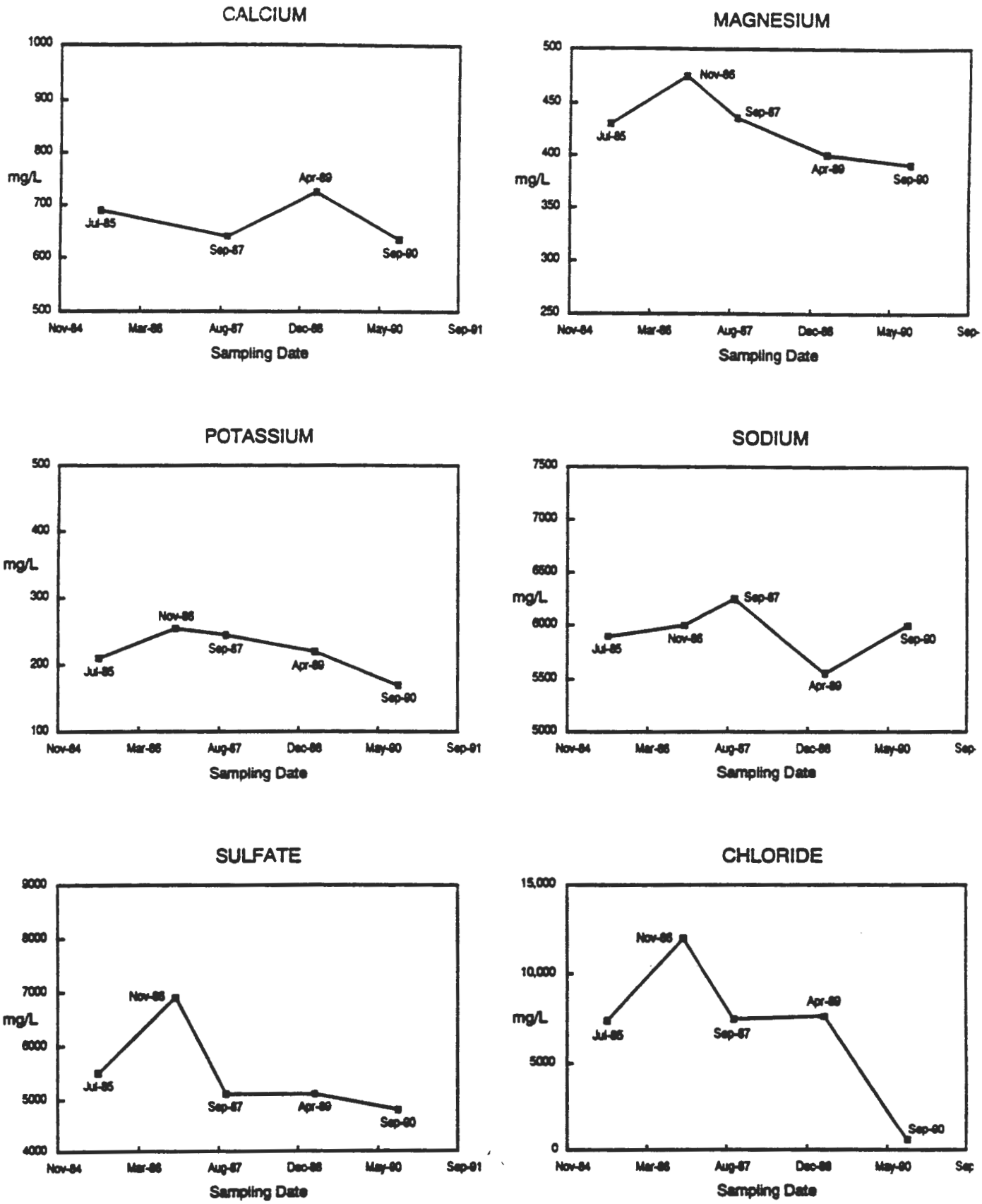

FIGURE 5-8 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL H-04b GROUNDWATER

Well H-04b groundwater is classified as saline, because the TDS are approximately 20,000 mg/ℓ (Freeze and Cherry, 1979). Well H-04b lies within hydrochemical Type Area 3 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. Groundwater in Type Area 3 contains TDS ranging from 10,000 to 100,000 mg/ℓ and may be a mixture of Type Area 1 and 2 groundwater. Several trace metals were repeatedly detected in groundwater samples from Well H-04b. Cesium, chromium, mercury, molybdenum, titanium, and zinc were detected in concentrations below 1 mg/ℓ (Table 5-8).

Benzo(a)pyrene was detected during the July 1985 sampling of Well H-04b. This one-time detection was the only occurrence of a hazardous organic compound in groundwater from the well.

Figure 5-8 shows the temporal variation in the concentration of the six major constituents of Well H-04b groundwater. Concentrations fluctuate, however, no temporal trends are observed in the constituents shown in Figure 5-8 or any other constituent of Well H-04b groundwater. The chloride concentration was highly variable; this may reflect sampling or analytical problems.

5.9 Well H-04c

Groundwater samples from the Magenta Dolomite were collected at Well H-04c. Well H-04c was sampled five times; the first sampling occurred in November 1986, and the most recent sampling took place in October 1990. Groundwater collected during each sampling event was analyzed for metals and general chemical parameters. Samples were analyzed for PCBs, VOCs, and semi-VOCs during four of the five sampling rounds; the October 1990 samples were not analyzed for hazardous organic constituents. Total PCB analyses were performed on samples collected during the first three rounds; and individual PCBs (e.g., Aroclor 1242) were analytes in the April 1989 sampling event.

Background concentrations for constituents in groundwater from Well H-04c are listed in Table 5-9. Table 5-9 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-9 are the concentration ranges of minor constituents and a list of the hazardous organic constituents that were detected in groundwater samples from Well H-04c.

Sodium is the dominant cation in groundwater from Well H-04c, followed by calcium, magnesium, and potassium. Chloride is the dominant anion, followed closely by sulfate

Table 5-9
Background Groundwater Chemistry
Well H-04c

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	11.8	0.5	11.2 - 12.4
Calcium	646	36	588 - 704
Iron	0.6	0.4	0.1 - 1.1
Lithium	0.41	0.02	0.39 - 0.43
Magnesium	445	40	396 - 494
Manganese	0.20	0.16	0.00 - 0.39
Potassium	102	23	73 - 130
Sodium	7,250	178	6,967 - 7,533
Strontium	13	1	11 - 14
General Chemistry			
Alkalinity (as HCO_3^-)	71	17	50 - 93
Bromide	7	1	6 - 8
Chloride	8,890	1 276	7,306 - 10,474
Fluoride	2.6	0.2	2.3 - 2.8
pH (s.u.)[b]	7.68	0.22	7.34 - 8.03
Sulfate	7,330	860	6,262 - 8,398
Total Dissolved Solids	23,690	830	22,660 - 24,720

See footnotes at end of table.

Table 5-9 *(Continued)*
Background Groundwater Chemistry
Well H-04c

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<2
Antimony	≤0.6
Arsenic	<0.1
Barium	<0.2
Beryllium	<0.05
Cadmium	<0.05
Cesium	≤0.1
Chromium	≤0.2
Cobalt	<0.5
Copper	≤0.3
Lead	<0.5
Mercury	≤0.0008
Molybdenum	<0.2
Nickel	<0.4
Selenium	<0.05
Silica	3.9 - 12
Silver	≤0.1
Thallium	<5
Titanium	≤0.5
Vanadium	<0.5
Zinc	<0.2
General Chemistry	
Cyanide	<0.02
Iodide	≤4
Nitrate (as N)	<0.1
Phenolics	≤0.038
Phosphate (as P)	≤0.06
Total Organic Carbon	≤3
Total Organic Halogen	≤0.53

See footnotes at end of table.

Table 5-9 *(Continued)*
Background Groundwater Chemistry
Well H-04c

Hazardous Organic Constituents[c]

	Sample Date	Concentration
1,3-Dichlorobenzene	19-Jul-88	15
Bis(2-ethylhexyl)phthalate[d]	19-Jul-88	110

[a] All concentrations in milligrams per liter, except where noted.
[b] s.u. = standard pH units.
[c] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[d] Suspected laboratory contaminant.

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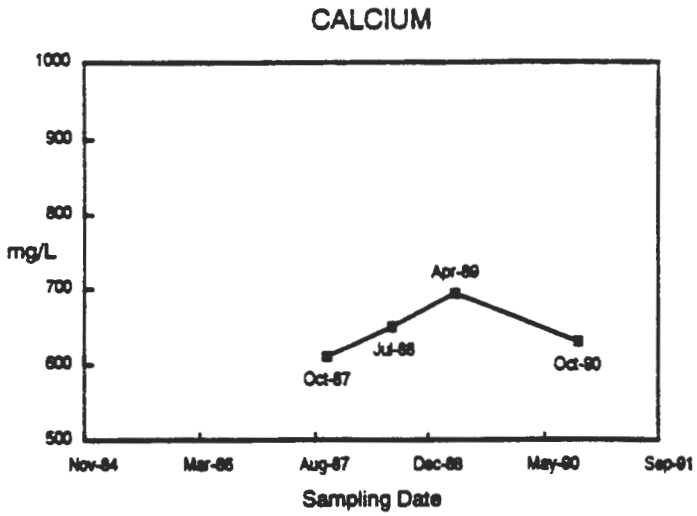

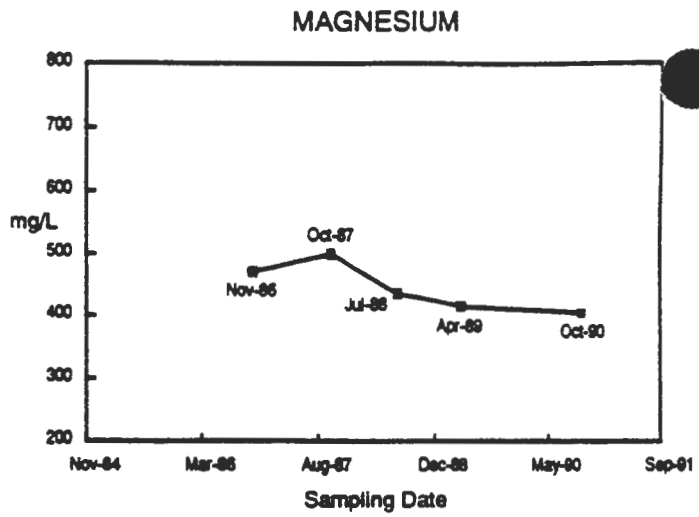

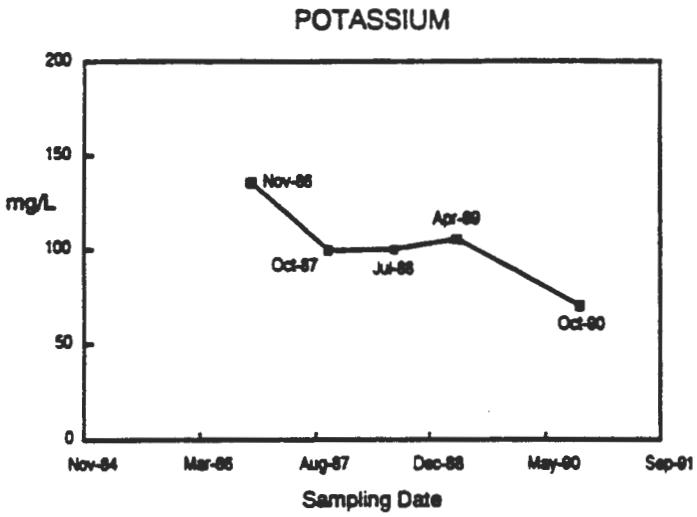

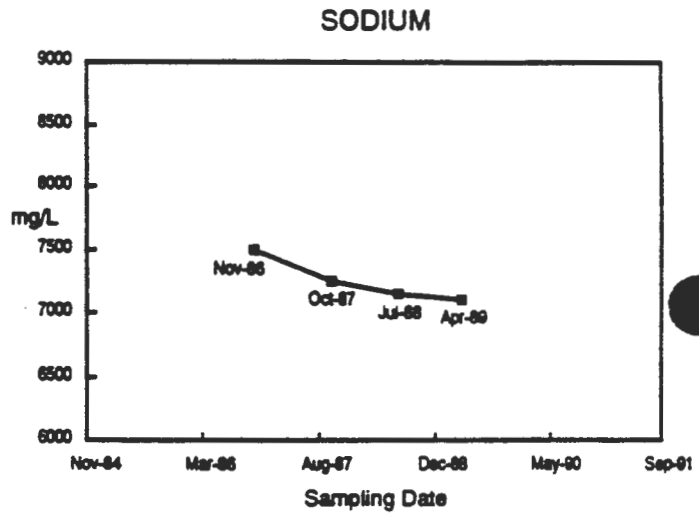

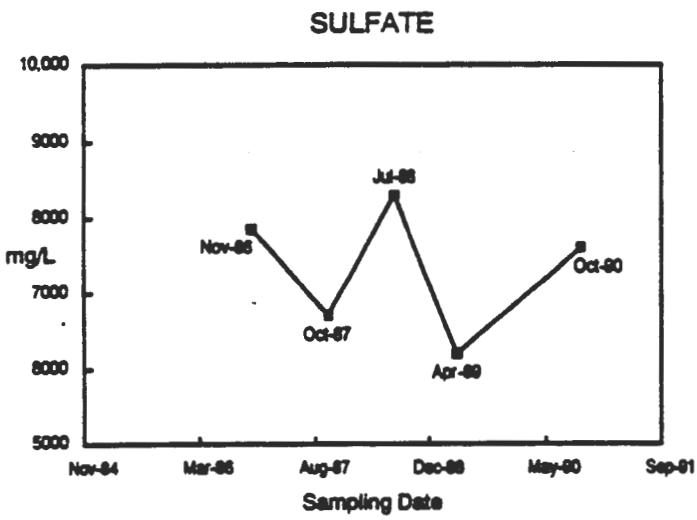

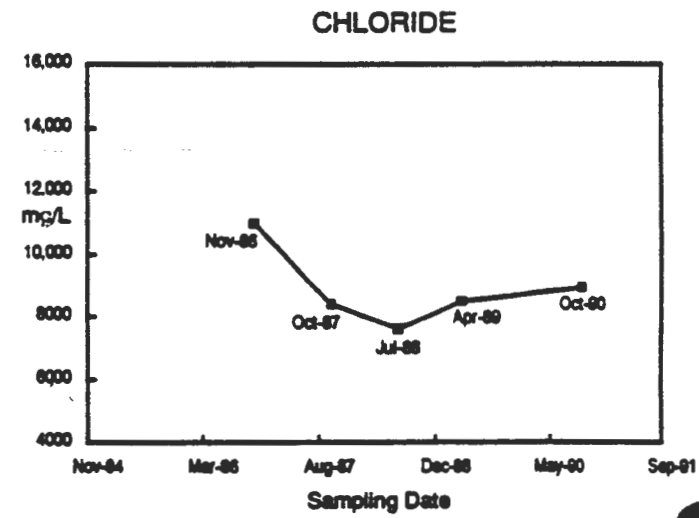

FIGURE 5-9 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL H-04c GROUNDWATER

(Table 5-9). Well H-04c groundwater is classified as saline, because TDS are approximately 23,500 mg/ℓ (Freeze and Cherry, 1979). Cesium, chromium, copper, mercury, and titanium were detected in Well H-04c groundwater during more than one sampling round. However, concentrations were considerably less than 1 mg/ℓ (Table 5-9).

Bis(2-ethylhexyl)phthalate and 1,3-dichlorobenzene were detected during the July 1988 sampling of groundwater at Well H-04c (Table 5-9). These are the only detections of hazardous organic compounds in samples from Well H-04c. Bis(2-ethylhexyl)phthalate is a common laboratory contaminant, according to an EPA risk assessment guidance document (EPA, 1989).

Figure 5-9 shows the temporal variation in the concentration of the six major constituents of groundwater from Well H-04c. The general downward trend in magnesium, potassium, and sodium concentrations is not supported by a corresponding decrease in TDS. Total dissolved solids actually increased during the WQSP (not shown in Figure 5-9). The concentration of chloride and several other constituents not shown in Figure 5-9 decreased significantly from the first (November 1986) to the second (October 1987) sampling round. This may be indicative of a "cleaning-up" effect, i.e., the first round sample may have been contaminated by drilling activities.

5.10 Well H-05b

Groundwater samples from the Culebra Dolomite were collected at Well H-05b. Well H-05b was sampled five times; the first sampling occurred in August 1985, and the most recent sampling took place in May 1990. Groundwater collected during each sampling event was analyzed for metals and general chemical parameters. Samples were analyzed for VOCs during four of the five sampling rounds; the August 1989 samples were not analyzed for VOCs. Samples were analyzed for semi-VOCs during three of the five sampling rounds; August 1989 and May 1990 samples were not analyzed for semi-VOCs. Total PCB analyses were performed on samples collected in May 1986 and February 1988.

Background concentrations for constituents in groundwater from Well H-05b are presented in Table 5-10. Table 5-10 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-10 are the concentration ranges of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from Well H-05b.

Table 5-10
Background Groundwater Chemistry
Well H-05b

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	31	3	28 - 35
Calcium	1,540	270	1,205 - 1,875
Iron	2.5	0.6	1.8 - 3.2
Lithium	0.9	0.1	0.6 - 1.3
Magnesium	1,840	204	1,586 - 2,094
Manganese	0.32	0.13	0.16 - 0.48
Potassium	1,188	140	1,014 - 1,362
Sodium	50,240	4,603	44,526 - 55,955
Strontium	27	7	18 - 36
General Chemistry			
Alkalinity (as HCO_3^-)	43	3	39 - 47
Bromide	61	30	24 - 99
Chloride	87,960	3,121	84,085 - 91,835
Fluoride	1.0	0.2	0.7 - 1.2
pH (s.u.)[b]	7.00	0.07	6.88 - 7.11
Sulfate	6,780	698	5,914 - 7,646
Total Dissolved Solids	153,300	8,693	142,508 - 164,093

See footnotes at end of table.

Table 5-10 *(Continued)*
Background Groundwater Chemistry
Well H-05b

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<2
Antimony	0.6 - 0.77
Arsenic	<0.1
Barium	<0.5
Beryllium	<0.05
Cadmium	≤0.11
Cesium	<1.1
Chromium	≤0.3
Cobalt	≤3.0
Copper	<1
Lead	≤1
Mercury	≤0.0005
Molybdenum	0.03 - 0.3
Nickel	<3
Selenium	≤7.3
Silica	<21
Silver	≤0.1
Thallium	<0.1
Titanium	≤0.1
Vanadium	<0.5
Zinc	0.03 - 2.5
General Chemistry	
Cyanide	<0.02
Iodide	<2
Nitrate (as N)	≤0.4
Phenolics	≤0.051
Phosphate (as P)	<0.19
Total Organic Carbon	≤4
Total Organic Halogen	≤7.6

See footnotes at end of table.

Table 5-10 *(Continued)*
Background Groundwater Chemistry
Well H-05b

Hazardous Organic Constituents[c]

	Sample Date	Concentration
Methylene Chloride[d]	02-May-90	6

[a] All concentrations in milligrams per liter, except where noted.
[b] s.u. = standard pH units.
[c] All concentrations in microgram per liter, only detected hazardous organic compounds are listed.
[d] Suspected laboratory contaminant.

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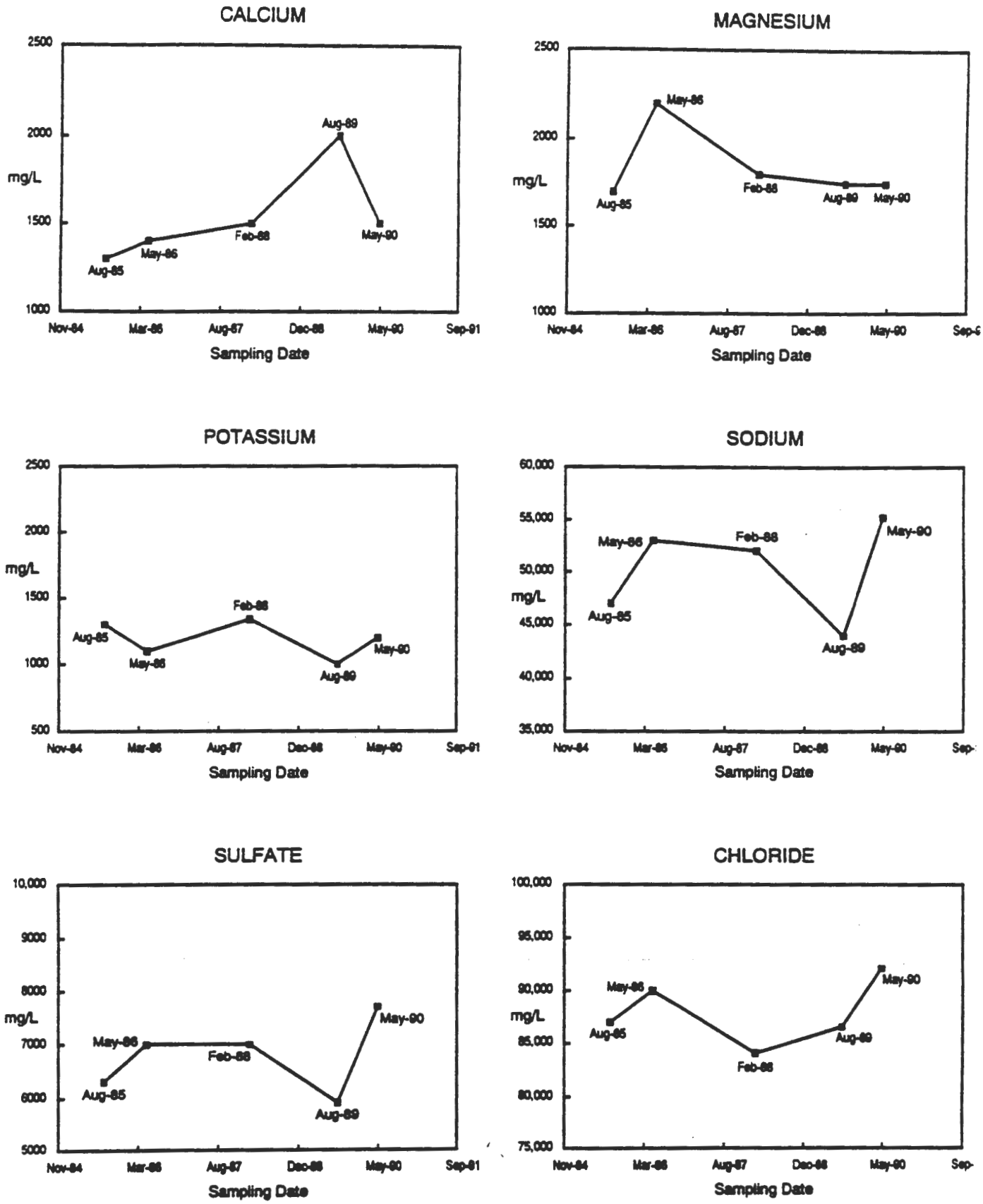

FIGURE 5-10 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL H-05b GROUNDWATER

Sodium is the dominant cation in groundwater at Well H-05b, followed by magnesium, calcium, and potassium; chloride is the dominant anion in groundwater, followed by sulfate (Table 5-10). Groundwater at Well H-05b is classified as brine, because the TDS exceed 100,000 mg/ℓ (Freeze and Cherry, 1979). Well H-05b lies within hydrochemical Type Area 1 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. Groundwater in Type Area 1 is a sodium chloride brine. Antimony, molybdenum, silver, and zinc were repeatedly detected in groundwater samples from Well H-05b. Several other trace metals were detected at concentrations that exceed 1 mg/ℓ (e.g., selenium) (Table 5-10), although these detections were usually one-time occurrences. As discussed in Section 4.5, relatively-high MDLs and trace metal concentrations are probably due to sample dilution prior to analysis. Thus, for brines, the analytical uncertainty associated with trace metal data is relatively large.

Methylene chloride was detected at 6 µg/ℓ in a May 1990 groundwater sample. This is the only detection of a hazardous organic compound in samples from Well H-05b. Methylene chloride is a common laboratory contaminant (EPA, 1989), and 10 µg/ℓ was also detected in the trip blank.

Figure 5-10 shows the temporal variation in the concentration of the six major constituents of Well H-05b groundwater. Though concentrations fluctuate, no temporal trends are observed in these or any other constituents. Much of the fluctuation may be due to difficulties related to the analysis of high-TDS samples.

5.11 Well H-05c

Samples of groundwater from the Magenta Dolomite were collected at Well H-05c. This well was sampled five times; the first sample was collected in October 1986, and the most recent was collected in May 1990. Groundwater collected during each round was analyzed for metals and general chemical parameters. Samples collected during the first three rounds were analyzed for VOCs, semi-VOCs, and total PCBs.

Background concentrations for constituents in groundwater from Well H-05c are presented in Table 5-11. Table 5-11 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-11 are the concentration range of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from Well H-05c.

Table 5-11
Background Groundwater Chemistry
Well H-05c

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	11	1	10 - 12
Calcium	621	100	496 - 746
Iron	0.7	0.4	0.2 - 1.2
Lithium	0.21	0.01	0.19 - 0.22
Magnesium	186	9	175 - 197
Manganese	NC[b]	NC	<0.15[c]
Potassium	40	7	32 - 48
Sodium	1,304	203	1,052 - 1,556
Strontium	10	1	9 - 11
General Chemistry			
Alkalinity (as HCO_3^-)	56	8	46 - 66
Bromide	2	1	1 - 4
Chloride	949	65	846 - 1,052
Fluoride	2.8	0.2	2.5 - 3.1
pH (s.u.)[d]	7.68	0.41	7.17 - 8.19
Sulfate	3,520	476	2,929 - 4,112
Total Dissolved Solids	7,050	158	6,854 - 7,246

See footnotes at end of table.

Table 5-11 *(Continued)*
Background Groundwater Chemistry
Well H-05c

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<2
Antimony	<1
Arsenic	<0.1
Barium	<0.05
Beryllium	<0.05
Cadmium	<0.05
Cesium	≤0.2
Chromium	≤0.2
Cobalt	<0.5
Copper	<0.25
Lead	≤0.6
Mercury	≤0.0005
Molybdenum	<0.2
Nickel	<0.4
Selenium	<0.05
Silica	4.7 - 12
Silver	≤0.2
Thallium	<1
Titanium	≤0.4
Vanadium	<0.5
Zinc	<0.2
General Chemistry	
Cyanide	<0.02
Iodide	<2
Nitrate (as N)	<0.1
Phenolics	≤0.016
Phosphate (as P)	≤0.04
Total Organic Carbon	≤3
Total Organic Halogen	<0.06

See footnotes at end of table.

Table 5-11 *(Continued)*
Background Groundwater Chemistry
Well H-05c

Hazardous Organic Constituents[e]

	Sample Date	Concentration
Bis(2-ethylhexyl)phthalate[f]	03-Mar-88	10

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.
[e] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[f] Suspected laboratory contaminant.

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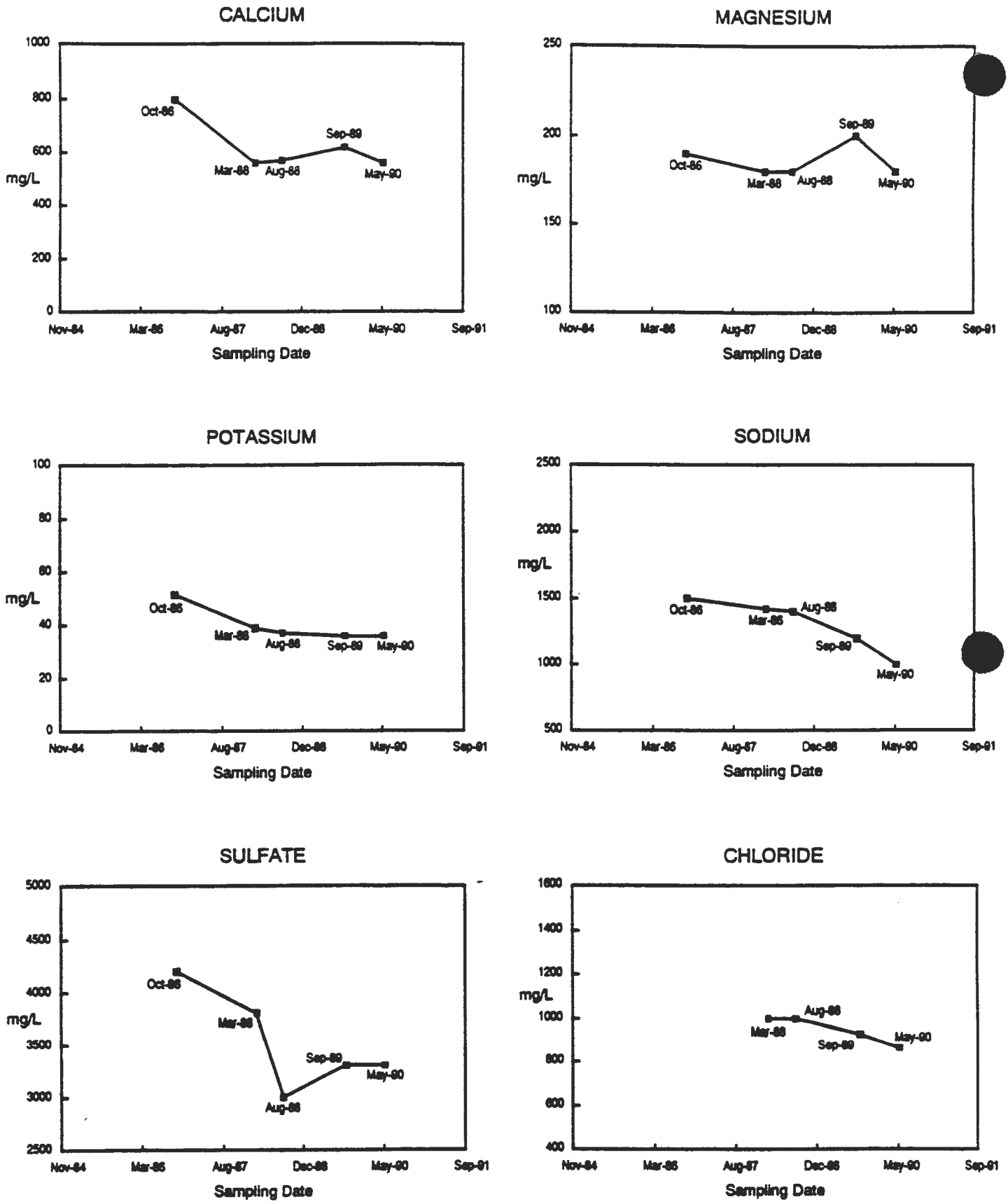

FIGURE 5-11 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL H-05c GROUNDWATER

Sodium is the dominant cation in Well H-05c groundwater, followed by calcium, magnesium, and potassium; sulfate is the dominant anion, followed by chloride and bicarbonate (Table 5-11). Well H-05c groundwater is classified as brackish, because TDS are approximately 7,000 mg/ℓ. Several trace metals were detected at concentrations less than 1 mg/ℓ in groundwater from Well H-05c (Table 5-11).

Bis(2-ethylhexyl)phthalate was detected during the March 1988 sampling of Well H-05c. This is the only detection of a hazardous organic compound in samples from the well. Bis(2-ethylhexyl)phthalate is a common laboratory contaminant, according to an EPA risk assessment guidance document (EPA, 1989).

Figure 5-11 shows the temporal variation in the concentration of the six major constituents of Well H-05c groundwater. In general, concentrations appear to decrease with time; however, a corresponding decrease in TDS (not shown in Figure 5-11) is not observed. Based on charge-balance considerations, the decrease in the sodium concentration could be balanced by the corresponding decrease in chloride and sulfate concentrations.

The concentration of calcium, sulfate, and to a lesser extent potassium and sodium decreased significantly from the first (October 1986) to the second (March 1988) sampling round. The pattern is also observed in some constituents that are not shown in Figure 5-11 (e.g., alkalinity). This trend may be due to a "cleaning-up" effect, i.e., the first round sample may have been contaminated by drilling activities to a greater extent than subsequent samples.

5.12 Well H-06b

Groundwater samples from the Culebra Dolomite were collected from Well H-06b. Well H-06b was sampled five times; the first groundwater sample was collected in September 1985, and the most recent was collected in February 1990. During all five rounds, samples were analyzed for metals and general chemical parameters. Samples were analyzed for VOCs during all but the July 1989 sampling round, and samples were analyzed for semi-VOCs during only the first three rounds, i.e., September 1985, July 1986, and November 1987. Total PCB analyses were performed on samples collected during July 1986 and November 1987.

Background concentrations for constituents in groundwater from Well H-06b are presented in Table 5-12. Table 5-12 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-12 are the

Table 5-12
Background Groundwater Chemistry
Well H-06b

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	9.2	1.2	7.7 - 10.7
Calcium	1,920	175	1,702 - 2,138
Iron	0.4	0.1	0.2 - 0.6
Lithium	0.5	0.1	0.3 - 0.7
Magnesium	938	118	791 - 1,085
Manganese	0.22	0.05	0.15 - 0.28
Potassium	443	91	330 - 556
Sodium	15,970	1,402	14,230 - 17,710
Strontium	29	4	24 - 34
General Chemistry			
Alkalinity (as HCO_3^-)	96	4	91 - 101
Bromide	37	20	12 - 62
Chloride	31,640	2,274	28,816 - 34,464
Fluoride	1.4	0.1	1.2 - 1.5
pH (s.u.)[b]	6.77	0.48	6.18 - 7.37
Sulfate	3,310	175	3,093 - 3,527
Total Dissolved Solids	60,700	3117	56,831 - 64,569

See footnotes at end of table.

Table 5-12 (*Continued*)
Background Groundwater Chemistry
Well H-06b

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<2
Antimony	≤0.8
Arsenic	<0.5
Barium	<0.1
Beryllium	<0.05
Cadmium	<0.05
Cesium	≤0.3
Chromium	0.22 - 0.45
Cobalt	≤0.94
Copper	<0.25
Lead	≤0.83
Mercury	≤0.0012
Molybdenum	≤0.5
Nickel	≤0.56
Selenium	≤1.3
Silica	8.3 - 25
Silver	≤0.1
Thallium	<10
Titanium	≤0.6
Vanadium	<0.5
Zinc	<0.2
General Chemistry	
Cyanide	<0.04
Iodide	<2
Nitrate (as N)	≤0.2
Phenolics	0.004 - 0.016
Phosphate (as P)	≤0.02
Total Organic Carbon	≤7
Total Organic Halogen	0.16 - 3

See footnotes at end of table.

Table 5-12 *(Continued)*
Background Groundwater Chemistry
Well H-06b

Hazardous Organic Constituents

None Detected

[a] All concentrations in mg/L, except where noted.
[b] s.u. = standard pH units.

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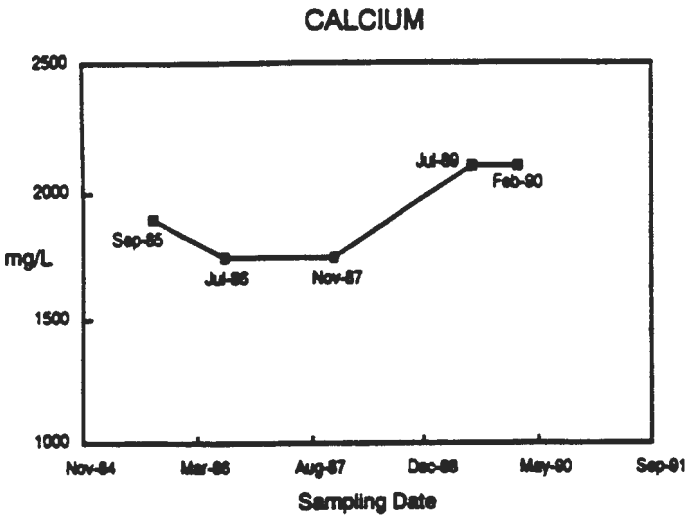

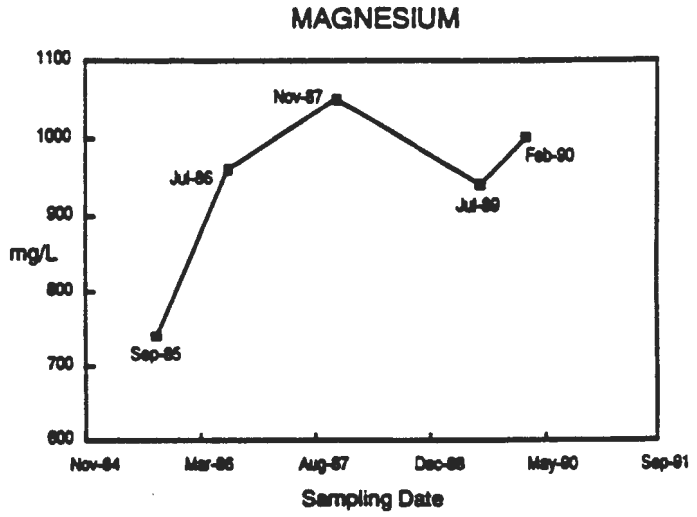

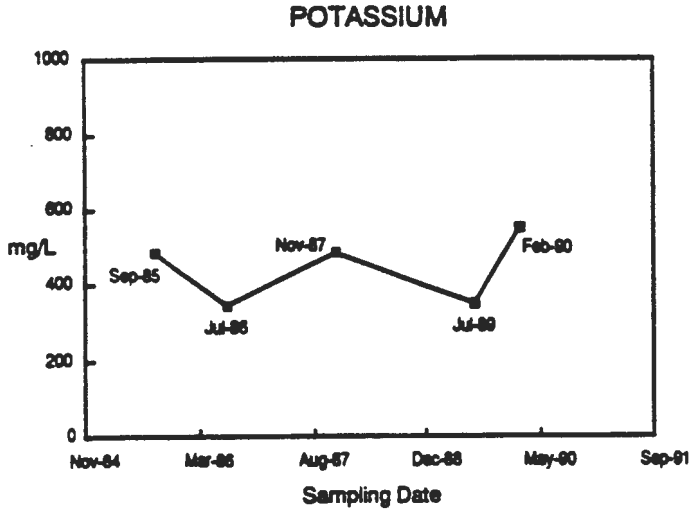

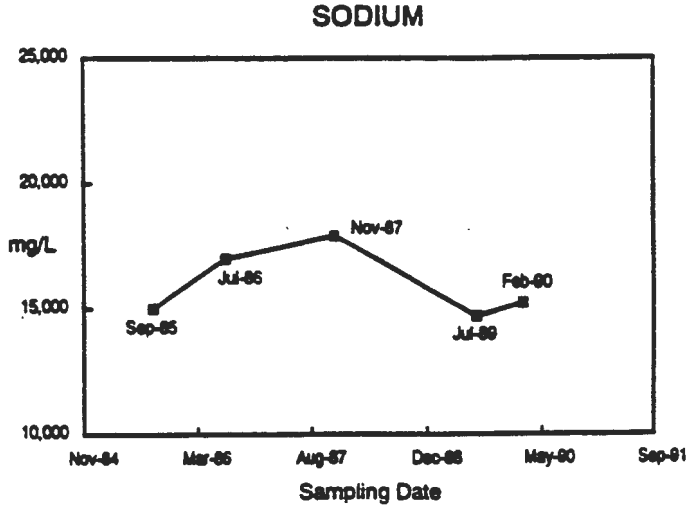

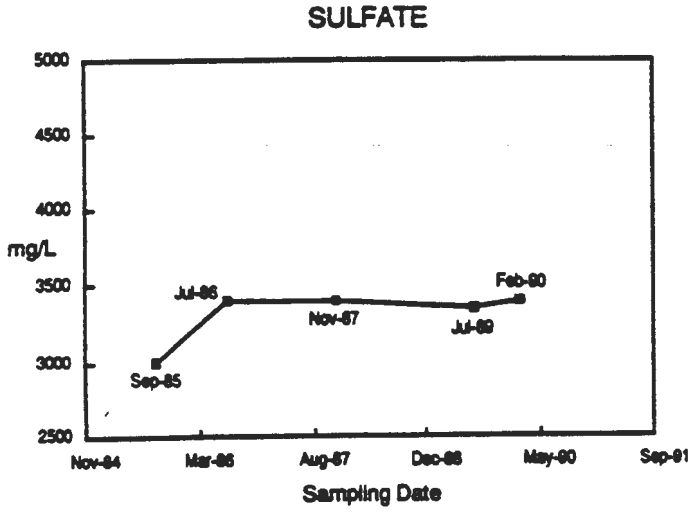

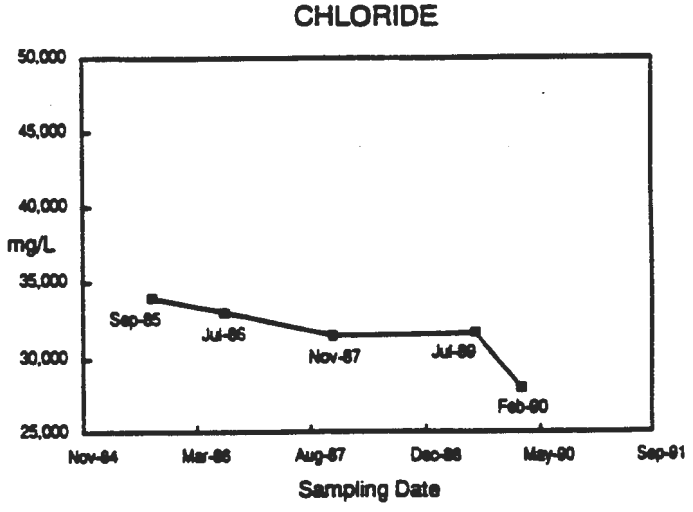

FIGURE 5-12 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL H-06b GROUNDWATER

concentration ranges of minor constituents. Hazardous organic constituents were not detected in groundwater samples from Well H-06b.

Sodium is the dominant cation in groundwater at Well H-06b, followed by calcium, magnesium, and potassium; chloride is the dominant anion, followed by sulfate (Table 5-12). Groundwater at Well H-06b is classified as saline, because the TDS are approximately 61,000 mg/ℓ (Freeze and Cherry, 1979). Well H-06b lies within hydrochemical Type Area 3 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. Several trace metals were detected at concentrations below 1 mg/ℓ (Table 5-12). Only chromium and molybdenum were repeatedly detected in groundwater samples from Well H-06b.

Figure 5-12 shows the temporal variation in the concentration of the six major dissolved constituents of Well H-06b groundwater. Although concentrations fluctuate, no temporal trends are observed in these or any other dissolved constituent of groundwater from Well H-06b.

5.13 Well H-06c

Groundwater samples from the Magenta Dolomite were collected from Well H-06c. Well H-06c was sampled five times; the first groundwater sample was collected in October 1986, and the most recent was collected in March 1990. Samples were analyzed for metals and general chemistry during all five rounds. Samples were analyzed for VOCs in four rounds; samples collected in August 1989 were not analyzed for VOCs. Also, groundwater samples were analyzed for total PCBs and semi-VOCs during the first three rounds, i.e., October 1986, November 1987, and July 1988.

Background concentrations for constituents in groundwater from Well H-06c are presented in Table 5-13. Table 5-13 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-13 are the concentration ranges of minor constituents. Hazardous organic constituents were not detected in groundwater samples from Well H-06c.

Sodium and calcium are the dominant cations in groundwater at Well H-06c, followed by magnesium; sulfate is the dominant anion, followed by chloride and bicarbonate (Table 5-13). Well H-06c groundwater is classified as brackish, because the TDS are approximately 5,000 mg/ℓ (Freeze and Cherry, 1979). Trace metal concentrations are below MDLs with the exception of one-time detections of cesium and mercury (Table 5-13).

Table 5-13
Background Groundwater Chemistry
Well H-06c

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	2.3	0.1	2.2 - 2.5
Calcium	567	45	512 - 623
Iron	0.4	0.1	0.2 - 0.5
Lithium	0.21	0.01	0.20 - 0.23
Magnesium	166	9	155 - 177
Manganese	NC[b]	NC	<0.15[c]
Potassium	18	7	10 - 26
Sodium	614	34	560 - 668
Strontium	9.0	1.2	7.5 - 10.4
General Chemistry			
Alkalinity (as HCO_3^-)	52	1	51 - 53
Bromide	NC	NC	<2[c]
Chloride	418	80	381 - 455
Fluoride	1.9	0.1	1.8 - 2.1
pH (s.u.)[d]	6.92	0.54	6.25 - 7.60
Sulfate	2,494	90	2,382 - 2,606
Total Dissolved Solids	4,760	89	4,649 - 4,871

See footnotes at end of table.

Table 5-13 *(Continued)*
Background Groundwater Chemistry
Well H-06c

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<2
Antimony	<0.6
Arsenic	<0.01
Barium	<0.05
Beryllium	<0.05
Cadmium	<0.05
Cesium	≤0.3
Chromium	<0.1
Cobalt	<0.5
Copper	<0.30
Lead	<0.5
Mercury	≤0.0005
Molybdenum	<0.2
Nickel	<0.4
Selenium	<0.5
Silica	5.1 - 13
Silver	<0.1
Thallium	<0.5
Titanium	<0.3
Vanadium	<0.5
Zinc	<0.2
General Chemistry	
Cyanide	<0.06
Iodide	<2
Nitrate (as N)	<0.1
Phenolics	≤0.014
Phosphate (as P)	≤0.02
Total Organic Carbon	≤1
Total Organic Halogen	≤0.06

See footnotes at end of table.

Table 5-13 *(Continued)*
Background Groundwater Chemistry
Well H-06c

Hazardous Organic Constituents

None Detected

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.

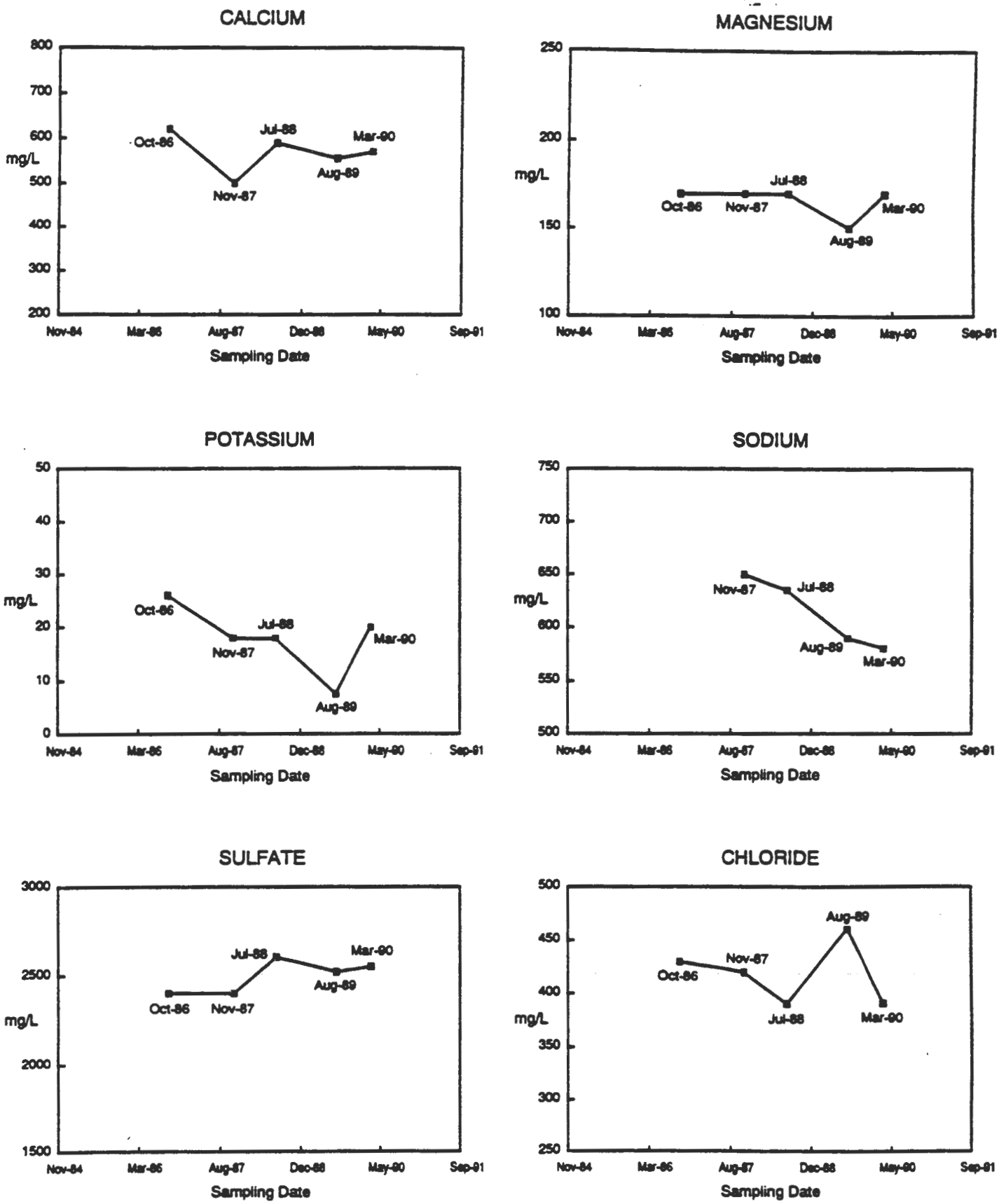

FIGURE 5-13 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL H-06c GROUNDWATER

Figure 5-13 shows the temporal variation in the concentration of the six major constituents of Well H-06c groundwater. Sodium concentrations appear to have decreased slightly with time; however, the total concentration change is within sampling and analytical variability. In general, concentrations of dissolved constituents in Well H-06c groundwater fluctuate but do not exhibit any significant temporal trends.

5.14 Well H-07b1

Groundwater samples from the Culebra Dolomite were collected at Well H-07b1. Well H-07b1 was sampled five times; the first sampling occurred in March 1986, and the most recent took place in November 1990. During all five rounds, groundwater samples were analyzed for metals and general chemical parameters. Samples collected during the first three rounds were also analyzed for VOCs and semi-VOCs, and samples collected during February 1987 and April 1988 were also analyzed for total PCBs.

Background concentrations for constituents in groundwater from Well H-07b1 are presented in Table 5-14. Table 5-14 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-14 are the concentration ranges of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from Well H-07b1.

Calcium is the dominant cation in Well H-07b1 groundwater, followed by sodium and magnesium; sulfate is the dominant anion, followed by chloride and bicarbonate (Table 5-14). Well H-07b1 groundwater is classified as brackish, because the TDS are approximately 3,500 mg/ℓ. Well H-07b1 lies within hydrochemical Type Area 2 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. The TDS of Type Area 2 groundwater is less than 10,000 mg/ℓ, and calcium and sulfate are the dominant dissolved constituents. Chromium is the only trace metal detected in groundwater samples from Well H-07b1 (Table 5-14).

Methylene chloride was detected during the March 1986 sampling of Well H-07b1. This is the only detection of a hazardous organic compound in samples from the well. Methylene chloride is a common laboratory contaminant, according to an EPA risk assessment guidance document (EPA, 1989).

Table 5-14
Background Groundwater Chemistry
Well H-07b1

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	0.8	0.1	0.7 - 0.9
Calcium	604	54	538 - 671
Iron	NC[b]	NC	≤0.3[c]
Lithium	0.10	0.03	0.05 - 0.15
Magnesium	132	6	125 - 139
Manganese	0.06	0.02	0.03 - 0.08
Potassium	8	1	7 - 9
Sodium	178	47	120 - 236
Strontium	7.9	1.2	6.4 - 9.4
General Chemistry			
Alkalinity (as HCO_3^-)	116	16	97 - 136
Bromide	NC	NC	≤3[c]
Chloride	283	25	243 - 322
Fluoride	1.4	0.1	1.3 - 1.6
pH (s.u.)[d]	7.19	0.24	6.90 - 7.49
Sulfate	1,960	261	1,636 - 2,284
Total Dissolved Solids	3,450	100	3,326 - 3,574

See footnotes at end of table.

Table 5-14 *(Continued)*
Background Groundwater Chemistry
Well H-07b1

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<2
Antimony	<0.6
Arsenic	<0.01
Barium	<0.05
Beryllium	<0.05
Cadmium	<0.05
Cesium	<0.2
Chromium	≤0.3
Cobalt	<0.5
Copper	<0.25
Lead	<0.5
Mercury	<0.002
Molybdenum	<0.2
Nickel	<0.4
Selenium	<0.05
Silica	20 - 46
Silver	<0.1
Thallium	<0.5
Titanium	<0.3
Vanadium	<0.5
Zinc	<0.2
General Chemistry	
Cyanide	<0.02
Iodide	<2
Nitrate (as N)	0.7 - 0.9
Phenolics	<0.05
Phosphate (as P)	≤0.08
Total Organic Carbon	<1
Total Organic Halogen	≤0.21

See footnotes at end of table.

Table 5-14 *(Continued)*
Background Groundwater Chemistry
Well H-07b1

Hazardous Organic Constituents[e]

	Sample Date	Concentration
Methylene Chloride[f]	27-Mar-86	11

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.
[e] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[f] Suspected laboratory contaminant.

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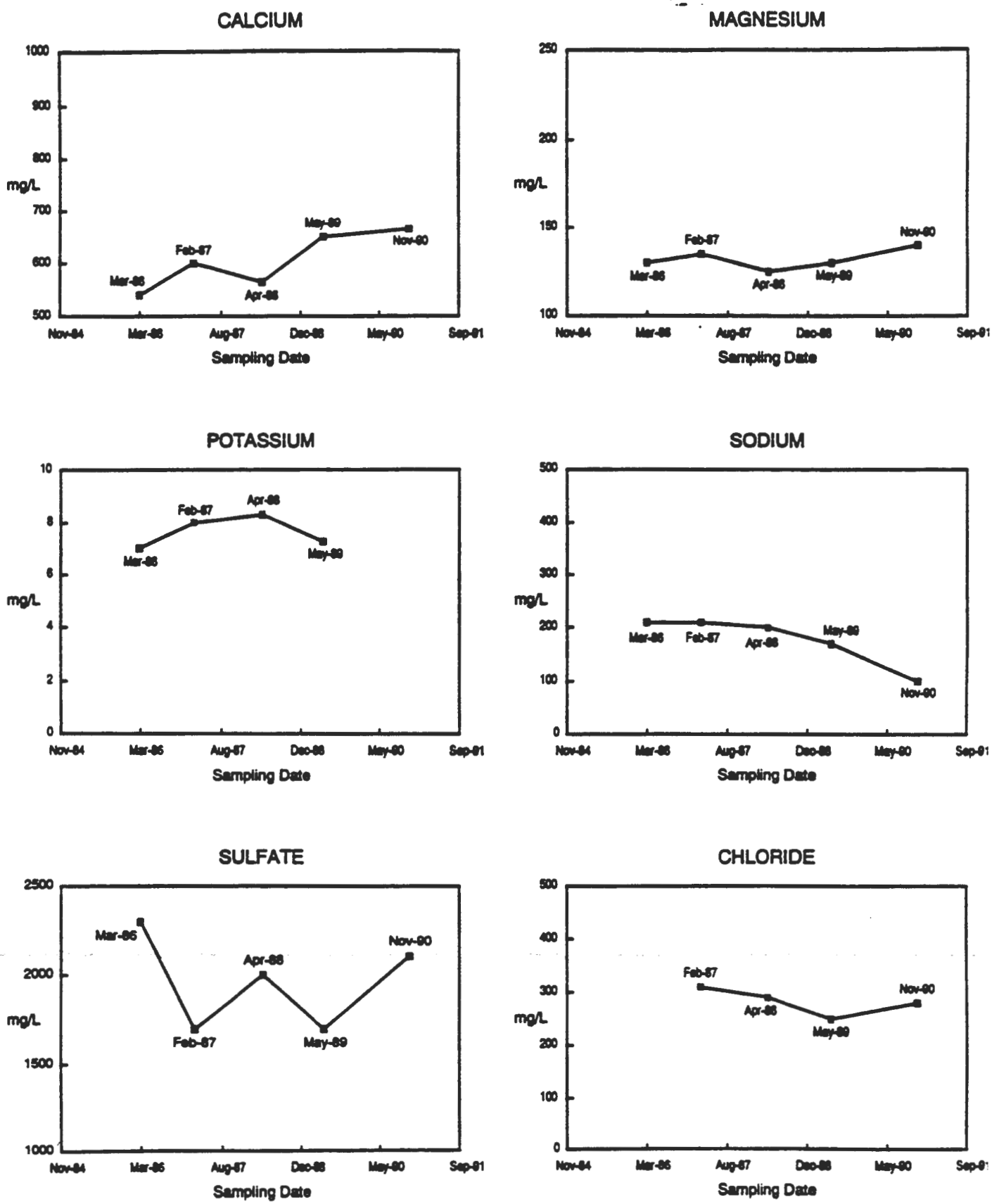

FIGURE 5-14 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL H-07b1 GROUNDWATER

Figure 5-14 shows the temporal variation in the concentration of the six major constituents of Well H-07b1 groundwater. The calcium concentration appears to have increased; while, sodium and bicarbonate (not shown in Figure 5-14) concentrations appear to have decreased. Based on charge balance considerations, the decrease in sodium could be offset by the increase in calcium concentration.

5.15 Well H-08b

Groundwater samples from the Culebra Dolomite were collected from Well H-08b. Well H-08b was sampled three times; the first sample was collected in January 1986, and the most recent was collected in June 1988. During all three rounds, samples were analyzed for VOCs, semi-VOCs, metals, and general chemical parameters. Samples collected during the first two rounds (i.e., January 1986 and February 1987) were also analyzed for total PCBs.

Background concentrations for constituents in groundwater from Well H-08b are presented in Table 5-15. Table 5-15 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-15 are the concentration ranges of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from Well H-08b.

Calcium is the dominant cation in groundwater from Well H-08b, followed by magnesium and sodium; sulfate is the dominant anion, followed by bicarbonate and chloride (Table 5-15). Well H-08b groundwater is classified as brackish, because the TDS concentration is approximately 3,000 mg/ℓ (Freeze and Cherry, 1979). Well H-08b lies within hydrochemical Type Area 2 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. The TDS of Type Area 2 groundwater is less than 10,000 mg/ℓ, and calcium and sulfate are the dominant dissolved constituents. Several trace metals are detected in groundwater samples from Well H-08b; however, detections are sporadic, and concentrations are well below 1 mg/ℓ (Table 5-15).

Bis(2-ethylhexyl)phthalate and 1,2-dichloroethane were detected in the January 1986 groundwater sample from Well H-08b (Table 5-15). The detection of bis(2-ethylhexyl)phthalate could be due to laboratory contamination, as the compound has been identified by the EPA as a common laboratory contaminant (EPA, 1989).

Figure 5-15 shows the temporal variation in the concentration of the six major constituents of Well H-08b groundwater. Calcium and sulfate concentrations appear to have increased with

Table 5-15
Background Groundwater Chemistry
Well H-08b

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	0.4	0.3	0 - 1.1
Calcium	568	33	486 - 651
Iron	0.05	0	0.05
Lithium	NC[b]	NC	0.12[c]
Magnesium	165	5	153 - 177
Manganese	NC	NC	<0.1[c]
Potassium	4.1	0.4	3.1 - 5.0
Sodium	54	2	48 - 59
Strontium	5.8	1.6	1.8 - 9.9
General Chemistry			
Alkalinity (as HCO_3^-)	95	2	91 - 99
Bromide	NC	NC	<2[c]
Chloride	34	2	30 - 38
Fluoride	NC	NC	2.4 - 2.5[c]
pH (s.u.)[d]	7.50	0.38	6.56 - 8.44
Sulfate	1,750	132	1,421 - 2,079
Total Dissolved Solids	3,050	132	2,721 - 3,379

See footnotes at end of table.

Table 5-15 *(Continued)*
Background Groundwater Chemistry
Well H-08b

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<1
Antimony	<0.5
Arsenic	<0.02
Barium	<0.1
Beryllium	<0.05
Cadmium	<0.05
Cesium	<0.24
Chromium	<0.1
Cobalt	<0.1
Copper	≤0.11
Lead	<0.5
Mercury	≤0.0002
Molybdenum	≤0.02
Nickel	<0.3
Selenium	<0.5
Silica	11 - 27
Silver	<0.1
Thallium	<0.05
Titanium	<0.3
Vanadium	0.04
Zinc	≤0.24
General Chemistry	
Cyanide	≤0.1
Iodide	<2
Nitrate (as N)	0.9 - 1.4
Phenolics	≤0.051
Phosphate (as P)	≤0.02
Total Organic Carbon	<1
Total Organic Halogen	<0.05

See footnotes at end of table.

Table 5-15 *(Continued)*
Background Groundwater Chemistry
Well H-08b

Hazardous Organic Constituents[e]

	Sample Date	Concentration
1,2-Dichloroethane	22-Jan-86	2.5
Bis(2-ethylhexyl)phthalate[f]	22-Jan-86	1.1

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.
[e] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[f] Suspected laboratory contaminant.

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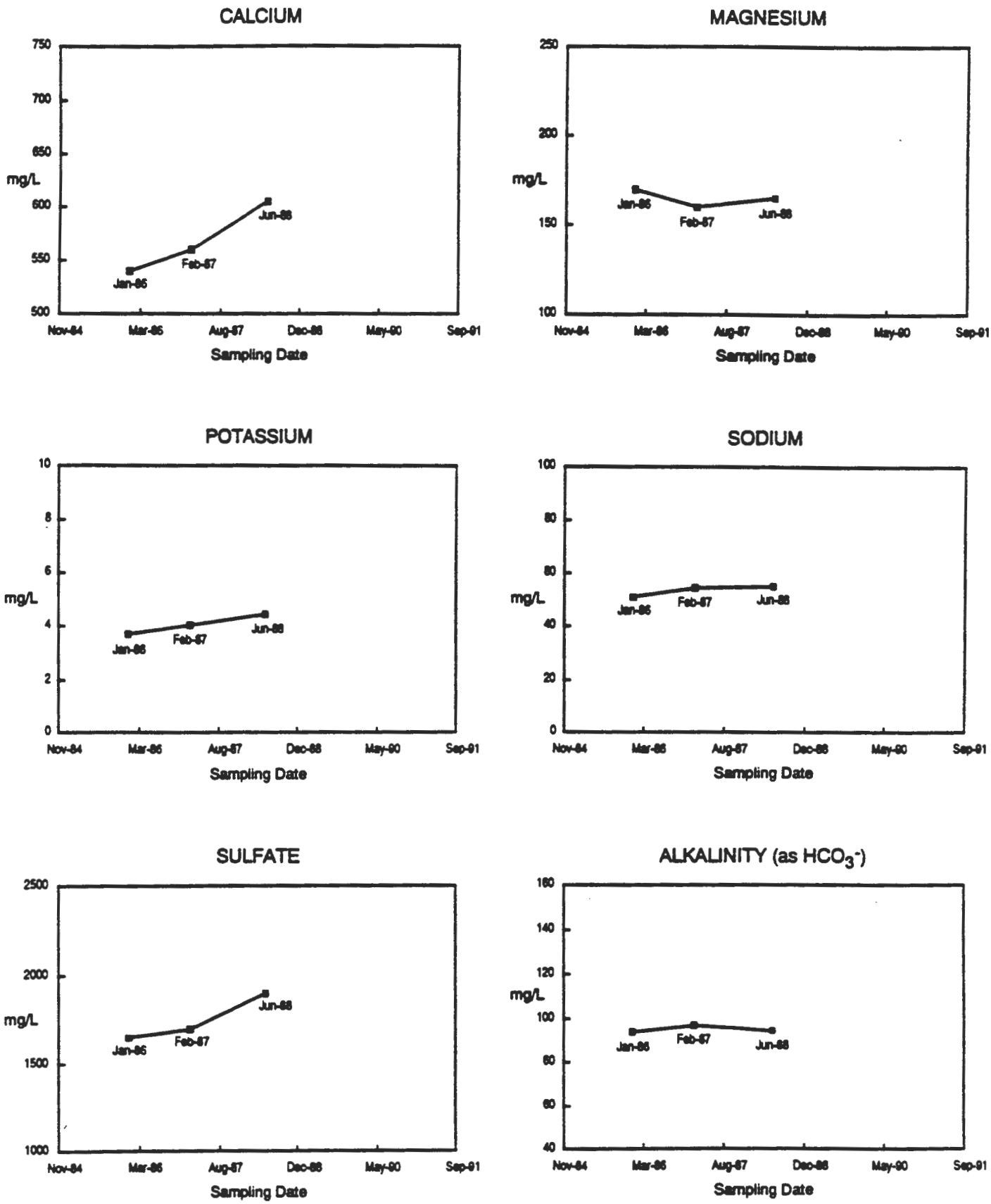

FIGURE 5-15 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL H-08b GROUNDWATER

time. This could be due to the dissolution of gypsum, if the groundwater at Well H-08b is not saturated with respect to the mineral. However, the observed increase in sulfate is greater than would be expected from the congruent dissolution of gypsum. Also, TDS (not shown in Figure 5-15) appear to be decreasing with time at Well H-08b. Thus, the observed concentration trends are not conclusive; more data would be required to further evaluate trends at Well H-08b.

5.16 Well H-09b

Groundwater samples from the Culebra Dolomite were collected at Well H-09b. Well H-09b was sampled four times; the first sample was collected in November 1985, and the most recent was collected in January 1990. During all four rounds, groundwater samples were analyzed for VOCs, semi-VOCs, metals, and general chemical parameters. Samples collected during the January 1987 and June 1988 rounds were analyzed for total PCBs, and the January 1990 sample was analyzed for individual PCBs (e.g., Aroclor 1016).

Background concentrations for constituents in groundwater from Well H-09b are presented in Table 5-16. Table 5-16 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-16 are the concentration range of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from Well H-09b.

Calcium is the dominant cation in Well H-09b groundwater, followed by magnesium and sodium; sulfate is the dominant anion, followed by chloride and bicarbonate (Table 5-16). Well H-09b groundwater is classified as brackish, because the TDS are approximately 3,250 mg/ℓ (Freeze and Cherry, 1979). Well H-09b lies within hydrochemical Type Area 2 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. The TDS of Type Area 2 groundwater is less than 10,000 mg/ℓ, and calcium and sulfate are the dominant dissolved constituents. Trace concentrations of cesium, cobalt, and mercury were detected in groundwater from Well H-09b (Table 5-16). Detected concentrations were well below 1 mg/ℓ, and detections were sporadic (i.e., not detected consistently from one round to the next). Molybdenum was consistently detected in Well H-09b groundwater (Table 5-16).

The compounds 1,3-dichlorobenzene and 2-butanone (metyl ethyl ketone) were detected in groundwater samples from Well H-09b (Table 5-16). The 1,3-dichlorobenzene was detected at 20 µg/ℓ in a groundwater sample and was also detected at 13 µg/ℓ in a method blank. The detection of 2-butanone could be due to laboratory contamination, as this compound was

Table 5-16
Background Groundwater Chemistry
Well H-09b

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	0.7	0.1	0.5 - 0.9
Calcium	613	37	554 - 672
Iron	NC[b]	NC	≤0.11[c]
Lithium	0.19	0.02	0.15 - 0.23
Magnesium	141	9	128 - 155
Manganese	0.06	0.05	0 - 0.13
Potassium	7.7	0.6	6.8 - 8.6
Sodium	129	27	96 - 163
Strontium	7.3	0.5	6.5 - 8.1
General Chemistry			
Alkalinity (as HCO_3^-)	120	0	120
Bromide	0.9	0.3	0.5 - 1.3
Chloride	183	17	155 - 210
Fluoride	3.1	0.4	2.5 - 3.7
pH (s.u.)[d]	7.40	0.26	6.99 - 7.81
Sulfate	1,650	168	1,382 - 1,918
Total Dissolved Solids	3,250	100	3,091 - 3,409

See footnotes at end of table.

Table 5-16 *(Continued)*
Background Groundwater Chemistry
Well H-09b

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<1
Antimony	<0.5
Arsenic	<0.01
Barium	<0.2
Beryllium	<0.05
Cadmium	<0.05
Cesium	≤0.2
Chromium	<0.1
Cobalt	≤0.12
Copper	<0.1
Lead	<0.5
Mercury	≤0.0041
Molybdenum	0.01 - 0.05
Nickel	<0.3
Selenium	<0.5
Silica	12 - 30
Silver	<0.1
Thallium	<0.5
Titanium	<0.3
Vanadium	<0.05
Zinc	<0.1
General Chemistry	
Cyanide	≤0.24
Iodide	<2
Nitrate (as N)	0.11 - 0.5
Phenolics	<0.05
Phosphate (as P)	≤0.03
Total Organic Carbon	≤3
Total Organic Halogen	≤0.22

See footnotes at end of table.

Table 5-16 *(Continued)*
Background Groundwater Chemistry
Well H-09b

Hazardous Organic Constituents[e]

	Sample Date	Concentration
1,3-Dichlorobenzene	19-Jan-90	20
2-Butanone[f]	14-Nov-85	46

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.
[e] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[f] Suspected laboratory contaminant.

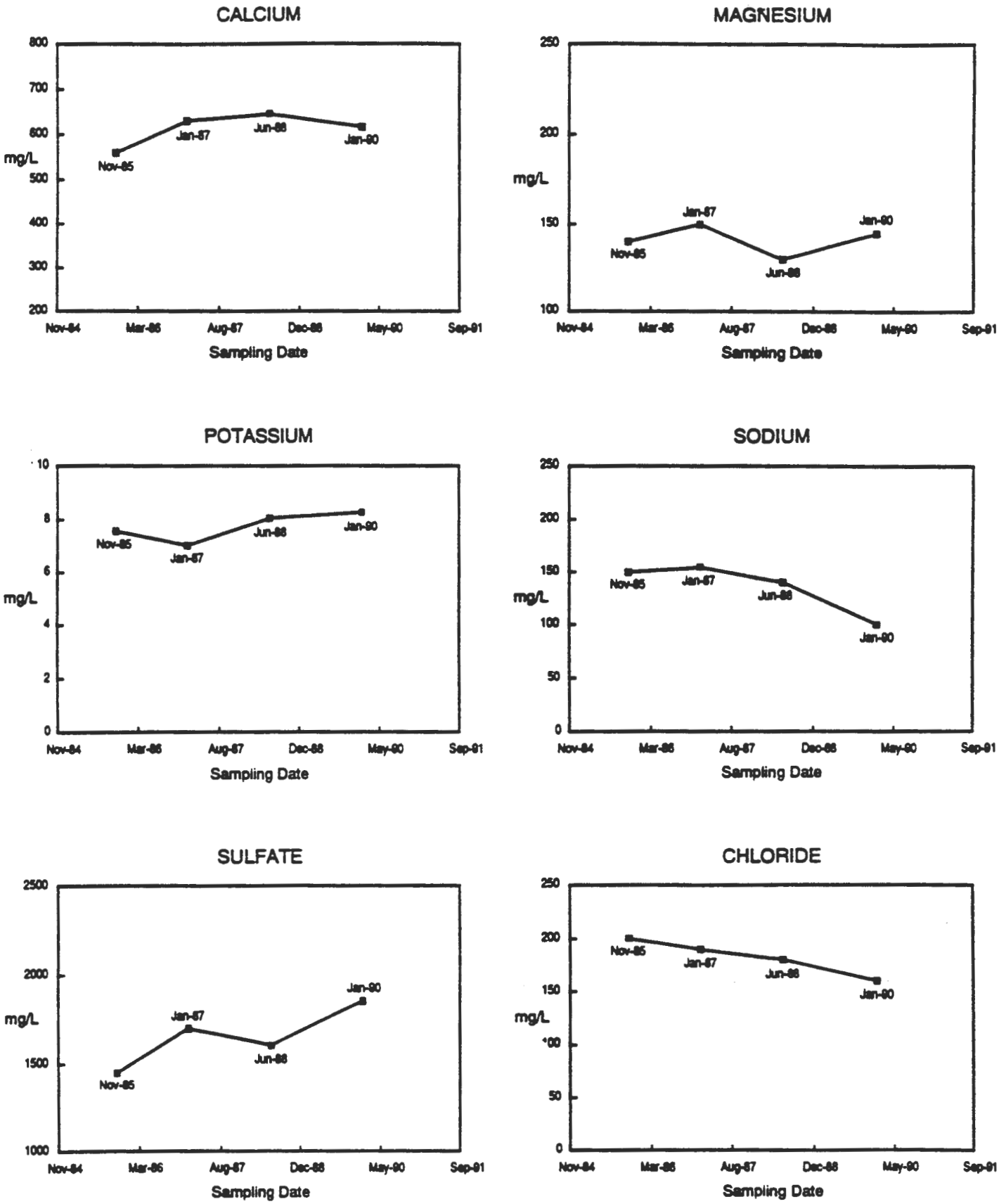

FIGURE 5-16 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL H-09b GROUNDWATER

identified as a common laboratory contaminant in an EPA risk assessment guidance document (EPA, 1989).

Figure 5-16 shows the temporal variation in the concentration of the six major constituents of Well H-09b groundwater. Sodium and chloride concentrations appear to have decreased slightly with time, while the sulfate concentration appears to have increased. Based on charge balance considerations, an actual increase in sulfate is not likely. Also, TDS (not shown in Figure 5-16) have remained relatively constant throughout the sampling of Well H-09b.

5.17 Well H-11b3

Groundwater samples from the Culebra Dolomite were collected from Well H-11b3. Well H-11b3 was sampled five times; the first sample was collected in June 1985, and the most recent was taken in October 1990. Samples from all five rounds were analyzed for metals and general chemical parameters. Groundwater samples from the first three rounds were also analyzed for VOCs and semi-VOCs. Samples collected during the June 1986 and September 1987 rounds were analyzed for total PCBs. Analytical results for major constituents from the June 1985 sampling event were provided by Bendix (Uhland and Randall, 1986). All other results were provided by ITAS.

Background concentrations for constituents in groundwater from Well H-11b3 are presented in Table 5-17. Table 5-17 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-17 are the concentration ranges of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from Well H-11b3.

Sodium is the dominant cation in Well H-11b3 groundwater, followed by calcium, magnesium, and potassium; chloride is the dominant anion, followed by sulfate. Groundwater at well H-11b3 is classified as brine, because the TDS are greater than 100,000 mg/ℓ (Freeze and Cherry, 1979). Well H-11b3 lies within hydrochemical Type Area 1 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. Groundwater in Type Area 1 contains TDS in excess of 100,000 mg/ℓ, and sodium and chloride are the dominant dissolved constituents. Several trace metals were detected in groundwater samples from Well H-11b3. Cadmium, cesium, chromium, copper, lead, molybdenum, silver, and titanium were repeatedly detected at Well H-11b3. Concentrations of these metals were all less than 1 mg/ℓ (Table-5-17). The MDLs for most of the trace metals were relatively high because of sample dilution during analysis.

Table 5-17
Background Groundwater Chemistry
Well H-11b3

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	30	1	29 - 31
Calcium	1,492	132	1,329 - 1,655
Iron	NC[b]	NC	<1[c]
Lithium	NC	NC	0.5 - 0.6[c]
Magnesium	1,155	94	1,038 - 1,272
Manganese	0.26	0.07	0.17 - 0.35
Potassium	822	136	654 - 990
Sodium	39,300	3,328	35,169 - 43,432
Strontium	23	6	15 - 30
General Chemistry			
Alkalinity (as HCO_3^-)	51	5	44 - 58
Bromide	54	29	18 - 90
Chloride	64,780	6,216	57,063 - 72,497
Fluoride	1.1	0.1	1.0 - 1.2
pH (s.u.)[d]	7.08	0.11	6.95 - 7.22
Sulfate	6,620	626	5,843 - 7,397
Total Dissolved Solids	118,400	3,782	113,705 - 123,095

See footnotes at end of table.

Table 5-17 *(Continued)*
Background Groundwater Chemistry
Well H-11b3

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<2
Antimony	≤0.9
Arsenic	≤0.15
Barium	<0.1
Beryllium	<0.05
Cadmium	0.06 - 0.09
Cesium	≤0.55
Chromium	0.32 - 0.4
Cobalt	<0.5
Copper	≤0.26
Lead	≤0.6
Mercury	<0.0004
Molybdenum	0.032 - 0.3
Nickel	<0.4
Selenium	<0.5
Silica	4.1 - 15
Silver	0.1 - 0.2
Thallium	<10
Titanium	≤0.69
Vanadium	<0.5
Zinc	<0.2
General Chemistry	
Cyanide	≤0.15
Iodide	<2
Nitrate (as N)	<0.3
Phenolics	≤0.02
Phosphate (as P)	≤0.04
Total Organic Carbon	≤3
Total Organic Halogen	≤1.5

See footnotes at end of table.

Table 5-17 *(Continued)*
Background Groundwater Chemistry
Well H-11b3

Hazardous Organic Constituents[e]

	Sample Date	Concentration
Acetone[f]	15-Sep-87	16
Bis(2-ethylhexyl)phthalate[f]	04-Jun-86	97
Bis(2-ethylhexyl)phthalate[f]	15-Sep-87	12
Methylene Chloride[f]	15-Sep-87	8

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.
[e] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[f] Suspected laboratory contaminant.

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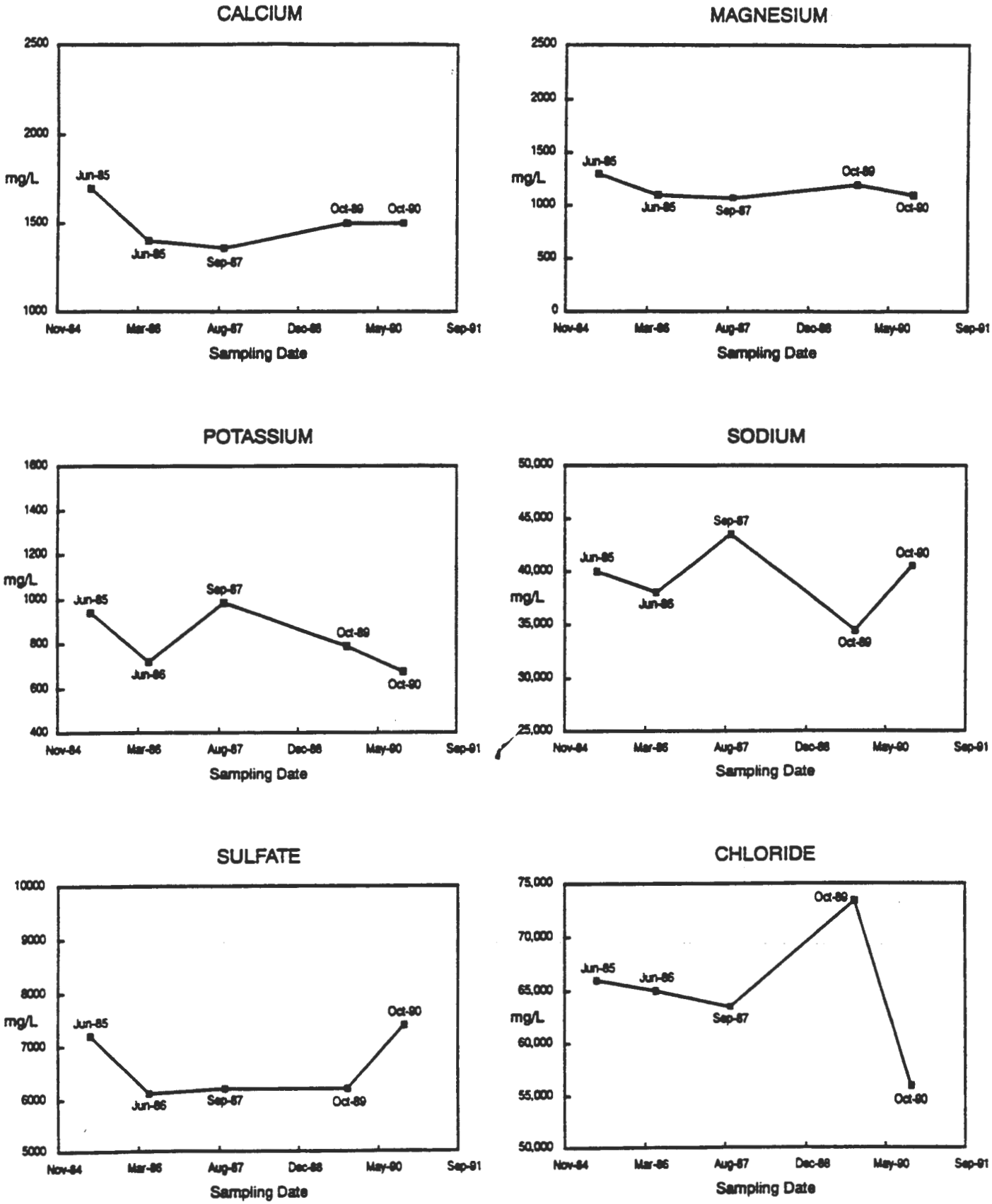

FIGURE 5-17 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL H-11b3 GROUNDWATER

Several detections of hazardous organic compounds were observed in samples of groundwater from Well H-11b3 (Table 5-17). All of the detections could be due to laboratory contamination, according to a list of common laboratory contaminants presented in an EPA risk assessment guidance document (EPA, 1989). Bis(2-ethyhexyl)phthalate was detected twice (Table 5-17); the other compounds were detected only once. Acetone was detected at 16 µg/ℓ in the September 1987 sampling. However, 19 µg/ℓ of acetone was also detected in a trip blank during the same sampling round.

Figure 5-17 shows the temporal variation in the concentration of the six major constituents of Well H-11b3 groundwater. While concentrations fluctuate, no temporal trends are observed in these constituents. The TDS of Well H-11b3 groundwater (not shown on Figure 5-17) appear to have decreased with time; however, this decrease is not supported by the major constituents shown in Figure 5-17.

5.18 Well H-12

Samples of groundwater from the Culebra Dolomite were collected at Well H-12. Well H-12 was sampled three times; the first sample was collected in August 1985, and the most recent was collected in December 1988. Groundwater samples collected during all three rounds were analyzed for VOCs, semi-VOCs, metals, and general chemical parameters. Samples collected during the January 1987 and December 1988 rounds were also analyzed for total PCBs.

Background concentrations for constituents in groundwater from Well H-12 are presented in Table 5-18. Table 5-18 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-18 are the concentration ranges of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from Well H-12.

Sodium is the dominant cation in groundwater from Well H-12, followed by calcium, magnesium, and potassium; chloride is the dominant anion, followed by sulfate. Groundwater at Well H-12 is classified as brine, because the TDS are greater than 100,000 mg/ℓ (Freeze and Cherry, 1979). Well H-12 lies within hydrochemical Type Area 1 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. Groundwater in Type Area 1 is a sodium-chloride brine. Several trace metals were repeatedly detected in groundwater samples from Well H-12. The MDLs for most of the trace metals were relatively high because of

Table 5-18
Background Groundwater Chemistry
Well H-12

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	38	3	31 - 46
Calcium	1,700	150	1,327 - 2,073
Iron	1.7	1.0	0 - 4.2
Lithium	NC[b]	NC	0.73 - 11[c]
Magnesium	1,700	300	955 - 2,445
Manganese	0.28	0.32	0 - 1.1
Potassium	1,480	131	1,154 - 1,806
Sodium	46,750	4,116	36,526 - 56,974
Strontium	30	11	4 - 57
General Chemistry			
Alkalinity (as HCO_3^-)	56	9	33 - 79
Bromide	103	37	12 - 194
Chloride	78,967	896	76,740 - 81,193
Fluoride	1.13	0.03	1.06 - 1.21
pH (s.u.)[d]	7.06	0.24	6.45 - 7.66
Sulfate	7,200	1,179	4,271 - 10,129
Total Dissolved Solids	136,500	8,322	115,826 - 157,174

See footnotes at end of table.

Table 5-18 *(Continued)*
Background Groundwater Chemistry
Well H-12

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<1
Antimony	1 - 2
Arsenic	≤0.17
Barium	<0.05
Beryllium	<0.05
Cadmium	0.05 - 0.15
Cesium	<10
Chromium	≤0.8
Cobalt	≤0.2
Copper	≤0.45
Lead	≤1.2
Mercury	≤0.001
Molybdenum	0.32 - 0.35
Nickel	≤0.84
Selenium	≤0.6
Silica	2.7 - 45
Silver	≤0.2
Thallium	<2.5
Titanium	<0.3
Vanadium	0.3
Zinc	0.3
General Chemistry	
Cyanide	<0.04
Iodide	<2
Nitrate (as N)	≤0.9
Phenolics	≤0.011
Phosphate (as P)	≤0.09
Total Organic Carbon	≤15
Total Organic Halogen	0.18 - 1.4

See footnotes at end of table.

Table 5-18 *(Continued)*
Background Groundwater Chemistry
Well H-12

Hazardous Organic Constituents[e]

	Sample Date	Concentration
Bis(2-Ethylhexyl)phthalate[f]	16-Jan-87	38
Bis(2-Ethylhexyl)phthalate[f]	14-Dec-88	16
Methylene Chloride[f]	14-Dec-88	5.6 (5.3)[g]

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.
[e] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[f] Suspected laboratory contaminant.
[g] Duplicate analysis in parentheses.

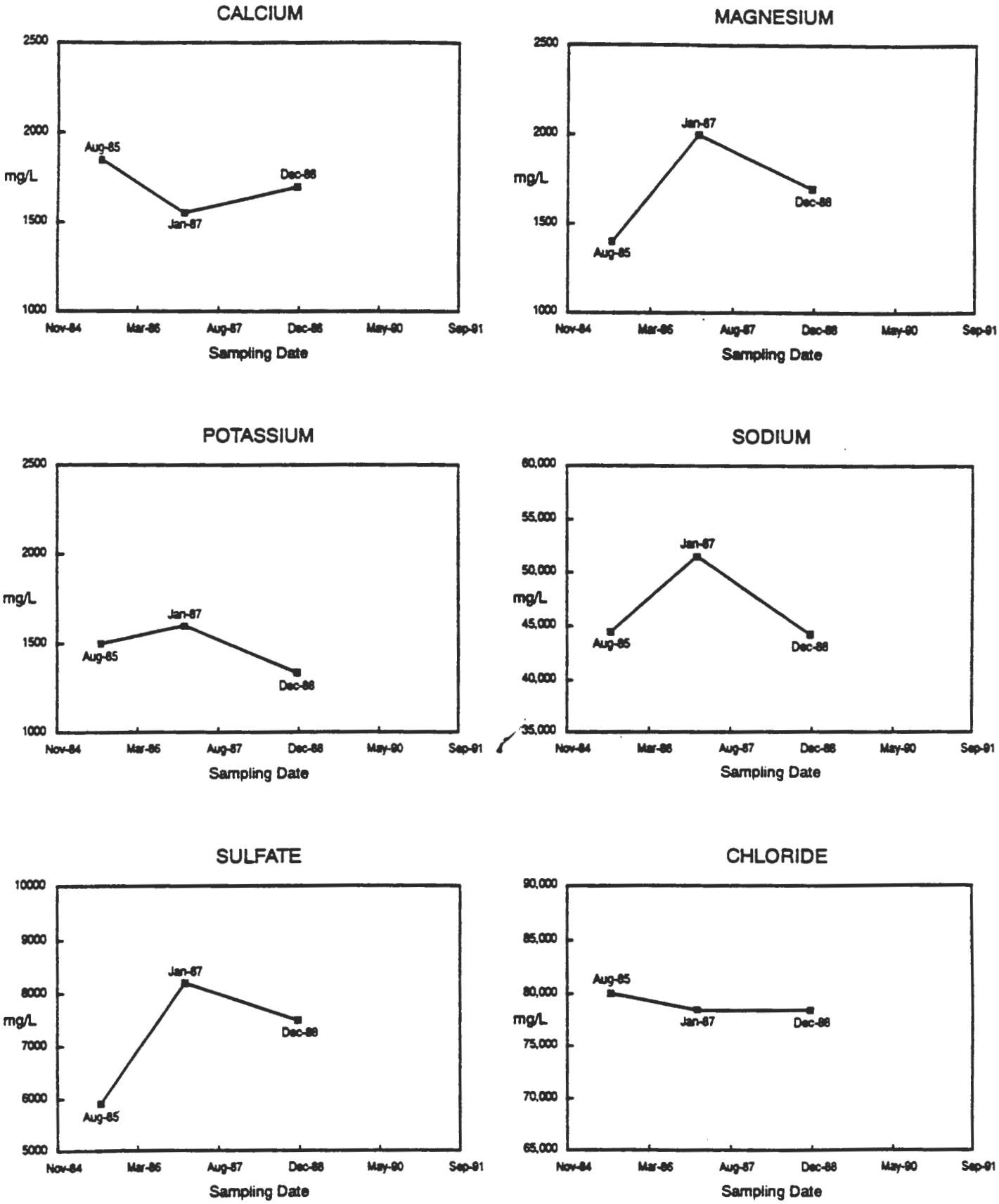

FIGURE 5-18 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL H-12 GROUNDWATER

sample dilution during analysis. Some of the relatively high concentrations (e.g., lead at 1.2 mg/ℓ) could be due to problems associated with the analysis of high-TDS solutions.

Bis(2-ethylhexyl)phthalate and methylene chloride were detected in groundwater samples from Well H-12 (Table 5-18). The phthalate compound was detected twice, in successive rounds. The presence of both compounds could be due to laboratory contamination, as the compounds have been identified by the EPA as common laboratory contaminants (EPA, 1989).

Figure 5-18 shows the temporal variation in the concentration of the six major constituents of groundwater from Well H-12. Though concentrations fluctuate, no temporal trends are observed in these or any other constituent of Well H-12 groundwater. The TDS (not shown on Figure 5-18) appear to have decreased by approximately 15,000 mg/ℓ from the first to the last sampling round. However, this decrease is not supported by concentration decreases in the major dissolved constituents.

5.19 Well H-14

Groundwater samples from the Culebra Dolomite were collected from Well H-14. Well H-14 was sampled three times; the first sampling occurred in May 1987, and the most recent took place in April 1989. During all three rounds, groundwater samples were analyzed for VOCs, semi-VOCs, metals, and general chemical parameters. In addition, samples collected during the first two rounds were analyzed for total PCBs, and a sample collected during the most recent round was analyzed for individual PCB compounds.

Background concentrations for constituents in groundwater from Well H-14 are presented in Table 5-19. Table 5-19 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-19 are the concentration ranges of minor constituents. Hazardous organic constituents were not detected in groundwater samples from Well H-14.

Sodium is the dominant cation in groundwater at Well H-14, followed by calcium, magnesium, and potassium; chloride is the dominant anion, followed by sulfate (Table 5-19). Groundwater at Well H-14 is classified as saline (Freeze and Cherry, 1979), because the TDS are approximately 17,000 mg/ℓ. Well H-14 lies within hydrochemical Type Area 3 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. Groundwater in Type Area 3 contains TDS ranging from 10,000 to 100,000 mg/ℓ and may be a mixture of Type Area 1 and 2 groundwater. Several trace metals were detected in groundwater samples from

Table 5-19
Background Groundwater Chemistry
Well H-14

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	11	0	11
Calcium	1,817	126	1,504 - 2,129
Iron	0.4	0.2	0.1 - 0.8
Lithium	0.47	0.04	0.39 - 0.56
Magnesium	532	33	451 - 613
Manganese	0.08	0.05	0 - 0.21
Potassium	245	5	233 - 257
Sodium	3,467	289	2,750 - 4,184
Strontium	32	1	30 - 35
General Chemistry			
Alkalinity (as HCO_3^-)	39	2	35 - 43
Bromide	13	2	9 - 18
Chloride	8,367	569	6,954 - 9,779
Fluoride	1.4	0.5	0.1 - 2.6
pH (s.u.)[b]	7.20	0.52	5.89 - 8.50
Sulfate	1,750	218	1,209 - 2,291
Total Dissolved Solids	16,967	1,168	14,066 - 19,867

See footnotes at end of table.

Table 5-19 *(Continued)*
Background Groundwater Chemistry
Well H-14

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	≤1
Antimony	0.5 - 0.6
Arsenic	<0.05
Barium	<0.05
Beryllium	<0.05
Cadmium	≤0.06
Cesium	<0.6
Chromium	0.2 - 0.4
Cobalt	<0.1
Copper	≤0.1
Lead	≤0.5
Mercury	≤0.0004
Molybdenum	0.06 - 0.2
Nickel	<0.3
Selenium	<0.05
Silica	5.5 - 14
Silver	≤0.1
Thallium	<5
Titanium	≤0.5
Vanadium	0.1 - 0.2
Zinc	<0.1
General Chemistry	
Cyanide	<0.04
Iodide	<2
Nitrate (as N)	≤0.4
Phenolics	0.068 - 0.14
Phosphate (as P)	≤0.05
Total Organic Carbon	≤2
Total Organic Halogen	0.08 - 1.1

See footnotes at end of table.

Table 5-19 *(Continued)*
Background Groundwater Chemistry
Well H-14

Hazardous Organic Constituents

None Detected

[a] All concentrations in milligrams per liter, except where noted.
[b] s.u. = standard pH units.

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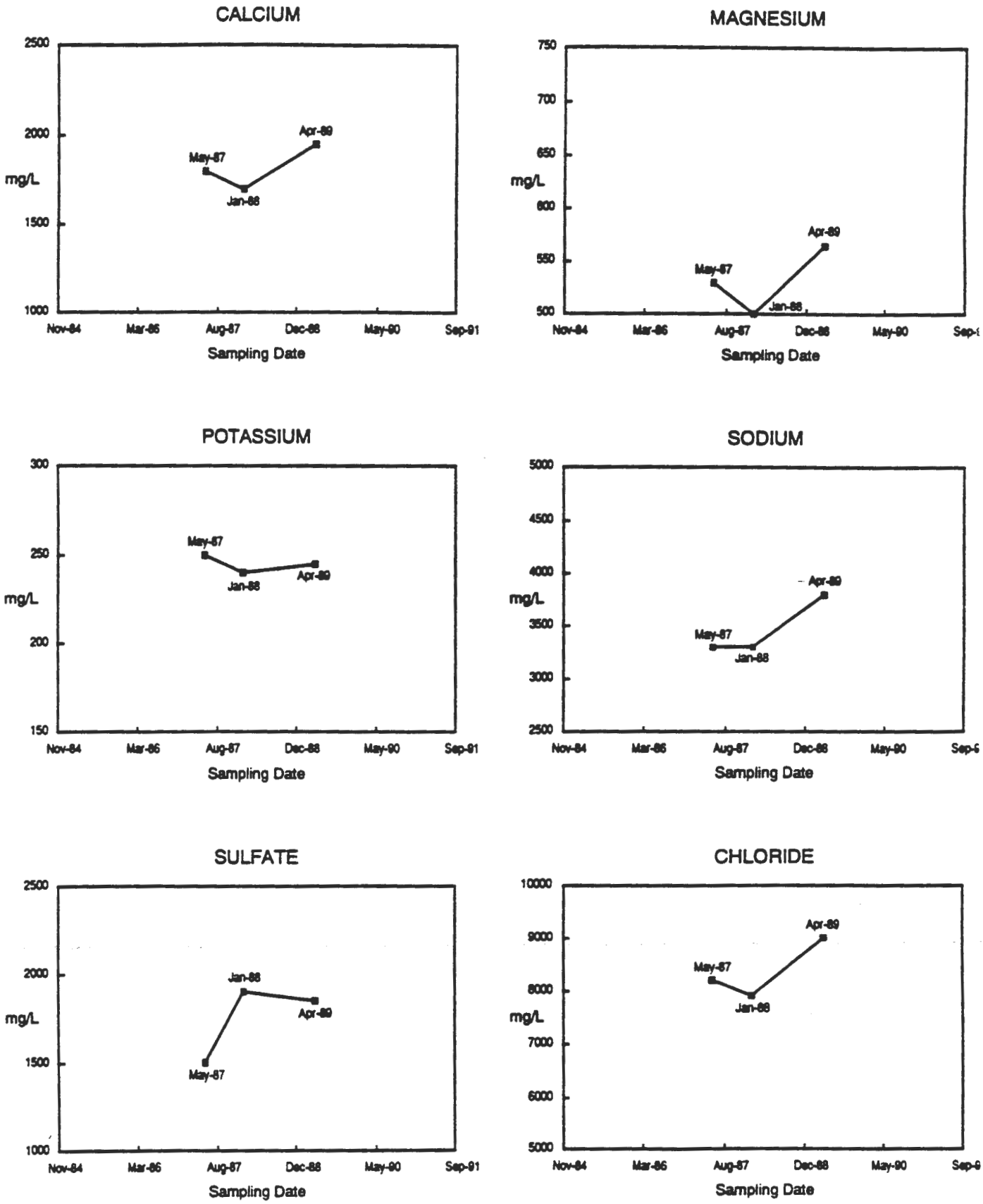

FIGURE 5-19 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL H-14 GROUNDWATER

Well H-14. Antimony, chromium, copper, molybdenum, titanium, and vanadium were repeatedly detected. Concentrations were below 1 mg/ℓ (Table 5-19).

Figure 5-19 shows the temporal variation in the concentration of the six major constituents of groundwater at Well H-14. Although concentrations vary, no trends are observed in these constituents. The TDS of groundwater at Well H-14 (not shown in Figure 5-19) appear to have decreased with time throughout the WQSP; however, this trend is not supported by a decrease in the concentration of the major constituents.

5.20 Well H-15

Groundwater samples from the Culebra Dolomite were collected from Well H-15. Well H-15 was sampled three times; the first sampling occurred in May 1987, and the most recent took place in November 1988. During all three rounds, groundwater samples were analyzed for VOCs, semi-VOCs, total PCBs, metals, and general chemical parameters.

Background concentrations for constituents in groundwater from Well H-15 are presented in Table 5-20. Table 5-20 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-20 are the concentration ranges of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from Well H-15.

Sodium is the dominant cation in Well H-15 groundwater, followed by magnesium, potassium, and calcium; chloride is the dominant anion, followed by sulfate (Table 5-20). Groundwater at Well H-15 is a brine (Freeze and Cherry, 1979), as the TDS concentration greatly exceeds 100,000 mg/ℓ. Well H-15 lies within hydrochemical Type Area 1 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. Groundwater in Type Area 1 is a sodium-chloride brine. The MDLs for trace metals are relatively-high, due to dilution prior to the analysis of the high-TDS samples from Well H-15. Also, several trace metals were detected at relatively-high concentrations, i.e., chromium and lead (Table 5-20). The validity of the trace metal data in uncertain, due to sample dilution and the problems associated with the analysis of high-TDS solutions.

Bis(2-ethylhexyl)phthalate was detected in Well H-15 groundwater samples from all three rounds (Table 5-20). This compound may have been present due to laboratory contamination; bis(2-ethylhexyl)phthalate is listed as a common laboratory contaminant in an EPA risk assessment guidance document (EPA, 1989). However, the repeated detection of the

Table 5-20
Background Groundwater Chemistry
Well H-15

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	47	3	40 - 55
Calcium	1,667	306	908 - 2,426
Iron	NC[b]	NC	3[c]
Lithium	0.8	0.1	0.6 - 1.1
Magnesium	2,533	208	2,016 - 3,051
Manganese	NC	NC	≤0.6[c]
Potassium	1,817	29	1,745 - 1,888
Sodium	77,967	6,550	61,694 - 94,239
Strontium	31	1	29 - 32
General Chemistry			
Alkalinity (as HCO_3^-)	35	3	28 - 43
Bromide	99	2	94 - 103
Chloride	136,333	3,215	128,347 - 144,319
Fluoride	0.7	0.1	0.5 - 0.8
pH (s.u.)[d]	6.66	0.13	6.34 - 6.97
Sulfate	6,467	961	4,080 - 8,854
Total Dissolved Solids	235,333	8,387	214,498 - 256,168

See footnotes at end of table.

Table 5-20 *(Continued)*
Background Groundwater Chemistry
Well H-15

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<10
Antimony	≤7
Arsenic	<1
Barium	<0.5
Beryllium	<0.5
Cadmium	≤0.7
Cesium	<1
Chromium	≤3
Cobalt	≤1
Copper	≤2
Lead	≤7
Mercury	<0.002
Molybdenum	0.2 - 0.52
Nickel	<3
Selenium	<5
Silica	<21
Silver	≤1
Thallium	<5
Titanium	<3
Vanadium	≤1
Zinc	≤1
General Chemistry	
Cyanide	<0.02
Iodide	<2
Nitrate (as N)	≤0.5
Phenolics	≤0.039
Phosphate (as P)	≤0.01
Total Organic Carbon	≤2
Total Organic Halogen	1.2 - 7.4

See footnotes at end of table.

Table 5-20 *(Continued)*
Background Groundwater Chemistry
Well H-15

Hazardous Organic Constituents[e]

	Sample Date	Concentration
Bis(2-ethylhexyl)phthalate[f]	11-May-87	64
Bis(2-ethylhexyl)phthalate[f]	13-Jan-88	22
Bis(2-ethylhexyl)phthalate[f]	07-Nov-88	44

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95 % confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.
[e] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[f] Suspected laboratory contaminant.

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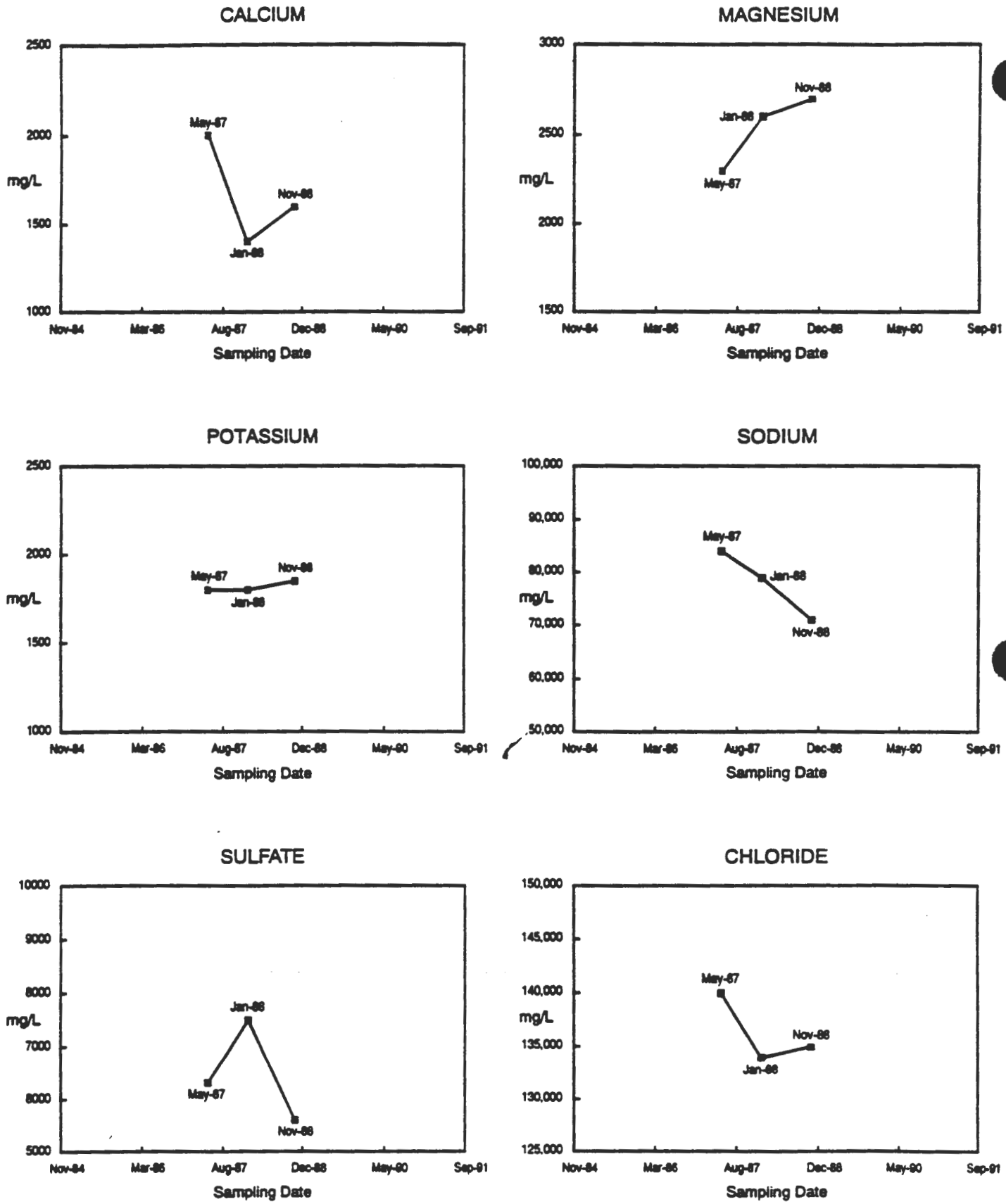

FIGURE 5-20 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL H-15 GROUNDWATER

compound could indicate actual contamination or the introduction of the compound during the sampling procedure.

Figure 5-20 shows the temporal variation in the concentration of the six major constituents of Well H-15 groundwater. The sodium concentration appears to have decreased, while the magnesium concentration and TDS (not shown on Figure 5-20) appear to have increased. Based on charge balance considerations, the sodium decrease could not be entirely offset by the magnesium increase. Also, the TDS increase is not supported by an increase in the concentration of the major constituents. Thus, it is likely that the observed trends in Well H-15 groundwater chemistry are not significant.

5.21 Well H-18

Groundwater samples from the Culebra Dolomite were collected from Well H-18. Well H-18 was sampled three times, in November 1987, April 1988, and April 1990. During all three rounds, samples were analyzed for VOCs, metals, and general chemical parameters. The November 1987 and April 1988 samples were also analyzed for semi-VOCs and total PCBs.

Background concentrations for constituents in groundwater from Well H-18 are presented in Table 5-21. Table 5-21 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-21 are the concentration ranges of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from Well H-18.

Sodium is the dominant cation in Well H-18 groundwater, followed by calcium, magnesium, and potassium; chloride is the dominant anion, followed by sulfate (Table 5-21). The groundwater at Well H-18 is classified as saline (Freeze and Cherry, 1979), because TDS are approximately 27,600 mg/ℓ. Well H-18 lies within hydrochemical Type Area 3 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. Groundwater in Type Area 3 contains TDS ranging from 10,000 to 100,000 mg/ℓ and may be a mixture of Type Area 1 and 2 groundwater. Cesium, chromium, and titanium were detected in samples from well H-18 at concentrations of less than 1 mg/ℓ (Table 5-21). Only cesium was repeatedly detected.

The occurrence of 5.5 µg/ℓ of methylene chloride in the April 1988 sample is the only detection of a hazardous organic compound observed in Well H-18 groundwater (Table 5-21). This probably is due to laboratory contamination, since 5.7 µg/ℓ of methylene chloride was

Table 5-21
Background Groundwater Chemistry
Well H-18

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	16	1	14 - 18
Calcium	1,093	110	820 - 1,367
Iron	0.4	0.2	0 - 0.7
Lithium	0.24	0.08	0.04 - 0.44
Magnesium	503	21	452 - 555
Manganese	0.18	0.03	0.09 - 0.26
Potassium	238	13	207 - 270
Sodium	7,617	664	5,967 - 9,266
Strontium	15	1	14 - 17
General Chemistry			
Alkalinity (as HCO_3^-)	53	3	46 - 61
Bromide	15	2	11 - 19
Chloride	12,500	500	11,258 - 13,742
Fluoride	1.7	0.2	1.4 - 2.1
pH (s.u.)[b]	6.92	0.83	4.87 - 8.98
Sulfate	4,233	839	2,150 - 6,317
Total Dissolved Solids	27,633	3,508	18,919 - 36,347

See footnotes at end of table.

Table 5-21 *(Continued)*
Background Groundwater Chemistry
Well H-18

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<2
Antimony	<0.6
Arsenic	<0.5
Barium	<0.05
Beryllium	<0.05
Cadmium	<0.05
Cesium	≤0.8
Chromium	≤0.2
Cobalt	<0.5
Copper	<0.25
Lead	<0.5
Mercury	<0.0002
Molybdenum	<2
Nickel	<0.4
Selenium	<0.5
Silica	5.1 - 13
Silver	<0.1
Thallium	<5
Titanium	≤0.6
Vanadium	<0.5
Zinc	<0.2
General Chemistry	
Cyanide	<0.02
Iodide	<2
Nitrate (as N)	<0.2
Phenolics	≤0.12
Phosphate (as P)	≤0.03
Total Organic Carbon	≤5
Total Organic Halogen	≤0.42

See footnotes at end of table.

Table 5-21 *(Continued)*
Background Groundwater Chemistry
Well H-18

Hazardous Organic Constituents[c]

	Sample Date	Concentration
Methylene Chloride[d]	07-Apr-88	5.5

[a] All concentrations in milligrams per liter, except where noted.
[b] s.u. = standard pH units.
[c] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[d] Suspected laboratory contaminant.

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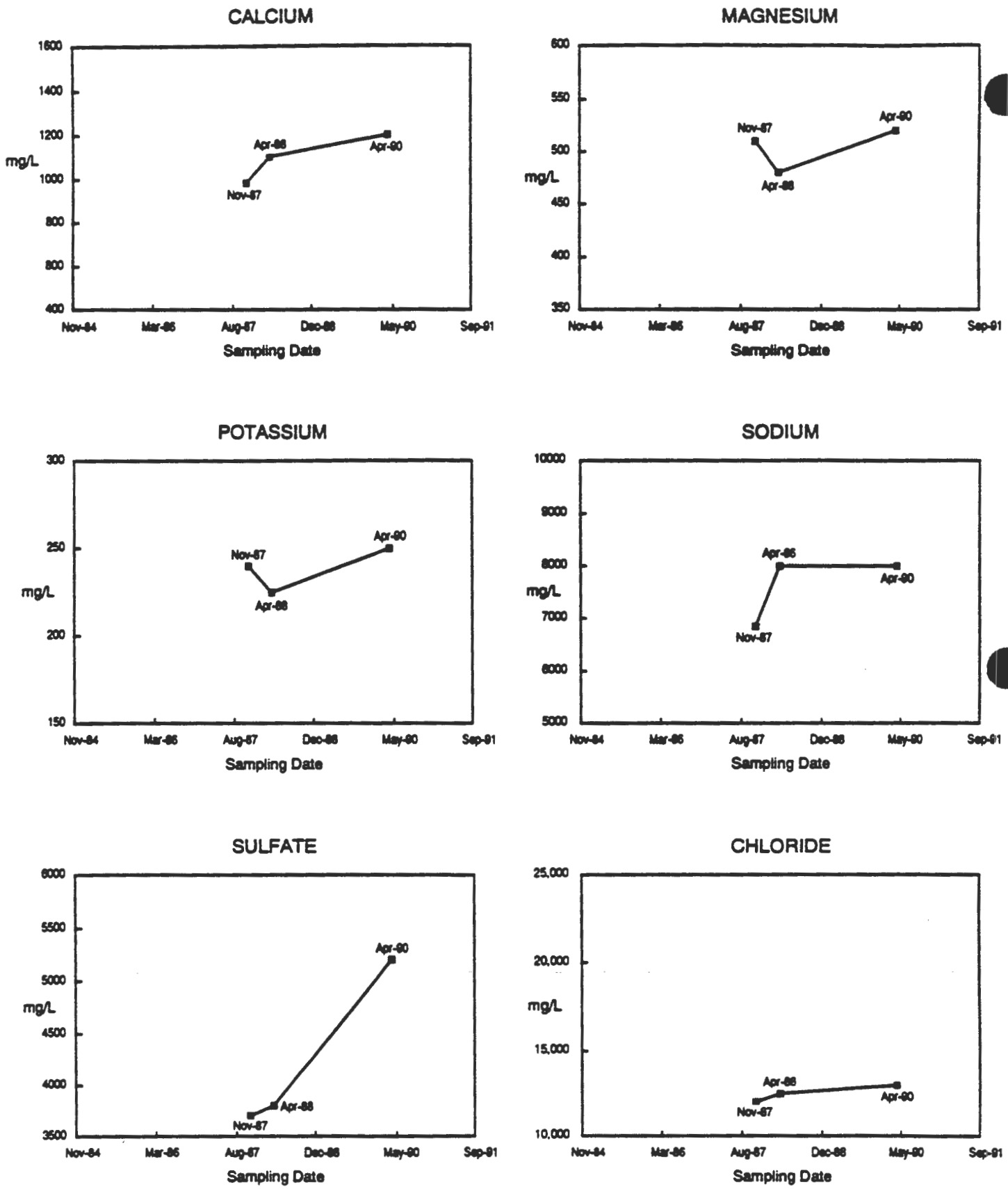

FIGURE 5-21 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL H-18 GROUNDWATER

also detected in a sample blank. The compound is considered a common laboratory contaminant by the EPA (EPA, 1989).

Figure 5-21 shows the temporal variation in the concentration of the six major constituents of Well H-18 groundwater. Calcium, chloride, sulfate and TDS (not show in Figure 5-21) concentrations appear to have increased with time at Well H-18. However, the TDS increase of approximately 7,000 mg/ℓ is much greater than would be expected, based on the increase in calcium, chloride, and sulfate. Also, the addition of positive charge due to the increase in calcium is not enough to balance the negative charge addition due to the increase in chloride and sulfate. Thus, although the data indicate that the Well H-18 groundwater chemistry is changing, the poor correlation between TDS and major-constituent concentrations and the lack of charge balance indicate that the trend is uncertain. Results from additional sampling are required for further trend evaluation.

5.22 Well P-14

Groundwater samples from the Culebra Dolomite were collected from Well P-14. Well P-14 was sampled three times; the first sample was collected in February 1986, and the most recent was collected in March 1988. During all three rounds, groundwater samples were analyzed for VOCs, semi-VOCs, metals, and general chemical parameters. Samples from the two most recent rounds (June 1987 and March 1988) were also analyzed for total PCBs.

Background concentrations for constituents in groundwater from Well P-14 are presented in Table 5-22. Table 5-22 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-22 are the concentration ranges of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from Well P-14.

Sodium is the dominant cation in Well P-14 groundwater, followed by calcium and magnesium; chloride is the dominant anion, followed by sulfate (Table 5-22). Well P-14 groundwater is classified as saline (Freeze and Cherry, 1979), because TDS are approximately 28,000 mg/ℓ. Well P-14 lies within hydrochemical Type Area 3 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. The TDS concentration of groundwater in Type Area 3 ranges from 10,000 to 100,000 mg/ℓ. This groundwater may be a mixture of Type Area 1 and 2 groundwater. Several trace metals were detected in groundwater samples from Well P-14; concentrations were generally below 1 mg/ℓ (Table 5-22). Chromium, copper, lead, molybdenum, titanium, and zinc were detected during more than one sampling round.

Table 5-22
Background Groundwater Chemistry
Well P-14

Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	0.7	0.1	0.5 - 0.9
Calcium	3,600	265	2,943 - 4,257
Iron	1.82	0.21	1.30 - 2.33
Lithium	NC[b]	NC	0.51 - 2.7[c]
Magnesium	845	75	660 - 1,031
Manganese	0.28	0.04	0.17 - 0.38
Potassium	48	3	41 - 54
Sodium	4,150	427	3,089 - 5,211
Strontium	50	4	39 - 61
General Chemistry			
Alkalinity (as HCO_3^-)	100	0	100
Bromide	19	4	8 - 30
Chloride	14,433	513	13,159 - 15,708
Fluoride	1.3	0.1	1.0 - 1.6
pH (s.u.)[d]	6.83	0.16	6.43 - 7.23
Sulfate	1,533	116	1,247 - 1,820
Total Dissolved Solids	28,033	1,762	23,657 - 32,410

See footnotes at end of table.

Table 5-22 *(Continued)*
Background Groundwater Chemistry
Well P-14

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<1
Antimony	≤0.89
Arsenic	<0.1
Barium	<0.1
Beryllium	<0.05
Cadmium	≤0.062
Cesium	<0.02
Chromium	≤0.41
Cobalt	≤0.63
Copper	≤0.12
Lead	≤0.67
Mercury	<0.0002
Molybdenum	0.05 - 0.12
Nickel	≤0.31
Selenium	<0.5
Silica	14 - 33
Silver	≤0.26
Thallium	<5
Titanium	≤0.68
Vanadium	≤0.24
Zinc	≤2
General Chemistry	
Cyanide	<0.02
Iodide	<2
Nitrate (as N)	0.03 - 0.6
Phenolics	≤0.019
Phosphate (as P)	≤0.02
Total Organic Carbon	2
Total Organic Halogen	0.33 - 2

See footnotes at end of table.

Table 5-22 *(Continued)*
Background Groundwater Chemistry
Well P-14

Hazardous Organic Constituents[e]

	Sample Date	Concentration
2-Butanone[f]	27-Feb-86	10
Acetone[f]	18-Jun-87	27

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.
[e] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[f] Suspected laboratory contaminant.

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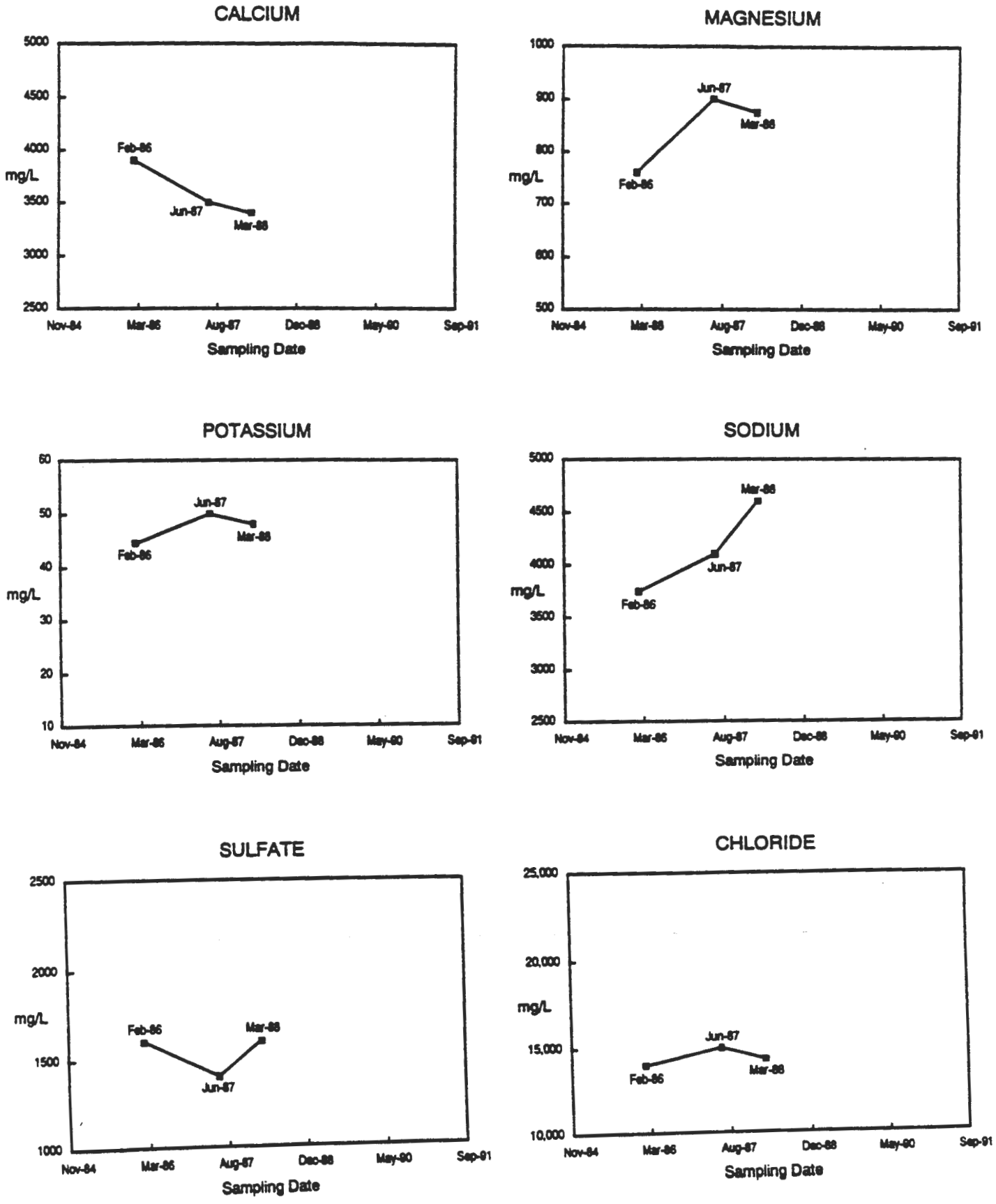

FIGURE 5-22 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL P-14 GROUNDWATER

Acetone and 2-butanone (methyl ethyl ketone) were detected in groundwater samples from Well P-14 (Table 5-22). Both of these compounds have been identified in an EPA risk assessment guidance document (EPA, 1989) as common laboratory contaminants. Acetone was detected at 27 µg/ℓ in the June 1987 sample and was also detected in the sample blank at 46 µg/ℓ.

Figure 5-22 shows the temporal variation in the concentration of the six major constituents of Well P-14 groundwater. The calcium concentration appears to have decreased; while, the sodium concentration appears to have increased. Based on charge-balance considerations, these changes are possible. Additional rounds of data could confirm the potential trends in Well P-14 groundwater.

5.23 Well P-17

Groundwater samples from the Culebra Dolomite were collected from Well P-17. Well P-17 was sampled three times: March 1986, December 1986, and October 1987. During all three rounds, samples were analyzed for VOCs, semi-VOCs, metals, and general chemical parameters. During the two most recent rounds, samples were also analyzed for total PCBs.

Background concentrations for constituents in groundwater from Well P-17 are presented in Table 5-23. Table 5-23 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-23 are the concentration ranges of minor constituents. Hazardous organic constituents were not detected in groundwater samples from Well P-17.

Sodium is the dominant cation in groundwater at Well P-17, followed by calcium, magnesium, and potassium; chloride is the dominant anion, followed by sulfate. Well P-17 groundwater is classified as saline (Freeze and Cherry, 1979), because the TDS are approximately 87,000 mg/ℓ. Well P-17 lies within hydrochemical Type Area 3 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. The TDS concentration of groundwater in Type Area 3 ranges from 10,000 to 100,000 mg/ℓ. Several trace metals were detected in groundwater samples from Well P-17 (Table 5-23), and most of these are repeatedly detected. As discussed above, the quantification of trace metals in high-TDS samples is somewhat uncertain due to analytical limitations.

Table 5-23
Background Groundwater Chemistry
Well P-17

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	35	2	29 - 40
Calcium	1,883	448	770 - 2,997
Iron	3.3	0.5	2.0 - 4.6
Lithium	NC[b]	NC	0.66 - 0.9[c]
Magnesium	1,650	132	1,321 - 1,979
Manganese	1.0	0.2	0.5 - 1.5
Potassium	972	207	457 - 1,487
Sodium	28,667	577	27,232 - 30,101
Strontium	33	5	22 - 45
General Chemistry			
Alkalinity (as HCO_3^-)	54	1	52 - 55
Bromide	84	15	47 - 121
Chloride	52,667	6,658	36,125 - 69,208
Fluoride	1.2	0.2	0.9 - 1.6
pH (s.u.)[d]	NC	NC	7.01 - 7.02[c]
Sulfate	6,367	851	4,254 - 8,480
Total Dissolved Solids	87,333	3,055	79,744 - 94,923

See footnotes at end of table.

Table 5-23 *(Continued)*
Background Groundwater Chemistry
Well P-17

Minor Constituents[a]	Concentration Range
Metals	
Aluminum	≤2
Antimony	1.4 - 1.5
Arsenic	≤0.31
Barium	0.06 - 0.11
Beryllium	<0.05
Cadmium	0.1 - 0.12
Cesium	≤0.6
Chromium	0.39 - 0.6
Cobalt	0.12 - 0.2
Copper	0.13 - 0.5
Lead	1.1
Mercury	<0.0002
Molybdenum	≤0.21
Nickel	<0.3
Selenium	<0.05
Silica	13
Silver	0.2 - 0.3
Thallium	<0.05
Titanium	0.4 - 1
Vanadium	0.3
Zinc	<0.1
General Chemistry	
Cyanide	<0.04
Iodide	≤7.3
Nitrate (as N)	≤0.3
Phenolics	≤0.005
Phosphate (as P)	≤0.02
Total Organic Carbon	≤2
Total Organic Halogen	0.23 - 2.5

See footnotes at end of table.

Table 5-23 *(Continued)*
Background Groundwater Chemistry
Well P-17

Hazardous Organic Constituents

None Detected

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.

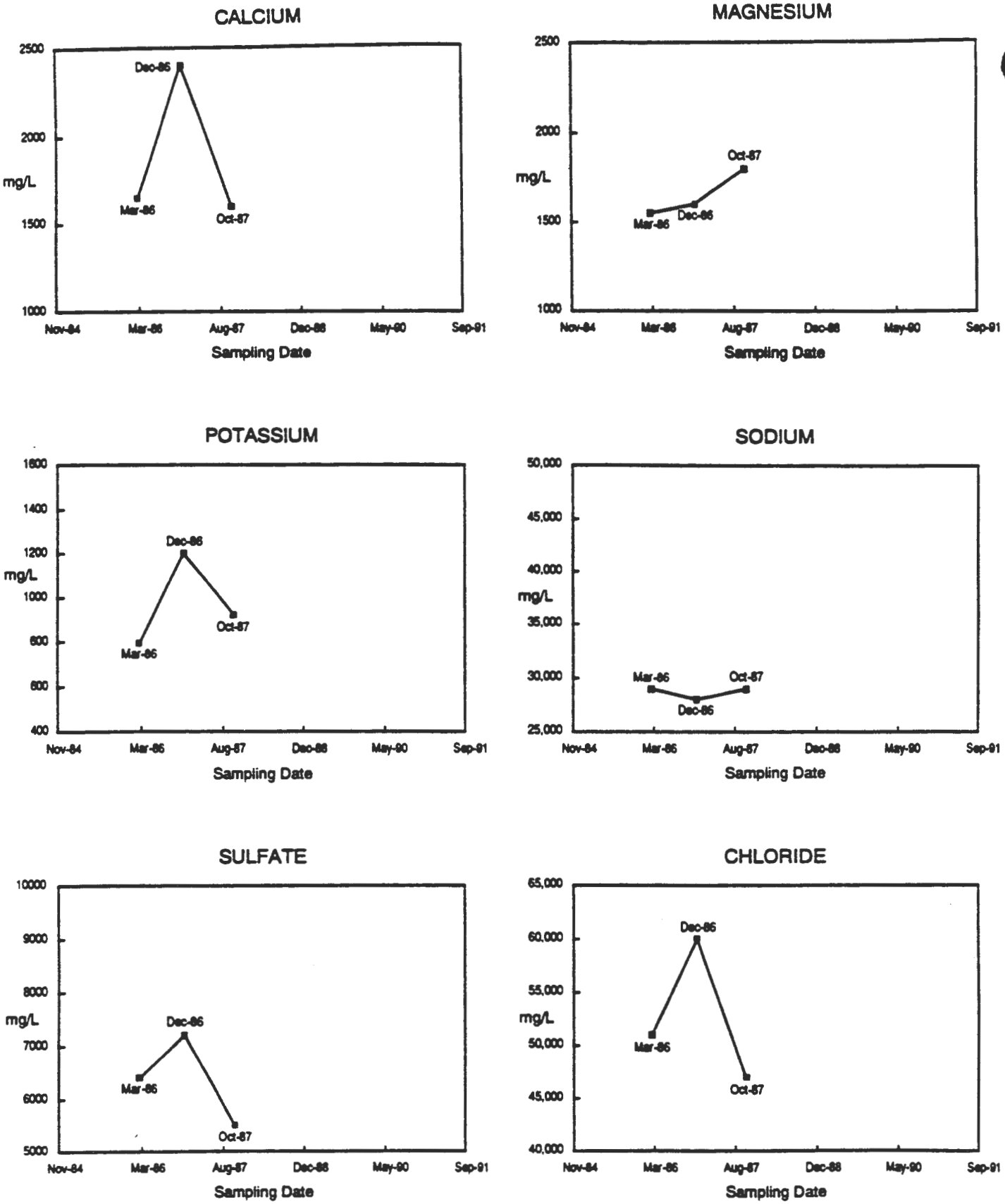

FIGURE 5-23 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL P-17 GROUNDWATER

Figure 5-23 shows the temporal variation in the concentration of the six major constituents of Well P-17 groundwater. The magnesium concentration appears to have increased with time. However, this increase is not supported by a similar increase in TDS or by charge-balance considerations. Data from the December 1986 sampling event is suspect, based on similar trends in calcium, potassium, sulfate, chloride and other constituents that are not shown in Figure 5-23. Concentrations from this sampling round appear to be too high, relative to those observed in other rounds. Although a longer observation period is required, it appears that the groundwater chemistry at Well P-17 is not changing with time.

5.24 Ranch Well

Groundwater samples from the Dewey Lake Redbeds were collected at the Ranch Well. The Ranch Well was sampled five times; the first sample was collected in June 1986, and the most recent was collected in June 1990. During all five rounds, samples were analyzed for metals and general chemical parameters. The list of metal and general chemical parameter analytes changed from round to round. For example, calcium and magnesium were analytes in four of the five rounds, and cyanide was an analyte in only three rounds. Samples collected during the first three rounds were analyzed for VOCs; samples collected during the June 1986 round were analyzed for a more extensive list of VOCs, relative to subsequent rounds. Semi-VOCs and total PCBs were analytes only in the June 1986 sampling event. Also, several pesticides were analytes in the December 1987 and April 1988 rounds.

Background concentrations for constituents in Ranch Well groundwater are presented in Table 5-24. Table 5-24 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-24 are the concentration ranges of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from the Ranch Well.

Calcium is the dominant cation in Ranch Well groundwater, followed by sodium and magnesium; sulfate is the dominant anion, followed by chloride and bicarbonate (Table 5-24). Ranch Well groundwater is classified as brackish (Freeze and Cherry, 1979), because the TDS are approximately 3,000 mg/ℓ. Several trace metals were detected in groundwater from the Ranch Well at concentrations that were below 1 mg/ℓ (Table 5-24). All the detected trace metals listed in Table 5-24, with the exception of mercury, were detected during more than one sampling round. The nitrate concentration of Ranch Well groundwater is relatively high, possibly due to contamination by livestock grazing in the vicinity of the well.

Table 5-24
Background Groundwater Chemistry
Ranch Well

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	0.23	0.07	0.12 - 0.33
Calcium	340	23	283 - 397
Iron	NC[b]	NC	<0.1[c]
Lithium	NC	NC	<0.1[c]
Magnesium	188	33	135 - 240
Manganese	NC	NC	<0.015[c]
Potassium	3.4	1.2	1.5 - 5.4
Sodium	193	49	115 - 270
Strontium	4.1	1.1	2.3 - 5.9
General Chemistry			
Alkalinity (as HCO_3^-)	235	13	215 - 256
Bromide	2	1	0 - 3
Chloride	394	61	318 - 470
Fluoride	1.1	0.3	0.7 - 1.5
pH (s.u.)[d]	7.16	0.33	6.75 - 7.58
Sulfate	999	241	700 - 1,299
Total Dissolved Solids	3,060	195	2,818 - 3,302

See footnotes at end of table.

Table 5-24 *(Continued)*
Background Groundwater Chemistry
Ranch Well

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<2
Antimony	0.1 - 0.16
Arsenic	<0.01
Barium	<0.2
Beryllium	<0.005
Cadmium	≤0.01
Cesium	<0.2
Chromium	≤0.07
Cobalt	<0.05
Copper	<0.025
Lead	≤0.08
Mercury	≤0.0008
Molybdenum	≤0.04
Nickel	<0.04
Selenium	≤0.079
Silica	20 - 49
Silver	≤0.02
Thallium	<1
Titanium	≤0.27
Vanadium	0.05 - 0.07
Zinc	0.02 - 0.16
General Chemistry	
Cyanide	<0.02
Iodide	<2
Nitrate (as N)	110 - 120
Phenolics	≤0.022
Phosphate (as P)	≤0.05
Total Organic Carbon	3 - 4
Total Organic Halogen	≤0.4

See footnotes at end of table.

Table 5-24 *(Continued)*
Background Groundwater Chemistry
Ranch Well

Hazardous Organic Constituents[e]

	Sample Date	Concentration
Chloroform	20-Dec-87	1.5
Di-n-butyl Phthalate[f]	18-Jun-86	11
Diethyl Phthalate[f]	18-Jun-86	24

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.
[e] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[f] Suspected laboratory contaminant.

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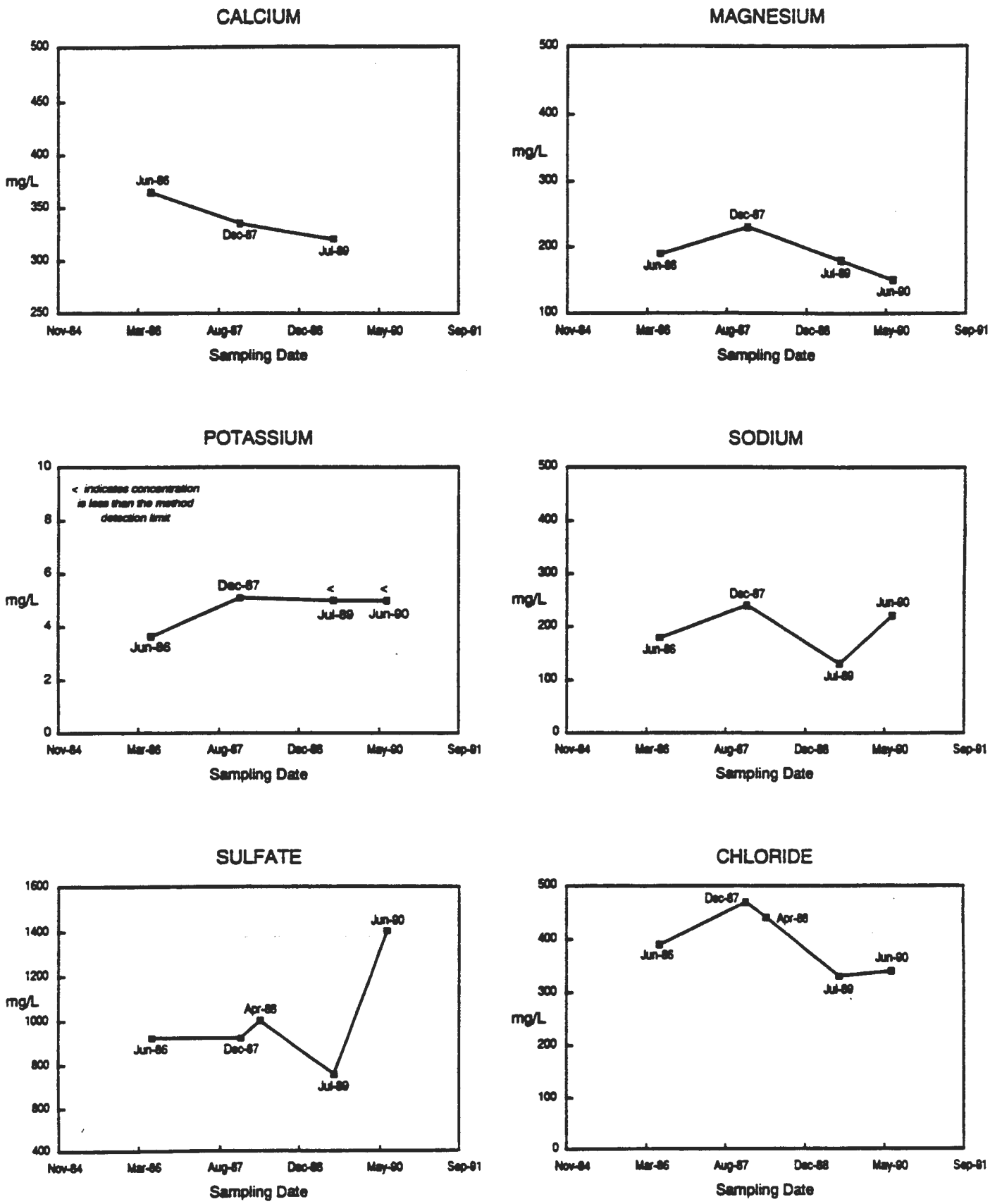

FIGURE 5-24 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF RANCH WELL GROUNDWATER

Chloroform, di-n-butyl phthalate, and diethyl phthalate were detected in Ranch Well groundwater. Chloroform was not detected in the other two rounds in which it was an analyte. Repeated detection of the phthalates could not be confirmed, as they were analytes in only one sampling round. Di-n-butyl and diethyl phthalate are listed as common laboratory contaminants in an EPA risk assessment guidance document (EPA, 1989).

Figure 5-24 shows the temporal variation in the concentration of the six major constituents of Ranch Well groundwater. Calcium concentrations appear to have decreased slightly; however, the concentration change is within the expected range of analytical variability. Overall, though concentrations fluctuate, no significant temporal trends are observed in chemistry of groundwater at the Ranch Well.

5.25 Twin Wells - Pasture Well

Groundwater samples from the Dewey Lake Redbeds were collected at the Twin Wells - Pasture Well (Pasture Well). The Pasture Well was sampled four times; the first sample was collected in January 1986, and the most recent was collected in May 1990. During all four rounds, samples were analyzed for metals and general chemical parameters. The list of metal and general chemical parameter analytes changed from round to round. For example, calcium and magnesium were analytes in three of the four rounds. Samples collected during the first two rounds were analyzed for VOCs; samples collected during the January 1986 round were analyzed for a more extensive list of VOCs, relative to the subsequent round. Semi-VOCs were analytes only in the June 1986 sampling event, and several pesticides were analytes in the August 1988 round.

Background concentrations for constituents in groundwater from the Pasture Well are presented in Table 5-25. Table 5-25 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-25 are the concentration ranges of minor constituents. Hazardous organic constituents were not detected in groundwater samples from the Pasture Well.

Calcium is the dominant cation in Pasture Well groundwater, followed by magnesium and sodium; bicarbonate is the dominant anion, followed by sulfate and chloride (Table 5-25). Groundwater from the Pasture Well is classified as fresh water, because the TDS are less than

Table 5-25
Background Groundwater Chemistry
Twin Wells - Pasture Well

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	0.15	0.02	0.11 - 0.19
Calcium	79	2	74 - 84
Iron	NC[b]	NC	≤0.34[c]
Lithium	NC	NC	<0.1[c]
Magnesium	24	0.3	23 - 25
Manganese	NC	NC	<0.05[c]
Potassium	NC	NC	<5[c]
Sodium	19	9	0 - 42
Strontium	0.9	0.2	0.3 - 1.5
General Chemistry			
Alkalinity (as HCO_3^-)	220	5	208 - 232
Bromide	4	4	0 - 13
Chloride	40	5	32 - 48
Fluoride	0.65	0.06	0.56 - 0.74
pH (s.u.)[d]	7.61	0.27	7.18 - 8.05
Sulfate	55	5	44 - 66
Total Dissolved Solids	401	9	388 - 415

See footnotes at end of table.

Table 5-25 *(Continued)*
Background Groundwater Chemistry
Twin Wells - Pasture Well

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<0.2
Antimony	<0.06
Arsenic	<0.01
Barium	<0.2
Beryllium	<0.005
Cadmium	<0.005
Cesium	<0.2
Chromium	≤0.03
Cobalt	≤0.05
Copper	≤0.048
Lead	<0.05
Mercury	≤0.0004
Molybdenum	≤0.03
Nickel	<0.04
Selenium	<0.1
Silica	18 - 43
Silver	≤0.01
Thallium	<0.1
Titanium	<0.1
Vanadium	<0.05
Zinc	≤0.52
General Chemistry	
Cyanide	<0.02
Iodide	<2
Nitrate (as N)	6.2 - 9.2
Phenolics	≤0.02
Phosphate (as P)	≤0.02
Total Organic Carbon	≤4
Total Organic Halogen	≤0.05

See footnotes at end of table.

Table 5-25 *(Continued)*
Background Groundwater Chemistry
Twin Wells - Pasture Well

Hazardous Organic Constituents

None Detected

[a] All concentrations in milligram per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.

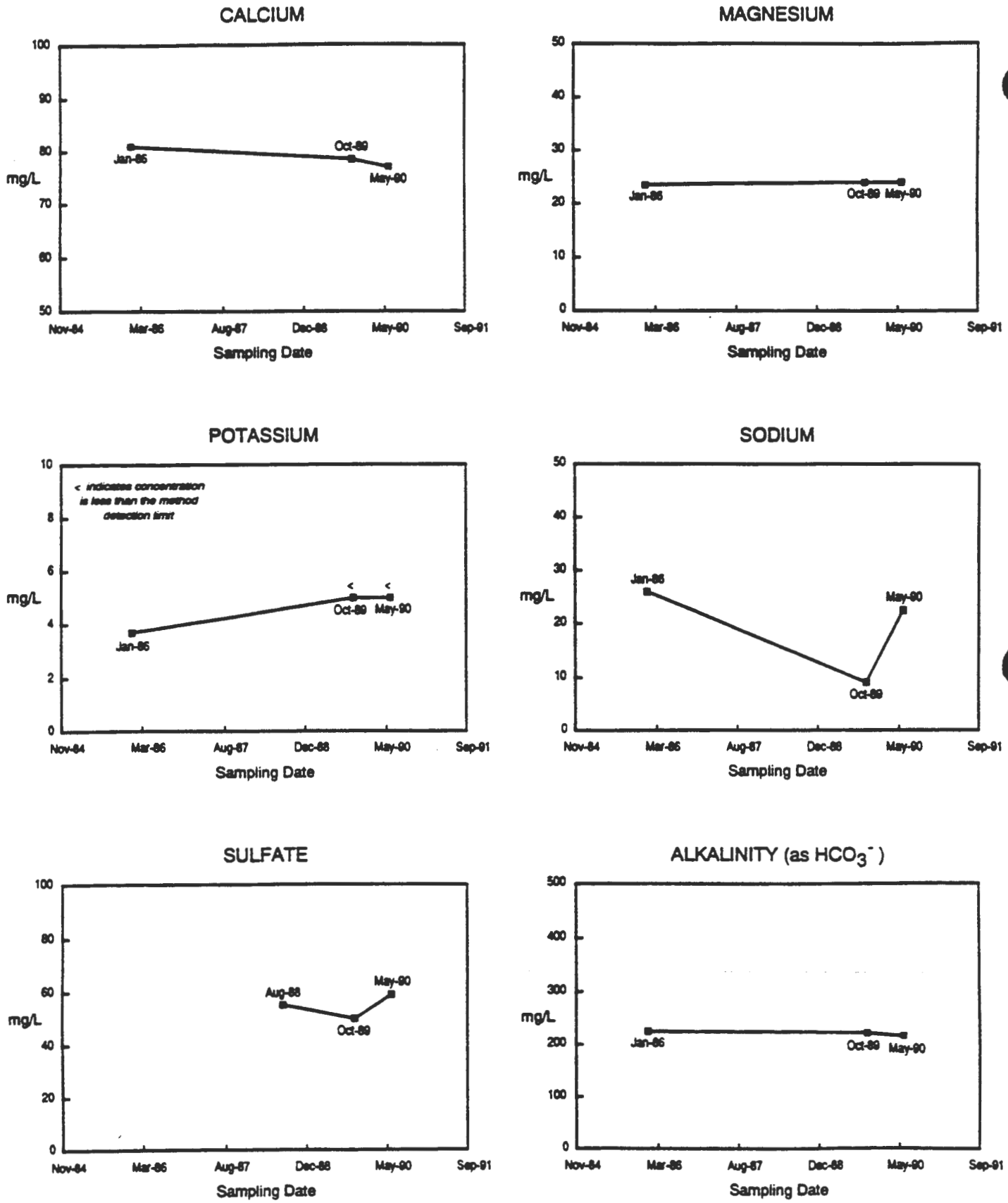

FIGURE 5-25 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF TWIN WELLS-PASTURE WELL GROUNDWATER

1,000 mg/ℓ (Freeze and Cherry, 1979). Several trace metals were detected in groundwater from the Pasture Well, at concentrations below 1 mg/ℓ (Table 5-25). Chromium, mercury, and zinc were detected during more than one sampling round.

Figure 5-25 shows the temporal variation in the concentration of six major constituents of Pasture Well groundwater. No temporal trends are observed in these constituents. The chloride concentration (not shown in Figure 5-25) appears to have decreased; however, charge-balance considerations and the TDS concentration do not support the apparent decrease of chloride in Pasture Well groundwater.

5.26 Well WIPP-19

Groundwater samples from the Culebra Dolomite were collected at Well WIPP-19. Well WIPP-19 was sampled five times; the first sample was collected in July 1987, and the most recent was collected in June 1990. Groundwater collected during each sampling event was analyzed for metals and general chemical parameters. During the first three rounds, i.e., July 1987, February 1988, and August 1988, samples were also analyzed for VOCs, semi-VOCs, and total PCBs.

Background concentrations for constituents in groundwater from Well WIPP-19 are presented in Table 5-26. Table 5-26 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-26 are the concentration ranges of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from Well WIPP-19.

Sodium is the dominant cation in Well WIPP-19 groundwater, followed by calcium, magnesium, and potassium; chloride is the dominant anion, followed by sulfate (Table 5-26). Groundwater at Well WIPP-19 is classified as saline (Freeze and Cherry, 1979), because the TDS concentration is approximately 86,000 mg/ℓ. Well WIPP-19 lies within hydrochemical Type Area 3 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. Groundwater in Type Area 3 contains TDS ranging from 10,000 to 100,000 mg/ℓ and may be a mixture of Type Area 1 and 2 groundwater. Chromium, vanadium, and zinc were detected in Well WIPP-19 groundwater (Table 5-26). The MDLs of most trace metals were relatively high, due to the required dilution prior to the analysis of high-TDS samples.

Table 5-26
Background Groundwater Chemistry
Well WIPP-19

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	31	3	27 - 34
Calcium	1,680	192	1,441 - 1,919
Iron	NC[b]	NC	≤2[c]
Lithium	0.7	0.2	0.3 - 1.1
Magnesium	1,600	515	961 - 2,239
Manganese	2.3	1.3	0.7 - 4.0
Potassium	739	140	565 - 913
Sodium	28,310	3,503	23,962 - 32,658
Strontium	32	9	21 - 42
General Chemistry			
Alkalinity (as HCO_3^-)	60	8	51 - 70
Bromide	74	42	22 - 126
Chloride	43,860	8,586	33,201 - 54,520
Fluoride	1.0	0.1	0.8 - 1.1
pH (s.u.)[d]	7.04	0.23	6.75 - 7.33
Sulfate	5,430	268	5,097 - 5,763
Total Dissolved Solids	85,770	14,001	68,389 - 103,151

See footnotes at end of table.

Table 5-26 *(Continued)*
Background Groundwater Chemistry
Well WIPP-19

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<20
Antimony	<6
Arsenic	<0.5
Barium	<0.5
Beryllium	<0.5
Cadmium	<0.5
Cesium	<0.5
Chromium	≤2
Cobalt	<1
Copper	<2.5
Lead	<5
Mercury	<0.002
Molybdenum	<0.2
Nickel	<4
Selenium	<0.5
Silica	≤4.4
Silver	<1
Thallium	<10
Titanium	<3
Vanadium	≤1
Zinc	≤2
General Chemistry	
Cyanide	<0.04
Iodide	<2
Nitrate (as N)	≤0.12
Phenolics	≤0.019
Phosphate (as P)	≤0.03
Total Organic Carbon	2 - 7
Total Organic Halogen	0.57 - 3.2

See footnotes at end of table.

Table 5-26 *(Continued)*
Background Groundwater Chemistry
Well WIPP-19

Hazardous Organic Constituents[e]

	Sample Date	Concentration
Acetone[f]	14-Jul-87	71
Acetone[f]	12-Feb-88	18
Acetone[f]	29-Aug-88	45 (33)[g]

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.
[e] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[f] Suspected laboratory contaminant.
[g] Duplicate analysis in parentheses.

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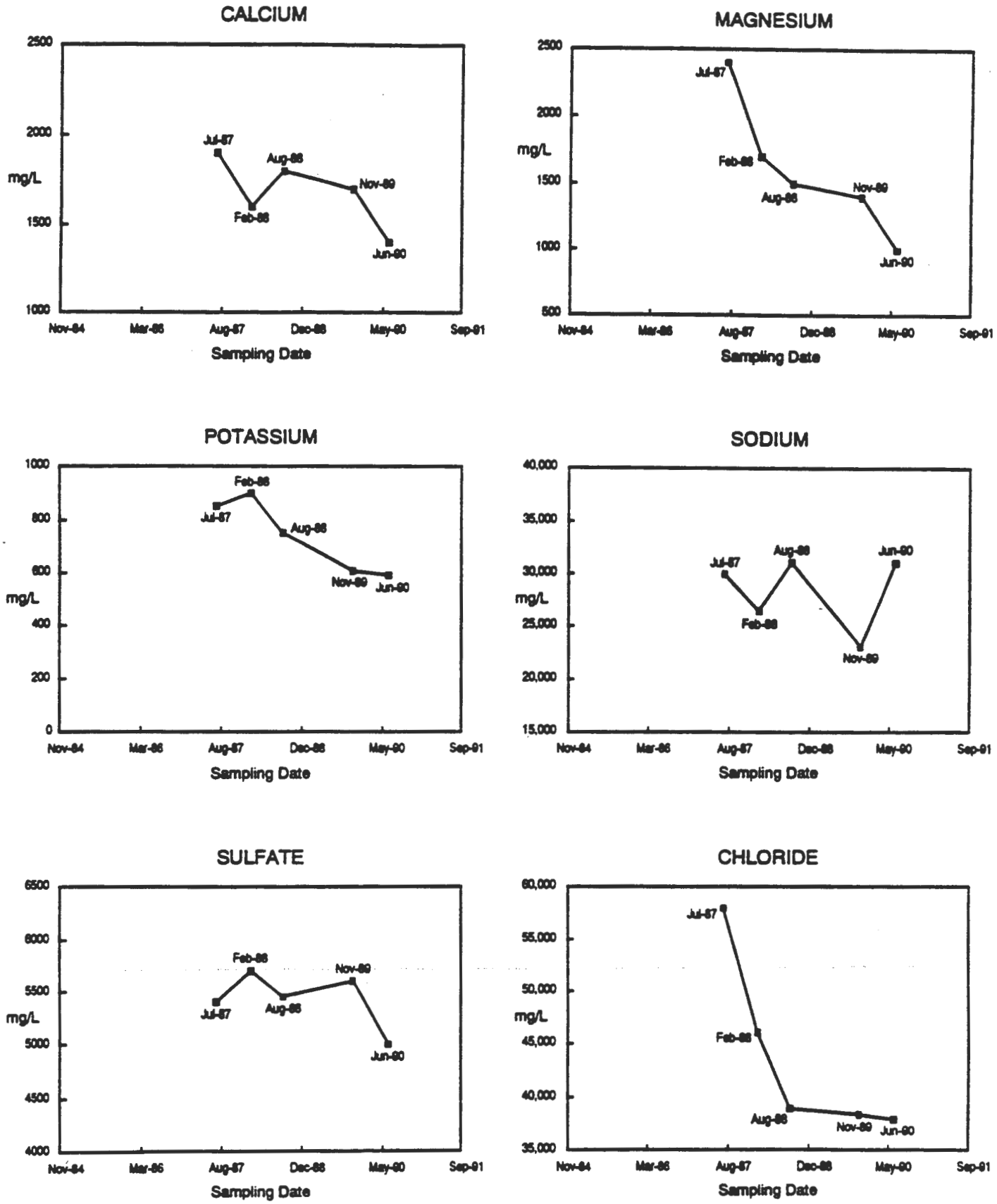

FIGURE 5-26 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL WIPP-19 GROUNDWATER

Acetone was detected in all three rounds in which it was an analyte (Table 5-26). Although acetone is a very common laboratory contaminant (EPA, 1989), its repeated presence may indicate contamination.

Figure 5-26 shows the temporal variation in the concentration of the six major constituents of well WIPP-19 groundwater. The concentration of magnesium and chloride and to a lesser extent calcium and potassium appears to have trended downward. Based on the concentration versus time plots for chloride, TDS (not shown in Figure 5-26), and several minor constituents, it appears that data collected during the first and possibly second sampling rounds are not representative of the groundwater chemistry at well WIPP-19. This could be due to incomplete well development or some other perturbation of the groundwater system in the vicinity of well WIPP-19.

5.27 Well WIPP-25

Groundwater samples from the Culebra Dolomite were collected from Well WIPP-25. Well WIPP-25 was sampled four times; the first sample was collected in February 1986, and the most recent was collected in June 1989. During all four rounds, samples were analyzed for metals and general chemical parameters. Samples from the first three rounds were also analyzed for VOCs and semi-VOCs. Groundwater samples collected in the April 1987 and March 1988 rounds were analyzed for total PCBs.

Background concentrations for constituents in groundwater from Well WIPP-25 are presented in Table 5-27. Table 5-27 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-27 are the concentration ranges of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from Well WIPP-25.

Sodium is the dominant cation in groundwater from Well WIPP-25, followed by calcium, magnesium, and potassium; chloride is the dominant anion, followed by sulfate and bicarbonate (Table 5-27). Well WIPP-25 groundwater is classified as saline (Freeze and Cherry, 1979), because the TDS are approximately 14,300 mg/ℓ. Well WIPP-25 lies within hydrochemical Type Area 3 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. Groundwater in Type Area 3 contains TDS ranging from 10,000 to 100,000 mg/ℓ and may be a mixture of Type Area 1 and 2 groundwater. Arsenic, silver, and titanium were detected in groundwater from Well WIPP-25 (Table 5-27). Only titanium was detected in

Table 5-27
Background Groundwater Chemistry
Well WIPP-25

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	1.7	0.1	1.5 - 1.9
Calcium	1,163	95	1,012 - 1,313
Iron	0.6	0.4	0.0 - 1.2
Lithium	0.24	0.02	0.21 - 0.28
Magnesium	339	9	325 - 352
Manganese	0.11	0.02	0.07 - 0.14
Potassium	134	26	93 - 175
Sodium	3,463	229	3,099 - 3,826
Strontium	10	10	0 - 26
General Chemistry			
Alkalinity (as HCO_3^-)	118	13	98 - 138
Bromide	4.4	0.7	3.3 - 5.6
Chloride	6,425	150	6,186 - 6,664
Fluoride	1.5	0.1	1.4 - 1.6
pH (s.u.)[b]	7.27	0.31	6.78 - 7.77
Sulfate	2,325	272	1,892 - 2,758
Total Dissolved Solids	14,325	395	13,697 - 14,953

See footnotes at end of table.

Table 5-27 *(Continued)*
Background Groundwater Chemistry
Well WIPP-25

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<2
Antimony	<0.5
Arsenic	≤0.27
Barium	<0.05
Beryllium	<0.05
Cadmium	<0.05
Cesium	<0.1
Chromium	<0.3
Cobalt	<0.3
Copper	<0.25
Lead	<0.5
Mercury	<0.0002
Molybdenum	<0.2
Nickel	<0.4
Selenium	<0.5
Silica	13 - 32
Silver	≤0.1
Thallium	<10
Titanium	≤0.8
Vanadium	<0.5
Zinc	<0.2
General Chemistry	
Cyanide	<0.02
Iodide	<2
Nitrate (as N)	1.8 - 3.6
Phenolics	≤0.013
Phosphate (as P)	≤0.03
Total Organic Carbon	≤4
Total Organic Halogen	≤0.38

See footnotes at end of table.

Table 5-27 *(Continued)*
Background Groundwater Chemistry
Well WIPP-25

Hazardous Organic Constituents[c]

	Sample Date	Concentration
Acetone[d]	12-Feb-86	21
Bis(2-ethylhexyl)phthalate[d]	12-Feb-86	280
Di-n-butyl Phthalate[d]	12-Feb-86	3.5
Di-n-octyl Phthalate[d]	12-Feb-86	33

[a] All concentrations in milligrams per liter, except where noted.
[b] s.u. = standard pH units.
[c] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[d] Suspected laboratory contaminant.

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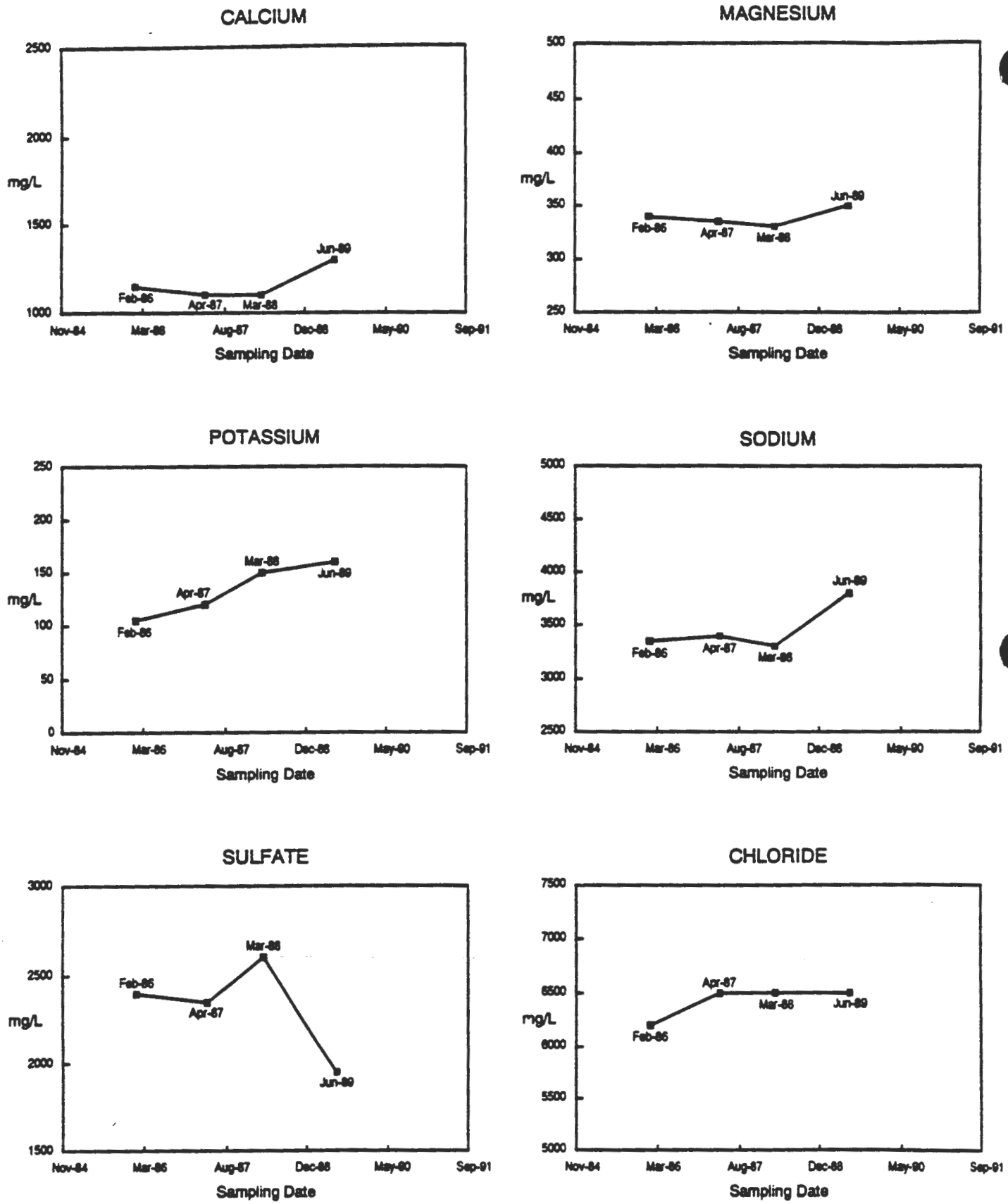

FIGURE 5-27 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL WIPP-25 GROUNDWATER

more than one sampling round. Although the TDS concentration is not extremely high, the MDLs for many of the trace metals are relatively-high (Table 5-27).

Several hazardous organic compounds were detected in the February 1986 groundwater sample from Well WIPP-25 (Table 5-27). The detections may be due to laboratory contamination; an EPA risk assessment guidance document reports that acetone and phthalates are common laboratory contaminants (EPA, 1989). The observation that all detections occurred during one sampling round further supports the contention that the detections are related to laboratory contamination. The organic compounds were not detected in samples from subsequent rounds.

Figure 5-27 shows the temporal variation in the concentration of the six major constituents of Well WIPP-25 groundwater. The concentration of potassium appears to have increased somewhat during the WQSP (Figure 5-27). This increase is not supported by charge-balance considerations or a corresponding increase in TDS. Siegel et al. (1991) report that between August 1980 and February 1986 the concentration of calcium and chloride, and to a lesser extent sodium and magnesium, increased significantly. Also, alkalinity decreased during the same period. Siegel et al. claimed that the concentration changes were not understood at the time. The changes reported by Siegel et al. were not observed during the WQSP (Figure 5-27).

5.28 Well WIPP-26

Groundwater samples from the Culebra Dolomite were collected from Well WIPP-26. Well WIPP-26 was sampled three times: November 1985, April 1987, and April 1988. During all three rounds, samples were analyzed for VOCs, semi-VOCs, metals, and general chemical parameters. In addition, samples collected in the April 1987 and April 1988 rounds were analyzed for total PCBs.

Background concentrations for constituents in groundwater from Well WIPP-26 are presented in Table 5-28. Table 5-28 gives the mean concentration, standard deviation, and 95 percent confidence interval for major groundwater constituents. Also shown in Table 5-28 are the concentration ranges of minor constituents and a list of hazardous organic constituents that were detected in groundwater samples from Well WIPP-26.

Sodium is the dominant cation in groundwater from Well WIPP-26, followed by calcium, magnesium, and potassium; chloride is the dominant anion, followed by sulfate and

Table 5-28
Background Groundwater Chemistry
Well WIPP-26

Major Constituents[a]

	Mean	Std. Dev.	95 % Confidence Interval
Metals			
Boron	0.9	0.8	0 - 2.8
Calcium	1,350	391	380 - 2,320
Iron	NC[b]	NC	<0.1[c]
Lithium	NC	NC	0.25 - 0.27
Magnesium	345	26	281 - 410
Manganese	NC	NC	≤0.09[c]
Potassium	250	87	33 - 467
Sodium	3,217	822	1,174 - 5,259
Strontium	18	1	16 - 20
General Chemistry			
Alkalinity (as HCO_3^-)	117	12	88 - 145
Bromide	7	5	0 - 19
Chloride	6,050	3,161	0 - 13,903
Fluoride	1.5	0.2	1.1 - 1.9
pH (s.u.)[d]	7.12	0.23	6.54 - 7.69
Sulfate	2,083	275	1,399 - 2,768
Total Dissolved Solids	14,617	2,931	7,335 - 21,898

See footnotes at end of table.

Table 5-28 *(Continued)*
Background Groundwater Chemistry
Well WIPP-26

Minor Constituents[a]

	Concentration Range
Metals	
Aluminum	<1
Antimony	<0.5
Arsenic	<0.5
Barium	<0.1
Beryllium	<0.05
Cadmium	<0.05
Cesium	<0.1
Chromium	≤0.35
Cobalt	≤0.44
Copper	<0.1
Lead	<0.5
Mercury	<0.0002
Molybdenum	<0.01
Nickel	≤0.35
Selenium	<0.1
Silica	15 - 36
Silver	<0.1
Thallium	<0.5
Titanium	≤0.3
Vanadium	<0.1
Zinc	<0.1
General Chemistry	
Cyanide	<0.02
Iodide	<2
Nitrate (as N)	3.6 - 5.7
Phenolics	≤0.012
Phosphate (as P)	0.01 - 0.08
Total Organic Carbon	≤2
Total Organic Halogen	≤0.07

See footnotes at end of table.

Table 5-28 *(Continued)*
Background Groundwater Chemistry
Well WIPP-26

Hazardous Organic Constituents[e]	Sample Date	Concentration
2-Butanone[f]	25-Nov-85	55
Bis(2-ethylhexyl)phthalate[f]	01-Apr-87	260
Bis(2-ethylhexyl)phthalate[f]	14-Apr-88	14
Di-n-octyl Phthalate[f]	01-Apr-87	21
Methylene Chloride[f]	25-Nov-85	11

[a] All concentrations in milligrams per liter, except where noted.
[b] NC = not calculated.
[c] The 95% confidence interval was not calculated. The observed concentration range is reported.
[d] s.u. = standard pH units.
[e] All concentrations in micrograms per liter, only detected hazardous organic compounds are listed.
[f] Suspected laboratory contaminant.

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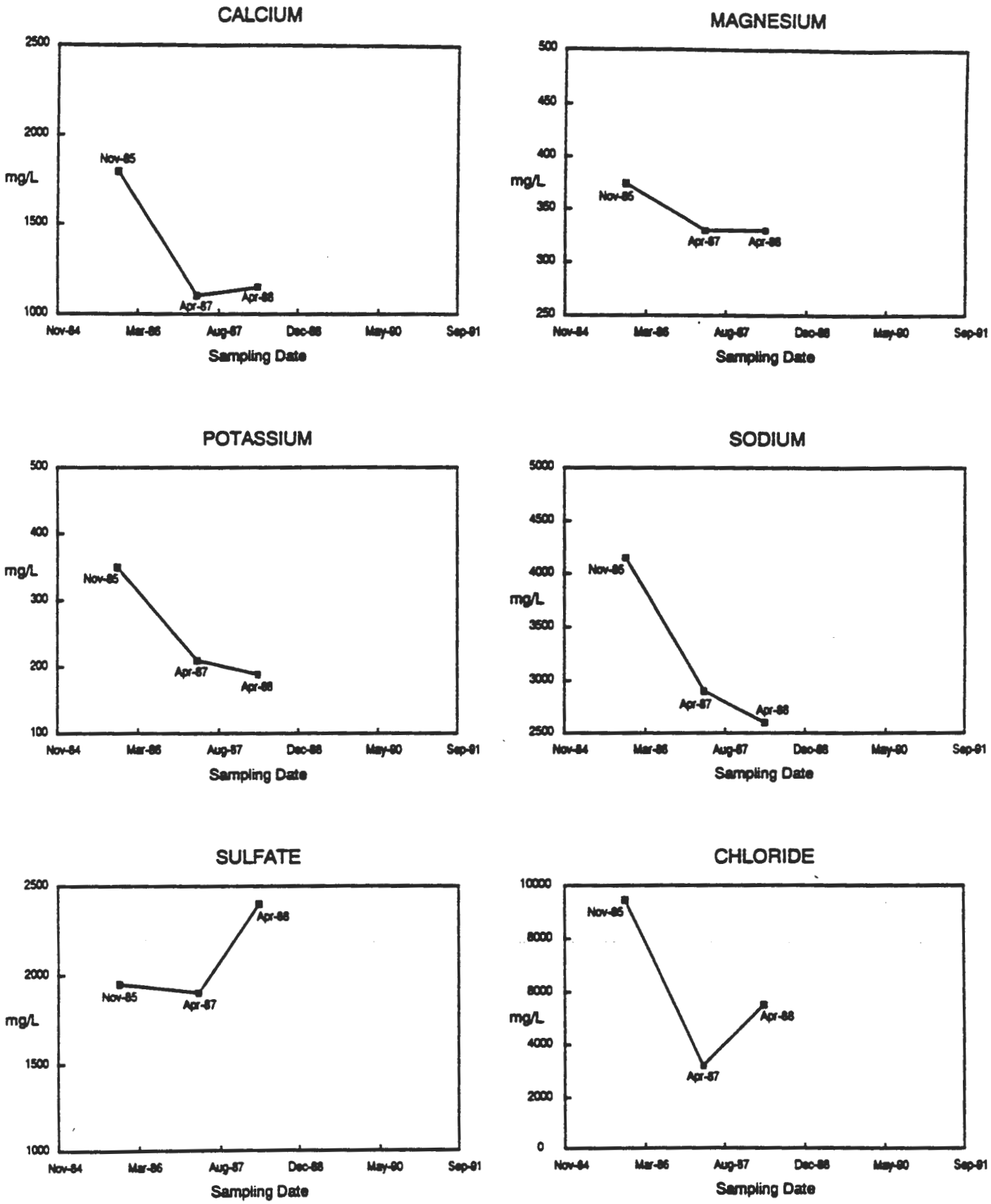

FIGURE 5-28 CONCENTRATION VERSUS TIME PLOTS FOR MAJOR CONSTITUENTS OF WELL WIPP-26 GROUNDWATER

bicarbonate (Table 5-28). Well WIPP-26 groundwater is classified as saline (Freeze and Cherry, 1979), because the TDS are approximately 14,600 mg/ℓ. Well WIPP-26 lies within hydrochemical Type Area 3 of the Culebra Dolomite (Holt et al., 1992), as shown in Figure 3-7. Groundwater in Type Area 3 contains TDS ranging from 10,000 to 100,000 mg/ℓ and may be a mixture of Type Area 1 and 2 groundwater. Chromium, cobalt, nickel, and titanium were detected in groundwater samples from Well WIPP-26 (Table 5-28). Only titanium was detected during more than one sampling round.

Several hazardous organic compounds were detected in groundwater samples from Well WIPP-26. Only bis(2-ethylhexyl)phthalate was detected in more than one round (Table 5-28). All of the compounds detected at Well WIPP-26 could be due to laboratory contamination, according to a listing of common laboratory contaminants reported in an EPA risk assessment guidance document (EPA, 1989).

Figure 5-28 shows the temporal variation in the concentration of the six major constituents of Well WIPP-26 groundwater. Except for magnesium and potassium, the November 1985 concentration of the major constituents appears to be too high, relative to subsequent rounds (Figure 5-28). Siegel et al. (1991) observed that between August 1980 and November 1985, the concentrations of sodium, potassium, chloride, calcium, and magnesium increased significantly and that alkalinity decreased slightly. Siegel et al. also noted the decrease in the concentrations of major constituents from the November 1985 WQSP round to the next round (April 1987). The researchers reported that concentrations in the April 1987 WQSP round were similar to those observed in August 1980. The temporary concentration increases may be due to a "cleaning-up" effect that occurred when Well WIPP-26 was sampled for the first time under the WQSP.

6.0 Comparison to Established Standards

An aquifer as defined by EPA is "a geological formation, a group of formations or part of a formation capable of yielding a significant amount of groundwater to wells or springs." (40 CFR 260.10) By this definition the Culebra and Magenta Members of the Rustler Formation located in the vicinity of the WIPP Site can be considered aquifers, irrespective of water quality. However, water quality, for all practical purposes, dictates the usefulness of any particular aquifer. In the case of the Rustler Formation at the WIPP, water quality is generally extremely poor. This is a result of the natural physical and chemical state of the groundwater. Because of its natural condition, water from the members of the Rustler Formation in the immediate vicinity of the WIPP is not suitable for domestic, livestock, or agricultural purposes. However, groundwater in the Culebra in Type Area 2 southwest of the WIPP is of much better quality (less than 10,000 mg/ℓ TDS). This area is removed from the WIPP by several miles and may have only limited hydrologic connection to the Culebra at the site (Section 3.2.2.1). Magenta water quality in some areas around WIPP is less than 10,000 m/gℓ TDS; however, the yield of water to wells is extremely small, thus limiting its potential usefulness.

6.1 Suitability

One basic measure of water quality is the TDS concentration, which is the total amount of solids (in mg/ℓ) that remain when a water sample is evaporated to dryness. Waters that are considered fresh range in concentration from 0 to 1000 mg/ℓ TDS. Waters that are considered brackish range from 1,000 to 10,000 mg/ℓ TDS. Saline waters range from 10,000 to 100,000 mg/ℓ TDS, and brines have TDS greater than 100,000 mg/ℓ. Sea water has a concentration of 35,000 mg/ℓ TDS (Stumm and Morgan, 1981). The TDS of water from the Culebra and Magenta Dolomites in the WIPP area range from less than 10,000 to over 280,000 mg/ℓ and for practical purposes is considered a brine in much of the area.

As a general measure for comparison, the EPA has developed a three-part classification system for groundwaters of the United States (EPA, 1984) based upon suitability of groundwater for domestic and agricultural uses. These classes are as follows:

- ***Class I: Special Groundwaters*** are those that are highly vulnerable to contamination because of the hydrological characteristics of the areas under which they occur and that are also either an irreplaceable source of drinking water or ecologically vital in that they provide the baseflow for a particularly sensitive ecological system.

- ***Class II: Current and Potential Sources of Drinking Water and Waters Having Other Beneficial Uses*** are all other groundwaters except Class III.

- ***Class III: Groundwaters Not Considered Potential Sources of Drinking Water and of Limited Beneficial Use*** because the salinity (TDS) is greater than 10,000 mg/ℓ or the groundwater is otherwise contaminated beyond levels that can be removed using methods reasonably employed in public water-supply treatment.

As previously discussed, Magenta and Culebra Dolomite groundwaters in most of the WIPP area range from less than 10,000 to over 280,000 mg/ℓ TDS and therefore are considered Class III groundwaters by the EPA. Based on TDS alone, these waters would not be considered for water-supply development using reasonable methods for treatment. However, as discussed previously, the groundwater from the Culebra in Type Area 2, southwest of the WIPP, is less than 10,000 mg/ℓ TDS and would be considered Class II groundwaters. Because of the rapid changes in Culebra transmissivity, Type Area 2 may have limited hydrologic connection to the WIPP site area. The Magenta in some areas around the WIPP also exhibits TDS concentrations less than 10,000 mg/ℓ and would be considered Class II groundwater. The transmissivity is very low in these areas of fresher Magenta water, thus greatly decreasing its useability, and the Magenta is not considered as a water supply.

Water to be used by livestock is subject to quality limitations that are similar to those that restrict the quality of drinking water for human consumption. Most animals, however, can tolerate water that is considerably higher in TDS than that which is considered satisfactory for humans. Range cattle in the Western United States may get accustomed to highly mineralized water. Hem (1985) reports that cattle will consume water that contains nearly 10,000 mg/ℓ TDS. An upper limit of dissolved solids for cattle is 10,100 mg/ℓ. The upper limit for an adult sheep is 12,900 mg/ℓ. However, for best growth and development, livestock water supplies should have TDS concentrations that are considerably below the upper limit (Hem, 1985).

Other criteria, besides TDS, have been established to determine the suitability of water for consideration as a public water-supply. Drinking water standards have been established by the EPA in order to determine the maximum contaminant levels (MCLs) for materials that may be found in drinking water (40 CFR 143). Primary MCLs have been promulgated for substances that may pose a health risk. For substances such as iron, chloride, sulfate, and

TDS, which can affect the aesthetic quality of water, secondary maximum contaminant levels (SMCLs) have been established. These chemicals are not hazardous to health but may be objectionable due to their effects on water taste, color, and odor.

6.2 Comparability

This section presents the comparison of WQSP background groundwater chemistry data to standards. The selection of wells used in the comparison and the selection of the appropriate water-quality standards are discussed.

6.2.1 Selection of Monitor Wells for Comparison to Standards

The WIPP Site covers an area of 16 square miles. Within this area, the overall water quality of the Culebra and Magenta Dolomites is highly variable, but is typical and representative for the general WIPP area. Groundwater-quality data from monitoring wells located within the 16-square-mile site boundary were selected for comparison with the water-quality standards described below.

The wells located within this area represent both upgradient and downgradient monitoring locations with respect to the WIPP surface operating facilities, which would meet the monitoring requirements of RCRA (40 CFR 264.90 through 100). However, as stated previously, these wells do not meet RCRA monitoring well requirements.

The wells selected for comparison to standards are DOE-1, H-02a, H-03b1, H-03b3, H-04b, H-04c, H-05b, H-05c, H-06b, H-06c, H-11b3, H-14, H-15, H-18, and WIPP-19. This group of wells reflects the variable water quality, with TDS ranging from approximately 10,000 mg/ℓ to 200,000 mg/ℓ, and includes wells completed in both the Culebra and Magenta Dolomites.

6.2.2 Selection of Appropriate Water-Quality Standards

WIPP is a RCRA facility that is currently undergoing a permit application process in order to receive and emplace TRU mixed waste. Consequently, the parameters described in 40 CFR 265 Appendix III, Interim Primary Drinking Water Standards (MCLs), were compared to WQSP data to aid in determining overall water quality in the vicinity of the WIPP Site. In addition, drinking water standards (SMCLs) found in the National Secondary Safe Drinking Water Act (SDWA)(40 CFR 143) were also used to quantify some parameters that were collected/analyzed for and are not listed in Appendix III of 40 CFR 265. Since analysis for pesticides were not performed for the wells of interest, only the inorganic compounds in the

EPA Inte Primary Drinking Water Standards (40 CFR 265 Appendix III) were compared to the WQSP groundwater chemistry. Additionally, since the background data show that Culebra and Magenta Dolomite waters do not contain halogenated hydrocarbons, the organic parameters of the SDWA were not compared with standard values. However, TDS, chloride, sulfate, iron, manganese, copper, and zinc were compared to the secondary drinking water standards (40 CFR 143). A comparison of the 40 CFR 143 and 40 CFR 265 parameters with collected groundwater quality data indicates that the aquifers are presently naturally polluted and should not be used for domestic or agricultural purposes in the foreseeable future.

6.2.3 Comparison to Water-Quality Standards - Results

This section compares the results of the analysis of WIPP WQSP background groundwater chemistry data with the EPA standards described above. For each well, pertinent background groundwater-chemistry data are listed in a summary table along with the relevant water-quality standards. The EPA standards are compared to both a maximum concentration value and a maximum quantitative value. The maximum concentration value can be an actual detection or an MDL, whichever is larger. The maximum quantitative value is the largest value of a given parameter for which an actual measurement was obtained. When quantitative values are not available for a given parameter, the MDL for that particular analysis is listed as the maximum concentration. In many or most wells, concentrations of inorganic chemicals exceed the primary and secondary water quality standards (40 CFR 265 Appendix III and 40 CFR 143, respectively). The following is a summary of the water quality for the selected wells at the WIPP Site.

Well DOE-1. Table 6-1 shows that a number of metal concentrations in the Culebra exceed the interim primary drinking water standards (MCLs) at Well DOE-1. These are cadmium, chromium, lead, selenium, and silver. In addition, secondary standard constituents such as TDS, chloride, sulfate, iron, and manganese exceed SMCLs. Total dissolved solids are over two orders of magnitude greater than the secondary drinking water standard.

Well H-02a. Table 6-2 shows that Culebra groundwater from Well H-02a contains a number of metals with concentrations exceeding MCLs. These include cadmium, chromium, lead, and silver. The selenium MDL exceeds the standard. Parameters such as TDS, chloride, sulfate, iron, and manganese also exceed SMCLs. Total dissolved solids are an order of magnitude greater than the standard.

Well H-03b1. Table 6-3 shows that a number of metal concentrations in Magenta Dolomite groundwater exceed MCLs at Well H-03b1. These are chromium, lead, and selenium. Cadmium and silver concentrations at this well are greater than the standard at the detection limit. Although it is an MDL, the maximum arsenic concentration is equal to the standard. Secondary standard constituents such as TDS, chloride, and sulfate also exceed SMCLs. Maximum iron concentrations are the same as secondary standards in Well H-03b1. The TDS of groundwater at Well H-03b1 are over an order of magnitude greater than the secondary standard.

Well H-03b3. Table 6-4 shows that Culebra Dolomite groundwater from Well H-03b3 contains a number of metals with concentrations exceeding MCLs. These metals are cadmium, chromium, lead, selenium, and silver. Although an MDL, the maximum arsenic concentration also exceeds the standard (Table 6-4). Parameters such as TDS, chloride, sulfate, iron, and manganese also exceed the SMCLs. Total dissolved solids are two orders of magnitude greater than the secondary standard.

Well H-04b. Table 6-5 shows that some of the metal concentrations in Culebra Dolomite groundwater from Well H-04b exceed MCLs. These are chromium, lead, and selenium. The value for mercury is just below the MCL, while cadmium and silver concentrations are greater than the standard at their detection limits. Secondary standard constituents such as TDS, chloride, sulfate, iron, and manganese also exceed SMCLs. Total dissolved solids are over an order of magnitude greater than the secondary standard.

Well H-04c. Table 6-6 shows that Magenta Dolomite groundwater from Well H-04c contains a few constituents that exceed MCLs. These include chromium, fluoride, selenium, and silver. Arsenic, cadmium, and lead concentrations are greater than the standard at their detection limits. Parameters such as TDS, chloride, sulfate, iron, and manganese also exceed SMCLs. Total dissolved solids are over an order of magnitude greater than the secondary standard.

Well H-05b. Table 6-7 shows that the concentration of a number of metals in Culebra Dolomite groundwater from Well H-05b exceeds MCLs. These metals are cadmium, chromium, lead, selenium, and silver. Although an MDL, the maximum arsenic concentration exceeds the primary standard (Table 6-7). Parameters such as TDS, chloride, sulfate, iron,

and manganese also exceed SMCLs in this well. The TDS concentration is over two orders of magnitude greater than the secondary standard.

Well H-05c. Table 6-8 shows that Magenta Dolomite groundwater from Well H-05c contains a number of constituents that exceed MCLs. The constituents are chromium, fluoride, lead, and silver. Arsenic, cadmium, and selenium concentrations are also greater than the standards at their detection limits. Secondary standard constituents such as TDS, chloride, sulfate, and iron exceed SMCLs. The manganese concentration exceeded the standard at the detection limit.

Well H-06b. Table 6-9 presents Culebra Dolomite groundwater from Well H-06b as compared to standards. A number of metals exceed MCLs. These metals are chromium, lead, selenium, and silver. Arsenic and cadmium concentrations are also greater than the standards at their detection limits. The TDS, chloride, sulfate, iron, and manganese concentrations exceed SMCLs at this well. Total dissolved solids in groundwater from Well H-06b are two orders of magnitude greater than the secondary drinking water standard.

Well H-06c. Table 6-10 shows that Magenta Dolomite groundwater from Well H-06c contains several metals with concentrations that are potentially in excess of the MCLs. Concentrations of cadmium, chromium, lead, selenium, and silver are greater than the interim drinking water standards at their detection limits. Secondary standard constituents such as TDS, chloride, sulfate, and iron also exceed SMCLs at this well. The manganese concentration exceeds the secondary drinking water standard at the detection limit. The TDS of groundwater from Well H-06c are almost an order of magnitude greater than the secondary standard.

Well H-11b3. Table 6-11 shows that Culebra Dolomite groundwater from Well H-11b3 contains several metals at concentrations that exceed MCLs. These metals are arsenic, cadmium, chromium, lead, and silver. Concentrations of selenium are also greater than interim primary drinking water standards at the detection limit. The parameters TDS, chloride, sulfate, iron, and manganese exceed SMCLs. The TDS of groundwater at this well are two orders of magnitude greater than the standard.

Well H-14. Table 6-12 shows that Culebra Dolomite groundwater from Well H-14 contains a number of metals with concentrations exceeding MCLs. These metals are cadmium,

chromium, lead, and silver. Concentrations of arsenic and selenium are equal to or greater than standards at the detection limit. The parameters TDS, chloride, sulfate, iron, and manganese also exceed SMCLs. Total dissolved solids are over an order of magnitude larger than the secondary standard.

Well H-15. Table 6-13 shows a number of metal concentrations from Culebra Dolomite groundwater at Well H-15 that exceed MCLs. These metals are cadmium, chromium, lead, and silver. Concentrations of arsenic and selenium are also greater than standards at the detection limit. Mercury concentrations are equal to the standard at the detection limit. Concentrations of TDS, chloride, sulfate, iron, manganese, and copper all exceed SMCLs. Total dissolved solids and chloride concentrations in this groundwater are over two orders of magnitude larger than secondary standards.

Well H-18. Table 6-14 shows Culebra Dolomite groundwater from Well H-18 as compared to standards. Only chromium concentrations exceed MCLs. However, concentrations of arsenic, cadmium, lead, selenium, and silver are greater than the standard at their detection limits. The secondary standard constituents TDS, chloride, sulfate, iron, and manganese exceed SMCLs. Total dissolved solids in this groundwater are over an order of magnitude larger than the secondary standard.

Well WIPP-19. Table 6-15 shows that the concentration of chromium and lead in Culebra Dolomite groundwater exceeds the MCLs for these metals at Well WIPP-19. Concentrations of arsenic, cadmium, selenium, and silver are greater than the standard at their detection limits. Also, the concentration of mercury is equal to the standard at its detection limit. The secondary standard constituents TDS, chloride, sulfate, iron, and manganese exceed SMCLs. Total dissolved solids and chloride are over two orders of magnitude larger than secondary standards.

Table 6-1
Comparison to Established Standards
Well DOE-1

Parameter	Standard (mg/ℓ)[a]	Maximum Concentration (mg/ℓ)	Maximum Quantitative Value (mg/ℓ)
	Inorganic MCL[b]		
Arsenic	0.05	<0.5	0.034
Barium	1.0	0.07	0.07
Cadmium	0.01	0.07	0.07
Chromium	0.05	0.4	0.4
Fluoride	2.4	1.05	1.05
Lead	0.05	1.3	1.3
Mercury	0.002	0.0008	0.0008
Nitrate (as N)	10	0.1	0.1
Selenium	0.01	<0.5	0.183
Silver	0.05	0.1	0.1
	SMCLs[c]		
TDS[d]	500	135,000	135,000
Chloride	250	81,000	81,000
Sulfate	250	7,400	7,400
Iron	0.3	1.4	1.4
Manganese	0.05	0.39	0.39
Copper	1.0	0.18	0.18
Zinc	5.0	<0.1	0.075

[a]Milligrams per liter.
[b]Maximum contaminant level.
[c]Secondary maximum contaminant level.
[d]Total dissolved solids.

Table 6-2
Comparison to Established Standards
Well H-02a

Parameter	Standard (mg/ℓ)[a]	Maximum Concentration (mg/ℓ)	Maximum Quantitative Value (mg/ℓ)
	Inorganic MCLs[b]		
Arsenic	0.05	<0.014	0.014
Barium	1.0	<0.05	NA
Cadmium	0.01	0.08	0.08
Chromium	0.05	0.4	0.4
Fluoride	2.4	2.2	2.2
Lead	0.05	0.5	0.5
Mercury	0.002	<0.0002	NA
Nitrate (as N)	10	0.3	0.3
Selenium	0.01	<0.05	NA
Silver	0.05	0.2	0.2
	SMCLs[c]		
TDS[d]	500	13,500	13,500
Chloride	250	5,300	5,300
Sulfate	250	3,300	3,300
Iron	0.3	1.2	1.2
Manganese	0.05	0.075	0.075
Copper	1.0	<0.105	NA
Zinc	5.0	<0.1	NA

[a]Milligrams per liter.
[b]Maximum contaminant level.
[c]Secondary maximum contaminant level.
[d]Total dissolved solids.

Table 6-3
Comparison to Established Standards
Well H-03b1

Parameter	Standard (mg/ℓ)[a]	Maximum Concentration (mg/ℓ)	Maximum Quantitative Value (mg/ℓ)
	Inorganic MCLs[b]		
Arsenic	0.05	<0.05	0.02
Barium	1.0	<0.2	NA
Cadmium	0.01	<0.05	NA
Chromium	0.05	0.2	0.2
Fluoride	2.4	2.2	2.2
Lead	0.05	<0.5	0.14
Mercury	0.002	<0.0004	0.0003
Nitrate (as N)	10	<0.1	NA
Selenium	0.01	0.09	0.09
Silver	0.05	<0.1	0.03
	SMCLs[c]		
TDS[d]	500	9,300	9,300
Chloride	250	3,500	3,500
Sulfate	250	2,400	2,400
Iron	0.3	0.3	0.3
Manganese	0.05	<0.05	0.045
Copper	1.0	<0.1	0.03
Zinc	5.0	<0.1	NA

[a]Milligrams per liter.
[b]Maximum contaminant level.
[c]Secondary maximum contaminant level.
[d]Total dissolved solids.

Table 6-4
Comparison to Established Standards
Well H-03b3

Parameter	Standard (mg/ℓ)[a]	Maximum Concentration (mg/ℓ)	Maximum Quantitative Value (mg/ℓ)
	Inorganic MCLs[b]		
Arsenic	0.05	<0.1	0.039
Barium	1.0	0.06	0.06
Cadmium	0.01	0.07	0.07
Chromium	0.05	0.4	0.4
Fluoride	2.4	1.6	1.6
Lead	0.05	0.5	0.5
Mercury	0.002	0.001	0.001
Nitrate (as N)	10	<0.2	0.1
Selenium	0.01	<0.5	0.0825
Silver	0.05	0.1	0.1
	SMCLs[c]		
TDS[d]	500	55,000	55,000
Chloride	250	31,000	31,000
Sulfate	250	4,800	4,800
Iron	0.3	<1.0	0.38
Manganese	0.05	0.18	0.18
Copper	1.0	0.26	0.26
Zinc	5.0	0.2	0.2

[a]Milligrams per liter.
[b]Maximum contaminant level.
[c]Secondary maximum contaminant level.
[d]Total dissolved solids.

Table 6-5
Comparison to Established Standards
Well H-04b

Parameter	Standard (mg/ℓ)[a]	Maximum Concentration (mg/ℓ)	Maximum Quantitative Value (mg/ℓ)
	Inorganic MCLs[b]		
Arsenic	0.05	<0.1	0.04
Barium	1.0	<0.1	NA
Cadmium	0.01	<0.05	NA
Chromium	0.05	0.3	0.3
Fluoride	2.4	2.15	2.15
Lead	0.05	<0.5	0.1
Mercury	0.002	0.0017	0.0017
Nitrate (as N)	10	<0.1	NA
Selenium	0.01	<0.05	0.03
Silver	0.05	<0.1	NA
	SMCLs[c]		
TDS[d]	500	22,500	22,500
Chloride	250	12,000	12,000
Sulfate	250	6,900	6,900
Iron	0.3	<1.0	0.55
Manganese	0.05	<0.175	0.175
Copper	1.0	<0.25	0.2
Zinc	5.0	0.4	0.4

[a]Milligrams per liter.
[b]Maximum contaminant level.
[c]Secondary maximum contaminant level.
[d]Total dissolved solids.

Table 6-6
Comparison to Established Standards
Well H-04c

Parameter	Standard (mg/ℓ)[a]	Maximum Concentration (mg/ℓ)	Maximum Quantitative Value (mg/ℓ)
	Inorganic MCLs[b]		
Arsenic	0.05	<0.1	NA
Barium	1.0	<0.2	0.06
Cadmium	0.01	<0.05	NA
Chromium	0.05	0.2	0.2
Fluoride	2.4	2.8	2.8
Lead	0.05	<0.5	NA
Mercury	0.002	0.0008	0.0008
Nitrate (as N)	10	<0.1	NA
Selenium	0.01	<0.05	0.04
Silver	0.05	0.1	0.1
	SMCLs[c]		
TDS[d]	500	24,600	24,600
Chloride	250	11,000	11,000
Sulfate	250	7,850	7,850
Iron	0.3	1.1	1.1
Manganese	0.05	0.46	0.46
Copper	1.0	0.3	0.3
Zinc	5.0	<0.2	NA

[a]Milligrams per liter.
[b]Maximum contaminant level.
[c]Secondary maximum contaminant level.
[d]Total dissolved solids.

Table 6-7
Comparison to Established Standards
Well H-05b

Parameter	Standard (mg/ℓ)[a]	Maximum Concentration (mg/ℓ)	Maximum Quantitative Value (mg/ℓ)
	Inorganic MCLs[b]		
Arsenic	0.05	<0.1	0.042
Barium	1.0	<0.5	NA
Cadmium	0.01	0.11	0.11
Chromium	0.05	0.3	0.3
Fluoride	2.4	1.3	1.3
Lead	0.05	1.0	1.0
Mercury	0.002	0.0005	0.0005
Nitrate (as N)	10	0.4	0.4
Selenium	0.01	7.3	7.3
Silver	0.05	0.1	0.1
	SMCLs[c]		
TDS[d]	500	166,500	166,500
Chloride	250	92,100	92,100
Sulfate	250	7,700	7,700
Iron	0.3	3.2	3.2
Manganese	0.05	0.52	0.52
Copper	1.0	<1.0	0.255
Zinc	5.0	2.5	2.5

[a]Milligrams per liter.
[b]Maximum contaminant level.
[c]Secondary maximum contaminant level.
[d]Total dissolved solids.

Table 6-8
Comparison to Established Standards
Well H-05c

Parameter	Standard (mg/ℓ)[a]	Maximum Concentration (mg/ℓ)	Maximum Quantitative Value (mg/ℓ)
	Inorganic MCLs[b]		
Arsenic	0.05	<0.1	NA
Barium	1.0	<0.05	NA
Cadmium	0.01	<0.05	NA
Chromium	0.05	0.2	0.2
Fluoride	2.4	3.1	3.1
Lead	0.05	0.6	0.6
Mercury	0.002	0.0005	0.0005
Nitrate (as N)	10	<0.1	0.02
Selenium	0.01	<0.05	NA
Silver	0.05	0.2	0.2
	SMCLs[c]		
TDS[d]	500	7,200	7,200
Chloride	250	1,000	1,000
Sulfate	250	4,200	4,200
Iron	0.3	1.3	1.3
Manganese	0.05	<0.15	NA
Copper	1.0	<0.25	0.2
Zinc	5.0	<0.2	NA

[a]Milligrams per liter.
[b]Maximum contaminant level.
[c]Secondary maximum contaminant level.
[d]Total dissolved solids.

Table 6-9
Comparison to Established Standards
Well H-06b

Parameter	Standard (mg/ℓ)[a]	Maximum Concentration (mg/ℓ)	Maximum Quantitative Value (mg/ℓ)
	Inorganic MCLs[b]		
Arsenic	0.05	<0.5	NA
Barium	1.0	<0.1	0.06
Cadmium	0.01	<0.05	NA
Chromium	0.05	0.45	0.45
Fluoride	2.4	1.55	1.55
Lead	0.05	0.83	0.83
Mercury	0.002	0.0012	0.0012
Nitrate (as N)	10	0.2	0.2
Selenium	0.01	1.3	1.3
Silver	0.05	0.1	0.1
	SMCLs[c]		
TDS[d]	500	66,000	66,000
Chloride	250	34,000	34,000
Sulfate	250	3,400	3,400
Iron	0.3	<1	0.55
Manganese	0.05	0.28	0.28
Copper	1.0	<0.25	0.125
Zinc	5.0	<0.2	0.1

[a]Milligrams per liter.
[b]Maximum contaminant level.
[c]Secondary maximum contaminant level.
[d]Total dissolved solids.

Table 6-10
Comparison to Established Standards
Well H-06c

Parameter	Standard (mg/ℓ)[a]	Maximum Concentration (mg/ℓ)	Maximum Quantitative Value (mg/ℓ)
	Inorganic MCLs[b]		
Arsenic	0.05	<0.01	NA
Barium	1.0	<0.05	NA
Cadmium	0.01	<0.05	NA
Chromium	0.05	<0.1	NA
Fluoride	2.4	1.9	1.9
Lead	0.05	<0.5	NA
Mercury	0.002	0.0005	0.0005
Nitrate (as N)	10	<0.1	NA
Selenium	0.01	<0.5	NA
Silver	0.05	<0.1	NA
	SMCLs[c]		
TDS[d]	500	4,800	4,800
Chloride	250	460	460
Sulfate	250	2,600	2,600
Iron	0.3	<1.0	0.4
Manganese	0.05	<0.15	NA
Copper	1.0	<0.3	NA
Zinc	5.0	<0.2	NA

[a]Milligrams per liter.
[b]Maximum contaminant level.
[c]Secondary maximum contaminant level.
[d]Total dissolved solids.

Table 6-11
Comparison to Established Standards
Well H-11b3

Parameter	Standard (mg/ℓ)[a]	Maximum Concentration (mg/ℓ)	Maximum Quantitative Value (mg/ℓ)
	Inorganic MCLs[b]		
Arsenic	0.05	0.15	0.15
Barium	1.0	<0.1	0.05
Cadmium	0.01	0.09	0.09
Chromium	0.05	0.4	0.4
Fluoride	2.4	1.2	1.2
Lead	0.05	0.6	0.6
Mercury	0.002	<0.0004	NA
Nitrate (as N)	10	<0.3	NA
Selenium	0.01	<0.5	NA
Silver	0.05	0.2	0.2
	SMCLs[c]		
TDS[d]	500	122,000	122,000
Chloride	250	73,400	73,400
Sulfate	250	7,400	7,400
Iron	0.3	<1.0	0.66
Manganese	0.05	0.39	0.39
Copper	1.0	0.26	0.26
Zinc	5.0	<0.2	0.14

[a]Milligrams per liter.
[b]Maximum contaminant level.
[c]Secondary maximum contaminant level.
[d]Total dissolved solids.

Table 6-12
Comparison to Established Standards
Well H-14

Parameter	Standard (mg/ℓ)[a]	Maximum Concentration (mg/ℓ)	Maximum Quantitative Value (mg/ℓ)
	Inorganic MCLs[b]		
Arsenic	0.05	<0.05	NA
Barium	1.0	<0.05	NA
Cadmium	0.01	0.06	0.06
Chromium	0.05	0.4	0.4
Fluoride	2.4	1.7	1.7
Lead	0.05	0.5	0.5
Mercury	0.002	0.0004	0.0004
Nitrate (as N)	10	0.4	0.4
Selenium	0.01	<0.05	NA
Silver	0.05	0.1	0.1
	SMCLs[c]		
TDS[d]	500	18,000	18,000
Chloride	250	9,000	9,000
Sulfate	250	1,900	1,900
Iron	0.3	0.6	0.6
Manganese	0.05	0.125	0.125
Copper	1.0	0.1	0.1
Zinc	5.0	<0.1	NA

[a]Milligrams per liter.
[b]Maximum contaminant level.
[c]Secondary maximum contaminant level.
[d]Total dissolved solids.

Table 6-13
Comparison to Established Standards
Well H-15

Parameter	Standard (mg/ℓ)[a]	Maximum Concentration (mg/ℓ)	Maximum Quantitative Value (mg/ℓ)
	Inorganic MCLs[b]		
Arsenic	0.05	<1	NA
Barium	1.0	<0.5	NA
Cadmium	0.01	0.7	0.7
Chromium	0.05	3.0	3.0
Fluoride	2.4	0.7	0.7
Lead	0.05	7.0	7.0
Mercury	0.002	<0.002	NA
Nitrate (as N)	10	0.5	0.5
Selenium	0.01	<5.0	NA
Silver	0.05	1.0	1.0
	SMCLs[c]		
TDS[d]	500	245,000	245,000
Chloride	250	140,000	140,000
Sulfate	250	7,500	7,500
Iron	0.3	3.0	3.0
Manganese	0.05	0.6	0.6
Copper	1.0	2.0	2.0
Zinc	5.0	1.0	1.0

[a]Milligrams per liter.
[b]Maximum contaminant level.
[c]Secondary maximum contaminant level.
[d]Total dissolved solids.

Table 6-14
Comparison to Established Standards
Well H-18

Parameter	Standard (mg/ℓ)[a]	Maximum Concentration (mg/ℓ)	Maximum Quantitative Value (mg/ℓ)
	Inorganic MCLs[b]		
Arsenic	0.05	<0.5	NA
Barium	1.0	<0.05	NA
Cadmium	0.01	<0.05	NA
Chromium	0.05	0.2	0.2
Fluoride	2.4	1.9	1.9
Lead	0.05	<0.5	NA
Mercury	0.002	<0.0002	NA
Nitrate (as N)	10	<0.2	NA
Selenium	0.01	<0.5	NA
Silver	0.05	<0.1	NA
	SMCLs[c]		
TDS[d]	500	31,000	31,000
Chloride	250	13,000	13,000
Sulfate	250	5,200	5,200
Iron	0.3	<1	0.35
Manganese	0.05	0.205	0.205
Copper	1.0	<0.25	0.15
Zinc	5.0	<0.2	NA

[a]Milligrams per liter.
[b]Maximum contaminant level.
[c]Secondary maximum contaminant level.
[d]Total dissolved solids.

Table 6-15
Comparison to Established Standards
Well WIPP-19

Parameter	Standard (mg/ℓ)[a]	Maximum Concentration (mg/ℓ)	Maximum Quantitative Value (mg/ℓ)
	Inorganic MCLs[b]		
Arsenic	0.05	<0.5	NA
Barium	1.0	<0.5	NA
Cadmium	0.01	<0.5	NA
Chromium	0.05	2	2
Fluoride	2.4	1.1	1.1
Lead	0.05	<5	1.25
Mercury	0.002	<0.002	0.0003
Nitrate (as N)	10	0.12	0.12
Selenium	0.01	<0.5	NA
Silver	0.05	<1	NA
	SMCLs[c]		
TDS[d]	500	110,000	110,000
Chloride	250	58,000	58,000
Sulfate	250	5,700	5,700
Iron	0.3	2.0	2.0
Manganese	0.05	4.2	4.2
Copper	1.0	<2.5	0.0615
Zinc	5.0	2	2

[a]Milligrams per liter.
[b]Maximum contaminant level.
[c]Secondary maximum contaminant level.
[d]Total dissolved solids.

7.0 Summary and Conclusions

This report contains tabulated background concentrations for groundwater-quality parameters from 28 wells that are located in the vicinity of the WIPP Site. Also presented in this report is a comparison of background groundwater chemistry to appropriate water-quality standards for 15 separate wells located in the immediate WIPP vicinity.

From 1985 to 1990, the WQSP has collected groundwater samples from water-bearing zones in the area of the WIPP Site. The WQSP has sampled 28 WIPP monitoring wells and 11 privately owned wells. Groundwater was sampled during the WQSP from the Bell Canyon Formation, the Culebra and Magenta Dolomite Members of the Rustler Formation, the Dewey Lake Redbeds, and the Dockum Group. The WQSP focused primarily on the characterization of Culebra Dolomite groundwater, since the Culebra Dolomite is the first continuous water-bearing zone above the waste repository horizon and is the most transmissive hydrologic unit in the WIPP area.

Because Culebra and Magenta Dolomite groundwater chemistries are extremely variable across the WIPP Site, area wide background values for groundwater constituents could not be established. Instead, background groundwater quality was defined for each individual well. A minimum of three separate rounds of data from a well was required to establish the background groundwater quality at that well.

Preliminary analysis categorized WQSP data into three groups based on the frequency of detection and the proximity of detections to MDLs. The three groups are as follows:

- ***Major Cations and Anions*** - Constituents that collectively make up greater than 99 percent of the dissolved solids. These constituents are generally detected at concentrations that are well above the MDL.

- ***Minor Cations, Anions, and Indicator Parameters*** - Constituents with concentrations that are generally less than 10 mg/ℓ in groundwater. A substantial amount of the data are below the MDL, and detected concentrations are generally close to the MDL.

- ***Organic Compounds*** - Include VOCs, semi-VOCs, pesticides, and PCBs. Very few detections of these compounds are observed in WQSP data.

Given the three data groups defined above, background concentrations were determined and reported in the following manner:

- A 95 percent confidence interval based on the Student's t distribution was computed for every major constituent from each well. Thus, the expected background concentration range for a major constituent at a given well is represented by a 95 percent confidence interval.

- Confidence intervals for minor constituents could not be calculated; thus, the background concentration range for a minor constituent at a given well is represented by the observed concentration range for that parameter at that well.

- Because of the relatively small number, all observed detections of hazardous organic compounds were tabulated.

Prior to the determination of background concentration values, the WQSP data were evaluated for trends. Trend analysis was necessary to determine if any concentrations were changing with time due to natural (or non-WIPP related) causes. The procedure used to determine background water quality is dependent on, or somewhat controlled by, the nature of the concentration/time relationship. In general, temporal trends in concentrations were not found in the WQSP data, and the procedure used to establish background water quality reflected this finding. The results of the trend analysis are summarized below in the specific findings of this study.

The WQSP data were also evaluated for outliers. Potential outliers were evaluated using the Q Test, a standard statistical method for small data sets. If a value was determined to be an outlier by the Q Test, an additional test was performed to ensure that the value was not labeled as an outlier due to routine analytical uncertainty. Approximately 2 percent of the values were removed from the major and minor constituent data set prior to the establishment of background concentrations.

The WQSP was developed as a site characterization sampling program; it has not served as a regulatory-guided sampling program for RCRA. Consequently, well construction was not typical of that generally used for environmental monitoring programs. Most WIPP monitoring wells were drilled and completed using oil field techniques. This factor, combined with complexities associated with the analysis of high-TDS samples, leads to a high degree of uncertainty in the reported concentration of many minor constituents (e.g., trace metals). The MDL of many trace metal analyses was often relatively high, preventing the

quantification of trace metal concentrations. Also, dilution of high-TDS samples has probably magnified spurious, near-MDL detections of minor groundwater constituents, resulting in false-positive values that appear to be quite significant.

The WIPP is a RCRA facility and will require a permit in order to receive and emplace TRU mixed waste. As a consequence, WQSP data were compared to the EPA interim primary drinking water standards that are listed in 40 CFR 265 Appendix III. In addition, several constituents of WQSP groundwater were compared to National Secondary Safe Drinking Water Act standards. Comparison to secondary standards was not driven by regulatory requirements, but rather it was done to document the general unsuitability of groundwater in the vicinity of the WIPP for domestic and agricultural use.

The following are the specific findings and conclusions of this study:

- Some constituents at several wells, including H-02a, H-05c, H-07b1, H-08b, and H-15, show apparent temporal concentration trends. However, in almost every case, the trend is within the range of expected analytical uncertainty, or the trend is not supported by charge-balance considerations or by similar trends in other constituents, such as TDS.

- Wells H-04c, H-05c, WIPP-19, and WIPP-26 exhibit concentrations of several parameters that decrease significantly from the first to the second sampling round. This may indicate that the first sample is not representative, possibly due to incomplete well development.

- Background groundwater quality was successfully defined for 28 wells. Background concentrations for major and minor cations, anions, and indicator parameters were established for Culebra Dolomite, Magenta Dolomite, and Dewey Lake Redbed groundwater. Although the background concentrations of minor constituents are uncertain, this report documents the "expected" values for these constituents, if similar analytical techniques are used in future sampling efforts.

- Hazardous organic compounds are not present in groundwater in the vicinity of the WIPP Site. Detections of these compounds are very infrequent, and the majority of detected compounds are typical laboratory contaminants as defined by the EPA. Some of the occurrences may also be related to well installation or sampling practices.

- Comparison of WQSP data with EPA interim primary drinking water standards (40 CFR 265 Appendix III) shows that cadmium, chromium, lead, selenium, and

silver concentrations typically exceed MCLs. Again, the quality of trace metal data are uncertain.

- Comparison of WQSP data with secondary drinking water standards (40 CFR 143) shows that TDS, chloride, and sulfate concentrations in groundwater greatly exceed SMCLs. Results indicate that the natural composition of groundwater from the Culebra and Magenta Dolomites makes the groundwater unsuitable for domestic or agricultural use in most areas of the WIPP Site.

- The repeated detection of trace metals such as chromium and molybdenum may be related to the corrosion of well casing that is exposed to high-TDS, high-chloride groundwater.

8.0 References

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APPENDIX A

SEPARATION OF TRACE ELEMENTS FROM WIPP GROUNDWATERS

Appendix A presents a compilation of the results of the IT Analytical Services (ITAS) laboratory analytical methods development program for improving trace-metal analysis accuracy and detection limits. As an alternative method of analysis for some of the trace metals, the ITAS laboratory adapted an ion-exchange technique used for separating and concentrating transition metals from alkali and alkaline-earth elements in sea water (Kingston et al., 1978) for use with some of the Waste Isolation Pilot Plant (WIPP) samples.

The methods development program involved performing cation exchange experiments, using different extraction techniques, on water samples from Well H-05b. Water from this well was selected as the test matrix for method development because it is representative of the more saline water found in the Culebra Dolomite in the WIPP vicinity.

The experiment consisted of preparing the cation-exchange resin, spiking the sample with known concentrations of the metals of interest, passing the sample through the resin column to load the metals onto the resin, and separating them from the sample matrix. The metals were then stripped off the resin using various concentrations of acid solutions, where they were analyzed at increased relative concentrations in a "cleaner" solution. Spike recoveries were calculated to determine the success of the separation and analysis procedure. The testing procedure was modified, as required, to develop the most effective separation technique for the matrix type represented by the WIPP groundwater. Spike recoveries were generally excellent for the 15 trace metals in the Well H-05b groundwater matrix.

Groundwater samples from three wells, H-05b (Round three), H-08b (Round three), and WIPP-19 (Round three) had the 15 trace metals analyzed using the cation exchange technique (Lyon, 1989). Generally, this technique reduced the lower limit of detection for 14 of the 15 trace metals by one or more orders of magnitude. These three wells were selected because they represent a cross section of the types of water quality from WQSP wells found in the WIPP vicinity.

The data from this experimental analysis were reported for the three wells listed above in the annual data report by Lyon (1989). Details of the ion-exchange experimental work were reported in periodic progress reports and data reports from the ITAS laboratory to the WQSP office at the WIPP. These progress and data reports, along with a copy of the report describing the actual technique (Kingston et al., 1978) are included in this appendix. Table A-1, preceding the progress reports included in this appendix, presents the final analytical results for trace-metal concentrations as concluded from this investigation.

Table A-1
Final Results of the WQSP Experimental Trace Metal Analysis

Parameter	WIPP-19	H-05b	H-08b
Concentration (mg/ℓ)[a]			
Antimony	1.08	0.77	<0.20
Arsenic	<0.020	<0.024	<0.020
Cadmium	<0.0030	<0.004	<0.0030
Cesium	<0.24	<0.28	<0.24
Chromium	0.006	0.016	0.005
Cobalt	<0.007	<0.010	<0.007
Copper	0.013	<0.010	0.11
Lead	<0.030	<0.040	<0.030
Lithium	0.73	0.75	0.12
Molybdenum	0.024	0.030	0.008
Nickel	<0.020	<0.10	0.030
Selenium	<0.040	<0.024	<0.040
Silver	<0.020	0.090	<0.020
Titanium	<0.007	<0.010	<0.007
Zinc	0.051	0.030	0.24

[a] milligrams per liter
Source: Lyon, 1989

CHELEX 100 SEPARATION #1
PROGRESS REPORT

COPY

PROJECT: DOE-WIPP

Project Summary:

The ITAS Pittsburgh Laoratory has been requested by ITES-Albuquerque to investigate techniques to achieve enrichment and isolation of cations monitored in the DOE-WIPP site's water quality program. The project goal is to establish an accurate baseline for the metalic species monitored. Ion exchange technology has been utilized by many investigators for the enrichment and isolation of various metalic ions in matrices characterized by high levels of inorganic salts. This first progress report is a summary of initial investigations using an ion exchange technique on characteristic WIPP type sample (Sample H05B). The technique used was taken from "Separation of the Eight Transition Elements from Alkali and Alkaline Earth Elements in Estuarine and Seawater with Chelating Resin and Their Determination by Graphit Furnace Atomic Absorption Spectrometry," H. M. Kingston, I. L. Barnes, T. J. Brady, and T. C. Rains, Analytical Chemistry, Vol. 50, No. 14, December, 1987.

Procedure Summary:

Chelex 100[1] resin was added to the column (3.2 grams). The resin bed was washed with subsequent portions of 2.5M HNO_3 and deionized water. The column was then rinsed with ammonium hydroxide until a basic eluant was achieved. After two additional deionized water rinses had been completed, the column was ready for ion exchange.

Once the column had been prepared as described above, 70 grams or approximately 70 milliliters of spiked sample (H05-B) was added to the column. The flow rate through the column was adjusted to approximately one milliliter per minute and the effluent was collected (anion fraction). The

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[1] Chelex 100 is a registered trademark of BIO-RAD Laboratories.

column was then eluted with 40 milliliters of ammonium acetate. This fraction was collected (alkaline and alkali fraction). Two subsequent elutions of 7 milliliters and 5 milliliters of 2.5M nitric acid were collected and labeled transition metals #1 and #2, respectively.

A method blank was processed as stated above. Analytical results of the analyses are listed in the the enclosed table.

Results and Discussion:

The transition elements, as expected, were recovered with the greatest success; however, almost all of the elements studied showed some recovery.

The inflated recoveries for lithium, titanium, and antimony may be due to positive interferences contained in the concentrated anion fraction. Also, concentration values found in the original sample were not subtracted out prior to the percent recovery calculation.

Results and Discussion:

In the next round of experiments, the samples will be diluted prior to the column loading to ensure instantaneous equalibrium on the exchange column. Concentrations of acid solutions will be varied so that cation groupings may be better isolated (or not). The next progress report should be completed by June 17, 1988.

PERCENT RECOVERY
FOR ANALYTES OF SPECIAL INTEREST (H05B)

Chelex 100 Separation #1

SAMPLE IDENTIFICATION	Li	Cs	Tl	Cr	Mo	Ni	Cu	Ag	Pb	As	Sb	Se
nion Fraction	460%	9%	340%	57%	11%	0%	0%	0%	0%	41%	260%	0%
& Alkali raction	32%	0%	69%	0%	ISS(1)	0%	0%	0%	0%	6.4%	59%	0%
ansition Metals #1	4%	0%	69%	13%	96%	74%	125%	0%	66%	0%	0%	0%
ansition Metals #2	3%	0%	5%	2%	4%	8%	15%	0%	0%	ISS	0%	0%

Method Blank (Units mg/ℓ)

SAMPLE IDENTIFICATION	Li	Cs	Tl	Cr	Mo	Ni	Cu	Ag	Pb	As	Sb	Se
nion Fraction	<0.01	<0.01	<0.03	<0.01	0.01	<0.03	<0.01	<0.01	<0.05	<0.005	<0.05	<0.005
kaline & Alkali Fraction	<0.006	<0.006	<0.02	<0.006	ISS	<0.02	<0.006	<0.006	<0.03	<0.003	<0.03	<0.003
ansition Metals #1 Fraction	<0.003	<0.003	<0.009	<0.003	<0.003	<0.009	<0.003	<0.003	<0.015	<0.0015	<0.015	<0.0015
ansition Metals #2	<0.002	0.002	<0.006	<0.002	0.002	<0.006	<0.002	<0.002	<0.010	<0.001	<0.010	<0.001
tection Limit	0.006	0.006	0.009	0.003	0.003	0.009	0.003	0.003	0.015	0.015	0.015	0.0015

(1) ISS = insufficient sample to perform the required analyusis.

CHELEX 100 SEPARATION #2
PROGRESS REPORT

PROJECT: DOE-WIPP

Procedure Summary; Separation #2A

Chelex 100[1] resin was added to the column (3.2 grams). The resin bed was washed with subsequent portions of 2.5M HNO_3 and deionized water. The column was then rinsed with ammonium hydroxide until a basic eluant was achieved. After two additional deionized water rinses had been completed, the column was ready for ion exchange.

A 50 milliliter aliquot of sample H05-B was spiked and diluted to 200 milliliters (pH = 2.4). This solution was added to the column. The flow rate through the column was adjusted to approximately one milliliter per minute and the effluent was collected (anion fraction). The column was then eluted with 40 milliliters of 0.5M ammonium acetate. This fraction was collected (alkaline and alkali fraction). Finally, an elution of 20 milliliters of 5.0M nitric acid was collected and labeled transition metals.

Procedure Summary; Separation #2B

The separation was performed as described in separation #2A with one exception, the pH of the diluted sample aliquot was adjusted to 5.5 prior to column loading.

Procedural Changes from Separation #1

Several procedural changes were made during separations #2A and #2B. The amount of spiking solution added to the sample was increased from 10 micrograms to 20 micrograms. Also, cadmium, cobalt, and zinc were added to the elements to be examined.

The sample was diluted by a factor of four in an effort to facilitate instantaneous equilibrium on the exchange column.

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[1] Chelex 100 is a registered trademark of BIO-RAD Laboratories.

The concentration of the nitric acid eluant was raised from 2.5M to 5.0M and one 20 milliliter wash was used rather than two smaller ones.

Analytical results of the analyses are listed in the enclosed tables.

Results and Discussion

The effect of sample pH adjustment was clearly observed and has proven to be a noteworthy consideration. Results for separation #2B showed fraction separations which were clearer and, in general, produced better spike recoveries than those of separation #2A where no pH adjustment was made. Furthermore, analytes which exhibited no spike recovery previously are now beginning to show some recovery, i.e., Ag and As.

Again, inflated recoveries for lithium, titanium, antimony, and zinc may be due to positive interferences contained in the concentrated anion fraction. Also, concentration values found in the original sample were not subtracted prior to the percent recovery calculation.

Results and Discussion

In the next round of experiments, three column pretreatments will be performed.

Separation #3A will duplicate separation #2B with the exception that no spike will be added. The information obtained will be used to subtract the analyte concentrations inherent to sample H08-B from the percent recovery calculations for separation #2B.

Separation #3B will duplicate separation #2B, except that the pH will be adjusted to 6.5 prior to column loading. This adjustment may facilitate the recovery of elements such as arsenic and silver.

Separation #3C will duplicate separation #2B, however, the sample volume will be decreased in a further effort to achieve equilibrium on the exchange column.

Both separations #3B and #3C will contain 40 micrograms of spiking solution rather than 20 micrograms as in separation #2A and #2B.

TABLE 1

SEPARATION #2B (Column A pH = 2.4)
PERCENT RECOVERY
FOR ANALYTES OF SPECIAL INTEREST (H05B)

Chelex 100 Separation #1

SAMPLE IDENTIFICATION	Li	Ca	Ti	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	As	Sb	Se
Anion Fraction	320	160	240	140	30	100	110	0	3.4	360	98	180	30	340	0
Alkaline & Alkali Fraction	12	5.7	0	0	0	0	0	0	0	25	3	0	1.3	0	0
Transition Metals #1	6.7	2.2	47	27	120	0	0	113	0	27	0	0	0	0	0

Observed Concentration (Units mg/ℓ)

SAMPLE IDENTIFICATION	Li	Ca	Ti	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	As	Sb	Se
Anion Fraction	0.32	0.16	0.24	0.14	0.03	0.10	0.11	0	0.34	0.36	0.098	0.18	0.032	0.34	0
Alkaline & Alkali Fraction	0.06	0.03	0	0	0	0	0	0	0	0.13	0.016	0	0.007	0	0
Transition Metals #1 Fraction	0.03	0.01	0.21	0.12	0.54	0	0	0.51	0	0.12	0	0	0	0	0

TABLE 2

SEPARATION #2B (Column B pH = 5.5)
PERCENT RECOVERY
FOR ANALYTES OF SPECIAL INTEREST (H05B)

Chelex 100 Separation #1

SAMPLE IDENTIFICATION	Li	Cs	Tl	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	As	Sb	Se
Anion Fraction	300	150	210	30	60	30	40	30	50	0	18	170	13	390	0
Alkaline & Alkali Fraction	15	12	27	5.8	9.6	5.8	7.7	15	5.8	13	2.7	29	10	46	5.4
Transition Metals #1	6.7	4.4	87	93	122	96	98	91	0	420	118	98	56	0	13

Observed Concentration (Units mg/ℓ)

SAMPLE IDENTIFICATION	Li	Cs	Tl	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	As	Sb	Se
Anion Fraction	0.30	0.15	0.21	0.03	0.06	0.03	0.04	0.03	0.05	0	0.018	0.17	0.013	0.39	0
Alkaline & Alkali Fraction	0.08	0.06	0.14	0.03	0.05	0.03	0.04	0.08	0.03	0.07	0.014	0.15	0.052	0.24	0.028
Transition Metals #1 Fraction	0.03	0.02	0.39	0.42	0.55	0.43	0.44	0.41	0	1.88	0.533	0.44	0.25	0	0.06

CHELEX 100 SEPARATION #3
PROGRESS REPORT

PROJECT: DOE-WIPP

Procedure Summary; Separation #3A

A slurry of Chelex 100[1] (3.2 gms) was added to the column and allowed to slowly drain forming the resin bed. It was washed with five 15 ml portions of 2.5 M nitric acid and then rinsed with two 5 ml portions of deionized water. The bed was subsequently activated with two 5 ml portions of 2.0 M ammonium hydroxide. This washing was continued until the eluant was basic. The bed was rinsed again with deionized water.

A 50.0 g aliquot of sample H05B was diluted to approximately 200 mls. The pH was then adjusted to 5.5 and the final volume was adjusted to 200 mls. The diluted sample was added to the column and the flow rate was adjusted to approximately 1.0 ml per minute. The effluent was collected and called the anion fraction. The column was then eluted with 40 mls of 0.5M ammonium acetate. This fraction was called the cation fraction (alkaline and alkali fraction). Next the column was eluted with two 10 ml portions of 5.0M nitric acid and called the transition metal fraction.

Procedure Summary; Separation #3B

The separation performed was the same as that described in #3A with a few exceptions. The 50.0g sample (H05B) was spiked with 20 mls of a 2 ppm solution containing the ions being studied. The final pH adjustment was to 6.5.

Procedure Summary; Separation #3C

The separation procedure was the same as #3A with the exception that only 20.0g of sample (H05B) was used and it was spiked with 20 mls of the 2 ppm solution.

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[1] Chelex 100 is a registered trademark of BIO-RAD Laboratories.

Procedural Changes from Separation #2

There were two procedural changes from the one followed in Separation #2. The first was that the pH of the spiked aliquot was adjusted to 6.5 in separation #3B. The second was that the amount of H05B used was lowered to 20.0g in separation #3C. This second change was made to ensure that the column was not being overloaded.

Analytical results are listed in the enclosed tables.

Results and Discussion

In comparing the results from Separation #2B with that of Separations #3B and #3C (both without sample subtraction, #3A) it can be seen that there is a much clearer separation overall and less positive interferences for elements such as Li, Cs, Ti. The positive background interferencs observed in Seperations #1 and #2 were apparently due to an absorbance signal which was very near the instrument's detection limits, where noise is a more significant factor. The amount of analyte contained in the spiking solution was increased in an effort to minimize this difficulty. This increase in concentration has effected a more stable analytical signal.

The subtraction of the analyte concentration inherent to the sample H05B (#3A) eliminated many of the positive interferences found with such elements as Li, Sb, and Zn. It has also appeared to eliminate recoveries previously reported in the anionic fraction for elements such as Li, Ti, Cr, Mo, and Sb. With clearer elemental separations, estimates can now be made as to which fraction the element might be expected to be found in.

Separation #3B was the duplicate of #3C with the exception that the pH was adjusted to 6.5 to potentially improve the separation and recovery of elements such as As and Ag. As can be seen in the accompanying tables, this was not a benificial experiment. In fact, Separation #3C appears to have less positive interferences and percent recoveries that are closer to 100 percent overall than #3B.

Several of the parameters that have not achieved an acceptable percent recovery were reanalyzed by Method of Standard Addition, and the results are shown in Tables 4A-4C. In some instances the results improved but, at this point, there is not enough evidence to prove that this method will improve the results overall. The method will be used again in the next round of experiments to determine its usefulness to our end goal.

Future Experiments

In the next round of experiments, four column pretreatments will be performed. In each case, the pH will be lowered to 5.0. This is the lowest of the pH range given by Kingston et.al.[2] Below the pH of 4.5, the ability of the resin to separate the transition metals is drastically lowered; therefore, this is expected to be the last pH adjustment.

Separation #4A will duplicate #3A.

Separation #4B-D will all be spiked with 40 µg of the analytes. Separations #4B and C will be prepared in duplicate to show analytical precision, as the separations preceding them did not prove how well reproducibility may be achieved. Separation 4D will be saved for possible further experiments, such as Hydride Generation and Hexachromium analysis for troublesome analytes.

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[2] H. M. Kingston, I.L. Barnes, T. J. Brady, and T.C. Rains, Analytical Chemistry, Vol. 50, No. 14, December 1978.

TABLE I

SEPARATION #3A (Column A; pH = 5.5)
FOR ANALYTES OF SPECIAL INTEREST (H058)

Raw Concentration (Units mg/ℓ)

SAMPLE IDENTIFICATION	Li	Cs	Tl	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	As	Sb	Se
Anion Fraction	0.18	0	0.27	0.06	0.06	0.017	0	0.01	0.02	0	0.012	0.08	0	0.21	0
Alkaline & Alkali Fraction	0.01	0	0	0	0.03	0	0	0	0	0	0	0	0	0.05	0
Transition Metals #1 Fraction	0.01	0	0.09	0	0.08	0	0	0.01	0	2.3	0	0	0	0	0

TABLE 2A

SEPARATION #3B (Column B; pH = 6.5)
WITHOUT SAMPLE SUBTRACTION (#3A)
PERCENT RECOVERY
FOR ANALYTES OF SPECIAL INTEREST (H05B)

Chelex 100 Separation #3B Percent Recovery

SAMPLE IDENTIFICATION	Li	Cs	Tl	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	As	Sb	Se
Anion Fraction	153	147	17	16	26	0	0	0	0	0	0	0	68	210	0
Alkaline & Alkali Fraction	1	0	0	0	35	0	0	0	0	0	0	0	1.7	0	0
Transition Metals #1 Fraction	0.5	0	76	18	78	104	106	106	0	250	105	100	6.6	3.2	0.3

Raw Concentration (Units mg/ℓ)

SAMPLE IDENTIFICATION	Li	Cs	Tl	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	As	Sb	Se
Anion Fraction	0.29	0.28	0.033	0.03	0.05	0	0	0	0	0	0	0	0.13	0.397	0
Alkaline & Alkali Fraction	0.01	0	0	0	0.35	0	0	0	0	0	0	0	0.017	0	0
Transition Metals #1 Fraction	0.01	0	1.3	0.30	1.33	1.77	1.8	1.8	0	1.28	1.79	1.7	0.112	0.055	0.005

TABLE 2B

SEPARATION #3B (Column B; pH = 6.5)
WITH SAMPLE CONCENTRATION SUBTRACTION (#3A)
PERCENT RECOVERY
FOR ANALYTES OF SPECIAL INTEREST (H05B)

Chelex 100 Separation #3B (Percent Recovery)

SAMPLE IDENTIFICATION	Li	Cs	Tl	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	As	Sb	Se
Anion Fraction	58	147	0	0	0	0	0	0	0	0	0	0	68	100	0
Alkaline & Alkali Fraction	0	0	0	0	32	0	0	0	0	0	0	0	1.7	0	0
Transition Metals #1 Fraction	0	0	72	18	74	104	106	100	0	116	105	100	6.6	3.2	0.3

Raw Concentration (Units mg/ℓ)

SAMPLE IDENTIFICATION	Li	Cs	Tl	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	As	Sb	Se
Anion Fraction	0.11	0.28	-0.24	-0.03	-0.01	-0.17	0	-0.01	-0.02	0	-0.012	-0.08	0.13	0.19	0
Alkaline & Alkali Fraction	0	0	0	0	0.32	0	0	0	0	0	0	0	0.017	-0.05	0
Transition Metals #1 Fraction	0	0	1.21	0.30	1.25	1.77	1.8	1.7	0	1.98	1.79	1.7	0.112	0.055	0.005

TABLE 3A

SEPARATION #3C (Column C; pH = 5.5)
WITHOUT SAMPLE SUBTRACTION (#3A)
PERCENT RECOVERY
FOR ANALYTES OF SPECIAL INTEREST (H05B)

Chelex 100 Separation #3C Percent Recovery

SAMPLE IDENTIFICATION	Li	Cs	Ti	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	As	Sb	Se
Anion Fraction	120	110	40	26	15	0	0	0	6.5	0	0	0	60	150	0
Alkaline & Alkali Fraction	1	0	0	0	29	0	0	0	0	0	0	0	2.9	0	0
Transition Metals #1 Fraction	0.5	0	96	28	82	101	101	104	0	160	102	96	18	3.4	2

Raw Concentration (Units mg/ℓ)

SAMPLE IDENTIFICATION	Li	Cs	Ti	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	As	Sb	Se
Anion Fraction	0.24	0.22	0.080	0.051	0.03	0	0	0	0.013	0	0	0	0.12	0.298	0
Alkaline & Alkali Fraction	0.01	0	0	0	0.28	0	0	0	0	0	0	0	0.028	0	0
Transition Metals #1 Fraction	0.01	0	1.63	0.473	1.39	1.71	1.71	1.76	0	2.72	1.73	1.63	0.13	0.058	0.029

TABLE 3B

SEPARATION #3C (Column C; pH = 5.5)
WITH SAMPLE CONCENTRATION SUBTRACTED (#3A)
PERCENT RECOVERY
FOR ANALYTES OF SPECIAL INTEREST (H05B)

Chelex 100 Separation #3C (Percent Recovery)

SAMPLE IDENTIFICATION	Li	Cs	Tl	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	As	Sb	Se
Anion Fraction	30	110	0	0	7.5	0	0	0	6	0	0	0	60	45	0
Alkaline & Alkali Fraction	0	0	0	0	26	0	0	0	0	0	0	0	2.9	0	0
Transition Metals #1 Fraction	0	0	91	28	77	101	101	103	0	25	102	96	18	3.4	2

Raw Concentration (Units mg/ℓ)

SAMPLE IDENTIFICATION	Li	Cs	Tl	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	As	Sb	Se
Anion Fraction	0.06	0.22	-0.19	-0.01	0.03	-0.017	0	0	0.011	0	-0.012	-0.03	0.12	0.09	0
Alkaline & Alkali Fraction	0	0	0	0	0.25	0	0	0	0	0	0	0	0.028	-0.05	0
Transition Metals #1 Fraction	0	0	1.54	0.473	1.31	1.71	1.71	1.75	0	0.42	1.73	1.63	0.31	0.058	0.029

TABLE 4A

SEPARATION #3A (Column A; pH = 5.5)
ANALYSIS BY METHOD OF STANDARD ADDITION
FOR ANALYTES OF SPECIAL INTEREST (H05B)

SAMPLE IDENTIFICATION	Raw Concentration (Units mg/ℓ)				
	Li	Cr	Ag	As	Se
Anion Fraction	0.290	0	0.010	0	0
Alkaline & Alkali Fraction	0.06	0	0	0	0
Transition Metals #1 Fraction	IS[1]	IS	IS	IS	IS

[1] Insufficient sample to reanalyze this fraction.

TABLE 4B

SEPARATION #3B (Column B; pH = 6.5)
ANALYSIS BY METHOD OF STANDARD ADDITION
WITH SAMPLE SUBTRACTION (#3A)
PERCENT RECOVERY
FOR ANALYTES OF SPECIAL INTEREST (HO5B)

Chelex 100 Separation #3B (Percent Recovery)

SAMPLE IDENTIFICATION	Li	Cr	Ag	As	Se
Anion Fraction	157	34	45	46	IS[1]
Alkaline & Alkali Fraction	0	0	0	1.7	0
Transition Metals #1 FRACTION	--	--	--	--	--

Raw Concentration (Units mg/ℓ)

SAMPLE IDENTIFICATION	Li	Cr	Ag	As	Se
Anion Fraction	0.23	0.065	0.085	0.087	(2)
Alkaline & Alkali Fraction	0	0	0	0.017	0
Transition Metals #1 Fraction	IS	IS	IS	IS	IS

[1] Insufficient sample to reanalyzed the fraction.

[2] Unable to achieve correlation coefficient ≥ 0.995.

TABLE 4C

SEPARATION #3C (Column C; pH = 5.5)
ANALYSIS BY METHOD OF STANDARD ADDITION
WITH SAMPLE SUBTRACTION (#3A)
PERCENT RECOVERY
FOR ANALYTES OF SPECIAL INTEREST (H05B)

Chelex 100 Separation #3C (Percent Recovery)

SAMPLE IDENTIFICATION	Li	Cr	Ag	As	Se
Anion Fraction	35	14	0	77	85
Alkaline & Alkali Fraction	0	0	0	2.4	0
Transition Metals #1 Fraction	--	--	--	--	--

Raw Concentration (Units mg/ℓ)

SAMPLE IDENTIFICATION	Li	Cr	Ag	As	Se
Anion Fraction	0.07	0.028	0	0.154	0.17
Alkaline & Alkali Fraction	0	0	0	0.024	0
Transition Metals #1 Fraction	IS(1)	IS	IS	IS	IS

CHELEX 100 SEPARATION #4
PROGRESS REPORT

PROJECT: DOE-WIPP

Procedure Summary; Separation #4A

The slurry of Chelex 100[1] resin (3.2g) was added to the column and allowed to slowly drain. The resin bed was washed with five 15 ml portions of 2.5 M nitric acid and then rinsed with two 5 ml portions of deionized water. The bed was subsequently activated with two 5 ml portions of 2.0 M ammonium hydroixde. This washing was continued until the eluant was basic. The column bed was rinsed again with deionized water.

A 50.0 g aliquot of sample H05B was diluted to approximately 200 ml and the pH was adjusted to 5.0. The sample was then brought up to a final volumn of 200 mls and it was added to the column. The column flow rate was adjusted to approximately one milliliter per minute and the effluent was collected and called the anion fraction. The column was then eluted with a total of 40 mls of 1.0 M ammonium acetate. This fraction was called the cation fraction (alkaline and alkali fraction). Next, the column was eluted with three 10 ml aliquots of 5.0 M nitric acid (Transition Metal #1 fraction). The final elution was with two 10 ml washes of 2.0 M sulfuric acid and was called the Transition Metal #2 fraction.

Procedure Summary; Separation #4B

The separation was performed as that described in #4A, with a few exceptions. Before the pH adjustment and the final volume adjustment, the 50.0 g sample was spiked with 20 ml of a 2 ppm solution containing the ions being studied. The final pH was 5.0. The amount of 2.0 M sulfuric acid was 30 mls, instead of 20 mls.

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[1] Chelex 100 is a registered trademark of BIO-RAD Laboratories.

Procedure Summary; Separation #4C, #4D

These separations followed the same procedure as that in #4B, except that only 20 mls of the 2.0 M sulfuric acid was used and a new cadmium cobalt and zinc spike was used.

Procedural Changes from Separation #3

The one significant change is that of the pH to 5.0. There was still one unspiked separation (#4A), while three identically spiked separations were eluted to show reproducibility. The third of these three (#4D) was not analyzed at this time.

Analytical results are listed in the enclosed tables.

Results and Discussion

In comparing the results from the separations in #3 with those in #4, it appears that the changes made in separation #4 were successful with few exceptions. The 2.0 M sulfuric acid extraction (Transition Metal #2 fraction) was a suggestion made by BIO-RAD Laboratories to release the elements off the column where there were recovery problems (Ag, Cr, As, etc.). This part of the experiment failed, as there was no recovery of any element found in this fraction.

The first success of this separation procedure was that the change in pH had no adverse effect on the analytes that had shown good recoveries in the past. The second favorable aspect of this extraction was the improvements in the Li, Ti, Mo, and As percent recoveries. The third and most important advancement was with the elements, Ag, Cr, and Se. There now is a small but consistant recovery of silver and within five percent of absolute for chromium and selenium; therefore, the pH of 5.0 is the best range to look for these elements.

When looking at Tables 3A and 3B (Separation #4C) it must be noted that a small amount of the Transition Metal #1 fraction was accidently added to the alkaline/alkali fraction. This was confirmed at the time of extraction by the pH of the elutant. After analysis, it was also confirmed by the percent recoveries being split between these two fractions and, when added together,

achieve near 100 percent recovery. This accident in the extraction procedure does give some more valuable information. It shows, through the percent recoveries in the alkaline/alkali fraction, the order in which the elements come off the column. Zinc is obviously the first off the column, while chromium is held by the column until the end of the extraction. Due to the above mentioned problem, Separations #4B and #4C did not prove method reproducibility.

Following the analytical results tables is a summary containing the analytes pH preference, fraction it will be contained in, the most beneficial procedure for analysis, and the expected detection limit.

Future Experiments

Samples H08B and WIPP-19 will be extracted and analyzed according to the recommendations made in Table 4. The laboratory has not proven the reproducibility of this method during past experiments. This research deviation will be accounted for during the separations of H08B and WIPP-19, where one or more replicates will be prepared and analyzed. Data collected in this study will be presented in the next report. The results will be completed as soon as possible.

TABLE 1

EXTRACTION RESULTS AND EXPECTED RECOVERY VALUES
FOR MATRIX SPIKES

Separation 4A: 50.04g of H05B, pH = 4.9, diluted to 200 ml

FRACTION	AMOUNT RECOVERED (g)
Anionic	213.56
Alkaline/Alkali	58.77
Transition Metal #1	32.24
Transition Metal #2	21.55

Separation 4B: 49.96g of H05B, plus 20 ml of 2 ppm spike, pH = 4.95, to 200 ml

FRACTION	AMOUNT RECOVERED (g)	THEORETICAL VALUE OF MATRIX SPIKE
Anionic	199.74	0.20
Alkaline/Alkali	36.85	1.09
Transition Metal #1	34.77	1.15
Transition Metal #2	29.44	1.36

TABLE 1
(Continued)

Separation 4C: 50.02g of H05B, plus 20 ml of 2 ppm spike, pH = 4.90, to 200 ml

FRACTION	AMOUNT RECOVERED (g)	THEORETICAL VALUE OF MATRIX SPIKE
Anionic	209.50	0.19
Alkaline/Alkali	39.87	1.00
Transition Metal #1	35.66	1.12
Transition Metal #2	17.47	2.29

Separation 4D: 50.04g of H05B, plus 20 ml of 2 ppm spike, pH 5.0, to 200 ml

FRACTION	AMOUNT RECOVERED (g)	THEORETICAL VALUE OF MATRIX SPIKE
Anionic	199.98	0.20
Alkaline/Alkali	37.70	1.06
Transition Metal #1	32.57	1.22
Transition Metal #2	19.68	2.03

TABLE 2A

SEPARATION #4A (Column A; pH = 5.0)
FOR ANALYTES OF SPECIAL INTEREST (H05B)
ICP EMISSION ANALYSIS

Raw Concentration (Units mg/ℓ)

SAMPLE IDENTIFICATION	Ti	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	Sb
Anion Fraction	0	0.32	--(1)	0	0	0	0	0	0	0	0.164
Alkaline & Alkali Fraction	0	0	0.02	0	0	0.05	0	1.83	0	0	0
Transition Metals #1 Fraction	0	0	0.04	0	0	0	0	0.04	0	0	0
Transition Metals #2 Fraction	0	0	0	0	0	0	0	0	0	0	0

(1) Not reported for the indicated parameter because of a laboratory accident.

TABLE 2B

SEPARATION #4A (Column A; pH = 5.0)
FOR ANALYTES OF SPECIAL INTEREST (H05B)
GRAPHITE FURNACE OR FLAME ATOMIC ABSORPTION ANALYSIS

Raw Concentration (Units mg/ℓ)

SAMPLE IDENTIFICATION	Li	Cs	Cr[1]	Ag[1]	As[1]	Sb	Se[1]
Anion Fraction	0.16	0	0	0.020	0	0.042	0
Alkaline & Alkali Fraction	0.02	0	0	0	0	0.008	IS[2]
Transition Metals #1 Fraction	0	0	0.022	0	0	0	0
Transition Metals #2 Fraction	0	0	0	0	0	0	0

[1] The element was analyzed by Method of Standard Addition.

[2] IS = Insufficient sample to analyze this fraction.

TABLE 3A

SEPARATION #4B (Column B; pH = 5.0)
WITH SAMPLE SUBTRACTION (#4A)
PERCENT RECOVERY
FOR ANALYTES OF SPECIAL INTEREST (H05B)
ICP EMISSION ANALYSIS

Chelex 100 Separation #4B (Percent Recovery)

SAMPLE IDENTIFICATION	Ti	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	Sb
Anion Fraction	0	18	--(1)	0.2	0	0	12	0	34	0	90
Alkaline & Alkali Fraction	0	0	0	0	0	0	0	0	0	0	0
Transition Metals #1 Fraction	103	82	102	102	104	104	0	96	63	92	0
Transition Metals #2 Fraction	0	0	0	0	0	0	0	0	0	0	0

Raw Concentration (Units mg/ℓ)

SAMPLE IDENTIFICATION	Ti	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	Sb
Anion Fraction	0	0.035	--	0.012	0	0	0.025	0	0.069	0	0.179
Alkaline & Alkali Fraction	0	0	0	0	0	0	0	0	0	0	0
Transition Metals #1 Fraction	1.18	0.941	1.17	1.17	1.20	1.2	0	1.1[illegible]	0.72	1.06	0
Transition Metals #2 Fraction	0	0	0	0	0	0	0	0	0	0	0

(1) Not reported for the indicated parameter because of a laboratory accident.

TABLE 3B

SEPARATION #4B (Column B; pH = 5.0)
WITH SAMPLE SUBTRACTION (4A)
PERCENT RECOVERY
FOR ANALYTES OF SPECIAL INTEREST (H05B)
GRAPHITE FURNACE OR FLAME ATOMIC ABSORPTION ANALYSIS

Chelex 100 Separation #4B (Percent Recovery)

SAMPLE IDENTIFICATION	Li	Cs	Cr	Ag	As	Sb	Se
Anion Fraction	80	140	15	3.0	73	154	99
Alkaline & Alkali Fraction	0	0	1.7	0	1.2	0.2	0.9
Transition Metals #1 Fraction	0	0	98	0	6.3	1.1	1.0
Transition Metals #2 Fraction	0	0	0	0	0	0	0

Raw Concentration (Units mg/ℓ)

SAMPLE IDENTIFICATION	Li	Cs	Cr(1)	Ag(1)	As(1)	Sb	Se(1)
Anion Fraction	0.16	0.28	0.030	0.006	0.142	0.308	0.197
Alkaline & Alkali Fraction	0	0	0.019	0	0.13	0.002	0.010
Transition Metals #1 Fraction	0	0	1.13	0	0.073	0.013	0.012
Transition Metals #2 Fraction	0	0	0	0	0	0	0

(1) The element was analyzed by Method of Standard Addition.

TABLE 4A

SEPARATION #4C (Column C; pH = 5.0)
WITH SAMPLE SUBTRACTION (#4A)
PERCENT RECOVERY
FOR ANALYTES OF SPECIAL INTEREST (H05B)
ICP EMISSION ANALYSIS

Chelex 100 Separation #4C (Percent Recovery)

SAMPLE IDENTIFICATION	Ti	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	Sb
Anion Fraction	0	18	--(1)	8.4	0	0	17	0	0	35	107
Alkaline & Alkali(2) Fraction	12	0	23	36	29	20	0	94	36	20	0
Transition Metals(2) #1 Fraction	63	82	71	57	63	71	0	0	61	54	0
Transition Metals #2 Fraction	0	0	0	0	0	0	0	0	0	0	0

Raw Concentration (Units mg/ℓ)

SAMPLE IDENTIFICATION	Ti	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	Sb
Anion Fraction	0	0.035	--	0.016	0	0	0.032	0	0	0.067	0.203
Alkaline & Alkali(2) Fraction	0.12	0	0.23	0.358	0.29	0.2	0	0.938	0.357	0.20	0
Transition Metals(2) #1 Fraction	0.71	0.99	0.79	0.63	0.70	0.8	0	0	0.68	0.60	0
Transition Metals # 2 Fraction	0	0	0	0	0	0	0	0	0	0	0

(1) Not reported for the indicated parameter because of a laboratory accident.
(2) At the time of separation, a small amount of alkaline and alkali fraction was contaminated by the transition metal #1 fraction.

TABLE 4B

SEPARATION #4C (Column C; pH = 5.0)
WITH SAMPLE SUBTRACTION (#4A)
PERCENT RECOVERY
FOR ANALYTES OF SPECIAL INTEREST (H05B)
GRAPHITE FURNACE OR FLAME ATOMIC ABSORPTION ANALYSIS

Chelex 100 Separation #3A (Percent Recovery)

SAMPLE IDENTIFICATION	Li	Cs	Cr	Ag	As	Sb	Se
Anion Fraction	79	111	4.2	5.8	65	136	95
Alkaline & Alkali[1] Fraction	0	0	3.6	0	6.0	0.9	0
Transition Metals[1] #1 Fraction	0	0	101	0	18	0.9	0
Transition Metals #2 Fraction	0	0	0	0	0	0	--[2]

Raw Concentration (Units mg/ℓ)

SAMPLE IDENTIFICATION	Li	Cs	Cr[3]	Ag[3]	As[3]	Sb	Se[3]
Anion Fraction	0.15	0.21	0.008	0.011	0.123	0.258	0.181
Alkaline & Alkali[1] Fraction	0	0	0.036	0	0.060	0.009	0
Transition Metals[1] #1 Fraction	0	0	1.126	0	0.204	0.011	0
Transition Metals #2 Fraction	0	0	0	0	0	0	--[2]

---

(1) At the time of separation, a small amount of the alkaline and alkali fraction was contaminated by the Transition Metal #1.

(2) Unable to achieve correlation coefficient ≥ 0.995.

(3) The element was analyzed by Method of Standard Edition.

TABLE 5

SUMMARY OF RECOMMENDED PROCEDURES
FOR ANALYTES OF SPECIAL INTEREST (HO5B)

	Li	Cs	Tl	Cr	Mo	Co	Ni	Cu	Ag	Zn	Cd	Pb	As	Sb	Se
Recommended pH for Elution	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Fraction Element is found	A	A	TM	TM	TM	TM	TM	TM	A	TM	TM	TM	A	A	A
Method of Analysis	FLAA	FLAA	ICP	GFAA/ MSA	ICP	ICP	ICP	ICP	GFAA/ MSA	ICP	ICP	ICP	GFAA/ MSA	ICP	GFAA/ MSA
Detection Limit (mg/l)	0.01	0.06	0.006	0.006	0.006	0.006	0.02	0.006	0.01	0.006	0.003	0.03	0.005	0.05	0.005

A = Anionic Fraction (with sample subtraction)
TM = Transition Metal Fraction (with sample subtraction)
GFAA = Graphite Furnace Atomic Absorption
ICP = Inductively Coupled Plasma
MSA = Method of Standard Addition
FLAA = Flame Atomic Absorption

INTERNATIONAL TECHNOLOGY CORPORATION

Memorandum

To: M. Lyon

Date: January 6, 1989

From: D. L. Waldschmidt

Subject: **Chelex 100 Separation**

IT Analytical Services (ITAS) is submitting a report for the above study.

Results are presented in the enclosed tables. Elements were analyzed according to the methods specified in Report #4, Table #5.

Should you have any questions or require additional information, please contact me at the Pittsburgh Laboratory.

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SEPARATION 5A
METAL ANALYSIS SUMMARY
FOR DOE-WIPP
PROJECT NO. 301001

		SAMPLE IDENTIFICATION		
			WIPP 19	
PARAMETER	UNITS	Anionic Fraction	Alkaline Alkali. Fraction	Transition Metal Fraction
Antimony	mg/L	1.08	0.12	ND0.03
Arsenic	mg/L	ND0.020	ND0.004	ND0.003
Cadmium	mg/L	0.068	ND0.004	ND0.003
Cesium	mg/L	ND0.24	ND0.05	ND0.04
Chromium	mg/L	ND0.020	ND0.004	0.006
Cobalt	mg/L	0.100	ND0.009	ND0.007
Copper	mg/L	0.11	ND0.009	0.013
Lead	mg/L	0.55	ND0.04	ND0.03
Lithium	mg/L	0.73	0.009	ND0.007
Molybdenum	mg/L	0.24	0.028	0.024
Nickel	mg/L	0.18	ND0.03	ND0.02
Selenium	mg/L	ND0.040	ND0.044	ND0.007
Silver	mg/L	ND0.020	ND0.004	ND0.003
Titanium	mg/L	0.060	ND0.009	ND0.007
Zinc	mg/L	ND0.040	ND0.009	0.051

mg/L = milligrams per liter or parts per million.

ND denotes that the compound is not detected at or above the indicated detection limit.

SEPARATION 5B
METAL ANALYSIS SUMMARY
FOR DOE-WIPP
PROJECT NO. 301001

		SAMPLE IDENTIFICATION		
			WIPP 19	
PARAMETER	UNITS	Anionic Fraction	Alkaline Alkali Fraction	Transition Metal Fraction
Antimony	mg/L	1.10	0.10	ND0.04
Arsenic	mg/L	ND0.020	ND0.004	ND0.004
Cadmium	mg/L	0.068	ND0.008	ND0.004
Cesium	mg/L	ND0.24	ND0.05	ND0.05
Chromium	mg/L	ND0.020	ND0.004	0.006
Cobalt	mg/L	0.096	ND0.008	ND0.008
Copper	mg/L	0.068	ND0.008	0.110
Lead	mg/L	0.53	ND0.04	ND0.04
Lithium	mg/L	0.68	0.015	ND0.008
Molybdenum	mg/L	0.24	0.024	0.029
Nickel	mg/L	0.16	ND0.02	ND0.03
Selenium	mg/L	ND0.040	ND0.039	ND0.008
Silver	mg/L	ND0.020	ND0.004	ND0.004
Titanium	mg/L	0.056	ND0.008	ND0.008
Zinc	mg/L	ND0.04	ND0.008	0.147

mg/L = milligrams per liter or parts per million.

ND denotes that the compound is not detected at or above the indicated detection limit.

SEPARATION 5C
SPIKE PERCENT RECOVERY SUMMARY
FOR DOE-WIPP
PROJECT NO. 301001
Based on 1st Run

SAMPLE IDENTIFICATION

PARAMETER	Anionic Fraction	WIPP-19 Alkaline Alkali Fraction	Transition Metal Fraction	
		Percent Recovery		
Antimony	66%	2.2%	16%	84.2
Arsenic	58%	5.2%	52%	115.2
Cadmium	0.2%	0%	100%	100.2
Cesium	185%	0%	5.0%	190
Chromium	0%	0%	129%	129
Cobalt	0%	0%	100%	100
Copper	31%	0%	106%	137
Lead	0%	0%	92%	92
Lithium	84%	1.9%	0%	85.9
Molybdenum	0%	0%	102%	102
Nickel	0%	0%	98%	98
Selenium	90%	8%	11%	109
Silver	134%	5.0%	3.8%	142.8
Titanium	0%	0%	94%	94
Zinc	0%	0%	96%	96

SEPARATION 6A
METAL ANALYSIS SUMMARY
FOR DOE-WIPP
PROJECT NO. 301001

PARAMETER	UNITS	SAMPLE IDENTIFICATION		
		Anionic Fraction	Method Blank Alkaline Alkali Fraction	Transition Metal Fraction
Antimony	mg/L	ND0.20	ND0.04	ND0.04
Arsenic	mg/L	ND0.020	ND0.004	ND0.004
Cadmium	mg/L	ND0.020	ND0.004	ND0.004
Cesium	mg/L	ND0.24	ND0.05	ND0.04
Chromium	mg/L	ND0.020	ND0.004	ND0.004
Cobalt	mg/L	ND0.040	ND0.008	ND0.007
Copper	mg/L	ND0.040	ND0.008	ND0.007
Lead	mg/L	ND0.020	ND0.040	ND0.040
Lithium	mg/L	ND0.040	ND0.008	ND0.007
Molybdenum	mg/L	ND0.040	ND0.008	ND0.007
Nickel	mg/L	ND0.12	ND0.02	ND0.02
Selenium	mg/L	ND0.040	ND0.008	ND0.007
Silver	mg/L	ND0.020	ND0.004	ND0.004
Titanium	mg/L	ND0.040	ND0.008	ND0.007
Zinc	mg/L	ND0.04	ND0.008	ND0.007

mg/L = milligrams per liter or parts per million.

ND denotes that the compound is not detected at or above the indicated detection limit.

SEPARATION 6B
METAL ANALYSIS SUMMARY
FOR DOE-WIPP
PROJECT NO. 301001

		SAMPLE IDENTIFICATION		
			H08B	
PARAMETER	UNITS	Anionic Fraction	Alkaline Alkali Fraction	Transition Metal Fraction
Antimony	mg/L	ND0.2	0.04	ND0.03
Arsenic	mg/L	ND0.020	ND0.018	ND0.003
Cadmium	mg/L	ND0.020	ND0.004	ND0.003
Cesium	mg/L	ND0.24	ND0.04	ND0.04
Chromium	mg/L	ND0.020	ND0.004	0.005
Cobalt	mg/L	ND0.04	ND0.007	ND0.007
Copper	mg/L	ND0.04	ND0.007	0.11
Lead	mg/L	ND0.20	ND0.04	ND0.03
Lithium	mg/L	0.12	0.011	ND0.007
Molybdenum	mg/L	ND0.04	0.01	0.008
Nickel	mg/L	ND0.12	ND0.02	0.03
Selenium	mg/L	ND0.04	ND0.007	ND0.007
Silver	mg/L	ND0.020	ND0.004	ND0.003
Titanium	mg/L	ND0.04	ND0.007	ND0.007
Zinc	mg/L	ND0.04	0.008	0.24

mg/L = milligrams per liter or parts per million.

ND denotes that the compound is not detected at or above the indicated detection limit.

SEPARATION 6C
SPIKE PERCENT RECOVERY SUMMARY
FOR DOE-WIPP
PROJECT NO. 301001

SAMPLE IDENTIFICATION

PARAMETER	Anionic Fraction	H08B Alkaline Alkali Fraction	Transition Metal Fraction	
		Percent Recovery		
Antimony	108%	3.8%	7.1%	118.9
Arsenic	69%	0%	6.8%	75.8
Cadmium	0%	0%	92%	92
Cesium	125%	0%	0%	125
Chromium	0%	0.8%	109%	109.8
Cobalt	0%	0%	95%	95
Copper	0%	0%	90%	90
Lead	0%	0%	79%	79
Lithium	100%	25%	0%	125
Molybdenum	0%	0.8%	95%	95.8
Nickel	0%	0%	85%	85
Selenium	91%	0%	10%	101
Silver	0.9%	6.2%	66%	73.1
Titanium	0%	0%	89%	89
Zinc	0%	0.3%	74%	74.3

SEPARATION 6D
SPIKE PERCENT RECOVERY SUMMARY
FOR DOE-WIPP
PROJECT NO. 301001

SAMPLE IDENTIFICATION

PARAMETER	Anionic Fraction	H08B Alkaline Alkali Fraction	Transition Metal Fraction	
		Percent Recovery		
Antimony	101%	3.8%	5.0%	109.8
Arsenic	98%	0%	35%	133
Cadmium	0%	0%	89%	89
Cesium	118%	0%	0%	118
Chromium	0%	8.8%	96%	104.8
Cobalt	0%	0%	91%	91
Copper	0%	0%	91%	91
Lead	0%	0%	80%	80
Lithium	102%	2.5%	0%	104.5
Molybdenum	0%	0.4%	96%	96.4
Nickel	0%	0%	86%	86
Selenium	84%	0%	10%	94
Silver	5%	7.5%	90%	102.5
Titanium	0%	0%	84%	84
Zinc	0%	1.5%	69%	70.5

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Separation of Eight Transition Elements from Alkali and Alkaline Earth Elements in Estuarine and Seawater with Chelating Resin and Their Determination by Graphite Furnace Atomic Absorption Spectrometry

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A method is described for determining Cd, Co, Cu, Fe, Mn, Ni, Pb, and Zn in seawater using Chelex 100 resin and graphite furnace atomic absorption spectrometry. The pH of the seawater is adjusted to 5.0 to 5.5 and then passed through a Chelex 100 resin column. Alkali and alkaline earth metals are eluted from the resin with ammonium acetate and then the trace elements are eluted with two 5-mL aliquots of 2.5 M HNO_3. The difficulties previously encountered with resin swelling and contracting have been overcome. By careful selection of the instrumental conditions, it is possible to determine subnanogram levels of these trace elements by graphite furnace atomic absorption spectrometry. The proposed method has been shown to separate quantitatively the elements desired from the alkali and alkaline earth metals and has been applied in the analysis of trace elements in estuarine water from the Chesapeake Bay and seawater from the Gulf of Alaska.

The literature of marine water analysis reflects the considerable difficulty in establishing an accurate and precise method of analysis for trace metals. A seawater matrix defies a simplified approach. For example, specific sampling techniques, container contamination, suspended particulate matter, and analytical techniques have to be considered. It is beyond the scope of this paper to discuss all of these parameters; however, the solving of the analytical problem is of little value unless a representative sample can be obtained, free of contamination and properly stored until analysis.

In recent years, methods have been developed to determine trace elements in seawater by X-ray fluorescence (*1*), neutron activation (*2*, *3*), spectrophotometry (*4*), anodic stripping voltammetry (*5*), and atomic absorption spectrometry (*6–8*). However, each of these analytical techniques requires a preliminary separation. Fabricand et al. (*9*) reported the direct determination of Cu, Fe, Mn, Ni, and Zn in seawater by atomic absorption spectrometry (AAS) using an air–acetylene flame, but other workers have reported difficulties using their technique because of light scattering and burner clogging.

Except for neutron activation analysis and anodic stripping voltammetry, no analytical techniques are currently available for the direct determination of trace elements in seawater at concentrations below 5 $\mu g\ L^{-1}$. Usually it is necessary to preconcentrate the trace elements from a large volume and separate the transition elements from the alkali and alkaline earth elements. In such sample preparations, the efficiency of concentration, completeness of separation, and total analytical blank become critical to the final instrumental method (*10*).

Preconcentration techniques which have been used are coprecipitation (*11*), chelation and extraction (*12*), and chelating ion-exchange resin (*10*, *13*). Most of these isolation methods require large volumes of chemicals which can lead to high blanks unless the reagents have been carefully purified.

Of the presently used preconcentration techniques, Chelex 100 chelating resin has been shown to be efficient and yields low analytical blanks (*14*). Applications of Chelex 100 resin for trace metal preconcentration from seawater have been reviewed by Riley and Skirrow (*10*). Chelex 100 is a strong chelator and removes metal ions from most known naturally occuring chelators in seawater (*14–16*). The resin will not, however, remove metals held in organic and inorganic colloids which can be present even after ultrafiltration. Precautions

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Table I. Instrumental Parameters

		P & E 603		HGA-2100			
element	wavelength, nm	SBW, nm	scale expansion	drying, T-sec[c]	charring T-sec	atomization T-sec	gas
Cd	228.8	0.7	1	100-30	200-20	2100-7	Ar[a]
Co	240.7	0.2	2	100-30	500-30	2700-7	Ar[a]
Cu	324.7	0.7	1	100-40	700-30	2500-6	Ar[a]
Fe	248.3	0.2	2	100-30	600-30	2700-7	Ar[a]
Mn	279.5	0.7	2	100-30	300-30	2700-7	Ar[a]
Ni	232.0	0.7	5	100-30	1000-30	2700-6	Ar[a]
Pb	283.3	0.7	3	100-40	400-30	2200-7	Ar[b]
Zn	213.9	0.7	0.5	100-30	500-20	2000-7	Ar[b]

[a] Interrupt mode. [b] Normal mode. [c] Note: T = temperature.

must be taken to destroy such colloids prior to collection of the ions by the resin. Florence and Batley have destroyed interfering organic colloids by the addition of 0.16 M nitric acid and heat and also by using ultraviolet irradiation of the sample prior to collection by the resin (*15, 16*). While excellent recovery and low analytical blanks are achieved, a relatively high concentration of Na, K, Ca, and Mg are retained with the trace metals. The concentration of these interfering alkali and alkaline earth salts in the final sample are in milligram quantities, as compared to the microgram and submicrogram quantities of concentrated trace metals. The alkali and alkaline earth ions occupy the resin sites not occupied by the transition metals and are co-eluted with the metals when using acids (*13*).

The complete separation of the alkali and alkaline earth metals from the trace metals in seawater has not been previously accomplished using Chelex 100, which has restricted its use. While the salts remaining after preconcentration do not interfere with instrumental techniques such as flame atomic absorption (*10*) or polarography (*15–17*), they do inhibit instrumental techniques which are more susceptible to matrix interelement effects such as flameless atomic absorption (*18*), neutron activation analysis (*19*), optical emission spectrometry using inductively coupled plasma or electrode plasma (dc arc) (*20*), and spark source mass spectrometry (21).

With the development of the graphite furnace for AAS, it is now possible to determine 10^{-9} to 10^{-12} g of many of the trace elements in seawater. However, the high salt content (35 g/kg) in marine water makes it difficult to effectively volatilize the matrix without loss of analyte. The major component in seawater is sodium chloride which has a relatively high volatilization temperature. Also, the trace metals in seawater are present as chlorides, which have a lower volatilization temperature. Therefore, it is difficult to volatilize the sodium chloride during the ashing step without losses of the analyte. Calcium and magnesium chloride are also present in seawater in large quantities and a temperature greater than 2000 °C is required to volatilize these elements. Thus, even if the sodium chloride is removed during the ashing step using matrix modification (*22*), residual calcium and magnesium chlorides remain to interfere with the analyte during atomization.

The research presented here describes a technique for the separation and preconcentration of Cd, Co, Cu, Fe, Mn, Ni, Pb, and Zn from Na, K, Ca, and Mg in seawater using a Chelex 100 resin column and the subsequent determination of these trace elements by graphite furnace atomic absorption spectrometry (GFAAS).

EXPERIMENTAL

Reagents. High purity water, nitric and glacial acetic acids were prepared using subboiling distillation at the National Bureau of Standards (NBS) (*23*). All reagents used in the separation process were prepared and stored in clean FEP Teflon bottles unless otherwise stated.

Ammonium hydroxide was prepared by bubbling filtered ammonia gas through high purity water until room temperature saturation was achieved.

A 1.0 M ammonium acetate solution was prepared by mixing 60 g of purified glacial acetic acid and 67 g of saturated NH_4OH and diluting to 1 L in a polypropylene volumetric flask. The acidity was adjusted to pH 5.0 by dropwise addition of HNO_3 and/or NH_4OH. All reagent and sample preparations were done in a class 100 clean air laboratory (*24*).

Chelex 100 chelating resin, 200–400 mesh size, was purchased from Bio-Rad Laboratories.

The radioactive tracers ^{59}Fe, ^{54}Mn, and ^{65}Zn in 0.5 N HCl were purified reagents obtained from the Chemical and Radioisotope Division of ICN. The ^{60}Co, and the short lived isotopes, ^{64}Cu and ^{65}Ni, were made by the Neutron Activation Analysis Group at NBS from "five-9's" pure metals and dissolved in nitric acid. The ^{109}Cd and ^{210}Pb were obtained by the Activation Analysis Group from other sources and analyzed using pulse height analysis for radiochemical purity before use.

All standard stock solutions for AAS were prepared from high purity metals or salts in subboiling distilled NBS acids as described by Dean and Rains (*25*). Working solutions were prepared as needed.

Counting Apparatus. The γ-ray counting of the elemental tracers was done utilizing a 7.6 cm × 7.6 cm NaI(Tl) crystal and associated electronics.

Seawater. The seawater was obtained during high tide at the Virginia Institute of Marine Science (VIMS), Gloucester Point, Va., on the Chesapeake Bay. The sample was collected with a submersible pump and plastic tubing permanently submerged approximately 100 m offshore from the Institute. The seawater was pumped directly into a conventional polyethylene drum which had been cleaned first with hydrochloric and then with nitric acid and purified water prior to use (*26*). After filtration through a 0.45-μm millipore filter using an all polypropylene filter apparatus, the seawater was collected in a polyethylene carboy and acidified (to 0.6 M in HNO_3) with high purity HNO_3 to prevent bacterial growth, to stabilize the trace element concentrations (*27, 28*), and to strip any trace elements bound by colloidal particles (*15, 16*).

AAS Apparatus. The instrumental system used in this study consists of a Perkin-Elmer Model 603 atomic absorption spectrometer with HGA-2100 graphite furnace (GFAAS). The 25-μL aliquot of sample was introduced into the furnace with the AS-1 autosampler. The instrumental parameters are given in Table I.

Column Separation Apparatus. The Isolab QS-Q polypropylene column with porous polyethylene resin support was used for 100-mL and 1-L sample volumes. Although the same column was used for both sample volumes, the amount of resin and reservoir systems were entirely different. For the 100-mL sample, the QS-S 25-mL conventional polyethylene extension funnel was attached to the column to act as a reservoir for the sample.

For a 1-L sample the reservoir was a 1-L Teflon (FEP) bottle inverted and modified with a machined Teflon (TFE) closure insert containing a microbore venting tube and outlet tube. The outlet was connected to a valve (TFE) by 1.59-mm ($^1/_{16}$ in.) i.d. Teflon (FEP) tubing connector and linked to the reservoir with a specially machined mount (TFE) which sealed the column into the closed system. The mount contained a vent (sealed with nylon

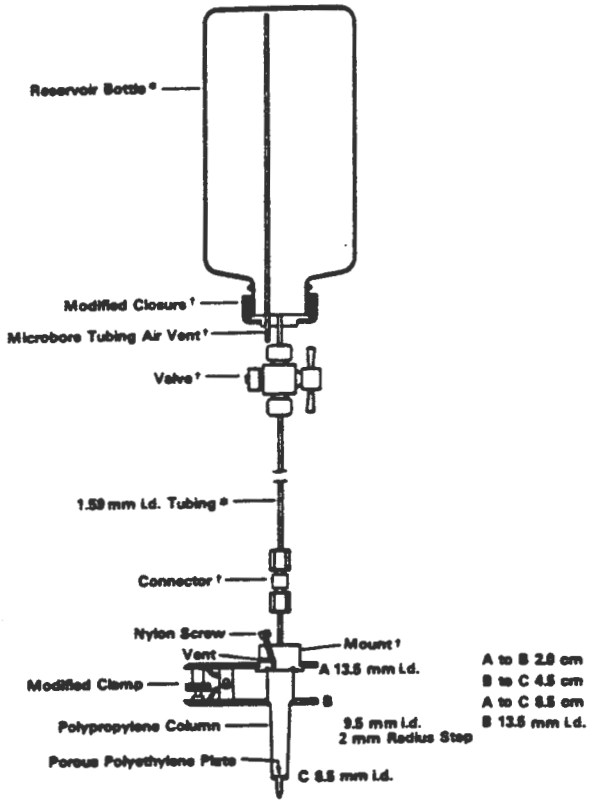

Figure 1. Apparatus used for holding and delivering large volumes of seawater at a controlled rate to Chelex 100 resin. The apparatus (excluding the column and clamp) was fabricated from Teflon FEP (*) or Teflon TFE (†) which has desirable nonwetting and noncontaminating properties

screw, allowing the removal of air from the system) as well as an inlet and was tightly clamped to the column using the lip on the column at point B (See Figure 1). The clamp (a modified glass joint clamp) and mount provided a seal which allowed the reservoir to be raised above the column to obtain enough pressure to control the flow rate using the pressure of the raised reservoir and the valve (Figure 1).

Column Preparation and Purification Procedure. The column preparation procedure consisted of precleaning the columns in 1:4 HCl and then in 1:4 HNO_3 for one week in each bath and then rinsing the columns with water after each acid wash. The column was loaded with a slurry of Chelex 100 resin, 200–400 mesh size (sodium form). For 100-mL seawater samples, 3.2 to 3.4 mL of resin was used which covered the lower barrel of the column from point B to point C in Figure 1. For 1-L samples, 5.8 to 5.9 mL of resin was used which filled the column from point A to point C in Figure 1. The resin was washed with 15 to 20 mL of 2.5 M HNO_3 (for the small and large resin volumes, respectively), in 5-mL portions to elute any trace metal contamination present in the resin. Then two 5-mL volumes of water were used to rinse the resin of excess acid. To transform the resin to the NH_4^+ form, 10 to 15 mL of 2.0 M NH_4OH was added in 5-mL volumes. After checking the pH of the effluent to ensure basicity, the column was then rinsed with 10 to 15 mL of water to remove the excess NH_4OH.

Column Preconcentration and Separation Procedure. For the 100-mL seawater sample, 101.8 ± 0.2 g was weighed directly into a clean 250-mL Teflon (FEP) beaker and the pH adjusted to 5.0 to 5.5 with the dropwise addition of NH_4OH. If a spike (natural or radiochemical) was to be added, it was added prior to the adjustment of the pH to equilibrate the ions in the acid media; the solution was allowed to equilibrate for a minimum of 1 h after the addition of any spike. Then 0.5 mL of 8 M ammonium acetate was added to aid in buffering the system. Any necessary agitation of the solution was done with a Teflon stirring rod. A small amount of the seawater was added to the reservoir and column to allow the resin to undergo its natural shrinkage as it changes ionic form and pH. This shrinkage results in a resin volume of approximately one half of its original volume. After the completion of this transformation was observed (2 to 3 min), the remaining seawater was added to the reservoir as needed to keep it filled; the flow rate was approximately 0.8 mL/min. To selectively elute Na, K, Ca, and Mg, and replace them with NH_4^+, 40 mL of 1.0 M ammonium acetate was added to the column in 10-mL aliquots. At the completion of the ammonium acetate addition, 10 mL of water was added to remove residual ammonium acetate. The transition metals were then eluted using 7 mL of 2.5 M HNO_3 and collected into clean preweighed 10-mL conventional polyethylene bottles. The bottles were capped with clean polyethylene lined caps and reweighed to determine the weight of the effluent accurately.

The procedure for the 1-L samples was the same as the 100-mL samples with minor alterations due to the apparatus (see above). The sample (1018.0 ± 0.5 g) was weighed into a 1-L Teflon (FEP) bottle and the pH adjusted in the same manner as previously described. The bottle became the reservoir and was fitted with a modified closure (see Figure 1). The bottle was inverted and the air purged from the system by means of the vent on the column mount. The flow rate was adjusted using the valve and the height of the reservoir. The flow rate was kept to less than 0.2 mL/min until the shrinkage of the resin was complete. Then the flow rate was increased to 1.0 mL/min and left overnight to flow through the column. After passing the sample through the column, the valve and tubing were removed at the connector above the column mount and replaced with a smaller reservoir containing 70 mL of 1.0 M ammonium acetate. The flow rate was adjusted to 0.5 mL/min until the reagent was exhausted. The resin was then washed with 10 mL of water. The transition metals were eluted with two 5-mL portions of 2.5 M HNO_3 into preweighed polyethylene bottles as previously described.

RESULTS AND DISCUSSION

Effect of Direct Injection of Seawater into Electrothermal Device. From the detection limits published in the literature for GFAAS, it could be assumed that several of the heavy metals in seawater could be determined by direct injection of the sample into the electrothermal device. However, in reality this has not been proved to be true unless the samples are taken from heavily polluted areas. A sample from the Chesapeake Bay was analyzed for Cd, Co, Cu, Mn, Ni, Pb, and Zn by direct injection into the graphite furnace by AAS. Only lead and nickel produced absorption signals of any analytical value. The other elements could not be detected. This is due in part to the highly depressing effect of the matrix on the analyte signal which can vary by a factor of 2 to 10 depending upon the analyte. Also, when the sample is evaporated, a small amount of solution may be trapped in the salt crystal lattice which could result in losses due to splattering during the atomization cycle.

The absorbances obtained for lead and nickel were very erratic due to the smoke produced during atomization. Ediger et al. (22) used matrix modification with ammonium nitrate to assist in the removal of sodium chloride; however, the method of standard addition was necessary to correct for interferences. In applying their method of matrix modification to the Chesapeake Bay sample, Cd, Co, Cu, Fe, Mn, and Zn were still not detected.

Separation of Calcium and Magnesium from Analytes on Chelex 100. To effect a separation of calcium and magnesium from the trace elements on the Chelex 100 resin column, it is necessary to choose a separating agent that can be purified to produce a low analytical blank. Also, the separating agent should not produce any adverse effects on the analytes in the GFAAS analysis. The ammonium ion reacts similarly to the alkali elements, and ammonium nitrate or acetate can be produced from high purity reagents.

While both ammonium nitrate and ammonium acetate remove sodium and potassium at identical rates, ammonium nitrate produced tailing of the calcium and magnesium which

Table II. Concentration of Alkali and Alkaline Earth Metals in Seawater before and after Separation on Chelex 100 Resin Column

sample	Na	K	Ca	Mg
	μg/mL			
original	6200	267	283	742
	after separation[a]			
wash[b]				
H_2O	320	10	350	63.
NH_4NO_3	0.3	0.7	83	1.3
NH_4COOCH_3	1.0	2.0	0.25	<0.05

[a] 100 mL of seawater preconcentrate into 7 mL of 2.5 M HNO_3. [b] Column washed with 50 mL of a given eluent.

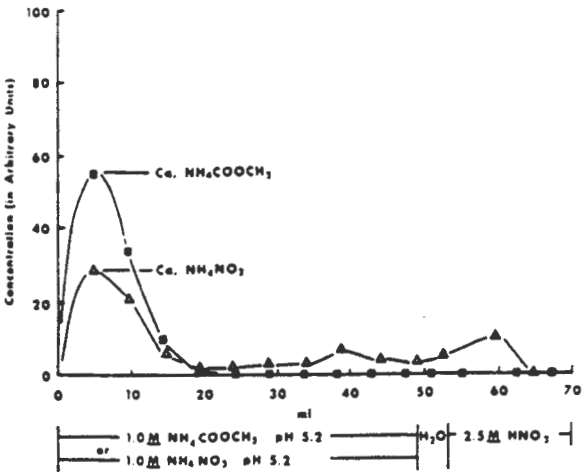

Figure 2. Comparison of ammonium acetate vs. ammonium nitrate for the separation of calcium from a Chelex 100 resin column which has previously chelated 100 mL of seawater

left appreciable quantities of these alkaline earths in the final HNO_3 effluent (Figure 2) (Table II). However, ammonium acetate eluted calcium and magnesium from the column with tailing of only 1 to 2 bed volumes (Figure 2). Manganese, which has the smallest selectivity coefficient of the transition metals of interest, was not eluted at pH 5.0 by ammonium acetate or ammonium nitrate. A relatively high concentration of ammonium acetate in the 2.5 M HNO_3 effluent produced a suppression of several of the analytes by GFAAS; however, the problem was alleviated by washing with 5 to 10 mL of water prior to the stripping of the column with the 2.5 M HNO_3 (Figure 2).

There is a contribution to the removal of calcium and magnesium from the resin by the acetate anion which does not appear with the nitrate ion. Sodium and potassium are replaced by the ammonium ion, but this cation is only partially responsible for the complete separation of chelated calcium and magnesium using ammonium acetate.

Effect of pH on the Separation. A study of the pH of the separating agent (1 M ammonium acetate) showed that a minimum pH of 5.0 was required to retain the transition metal ions on the Chelex 100 resin while removing the alkali and alkaline earth ions. Below pH 5.0, it was found that the transition metals were eluted by the 1 M ammonium acetate. From pH 5.0 to 5.5, the transition metals Cd, Co, Cn, Fe, Mn, Ni, Pb, and Zn were retained by the resin while the Na, K, Ca, and Mg were quantitately eluted (see Figure 3).

The chelating efficiency of Chelex 100 increases for the transition metals from pH 4 to 5 and reaches an optimum at

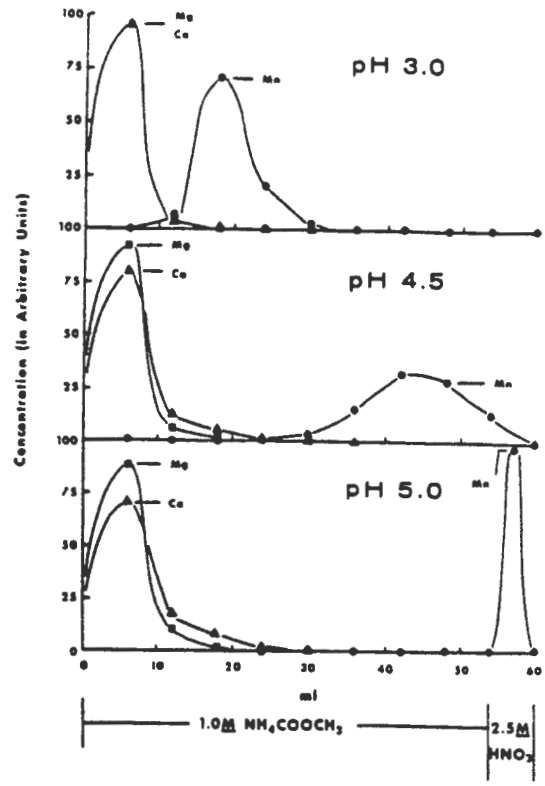

Figure 3. Comparison of ammonium acetate elution of Ca, Mg, and Mn in the pH range of 3.0 to 5.0. The graph depicts percent of the total column content of an element eluted with volume

approximately pH 5.0. For most of the transition elements, this optimum efficiency remains for an increase of several pH units. However, the chelating efficiency of Chelex 100 for Co and Cu has been shown to decrease above pH 6.0 (*29–32*).

The chelation efficiency of Chelex 100 for Ca and Mg has been reported to be similar to those of the transition metals increasing with pH to a maximum at pH 5 in low ionic strength solutions (*30, 33*). However, in high ionic strength solutions of sodium chloride, there exists a minimum in the chelation of Chelex 100 for both Ca and Mg from pH 5.0 to 5.8. Above pH 5.8 the chelating efficiency for Ca and Mg increases sharply (*33*).

From our experimental results and the literature, a working range of pH 5.0 to 5.5 was established for both the preconcentration of the transition elements from the seawater and the elution of the alkali and alkaline earth elements from the resin using the ammonium acetate.

Separation Parameters for Both 100-mL and 1-L Seawater Samples. The separation parameters, as described in the Procedure section, are represented graphically for a 100-mL sea water sample in Figure 4, and for a 1-L sample in Figure 5. The difference between the two systems is approximately double the amount of resin for the 1-L sample. The larger amount of resin was found to be necessary for quantitative retention of this larger volume, but is still rather small considering a 10-fold increase in the total ionic content of the larger sample. An increased volume of ammonium acetate was required for the removal of the greater quantity of salts occupying more residual sites. Also, a larger volume of water is required to wash the residual ammonium acetate from the column prior to transition metal elution with nitric acid. The elimination of ammonium acetate was found to be necessary to prevent both buffering of the acid wash and a suppression of the GFAAS signal caused by the acetate in the subsequent analysis. The acid fraction did not undergo tailing

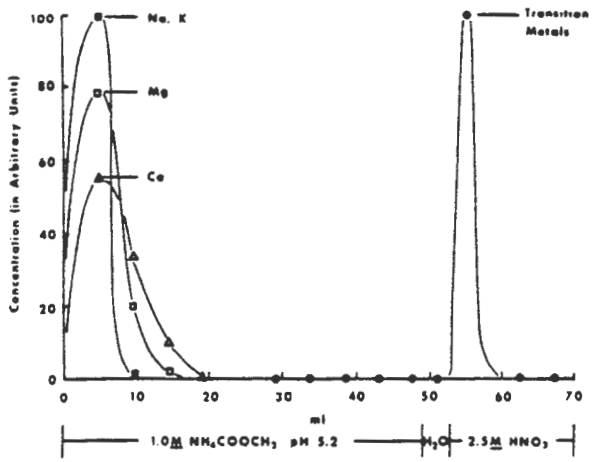

Figure 4. Represents the separation obtained using 1.0 M ammonium acetate at pH 5.0 to 5.5 for the transition metals from Na, K, Ca, and Mg chelated in a column of Chelex 100 from a 100-mL seawater sample

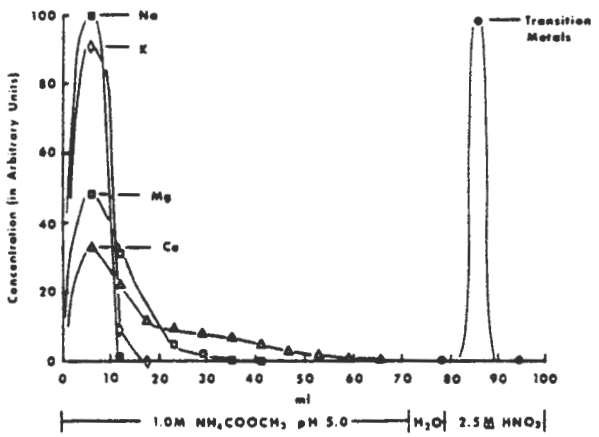

Figure 5. Represents the separation obtained using 1.0 M ammonium acetate at pH 5.0 to 5.5 for the transition metals from Na, K, Ca, and Mg chelated on a column of Chelex 100 from a 1-L seawater sample

from the transition metals as seen by atomic absorption or by radio tracer studies. The Chelex 100 resin in the presence of 2.5 M HNO_3 does not chelate the transition metals and they are eluted simultaneously into a single small volume of acid.

Chelex 100 resin is a dynamic resin, and in the ammonium form at a pH of 7 to 14, the resin shrinks to approximately $^1/_2$ of its original volume when subjected to the seawater sample at pH 5.0 to 5.5. The particle size and subsequent flow rate were also reduced and the use of the column apparatus for 1-L samples became necessary to increase the pressure of the sample to obtain a realistic flow rate for both the sample and ammonium acetate. The flow rate of 1 mL/min was attained by adjusting the Teflon valve and reservoir height simultaneously to control the pressure. The residual volume which would retain any sample in the entire apparatus was estimated at less than 0.10 mL. The use of all Teflon components in contact with the sample affords the nonwetting characteristics and noncontaminating nature of this fluorocarbon which can be scrupulously cleaned in acid (*26*). Another important benefit of this apparatus is that during the preconcentration onto the Chelex 100, the sample and column are protected from contamination from the environment; the only entrance into the system is a microbore tube which can be fitted with a filter to exclude particulate contamination. These characteristics make the column apparatus very attractive for field or shipboard use to prevent contamination.

Radiochemical Study. Radiochemical tracers were used to gain specific information about the behavior of each ion during preconcentration and separation using the Chelex 100. The tracers were added to the seawater as one radioisotope per sample prior to the pH adjustment. The column procedure was identical in all respects to the preparation of the analytical samples previously described. However, all effluent from the column was collected, including the seawater. The seawater, ammonium acetate buffer, acid effluent, and column resin were collected in polyethylene bottles. The 1-L samples were collected in 250-mL bottles and the 100-mL samples were collected in 125-mL bottles. Distilled water was added to the bottles prior to measurement to make all liquid levels the same to give constant counting geometry.

The samples were counted for 10-min periods for γ radiation only (Table III). The counting statistics for each element were optimized by energy discrimination. The concentration of tracers used gave from 10^6–10^7 counts in a 10-min period while background was kept to 10^2–10^3 counts during the same period. The statistical error was obtained using the following equation (*34*, *35*):

$$Q_c = 100 \times \frac{k}{N_s - N_b} \sqrt{N_s + N_b}$$

where Q_c = percent experimental error corrected for background, k = number of standard deviations, N = cpm = counts per minute or period unit time, s = sample including background, and b = background.

This technique enabled the use of ^{64}Cu and ^{65}Ni short-lived isotopes as well as ^{59}Fe and ^{54}Mn intermediately-lived isotopes since counting of all fractions could be completed in 40 min. The error caused by the decay of these isotopes over the course of the experiment was eliminated; nickel which has a half life of only 2.6 h, decayed beyond usefulness over the 1-day period of the 1-L experiment.

The counting technique was checked for total recovery using ^{65}Zn. The tracer was added to 250 mL of the seawater sample and counted prior to manipulation. This volume was then added to 750 mL of seawater and treated as a 1-L ^{65}Zn spiked seawater sample. The final acid volume was then counted at the end of the separation as previously described. The total quantity obtained agreed for both the acid fraction and total recovery, 99.99 ± 0.12 and 100.1 ± 0.12, respectively. Thus, the counting of all effluent fractions and the column itself allows the specific identification of all losses, as well as the total recovery of the element of interest in the acid fraction.

The ammonium acetate separation did not remove a detectable amount of any trace metal with the possible exception of Fe which could have been in the residual volume from the seawater effluent. Thus, the separation does not affect the maximum efficiency of the concentration alone, and the Na, K, Ca, and Mg can be eliminated with the same efficiency as the traditional concentration alone.

The majority of any minute losses Pb 1.4%, Co 0.3%, and Fe 6.3% is due to incomplete removal of the transition metal ions from the seawater. The chelation efficiency of both ^{60}Co and ^{59}Fe was studied by Callahan et al. (*32*). They found that the two oxidation states of cobalt and iron reacted similarly and that 100% retention of cobalt and iron could only be achieved by reduction of Co(III) to Co(II) and Fe(III) to Fe(II) using sodium dithionite ($Na_2S_2O_4$) at pH 5.0 to 5.3. In natural seawater the approximate concentration of Co(II) was found to be 96% of the total cobalt. They obtained 96 to 99% retention for cobalt and 95% for iron without any attempt to reduce the trivalent ions, which is in agreement with our findings.

The radiochemical tracer experiments for Cd, Cu, Fe, Ni, and Zn were repeated several times and all values fell within the calculated error limits with the exception of those for iron.

Table III. Recovery and Characterization of Selected Transition Elements in Seawater Using Chelex 100

element	sample, 100 mL[a]				sample, 1 L[a]			
		loss, %		recovery, %		loss, %		recovery, %
	seawater effluent	1.0 M NH_4COOCH_3 effluent	column and resin	2.5 M HNO_3 effluent	seawater effluent	1.0 M NH_4COOCH_3 effluent	column and resin	2.5 M HNO_3 effluent
^{109}Cd	<0.06	<0.06	<0.06	99.99 ± 0.071	<0.02	<0.06	<0.012	99.99 ± 0.063
^{65}Zn	0.039 ± 0.007	<0.02	<0.02	99.96 ± 0.097	<0.01	<0.03	<0.04	99.99 ± 0.12
^{54}Mn	<0.048	<0.02	<0.006	99.99 ± 0.11	...	...	...	...
^{63}Ni	0.09 ± 0.005	<0.004	<0.004	99.91 ± 0.083	...	...	...	...
^{64}Cu	0.03 ± 0.001	<0.002	<0.02	99.97 ± 0.030	0.17 ± 0.006	<0.007	0.01 ± 0.003	99.82 ± 0.069
^{210}Pb	1.4 ± 0.10	<0.01	0.2 ± 0.13	98.4 ± 0.48	2.15 ± 0.14	<0.06	0.12 ± 0.08	97.7 ± 0.39
^{60}Co	0.3 ± 0.04	<0.03	0.17 ± 0.03	99.5 ± 0.3	1.7 ± 0.05	0.03 ± 0.01	0.9 ± 0.02	97.3 ± 0.2
^{59}Fe[b]	6.3 ± 1.9	0.41 ± 0.01	0.21 ± 0.01	93.1 ± 2.2	6.2 ± 1.9	0.90 ± 0.3	0.31 ± 0.01	92.6 ± 2.2

[a] The uncertenty is based on 1 σ values calculated as described in the text. [b] The uncertainty was increased to show additional uncertainty found in replicate experiments.

Table IV. Trace Elements in Chesapeake Bay

element	concentration, ng/mL[a]	
	blank	seawater
Cd	<0.01	0.05 ± 0.01
Co	<0.1	<0.1
Cu	<0.1	2.0 ± 0.1
Fe	0.2 ± 0.1	2.1 ± 0.5
Mn	<0.1	2.0 ± 0.1
Ni	<0.1	1.2 ± 0.1
Pb	<0.1	0.3 ± 0.2
Zn	<0.05	4.8 ± 0.3

[a] Replicate analysis of four samples.

Iron exhibited a 2% variation around the average value (Table III). This could be due to altered ratios of Fe(II) and Fe(III) between samples tested.

GFAAS Determination of Trace Elements in Seawater from the Chesapeake Bay. The reliability of the proposed separation and preconcentration method was tested by making replicate analyses on a sample of seawater. These samples were processed as described in the Separation and Preconcentration Procedure. Then the 8–10 mL of 2.5 N HNO_3 effluent collected was analyzed for the trace elements by GFAAS. The instrumental conditions for drying, charring, and atomizing (Table I) for each analyte were optimized to obtain the maximum sensitivity and precision with the minimum of interferences. The samples (25 μL) were introduced into the graphite furnace with the AS-1 which improved the precision of the analysis with the minimum amount of contamination. It was necessary to preclean each sample cup from the AS-1 with 20% HNO_3 to remove trace contaminants. Pyrolytic and nonpyrolytic coated graphite tubes were used in this study. The life of the pyrolytic coated tube was extended by a factor of three over the nonpyrolytic coated tube in the presence of 2.5 M HNO_3. Background correction with the deuterium arc lamp was used for each analyte.

For each analysis the hollow cathode lamp was turned on and allowed to stabilize (15 to 60 min). Working standard solutions of each analyte were prepared in 2.5 M HNO_3, and then a three to five point calibration curve was established using the optimum instrumental conditions. After the calibration curve was established, the unknowns were determined using a sample bracketing technique. As a check for chemical interferences, each sample was tested by the single standard addition method (*36*) and no chemical interferences were encountered. The results are given in Table IV. Cobalt was not detected using a 100-mL sample. To obtain an analytical value for cobalt in the Chesapeake Bay Water, a 1-L sample would be required to be separated and preconcentrated. Some difficulty was encounted in the GFAAS determination of iron. Iron is known to form carbides in the graphite furnace which produce erratic results. Also, a high reagent blank was obtained (see Table IV) whereas the reagent blanks for the other elements were below our detection limits. The lead values are close to the detection limit using a 100-mL sample. With a 0.5- to 1-L sample, the precision of the lead analysis could be improved.

Recovery of Trace Elements Added to Chesapeake Bay Seawater. Since there are no samples of seawater with accurate analytical values for the trace elements under study, the accuracy of the GFAAS technique was checked by adding 0.5 to 2.0 ng/mL of the trace elements to six samples of seawater and processed as previously described. Recoveries of 90 to 117% were obtained (Table V). The high recovery value for zinc was due to the low concentration added to the samples. Since zinc is so sensitive by GFAAS, a 1- to 10-fold dilution of the 2.5 M HNO_3 effluent had to be made. Since

Table V. Recovery of Trace Elements Added to Samples of Seawater by GFAAS

element	concentration, ng/mL[a] present	added	found	av. recovery, %
Cd	0.05	0.5	0.54 ± 0.02	98
Co	<0.1	1.0	1.07 ± 0.02	107
Cu	2.0	1.0	2.9 ± 0.07	97
Fe	2.1	2.0	3.7 ± 0.4	90
Mn	2.4	2.0	4.2 ± 0.04	95
Ni	1.2	2.0	3.2 ± 0.1	100
Pb	0.3	1.0	1.4 ± 0.07	108
Zn	4.8	0.5	6.2 ± 0.09	117

[a] Replicate analysis of six samples.

a dilution was required for GFAAS, the original spikes added to the seawater were too low to obtain accurate recoveries. The recoveries of the other trace elements are consistent with the known reproducibility of the GFAAS at these concentration levels.

Application of the Technique to Alaskan Seawater Samples. In addition to the one homogeneous Chesapeake Bay water sample, other seawater samples were also analyzed for Cd, Mn, Ni, and Pb. These samples were obtained from the Gulf of Alaska and ranged in depth from surface to 1500 m. These samples were treated in the same manner and no alteration in the separation technique was necessary. The trace metal concentrations from Alaskan seawater were found to be generally lower in concentration over those of the Chesapeake Bay. The values for Pb and Mn were found to be consistently 1 to 2 orders of magnitude below those reported here for these same elemental concentrations in the Chesapeake Bay.

CONCLUSION

The application of Chelex 100 resin and GFAAS used in this investigation has been shown to provide a new way of determining Cd, Co, Cu, Fe, Mn, Ni, Pb, and Zn in seawater. Chelex 100 resin is known to be an efficient means of separating many of the trace elements from the alkali metals; however, by using an ammonium acetate wash, calcium and magnesium are also removed. Calcium and magnesium severely suppress many analytes in GFAAS and, with their removal, the detection limits of many trace elements by GFAAS can be extended to subnanogram per milliliter. In our radiotracer study, the recovery of Cd, Cu, Mn, Ni, and Zn was greater than 99.9% while the recovery of Co, Pb, and Fe was 99.5, 98.4, and 93.1%, respectively. The precision of the technique was limited by the GFAAS measurements which varied with the element and concentration present. Not only has the proposed technique been applied to seawater from the Chesapeake Bay but the method was applied to the determination of Cd, Mn, Ni, and Pb at the ng/mL level in seawater from the Gulf of Alaska.

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APPENDIX B

WATER QUALITY SAMPLING PROGRAM DATA OUTLIERS

Appendix B contains a tabulation of the data that were determined to be outliers to the WQSP data set. The procedure used to evaluate the data and determine outliers is presented in Section 4.3. The outliers listed in Appendix B were excluded from the data set used to establish Waste Isolation Pilot Plant WQSP background groundwater chemistry (Chapter 5.0). Likewise, the outliers contained in Appendix B were not used in the comparison to standards presented in Chapter 6.0.

Table B-1
Water Quality Sampling Program
Data Outliers

Well	Parameter	Sample Date	Outlier[a] (mg/ℓ)	Remarks
DOE-1	Boron	04/25/85	7.2	Sampling/analytical error[b]
DOE-1	Cesium	04/25/85	8.6	Dilution/decimal point error[c]
DOE-1	Chromium	04/25/85	<0.001	Sampling/analytical error
DOE-1	Molybdenum	07/03/86	0.27	Sampling/analytical error
DOE-1	Nickel	04/25/85	1.9	Dilution/decimal point error
DOE-1	Nitrate	07/28/87	3.4	Sampling/analytical error
DOE-1	Phenolics	04/25/85	<0.002	Sampling/analytical error
DOE-2	Iron	08/27/86	1.4	Sampling/analytical error
DOE-2	Molybdenum	05/19/88	10.0	Dilution/decimal point error
Engle Well	Cobalt	03/04/85	<0.001	Sampling/analytical error
H-02a	Fluoride	04/21/86	14	Dilution/decimal point error
H-03b1	Bromide	07/01/85	23	Sampling/analytical error
H-03b1	Lithium	09/02/87	3.6	Dilution/decimal point error
H-03b1	Sodium	03/16/89	14,500	Dilution/decimal point error
H-03b3	Barium	08/15/90	<2	High detection limit[d]
H-03b3	Cesium	02/04/85	1.6	Dilution/decimal point error
H-03b3	TOX[e]	08/24/87	1.6	Sampling/analytical error
H-04b	Barium	09/11/90	<2	High detection limit
H-04b	Calcium	11/13/86	1,100	Sampling/analytical error
H-04b	Cesium	04/06/89	<10	High detection limit
H-04b	Selenium	09/25/87	<0.5	High detection limit
H-04b	Thallium	04/06/89	<4	High detection limit
H-04c	Calcium	11/04/86	1,100	Sampling/analytical error
H-04c	Cesium	04/21/89	<10	High detection limit
H-04c	pH	10/05/87	6.44 (s.u.)[f]	Sampling/analytical error

See footnotes at end of table.

Table B-1 *(Continued)*

Water Quality Sampling Program
Data Outliers

Well	Parameter	Sample Date	Outlier[a] (mg/ℓ)	Remarks
H-04c	Selenium	07/19/88	<0.5	High detection limit
H-04c	Sodium	10/02/90	3,600	Sampling/analytical error
H-05b	Aluminum	05/21/86	<10	High detection limit
H-05b	Arsenic	08/27/85	6.7	Dilution/decimal point error
H-05b	Barium	08/23/89	<2	High detection limit
H-05b	Barium	05/02/90	<2	High detection limit
H-05b	Beryllium	05/21/86	<0.5	High detection limit
H-05b	Chromium	05/21/86	<3.0	High detection limit
H-05b	Lead	05/21/86	<5	High detection limit
H-05b	Nitrate	08/27/85	0.4	Sampling/analytical error
H-05b	pH	05/02/90	8.33 (s.u.)[f]	Sampling/analytical error
H-05b	Phenolics	05/02/90	0.160	Sampling/analytical error
H-05b	Thallium	05/02/90	<10	High detection limit
H-05b	TOC[g]	05/02/90	9	Sampling/analytical error
H-05c	Barium	09/14/89	<2	High detection limit
H-05c	Barium	05/16/90	<2	High detection limit
H-05c	Chloride	10/24/86	1,600	Sampling/analytical error
H-05c	Selenium	03/03/88	<0.5	High detection limit
H-06b	Arsenic	09/15/85	78	Dilution/decimal point error
H-06b	Barium	07/24/89	<2	High detection limit
H-06b	Barium	02/12/90	<2	High detection limit
H-06b	Cesium	09/15/85	<1	High detection limit
H-06b	Phenolics	02/12/90	0.55	Sampling/analytical error
H-06c	Barium	08/04/89	<2	High detection limit

See footnotes at end of table.

Table B-1 *(Continued)*

Water Quality Sampling Program
Data Outliers

Well	Parameter	Sample Date	Outlier[a] (mg/ℓ)	Remarks
H-06c	Barium	03/15/90	<2	High detection limit
H-06c	Nitrate	08/04/89	7.3	Sampling/analytical error
H-06c	Sodium	10/01/86	1,050	Sampling/analytical error
H-07b1	Arsenic	02/25/87	<0.05	High detection limit
H-07b1	Barium	11/09/90	<2	High detection limit
H-07b1	Chloride	03/27/86	700	Sampling/analytical error
H-07b1	Iron	11/09/90	<1	High detection limit
H-07b1	Molybdenum	04/25/88	<1	High detection limit
H-07b1	Potassium	11/09/90	<50	High detection limit
H-07b1	Selenium	05/19/89	<0.5	High detection limit
H-07b1	TOC	11/09/90	8	Sampling/analytical error
H-08b	Cesium	01/22/86	<1	High detection limit
H-08b	Fluoride	06/08/88	0.2	Dilution/decimal point error
H-08b	Phenolics	06/08/88	0.165	Sampling/analytical error
H-08b	TOC	01/22/86	14	Sampling/analytical error
H-09b	Boron	11/14/85	<0.1	Sampling/analytical error
H-09b	Thallium	01/19/90	<10	High detection limit
H-11b3	Barium	10/25/89	<2	High detection limit
H-11b3	Barium	10/17/90	<2	High detection limit
H-11b3	Boron	06/04/85	13	Sampling/analytical error
H-11b3	Chromium	06/04/85	<0.001	Sampling/analytical error
H-11b3	Lithium	09/15/87	9.5	Dilution/decimal point error
H-11b3	Nickel	06/04/85	1.1	Dilution/decimal point error
H-11b3	Selenium	09/15/87	<5	High detection limit

See footnotes at end of table.

Table B-1 *(Continued)*

Water Quality Sampling Program
Data Outliers

Well	Parameter	Sample Date	Outlier[a] (mg/ℓ)	Remarks
H-11b3	Silica	06/04/86	150	Dilution/decimal point error
H-11b3	TOX	09/15/87	13	Sampling/analytical error
H-12	Arsenic	08/09/85	18	Dilution/decimal point error
H-12	Barium	08/09/85	1.2	Dilution/decimal point error
H-12	Cobalt	08/09/85	2.4	Dilution/decimal point error
H-12	Molybdenum	08/09/85	15	Dilution/decimal point error
H-12	Phenolics	12/14/88	<0.56	Sampling/analytical error
H-12	Zinc	08/09/85	2.2	Dilution/decimal point error
H-15	Iron	05/11/87	<1.0	Sampling/analytical error
H-15	Mercury	11/07/88	<0.4	High detection limit
H-18	Barium	04/10/90	<2	High detection limit
P-14	Cesium	06/18/87	<1	High detection limit
P-17	Nickel	03/17/86	1.1	Dilution/decimal point error
P-17	pH	10/21/87	6.28 (s.u.)	Sampling/analytical error
P-17	Selenium	03/17/86	<1	High detection limit
P-17	Silica	03/17/86	<0.2	Sampling/analytical error
Ranch Well	Calcium	06/20/90	550	Sampling/analytical error
Ranch Well	Lithium	07/27/89	12	Sampling/analytical error
Ranch Well	Nitrate	07/20/90	71	Sampling/analytical error
Twin Wells-Pasture Well	Sulfate	01/30/86	270	Sampling/analytical error
WIPP-19	Barium	11/03/89	<20	High detection limit
WIPP-19	Barium	06/13/90	<2	High detection limit
WIPP-19	Cobalt	11/03/89	<5	High detection limit
WIPP-19	Iodide	11/03/89	18	Dilution/decimal point error

See footnotes at end of table.

Table B-1 *(Continued)*

Water Quality Sampling Program
Data Outliers

Well	Parameter	Sample Date	Outlier[a] (mg/ℓ)	Remarks
WIPP-19	Iron	11/03/89	<10	High detection limit
WIPP-19	Lithium	07/14/87	3.4	Sampling/analytical error
WIPP-19	Molybdenum	11/03/89	<2	High detection limit
WIPP-19	Nitrate	07/14/87	0.9	Sampling/analytical error
WIPP-19	Phenolics	08/29/88	0.097	Sampling/analytical error
WIPP-19	Silica	07/14/87	21	Mixed reporting as SiO_2 and Si[h]
WIPP-19	Vanadium	11/03/89	<5	High detection limit
WIPP-25	Barium	06/27/89	<2	High detection limit
WIPP-25	Molybdenum	03/28/88	<1.0	High detection limit
WIPP-25	Phenolics	03/28/88	0.106	Sampling/analytical error
WIPP-26	Molybdenum	04/14/88	<2	High detection limit

[a] All outlier concentrations in milligrams per liter (mg/ℓ), except where noted.
[b] The value is an outlier due to an undetermined sampling or analytical error.
[c] It is suspected that the value is different by an order of magnitude from the actual value, i.e., the decimal point was incorrectly placed. This could have occurred if the wrong dilution factor was applied in converting the value recorded by the analytical instrument to the reported value.
[d] The method detection limit is high relative to that of other rounds. This is probably due to the dilution of the sample prior to analysis.
[e] TOX = total organic halogen.
[f] s.u. = standard pH units.
[g] TOC = total organic carbon.
[h] It is suspected that the format for reporting silica data was inconsistent. It appears that some of the values were converted to equivalent silica (SiO_2) prior to reporting; while, other values were not converted and probably reflect the silicon concentration, Si, rather than SiO_2. However, the data are always reported as "silica."

APPENDIX C

WASTE ISOLATION PILOT PLANT
WATER QUALITY SAMPLING PROGRAM DATA

Appendix C contains the WIPP WQSP analytical data set used to establish the background groundwater quality. All analyses were performed by IT Analytical Services, with the exception of the major constituent chemistry for 1985 samples from 7 monitoring wells. These data were provided by Bendix.

Table C-1
Analytical Results Analyzed by Bendix Field Engineering Services[a]

Parameter	Units	Well DOE-1 04/25/85[b]	Well DOE-2 03/12/85	Engle Well 03/04/85	Well H-03b1 07/01/85	Well H-03b3 02/04/85	Well H-04b 07/24/85	Well H-11b3 06/04/85
calcium	mg/ℓ	1,700	2,000	590	1,000	1,500	690	1,700
chloride	mg/ℓ	74,000	35,000	230	3,400	30,000	7,400	66,000
magnesium	mg/ℓ	1,600	1,100	150	290	780	430	1,300
potassium	mg/ℓ	1,100	410	5.6	34	430	210	940
sodium	mg/ℓ	46,000	18,000	200	1,500	18,000	5,900	40,000
sulfate	mg/ℓ	7,400	4,000	2,000	2,300	4,800	5,500	7,200

[a] Preliminary analytical results analyzed by Bendix Field Engineering Services for Sandia National Laboratories.
[b] Sample date.

Source: Uhland and Randall, 1986

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID	BLANK	WATER	BLANK	UNITS	DATE	RND	LAB	C
** AIS																
AIS	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000					mg/l	10/28/88	0	IT	GC
AIS	CULEBRA	ALKALINITY (HCO3)		98.0000			100.0000					mg/l	10/28/88	0	IT	GC
AIS	CULEBRA	ALUMINUM	<	10.0000		<	10.0000					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	ANTIMONY	<	5.0000		<	5.0000					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	ARSENIC	<	0.0500		<	0.0500					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	BARIUM	<	0.5000		<	0.5000					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	BERYLLIUM	<	0.5000		<	0.0500					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	BORON		30.0000			30.0000					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	BROMIDE		22.0000			23.0000					mg/l	10/28/88	0	IT	GC
AIS	CULEBRA	CADMIUM	<	0.5000		<	0.5000					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	CALCIUM		1000.0000			1000.0000					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	CESIUM		0.0600			0.0800					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	CHLORIDE		20500.0000		NA	0.0000					mg/l	10/28/88	0	IT	GC
AIS	CULEBRA	CHROMIUM		2.0000			2.0000					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	COBALT	<	1.0000		<	1.0000					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	COPPER		1.0000			1.0000					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	CYANIDE	<	0.0100		NA	0.0000					mg/l	10/28/88	0	IT	GC
AIS	CULEBRA	FLUORIDE		1.4000			1.4000					mg/l	10/28/88	0	IT	GC
AIS	CULEBRA	IODIDE	<	2.0000		<	2.0000					mg/l	10/28/88	0	IT	GC
AIS	CULEBRA	IRON	<	1.0000		<	1.0000					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	LEAD	<	5.0000		<	5.0000					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	LITHIUM		0.5000			0.5000					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	MAGNESIUM		510.0000			520.0000					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	MANGANESE	<	0.5000		<	0.5000					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	MERCURY	<	0.0002		<	0.0002					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	MOLYBDENUM		0.1500			0.1500					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	NICKEL	<	3.0000		<	3.0000					mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	NITRATE	<	0.0200		NA	0.0000					mg/l NO3-N	10/28/88	0	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
AIS	CULEBRA	PHENOLICS		0.0240		NA	0.0000			mg/l	10/28/88	0	IT	GC
AIS	CULEBRA	PHOSPHATE		0.0100			0.0100			mg/l T-PO4-P	10/28/88	0	IT	GC
AIS	CULEBRA	POTASSIUM		400.0000			420.0000			mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	RESIDUE, FILTERABLE @ 180 C		43100.0000			42200.0000			mg/l	10/28/88	0	IT	GC
AIS	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		110.0000			120.0000			mg/l	10/28/88	0	IT	GC
AIS	CULEBRA	SELENIUM	<	0.5000		<	0.5000			mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	SILICA		3.7000			3.7000			mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	SILVER	<	1.0000		<	1.0000			mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	SODIUM		12600.0000			12400.0000			mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	SPECIFIC CONDUCTANCE		61400.0000			60500.0000			umhos/cm@25C	10/28/88	0	IT	GC
AIS	CULEBRA	STRONTIUM		12.0000			12.0000			mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	SULFATE		5900.0000			5400.0000			mg/l	10/28/88	0	IT	GC
AIS	CULEBRA	THALLIUM	<	0.5000		NA	0.0000			mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	TITANIUM	<	1.0000		<	1.0000			mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	TOTAL ORGANIC CARBON		3.0000			3.0000			mg/l	10/28/88	0	IT	GC
AIS	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500			0.0700			mg/l	10/28/88	0	IT	GC
AIS	CULEBRA	VANADIUM	<	1.0000		<	1.0000			mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	ZINC	<	1.0000		<	1.0000			mg/l	10/28/88	0	IT	ME
AIS	CULEBRA	pH		7.9400			7.9500				10/28/88	0	IT	GC
** BARN WELL														
BARN WELL	DEWEY LAKE	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	2	IT	V
BARN WELL	DEWEY LAKE	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	2	IT	V
BARN WELL	DEWEY LAKE	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
BARN WELL	DEWEY LAKE	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	2	IT	V
BARN WELL	DEWEY LAKE	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	2,4,5-TP (SILVEX)	<	0.0005		NA	0.0000			mg/l	04/20/88	2	IT	HP
BARN WELL	DEWEY LAKE	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	2,4-D	<	0.0050		NA	0.0000			mg/l	04/20/88	2	IT	HP
BARN WELL	DEWEY LAKE	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV

WATER QUALITY SAMPLING
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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
BARN WELL	DEWEY LAKE	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	ACETONE	<	10.0000		NA	0.0000		T 24	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	ALKALINITY (CO3)		0.0000			0.0000			mg/l	11/04/87	1	IT	GC
BARN WELL	DEWEY LAKE	ALKALINITY (HCO3)		270.0000			270.0000			mg/l	11/04/87	1	IT	GC
BARN WELL	DEWEY LAKE	ALKALINITY (HCO3)		280.0000			280.0000			mg/l	07/27/89	3	IT	GC
BARN WELL	DEWEY LAKE	ALKALINITY (HCO3)		280.0000		NA	0.0000			mg/l	06/21/90	4	IT	GC
BARN WELL	DEWEY LAKE	ALUMINUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	ALUMINUM	<	0.2000		<	0.2000			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	ALUMINUM	<	2.0000		<	2.0000			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	ANTIMONY		0.0500		<	0.0500	< 0.05	< 0.05	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	ANTIMONY	<	0.0600		<	0.0600			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	ANTIMONY	<	0.0600		<	0.0600			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	ARSENIC	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	ARSENIC		0.0060		NA	0.0000	< 0.005	< 0.005	mg/l	04/20/88	2	IT	ME
BARN WELL	DEWEY LAKE	ARSENIC	<	0.0100		NA	0.0000			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	ARSENIC	<	0.0100		NA	0.0000			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	BARIUM		0.0280			0.0280	< 0.005	< 0.005	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	BARIUM		0.0320			0.0320	< 0.005	< 0.005	mg/l	04/20/88	2	IT	ME
BARN WELL	DEWEY LAKE	BARIUM	<	0.2000		<	0.2000			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	BARIUM	<	0.2000		<	0.2000			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
BARN WELL	DEWEY LAKE	BENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	2	IT	V
BARN WELL	DEWEY LAKE	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	BERYLLIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	BERYLLIUM	<	0.0050		<	0.0050			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	BERYLLIUM	<	0.0050		<	0.0050			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	BORON		0.3900			0.4000	< 0.01	< 0.01	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	BORON		0.3300			0.3300			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	BORON		0.3600			0.3600			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	BROMIDE	<	2.0000		NA	0.0000			mg/l	11/04/87	1	IT	GC
BARN WELL	DEWEY LAKE	BROMIDE	<	2.0000		<	2.0000			mg/l	07/27/89	3	IT	GC
BARN WELL	DEWEY LAKE	BROMIDE	<	2.0000		<	2.0000			mg/l	06/21/90	4	IT	GC
BARN WELL	DEWEY LAKE	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	BROMOFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	2	IT	V
BARN WELL	DEWEY LAKE	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	CADMIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	CADMIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	04/20/88	2	IT	ME
BARN WELL	DEWEY LAKE	CADMIUM	<	0.0050		<	0.0050			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	CADMIUM	<	0.0050		<	0.0050			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	CALCIUM		59.0000			59.0000			mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	CALCIUM		74.0000			74.0000			mg/l	07/27/89	3	IT	MC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
BARN WELL	DEWEY LAKE	CALCIUM		64.0000			64.0000			mg/l	06/21/90	4	IT	MC
BARN WELL	DEWEY LAKE	CALCIUM HARDNESS (CaCO3)		150.0000		NA	0.0000			mg/l	06/21/90	4	IT	GC
BARN WELL	DEWEY LAKE	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	2	IT	V
BARN WELL	DEWEY LAKE	CESIUM		0.1000			0.1000	0.02	0.02	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	CESIUM	<	0.1000		NA	0.0000			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	CESIUM	<	0.2000		<	0.2000			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	CHLORIDE		35.0000		NA	0.0000			mg/l	11/04/87	1	IT	GC
BARN WELL	DEWEY LAKE	CHLORIDE		39.0000		NA	0.0000			mg/l	04/20/88	2	IT	GC
BARN WELL	DEWEY LAKE	CHLORIDE		48.0000			47.0000			mg/l	07/27/89	3	IT	GC
BARN WELL	DEWEY LAKE	CHLORIDE		41.0000		NA	0.0000			mg/l	06/21/90	4	IT	GC
BARN WELL	DEWEY LAKE	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	CHLOROFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	2	IT	V
BARN WELL	DEWEY LAKE	CHROMIUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	CHROMIUM		0.0200			0.0200	0.02	0.01	mg/l	04/20/88	2	IT	ME
BARN WELL	DEWEY LAKE	CHROMIUM		0.0100			0.0100			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	CHROMIUM	<	0.0100		<	0.0100			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	CHRYSENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	COBALT	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	COBALT	<	0.0500		<	0.0500			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	COBALT	<	0.0500		<	0.0500			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	COLOR	<	1.0000		NA	0.0000			CU	04/20/88	2	IT	GC
BARN WELL	DEWEY LAKE	COPPER	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	COPPER		0.0100			0.0100	0.02	0.01	mg/l	04/20/88	2	IT	ME
BARN WELL	DEWEY LAKE	COPPER	<	0.0250		<	0.0250			mg/l	07/27/89	3	IT	MT

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
BARN WELL	DEWEY LAKE	COPPER	<	0.0250		<	0.0250			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	CYANIDE	<	0.0100		<	0.0200			mg/l	07/27/89	3	IT	GC
BARN WELL	DEWEY LAKE	CYANIDE	<	0.0100		NA	0.0000			mg/l	06/21/90	4	IT	GC
BARN WELL	DEWEY LAKE	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	2	IT	V
BARN WELL	DEWEY LAKE	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	2	IT	V
BARN WELL	DEWEY LAKE	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	ENDRIN	<	0.0200		NA	0.0000			ug/l	04/20/88	2	IT	HP
BARN WELL	DEWEY LAKE	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	FLUORENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	FLUORIDE		2.7000		NA	0.0000			mg/l	11/04/87	1	IT	GC
BARN WELL	DEWEY LAKE	FLUORIDE		2.6000			2.6000			mg/l	04/20/88	2	IT	GC
BARN WELL	DEWEY LAKE	FLUORIDE		2.5000			2.5000			mg/l	07/27/89	3	IT	GC
BARN WELL	DEWEY LAKE	FLUORIDE		2.6000		NA	0.0000			mg/l	06/21/90	4	IT	GC
BARN WELL	DEWEY LAKE	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	IODIDE	<	2.0000		NA	0.0000			mg/l	11/04/87	1	IT	GC
BARN WELL	DEWEY LAKE	IODIDE	<	2.0000		<	2.0000			mg/l	07/27/89	3	IT	GC
BARN WELL	DEWEY LAKE	IODIDE	<	2.0000		<	2.0000			mg/l	06/21/90	4	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
BARN WELL	DEWEY LAKE	IRON		0.0100			0.0100	< 0.01	< 0.01	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	IRON	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	04/20/88	2	IT	ME
BARN WELL	DEWEY LAKE	IRON	<	0.1000		<	0.1000			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	IRON	<	0.1000		<	0.1000			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	LANGELIER SATURATION INDEX		0.2500		NA	0.0000				06/21/90	4	IT	GC
BARN WELL	DEWEY LAKE	LEAD	<	0.0500		<	0.0500	< 0.05	< 0.05	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	LEAD	<	0.0500		<	0.0500	< 0.05	< 0.05	mg/l	04/20/88	2	IT	ME
BARN WELL	DEWEY LAKE	LEAD	<	0.0500		<	0.0500			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	LEAD	<	0.0500		<	0.0500			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	LINDANE	<	0.0400		NA	0.0000			ug/l	04/20/88	2	IT	HP
BARN WELL	DEWEY LAKE	LITHIUM		0.0500			0.0500	< 0.01	< 0.01	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	LITHIUM		0.0500			0.0500			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	LITHIUM		0.0400			0.0400			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	LSI CORROSIVITY		0.0200		NA	0.0000				04/20/88	2	IT	GC
BARN WELL	DEWEY LAKE	MAGNESIUM		31.0000			31.0000			mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	MAGNESIUM		37.0000			37.0000			mg/l	07/27/89	3	IT	MC
BARN WELL	DEWEY LAKE	MAGNESIUM		33.0000			33.0000			mg/l	06/21/90	4	IT	MC
BARN WELL	DEWEY LAKE	MANGANESE	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	MANGANESE	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	04/20/88	2	IT	ME
BARN WELL	DEWEY LAKE	MANGANESE	<	0.0150		<	0.0150			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	MANGANESE	<	0.0150		<	0.0150			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	MBAS		0.0300		NA	0.0000			mg/l	04/20/88	2	IT	GC
BARN WELL	DEWEY LAKE	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	04/20/88	2	IT	ME
BARN WELL	DEWEY LAKE	MERCURY	<	0.0002		<	0.0002			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	MERCURY	<	0.0002		<	0.0002			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	METHOXYCHLOR	<	0.0010		NA	0.0000			mg/l	04/20/88	2	IT	HP
BARN WELL	DEWEY LAKE	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	1	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
BARN WELL	DEWEY LAKE	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	METHYLENE CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	MOLYBDENUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	MOLYBDENUM	<	0.0200		<	0.0200			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	MOLYBDENUM	<	0.0200		<	0.0200			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	NICKEL	<	0.0300		<	0.0300	< 0.03	< 0.03	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	NICKEL	<	0.0400		<	0.0400			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	NICKEL	<	0.0400		<	0.0400			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	NITRATE		8.5000		NA	0.0000			mg/l NO3-N	11/04/87	1	IT	GC
BARN WELL	DEWEY LAKE	NITRATE		7.2000			6.9000			mg/l NO3-N	04/20/88	2	IT	GC
BARN WELL	DEWEY LAKE	NITRATE		9.6000		NA	0.0000			mg/l	07/27/89	3	IT	GC
BARN WELL	DEWEY LAKE	NITRATE		8.9000		NA	0.0000			mg/l	06/21/90	4	IT	GC
BARN WELL	DEWEY LAKE	NITROBENZENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	ODOR		1.0000		NA	0.0000			T.O.N.	04/20/88	2	IT	GC
BARN WELL	DEWEY LAKE	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	P-DICHLOROBENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	2	IT	V
BARN WELL	DEWEY LAKE	PCB	<	1.0000		NA	0.0000			ug/l	11/04/87	1	IT	PC
BARN WELL	DEWEY LAKE	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	PHENOL	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	PHENOLICS	<	0.0050		<	0.0100			mg/l	07/27/89	3	IT	GC
BARN WELL	DEWEY LAKE	PHENOLICS	<	0.0050		NA	0.0000			mg/l	06/21/90	4	IT	GC
BARN WELL	DEWEY LAKE	PHOSPHATE		0.0200		NA	0.0000			mg/l T-PO4-P	11/04/87	1	IT	GC
BARN WELL	DEWEY LAKE	PHOSPHORUS		0.0400		NA	0.0000			mg/l	07/27/89	3	IT	GC
BARN WELL	DEWEY LAKE	PHOSPHORUS	<	0.0100		NA	0.0000			mg/l	06/21/90	4	IT	GC
BARN WELL	DEWEY LAKE	POTASSIUM		2.6000			2.5000			mg/l	11/04/87	1	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
BARN WELL	DEWEY LAKE	POTASSIUM	<	5.0000		<	5.0000			mg/l	07/27/89	3	IT	MC
BARN WELL	DEWEY LAKE	POTASSIUM	<	5.0000		<	5.0000			mg/l	06/21/90	4	IT	MC
BARN WELL	DEWEY LAKE	PYRENE	<	10.0000		NA	0.0000			ug/l	11/04/87	1	IT	SV
BARN WELL	DEWEY LAKE	RESIDUE, FILTERABLE @ 180 C		670.0000		NA	0.0000			mg/l	11/04/87	1	IT	GC
BARN WELL	DEWEY LAKE	RESIDUE, FILTERABLE @ 180 C		720.0000		NA	0.0000			mg/l	04/20/88	2	IT	GC
BARN WELL	DEWEY LAKE	RESIDUE, FILTERABLE @ 180 C		630.0000		NA	0.0000			mg/l	07/27/89	3	IT	GC
BARN WELL	DEWEY LAKE	RESIDUE, FILTERABLE @ 180 C		650.0000			650.0000			mg/l	06/21/90	4	IT	GC
BARN WELL	DEWEY LAKE	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000		NA	0.0000			mg/l	11/04/87	1	IT	GC
BARN WELL	DEWEY LAKE	RESIDUE, NONFILTERABLE @ 105 C		29.0000		NA	29.0000			mg/l	07/27/89	3	IT	GC
BARN WELL	DEWEY LAKE	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000		<	4.0000			mg/l	06/21/90	4	IT	GC
BARN WELL	DEWEY LAKE	SELENIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	SELENIUM		0.0320		NA	0.0000	< 0.005	< 0.005	mg/l	04/20/88	2	IT	ME
BARN WELL	DEWEY LAKE	SELENIUM	<	0.0500		NA	0.0000			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	SELENIUM	<	0.0500		NA	0.0000			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	SILICA		54.0000			54.0000	< 0.2	< 0.2	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	SILICA		24.0000			24.0000			mg/l	07/27/89	3	IT	GC
BARN WELL	DEWEY LAKE	SILICA		25.0000		NA	0.0000			mg/l	06/21/90	4	IT	GC
BARN WELL	DEWEY LAKE	SILVER	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	SILVER	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	04/20/88	2	IT	ME
BARN WELL	DEWEY LAKE	SILVER	<	0.0100		<	0.0100			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	SILVER	<	0.0100		<	0.0100			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	SODIUM		110.0000			110.0000			mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	SODIUM		93.0000			93.0000			mg/l	07/27/89	3	IT	MC
BARN WELL	DEWEY LAKE	SODIUM		120.0000			120.0000			mg/l	06/21/90	4	IT	MC
BARN WELL	DEWEY LAKE	SPECIFIC CONDUCTANCE		1000.0000		NA	0.0000			umhos/cm@25C	11/04/87	1	IT	GC
BARN WELL	DEWEY LAKE	SPECIFIC CONDUCTANCE		1092.0000			1095.0000			uMhos/cm@25C	07/27/89	3	IT	GC
BARN WELL	DEWEY LAKE	SPECIFIC CONDUCTANCE		1048.0000			1049.0000			uMhos/cm@25C	06/21/90	4	IT	GC
BARN WELL	DEWEY LAKE	STRONTIUM		0.7900			0.7900	< 0.01	< 0.01	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	STRONTIUM		1.0000		NA	0.0000			mg/l	07/27/89	3	IT	MT

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
BARN WELL	DEWEY LAKE	STRONTIUM		0.9400			0.9400			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	SULFATE		190.0000		NA	0.0000			mg/l	11/04/87	1	IT	GC
BARN WELL	DEWEY LAKE	SULFATE		230.0000		NA	0.0000			mg/l	04/20/88	2	IT	GC
BARN WELL	DEWEY LAKE	SULFATE		210.0000			240.0000			mg/l	07/27/89	3	IT	GC
BARN WELL	DEWEY LAKE	SULFATE		180.0000		NA	0.0000			mg/l	06/21/90	4	IT	GC
BARN WELL	DEWEY LAKE	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	2	IT	V
BARN WELL	DEWEY LAKE	THALLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	THALLIUM	<	0.0100		NA	0.0000			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	THALLIUM	<	0.0100		NA	0.0000			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	TITANIUM	<	0.0300		<	0.0300	< 0.03	< 0.03	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	TITANIUM	<	0.0100		NA	0.0000			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	TITANIUM	<	0.0100		<	0.0100			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	TOTAL ORGANIC CARBON		1.0000			1.0000			mg/l	11/04/87	1	IT	GC
BARN WELL	DEWEY LAKE	TOTAL ORGANIC CARBON		4.0000			4.0000			mg/l	07/27/89	3	IT	GC
BARN WELL	DEWEY LAKE	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	06/21/90	4	IT	GC
BARN WELL	DEWEY LAKE	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	11/04/87	1	IT	GC
BARN WELL	DEWEY LAKE	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	07/27/89	3	IT	GC
BARN WELL	DEWEY LAKE	TOTAL ORGANIC HALOGEN		0.1800			0.1200			mg/l	06/21/90	4	IT	GC
BARN WELL	DEWEY LAKE	TOXAPHENE	<	0.0005		NA	0.0000			mg/l	04/20/88	2	IT	HP
BARN WELL	DEWEY LAKE	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	TRICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	2	IT	V
BARN WELL	DEWEY LAKE	TURBIDITY		1.0000		NA	0.0000			NTU	04/20/88	2	IT	GC
BARN WELL	DEWEY LAKE	VANADIUM		0.0600			0.0600	< 0.01	< 0.01	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	VANADIUM		0.0600			0.0600			mg/l	07/27/89	3	IT	MT

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
BARN WELL	DEWEY LAKE	VANADIUM		0.0600			0.0600			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	VINYL CHLORIDE	<	2.0000		NA	0.0000		T < 2.0	ug/l	04/20/88	2	IT	V
BARN WELL	DEWEY LAKE	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	1	IT	V
BARN WELL	DEWEY LAKE	ZINC		0.0300			0.0300	< 0.01	< 0.01	mg/l	11/04/87	1	IT	ME
BARN WELL	DEWEY LAKE	ZINC		0.0300			0.0300	< 0.01	< 0.01	mg/l	04/20/88	2	IT	ME
BARN WELL	DEWEY LAKE	ZINC		0.0200			0.0200			mg/l	07/27/89	3	IT	MT
BARN WELL	DEWEY LAKE	ZINC	<	0.0200		<	0.0200			mg/l	06/21/90	4	IT	MT
BARN WELL	DEWEY LAKE	pH		6.5000		NA	0.0000				11/04/87	1	IT	GC
BARN WELL	DEWEY LAKE	pH		7.6900			7.7200				04/20/88	2	IT	GC
BARN WELL	DEWEY LAKE	pH		7.1200			7.2700				07/27/89	3	IT	GC
BARN WELL	DEWEY LAKE	pH		7.6900			7.6800				06/21/90	4	IT	GC
** CLIFTON WELL														
CLIFTON WELL	DOCKUM	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/29/88	2	IT	V
CLIFTON WELL	DOCKUM	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/29/88	2	IT	V
CLIFTON WELL	DOCKUM	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/29/88	2	IT	V
CLIFTON WELL	DOCKUM	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
CLIFTON WELL	DOCKUM	2,4,5-TP (SILVEX)	<	0.0005		NA	0.0000			mg/l	06/29/88	2	IT	HP
CLIFTON WELL	DOCKUM	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	2,4-D	<	0.0050		NA	0.0000			mg/l	06/29/88	2	IT	HP
CLIFTON WELL	DOCKUM	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV

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CLIFTON WELL	DOCKUM	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	ACETONE		11.0000		NA	0.0000		T < 10	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	10/28/87	1	IT	GC
CLIFTON WELL	DOCKUM	ALKALINITY (HCO3)		240.0000		NA	0.0000			mg/l	10/28/87	1	IT	GC
CLIFTON WELL	DOCKUM	ALUMINUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	ANTIMONY		0.0600		<	0.0500	< 0.05	< 0.05	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	ARSENIC	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	ARSENIC	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	06/29/88	2	IT	ME
CLIFTON WELL	DOCKUM	BARIUM		0.0120			0.0120	< 0.005	< 0.005	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	BARIUM		0.0130			0.0140	< 0.005	< 0.005	mg/l	06/29/88	2	IT	ME
CLIFTON WELL	DOCKUM	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	BENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/29/88	2	IT	V
CLIFTON WELL	DOCKUM	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	BERYLLIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	BORON		0.6200			0.6300	0.04	0.04	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	BROMIDE	<	2.0000		NA	0.0000			mg/l	10/28/87	1	IT	GC
CLIFTON WELL	DOCKUM	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	BROMOFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/29/88	2	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
CLIFTON WELL	DOCKUM	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	CADMIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	CADMIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	06/29/88	2	IT	ME
CLIFTON WELL	DOCKUM	CALCIUM		35.0000			35.0000			mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/29/88	2	IT	V
CLIFTON WELL	DOCKUM	CESIUM		0.0100			0.0100	< 0.01	< 0.01	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	CHLORIDE		45.0000		NA	0.0000			mg/l	10/28/87	1	IT	GC
CLIFTON WELL	DOCKUM	CHLORIDE		50.0000		NA	0.0000			mg/l	06/29/88	2	IT	GC
CLIFTON WELL	DOCKUM	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	CHLOROFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/29/88	2	IT	V
CLIFTON WELL	DOCKUM	CHROMIUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	CHROMIUM	<	0.0100			0.0100	0.01	0.01	mg/l	06/29/88	2	IT	ME
CLIFTON WELL	DOCKUM	CHRYSENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	COBALT	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	COLOR	<	1.0000		NA	0.0000			CU	06/29/88	2	IT	GC
CLIFTON WELL	DOCKUM	COPPER	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	COPPER	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	06/29/88	2	IT	ME
CLIFTON WELL	DOCKUM	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/29/88	2	IT	V
CLIFTON WELL	DOCKUM	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V

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CLIFTON WELL	DOCKUM	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/29/88	2	IT	V
CLIFTON WELL	DOCKUM	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	ENDRIN	<	0.0200		NA	0.0000			ug/l	06/29/88	2	IT	HP
CLIFTON WELL	DOCKUM	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	FLUORENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	FLUORIDE		1.9000		NA	0.0000			mg/l	10/28/87	1	IT	GC
CLIFTON WELL	DOCKUM	FLUORIDE		1.5000		NA	0.0000			mg/l	06/29/88	2	IT	GC
CLIFTON WELL	DOCKUM	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	IODIDE	<	2.0000		<	2.0000			mg/l	10/28/87	1	IT	GC
CLIFTON WELL	DOCKUM	IRON		0.0500			0.0400	0.01	< 0.01	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	IRON	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	06/29/88	2	IT	ME
CLIFTON WELL	DOCKUM	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	LEAD	<	0.0500		<	0.0500	< 0.05	< 0.05	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	LEAD	<	0.0500		<	0.0500	< 0.05	< 0.05	mg/l	06/29/88	2	IT	ME
CLIFTON WELL	DOCKUM	LINDANE	<	0.0400		NA	0.0000			ug/l	06/29/88	2	IT	HP
CLIFTON WELL	DOCKUM	LITHIUM		0.0800			0.0800	< 0.01	< 0.01	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	LSI CORROSIVITY		0.6000		NA	0.0000				06/29/88	2	IT	GC
CLIFTON WELL	DOCKUM	MAGNESIUM		34.0000			34.0000			mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	MANGANESE	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	MANGANESE	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	06/29/88	2	IT	ME
CLIFTON WELL	DOCKUM	MBAS		0.0700			0.0700			mg/l	06/29/88	2	IT	GC
CLIFTON WELL	DOCKUM	MERCURY	<	0.0002		<	0.0002	0.0002	< 0.0002	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	06/29/88	2	IT	ME

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CLIFTON WELL	DOCKUM	METHOXYCHLOR	<	0.0010		NA	0.0000			mg/l	06/29/88	2	IT	HP
CLIFTON WELL	DOCKUM	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	METHYLENE CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	MOLYBDENUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	NICKEL	<	0.0300		<	0.0300	< 0.03	< 0.03	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	NITRATE		1.9000		NA	0.0000			mg/l NO3-N	10/28/87	1	IT	GC
CLIFTON WELL	DOCKUM	NITRATE		8.4000		NA	0.0000			mg/l NO3-N	06/29/88	2	IT	GC
CLIFTON WELL	DOCKUM	NITROBENZENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	ODOR	<	1.0000		NA	0.0000			T.O.N.	06/29/88	2	IT	GC
CLIFTON WELL	DOCKUM	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	P-DICHLOROBENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/29/88	2	IT	V
CLIFTON WELL	DOCKUM	PCB	<	1.0000		NA	0.0000			ug/l	10/28/87	1	IT	PC
CLIFTON WELL	DOCKUM	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	PHENOL	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	PHOSPHATE		0.0100		NA	0.0000			mg/l T-PO4-P	10/28/87	1	IT	GC
CLIFTON WELL	DOCKUM	POTASSIUM		3.9000			4.0000			mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	PYRENE	<	10.0000		NA	0.0000			ug/l	10/28/87	1	IT	SV
CLIFTON WELL	DOCKUM	RESIDUE, FILTERABLE @ 180 C		780.0000		NA	0.0000			mg/l	10/28/87	1	IT	GC
CLIFTON WELL	DOCKUM	RESIDUE, FILTERABLE @ 180 C		780.0000		NA	0.0000			mg/l	06/29/88	2	IT	GC
CLIFTON WELL	DOCKUM	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000		NA	0.0000			mg/l	10/28/87	1	IT	GC
CLIFTON WELL	DOCKUM	SELENIUM		0.0800			0.0800	< 0.005	< 0.005	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	SELENIUM		0.0650			0.0700	< 0.005	< 0.005	mg/l	06/29/88	2	IT	ME
CLIFTON WELL	DOCKUM	SILICA		16.0000			16.0000	1.4	1.4	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	SILVER	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	10/28/87	1	IT	ME

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CLIFTON WELL	DOCKUM	SILVER	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	06/29/88	2	IT	ME
CLIFTON WELL	DOCKUM	SODIUM		190.0000			190.0000			mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	SPECIFIC CONDUCTANCE		1370.0000			1360.0000			umhos/cm@25C	10/28/87	1	IT	GC
CLIFTON WELL	DOCKUM	STRONTIUM		1.1000			1.1000	< 0.01	< 0.01	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	SULFATE		330.0000		NA	0.0000			mg/l	10/28/87	1	IT	GC
CLIFTON WELL	DOCKUM	SULFATE		310.0000		NA	0.0000			mg/l	06/29/88	2	IT	GC
CLIFTON WELL	DOCKUM	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/29/88	2	IT	V
CLIFTON WELL	DOCKUM	THALLIUM	<	5.0000		<	5.0000	< 0.005	< 0.005	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	TITANIUM	<	0.0300		<	0.0300	< 0.03	< 0.03	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	TOTAL ORGANIC CARBON		1.0000			2.0000			mg/l	10/28/87	1	IT	GC
CLIFTON WELL	DOCKUM	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	10/28/87	1	IT	GC
CLIFTON WELL	DOCKUM	TOXAPHENE	<	0.0005		NA	0.0000			mg/l	06/29/88	2	IT	HP
CLIFTON WELL	DOCKUM	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	TRICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/29/88	2	IT	V
CLIFTON WELL	DOCKUM	TURBIDITY	<	0.9000		NA	0.0000			NTU	06/29/88	2	IT	GC
CLIFTON WELL	DOCKUM	VANADIUM		0.0400			0.0400	< 0.01	< 0.01	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	VINYL CHLORIDE	<	2.0000		NA	0.0000		T < 2.0	ug/l	06/29/88	2	IT	V
CLIFTON WELL	DOCKUM	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/28/87	1	IT	V
CLIFTON WELL	DOCKUM	ZINC		0.1100			0.1100	< 0.01	< 0.01	mg/l	10/28/87	1	IT	ME
CLIFTON WELL	DOCKUM	ZINC		0.2200			0.2200	< 0.01	< 0.01	mg/l	06/29/88	2	IT	ME
CLIFTON WELL	DOCKUM	pH		6.7200			6.8400				10/28/87	1	IT	GC
CLIFTON WELL	DOCKUM	pH		7.6100			7.6500				06/29/88	2	IT	GC

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** COMANCHE WELL														
COMANCHE WELL	DOCKUM	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/28/88	2	IT	V
COMANCHE WELL	DOCKUM	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/28/88	2	IT	V
COMANCHE WELL	DOCKUM	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/28/88	2	IT	V
COMANCHE WELL	DOCKUM	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	2,4,5-TP (SILVEX)	<	0.0005		NA	0.0000			mg/l	06/28/88	2	IT	HP
COMANCHE WELL	DOCKUM	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	2,4-D	<	0.0050		NA	0.0000			mg/l	06/28/88	2	IT	HP
COMANCHE WELL	DOCKUM	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
COMANCHE WELL	DOCKUM	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	ACETONE	<	10.0000		NA	0.0000		T < 10	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	10/26/87	1	IT	GC
COMANCHE WELL	DOCKUM	ALKALINITY (HCO3)		230.0000		NA	0.0000			mg/l	10/26/87	1	IT	GC
COMANCHE WELL	DOCKUM	ALUMINUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	ANTIMONY	<	0.0500		<	0.0500	< 0.05	< 0.05	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	ARSENIC	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	ARSENIC	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	06/28/88	2	IT	ME
COMANCHE WELL	DOCKUM	BARIUM		0.0560			0.0560	< 0.005	< 0.005	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	BARIUM		0.0580			0.0580	< 0.005	< 0.005	mg/l	06/28/88	2	IT	ME
COMANCHE WELL	DOCKUM	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V

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COMANCHE WELL	DOCKUM	BENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/28/88	2	IT	V
COMANCHE WELL	DOCKUM	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	BERYLLIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	BORON		0.4400			0.4400	< 0.01	< 0.01	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	BROMIDE	<	2.0000		NA	0.0000			mg/l	10/26/87	1	IT	GC
COMANCHE WELL	DOCKUM	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	BROMOFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/28/88	2	IT	V
COMANCHE WELL	DOCKUM	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	CADMIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	CADMIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	06/28/88	2	IT	ME
COMANCHE WELL	DOCKUM	CALCIUM		31.0000			31.0000			mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/28/88	2	IT	V
COMANCHE WELL	DOCKUM	CESIUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	CHLORIDE		15.0000			15.0000			mg/l	10/26/87	1	IT	GC
COMANCHE WELL	DOCKUM	CHLORIDE		27.0000		NA	0.0000			mg/l	06/28/88	2	IT	GC
COMANCHE WELL	DOCKUM	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V

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COMANCHE WELL	DOCKUM	CHLOROFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/28/88	2	IT	V
COMANCHE WELL	DOCKUM	CHROMIUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	CHROMIUM	<	0.0100		<	0.0100	< 0.01	0.01	mg/l	06/28/88	2	IT	ME
COMANCHE WELL	DOCKUM	CHRYSENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	COBALT	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	COLOR	<	1.0000		<	1.0000			CU	06/28/88	2	IT	GC
COMANCHE WELL	DOCKUM	COPPER	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	COPPER	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	06/28/88	2	IT	ME
COMANCHE WELL	DOCKUM	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/28/88	2	IT	V
COMANCHE WELL	DOCKUM	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/28/88	2	IT	V
COMANCHE WELL	DOCKUM	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	ENDRIN	<	0.0200		NA	0.0000			ug/l	06/28/88	2	IT	HP
COMANCHE WELL	DOCKUM	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	FLUORENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	FLUORIDE		2.1000		NA	0.0000			mg/l	10/26/87	1	IT	GC
COMANCHE WELL	DOCKUM	FLUORIDE		2.3000			2.2000			mg/l	06/28/88	2	IT	GC
COMANCHE WELL	DOCKUM	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV

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COMANCHE WELL	DOCKUM	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	IODIDE	<	2.0000		NA	0.0000			mg/l	10/26/87	1	IT	GC
COMANCHE WELL	DOCKUM	IRON		0.0300			0.0300	< 0.01	< 0.01	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	IRON		0.0200			0.0200	< 0.01	< 0.01	mg/l	06/28/88	2	IT	ME
COMANCHE WELL	DOCKUM	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	LEAD	<	0.0500		<	0.0500	< 0.05	< 0.05	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	LEAD	<	0.0500		<	0.0500	< 0.05	< 0.05	mg/l	06/28/88	2	IT	ME
COMANCHE WELL	DOCKUM	LINDANE	<	0.0400		NA	0.0000			ug/l	06/28/88	2	IT	HP
COMANCHE WELL	DOCKUM	LITHIUM		0.0500			0.0500	< 0.01	< 0.01	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	LSI CORROSIVITY		0.3600		NA	0.0000				06/28/88	2	IT	GC
COMANCHE WELL	DOCKUM	MAGNESIUM		22.0000			22.0000			mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	MANGANESE		0.0060			0.0060	< 0.005	< 0.005	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	MANGANESE	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	06/28/88	2	IT	ME
COMANCHE WELL	DOCKUM	MBAS		0.0700		NA	0.0000			mg/l	06/28/88	2	IT	GC
COMANCHE WELL	DOCKUM	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	06/28/88	2	IT	ME
COMANCHE WELL	DOCKUM	METHOXYCHLOR	<	0.0010		NA	0.0000			mg/l	06/28/88	2	IT	HP
COMANCHE WELL	DOCKUM	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	METHYLENE CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	MOLYBDENUM		0.0300			0.0300	< 0.01	< 0.01	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	NICKEL	<	0.0300		<	0.0300	< 0.03	< 0.03	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	NITRATE		2.2000		NA	0.0000			mg/l NO3-N	10/26/87	1	IT	GC
COMANCHE WELL	DOCKUM	NITRATE		5.8000		NA	0.0000			mg/l NO3-N	06/28/88	2	IT	GC
COMANCHE WELL	DOCKUM	NITROBENZENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	ODOR	<	1.0000		NA	0.0000			T.O.N.	06/28/88	2	IT	GC

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COMANCHE WELL	DOCKUM	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	P-DICHLOROBENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/28/88	2	IT	V
COMANCHE WELL	DOCKUM	PCB	<	1.0000		NA	0.0000			ug/l	10/26/87	1	IT	PC
COMANCHE WELL	DOCKUM	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	PHENOL	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	PHOSPHATE	<	0.0100		NA	0.0000			mg/l T-PO4-P	10/26/87	1	IT	GC
COMANCHE WELL	DOCKUM	POTASSIUM		5.1000			5.0000			mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	PYRENE	<	10.0000		NA	0.0000			ug/l	10/26/87	1	IT	SV
COMANCHE WELL	DOCKUM	RESIDUE, FILTERABLE @ 180 C		340.0000			350.0000			mg/l	10/26/87	1	IT	GC
COMANCHE WELL	DOCKUM	RESIDUE, FILTERABLE @ 180 C		340.0000			330.0000			mg/l	06/28/88	2	IT	GC
COMANCHE WELL	DOCKUM	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000		NA	0.0000			mg/l	10/26/87	1	IT	GC
COMANCHE WELL	DOCKUM	SELENIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	SELENIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	06/28/88	2	IT	ME
COMANCHE WELL	DOCKUM	SILICA		28.0000			28.0000	< 0.2	< 0.2	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	SILVER	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	SILVER	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	06/28/88	2	IT	ME
COMANCHE WELL	DOCKUM	SODIUM		45.0000			45.0000			mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	SPECIFIC CONDUCTANCE		561.0000			565.0000			umhos/cm@25C	10/26/87	1	IT	GC
COMANCHE WELL	DOCKUM	STRONTIUM		0.7400			0.7400	< 0.01	< 0.01	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	SULFATE		40.0000			41.0000			mg/l	10/26/87	1	IT	GC
COMANCHE WELL	DOCKUM	SULFATE		66.0000			63.0000			mg/l	06/28/88	2	IT	GC
COMANCHE WELL	DOCKUM	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/28/88	2	IT	V
COMANCHE WELL	DOCKUM	THALLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	TITANIUM	<	0.0300		<	0.0300	< 0.03	< 0.03	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	TOTAL ORGANIC CARBON		2.0000			2.0000			mg/l	10/26/87	1	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
COMANCHE WELL	DOCKUM	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	10/26/87	1	IT	GC
COMANCHE WELL	DOCKUM	TOXAPHENE	<	0.0005		NA	0.0000			mg/l	06/28/88	2	IT	HP
COMANCHE WELL	DOCKUM	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	TRICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	06/28/88	2	IT	V
COMANCHE WELL	DOCKUM	TURBIDITY	<	0.9000		<	0.9000			NTU	06/28/88	2	IT	GC
COMANCHE WELL	DOCKUM	VANADIUM		0.0300			0.0300	< 0.01	< 0.01	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	VINYL CHLORIDE	<	2.0000		NA	0.0000		T < 2.0	ug/l	06/28/88	2	IT	V
COMANCHE WELL	DOCKUM	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/26/87	1	IT	V
COMANCHE WELL	DOCKUM	ZINC		0.1200			0.1200	< 0.01	< 0.01	mg/l	10/26/87	1	IT	ME
COMANCHE WELL	DOCKUM	ZINC		0.4400			0.4500	< 0.01	< 0.01	mg/l	06/28/88	2	IT	ME
COMANCHE WELL	DOCKUM	pH		7.4500			7.4800				10/26/87	1	IT	GC
COMANCHE WELL	DOCKUM	pH		7.2600		NA	0.0000				06/28/88	2	IT	GC
** DOE-1														
DOE-1	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	1,1,2-TRICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	1,1-DICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V

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DOE-1	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	1,2,4-TRICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	1,2-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	1,2-DICHLOROETHANE	<	1.0000		NA	1.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	1,2-DICHLOROPROPANE	<	1.0000		NA	1.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	1,2-DIPHENYLHYDRAZINE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	1,3-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	1,3-DICHLOROPROPYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	1,4-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	2,3,7,8-TETRACHLOROBENZO-P-DIOXIN	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	2,4,5-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV

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DOE-1	CULEBRA	2,4,6-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	2,4-DICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	2,4-DIMETHYLPHENOL	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	2,4-DINITROPHENOL	<	10.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	2,4-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	2,6-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	2-BUTANONE		97.0000		NA	0.0000		T < 10	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	2-BUTANONE	<	10.0000		<	10.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		<	10.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	2-CHLORONAPHTHALENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	2-CHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV

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DOE-1	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	2-HEXANONE	<	10.0000		<	10.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	2-METHYLNAPHTHALENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	2-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	2-NITROANILINE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	2-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	2-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	2-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	3,3'-DICHLOROBENZIDINE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	3,4-BENZOFLUORANTHENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	3-NITROANILINE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	4,6-DINITRO-O-CRESOL	<	10.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV

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DOE-1	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		<	10.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	4-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	4-NITROANILINE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	4-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	ACENAPHTHENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	ACENAPHTHYLENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	ACETONE		29.0000		NA	0.0000		T < 10	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	ACETONE	<	10.0000		<	10.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	ACETONE		44.0000		NA	0.0000			ug/l	07/28/87	3	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
DOE-1	CULEBRA	ACROLEIN	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	ACRYLONITRILE	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	07/03/86	2	IT	GC
DOE-1	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	07/28/87	3	IT	GC
DOE-1	CULEBRA	ALKALINITY (HCO3)		57.0000		NA	0.0000			mg/l	07/03/86	2	IT	GC
DOE-1	CULEBRA	ALKALINITY (HCO3)		44.0000		NA	0.0000			mg/l	07/28/87	3	IT	GC
DOE-1	CULEBRA	ALUMINUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	ALUMINUM		1.4000		NA	0.0000	< 0.1	< 0.1	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	ANILINE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	ANTHRACENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	ANTIMONY		1.4000			1.1000	< 0.05	< 0.05	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	ARSENIC		0.0060			0.0160	< 0.001	< 0.001	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	ARSENIC		0.0340			0.0340	< 0.001	< 0.001	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	ARSENIC	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	BARIUM		0.0700			0.0700	< 0.01	< 0.01	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	BARIUM		0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	BENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	BENZENE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	BENZIDINE	<	4.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	BENZO(A)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	BENZO(A)PYRENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV

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DOE-1	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	BENZO(G,H,I)PERYLENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	BENZO(K)FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	BENZOIC ACID	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	BENZYL ALCOHOL	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	BERYLLIUM		0.2700			0.2000	0.001	< 0.001	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	4.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE		33.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	BIS(CHLOROMETHYL)ETHER	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV

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DOE-1	CULEBRA	BORON		7.5000			6.9000	< 0.10	< 0.10	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	BORON		35.0000		NA	0.0000	0.03	0.03	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	BORON		34.0000			34.0000	< 0.01	< 0.01	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	BROMIDE		63.0000			65.0000			mg/l	04/25/85	1	IT	GC
DOE-1	CULEBRA	BROMIDE		59.0000		NA	0.0000			mg/l	07/03/86	2	IT	GC
DOE-1	CULEBRA	BROMIDE		61.0000		NA	0.0000			mg/l	07/28/87	3	IT	GC
DOE-1	CULEBRA	BROMOFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	BROMOFORM	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	BUTYL BENZYL PHTHALATE		1.9000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	CADMIUM		0.0700			0.0700	< 0.005	< 0.005	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	CALCIUM		1600.0000		NA	0.0000			mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	CALCIUM		1400.0000			1400.0000			mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	CARBON DISULFIDE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	CARBON DISULFIDE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	CESIUM		10.0000			7.2000	0.19	0.30	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	CESIUM		0.4000		NA	0.0000	0.2	0.1	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	CESIUM		0.4600			0.4900	< 0.05	< 0.05	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	CHLORIDE		77000.0000		NA	0.0000			mg/l	07/03/86	2	IT	GC
DOE-1	CULEBRA	CHLORIDE		81000.0000		NA	0.0000			mg/l	07/28/87	3	IT	GC
DOE-1	CULEBRA	CHLOROBENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	CHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V

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DOE-1	CULEBRA	CHLOROETHANE	<	10.0000		<	10.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	CHLOROFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	CHLOROFORM	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	CHROMIUM	<	0.0010		<	0.0010	< 0.001	< 0.001	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	CHROMIUM		0.3800		NA	0.0000	< 0.01	< 0.01	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	CHROMIUM		0.4000			0.4000	< 0.01	< 0.01	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	CHRYSENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	COBALT		0.4100			0.1800	< 0.01	< 0.01	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	COBALT		0.1300		NA	0.0000	< 0.01	< 0.01	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	COBALT		0.1000			0.1000	< 0.01	< 0.01	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	COPPER		0.1800			0.1800	< 0.01	< 0.01	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	COPPER		0.1600		NA	0.0000	< 0.01	< 0.01	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	COPPER		0.1000			0.1000	< 0.01	< 0.01	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	04/25/85	1	IT	GC
DOE-1	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	07/03/86	2	IT	GC
DOE-1	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	07/28/87	3	IT	GC
DOE-1	CULEBRA	DI-N-BUTYL PHTHALATE		2.6000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	DI-N-OCTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV

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DOE-1	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	DICHLORODIFLUOROMETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	DIETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	DIMETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	ETHYLBENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	ETHYLBENZENE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	Eh		554.0000		NA	0.0000			mV	04/25/85	1	IT	GC
DOE-1	CULEBRA	FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	FLUORENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	FLUORIDE		1.0000		NA	0.0000			mg/l	04/25/85	1	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
DOE-1	CULEBRA	FLUORIDE		1.0000			1.1000			mg/l	07/03/86	2	IT	GC
DOE-1	CULEBRA	FLUORIDE		0.8000		NA	0.0000			mg/l	07/28/87	3	IT	GC
DOE-1	CULEBRA	HEXACHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	HEXACHLOROBUTADIENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	HEXACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	IODIDE	<	1.0000		<	1.0000			mg/l	04/25/85	1	IT	GC
DOE-1	CULEBRA	IODIDE		1.2000		NA	0.0000			mg/l	07/03/86	2	IT	GC
DOE-1	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	07/28/87	3	IT	GC
DOE-1	CULEBRA	IRON		1.3000			1.3000	< 0.01	0.01	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	IRON		1.4000		NA	0.0000	< 0.01	< 0.01	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	IRON		0.7000			0.7000	< 0.01	< 0.01	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	ISOPHORONE	<	4.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	LEAD		0.1800			2.4000	< 0.10	< 0.10	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	LEAD		0.6600		NA	0.0000	< 0.05	< 0.05	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	LEAD		0.6000			0.6000	< 0.05	< 0.05	mg/l	07/28/87	3	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
DOE-1	CULEBRA	LITHIUM		3.2000			3.1000	< 0.01	< 0.01	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	MAGNESIUM		1400.0000		NA	0.0000			mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	MAGNESIUM		1600.0000		NA	0.0000			mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	MANGANESE		0.3500			0.4300	< 0.01	0.02	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	MANGANESE		0.2300		NA	0.0000	< 0.005	< 0.005	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	MANGANESE		0.2000			0.2000	< 0.005	< 0.005	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	MERCURY	<	0.0002			0.0008	< 0.0002	< 0.0002	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	MERCURY		0.0008		NA	0.0000	< 0.0002	< 0.0002	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	METHYL BROMIDE	<	10.0000		<	10.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	METHYL CHLORIDE	<	10.0000		<	10.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	METHYLENE CHLORIDE		10.0000		<	10.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	MOLYBDENUM		0.0510			0.0440	< 0.001	< 0.001	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	MOLYBDENUM		0.2700		NA	0.0000	0.01	< 0.01	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	MOLYBDENUM	<	0.0500		<	0.0500	< 0.01	< 0.01	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	N-NITROSO-DI-METHYLAMINE		2.4000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	NAPHTHALENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV

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DOE-1	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		07/28/87	3	IT	SV
DOE-1	CULEBRA	NICKEL		1.9000			1.9000	< 0.01	< 0.01	mg/l		04/25/85	1	IT	ME
DOE-1	CULEBRA	NICKEL	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l		07/03/86	2	IT	ME
DOE-1	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		07/28/87	3	IT	ME
DOE-1	CULEBRA	NITRATE	<	0.1000		<	0.1000			mg/l	NO3-N	04/25/85	1	IT	GC
DOE-1	CULEBRA	NITRATE		0.1000			0.1000			mg/l	NO3-N	07/03/86	2	IT	GC
DOE-1	CULEBRA	NITRATE		3.4000		NA	0.0000			mg/l	NO3-N	07/28/87	3	IT	GC
DOE-1	CULEBRA	NITROBENZENE	<	1.0000		NA	0.0000			ug/l		04/25/85	1	IT	SV
DOE-1	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		07/03/86	2	IT	SV
DOE-1	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		07/28/87	3	IT	SV
DOE-1	CULEBRA	P-CHLORO-M-CRESOL	<	1.0000		NA	0.0000			ug/l		04/25/85	1	IT	SV
DOE-1	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		07/03/86	2	IT	SV
DOE-1	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		07/28/87	3	IT	SV
DOE-1	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		07/03/86	2	IT	PC
DOE-1	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		07/28/87	3	IT	PC
DOE-1	CULEBRA	PENTACHLOROPHENOL	<	1.0000		NA	0.0000			ug/l		04/25/85	1	IT	SV
DOE-1	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		07/03/86	2	IT	SV
DOE-1	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		07/28/87	3	IT	SV
DOE-1	CULEBRA	PHENANTHRENE	<	1.0000		NA	0.0000			ug/l		04/25/85	1	IT	SV
DOE-1	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		07/03/86	2	IT	SV
DOE-1	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		07/28/87	3	IT	SV
DOE-1	CULEBRA	PHENOL	<	1.0000		NA	0.0000			ug/l		04/25/85	1	IT	SV
DOE-1	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		07/03/86	2	IT	SV
DOE-1	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		07/28/87	3	IT	SV
DOE-1	CULEBRA	PHENOLICS	<	0.0020		NA	0.0000			mg/l		04/25/85	1	IT	GC
DOE-1	CULEBRA	PHENOLICS		0.0120		NA	0.0000			mg/l		07/03/86	2	IT	GC
DOE-1	CULEBRA	PHENOLICS		0.0120		NA	0.0000			mg/l		07/28/87	3	IT	GC
DOE-1	CULEBRA	PHOSPHATE	<	0.0100		<	0.0100			mg/l	T-PO4-P	04/25/85	1	IT	GC
DOE-1	CULEBRA	PHOSPHATE	<	0.0100		<	0.0100			mg/l	T-PO4-P	07/03/86	2	IT	GC

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DOE-1	CULEBRA	PHOSPHATE		0.0100		NA	0.0000			mg/l T-PO4-P	07/28/87	3	IT	GC
DOE-1	CULEBRA	POTASSIUM		900.0000		NA	0.0000			mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	POTASSIUM		1000.0000		NA	0.0000			mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	PYRENE	<	1.0000		NA	0.0000			ug/l	04/25/85	1	IT	SV
DOE-1	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l	07/03/86	2	IT	SV
DOE-1	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	SV
DOE-1	CULEBRA	RESIDUE, FILTERABLE @ 180 C		130000.0000		NA	0.0000			mg/l	04/25/85	1	IT	GC
DOE-1	CULEBRA	RESIDUE, FILTERABLE @ 180 C		130000.0000		NA	0.0000			mg/l	07/03/86	2	IT	GC
DOE-1	CULEBRA	RESIDUE, FILTERABLE @ 180 C		130000.0000			140000.0000			mg/l	07/28/87	3	IT	GC
DOE-1	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		290.0000		NA	0.0000			mg/l	04/25/85	1	IT	GC
DOE-1	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		58.0000		NA	0.0000			mg/l	07/03/86	2	IT	GC
DOE-1	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		460.0000			440.0000			mg/l	07/28/87	3	IT	GC
DOE-1	CULEBRA	SELENIUM	<	0.0010		<	0.0010	< 0.001	< 0.001	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	SELENIUM		0.2300			0.1360	< 0.001	0.001	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	SELENIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	SILICA		11.0000			10.0000	0.30	< 0.21	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	SILICA		21.0000		NA	0.0000	0.42	0.41	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	SILICA		12.0000			12.0000	< 0.2	< 0.2	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	SILVER		0.1000			0.1000	< 0.01	< 0.01	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	SODIUM		46000.0000		NA	0.0000			mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	SODIUM		46000.0000		NA	0.0000			mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	SPECIFIC CONDUCTANCE		146000.0000		NA	0.0000			umhos/cm@25C	04/25/85	1	IT	GC
DOE-1	CULEBRA	SPECIFIC CONDUCTANCE		128000.0000		NA	0.0000			umhos/cm@25C	07/03/86	2	IT	GC
DOE-1	CULEBRA	SPECIFIC CONDUCTANCE		222000.0000			232000.0000			umhos/cm@25C	07/28/87	3	IT	GC
DOE-1	CULEBRA	STRONTIUM		5.8000			5.9000	< 0.01	< 0.01	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	STRONTIUM		16.0000		NA	0.0000	0.03	0.03	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	STRONTIUM		33.0000			32.0000	< 0.01	< 0.01	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	STYRENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	STYRENE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V

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DOE-1	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	SULFATE		6700.0000			6400.0000			mg/l	07/03/86	2	IT	GC
DOE-1	CULEBRA	SULFATE		6700.0000		NA	0.0000			mg/l	07/28/87	3	IT	GC
DOE-1	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	THALLIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	TIN		0.7000			0.7000	< 0.04	< 0.04	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	TITANIUM	<	0.0100			0.0300	< 0.01	< 0.01	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	TITANIUM		0.6900		NA	0.0000	< 0.03	< 0.03	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	TITANIUM		0.5000			0.5000	< 0.03	< 0.03	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	TOLUENE		2.1000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	TOLUENE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		NA	0.0000			mg/l	04/25/85	1	IT	GC
DOE-1	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		NA	0.0000			mg/l	07/03/86	2	IT	GC
DOE-1	CULEBRA	TOTAL ORGANIC CARBON		1.0000			1.0000			mg/l	07/28/87	3	IT	GC
DOE-1	CULEBRA	TOTAL ORGANIC HALOGEN		0.8400		NA	0.0000			mg/l	04/25/85	1	IT	GC
DOE-1	CULEBRA	TOTAL ORGANIC HALOGEN		2.3000		NA	0.0000			mg/l	07/03/86	2	IT	GC
DOE-1	CULEBRA	TOTAL ORGANIC HALOGEN		9.7000		NA	0.0000			mg/l	07/28/87	3	IT	GC
DOE-1	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	TRICHLOROETHYLENE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	TRICHLOROFLUOROMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
DOE-1	CULEBRA	VANADIUM		0.2000			0.2000	< 0.01	< 0.01	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	VINYL ACETATE	<	10.0000		<	10.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	VINYL CHLORIDE	<	10.0000		<	10.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	XYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/25/85	1	IT	V
DOE-1	CULEBRA	XYLENE	<	5.0000		<	5.0000			ug/l	07/03/86	2	IT	V
DOE-1	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	07/28/87	3	IT	V
DOE-1	CULEBRA	ZINC		0.0800			0.0700	< 0.01	< 0.01	mg/l	04/25/85	1	IT	ME
DOE-1	CULEBRA	ZINC	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	07/03/86	2	IT	ME
DOE-1	CULEBRA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	07/28/87	3	IT	ME
DOE-1	CULEBRA	pH		6.9400		NA	0.0000				04/25/85	1	IT	GC
DOE-1	CULEBRA	pH		7.0900		NA	0.0000				07/03/86	2	IT	GC
DOE-1	CULEBRA	pH		6.4700			6.5000				07/28/87	3	IT	GC
** DOE-2														
DOE-2	BELL CANYON	ALUMINUM	<	0.2000			0.2600	< 0.10	< 0.10	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	ARSENIC	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	BARIUM		0.3200		NA	0.0000	< 0.1	< 0.1	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	BERYLLIUM		0.0120		NA	0.0000	< 0.001	< 0.001	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	BORON		61.0000		NA	0.0000	< 0.1	< 0.1	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	BROMIDE		89.0000			100.0000			mg/l	07/23/85	1	IT	GC
DOE-2	BELL CANYON	CESIUM		3.4000			3.2000	< 0.10	< 0.10	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	CHROMIUM	<	0.0020		<	0.0020	< 0.001	< 0.001	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	COBALT		0.6200		NA	0.0000	< 0.001	< 0.001	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	COPPER		0.3200			0.3000	< 0.01	< 0.01	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	FLUORIDE		0.4000			0.4000			mg/l	07/23/85	1	IT	GC

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DOE-2	BELL CANYON	IODIDE		7.9000		NA	0.0000			mg/l	07/23/85	1	IT	GC
DOE-2	BELL CANYON	IRON		9.0000			9.2000	< 0.01	< 0.01	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	LEAD		0.1400		NA	0.0000	< 0.01	< 0.01	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	MANGANESE		2.5000			2.5000	0.01	0.01	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	MERCURY	<	0.0004		<	0.0004	0.0002	< 0.0002	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	MOLYBDENUM		0.1300			0.1500	< 0.01	< 0.01	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	NICKEL		1.8000			1.8000	< 0.01	0.02	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	NITRATE		0.7000			0.8000			mg/l NO3-N	07/23/85	1	IT	GC
DOE-2	BELL CANYON	PHOSPHATE		0.5100		NA	0.0000			mg/l T-PO4-P	07/23/85	1	IT	GC
DOE-2	BELL CANYON	RESIDUE, FILTERABLE @ 180 C		160000.0000		NA	0.0000			mg/l	07/23/85	1	IT	GC
DOE-2	BELL CANYON	RESIDUE, NONFILTERABLE @ 105 C		460.0000		NA	0.0000			mg/l	07/23/85	1	IT	GC
DOE-2	BELL CANYON	SELENIUM		3.6000		NA	0.0000	< 0.01	< 0.01	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	SILICA		14.0000		NA	0.0000	< 0.1	< 0.1	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	SPECIFIC CONDUCTANCE		132000.0000		NA	0.0000			umhos/cm@25C	07/23/85	1	IT	GC
DOE-2	BELL CANYON	STRONTIUM		300.0000			300.0000	< 0.01	< 0.01	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	TITANIUM	<	0.0200		NA	0.0000	< 0.01	< 0.01	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	ZINC		0.1400			0.1500	< 0.01	< 0.01	mg/l	07/23/85	1	IT	ME
DOE-2	BELL CANYON	pH		6.7200		NA	0.0000				07/23/85	1	IT	GC
DOE-2	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV

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DOE-2	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	05/19/88	3	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
DOE-2	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	V

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DOE-2	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	4-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	ACETONE	<	10.0000		NA	0.0000		T < 10	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	08/27/86	2	IT	GC
DOE-2	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	05/19/88	3	IT	GC
DOE-2	CULEBRA	ALKALINITY (HCO3)		160.0000			160.0000			mg/l	08/27/86	2	IT	GC
DOE-2	CULEBRA	ALKALINITY (HCO3)		130.0000			130.0000			mg/l	05/19/88	3	IT	GC
DOE-2	CULEBRA	ALUMINUM		0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	03/12/85	1	IT	ME
DOE-2	CULEBRA	ALUMINUM	<	10.0000		NA	0.0000	< 0.1	< 0.1	mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	ANTIMONY		0.6000			0.6000	< 0.05	< 0.05	mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	ARSENIC		0.0240			0.0260	< 0.001	< 0.001	mg/l	03/12/85	1	IT	ME
DOE-2	CULEBRA	ARSENIC	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	ARSENIC	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	BARIUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	03/12/85	1	IT	ME
DOE-2	CULEBRA	BARIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	05/19/88	3	IT	ME

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DOE-2	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	BERYLLIUM		0.1400			0.1800	< 0.001	< 0.001	mg/l	03/12/85	1	IT	ME
DOE-2	CULEBRA	BERYLLIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	BORON		24.0000		NA	0.0000	< 0.10	0.47	mg/l	03/12/85	1	IT	ME
DOE-2	CULEBRA	BORON		14.0000		NA	0.0000	< 0.01	< 0.01	mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	BORON		15.0000			15.0000	< 0.01	< 0.01	mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	BROMIDE		50.0000		NA	0.0000			mg/l	03/12/85	1	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
DOE-2	CULEBRA	BROMIDE		36.0000		NA	0.0000			mg/l	08/27/86	2	IT	GC
DOE-2	CULEBRA	BROMIDE		36.0000		NA	0.0000			mg/l	05/19/88	3	IT	GC
DOE-2	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	CALCIUM		1900.0000		NA	0.0000			mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	CALCIUM		1700.0000			1700.0000			mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	CESIUM		1.7000			1.7000	< 0.01	< 0.01	mg/l	03/12/85	1	IT	ME
DOE-2	CULEBRA	CESIUM		0.3000		NA	0.0000	< 0.1	0.1	mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	CESIUM		0.0300			0.0300	< 0.01	< 0.01	mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	CHLORIDE		33000.0000			32000.0000			mg/l	08/27/86	2	IT	GC
DOE-2	CULEBRA	CHLORIDE		29200.0000		NA	0.0000			mg/l	05/19/88	3	IT	GC
DOE-2	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	CHROMIUM		0.0070			0.0080	< 0.001	< 0.001	mg/l	03/12/85	1	IT	ME
DOE-2	CULEBRA	CHROMIUM	<	1.0000		NA	0.0000	< 0.01	0.01	mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	CHROMIUM		0.2000			0.2000	< 0.01	< 0.01	mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV

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DOE-2	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	COBALT		0.1600		NA	0.0000	< 0.001	< 0.001	mg/l	03/12/85	1	IT	ME
DOE-2	CULEBRA	COBALT	<	1.0000		NA	0.0000	< 0.01	< 0.01	mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	COPPER		0.1000		NA	0.0000	0.01	0.01	mg/l	03/12/85	1	IT	ME
DOE-2	CULEBRA	COPPER	<	1.0000		NA	0.0000	0.01	0.01	mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	COPPER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	CYANIDE		0.0200		NA	0.0000			mg/l	03/12/85	1	IT	GC
DOE-2	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	08/27/86	2	IT	GC
DOE-2	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	05/19/88	3	IT	GC
DOE-2	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	Eh		459.0000		NA	0.0000			mV	03/12/85	1	IT	GC

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DOE-2	CULEBRA	Eh		380.0000		NA	0.0000			mV	08/27/86	2	IT	GC
DOE-2	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	FLUORIDE		1.2000		NA	0.0000			mg/l	03/12/85	1	IT	GC
DOE-2	CULEBRA	FLUORIDE		1.2000			1.2000			mg/l	08/27/86	2	IT	GC
DOE-2	CULEBRA	FLUORIDE		1.4000		NA	0.0000			mg/l	05/19/88	3	IT	GC
DOE-2	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	IODIDE	<	1.0000		NA	0.0000			mg/l	03/12/85	1	IT	GC
DOE-2	CULEBRA	IODIDE		1.0000		NA	0.0000			mg/l	08/27/86	2	IT	GC
DOE-2	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	05/19/88	3	IT	GC
DOE-2	CULEBRA	IRON		0.3500		NA	0.0000	< 0.01	< 0.01	mg/l	03/12/85	1	IT	ME
DOE-2	CULEBRA	IRON		1.4000		NA	0.0000	< 0.01	< 0.01	mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	IRON		0.4000			0.4000	< 0.01	< 0.01	mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	LEAD	<	0.1000		<	0.1000	< 0.10	< 0.10	mg/l	03/12/85	1	IT	ME
DOE-2	CULEBRA	LEAD	<	5.0000		NA	0.0000	< 0.05	< 0.05	mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	05/19/88	3	IT	ME

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DOE-2	CULEBRA	LITHIUM		0.5000			0.5200	0.01	0.01	mg/l		05/19/88	3	IT	ME
DOE-2	CULEBRA	MAGNESIUM		1100.0000		NA	0.0000			mg/l		08/27/86	2	IT	ME
DOE-2	CULEBRA	MAGNESIUM		950.0000			960.0000			mg/l		05/19/88	3	IT	ME
DOE-2	CULEBRA	MANGANESE		0.3700		NA	0.0000	< 0.01	< 0.01	mg/l		03/12/85	1	IT	ME
DOE-2	CULEBRA	MANGANESE		0.6000		NA	0.0000	< 0.005	< 0.005	mg/l		08/27/86	2	IT	ME
DOE-2	CULEBRA	MANGANESE		0.4900			0.4900	< 0.005	< 0.005	mg/l		05/19/88	3	IT	ME
DOE-2	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l		03/12/85	1	IT	ME
DOE-2	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l		08/27/86	2	IT	ME
DOE-2	CULEBRA	MERCURY		0.0015			0.0018	0.0014	0.0009	mg/l		05/19/88	3	IT	ME
DOE-2	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l		08/27/86	2	IT	V
DOE-2	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l		05/19/88	3	IT	V
DOE-2	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l		08/27/86	2	IT	V
DOE-2	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l		05/19/88	3	IT	V
DOE-2	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l		08/27/86	2	IT	V
DOE-2	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l		05/19/88	3	IT	V
DOE-2	CULEBRA	MOLYBDENUM		0.0300		NA	0.0000	< 0.001	< 0.001	mg/l		03/12/85	1	IT	ME
DOE-2	CULEBRA	MOLYBDENUM		0.0900		NA	0.0000	< 0.01	< 0.01	mg/l		08/27/86	2	IT	ME
DOE-2	CULEBRA	MOLYBDENUM		10.0000			10.0000	< 0.01	< 0.01	mg/l		05/19/88	3	IT	ME
DOE-2	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		08/27/86	2	IT	SV
DOE-2	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		05/19/88	3	IT	SV
DOE-2	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		08/27/86	2	IT	SV
DOE-2	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		05/19/88	3	IT	SV
DOE-2	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		08/27/86	2	IT	SV
DOE-2	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		05/19/88	3	IT	SV
DOE-2	CULEBRA	NICKEL		0.5000		NA	0.0000	< 0.01	0.01	mg/l		03/12/85	1	IT	ME
DOE-2	CULEBRA	NICKEL	<	3.0000		NA	0.0000	< 0.03	< 0.03	mg/l		08/27/86	2	IT	ME
DOE-2	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		05/19/88	3	IT	ME
DOE-2	CULEBRA	NITRATE	<	0.1000		NA	0.0000			mg/l	NO3-N	03/12/85	1	IT	GC
DOE-2	CULEBRA	NITRATE	<	0.1000		NA	0.0000			mg/l	NO3-N	08/27/86	2	IT	GC

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DOE-2	CULEBRA	NITRATE	<	0.0200		NA	0.0000			mg/l NO3-N	05/19/88	3	IT	GC
DOE-2	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l	08/27/86	2	IT	PC
DOE-2	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l	05/19/88	3	IT	PC
DOE-2	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	PHENOLICS		0.0090		NA	0.0000			mg/l	03/12/85	1	IT	GC
DOE-2	CULEBRA	PHENOLICS		0.0100		NA	0.0000			mg/l	08/27/86	2	IT	GC
DOE-2	CULEBRA	PHENOLICS	<	0.0050		NA	0.0000			mg/l	05/19/88	3	IT	GC
DOE-2	CULEBRA	PHOSPHATE		0.0100		NA	0.0000			mg/l T-PO4-P	03/12/85	1	IT	GC
DOE-2	CULEBRA	PHOSPHATE	<	0.0100		<	0.0100			mg/l T-PO4-P	08/27/86	2	IT	GC
DOE-2	CULEBRA	PHOSPHATE	<	0.0100		NA	0.0000			mg/l T-PO4-P	05/19/88	3	IT	GC
DOE-2	CULEBRA	POTASSIUM		420.0000		NA	0.0000			mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	POTASSIUM		460.0000			460.0000			mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	SV
DOE-2	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l	05/19/88	3	IT	SV
DOE-2	CULEBRA	RESIDUE, FILTERABLE @ 180 C		58000.0000		NA	0.0000			mg/l	03/12/85	1	IT	GC
DOE-2	CULEBRA	RESIDUE, FILTERABLE @ 180 C		54000.0000		NA	0.0000			mg/l	08/27/86	2	IT	GC
DOE-2	CULEBRA	RESIDUE, FILTERABLE @ 180 C		57500.0000			57500.0000			mg/l	05/19/88	3	IT	GC
DOE-2	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		130.0000		NA	0.0000			mg/l	03/12/85	1	IT	GC
DOE-2	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		60.0000		NA	0.0000			mg/l	08/27/86	2	IT	GC
DOE-2	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		120.0000			130.0000			mg/l	05/19/88	3	IT	GC
DOE-2	CULEBRA	SELENIUM		0.0480		NA	0.0000	< 0.001	< 0.001	mg/l	03/12/85	1	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
DOE-2	CULEBRA	SELENIUM	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	SELENIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	SILICA		11.0000			11.0000	6.7	5.2	mg/l	03/12/85	1	IT	ME
DOE-2	CULEBRA	SILICA		24.0000		NA	0.0000	< 0.2	< 0.2	mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	SILICA		6.4000			6.5000			mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	SODIUM		17000.0000		NA	0.0000			mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	SODIUM		17600.0000			17400.0000			mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	SPECIFIC CONDUCTANCE		78900.0000		NA	0.0000			umhos/cm@25C	03/12/85	1	IT	GC
DOE-2	CULEBRA	SPECIFIC CONDUCTANCE		71200.0000		NA	0.0000			umhos/cm@25C	08/27/86	2	IT	GC
DOE-2	CULEBRA	SPECIFIC CONDUCTANCE		76500.0000			76200.0000			umhos/cm@25C	05/19/88	3	IT	GC
DOE-2	CULEBRA	STRONTIUM		28.0000			28.0000	0.01	0.01	mg/l	03/12/85	1	IT	ME
DOE-2	CULEBRA	STRONTIUM		22.0000		NA	0.0000	< 0.01	< 0.01	mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	STRONTIUM		34.0000			34.0000	< 0.01	< 0.01	mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	SULFATE		3700.0000		NA	0.0000			mg/l	08/27/86	2	IT	GC
DOE-2	CULEBRA	SULFATE		4500.0000		NA	0.0000			mg/l	05/19/88	3	IT	GC
DOE-2	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	THALLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	TITANIUM	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	03/12/85	1	IT	ME
DOE-2	CULEBRA	TITANIUM	<	3.0000		NA	0.0000	< 0.03	< 0.03	mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	TITANIUM		0.4000			0.5000	< 0.03	< 0.03	mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	TOTAL ORGANIC CARBON		1.0000		NA	0.0000			mg/l	03/12/85	1	IT	GC
DOE-2	CULEBRA	TOTAL ORGANIC CARBON		5.0000		NA	0.0000			mg/l	08/27/86	2	IT	GC
DOE-2	CULEBRA	TOTAL ORGANIC CARBON		1.0000		<	1.0000			mg/l	05/19/88	3	IT	GC

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DOE-2	CULEBRA	TOTAL ORGANIC HALOGEN		0.6100		NA	0.0000			mg/l	08/27/86	2	IT	GC
DOE-2	CULEBRA	TOTAL ORGANIC HALOGEN		2.1000			1.9000			mg/l	05/19/88	3	IT	GC
DOE-2	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	VANADIUM		0.1000			0.1000	< 0.01	< 0.01	mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	08/27/86	2	IT	V
DOE-2	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	05/19/88	3	IT	V
DOE-2	CULEBRA	ZINC		0.0400		NA	0.0000	< 0.01	< 0.01	mg/l	03/12/85	1	IT	ME
DOE-2	CULEBRA	ZINC	<	1.0000		NA	0.0000	< 0.01	< 0.01	mg/l	08/27/86	2	IT	ME
DOE-2	CULEBRA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	05/19/88	3	IT	ME
DOE-2	CULEBRA	pH		7.0800		NA	0.0000				03/12/85	1	IT	GC
DOE-2	CULEBRA	pH		6.6500			6.6800				08/27/86	2	IT	GC
DOE-2	CULEBRA	pH		6.4700			6.4900				05/19/88	3	IT	GC
** ENGLE														
ENGLE	CULEBRA	2-NITROANILINE		50.0000		NA	0.0000		M< 50	ug/l	01/31/90	3	IT	SV
** ENGLE WELL														
ENGLE WELL	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/08/87	2	IT	V
ENGLE WELL	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V

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ENGLE WELL	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	1,1,2-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	1,1-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/08/87	2	IT	V
ENGLE WELL	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	1,2,4-TRICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	1,2-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/08/87	2	IT	V
ENGLE WELL	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	1,2-DICHLOROPROPANE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	1,2-DIPHENYLHYDRAZINE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	1,3-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	1,3-DICHLOROPROPYLENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	1,4-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	2,3,7,8-TETRACHLOROBENZO-P-DIOXIN	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	2,4,5-TP (SILVEX)	<	0.0005		NA	0.0000			mg/l	12/08/87	2	IT	HP
ENGLE WELL	CULEBRA	2,4,5-TP (SILVEX)	<	1.7000		NA	0.0000		M< 1.7	ug/l	01/31/90	3	IT	H
ENGLE WELL	CULEBRA	2,4,5-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV

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ENGLE WELL	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000		M< 50	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	2,4,6-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	2,4-D	<	0.0050		NA	0.0000			mg/l	12/08/87	2	IT	HP
ENGLE WELL	CULEBRA	2,4-D	<	12.0000		NA	0.0000		M< 12	ug/l	01/31/90	3	IT	H
ENGLE WELL	CULEBRA	2,4-DICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	2,4-DIMETHYLPHENOL	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	2,4-DINITROPHENOL	<	10.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000		M< 50	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	2,4-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	2,6-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	2-CHLORONAPHTHALENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	2-CHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	2-METHYLNAPHTHALENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	2-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	2-NITROANILINE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV

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ENGLE WELL	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000		M< 50	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	2-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	3,3'-DICHLOROBENZIDINE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000		M< 20	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	3,4-BENZOFLUORANTHENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	3-NITROANILINE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000		M< 50	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	4,6-DINITRO-O-CRESOL	<	10.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000		M< 50	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	4-CHLOROANILINE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	4-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	4-NITROANILINE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000		M< 50	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	4-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000		M< 50	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	ACENAPHTHENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	ACENAPHTHYLENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	ACETONE		31.0000		NA	0.0000			ug/l	03/04/85	1	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
ENGLE WELL	CULEBRA	ACETONE	<	10.0000	NA		0.0000	T< 10	M< 10	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	ACROLEIN	<	10.0000	NA		0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	ACRYLONITRILE	<	10.0000	NA		0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	ALKALINITY (CO3)	NA	0.0000	NA		0.0000			mg/l	03/04/85	1	IT	GC
ENGLE WELL	CULEBRA	ALKALINITY (CO3)		0.0000	NA		0.0000			mg/l	12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	ALKALINITY (CO3)		0.0000	NA		0.0000			mg/l	01/31/90	3	IT	GC
ENGLE WELL	CULEBRA	ALKALINITY (HCO3)	NA	0.0000	NA		0.0000			mg/l	03/04/85	1	IT	GC
ENGLE WELL	CULEBRA	ALKALINITY (HCO3)		74.0000	NA		0.0000			mg/l	12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	ALKALINITY (HCO3)		110.0000			110.0000			mg/l	01/31/90	3	IT	GC
ENGLE WELL	CULEBRA	ALUMINUM	<	0.0100	NA		0.0000	< 0.01	< 0.01	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	ALUMINUM	<	0.1000	<		0.1000	< 0.1	< 0.1	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	ALUMINUM		0.2000			0.2000	< 0.1	< 0.1	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	ANILINE	<	1.0000	NA		0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	ANTHRACENE	<	1.0000	NA		0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	ANTHRACENE	<	10.0000	NA		0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	ANTIMONY		0.1600			0.1700	< 0.05	< 0.05	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	ANTIMONY		0.1200			0.1000	< .05	< .05	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	ARSENIC	<	0.0010	NA		0.0000	< 0.001	< 0.001	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	ARSENIC	<	0.0050	<		0.0050	< 0.005	< 0.005	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	ARSENIC	<	0.0020	NA		0.0000	< .002	< .002	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	BARIUM	<	0.0100	NA		0.0000	< 0.01	< 0.01	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	BARIUM		0.0110			0.0120	< 0.005	< 0.005	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	BARIUM	<	0.0500	<		0.0500	< .005	< .005	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	BENZENE	<	1.0000	NA		0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	BENZENE	<	1.0000	NA		0.0000		T < 1.0	ug/l	12/08/87	2	IT	V
ENGLE WELL	CULEBRA	BENZENE	<	5.0000	NA		0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	BENZIDINE	<	4.0000	NA		0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	BENZO(A)ANTHRACENE	<	1.0000	NA		0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000	NA		0.0000		M< 10	ug/l	01/31/90	3	IT	SV

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ENGLE WELL	CULEBRA	BENZO(A)PYRENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	BENZO(B)FLUORANTHENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	BENZO(G,H,I)PERYLENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	BENZO(K)FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	BENZOIC ACID	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000		M< 50	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	BENZYL ALCOHOL	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	BERYLLIUM		0.0010		NA	0.0000	0.001	< 0.001	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	BERYLLIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	BERYLLIUM	<	0.0050		<	0.0050	< .005	< .005	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	4.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	BIS(CHLOROMETHYL)ETHER	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	BORON		0.7700		NA	0.0000	0.87	< 0.1	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	BORON		2.5000			2.4000	< 0.01	< 0.01	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	BORON		1.2000			1.3000	< 0.02	< 0.02	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	BROMIDE		1.2000		NA	0.0000			mg/l	03/04/85	1	IT	GC
ENGLE WELL	CULEBRA	BROMIDE	<	2.0000		<	2.0000			mg/l	12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	BROMIDE	<	2.0000		<	2.0000			mg/l	01/31/90	3	IT	GC

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ENGLE WELL	CULEBRA	BROMOFORM	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	BROMOFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/08/87	2	IT	V
ENGLE WELL	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	BUTYL BENZYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	CADMIUM		0.0120			0.0140	< 0.005	< 0.005	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	CADMIUM		0.0130			0.0110	< .005	< .005	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	CALCIUM		590.0000			550.0000			mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	CALCIUM		610.0000			610.0000	< 0.1	< 0.1	mg/l	01/31/90	3	IT	MC
ENGLE WELL	CULEBRA	CALCIUM HARDNESS		1500.0000			1500.0000			mg/l	01/31/90	3	IT	GC
ENGLE WELL	CULEBRA	CARBON DISULFIDE	<	10.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/08/87	2	IT	V
ENGLE WELL	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	CESIUM		0.0700		NA	0.0000	0.09	< 0.01	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	CESIUM		0.0300			0.0300	0.02	0.02	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	CESIUM	<	0.2000		<	0.2000	< 0.2	< 0.2	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	CHLORIDE		450.0000		NA	0.0000			mg/l	12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	CHLORIDE		190.0000		NA	0.0000			mg/l	01/31/90	3	IT	GC
ENGLE WELL	CULEBRA	CHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	CHLOROETHANE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	CHLOROFORM	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	CHLOROFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/08/87	2	IT	V
ENGLE WELL	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	CHROMIUM	<	0.0010		<	0.0010	< 0.001	< 0.001	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	CHROMIUM		0.0700			0.0800	0.01	0.01	mg/l	12/08/87	2	IT	ME

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ENGLE WELL	CULEBRA	CHROMIUM		0.0600			0.0600	< .02	< .01	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	CHRYSENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	COBALT	<	0.0010		NA	0.0000	< 0.001	< 0.001	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	COBALT		0.0200			0.0200	< 0.01	< 0.01	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	COBALT		0.0200			0.0200	< .01	< .01	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	COLOR		60.0000		NA	0.0000			CU	12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	COPPER	<	0.0100		NA	0.0000	< 0.01	0.12	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	COPPER		0.0200			0.0200	0.03	0.03	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	COPPER	<	0.1000		<	0.1000	< .01	< .01	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	03/04/85	1	IT	GC
ENGLE WELL	CULEBRA	CYANIDE	<	0.0100		NA	0.0000			mg/l	01/31/90	3	IT	GC
ENGLE WELL	CULEBRA	DI-N-BUTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	DI-N-OCTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	DIBENZOFURAN	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/08/87	2	IT	V
ENGLE WELL	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/08/87	2	IT	V
ENGLE WELL	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	DICHLORODIFLUOROMETHANE	<	10.0000		NA	0.0000			ug/l	03/04/85	1	IT	V

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ENGLE WELL	CULEBRA	DIETHYL PHTHALATE		3.9000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	DIMETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	ENDRIN	<	0.0200		NA	0.0000			ug/l	12/08/87	2	IT	HP
ENGLE WELL	CULEBRA	ENDRIN	<	0.1000		NA	0.0000		M< .10	ug/l	01/31/90	3	IT	P
ENGLE WELL	CULEBRA	ETHYLBENZENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	Eh		429.0000		NA	0.0000			mV	03/04/85	1	IT	GC
ENGLE WELL	CULEBRA	FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	FLUORENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	FLUORENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	FLUORIDE		2.8000		NA	0.0000			mg/l	03/04/85	1	IT	GC
ENGLE WELL	CULEBRA	FLUORIDE		2.0000		NA	0.0000			mg/l	12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	FLUORIDE		2.8000		NA	0.0000			mg/l	01/31/90	3	IT	GC
ENGLE WELL	CULEBRA	FREON-113	<	50.0000		NA	0.0000	T< 50	M< 50	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	HEXACHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	HEXACHLOROBUTADIENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	HEXACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	IODIDE	<	1.0000		NA	0.0000			mg/l	03/04/85	1	IT	GC
ENGLE WELL	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	12/08/87	2	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
ENGLE WELL	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	01/31/90	3	IT	GC
ENGLE WELL	CULEBRA	IRON		0.3200		NA	0.0000	0.02	0.03	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	IRON		3.6000			3.6000	< 0.01	< 0.01	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	IRON	<	0.0300		<	0.0300	< .03	< .03	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	ISOPHORONE	<	4.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	LEAD	<	0.1000		NA	0.0000	< 0.10	< 0.10	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	LEAD		0.1200			0.1500	< 0.05	< 0.05	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	LEAD		0.0900			0.0800	< .05	< .05	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	LINDANE	<	0.0400		NA	0.0000			ug/l	12/08/87	2	IT	HP
ENGLE WELL	CULEBRA	LINDANE	<	0.0500		NA	0.0000		M< .05	ug/l	01/31/90	3	IT	P
ENGLE WELL	CULEBRA	LITHIUM		0.2000			0.2000	< 0.01	< 0.01	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	LITHIUM		0.1600			0.1600	< .01	< .01	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	LSI CORROSIVITY		-1.4800		NA	0.0000				12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	MAGNESIUM		160.0000			160.0000			mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	MAGNESIUM		150.0000			150.0000	< 0.1	< 0.1	mg/l	01/31/90	3	IT	MC
ENGLE WELL	CULEBRA	MANGANESE	<	0.0100			0.0200	0.02	< 0.01	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	MANGANESE		0.1200			0.1200	< 0.005	< 0.005	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	MANGANESE		0.0390			0.0360	< .005	< .005	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	MBAS		1.2000			1.3000			mg/l	12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	MERCURY	<	0.0002		<	0.0002	< .0002	< .0002	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	METHOXYCHLOR	<	0.0010		NA	0.0000			mg/l	12/08/87	2	IT	HP
ENGLE WELL	CULEBRA	METHOXYCHLOR	<	0.5000		NA	0.0000		M< .50	ug/l	01/31/90	3	IT	P
ENGLE WELL	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	01/31/90	3	IT	V

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ENGLE WELL	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000	T 6	M 6	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	MOLYBDENUM		0.0320		NA	0.0000	0.036	0.002	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	MOLYBDENUM		0.0800			0.0700	< 0.01	< 0.01	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	MOLYBDENUM		0.0500			0.0500	< .02	< .02	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	N-NITROSO-DI-METHYLAMINE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	N-NITROSO-DI-PHENYLAMINE		5.9000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	NAPHTHALENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	NICKEL		0.0400		NA	0.0000	0.07	< 0.01	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	NICKEL	<	0.0300			0.0300	< 0.03	< 0.03	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	NICKEL		0.0300		<	0.0300	< .03	< .03	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	NITRATE		0.5000		NA	0.0000			mg/l NO3-N	03/04/85	1	IT	GC
ENGLE WELL	CULEBRA	NITRATE	<	0.1000		NA	0.0000			mg/l NO3-N	12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	NITRATE		0.1100			0.1200			mg/l	01/31/90	3	IT	GC
ENGLE WELL	CULEBRA	NITROBENZENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	ODOR		4.0000		NA	0.0000			T.O.N.	12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	P-CHLORO-M-CRESOL	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	P-DICHLOROBENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/08/87	2	IT	V
ENGLE WELL	CULEBRA	PENTACHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000		M< 50	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	PHENANTHRENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	PHENOL	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV

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ENGLE WELL	CULEBRA	PHENOL	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	PHENOLICS		0.0060		NA	0.0000			mg/l	03/04/85	1	IT	GC
ENGLE WELL	CULEBRA	PHENOLICS		0.0060			0.0000			mg/l	01/31/90	3	IT	GC
ENGLE WELL	CULEBRA	PHOSPHATE	<	0.0100		NA	0.0000			mg/l T-PO4-P	03/04/85	1	IT	GC
ENGLE WELL	CULEBRA	PHOSPHATE		0.1700			0.1400			mg/l T-PO4-P	12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	PHOSPHORUS	<	0.0100		NA	0.0000			mg/l	01/31/90	3	IT	GC
ENGLE WELL	CULEBRA	POTASSIUM		10.0000			10.0000			mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	POTASSIUM		7.6000			7.5000	< 0.1	< 0.1	mg/l	01/31/90	3	IT	MC
ENGLE WELL	CULEBRA	PYRENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	SV
ENGLE WELL	CULEBRA	PYRENE	<	10.0000		NA	0.0000		M< 10	ug/l	01/31/90	3	IT	SV
ENGLE WELL	CULEBRA	RESIDUE, FILTERABLE @ 180 C		3450.0000			3460.0000			mg/l	03/04/85	1	IT	GC
ENGLE WELL	CULEBRA	RESIDUE, FILTERABLE @ 180 C		4000.0000		NA	0.0000			mg/l	12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	RESIDUE, FILTERABLE @ 180 C		3600.0000			3600.0000			mg/l	01/31/90	3	IT	GC
ENGLE WELL	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		11.0000		NA	0.0000			mg/l	03/04/85	1	IT	GC
ENGLE WELL	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		9.0000			8.0000			mg/l	12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000		<	4.0000			mg/l	01/31/90	3	IT	GC
ENGLE WELL	CULEBRA	SELENIUM		0.1000		NA	0.0000	0.011	< 0.001	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	SELENIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	SELENIUM	<	0.2000		NA	0.0000	< .002	< .002	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	SILICA		25.0000		NA	0.0000	25	37	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	SILICA		17.0000			16.0000	< 0.2	< 0.2	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	SILICA		12.0000			12.0000			mg/l	01/31/90	3	IT	GC
ENGLE WELL	CULEBRA	SILVER		0.0200			0.0300	< 0.01	< 0.01	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	SILVER		0.0200			0.0200	< .01	< .01	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	SODIUM		440.0000			430.0000			mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	SODIUM		220.0000			220.0000	< 0.1	< 0.1	mg/l	01/31/90	3	IT	MC
ENGLE WELL	CULEBRA	SPECIFIC CONDUCTANCE		3700.0000		NA	0.0000			umhos/cm@25C	03/04/85	1	IT	GC
ENGLE WELL	CULEBRA	SPECIFIC CONDUCTANCE		4820.0000			4880.0000			umhos/cm@25C	12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	SPECIFIC CONDUCTANCE		4060.0000			4060.0000			uMhos/cm@25C	01/31/90	3	IT	GC

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ENGLE WELL	CULEBRA	STRONTIUM		7.0000		NA	0.0000	8.2	0.01	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	STRONTIUM		8.3000			8.3000	< 0.01	< 0.01	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	STRONTIUM		7.9000			8.0000	< .01	< .01	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	STYRENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	STYRENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	SULFATE		2000.0000		NA	0.0000			mg/l	03/04/85	1	IT	GC
ENGLE WELL	CULEBRA	SULFATE		2000.0000		NA	0.0000			mg/l	12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	SULFATE		1900.0000			2000.0000			mg/l	01/31/90	3	IT	GC
ENGLE WELL	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/08/87	2	IT	V
ENGLE WELL	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	THALLIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	THALLIUM	<	0.0100		NA	0.0000	< .001	< .001	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	TITANIUM	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	TITANIUM		0.2000			0.2400	< 0.03	< 0.03	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	TITANIUM	<	0.0100		<	0.0100	< .01	< .01	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	TOLUENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	TOLUENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	TOTAL HARDNESS		2200.0000		NA	0.0000			mg/l	01/31/90	3	IT	GC
ENGLE WELL	CULEBRA	TOTAL ORGANIC CARBON		2.0000		NA	0.0000			mg/l	03/04/85	1	IT	GC
ENGLE WELL	CULEBRA	TOTAL ORGANIC CARBON		3.0000			3.0000			mg/l	12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	01/31/90	3	IT	GC
ENGLE WELL	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.1000		NA	0.0000			mg/l	03/04/85	1	IT	GC
ENGLE WELL	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	01/31/90	3	IT	GC
ENGLE WELL	CULEBRA	TOXAPHENE	<	0.0005		NA	0.0000			mg/l	12/08/87	2	IT	HP
ENGLE WELL	CULEBRA	TOXAPHENE	<	1.0000		NA	0.0000		M< 1.0	ug/l	01/31/90	3	IT	P
ENGLE WELL	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V

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ENGLE WELL	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/08/87	2	IT	V
ENGLE WELL	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	TRICHLOROFLUOROMETHANE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	TURBIDITY		60.0000			65.0000			NTU	12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	VANADIUM		0.0400			0.0400	< 0.01	< 0.01	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	VANADIUM		0.0400			0.0400	< .01	< .01	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	VINYL CHLORIDE	<	2.0000		NA	0.0000		T < 2.0	ug/l	12/08/87	2	IT	V
ENGLE WELL	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	XYLENE	<	1.0000		NA	0.0000			ug/l	03/04/85	1	IT	V
ENGLE WELL	CULEBRA	XYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	01/31/90	3	IT	V
ENGLE WELL	CULEBRA	ZINC		0.2000			0.2000	0.19	0.02	mg/l	03/04/85	1	IT	ME
ENGLE WELL	CULEBRA	ZINC		0.3700			0.3700	< 0.01	< 0.01	mg/l	12/08/87	2	IT	ME
ENGLE WELL	CULEBRA	ZINC		2.2000			2.2000	< .02	< .02	mg/l	01/31/90	3	IT	MT
ENGLE WELL	CULEBRA	pH		6.5000		NA	0.0000				03/04/85	1	IT	GC
ENGLE WELL	CULEBRA	pH		6.2800			6.4000				12/08/87	2	IT	GC
ENGLE WELL	CULEBRA	pH		7.1000			7.1100				01/31/90	3	IT	GC
** FAIRVIEW WINDMILL														
FAIRVIEW WINDMILL	DEWEY LAKE	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/16/87	1	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/16/87	1	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/16/87	1	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
FAIRVIEW WINDMILL	DEWEY LAKE	2,4,5-TP (SILVEX)	<	0.0005		NA	0.0000			mg/l	11/16/87	1	IT	HP
FAIRVIEW WINDMILL	DEWEY LAKE	2,4,5-TP (SILVEX)	<	0.0005		NA	0.0000			mg/l	07/06/88	2	IT	HP
FAIRVIEW WINDMILL	DEWEY LAKE	2,4-D	<	0.0050		NA	0.0000			mg/l	11/16/87	1	IT	HP
FAIRVIEW WINDMILL	DEWEY LAKE	2,4-D	<	0.0050		NA	0.0000			mg/l	07/06/88	2	IT	HP
FAIRVIEW WINDMILL	DEWEY LAKE	ARSENIC	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	11/16/87	1	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	ARSENIC	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	07/06/88	2	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	BARIUM		0.0110			0.0110	< 0.005	< 0.005	mg/l	11/16/87	1	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	BARIUM		0.0280			0.0290	< 0.005	< 0.005	mg/l	07/06/88	2	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	BENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/16/87	1	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	BENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	BROMOFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/16/87	1	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	BROMOFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	CADMIUM		0.0070			0.0100	< 0.005	< 0.005	mg/l	11/16/87	1	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	CADMIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	07/06/88	2	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/16/87	1	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	CHLORIDE		140.0000		NA	0.0000			mg/l	11/16/87	1	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	CHLORIDE		140.0000		NA	0.0000			mg/l	07/06/88	2	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	CHLOROFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/16/87	1	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	CHLOROFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	CHROMIUM		0.0500			0.0600	< 0.01	< 0.01	mg/l	11/16/87	1	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	CHROMIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	07/06/88	2	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	COLOR		200.0000		NA	0.0000			CU	11/16/87	1	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	COLOR	<	1.0000		NA	0.0000			CU	07/06/88	2	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	COPPER		0.0100			0.0200	< 0.01	< 0.01	mg/l	11/16/87	1	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	COPPER		0.1100			0.1200	< 0.01	< 0.01	mg/l	07/06/88	2	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/16/87	1	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/16/87	1	IT	V

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FAIRVIEW WINDMILL	DEWEY LAKE	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	ENDRIN	<	0.0200		NA	0.0000			ug/l	11/16/87	1	IT	HP
FAIRVIEW WINDMILL	DEWEY LAKE	ENDRIN	<	0.0200		NA	0.0000			ug/l	07/06/88	2	IT	HP
FAIRVIEW WINDMILL	DEWEY LAKE	FLUORIDE		2.0000		NA	0.0000			mg/l	11/16/87	1	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	FLUORIDE		2.1000		NA	0.0000			mg/l	07/06/88	2	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	IRON		6.7000			6.8000	< 0.01	< 0.01	mg/l	11/16/87	1	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	IRON		0.0800			0.0800	< 0.01	< 0.01	mg/l	07/06/88	2	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	LEAD		0.0700			0.0900	< 0.05	< 0.05	mg/l	11/16/87	1	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	LEAD	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	07/06/88	2	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	LINDANE	<	0.0400		NA	0.0000			ug/l	11/16/87	1	IT	HP
FAIRVIEW WINDMILL	DEWEY LAKE	LINDANE	<	0.0400		NA	0.0000			ug/l	07/06/88	2	IT	HP
FAIRVIEW WINDMILL	DEWEY LAKE	LSI CORROSIVITY		-0.3400		NA	0.0000				11/16/87	1	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	LSI CORROSIVITY		-0.0800		NA	0.0000			--	07/06/88	2	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	MANGANESE		0.1500			0.1500	< 0.005	< 0.005	mg/l	11/16/87	1	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	MANGANESE		0.0520			0.0600	< 0.005	< 0.005	mg/l	07/06/88	2	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	MBAS	<	0.0250		<	0.0250			mg/l	11/16/87	1	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	MBAS		0.0320		NA	0.0000			mg/l	07/06/88	2	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	11/16/87	1	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	MERCURY		0.0024		NA	0.0000	< 0.0002	< 0.0002	mg/l	07/06/88	2	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	METHOXYCHLOR	<	0.0010		NA	0.0000			mg/l	11/16/87	1	IT	HP
FAIRVIEW WINDMILL	DEWEY LAKE	METHOXYCHLOR	<	0.0010		NA	0.0000			mg/l	07/06/88	2	IT	HP
FAIRVIEW WINDMILL	DEWEY LAKE	NITRATE		0.3000		NA	0.0000			mg/l NO3-N	11/16/87	1	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	NITRATE		1.4000		NA	0.0000			mg/l NO3-N	07/06/88	2	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	ODOR		20.0000		NA	0.0000			T.O.N	11/16/87	1	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	ODOR		1.0000		NA	0.0000			T.O.N.	07/06/88	2	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	P-DICHLOROBENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/16/87	1	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	P-DICHLOROBENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	RESIDUE, FILTERABLE @ 180 C		3400.0000		NA	0.0000			mg/l	11/16/87	1	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	RESIDUE, FILTERABLE @ 180 C		3300.0000		NA	0.0000			mg/l	07/06/88	2	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
FAIRVIEW WINDMILL	DEWEY LAKE	SELENIUM		0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	11/16/87	1	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	SELENIUM		0.0110		NA	0.0000	< 0.005	< 0.005	mg/l	07/06/88	2	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	SILVER	<	0.0100			0.0100	< 0.01	< 0.01	mg/l	11/16/87	1	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	SILVER	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	07/06/88	2	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	SULFATE		1600.0000		NA	0.0000			mg/l	11/16/87	1	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	SULFATE		1900.0000		NA	0.0000			mg/l	07/06/88	2	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/16/87	1	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	TOXAPHENE	<	0.0005		NA	0.0000			mg/l	11/16/87	1	IT	HP
FAIRVIEW WINDMILL	DEWEY LAKE	TOXAPHENE	<	0.0005		NA	0.0000			mg/l	07/06/88	2	IT	HP
FAIRVIEW WINDMILL	DEWEY LAKE	TRICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/16/87	1	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	TRICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	TURBIDITY		120.0000			120.0000			NTU	11/16/87	1	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	TURBIDITY		1.0000		NA	0.0000			NTU	07/06/88	2	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	VINYL CHLORIDE	<	2.0000		NA	0.0000		T < 2.0	ug/l	11/16/87	1	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	VINYL CHLORIDE	<	2.0000		NA	0.0000		T < 2.0	ug/l	07/06/88	2	IT	V
FAIRVIEW WINDMILL	DEWEY LAKE	ZINC		0.0200			0.0200	< 0.01	< 0.01	mg/l	11/16/87	1	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	ZINC		0.0200			0.0100	< 0.01	< 0.01	mg/l	07/06/88	2	IT	ME
FAIRVIEW WINDMILL	DEWEY LAKE	pH		7.1700		NA	0.0000				11/16/87	1	IT	GC
FAIRVIEW WINDMILL	DEWEY LAKE	pH		7.1000			7.1300			--	07/06/88	2	IT	GC
** H-02a														
H-02a	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-02a	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV

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H-02a	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	2-BUTANONE	<	10.0000		<	10.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	2-BUTANONE	<	10.0000		<	10.0000	< 10	< 10	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		<	10.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		<	10.0000	< 10	< 10	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-02a	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	2-HEXANONE	<	10.0000		<	10.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	2-HEXANONE	<	10.0000		<	10.0000	< 10	< 10	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	2-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-02a	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		<	10.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		<	10.0000	< 10	< 10	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	ACETONE	<	10.0000		<	10.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	ACETONE		1400.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	ACETONE		27.0000			1200.0000	1200	17	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	04/21/86	1	IT	GC

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H-02a	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	08/12/87	2	IT	GC
H-02a	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	01/19/89	3	IT	GC
H-02a	CULEBRA	ALKALINITY (HCO3)		56.0000		NA	0.0000			mg/l	04/21/86	1	IT	GC
H-02a	CULEBRA	ALKALINITY (HCO3)		54.0000			54.0000			mg/l	08/12/87	2	IT	GC
H-02a	CULEBRA	ALKALINITY (HCO3)		57.0000			57.0000			mg/l	01/19/89	3	IT	GC
H-02a	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	ANTIMONY	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	ANTIMONY	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	ARSENIC	<	0.0100		<	0.0100	< 0.001	< 0.001	mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	ARSENIC		0.0150			0.0130	< 0.005	< 0.005	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	ARSENIC	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	BENZENE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	BENZENE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	BENZO(B)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV

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H-02a	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE		20.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	BORON		10.0000			10.0000	< 0.01	< 0.01	mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	BORON		10.0000			10.0000	< 0.01	< 0.01	mg/l	08/12/87	2	IT	ME

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H-02a	CULEBRA	BORON		11.0000			11.0000	< 0.01	< 0.01	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	BROMIDE	<	1.0000		NA	0.0000			mg/l	04/21/86	1	IT	GC
H-02a	CULEBRA	BROMIDE	<	2.0000		NA	0.0000			mg/l	08/12/87	2	IT	GC
H-02a	CULEBRA	BROMIDE		3.0000			3.0000			mg/l	01/19/89	3	IT	GC
H-02a	CULEBRA	BROMOFORM	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	BROMOFORM	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	CADMIUM		0.0800			0.0800	< 0.005	< 0.005	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	CALCIUM		700.0000			710.0000			mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	CALCIUM		670.0000		NA	0.0000			mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	CALCIUM		770.0000			770.0000			mg/l	01/19/89	3	IT	MC
H-02a	CULEBRA	CARBON DISULFIDE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	CARBON DISULFIDE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	CESIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	CESIUM		0.1000			0.1000	0.03	0.03	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	CESIUM	<	0.0600		<	0.0600	< 0.06	< 0.06	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	CHLORIDE		5300.0000		NA	0.0000			mg/l	04/21/86	1	IT	GC
H-02a	CULEBRA	CHLORIDE		4800.0000		NA	0.0000			mg/l	08/12/87	2	IT	GC
H-02a	CULEBRA	CHLORIDE		3600.0000			3600.0000			mg/l	01/19/89	3	IT	GC
H-02a	CULEBRA	CHLOROBENZENE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-02a	CULEBRA	CHLOROBENZENE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	CHLOROETHANE	<	10.0000		<	10.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	CHLOROETHANE	<	10.0000		<	10.0000	< 10	< 10	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	CHLOROFORM	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	CHLOROFORM	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	CHROMIUM	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	CHROMIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	CHROMIUM		0.4000			0.4000	< 0.01	< 0.01	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	COPPER	<	0.1000			0.1100	< 0.01	< 0.01	mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	COPPER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	COPPER	<	0.1000			0.1000	< 0.01	< 0.01	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	04/21/86	1	IT	GC
H-02a	CULEBRA	CYANIDE	<	0.0400		NA	0.0000			mg/l	08/12/87	2	IT	GC
H-02a	CULEBRA	CYANIDE	<	0.0100		NA	0.0000			mg/l	01/19/89	3	IT	GC
H-02a	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV

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H-02a	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	ETHYLBENZENE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	ETHYLBENZENE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	Eh		388.0000		NA	0.0000			mV	04/21/86	1	IT	GC
H-02a	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV

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H-02a	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	FLUORIDE		14.0000		NA	0.0000			mg/l	04/21/86	1	IT	GC
H-02a	CULEBRA	FLUORIDE		2.1000		NA	0.0000			mg/l	08/12/87	2	IT	GC
H-02a	CULEBRA	FLUORIDE		2.2000			2.2000			mg/l	01/19/89	3	IT	GC
H-02a	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	IODIDE		1.0000		NA	0.0000			mg/l	04/21/86	1	IT	GC
H-02a	CULEBRA	IODIDE		8.0000			7.0000			mg/l	08/12/87	2	IT	GC
H-02a	CULEBRA	IODIDE		9.0000			8.0000			mg/l	01/19/89	3	IT	GC
H-02a	CULEBRA	IRON		0.7400			0.7800	< 0.01	< 0.01	mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	IRON		0.3000			0.3000	< 0.01	< 0.01	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	IRON		1.2000			1.2000	< 0.01	< 0.01	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	04/21/86	1	IT	ME

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H-02a	CULEBRA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	LEAD		0.5000			0.5000	< 0.05	< 0.05	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	LITHIUM		0.7200			0.7200	< 0.01	< 0.01	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	LITHIUM		0.2600			0.2500	< 0.01	< 0.01	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	MAGNESIUM		170.0000			170.0000			mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	MAGNESIUM		160.0000		NA	0.0000			mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	MAGNESIUM		170.0000			170.0000			mg/l	01/19/89	3	IT	MC
H-02a	CULEBRA	MANGANESE		0.0700			0.0800	< 0.005	< 0.005	mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	MANGANESE		0.0700			0.0700	< 0.005	< 0.005	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	MANGANESE	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	MERCURY		0.0002		<	0.0002	0.0002	< 0.0002	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	METHYL BROMIDE	<	10.0000		<	10.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	METHYL BROMIDE	<	10.0000		<	10.0000	< 10	< 10	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	METHYL CHLORIDE	<	10.0000		<	10.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	METHYL CHLORIDE	<	10.0000		<	10.0000	< 10	< 10	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	METHYLENE CHLORIDE	<	10.0000		<	10.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	METHYLENE CHLORIDE		16.0000			45.0000	< 5	30	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	MOLYBDENUM		0.0400			0.0300	< 0.01	0.02	mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	MOLYBDENUM		0.0600			0.0700	0.03	0.03	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	MOLYBDENUM	<	0.0500		<	0.0500	< 0.05	< 0.05	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV

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H-02a	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		08/12/87	2	IT	SV
H-02a	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		01/19/89	3	IT	SV
H-02a	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		04/21/86	1	IT	SV
H-02a	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		08/12/87	2	IT	SV
H-02a	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		01/19/89	3	IT	SV
H-02a	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		04/21/86	1	IT	ME
H-02a	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		08/12/87	2	IT	ME
H-02a	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		01/19/89	3	IT	MT
H-02a	CULEBRA	NITRATE		0.3000		NA	0.0000			mg/l	NO3-N	04/21/86	1	IT	GC
H-02a	CULEBRA	NITRATE	<	0.2000		NA	0.0000			mg/l	NO3-N	08/12/87	2	IT	GC
H-02a	CULEBRA	NITRATE	<	0.0200		<	0.0200			mg/l		01/19/89	3	IT	GC
H-02a	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		04/21/86	1	IT	SV
H-02a	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		08/12/87	2	IT	SV
H-02a	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		01/19/89	3	IT	SV
H-02a	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		04/21/86	1	IT	SV
H-02a	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		08/12/87	2	IT	SV
H-02a	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		01/19/89	3	IT	SV
H-02a	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		08/12/87	2	IT	PC
H-02a	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		04/21/86	1	IT	SV
H-02a	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		08/12/87	2	IT	SV
H-02a	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		01/19/89	3	IT	SV
H-02a	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		04/21/86	1	IT	SV
H-02a	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		08/12/87	2	IT	SV
H-02a	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		01/19/89	3	IT	SV
H-02a	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		04/21/86	1	IT	SV
H-02a	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		08/12/87	2	IT	SV
H-02a	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		01/19/89	3	IT	SV
H-02a	CULEBRA	PHENOLICS		0.0290			0.0260			mg/l		04/21/86	1	IT	GC
H-02a	CULEBRA	PHENOLICS		0.0970		NA	0.0000			mg/l		08/12/87	2	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-02a	CULEBRA	PHENOLICS	<	0.0100		NA	0.0000			mg/l	01/19/89	3	IT	GC
H-02a	CULEBRA	PHOSPHATE		0.0200		NA	0.0000			mg/l T-PO4-P	04/21/86	1	IT	GC
H-02a	CULEBRA	PHOSPHATE	<	0.0100		NA	0.0000			mg/l T-PO4-P	08/12/87	2	IT	GC
H-02a	CULEBRA	PHOSPHORUS		0.0200			0.0400			mg/l	01/19/89	3	IT	GC
H-02a	CULEBRA	POTASSIUM		97.0000			98.0000			mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	POTASSIUM		100.0000		NA	0.0000			mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	POTASSIUM		110.0000			110.0000			mg/l	01/19/89	3	IT	MC
H-02a	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l	04/21/86	1	IT	SV
H-02a	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	SV
H-02a	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l	01/19/89	3	IT	SV
H-02a	CULEBRA	RESIDUE, FILTERABLE @ 180 C		13000.0000			14000.0000			mg/l	04/21/86	1	IT	GC
H-02a	CULEBRA	RESIDUE, FILTERABLE @ 180 C		11000.0000			11000.0000			mg/l	08/12/87	2	IT	GC
H-02a	CULEBRA	RESIDUE, FILTERABLE @ 180 C		10500.0000			10400.0000			mg/l	01/19/89	3	IT	GC
H-02a	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		60.0000		NA	0.0000			mg/l	04/21/86	1	IT	GC
H-02a	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		53.0000			51.0000			mg/l	08/12/87	2	IT	GC
H-02a	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		8.0000			9.0000			mg/l	01/19/89	3	IT	GC
H-02a	CULEBRA	SELENIUM	<	0.0100		<	0.0100	< 0.001	< 0.001	mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	SELENIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	SELENIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	SILICA		13.0000			13.0000	< 0.2	< 0.2	mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	SILICA		13.0000			14.0000	< 0.2	< 0.2	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	SILICA		6.0000			6.2000			mg/l	01/19/89	3	IT	GC
H-02a	CULEBRA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	SILVER		0.2000			0.2000	< 0.01	< 0.01	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	SODIUM		3600.0000			3600.0000			mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	SODIUM		2600.0000		NA	0.0000			mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	SODIUM		1400.0000			1400.0000			mg/l	01/19/89	3	IT	MC
H-02a	CULEBRA	SPECIFIC CONDUCTANCE		18500.0000			18500.0000			umhos/cm@25C	04/21/86	1	IT	GC
H-02a	CULEBRA	SPECIFIC CONDUCTANCE		15800.0000			15700.0000			umhos/cm@25C	08/12/87	2	IT	GC

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H-02a	CULEBRA	SPECIFIC CONDUCTANCE		15800.0000			15800.0000			uMhos/cm@25C	01/19/89	3	IT	GC
H-02a	CULEBRA	STRONTIUM		6.8000			6.9000	0.01	0.01	mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	STRONTIUM		9.8000			9.8000	< 0.01	< 0.01	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	STRONTIUM		8.6000			8.6000	0.01	0.01	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	STYRENE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	STYRENE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	SULFATE		3300.0000		NA	0.0000			mg/l	04/21/86	1	IT	GC
H-02a	CULEBRA	SULFATE		2900.0000		NA	0.0000			mg/l	08/12/87	2	IT	GC
H-02a	CULEBRA	SULFATE		2600.0000			2600.0000			mg/l	01/19/89	3	IT	GC
H-02a	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	THALLIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	THALLIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	TIN	<	0.4000		<	0.4000	< 0.04	< 0.04	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	TITANIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	TITANIUM	<	0.3000		<	0.3000	< 0.3	< 0.3	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	TITANIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	TOLUENE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	TOLUENE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	TOTAL ORGANIC CARBON		7.0000		NA	0.0000			mg/l	04/21/86	1	IT	GC
H-02a	CULEBRA	TOTAL ORGANIC CARBON		5.0000			5.0000			mg/l	08/12/87	2	IT	GC
H-02a	CULEBRA	TOTAL ORGANIC CARBON		5.0000			6.0000			mg/l	01/19/89	3	IT	GC
H-02a	CULEBRA	TOTAL ORGANIC HALOGEN		0.1400		NA	0.0000			mg/l	04/21/86	1	IT	GC
H-02a	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	08/12/87	2	IT	GC
H-02a	CULEBRA	TOTAL ORGANIC HALOGEN		0.0700			0.0900			mg/l	01/19/89	3	IT	GC
H-02a	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V

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H-02a	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	TRICHLOROETHYLENE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	TRICHLOROETHYLENE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	VANADIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	VANADIUM		0.1000			0.1000	< 0.01	< 0.01	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	VINYL ACETATE	<	10.0000		<	10.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	VINYL ACETATE	<	10.0000		<	10.0000	< 10	< 10	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	VINYL CHLORIDE	<	10.0000		<	10.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	VINYL CHLORIDE	<	10.0000		<	10.0000	< 10	< 10	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	XYLENE	<	5.0000		<	5.0000			ug/l	04/21/86	1	IT	V
H-02a	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	08/12/87	2	IT	V
H-02a	CULEBRA	XYLENE	<	5.0000		<	5.0000	< 5	< 5	ug/l	01/19/89	3	IT	V
H-02a	CULEBRA	ZINC	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	04/21/86	1	IT	ME
H-02a	CULEBRA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	08/12/87	2	IT	ME
H-02a	CULEBRA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	01/19/89	3	IT	MT
H-02a	CULEBRA	pH		7.8300		NA	0.0000				04/21/86	1	IT	GC
H-02a	CULEBRA	pH		7.4400			7.7400				08/12/87	2	IT	GC
H-02a	CULEBRA	pH		7.7300			7.7400				01/19/89	3	IT	GC
** H-02c														
H-02c	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V

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H-02c	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	1,3-DICHLOROBENZENE		11.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	1,4-DICHLOROBENZENE		23.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000		< 50	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000		< 50	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	2-BUTANONE	<	10.0000		<	200.0000	20	< 10	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	2-HEXANONE	<	10.0000		<	200.0000	< 10	< 10	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000		< 50	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000		< 20	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000		< 50	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000		< 50	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV

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H-02c	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		<	200.0000	< 10	< 10	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000		< 50	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000		< 50	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	ACETONE		2800.0000			2100.0000	< 10	< 10	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	12/13/89	1	IT	GC
H-02c	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	07/25/90	2	IT	GC
H-02c	CULEBRA	ALKALINITY (HCO3)		56.0000		NA	0.0000			mg/l	12/13/89	1	IT	GC
H-02c	CULEBRA	ALKALINITY (HCO3)		60.0000			0.0000			mg/l	07/25/90	2	IT	GC
H-02c	CULEBRA	ALUMINUM	<	0.2000		<	0.2000	< 0.2	< 0.2	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	ALUMINUM	<	2.0000		<	2.0000	< .2	< .2	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	ANTIMONY		0.0900			0.0800	< 0.06	< 0.06	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	ANTIMONY	<	0.6000		<	0.6000	< .06	< .06	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	AROCLOR 1016	<	0.5000		NA	0.0000		< 0.5	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	AROCLOR 1221	<	0.5000		NA	0.0000		< 0.5	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	AROCLOR 1232	<	0.5000		NA	0.0000		< 0.5	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	AROCLOR 1242	<	0.5000		NA	0.0000		< 0.5	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	AROCLOR 1248	<	0.5000		NA	0.0000		< 0.5	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	AROCLOR 1254	<	1.0000		NA	0.0000		< 1.0	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	AROCLOR 1260	<	1.0000		NA	0.0000		< 1.0	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	ARSENIC	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	ARSENIC	<	0.0100		NA	0.0000	< .01	< .01	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	BARIUM	<	0.2000		<	0.2000	< 0.2	< 0.2	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	BARIUM	<	2.0000		<	2.0000	< .2	< .2	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	BENZENE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V

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H-02c	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	BENZO(B)FLUORANTHENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000		< 50	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	BERYLLIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< .005	< .005	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	BORON		10.0000			9.7000	< 0.02	< 0.02	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	BORON		11.0000			11.0000	< .02	< .02	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	BROMIDE		6.0000			6.0000			mg/l	12/13/89	1	IT	GC
H-02c	CULEBRA	BROMIDE		12.0000			12.0000			mg/l	07/25/90	2	IT	GC
H-02c	CULEBRA	BROMOFORM	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	CADMIUM		0.0110			0.0120	< 0.005	< 0.005	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	CADMIUM	<	0.0500		<	0.0500	< .005	< .005	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	CALCIUM		720.0000			710.0000			mg/l	12/13/89	1	IT	MC
H-02c	CULEBRA	CALCIUM		680.0000			680.0000			mg/l	07/25/90	2	IT	MC
H-02c	CULEBRA	CARBON DISULFIDE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	CESIUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	CESIUM	<	0.2000		<	0.2000	< .2	< .2	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	CHLORIDE		3700.0000			3600.0000			mg/l	12/13/89	1	IT	GC
H-02c	CULEBRA	CHLORIDE		2700.0000			0.0000			mg/l	07/25/90	2	IT	GC

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H-02c	CULEBRA	CHLOROBENZENE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	CHLOROETHANE	<	10.0000		<	200.0000	< 10	< 10	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	CHLOROFORM	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	CHROMIUM		0.0600			0.0600	< 0.01	< 0.01	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	CHROMIUM		0.1000			0.1000	< .01	< .02	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	COBALT	<	0.0500		<	0.0500	< 0.05	< 0.05	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	COBALT	<	0.5000		<	0.5000	< .05	< .05	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	COPPER	<	0.0250		<	0.0250	< 0.025	< 0.025	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	COPPER	<	0.2500		<	0.2500	< .025	< .025	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	CYANIDE		0.0100		NA	0.0000			mg/l	12/13/89	1	IT	GC
H-02c	CULEBRA	CYANIDE	<	0.0100		NA	0.0000			mg/l	07/25/90	2	IT	GC
H-02c	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	ETHYLBENZENE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	FLUORENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	FLUORESCEIN		16.0000			17.0000			mg/l	12/13/89	1	IT	GC
H-02c	CULEBRA	FLUORESCEIN		4.4000			4.6000			mg/l	07/25/90	2	IT	GC
H-02c	CULEBRA	FLUORIDE		2.4000		NA	0.0000			mg/l	12/13/89	1	IT	GC
H-02c	CULEBRA	FLUORIDE		2.5000			0.0000			mg/l	07/25/90	2	IT	GC
H-02c	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV

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H-02c	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	12/13/89	1	IT	GC
H-02c	CULEBRA	IODIDE		4.0000			5.0000			mg/l	07/25/90	2	IT	GC
H-02c	CULEBRA	IRON		1.1000			1.1000	< 0.1	< 0.1	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	IRON		1.0000			1.0000	< .1	< .1	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	LEAD		0.0800			0.0900	< 0.05	< 0.05	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	LEAD	<	0.5000		<	0.5000	< .05	< .05	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	LITHIUM		0.2400			0.2400	< 0.01	< 0.01	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	LITHIUM		0.2000			0.2000	< .01	< .01	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	MAGNESIUM		150.0000			150.0000			mg/l	12/13/89	1	IT	MC
H-02c	CULEBRA	MAGNESIUM		160.0000			160.0000			mg/l	07/25/90	2	IT	MC
H-02c	CULEBRA	MANGANESE		0.1100			0.1000	< 0.015	< 0.015	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	MANGANESE	<	0.1500		<	0.1500	< .015	< .015	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	MERCURY	<	0.0002		<	0.0002	< .0002	< .0002	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	METHYL BROMIDE	<	10.0000		<	200.0000	< 10	< 10	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	METHYL CHLORIDE	<	10.0000		<	200.0000	< 10	< 10	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	METHYLENE CHLORIDE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	MOLYBDENUM		0.0400			0.0400	< 0.02	< 0.02	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	MOLYBDENUM	<	0.2000		<	0.2000	< .02	< .02	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	NICKEL	<	0.0400		<	0.0400	< 0.04	< 0.04	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	NICKEL	<	0.4000		<	0.4000	< .04	< .04	mg/l	07/25/90	2	IT	MT

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H-02c	CULEBRA	NITRATE	<	0.0200		NA	0.0000			mg/l	12/13/89	1	IT	GC
H-02c	CULEBRA	NITRATE	<	0.0200			0.0000			mg/l	07/25/90	2	IT	GC
H-02c	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000		< 50	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	PHENOL	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	PHENOLICS	<	0.0050		<	0.0100			mg/l	12/13/89	1	IT	GC
H-02c	CULEBRA	PHENOLICS	<	0.0050			0.0000			mg/l	07/25/90	2	IT	GC
H-02c	CULEBRA	PHOSPHORUS		0.0400		NA	0.0000			mg/l	12/13/89	1	IT	GC
H-02c	CULEBRA	PHOSPHORUS		0.0200			0.0000			mg/l	07/25/90	2	IT	GC
H-02c	CULEBRA	POTASSIUM		110.0000			110.0000			mg/l	12/13/89	1	IT	MC
H-02c	CULEBRA	POTASSIUM		100.0000			100.0000			mg/l	07/25/90	2	IT	MC
H-02c	CULEBRA	PYRENE	<	10.0000		NA	0.0000		< 10	ug/l	12/13/89	1	IT	SV
H-02c	CULEBRA	RESIDUE, FILTERABLE @ 180 C		10500.0000		NA	0.0000			mg/l	12/13/89	1	IT	GC
H-02c	CULEBRA	RESIDUE, FILTERABLE @ 180 C		9300.0000			0.0000			mg/l	07/25/90	2	IT	GC
H-02c	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		7.0000		NA	0.0000			mg/l	12/13/89	1	IT	GC
H-02c	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		62.0000			0.0000			mg/l	07/25/90	2	IT	GC
H-02c	CULEBRA	SELENIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	SELENIUM	<	0.0500		NA	0.0000	< .005	< .005	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	SILICA		5.8000		NA	0.0000			mg/l	12/13/89	1	IT	GC
H-02c	CULEBRA	SILICA		6.2000			0.0000			mg/l	07/25/90	2	IT	GC
H-02c	CULEBRA	SILVER		0.0200			0.0200	< 0.01	< 0.01	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	SILVER	<	0.1000		<	0.1000	< .01	< .01	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	SODIUM		2700.0000			2700.0000			mg/l	12/13/89	1	IT	MC
H-02c	CULEBRA	SODIUM		2000.0000			2000.0000			mg/l	07/25/90	2	IT	MC
H-02c	CULEBRA	SPECIFIC CONDUCTANCE		12300.0000			12400.0000			uMhos/cm@25C	12/13/89	1	IT	GC
H-02c	CULEBRA	SPECIFIC CONDUCTANCE		13900.0000			14000.0000			uMhos/cm@25C	07/25/90	2	IT	GC
H-02c	CULEBRA	STRONTIUM		7.5000			7.3000	< 0.01	< 0.01	mg/l	12/13/89	1	IT	MT

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H-02c	CULEBRA	STRONTIUM		8.7000			8.8000	< .01	< .01	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	STYRENE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	SULFATE		3200.0000			3000.0000			mg/l	12/13/89	1	IT	GC
H-02c	CULEBRA	SULFATE		2900.0000			0.0000			mg/l	07/25/90	2	IT	GC
H-02c	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	THALLIUM	<	1.0000		NA	0.0000	< 0.01	< 0.01	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	THALLIUM	<	0.0100		NA	0.0000	< .01	< .01	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	TITANIUM		0.0100			0.0100	< 0.01	< 0.01	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	TITANIUM	<	0.1000		<	0.1000	< .01	< .01	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	TOLUENE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	TOTAL ORGANIC CARBON		4.0000			4.0000			mg/l	12/13/89	1	IT	GC
H-02c	CULEBRA	TOTAL ORGANIC CARBON		2.0000			2.0000			mg/l	07/25/90	2	IT	GC
H-02c	CULEBRA	TOTAL ORGANIC HALOGEN		0.1700			0.1400			mg/l	12/13/89	1	IT	GC
H-02c	CULEBRA	TOTAL ORGANIC HALOGEN		0.1100			0.0700			mg/l	07/25/90	2	IT	GC
H-02c	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	TRICHLOROETHYLENE	<	5.0000		<	100.0000	5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	VANADIUM	<	0.0500		<	0.0500	< 0.05	< 0.05	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	VANADIUM	<	0.5000		<	0.5000	< .05	< .05	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	VINYL ACETATE	<	10.0000		<	200.0000	< 10	< 10	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	VINYL CHLORIDE	<	10.0000		<	200.0000	< 10	< 10	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	XYLENE	<	5.0000		<	100.0000	< 5	< 5	ug/l	12/13/89	1	IT	V
H-02c	CULEBRA	ZINC	<	0.0600			0.0600	< 0.02	< 0.02	mg/l	12/13/89	1	IT	MT
H-02c	CULEBRA	ZINC	<	0.2000		<	0.2000	< .02	< .02	mg/l	07/25/90	2	IT	MT
H-02c	CULEBRA	pH		6.6500			6.6500				12/13/89	1	IT	GC
H-02c	CULEBRA	pH		7.4400			7.4400				07/25/90	2	IT	GC
** H-03b1														
H-03b1	MAGENTA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V

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H-03b1	MAGENTA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	1,1,2,2-TETRACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	1,1,2-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	1,1-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	1,2,4-TRICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	1,2-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-03b1	MAGENTA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	1,2-DICHLOROPROPANE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	1,2-DIPHENYLHYDRAZINE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	1,3-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	1,3-DICHLOROPROPYLENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	1,4-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	2,4,5-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	2,4,6-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	2,4-DICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	2,4-DIMETHYLPHENOL	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-03b1	MAGENTA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	2,4-DINITROPHENOL	<	10.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	2,4-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	2,6-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	2-BUTANONE	<	10.0000		NA	0.0000	< 10		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	2-CHLOROETHYLVINYL ETHER	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000	< 10		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	2-CHLORONAPHTHALENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	2-CHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-03b1	MAGENTA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	2-HEXANONE	<	10.0000		NA	0.0000	< 10		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	2-METHYLNAPHTHALENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	2-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	2-NITROANILINE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	2-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	3,3'-DICHLOROBENZIDINE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	3,4-BENZOFLUORANTHENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-03b1	MAGENTA	3-NITROANILINE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	4,6-DINITRO-O-CRESOL	<	10.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	4-BROMOPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	4-CHLOROANILINE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	4-CHLOROPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000	< 10		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	4-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	4-NITROANILINE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-03b1	MAGENTA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	4-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	4-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	ACENAPHTHENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	ACENAPHTHYLENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	ACETONE	<	10.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	ACETONE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	ACETONE	<	10.0000		NA	0.0000		T < 10	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	ACETONE	<	10.0000		NA	0.0000	< 10		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	ACROLEIN	<	10.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	ACRYLONITRILE	<	10.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	09/16/86	2	IT	GC
H-03b1	MAGENTA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	09/02/87	3	IT	GC
H-03b1	MAGENTA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	03/16/89	4	IT	GC
H-03b1	MAGENTA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	08/28/90	5	IT	GC
H-03b1	MAGENTA	ALKALINITY (HCO3)		58.0000			52.0000			mg/l	09/16/86	2	IT	GC
H-03b1	MAGENTA	ALKALINITY (HCO3)		40.0000			41.0000			mg/l	09/02/87	3	IT	GC
H-03b1	MAGENTA	ALKALINITY (HCO3)		43.0000			41.0000			mg/l	03/16/89	4	IT	GC
H-03b1	MAGENTA	ALKALINITY (HCO3)		36.0000			0.0000			mg/l	08/28/90	5	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-03b1	MAGENTA	ALUMINUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	ALUMINUM	<	1.0000		NA	0.0000	< 0.1	< 0.1	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	ALUMINUM		0.3000			0.3000			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	ANTHRACENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	ANTIMONY	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	ANTIMONY	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	ANTIMONY		0.1100			0.1000			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	AROCLOR 1016	<	0.5000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	AROCLOR 1221	<	0.5000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	AROCLOR 1232	<	0.5000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	AROCLOR 1242	<	0.5000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	AROCLOR 1248	<	0.5000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	AROCLOR 1254	<	1.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	AROCLOR 1260	<	1.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	ARSENIC		0.0200		NA	0.0000	< 0.01	< 0.01	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	ARSENIC	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	ARSENIC	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	ARSENIC	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	ARSENIC	<	0.0100		NA	0.0000			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	BARIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	BARIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	BARIUM	<	0.2000		<	0.2000			mg/l	08/28/90	5	IT	MT

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-03b1	MAGENTA	BENZENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	BENZENE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	BENZENE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	BENZIDINE	<	4.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	BENZO(A)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	BENZO(A)PYRENE		6.5000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	BENZO(B)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	BENZO(G,H,I)PERYLENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	BENZO(K)FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	BENZOIC ACID	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	BENZYL ALCOHOL	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV

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H-03b1	MAGENTA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	BERYLLIUM	<	0.0010		<	0.0010	< 0.001	< 0.001	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	BERYLLIUM	<	0.0500		<	0.0500	<0.005	< 0.005	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	BERYLLIUM	<	0.0050		<	0.0050			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	BIS(2-CHLOROETHOXY)METHANE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	BIS(2-CHLOROETHYL)ETHER	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	BIS(2-CHLOROISOPROPYL)ETHER	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	BIS(2-ETHYLHEXYL)PHTHALATE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	BIS(2-ETHYLHEXYL)PHTHALATE		11.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	BORON		4.5000		NA	0.0000	< 0.01	0.24	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	BORON		3.5000		NA	0.0000	< 0.01	< 0.01	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	BORON		3.4000			3.4000	< 0.01	< 0.01	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	BORON		3.4000			3.4000	< 0.01	< 0.01	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	BORON		3.3000			3.3000			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	BROMIDE		23.0000		NA	0.0000			mg/l	07/01/85	1	IT	GC
H-03b1	MAGENTA	BROMIDE		6.0000		NA	0.0000			mg/l	09/16/86	2	IT	GC

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H-03b1	MAGENTA	BROMIDE		6.0000		NA	0.0000			mg/l	09/02/87	3	IT	GC
H-03b1	MAGENTA	BROMIDE		6.0000			6.0000			mg/l	03/16/89	4	IT	GC
H-03b1	MAGENTA	BROMIDE		6.0000			6.0000			mg/l	08/28/90	5	IT	GC
H-03b1	MAGENTA	BROMOFORM	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	BROMOFORM	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	BUTYL BENZYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	CADMIUM	<	0.0170		<	0.0180			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	CALCIUM		1000.0000		NA	0.0000			mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	CALCIUM		920.0000			930.0000			mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	CALCIUM		1000.0000			1000.0000			mg/l	03/16/89	4	IT	MC
H-03b1	MAGENTA	CALCIUM		1100.0000			1100.0000			mg/l	08/28/90	5	IT	MC
H-03b1	MAGENTA	CARBON DISULFIDE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	CARBON DISULFIDE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	CESIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	CESIUM		0.2000		NA	0.0000	< 0.1	0.1	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	CESIUM	<	0.0100		<	0.0100	< 0.1	< 0.1	mg/l	09/02/87	3	IT	ME

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H-03b1	MAGENTA	CESIUM	<	0.1200		<	0.1200	< 0.06	< 0.06	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	CESIUM	<	0.2000		<	0.2000			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	CHLORIDE		3500.0000			3500.0000			mg/l	09/16/86	2	IT	GC
H-03b1	MAGENTA	CHLORIDE		3400.0000			3300.0000			mg/l	09/02/87	3	IT	GC
H-03b1	MAGENTA	CHLORIDE		3300.0000			3400.0000			mg/l	03/16/89	4	IT	GC
H-03b1	MAGENTA	CHLORIDE		3200.0000			3200.0000			mg/l	08/28/90	5	IT	GC
H-03b1	MAGENTA	CHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	CHLOROBENZENE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	CHLOROETHANE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	CHLOROETHANE	<	10.0000		NA	0.0000	< 10		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	CHLOROFORM	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	CHLOROFORM	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	CHROMIUM	<	0.0010		NA	0.0000	< 0.001	< 0.001	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	CHROMIUM	<	0.1000		NA	0.0000	< 0.01	0.01	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	CHROMIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	CHROMIUM		0.2000			0.2000	< 0.01	0.01	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	CHROMIUM		0.1200			0.1200			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	CHRYSENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-03b1	MAGENTA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	COBALT		0.0040		NA	0.0000	< 0.001	< 0.001	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	COBALT	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	COBALT	<	0.0500		<	0.0500			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	COPPER		0.0300			0.0300	< 0.01	< 0.01	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	COPPER	<	0.1000		NA	0.0000	< 0.01	0.01	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	COPPER	<	0.1000		<	0.1000	0.01	< 0.01	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	COPPER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	COPPER	<	0.0250		<	0.0250			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	CYANIDE	<	0.0200		NA	0.0000			mg/l	07/01/85	1	IT	GC
H-03b1	MAGENTA	CYANIDE	<	0.0200		NA	0.0000			mg/l	09/16/86	2	IT	GC
H-03b1	MAGENTA	CYANIDE	<	0.0200		NA	0.0000			mg/l	09/02/87	3	IT	GC
H-03b1	MAGENTA	CYANIDE	<	0.0100		NA	0.0000			mg/l	03/16/89	4	IT	GC
H-03b1	MAGENTA	CYANIDE	<	0.0100			0.0000			mg/l	08/28/90	5	IT	GC
H-03b1	MAGENTA	DI-N-BUTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	DI-N-OCTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	DIBENZO(A,H)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	DIBENZOFURAN	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV

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H-03b1	MAGENTA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	DIETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	DIMETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	ETHYLBENZENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	ETHYLBENZENE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	Eh		380.0000		NA	0.0000			mV	09/16/86	2	IT	GC
H-03b1	MAGENTA	FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	FLUORENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV

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H-03b1	MAGENTA	FLUORENE	<	10.0000		NA	0.0000				ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	FLUORENE	<	10.0000		NA	0.0000				ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	FLUORENE	<	10.0000		NA	0.0000				ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	FLUORIDE		1.8000			1.8000				mg/l	07/01/85	1	IT	GC
H-03b1	MAGENTA	FLUORIDE		1.9000		NA	0.0000				mg/l	09/16/86	2	IT	GC
H-03b1	MAGENTA	FLUORIDE		1.8000		NA	0.0000				mg/l	09/02/87	3	IT	GC
H-03b1	MAGENTA	FLUORIDE		2.0000			2.0000				mg/l	03/16/89	4	IT	GC
H-03b1	MAGENTA	FLUORIDE		2.2000			0.0000				mg/l	08/28/90	5	IT	GC
H-03b1	MAGENTA	HEXACHLOROBENZENE	<	1.0000		NA	0.0000				ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000				ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000				ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000				ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	HEXACHLOROBUTADIENE	<	1.0000		NA	0.0000				ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000				ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000				ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000				ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	HEXACHLOROCYCLOPENTADIENE	<	1.0000		NA	0.0000				ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000				ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000				ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000				ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	HEXACHLOROETHANE	<	1.0000		NA	0.0000				ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	HEXACHLOROETHANE	<	10.0000		NA	0.0000				ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	HEXACHLOROETHANE	<	10.0000		NA	0.0000				ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	HEXACHLOROETHANE	<	10.0000		NA	0.0000				ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	INDENO(1,2,3-CD)PYRENE	<	1.0000		NA	0.0000				ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000				ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000				ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000				ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	IODIDE		1.6000			1.6000				mg/l	07/01/85	1	IT	GC

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H-03b1	MAGENTA	IODIDE		2.0000		NA	0.0000			mg/l	09/16/86	2	IT	GC
H-03b1	MAGENTA	IODIDE	<	2.0000		<	2.0000			mg/l	09/02/87	3	IT	GC
H-03b1	MAGENTA	IODIDE	<	2.0000		<	2.0000			mg/l	03/16/89	4	IT	GC
H-03b1	MAGENTA	IODIDE	<	2.0000		<	2.0000			mg/l	08/28/90	5	IT	GC
H-03b1	MAGENTA	IRON		0.1500			0.1400	0.01	< 0.01	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	IRON		0.3000		NA	0.0000	< 0.01	< 0.01	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	IRON	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	IRON	<	0.2000		<	0.2000	< 0.02	< 0.02	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	IRON	<	0.1000		<	0.1000			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	ISOPHORONE	<	4.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	LEAD		0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	LEAD	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	LEAD		0.1400			0.1400			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	LITHIUM		3.6000			3.6000	0.01	0.01	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	LITHIUM		0.3300			0.3300	< 0.01	< 0.01	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	LITHIUM		0.3000			0.3000			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	MAGNESIUM		330.0000		NA	0.0000			mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	MAGNESIUM		290.0000			300.0000			mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	MAGNESIUM		300.0000			290.0000			mg/l	03/16/89	4	IT	MC
H-03b1	MAGENTA	MAGNESIUM		270.0000			270.0000			mg/l	08/28/90	5	IT	MC
H-03b1	MAGENTA	MANGANESE		0.0400			0.0500	0.02	0.01	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	MANGANESE	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	MANGANESE	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	MANGANESE	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	03/16/89	4	IT	MT

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H-03b1	MAGENTA	MANGANESE		0.0310			0.0300			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	MERCURY		0.0003			0.0003	0.0003	< 0.0002	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	MERCURY	<	0.0004		NA	0.0000	< 0.0002	< 0.0002	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	MERCURY	<	0.0004		NA	0.0000	< 0.0002	< 0.0002	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	MERCURY	<	0.0004		<	0.0004			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	METHYL BROMIDE	<	10.0000		NA	0.0000	< 10		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	METHYL CHLORIDE	<	10.0000		NA	0.0000	< 10		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	METHYLENE CHLORIDE		14.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	MOLYBDENUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	MOLYBDENUM		0.0400		NA	0.0000	< 0.01	< 0.01	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	MOLYBDENUM		0.0300			0.0200	< 0.01	< 0.01	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	MOLYBDENUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	MOLYBDENUM		0.0500			0.0500			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	N-NITROSO-DI-N-PROPYLAMINE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV
H-03b1	MAGENTA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	09/02/87	3	IT	SV
H-03b1	MAGENTA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	03/16/89	4	IT	SV
H-03b1	MAGENTA	N-NITROSO-DI-PHENYLAMINE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	SV
H-03b1	MAGENTA	N-NITROSO-DI-PHENYLAMINE		24.0000		NA	0.0000			ug/l	09/16/86	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS		DATE	RND	LAB	C
H-03b1	MAGENTA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		09/02/87	3	IT	SV
H-03b1	MAGENTA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		03/16/89	4	IT	SV
H-03b1	MAGENTA	NAPHTHALENE	<	1.0000		NA	0.0000			ug/l		07/01/85	1	IT	SV
H-03b1	MAGENTA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		09/16/86	2	IT	SV
H-03b1	MAGENTA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		09/02/87	3	IT	SV
H-03b1	MAGENTA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		03/16/89	4	IT	SV
H-03b1	MAGENTA	NICKEL		0.1300			0.1200	0.02	< 0.01	mg/l		07/01/85	1	IT	ME
H-03b1	MAGENTA	NICKEL	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l		09/16/86	2	IT	ME
H-03b1	MAGENTA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		09/02/87	3	IT	ME
H-03b1	MAGENTA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		03/16/89	4	IT	MT
H-03b1	MAGENTA	NICKEL		0.0600			0.0600			mg/l		08/28/90	5	IT	MT
H-03b1	MAGENTA	NITRATE	<	0.1000		<	0.1000			mg/l	NO3-N	07/01/85	1	IT	GC
H-03b1	MAGENTA	NITRATE	<	0.1000		NA	0.0000			mg/l	NO3-N	09/16/86	2	IT	GC
H-03b1	MAGENTA	NITRATE	<	0.1000		NA	0.0000			mg/l	NO3-N	09/02/87	3	IT	GC
H-03b1	MAGENTA	NITRATE	<	0.0200		<	0.0200			mg/l		03/16/89	4	IT	GC
H-03b1	MAGENTA	NITRATE	<	0.0200		<	0.0200			mg/l		08/28/90	5	IT	GC
H-03b1	MAGENTA	NITROBENZENE	<	1.0000		NA	0.0000			ug/l		07/01/85	1	IT	SV
H-03b1	MAGENTA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		09/16/86	2	IT	SV
H-03b1	MAGENTA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		09/02/87	3	IT	SV
H-03b1	MAGENTA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		03/16/89	4	IT	SV
H-03b1	MAGENTA	P-CHLORO-M-CRESOL	<	1.0000		NA	0.0000			ug/l		07/01/85	1	IT	SV
H-03b1	MAGENTA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		09/16/86	2	IT	SV
H-03b1	MAGENTA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		09/02/87	3	IT	SV
H-03b1	MAGENTA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		03/16/89	4	IT	SV
H-03b1	MAGENTA	PCB	<	1.0000		NA	0.0000			ug/l		09/16/86	2	IT	PC
H-03b1	MAGENTA	PCB	<	1.0000		NA	0.0000			ug/l		09/02/87	3	IT	PC
H-03b1	MAGENTA	PENTACHLOROPHENOL	<	1.0000		NA	0.0000			ug/l		07/01/85	1	IT	SV
H-03b1	MAGENTA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		09/16/86	2	IT	SV
H-03b1	MAGENTA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		09/02/87	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID	BLANK	WATER BLANK	UNITS		DATE	RND	LAB	C
H-03b1	MAGENTA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000				ug/l		03/16/89	4	IT	SV
H-03b1	MAGENTA	PHENANTHRENE	<	1.0000		NA	0.0000				ug/l		07/01/85	1	IT	SV
H-03b1	MAGENTA	PHENANTHRENE	<	10.0000		NA	0.0000				ug/l		09/16/86	2	IT	SV
H-03b1	MAGENTA	PHENANTHRENE	<	10.0000		NA	0.0000				ug/l		09/02/87	3	IT	SV
H-03b1	MAGENTA	PHENANTHRENE	<	10.0000		NA	0.0000				ug/l		03/16/89	4	IT	SV
H-03b1	MAGENTA	PHENOL	<	1.0000		NA	0.0000				ug/l		07/01/85	1	IT	SV
H-03b1	MAGENTA	PHENOL	<	10.0000		NA	0.0000				ug/l		09/02/87	3	IT	SV
H-03b1	MAGENTA	PHENOL	<	10.0000		NA	0.0000				ug/l		03/16/89	4	IT	SV
H-03b1	MAGENTA	PHENOLICS		0.0290			0.0290				mg/l		07/01/85	1	IT	GC
H-03b1	MAGENTA	PHENOLICS		0.0500		NA	0.0000				mg/l		09/16/86	2	IT	GC
H-03b1	MAGENTA	PHENOLICS		0.0530		NA	0.0000				mg/l		09/02/87	3	IT	GC
H-03b1	MAGENTA	PHENOLICS	<	0.0100		NA	0.0000				mg/l		03/16/89	4	IT	GC
H-03b1	MAGENTA	PHENOLICS	<	0.0050			0.0000				mg/l		08/28/90	5	IT	GC
H-03b1	MAGENTA	PHOSPHATE	<	0.0100		NA	0.0000				mg/l	T-PO4-P	07/01/85	1	IT	GC
H-03b1	MAGENTA	PHOSPHATE	<	0.0100		NA	0.0000				mg/l	T-PO4-P	09/16/86	2	IT	GC
H-03b1	MAGENTA	PHOSPHATE	<	0.0100		<	0.0100				mg/l	T-PO4-P	09/02/87	3	IT	GC
H-03b1	MAGENTA	PHOSPHORUS		0.0100			0.0100				mg/l		03/16/89	4	IT	GC
H-03b1	MAGENTA	PHOSPHORUS		0.0300			0.0000				mg/l		08/28/90	5	IT	GC
H-03b1	MAGENTA	POTASSIUM		35.0000		NA	0.0000				mg/l		09/16/86	2	IT	ME
H-03b1	MAGENTA	POTASSIUM		36.0000			35.0000				mg/l		09/02/87	3	IT	ME
H-03b1	MAGENTA	POTASSIUM		34.0000			36.0000				mg/l		03/16/89	4	IT	MC
H-03b1	MAGENTA	POTASSIUM		30.0000			30.0000				mg/l		08/28/90	5	IT	MC
H-03b1	MAGENTA	PYRENE	<	1.0000		NA	0.0000				ug/l		07/01/85	1	IT	SV
H-03b1	MAGENTA	PYRENE	<	10.0000		NA	0.0000				ug/l		09/16/86	2	IT	SV
H-03b1	MAGENTA	PYRENE	<	10.0000		NA	0.0000				ug/l		09/02/87	3	IT	SV
H-03b1	MAGENTA	PYRENE	<	10.0000		NA	0.0000				ug/l		03/16/89	4	IT	SV
H-03b1	MAGENTA	RESIDUE, FILTERABLE @ 180 C		8800.0000			9200.0000				mg/l		07/01/85	1	IT	GC
H-03b1	MAGENTA	RESIDUE, FILTERABLE @ 180 C		8500.0000		NA	0.0000				mg/l		09/16/86	2	IT	GC
H-03b1	MAGENTA	RESIDUE, FILTERABLE @ 180 C		15.0000			13.0000				mg/l		09/02/87	3	IT	GC

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H-03b1	MAGENTA	RESIDUE, FILTERABLE @ 180 C		8800.0000			8600.0000			mg/l	03/16/89	4	IT	GC
H-03b1	MAGENTA	RESIDUE, FILTERABLE @ 180 C		9300.0000			0.0000			mg/l	08/28/90	5	IT	GC
H-03b1	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C		18.0000			19.0000			mg/l	07/01/85	1	IT	GC
H-03b1	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C		43.0000		NA	0.0000			mg/l	09/16/86	2	IT	GC
H-03b1	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C		8100.0000			7800.0000			mg/l	09/02/87	3	IT	GC
H-03b1	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C		43.0000			40.0000			mg/l	03/16/89	4	IT	GC
H-03b1	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C		18.0000			0.0000			mg/l	08/28/90	5	IT	GC
H-03b1	MAGENTA	SELENIUM		0.0900		NA	0.0000	< 0.01	< 0.01	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	SELENIUM	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	SELENIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	SELENIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	SELENIUM	<	0.0500		NA	0.0000			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	SILICA		11.0000		NA	0.0000	< 0.1	< 0.1	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	SILICA		12.0000		NA	0.0000	< 0.2	< 0.2	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	SILICA		11.0000			11.0000	< 0.2	< 0.2	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	SILICA		4.5000			4.5000			mg/l	03/16/89	4	IT	GC
H-03b1	MAGENTA	SILICA		5.5000			0.0000			mg/l	08/28/90	5	IT	GC
H-03b1	MAGENTA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	SILVER		0.0300			0.0300			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	SODIUM		1700.0000		NA	0.0000			mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	SODIUM		1500.0000			1500.0000			mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	SODIUM		14500.0000			14500.0000			mg/l	03/16/89	4	IT	MC
H-03b1	MAGENTA	SODIUM		1400.0000			1400.0000			mg/l	08/28/90	5	IT	MC
H-03b1	MAGENTA	SPECIFIC CONDUCTANCE		11900.0000		NA	0.0000			umhos/cm@25C	07/01/85	1	IT	GC
H-03b1	MAGENTA	SPECIFIC CONDUCTANCE		13800.0000		NA	0.0000			umhos/cm@25C	09/16/86	2	IT	GC
H-03b1	MAGENTA	SPECIFIC CONDUCTANCE		12600.0000			12300.0000			umhos/cm@25C	09/02/87	3	IT	GC
H-03b1	MAGENTA	SPECIFIC CONDUCTANCE		11500.0000			11500.0000			uMhos/cm@25C	03/16/89	4	IT	GC
H-03b1	MAGENTA	SPECIFIC CONDUCTANCE		10300.0000			10310.0000			uMhos/cm@25C	08/28/90	5	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-03b1	MAGENTA	STRONTIUM		17.0000			17.0000	< 0.01	< 0.01	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	STRONTIUM		13.0000		NA	0.0000	< 0.01	< 0.01	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	STRONTIUM		17.0000			18.0000	< 0.01	< 0.01	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	STRONTIUM		17.0000			17.0000	< 0.01	< 0.01	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	STRONTIUM		16.0000			16.0000			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	STYRENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	STYRENE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	STYRENE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	SULFATE		1800.0000		NA	0.0000			mg/l	09/16/86	2	IT	GC
H-03b1	MAGENTA	SULFATE		2400.0000		NA	0.0000			mg/l	09/02/87	3	IT	GC
H-03b1	MAGENTA	SULFATE		2000.0000			2100.0000			mg/l	03/16/89	4	IT	GC
H-03b1	MAGENTA	SULFATE		2100.0000			0.0000			mg/l	08/28/90	5	IT	GC
H-03b1	MAGENTA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	THALLIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	THALLIUM	<	0.4000		NA	0.0000	< 0.004	< 0.004	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	THALLIUM	<	1.0000		NA	0.0000			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	TIN	<	0.4000		<	0.4000	< 0.04	< 0.04	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	TITANIUM		0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	TITANIUM	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	TITANIUM		0.3000			0.3000	< 0.1	< 0.1	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	TITANIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	TITANIUM		0.0200			0.0200			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	TOLUENE		2.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	TOLUENE		32.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V

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H-03b1	MAGENTA	TOLUENE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	TOTAL ORGANIC CARBON	<	1.0000		NA	0.0000			mg/l	07/01/85	1	IT	GC
H-03b1	MAGENTA	TOTAL ORGANIC CARBON		4.0000		NA	0.0000			mg/l	09/16/86	2	IT	GC
H-03b1	MAGENTA	TOTAL ORGANIC CARBON		2.0000			2.0000			mg/l	09/02/87	3	IT	GC
H-03b1	MAGENTA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	03/16/89	4	IT	GC
H-03b1	MAGENTA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	08/28/90	5	IT	GC
H-03b1	MAGENTA	TOTAL ORGANIC HALOGEN		0.4100		NA	0.0000			mg/l	07/01/85	1	IT	GC
H-03b1	MAGENTA	TOTAL ORGANIC HALOGEN		0.8500		NA	0.0000			mg/l	09/16/86	2	IT	GC
H-03b1	MAGENTA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	09/02/87	3	IT	GC
H-03b1	MAGENTA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	03/16/89	4	IT	GC
H-03b1	MAGENTA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	08/28/90	5	IT	GC
H-03b1	MAGENTA	TRANS-1,2-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	TRICHLOROFLUOROMETHANE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	VANADIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	VANADIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	VANADIUM		0.0700			0.0700			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	09/02/87	3	IT	V

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H-03b1	MAGENTA	VINYL ACETATE	<	10.0000		NA	0.0000	< 10		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	VINYL CHLORIDE	<	10.0000		NA	0.0000	< 10		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	XYLENE	<	1.0000		NA	0.0000			ug/l	07/01/85	1	IT	V
H-03b1	MAGENTA	XYLENE	<	5.0000		NA	0.0000			ug/l	09/16/86	2	IT	V
H-03b1	MAGENTA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/02/87	3	IT	V
H-03b1	MAGENTA	XYLENE	<	5.0000		NA	0.0000	< 5		ug/l	03/16/89	4	IT	V
H-03b1	MAGENTA	ZINC	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	07/01/85	1	IT	ME
H-03b1	MAGENTA	ZINC	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	09/16/86	2	IT	ME
H-03b1	MAGENTA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	09/02/87	3	IT	ME
H-03b1	MAGENTA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/16/89	4	IT	MT
H-03b1	MAGENTA	ZINC	<	0.0200		<	0.0200			mg/l	08/28/90	5	IT	MT
H-03b1	MAGENTA	pH		7.5700		NA	0.0000				07/01/85	1	IT	GC
H-03b1	MAGENTA	pH		7.1100			7.1200				09/16/86	2	IT	GC
H-03b1	MAGENTA	pH		6.5800			6.8000				09/02/87	3	IT	GC
H-03b1	MAGENTA	pH		6.9600			6.9700				03/16/89	4	IT	GC
H-03b1	MAGENTA	pH		6.5000			6.5100				08/28/90	5	IT	GC
** H-03b3														
H-03b3	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-03b3	CULEBRA	1,1,2-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	1,1-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	1,2,4-TRICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	1,2-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	1,2-DICHLOROPROPANE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	1,2-DIPHENYLHYDRAZINE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV

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H-03b3	CULEBRA	1,3-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	1,3-DICHLOROPROPYLENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	1,4-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	2,3,7,8-TETRACHLOROBENZO-P-DIO XIN	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	2,4,5-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	2,4,6-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	2,4-DICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	2,4-DIMETHYLPHENOL	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	2,4-DINITROPHENOL	<	10.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV

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H-03b3	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	2,4-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	2,6-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000	< 10		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000	< 10		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	2-CHLORONAPHTHALENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	2-CHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	08/24/87	3	IT	V

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H-03b3	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000	< 10		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	2-METHYLNAPHTHALENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	2-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	2-NITROANILINE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	2-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	2-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	3,3'-DICHLOROBENZIDINE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	3,4-BENZOFLUORANTHENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	3-NITROANILINE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	4,6-DINITRO-O-CRESOL	<	10.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV

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H-03b3	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	4-CHLOROANILINE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000	< 10		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	4-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	4-NITROANILINE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	4-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-03b3	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	ACENAPHTHENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	ACENAPHTHYLENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	ACETONE		11.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	ACETONE	<	10.0000		NA	0.0000		T < 10	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	ACETONE	<	10.0000		NA	0.0000	< 10		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	ACROLEIN	<	10.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	ACRYLONITRILE	<	10.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	05/05/86	2	IT	GC
H-03b3	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	08/24/87	3	IT	GC
H-03b3	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	03/02/89	4	IT	GC
H-03b3	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	08/15/90	5	IT	GC
H-03b3	CULEBRA	ALKALINITY (HCO3)		52.0000			54.0000			mg/l	05/05/86	2	IT	GC
H-03b3	CULEBRA	ALKALINITY (HCO3)		47.0000		NA	0.0000			mg/l	08/24/87	3	IT	GC
H-03b3	CULEBRA	ALKALINITY (HCO3)		51.0000			51.0000			mg/l	03/02/89	4	IT	GC
H-03b3	CULEBRA	ALKALINITY (HCO3)		49.0000		NA	0.0000			mg/l	08/15/90	5	IT	GC
H-03b3	CULEBRA	ALUMINUM	<	0.0100		NA	0.0000	< .01/<.	< 0.01	mg/l	02/04/85	1	IT	ME
H-03b3	CULEBRA	ALUMINUM		1.1000		NA	0.0000	< 0.1	< 0.1	mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	ALUMINUM		1.0000		<	1.0000	< 0.1	< 0.1	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	ALUMINUM	<	2.0000		<	2.0000			mg/l	08/15/90	5	IT	MT

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H-03b3	CULEBRA	ANILINE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	ANTHRACENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	ANTIMONY		0.8000			0.8000	< 0.05	< 0.05	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	ANTIMONY		0.6000			0.6000	< 0.05	< 0.05	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	ANTIMONY	<	0.6000		<	0.6000			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	AROCLOR 1016	<	0.5000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	AROCLOR 1221	<	0.5000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	AROCLOR 1232	<	0.5000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	AROCLOR 1242	<	0.5000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	AROCLOR 1248	<	0.5000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	AROCLOR 1254	<	1.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	AROCLOR 1260	<	1.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	ARSENIC		0.0240			0.0250	< 0.001	< 0.001	mg/l	02/04/85	1	IT	ME
H-03b3	CULEBRA	ARSENIC		0.0390		NA	0.0000	< 0.001	< 0.001	mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	ARSENIC	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	ARSENIC	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	ARSENIC	<	0.1000		NA	0.0000			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	BARIUM		0.0400			0.0500	< 0.01	< 0.01	mg/l	02/04/85	1	IT	ME
H-03b3	CULEBRA	BARIUM		0.0600		NA	0.0000	< 0.005	< 0.005	mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	BARIUM	<	2.0000		<	2.0000			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	BENZENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	BENZENE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V

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H-03b3	CULEBRA	BENZIDINE	<	4.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	BENZO(A)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	BENZO(A)PYRENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	BENZO(B)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	BENZO(G,H,I)PERYLENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	BENZO(K)FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	BENZOIC ACID		17.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	BENZYL ALCOHOL	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	BERYLLIUM		0.1400			0.1600	< 0.001	< 0.001	mg/l	02/04/85	1	IT	ME
H-03b3	CULEBRA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	08/24/87	3	IT	ME

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H-03b3	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	4.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE		20.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	BIS(CHLOROMETHYL)ETHER	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	BORON		34.0000		NA	0.0000	< 0.10	0.57	mg/l	02/04/85	1	IT	ME
H-03b3	CULEBRA	BORON		21.0000		NA	0.0000	< 0.01	< 0.01	mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	BORON		24.0000			24.0000	< 0.01	< 0.01	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	BORON		25.0000			25.0000	< 0.01	< 0.01	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	BORON		22.0000			22.0000			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	BROMIDE		1.9000		NA	0.0000			mg/l	02/04/85	1	IT	GC
H-03b3	CULEBRA	BROMIDE		39.0000		NA	0.0000			mg/l	05/05/86	2	IT	GC
H-03b3	CULEBRA	BROMIDE		28.0000			27.0000			mg/l	08/24/87	3	IT	GC
H-03b3	CULEBRA	BROMIDE		25.0000			25.0000			mg/l	03/02/89	4	IT	GC
H-03b3	CULEBRA	BROMIDE		27.0000			27.0000			mg/l	08/15/90	5	IT	GC

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H-03b3	CULEBRA	BROMOFORM	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	BUTYL BENZYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	CADMIUM		0.0700			0.0700	< 0.005	< 0.005	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	CADMIUM	<	0.0500		<	0.0500			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	CALCIUM		1200.0000		NA	0.0000			mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	CALCIUM		1300.0000		NA	0.0000			mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	CALCIUM		1500.0000			1500.0000			mg/l	03/02/89	4	IT	MC
H-03b3	CULEBRA	CALCIUM		1300.0000			1300.0000			mg/l	08/15/90	5	IT	MC
H-03b3	CULEBRA	CARBON DISULFIDE	<	10.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	CESIUM		1.6000			1.6000	< 0.01	< 0.01	mg/l	02/04/85	1	IT	ME
H-03b3	CULEBRA	CESIUM	<	0.1000		NA	0.0000	< 0.1	< 0.1	mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	CESIUM		0.0700			0.0900	< 0.01	< 0.01	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	CESIUM	<	0.0600		<	0.0600	< 0.06	< 0.06	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	CESIUM	<	0.2000		<	0.2000			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	CHLORIDE		31000.0000		NA	0.0000			mg/l	05/05/86	2	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-03b3	CULEBRA	CHLORIDE		28000.0000		NA	0.0000			mg/l	08/24/87	3	IT	GC
H-03b3	CULEBRA	CHLORIDE		27700.0000			28200.0000			mg/l	03/02/89	4	IT	GC
H-03b3	CULEBRA	CHLORIDE		27000.0000			27000.0000			mg/l	08/15/90	5	IT	GC
H-03b3	CULEBRA	CHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	CHLOROETHANE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000	< 10		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	CHLOROFORM	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	CHROMIUM		0.0070			0.0070	< 0.001	< 0.001	mg/l	02/04/85	1	IT	ME
H-03b3	CULEBRA	CHROMIUM		0.3500		NA	0.0000	< 0.03	< 0.03	mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	CHROMIUM		0.3000			0.3000	< 0.01	< 0.01	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	CHROMIUM		0.4000			0.4000	0.02	0.02	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	CHROMIUM		0.1000			0.2000			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	CHRYSENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	COBALT		0.1800			0.1300	< 0.001	< 0.001	mg/l	02/04/85	1	IT	ME
H-03b3	CULEBRA	COBALT	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	05/05/86	2	IT	ME

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H-03b3	CULEBRA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	COBALT	<	0.1000			0.1000	< 0.01	< 0.01	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	COBALT	<	0.5000		<	0.5000			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	COPPER		0.0800		NA	0.0000	0.02	0.02	mg/l	02/04/85	1	IT	ME
H-03b3	CULEBRA	COPPER		0.2600		NA	0.0000	0.02	0.03	mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	COPPER		0.1000			0.1000	< 0.01	< 0.01	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	COPPER		0.1000			0.1000	< 0.01	0.01	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	COPPER	<	0.2500		<	0.2500			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	02/04/85	1	IT	GC
H-03b3	CULEBRA	CYANIDE	<	0.0200		<	0.0200			mg/l	05/05/86	2	IT	GC
H-03b3	CULEBRA	CYANIDE		0.1100		NA	0.0000			mg/l	08/24/87	3	IT	GC
H-03b3	CULEBRA	CYANIDE	<	0.0100		NA	0.0000			mg/l	03/02/89	4	IT	GC
H-03b3	CULEBRA	CYANIDE	<	0.0100			0.0000			mg/l	08/15/90	5	IT	GC
H-03b3	CULEBRA	DI-N-BUTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	DI-N-OCTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	DIBENZOFURAN	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV

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H-03b3	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	DICHLORODIFLUOROMETHANE	<	10.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	DIETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	DIMETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	ETHYLBENZENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	Eh		444.0000		NA	0.0000			mV	02/04/85	1	IT	GC
H-03b3	CULEBRA	FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	FLUORENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV

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H-03b3	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	FLUORIDE		1.6000		NA	0.0000			mg/l	02/04/85	1	IT	GC
H-03b3	CULEBRA	FLUORIDE		1.5000			1.5000			mg/l	05/05/86	2	IT	GC
H-03b3	CULEBRA	FLUORIDE		1.6000		NA	0.0000			mg/l	08/24/87	3	IT	GC
H-03b3	CULEBRA	FLUORIDE		1.5000			1.5000			mg/l	03/02/89	4	IT	GC
H-03b3	CULEBRA	FLUORIDE		1.5000			0.0000			mg/l	08/15/90	5	IT	GC
H-03b3	CULEBRA	HEXACHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	HEXACHLOROBUTADIENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	HEXACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	IODIDE		1.0000		NA	0.0000			mg/l	02/04/85	1	IT	GC
H-03b3	CULEBRA	IODIDE	<	1.0000		NA	0.0000			mg/l	05/05/86	2	IT	GC
H-03b3	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	08/24/87	3	IT	GC

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H-03b3	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	03/02/89	4	IT	GC
H-03b3	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	08/15/90	5	IT	GC
H-03b3	CULEBRA	IRON		0.3400			0.4200	< 0.01	< 0.01	mg/l	02/04/85	1	IT	ME
H-03b3	CULEBRA	IRON		0.2400		NA	0.0000	< 0.01	< 0.01	mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	IRON		0.2000			0.2000	< 0.01	< 0.01	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	IRON		0.2000			0.2000	< 0.02	< 0.02	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	IRON	<	1.0000		<	1.0000			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	ISOPHORONE	<	4.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	LEAD	<	0.1000		NA	0.0000	< 0.10	< 0.10	mg/l	02/04/85	1	IT	ME
H-03b3	CULEBRA	LEAD	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	LEAD		0.5000			0.5000	< 0.05	< 0.05	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	LEAD	<	0.5000		<	0.5000			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	LITHIUM		0.6400			0.6400	< 0.01	< 0.01	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	LITHIUM		0.4000			0.4200	< 0.01	< 0.01	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	LITHIUM		0.4000			0.4000			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	MAGNESIUM		780.0000		NA	0.0000			mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	MAGNESIUM		830.0000		NA	0.0000			mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	MAGNESIUM		750.0000			740.0000			mg/l	03/02/89	4	IT	MC
H-03b3	CULEBRA	MAGNESIUM		700.0000			710.0000			mg/l	08/15/90	5	IT	MC
H-03b3	CULEBRA	MANGANESE		0.1800		NA	0.0000	< 0.01	< 0.01	mg/l	02/04/85	1	IT	ME
H-03b3	CULEBRA	MANGANESE		0.1200		NA	0.0000	< 0.005	< 0.005	mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	MANGANESE		0.1400			0.1400	< 0.005	< 0.005	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	MANGANESE		0.1300			0.1300	< 0.005	< 0.005	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	MANGANESE	<	0.1500		<	0.1500			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	02/04/85	1	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-03b3	CULEBRA	MERCURY		0.0010		NA	0.0000	< 0.0002	< 0.0002	mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	MERCURY		0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	MERCURY	<	0.0002		<	0.0002			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000	< 10		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000	< 10		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000	12		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	MOLYBDENUM		0.0320			0.0280	< 0.001	< 0.001	mg/l	02/04/85	1	IT	ME
H-03b3	CULEBRA	MOLYBDENUM		0.0500		NA	0.0000	< 0.01	0.01	mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	MOLYBDENUM		0.1800			0.1800	< 0.01	< 0.01	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	MOLYBDENUM		0.2000			0.2000	< 0.01	< 0.01	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	MOLYBDENUM	<	0.2000		<	0.2000			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	N-NITROSO-DI-METHYLAMINE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV
H-03b3	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	03/02/89	4	IT	SV
H-03b3	CULEBRA	N-NITROSO-DI-PHENYLAMINE		6.5000		NA	0.0000			ug/l	02/04/85	1	IT	SV
H-03b3	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	SV
H-03b3	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	08/24/87	3	IT	SV

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H-03b3	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		03/02/89	4	IT	SV
H-03b3	CULEBRA	NAPHTHALENE	<	1.0000		NA	0.0000			ug/l		02/04/85	1	IT	SV
H-03b3	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		05/05/86	2	IT	SV
H-03b3	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		08/24/87	3	IT	SV
H-03b3	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		03/02/89	4	IT	SV
H-03b3	CULEBRA	NICKEL		0.4400		NA	0.0000	0.02	0.02	mg/l		02/04/85	1	IT	ME
H-03b3	CULEBRA	NICKEL	<	0.3000		NA	0.0000	< 0.3	< 0.3	mg/l		05/05/86	2	IT	ME
H-03b3	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		08/24/87	3	IT	ME
H-03b3	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		03/02/89	4	IT	MT
H-03b3	CULEBRA	NICKEL	<	0.4000		<	0.4000			mg/l		08/15/90	4	IT	MT
H-03b3	CULEBRA	NITRATE	<	0.1000		NA	0.0000			mg/l	NO3-N	02/04/85	1	IT	GC
H-03b3	CULEBRA	NITRATE		0.1000		NA	0.0000			mg/l	NO3-N	05/05/86	2	IT	GC
H-03b3	CULEBRA	NITRATE	<	0.2000		NA	0.0000			mg/l	NO3-N	08/24/87	3	IT	GC
H-03b3	CULEBRA	NITRATE	<	0.0200		<	0.0200			mg/l		03/02/89	4	IT	GC
H-03b3	CULEBRA	NITRATE	<	0.0200			0.0000			mg/l		08/15/90	5	IT	GC
H-03b3	CULEBRA	NITROBENZENE	<	1.0000		NA	0.0000			ug/l		02/04/85	1	IT	SV
H-03b3	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		05/05/86	2	IT	SV
H-03b3	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		08/24/87	3	IT	SV
H-03b3	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		03/02/89	4	IT	SV
H-03b3	CULEBRA	P-CHLORO-M-CRESOL	<	1.0000		NA	0.0000			ug/l		02/04/85	1	IT	SV
H-03b3	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		05/05/86	2	IT	SV
H-03b3	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		08/24/87	3	IT	SV
H-03b3	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		03/02/89	4	IT	SV
H-03b3	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		05/05/86	2	IT	PC
H-03b3	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		08/24/87	3	IT	PC
H-03b3	CULEBRA	PENTACHLOROPHENOL		5.6000		NA	0.0000			ug/l		02/04/85	1	IT	SV
H-03b3	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		05/05/86	2	IT	SV
H-03b3	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		08/24/87	3	IT	SV
H-03b3	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		03/02/89	4	IT	SV

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H-03b3	CULEBRA	PHENANTHRENE	<	1.0000		NA	0.0000				ug/l		02/04/85	1	IT	SV
H-03b3	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000				ug/l		05/05/86	2	IT	SV
H-03b3	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000				ug/l		08/24/87	3	IT	SV
H-03b3	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000				ug/l		03/02/89	4	IT	SV
H-03b3	CULEBRA	PHENOL	<	1.0000		NA	0.0000				ug/l		02/04/85	1	IT	SV
H-03b3	CULEBRA	PHENOL	<	10.0000		NA	0.0000				ug/l		05/05/86	2	IT	SV
H-03b3	CULEBRA	PHENOL	<	10.0000		NA	0.0000				ug/l		08/24/87	3	IT	SV
H-03b3	CULEBRA	PHENOL	<	10.0000		NA	0.0000				ug/l		03/02/89	4	IT	SV
H-03b3	CULEBRA	PHENOLICS		0.0020		NA	0.0000				mg/l		02/04/85	1	IT	GC
H-03b3	CULEBRA	PHENOLICS		0.0330		NA	0.0000				mg/l		05/05/86	2	IT	GC
H-03b3	CULEBRA	PHENOLICS	<	0.0050		NA	0.0000				mg/l		08/24/87	3	IT	GC
H-03b3	CULEBRA	PHENOLICS	<	0.0100		NA	0.0000				mg/l		03/02/89	4	IT	GC
H-03b3	CULEBRA	PHENOLICS	<	0.0050		<	0.0100				mg/l		08/15/90	5	IT	GC
H-03b3	CULEBRA	PHOSPHATE	<	0.0100		NA	0.0000				mg/l	T-PO4-P	02/04/85	1	IT	GC
H-03b3	CULEBRA	PHOSPHATE		0.0100		NA	0.0000				mg/l	T-PO4-P	05/05/86	2	IT	GC
H-03b3	CULEBRA	PHOSPHATE		0.0200		NA	0.0000				mg/l	T-PO4-P	08/24/87	3	IT	GC
H-03b3	CULEBRA	PHOSPHORUS		0.0600		NA	0.0000				mg/l		03/02/89	4	IT	GC
H-03b3	CULEBRA	PHOSPHORUS	<	0.0100			0.0000				mg/l		08/15/90	5	IT	GC
H-03b3	CULEBRA	POTASSIUM		360.0000		NA	0.0000				mg/l		05/05/86	2	IT	ME
H-03b3	CULEBRA	POTASSIUM		530.0000		NA	0.0000				mg/l		08/24/87	3	IT	ME
H-03b3	CULEBRA	POTASSIUM		500.0000			490.0000				mg/l		03/02/89	4	IT	MC
H-03b3	CULEBRA	POTASSIUM		450.0000			450.0000				mg/l		08/15/90	5	IT	MC
H-03b3	CULEBRA	PYRENE	<	1.0000		NA	0.0000				ug/l		02/04/85	1	IT	SV
H-03b3	CULEBRA	PYRENE	<	10.0000		NA	0.0000				ug/l		05/05/86	2	IT	SV
H-03b3	CULEBRA	PYRENE	<	10.0000		NA	0.0000				ug/l		08/24/87	3	IT	SV
H-03b3	CULEBRA	PYRENE	<	10.0000		NA	0.0000				ug/l		03/02/89	4	IT	SV
H-03b3	CULEBRA	RESIDUE, FILTERABLE @ 180 C		55000.0000		NA	0.0000				mg/l		02/04/85	1	IT	GC
H-03b3	CULEBRA	RESIDUE, FILTERABLE @ 180 C		54000.0000		NA	0.0000				mg/l		05/05/86	2	IT	GC
H-03b3	CULEBRA	RESIDUE, FILTERABLE @ 180 C		54000.0000			53000.0000				mg/l		08/24/87	3	IT	GC

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H-03b3	CULEBRA	RESIDUE, FILTERABLE @ 180 C		53400.0000			53100.0000			mg/l	03/02/89	4	IT	GC
H-03b3	CULEBRA	RESIDUE, FILTERABLE @ 180 C		55000.0000			0.0000			mg/l	08/15/90	5	IT	GC
H-03b3	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		96.0000		NA	0.0000			mg/l	02/04/85	1	IT	GC
H-03b3	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		92.0000			100.0000			mg/l	05/05/86	2	IT	GC
H-03b3	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000		<	4.0000			mg/l	08/24/87	3	IT	GC
H-03b3	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		18.0000			19.0000			mg/l	03/02/89	4	IT	GC
H-03b3	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		100.0000			0.0000			mg/l	08/15/90	5	IT	GC
H-03b3	CULEBRA	SELENIUM		0.0670			0.0980	< 0.001	< 0.001	mg/l	02/04/85	1	IT	ME
H-03b3	CULEBRA	SELENIUM	<	0.1000		NA	0.0000	< 0.001	< 0.001	mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	SELENIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	SELENIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	SELENIUM	<	0.5000		NA	0.0000			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	SILICA		8.8000			8.9000	5	5.1	mg/l	02/04/85	1	IT	ME
H-03b3	CULEBRA	SILICA		11.0000		NA	0.0000	< 0.2	< 0.2	mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	SILICA		13.0000			13.0000	< 0.2	< 0.2	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	SILICA		4.9000			4.9000			mg/l	03/02/89	4	IT	GC
H-03b3	CULEBRA	SILICA		4.5000			0.0000			mg/l	08/15/90	5	IT	GC
H-03b3	CULEBRA	SILVER		0.1000			0.1000	< 0.01	< 0.01	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	SILVER		0.1000			0.1000	< 0.01	< 0.01	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	SILVER	<	0.1000		<	0.1000			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	SODIUM		17000.0000		NA	0.0000			mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	SODIUM		17000.0000		NA	0.0000			mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	SODIUM		17000.0000			17200.0000			mg/l	03/02/89	4	IT	MC
H-03b3	CULEBRA	SODIUM		16000.0000			16000.0000			mg/l	08/15/90	5	IT	MC
H-03b3	CULEBRA	SPECIFIC CONDUCTANCE		82000.0000		NA	0.0000			umhos/cm@25C	02/04/85	1	IT	GC
H-03b3	CULEBRA	SPECIFIC CONDUCTANCE		71500.0000		NA	0.0000			umhos/cm@25C	05/05/86	2	IT	GC
H-03b3	CULEBRA	SPECIFIC CONDUCTANCE		89700.0000			86500.0000			umhos/cm@25C	08/24/87	3	IT	GC
H-03b3	CULEBRA	SPECIFIC CONDUCTANCE		75100.0000			75500.0000			uMhos/cm@25C	03/02/89	4	IT	GC
H-03b3	CULEBRA	SPECIFIC CONDUCTANCE		66000.0000			66000.0000			uMhos/cm@25C	08/15/90	5	IT	GC

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H-03b3	CULEBRA	STRONTIUM		25.0000			25.0000	0.02	0.03	mg/l	02/04/85	1	IT	ME
H-03b3	CULEBRA	STRONTIUM		23.0000		NA	0.0000	< 0.01	< 0.01	mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	STRONTIUM		31.0000			32.0000	< 0.01	< 0.01	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	STRONTIUM		23.0000			23.0000	< 0.01	< 0.01	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	STRONTIUM		23.0000			23.0000			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	STYRENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	STYRENE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	SULFATE		4600.0000			4700.0000			mg/l	05/05/86	2	IT	GC
H-03b3	CULEBRA	SULFATE		4800.0000			4700.0000			mg/l	08/24/87	3	IT	GC
H-03b3	CULEBRA	SULFATE		4300.0000			4700.0000			mg/l	03/02/89	4	IT	GC
H-03b3	CULEBRA	SULFATE		4700.0000			0.0000			mg/l	08/15/90	5	IT	GC
H-03b3	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	THALLIUM	<	5.0000		<	5.0000	< 0.005	< 0.005	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	THALLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	THALLIUM	<	10.0000		NA	0.0000			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	TIN		0.6000			0.5000	< 0.04	< 0.04	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	TITANIUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	02/04/85	1	IT	ME
H-03b3	CULEBRA	TITANIUM	<	0.1000		NA	0.0000	< 0.1	< 0.1	mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	TITANIUM		0.8000			0.8000	< 0.03	< 0.03	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	TITANIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	TITANIUM	<	0.1000		<	0.1000			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	TOLUENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-03b3	CULEBRA	TOLUENE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	TOTAL ORGANIC CARBON		2.0000		NA	0.0000			mg/l	02/04/85	1	IT	GC
H-03b3	CULEBRA	TOTAL ORGANIC CARBON		2.0000		NA	0.0000			mg/l	05/05/86	2	IT	GC
H-03b3	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	08/24/87	3	IT	GC
H-03b3	CULEBRA	TOTAL ORGANIC CARBON		1.0000			1.0000			mg/l	03/02/89	4	IT	GC
H-03b3	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000			1.0000			mg/l	08/15/90	5	IT	GC
H-03b3	CULEBRA	TOTAL ORGANIC HALOGEN		0.3000		NA	0.0000			mg/l	02/04/85	1	IT	GC
H-03b3	CULEBRA	TOTAL ORGANIC HALOGEN		0.4200		NA	0.0000			mg/l	05/05/86	2	IT	GC
H-03b3	CULEBRA	TOTAL ORGANIC HALOGEN		1.9000			1.3000			mg/l	08/24/87	3	IT	GC
H-03b3	CULEBRA	TOTAL ORGANIC HALOGEN		0.4200			0.2400			mg/l	03/02/89	4	IT	GC
H-03b3	CULEBRA	TOTAL ORGANIC HALOGEN		0.1300			0.1400			mg/l	08/15/90	5	IT	GC
H-03b3	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	TRICHLOROFLUOROMETHANE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	VANADIUM		0.2000			0.2000	< 0.01	< 0.01	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	VANADIUM		0.2000			0.2000	< 0.01	< 0.01	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	VANADIUM	<	0.5000		<	0.5000			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	08/24/87	3	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-03b3	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000	< 10		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000	< 10		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	XYLENE	<	1.0000		NA	0.0000			ug/l	02/04/85	1	IT	V
H-03b3	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	05/05/86	2	IT	V
H-03b3	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	08/24/87	3	IT	V
H-03b3	CULEBRA	XYLENE	<	5.0000		NA	0.0000	< 5		ug/l	03/02/89	4	IT	V
H-03b3	CULEBRA	ZINC		0.0200		NA	0.0000	< 0.01	< 0.01	mg/l	02/04/85	1	IT	ME
H-03b3	CULEBRA	ZINC		0.1400		NA	0.0000	< 0.005	< 0.005	mg/l	05/05/86	2	IT	ME
H-03b3	CULEBRA	ZINC		0.2000			0.2000	< 0.01	< 0.01	mg/l	08/24/87	3	IT	ME
H-03b3	CULEBRA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/02/89	4	IT	MT
H-03b3	CULEBRA	ZINC	<	0.2000		<	0.2000			mg/l	08/15/90	5	IT	MT
H-03b3	CULEBRA	pH		7.6000		NA	0.0000				02/04/85	1	IT	GC
H-03b3	CULEBRA	pH		7.4200			7.4600				05/05/86	2	IT	GC
H-03b3	CULEBRA	pH		6.7300			6.7700				08/24/87	3	IT	GC
H-03b3	CULEBRA	pH		7.3300			7.3300				03/02/89	4	IT	GC
H-03b3	CULEBRA	pH		7.1600			7.1600				08/15/90	5	IT	GC
** H-04b														
H-04b	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V

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H-04b	CULEBRA	1,1,2-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	1,1-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	1,2,4-TRICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	1,2-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	1,2-DICHLOROPROPANE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	1,2-DIPHENYLHYDRAZINE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV

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H-04b	CULEBRA	1,3-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	1,3-DICHLOROPROPYLENE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	1,4-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	2,3,7,8-TETRACHLOROBENZO-P-DIO XIN	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	2,4,5-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	2,4,6-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	2,4-DICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	2,4-DIMETHYLPHENOL	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	2,4-DINITROPHENOL	<	10.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV

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H-04b	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	2,4-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	2,6-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000	< 10		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000	< 10		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	2-CHLORONAPHTHALENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	2-CHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	09/25/87	3	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID	BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-04b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000	< 10			ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	2-METHYLNAPHTHALENE	<	1.0000		NA	0.0000				ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000				ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000				ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000				ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	2-METHYLPHENOL	<	1.0000		NA	0.0000				ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000				ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000				ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000				ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	2-NITROANILINE	<	1.0000		NA	0.0000				ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000				ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000				ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000				ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	2-NITROPHENOL	<	1.0000		NA	0.0000				ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000				ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000				ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000				ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	3,3'-DICHLOROBENZIDINE	<	1.0000		NA	0.0000				ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000				ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000				ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000				ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	3,4-BENZOFLUORANTHENE	<	1.0000		NA	0.0000				ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000				ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000				ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	3-NITROANILINE	<	1.0000		NA	0.0000				ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000				ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000				ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000				ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	4,6-DINITRO-O-CRESOL	<	10.0000		NA	0.0000				ug/l	07/20/85	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-04b	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	4-CHLOROANILINE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000	< 10		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	4-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	4-NITROANILINE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	4-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV

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H-04b	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	ACENAPHTHENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	ACENAPHTHYLENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	ACETONE	<	10.0000		NA	0.0000		T < 10	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	ACETONE	<	10.0000		NA	0.0000	< 10		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	ACROLEIN	<	10.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	ACRYLONITRILE	<	10.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	11/13/86	2	IT	GC
H-04b	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	09/25/87	3	IT	GC
H-04b	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	04/06/89	4	IT	GC
H-04b	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	09/11/90	5	IT	GC
H-04b	CULEBRA	ALKALINITY (HCO3)		68.0000			68.0000			mg/l	11/13/86	2	IT	GC
H-04b	CULEBRA	ALKALINITY (HCO3)		58.0000		NA	0.0000			mg/l	09/25/87	3	IT	GC
H-04b	CULEBRA	ALKALINITY (HCO3)		66.0000			67.0000			mg/l	04/06/89	4	IT	GC
H-04b	CULEBRA	ALKALINITY (HCO3)		54.0000			0.0000			mg/l	09/11/90	5	IT	GC
H-04b	CULEBRA	ALUMINUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	ALUMINUM	<	1.0000		NA	0.0000	< 0.1	< 0.1	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< .1	< .1	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	ALUMINUM	<	2.0000		<	2.0000			mg/l	09/11/90	5	IT	MT

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-04b	CULEBRA	ANILINE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	ANTHRACENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	ANTIMONY	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	ANTIMONY		0.7000		<	0.5000	< 0.05	< 0.05	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	ANTIMONY	<	0.5000		<	0.5000	< .05	< .05	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	ANTIMONY	<	0.6000		<	0.6000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	AROCLOR 1016	<	0.5000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	AROCLOR 1221	<	0.5000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	AROCLOR 1232	<	0.5000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	AROCLOR 1242	<	0.5000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	AROCLOR 1248	<	0.5000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	AROCLOR 1254	<	1.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	AROCLOR 1260	<	1.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	ARSENIC		0.0400		NA	0.0000	< 0.01	< 0.01	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	ARSENIC		0.0200		NA	0.0000	< 0.01	< 0.01	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	ARSENIC	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	ARSENIC	<	0.0300		<	0.0300	< .003	< .003	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	ARSENIC	<	0.1000		NA	0.0000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	BARIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	BARIUM	<	0.0500		NA	0.0000	< 0.05	< 0.05	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	BARIUM	<	0.0500		<	0.0500	< .005	< .005	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	BARIUM	<	2.0000		<	2.0000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	BENZENE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V

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H-04b	CULEBRA	BENZENE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	BENZIDINE	<	4.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	BENZO(A)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	BENZO(A)PYRENE		6.5000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	BENZO(B)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	BENZO(G,H,I)PERYLENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	BENZO(K)FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	BENZOIC ACID	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	BENZYL ALCOHOL	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	BERYLLIUM		0.0010		NA	0.0000	< 0.001	< 0.001	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	11/13/86	2	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-04b	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< .005	< .005	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	BIS(CHLOROMETHYL)ETHER	<	4.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	BORON		23.0000		NA	0.0000	< 0.1	< 0.1	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	BORON		16.0000		NA	0.0000	< 0.05	< 0.05	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	BORON		16.0000			16.0000	< 0.01	< 0.01	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	BORON		17.0000			17.0000	< .005	.006	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	BORON		17.0000			17.0000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	BROMIDE		64.0000		NA	0.0000			mg/l	07/20/85	1	IT	GC
H-04b	CULEBRA	BROMIDE		44.0000		NA	0.0000			mg/l	11/13/86	2	IT	GC
H-04b	CULEBRA	BROMIDE		42.0000			42.0000			mg/l	09/25/87	3	IT	GC
H-04b	CULEBRA	BROMIDE		90.0000			91.0000			mg/l	04/06/89	4	IT	GC

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H-04b	CULEBRA	BROMIDE		44.0000			44.0000			mg/l	09/11/90	5	IT	GC
H-04b	CULEBRA	BROMOFORM	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	BUTYL BENZYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	CADMIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	CADMIUM	<	0.0500		<	0.0500	< .005	< .005	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	CADMIUM	<	0.0500		<	0.0500			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	CALCIUM		1100.0000			1100.0000			mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	CALCIUM		640.0000			640.0000			mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	CALCIUM		730.0000			720.0000			mg/l	04/06/89	4	IT	MC
H-04b	CULEBRA	CALCIUM		630.0000			640.0000			mg/l	09/11/90	5	IT	MC
H-04b	CULEBRA	CARBON DISULFIDE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	CESIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	CESIUM		0.2000		NA	0.0000	< 0.1	< 0.1	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	CESIUM		0.1100			0.0800	< 0.01	< 0.01	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	CESIUM	<	10.0000		<	10.0000	< .2	< .2	mg/l	04/06/89	4	IT	MT

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H-04b	CULEBRA	CESIUM	<	0.2000		<	0.2000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	CHLORIDE		12000.0000		NA	0.0000			mg/l	11/13/86	2	IT	GC
H-04b	CULEBRA	CHLORIDE		7500.0000		NA	0.0000			mg/l	09/25/87	3	IT	GC
H-04b	CULEBRA	CHLORIDE		7600.0000			7700.0000			mg/l	04/06/89	4	IT	GC
H-04b	CULEBRA	CHLORIDE		650.0000			580.0000			mg/l	09/11/90	5	IT	GC
H-04b	CULEBRA	CHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	CHLOROETHANE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000	< 10		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	CHLOROFORM	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	CHROMIUM	<	0.0010		<	0.0010	< 0.001	< 0.001	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	CHROMIUM		0.1000		NA	0.0000	< 0.05	< 0.05	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	CHROMIUM		0.1000		<	0.1000	< 0.01	< 0.01	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	CHROMIUM		0.3000			0.2000	.02	.02	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	CHROMIUM		0.2000			0.2000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	CHRYSENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-04b	CULEBRA	COBALT		0.0590			0.0680	< 0.001	< 0.001	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	COBALT	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	COBALT	<	0.1000		<	0.1000	< .01	< .01	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	COBALT	<	0.5000		<	0.5000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	COPPER		0.0400			0.0200	< 0.01	< 0.01	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	COPPER		0.2000		NA	0.0000	< 0.05	< 0.05	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	COPPER	<	0.1000		<	0.1000	0.01	< 0.01	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	COPPER	<	0.1000		<	0.1000	< .01	< .01	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	COPPER	<	0.2500		<	0.2500			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	CYANIDE	<	0.0200		<	0.0200			mg/l	07/20/85	1	IT	GC
H-04b	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	11/13/86	2	IT	GC
H-04b	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	09/25/87	3	IT	GC
H-04b	CULEBRA	CYANIDE	<	0.0100		NA	0.0000			mg/l	04/06/89	4	IT	GC
H-04b	CULEBRA	CYANIDE	<	0.0100			0.0000			mg/l	09/11/90	5	IT	GC
H-04b	CULEBRA	DI-N-BUTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	DI-N-OCTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	DIBENZOFURAN	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV

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H-04b	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	DIETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	DIMETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	ETHYLBENZENE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	Eh		494.0000		NA	0.0000			mV	07/20/85	1	IT	GC
H-04b	CULEBRA	FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	FLUORENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID	BLANK	WATER	BLANK	UNITS	DATE	RND	LAB	C
H-04b	CULEBRA	FLUORENE	<	10.0000		NA	0.0000					ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	FLUORENE	<	10.0000		NA	0.0000					ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	FLUORIDE		1.7000		NA	0.0000					mg/l	07/20/85	1	IT	GC
H-04b	CULEBRA	FLUORIDE		2.1000			2.2000					mg/l	11/13/86	2	IT	GC
H-04b	CULEBRA	FLUORIDE		1.8000			1.9000					mg/l	09/25/87	3	IT	GC
H-04b	CULEBRA	FLUORIDE		1.9000			1.9000					mg/l	04/06/89	4	IT	GC
H-04b	CULEBRA	FLUORIDE		2.1000			0.0000					mg/l	09/11/90	5	IT	GC
H-04b	CULEBRA	HEXACHLOROBENZENE	<	1.0000		NA	0.0000					ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000					ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000					ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000					ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	HEXACHLOROBUTADIENE	<	1.0000		NA	0.0000					ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000					ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000					ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000					ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	1.0000		NA	0.0000					ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000					ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000					ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000					ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	HEXACHLOROETHANE	<	1.0000		NA	0.0000					ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000					ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000					ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000					ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	1.0000		NA	0.0000					ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000					ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000					ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000					ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	IODIDE		1.1000		NA	0.0000					mg/l	07/20/85	1	IT	GC
H-04b	CULEBRA	IODIDE		2.0000		NA	0.0000					mg/l	11/13/86	2	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-04b	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	09/25/87	3	IT	GC
H-04b	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	04/06/89	4	IT	GC
H-04b	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	09/11/90	5	IT	GC
H-04b	CULEBRA	IRON		0.4200			0.4400	< 0.01	< 0.01	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	IRON		0.4000		NA	0.0000	< 0.05	< 0.05	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	IRON		0.6000			0.5000	< 0.01	< 0.01	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	IRON		0.5000			0.5000	< .02	< .02	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	IRON	<	1.0000		<	1.0000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	ISOPHORONE	<	4.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	LEAD		0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	LEAD	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	LEAD	<	0.5000		<	0.5000	< .05	< .05	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	LEAD	<	0.5000		<	0.5000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	LITHIUM		0.4100		NA	0.0000	< 0.05	< 0.05	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	LITHIUM		0.5500			0.5500	< 0.01	< 0.01	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	LITHIUM		0.4000			0.4000	< .01	< .01	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	LITHIUM		0.3000			0.3000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	MAGNESIUM		470.0000			480.0000			mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	MAGNESIUM		430.0000			440.0000			mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	MAGNESIUM		400.0000			400.0000			mg/l	04/06/89	4	IT	MC
H-04b	CULEBRA	MAGNESIUM		390.0000			390.0000			mg/l	09/11/90	5	IT	MC
H-04b	CULEBRA	MANGANESE		0.1200			0.1200	0.01	0.01	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	MANGANESE		0.1200		NA	0.0000	< 0.05	< 0.05	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	MANGANESE		0.1400			0.1400	< 0.005	< 0.005	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	MANGANESE		0.1800			0.1700	< .005	< .005	mg/l	04/06/89	4	IT	MT

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-04b	CULEBRA	MANGANESE	<	0.1900		<	0.1900			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	MERCURY		0.0003			0.0003	0.0002	< 0.0002	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	MERCURY		0.0015			0.0018	< 0.0002	< 0.0002	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	MERCURY	<	0.0002			0.0005	< .0002	< .0002	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	MERCURY	<	0.0004		<	0.0004			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000	< 10		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000	< 10		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000	17		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	MOLYBDENUM		0.0700			0.0800	0.03	0.03	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	MOLYBDENUM		0.1100		NA	0.0000	< 0.05	0.06	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	MOLYBDENUM		0.1600			0.1700	< 0.01	< 0.01	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	MOLYBDENUM		0.2000			0.2000	< .01	< .01	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	MOLYBDENUM	<	0.2000		<	0.2000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	N-NITROSO-DI-METHYLAMINE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-04b	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	NAPHTHALENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	NICKEL		0.1900			0.1900	0.02	0.01	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	NICKEL	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	NICKEL	<	0.3000		<	0.3000	< .03	< .03	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	NICKEL	<	0.4000		<	0.4000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	NITRATE	<	0.1000		<	0.1000			mg/l NO3-N	07/20/85	1	IT	GC
H-04b	CULEBRA	NITRATE	<	0.1000		<	0.1000			mg/l NO3-N	11/13/86	2	IT	GC
H-04b	CULEBRA	NITRATE	<	0.1000		NA	0.0000			mg/l NO3-N	09/25/87	3	IT	GC
H-04b	CULEBRA	NITRATE	<	0.0200		<	0.0200			mg/l	04/06/89	4	IT	GC
H-04b	CULEBRA	NITRATE	<	0.0200		<	0.0200			mg/l	09/11/90	5	IT	GC
H-04b	CULEBRA	NITROBENZENE	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	P-CHLORO-M-CRESOL	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV
H-04b	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l	09/25/87	3	IT	SV
H-04b	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l	04/06/89	4	IT	SV
H-04b	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l	11/13/86	2	IT	PC
H-04b	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l	09/25/87	3	IT	PC
H-04b	CULEBRA	PENTACHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	07/20/85	1	IT	SV
H-04b	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	11/13/86	2	IT	SV

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H-04b	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000				ug/l		09/25/87	3	IT	SV
H-04b	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000				ug/l		04/06/89	4	IT	SV
H-04b	CULEBRA	PHENANTHRENE	<	1.0000		NA	0.0000				ug/l		07/20/85	1	IT	SV
H-04b	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000				ug/l		11/13/86	2	IT	SV
H-04b	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000				ug/l		09/25/87	3	IT	SV
H-04b	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000				ug/l		04/06/89	4	IT	SV
H-04b	CULEBRA	PHENOL	<	1.0000		NA	0.0000				ug/l		07/20/85	1	IT	SV
H-04b	CULEBRA	PHENOL	<	10.0000		NA	0.0000				ug/l		11/13/86	2	IT	SV
H-04b	CULEBRA	PHENOL	<	10.0000		NA	0.0000				ug/l		09/25/87	3	IT	SV
H-04b	CULEBRA	PHENOL	<	10.0000		NA	0.0000				ug/l		04/06/89	4	IT	SV
H-04b	CULEBRA	PHENOLICS		0.0070		NA	0.0000				mg/l		07/20/85	1	IT	GC
H-04b	CULEBRA	PHENOLICS		0.0040		NA	0.0000				mg/l		11/13/86	2	IT	GC
H-04b	CULEBRA	PHENOLICS		0.0120		NA	0.0000				mg/l		09/25/87	3	IT	GC
H-04b	CULEBRA	PHENOLICS		0.0260		NA	0.0000				mg/l		04/06/89	4	IT	GC
H-04b	CULEBRA	PHENOLICS	<	0.0050			0.0000				mg/l		09/11/90	5	IT	GC
H-04b	CULEBRA	PHOSPHATE		0.0300		NA	0.0000				mg/l	T-PO4-P	07/20/85	1	IT	GC
H-04b	CULEBRA	PHOSPHATE	<	0.0100		<	0.0100				mg/l	T-PO4-P	11/13/86	2	IT	GC
H-04b	CULEBRA	PHOSPHATE	<	0.0100		<	0.0100				mg/l	T-PO4-P	09/25/87	3	IT	GC
H-04b	CULEBRA	PHOSPHORUS		0.0200			0.0200				mg/l		04/06/89	4	IT	GC
H-04b	CULEBRA	PHOSPHORUS	<	0.0100			0.0000				mg/l		09/11/90	5	IT	GC
H-04b	CULEBRA	POTASSIUM		250.0000			260.0000				mg/l		11/13/86	2	IT	ME
H-04b	CULEBRA	POTASSIUM		240.0000			250.0000	N/A			mg/l		09/25/87	3	IT	ME
H-04b	CULEBRA	POTASSIUM		220.0000			220.0000				mg/l		04/06/89	4	IT	MC
H-04b	CULEBRA	POTASSIUM		170.0000			170.0000				mg/l		09/11/90	5	IT	MC
H-04b	CULEBRA	PYRENE	<	1.0000		NA	0.0000				ug/l		07/20/85	1	IT	SV
H-04b	CULEBRA	PYRENE	<	10.0000		NA	0.0000				ug/l		11/13/86	2	IT	SV
H-04b	CULEBRA	PYRENE	<	10.0000		NA	0.0000				ug/l		09/25/87	3	IT	SV
H-04b	CULEBRA	PYRENE	<	10.0000		NA	0.0000				ug/l		04/06/89	4	IT	SV
H-04b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		20000.0000		NA	0.0000				mg/l		07/20/85	1	IT	GC

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H-04b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		23000.0000			22000.0000			mg/l	11/13/86	2	IT	GC
H-04b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		16000.0000		NA	0.0000			mg/l	09/25/87	3	IT	GC
H-04b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		20700.0000			20600.0000			mg/l	04/06/89	4	IT	GC
H-04b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		21000.0000			0.0000			mg/l	09/11/90	5	IT	GC
H-04b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		42.0000		NA	0.0000			mg/l	07/20/85	1	IT	GC
H-04b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		43.0000			36.0000			mg/l	11/13/86	2	IT	GC
H-04b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		32.0000		NA	0.0000			mg/l	09/25/87	3	IT	GC
H-04b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		95.0000			97.0000			mg/l	04/06/89	4	IT	GC
H-04b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		48.0000			0.0000			mg/l	09/11/90	5	IT	GC
H-04b	CULEBRA	SELENIUM	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	SELENIUM		0.0300		NA	0.0000	< 0.01	< 0.01	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	SELENIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	SELENIUM	<	0.0500		<	0.0500	< .005	< .005	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	SELENIUM	<	0.0500		NA	0.0000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	SILICA		14.0000		NA	0.0000	< 0.1	< 0.1	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	SILICA		14.0000		NA	0.0000	< 1	< 1	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	SILICA		13.0000			13.0000	< 0.2	< 0.2	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	SILICA		5.6000			5.5000			mg/l	04/06/89	4	IT	GC
H-04b	CULEBRA	SILICA		5.9000			0.0000			mg/l	09/11/90	5	IT	GC
H-04b	CULEBRA	SILVER	<	0.1000		NA	0.0000	< 0.05	< 0.05	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	SILVER	<	0.1000		<	0.1000	.02	.01	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	SILVER	<	0.1000		<	0.1000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	SODIUM		6000.0000			6000.0000			mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	SODIUM		6300.0000			6200.0000	N/A		mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	SODIUM		5500.0000			5600.0000			mg/l	04/06/89	4	IT	MC
H-04b	CULEBRA	SODIUM		6000.0000			6000.0000			mg/l	09/11/90	5	IT	MC
H-04b	CULEBRA	SPECIFIC CONDUCTANCE		23600.0000		NA	0.0000			umhos/cm@25C	07/20/85	1	IT	GC
H-04b	CULEBRA	SPECIFIC CONDUCTANCE		26300.0000			26600.0000			umhos/cm@25C	11/13/86	2	IT	GC

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H-04b	CULEBRA	SPECIFIC CONDUCTANCE		26400.0000			27500.0000			umhos/cm@25C	09/25/87	3	IT	GC
H-04b	CULEBRA	SPECIFIC CONDUCTANCE		31000.0000			31000.0000			uMhos/cm@25C	04/06/89	4	IT	GC
H-04b	CULEBRA	SPECIFIC CONDUCTANCE		21900.0000			22000.0000			uMhos/cm@25C	09/11/90	5	IT	GC
H-04b	CULEBRA	STRONTIUM		15.0000			15.0000	< 0.01	< 0.01	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	STRONTIUM		13.0000		NA	0.0000	< 0.05	< 0.05	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	STRONTIUM		16.0000			16.0000	< 0.01	< 0.01	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	STRONTIUM		14.0000			14.0000	< .01	< .01	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	STRONTIUM		13.0000			13.0000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	STYRENE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	STYRENE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	SULFATE		6900.0000		NA	0.0000			mg/l	11/13/86	2	IT	GC
H-04b	CULEBRA	SULFATE		5100.0000		NA	0.0000			mg/l	09/25/87	3	IT	GC
H-04b	CULEBRA	SULFATE		5000.0000			5200.0000			mg/l	04/06/89	4	IT	GC
H-04b	CULEBRA	SULFATE		4800.0000			0.0000			mg/l	09/11/90	5	IT	GC
H-04b	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	THALLIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	THALLIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	THALLIUM	<	4.0000		<	4.0000	< .004	< .004	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	THALLIUM	<	0.1000		NA	0.0000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	TIN		0.7000			0.5000	0.04	< 0.04	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	TITANIUM	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	TITANIUM		0.3000		NA	0.0000	< 0.05	< 0.05	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	TITANIUM		0.6000			0.4000	< 0.03	< 0.03	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	TITANIUM	<	0.1000		<	0.1000	< .01	< .01	mg/l	04/06/89	4	IT	MT

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H-04b	CULEBRA	TITANIUM	<	0.1000		<	0.1000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	TOLUENE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	TOLUENE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	TOTAL ORGANIC CARBON		3.0000		NA	0.0000			mg/l	07/20/85	1	IT	GC
H-04b	CULEBRA	TOTAL ORGANIC CARBON		3.0000		NA	0.0000			mg/l	11/13/86	2	IT	GC
H-04b	CULEBRA	TOTAL ORGANIC CARBON		5.0000			4.0000			mg/l	09/25/87	3	IT	GC
H-04b	CULEBRA	TOTAL ORGANIC CARBON		3.0000			3.0000			mg/l	04/06/89	4	IT	GC
H-04b	CULEBRA	TOTAL ORGANIC CARBON		5.0000			4.0000			mg/l	09/11/90	5	IT	GC
H-04b	CULEBRA	TOTAL ORGANIC HALOGEN		0.4600		NA	0.0000			mg/l	07/20/85	1	IT	GC
H-04b	CULEBRA	TOTAL ORGANIC HALOGEN		0.0900		NA	0.0000			mg/l	11/13/86	2	IT	GC
H-04b	CULEBRA	TOTAL ORGANIC HALOGEN		0.4400			0.8300			mg/l	09/25/87	3	IT	GC
H-04b	CULEBRA	TOTAL ORGANIC HALOGEN		0.0500			0.0600			mg/l	04/06/89	4	IT	GC
H-04b	CULEBRA	TOTAL ORGANIC HALOGEN		0.0800			0.0600			mg/l	09/11/90	5	IT	GC
H-04b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	TRICHLOROFLUOROMETHANE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	VANADIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	VANADIUM	<	0.1000		<	0.1000	< .01	< .01	mg/l	04/06/89	4	IT	MT

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H-04b	CULEBRA	VANADIUM	<	0.5000		<	0.5000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000	< 10		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000	< 10		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	XYLENE	<	1.0000		NA	0.0000			ug/l	07/25/85	1	IT	V
H-04b	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	11/13/86	2	IT	V
H-04b	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/25/87	3	IT	V
H-04b	CULEBRA	XYLENE	<	5.0000		NA	0.0000	< 5		ug/l	04/06/89	4	IT	V
H-04b	CULEBRA	ZINC	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	07/20/85	1	IT	ME
H-04b	CULEBRA	ZINC		0.4000		NA	0.0000	< 0.05	< 0.05	mg/l	11/13/86	2	IT	ME
H-04b	CULEBRA	ZINC		0.4000			0.3000	< 0.01	< 0.01	mg/l	09/25/87	3	IT	ME
H-04b	CULEBRA	ZINC		0.3000			0.3000	< .01	< .01	mg/l	04/06/89	4	IT	MT
H-04b	CULEBRA	ZINC	<	0.2000		<	0.2000			mg/l	09/11/90	5	IT	MT
H-04b	CULEBRA	pH		7.5900		NA	0.0000				07/20/85	1	IT	GC
H-04b	CULEBRA	pH		7.3900			7.4100				11/13/86	2	IT	GC
H-04b	CULEBRA	pH		6.1400			6.1900				09/25/87	3	IT	GC
H-04b	CULEBRA	pH		7.4600			7.4600				04/06/89	4	IT	GC
H-04b	CULEBRA	pH		6.6800			6.7100				09/11/90	5	IT	GC
** H-04c														
H-04c	MAGENTA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V

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H-04c	MAGENTA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V

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H-04c	MAGENTA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	1,3-DICHLOROBENZENE		15.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-04c	MAGENTA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	2-BUTANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	2-BUTANONE	<	10.0000		NA	0.0000	< 10		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000	< 10		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	2-HEXANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/19/88	3	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID	BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-04c	MAGENTA	2-HEXANONE	<	10.0000		NA	0.0000	< 10			ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000				ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000				ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000				ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000				ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	2-METHYLPHENOL	<	10.0000		NA	0.0000				ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	2-METHYLPHENOL	<	10.0000		NA	0.0000				ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	2-METHYLPHENOL	<	10.0000		NA	0.0000				ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	2-METHYLPHENOL	<	10.0000		NA	0.0000				ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	2-NITROANILINE	<	50.0000		NA	0.0000				ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	2-NITROANILINE	<	50.0000		NA	0.0000				ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	2-NITROANILINE	<	50.0000		NA	0.0000				ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	2-NITROANILINE	<	50.0000		NA	0.0000				ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	2-NITROPHENOL	<	10.0000		NA	0.0000				ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	2-NITROPHENOL	<	10.0000		NA	0.0000				ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	2-NITROPHENOL	<	10.0000		NA	0.0000				ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	2-NITROPHENOL	<	10.0000		NA	0.0000				ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000				ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000				ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000				ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000				ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000				ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000				ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000				ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	3-NITROANILINE	<	50.0000		NA	0.0000				ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	3-NITROANILINE	<	50.0000		NA	0.0000				ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	3-NITROANILINE	<	50.0000		NA	0.0000				ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	3-NITROANILINE	<	50.0000		NA	0.0000				ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000				ug/l	11/04/86	1	IT	SV

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H-04c	MAGENTA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000	< 10		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV

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H-04c	MAGENTA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	ACETONE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	ACETONE	<	10.0000		NA	0.0000		T < 10	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	ACETONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	ACETONE	<	10.0000		NA	0.0000	< 10		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	11/04/86	1	IT	GC
H-04c	MAGENTA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	10/05/87	2	IT	GC
H-04c	MAGENTA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	07/19/88	3	IT	GC
H-04c	MAGENTA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	04/21/89	4	IT	GC
H-04c	MAGENTA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	10/02/90	5	IT	GC
H-04c	MAGENTA	ALKALINITY (HCO3)		100.0000			100.0000			mg/l	11/04/86	1	IT	GC
H-04c	MAGENTA	ALKALINITY (HCO3)		59.0000			60.0000			mg/l	10/05/87	2	IT	GC
H-04c	MAGENTA	ALKALINITY (HCO3)		74.0000		NA	0.0000			mg/l	07/19/88	3	IT	GC
H-04c	MAGENTA	ALKALINITY (HCO3)		61.0000			61.0000			mg/l	04/21/89	4	IT	GC
H-04c	MAGENTA	ALKALINITY (HCO3)		62.0000			0.0000			mg/l	10/02/90	5	IT	GC
H-04c	MAGENTA	ALUMINUM	<	1.0000		NA	0.0000	< 0.1	< 0.1	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	ALUMINUM	<	1.0000		<	1.0000	< .1	< .1	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	ALUMINUM	<	2.0000		<	2.0000			mg/l	10/02/90	5	IT	MT

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H-04c	MAGENTA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	ANTIMONY		0.6000		NA	0.0000	< 0.05	< 0.05	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	ANTIMONY	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	ANTIMONY	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	ANTIMONY	<	0.5000		<	0.5000	< .05	< .05	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	ANTIMONY	<	0.6000		<	0.6000			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	AROCLOR 1016	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	AROCLOR 1221	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	AROCLOR 1232	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	AROCLOR 1242	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	AROCLOR 1248	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	AROCLOR 1254	<	21.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	AROCLOR 1260	<	21.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	ARSENIC	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	ARSENIC	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	ARSENIC	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	ARSENIC	<	0.0300		NA	0.0000	< .003	< .003	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	ARSENIC	<	0.1000		NA	0.0000			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	BARIUM		0.0600		NA	0.0000	< 0.05	< 0.05	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	BARIUM	<	0.0500		<	0.0500	< .005	< .005	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	BARIUM	<	0.2000		<	0.2000			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	BENZENE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	BENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-04c	MAGENTA	BENZENE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	BENZO(B)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	07/19/88	3	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-04c	MAGENTA	BERYLLIUM	<	0.0500		<	0.0500	< .005	< .005	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	BERYLLIUM	<	0.0500		<	0.0500			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	BIS(2-ETHYLHEXYL)PHTHALATE		110.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	BORON		11.0000		NA	0.0000	< 0.05	< 0.05	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	BORON		12.0000			12.0000	< 0.01	< 0.01	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	BORON		12.0000			12.0000	< 0.01	< 0.01	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	BORON		12.0000			12.0000	.011	.012	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	BORON		12.0000			12.0000			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	BROMIDE		7.0000		NA	0.0000			mg/l	11/04/86	1	IT	GC
H-04c	MAGENTA	BROMIDE		8.0000			7.0000			mg/l	10/05/87	2	IT	GC
H-04c	MAGENTA	BROMIDE		7.0000			7.0000			mg/l	07/19/88	3	IT	GC
H-04c	MAGENTA	BROMIDE		6.0000		NA	0.0000			mg/l	04/21/89	4	IT	GC
H-04c	MAGENTA	BROMIDE		6.0000			6.0000			mg/l	10/02/90	5	IT	GC
H-04c	MAGENTA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V

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H-04c	MAGENTA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	BROMOFORM	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	BROMOFORM	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	CADMIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	CADMIUM	<	0.0500		<	0.0500	< .005	< .005	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	CADMIUM	<	0.0500		<	0.0500			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	CALCIUM		1100.0000			1100.0000			mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	CALCIUM		610.0000			610.0000			mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	CALCIUM		640.0000			660.0000			mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	CALCIUM		700.0000			690.0000			mg/l	04/21/89	4	IT	MC
H-04c	MAGENTA	CALCIUM		630.0000			630.0000			mg/l	10/02/90	5	IT	MC
H-04c	MAGENTA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	CARBON DISULFIDE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	CARBON DISULFIDE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	CESIUM		0.1000		NA	0.0000	< 0.1	< 0.1	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	CESIUM		0.0500			0.0600	0.02	0.04	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	CESIUM	<	0.0600		<	0.0600	< 0.06	< 0.06	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	CESIUM	<	10.0000		<	10.0000	< 1	< 1	mg/l	04/21/89	4	IT	MT

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H-04c	MAGENTA	CESIUM	<	0.1000		<	0.1000			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	CHLORIDE		11000.0000			11000.0000			mg/l	11/04/86	1	IT	GC
H-04c	MAGENTA	CHLORIDE		8400.0000		NA	0.0000			mg/l	10/05/87	2	IT	GC
H-04c	MAGENTA	CHLORIDE		7600.0000		NA	0.0000			mg/l	07/19/88	3	IT	GC
H-04c	MAGENTA	CHLORIDE		8500.0000			8500.0000			mg/l	04/21/89	4	IT	GC
H-04c	MAGENTA	CHLORIDE		9000.0000			8900.0000			mg/l	10/02/90	5	IT	GC
H-04c	MAGENTA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	CHLOROBENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	CHLOROBENZENE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	CHLOROETHANE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	CHLOROETHANE	<	10.0000		NA	0.0000	< 10		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	CHLOROFORM	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	CHLOROFORM	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	CHROMIUM		0.2000		NA	0.0000	< 0.05	< 0.05	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	CHROMIUM		0.2000			0.2000	< 0.01	< 0.01	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	CHROMIUM	<	0.1000			0.1000	0.01	0.01	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	CHROMIUM		0.2000			0.2000	.02	.02	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	CHROMIUM	<	0.1000		<	0.1000			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V

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H-04c	MAGENTA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	COBALT	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	COBALT	<	0.1000		<	0.1000	< .01	< .01	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	COBALT	<	0.5000		<	0.5000			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	COPPER		0.3000		NA	0.0000	< 0.05	< 0.05	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	COPPER		0.2000			0.2000	0.01	< 0.01	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	COPPER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	COPPER	<	0.1000		<	0.1000	< .01	< .01	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	COPPER	<	0.2500		<	0.2500			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	CYANIDE	<	0.0200		NA	0.0000			mg/l	11/04/86	1	IT	GC
H-04c	MAGENTA	CYANIDE	<	0.0200		NA	0.0000			mg/l	10/05/87	2	IT	GC
H-04c	MAGENTA	CYANIDE	<	0.0200		NA	0.0000			mg/l	07/19/88	3	IT	GC
H-04c	MAGENTA	CYANIDE	<	0.0100		NA	0.0000			mg/l	04/21/89	4	IT	GC
H-04c	MAGENTA	CYANIDE	<	0.0100		NA	0.0000			mg/l	10/02/90	5	IT	GC
H-04c	MAGENTA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-04c	MAGENTA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	ETHYLBENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	ETHYLBENZENE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	FLUORENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-04c	MAGENTA	FLUORENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	FLUORENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	FLUORENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	FLUORIDE		2.2000		NA	0.0000			mg/l	11/04/86	1	IT	GC
H-04c	MAGENTA	FLUORIDE		2.5000			2.6000			mg/l	10/05/87	2	IT	GC
H-04c	MAGENTA	FLUORIDE		2.6000			2.6000			mg/l	07/19/88	3	IT	GC
H-04c	MAGENTA	FLUORIDE		2.6000			2.6000			mg/l	04/21/89	4	IT	GC
H-04c	MAGENTA	FLUORIDE		2.8000			0.0000			mg/l	10/02/90	5	IT	GC
H-04c	MAGENTA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	IODIDE		1.0000		NA	0.0000			mg/l	11/04/86	1	IT	GC

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H-04c	MAGENTA	IODIDE	<	2.0000		<	2.0000			mg/l	10/05/87	2	IT	GC
H-04c	MAGENTA	IODIDE	<	2.0000		<	2.0000			mg/l	07/19/88	3	IT	GC
H-04c	MAGENTA	IODIDE		4.0000			4.0000			mg/l	04/21/89	4	IT	GC
H-04c	MAGENTA	IODIDE	<	2.0000		<	2.0000			mg/l	10/02/90	5	IT	GC
H-04c	MAGENTA	IRON		0.9000		NA	0.0000	< 0.05	< 0.05	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	IRON		0.3000			0.3000	< 0.01	< 0.01	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	IRON		0.2000			0.2000	< 0.01	< 0.01	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	IRON		1.1000			1.1000	< .02	< .02	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	IRON	<	1.0000		<	1.0000			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	LEAD	<	0.5000		NA	0.0000	0.06	0.05	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	LEAD	<	0.5000		<	0.5000	< .05	< .05	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	LEAD	<	0.5000		<	0.5000			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	LITHIUM		0.4300		NA	0.0000	< 0.05	< 0.05	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	LITHIUM		0.4100			0.4100	< 0.01	< 0.01	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	LITHIUM		0.3900			0.3900	< 0.01	< 0.01	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	LITHIUM		0.4200			0.4200	< .01	< .01	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	LITHIUM		0.3900			0.3900			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	MAGNESIUM		470.0000			470.0000			mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	MAGNESIUM		490.0000			510.0000			mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	MAGNESIUM		430.0000			440.0000			mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	MAGNESIUM		420.0000			410.0000			mg/l	04/21/89	4	IT	MC
H-04c	MAGENTA	MAGNESIUM		400.0000			410.0000			mg/l	10/02/90	5	IT	MC
H-04c	MAGENTA	MANGANESE		0.4600		NA	0.0000	< 0.05	< 0.05	mg/l	11/04/86	1	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-04c	MAGENTA	MANGANESE		0.1300			0.1200	< 0.005	< 0.005	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	MANGANESE		0.1100			0.1100	< 0.005	< 0.005	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	MANGANESE		0.2100			0.2100	< .005	< .005	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	MANGANESE	<	0.1500		<	0.1500			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	MERCURY		0.0007			0.0007	< 0.0002	< 0.0002	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	MERCURY		0.0008		NA	0.0000	0.0002	< 0.0002	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	MERCURY	<	0.0002		<	0.0002	< .0002	< .0002	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	MERCURY	<	0.0002		<	0.0002			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	METHYL BROMIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	METHYL BROMIDE	<	10.0000		NA	0.0000	< 10		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	METHYL CHLORIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	METHYL CHLORIDE	<	10.0000		NA	0.0000	< 10		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000	T 13	T 26	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000	11		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	MOLYBDENUM	<	0.0500		NA	0.0000	< 0.05	< 0.05	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	MOLYBDENUM		0.0600			0.0700	0.02	0.02	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	MOLYBDENUM		0.0900			0.1000	< 0.05	< 0.05	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	MOLYBDENUM		0.1000		<	0.1000	< .01	< .01	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	MOLYBDENUM	<	0.2000		<	0.2000			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	SV
H-04c	MAGENTA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS		DATE	RND	LAB	C
H-04c	MAGENTA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		04/21/89	4	IT	SV
H-04c	MAGENTA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		11/04/86	1	IT	SV
H-04c	MAGENTA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		10/05/87	2	IT	SV
H-04c	MAGENTA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		07/19/88	3	IT	SV
H-04c	MAGENTA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		04/21/89	4	IT	SV
H-04c	MAGENTA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		11/04/86	1	IT	SV
H-04c	MAGENTA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		10/05/87	2	IT	SV
H-04c	MAGENTA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		07/19/88	3	IT	SV
H-04c	MAGENTA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		04/21/89	4	IT	SV
H-04c	MAGENTA	NICKEL	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l		11/04/86	1	IT	ME
H-04c	MAGENTA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		10/05/87	2	IT	ME
H-04c	MAGENTA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		07/19/88	3	IT	ME
H-04c	MAGENTA	NICKEL	<	0.3000		<	0.3000	< .03	< .03	mg/l		04/21/89	4	IT	MT
H-04c	MAGENTA	NICKEL	<	0.4000		<	0.4000			mg/l		10/02/90	5	IT	MT
H-04c	MAGENTA	NITRATE	<	0.1000		<	0.1000			mg/l	NO3-N	11/04/86	1	IT	GC
H-04c	MAGENTA	NITRATE	<	0.1000		NA	0.0000			mg/l	NO3-N	10/05/87	2	IT	GC
H-04c	MAGENTA	NITRATE	<	0.0200		NA	0.0000			mg/l	NO3-N	07/19/88	3	IT	GC
H-04c	MAGENTA	NITRATE	<	0.0200		<	0.0200			mg/l		04/21/89	4	IT	GC
H-04c	MAGENTA	NITRATE	<	0.0200		<	0.0200			mg/l		10/02/90	5	IT	GC
H-04c	MAGENTA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		11/04/86	1	IT	SV
H-04c	MAGENTA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		10/05/87	2	IT	SV
H-04c	MAGENTA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		07/19/88	3	IT	SV
H-04c	MAGENTA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		04/21/89	4	IT	SV
H-04c	MAGENTA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		11/04/86	1	IT	SV
H-04c	MAGENTA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		10/05/87	2	IT	SV
H-04c	MAGENTA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		07/19/88	3	IT	SV
H-04c	MAGENTA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		04/21/89	4	IT	SV
H-04c	MAGENTA	PCB	<	1.0000		NA	0.0000			ug/l		11/04/86	1	IT	PC
H-04c	MAGENTA	PCB	<	1.0000		NA	0.0000			ug/l		10/05/87	2	IT	PC

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H-04c	MAGENTA	PCB	<	1.0000		NA	0.0000			ug/l		07/19/88	3	IT	PC
H-04c	MAGENTA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		11/04/86	1	IT	SV
H-04c	MAGENTA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		10/05/87	2	IT	SV
H-04c	MAGENTA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		07/19/88	3	IT	SV
H-04c	MAGENTA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		04/21/89	4	IT	SV
H-04c	MAGENTA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		11/04/86	1	IT	SV
H-04c	MAGENTA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		10/05/87	2	IT	SV
H-04c	MAGENTA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		07/19/88	3	IT	SV
H-04c	MAGENTA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		04/21/89	4	IT	SV
H-04c	MAGENTA	PHENOL	<	10.0000		NA	0.0000			ug/l		11/04/86	1	IT	SV
H-04c	MAGENTA	PHENOL	<	10.0000		NA	0.0000			ug/l		10/05/87	2	IT	SV
H-04c	MAGENTA	PHENOL	<	10.0000		NA	0.0000			ug/l		07/19/88	3	IT	SV
H-04c	MAGENTA	PHENOL	<	10.0000		NA	0.0000			ug/l		04/21/89	4	IT	SV
H-04c	MAGENTA	PHENOLICS		0.0150		NA	0.0000			mg/l		11/04/86	1	IT	GC
H-04c	MAGENTA	PHENOLICS		0.0140		NA	0.0000			mg/l		10/05/87	2	IT	GC
H-04c	MAGENTA	PHENOLICS	<	0.0050		NA	0.0000			mg/l		07/19/88	3	IT	GC
H-04c	MAGENTA	PHENOLICS		0.0370			0.0380			mg/l		04/21/89	4	IT	GC
H-04c	MAGENTA	PHENOLICS		0.0290		NA	0.0000			mg/l		10/02/90	5	IT	GC
H-04c	MAGENTA	PHOSPHATE		0.0600		NA	0.0000			mg/l	T-PO4-P	11/04/86	1	IT	GC
H-04c	MAGENTA	PHOSPHATE		0.0100		NA	0.0000			mg/l	T-PO4-P	10/05/87	2	IT	GC
H-04c	MAGENTA	PHOSPHATE		0.0200		NA	0.0000			mg/l	T-PO4-P	07/19/88	3	IT	GC
H-04c	MAGENTA	PHOSPHORUS	<	0.0100		NA	0.0000			mg/l		04/21/89	4	IT	GC
H-04c	MAGENTA	PHOSPHORUS	<	0.0100		NA	0.0000			mg/l		10/02/90	5	IT	GC
H-04c	MAGENTA	POTASSIUM		130.0000			140.0000			mg/l		11/04/86	1	IT	ME
H-04c	MAGENTA	POTASSIUM		100.0000			98.0000			mg/l		10/05/87	2	IT	ME
H-04c	MAGENTA	POTASSIUM		99.0000			100.0000			mg/l		07/19/88	3	IT	ME
H-04c	MAGENTA	POTASSIUM		110.0000			100.0000			mg/l		04/21/89	4	IT	MC
H-04c	MAGENTA	POTASSIUM		70.0000			70.0000			mg/l		10/02/90	5	IT	MC
H-04c	MAGENTA	PYRENE	<	10.0000		NA	0.0000			ug/l		11/04/86	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-04c	MAGENTA	PYRENE	<	10.0000		NA	0.0000			ug/l	10/05/87	2	IT	SV
H-04c	MAGENTA	PYRENE	<	10.0000		NA	0.0000			ug/l	07/19/88	3	IT	SV
H-04c	MAGENTA	PYRENE	<	10.0000		NA	0.0000			ug/l	04/21/89	4	IT	SV
H-04c	MAGENTA	RESIDUE, FILTERABLE @ 180 C		22000.0000			23000.0000			mg/l	11/04/86	1	IT	GC
H-04c	MAGENTA	RESIDUE, FILTERABLE @ 180 C		24000.0000			23000.0000			mg/l	10/05/87	2	IT	GC
H-04c	MAGENTA	RESIDUE, FILTERABLE @ 180 C		23500.0000		NA	0.0000			mg/l	07/19/88	3	IT	GC
H-04c	MAGENTA	RESIDUE, FILTERABLE @ 180 C		24400.0000			24300.0000			mg/l	04/21/89	4	IT	GC
H-04c	MAGENTA	RESIDUE, FILTERABLE @ 180 C		24600.0000		NA	0.0000			mg/l	10/02/90	5	IT	GC
H-04c	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C		27.0000			25.0000			mg/l	11/04/86	1	IT	GC
H-04c	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C		25.0000			21.0000			mg/l	10/05/87	2	IT	GC
H-04c	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C		26.0000		NA	0.0000			mg/l	07/19/88	3	IT	GC
H-04c	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C		56.0000			56.0000			mg/l	04/21/89	4	IT	GC
H-04c	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C		59.0000		NA	0.0000			mg/l	10/02/90	5	IT	GC
H-04c	MAGENTA	SELENIUM		0.0400		NA	0.0000	< 0.01	< 0.01	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	SELENIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	SELENIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	SELENIUM	<	0.0500		NA	0.0000	< .005	< .005	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	SELENIUM	<	0.0500		NA	0.0000			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	SILICA		10.0000		NA	0.0000	< 1	< 1	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	SILICA		12.0000			11.0000	< 0.2	< 0.2	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	SILICA		4.0000			4.1000			mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	SILICA		3.9000			3.9000			mg/l	04/21/89	4	IT	GC
H-04c	MAGENTA	SILICA		4.7000		NA	0.0000			mg/l	10/02/90	5	IT	GC
H-04c	MAGENTA	SILVER		0.1000		NA	0.0000	< 0.05	< 0.05	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	SILVER	<	0.1000		<	0.1000	< .01	< .01	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	SILVER	<	0.1000		<	0.1000			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	SODIUM		7500.0000			7500.0000			mg/l	11/04/86	1	IT	ME

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H-04c	MAGENTA	SODIUM		7300.0000			7200.0000			mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	SODIUM		7100.0000			7200.0000			mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	SODIUM		7100.0000			7100.0000			mg/l	04/21/89	4	IT	MC
H-04c	MAGENTA	SODIUM		3600.0000			3600.0000			mg/l	10/02/90	5	IT	MC
H-04c	MAGENTA	SPECIFIC CONDUCTANCE		32100.0000			32100.0000			umhos/cm@25C	11/04/86	1	IT	GC
H-04c	MAGENTA	SPECIFIC CONDUCTANCE		30600.0000			31000.0000			umhos/cm@25C	10/05/87	2	IT	GC
H-04c	MAGENTA	SPECIFIC CONDUCTANCE		30400.0000			30500.0000			umhos/cm@25C	07/19/88	3	IT	GC
H-04c	MAGENTA	SPECIFIC CONDUCTANCE		34000.0000			34300.0000			uMhos/cm@25C	04/21/89	4	IT	GC
H-04c	MAGENTA	SPECIFIC CONDUCTANCE		28800.0000			28800.0000			uMhos/cm@25C	10/02/90	5	IT	GC
H-04c	MAGENTA	STRONTIUM		13.0000		NA	0.0000	< 0.05	< 0.05	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	STRONTIUM		14.0000			14.0000	< 0.01	< 0.01	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	STRONTIUM		13.0000			13.0000	< 0.01	< 0.01	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	STRONTIUM		12.0000			12.0000	< .01	< .01	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	STRONTIUM		11.0000			11.0000							
H-04c	MAGENTA	STYRENE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	STYRENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	STYRENE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	SULFATE		7900.0000			7800.0000			mg/l	11/04/86	1	IT	GC
H-04c	MAGENTA	SULFATE		6700.0000		NA	0.0000			mg/l	10/05/87	2	IT	GC
H-04c	MAGENTA	SULFATE		8300.0000			8300.0000			mg/l	07/19/88	3	IT	GC
H-04c	MAGENTA	SULFATE		6200.0000		NA	0.0000			mg/l	04/21/89	4	IT	GC
H-04c	MAGENTA	SULFATE		7600.0000		NA	0.0000			mg/l	10/02/90	5	IT	GC
H-04c	MAGENTA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V

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H-04c	MAGENTA	THALLIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	THALLIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	THALLIUM	<	5.0000		NA	0.0000	< 0.005	< 0.005	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	THALLIUM	<	5.0000		NA	0.0000	< .005	< .005	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	THALLIUM	<	0.1000		NA	0.0000			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	TITANIUM		0.4000		NA	0.0000	< 0.05	< 0.05	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	TITANIUM		0.5000			0.4000	< 0.03	< 0.03	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	TITANIUM	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	TITANIUM	<	0.1000		<	0.1000	< .01	< .01	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	TITANIUM	<	0.1000		<	0.1000			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	TOLUENE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	TOLUENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	TOLUENE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	TOTAL ORGANIC CARBON		1.0000		NA	0.0000			mg/l	11/04/86	1	IT	GC
H-04c	MAGENTA	TOTAL ORGANIC CARBON		3.0000			2.0000			mg/l	10/05/87	2	IT	GC
H-04c	MAGENTA	TOTAL ORGANIC CARBON		1.0000			1.0000			mg/l	07/19/88	3	IT	GC
H-04c	MAGENTA	TOTAL ORGANIC CARBON		1.0000		<	1.0000			mg/l	04/21/89	4	IT	GC
H-04c	MAGENTA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	10/02/90	5	IT	GC
H-04c	MAGENTA	TOTAL ORGANIC HALOGEN		0.0800		NA	0.0000			mg/l	11/04/86	1	IT	GC
H-04c	MAGENTA	TOTAL ORGANIC HALOGEN		0.4900			0.5600			mg/l	10/05/87	2	IT	GC
H-04c	MAGENTA	TOTAL ORGANIC HALOGEN		0.1800			0.3000			mg/l	07/19/88	3	IT	GC
H-04c	MAGENTA	TOTAL ORGANIC HALOGEN		0.0600		<	0.0500			mg/l	04/21/89	4	IT	GC
H-04c	MAGENTA	TOTAL ORGANIC HALOGEN	<	0.1000		<	0.0500			mg/l	10/02/90	5	IT	GC
H-04c	MAGENTA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V

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H-04c	MAGENTA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	VANADIUM		0.1000			0.1000	< 0.01	< 0.01	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	VANADIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	VANADIUM	<	0.1000		<	0.1000	< .01	< .01	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	VANADIUM	<	0.5000		<	0.5000			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	VINYL ACETATE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	VINYL ACETATE	<	10.0000		NA	0.0000	< 10		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	VINYL CHLORIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	VINYL CHLORIDE	<	10.0000		NA	0.0000	< 10		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	XYLENE	<	5.0000		NA	0.0000			ug/l	11/04/86	1	IT	V
H-04c	MAGENTA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/05/87	2	IT	V
H-04c	MAGENTA	XYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/19/88	3	IT	V
H-04c	MAGENTA	XYLENE	<	5.0000		NA	0.0000	< 5		ug/l	04/21/89	4	IT	V
H-04c	MAGENTA	ZINC	<	0.1000		NA	0.0000	< 0.05	< 0.05	mg/l	11/04/86	1	IT	ME
H-04c	MAGENTA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	10/05/87	2	IT	ME
H-04c	MAGENTA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	07/19/88	3	IT	ME
H-04c	MAGENTA	ZINC	<	0.1000		<	0.1000	< .01	< .01	mg/l	04/21/89	4	IT	MT
H-04c	MAGENTA	ZINC	<	0.2000		<	0.2000			mg/l	10/02/90	5	IT	MT
H-04c	MAGENTA	pH		7.9900			7.9400				11/04/86	1	IT	GC

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H-04c	MAGENTA	pH		6.4000			6.4800				10/05/87	2	IT	GC
H-04c	MAGENTA	pH		7.7100			7.6900				07/19/88	3	IT	GC
H-04c	MAGENTA	pH		7.6400			7.6500				04/21/89	4	IT	GC
H-04c	MAGENTA	pH		7.4300			7.4300				10/02/90	5	IT	GC
** H-05b														
H-05b	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	1,1,2-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	1,1-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	1,2,4-TRICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05b	CULEBRA	1,2-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	1,2-DICHLOROPROPANE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	1,2-DIPHENYLHYDRAZINE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	1,3-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	1,3-DICHLOROPROPYLENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	1,4-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	2,4,5-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	2,4,6-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	2,4-DICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	2,4-DIMETHYLPHENOL	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05b	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	2,4-DINITROPHENOL	<	10.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	2,4-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	2,6-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	2-CHLORONAPHTHALENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	2-CHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	2-METHYLNAPHTHALENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV

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H-05b	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	2-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	2-NITROANILINE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	2-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	3,3'-DICHLOROBENZIDINE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	3,4-BENZOFLUORANTHENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	3-NITROANILINE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	4,6-DINITRO-O-CRESOL	<	10.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	4-CHLOROANILINE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05b	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	4-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	4-NITROANILINE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	4-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	ACENAPHTHENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	ACENAPHTHYLENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	ACETONE	<	10.0000		NA	0.0000	T < 10	T 43	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	ACETONE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	ACROLEIN	<	10.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	ACRYLONITRILE	<	10.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	08/27/85	1	IT	GC

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H-05b	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	05/21/86	2	IT	GC
H-05b	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	02/24/88	3	IT	GC
H-05b	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	08/23/89	4	IT	GC
H-05b	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	05/02/90	5	IT	GC
H-05b	CULEBRA	ALKALINITY (HCO3)		47.0000		NA	0.0000			mg/l	08/27/85	1	IT	GC
H-05b	CULEBRA	ALKALINITY (HCO3)		46.0000			46.0000			mg/l	05/21/86	2	IT	GC
H-05b	CULEBRA	ALKALINITY (HCO3)		42.0000			42.0000			mg/l	02/24/88	3	IT	GC
H-05b	CULEBRA	ALKALINITY (HCO3)		42.0000			37.0000			mg/l	08/23/89	4	IT	GC
H-05b	CULEBRA	ALKALINITY (HCO3)		41.0000			41.0000			mg/l	05/02/90	5	IT	GC
H-05b	CULEBRA	ALUMINUM		0.2300		NA	0.0000	< 0.01	< 0.01	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	ALUMINUM	<	10.0000		<	10.0000	< 0.1	< 0.1	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	ALUMINUM	<	2.0000		<	2.0000	< 0.2	< 0.2	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	ALUMINUM	<	2.0000		<	2.0000	< .2	< .2	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	ANILINE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	ANTHRACENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	ANTIMONY		0.7700		NA	0.0000			mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	ANTIMONY		0.7000			0.6000	< 0.06	< 0.06	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	ANTIMONY		0.6000			0.6000	< .06	< .06	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	ARSENIC		6.7000		NA	0.0000	< 0.01	< 0.01	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	ARSENIC		0.0420			0.0420	< 0.001	< 0.001	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	ARSENIC	<	0.0240		NA	0.0000			mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	ARSENIC	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	ARSENIC	<	0.1000		NA	0.0000	< .01	< .01	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	BARIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	BARIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	02/24/88	3	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05b	CULEBRA	BARIUM	<	2.0000		<	2.0000	< 0.2	< 0.2	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	BARIUM	<	2.0000		<	2.0000	< .2	< .2	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	BENZENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	BENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	BENZENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	BENZIDINE	<	4.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	BENZO(A)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	BENZO(A)PYRENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	BENZO(G,H,I)PERYLENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	BENZO(K)FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	BENZOIC ACID	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	BENZYL ALCOHOL	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	BERYLLIUM	<	0.0100		<	0.0100	< 0.1	< 0.01	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	BERYLLIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	08/23/89	4	IT	MT

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05b	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< .005	< .005	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	4.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	BORON		29.0000		NA	0.0000	< 0.1	< 0.1	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	BORON		33.0000			33.0000	0.11	0.11	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	BORON		35.0000			35.0000	< 0.01	< 0.01	mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	BORON		31.0000			29.0000	< 0.02	< 0.02	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	BORON		30.0000			30.0000	< .02	< .02	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	BROMIDE		100.0000			87.0000			mg/l	08/27/85	1	IT	GC
H-05b	CULEBRA	BROMIDE		59.0000		NA	0.0000			mg/l	05/21/86	2	IT	GC
H-05b	CULEBRA	BROMIDE		73.0000			73.0000			mg/l	02/24/88	3	IT	GC
H-05b	CULEBRA	BROMIDE		12.0000			12.0000			mg/l	08/23/89	4	IT	GC
H-05b	CULEBRA	BROMIDE		69.0000		NA	0.0000			mg/l	05/02/90	5	IT	GC
H-05b	CULEBRA	BROMOFORM	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	BUTYL BENZYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV

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H-05b	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	CADMIUM	<	0.0040		NA	0.0000			mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	CADMIUM		0.1100			0.1100	< 0.005	< 0.005	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	CADMIUM		0.1000			0.1000	< .005	< .005	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	CALCIUM		1300.0000			1300.0000	0.2	0.2	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	CALCIUM		1400.0000		NA	0.0000			mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	CALCIUM		1500.0000			1500.0000			mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	CALCIUM		2000.0000			2000.0000			mg/l	08/23/89	4	IT	MC
H-05b	CULEBRA	CALCIUM		1500.0000			1500.0000			mg/l	05/02/90	5	IT	MC
H-05b	CULEBRA	CARBON DISULFIDE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	CESIUM	<	1.0000		NA	0.0000	< 1.0	< 1.0	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	CESIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	CESIUM	<	0.2800		NA	0.0000			mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	CESIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	CESIUM	<	0.2000		<	2.0000	< .2	< .2	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	CHLORIDE		87000.0000		NA	0.0000			mg/l	08/27/85	1	IT	GC
H-05b	CULEBRA	CHLORIDE		89000.0000			91000.0000			mg/l	05/21/86	2	IT	GC
H-05b	CULEBRA	CHLORIDE		84100.0000		NA	0.0000			mg/l	02/24/88	3	IT	GC
H-05b	CULEBRA	CHLORIDE		86600.0000		NA	0.0000			mg/l	08/23/89	4	IT	GC
H-05b	CULEBRA	CHLORIDE		92100.0000		NA	0.0000			mg/l	05/02/90	5	IT	GC
H-05b	CULEBRA	CHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05b	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	CHLOROETHANE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	CHLOROFORM	<	2.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	CHROMIUM	<	0.0010		<	0.0010	< 0.001	< 0.001	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	CHROMIUM	<	3.0000		<	3.0000	< 0.03	< 0.03	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	CHROMIUM		0.0160		NA	0.0000			mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	CHROMIUM		0.2000			0.3000	0.01	0.02	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	CHROMIUM		0.3000			0.3000	.01	.01	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	CHRYSENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	COBALT		3.0000			2.9000	0.02	0.02	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	COBALT	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	COBALT	<	0.0100		NA	0.0000			mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	COBALT	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	COBALT	<	0.5000		<	0.5000	< .05	< .05	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	COPPER		0.2600			0.2500	< 0.01	< 0.01	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	COPPER	<	1.0000		<	1.0000	0.02	0.02	mg/l	05/21/86	2	IT	ME

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H-05b	CULEBRA	COPPER	<	0.0100		NA	0.0000			mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	COPPER	<	0.2500		<	0.2500	< 0.025	< 0.025	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	COPPER	<	0.2500		<	0.2500	< .025	< .025	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	CYANIDE	<	0.0200		<	0.0200			mg/l	08/27/85	1	IT	GC
H-05b	CULEBRA	CYANIDE	<	0.0200		<	0.0200			mg/l	05/21/86	2	IT	GC
H-05b	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	02/24/88	3	IT	GC
H-05b	CULEBRA	CYANIDE	<	0.0100		<	0.0200			mg/l	08/23/89	4	IT	GC
H-05b	CULEBRA	CYANIDE	<	0.0100		NA	0.0000			mg/l	05/02/90	5	IT	GC
H-05b	CULEBRA	DI-N-BUTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	DI-N-OCTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	DIBENZOFURAN	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	DIETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05b	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	DIMETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	ETHYLBENZENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	Eh		524.0000		NA	0.0000			mV	08/27/85	1	IT	GC
H-05b	CULEBRA	FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	FLUORENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	FLUORIDE		1.3000		NA	0.0000			mg/l	08/27/85	1	IT	GC
H-05b	CULEBRA	FLUORIDE		0.8000			0.8000			mg/l	05/21/86	2	IT	GC
H-05b	CULEBRA	FLUORIDE		0.9000		NA	0.0000			mg/l	02/24/88	3	IT	GC
H-05b	CULEBRA	FLUORIDE		0.9000			0.9000			mg/l	08/23/89	4	IT	GC
H-05b	CULEBRA	FLUORIDE		0.9000			0.9000			mg/l	05/02/90	5	IT	GC
H-05b	CULEBRA	HEXACHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	HEXACHLOROBUTADIENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV

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H-05b	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	HEXACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	IODIDE		1.1000			1.1000			mg/l	08/27/85	1	IT	GC
H-05b	CULEBRA	IODIDE		1.3000		NA	0.0000			mg/l	05/21/86	2	IT	GC
H-05b	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	02/24/88	3	IT	GC
H-05b	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	08/23/89	4	IT	GC
H-05b	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	05/02/90	5	IT	GC
H-05b	CULEBRA	IRON		3.1000			3.0000	< 0.01	< 0.01	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	IRON		3.3000			3.1000	< 0.01	< 0.01	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	IRON		2.3000			2.3000	0.01	< 0.01	mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	IRON		2.0000			2.0000	< 0.1	< 0.1	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	IRON		2.0000			2.0000	< .1	< .1	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	ISOPHORONE	<	4.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	LEAD		1.1000			0.9000	< 0.1	< 0.1	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	LEAD	<	5.0000		<	5.0000	< 0.05	< 0.05	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	LEAD	<	0.0400		NA	0.0000			mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	LEAD	<	0.5000		<	0.5000	< .05	< .05	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	LITHIUM		0.7500		NA	0.0000			mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	LITHIUM		1.0000			1.0000	< 0.01	< 0.01	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	LITHIUM		1.0000			1.0000	< .01	< .01	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	MAGNESIUM		1700.0000			1700.0000	< 0.1	< 0.1	mg/l	08/27/85	1	IT	ME

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H-05b	CULEBRA	MAGNESIUM		2200.0000		NA	0.0000			mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	MAGNESIUM		1800.0000			1800.0000			mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	MAGNESIUM		1700.0000			1800.0000			mg/l	08/23/89	4	IT	MC
H-05b	CULEBRA	MAGNESIUM		1800.0000			1700.0000			mg/l	05/02/90	5	IT	MC
H-05b	CULEBRA	MANGANESE		0.5200			0.5200	< 0.01	< 0.01	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	MANGANESE	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	MANGANESE		0.2100			0.2100	< 0.005	< 0.005	mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	MANGANESE		0.3800			0.3800	< 0.015	< 0.015	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	MANGANESE		0.2300			0.2400	< .015	< .015	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	MERCURY		0.0005		NA	0.0000	0.0004	0.0004	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	MERCURY		0.0003		<	0.0002	< 0.0002	< 0.0002	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	MERCURY	<	0.0002		<	0.0002	0.0002	0.0002	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	MERCURY	<	0.0002		<	0.0002	< .0002	< .0002	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	METHYLENE CHLORIDE	<	20.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000	T 85	T 110	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	METHYLENE CHLORIDE		6.0000		NA	0.0000	T 10	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	MOLYBDENUM		0.1000			0.1200	0.03	0.04	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	MOLYBDENUM		0.1700			0.1400	< 0.01	< 0.01	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	MOLYBDENUM		0.0300		NA	0.0000			mg/l	02/24/88	3	IT	ME

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H-05b	CULEBRA	MOLYBDENUM		0.3000			0.3000	< 0.02	< 0.02	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	MOLYBDENUM		0.3000			0.3000	< .02	< .02	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	N-NITROSO-DI-METHYLAMINE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	4.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	NAPHTHALENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	NICKEL		1.7000			1.6000	< 0.01	< 0.01	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	NICKEL	<	3.0000		<	3.0000	< 0.03	< 0.03	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	NICKEL	<	0.0100		NA	0.0000			mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	NICKEL	<	0.4000		<	0.4000	< 0.04	< 0.04	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	NICKEL	<	0.4000		<	0.4000	< .04	< .04	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	NITRATE		0.4000			0.4000			mg/l NO3-N	08/27/85	1	IT	GC
H-05b	CULEBRA	NITRATE		0.1000		<	0.1000			mg/l NO3-N	05/21/86	2	IT	GC
H-05b	CULEBRA	NITRATE		0.0400		NA	0.0000			mg/l NO3-N	02/24/88	3	IT	GC
H-05b	CULEBRA	NITRATE	<	0.0200		NA	0.0000			mg/l	08/23/89	4	IT	GC
H-05b	CULEBRA	NITRATE		0.0300			0.0400			mg/l	05/02/90	5	IT	GC
H-05b	CULEBRA	NITROBENZENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	P-CHLORO-M-CRESOL	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	SV
H-05b	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	SV
H-05b	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l	02/24/88	3	IT	SV
H-05b	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l	05/21/86	2	IT	PC

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H-05b	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		02/24/88	3	IT	PC
H-05b	CULEBRA	PENTACHLOROPHENOL	<	1.0000		NA	0.0000			ug/l		08/27/85	1	IT	SV
H-05b	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		05/21/86	2	IT	SV
H-05b	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		02/24/88	3	IT	SV
H-05b	CULEBRA	PHENANTHRENE	<	1.0000		NA	0.0000			ug/l		08/27/85	1	IT	SV
H-05b	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		05/21/86	2	IT	SV
H-05b	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		02/24/88	3	IT	SV
H-05b	CULEBRA	PHENOL	<	1.0000		NA	0.0000			ug/l		08/27/85	1	IT	SV
H-05b	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		05/21/86	2	IT	SV
H-05b	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		02/24/88	3	IT	SV
H-05b	CULEBRA	PHENOLICS	<	0.0020		NA	0.0000			mg/l		08/27/85	1	IT	GC
H-05b	CULEBRA	PHENOLICS		0.0090		NA	0.0000			mg/l		05/21/86	2	IT	GC
H-05b	CULEBRA	PHENOLICS		0.0510		NA	0.0000			mg/l		02/24/88	3	IT	GC
H-05b	CULEBRA	PHENOLICS		0.0060		NA	0.0000			mg/l		08/23/89	4	IT	GC
H-05b	CULEBRA	PHENOLICS		0.1600		NA	0.0000			mg/l		05/02/90	5	IT	GC
H-05b	CULEBRA	PHOSPHATE		0.0600			0.0800			mg/l	T-PO4-P	08/27/85	1	IT	GC
H-05b	CULEBRA	PHOSPHATE	<	0.0100		NA	0.0000			mg/l	T-PO4-P	05/21/86	2	IT	GC
H-05b	CULEBRA	PHOSPHATE		0.0200		NA	0.0000			mg/l	T-PO4-P	02/24/88	3	IT	GC
H-05b	CULEBRA	PHOSPHORUS	<	0.1900		NA	0.0000			mg/l		08/23/89	4	IT	GC
H-05b	CULEBRA	PHOSPHORUS		0.0200		NA	0.0000			mg/l		05/02/90	5	IT	GC
H-05b	CULEBRA	POTASSIUM		1300.0000			1300.0000	< 0.01	< 0.01	mg/l		08/27/85	1	IT	ME
H-05b	CULEBRA	POTASSIUM		1100.0000		NA	0.0000			mg/l		05/21/86	2	IT	ME
H-05b	CULEBRA	POTASSIUM		1340.0000			1340.0000			mg/l		02/24/88	3	IT	ME
H-05b	CULEBRA	POTASSIUM		1000.0000			1000.0000			mg/l		08/23/89	4	IT	MC
H-05b	CULEBRA	POTASSIUM		1200.0000			1200.0000			mg/l		05/02/90	5	IT	MC
H-05b	CULEBRA	PYRENE	<	1.0000		NA	0.0000			ug/l		08/27/85	1	IT	SV
H-05b	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l		05/21/86	2	IT	SV
H-05b	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l		02/24/88	3	IT	SV
H-05b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		144000.0000			141000.0000			mg/l		08/27/85	1	IT	GC

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H-05b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		150000.0000		NA	0.0000			mg/l	05/21/86	2	IT	GC
H-05b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		153000.0000			154000.0000			mg/l	02/24/88	3	IT	GC
H-05b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		154000.0000		NA	0.0000			mg/l	08/23/89	4	IT	GC
H-05b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		160000.0000			173000.0000			mg/l	05/02/90	5	IT	GC
H-05b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		840.0000			880.0000			mg/l	08/27/85	1	IT	GC
H-05b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		360.0000			420.0000			mg/l	05/21/86	2	IT	GC
H-05b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		760.0000			640.0000			mg/l	02/24/88	3	IT	GC
H-05b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		20.0000		NA	0.0000			mg/l	08/23/89	4	IT	GC
H-05b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		38.0000			34.0000			mg/l	05/02/90	5	IT	GC
H-05b	CULEBRA	SELENIUM		7.3000		NA	0.0000	< 0.01	< 0.01	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	SELENIUM	<	0.1000		<	0.1000	< 0.001	< 0.001	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	SELENIUM	<	0.0240		NA	0.0000			mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	SELENIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	SELENIUM	<	5.0000		NA	0.0000	< .005	< .005	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	SILICA		17.0000			17.0000	< 0.2	< 0.2	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	SILICA	<	21.0000		<	21.0000	4.3	4.3	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	SILICA		2.8000		NA	0.0000			mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	SILICA		3.6000			3.4000			mg/l	08/23/89	4	IT	GC
H-05b	CULEBRA	SILICA		2.7000			3.2000			mg/l	05/02/90	5	IT	GC
H-05b	CULEBRA	SILVER		0.0900		NA	0.1000			mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	SILVER		0.1000		<	0.1000	< 0.01	< 0.01	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	SILVER		0.1000			0.1000	< .01	< .01	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	SODIUM		48000.0000			46000.0000	< 0.1	< 0.1	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	SODIUM		53000.0000		NA	0.0000			mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	SODIUM		52000.0000			52000.0000			mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	SODIUM		44000.0000			44000.0000			mg/l	08/23/89	4	IT	MC
H-05b	CULEBRA	SODIUM		55200.0000			55200.0000			mg/l	05/02/90	5	IT	MC
H-05b	CULEBRA	SPECIFIC CONDUCTANCE		131000.0000			138000.0000			umhos/cm@25C	08/27/85	1	IT	GC
H-05b	CULEBRA	SPECIFIC CONDUCTANCE		161000.0000		NA	0.0000			umhos/cm@25C	05/21/86	2	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05b	CULEBRA	SPECIFIC CONDUCTANCE		242000.0000			241000.0000			umhos/cm@25C	02/24/88	3	IT	GC
H-05b	CULEBRA	SPECIFIC CONDUCTANCE		157000.0000			158000.0000			uMhos/cm@25C	08/23/89	4	IT	GC
H-05b	CULEBRA	SPECIFIC CONDUCTANCE		153000.0000			153000.0000			uMhos/cm@25C	05/02/90	5	IT	GC
H-05b	CULEBRA	STRONTIUM		16.0000			16.0000	< 0.01	< 0.01	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	STRONTIUM		32.0000			32.0000	< 0.01	< 0.01	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	STRONTIUM		34.0000			34.0000	< 0.01	< 0.01	mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	STRONTIUM		27.0000			27.0000	< 0.01	< 0.01	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	STRONTIUM		26.0000			26.0000	< .01	< .01	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	STYRENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	STYRENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	STYRENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	SULFATE		6300.0000		NA	0.0000			mg/l	08/27/85	1	IT	GC
H-05b	CULEBRA	SULFATE		7000.0000		NA	0.0000			mg/l	05/21/86	2	IT	GC
H-05b	CULEBRA	SULFATE		7000.0000		NA	0.0000			mg/l	02/24/88	3	IT	GC
H-05b	CULEBRA	SULFATE		5900.0000		NA	0.0000			mg/l	08/23/89	4	IT	GC
H-05b	CULEBRA	SULFATE		7900.0000			7500.0000			mg/l	05/02/90	5	IT	GC
H-05b	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	THALLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	THALLIUM	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	THALLIUM	<	10.0000		NA	0.0000	< .01	< .01	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	TITANIUM		0.1000		NA	0.0000	< 0.1	< 0.1	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	TITANIUM		0.1000			0.1000	< 0.1	< 0.1	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	TITANIUM	<	0.0100		NA	0.0000			mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	TITANIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	TITANIUM	<	0.1000		<	0.1000	< .01	< .01	mg/l	05/02/90	5	IT	MT

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H-05b	CULEBRA	TOLUENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	TOLUENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	TOLUENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	08/27/85	1	IT	GC
H-05b	CULEBRA	TOTAL ORGANIC CARBON		2.0000		NA	0.0000			mg/l	05/21/86	2	IT	GC
H-05b	CULEBRA	TOTAL ORGANIC CARBON		4.0000			3.0000			mg/l	02/24/88	3	IT	GC
H-05b	CULEBRA	TOTAL ORGANIC CARBON		1.0000		<	1.0000			mg/l	08/23/89	4	IT	GC
H-05b	CULEBRA	TOTAL ORGANIC CARBON		9.0000		NA	0.0000			mg/l	05/02/90	5	IT	GC
H-05b	CULEBRA	TOTAL ORGANIC HALOGEN		1.7000		NA	0.0000			mg/l	08/27/85	1	IT	GC
H-05b	CULEBRA	TOTAL ORGANIC HALOGEN		1.6000		NA	0.0000			mg/l	05/21/86	2	IT	GC
H-05b	CULEBRA	TOTAL ORGANIC HALOGEN		8.2000			7.0000			mg/l	02/24/88	3	IT	GC
H-05b	CULEBRA	TOTAL ORGANIC HALOGEN		3.9000		<	3.6000			mg/l	08/23/89	4	IT	GC
H-05b	CULEBRA	TOTAL ORGANIC HALOGEN		0.8900		NA	0.0000			mg/l	05/02/90	5	IT	GC
H-05b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	TRICHLOROFLUOROMETHANE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	VANADIUM		0.2000			0.2000	< 0.01	< 0.01	mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	VANADIUM	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	VANADIUM	<	0.0500		<	0.0500	< .05	< .05	mg/l	05/02/90	5	IT	MT

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H-05b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	XYLENE	<	1.0000		NA	0.0000			ug/l	08/27/85	1	IT	V
H-05b	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	05/21/86	2	IT	V
H-05b	CULEBRA	XYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	02/24/88	3	IT	V
H-05b	CULEBRA	XYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	05/02/90	5	IT	V
H-05b	CULEBRA	ZINC		0.9600			0.8800	< 0.01	< 0.01	mg/l	08/27/85	1	IT	ME
H-05b	CULEBRA	ZINC		2.5000			2.4000	< 0.005	< 0.005	mg/l	05/21/86	2	IT	ME
H-05b	CULEBRA	ZINC		0.0300		NA	0.0000			mg/l	02/24/88	3	IT	ME
H-05b	CULEBRA	ZINC		1.1000			1.0000	< 0.02	< 0.02	mg/l	08/23/89	4	IT	MT
H-05b	CULEBRA	ZINC		0.8000			0.8000	< .02	< .02	mg/l	05/02/90	5	IT	MT
H-05b	CULEBRA	pH		7.0400		NA	0.0000				08/27/85	1	IT	GC
H-05b	CULEBRA	pH		6.8400			6.9500				05/21/86	2	IT	GC
H-05b	CULEBRA	pH		7.0300			7.0300				02/24/88	3	IT	GC
H-05b	CULEBRA	pH		7.0200			7.0200				08/23/89	4	IT	GC
H-05b	CULEBRA	pH		8.3300			8.3300				05/02/90	5	IT	GC
** H-05c														
H-05c	MAGENTA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V

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H-05c	MAGENTA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV

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H-05c	MAGENTA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	2-BUTANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	2-BUTANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05c	MAGENTA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	2-HEXANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	2-HEXANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05c	MAGENTA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	ACETONE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05c	MAGENTA	ACETONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	ACETONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	10/24/86	1	IT	GC
H-05c	MAGENTA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	03/03/88	2	IT	GC
H-05c	MAGENTA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	08/18/88	3	IT	GC
H-05c	MAGENTA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	09/14/89	4	IT	GC
H-05c	MAGENTA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	05/16/90	5	IT	GC
H-05c	MAGENTA	ALKALINITY (HCO3)		70.0000			68.0000			mg/l	10/24/86	1	IT	GC
H-05c	MAGENTA	ALKALINITY (HCO3)		55.0000		NA	0.0000			mg/l	03/03/88	2	IT	GC
H-05c	MAGENTA	ALKALINITY (HCO3)		54.0000		NA	0.0000			mg/l	08/18/88	3	IT	GC
H-05c	MAGENTA	ALKALINITY (HCO3)		55.0000			53.0000			mg/l	09/14/89	4	IT	GC
H-05c	MAGENTA	ALKALINITY (HCO3)		46.0000			49.0000			mg/l	05/16/90	5	IT	GC
H-05c	MAGENTA	ALUMINUM	<	1.0000		NA	0.0000	< 0.1	< 0.1	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	ALUMINUM		1.0000		<	1.0000	< 0.1	< 0.1	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	ALUMINUM	<	2.0000		<	2.0000	< 0.2	< 0.2	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	ALUMINUM	<	2.0000		<	2.0000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	ANTIMONY	<	1.0000		NA	0.0000	< 0.1	< 0.1	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	ANTIMONY	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	ANTIMONY		0.6000			0.5000	< 0.05	< 0.05	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	ANTIMONY	<	0.6000		<	0.6000	< 0.06	< 0.06	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	ANTIMONY	<	0.6000		<	0.6000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	ARSENIC	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	ARSENIC	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	ARSENIC	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	ARSENIC	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	09/14/89	4	IT	MT

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05c	MAGENTA	ARSENIC	<	0.1000		NA	0.0000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	BARIUM	<	0.0500		NA	0.0000	< 0.05	< 0.05	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	BARIUM	<	0.0100		<	0.0100	< 0.005	< 0.005	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	BARIUM	<	2.0000		<	2.0000	< 0.2	< 0.2	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	BARIUM	<	2.0000		<	2.0000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	BENZENE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	BENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	BENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	03/03/88	2	IT	ME

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H-05c	MAGENTA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	BERYLLIUM	<	0.0500		<	0.0500			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	BIS(2-ETHYLHEXYL)PHTHALATE		10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	BORON		10.0000		NA	0.0000	< 0.05	< 0.05	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	BORON		12.0000		NA	0.0000	< 0.01	< 0.01	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	BORON		11.0000			11.0000	< 0.01	< 0.01	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	BORON		11.0000			11.0000	< 0.02	< 0.02	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	BORON		10.0000			10.0000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	BROMIDE		4.0000		NA	0.0000			mg/l	10/24/86	1	IT	GC
H-05c	MAGENTA	BROMIDE		2.5000			2.5000			mg/l	03/03/88	2	IT	GC
H-05c	MAGENTA	BROMIDE		3.0000		NA	0.0000			mg/l	08/18/88	3	IT	GC
H-05c	MAGENTA	BROMIDE	<	2.0000		<	2.0000			mg/l	09/14/89	4	IT	GC
H-05c	MAGENTA	BROMIDE	<	2.0000		<	2.0000			mg/l	05/16/90	5	IT	GC
H-05c	MAGENTA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	BROMOFORM	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	BROMOFORM	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05c	MAGENTA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	CADMIUM	<	0.0500		NA	0.0000	< 0.05	< 0.05	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	CADMIUM	<	0.0500		<	0.0500			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	CALCIUM		790.0000			800.0000			mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	CALCIUM		560.0000			560.0000			mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	CALCIUM		570.0000			570.0000			mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	CALCIUM		620.0000			620.0000			mg/l	09/14/89	4	IT	MC
H-05c	MAGENTA	CALCIUM		560.0000			560.0000			mg/l	05/16/90	5	IT	MC
H-05c	MAGENTA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	CARBON DISULFIDE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	CARBON DISULFIDE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	CESIUM		0.2000		NA	0.0000	< 0.1	< 0.1	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	CESIUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	CESIUM	<	0.0600		<	0.0600	< 0.06	< 0.06	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	CESIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	CESIUM	<	0.2000		<	0.2000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	CHLORIDE		1600.0000		NA	0.0000			mg/l	10/24/86	1	IT	GC
H-05c	MAGENTA	CHLORIDE		1000.0000		NA	0.0000			mg/l	03/03/88	2	IT	GC
H-05c	MAGENTA	CHLORIDE		1000.0000			1000.0000			mg/l	08/18/88	3	IT	GC
H-05c	MAGENTA	CHLORIDE		930.0000		NA	0.0000			mg/l	09/14/89	4	IT	GC
H-05c	MAGENTA	CHLORIDE		870.0000			860.0000			mg/l	05/16/90	5	IT	GC
H-05c	MAGENTA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05c	MAGENTA	CHLOROBENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	CHLOROBENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	CHLOROETHANE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	CHLOROETHANE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	CHLOROFORM	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	CHLOROFORM	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	CHROMIUM	<	0.1000		NA	0.0000	< 0.05	< 0.05	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	CHROMIUM		0.2000			0.2000	0.02	0.02	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	CHROMIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	CHROMIUM		0.1000			0.1000	< 0.01	< 0.01	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	CHROMIUM	<	0.1000		<	0.1000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	COBALT	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	COBALT		0.1000			0.1000	< 0.01	< 0.01	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	COBALT	<	0.5000		<	0.5000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	COPPER		0.2000		NA	0.0000	< 0.05	< 0.05	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	COPPER	<	0.1000		<	0.1000	0.01	0.02	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	COPPER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	COPPER	<	0.2500		<	0.2500	< 0.025	< 0.025	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	COPPER	<	0.2500		<	0.2500			mg/l	05/16/90	5	IT	MT

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H-05c	MAGENTA	CYANIDE	<	0.0200		NA	0.0000			mg/l	10/24/86	1	IT	GC
H-05c	MAGENTA	CYANIDE	<	0.0100		NA	0.0000			mg/l	03/03/88	2	IT	GC
H-05c	MAGENTA	CYANIDE	<	0.0200		NA	0.0000			mg/l	08/18/88	3	IT	GC
H-05c	MAGENTA	CYANIDE	<	0.0100		NA	0.0000			mg/l	09/14/89	4	IT	GC
H-05c	MAGENTA	CYANIDE	<	0.0100		<	0.0100			mg/l	05/16/90	5	IT	GC
H-05c	MAGENTA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05c	MAGENTA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	ETHYLBENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	ETHYLBENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	FLUORENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	FLUORENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	FLUORENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	FLUORIDE		2.5000		NA	0.0000			mg/l	10/24/86	1	IT	GC
H-05c	MAGENTA	FLUORIDE		2.8000		NA	0.0000			mg/l	03/03/88	2	IT	GC
H-05c	MAGENTA	FLUORIDE		3.1000		NA	0.0000			mg/l	08/18/88	3	IT	GC
H-05c	MAGENTA	FLUORIDE		2.6000		NA	0.0000			mg/l	09/14/89	4	IT	GC
H-05c	MAGENTA	FLUORIDE		2.9000			0.0000			mg/l	05/16/90	5	IT	GC
H-05c	MAGENTA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV

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H-05c	MAGENTA	IODIDE	<	1.0000		NA	0.0000			mg/l	10/24/86	1	IT	GC
H-05c	MAGENTA	IODIDE	<	2.0000		<	2.0000			mg/l	03/03/88	2	IT	GC
H-05c	MAGENTA	IODIDE	<	2.0000		NA	0.0000			mg/l	08/18/88	3	IT	GC
H-05c	MAGENTA	IODIDE	<	2.0000		<	2.0000			mg/l	09/14/89	4	IT	GC
H-05c	MAGENTA	IODIDE	<	2.0000		<	2.0000			mg/l	05/16/90	5	IT	GC
H-05c	MAGENTA	IRON		1.3000		NA	0.0000	< 0.05	< 0.05	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	IRON		0.3000			0.3000	0.02	< 0.01	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	IRON		1.0000			1.0000	< 0.01	< 0.01	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	IRON	<	1.0000			1.0000	< 0.1	< 0.1	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	IRON	<	1.0000		<	1.0000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	LEAD	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	LEAD		0.1800			0.1800	< 0.01	< 0.01	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	LEAD		0.6000			0.6000	< 0.05	< 0.05	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	LEAD	<	0.5000		<	0.5000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	LITHIUM		0.2000		NA	0.0000	< 0.05	< 0.05	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	LITHIUM		0.2200			0.2200	< 0.01	< 0.01	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	LITHIUM		0.2200			0.2200	0.01	0.01	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	LITHIUM		0.1900			0.1900	< 0.01	< 0.01	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	LITHIUM		0.2000			0.2000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	MAGNESIUM		190.0000			190.0000			mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	MAGNESIUM		180.0000			180.0000			mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	MAGNESIUM		180.0000			180.0000			mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	MAGNESIUM		200.0000			200.0000			mg/l	09/14/89	4	IT	MC
H-05c	MAGENTA	MAGNESIUM		180.0000			180.0000			mg/l	05/16/90	5	IT	MC
H-05c	MAGENTA	MANGANESE	<	0.0500		NA	0.0000	< 0.05	0.05	mg/l	10/24/86	1	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05c	MAGENTA	MANGANESE	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	MANGANESE	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	MANGANESE	<	0.1500		<	0.1500	< 0.015	, 0.015	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	MANGANESE	<	0.1500		<	0.1500			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	MERCURY		0.0005			0.0005	0.0007	0.0005	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	MERCURY	<	0.0002		<	0.0002			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	METHYL BROMIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	METHYL BROMIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	METHYL CHLORIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	METHYL CHLORIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000	T 81	T 72	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000	T 8.7	T 7.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	MOLYBDENUM	<	0.0500		NA	0.0000	< 0.05	< 0.05	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	MOLYBDENUM		0.0500			0.0500	0.01	0.01	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	MOLYBDENUM		0.0800			0.0600	0.10	0.11	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	MOLYBDENUM	<	0.2000		<	0.2000	< 0.02	< 0.02	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	MOLYBDENUM	<	0.2000		<	0.2000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV
H-05c	MAGENTA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	SV
H-05c	MAGENTA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	03/03/88	2	IT	SV
H-05c	MAGENTA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	08/18/88	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS		DATE	RND	LAB	C
H-05c	MAGENTA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		10/24/86	1	IT	SV
H-05c	MAGENTA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		03/03/88	2	IT	SV
H-05c	MAGENTA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		08/18/88	3	IT	SV
H-05c	MAGENTA	NICKEL	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l		10/24/86	1	IT	ME
H-05c	MAGENTA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		03/03/88	2	IT	ME
H-05c	MAGENTA	NICKEL	<	0.3000		<	0.0300	< 0.03	< 0.03	mg/l		08/18/88	3	IT	ME
H-05c	MAGENTA	NICKEL	<	0.4000		<	0.4000	< 0.04	< 0.04	mg/l		09/14/89	4	IT	MT
H-05c	MAGENTA	NICKEL	<	0.4000		<	0.4000			mg/l		05/16/90	5	IT	MT
H-05c	MAGENTA	NITRATE	<	0.1000		<	0.1000			mg/l	NO3-N	10/24/86	1	IT	GC
H-05c	MAGENTA	NITRATE		0.0200		NA	0.0000			mg/l	NO3-N	03/03/88	2	IT	GC
H-05c	MAGENTA	NITRATE	<	0.0200		NA	0.0000			mg/l	NO3-N	08/18/88	3	IT	GC
H-05c	MAGENTA	NITRATE	<	0.0200		NA	0.0000			mg/l		09/14/89	4	IT	GC
H-05c	MAGENTA	NITRATE	<	0.0200		<	0.0200			mg/l		05/16/90	5	IT	GC
H-05c	MAGENTA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		10/24/86	1	IT	SV
H-05c	MAGENTA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		03/03/88	2	IT	SV
H-05c	MAGENTA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		08/18/88	3	IT	SV
H-05c	MAGENTA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		10/24/86	1	IT	SV
H-05c	MAGENTA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		03/03/88	2	IT	SV
H-05c	MAGENTA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		08/18/88	3	IT	SV
H-05c	MAGENTA	PCB	<	1.0000		NA	0.0000			ug/l		10/24/86	1	IT	PC
H-05c	MAGENTA	PCB	<	1.0000		NA	0.0000			ug/l		03/03/88	2	IT	PC
H-05c	MAGENTA	PCB	<	1.0000		NA	0.0000			ug/l		08/18/88	3	IT	PC
H-05c	MAGENTA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		10/24/86	1	IT	SV
H-05c	MAGENTA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		03/03/88	2	IT	SV
H-05c	MAGENTA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		08/18/88	3	IT	SV
H-05c	MAGENTA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		10/24/86	1	IT	SV
H-05c	MAGENTA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		03/03/88	2	IT	SV
H-05c	MAGENTA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		08/18/88	3	IT	SV
H-05c	MAGENTA	PHENOL	<	10.0000		NA	0.0000			ug/l		10/24/86	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID	BLANK	WATER	BLANK	UNITS		DATE	RND	LAB	C
H-05c	MAGENTA	PHENOL	<	10.0000		NA	0.0000					ug/l		03/03/88	2	IT	SV
H-05c	MAGENTA	PHENOL	<	10.0000		NA	0.0000					ug/l		08/18/88	3	IT	SV
H-05c	MAGENTA	PHENOLICS		0.0150			0.0160					mg/l		10/24/86	1	IT	GC
H-05c	MAGENTA	PHENOLICS		0.0100		NA	0.0000					mg/l		03/03/88	2	IT	GC
H-05c	MAGENTA	PHENOLICS	<	0.0050		NA	0.0000					mg/l		08/18/88	3	IT	GC
H-05c	MAGENTA	PHENOLICS	<	0.0050		NA	0.0000					mg/l		09/14/89	4	IT	GC
H-05c	MAGENTA	PHENOLICS		0.0100			0.0000					mg/l		05/16/90	5	IT	GC
H-05c	MAGENTA	PHOSPHATE		0.0400		NA	0.0000					mg/l	T-PO4-P	10/24/86	1	IT	GC
H-05c	MAGENTA	PHOSPHATE	<	0.0100		NA	0.0000					mg/l	T-PO4-P	03/03/88	2	IT	GC
H-05c	MAGENTA	PHOSPHATE		0.0100			0.0100					mg/l	T-PO4-P	08/18/88	3	IT	GC
H-05c	MAGENTA	PHOSPHORUS		0.0200		NA	0.0000					mg/l		09/14/89	4	IT	GC
H-05c	MAGENTA	PHOSPHORUS	<	0.0100		NA	0.0000					mg/l		05/16/90	5	IT	GC
H-05c	MAGENTA	POTASSIUM		51.0000			52.0000					mg/l		10/24/86	1	IT	ME
H-05c	MAGENTA	POTASSIUM		38.0000			40.0000					mg/l		03/03/88	2	IT	ME
H-05c	MAGENTA	POTASSIUM		36.0000			38.0000					mg/l		08/18/88	3	IT	ME
H-05c	MAGENTA	POTASSIUM		36.0000			36.0000					mg/l		09/14/89	4	IT	MC
H-05c	MAGENTA	POTASSIUM		36.0000			36.0000					mg/l		05/16/90	5	IT	MC
H-05c	MAGENTA	PYRENE	<	10.0000		NA	0.0000					ug/l		10/24/86	1	IT	SV
H-05c	MAGENTA	PYRENE	<	10.0000		NA	0.0000					ug/l		03/03/88	2	IT	SV
H-05c	MAGENTA	PYRENE	<	10.0000		NA	0.0000					ug/l		08/18/88	3	IT	SV
H-05c	MAGENTA	RESIDUE, FILTERABLE @ 180 C		6800.0000		NA	0.0000					mg/l		10/24/86	1	IT	GC
H-05c	MAGENTA	RESIDUE, FILTERABLE @ 180 C		6900.0000			7400.0000					mg/l		03/03/88	2	IT	GC
H-05c	MAGENTA	RESIDUE, FILTERABLE @ 180 C		7000.0000		NA	0.0000					mg/l		08/18/88	3	IT	GC
H-05c	MAGENTA	RESIDUE, FILTERABLE @ 180 C		7100.0000		NA	0.0000					mg/l		09/14/89	4	IT	GC
H-05c	MAGENTA	RESIDUE, FILTERABLE @ 180 C		7200.0000			0.0000					mg/l		05/16/90	5	IT	GC
H-05c	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C		7.0000		NA	0.0000					mg/l		10/24/86	1	IT	GC
H-05c	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000		<	4.0000					mg/l		03/03/88	2	IT	GC
H-05c	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C		50.0000		NA	0.0000					mg/l		08/18/88	3	IT	GC
H-05c	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000		NA	0.0000					mg/l		09/14/89	4	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05c	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000			0.0000			mg/l	05/16/90	5	IT	GC
H-05c	MAGENTA	SELENIUM	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	SELENIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	SELENIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	SELENIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	SELENIUM	<	0.0050		NA	0.0000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	SILICA		12.0000		NA	0.0000	< 1	< 1	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	SILICA		5.0000		NA	0.0000			mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	SILICA		4.6000			4.7000			mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	SILICA		4.8000		NA	0.0000			mg/l	09/14/89	4	IT	GC
H-05c	MAGENTA	SILICA		4.9000			4.4000			mg/l	05/16/90	5	IT	GC
H-05c	MAGENTA	SILVER	<	0.1000		NA	0.0000	< 0.05	< 0.05	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	SILVER		0.0200			0.0200	< 0.01	< 0.01	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	SILVER		0.2000			0.2000	< 0.01	< 0.01	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	SILVER	<	0.1000		<	0.1000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	SODIUM		1500.0000			1500.0000			mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	SODIUM		1420.0000			1420.0000			mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	SODIUM		1400.0000			1400.0000			mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	SODIUM		1200.0000			1200.0000			mg/l	09/14/89	4	IT	MC
H-05c	MAGENTA	SODIUM		1000.0000			1000.0000			mg/l	05/16/90	5	IT	MC
H-05c	MAGENTA	SPECIFIC CONDUCTANCE		9050.0000		NA	0.0000			umhos/cm@25C	10/24/86	1	IT	GC
H-05c	MAGENTA	SPECIFIC CONDUCTANCE		9000.0000			9050.0000			umhos/cm@25C	03/03/88	2	IT	GC
H-05c	MAGENTA	SPECIFIC CONDUCTANCE		9240.0000			9250.0000			umhos/cm@25C	08/18/88	3	IT	GC
H-05c	MAGENTA	SPECIFIC CONDUCTANCE		8632.0000			8642.0000			uMhos/cm@25C	09/14/89	4	IT	GC
H-05c	MAGENTA	SPECIFIC CONDUCTANCE		9100.0000			9100.0000			uMhos/cm@25C	05/16/90	5	IT	GC
H-05c	MAGENTA	STRONTIUM		8.4000		NA	0.0000	< 0.05	< 0.05	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	STRONTIUM		9.5000			9.7000	< 0.01	< 0.01	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	STRONTIUM		9.5000			9.4000	0.02	0.1	mg/l	08/18/88	3	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05c	MAGENTA	STRONTIUM		11.0000			11.0000	< 0.01	< 0.01	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	STRONTIUM		9.8000			9.8000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	STYRENE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	STYRENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	STYRENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	SULFATE		4200.0000		NA	0.0000			mg/l	10/24/86	1	IT	GC
H-05c	MAGENTA	SULFATE		3800.0000		NA	0.0000			mg/l	03/03/88	2	IT	GC
H-05c	MAGENTA	SULFATE		3000.0000		NA	0.0000			mg/l	08/18/88	3	IT	GC
H-05c	MAGENTA	SULFATE		3300.0000		NA	0.0000			mg/l	09/14/89	4	IT	GC
H-05c	MAGENTA	SULFATE		3300.0000		NA	3300.0000			mg/l	05/16/90	5	IT	GC
H-05c	MAGENTA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	THALLIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	THALLIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	THALLIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	THALLIUM	<	1.0000		NA	0.0000	< 0.01	< 0.01	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	THALLIUM	<	0.2500		NA	0.0000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	TITANIUM	<	0.3000		NA	0.0000	< 0.05	< 0.05	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	TITANIUM		0.4000			0.4000	0.03	0.03	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	TITANIUM		0.2000			0.1000	< 0.01	< 0.01	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	TITANIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	TITANIUM	<	0.1000		<	0.1000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	TOLUENE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	TOLUENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	TOLUENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	TOTAL ORGANIC CARBON		2.0000		NA	0.0000			mg/l	10/24/86	1	IT	GC
H-05c	MAGENTA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	03/03/88	2	IT	GC
H-05c	MAGENTA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	08/18/88	3	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05c	MAGENTA	TOTAL ORGANIC CARBON		3.0000			2.0000			mg/l	09/14/89	4	IT	GC
H-05c	MAGENTA	TOTAL ORGANIC CARBON		2.0000			2.0000			mg/l	05/16/90	5	IT	GC
H-05c	MAGENTA	TOTAL ORGANIC HALOGEN	<	0.0500		NA	0.0000			mg/l	10/24/86	1	IT	GC
H-05c	MAGENTA	TOTAL ORGANIC HALOGEN	<	0.0500			0.0600			mg/l	03/03/88	2	IT	GC
H-05c	MAGENTA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	08/18/88	3	IT	GC
H-05c	MAGENTA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	09/14/89	4	IT	GC
H-05c	MAGENTA	TOTAL ORGANIC HALOGEN		0.0700		<	0.0500			mg/l	05/16/90	5	IT	GC
H-05c	MAGENTA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	VANADIUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	VANADIUM		0.2000			0.1000	< 0.01	< 0.01	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	VANADIUM	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	VANADIUM	<	0.5000		<	0.5000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	VINYL ACETATE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	VINYL ACETATE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	VINYL CHLORIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	VINYL CHLORIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	08/18/88	3	IT	V
H-05c	MAGENTA	XYLENE	<	5.0000		NA	0.0000			ug/l	10/24/86	1	IT	V
H-05c	MAGENTA	XYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/03/88	2	IT	V
H-05c	MAGENTA	XYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	08/18/88	3	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-05c	MAGENTA	ZINC	<	0.1000		NA	0.0000	< 0.05	< 0.05	mg/l	10/24/86	1	IT	ME
H-05c	MAGENTA	ZINC	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	03/03/88	2	IT	ME
H-05c	MAGENTA	ZINC		0.1000		<	0.1000	< 0.01	< 0.01	mg/l	08/18/88	3	IT	ME
H-05c	MAGENTA	ZINC	<	0.2000		<	0.2000	< 0.02	< 0.02	mg/l	09/14/89	4	IT	MT
H-05c	MAGENTA	ZINC	<	0.2000		<	0.2000			mg/l	05/16/90	5	IT	MT
H-05c	MAGENTA	pH		7.5200			7.2300				10/24/86	1	IT	GC
H-05c	MAGENTA	pH		7.8400			7.8600				03/03/88	2	IT	GC
H-05c	MAGENTA	pH		7.4900			7.5000				08/18/88	3	IT	GC
H-05c	MAGENTA	pH		7.3800			7.3700				09/14/89	4	IT	GC
H-05c	MAGENTA	pH		8.3300			8.3300				05/16/90	5	IT	GC
** H-06b														
H-06b	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	1,1,2-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	1,1-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V

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H-06b	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	1,2,4-TRICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	1,2-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	1,2-DICHLOROPROPANE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	1,2-DIPHENYLHYDRAZINE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	1,3-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	1,3-DICHLOROPROPYLENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	1,4-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	2,4,5-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	2,4,6-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-06b	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	2,4-DICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	2,4-DIMETHYLPHENOL	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	2,4-DINITROPHENOL	<	10.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	2,4-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	2,6-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000	T< 10	16	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	2-CHLORONAPHTHALENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	2-CHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV

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H-06b	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	2-METHYLNAPHTHALENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	2-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	2-NITROANILINE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	2-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	2-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	3,3'-DICHLOROBENZIDINE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	3,4-BENZOFLUORANTHENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	3-NITROANILINE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	4,6-DINITRO-O-CRESOL	<	10.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV

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H-06b	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	4-CHLOROANILINE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	4-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	4-NITROANILINE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	4-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	ACENAPHTHENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	ACENAPHTHYLENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	09/15/85	1	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-06b	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	ACETONE	<	10.0000		NA	0.0000		T < 10	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	ACETONE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	ACROLEIN	<	10.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	ACRYLONITRILE	<	10.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	09/15/85	1	IT	GC
H-06b	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	07/28/86	2	IT	GC
H-06b	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	11/16/87	3	IT	GC
H-06b	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	07/24/89	4	IT	GC
H-06b	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	02/12/90	5	IT	GC
H-06b	CULEBRA	ALKALINITY (HCO3)		100.0000		NA	0.0000			mg/l	09/15/85	1	IT	GC
H-06b	CULEBRA	ALKALINITY (HCO3)		100.0000			100.0000			mg/l	07/28/86	2	IT	GC
H-06b	CULEBRA	ALKALINITY (HCO3)		97.0000		NA	0.0000			mg/l	11/16/87	3	IT	GC
H-06b	CULEBRA	ALKALINITY (HCO3)		91.0000			92.0000			mg/l	07/24/89	4	IT	GC
H-06b	CULEBRA	ALKALINITY (HCO3)		93.0000		NA	0.0000			mg/l	02/12/90	5	IT	GC
H-06b	CULEBRA	ALUMINUM		0.1300		NA	0.0000	< 0.01	< 0.01	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	ALUMINUM	<	2.0000		<	2.0000	< 0.2	< 0.2	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	ALUMINUM	<	2.0000		<	2.0000			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	ANILINE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	ANTHRACENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	ANTIMONY		0.8000			0.8000	< 0.05	< 0.05	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	ANTIMONY	<	0.6000		<	0.6000	< 0.06	< 0.06	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	ANTIMONY	<	0.6000		<	0.6000			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	ARSENIC		78.0000		NA	0.0000	< 0.01	< 0.01	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	ARSENIC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	07/28/86	2	IT	ME

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H-06b	CULEBRA	ARSENIC	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	ARSENIC	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	ARSENIC	<	0.0100		NA	0.0000			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	BARIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	BARIUM		0.0600			0.0600	< 0.005	< 0.005	mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	BARIUM	<	2.0000		<	2.0000	< 0.2	< 0.2	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	BARIUM	<	2.0000		<	2.0000			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	BENZENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	BENZENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	BENZIDINE	<	4.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	BENZO(A)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	BENZO(A)PYRENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	BENZO(G,H,I)PERYLENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	BENZO(K)FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	BENZOIC ACID	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	BENZYL ALCOHOL	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV

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H-06b	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	BERYLLIUM		0.0200			0.0200	< 0.01	< 0.01	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	4.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	BORON		7.4000			6.8000	< 0.1	< 0.1	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	BORON		10.0000			9.9000	< 0.01	< 0.01	mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	BORON		9.6000			9.6000	< 0.01	< 0.01	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	BORON		9.7000			9.8000	< 0.02	< 0.02	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	BORON		9.8000			9.7000			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	BROMIDE		67.0000		NA	0.0000			mg/l	09/15/85	1	IT	GC
H-06b	CULEBRA	BROMIDE		35.0000		NA	0.0000			mg/l	07/28/86	2	IT	GC
H-06b	CULEBRA	BROMIDE		37.0000		NA	0.0000			mg/l	11/16/87	3	IT	GC
H-06b	CULEBRA	BROMIDE		35.0000		NA	0.0000			mg/l	07/24/89	4	IT	GC
H-06b	CULEBRA	BROMIDE	<	23.0000			22.0000			mg/l	02/12/90	5	IT	GC

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H-06b	CULEBRA	BROMOFORM	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	BUTYL BENZYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	CADMIUM	<	0.0500		<	0.0500			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	CALCIUM		1900.0000			1900.0000	0.3	0.3	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	CALCIUM		1800.0000			1700.0000			mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	CALCIUM		1700.0000			1800.0000	N/A		mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	CALCIUM		2100.0000			2100.0000			mg/l	07/24/89	4	IT	MC
H-06b	CULEBRA	CALCIUM		2100.0000			2100.0000			mg/l	02/12/90	5	IT	MC
H-06b	CULEBRA	CARBON DISULFIDE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	CESIUM	<	1.0000		<	1.0000	< 1.0	< 1.0	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	CESIUM		0.3000			0.3000	0.3	0.3	mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	CESIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	CESIUM	<	0.1000		NA	0.0000	< 0.1	< 0.1	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	CESIUM	<	0.1000		<	0.1000			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	CHLORIDE		34000.0000		NA	0.0000			mg/l	09/15/85	1	IT	GC

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H-06b	CULEBRA	CHLORIDE		33000.0000		NA	0.0000			mg/l	07/28/86	2	IT	GC
H-06b	CULEBRA	CHLORIDE		31500.0000		NA	0.0000			mg/l	11/16/87	3	IT	GC
H-06b	CULEBRA	CHLORIDE		31600.0000			31800.0000			mg/l	07/24/89	4	IT	GC
H-06b	CULEBRA	CHLORIDE		28000.0000		NA	0.0000			mg/l	02/12/90	5	IT	GC
H-06b	CULEBRA	CHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	CHLOROETHANE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	CHLOROFORM	<	2.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	CHROMIUM		0.2200			0.2100	< 0.01	< 0.01	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	CHROMIUM		0.4300			0.4600	< 0.01	0.01	mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	CHROMIUM		0.3000			0.3000	< 0.01	< 0.01	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	CHROMIUM		0.3000			0.3000	0.02	0.02	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	CHROMIUM		0.2000			0.3000			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	CHRYSENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	COBALT		0.9600			0.9200	0.02	0.02	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	COBALT		0.1200			0.1300	< 0.01	< 0.01	mg/l	07/28/86	2	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-06b	CULEBRA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	COBALT	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	COBALT		0.5000		<	0.5000			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	COPPER		0.1200			0.1200	< 0.01	< 0.01	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	COPPER		0.1200			0.1300	< 0.01	0.01	mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	COPPER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	COPPER	<	0.2500		<	0.2500	< 0.025	< 0.025	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	COPPER	<	0.2500		<	0.2500			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	CYANIDE	<	0.0200		<	0.0200			mg/l	09/15/85	1	IT	GC
H-06b	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	07/28/86	2	IT	GC
H-06b	CULEBRA	CYANIDE	<	0.0400		NA	0.0000			mg/l	11/16/87	3	IT	GC
H-06b	CULEBRA	CYANIDE	<	0.0100		<	0.0200			mg/l	07/24/89	4	IT	GC
H-06b	CULEBRA	CYANIDE	<	0.0100		NA	0.0000			mg/l	02/12/90	5	IT	GC
H-06b	CULEBRA	DI-N-BUTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	DI-N-OCTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	DIBENZOFURAN	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-06b	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	DIETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	DIMETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	ETHYLBENZENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	Eh		514.0000		NA	0.0000			mV	09/15/85	1	IT	GC
H-06b	CULEBRA	FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	FLUORENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	FLUORIDE		1.6000			1.5000			mg/l	09/15/85	1	IT	GC
H-06b	CULEBRA	FLUORIDE		1.3000			1.3000			mg/l	07/28/86	2	IT	GC
H-06b	CULEBRA	FLUORIDE		1.3000			1.3000			mg/l	11/16/87	3	IT	GC
H-06b	CULEBRA	FLUORIDE		1.3000			1.3000			mg/l	07/24/89	4	IT	GC
H-06b	CULEBRA	FLUORIDE		1.4000			1.4000			mg/l	02/12/90	5	IT	GC
H-06b	CULEBRA	FREON-113	<	50.0000		NA	0.0000	T< 50	M< 50	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	HEXACHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV

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H-06b	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	HEXACHLOROBUTADIENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	HEXACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	IODIDE	<	1.0000		<	1.0000			mg/l	09/15/85	1	IT	GC
H-06b	CULEBRA	IODIDE		0.9000		NA	0.0000			mg/l	07/28/86	2	IT	GC
H-06b	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	11/16/87	3	IT	GC
H-06b	CULEBRA	IODIDE	<	2.0000		NA	0.0000			mg/l	07/24/89	4	IT	GC
H-06b	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	02/12/90	5	IT	GC
H-06b	CULEBRA	IRON		0.5500			0.5500	< 0.01	< 0.01	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	IRON		0.3500			0.3600	< 0.01	< 0.01	mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	IRON		0.2000			0.2000	< 0.01	< 0.01	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	IRON	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	IRON	<	1.0000		<	1.0000			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	ISOPHORONE	<	4.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	LEAD		0.4000			0.2000	< 0.1	< 0.1	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	LEAD		0.8000			0.8600	< 0.05	< 0.05	mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	11/16/87	3	IT	ME

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H-06b	CULEBRA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	LEAD	<	0.5000		<	0.5000			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	LITHIUM		0.5500			0.5500	< 0.01	< 0.01	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	LITHIUM		0.4100			0.4100	< 0.01	< 0.01	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	LITHIUM		0.5000			0.5000			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	MAGNESIUM		740.0000			740.0000	< 0.1	< 0.1	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	MAGNESIUM		970.0000			950.0000			mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	MAGNESIUM		1000.0000			1100.0000	N/A		mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	MAGNESIUM		940.0000			940.0000			mg/l	07/24/89	4	IT	MC
H-06b	CULEBRA	MAGNESIUM		1000.0000			1000.0000			mg/l	02/12/90	5	IT	MC
H-06b	CULEBRA	MANGANESE		0.2000			0.2000	< 0.01	< 0.01	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	MANGANESE		0.2000			0.2000	< 0.005	< 0.005	mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	MANGANESE		0.1500			0.1500	< 0.005	< 0.005	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	MANGANESE		0.2800			0.2800	< 0.015	< 0.015	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	MANGANESE		0.2500			0.2600			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	MERCURY		0.0012			0.0012	< 0.0002	0.0009	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	MERCURY	<	0.0002			0.0004	< 0.0002	< 0.0002	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	MERCURY	<	0.0002		<	0.0002			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	09/15/85	1	IT	V

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H-06b	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l		07/28/86	2	IT	V
H-06b	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l		11/16/87	3	IT	V
H-06b	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l		02/12/90	5	IT	V
H-06b	CULEBRA	MOLYBDENUM		0.0400			0.0400	< 0.01	< 0.01	mg/l		09/15/85	1	IT	ME
H-06b	CULEBRA	MOLYBDENUM		0.2500			0.1500	0.02	< 0.01	mg/l		07/28/86	2	IT	ME
H-06b	CULEBRA	MOLYBDENUM		0.5000			0.5000	< 0.01	< 0.01	mg/l		11/16/87	3	IT	ME
H-06b	CULEBRA	MOLYBDENUM		0.2000			0.2000	< 0.02	< 0.02	mg/l		07/24/89	4	IT	MT
H-06b	CULEBRA	MOLYBDENUM	<	0.2000		<	0.2000			mg/l		02/12/90	5	IT	MT
H-06b	CULEBRA	N-NITROSO-DI-METHYLAMINE	<	1.0000		NA	0.0000			ug/l		09/15/85	1	IT	SV
H-06b	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	1.0000		NA	0.0000			ug/l		09/15/85	1	IT	SV
H-06b	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		07/28/86	2	IT	SV
H-06b	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		11/16/87	3	IT	SV
H-06b	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	4.0000		NA	0.0000			ug/l		09/15/85	1	IT	SV
H-06b	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		07/28/86	2	IT	SV
H-06b	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		11/16/87	3	IT	SV
H-06b	CULEBRA	NAPHTHALENE	<	1.0000		NA	0.0000			ug/l		09/15/85	1	IT	SV
H-06b	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		07/28/86	2	IT	SV
H-06b	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		11/16/87	3	IT	SV
H-06b	CULEBRA	NICKEL		0.5600			0.5600	< 0.01	< 0.01	mg/l		09/15/85	1	IT	ME
H-06b	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		07/28/86	2	IT	ME
H-06b	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		11/16/87	3	IT	ME
H-06b	CULEBRA	NICKEL	<	0.4000		<	0.4000	< 0.04	< 0.04	mg/l		07/24/89	4	IT	MT
H-06b	CULEBRA	NICKEL	<	0.4000		<	0.4000			mg/l		02/12/90	5	IT	MT
H-06b	CULEBRA	NITRATE		0.2000			0.2000			mg/l	NO3-N	09/15/85	1	IT	GC
H-06b	CULEBRA	NITRATE		0.2000			0.2000			mg/l	NO3-N	07/28/86	2	IT	GC
H-06b	CULEBRA	NITRATE	<	0.2000		NA	0.0000			mg/l	NO3-N	11/16/87	3	IT	GC
H-06b	CULEBRA	NITRATE		0.0700			0.0700			mg/l		07/24/89	4	IT	GC
H-06b	CULEBRA	NITRATE		0.0800		NA	0.0000			mg/l		02/12/90	5	IT	GC
H-06b	CULEBRA	NITROBENZENE	<	1.0000		NA	0.0000			ug/l		09/15/85	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID	BLANK	WATER BLANK	UNITS		DATE	RND	LAB	C
H-06b	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000				ug/l		07/28/86	2	IT	SV
H-06b	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000				ug/l		11/16/87	3	IT	SV
H-06b	CULEBRA	P-CHLORO-M-CRESOL	<	1.0000		NA	0.0000				ug/l		09/15/85	1	IT	SV
H-06b	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000				ug/l		07/28/86	2	IT	SV
H-06b	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000				ug/l		11/16/87	3	IT	SV
H-06b	CULEBRA	PCB	<	1.0000		NA	0.0000				ug/l		07/28/86	2	IT	PC
H-06b	CULEBRA	PCB	<	1.0000		NA	0.0000				ug/l		11/16/87	3	IT	PC
H-06b	CULEBRA	PENTACHLOROPHENOL	<	1.0000		NA	0.0000				ug/l		09/15/85	1	IT	SV
H-06b	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000				ug/l		07/28/86	2	IT	SV
H-06b	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000				ug/l		11/16/87	3	IT	SV
H-06b	CULEBRA	PHENANTHRENE	<	1.0000		NA	0.0000				ug/l		09/15/85	1	IT	SV
H-06b	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000				ug/l		07/28/86	2	IT	SV
H-06b	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000				ug/l		11/16/87	3	IT	SV
H-06b	CULEBRA	PHENOL	<	1.0000		NA	0.0000				ug/l		09/15/85	1	IT	SV
H-06b	CULEBRA	PHENOL	<	10.0000		NA	0.0000				ug/l		07/28/86	2	IT	SV
H-06b	CULEBRA	PHENOL	<	10.0000		NA	0.0000				ug/l		11/16/87	3	IT	SV
H-06b	CULEBRA	PHENOLICS		0.0040		NA	0.0000				mg/l		09/15/85	1	IT	GC
H-06b	CULEBRA	PHENOLICS		0.0170			0.0140				mg/l		07/28/86	2	IT	GC
H-06b	CULEBRA	PHENOLICS		0.0080		NA	0.0000				mg/l		11/16/87	3	IT	GC
H-06b	CULEBRA	PHENOLICS		0.0090		NA	0.0000				mg/l		07/24/89	4	IT	GC
H-06b	CULEBRA	PHENOLICS		0.5500		NA	0.0000				mg/l		02/12/90	5	IT	GC
H-06b	CULEBRA	PHOSPHATE		0.0200			0.0100				mg/l	T-PO4-P	09/15/85	1	IT	GC
H-06b	CULEBRA	PHOSPHATE	<	0.0100		<	0.0100				mg/l	T-PO4-P	07/28/86	2	IT	GC
H-06b	CULEBRA	PHOSPHATE		0.0200		NA	0.0000				mg/l	T-PO4-P	11/16/87	3	IT	GC
H-06b	CULEBRA	PHOSPHORUS	<	0.0200		NA	0.0000				mg/l		07/24/89	4	IT	GC
H-06b	CULEBRA	PHOSPHORUS	<	0.0100		NA	0.0000				mg/l		02/12/90	5	IT	GC
H-06b	CULEBRA	POTASSIUM		480.0000			490.0000	< 0.01		< 0.01	mg/l		09/15/85	1	IT	ME
H-06b	CULEBRA	POTASSIUM		350.0000			340.0000				mg/l		07/28/86	2	IT	ME
H-06b	CULEBRA	POTASSIUM		480.0000			490.0000	N/A			mg/l		11/16/87	3	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-06b	CULEBRA	POTASSIUM		350.0000			350.0000			mg/l	07/24/89	4	IT	MC
H-06b	CULEBRA	POTASSIUM		600.0000			500.0000			mg/l	02/12/90	5	IT	MC
H-06b	CULEBRA	PYRENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	SV
H-06b	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	SV
H-06b	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l	11/16/87	3	IT	SV
H-06b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		58000.0000			58000.0000			mg/l	09/15/85	1	IT	GC
H-06b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		59000.0000			59000.0000			mg/l	07/28/86	2	IT	GC
H-06b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		60300.0000			60800.0000			mg/l	11/16/87	3	IT	GC
H-06b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		59600.0000			60300.0000			mg/l	07/24/89	4	IT	GC
H-06b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		66000.0000			66000.0000			mg/l	02/12/90	5	IT	GC
H-06b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		240.0000			260.0000			mg/l	09/15/85	1	IT	GC
H-06b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		190.0000			160.0000			mg/l	07/28/86	2	IT	GC
H-06b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		8.0000			7.0000			mg/l	11/16/87	3	IT	GC
H-06b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		190.0000			190.0000			mg/l	07/24/89	4	IT	GC
H-06b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C	<	8.0000			7.0000			mg/l	02/12/90	5	IT	GC
H-06b	CULEBRA	SELENIUM		1.3000		NA	0.0000	< 0.01	< 0.01	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	SELENIUM	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	SELENIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	SELENIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	SELENIUM	<	0.5000		NA	0.0000			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	SILICA		19.0000			20.0000	< 0.2	< 0.2	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	SILICA		26.0000			24.0000	< 0.2	< 0.2	mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	SILICA		21.0000			20.0000	< 0.2	< 0.2	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	SILICA		8.3000			8.3000			mg/l	07/24/89	4	IT	GC
H-06b	CULEBRA	SILICA		8.3000			8.3000			mg/l	02/12/90	5	IT	GC
H-06b	CULEBRA	SILVER		0.1000			0.1000	< 0.01	< 0.01	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	SILVER	<	0.1000			0.1000			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	SODIUM		15000.0000			15000.0000	< 0.1	< 0.1	mg/l	09/15/85	1	IT	ME

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H-06b	CULEBRA	SODIUM		17000.0000		NA	0.0000			mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	SODIUM		17800.0000			18000.0000	N/A		mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	SODIUM		14600.0000			14800.0000			mg/l	07/24/89	4	IT	MC
H-06b	CULEBRA	SODIUM		15000.0000			15500.0000			mg/l	02/12/90	5	IT	MC
H-06b	CULEBRA	SPECIFIC CONDUCTANCE		80400.0000		NA	0.0000			umhos/cm@25C	09/15/85	1	IT	GC
H-06b	CULEBRA	SPECIFIC CONDUCTANCE		69100.0000		NA	0.0000			umhos/cm@25C	07/28/86	2	IT	GC
H-06b	CULEBRA	SPECIFIC CONDUCTANCE		108000.0000			112000.0000			umhos/cm@25C	11/16/87	3	IT	GC
H-06b	CULEBRA	SPECIFIC CONDUCTANCE		74509.0000			74625.0000			uMhos/cm@25C	07/24/89	4	IT	GC
H-06b	CULEBRA	SPECIFIC CONDUCTANCE		77600.0000			77800.0000			umhos/cm@25C	02/12/90	5	IT	GC
H-06b	CULEBRA	STRONTIUM		24.0000			24.0000	< 0.01	< 0.01	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	STRONTIUM		25.0000			25.0000	< 0.01	< 0.01	mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	STRONTIUM		33.0000			34.0000	< 0.01	< 0.01	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	STRONTIUM		31.0000			31.0000	< 0.01	< 0.01	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	STRONTIUM		30.0000			30.0000			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	STYRENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	STYRENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	SULFATE		3000.0000		NA	0.0000			mg/l	09/15/85	1	IT	GC
H-06b	CULEBRA	SULFATE		3300.0000			3500.0000			mg/l	07/28/86	2	IT	GC
H-06b	CULEBRA	SULFATE		3400.0000		NA	0.0000			mg/l	11/16/87	3	IT	GC
H-06b	CULEBRA	SULFATE		3100.0000			3600.0000			mg/l	07/24/89	4	IT	GC
H-06b	CULEBRA	SULFATE		3400.0000			3400.0000			mg/l	02/12/90	5	IT	GC
H-06b	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	THALLIUM	<	5.0000		<	5.0000	< 0.005	< 0.005	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	THALLIUM	<	10.0000		NA	0.0000	< 0.01	< 0.01	mg/l	07/24/89	4	IT	MT

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H-06b	CULEBRA	THALLIUM	<	10.0000		NA	0.0000			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	TITANIUM	<	0.1000		NA	0.0000	< 0.1	< 0.1	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	TITANIUM		0.6000			0.6000	< 0.03	< 0.03	mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	TITANIUM		0.5000			0.6000	< 0.03	< 0.03	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	TITANIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	TITANIUM	<	0.1000		<	0.1000			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	TOLUENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	TOLUENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		NA	0.0000			mg/l	09/15/85	1	IT	GC
H-06b	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		NA	0.0000			mg/l	07/28/86	2	IT	GC
H-06b	CULEBRA	TOTAL ORGANIC CARBON		6.0000			4.0000			mg/l	11/16/87	3	IT	GC
H-06b	CULEBRA	TOTAL ORGANIC CARBON		2.0000			1.0000			mg/l	07/24/89	4	IT	GC
H-06b	CULEBRA	TOTAL ORGANIC CARBON		7.0000			7.0000			mg/l	02/12/90	5	IT	GC
H-06b	CULEBRA	TOTAL ORGANIC HALOGEN		0.9700		NA	0.0000			mg/l	09/15/85	1	IT	GC
H-06b	CULEBRA	TOTAL ORGANIC HALOGEN		0.9200		NA	0.0000			mg/l	07/28/86	2	IT	GC
H-06b	CULEBRA	TOTAL ORGANIC HALOGEN		2.0000			3.0000			mg/l	11/16/87	3	IT	GC
H-06b	CULEBRA	TOTAL ORGANIC HALOGEN		0.2700			0.3000			mg/l	07/24/89	4	IT	GC
H-06b	CULEBRA	TOTAL ORGANIC HALOGEN		0.1800			0.1400			mg/l	02/12/90	5	IT	GC
H-06b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V

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H-06b	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	TRICHLOROFLUOROMETHANE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	TURBIDITY		4.3000			4.4000			NTU	07/24/89	4	IT	GC
H-06b	CULEBRA	VANADIUM		0.2000			0.2000	< 0.01	< 0.01	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	VANADIUM	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	VANADIUM	<	0.5000		<	0.5000			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	XYLENE	<	1.0000		NA	0.0000			ug/l	09/15/85	1	IT	V
H-06b	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	07/28/86	2	IT	V
H-06b	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/16/87	3	IT	V
H-06b	CULEBRA	XYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	02/12/90	5	IT	V
H-06b	CULEBRA	ZINC		0.0600			0.0700	< 0.01	< 0.01	mg/l	09/15/85	1	IT	ME
H-06b	CULEBRA	ZINC		0.1000			0.1000	< 0.01	< 0.01	mg/l	07/28/86	2	IT	ME
H-06b	CULEBRA	ZINC		0.1000			0.1000	< 0.01	< 0.01	mg/l	11/16/87	3	IT	ME
H-06b	CULEBRA	ZINC	<	0.2000		<	0.2000	< 0.02	< 0.02	mg/l	07/24/89	4	IT	MT
H-06b	CULEBRA	ZINC	<	0.2000		<	0.2000			mg/l	02/12/90	5	IT	MT
H-06b	CULEBRA	pH		7.1900		NA	0.0000				09/15/85	1	IT	GC
H-06b	CULEBRA	pH		7.0600			7.0800				07/28/86	2	IT	GC
H-06b	CULEBRA	pH		5.9200			6.0400				11/16/87	3	IT	GC
H-06b	CULEBRA	pH		6.7000			6.7700				07/24/89	4	IT	GC
H-06b	CULEBRA	pH		6.9000			6.9000				02/12/90	5	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
** H-06c														
H-06c	MAGENTA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-06c	MAGENTA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV

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H-06c	MAGENTA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	2-BUTANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	2-BUTANONE	<	10.0000		NA	0.0000	T< 10	M 13	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	2-HEXANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	2-HEXANONE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-06c	MAGENTA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T 26	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/26/88	3	IT	V

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H-06c	MAGENTA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	ACETONE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	ACETONE	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	ACETONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	ACETONE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	10/01/86	1	IT	GC
H-06c	MAGENTA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	11/04/87	2	IT	GC
H-06c	MAGENTA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	07/26/88	3	IT	GC
H-06c	MAGENTA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	08/04/89	4	IT	GC
H-06c	MAGENTA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	03/15/90	5	IT	GC
H-06c	MAGENTA	ALKALINITY (HCO3)		51.0000			54.0000			mg/l	10/01/86	1	IT	GC
H-06c	MAGENTA	ALKALINITY (HCO3)		52.0000		NA	0.0000			mg/l	11/04/87	2	IT	GC
H-06c	MAGENTA	ALKALINITY (HCO3)		52.0000		NA	0.0000			mg/l	07/26/88	3	IT	GC
H-06c	MAGENTA	ALKALINITY (HCO3)		51.0000		NA	0.0000			mg/l	08/04/89	4	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-06c	MAGENTA	ALKALINITY (HCO3)		51.0000			54.0000			mg/l	03/15/90	5	IT	GC
H-06c	MAGENTA	ALUMINUM	<	1.0000		NA	0.0000	< 0.1	< 0.1	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	ALUMINUM	<	2.0000		<	2.0000	< 0.2	< 0.2	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	ALUMINUM	<	2.0000		<	2.0000			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	ANTIMONY	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	ANTIMONY	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	ANTIMONY	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	ANTIMONY	<	0.6000		<	0.6000	< 0.06	< 0.06	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	ANTIMONY	<	0.6000		<	0.6000			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	ARSENIC	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	ARSENIC	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	ARSENIC	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	ARSENIC	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	ARSENIC	<	0.0100		NA	0.0000			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	BARIUM	<	0.0500		NA	0.0000	< 0.05	< 0.05	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	BARIUM	<	2.0000		<	2.0000	< 0.2	< 0.2	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	BARIUM	<	2.0000		<	2.0000			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	BENZENE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	BENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	BENZENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV

WATER QUALITY SAMPLING
DATA BASE OF
CHEMICAL ANALYSIS

WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-06c	MAGENTA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	BERYLLIUM	<	0.0500		<	0.0500			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-06c	MAGENTA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	BORON		2.4000		NA	0.0000	< 0.05	< 0.05	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	BORON		2.1000			2.1000	0.01	0.01	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	BORON		2.4000			2.4000	< 0.01	< 0.01	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	BORON		2.3000			2.3000	< 0.02	< 0.02	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	BORON		2.3000			2.4000			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	BROMIDE		1.0000		NA	0.0000			mg/l	10/01/86	1	IT	GC
H-06c	MAGENTA	BROMIDE	<	2.0000		NA	0.0000			mg/l	11/04/87	2	IT	GC
H-06c	MAGENTA	BROMIDE	<	2.0000		NA	0.0000			mg/l	07/26/88	3	IT	GC
H-06c	MAGENTA	BROMIDE	<	2.0000		<	2.0000			mg/l	08/04/89	4	IT	GC
H-06c	MAGENTA	BROMIDE	<	2.0000		<	2.0000			mg/l	03/15/90	5	IT	GC
H-06c	MAGENTA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	BROMOFORM	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	BROMOFORM	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	CADMIUM	<	0.0500		NA	0.0000	< 0.05	< 0.05	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	CADMIUM	<	0.0500		<	0.0500			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	CALCIUM		630.0000			610.0000			mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	CALCIUM		500.0000			500.0000	N/A		mg/l	11/04/87	2	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-06c	MAGENTA	CALCIUM		590.0000			590.0000			mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	CALCIUM		550.0000			560.0000			mg/l	08/04/89	4	IT	MC
H-06c	MAGENTA	CALCIUM		570.0000			570.0000			mg/l	03/15/90	5	IT	MC
H-06c	MAGENTA	CALCIUM HARDNESS		0.0000			0.0000			mg/l	03/15/90	5	IT	GC
H-06c	MAGENTA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	CARBON DISULFIDE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	CARBON DISULFIDE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	CESIUM		0.3000		NA	0.0000	< 0.1	0.1	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	CESIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	CESIUM	<	0.0600		<	0.0600	< 0.06	< 0.06	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	CESIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	CESIUM	<	0.2000		<	0.2000			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	CHLORIDE		430.0000			430.0000			mg/l	10/01/86	1	IT	GC
H-06c	MAGENTA	CHLORIDE		420.0000		NA	0.0000			mg/l	11/04/87	2	IT	GC
H-06c	MAGENTA	CHLORIDE		390.0000		NA	0.0000			mg/l	07/26/88	3	IT	GC
H-06c	MAGENTA	CHLORIDE		470.0000			450.0000			mg/l	08/04/89	4	IT	GC
H-06c	MAGENTA	CHLORIDE		390.0000		NA	0.0000			mg/l	03/15/90	5	IT	GC
H-06c	MAGENTA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	CHLOROBENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	CHLOROBENZENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	CHLOROETHANE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/26/88	3	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-06c	MAGENTA	CHLOROETHANE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	CHLOROFORM	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	CHLOROFORM	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	CHROMIUM	<	0.1000		NA	0.0000	< 0.05	< 0.05	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	CHROMIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	CHROMIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	CHROMIUM	<	0.1000			0.1000	0.02	0.03	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	CHROMIUM	<	0.1000		<	0.1000			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	COBALT	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	COBALT	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	COBALT	<	0.5000		<	0.5000			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	COPPER	<	0.1000		NA	0.0000	< 0.05	< 0.05	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	COPPER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	COPPER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	COPPER		0.3400		<	0.2500	< 0.025	< 0.025	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	COPPER	<	0.2500		<	0.2500			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	CYANIDE	<	0.0200		NA	0.0000			mg/l	10/01/86	1	IT	GC
H-06c	MAGENTA	CYANIDE	<	0.0200		NA	0.0000			mg/l	11/04/87	2	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-06c	MAGENTA	CYANIDE	<	0.0200		NA	0.0000			mg/l	07/26/88	3	IT	GC
H-06c	MAGENTA	CYANIDE	<	0.1000		<	0.0200			mg/l	08/04/89	4	IT	GC
H-06c	MAGENTA	CYANIDE	<	0.0100		<	0.0200			mg/l	03/15/90	5	IT	GC
H-06c	MAGENTA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-06c	MAGENTA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	ETHYLBENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	ETHYLBENZENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	FLUORENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	FLUORENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	FLUORENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	FLUORIDE		1.7000			1.7000			mg/l	10/01/86	1	IT	GC
H-06c	MAGENTA	FLUORIDE		2.0000			2.0000			mg/l	11/04/87	2	IT	GC
H-06c	MAGENTA	FLUORIDE		2.0000		NA	0.0000			mg/l	07/26/88	3	IT	GC
H-06c	MAGENTA	FLUORIDE		1.9000			1.9000			mg/l	08/04/89	4	IT	GC
H-06c	MAGENTA	FLUORIDE		1.9000			1.9000			mg/l	03/15/90	5	IT	GC
H-06c	MAGENTA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV

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H-06c	MAGENTA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	IODIDE	<	1.0000		NA	0.0000			mg/l	10/01/86	1	IT	GC
H-06c	MAGENTA	IODIDE	<	2.0000		<	2.0000			mg/l	11/04/87	2	IT	GC
H-06c	MAGENTA	IODIDE	<	2.0000		NA	0.0000			mg/l	07/26/88	3	IT	GC
H-06c	MAGENTA	IODIDE	<	2.0000		<	2.0000			mg/l	08/04/89	4	IT	GC
H-06c	MAGENTA	IODIDE	<	2.0000		<	2.0000			mg/l	03/15/90	5	IT	GC
H-06c	MAGENTA	IRON		0.3000		NA	0.0000	< 0.05	< 0.05	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	IRON		0.2000			0.2000	< 0.01	< 0.01	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	IRON		0.4000			0.4000	< 0.01	< 0.01	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	IRON	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	IRON	<	1.0000		<	1.0000			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV
H-06c	MAGENTA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	07/26/88	3	IT	SV
H-06c	MAGENTA	LEAD	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	LEAD	<	0.5000		<	0.5000			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	LITHIUM		0.1900		NA	0.0000	< 0.05	< 0.05	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	LITHIUM		0.2200			0.2200	< 0.01	< 0.01	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	LITHIUM		0.2200			0.2200	0.01	0.01	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	LITHIUM		0.2200			0.2100	< 0.01	< 0.01	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	LITHIUM		0.2100			0.2100			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	MAGNESIUM		170.0000			170.0000			mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	MAGNESIUM		170.0000			170.0000	N/A		mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	MAGNESIUM		170.0000			170.0000			mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	MAGNESIUM		150.0000			150.0000			mg/l	08/04/89	4	IT	MC
H-06c	MAGENTA	MAGNESIUM		170.0000			170.0000			mg/l	03/15/90	5	IT	MC

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H-06c	MAGENTA	MANGANESE	<	0.0500		NA	0.0000	< 0.05	< 0.05	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	MANGANESE	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	MANGANESE	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	MANGANESE	<	0.1500		<	0.1500	< 0.015	< 0.015	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	MANGANESE	<	0.1500		<	0.1500			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	MERCURY	<	0.0002		NA	0.0000			mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	MERCURY		0.0006			0.0003	< 0.0002	< 0.0002	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	MERCURY	<	0.0004		<	0.0004			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	METHYL BROMIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	METHYL BROMIDE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	METHYL CHLORIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	METHYL CHLORIDE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000	T 13	T 7.4	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000	T < 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	MOLYBDENUM		0.0500		NA	0.0000	< 0.05	< 0.05	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	MOLYBDENUM		0.0500			0.0500	< 0.01	< 0.01	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	MOLYBDENUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	MOLYBDENUM	<	0.2000		<	0.2000	< 0.02	< 0.02	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	MOLYBDENUM	<	0.2000		<	0.2000			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	SV
H-06c	MAGENTA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	11/04/87	2	IT	SV

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H-06c	MAGENTA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		07/26/88	3	IT	SV
H-06c	MAGENTA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		10/01/86	1	IT	SV
H-06c	MAGENTA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		11/04/87	2	IT	SV
H-06c	MAGENTA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		07/26/88	3	IT	SV
H-06c	MAGENTA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		10/01/86	1	IT	SV
H-06c	MAGENTA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		11/04/87	2	IT	SV
H-06c	MAGENTA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		07/26/88	3	IT	SV
H-06c	MAGENTA	NICKEL	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l		10/01/86	1	IT	ME
H-06c	MAGENTA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		11/04/87	2	IT	ME
H-06c	MAGENTA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		07/26/88	3	IT	ME
H-06c	MAGENTA	NICKEL	<	0.4000		<	0.4000	< 0.04	< 0.04	mg/l		08/04/89	4	IT	MT
H-06c	MAGENTA	NICKEL	<	0.4000		<	0.4000			mg/l		03/15/90	5	IT	MT
H-06c	MAGENTA	NITRATE	<	0.1000		NA	0.0000			mg/l	NO3-N	10/01/86	1	IT	GC
H-06c	MAGENTA	NITRATE	<	0.1000		NA	0.0000			mg/l	NO3-N	11/04/87	2	IT	GC
H-06c	MAGENTA	NITRATE	<	0.0200		NA	0.0000			mg/l	NO3-N	07/26/88	3	IT	GC
H-06c	MAGENTA	NITRATE		7.3000			7.2000			mg/l		08/04/89	4	IT	GC
H-06c	MAGENTA	NITRATE	<	0.0200		<	0.0200			mg/l		03/15/90	5	IT	GC
H-06c	MAGENTA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		10/01/86	1	IT	SV
H-06c	MAGENTA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		11/04/87	2	IT	SV
H-06c	MAGENTA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		07/26/88	3	IT	SV
H-06c	MAGENTA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		10/01/86	1	IT	SV
H-06c	MAGENTA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		11/04/87	2	IT	SV
H-06c	MAGENTA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		07/26/88	3	IT	SV
H-06c	MAGENTA	PCB	<	1.0000		NA	0.0000			ug/l		10/01/86	1	IT	PC
H-06c	MAGENTA	PCB	<	1.0000		NA	0.0000			ug/l		11/04/87	2	IT	PC
H-06c	MAGENTA	PCB	<	1.0000		NA	0.0000			ug/l		07/26/88	3	IT	PC
H-06c	MAGENTA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		10/01/86	1	IT	SV
H-06c	MAGENTA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		11/04/87	2	IT	SV
H-06c	MAGENTA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		07/26/88	3	IT	SV

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H-06c	MAGENTA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		10/01/86	1	IT	SV
H-06c	MAGENTA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		11/04/87	2	IT	SV
H-06c	MAGENTA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		07/26/88	3	IT	SV
H-06c	MAGENTA	PHENOL	<	10.0000		NA	0.0000			ug/l		10/01/86	1	IT	SV
H-06c	MAGENTA	PHENOL	<	10.0000		NA	0.0000			ug/l		11/04/87	2	IT	SV
H-06c	MAGENTA	PHENOL	<	10.0000		NA	0.0000			ug/l		07/26/88	3	IT	SV
H-06c	MAGENTA	PHENOLICS		0.0040		NA	0.0000			mg/l		10/01/86	1	IT	GC
H-06c	MAGENTA	PHENOLICS		0.0140		NA	0.0000			mg/l		11/04/87	2	IT	GC
H-06c	MAGENTA	PHENOLICS	<	0.0050		NA	0.0000			mg/l		07/26/88	3	IT	GC
H-06c	MAGENTA	PHENOLICS	<	0.0050		NA	0.0000			mg/l		08/04/89	4	IT	GC
H-06c	MAGENTA	PHENOLICS	<	0.0050			0.0000			mg/l		03/15/90	5	IT	GC
H-06c	MAGENTA	PHOSPHATE		0.0200		NA	0.0000			mg/l	T-PO4-P	10/01/86	1	IT	GC
H-06c	MAGENTA	PHOSPHATE		0.0100			0.0100			mg/l	T-PO4-P	11/04/87	2	IT	GC
H-06c	MAGENTA	PHOSPHATE		0.0200		NA	0.0000			mg/l	T-PO4-P	07/26/88	3	IT	GC
H-06c	MAGENTA	PHOSPHORUS		0.0100		NA	0.0000			mg/l		08/04/89	4	IT	GC
H-06c	MAGENTA	PHOSPHORUS	<	0.0100		NA	0.0000			mg/l		03/15/90	5	IT	GC
H-06c	MAGENTA	POTASSIUM		26.0000			26.0000			mg/l		10/01/86	1	IT	ME
H-06c	MAGENTA	POTASSIUM		18.0000			18.0000	N/A		mg/l		11/04/87	2	IT	ME
H-06c	MAGENTA	POTASSIUM		18.0000			18.0000			mg/l		07/26/88	3	IT	ME
H-06c	MAGENTA	POTASSIUM		7.0000			8.0000			mg/l		08/04/89	4	IT	MC
H-06c	MAGENTA	POTASSIUM		20.0000			20.0000			mg/l		03/15/90	5	IT	MC
H-06c	MAGENTA	PYRENE	<	10.0000		NA	0.0000			ug/l		10/01/86	1	IT	SV
H-06c	MAGENTA	PYRENE	<	10.0000		NA	0.0000			ug/l		11/04/87	2	IT	SV
H-06c	MAGENTA	PYRENE	<	10.0000		NA	0.0000			ug/l		07/26/88	3	IT	SV
H-06c	MAGENTA	RESIDUE, FILTERABLE @ 180 C		4600.0000			4600.0000			mg/l		10/01/86	1	IT	GC
H-06c	MAGENTA	RESIDUE, FILTERABLE @ 180 C		4800.0000		NA	0.0000			mg/l		11/04/87	2	IT	GC
H-06c	MAGENTA	RESIDUE, FILTERABLE @ 180 C		4800.0000		NA	0.0000			mg/l		07/26/88	3	IT	GC
H-06c	MAGENTA	RESIDUE, FILTERABLE @ 180 C		4800.0000			4800.0000			mg/l		08/04/89	4	IT	GC
H-06c	MAGENTA	RESIDUE, FILTERABLE @ 180 C		4800.0000			4800.0000			mg/l		03/15/90	5	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-06c	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C		13.0000		NA	0.0000			mg/l	10/01/86	1	IT	GC
H-06c	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C		5.0000			6.0000			mg/l	11/04/87	2	IT	GC
H-06c	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C		29.0000		NA	0.0000			mg/l	07/26/88	3	IT	GC
H-06c	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000		<	4.0000			mg/l	08/04/89	4	IT	GC
H-06c	MAGENTA	RESIDUE, NONFILTERABLE @ 105 C		10.0000			7.0000			mg/l	03/15/90	5	IT	GC
H-06c	MAGENTA	SELENIUM	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	SELENIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	SELENIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	SELENIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	SELENIUM	<	0.5000		NA	0.0000			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	SILICA		13.0000		NA	0.0000	< 1	< 1	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	SILICA		11.0000			11.0000	< 0.2	< 0.2	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	SILICA		5.4000		NA	0.0000			mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	SILICA		5.0000			5.2000			mg/l	08/04/89	4	IT	GC
H-06c	MAGENTA	SILICA		5.1000			5.1000			mg/l	03/15/90	5	IT	GC
H-06c	MAGENTA	SILVER	<	0.0500		NA	0.0000	< 0.05	< 0.05	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	SILVER	<	0.1000		<	0.1000			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	SODIUM		1100.0000			1000.0000			mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	SODIUM		650.0000			650.0000	N/A		mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	SODIUM		640.0000			630.0000			mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	SODIUM		590.0000			590.0000			mg/l	08/04/89	4	IT	MC
H-06c	MAGENTA	SODIUM		570.0000			590.0000			mg/l	03/15/90	5	IT	MC
H-06c	MAGENTA	SPECIFIC CONDUCTANCE		5550.0000			5570.0000			umhos/cm@25C	10/01/86	1	IT	GC
H-06c	MAGENTA	SPECIFIC CONDUCTANCE		5450.0000			5440.0000			umhos/cm@25C	11/04/87	2	IT	GC
H-06c	MAGENTA	SPECIFIC CONDUCTANCE		3860.0000			3880.0000			umhos/cm@25C	07/26/88	3	IT	GC
H-06c	MAGENTA	SPECIFIC CONDUCTANCE		5796.0000			5808.0000			uMhos/cm@25C	08/04/89	4	IT	GC

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H-06c	MAGENTA	SPECIFIC CONDUCTANCE		6600.0000			6600.0000			uMhos/cm@25C	03/15/90	5	IT	GC
H-06c	MAGENTA	STRONTIUM		7.1000		NA	0.0000	< 0.05	< 0.05	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	STRONTIUM		8.6000			8.7000	< 0.01	< 0.01	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	STRONTIUM		9.4000			9.3000	< 0.01	< 0.01	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	STRONTIUM		9.8000			9.8000	< 0.01	< 0.01	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	STRONTIUM		10.0000			10.0000			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	STYRENE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	STYRENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	STYRENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	SULFATE		2400.0000			2400.0000			mg/l	10/01/86	1	IT	GC
H-06c	MAGENTA	SULFATE		2400.0000		NA	0.0000			mg/l	11/04/87	2	IT	GC
H-06c	MAGENTA	SULFATE		2600.0000		NA	0.0000			mg/l	07/26/88	3	IT	GC
H-06c	MAGENTA	SULFATE		2520.0000		NA	0.0000			mg/l	08/04/89	4	IT	GC
H-06c	MAGENTA	SULFATE		2600.0000			2500.0000			mg/l	03/15/90	5	IT	GC
H-06c	MAGENTA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	THALLIUM	<	0.0050		NA	0.0000	< 0.05	< 0.05	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	THALLIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	THALLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	THALLIUM	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	THALLIUM	<	0.1000		NA	0.0000			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	TITANIUM	<	0.3000		NA	0.0000	< 0.05	< 0.05	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	TITANIUM	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	TITANIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	TITANIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	TITANIUM	<	0.1000		<	0.1000			mg/l	03/15/90	5	IT	MT

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H-06c	MAGENTA	TOLUENE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	TOLUENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	TOLUENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	TOTAL HARDNESS		0.0000		NA	0.0000			mg/l	03/15/90	5	IT	GC
H-06c	MAGENTA	TOTAL ORGANIC CARBON	<	1.0000		NA	0.0000			mg/l	10/01/86	1	IT	GC
H-06c	MAGENTA	TOTAL ORGANIC CARBON		1.0000		<	1.0000			mg/l	11/04/87	2	IT	GC
H-06c	MAGENTA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	07/26/88	3	IT	GC
H-06c	MAGENTA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	08/04/89	4	IT	GC
H-06c	MAGENTA	TOTAL ORGANIC CARBON		1.0000			1.0000			mg/l	03/15/90	5	IT	GC
H-06c	MAGENTA	TOTAL ORGANIC HALOGEN		0.0500		NA	0.0000			mg/l	10/01/86	1	IT	GC
H-06c	MAGENTA	TOTAL ORGANIC HALOGEN		0.0700			0.0500			mg/l	11/04/87	2	IT	GC
H-06c	MAGENTA	TOTAL ORGANIC HALOGEN	<	0.0500			0.0600			mg/l	07/26/88	3	IT	GC
H-06c	MAGENTA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	08/04/89	4	IT	GC
H-06c	MAGENTA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	03/15/90	5	IT	GC
H-06c	MAGENTA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	VANADIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	VANADIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	07/26/88	3	IT	ME

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H-06c	MAGENTA	VANADIUM	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	VANADIUM	<	0.5000		<	0.5000			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	VINYL ACETATE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	VINYL ACETATE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	VINYL CHLORIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	VINYL CHLORIDE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	XYLENE	<	5.0000		NA	0.0000			ug/l	10/01/86	1	IT	V
H-06c	MAGENTA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/04/87	2	IT	V
H-06c	MAGENTA	XYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	07/26/88	3	IT	V
H-06c	MAGENTA	XYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	03/15/90	5	IT	V
H-06c	MAGENTA	ZINC	<	0.1000		NA	0.0000	< 0.05	< 0.05	mg/l	10/01/86	1	IT	ME
H-06c	MAGENTA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/04/87	2	IT	ME
H-06c	MAGENTA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	07/26/88	3	IT	ME
H-06c	MAGENTA	ZINC	<	0.2000		<	0.2000	< 0.02	< 0.02	mg/l	08/04/89	4	IT	MT
H-06c	MAGENTA	ZINC	<	0.2000		<	0.2000			mg/l	03/15/90	5	IT	MT
H-06c	MAGENTA	pH		7.2100		NA	0.0000				10/01/86	1	IT	GC
H-06c	MAGENTA	pH		6.1000			6.1300				11/04/87	2	IT	GC
H-06c	MAGENTA	pH		7.1900			7.2100			--	07/26/88	3	IT	GC
H-06c	MAGENTA	pH		6.6000			6.6500				08/04/89	4	IT	GC
H-06c	MAGENTA	pH		7.4500			7.4600				03/15/90	5	IT	GC
** H-07b1														
H-07b1	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V

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H-07b1	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-07b1	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-07b1	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	2-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV

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H-07b1	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV

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H-07b1	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	ACETONE	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	03/27/86	1	IT	GC
H-07b1	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	02/25/87	2	IT	GC
H-07b1	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	04/25/88	3	IT	GC
H-07b1	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	05/19/89	4	IT	GC
H-07b1	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	11/09/90	5	IT	GC
H-07b1	CULEBRA	ALKALINITY (HCO3)		130.0000		NA	0.0000			mg/l	03/27/86	1	IT	GC
H-07b1	CULEBRA	ALKALINITY (HCO3)		130.0000			130.0000			mg/l	02/25/87	2	IT	GC
H-07b1	CULEBRA	ALKALINITY (HCO3)		120.0000		NA	0.0000			mg/l	04/25/88	3	IT	GC
H-07b1	CULEBRA	ALKALINITY (HCO3)		110.0000			110.0000			mg/l	05/19/89	4	IT	GC
H-07b1	CULEBRA	ALKALINITY (HCO3)		92.0000		NA	0.0000			mg/l	11/09/90	5	IT	GC
H-07b1	CULEBRA	ALUMINUM	<	0.1000		NA	0.0000	< 0.10	< 0.10	mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	ALUMINUM	<	1.0000		NA	0.0000	< 0.1	< 0.1	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	ALUMINUM	<	2.0000		<	2.0000	< .2	< .2	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	ANTIMONY	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	ANTIMONY	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	ANTIMONY	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	ANTIMONY	<	0.6000		<	0.6000	< .06	< .06	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	ARSENIC		0.0050		NA	0.0000	< 0.001	< 0.001	mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	ARSENIC	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	ARSENIC		0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	04/25/88	3	IT	ME

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H-07b1	CULEBRA	ARSENIC		0.0040		NA	0.0000	< 0.003	< 0.003	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	ARSENIC	<	0.0100		NA	0.0000	< .01	< .01	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	BARIUM		0.0100		NA	0.0000	< 0.005	< 0.005	mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	BARIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	BARIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	BARIUM	<	2.0000		<	2.0000	< .2	< .2	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	BERYLLIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	03/27/86	1	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-07b1	CULEBRA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< .005	< .005	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	BORON		0.7400		NA	0.0000	< 0.01	< 0.01	mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	BORON		0.8000		NA	0.0000	< 0.01	< 0.01	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	BORON		0.7000			0.7000	< 0.01	< 0.01	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	BORON		0.8000			0.8000	< 0.01	< 0.01	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	BORON		0.9000			0.9000	0.04	0.03	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	BROMIDE		1.0000		NA	0.0000			mg/l	03/27/86	1	IT	GC
H-07b1	CULEBRA	BROMIDE	<	2.0000		NA	0.0000			mg/l	02/25/87	2	IT	GC
H-07b1	CULEBRA	BROMIDE	<	2.0000		NA	0.0000			mg/l	04/25/88	3	IT	GC
H-07b1	CULEBRA	BROMIDE		3.0000		NA	0.0000			mg/l	05/19/89	4	IT	GC
H-07b1	CULEBRA	BROMIDE	<	2.0000		<	2.0000			mg/l	11/09/90	5	IT	GC
H-07b1	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-07b1	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	CADMIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	CADMIUM	<	0.0500		<	0.0500	< 0.005	0.006	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	CADMIUM	<	0.0500		<	0.0500	< .005	< .005	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	CALCIUM		540.0000		NA	0.0000			mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	CALCIUM		620.0000			580.0000			mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	CALCIUM		570.0000			560.0000			mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	CALCIUM		650.0000			650.0000			mg/l	05/19/89	4	IT	MC
H-07b1	CULEBRA	CALCIUM		670.0000			660.0000			mg/l	11/09/90	5	IT	MC
H-07b1	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	CESIUM	<	0.1000		NA	0.0000	< 0.1	< 0.1	mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	CESIUM	<	0.1000		NA	0.0000	< 0.1	< 0.1	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	CESIUM		0.0100			0.0100	< 0.01	< 0.01	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	CESIUM	<	0.2000		<	0.2000	< 0.2	< 0.2	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	CESIUM	<	0.1000		<	0.1000	< .1	< .1	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	CHLORIDE		700.0000		NA	0.0000			mg/l	03/27/86	1	IT	GC
H-07b1	CULEBRA	CHLORIDE		310.0000		NA	0.0000			mg/l	02/25/87	2	IT	GC
H-07b1	CULEBRA	CHLORIDE		290.0000		NA	0.0000			mg/l	04/25/88	3	IT	GC
H-07b1	CULEBRA	CHLORIDE		250.0000			250.0000			mg/l	05/19/89	4	IT	GC
H-07b1	CULEBRA	CHLORIDE		280.0000			280.0000			mg/l	11/09/90	5	IT	GC
H-07b1	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V

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H-07b1	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	CHROMIUM		0.3000		NA	0.0000	< 0.03	< 0.03	mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	CHROMIUM	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	CHROMIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	CHROMIUM		0.2000			0.2000	0.01	0.02	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	CHROMIUM		0.2000			0.2000	0.01	0.01	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	COBALT	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	COBALT	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	COBALT	<	0.5000		<	0.5000	< .05	< .05	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	COPPER	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	COPPER	<	0.1000		NA	0.0000	0.01	< 0.01	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	COPPER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	COPPER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	COPPER	<	0.2500		<	0.2500	< .025	< .025	mg/l	11/09/90	5	IT	MT

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H-07b1	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	03/27/86	1	IT	GC
H-07b1	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	02/25/87	2	IT	GC
H-07b1	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	04/25/88	3	IT	GC
H-07b1	CULEBRA	CYANIDE	<	0.0010		NA	0.0000			mg/l	05/19/89	4	IT	GC
H-07b1	CULEBRA	CYANIDE	<	0.0100		NA	0.0000			mg/l	11/09/90	5	IT	GC
H-07b1	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV

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H-07b1	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	Eh		391.0000		NA	0.0000			mV	03/27/86	1	IT	GC
H-07b1	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	FLUORIDE		1.2000		NA	0.0000			mg/l	03/27/86	1	IT	GC
H-07b1	CULEBRA	FLUORIDE		1.5000			1.5000			mg/l	02/25/87	2	IT	GC
H-07b1	CULEBRA	FLUORIDE		1.5000		NA	0.0000			mg/l	04/25/88	3	IT	GC
H-07b1	CULEBRA	FLUORIDE		1.5000			1.5000			mg/l	05/19/89	4	IT	GC
H-07b1	CULEBRA	FLUORIDE		1.5000		NA	0.0000			mg/l	11/09/90	5	IT	GC
H-07b1	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-07b1	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	IODIDE	<	1.0000		NA	0.0000			mg/l	03/27/86	1	IT	GC
H-07b1	CULEBRA	IODIDE	<	2.0000		NA	0.0000			mg/l	02/25/87	2	IT	GC
H-07b1	CULEBRA	IODIDE	<	2.0000		NA	0.0000			mg/l	04/25/88	3	IT	GC
H-07b1	CULEBRA	IODIDE	<	2.0000		NA	0.0000			mg/l	05/19/89	4	IT	GC
H-07b1	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	11/09/90	5	IT	GC
H-07b1	CULEBRA	IRON		0.0800		NA	0.0000	< 0.01	< 0.01	mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	IRON	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	IRON	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	IRON		0.3000			0.3000	< 0.02	< 0.02	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	IRON	<	1.0000			1.0000	< .1	< .1	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	LEAD	<	0.0500		NA	0.0000	< 0.05	< 0.05	mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	LEAD	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	LEAD	<	0.5000		<	0.5000	< .05	< .05	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	LITHIUM		0.1200		NA	0.0000	0.01	0.01	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	LITHIUM		0.1200			0.1200	0.01	0.01	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	LITHIUM		0.1100			0.1100	< 0.01	< 0.01	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	LITHIUM	<	0.1000		<	0.1000	< .01	< .01	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	MAGNESIUM		130.0000		NA	0.0000			mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	MAGNESIUM		140.0000			130.0000			mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	MAGNESIUM		130.0000			120.0000			mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	MAGNESIUM		130.0000			130.0000			mg/l	05/19/89	4	IT	MC
H-07b1	CULEBRA	MAGNESIUM		140.0000			140.0000			mg/l	11/09/90	5	IT	MC
H-07b1	CULEBRA	MANGANESE		0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	03/27/86	1	IT	ME

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H-07b1	CULEBRA	MANGANESE		0.0700		NA	0.0000	< 0.005	< 0.005	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	MANGANESE		0.0600			0.0500	< 0.005	< 0.005	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	MANGANESE	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	MANGANESE	<	0.1500		<	0.1500	< .015	< .015	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	MERCURY	<	0.0020		<	0.0020	< .0002	< .0002	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	METHYLENE CHLORIDE		11.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000		T 9.8	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	MOLYBDENUM		0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	MOLYBDENUM		0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	MOLYBDENUM	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	MOLYBDENUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	MOLYBDENUM	<	0.2000		<	0.2000	< .02	< .02	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV
H-07b1	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	SV
H-07b1	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	SV
H-07b1	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	04/25/88	3	IT	SV

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H-07b1	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		03/27/86	1	IT	SV
H-07b1	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		02/25/87	2	IT	SV
H-07b1	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		04/25/88	3	IT	SV
H-07b1	CULEBRA	NICKEL	<	0.0300		NA	0.0000	< 0.03	< 0.03	mg/l		03/27/86	1	IT	ME
H-07b1	CULEBRA	NICKEL	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l		02/25/87	2	IT	ME
H-07b1	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		04/25/88	3	IT	ME
H-07b1	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		05/19/89	4	IT	MT
H-07b1	CULEBRA	NICKEL	<	0.4000		<	0.4000	< .04	< .04	mg/l		11/09/90	5	IT	MT
H-07b1	CULEBRA	NITRATE		0.7000		NA	0.0000			mg/l	NO3-N	03/27/86	1	IT	GC
H-07b1	CULEBRA	NITRATE		0.8000		NA	0.0000			mg/l	NO3-N	02/25/87	2	IT	GC
H-07b1	CULEBRA	NITRATE		0.7000		NA	0.0000			mg/l	NO3-N	04/25/88	3	IT	GC
H-07b1	CULEBRA	NITRATE		0.7400			0.7300			mg/l		05/19/89	4	IT	GC
H-07b1	CULEBRA	NITRATE		0.9000			0.9000			mg/l		11/09/90	5	IT	GC
H-07b1	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		03/27/86	1	IT	SV
H-07b1	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		02/25/87	2	IT	SV
H-07b1	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		04/25/88	3	IT	SV
H-07b1	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		03/27/86	1	IT	SV
H-07b1	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		02/25/87	2	IT	SV
H-07b1	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		04/25/88	3	IT	SV
H-07b1	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		02/25/87	2	IT	PC
H-07b1	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		04/25/88	3	IT	PC
H-07b1	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		03/27/86	1	IT	SV
H-07b1	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		02/25/87	2	IT	SV
H-07b1	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		04/25/88	3	IT	SV
H-07b1	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		03/27/86	1	IT	SV
H-07b1	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		02/25/87	2	IT	SV
H-07b1	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		04/25/88	3	IT	SV
H-07b1	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		03/27/86	1	IT	SV
H-07b1	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		02/25/87	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID	BLANK	WATER	BLANK	UNITS		DATE	RND	LAB	C
H-07b1	CULEBRA	PHENOL	<	10.0000		NA	0.0000					ug/l		04/25/88	3	IT	SV
H-07b1	CULEBRA	PHENOLICS		0.0420		NA	0.0000					mg/l		03/27/86	1	IT	GC
H-07b1	CULEBRA	PHENOLICS	<	0.0500		NA	0.0000					mg/l		02/25/87	2	IT	GC
H-07b1	CULEBRA	PHENOLICS	<	0.0050		NA	0.0000					mg/l		04/25/88	3	IT	GC
H-07b1	CULEBRA	PHENOLICS		0.0060		NA	0.0000					mg/l		05/19/89	4	IT	GC
H-07b1	CULEBRA	PHENOLICS	<	0.0050		NA	0.0000					mg/l		11/09/90	5	IT	GC
H-07b1	CULEBRA	PHOSPHATE		0.0800		NA	0.0000					mg/l	T-PO4-P	03/27/86	1	IT	GC
H-07b1	CULEBRA	PHOSPHATE		0.0200			0.0200					mg/l	T-PO4-P	02/25/87	2	IT	GC
H-07b1	CULEBRA	PHOSPHATE		0.0300		NA	0.0000					mg/l	T-PO4-P	04/25/88	3	IT	GC
H-07b1	CULEBRA	PHOSPHORUS		0.0400		NA	0.0000					mg/l		05/19/89	4	IT	GC
H-07b1	CULEBRA	PHOSPHORUS	<	0.0100		NA	0.0000					mg/l		11/09/90	5	IT	GC
H-07b1	CULEBRA	POTASSIUM		7.0000		NA	0.0000					mg/l		03/27/86	1	IT	ME
H-07b1	CULEBRA	POTASSIUM		8.0000		NA	0.0000					mg/l		02/25/87	2	IT	ME
H-07b1	CULEBRA	POTASSIUM		8.2000			8.4000					mg/l		04/25/88	3	IT	ME
H-07b1	CULEBRA	POTASSIUM		7.2000			7.3000					mg/l		05/19/89	4	IT	MC
H-07b1	CULEBRA	POTASSIUM	<	50.0000		<	50.0000					mg/l		11/09/90	5	IT	MC
H-07b1	CULEBRA	PYRENE	<	10.0000		NA	0.0000					ug/l		03/27/86	1	IT	SV
H-07b1	CULEBRA	PYRENE	<	10.0000		NA	0.0000					ug/l		02/25/87	2	IT	SV
H-07b1	CULEBRA	PYRENE	<	10.0000		NA	0.0000					ug/l		04/25/88	3	IT	SV
H-07b1	CULEBRA	RESIDUE, FILTERABLE @ 180 C		3400.0000		NA	0.0000					mg/l		03/27/86	1	IT	GC
H-07b1	CULEBRA	RESIDUE, FILTERABLE @ 180 C		3500.0000		NA	0.0000					mg/l		02/25/87	2	IT	GC
H-07b1	CULEBRA	RESIDUE, FILTERABLE @ 180 C		3400.0000			3200.0000					mg/l		04/25/88	3	IT	GC
H-07b1	CULEBRA	RESIDUE, FILTERABLE @ 180 C		3500.0000			3600.0000					mg/l		05/19/89	4	IT	GC
H-07b1	CULEBRA	RESIDUE, FILTERABLE @ 180 C		3500.0000		NA	0.0000					mg/l		11/09/90	5	IT	GC
H-07b1	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		3.0000		NA	1.0000					mg/l		03/27/86	1	IT	GC
H-07b1	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		120.0000		NA	0.0000					mg/l		02/25/87	2	IT	GC
H-07b1	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000		<	4.0000					mg/l		04/25/88	3	IT	GC
H-07b1	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		13.0000			13.0000					mg/l		05/19/89	4	IT	GC
H-07b1	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000		NA	0.0000					mg/l		11/09/90	5	IT	GC

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H-07b1	CULEBRA	SELENIUM		0.0060		NA	0.0000	< 0.001	< 0.001	mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	SELENIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	SELENIUM		0.0120		NA	0.0000	< 0.005	< 0.005	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	SELENIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	SELENIUM	<	0.0500		NA	0.0000	< .005	< .005	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	SILICA		43.0000		NA	0.0000	< 0.2	< 0.2	mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	SILICA		46.0000		NA	0.0000	< 0.2	< 0.2	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	SILICA		20.0000		NA	0.0000			mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	SILICA		20.0000			20.0000			mg/l	05/19/89	4	IT	GC
H-07b1	CULEBRA	SILICA		23.0000		NA	0.0000			mg/l	11/09/90	5	IT	GC
H-07b1	CULEBRA	SILVER	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	SILVER	<	0.1000		<	0.1000	< .01	< .01	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	SODIUM		210.0000		NA	0.0000			mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	SODIUM		210.0000			210.0000			mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	SODIUM		200.0000			200.0000			mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	SODIUM		170.0000			170.0000			mg/l	05/19/89	4	IT	MC
H-07b1	CULEBRA	SODIUM		100.0000			100.0000			mg/l	11/09/90	5	IT	MC
H-07b1	CULEBRA	SPECIFIC CONDUCTANCE		3390.0000		NA	0.0000			umhos/cm@25C	03/27/86	1	IT	GC
H-07b1	CULEBRA	SPECIFIC CONDUCTANCE		4120.0000		NA	0.0000			umhos/cm@25C	02/25/87	2	IT	GC
H-07b1	CULEBRA	SPECIFIC CONDUCTANCE		3970.0000			3980.0000			umhos/cm@25C	04/25/88	3	IT	GC
H-07b1	CULEBRA	SPECIFIC CONDUCTANCE		4510.0000		NA	0.0000			uMhos/cm@25C	05/19/89	4	IT	GC
H-07b1	CULEBRA	SPECIFIC CONDUCTANCE		3760.0000			3760.0000			uMhos/cm@25C	11/09/90	5	IT	GC
H-07b1	CULEBRA	STRONTIUM		5.8000		NA	0.0000	0.01	0.01	mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	STRONTIUM		8.7000		NA	0.0000	< 0.01	< 0.01	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	STRONTIUM		8.4000			8.4000	< 0.01	< 0.01	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	STRONTIUM		8.2000			8.1000	< 0.01	< 0.01	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	STRONTIUM		8.5000			8.5000	< .01	< .01	mg/l	11/09/90	5	IT	MT

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-07b1	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	SULFATE		2300.0000		NA	0.0000			mg/l	03/27/86	1	IT	GC
H-07b1	CULEBRA	SULFATE		1700.0000		NA	0.0000			mg/l	02/25/87	2	IT	GC
H-07b1	CULEBRA	SULFATE		2000.0000		NA	0.0000			mg/l	04/25/88	3	IT	GC
H-07b1	CULEBRA	SULFATE		1700.0000			1700.0000			mg/l	05/19/89	4	IT	GC
H-07b1	CULEBRA	SULFATE		2100.0000			2100.0000			mg/l	11/09/90	5	IT	GC
H-07b1	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	THALLIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	THALLIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	THALLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	THALLIUM	<	0.1000			0.0000	< .01	< .01	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	TIN	<	0.4000		NA	0.0000	< 0.04	< 0.04	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	TITANIUM	<	0.1000		NA	0.0000	< 0.1	< 0.1	mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	TITANIUM		0.1000		NA	0.0000	< 0.1	< 0.1	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	TITANIUM	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	TITANIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	TITANIUM	<	0.1000		<	0.1000	< .01	< .01	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		NA	0.0000			mg/l	03/27/86	1	IT	GC
H-07b1	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000			1.0000			mg/l	02/25/87	2	IT	GC
H-07b1	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	04/25/88	3	IT	GC
H-07b1	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	05/19/89	4	IT	GC
H-07b1	CULEBRA	TOTAL ORGANIC CARBON		8.0000			8.0000			mg/l	11/09/90	5	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-07b1	CULEBRA	TOTAL ORGANIC HALOGEN		0.2100		NA	0.0000			mg/l	03/27/86	1	IT	GC
H-07b1	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	02/25/87	2	IT	GC
H-07b1	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	04/25/88	3	IT	GC
H-07b1	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	05/19/89	4	IT	GC
H-07b1	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500			0.0600			mg/l	11/09/90	5	IT	GC
H-07b1	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	VANADIUM		0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	02/25/87	2	IT	ME
H-07b1	CULEBRA	VANADIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	VANADIUM		0.1000			0.1000	< 0.01	< 0.01	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	VANADIUM	<	0.5000		<	0.5000	< .05	< .05	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	03/27/86	1	IT	V
H-07b1	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	02/25/87	2	IT	V
H-07b1	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/25/88	3	IT	V
H-07b1	CULEBRA	ZINC		0.0200		NA	0.0000	< 0.005	< 0.005	mg/l	03/27/86	1	IT	ME
H-07b1	CULEBRA	ZINC	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	02/25/87	2	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-07b1	CULEBRA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/25/88	3	IT	ME
H-07b1	CULEBRA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	05/19/89	4	IT	MT
H-07b1	CULEBRA	ZINC	<	0.2000		<	0.2000	< .02	< .02	mg/l	11/09/90	5	IT	MT
H-07b1	CULEBRA	pH		7.5000		NA	0.0000				03/27/86	1	IT	GC
H-07b1	CULEBRA	pH		7.3800			7.3800				02/25/87	2	IT	GC
H-07b1	CULEBRA	pH		6.9500			6.9800				04/25/88	3	IT	GC
H-07b1	CULEBRA	pH		7.0000			7.0000				05/19/89	4	IT	GC
H-07b1	CULEBRA	pH		7.1400			7.1200				11/09/90	5	IT	GC
** H-08b														
H-08b	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	1,1,2-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	1,1-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	1,2,4-TRICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	1,2-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-08b	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	1,2-DICHLOROETHANE		2.5000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	1,2-DICHLOROPROPANE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	1,2-DIPHENYLHYDRAZINE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	1,3-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	1,3-DICHLOROPROPYLENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	1,4-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	2,3,7,8-TETRACHLOROBENZO-P-DIOXIN	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	2,4,5-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	2,4,6-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	2,4-DICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	2,4-DIMETHYLPHENOL	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV

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H-08b	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	2,4-DINITROPHENOL	<	10.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	2,4-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	2,6-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	2-CHLORONAPHTHALENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	2-CHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	2-METHYLNAPHTHALENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	2-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV

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H-08b	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	2-NITROANILINE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	2-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	2-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	3,3'-DICHLOROBENZIDINE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	3,4-BENZOFLUORANTHENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	3-NITROANILINE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	4,6-DINITRO-O-CRESOL	<	10.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	4-CHLOROANILINE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-08b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	4-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	4-NITROANILINE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	4-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	ACENAPHTHENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	ACENAPHTHYLENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	ACETONE	<	20.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	ACETONE	<	10.0000		NA	0.0000		T < 10	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	ACROLEIN	<	10.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	ACRYLONITRILE	<	10.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	01/22/86	1	IT	GC
H-08b	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	02/11/87	2	IT	GC
H-08b	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	06/08/88	3	IT	GC
H-08b	CULEBRA	ALKALINITY (HCO3)		94.0000		NA	0.0000			mg/l	01/22/86	1	IT	GC
H-08b	CULEBRA	ALKALINITY (HCO3)		96.0000			98.0000			mg/l	02/11/87	2	IT	GC
H-08b	CULEBRA	ALKALINITY (HCO3)		95.0000			94.0000			mg/l	06/08/88	3	IT	GC

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H-08b	CULEBRA	ALUMINUM	<	0.0100		<	0.0100	< 0.01	0.02	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	ALUMINUM	<	1.0000		NA	0.0000	< 0.1	< 0.1	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	ALUMINUM	<	0.1000		<	0.1000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	ANILINE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	ANTHRACENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	ANTIMONY	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	ANTIMONY	<	0.2000		NA	0.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	ARSENIC		0.0020		<	0.0010	< 0.001	< 0.001	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	ARSENIC	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	ARSENIC	<	0.0200		NA	0.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	BARIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	BARIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	BARIUM		0.0110			0.0110			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	BENZENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	BENZIDINE	<	4.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	BENZO(A)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	BENZO(A)PYRENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	BENZO(G,H,I)PERYLENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	BENZO(K)FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV

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H-08b	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	BENZOIC ACID	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	BENZYL ALCOHOL	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	BERYLLIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	BERYLLIUM	<	0.0050		<	0.0050			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE		1.1000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	BIS(CHLOROMETHYL)ETHER	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	BORON		0.0600		NA	0.0000	< 0.01	< 0.01	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	BORON		0.5000		NA	0.0000	< 0.01	< 0.01	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	BORON		0.5800			0.5700			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	BROMIDE	<	1.0000		NA	0.0000			mg/l	01/22/86	1	IT	GC
H-08b	CULEBRA	BROMIDE	<	2.0000		NA	0.0000			mg/l	02/11/87	2	IT	GC

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H-08b	CULEBRA	BROMIDE	<	2.0000		<	2.0000			mg/l	06/08/88	3	IT	GC
H-08b	CULEBRA	BROMOFORM	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	BUTYL BENZYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	CADMIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	CADMIUM	<	0.0030		NA	0.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	CALCIUM		540.0000			540.0000	< 0.1	< 0.1	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	CALCIUM		560.0000			560.0000			mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	CALCIUM		610.0000			600.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	CARBON DISULFIDE	<	1.0000		NA	1.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	1.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	CESIUM	<	1.0000		<	1.0000	< 0.10	< 0.10	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	CESIUM		0.2000		NA	0.0000	< 0.1	< 0.1	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	CESIUM	<	0.2400		NA	0.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	CHLORIDE		33.0000			33.0000			mg/l	01/22/86	1	IT	GC
H-08b	CULEBRA	CHLORIDE		36.0000		NA	0.0000			mg/l	02/11/87	2	IT	GC
H-08b	CULEBRA	CHLORIDE		33.0000		NA	0.0000			mg/l	06/08/88	3	IT	GC
H-08b	CULEBRA	CHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	CHLOROETHANE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	V

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H-08b	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	CHLOROFORM	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	CHROMIUM		0.0100			0.0100	< 0.01	< 0.01	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	CHROMIUM	<	0.1000		NA	0.0000	0.02	0.02	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	CHROMIUM		0.0050		NA	0.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	CHRYSENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	COBALT		0.0800			0.0700	< 0.01	< 0.01	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	COBALT	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	COBALT	<	0.0070		NA	0.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	COPPER		0.0200			0.0200	< 0.01	< 0.01	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	COPPER	<	0.1000		NA	0.0000	0.02	0.02	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	COPPER		0.1100		NA	0.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	CYANIDE	<	0.0200		<	0.0200			mg/l	01/22/86	1	IT	GC
H-08b	CULEBRA	CYANIDE		0.1000		NA	0.0000			mg/l	02/11/87	2	IT	GC
H-08b	CULEBRA	CYANIDE	<	0.0100		NA	0.0000			mg/l	06/08/88	3	IT	GC
H-08b	CULEBRA	DI-N-BUTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	DI-N-OCTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-08b	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	DIBENZOFURAN	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	DICHLORODIFLUOROMETHANE	<	10.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	DIETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	DIMETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	ETHYLBENZENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	Eh		456.0000		NA	0.0000			mV	01/22/86	1	IT	GC
H-08b	CULEBRA	FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	FLUORENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	FLUORIDE		2.4000			2.5000			mg/l	01/22/86	1	IT	GC
H-08b	CULEBRA	FLUORIDE		2.4000		NA	0.0000			mg/l	02/11/87	2	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-08b	CULEBRA	FLUORIDE		0.2000		NA	0.0000			mg/l	06/08/88	3	IT	GC
H-08b	CULEBRA	HEXACHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	HEXACHLOROBUTADIENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	HEXACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	IODIDE	<	1.0000		NA	0.0000			mg/l	01/22/86	1	IT	GC
H-08b	CULEBRA	IODIDE	<	2.0000		NA	0.0000			mg/l	02/11/87	2	IT	GC
H-08b	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	06/08/88	3	IT	GC
H-08b	CULEBRA	IRON		0.0500			0.0500	< 0.01	< 0.01	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	IRON	<	0.1000		NA	0.0000	0.01	< 0.01	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	IRON		0.0500			0.0500			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	ISOPHORONE	<	4.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	LEAD		0.0600			0.0600	< 0.01	< 0.01	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	LEAD	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	LEAD	<	0.0300		NA	0.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	LITHIUM		0.1200		NA	0.0000	< 0.01	< 0.01	mg/l	02/11/87	2	IT	ME

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H-08b	CULEBRA	LITHIUM		0.1200		NA	0.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	MAGNESIUM		170.0000			170.0000	< 0.1	< 0.1	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	MAGNESIUM		160.0000			160.0000			mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	MAGNESIUM		170.0000			160.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	MANGANESE	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	MANGANESE	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	MANGANESE	<	0.0050		<	0.0050			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	MERCURY		0.0002			0.0002			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	MOLYBDENUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	MOLYBDENUM		0.0200		NA	0.0000	0.02	0.01	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	MOLYBDENUM		0.0080		NA	0.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	N-NITROSO-DI-METHYLAMINE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	NAPHTHALENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV

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H-08b	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		02/11/87	2	IT	SV
H-08b	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		06/08/88	3	IT	SV
H-08b	CULEBRA	NICKEL		0.0300			0.0300	< 0.01	< 0.01	mg/l		01/22/86	1	IT	ME
H-08b	CULEBRA	NICKEL	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l		02/11/87	2	IT	ME
H-08b	CULEBRA	NICKEL		0.0300		NA	0.0000			mg/l		06/08/88	3	IT	ME
H-08b	CULEBRA	NITRATE		1.4000		NA	0.0000			mg/l	NO3-N	01/22/86	1	IT	GC
H-08b	CULEBRA	NITRATE		1.4000		NA	0.0000			mg/l	NO3-N	02/11/87	2	IT	GC
H-08b	CULEBRA	NITRATE		0.9000		NA	0.0000			mg/l	NO3-N	06/08/88	3	IT	GC
H-08b	CULEBRA	NITROBENZENE	<	1.0000		NA	0.0000			ug/l		01/22/86	1	IT	SV
H-08b	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		02/11/87	2	IT	SV
H-08b	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		06/08/88	3	IT	SV
H-08b	CULEBRA	P-CHLORO-M-CRESOL	<	1.0000		NA	0.0000			ug/l		01/22/86	1	IT	SV
H-08b	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		02/11/87	2	IT	SV
H-08b	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		06/08/88	3	IT	SV
H-08b	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		02/11/87	2	IT	PC
H-08b	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		06/08/88	3	IT	PC
H-08b	CULEBRA	PENTACHLOROPHENOL	<	1.0000		NA	0.0000			ug/l		01/22/86	1	IT	SV
H-08b	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		02/11/87	2	IT	SV
H-08b	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		06/08/88	3	IT	SV
H-08b	CULEBRA	PHENANTHRENE	<	1.0000		NA	0.0000			ug/l		01/22/86	1	IT	SV
H-08b	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		02/11/87	2	IT	SV
H-08b	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		06/08/88	3	IT	SV
H-08b	CULEBRA	PHENOL	<	1.0000		NA	0.0000			ug/l		01/22/86	1	IT	SV
H-08b	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		02/11/87	2	IT	SV
H-08b	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		06/08/88	3	IT	SV
H-08b	CULEBRA	PHENOLICS		0.0120			0.0900			mg/l		01/22/86	1	IT	GC
H-08b	CULEBRA	PHENOLICS	<	0.0500		NA	0.0000			mg/l		02/11/87	2	IT	GC
H-08b	CULEBRA	PHENOLICS		0.1650		NA	0.0000			mg/l		06/08/88	3	IT	GC
H-08b	CULEBRA	PHOSPHATE	<	0.0100		NA	0.0000			mg/l	T-PO4-P	01/22/86	1	IT	GC

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H-08b	CULEBRA	PHOSPHATE	<	0.0100		<	0.0100			mg/l T-PO4-P	02/11/87	2	IT	GC
H-08b	CULEBRA	PHOSPHATE		0.0200		NA	0.0000			mg/l T-PO4-P	06/08/88	3	IT	GC
H-08b	CULEBRA	POTASSIUM		3.7000			3.7000	< 0.01	< 0.01	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	POTASSIUM		4.0000			4.1000			mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	POTASSIUM		4.4000			4.5000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	PYRENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	SV
H-08b	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	SV
H-08b	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l	06/08/88	3	IT	SV
H-08b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		3100.0000			3200.0000			mg/l	01/22/86	1	IT	GC
H-08b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		3100.0000			3100.0000			mg/l	02/11/87	2	IT	GC
H-08b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		2900.0000			2900.0000			mg/l	06/08/88	3	IT	GC
H-08b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		18.0000		NA	0.0000			mg/l	01/22/86	1	IT	GC
H-08b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		12.0000			14.0000			mg/l	02/11/87	2	IT	GC
H-08b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000		<	4.0000			mg/l	06/08/88	3	IT	GC
H-08b	CULEBRA	SELENIUM	<	0.0010		<	0.0010	< 0.01	< 0.01	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	SELENIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	SELENIUM	<	0.0400		NA	0.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	SILICA		26.0000			25.0000	< 0.2	< 0.2	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	SILICA		27.0000		NA	0.0000	< 0.2	< 0.2	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	SILICA		11.0000		NA	0.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	SILVER	<	0.1000		NA	0.0000	0.01	0.01	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	SILVER	<	0.0200		NA	0.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	SODIUM		51.0000			51.0000	< 0.1	< 0.1	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	SODIUM		55.0000			54.0000			mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	SODIUM		55.0000			55.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	SPECIFIC CONDUCTANCE		3270.0000		NA	0.0000			umhos/cm@25C	01/22/86	1	IT	GC
H-08b	CULEBRA	SPECIFIC CONDUCTANCE		3160.0000			3110.0000			umhos/cm@25C	02/11/87	2	IT	GC
H-08b	CULEBRA	SPECIFIC CONDUCTANCE		3150.0000			3140.0000			umhos/cm@25C	06/08/88	3	IT	GC
H-08b	CULEBRA	STRONTIUM		5.9000			5.9000	< 0.01	< 0.01	mg/l	01/22/86	1	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-08b	CULEBRA	STRONTIUM		7.4000		NA	0.0000	< 0.01	< 0.01	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	STRONTIUM		4.1000			4.2000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	STYRENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	SULFATE		1700.0000			1600.0000			mg/l	01/22/86	1	IT	GC
H-08b	CULEBRA	SULFATE		1700.0000		NA	0.0000			mg/l	02/11/87	2	IT	GC
H-08b	CULEBRA	SULFATE		1900.0000		NA	0.0000			mg/l	06/08/88	3	IT	GC
H-08b	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	THALLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	THALLIUM	<	0.0500		NA	0.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	TITANIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	TITANIUM	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	TITANIUM	<	0.0070		NA	0.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	TOLUENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	TOTAL ORGANIC CARBON		14.0000		NA	0.0000			mg/l	01/22/86	1	IT	GC
H-08b	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		NA	0.0000			mg/l	02/11/87	2	IT	GC
H-08b	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	06/08/88	3	IT	GC
H-08b	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		NA	0.0000			mg/l	01/22/86	1	IT	GC
H-08b	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		NA	0.0000			mg/l	02/11/87	2	IT	GC
H-08b	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	06/08/88	3	IT	GC
H-08b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V

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H-08b	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	TRICHLOROFLUOROMETHANE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	VANADIUM		0.0400			0.0400			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	XYLENE	<	1.0000		NA	0.0000			ug/l	01/22/86	1	IT	V
H-08b	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	02/11/87	2	IT	V
H-08b	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/08/88	3	IT	V
H-08b	CULEBRA	ZINC		0.0200			0.0200	< 0.01	< 0.01	mg/l	01/22/86	1	IT	ME
H-08b	CULEBRA	ZINC	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	02/11/87	2	IT	ME
H-08b	CULEBRA	ZINC		0.2400		NA	0.0000			mg/l	06/08/88	3	IT	ME
H-08b	CULEBRA	pH		7.9000		NA	0.0000				01/22/86	1	IT	GC
H-08b	CULEBRA	pH		7.4500			7.4600				02/11/87	2	IT	GC
H-08b	CULEBRA	pH		7.1500			7.1400				06/08/88	3	IT	GC
** H-09b														
H-09b	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V

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H-09b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	1,1,2-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	1,1-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	1,2,4-TRICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	1,2-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	1,2-DICHLOROPROPANE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V

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H-09b	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	1,3-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	1,3-DICHLOROBENZENE		20.0000		NA	0.0000		13 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	1,3-DICHLOROPROPYLENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	1,4-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	2,4,5-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000		< 50 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	2,4,6-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	2,4-DICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	2,4-DIMETHYLPHENOL	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	2,4-DINITROPHENOL	<	10.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV

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H-09b	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000		< 50 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	2,4-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	2,6-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	2-BUTANONE		46.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000	< 10 T	< 10 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	2-CHLORONAPHTHALENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	2-CHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000	< 10 T	< 10 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	2-METHYLNAPHTHALENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-09b	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	2-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	2-NITROANILINE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000		< 50 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	2-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	3,3'-DICHLOROBENZIDINE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000		< 20 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	3,4-BENZOFLUORANTHENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	3-NITROANILINE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000		< 50 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	4,6-DINITRO-O-CRESOL	<	10.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-09b	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000		< 50 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	4-CHLOROANILINE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000	< 10 T	< 10 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	4-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	4-NITROANILINE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000		< 50 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	4-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000		< 50 M	ug/l	01/19/90	4	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-09b	CULEBRA	ACENAPHTHENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	ACENAPHTHYLENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	ACETONE	<	10.0000		NA	0.0000		T < 10	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	ACETONE	<	10.0000		NA	0.0000	< 10 T	< 10 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	ACROLEIN	<	10.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	ACRYLONITRILE	<	10.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	11/14/85	1	IT	GC
H-09b	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	01/28/87	2	IT	GC
H-09b	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	06/21/88	3	IT	GC
H-09b	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	01/19/90	4	IT	GC
H-09b	CULEBRA	ALKALINITY (HCO3)		120.0000			120.0000			mg/l	11/14/85	1	IT	GC
H-09b	CULEBRA	ALKALINITY (HCO3)		120.0000			120.0000			mg/l	01/28/87	2	IT	GC
H-09b	CULEBRA	ALKALINITY (HCO3)		120.0000			120.0000			mg/l	06/21/88	3	IT	GC
H-09b	CULEBRA	ALKALINITY (HCO3)		120.0000			0.0000			mg/l	01/19/90	4	IT	GC
H-09b	CULEBRA	ALUMINUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	ALUMINUM	<	1.0000		NA	0.0000	< 0.1	< 0.1	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	ALUMINUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	ALUMINUM	<	0.2000		<	0.2000	< .2	< .2	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	ANILINE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	ANTHRACENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV

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H-09b	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	ANTIMONY	<	0.5000		NA	0.0000	< 0.5	< 0.05	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	ANTIMONY		0.0800			0.1300	< 0.05	< 0.05	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	ANTIMONY		0.0900			0.1200	< .06	< .06	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	AROCLOR 1016	<	0.5000		NA	0.0000		< .5 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	AROCLOR 1221	<	0.5000		NA	0.0000		< .5 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	AROCLOR 1232	<	0.5000		NA	0.0000		< .5 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	AROCLOR 1242	<	0.5000		NA	0.0000		< .5 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	AROCLOR 1248	<	0.5000		NA	0.0000		< .5 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	AROCLOR 1254	<	1.0000		NA	0.0000		<1.0 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	AROCLOR 1260	<	1.0000		NA	0.0000		<1.0 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	ARSENIC	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	ARSENIC	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	ARSENIC	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	ARSENIC	<	0.0100		NA	0.0000	< .01	< .01	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	BARIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	BARIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	BARIUM	<	0.2000		<	0.2000	< .2	< .2	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	BENZENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	BENZENE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	BENZIDINE	<	4.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	BENZO(A)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV

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H-09b	CULEBRA	BENZO(A)PYRENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	BENZO(B)FLUORANTHENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	BENZO(G,H,I)PERYLENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	BENZO(K)FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	BENZOIC ACID	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000		< 50 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	BENZYL ALCOHOL	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	BERYLLIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	BERYLLIUM	<	0.0050		<	0.0500	< .005	< .005	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-09b	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	BORON	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	BORON		0.7000		NA	0.0000	< 0.01	< 0.01	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	BORON		0.7000			0.7000	< 0.01	< 0.01	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	BORON		0.6000			0.5300	< .02	< .02	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	BROMIDE		1.0000			1.0000			mg/l	11/14/85	1	IT	GC
H-09b	CULEBRA	BROMIDE	<	1.0000		<	1.0000			mg/l	01/28/87	2	IT	GC
H-09b	CULEBRA	BROMIDE	<	2.0000		NA	0.0000			mg/l	06/21/88	3	IT	GC
H-09b	CULEBRA	BROMIDE	<	2.0000		<	2.0000			mg/l	01/19/90	4	IT	GC
H-09b	CULEBRA	BROMOFORM	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	BUTYL BENZYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	CADMIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	01/28/87	2	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-09b	CULEBRA	CADMIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	CADMIUM		0.0090			0.0140	< .005	< .005	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	CALCIUM		560.0000			560.0000	< 0.1	< 0.1	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	CALCIUM		630.0000			630.0000			mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	CALCIUM		690.0000			600.0000			mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	CALCIUM		650.0000			580.0000			mg/l	01/19/90	4	IT	MC
H-09b	CULEBRA	CARBON DISULFIDE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	CESIUM		0.2000			0.2000	0.1	0.2	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	CESIUM	<	0.1000		NA	0.0000	< 0.1	< 0.1	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	CESIUM		0.0300			0.0300	< 0.01	< 0.01	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	CESIUM	<	0.2000		<	0.2000	< .2	< .2	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	CHLORIDE		200.0000		NA	0.0000			mg/l	11/14/85	1	IT	GC
H-09b	CULEBRA	CHLORIDE		190.0000			190.0000			mg/l	01/28/87	2	IT	GC
H-09b	CULEBRA	CHLORIDE		180.0000		NA	0.0000			mg/l	06/21/88	3	IT	GC
H-09b	CULEBRA	CHLORIDE		160.0000			160.0000			mg/l	01/19/90	4	IT	GC
H-09b	CULEBRA	CHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	CHLOROETHANE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	06/21/88	3	IT	V

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H-09b	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000	< 10 T	< 10 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	CHLOROFORM	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	CHROMIUM		0.0400			0.0600	< 0.01	< 0.01	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	CHROMIUM	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	CHROMIUM		0.0400			0.0400	< 0.01	< 0.01	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	CHROMIUM		0.0200			0.0400	< .01	< .01	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	CHRYSENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	COBALT		0.1100			0.1200	< 0.01	< 0.01	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	COBALT	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	COBALT	<	0.0100			0.0200	< 0.01	< 0.01	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	COBALT	<	0.0500		<	0.0500	< .05	< .05	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	COPPER		0.0300			0.0300	0.02	0.01	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	COPPER	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	COPPER	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	COPPER	<	0.0250		<	0.0250	< .025	< .025	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	CYANIDE	<	0.0200		<	0.0200			mg/l	11/14/85	1	IT	GC
H-09b	CULEBRA	CYANIDE		0.2400		NA	0.0000			mg/l	01/28/87	2	IT	GC
H-09b	CULEBRA	CYANIDE	<	0.0100		NA	0.0000			mg/l	06/21/88	3	IT	GC
H-09b	CULEBRA	CYANIDE	<	0.0100		NA	0.0000			mg/l	01/19/90	4	IT	GC
H-09b	CULEBRA	DI-N-BUTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV

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H-09b	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	DI-N-OCTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	DIBENZOFURAN	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	DIETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	DIMETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV

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H-09b	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	ETHYLBENZENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	Eh		452.0000		NA	0.0000			mV	11/14/85	1	IT	GC
H-09b	CULEBRA	FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	FLUORENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	FLUORENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	FLUORIDE		2.6000		NA	0.0000			mg/l	11/14/85	1	IT	GC
H-09b	CULEBRA	FLUORIDE		3.2000		NA	0.0000			mg/l	01/28/87	2	IT	GC
H-09b	CULEBRA	FLUORIDE		3.1000		NA	0.0000			mg/l	06/21/88	3	IT	GC
H-09b	CULEBRA	FLUORIDE		3.5000		NA	0.0000			mg/l	01/19/90	4	IT	GC
H-09b	CULEBRA	FREON-113	<	50.0000		NA	0.0000	< 50 T	< 50 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	HEXACHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	HEXACHLOROBUTADIENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-09b	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	HEXACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	IODIDE	<	1.0000		NA	0.0000			mg/l	11/14/85	1	IT	GC
H-09b	CULEBRA	IODIDE	<	1.0000		<	1.0000			mg/l	01/28/87	2	IT	GC
H-09b	CULEBRA	IODIDE	<	2.0000		NA	0.0000			mg/l	06/21/88	3	IT	GC
H-09b	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	01/19/90	4	IT	GC
H-09b	CULEBRA	IRON	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	IRON	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	IRON		0.1200			0.1000	< 0.01	< 0.01	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	IRON	<	0.1000		<	0.1000	< .1	< .1	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	ISOPHORONE	<	4.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	LEAD		0.1200			0.1300	< 0.01	< 0.01	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	LEAD	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	LEAD	<	0.0500			0.0600	< 0.05	< 0.05	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	LEAD		0.0600			0.1100	< .05	< .05	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	LITHIUM		0.1700		NA	0.0000	< 0.01	< 0.01	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	LITHIUM		0.2000			0.1900	< 0.01	< 0.01	mg/l	06/21/88	3	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-09b	CULEBRA	LITHIUM		0.2000			0.2000	< .01	< .01	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	MAGNESIUM		140.0000			140.0000	< 0.1	< 0.1	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	MAGNESIUM		150.0000			150.0000			mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	MAGNESIUM		140.0000			120.0000			mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	MAGNESIUM		160.0000			130.0000			mg/l	01/19/90	4	IT	MC
H-09b	CULEBRA	MANGANESE		0.0600			0.0600	0.03	0.03	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	MANGANESE	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	MANGANESE		0.0180			0.0190	< 0.005	< 0.005	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	MANGANESE		0.2100			0.0330	< .015	< .015	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	MERCURY		0.0041		NA	0.0000	0.0003	< 0.0002	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	MERCURY		0.0002		<	0.0002	0.0002	< 0.0002	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	MERCURY	<	0.0002		<	0.0002	< .0002	< .0002	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000	< 10 T	< 10 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000	< 10 T	< 10 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000		T 5.8	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	METHYLENE CHLORIDE	<	6.0000		NA	0.0000	15 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	MOLYBDENUM		0.0400			0.0200	< 0.01	< 0.01	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	MOLYBDENUM		0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	MOLYBDENUM		0.0500			0.0500	< 0.01	< 0.01	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	MOLYBDENUM		0.0500			0.0500	< .02	< .02	mg/l	01/19/90	4	IT	MT

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-09b	CULEBRA	N-NITROSO-DI-METHYLAMINE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	NAPHTHALENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	NICKEL		0.1300			0.1200	< 0.01	< 0.01	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	NICKEL	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	NICKEL	<	0.0300			0.0300	< 0.03	< 0.03	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	NICKEL	<	0.0400		<	0.0400	< .04	< .04	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	NITRATE		0.2000		NA	0.0000			mg/l NO3-N	11/14/85	1	IT	GC
H-09b	CULEBRA	NITRATE		0.5000			0.4000			mg/l NO3-N	01/28/87	2	IT	GC
H-09b	CULEBRA	NITRATE		0.1100			0.1200			mg/l NO3-N	06/21/88	3	IT	GC
H-09b	CULEBRA	NITRATE		0.1100			0.1100			mg/l	01/19/90	4	IT	GC
H-09b	CULEBRA	NITROBENZENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	P-CHLORO-M-CRESOL	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	SV
H-09b	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	SV
H-09b	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l	06/21/88	3	IT	SV
H-09b	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS		DATE	RND	LAB	C
H-09b	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		01/28/87	2	IT	PC
H-09b	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		06/21/88	3	IT	PC
H-09b	CULEBRA	PENTACHLOROPHENOL	<	1.0000		NA	0.0000			ug/l		11/14/85	1	IT	SV
H-09b	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		01/28/87	2	IT	SV
H-09b	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		06/21/88	3	IT	SV
H-09b	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000		< 50 M	ug/l		01/19/90	4	IT	SV
H-09b	CULEBRA	PHENANTHRENE	<	1.0000		NA	0.0000			ug/l		11/14/85	1	IT	SV
H-09b	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		01/28/87	2	IT	SV
H-09b	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		06/21/88	3	IT	SV
H-09b	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000		< 10 M	ug/l		01/19/90	4	IT	SV
H-09b	CULEBRA	PHENOL	<	1.0000		NA	0.0000			ug/l		11/14/85	1	IT	SV
H-09b	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		01/28/87	2	IT	SV
H-09b	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		06/21/88	3	IT	SV
H-09b	CULEBRA	PHENOL	<	10.0000		NA	0.0000		< 10 M	ug/l		01/19/90	4	IT	SV
H-09b	CULEBRA	PHENOLICS		0.0160		NA	0.0000			mg/l		11/14/85	1	IT	GC
H-09b	CULEBRA	PHENOLICS	<	0.0500		NA	0.0000			mg/l		01/28/87	2	IT	GC
H-09b	CULEBRA	PHENOLICS	<	0.0100		NA	0.0000			mg/l		06/21/88	3	IT	GC
H-09b	CULEBRA	PHENOLICS		0.0060		NA	0.0000			mg/l		01/19/90	4	IT	GC
H-09b	CULEBRA	PHOSPHATE		0.0200		NA	0.0000			mg/l	T-PO4-P	11/14/85	1	IT	GC
H-09b	CULEBRA	PHOSPHATE		0.0100		<	0.0100			mg/l	T-PO4-P	01/28/87	2	IT	GC
H-09b	CULEBRA	PHOSPHATE		0.0200			0.0300			mg/l	T-PO4-P	06/21/88	3	IT	GC
H-09b	CULEBRA	PHOSPHORUS	<	0.0100		<	0.0100			mg/l		01/19/90	4	IT	GC
H-09b	CULEBRA	POTASSIUM		7.7000			7.4000	< 0.01	< 0.01	mg/l		11/14/85	1	IT	ME
H-09b	CULEBRA	POTASSIUM		7.0000			7.0000			mg/l		01/28/87	2	IT	ME
H-09b	CULEBRA	POTASSIUM		8.2000			7.9000			mg/l		06/21/88	3	IT	ME
H-09b	CULEBRA	POTASSIUM		8.3000			8.2000			mg/l		01/19/90	4	IT	MC
H-09b	CULEBRA	PYRENE	<	1.0000		NA	0.0000			ug/l		11/14/85	1	IT	SV
H-09b	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l		01/28/87	2	IT	SV
H-09b	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l		06/21/88	3	IT	SV

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H-09b	CULEBRA	PYRENE	<	10.0000		NA	0.0000		< 10 M	ug/l	01/19/90	4	IT	SV
H-09b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		3300.0000			3300.0000			mg/l	11/14/85	1	IT	GC
H-09b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		3300.0000			3300.0000			mg/l	01/28/87	2	IT	GC
H-09b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		3100.0000			3100.0000			mg/l	06/21/88	3	IT	GC
H-09b	CULEBRA	RESIDUE, FILTERABLE @ 180 C		3300.0000			3300.0000			mg/l	01/19/90	4	IT	GC
H-09b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		9.0000		NA	0.0000			mg/l	11/14/85	1	IT	GC
H-09b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		10.0000			6.0000			mg/l	01/28/87	2	IT	GC
H-09b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000		<	4.0000			mg/l	06/21/88	3	IT	GC
H-09b	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000		<	4.0000			mg/l	01/19/90	4	IT	GC
H-09b	CULEBRA	SELENIUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	SELENIUM		0.0120		NA	0.0000	< 0.005	< 0.005	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	SELENIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	SELENIUM	<	0.0500		NA	0.0000	< .005	< .005	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	SILICA		18.0000			19.0000	0.23	2.6	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	SILICA		30.0000		NA	0.0000	< 0.2	< 0.2	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	SILICA		12.0000			13.0000			mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	SILICA		12.0000			12.0000			mg/l	01/19/90	4	IT	GC
H-09b	CULEBRA	SILVER	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	SILVER	<	0.0100			0.0100	< 0.01	< 0.01	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	SILVER		0.0200			0.0300	< .01	< .01	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	SODIUM		150.0000			150.0000	< 0.1	< 0.1	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	SODIUM		150.0000			160.0000			mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	SODIUM		140.0000			140.0000			mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	SODIUM		100.0000			100.0000			mg/l	01/19/90	4	IT	MC
H-09b	CULEBRA	SODIUM		100.0000			100.0000			mg/l	01/19/90	4	IT	MC
H-09b	CULEBRA	SPECIFIC CONDUCTANCE		3860.0000		NA	0.0000			umhos/cm@25C	11/14/85	1	IT	GC
H-09b	CULEBRA	SPECIFIC CONDUCTANCE		4900.0000		NA	0.0000			umhos/cm@25C	01/28/87	2	IT	GC
H-09b	CULEBRA	SPECIFIC CONDUCTANCE		3420.0000			3460.0000			umhos/cm@25C	06/21/88	3	IT	GC
H-09b	CULEBRA	SPECIFIC CONDUCTANCE		3590.0000			3590.0000			umhos/cm@25C	01/19/90	4	IT	GC

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H-09b	CULEBRA	STRONTIUM		7.2000			6.9000	< 0.01	< 0.01	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	STRONTIUM		7.2000		NA	0.0000	< 0.01	< 0.01	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	STRONTIUM		8.0000			8.1000	< 0.01	< 0.01	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	STRONTIUM		7.5000			6.4000	< .01	< .01	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	STYRENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	STYRENE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	SULFATE		1600.0000			1300.0000			mg/l	11/14/85	1	IT	GC
H-09b	CULEBRA	SULFATE		1700.0000		NA	0.0000			mg/l	01/28/87	2	IT	GC
H-09b	CULEBRA	SULFATE		1600.0000		NA	0.0000			mg/l	06/21/88	3	IT	GC
H-09b	CULEBRA	SULFATE		1800.0000			1900.0000			mg/l	01/19/90	4	IT	GC
H-09b	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	THALLIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	THALLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	THALLIUM	<	10.0000		NA	0.0000	< .01	< .01	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	TITANIUM		0.0600			0.0600	< 0.01	0.04	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	TITANIUM	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	TITANIUM		0.1300			0.1100	0.01	0.01	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	TITANIUM		0.0100		<	0.0100	< .01	< .01	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	TOLUENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	TOLUENE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	TOTAL ORGANIC CARBON		2.0000		NA	0.0000			mg/l	11/14/85	1	IT	GC
H-09b	CULEBRA	TOTAL ORGANIC CARBON		3.0000		NA	0.0000			mg/l	01/28/87	2	IT	GC

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H-09b	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	06/21/88	3	IT	GC
H-09b	CULEBRA	TOTAL ORGANIC CARBON		1.0000		<	1.0000			mg/l	01/19/90	4	IT	GC
H-09b	CULEBRA	TOTAL ORGANIC HALOGEN		0.2200		NA	0.0000			mg/l	11/14/85	1	IT	GC
H-09b	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		NA	0.0000			mg/l	01/28/87	2	IT	GC
H-09b	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	06/21/88	3	IT	GC
H-09b	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	01/19/90	4	IT	GC
H-09b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	VANADIUM		0.0300			0.0500	< 0.01	< 0.01	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	VANADIUM	<	0.0500		<	0.0500	< .05	< .05	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000	< 10 T	< 10 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	01/28/87	2	IT	V
H-09b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000	< 10 T	< 10 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	XYLENE	<	1.0000		NA	0.0000			ug/l	11/14/85	1	IT	V
H-09b	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	01/28/87	2	IT	V

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H-09b	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/21/88	3	IT	V
H-09b	CULEBRA	XYLENE	<	5.0000		NA	0.0000	< 5 T	< 5 M	ug/l	01/19/90	4	IT	V
H-09b	CULEBRA	ZINC		0.0200			0.0200	< 0.01	< 0.01	mg/l	11/14/85	1	IT	ME
H-09b	CULEBRA	ZINC	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	01/28/87	2	IT	ME
H-09b	CULEBRA	ZINC	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	06/21/88	3	IT	ME
H-09b	CULEBRA	ZINC	<	0.0200		<	0.0200	< .02	< .02	mg/l	01/19/90	4	IT	MT
H-09b	CULEBRA	pH		7.5000			7.9800				11/14/85	1	IT	GC
H-09b	CULEBRA	pH		7.4400			7.4600				01/28/87	2	IT	GC
H-09b	CULEBRA	pH		7.0300			7.0800				06/21/88	3	IT	GC
H-09b	CULEBRA	pH		7.4100			7.4200				01/19/90	4	IT	GC
** H-11b3														
H-11b3	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	1,1,2-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	1,1-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	1,2,4-TRICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV

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H-11b3	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	1,2-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	1,2-DICHLOROPROPANE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	1,2-DIPHENYLHYDRAZINE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	1,3-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	1,3-DICHLOROPROPYLENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	1,4-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	2,3,7,8-TETRACHLOROBENZO-P-DIO XIN	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	2,4,5-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	2,4,6-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	2,4-DICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV

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H-11b3	CULEBRA	2,4-DIMETHYLPHENOL	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	2,4-DINITROPHENOL	<	10.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	2,4-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	2,6-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	2-CHLORONAPHTHALENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	2-CHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	2-METHYLNAPHTHALENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV

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H-11b3	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	2-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	2-NITROANILINE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	2-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	3,3'-DICHLOROBENZIDINE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	3,4-BENZOFLUORANTHENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	3-NITROANILINE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	4,6-DINITRO-O-CRESOL	<	10.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	4-CHLOROANILINE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-11b3	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	4-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	4-NITROANILINE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	4-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	4-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	ACENAPHTHENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	ACENAPHTHYLENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	ACETONE		16.0000		NA	0.0000		T 19	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	ACROLEIN	<	10.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	ACRYLONITRILE	<	10.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	06/04/86	2	IT	GC
H-11b3	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	09/15/87	3	IT	GC
H-11b3	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	10/25/89	4	IT	GC
H-11b3	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	10/17/90	5	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-11b3	CULEBRA	ALKALINITY (HCO3)		52.0000			54.0000			mg/l	06/04/86	2	IT	GC
H-11b3	CULEBRA	ALKALINITY (HCO3)		52.0000		NA	0.0000			mg/l	09/15/87	3	IT	GC
H-11b3	CULEBRA	ALKALINITY (HCO3)		54.0000		NA	0.0000			mg/l	10/25/89	4	IT	GC
H-11b3	CULEBRA	ALKALINITY (HCO3)		44.0000			0.0000			mg/l	10/17/90	5	IT	GC
H-11b3	CULEBRA	ALUMINUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	06/04/85	1	IT	ME
H-11b3	CULEBRA	ALUMINUM	<	1.0000		NA	0.0000	< 0.1	< 0.1	mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	ALUMINUM	<	2.0000		<	2.0000	< 0.2	< 0.2	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	ALUMINUM	<	2.0000		<	2.0000			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	ANILINE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	ANTHRACENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	ANTIMONY		0.9000			0.9000	< 0.05	< 0.05	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	ANTIMONY	<	0.6000		<	0.6000	< 0.06	< 0.06	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	ANTIMONY	<	0.6000		<	0.6000			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	ARSENIC		0.1500			0.1500	< 0.01	< 0.01	mg/l	06/04/85	1	IT	ME
H-11b3	CULEBRA	ARSENIC		0.0400			0.0400	< 0.001	< 0.001	mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	ARSENIC	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	ARSENIC	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	ARSENIC	<	0.1000		NA	0.0000			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	BARIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	06/04/85	1	IT	ME
H-11b3	CULEBRA	BARIUM		0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	BARIUM	<	2.0000		<	2.0000	< 0.2	< 0.2	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	BARIUM	<	2.0000		<	2.0000			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	BENZENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V

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H-11b3	CULEBRA	BENZIDINE	<	4.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	BENZO(A)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	BENZO(A)PYRENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	BENZO(G,H,I)PERYLENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	BENZO(K)FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	BENZOIC ACID	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	BENZYL ALCOHOL	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	BERYLLIUM		0.0010			0.0010	0.001	0.001	mg/l	06/04/85	1	IT	ME
H-11b3	CULEBRA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV

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H-11b3	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE		97.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE		12.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	BIS(CHLOROMETHYL)ETHER	<	4.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	BORON		13.0000		NA	0.0000	< 0.10	< 0.10	mg/l	06/04/85	1	IT	ME
H-11b3	CULEBRA	BORON		30.0000		NA	0.0000	0.03	0.03	mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	BORON		30.0000			30.0000	< 0.01	< 0.01	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	BORON		30.0000			30.0000	< 0.02	< 0.02	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	BORON		31.0000			31.0000			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	BROMIDE		100.0000			100.0000			mg/l	06/04/85	1	IT	GC
H-11b3	CULEBRA	BROMIDE		48.0000		NA	0.0000			mg/l	06/04/86	2	IT	GC
H-11b3	CULEBRA	BROMIDE		52.0000		NA	0.0000			mg/l	09/15/87	3	IT	GC
H-11b3	CULEBRA	BROMIDE		21.0000			17.0000			mg/l	10/25/89	4	IT	GC
H-11b3	CULEBRA	BROMIDE		51.0000		NA	0.0000			mg/l	10/17/90	5	IT	GC
H-11b3	CULEBRA	BROMOFORM	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	BUTYL BENZYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	CADMIUM		0.0500			0.0600	< 0.005	< 0.005	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	CADMIUM		0.0900			0.0900	< 0.005	0.006	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	CADMIUM		0.0600			0.0600			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	CALCIUM		1400.0000		NA	0.0000			mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	CALCIUM		1370.0000			1350.0000			mg/l	09/15/87	3	IT	ME

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H-11b3	CULEBRA	CALCIUM		1500.0000			1500.0000			mg/l	10/25/89	4	IT	MC
H-11b3	CULEBRA	CALCIUM		1500.0000			1500.0000			mg/l	10/17/90	5	IT	MC
H-11b3	CULEBRA	CARBON DISULFIDE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	CESIUM		0.3000			0.2800	0.03	0.04	mg/l	06/04/85	1	IT	ME
H-11b3	CULEBRA	CESIUM		0.5000		NA	0.0000	0.2	0.2	mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	CESIUM		0.5600			0.5300	< 0.01	< 0.01	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	CESIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	CESIUM	<	0.1000		<	0.1000			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	CHLORIDE		65000.0000			65000.0000			mg/l	06/04/86	2	IT	GC
H-11b3	CULEBRA	CHLORIDE		63000.0000			64000.0000			mg/l	09/15/87	3	IT	GC
H-11b3	CULEBRA	CHLORIDE		73400.0000		NA	0.0000			mg/l	10/25/89	4	IT	GC
H-11b3	CULEBRA	CHLORIDE		56000.0000			56000.0000			mg/l	10/17/90	5	IT	GC
H-11b3	CULEBRA	CHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	CHLOROETHANE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	CHLOROFORM	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	CHROMIUM	<	0.0010		<	0.0010	< 0.001	< 0.001	mg/l	06/04/85	1	IT	ME
H-11b3	CULEBRA	CHROMIUM		0.3200		NA	0.0000	< 0.01	< 0.01	mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	CHROMIUM		0.3000			0.4000	< 0.01	< 0.01	mg/l	09/15/87	3	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-11b3	CULEBRA	CHROMIUM		0.4000			0.4000	0.02	0.04	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	CHROMIUM		0.4000			0.4000			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	CHRYSENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	COBALT		0.0300		NA	0.0000	< 0.01	< 0.01	mg/l	06/04/85	1	IT	ME
H-11b3	CULEBRA	COBALT	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	COBALT	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	COBALT	<	0.5000		<	0.5000			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	COPPER		0.2600			0.2500	< 0.01	< 0.01	mg/l	06/04/85	1	IT	ME
H-11b3	CULEBRA	COPPER		0.1600		NA	0.0000	< 0.01	0.01	mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	COPPER		0.1000			0.1000	< 0.01	< 0.01	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	COPPER	<	0.2500		<	0.2500	< 0.025	< 0.025	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	COPPER	<	0.2500		<	0.2500			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	CYANIDE		0.1500		NA	0.0000			mg/l	06/04/85	1	IT	GC
H-11b3	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	06/04/86	2	IT	GC
H-11b3	CULEBRA	CYANIDE	<	0.0400		NA	0.0000			mg/l	09/15/87	3	IT	GC
H-11b3	CULEBRA	CYANIDE	<	0.0100		NA	0.0000			mg/l	10/25/89	4	IT	GC
H-11b3	CULEBRA	CYANIDE	<	0.0100			0.0000			mg/l	10/17/90	5	IT	GC
H-11b3	CULEBRA	DI-N-BUTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	DI-N-OCTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV

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H-11b3	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	DICHLORODIFLUOROMETHANE	<	10.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	DIETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	DIMETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	ETHYLBENZENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	Eh		501.0000		NA	0.0000			mV	06/04/85	1	IT	GC
H-11b3	CULEBRA	FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	FLUORENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	FLUORIDE		1.0000			1.0000			mg/l	06/04/85	1	IT	GC

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H-11b3	CULEBRA	FLUORIDE		1.2000			1.2000			mg/l	06/04/86	2	IT	GC
H-11b3	CULEBRA	FLUORIDE		1.0000		NA	0.0000			mg/l	09/15/87	3	IT	GC
H-11b3	CULEBRA	FLUORIDE		1.1000			1.2000			mg/l	10/25/89	4	IT	GC
H-11b3	CULEBRA	FLUORIDE		1.1000			0.0000			mg/l	10/17/90	5	IT	GC
H-11b3	CULEBRA	HEXACHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	HEXACHLOROBUTADIENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	HEXACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	IODIDE		1.1000		NA	0.0000			mg/l	06/04/85	1	IT	GC
H-11b3	CULEBRA	IODIDE		0.4800		NA	0.0000			mg/l	06/04/86	2	IT	GC
H-11b3	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	09/15/87	3	IT	GC
H-11b3	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	10/25/89	4	IT	GC
H-11b3	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	10/17/90	5	IT	GC
H-11b3	CULEBRA	IRON		0.7100			0.6100	< 0.01	< 0.01	mg/l	06/04/85	1	IT	ME
H-11b3	CULEBRA	IRON	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	IRON		0.3000			0.3000	< 0.01	< 0.01	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	IRON	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	IRON	<	1.0000		<	1.0000			mg/l	10/17/90	5	IT	MT

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H-11b3	CULEBRA	ISOPHORONE	<	4.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	LEAD		0.1900		NA	0.0000	< 0.01	< 0.01	mg/l	06/04/85	1	IT	ME
H-11b3	CULEBRA	LEAD		0.5200		NA	0.0000	< 0.05	< 0.05	mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	LEAD		0.5000			0.5000	< 0.05	0.06	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	LEAD		0.6000			0.6000			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	LITHIUM		9.5000			9.5000	< 0.01	< 0.01	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	LITHIUM		0.6000			0.6000	< 0.01	< 0.01	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	LITHIUM		0.5000			0.5000			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	MAGNESIUM		1100.0000		NA	0.0000			mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	MAGNESIUM		1080.0000			1070.0000			mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	MAGNESIUM		1200.0000			1200.0000			mg/l	10/25/89	4	IT	MC
H-11b3	CULEBRA	MAGNESIUM		1100.0000			1100.0000			mg/l	10/17/90	5	IT	MC
H-11b3	CULEBRA	MANGANESE		0.3900			0.3900	< 0.01	< 0.01	mg/l	06/04/85	1	IT	ME
H-11b3	CULEBRA	MANGANESE		0.2200		NA	0.0000	< 0.005	< 0.005	mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	MANGANESE		0.2300			0.2300	< 0.005	< 0.005	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	MANGANESE		0.2300			0.2300	< 0.015	< 0.015	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	MANGANESE		0.2200			0.2300			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	06/04/85	1	IT	ME
H-11b3	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	MERCURY	<	0.0004		<	0.0004	< 0.0002	< 0.0002	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	MERCURY	<	0.0002		<	0.0002			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	06/04/85	1	IT	V

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H-11b3	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l		06/04/86	2	IT	V
H-11b3	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l		09/15/87	3	IT	V
H-11b3	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l		06/04/85	1	IT	V
H-11b3	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l		06/04/86	2	IT	V
H-11b3	CULEBRA	METHYLENE CHLORIDE		8.0000		NA	0.0000		T < 5.0	ug/l		09/15/87	3	IT	V
H-11b3	CULEBRA	MOLYBDENUM		0.0320		NA	0.0000	< 0.001	< 0.001	mg/l		06/04/85	1	IT	ME
H-11b3	CULEBRA	MOLYBDENUM		0.2500		NA	0.0000	< 0.01	0.01	mg/l		06/04/86	2	IT	ME
H-11b3	CULEBRA	MOLYBDENUM		0.2600			0.2600	< 0.01	< 0.01	mg/l		09/15/87	3	IT	ME
H-11b3	CULEBRA	MOLYBDENUM		0.2000			0.2000	< 0.02	< 0.02	mg/l		10/25/89	4	IT	MT
H-11b3	CULEBRA	MOLYBDENUM		0.3000			0.3000			mg/l		10/17/90	5	IT	MT
H-11b3	CULEBRA	N-NITROSO-DI-METHYLAMINE	<	1.0000		NA	0.0000			ug/l		06/04/85	1	IT	SV
H-11b3	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		06/04/86	2	IT	SV
H-11b3	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		09/15/87	3	IT	SV
H-11b3	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	1.0000		NA	0.0000			ug/l		06/04/85	1	IT	SV
H-11b3	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		06/04/86	2	IT	SV
H-11b3	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		09/15/87	3	IT	SV
H-11b3	CULEBRA	NAPHTHALENE	<	1.0000		NA	0.0000			ug/l		06/04/85	1	IT	SV
H-11b3	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		06/04/86	2	IT	SV
H-11b3	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		09/15/87	3	IT	SV
H-11b3	CULEBRA	NICKEL		1.1000			1.1000	< 0.01	< 0.01	mg/l		06/04/85	1	IT	ME
H-11b3	CULEBRA	NICKEL	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l		06/04/86	2	IT	ME
H-11b3	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		09/15/87	3	IT	ME
H-11b3	CULEBRA	NICKEL	<	0.4000		<	0.4000	< 0.04	< 0.04	mg/l		10/25/89	4	IT	MT
H-11b3	CULEBRA	NICKEL	<	0.4000		<	0.4000			mg/l		10/17/90	5	IT	MT
H-11b3	CULEBRA	NITRATE	<	0.1000		<	0.1000			mg/l	NO3-N	06/04/85	1	IT	GC
H-11b3	CULEBRA	NITRATE	<	0.1000		<	0.1000			mg/l	NO3-N	06/04/86	2	IT	GC
H-11b3	CULEBRA	NITRATE	<	0.3000		NA	0.0000			mg/l	NO3-N	09/15/87	3	IT	GC
H-11b3	CULEBRA	NITRATE	<	0.0200		NA	0.0000			mg/l		10/25/89	4	IT	GC
H-11b3	CULEBRA	NITRATE	<	0.0200			0.0000			mg/l		10/17/90	5	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID	BLANK	WATER	BLANK	UNITS		DATE	RND	LAB	C
H-11b3	CULEBRA	NITROBENZENE	<	1.0000		NA	0.0000					ug/l		06/04/85	1	IT	SV
H-11b3	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000					ug/l		06/04/86	2	IT	SV
H-11b3	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000					ug/l		09/15/87	3	IT	SV
H-11b3	CULEBRA	P-CHLORO-M-CRESOL	<	1.0000		NA	0.0000					ug/l		06/04/85	1	IT	SV
H-11b3	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000					ug/l		06/04/86	2	IT	SV
H-11b3	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000					ug/l		09/15/87	3	IT	SV
H-11b3	CULEBRA	PCB	<	1.0000		NA	0.0000					ug/l		06/04/86	2	IT	PC
H-11b3	CULEBRA	PCB	<	1.0000		NA	0.0000					ug/l		09/15/87	3	IT	PC
H-11b3	CULEBRA	PENTACHLOROPHENOL	<	1.0000		NA	0.0000					ug/l		06/04/85	1	IT	SV
H-11b3	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000					ug/l		06/04/86	2	IT	SV
H-11b3	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000					ug/l		09/15/87	3	IT	SV
H-11b3	CULEBRA	PHENANTHRENE	<	1.0000		NA	0.0000					ug/l		06/04/85	1	IT	SV
H-11b3	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000					ug/l		06/04/86	2	IT	SV
H-11b3	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000					ug/l		09/15/87	3	IT	SV
H-11b3	CULEBRA	PHENOL	<	1.0000		NA	0.0000					ug/l		06/04/85	1	IT	SV
H-11b3	CULEBRA	PHENOL	<	10.0000		NA	0.0000					ug/l		09/15/87	3	IT	SV
H-11b3	CULEBRA	PHENOLICS		0.0090		NA	0.0000					mg/l		06/04/85	1	IT	GC
H-11b3	CULEBRA	PHENOLICS	<	0.0020			0.0060					mg/l		06/04/86	2	IT	GC
H-11b3	CULEBRA	PHENOLICS		0.0200		NA	0.0000					mg/l		09/15/87	3	IT	GC
H-11b3	CULEBRA	PHENOLICS		0.0100		NA	0.0000					mg/l		10/25/89	4	IT	GC
H-11b3	CULEBRA	PHENOLICS	<	0.0050			0.0000					mg/l		10/17/90	5	IT	GC
H-11b3	CULEBRA	PHOSPHATE		0.0200		NA	0.0000					mg/l	T-PO4-P	06/04/85	1	IT	GC
H-11b3	CULEBRA	PHOSPHATE	<	0.0100		<	0.0100					mg/l	T-PO4-P	06/04/86	2	IT	GC
H-11b3	CULEBRA	PHOSPHATE		0.0100		NA	0.0000					mg/l	T-PO4-P	09/15/87	3	IT	GC
H-11b3	CULEBRA	PHOSPHORUS		0.0400		NA	0.0000					mg/l		10/25/89	4	IT	GC
H-11b3	CULEBRA	PHOSPHORUS	<	0.0100			0.0000					mg/l		10/17/90	5	IT	GC
H-11b3	CULEBRA	POTASSIUM		720.0000		NA	0.0000					mg/l		06/04/86	2	IT	ME
H-11b3	CULEBRA	POTASSIUM		980.0000			990.0000					mg/l		09/15/87	3	IT	ME
H-11b3	CULEBRA	POTASSIUM		780.0000			800.0000					mg/l		10/25/89	4	IT	MC

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H-11b3	CULEBRA	POTASSIUM		680.0000			670.0000			mg/l	10/17/90	5	IT	MC
H-11b3	CULEBRA	PYRENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	SV
H-11b3	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	SV
H-11b3	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l	09/15/87	3	IT	SV
H-11b3	CULEBRA	RESIDUE, FILTERABLE @ 180 C		122000.0000		NA	0.0000			mg/l	06/04/85	1	IT	GC
H-11b3	CULEBRA	RESIDUE, FILTERABLE @ 180 C		121000.0000			121000.0000			mg/l	06/04/86	2	IT	GC
H-11b3	CULEBRA	RESIDUE, FILTERABLE @ 180 C		120000.0000		NA	0.0000			mg/l	09/15/87	3	IT	GC
H-11b3	CULEBRA	RESIDUE, FILTERABLE @ 180 C		116000.0000			116000.0000			mg/l	10/25/89	4	IT	GC
H-11b3	CULEBRA	RESIDUE, FILTERABLE @ 180 C		113000.0000			0.0000			mg/l	10/17/90	5	IT	GC
H-11b3	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		220.0000		NA	0.0000			mg/l	06/04/85	1	IT	GC
H-11b3	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		170.0000			170.0000			mg/l	06/04/86	2	IT	GC
H-11b3	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		130.0000			110.0000			mg/l	09/15/87	3	IT	GC
H-11b3	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		40.0000			39.0000			mg/l	10/25/89	4	IT	GC
H-11b3	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		640.0000			0.0000			mg/l	10/17/90	5	IT	GC
H-11b3	CULEBRA	SELENIUM	<	0.0010		<	0.0010	< 0.001	< 0.001	mg/l	06/04/85	1	IT	ME
H-11b3	CULEBRA	SELENIUM	<	0.1000		<	0.1000	0.001	0.001	mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	SELENIUM	<	5.0000		<	5.0000	< 0.005	< 0.005	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	SELENIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	SELENIUM	<	0.0500		NA	0.0000			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	SILICA		15.0000			15.0000	< 0.2	0.51	mg/l	06/04/85	1	IT	ME
H-11b3	CULEBRA	SILICA		150.0000		NA	0.0000	0.45	0.47	mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	SILICA		12.0000			12.0000	< 0.2	< 0.2	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	SILICA		4.7000			4.5000			mg/l	10/25/89	4	IT	GC
H-11b3	CULEBRA	SILICA		4.1000			0.0000			mg/l	10/17/90	5	IT	GC
H-11b3	CULEBRA	SILVER		0.1000			0.1000	< 0.01	< 0.01	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	SILVER		0.2000			0.2000	0.01	0.02	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	SILVER		0.1000			0.1000			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	SODIUM		38000.0000		NA	0.0000			mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	SODIUM		44000.0000			43000.0000			mg/l	09/15/87	3	IT	ME

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H-11b3	CULEBRA	SODIUM		35000.0000			34000.0000			mg/l	10/25/89	4	IT	MC
H-11b3	CULEBRA	SODIUM		40000.0000			41000.0000			mg/l	10/17/90	5	IT	MC
H-11b3	CULEBRA	SPECIFIC CONDUCTANCE		135000.0000		NA	0.0000			umhos/cm@25C	06/04/85	1	IT	GC
H-11b3	CULEBRA	SPECIFIC CONDUCTANCE		126000.0000		NA	0.0000			umhos/cm@25C	06/04/86	2	IT	GC
H-11b3	CULEBRA	SPECIFIC CONDUCTANCE		193000.0000			194000.0000			umhos/cm@25C	09/15/87	3	IT	GC
H-11b3	CULEBRA	SPECIFIC CONDUCTANCE		126000.0000			126000.0000			uMhos/cm@25C	10/25/89	4	IT	GC
H-11b3	CULEBRA	SPECIFIC CONDUCTANCE		112000.0000			112000.0000			uMhos/cm@25C	10/17/90	5	IT	GC
H-11b3	CULEBRA	STRONTIUM		18.0000			18.0000	0.02	0.02	mg/l	06/04/85	1	IT	ME
H-11b3	CULEBRA	STRONTIUM		18.0000		NA	0.0000	0.04	0.05	mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	STRONTIUM		32.0000			32.0000	< 0.01	< 0.01	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	STRONTIUM		23.0000			24.0000	< 0.01	< 0.01	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	STRONTIUM		21.0000			21.0000			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	STYRENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	SULFATE		6100.0000			6100.0000			mg/l	06/04/86	2	IT	GC
H-11b3	CULEBRA	SULFATE		6200.0000		NA	0.0000			mg/l	09/15/87	3	IT	GC
H-11b3	CULEBRA	SULFATE		6200.0000		NA	0.0000			mg/l	10/25/89	4	IT	GC
H-11b3	CULEBRA	SULFATE		7400.0000			0.0000			mg/l	10/17/90	5	IT	GC
H-11b3	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	THALLIUM	<	5.0000		<	5.0000	< 0.005	< 0.005	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	THALLIUM	<	10.0000		NA	0.0000	< 0.01	< 0.01	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	THALLIUM	<	10.0000		NA	0.0000			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	TIN		0.6000			0.7000	< 0.04	< 0.04	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	TITANIUM		0.0200			0.0400	< 0.01	< 0.01	mg/l	06/04/85	1	IT	ME
H-11b3	CULEBRA	TITANIUM		0.6900		NA	0.0000	< 0.03	< 0.03	mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	TITANIUM		0.5000			0.5000	< 0.03	< 0.03	mg/l	09/15/87	3	IT	ME

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H-11b3	CULEBRA	TITANIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	TITANIUM		0.1000			0.1000			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	TOLUENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	TOTAL ORGANIC CARBON		2.0000		NA	0.0000			mg/l	06/04/85	1	IT	GC
H-11b3	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		NA	0.0000			mg/l	06/04/86	2	IT	GC
H-11b3	CULEBRA	TOTAL ORGANIC CARBON		2.0000		<	1.0000			mg/l	09/15/87	3	IT	GC
H-11b3	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	10/25/89	4	IT	GC
H-11b3	CULEBRA	TOTAL ORGANIC CARBON		3.0000			2.0000			mg/l	10/17/90	5	IT	GC
H-11b3	CULEBRA	TOTAL ORGANIC HALOGEN		1.5000		NA	0.0000			mg/l	06/04/85	1	IT	GC
H-11b3	CULEBRA	TOTAL ORGANIC HALOGEN		0.8800		NA	0.0000			mg/l	06/04/86	2	IT	GC
H-11b3	CULEBRA	TOTAL ORGANIC HALOGEN		11.0000			15.0000			mg/l	09/15/87	3	IT	GC
H-11b3	CULEBRA	TOTAL ORGANIC HALOGEN		0.3700			0.3500			mg/l	10/25/89	4	IT	GC
H-11b3	CULEBRA	TOTAL ORGANIC HALOGEN		0.0600		<	0.0500			mg/l	10/17/90	5	IT	GC
H-11b3	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	TRICHLOROFLUOROMETHANE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	VANADIUM		0.2000			0.2000	< 0.01	< 0.01	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	VANADIUM	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	VANADIUM	<	0.5000		<	0.5000			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	V

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H-11b3	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	XYLENE	<	1.0000		NA	0.0000			ug/l	06/04/85	1	IT	V
H-11b3	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	06/04/86	2	IT	V
H-11b3	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	09/15/87	3	IT	V
H-11b3	CULEBRA	ZINC		0.0700			0.0600	0.02	< 0.01	mg/l	06/04/85	1	IT	ME
H-11b3	CULEBRA	ZINC		0.1400		NA	0.0000	< 0.01	< 0.01	mg/l	06/04/86	2	IT	ME
H-11b3	CULEBRA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	09/15/87	3	IT	ME
H-11b3	CULEBRA	ZINC	<	0.2000		<	0.2000	< 0.02	< 0.02	mg/l	10/25/89	4	IT	MT
H-11b3	CULEBRA	ZINC	<	0.2000		<	0.2000			mg/l	10/17/90	5	IT	MT
H-11b3	CULEBRA	pH		7.1800		NA	0.0000				06/04/85	1	IT	GC
H-11b3	CULEBRA	pH		7.1800			7.2100				06/04/86	2	IT	GC
H-11b3	CULEBRA	pH		6.8700			6.9700				09/15/87	3	IT	GC
H-11b3	CULEBRA	pH		7.0700			7.0700				10/25/89	4	IT	GC
H-11b3	CULEBRA	pH		7.0600			7.0600				10/17/90	5	IT	GC
** H-12														
H-12	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	1,1,2-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	1,1-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-12	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	1,2,4-TRICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	1,2-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	1,2-DICHLOROPROPANE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	1,2-DIPHENYLHYDRAZINE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	1,3-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	1,3-DICHLOROPROPYLENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	1,4-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	2,4,5-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	2,4,6-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-12	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	2,4-DICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	2,4-DIMETHYLPHENOL	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	2,4-DINITROPHENOL	<	10.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	2,4-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	2,6-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	2-BUTANONE	<	10.0000		<	10.0000		T < 10	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		<	10.0000		T < 10	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	2-CHLORONAPHTHALENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	2-CHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV

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H-12	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	2-HEXANONE	<	10.0000		<	10.0000		T < 10	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	2-METHYLNAPHTHALENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	2-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	2-NITROANILINE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	2-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	3,3'-DICHLOROBENZIDINE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	3,4-BENZOFLUORANTHENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	3-NITROANILINE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	4,6-DINITRO-O-CRESOL	<	10.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV

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H-12	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	4-CHLOROANILINE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		<	10.0000		T < 10	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	4-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	4-NITROANILINE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	4-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	ACENAPHTHENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	ACENAPHTHYLENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	ACETONE	<	10.0000		<	10.0000		T < 10	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	ACROLEIN	<	10.0000		NA	0.0000			ug/l	08/09/85	1	IT	V

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H-12	CULEBRA	ACRYLONITRILE	<	10.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	08/09/85	1	IT	GC
H-12	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	01/16/87	2	IT	GC
H-12	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	12/14/88	3	IT	GC
H-12	CULEBRA	ALKALINITY (HCO3)		56.0000		NA	0.0000			mg/l	08/09/85	1	IT	GC
H-12	CULEBRA	ALKALINITY (HCO3)		62.0000			69.0000			mg/l	01/16/87	2	IT	GC
H-12	CULEBRA	ALKALINITY (HCO3)		46.0000			48.0000			mg/l	12/14/88	3	IT	GC
H-12	CULEBRA	ALUMINUM		0.6600		NA	0.0000	< 0.01	< 0.01	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	ALUMINUM	<	1.0000		NA	0.0000	< 0.1	< 0.1	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	ANILINE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	ANTHRACENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	ANTIMONY		1.0000		NA	0.0000	< 0.05	< 0.05	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	ANTIMONY		1.9000			2.0000	< 0.05	< 0.05	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	ARSENIC		18.0000		NA	0.0000	< 0.01	< 0.01	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	ARSENIC		0.1700		NA	0.0000	< 0.01	< 0.01	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	ARSENIC	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	BARIUM		1.2000			1.2000	0.12	0.12	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	BARIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	BENZENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	BENZENE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	BENZIDINE	<	4.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	BENZO(A)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-12	CULEBRA	BENZO(A)PYRENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	BENZO(G,H,I)PERYLENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	BENZO(K)FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	BENZOIC ACID	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	BENZYL ALCOHOL	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	BERYLLIUM		0.0250			0.0230	< 0.001	< 0.001	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	4.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE		38.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV

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H-12	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE		16.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	BORON		35.0000		NA	0.0000	< 0.1	< 0.1	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	BORON		39.0000		NA	0.0000	< 0.01	< 0.01	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	BORON		41.0000			41.0000	< 0.01	< 0.01	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	BROMIDE		140.0000			150.0000			mg/l	08/09/85	1	IT	GC
H-12	CULEBRA	BROMIDE		77.0000		NA	0.0000			mg/l	01/16/87	2	IT	GC
H-12	CULEBRA	BROMIDE		86.0000			88.0000			mg/l	12/14/88	3	IT	GC
H-12	CULEBRA	BROMOFORM	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	BROMOFORM	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	BUTYL BENZYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	CADMIUM		0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	CADMIUM		0.1500			0.1500	< 0.005	< 0.005	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	CALCIUM		1900.0000			1800.0000	0.2	0.2	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	CALCIUM		1600.0000			1500.0000			mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	CALCIUM		1700.0000			1700.0000			mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	CARBON DISULFIDE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	CARBON DISULFIDE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	CESIUM	<	10.0000		NA	0.0000	< 1.0	< 1.0	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	CESIUM		0.9000		NA	0.0000	< 0.1	< 0.1	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	CESIUM	<	0.0600		<	0.0600	< 0.06	< 0.06	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	CHLORIDE		80000.0000		NA	0.0000			mg/l	08/09/85	1	IT	GC
H-12	CULEBRA	CHLORIDE		78000.0000			79000.0000			mg/l	01/16/87	2	IT	GC

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H-12	CULEBRA	CHLORIDE		78200.0000			78600.0000			mg/l	12/14/88	3	IT	GC
H-12	CULEBRA	CHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	CHLOROBENZENE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	CHLOROETHANE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	CHLOROETHANE	<	10.0000		<	10.0000		T < 10	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	CHLOROFORM	<	2.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	CHLOROFORM	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	CHROMIUM	<	0.0010		<	0.0010	< 0.001	< 0.001	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	CHROMIUM		0.3000		NA	0.0000	0.01	< 0.01	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	CHROMIUM		0.7000			0.8000	< 0.01	< 0.01	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	CHRYSENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	COBALT		2.9000			1.9000	< 0.01	< 0.01	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	COBALT	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	COBALT		0.2000			0.2000	< 0.01	< 0.01	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	COPPER		0.4500			0.4500	< 0.01	< 0.01	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	COPPER	<	0.1000		NA	0.0000	0.01	< 0.01	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	COPPER		0.1000			0.1000	< 0.01	< 0.01	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	CYANIDE	<	0.0200		<	0.0200			mg/l	08/09/85	1	IT	GC
H-12	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	01/16/87	2	IT	GC
H-12	CULEBRA	CYANIDE	<	0.0200		<	0.0500			mg/l	12/14/88	3	IT	GC
H-12	CULEBRA	DI-N-BUTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV

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H-12	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	DI-N-OCTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	DIBENZOFURAN	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	DIETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	DIMETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	ETHYLBENZENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	ETHYLBENZENE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	Eh		514.0000		NA	0.0000			mV	08/09/85	1	IT	GC
H-12	CULEBRA	FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV

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H-12	CULEBRA	FLUORENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	FLUORIDE		1.1000			1.2000			mg/l	08/09/85	1	IT	GC
H-12	CULEBRA	FLUORIDE		1.1000			1.1000			mg/l	01/16/87	2	IT	GC
H-12	CULEBRA	FLUORIDE		1.1000			1.2000			mg/l	12/14/88	3	IT	GC
H-12	CULEBRA	HEXACHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	HEXACHLOROBUTADIENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	HEXACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	IODIDE		1.6000		NA	0.0000			mg/l	08/09/85	1	IT	GC
H-12	CULEBRA	IODIDE	<	1.0000		NA	0.0000			mg/l	01/16/87	2	IT	GC
H-12	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	12/14/88	3	IT	GC
H-12	CULEBRA	IRON		0.5600		NA	0.0000	< 0.01	< 0.01	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	IRON		2.6000		NA	0.0000	< 0.01	< 0.01	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	IRON		1.8000			1.8000	< 0.01	< 0.01	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	ISOPHORONE	<	4.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV

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H-12	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	LEAD		0.1800		NA	0.0000	< 0.01	< 0.01	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	LEAD	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	LEAD		1.2000			1.2000	< 0.05	< 0.05	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	LITHIUM		0.7300		NA	0.0000	< 0.01	0.02	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	LITHIUM		10.0000			11.0000	< 0.01	< 0.01	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	MAGNESIUM		1400.0000			1400.0000	< 0.1	< 0.1	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	MAGNESIUM		2000.0000			2000.0000			mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	MAGNESIUM		1700.0000			1700.0000			mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	MANGANESE		0.6400			0.6400	0.01	0.01	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	MANGANESE		0.1600		NA	0.0000	< 0.005	< 0.005	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	MANGANESE	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	MERCURY		0.0010			0.0009	0.0006	0.0006	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	MERCURY	<	0.0004		NA	0.0000	< 0.0002	< 0.0002	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	METHYL BROMIDE	<	10.0000		<	10.0000		T < 10	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	METHYL CHLORIDE	<	10.0000		<	10.0000		T < 10	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	METHYLENE CHLORIDE	<	20.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	METHYLENE CHLORIDE		5.6000			5.3000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	MOLYBDENUM		15.0000		NA	0.0000	< 0.01	< 0.01	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	MOLYBDENUM		0.3500		NA	0.0000	< 0.01	< 0.01	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	MOLYBDENUM		0.3200			0.3200	< 0.05	0.05	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	N-NITROSO-DI-METHYLAMINE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV

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H-12	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	4.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	NAPHTHALENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	NICKEL		0.8400			0.8400	< 0.01	< 0.01	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	NICKEL	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	NICKEL		0.4000			0.4000	< 0.03	< 0.03	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	NITRATE	<	0.1000		<	0.1000			mg/l NO3-N	08/09/85	1	IT	GC
H-12	CULEBRA	NITRATE		0.8000			0.9000			mg/l NO3-N	01/16/87	2	IT	GC
H-12	CULEBRA	NITRATE	<	0.0200		<	0.0200			mg/l NO3-N	12/14/88	3	IT	GC
H-12	CULEBRA	NITROBENZENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	P-CHLORO-M-CRESOL	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l	01/16/87	2	IT	PC
H-12	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l	12/14/88	3	IT	PC
H-12	CULEBRA	PENTACHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	PHENANTHRENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV
H-12	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	SV
H-12	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l	12/14/88	3	IT	SV
H-12	CULEBRA	PHENOL	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	SV

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H-12	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		01/16/87	2	IT	SV
H-12	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		12/14/88	3	IT	SV
H-12	CULEBRA	PHENOLICS		0.0050			0.0170			mg/l		08/09/85	1	IT	GC
H-12	CULEBRA	PHENOLICS	<	0.0050		<	0.0050			mg/l		01/16/87	2	IT	GC
H-12	CULEBRA	PHENOLICS	<	0.0290			1.1000			mg/l		12/14/88	3	IT	GC
H-12	CULEBRA	PHOSPHATE		0.0900		NA	0.0000			mg/l	T-PO4-P	08/09/85	1	IT	GC
H-12	CULEBRA	PHOSPHATE	<	0.0100		<	0.0100			mg/l	T-PO4-P	01/16/87	2	IT	GC
H-12	CULEBRA	PHOSPHATE		0.0100		<	0.0100			mg/l	T-PO4-P	12/14/88	3	IT	GC
H-12	CULEBRA	POTASSIUM		1500.0000			1500.0000	< 0.01	< 0.01	mg/l		08/09/85	1	IT	ME
H-12	CULEBRA	POTASSIUM		1600.0000			1600.0000			mg/l		01/16/87	2	IT	ME
H-12	CULEBRA	POTASSIUM		1300.0000			1380.0000			mg/l		12/14/88	3	IT	ME
H-12	CULEBRA	PYRENE	<	1.0000		NA	0.0000			ug/l		08/09/85	1	IT	SV
H-12	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l		01/16/87	2	IT	SV
H-12	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l		12/14/88	3	IT	SV
H-12	CULEBRA	RESIDUE, FILTERABLE @ 180 C		143000.0000			142000.0000			mg/l		08/09/85	1	IT	GC
H-12	CULEBRA	RESIDUE, FILTERABLE @ 180 C		140000.0000		NA	0.0000			mg/l		01/16/87	2	IT	GC
H-12	CULEBRA	RESIDUE, FILTERABLE @ 180 C		130000.0000			124000.0000			mg/l		12/14/88	3	IT	GC
H-12	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		280.0000			280.0000			mg/l		08/09/85	1	IT	GC
H-12	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		240.0000		NA	0.0000			mg/l		01/16/87	2	IT	GC
H-12	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		86.0000			84.0000			mg/l		12/14/88	3	IT	GC
H-12	CULEBRA	SELENIUM		0.6000		NA	0.0000	< 0.001	< 0.001	mg/l		08/09/85	1	IT	ME
H-12	CULEBRA	SELENIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l		01/16/87	2	IT	ME
H-12	CULEBRA	SELENIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l		12/14/88	3	IT	ME
H-12	CULEBRA	SILICA		42.0000			48.0000	< 0.1	< 0.1	mg/l		08/09/85	1	IT	ME
H-12	CULEBRA	SILICA		11.0000		NA	0.0000	< 0.2	< 0.2	mg/l		01/16/87	2	IT	ME
H-12	CULEBRA	SILICA		2.8000			2.6000			mg/l		12/14/88	3	IT	ME
H-12	CULEBRA	SILVER	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l		01/16/87	2	IT	ME
H-12	CULEBRA	SILVER		0.2000			0.2000	< 0.01	< 0.01	mg/l		12/14/88	3	IT	ME
H-12	CULEBRA	SODIUM		45000.0000			44000.0000	< 0.1	< 0.1	mg/l		08/09/85	1	IT	ME

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H-12	CULEBRA	SODIUM		52000.0000			51000.0000			mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	SODIUM		44500.0000			44000.0000			mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	SPECIFIC CONDUCTANCE		140000.0000		NA	0.0000			umhos/cm@25C	08/09/85	1	IT	GC
H-12	CULEBRA	SPECIFIC CONDUCTANCE		216000.0000		NA	0.0000			umhos/cm@25C	01/16/87	2	IT	GC
H-12	CULEBRA	SPECIFIC CONDUCTANCE		129000.0000			129000.0000			umhos/cm@25C	12/14/88	3	IT	GC
H-12	CULEBRA	STRONTIUM		18.0000			18.0000	< 0.01	< 0.01	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	STRONTIUM		38.0000		NA	0.0000	0.01	< 0.01	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	STRONTIUM		34.0000			35.0000	< 0.01	< 0.01	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	STYRENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	STYRENE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	SULFATE		5900.0000		NA	0.0000			mg/l	08/09/85	1	IT	GC
H-12	CULEBRA	SULFATE		8200.0000		NA	0.0000			mg/l	01/16/87	2	IT	GC
H-12	CULEBRA	SULFATE		7500.0000		NA	0.0000			mg/l	12/14/88	3	IT	GC
H-12	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	THALLIUM	<	2.5000		NA	0.0000	< 0.005	< 0.005	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	THALLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	TITANIUM	<	0.1000		NA	0.0000	< 0.1	< 0.1	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	TITANIUM	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	TITANIUM	<	0.1000			0.1000	< 0.01	< 0.01	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	TOLUENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	TOLUENE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		NA	0.0000			mg/l	08/09/85	1	IT	GC
H-12	CULEBRA	TOTAL ORGANIC CARBON		15.0000		NA	0.0000			mg/l	01/16/87	2	IT	GC
H-12	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	12/14/88	3	IT	GC
H-12	CULEBRA	TOTAL ORGANIC HALOGEN		1.4000		NA	0.0000			mg/l	08/09/85	1	IT	GC

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H-12	CULEBRA	TOTAL ORGANIC HALOGEN		0.1800		NA	0.0000			mg/l	01/16/87	2	IT	GC
H-12	CULEBRA	TOTAL ORGANIC HALOGEN		1.0000			0.7200			mg/l	12/14/88	3	IT	GC
H-12	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	TRICHLOROETHYLENE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	TRICHLOROFLUOROMETHANE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	VANADIUM		0.3000			0.3000	< 0.01	< 0.01	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	VINYL ACETATE	<	10.0000		<	10.0000		T < 10	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	VINYL CHLORIDE	<	10.0000		<	10.0000		T < 10	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	XYLENE	<	1.0000		NA	0.0000			ug/l	08/09/85	1	IT	V
H-12	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	01/16/87	2	IT	V
H-12	CULEBRA	XYLENE	<	5.0000		<	5.0000		T < 5.0	ug/l	12/14/88	3	IT	V
H-12	CULEBRA	ZINC		2.2000			2.2000	0.53	< 0.01	mg/l	08/09/85	1	IT	ME
H-12	CULEBRA	ZINC		0.3000		NA	0.0000	< 0.01	< 0.01	mg/l	01/16/87	2	IT	ME
H-12	CULEBRA	ZINC		0.3000			0.3000	< 0.01	< 0.01	mg/l	12/14/88	3	IT	ME
H-12	CULEBRA	pH		7.3300		NA	0.0000				08/09/85	1	IT	GC
H-12	CULEBRA	pH		6.8100			6.9200				01/16/87	2	IT	GC
H-12	CULEBRA	pH		6.9700			6.9800				12/14/88	3	IT	GC

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** H-14														
H-14	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-14	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-14	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	2-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV

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H-14	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	4-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV

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H-14	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	ACETONE	<	10.0000		NA	0.0000		T < 10	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	05/26/87	1	IT	GC
H-14	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	01/27/88	2	IT	GC
H-14	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	04/21/89	3	IT	GC
H-14	CULEBRA	ALKALINITY (HCO3)		40.0000			40.0000			mg/l	05/26/87	1	IT	GC
H-14	CULEBRA	ALKALINITY (HCO3)		39.0000		NA	0.0000			mg/l	01/27/88	2	IT	GC
H-14	CULEBRA	ALKALINITY (HCO3)		37.0000			37.0000			mg/l	04/21/89	3	IT	GC
H-14	CULEBRA	ALUMINUM	<	1.0000		NA	0.0000	< 0.1	< 0.1	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	ALUMINUM		1.0000			1.0000	< 0.1	< 0.1	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	ANTIMONY		0.6000		NA	0.0000	< 0.05	< 0.05	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	ANTIMONY		0.6000			0.6000	< 0.05	< 0.05	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	ANTIMONY		0.5000			0.5000	< 0.05	< 0.05	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	AROCLOR 1016	<	0.5000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	AROCLOR 1221	<	0.5000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	AROCLOR 1232	<	0.5000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	AROCLOR 1242	<	0.5000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	AROCLOR 1248	<	0.5000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	AROCLOR 1254	<	1.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	AROCLOR 1260	<	1.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-14	CULEBRA	ARSENIC	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	ARSENIC	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	ARSENIC	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	BARIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	BENZO(B)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	05/26/87	1	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-14	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	BORON		11.0000		NA	0.0000	< 0.01	< 0.01	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	BORON		11.0000			11.0000	< 0.01	< 0.01	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	BORON		11.0000			11.0000	< 0.01	< 0.01	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	BROMIDE		14.0000		NA	0.0000			mg/l	05/26/87	1	IT	GC
H-14	CULEBRA	BROMIDE		11.0000			11.0000			mg/l	01/27/88	2	IT	GC
H-14	CULEBRA	BROMIDE		15.0000			14.0000			mg/l	04/21/89	3	IT	GC
H-14	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	CADMIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	CADMIUM		0.0600			0.0600	< 0.005	< 0.005	mg/l	04/21/89	3	IT	MT

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-14	CULEBRA	CALCIUM		1800.0000			1800.0000			mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	CALCIUM		1700.0000			1700.0000			mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	CALCIUM		2000.0000			1900.0000			mg/l	04/21/89	3	IT	MC
H-14	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	CESIUM		0.1000		NA	0.0000	< 0.1	< 0.1	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	CESIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	CESIUM	<	0.6000		<	0.6000	< 0.06	< 0.06	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	CHLORIDE		8200.0000		NA	0.0000			mg/l	05/26/87	1	IT	GC
H-14	CULEBRA	CHLORIDE		7900.0000		NA	0.0000			mg/l	01/27/88	2	IT	GC
H-14	CULEBRA	CHLORIDE		9000.0000			9000.0000			mg/l	04/21/89	3	IT	GC
H-14	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	CHROMIUM		0.2000		NA	0.0000	< 0.01	< 0.01	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	CHROMIUM		0.3000			0.3000	0.01	0.02	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	CHROMIUM		0.4000			0.4000	0.02	0.02	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV

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H-14	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	COBALT	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	COPPER	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	COPPER		0.1000			0.1000	< 0.01	< 0.01	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	COPPER		0.1000			0.1000	< 0.01	0.01	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	05/26/87	1	IT	GC
H-14	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	01/27/88	2	IT	GC
H-14	CULEBRA	CYANIDE	<	0.0200		<	0.0500			mg/l	04/21/89	3	IT	GC
H-14	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V

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H-14	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	FLUORIDE		0.8000		NA	0.0000			mg/l	05/26/87	1	IT	GC
H-14	CULEBRA	FLUORIDE		1.6000		NA	0.0000			mg/l	01/27/88	2	IT	GC
H-14	CULEBRA	FLUORIDE		1.7000			1.7000			mg/l	04/21/89	3	IT	GC
H-14	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV

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H-14	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	05/26/87	1	IT	GC
H-14	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	01/27/88	2	IT	GC
H-14	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	04/21/89	3	IT	GC
H-14	CULEBRA	IRON		0.4000		NA	0.0000	< 0.01	< 0.01	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	IRON		0.3000			0.3000	< 0.01	< 0.01	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	IRON		0.6000			0.6000	< 0.02	< 0.02	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	SV
H-14	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	01/27/88	2	IT	SV
H-14	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	SV
H-14	CULEBRA	LEAD	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	LEAD		0.5000			0.5000	< 0.05	< 0.05	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	LITHIUM		0.4700		NA	0.0000	< 0.01	< 0.01	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	LITHIUM		0.4400			0.4400	< 0.01	< 0.01	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	LITHIUM		0.5100			0.5100	< 0.01	< 0.01	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	MAGNESIUM		530.0000			530.0000			mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	MAGNESIUM		500.0000			500.0000			mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	MAGNESIUM		570.0000			560.0000			mg/l	04/21/89	3	IT	MC
H-14	CULEBRA	MANGANESE	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	MANGANESE		0.0900			0.0900	< 0.005	< 0.005	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	MANGANESE		0.1300			0.1200	< 0.005	< 0.005	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	01/27/88	2	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS		DATE	RND	LAB	C
H-14	CULEBRA	MERCURY		0.0004			0.0003	0.0004	0.0003	mg/l		04/21/89	3	IT	MT
H-14	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l		05/26/87	1	IT	V
H-14	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l		01/27/88	2	IT	V
H-14	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l		04/21/89	3	IT	V
H-14	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l		05/26/87	1	IT	V
H-14	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l		01/27/88	2	IT	V
H-14	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l		04/21/89	3	IT	V
H-14	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l		05/26/87	1	IT	V
H-14	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l		01/27/88	2	IT	V
H-14	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000			ug/l		04/21/89	3	IT	V
H-14	CULEBRA	MOLYBDENUM		0.0600		NA	0.0000	0.02	0.03	mg/l		05/26/87	1	IT	ME
H-14	CULEBRA	MOLYBDENUM		0.0700			0.0700	< 0.01	< 0.01	mg/l		01/27/88	2	IT	ME
H-14	CULEBRA	MOLYBDENUM		0.2000			0.2000	< 0.01	< 0.01	mg/l		04/21/89	3	IT	MT
H-14	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		05/26/87	1	IT	SV
H-14	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		01/27/88	2	IT	SV
H-14	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		04/21/89	3	IT	SV
H-14	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		05/26/87	1	IT	SV
H-14	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		01/27/88	2	IT	SV
H-14	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		04/21/89	3	IT	SV
H-14	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		05/26/87	1	IT	SV
H-14	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		01/27/88	2	IT	SV
H-14	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		04/21/89	3	IT	SV
H-14	CULEBRA	NICKEL	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l		05/26/87	1	IT	ME
H-14	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		01/27/88	2	IT	ME
H-14	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		04/21/89	3	IT	MT
H-14	CULEBRA	NITRATE		0.4000		NA	0.0000			mg/l	NO3-N	05/26/87	1	IT	GC
H-14	CULEBRA	NITRATE	<	0.0200		NA	0.0000			mg/l	NO3-N	01/27/88	2	IT	GC
H-14	CULEBRA	NITRATE	<	0.0200		<	0.0200			mg/l		04/21/89	3	IT	GC
H-14	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		05/26/87	1	IT	SV

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H-14	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000					ug/l		01/27/88	2	IT	SV
H-14	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000					ug/l		04/21/89	3	IT	SV
H-14	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000					ug/l		05/26/87	1	IT	SV
H-14	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000					ug/l		01/27/88	2	IT	SV
H-14	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000					ug/l		04/21/89	3	IT	SV
H-14	CULEBRA	PCB	<	1.0000		NA	0.0000					ug/l		05/26/87	1	IT	PC
H-14	CULEBRA	PCB	<	1.0000		NA	0.0000					ug/l		01/27/88	2	IT	PC
H-14	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000					ug/l		05/26/87	1	IT	SV
H-14	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000					ug/l		01/27/88	2	IT	SV
H-14	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000					ug/l		04/21/89	3	IT	SV
H-14	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000					ug/l		05/26/87	1	IT	SV
H-14	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000					ug/l		01/27/88	2	IT	SV
H-14	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000					ug/l		04/21/89	3	IT	SV
H-14	CULEBRA	PHENOL	<	10.0000		NA	0.0000					ug/l		05/26/87	1	IT	SV
H-14	CULEBRA	PHENOL	<	10.0000		NA	0.0000					ug/l		01/27/88	2	IT	SV
H-14	CULEBRA	PHENOL	<	10.0000		NA	0.0000					ug/l		04/21/89	3	IT	SV
H-14	CULEBRA	PHENOLICS		0.0680		NA	0.0000					mg/l		05/26/87	1	IT	GC
H-14	CULEBRA	PHENOLICS		0.0900		NA	0.0000					mg/l		01/27/88	2	IT	GC
H-14	CULEBRA	PHENOLICS		0.1400		NA	0.0000					mg/l		04/21/89	3	IT	GC
H-14	CULEBRA	PHOSPHATE		0.0200			0.0400					mg/l	T-PO4-P	05/26/87	1	IT	GC
H-14	CULEBRA	PHOSPHATE	<	0.0100		NA	0.0000					mg/l	T-PO4-P	01/27/88	2	IT	GC
H-14	CULEBRA	PHOSPHORUS		0.0400			0.0500					mg/l		04/21/89	3	IT	GC
H-14	CULEBRA	POTASSIUM		250.0000		NA	0.0000					mg/l		05/26/87	1	IT	ME
H-14	CULEBRA	POTASSIUM		240.0000			240.0000					mg/l		01/27/88	2	IT	ME
H-14	CULEBRA	POTASSIUM		250.0000			240.0000					mg/l		04/21/89	3	IT	MC
H-14	CULEBRA	PYRENE	<	10.0000		NA	0.0000					ug/l		05/26/87	1	IT	SV
H-14	CULEBRA	PYRENE	<	10.0000		NA	0.0000					ug/l		01/27/88	2	IT	SV
H-14	CULEBRA	PYRENE	<	10.0000		NA	0.0000					ug/l		04/21/89	3	IT	SV
H-14	CULEBRA	RESIDUE, FILTERABLE @ 180 C		18000.0000		NA	0.0000					mg/l		05/26/87	1	IT	GC

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H-14	CULEBRA	RESIDUE, FILTERABLE @ 180 C		17200.0000			17200.0000			mg/l	01/27/88	2	IT	GC
H-14	CULEBRA	RESIDUE, FILTERABLE @ 180 C		16500.0000			14900.0000			mg/l	04/21/89	3	IT	GC
H-14	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		14.0000		NA	0.0000			mg/l	05/26/87	1	IT	GC
H-14	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		62.0000			60.0000			mg/l	01/27/88	2	IT	GC
H-14	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		71.0000			68.0000			mg/l	04/21/89	3	IT	GC
H-14	CULEBRA	SELENIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	SELENIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	SELENIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	SILICA		14.0000		NA	0.0000	< 0.2	< 0.2	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	SILICA		14.0000			14.0000	< 0.2	< 0.2	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	SILICA		5.5000			5.4000			mg/l	04/21/89	3	IT	GC
H-14	CULEBRA	SILVER	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	SILVER		0.1000			0.1000	< 0.01	< 0.01	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	SODIUM		3300.0000		NA	0.0000			mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	SODIUM		3300.0000			3300.0000			mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	SODIUM		3800.0000			3800.0000			mg/l	04/21/89	3	IT	MC
H-14	CULEBRA	SPECIFIC CONDUCTANCE		25200.0000			24800.0000			umhos/cm@25C	05/26/87	1	IT	GC
H-14	CULEBRA	SPECIFIC CONDUCTANCE		27700.0000			28200.0000			umhos/cm@25C	01/27/88	2	IT	GC
H-14	CULEBRA	SPECIFIC CONDUCTANCE		27000.0000			26900.0000			uMhos/cm@25C	04/21/89	3	IT	GC
H-14	CULEBRA	STRONTIUM		31.0000		NA	0.0000	< 0.01	< 0.01	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	STRONTIUM		33.0000			33.0000	< 0.01	< 0.01	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	STRONTIUM		32.0000			32.0000	< 0.01	< 0.01	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	SULFATE		1500.0000		NA	0.0000			mg/l	05/26/87	1	IT	GC
H-14	CULEBRA	SULFATE		1900.0000		NA	0.0000			mg/l	01/27/88	2	IT	GC
H-14	CULEBRA	SULFATE		1900.0000			1800.0000			mg/l	04/21/89	3	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-14	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	THALLIUM	<	5.0000		NA	0.0000	< 0.005	< 0.005	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	THALLIUM	<	5.0000		<	5.0000	< 0.005	< 0.005	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	THALLIUM	<	5.0000		NA	0.0000	< 0.005	< 0.005	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	TIN		0.6000		NA	0.0000	< 0.04	< 0.04	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	TITANIUM	<	0.1000		NA	0.0000	< 0.1	< 0.1	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	TITANIUM		0.5000			0.5000	< 0.03	< 0.03	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	TITANIUM		0.1000			0.1000	< 0.01	< 0.01	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	TOTAL ORGANIC CARBON		1.0000		<	1.0000			mg/l	05/26/87	1	IT	GC
H-14	CULEBRA	TOTAL ORGANIC CARBON		2.0000			2.0000			mg/l	01/27/88	2	IT	GC
H-14	CULEBRA	TOTAL ORGANIC CARBON		2.0000			2.0000			mg/l	04/21/89	3	IT	GC
H-14	CULEBRA	TOTAL ORGANIC HALOGEN		0.0800		NA	0.0000			mg/l	05/26/87	1	IT	GC
H-14	CULEBRA	TOTAL ORGANIC HALOGEN		1.2000			0.9800			mg/l	01/27/88	2	IT	GC
H-14	CULEBRA	TOTAL ORGANIC HALOGEN		0.2400			0.3900			mg/l	04/21/89	3	IT	GC
H-14	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	VANADIUM		0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	VANADIUM		0.2000			0.1000	< 0.01	< 0.01	mg/l	01/27/88	2	IT	ME

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H-14	CULEBRA	VANADIUM		0.2000			0.2000	< 0.01	< 0.01	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	05/26/87	1	IT	V
H-14	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/27/88	2	IT	V
H-14	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	04/21/89	3	IT	V
H-14	CULEBRA	ZINC	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	05/26/87	1	IT	ME
H-14	CULEBRA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	01/27/88	2	IT	ME
H-14	CULEBRA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/21/89	3	IT	MT
H-14	CULEBRA	pH		7.5000			7.5400				05/26/87	1	IT	GC
H-14	CULEBRA	pH		6.5400			6.6500				01/27/88	2	IT	GC
H-14	CULEBRA	pH		7.4800			7.4800				04/21/89	3	IT	GC
** H-15														
H-15	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V

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H-15	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	1,2,4-TRICHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	1,2-DICHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	1,3-DICHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	1,4-DICHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	2,4,5-TRICHLOROPHENOL	<	100.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	2,4,6-TRICHLOROPHENOL	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	2,4-DICHLOROPHENOL	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-15	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	2,4-DIMETHYLPHENOL	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	2,4-DINITROPHENOL	<	100.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	2,4-DINITROTOLUENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	2,6-DINITROTOLUENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	2-CHLORONAPHTHALENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	2-CHLOROPHENOL	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	11/07/88	3	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID	BLANK	WATER	BLANK	UNITS	DATE	RND	LAB	C
H-15	CULEBRA	2-METHYLNAPHTHALENE	<	20.0000		NA	0.0000					ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000					ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000					ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	2-METHYLPHENOL	<	20.0000		NA	0.0000					ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000					ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000					ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	2-NITROANILINE	<	100.0000		NA	0.0000					ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000					ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000					ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	2-NITROPHENOL	<	100.0000		NA	0.0000					ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000					ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000					ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	3,3'-DICHLOROBENZIDINE	<	40.0000		NA	0.0000					ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000					ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000					ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	3,4-BENZOFLUORANTHENE	<	20.0000		NA	0.0000					ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000					ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000					ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	3-NITROANILINE	<	100.0000		NA	0.0000					ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000					ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000					ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	4,6-DINITRO-O-CRESOL	<	100.0000		NA	0.0000					ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000					ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000					ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	20.0000		NA	0.0000					ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000					ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000					ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	4-CHLOROANILINE	<	20.0000		NA	0.0000					ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000					ug/l	01/13/88	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-15	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	4-METHYLPHENOL	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	4-NITROANILINE	<	100.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	4-NITROPHENOL	<	100.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	ACENAPHTHENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	ACENAPHTHYLENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	ACETONE	<	10.0000		NA	0.0000		T < 10	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	ACETONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	05/11/87	1	IT	GC
H-15	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	01/13/88	2	IT	GC
H-15	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	11/07/88	3	IT	GC
H-15	CULEBRA	ALKALINITY (HCO3)		36.0000			36.0000			mg/l	05/11/87	1	IT	GC

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H-15	CULEBRA	ALKALINITY (HCO3)		32.0000		NA	0.0000			mg/l	01/13/88	2	IT	GC
H-15	CULEBRA	ALKALINITY (HCO3)		38.0000		NA	0.0000			mg/l	11/07/88	3	IT	GC
H-15	CULEBRA	ALUMINUM	<	10.0000		NA	0.0000	< 0.1	< 0.1	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	ALUMINUM	<	10.0000		<	10.0000	< 0.1	< 0.1	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	ALUMINUM	<	10.0000		<	10.0000	< 0.1	< 0.1	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	ANTHRACENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	ANTIMONY	<	5.0000		NA	0.0000	< 0.05	< 0.05	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	ANTIMONY	<	5.0000		<	5.0000	< 0.05	< 0.05	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	ANTIMONY		7.0000			7.0000	< 0.05	< 0.05	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	ARSENIC	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	ARSENIC	<	1.0000		<	1.0000	< 0.005	< 0.005	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	ARSENIC	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	BARIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	BARIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	BARIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	BENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	BENZO(A)ANTHRACENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	BENZO(A)PYRENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	BENZO(G,H,I)PERYLENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-15	CULEBRA	BENZO(K)FLUORANTHENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	BENZOIC ACID	<	100.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	BENZYL ALCOHOL	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	BERYLLIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	BERYLLIUM		0.5000		<	0.5000	< 0.005	< 0.005	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE		64.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE		22.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE		44.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	BORON		48.0000		NA	0.0000	< 0.01	< 0.01	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	BORON		44.0000			44.0000	< 0.01	< 0.01	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	BORON		50.0000			50.0000	< 0.01	< 0.01	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	BROMIDE		100.0000			100.0000			mg/l	05/11/87	1	IT	GC
H-15	CULEBRA	BROMIDE		99.0000			100.0000			mg/l	01/13/88	2	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-15	CULEBRA	BROMIDE		94.0000			99.0000			mg/l	11/07/88	3	IT	GC
H-15	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	BUTYL BENZYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	CADMIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	CADMIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	CADMIUM		0.7000			0.7000	< 0.005	< 0.005	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	CALCIUM		2000.0000		NA	0.0000			mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	CALCIUM		1400.0000			1400.0000			mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	CALCIUM		1600.0000			1600.0000			mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	CESIUM		0.2400		NA	0.0000	< 0.01	< 0.01	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	CESIUM	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	CESIUM		0.4000			0.4000	< 0.06	< 0.06	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	CHLORIDE		140000.0000			140000.0000			mg/l	05/11/87	1	IT	GC
H-15	CULEBRA	CHLORIDE		134000.0000		NA	0.0000			mg/l	01/13/88	2	IT	GC
H-15	CULEBRA	CHLORIDE		135000.0000		NA	0.0000			mg/l	11/07/88	3	IT	GC
H-15	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	05/11/87	1	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-15	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	CHROMIUM	<	1.0000		NA	0.0000	< 0.01	< 0.01	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	CHROMIUM	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	CHROMIUM		3.0000			3.0000	< 0.01	< 0.01	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	CHRYSENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	COBALT	<	1.0000		NA	0.0000	< 0.01	< 0.01	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	COBALT	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	COBALT		1.0000			1.0000	< 0.01	< 0.01	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	COPPER	<	1.0000		NA	0.0000	< 0.01	< 0.01	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	COPPER	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	COPPER		2.0000			2.0000	< 0.01	< 0.01	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	05/11/87	1	IT	GC
H-15	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	01/13/88	2	IT	GC
H-15	CULEBRA	CYANIDE	<	0.0100		<	0.0200			mg/l	11/07/88	3	IT	GC
H-15	CULEBRA	DI-N-BUTYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	DI-N-OCTYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV

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H-15	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	DIBENZOFURAN	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	DIETHYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	DIMETHYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	FLUORANTHENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	FLUORENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	FLUORIDE		0.7000		NA	0.0000			mg/l	05/11/87	1	IT	GC
H-15	CULEBRA	FLUORIDE		0.7000		NA	0.0000			mg/l	01/13/88	2	IT	GC

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H-15	CULEBRA	FLUORIDE		0.6000		NA	0.0000			mg/l	11/07/88	3	IT	GC
H-15	CULEBRA	HEXACHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	HEXACHLOROBUTADIENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	HEXACHLOROETHANE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	05/11/87	1	IT	GC
H-15	CULEBRA	IODIDE	<	2.0000		NA	0.0000			mg/l	01/13/88	2	IT	GC
H-15	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	11/07/88	3	IT	GC
H-15	CULEBRA	IRON	<	1.0000		NA	0.0000	< 0.01	< 0.01	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	IRON		3.0000			3.0000	< 0.01	< 0.01	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	IRON		3.0000			3.0000	< 0.01	< 0.01	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	ISOPHORONE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	LEAD	<	5.0000		NA	0.0000	< 0.05	< 0.05	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	LEAD	<	5.0000		<	5.0000	< 0.05	< 0.05	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	LEAD		7.0000			7.0000	< 0.05	< 0.05	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	LITHIUM		0.7000		NA	0.0000	< 0.01	< 0.01	mg/l	05/11/87	1	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-15	CULEBRA	LITHIUM		0.8000			0.8000	< 0.01	< 0.01	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	LITHIUM		0.9000			0.9000	< 0.01	< 0.01	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	MAGNESIUM		2300.0000		NA	0.0000			mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	MAGNESIUM		2600.0000			2600.0000			mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	MAGNESIUM		2700.0000			2700.0000			mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	MANGANESE	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	MANGANESE		0.6000			0.6000	< 0.005	< 0.005	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	MANGANESE	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	MERCURY	<	0.0002		NA	0.0000	0.0004	0.0009	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	MERCURY	<	0.0020		NA	0.0000	< 0.0002	< 0.0002	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	MERCURY	<	0.4000		<	0.4000	< 0.0002	< 0.0002	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000	T 9.6	T 14	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	MOLYBDENUM		0.2000		NA	0.0000	0.03	0.02	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	MOLYBDENUM		0.5200			0.5200	0.02	0.01	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	MOLYBDENUM		0.2900			0.2700	< 0.05	< 0.05	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS		DATE	RND	LAB	C
H-15	CULEBRA	NAPHTHALENE	<	20.0000		NA	0.0000			ug/l		05/11/87	1	IT	SV
H-15	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		01/13/88	2	IT	SV
H-15	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		11/07/88	3	IT	SV
H-15	CULEBRA	NICKEL	<	3.0000		NA	0.0000	< 0.03	< 0.03	mg/l		05/11/87	1	IT	ME
H-15	CULEBRA	NICKEL	<	3.0000		<	3.0000	< 0.03	< 0.03	mg/l		01/13/88	2	IT	ME
H-15	CULEBRA	NICKEL	<	3.0000		<	3.0000	< 0.03	< 0.03	mg/l		11/07/88	3	IT	ME
H-15	CULEBRA	NITRATE		0.5000		NA	0.0000			mg/l	NO3-N	05/11/87	1	IT	GC
H-15	CULEBRA	NITRATE	<	0.0200		NA	0.0000			mg/l	NO3-N	01/13/88	2	IT	GC
H-15	CULEBRA	NITRATE	<	0.0200		NA	0.0000			mg/l	NO3-N	11/07/88	3	IT	GC
H-15	CULEBRA	NITROBENZENE	<	20.0000		NA	0.0000			ug/l		05/11/87	1	IT	SV
H-15	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		01/13/88	2	IT	SV
H-15	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		11/07/88	3	IT	SV
H-15	CULEBRA	P-CHLORO-M-CRESOL	<	20.0000		NA	0.0000			ug/l		05/11/87	1	IT	SV
H-15	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		01/13/88	2	IT	SV
H-15	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		11/07/88	3	IT	SV
H-15	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		05/11/87	1	IT	PC
H-15	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		01/13/88	2	IT	PC
H-15	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		11/07/88	3	IT	PC
H-15	CULEBRA	PENTACHLOROPHENOL	<	100.0000		NA	0.0000			ug/l		05/11/87	1	IT	SV
H-15	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		01/13/88	2	IT	SV
H-15	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		11/07/88	3	IT	SV
H-15	CULEBRA	PHENANTHRENE	<	20.0000		NA	0.0000			ug/l		05/11/87	1	IT	SV
H-15	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		01/13/88	2	IT	SV
H-15	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		11/07/88	3	IT	SV
H-15	CULEBRA	PHENOL	<	20.0000		NA	0.0000			ug/l		05/11/87	1	IT	SV
H-15	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		01/13/88	2	IT	SV
H-15	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		11/07/88	3	IT	SV
H-15	CULEBRA	PHENOLICS	<	0.0080		NA	0.0000			mg/l		05/11/87	1	IT	GC
H-15	CULEBRA	PHENOLICS		0.0390		NA	0.0000			mg/l		01/13/88	2	IT	GC

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H-15	CULEBRA	PHENOLICS		0.0260		NA	0.0000			mg/l	11/07/88	3	IT	GC
H-15	CULEBRA	PHOSPHATE	<	0.0100		<	0.0100			mg/l T-PO4-P	05/11/87	1	IT	GC
H-15	CULEBRA	PHOSPHATE	<	0.0100		NA	0.0000			mg/l T-PO4-P	01/13/88	2	IT	GC
H-15	CULEBRA	PHOSPHATE		0.0100			0.0100			mg/l T-PO4-P	11/07/88	3	IT	GC
H-15	CULEBRA	POTASSIUM		1800.0000		NA	0.0000			mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	POTASSIUM		1800.0000			1800.0000			mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	POTASSIUM		1800.0000			1900.0000			mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	PYRENE	<	20.0000		NA	0.0000			ug/l	05/11/87	1	IT	SV
H-15	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l	01/13/88	2	IT	SV
H-15	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l	11/07/88	3	IT	SV
H-15	CULEBRA	RESIDUE, FILTERABLE @ 180 C		230000.0000		NA	0.0000			mg/l	05/11/87	1	IT	GC
H-15	CULEBRA	RESIDUE, FILTERABLE @ 180 C		230000.0000			232000.0000			mg/l	01/13/88	2	IT	GC
H-15	CULEBRA	RESIDUE, FILTERABLE @ 180 C		246000.0000			244000.0000			mg/l	11/07/88	3	IT	GC
H-15	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		680.0000		NA	0.0000			mg/l	05/11/87	1	IT	GC
H-15	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		54.0000			68.0000			mg/l	01/13/88	2	IT	GC
H-15	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		930.0000			820.0000			mg/l	11/07/88	3	IT	GC
H-15	CULEBRA	SELENIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	SELENIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	SELENIUM	<	5.0000		<	5.0000	< 0.005	< 0.005	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	SILICA	<	20.0000		NA	0.0000	< 0.2	< 0.2	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	SILICA	<	21.0000		<	21.0000	< 0.2	< 0.2	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	SILICA		1.6000		NA	0.0000			mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	SILVER	<	1.0000		NA	0.0000	< 0.01	< 0.01	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	SILVER	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	SILVER		1.0000			1.0000	< 0.01	< 0.01	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	SODIUM		84000.0000		NA	0.0000			mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	SODIUM		78900.0000			78900.0000			mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	SODIUM		71000.0000			71000.0000			mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	SPECIFIC CONDUCTANCE		358000.0000			368000.0000			umhos/cm@25C	05/11/87	1	IT	GC

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H-15	CULEBRA	SPECIFIC CONDUCTANCE		410000.0000			405000.0000			umhos/cm@25C	01/13/88	2	IT	GC
H-15	CULEBRA	SPECIFIC CONDUCTANCE		210000.0000			210000.0000			umhos/cm@25C	11/07/88	3	IT	GC
H-15	CULEBRA	STRONTIUM		30.0000		NA	0.0000	< 0.01	< 0.01	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	STRONTIUM		30.0000			31.0000	< 0.01	< 0.01	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	STRONTIUM		31.0000			31.0000	< 0.01	< 0.01	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	STYRENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	SULFATE		6300.0000		NA	0.0000			mg/l	05/11/87	1	IT	GC
H-15	CULEBRA	SULFATE		7500.0000		NA	0.0000			mg/l	01/13/88	2	IT	GC
H-15	CULEBRA	SULFATE		5500.0000			5700.0000			mg/l	11/07/88	3	IT	GC
H-15	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	THALLIUM	<	2.5000		NA	0.0000	< 0.005	< 0.005	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	THALLIUM	<	5.0000		<	5.0000	< 0.005	< 0.005	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	THALLIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	TIN	<	4.0000		NA	0.0000	< 0.04	< 0.04	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	TITANIUM	<	0.5000		NA	0.0000	< 0.1	< 0.1	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	TITANIUM	<	3.0000		<	3.0000	< 0.03	< 0.03	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	TITANIUM	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	TOLUENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	TOTAL ORGANIC CARBON		1.0000			2.0000			mg/l	05/11/87	1	IT	GC
H-15	CULEBRA	TOTAL ORGANIC CARBON		2.0000			1.0000			mg/l	01/13/88	2	IT	GC
H-15	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	11/07/88	3	IT	GC
H-15	CULEBRA	TOTAL ORGANIC HALOGEN		8.1000			6.7000			mg/l	05/11/87	1	IT	GC
H-15	CULEBRA	TOTAL ORGANIC HALOGEN		2.5000			2.8000			mg/l	01/13/88	2	IT	GC

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H-15	CULEBRA	TOTAL ORGANIC HALOGEN		1.3000			1.1000			mg/l	11/07/88	3	IT	GC
H-15	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	VANADIUM	<	1.0000		NA	0.0000	< 0.01	< 0.01	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	VANADIUM	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	VANADIUM		1.0000			1.0000	< 0.01	< 0.01	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	05/11/87	1	IT	V
H-15	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	01/13/88	2	IT	V
H-15	CULEBRA	XYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	11/07/88	3	IT	V
H-15	CULEBRA	ZINC	<	1.0000		NA	0.0000	< 0.01	< 0.01	mg/l	05/11/87	1	IT	ME
H-15	CULEBRA	ZINC	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	01/13/88	2	IT	ME
H-15	CULEBRA	ZINC		1.0000			1.0000	< 0.01	< 0.01	mg/l	11/07/88	3	IT	ME
H-15	CULEBRA	pH		6.5900			6.6200				05/11/87	1	IT	GC
H-15	CULEBRA	pH		6.8000		NA	0.0000				01/13/88	2	IT	GC
H-15	CULEBRA	pH		6.5500			6.5800				11/07/88	3	IT	GC

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** H-17														
H-17	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-17	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	ACETONE		29.0000		NA	0.0000		T < 10	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	10/27/87	1	IT	GC
H-17	CULEBRA	ALKALINITY (HCO3)		43.0000		NA	0.0000			mg/l	10/27/87	1	IT	GC
H-17	CULEBRA	ALUMINUM		2.0000			3.0000	< 0.1	< 0.1	mg/l	10/27/87	1	IT	ME
H-17	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	ANTIMONY		2.5000			2.5000	< 0.05	< 0.05	mg/l	10/27/87	1	IT	ME
H-17	CULEBRA	ARSENIC	<	0.0500			0.0500	< 0.005	< 0.005	mg/l	10/27/87	1	IT	ME
H-17	CULEBRA	BARIUM		0.1200			0.1300	< 0.005	< 0.005	mg/l	10/27/87	1	IT	ME
H-17	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	10/27/87	1	IT	ME
H-17	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV

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H-17	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	BORON		39.0000			40.0000	< 0.01	< 0.01	mg/l	10/27/87	1	IT	ME
H-17	CULEBRA	BROMIDE		75.0000		NA	0.0000			mg/l	10/27/87	1	IT	GC
H-17	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	CADMIUM		0.2400			0.2500	< 0.005	< 0.005	mg/l	10/27/87	1	IT	ME
H-17	CULEBRA	CALCIUM		1500.0000			1500.0000			mg/l	10/27/87	1	IT	ME
H-17	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	CESIUM		5.0000			5.0000	< 0.01	< 0.01	mg/l	10/27/87	1	IT	ME
H-17	CULEBRA	CHLORIDE		87300.0000		NA	0.0000			mg/l	10/27/87	1	IT	GC
H-17	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	CHROMIUM		1.1000			1.2000	< 0.01	< 0.01	mg/l	10/27/87	1	IT	ME
H-17	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	COBALT		0.4000			0.4000	< 0.01	< 0.01	mg/l	10/27/87	1	IT	ME
H-17	CULEBRA	COPPER		0.6000			0.6000	< 0.01	< 0.01	mg/l	10/27/87	1	IT	ME
H-17	CULEBRA	CYANIDE	<	0.0400		NA	0.0000			mg/l	10/27/87	1	IT	GC
H-17	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV
H-17	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/27/87	1	IT	SV

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H-17	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l		10/27/87	1	IT	SV
H-17	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l		10/27/87	1	IT	V
H-17	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l		10/27/87	1	IT	SV
H-17	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l		10/27/87	1	IT	SV
H-17	CULEBRA	FLUORIDE		1.3000			1.2000			mg/l		10/27/87	1	IT	GC
H-17	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l		10/27/87	1	IT	SV
H-17	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l		10/27/87	1	IT	SV
H-17	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l		10/27/87	1	IT	SV
H-17	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l		10/27/87	1	IT	SV
H-17	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l		10/27/87	1	IT	SV
H-17	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l		10/27/87	1	IT	GC
H-17	CULEBRA	IRON		1.2000			1.2000	< 0.01	< 0.01	mg/l		10/27/87	1	IT	ME
H-17	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l		10/27/87	1	IT	SV
H-17	CULEBRA	LEAD		2.0000			2.2000	< 0.05	< 0.05	mg/l		10/27/87	1	IT	ME
H-17	CULEBRA	LITHIUM		1.0000			0.9600	< 0.01	< 0.01	mg/l		10/27/87	1	IT	ME
H-17	CULEBRA	MAGNESIUM		1700.0000			1700.0000			mg/l		10/27/87	1	IT	ME
H-17	CULEBRA	MANGANESE		0.1600			0.1700	< 0.005	< 0.005	mg/l		10/27/87	1	IT	ME
H-17	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l		10/27/87	1	IT	ME
H-17	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l		10/27/87	1	IT	V
H-17	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l		10/27/87	1	IT	V
H-17	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l		10/27/87	1	IT	V
H-17	CULEBRA	MOLYBDENUM		0.2400			0.2200	< 0.01	< 0.01	mg/l		10/27/87	1	IT	ME
H-17	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		10/27/87	1	IT	SV
H-17	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		10/27/87	1	IT	SV
H-17	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		10/27/87	1	IT	SV
H-17	CULEBRA	NICKEL		0.7000			0.7000	< 0.03	< 0.03	mg/l		10/27/87	1	IT	ME
H-17	CULEBRA	NITRATE	<	0.2000		NA	0.0000			mg/l	NO3-N	10/27/87	1	IT	GC
H-17	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		10/27/87	1	IT	SV
H-17	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		10/27/87	1	IT	SV

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H-17	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		10/27/87	1	IT	PC
H-17	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		10/27/87	1	IT	SV
H-17	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		10/27/87	1	IT	SV
H-17	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		10/27/87	1	IT	SV
H-17	CULEBRA	PHENOLICS		0.0470		NA	0.0000			mg/l		10/27/87	1	IT	GC
H-17	CULEBRA	PHOSPHATE		0.0200		NA	0.0000			mg/l	T-PO4-P	10/27/87	1	IT	GC
H-17	CULEBRA	POTASSIUM		1400.0000			1400.0000			mg/l		10/27/87	1	IT	ME
H-17	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l		10/27/87	1	IT	SV
H-17	CULEBRA	RESIDUE, FILTERABLE @ 180 C		151000.0000			151000.0000			mg/l		10/27/87	1	IT	GC
H-17	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		230.0000			250.0000			mg/l		10/27/87	1	IT	GC
H-17	CULEBRA	SELENIUM	<	5.0000		<	5.0000	< 0.005	< 0.005	mg/l		10/27/87	1	IT	ME
H-17	CULEBRA	SILICA		12.0000			13.0000	< 0.2	< 0.2	mg/l		10/27/87	1	IT	ME
H-17	CULEBRA	SILVER		0.3000			0.4000	< 0.01	< 0.01	mg/l		10/27/87	1	IT	ME
H-17	CULEBRA	SODIUM		54700.0000			55000.0000			mg/l		10/27/87	1	IT	ME
H-17	CULEBRA	SPECIFIC CONDUCTANCE		224000.0000											
H-17	CULEBRA	STRONTIUM		37.0000			37.0000	< 0.01	< 0.01	mg/l		10/27/87	1	IT	ME
H-17	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l		10/27/87	1	IT	V
H-17	CULEBRA	SULFATE		7000.0000		NA	0.0000			mg/l		10/27/87	1	IT	GC
H-17	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l		10/27/87	1	IT	V
H-17	CULEBRA	THALLIUM	<	5.0000		<	5.0000	< 0.005	< 0.005	mg/l		10/27/87	1	IT	ME
H-17	CULEBRA	TITANIUM		1.3000			1.4000	< 0.03	< 0.03	mg/l		10/27/87	1	IT	ME
H-17	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l		10/27/87	1	IT	V
H-17	CULEBRA	TOTAL ORGANIC CARBON		1.0000			1.0000			mg/l		10/27/87	1	IT	GC
H-17	CULEBRA	TOTAL ORGANIC HALOGEN		6.5000			7.8000			mg/l		10/27/87	1	IT	GC
H-17	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l		10/27/87	1	IT	V
H-17	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l		10/27/87	1	IT	V
H-17	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l		10/27/87	1	IT	V

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H-17	CULEBRA	VANADIUM		0.5000			0.5000	< 0.01	< 0.01	mg/l	10/27/87	1	IT	ME
H-17	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/27/87	1	IT	V
H-17	CULEBRA	ZINC		0.2000			0.2000	< 0.01	< 0.01	mg/l	10/27/87	1	IT	ME
H-17	CULEBRA	pH		6.6400			6.6700				10/27/87	1	IT	GC
** H-18														
H-18	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-18	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-18	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T 13	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	04/07/88	2	IT	V

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H-18	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	ACETONE	<	10.0000		NA	0.0000		T < 10	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	ACETONE	<	10.0000		NA	0.0000		T 12	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	ACETONE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	11/10/87	1	IT	GC
H-18	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	04/07/88	2	IT	GC
H-18	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	04/10/90	3	IT	GC
H-18	CULEBRA	ALKALINITY (HCO3)		54.0000		NA	0.0000			mg/l	11/10/87	1	IT	GC
H-18	CULEBRA	ALKALINITY (HCO3)		50.0000		NA	0.0000			mg/l	04/07/88	2	IT	GC
H-18	CULEBRA	ALKALINITY (HCO3)		56.0000		NA	0.0000			mg/l	04/10/90	3	IT	GC
H-18	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	ALUMINUM	<	2.0000		<	2.0000			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	ANTIMONY	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	ANTIMONY	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	ANTIMONY	<	0.6000		<	0.6000			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	ARSENIC	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	11/10/87	1	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-18	CULEBRA	ARSENIC	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	ARSENIC	<	0.1000		NA	0.0000			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	BARIUM	<	0.0500		<	0.0500	0.005	< 0.005	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	BARIUM	<	2.0000		<	2.0000			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	BENZENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV

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H-18	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	BORON		16.0000			15.0000	< 0.01	< 0.01	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	BORON		17.0000			17.0000	0.01	0.01	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	BORON		16.0000			16.0000			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	BROMIDE		17.0000		NA	0.0000			mg/l	11/10/87	1	IT	GC
H-18	CULEBRA	BROMIDE		14.0000		NA	0.0000			mg/l	04/07/88	2	IT	GC
H-18	CULEBRA	BROMIDE		14.0000			14.0000			mg/l	04/10/90	3	IT	GC
H-18	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	CADMIUM	<	0.0500		<	0.0500			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	CALCIUM		980.0000			980.0000			mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	CALCIUM		1100.0000			1100.0000			mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	CALCIUM		1200.0000			1200.0000			mg/l	04/10/90	3	IT	MC
H-18	CULEBRA	CALCIUM HARDNESS		0.0000			0.0000			mg/l	04/10/90	3	IT	GC
H-18	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	CESIUM		0.3900			0.3900	< 0.01	< 0.01	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	CESIUM	<	0.0500		<	0.0500	< 0.01	< 0.01	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	CESIUM		0.7000			0.8000			mg/l	04/10/90	3	IT	MT

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H-18	CULEBRA	CHLORIDE		12000.0000		NA	0.0000			mg/l	11/10/87	1	IT	GC
H-18	CULEBRA	CHLORIDE		12500.0000		NA	0.0000			mg/l	04/07/88	2	IT	GC
H-18	CULEBRA	CHLORIDE		13000.0000			13000.0000			mg/l	04/10/90	3	IT	GC
H-18	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	CHROMIUM	<	0.1000		<	0.1000	< 0.01	0.01	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	CHROMIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	CHROMIUM		0.2000			0.2000			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	COBALT	<	0.1000		<	0.1000	0.02	0.02	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	COBALT	<	0.5000		<	0.5000			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	COPPER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	COPPER		0.1000			0.2000	< 0.01	< 0.01	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	COPPER	<	0.2500		<	0.2500			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	11/10/87	1	IT	GC
H-18	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	04/07/88	2	IT	GC
H-18	CULEBRA	CYANIDE	<	0.0100		NA	0.0000			mg/l	04/10/90	3	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-18	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	FLUORIDE		1.9000		NA	0.0000			mg/l	11/10/87	1	IT	GC
H-18	CULEBRA	FLUORIDE		1.6000		NA	0.0000			mg/l	04/07/88	2	IT	GC
H-18	CULEBRA	FLUORIDE		1.7000			1.7000			mg/l	04/10/90	3	IT	GC

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H-18	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	IODIDE	<	2.0000		NA	0.0000			mg/l	11/10/87	1	IT	GC
H-18	CULEBRA	IODIDE	<	2.0000		NA	0.0000			mg/l	04/07/88	2	IT	GC
H-18	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	04/10/90	3	IT	GC
H-18	CULEBRA	IRON		0.2000			0.2000	< 0.01	< 0.01	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	IRON		0.3000			0.4000	< 0.01	< 0.01	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	IRON	<	1.0000		<	1.0000			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	11/10/87	1	IT	SV
H-18	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	04/07/88	2	IT	SV
H-18	CULEBRA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	LEAD	<	0.5000		<	0.5000			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	LITHIUM		0.2500			0.2500	< 0.01	< 0.01	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	LITHIUM		0.3100			0.3100	< 0.01	< 0.01	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	LITHIUM		0.2000			0.1000			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	MAGNESIUM		500.0000			520.0000			mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	MAGNESIUM		480.0000			480.0000			mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	MAGNESIUM		520.0000			520.0000			mg/l	04/10/90	3	IT	MC
H-18	CULEBRA	MANGANESE		0.1400			0.1400	< 0.005	< 0.005	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	MANGANESE		0.1800			0.1800	< 0.005	< 0.005	mg/l	04/07/88	2	IT	ME

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H-18	CULEBRA	MANGANESE		0.2100			0.2000			mg/l		04/10/90	3	IT	MT
H-18	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	0.0003	mg/l		11/10/87	1	IT	ME
H-18	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l		04/07/88	2	IT	ME
H-18	CULEBRA	MERCURY	<	0.0002		<	0.0002			mg/l		04/10/90	3	IT	MT
H-18	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l		11/10/87	1	IT	V
H-18	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l		04/07/88	2	IT	V
H-18	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l		04/10/90	3	IT	V
H-18	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l		11/10/87	1	IT	V
H-18	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l		04/07/88	2	IT	V
H-18	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l		04/10/90	3	IT	V
H-18	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l		11/10/87	1	IT	V
H-18	CULEBRA	METHYLENE CHLORIDE		5.5000		NA	0.0000		T 5.7	ug/l		04/07/88	2	IT	V
H-18	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000	T 6	M< 5	ug/l		04/10/90	3	IT	V
H-18	CULEBRA	MOLYBDENUM		0.0500			0.0600	< 0.01	< 0.01	mg/l		11/10/87	1	IT	ME
H-18	CULEBRA	MOLYBDENUM	<	2.0000		<	2.0000	< 0.01	< 0.01	mg/l		04/07/88	2	IT	ME
H-18	CULEBRA	MOLYBDENUM	<	0.2000		<	0.2000			mg/l		04/10/90	3	IT	MT
H-18	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		11/10/87	1	IT	SV
H-18	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		04/07/88	2	IT	SV
H-18	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		11/10/87	1	IT	SV
H-18	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		04/07/88	2	IT	SV
H-18	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		11/10/87	1	IT	SV
H-18	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		04/07/88	2	IT	SV
H-18	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		11/10/87	1	IT	ME
H-18	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		04/07/88	2	IT	ME
H-18	CULEBRA	NICKEL	<	0.4000		<	0.4000			mg/l		04/10/90	3	IT	MT
H-18	CULEBRA	NITRATE	<	0.2000		NA	0.0000			mg/l	NO3-N	11/10/87	1	IT	GC
H-18	CULEBRA	NITRATE	<	0.0200		NA	0.0000			mg/l	NO3-N	04/07/88	2	IT	GC
H-18	CULEBRA	NITRATE	<	0.2000		NA	0.0000			mg/l		04/10/90	3	IT	GC
H-18	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		11/10/87	1	IT	SV

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H-18	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		04/07/88	2	IT	SV
H-18	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		11/10/87	1	IT	SV
H-18	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		04/07/88	2	IT	SV
H-18	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		11/10/87	1	IT	PC
H-18	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		04/07/88	2	IT	PC
H-18	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		11/10/87	1	IT	SV
H-18	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		04/07/88	2	IT	SV
H-18	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		11/10/87	1	IT	SV
H-18	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		04/07/88	2	IT	SV
H-18	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		11/10/87	1	IT	SV
H-18	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		04/07/88	2	IT	SV
H-18	CULEBRA	PHENOLICS		0.0410		NA	0.0000			mg/l		11/10/87	1	IT	GC
H-18	CULEBRA	PHENOLICS	<	0.0050		NA	0.0000			mg/l		04/07/88	2	IT	GC
H-18	CULEBRA	PHENOLICS		0.1200		NA	0.0000			mg/l		04/10/90	3	IT	GC
H-18	CULEBRA	PHOSPHATE		0.0300		NA	0.0000			mg/l	T-PO4-P	11/10/87	1	IT	GC
H-18	CULEBRA	PHOSPHATE	<	0.0100		NA	0.0000			mg/l	T-PO4-P	04/07/88	2	IT	GC
H-18	CULEBRA	PHOSPHORUS	<	0.0100		NA	0.0000			mg/l		04/10/90	3	IT	GC
H-18	CULEBRA	POTASSIUM		240.0000			240.0000			mg/l		11/10/87	1	IT	ME
H-18	CULEBRA	POTASSIUM		220.0000			230.0000			mg/l		04/07/88	2	IT	ME
H-18	CULEBRA	POTASSIUM		300.0000			200.0000			mg/l		04/10/90	3	IT	MC
H-18	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l		11/10/87	1	IT	SV
H-18	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l		04/07/88	2	IT	SV
H-18	CULEBRA	RESIDUE, FILTERABLE @ 180 C		24000.0000		NA	0.0000			mg/l		11/10/87	1	IT	GC
H-18	CULEBRA	RESIDUE, FILTERABLE @ 180 C		27900.0000		NA	0.0000			mg/l		04/07/88	2	IT	GC
H-18	CULEBRA	RESIDUE, FILTERABLE @ 180 C		31000.0000			31000.0000			mg/l		04/10/90	3	IT	GC
H-18	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		25.0000			25.0000			mg/l		11/10/87	1	IT	GC
H-18	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		6.0000		NA	0.0000			mg/l		04/07/88	2	IT	GC
H-18	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000			7.0000			mg/l		04/10/90	3	IT	GC
H-18	CULEBRA	SELENIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l		11/10/87	1	IT	ME

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H-18	CULEBRA	SELENIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	SELENIUM	<	0.5000		NA	0.0000			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	SILICA		13.0000			12.0000	0.32	0.42	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	SILICA		5.3000			5.3000			mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	SILICA		5.1000		NA	0.0000			mg/l	04/10/90	3	IT	GC
H-18	CULEBRA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	SILVER	<	0.1000		<	0.1000			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	SODIUM		6900.0000			6800.0000			mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	SODIUM		8000.0000			8000.0000			mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	SODIUM		8000.0000			8000.0000			mg/l	04/10/90	3	IT	MC
H-18	CULEBRA	SPECIFIC CONDUCTANCE		36300.0000			36400.0000			umhos/cm@25C	11/10/87	1	IT	GC
H-18	CULEBRA	SPECIFIC CONDUCTANCE		39200.0000			39600.0000			umhos/cm@25C	04/07/88	2	IT	GC
H-18	CULEBRA	SPECIFIC CONDUCTANCE		39300.0000			39300.0000			uMhos/cm@25C	04/10/90	3	IT	GC
H-18	CULEBRA	STRONTIUM		15.0000			15.0000	< 0.01	< 0.01	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	STRONTIUM		16.0000			16.0000	< 0.01	< 0.01	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	STRONTIUM		15.0000			15.0000			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	STYRENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	SULFATE		3700.0000		NA	0.0000			mg/l	11/10/87	1	IT	GC
H-18	CULEBRA	SULFATE		3800.0000		NA	0.0000			mg/l	04/07/88	2	IT	GC
H-18	CULEBRA	SULFATE		5200.0000		NA	0.0000			mg/l	04/10/90	3	IT	GC
H-18	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	THALLIUM	<	5.0000		<	5.0000	< 0.005	< 0.005	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	THALLIUM	<	5.0000		<	5.0000	< 0.005	< 0.005	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	THALLIUM	<	0.5000		NA	0.0000			mg/l	04/10/90	3	IT	MT

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
H-18	CULEBRA	TITANIUM	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	TITANIUM		0.6000			0.6000	< 0.03	< 0.03	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	TITANIUM	<	0.1000		<	0.1000			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	TOLUENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	TOTAL HARDNESS		0.0000		NA	0.0000			mg/l	04/10/90	3	IT	GC
H-18	CULEBRA	TOTAL ORGANIC CARBON		1.0000			1.0000			mg/l	11/10/87	1	IT	GC
H-18	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	04/07/88	2	IT	GC
H-18	CULEBRA	TOTAL ORGANIC CARBON		4.0000			5.0000			mg/l	04/10/90	3	IT	GC
H-18	CULEBRA	TOTAL ORGANIC HALOGEN		0.3500			0.4600			mg/l	11/10/87	1	IT	GC
H-18	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	04/07/88	2	IT	GC
H-18	CULEBRA	TOTAL ORGANIC HALOGEN		0.4300			0.4100			mg/l	04/10/90	3	IT	GC
H-18	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	VANADIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	VANADIUM		0.1000			0.2000	< 0.01	< 0.01	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	VANADIUM	<	0.5000		<	0.5000			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	11/10/87	1	IT	V

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H-18	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000	T< 10	M< 10	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	11/10/87	1	IT	V
H-18	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/07/88	2	IT	V
H-18	CULEBRA	XYLENE	<	5.0000		NA	0.0000	T< 5	M< 5	ug/l	04/10/90	3	IT	V
H-18	CULEBRA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/10/87	1	IT	ME
H-18	CULEBRA	ZINC	<	0.1000			0.1000	< 0.01	< 0.01	mg/l	04/07/88	2	IT	ME
H-18	CULEBRA	ZINC	<	0.2000		<	0.2000			mg/l	04/10/90	3	IT	MT
H-18	CULEBRA	pH		5.9700			6.0300				11/10/87	1	IT	GC
H-18	CULEBRA	pH		7.1600			7.2000				04/07/88	2	IT	GC
H-18	CULEBRA	pH		7.5900			7.6000				04/10/90	3	IT	GC
** MOBLEY WELL														
MOBLEY WELL	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	06/16/87	1	IT	V
MOBLEY WELL	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/14/88	2	IT	V
MOBLEY WELL	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	06/16/87	1	IT	V
MOBLEY WELL	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/14/88	2	IT	V
MOBLEY WELL	CULEBRA	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	06/16/87	1	IT	V
MOBLEY WELL	CULEBRA	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/14/88	2	IT	V
MOBLEY WELL	CULEBRA	2,4,5-TP (SILVEX)	<	0.0005		NA	0.0000			mg/l	06/16/87	1	IT	HP
MOBLEY WELL	CULEBRA	2,4,5-TP (SILVEX)	<	0.0005		NA	0.0000			mg/l	04/14/88	2	IT	HP
MOBLEY WELL	CULEBRA	2,4-D	<	0.0050		NA	0.0000			mg/l	06/16/87	1	IT	HP
MOBLEY WELL	CULEBRA	2,4-D	<	0.0050		NA	0.0000			mg/l	04/14/88	2	IT	HP
MOBLEY WELL	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	04/14/88	2	IT	GC
MOBLEY WELL	CULEBRA	ALKALINITY (HCO3)		140.0000		NA	0.0000			mg/l	04/14/88	2	IT	GC
MOBLEY WELL	CULEBRA	ALUMINUM		0.2000			0.2000	< 0.1	< 0.1	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	ANTIMONY		0.1200			0.1500	< 0.05	< 0.05	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	ARSENIC		0.0080		NA	0.0000			mg/l	06/16/87	1	IT	ME
MOBLEY WELL	CULEBRA	ARSENIC		0.0050			0.0050	< 0.005	< 0.005	mg/l	04/14/88	2	IT	ME

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MOBLEY WELL	CULEBRA	BARIUM		0.0090		NA	0.0000			mg/l	06/16/87	1	IT	ME
MOBLEY WELL	CULEBRA	BARIUM		0.0160			0.0170	< 0.005	< 0.005	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	BENZENE	<	1.0000		NA	0.0000			ug/l	06/16/87	1	IT	V
MOBLEY WELL	CULEBRA	BENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/14/88	2	IT	V
MOBLEY WELL	CULEBRA	BERYLLIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	BORON		1.6000			1.7000	0.03	< 0.01	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	BROMIDE		5.0000		NA	0.0000			mg/l	04/14/88	2	IT	GC
MOBLEY WELL	CULEBRA	BROMOFORM	<	2.0000		NA	0.0000			ug/l	06/16/87	1	IT	V
MOBLEY WELL	CULEBRA	BROMOFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/14/88	2	IT	V
MOBLEY WELL	CULEBRA	CADMIUM	<	0.0030		NA	0.0000			mg/l	06/16/87	1	IT	ME
MOBLEY WELL	CULEBRA	CADMIUM	<	0.0100		NA	0.0000	< 0.001	< 0.001	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	CALCIUM		620.0000			610.0000			mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000			ug/l	06/16/87	1	IT	V
MOBLEY WELL	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/14/88	2	IT	V
MOBLEY WELL	CULEBRA	CESIUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	CHLORIDE		450.0000			440.0000			mg/l	06/16/87	1	IT	GC
MOBLEY WELL	CULEBRA	CHLORIDE		430.0000		NA	0.0000			mg/l	04/14/88	2	IT	GC
MOBLEY WELL	CULEBRA	CHLOROFORM	<	1.0000		NA	0.0000			ug/l	06/16/87	1	IT	V
MOBLEY WELL	CULEBRA	CHLOROFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/14/88	2	IT	V
MOBLEY WELL	CULEBRA	CHROMIUM	<	0.0200		NA	0.0000			mg/l	06/16/87	1	IT	ME
MOBLEY WELL	CULEBRA	CHROMIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	COBALT		0.0200			0.0300	< 0.01	< 0.01	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	COLOR		10.0000		NA	0.0000			CU	06/16/87	1	IT	GC
MOBLEY WELL	CULEBRA	COPPER		0.0090		NA	0.0000			mg/l	06/16/87	1	IT	ME
MOBLEY WELL	CULEBRA	COPPER		0.0400			0.0500	0.01	0.01	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000			ug/l	06/16/87	1	IT	V
MOBLEY WELL	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/14/88	2	IT	V
MOBLEY WELL	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000			ug/l	06/16/87	1	IT	V
MOBLEY WELL	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/14/88	2	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
MOBLEY WELL	CULEBRA	ENDRIN	<	0.0200		NA	0.0000			ug/l	06/16/87	1	IT	HP
MOBLEY WELL	CULEBRA	ENDRIN	<	0.0200		NA	0.0000			ug/l	04/14/88	2	IT	HP
MOBLEY WELL	CULEBRA	FLUORIDE		2.4000			2.3000			mg/l	06/16/87	1	IT	GC
MOBLEY WELL	CULEBRA	FLUORIDE		2.2000		NA	0.0000			mg/l	04/14/88	2	IT	GC
MOBLEY WELL	CULEBRA	IODIDE	<	2.0000		NA	0.0000			mg/l	04/14/88	2	IT	GC
MOBLEY WELL	CULEBRA	IRON		0.0600		NA	0.0000			mg/l	06/16/87	1	IT	ME
MOBLEY WELL	CULEBRA	IRON		0.0600			0.0600	0.04	< 0.01	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	LEAD	<	0.0050		NA	0.0000			mg/l	06/16/87	1	IT	ME
MOBLEY WELL	CULEBRA	LEAD	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	LINDANE	<	0.0400		NA	0.0000			ug/l	06/16/87	1	IT	HP
MOBLEY WELL	CULEBRA	LINDANE	<	0.0400		NA	0.0000			ug/l	04/14/88	2	IT	HP
MOBLEY WELL	CULEBRA	LITHIUM		0.2000			0.2000	< 0.01	< 0.01	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	LSI CORROSIVITY		1.5700		NA	0.0000				06/16/87	1	IT	GC
MOBLEY WELL	CULEBRA	MAGNESIUM		140.0000			140.0000			mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	MANGANESE		0.0030		NA	0.0000			mg/l	06/16/87	1	IT	ME
MOBLEY WELL	CULEBRA	MANGANESE		0.0080			0.0090	< 0.005	< 0.005	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	MBAS		0.0500			0.0400			mg/l	06/16/87	1	IT	GC
MOBLEY WELL	CULEBRA	MERCURY	<	0.0002		NA	0.0000			mg/l	06/16/87	1	IT	ME
MOBLEY WELL	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	METHOXYCHLOR	<	0.0010		NA	0.0000			mg/l	06/16/87	1	IT	HP
MOBLEY WELL	CULEBRA	METHOXYCHLOR	<	0.0010		NA	0.0000			mg/l	04/14/88	2	IT	HP
MOBLEY WELL	CULEBRA	MOLYBDENUM	<	10.0000		<	10.0000	< 0.01	< 0.01	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	NICKEL		0.0400			0.0400	< 0.03	< 0.03	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	NITRATE		1.6000		NA	0.0000			mg/l NO3-N	06/16/87	1	IT	GC
MOBLEY WELL	CULEBRA	NITRATE		1.2000		NA	0.0000			mg/l NO3-N	04/14/88	2	IT	GC
MOBLEY WELL	CULEBRA	ODOR		1.4000		NA	0.0000			T.O.N.	06/16/87	1	IT	GC
MOBLEY WELL	CULEBRA	P-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	06/16/87	1	IT	V
MOBLEY WELL	CULEBRA	P-DICHLOROBENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/14/88	2	IT	V
MOBLEY WELL	CULEBRA	PHOSPHATE	<	0.0100		<	0.0100			mg/l T-PO4-P	04/14/88	2	IT	GC

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MOBLEY WELL	CULEBRA	POTASSIUM		10.0000			10.0000			mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	RESIDUE, FILTERABLE @ 180 C		3800.0000		NA	0.0000			mg/l	06/16/87	1	IT	GC
MOBLEY WELL	CULEBRA	RESIDUE, FILTERABLE @ 180 C		3800.0000		NA	0.0000			mg/l	04/14/88	2	IT	GC
MOBLEY WELL	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000		NA	0.0000			mg/l	04/14/88	2	IT	GC
MOBLEY WELL	CULEBRA	SELENIUM		0.0030		NA	0.0000			mg/l	06/16/87	1	IT	ME
MOBLEY WELL	CULEBRA	SELENIUM		0.0110		NA	0.0000	< 0.005	< 0.005	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	SILICA		19.0000		NA	0.0000			mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	SILVER	<	0.0060		NA	0.0000			mg/l	06/16/87	1	IT	ME
MOBLEY WELL	CULEBRA	SILVER	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	SODIUM		280.0000			280.0000			mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	SPECIFIC CONDUCTANCE		4530.0000		NA	0.0000			umhos/cm@25C	04/14/88	2	IT	GC
MOBLEY WELL	CULEBRA	STRONTIUM		9.1000			9.2000	< 0.01	< 0.01	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	SULFATE		1900.0000			2000.0000			mg/l	06/16/87	1	IT	GC
MOBLEY WELL	CULEBRA	SULFATE		2100.0000		NA	0.0000			mg/l	04/14/88	2	IT	GC
MOBLEY WELL	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	06/16/87	1	IT	V
MOBLEY WELL	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/14/88	2	IT	V
MOBLEY WELL	CULEBRA	THALLIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	TITANIUM		0.3000			0.3300	< 0.03	< 0.03	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	04/14/88	2	IT	GC
MOBLEY WELL	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	04/14/88	2	IT	GC
MOBLEY WELL	CULEBRA	TOXAPHENE	<	0.0005		NA	0.0000			mg/l	06/16/87	1	IT	HP
MOBLEY WELL	CULEBRA	TOXAPHENE	<	0.0005		NA	0.0000			mg/l	04/14/88	2	IT	HP
MOBLEY WELL	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	06/16/87	1	IT	V
MOBLEY WELL	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/14/88	2	IT	V
MOBLEY WELL	CULEBRA	TURBIDITY		2.7700			2.7400			NTU	06/16/87	1	IT	GC
MOBLEY WELL	CULEBRA	VANADIUM		0.0800			0.0900	< 0.01	< 0.01	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	VINYL CHLORIDE	<	1.0000		NA	0.0000			ug/l	06/16/87	1	IT	V
MOBLEY WELL	CULEBRA	VINYL CHLORIDE	<	2.0000		NA	0.0000		T < 2.0	ug/l	04/14/88	2	IT	V
MOBLEY WELL	CULEBRA	ZINC		0.0210		NA	0.0000			mg/l	06/16/87	1	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
MOBLEY WELL	CULEBRA	ZINC	<	0.0100			0.0100	< 0.01	< 0.01	mg/l	04/14/88	2	IT	ME
MOBLEY WELL	CULEBRA	pH		7.3700		NA	0.0000				06/16/87	1	IT	GC
MOBLEY WELL	CULEBRA	pH		7.1000		NA	0.0000				04/14/88	2	IT	GC
** P-14														
P-14	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
P-14	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV

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P-14	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	2-BUTANONE		10.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	2-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV

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P-14	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV

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P-14	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	ACETONE		27.0000		NA	0.0000		T 46	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	ACETONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	02/27/86	1	IT	GC
P-14	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	06/18/87	2	IT	GC
P-14	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	03/16/88	3	IT	GC
P-14	CULEBRA	ALKALINITY (HCO3)		100.0000		NA	0.0000			mg/l	02/27/86	1	IT	GC
P-14	CULEBRA	ALKALINITY (HCO3)		100.0000			100.0000			mg/l	06/18/87	2	IT	GC
P-14	CULEBRA	ALKALINITY (HCO3)		100.0000		NA	0.0000			mg/l	03/16/88	3	IT	GC
P-14	CULEBRA	ALUMINUM	<	0.1000		<	0.1000	< 0.10	< 0.10	mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	ANTIMONY		0.8900			0.8900	< 0.05	< 0.05	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	ANTIMONY	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	ARSENIC	<	0.1000		<	0.1000	< 0.001	< 0.001	mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	ARSENIC	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	ARSENIC	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	03/16/88	3	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
P-14	CULEBRA	BARIUM	<	0.1000		<	0.1000	< 0.10	< 0.01	mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	BARIUM		0.0760			0.0790	< 0.005	< 0.005	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	BARIUM	<	0.1000		<	0.0100	0.01	0.01	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	BENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	BERYLLIUM		0.0060			0.0070	< 0.005	< 0.005	mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
P-14	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	BORON		0.7000			0.6000	< 0.01	< 0.01	mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	BORON		0.8200			0.8200	< 0.01	< 0.01	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	BORON		0.7000			0.7000	< 0.01	< 0.01	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	BROMIDE		24.0000			24.0000			mg/l	02/27/86	1	IT	GC
P-14	CULEBRA	BROMIDE		17.0000		NA	0.0000			mg/l	06/18/87	2	IT	GC
P-14	CULEBRA	BROMIDE		16.0000		NA	0.0000			mg/l	03/16/88	3	IT	GC
P-14	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	CADMIUM		0.0580			0.0660	< 0.005	< 0.005	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	CALCIUM		3900.0000			3900.0000			mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	CALCIUM		3500.0000		NA	0.0000			mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	CALCIUM		3400.0000			3400.0000			mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V

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P-14	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	CESIUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	CESIUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	CESIUM	<	0.0200		<	0.0200	< 0.01	< 0.01	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	CHLORIDE		14000.0000		NA	0.0000			mg/l	02/27/86	1	IT	GC
P-14	CULEBRA	CHLORIDE		15000.0000			15000.0000			mg/l	06/18/87	2	IT	GC
P-14	CULEBRA	CHLORIDE		14300.0000		NA	0.0000			mg/l	03/16/88	3	IT	GC
P-14	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	CHROMIUM		0.0800			0.0800	< 0.01	< 0.01	mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	CHROMIUM		0.3900			0.4200	< 0.01	< 0.01	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	CHROMIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	COBALT		0.6200			0.6300	0.03	0.01	mg/l	02/27/86	1	IT	ME

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P-14	CULEBRA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	COPPER		0.0800			0.0700	< 0.01	0.02	mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	COPPER		0.1100			0.1300	< 0.01	< 0.01	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	COPPER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	CYANIDE	<	0.0200		<	0.0200			mg/l	02/27/86	1	IT	GC
P-14	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	06/18/87	2	IT	GC
P-14	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	03/16/88	3	IT	GC
P-14	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV

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P-14	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	Eh		446.0000			441.0000			mV	02/27/86	1	IT	GC
P-14	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	FLUORIDE		1.2000		NA	0.0000			mg/l	02/27/86	1	IT	GC
P-14	CULEBRA	FLUORIDE		1.4000			1.4000			mg/l	06/18/87	2	IT	GC
P-14	CULEBRA	FLUORIDE		1.2000		NA	0.0000			mg/l	03/16/88	3	IT	GC
P-14	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV

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P-14	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	IODIDE	<	1.0000		NA	0.0000			mg/l	02/27/86	1	IT	GC
P-14	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	06/18/87	2	IT	GC
P-14	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	03/16/88	3	IT	GC
P-14	CULEBRA	IRON		1.6000			1.7000	0.01	< 0.01	mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	IRON		2.0000			2.1000	< 0.01	< 0.01	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	IRON		1.7000			1.8000	< 0.01	< 0.01	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	SV
P-14	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	06/18/87	2	IT	SV
P-14	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	03/16/88	3	IT	SV
P-14	CULEBRA	LEAD		0.5400			0.5500	0.02	< 0.01	mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	LEAD		0.6500			0.6800	< 0.05	< 0.05	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	LITHIUM		2.7000			2.7000	< 0.01	< 0.01	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	LITHIUM		0.5000			0.5100	< 0.01	< 0.01	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	MAGNESIUM		760.0000			760.0000			mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	MAGNESIUM		910.0000			890.0000			mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	MAGNESIUM		880.0000			870.0000			mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	MANGANESE		0.2300			0.2300	< 0.01	< 0.01	mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	MANGANESE		0.3000			0.3000	< 0.005	< 0.005	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	MANGANESE		0.3100			0.3000	< 0.005	< 0.005	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	MERCURY	<	0.0002			0.0002	< 0.0002	< 0.0002	mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS		DATE	RND	LAB	C
P-14	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l		06/18/87	2	IT	V
P-14	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l		03/16/88	3	IT	V
P-14	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l		02/27/86	1	IT	V
P-14	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l		06/18/87	2	IT	V
P-14	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000	T 31	T 32	ug/l		03/16/88	3	IT	V
P-14	CULEBRA	MOLYBDENUM		0.0400			0.0500	< 0.01	< 0.01	mg/l		02/27/86	1	IT	ME
P-14	CULEBRA	MOLYBDENUM		0.1100			0.1200	0.03	0.02	mg/l		06/18/87	2	IT	ME
P-14	CULEBRA	MOLYBDENUM		0.0800			0.0700	0.01	0.01	mg/l		03/16/88	3	IT	ME
P-14	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		02/27/86	1	IT	SV
P-14	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		06/18/87	2	IT	SV
P-14	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		03/16/88	3	IT	SV
P-14	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		02/27/86	1	IT	SV
P-14	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		06/18/87	2	IT	SV
P-14	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		03/16/88	3	IT	SV
P-14	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		02/27/86	1	IT	SV
P-14	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		06/18/87	2	IT	SV
P-14	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		03/16/88	3	IT	SV
P-14	CULEBRA	NICKEL		0.3100			0.3100	< 0.01	< 0.01	mg/l		02/27/86	1	IT	ME
P-14	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		06/18/87	2	IT	ME
P-14	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		03/16/88	3	IT	ME
P-14	CULEBRA	NITRATE		0.2000		NA	0.0000			mg/l	NO3-N	02/27/86	1	IT	GC
P-14	CULEBRA	NITRATE		0.6000		NA	0.0000			mg/l	NO3-N	06/18/87	2	IT	GC
P-14	CULEBRA	NITRATE		0.0300		NA	0.0000			mg/l	NO3-N	03/16/88	3	IT	GC
P-14	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		02/27/86	1	IT	SV
P-14	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		06/18/87	2	IT	SV
P-14	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		03/16/88	3	IT	SV
P-14	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		02/27/86	1	IT	SV
P-14	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		06/18/87	2	IT	SV
P-14	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		03/16/88	3	IT	SV

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P-14	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		06/18/87	2	IT	PC
P-14	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		03/16/88	3	IT	PC
P-14	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		02/27/86	1	IT	SV
P-14	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		06/18/87	2	IT	SV
P-14	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		03/16/88	3	IT	SV
P-14	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		02/27/86	1	IT	SV
P-14	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		06/18/87	2	IT	SV
P-14	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		03/16/88	3	IT	SV
P-14	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		02/27/86	1	IT	SV
P-14	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		06/18/87	2	IT	SV
P-14	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		03/16/88	3	IT	SV
P-14	CULEBRA	PHENOLICS		0.0190		NA	0.0000			mg/l		02/27/86	1	IT	GC
P-14	CULEBRA	PHENOLICS		0.0170		NA	0.0000			mg/l		06/18/87	2	IT	GC
P-14	CULEBRA	PHENOLICS	<	0.0050		NA	0.0000			mg/l		03/16/88	3	IT	GC
P-14	CULEBRA	PHOSPHATE	<	0.0100		NA	0.0000			mg/l	T-PO4-P	02/27/86	1	IT	GC
P-14	CULEBRA	PHOSPHATE		0.0200			0.0200			mg/l	T-PO4-P	06/18/87	2	IT	GC
P-14	CULEBRA	PHOSPHATE	<	0.0200		<	0.0200			mg/l	T-PO4-P	03/16/88	3	IT	GC
P-14	CULEBRA	POTASSIUM		44.0000			45.0000			mg/l		02/27/86	1	IT	ME
P-14	CULEBRA	POTASSIUM		50.0000		NA	0.0000			mg/l		06/18/87	2	IT	ME
P-14	CULEBRA	POTASSIUM		48.0000			48.0000			mg/l		03/16/88	3	IT	ME
P-14	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l		02/27/86	1	IT	SV
P-14	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l		06/18/87	2	IT	SV
P-14	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l		03/16/88	3	IT	SV
P-14	CULEBRA	RESIDUE, FILTERABLE @ 180 C		26000.0000			26000.0000			mg/l		02/27/86	1	IT	GC
P-14	CULEBRA	RESIDUE, FILTERABLE @ 180 C		29000.0000			29000.0000			mg/l		06/18/87	2	IT	GC
P-14	CULEBRA	RESIDUE, FILTERABLE @ 180 C		29400.0000			28800.0000			mg/l		03/16/88	3	IT	GC
P-14	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		95.0000		NA	0.0000			mg/l		02/27/86	1	IT	GC
P-14	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		38.0000			49.0000			mg/l		06/18/87	2	IT	GC
P-14	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000		<	4.0000			mg/l		03/16/88	3	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
P-14	CULEBRA	SELENIUM	<	0.1000		<	0.1000	< 0.001	< 0.001	mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	SELENIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	SELENIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	SILICA		32.0000			31.0000	< 0.2	0.6	mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	SILICA		33.0000			33.0000	< 0.2	< 0.2	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	SILICA		14.0000			14.0000			mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	SILVER		0.2600			0.2600	< 0.01	< 0.01	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	SODIUM		3700.0000			3800.0000			mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	SODIUM		4100.0000		NA	0.0000			mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	SODIUM		4600.0000			4600.0000			mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	SPECIFIC CONDUCTANCE		42300.0000		NA	0.0000			umhos/cm@25C	02/27/86	1	IT	GC
P-14	CULEBRA	SPECIFIC CONDUCTANCE		37600.0000			37900.0000			umhos/cm@25C	06/18/87	2	IT	GC
P-14	CULEBRA	SPECIFIC CONDUCTANCE		36000.0000			36000.0000			umhos/cm@25C	03/16/88	3	IT	GC
P-14	CULEBRA	STRONTIUM		48.0000			47.0000	< 0.01	< 0.01	mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	STRONTIUM		47.0000			48.0000	< 0.01	< 0.01	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	STRONTIUM		55.0000			55.0000	< 0.01	< 0.01	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	STYRENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	SULFATE		1700.0000			1500.0000			mg/l	02/27/86	1	IT	GC
P-14	CULEBRA	SULFATE		1400.0000		NA	0.0000			mg/l	06/18/87	2	IT	GC
P-14	CULEBRA	SULFATE		1600.0000		NA	0.0000			mg/l	03/16/88	3	IT	GC
P-14	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	THALLIUM	<	5.0000		<	5.0000	< 0.005	< 0.005	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	THALLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	TIN		0.5600			0.4600	< 0.04	< 0.04	mg/l	06/18/87	2	IT	ME

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P-14	CULEBRA	TITANIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	TITANIUM		0.6800			0.6800	< 0.3	< 0.3	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	TITANIUM		0.5000			0.6000	< 0.03	< 0.03	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	TOLUENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	TOTAL ORGANIC CARBON		2.0000		NA	0.0000			mg/l	02/27/86	1	IT	GC
P-14	CULEBRA	TOTAL ORGANIC CARBON		1.0000			2.0000			mg/l	06/18/87	2	IT	GC
P-14	CULEBRA	TOTAL ORGANIC CARBON		2.0000			1.0000			mg/l	03/16/88	3	IT	GC
P-14	CULEBRA	TOTAL ORGANIC HALOGEN		0.7600		NA	0.0000			mg/l	02/27/86	1	IT	GC
P-14	CULEBRA	TOTAL ORGANIC HALOGEN		1.0000			2.0000			mg/l	06/18/87	2	IT	GC
P-14	CULEBRA	TOTAL ORGANIC HALOGEN		0.2500			0.4100			mg/l	03/16/88	3	IT	GC
P-14	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	VANADIUM		0.2300			0.2400	< 0.01	< 0.01	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	VANADIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/16/88	3	IT	V

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P-14	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	02/27/86	1	IT	V
P-14	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	06/18/87	2	IT	V
P-14	CULEBRA	XYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/16/88	3	IT	V
P-14	CULEBRA	ZINC		0.1000			0.1000	< 0.01	< 0.01	mg/l	02/27/86	1	IT	ME
P-14	CULEBRA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	06/18/87	2	IT	ME
P-14	CULEBRA	ZINC		0.2000			0.1000	< 0.01	< 0.01	mg/l	03/16/88	3	IT	ME
P-14	CULEBRA	pH		7.0100		NA	0.0000				02/27/86	1	IT	GC
P-14	CULEBRA	pH		6.7500			6.8000				06/18/87	2	IT	GC
P-14	CULEBRA	pH		6.6800			6.7200				03/16/88	3	IT	GC
** P-17														
P-17	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
P-17	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
P-17	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV

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P-17	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	10/21/87	3	IT	V

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P-17	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	ACETONE	<	10.0000		NA	0.0000		T < 10	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	03/17/86	1	IT	GC
P-17	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	12/18/86	2	IT	GC
P-17	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	10/21/87	3	IT	GC
P-17	CULEBRA	ALKALINITY (HCO3)		54.0000		NA	0.0000			mg/l	03/17/86	1	IT	GC
P-17	CULEBRA	ALKALINITY (HCO3)		53.0000			53.0000			mg/l	12/18/86	2	IT	GC
P-17	CULEBRA	ALKALINITY (HCO3)		54.0000		NA	0.0000			mg/l	10/21/87	3	IT	GC
P-17	CULEBRA	ALUMINUM		1.0000		<	1.0000	< 0.1/<0	< 0.10	mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	ALUMINUM		2.0000		NA	0.0000	< 0.1	< 0.1	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	ALUMINUM		1.0000			1.0000	< 0.1	< 0.1	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
P-17	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	ANTIMONY		1.4000		NA	0.0000	< 0.05	< 0.05	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	ANTIMONY		1.5000			1.4000	< 0.05	< 0.05	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	ARSENIC		0.3200			0.2900	< 0.01	< 0.01	mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	ARSENIC		0.1700		NA	0.0000	< 0.005	< 0.005	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	ARSENIC	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	BARIUM		0.0600			0.0500	< 0.05	< 0.05	mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	BARIUM		0.1100		NA	0.0000	0.008	0.007	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	BARIUM		0.0600			0.0600	< 0.005	< 0.005	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
P-17	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.05	< 0.05	mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	BORON		36.0000			35.0000	< 0.01	< 0.01	mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	BORON		32.0000		NA	0.0000	0.02	0.02	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	BORON		36.0000			36.0000	< 0.01	< 0.01	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	BROMIDE		97.0000			100.0000			mg/l	03/17/86	1	IT	GC
P-17	CULEBRA	BROMIDE		69.0000		NA	0.0000			mg/l	12/18/86	2	IT	GC
P-17	CULEBRA	BROMIDE		84.0000		NA	0.0000			mg/l	10/21/87	3	IT	GC
P-17	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	CADMIUM		0.1000		NA	0.0000	< 0.005	< 0.005	mg/l	12/18/86	2	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
P-17	CULEBRA	CADMIUM		0.1200			0.1200	< 0.005	< 0.005	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	CALCIUM		1700.0000			1600.0000			mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	CALCIUM		2400.0000			2400.0000			mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	CALCIUM		1600.0000			1600.0000			mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	CESIUM	<	0.1000		<	0.1000	< 0.10	< 0.10	mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	CESIUM		0.6000		NA	0.0000	< 0.1	< 0.1	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	CESIUM		0.1800			0.1600	0.03	0.04	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	CHLORIDE		51000.0000		NA	0.0000			mg/l	03/17/86	1	IT	GC
P-17	CULEBRA	CHLORIDE		60000.0000			60000.0000			mg/l	12/18/86	2	IT	GC
P-17	CULEBRA	CHLORIDE		47000.0000		NA	0.0000			mg/l	10/21/87	3	IT	GC
P-17	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	CHROMIUM		0.4000			0.3700	< 0.01	< 0.01	mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	CHROMIUM		0.6000		NA	0.0000	0.02	0.02	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	CHROMIUM		0.6000			0.6000	< 0.01	0.01	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV

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P-17	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	COBALT		0.1300			0.1100	< 0.01	< 0.01	mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	COBALT		0.2000		NA	0.0000	< 0.01	< 0.01	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	COBALT		0.2000			0.2000	< 0.01	< 0.01	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	COPPER		0.1400			0.1200	< 0.01	< 0.01	mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	COPPER		0.5000		NA	0.0000	0.03	0.03	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	COPPER		0.2000			0.2000	0.01	0.02	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	03/17/86	1	IT	GC
P-17	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	12/18/86	2	IT	GC
P-17	CULEBRA	CYANIDE	<	0.0400		NA	0.0000			mg/l	10/21/87	3	IT	GC
P-17	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V

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P-17	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	Eh		426.0000		NA	0.0000			mV	03/17/86	1	IT	GC
P-17	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	FLUORIDE		1.2000			1.2000			mg/l	03/17/86	1	IT	GC
P-17	CULEBRA	FLUORIDE		1.4000		NA	0.0000			mg/l	12/18/86	2	IT	GC
P-17	CULEBRA	FLUORIDE		1.1000		NA	0.0000			mg/l	10/21/87	3	IT	GC
P-17	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV

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P-17	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	IODIDE		7.3000			7.3000			mg/l	03/17/86	1	IT	GC
P-17	CULEBRA	IODIDE	<	1.0000		NA	0.0000			mg/l	12/18/86	2	IT	GC
P-17	CULEBRA	IODIDE	<	2.0000		NA	0.0000			mg/l	10/21/87	3	IT	GC
P-17	CULEBRA	IRON		3.9000			3.8000	< 0.01	< 0.01	mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	IRON		2.8000		NA	0.0000	< 0.01	< 0.01	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	IRON		3.3000			3.3000	< 0.01	< 0.01	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	SV
P-17	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	SV
P-17	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	10/21/87	3	IT	SV
P-17	CULEBRA	LEAD		1.1000			1.0000	< 0.01	< 0.01	mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	LEAD		1.1000		NA	0.0000	0.05	< 0.05	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	LEAD		1.1000			1.1000	< 0.05	< 0.05	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	LITHIUM		0.6600		NA	0.0000	< 0.01	0.02	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	LITHIUM		0.9000			0.9000	< 0.01	< 0.01	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	MAGNESIUM		1600.0000			1500.0000			mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	MAGNESIUM		1600.0000			1600.0000			mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	MAGNESIUM		1800.0000			1800.0000			mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	MANGANESE		0.7900			0.8100	< 0.01	< 0.01	mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	MANGANESE		0.9000		NA	0.0000	< 0.005	< 0.005	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	MANGANESE		1.2000			1.2000	< 0.005	< 0.005	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	03/17/86	1	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS		DATE	RND	LAB	C
P-17	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l		12/18/86	2	IT	ME
P-17	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	0.0003	mg/l		10/21/87	3	IT	ME
P-17	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l		03/17/86	1	IT	V
P-17	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l		12/18/86	2	IT	V
P-17	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l		10/21/87	3	IT	V
P-17	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l		03/17/86	1	IT	V
P-17	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l		12/18/86	2	IT	V
P-17	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l		10/21/87	3	IT	V
P-17	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l		03/17/86	1	IT	V
P-17	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l		12/18/86	2	IT	V
P-17	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l		10/21/87	3	IT	V
P-17	CULEBRA	MOLYBDENUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l		03/17/86	1	IT	ME
P-17	CULEBRA	MOLYBDENUM		0.1000		NA	0.0000	< 0.01	< 0.01	mg/l		12/18/86	2	IT	ME
P-17	CULEBRA	MOLYBDENUM		0.2000			0.2200	< 0.01	< 0.01	mg/l		10/21/87	3	IT	ME
P-17	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		03/17/86	1	IT	SV
P-17	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		12/18/86	2	IT	SV
P-17	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		10/21/87	3	IT	SV
P-17	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		03/17/86	1	IT	SV
P-17	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		12/18/86	2	IT	SV
P-17	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		10/21/87	3	IT	SV
P-17	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		03/17/86	1	IT	SV
P-17	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		12/18/86	2	IT	SV
P-17	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		10/21/87	3	IT	SV
P-17	CULEBRA	NICKEL		1.1000			1.1000	< 0.01	< 0.01	mg/l		03/17/86	1	IT	ME
P-17	CULEBRA	NICKEL	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l		12/18/86	2	IT	ME
P-17	CULEBRA	NICKEL		0.3000		<	0.3000	< 0.03	< 0.03	mg/l		10/21/87	3	IT	ME
P-17	CULEBRA	NITRATE		0.3000		NA	0.0000			mg/l	NO3-N	03/17/86	1	IT	GC
P-17	CULEBRA	NITRATE		0.1000			0.2000			mg/l	NO3-N	12/18/86	2	IT	GC
P-17	CULEBRA	NITRATE	<	0.2000		NA	0.0000			mg/l	NO3-N	10/21/87	3	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID	BLANK	WATER	BLANK	UNITS		DATE	RND	LAB	C
P-17	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000					ug/l		03/17/86	1	IT	SV
P-17	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000					ug/l		12/18/86	2	IT	SV
P-17	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000					ug/l		10/21/87	3	IT	SV
P-17	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000					ug/l		03/17/86	1	IT	SV
P-17	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000					ug/l		12/18/86	2	IT	SV
P-17	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000					ug/l		10/21/87	3	IT	SV
P-17	CULEBRA	PCB	<	1.0000		NA	0.0000					ug/l		12/18/86	2	IT	PC
P-17	CULEBRA	PCB	<	1.0000		NA	0.0000					ug/l		10/21/87	3	IT	PC
P-17	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000					ug/l		03/17/86	1	IT	SV
P-17	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000					ug/l		12/18/86	2	IT	SV
P-17	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000					ug/l		10/21/87	3	IT	SV
P-17	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000					ug/l		03/17/86	1	IT	SV
P-17	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000					ug/l		12/18/86	2	IT	SV
P-17	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000					ug/l		10/21/87	3	IT	SV
P-17	CULEBRA	PHENOL	<	10.0000		NA	0.0000					ug/l		03/17/86	1	IT	SV
P-17	CULEBRA	PHENOL	<	10.0000		NA	0.0000					ug/l		12/18/86	2	IT	SV
P-17	CULEBRA	PHENOL	<	10.0000		NA	0.0000					ug/l		10/21/87	3	IT	SV
P-17	CULEBRA	PHENOLICS		0.0040			0.0020					mg/l		03/17/86	1	IT	GC
P-17	CULEBRA	PHENOLICS	<	0.0050		NA	0.0000					mg/l		12/18/86	2	IT	GC
P-17	CULEBRA	PHENOLICS		0.0050		NA	0.0000					mg/l		10/21/87	3	IT	GC
P-17	CULEBRA	PHOSPHATE	<	0.0100		NA	0.0000					mg/l	T-PO4-P	03/17/86	1	IT	GC
P-17	CULEBRA	PHOSPHATE	<	0.0100		<	0.0100					mg/l	T-PO4-P	12/18/86	2	IT	GC
P-17	CULEBRA	PHOSPHATE		0.0200		NA	0.0000					mg/l	T-PO4-P	10/21/87	3	IT	GC
P-17	CULEBRA	POTASSIUM		800.0000			790.0000					mg/l		03/17/86	1	IT	ME
P-17	CULEBRA	POTASSIUM		1200.0000			1200.0000					mg/l		12/18/86	2	IT	ME
P-17	CULEBRA	POTASSIUM		930.0000			910.0000					mg/l		10/21/87	3	IT	ME
P-17	CULEBRA	PYRENE	<	10.0000		NA	0.0000					ug/l		03/17/86	1	IT	SV
P-17	CULEBRA	PYRENE	<	10.0000		NA	0.0000					ug/l		12/18/86	2	IT	SV
P-17	CULEBRA	PYRENE	<	10.0000		NA	0.0000					ug/l		10/21/87	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
P-17	CULEBRA	RESIDUE, FILTERABLE @ 180 C		88000.0000		NA	0.0000			mg/l	03/17/86	1	IT	GC
P-17	CULEBRA	RESIDUE, FILTERABLE @ 180 C		90000.0000			90000.0000			mg/l	12/18/86	2	IT	GC
P-17	CULEBRA	RESIDUE, FILTERABLE @ 180 C		84000.0000		NA	0.0000			mg/l	10/21/87	3	IT	GC
P-17	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		340.0000		NA	0.0000			mg/l	03/17/86	1	IT	GC
P-17	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		160.0000			200.0000			mg/l	12/18/86	2	IT	GC
P-17	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		22.0000			25.0000			mg/l	10/21/87	3	IT	GC
P-17	CULEBRA	SELENIUM	<	1.0000		NA	0.0000	< 0.001	< 0.001	mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	SELENIUM		0.0330		NA	0.0000	< 0.005	< 0.005	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	SELENIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	SILICA	<	0.2000		<	0.2000	< 0.02	< 0.02	mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	SILICA		13.0000		NA	0.0000	0.3	0.3	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	SILICA		13.0000			13.0000	< 0.2	< 0.2	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	SILVER		0.3000		NA	0.0000	0.01	0.02	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	SILVER		0.2000			0.2000	< 0.01	< 0.01	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	SODIUM		29000.0000			29000.0000			mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	SODIUM		28000.0000			28000.0000			mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	SODIUM		29000.0000			29000.0000			mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	SPECIFIC CONDUCTANCE		120000.0000		NA	0.0000			umhos/cm@25C	03/17/86	1	IT	GC
P-17	CULEBRA	SPECIFIC CONDUCTANCE		104000.0000			104000.0000			umhos/cm@25C	12/18/86	2	IT	GC
P-17	CULEBRA	SPECIFIC CONDUCTANCE		142000.0000			141000.0000			umhos/cm@25C	10/21/87	3	IT	GC
P-17	CULEBRA	STRONTIUM		28.0000			28.0000	0.01	0.01	mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	STRONTIUM		36.0000		NA	0.0000	0.01	0.01	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	STRONTIUM		36.0000			36.0000	< 0.01	< 0.01	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	SULFATE		6400.0000		NA	0.0000			mg/l	03/17/86	1	IT	GC
P-17	CULEBRA	SULFATE		7100.0000			7300.0000			mg/l	12/18/86	2	IT	GC
P-17	CULEBRA	SULFATE		5500.0000		NA	0.0000			mg/l	10/21/87	3	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
P-17	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	THALLIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	THALLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	TITANIUM		0.4000		NA	0.0000	< 0.1	< 0.1	mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	TITANIUM		1.0000		NA	0.0000	< 0.03	< 0.03	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	TITANIUM		1.0000			0.9000	< 0.03	< 0.03	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	TOTAL ORGANIC CARBON		2.0000		NA	0.0000			mg/l	03/17/86	1	IT	GC
P-17	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		NA	0.0000			mg/l	12/18/86	2	IT	GC
P-17	CULEBRA	TOTAL ORGANIC CARBON		1.0000			1.0000			mg/l	10/21/87	3	IT	GC
P-17	CULEBRA	TOTAL ORGANIC HALOGEN		0.2300		NA	0.0000			mg/l	03/17/86	1	IT	GC
P-17	CULEBRA	TOTAL ORGANIC HALOGEN		1.8000		NA	0.0000			mg/l	12/18/86	2	IT	GC
P-17	CULEBRA	TOTAL ORGANIC HALOGEN		2.1000			2.9000			mg/l	10/21/87	3	IT	GC
P-17	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	VANADIUM		0.3000			0.3000	< 0.01	< 0.01	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	V

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P-17	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	03/17/86	1	IT	V
P-17	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	12/18/86	2	IT	V
P-17	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	10/21/87	3	IT	V
P-17	CULEBRA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/17/86	1	IT	ME
P-17	CULEBRA	ZINC	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	12/18/86	2	IT	ME
P-17	CULEBRA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	10/21/87	3	IT	ME
P-17	CULEBRA	pH		7.0200		NA	0.0000				03/17/86	1	IT	GC
P-17	CULEBRA	pH		7.0100		NA	0.0000				12/18/86	2	IT	GC
P-17	CULEBRA	pH		6.2400			6.3300				10/21/87	3	IT	GC
** POKER TRAP WINDMILL														
POKER TRAP WINDMILL	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/19/87	1	IT	V
POKER TRAP WINDMILL	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
POKER TRAP WINDMILL	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/19/87	1	IT	V
POKER TRAP WINDMILL	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
POKER TRAP WINDMILL	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/19/87	1	IT	V
POKER TRAP WINDMILL	CULEBRA	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
POKER TRAP WINDMILL	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	2,4,5-TP (SILVEX)	<	0.0005		NA	0.0000			mg/l	12/19/87	1	IT	HP
POKER TRAP WINDMILL	CULEBRA	2,4,5-TP (SILVEX)	<	0.0005		NA	0.0000			mg/l	07/07/88	2	IT	HP
POKER TRAP WINDMILL	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV

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POKER TRAP WINDMILL	CULEBRA	2,4-D	<	0.0050		NA	0.0000			mg/l	12/19/87	1	IT	HP
POKER TRAP WINDMILL	CULEBRA	2,4-D	<	0.0050		NA	0.0000			mg/l	07/07/88	2	IT	HP
POKER TRAP WINDMILL	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	12/19/87	1	IT	GC
POKER TRAP WINDMILL	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	ALKALINITY (HCO3)		100.0000		NA	0.0000			mg/l	12/19/87	1	IT	GC
POKER TRAP WINDMILL	CULEBRA	ALKALINITY (HCO3)		79.0000		NA	0.0000			mg/l	07/07/88	2	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
POKER TRAP WINDMILL	CULEBRA	ALUMINUM	<	0.5000		<	0.5000	< 0.1	< 0.1	mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	ALUMINUM	<	0.1000			0.2000	< 0.10	< 0.10	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	ANTIMONY	<	0.2500		<	0.2500	< 0.05	< 0.05	mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	ANTIMONY	<	0.0500			0.1500	< 0.05	< 0.05	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	ANTIMONY		0.0500			0.1000	< 0.05	< 0.05	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	ARSENIC	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	ARSENIC	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	BARIUM	<	0.0250		<	0.0250	< 0.005	< 0.005	mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	BARIUM		0.0100			0.0210	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	BARIUM		0.0100			0.0150	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	BENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/19/87	1	IT	V
POKER TRAP WINDMILL	CULEBRA	BENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
POKER TRAP WINDMILL	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	BERYLLIUM	<	0.0250		<	0.0250	< 0.005	< 0.005	mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	BERYLLIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	BERYLLIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	BORON		0.2000			0.2100	< 0.01	< 0.01	mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	BORON		0.3400			0.3600	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	BROMIDE	<	2.0000		<	2.0000			mg/l	12/19/87	1	IT	GC

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POKER TRAP WINDMILL	CULEBRA	BROMIDE	<	2.0000		NA	0.0000			mg/l	07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	BROMOFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/19/87	1	IT	V
POKER TRAP WINDMILL	CULEBRA	BROMOFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
POKER TRAP WINDMILL	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	CADMIUM	<	0.0250		<	0.0250	< 0.005	< 0.005	mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	CADMIUM	<	0.0050			0.0230	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	CADMIUM	<	0.0050			0.0080	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	CALCIUM		420.0000			410.0000			mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	CALCIUM		450.0000			420.0000			mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/19/87	1	IT	V
POKER TRAP WINDMILL	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
POKER TRAP WINDMILL	CULEBRA	CESIUM		0.0100			0.0100	0.01	0.01	mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	CESIUM	<	0.0600		<	0.0600	< 0.06	< 0.06	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	CHLORIDE		24.0000		NA	0.0000			mg/l	12/19/87	1	IT	GC
POKER TRAP WINDMILL	CULEBRA	CHLORIDE		31.0000		NA	0.0000			mg/l	07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	CHLOROFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/19/87	1	IT	V
POKER TRAP WINDMILL	CULEBRA	CHLOROFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
POKER TRAP WINDMILL	CULEBRA	CHROMIUM	<	0.0500			0.0700	< 0.01	< 0.01	mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	CHROMIUM		0.0300			0.1500	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	CHROMIUM		0.0300			0.0600	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	COBALT	<	0.0500		<	0.0500	< 0.01	< 0.01	mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	COBALT	<	0.0100			0.0500	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	COLOR		60.0000		NA	0.0000			CU	12/19/87	1	IT	GC
POKER TRAP WINDMILL	CULEBRA	COLOR	<	1.0000		NA	0.0000			CU	07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	COPPER	<	0.0500		<	0.0500	0.01	0.01	mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	COPPER	<	0.0100			0.0700	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	COPPER	<	0.0100			0.0300	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV

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POKER TRAP WINDMILL	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/19/87	1	IT	V
POKER TRAP WINDMILL	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
POKER TRAP WINDMILL	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/19/87	1	IT	V
POKER TRAP WINDMILL	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
POKER TRAP WINDMILL	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	ENDRIN	<	0.0200		NA	0.0000			ug/l	12/19/87	1	IT	HP
POKER TRAP WINDMILL	CULEBRA	ENDRIN	<	0.0200		NA	0.0000			ug/l	07/07/88	2	IT	HP
POKER TRAP WINDMILL	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	FLUORIDE		0.9000		NA	0.0000			mg/l	12/19/87	1	IT	GC
POKER TRAP WINDMILL	CULEBRA	FLUORIDE		2.9000		NA	0.0000			mg/l	07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	IODIDE	<	2.0000		NA	0.0000			mg/l	12/19/87	1	IT	GC
POKER TRAP WINDMILL	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	IRON	<	0.0500		<	0.0500	< 0.01	< 0.01	mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	IRON		0.0200			0.0500	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	IRON		0.0200			0.0300	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	LEAD	<	0.2500		<	0.2500	< 0.05	< 0.05	mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	LEAD		0.0900		NA	0.0000	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	LEAD	<	0.0050		<	0.0500	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME

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POKER TRAP WINDMILL	CULEBRA	LINDANE	<	0.0400		NA	0.0000			ug/l		12/19/87	1	IT	HP
POKER TRAP WINDMILL	CULEBRA	LINDANE	<	0.0400		NA	0.0000			ug/l		07/07/88	2	IT	HP
POKER TRAP WINDMILL	CULEBRA	LITHIUM		0.1200			0.1200	< 0.01	< 0.01	mg/l		12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	LITHIUM		0.0800			0.0800	< 0.01	< 0.01	mg/l		07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	LSI CORROSIVITY		-0.2500		NA	0.0000					12/19/87	1	IT	GC
POKER TRAP WINDMILL	CULEBRA	LSI CORROSIVITY		0.1000		NA	0.0000			--		07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	MAGNESIUM		82.0000			82.0000			mg/l		12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	MAGNESIUM		82.0000			72.0000			mg/l		07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	MAGNESIUM		81.0000			71.0000			mg/l		07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	MANGANESE		0.0470			0.0480	< 0.005	< 0.005	mg/l		12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	MANGANESE		0.0100			0.0110	< 0.005	< 0.005	mg/l		07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	MANGANESE		0.0090			0.0150	< 0.005	< 0.005	mg/l		07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	MBAS	<	0.0250		NA	0.0000			mg/l		12/19/87	1	IT	GC
POKER TRAP WINDMILL	CULEBRA	MBAS	<	0.0250		NA	0.0000			mg/l		07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	MERCURY		0.0008			0.0009	0.0008	0.0007	mg/l		12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	MERCURY		0.0007		NA	0.0000	< 0.0002	< 0.0002	mg/l		07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	METHOXYCHLOR	<	0.0010		NA	0.0000			mg/l		12/19/87	1	IT	HP
POKER TRAP WINDMILL	CULEBRA	METHOXYCHLOR	<	0.0010		NA	0.0000			mg/l		07/07/88	2	IT	HP
POKER TRAP WINDMILL	CULEBRA	MOLYBDENUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l		12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	MOLYBDENUM	<	0.0500		<	0.0500	< 0.05	< 0.05	mg/l		07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	NICKEL	<	0.1500		<	0.1500	< 0.03	< 0.03	mg/l		12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	NICKEL	<	0.0300		<	0.0300	< 0.03	< 0.03	mg/l		07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	NICKEL	<	0.0300			0.0700	< 0.03	< 0.03	mg/l		07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	NITRATE		2.9000		NA	0.0000			mg/l	NO3-N	12/19/87	1	IT	GC
POKER TRAP WINDMILL	CULEBRA	NITRATE		2.4000			2.3000			mg/l	NO3-N	07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		07/07/88	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS		DATE	RND	LAB	C
POKER TRAP WINDMILL	CULEBRA	ODOR		9.0000		NA	0.0000			T.O.N.		12/19/87	1	IT	GC
POKER TRAP WINDMILL	CULEBRA	ODOR		1.0000		NA	0.0000			T.O.N.		07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	P-DICHLOROBENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l		12/19/87	1	IT	V
POKER TRAP WINDMILL	CULEBRA	P-DICHLOROBENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l		07/07/88	2	IT	V
POKER TRAP WINDMILL	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		07/07/88	2	IT	PC
POKER TRAP WINDMILL	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	PHENOLICS		0.0240		NA	0.0000			mg/l		12/19/87	1	IT	GC
POKER TRAP WINDMILL	CULEBRA	PHENOLICS		0.0730			0.0630			mg/l		07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	PHOSPHATE		0.0700		NA	0.0000			mg/l	T-PO4-P	12/19/87	1	IT	GC
POKER TRAP WINDMILL	CULEBRA	PHOSPHATE		0.0400		NA	0.0000			mg/l	T-PO4-P	07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	POTASSIUM		3.2000			3.2000			mg/l		12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	POTASSIUM		3.7000			3.7000			mg/l		07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l		07/07/88	2	IT	SV
POKER TRAP WINDMILL	CULEBRA	RESIDUE, FILTERABLE @ 180 C		2200.0000		NA	0.0000			mg/l		12/19/87	1	IT	GC
POKER TRAP WINDMILL	CULEBRA	RESIDUE, FILTERABLE @ 180 C		2200.0000			2200.0000			mg/l		07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		160.0000			130.0000			mg/l		12/19/87	1	IT	GC
POKER TRAP WINDMILL	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		19.0000			13.0000			mg/l		07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	SELENIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l		12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	SELENIUM		0.0090		NA	0.0000	< 0.005	< 0.005	mg/l		07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	SILICA		27.0000			26.0000	< 0.2	< 0.2	mg/l		12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	SILICA		14.0000		NA	0.0000			mg/l		07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	SILVER	<	0.0500		<	0.0500	< 0.01	< 0.01	mg/l		12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	SILVER		0.0100			0.0100	< 0.01	< 0.01	mg/l		07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	SODIUM		43.0000			43.0000			mg/l		12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	SODIUM		420.0000			420.0000			mg/l		07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	SPECIFIC CONDUCTANCE		2400.0000		NA	0.0000			umhos/cm@25C		12/19/87	1	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
POKER TRAP WINDMILL	CULEBRA	SPECIFIC CONDUCTANCE		2450.0000			2470.0000			umhos/cm@25C	07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	STRONTIUM		4.6000			4.7000	< 0.01	< 0.01	mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	STRONTIUM		4.9000			4.9000	0.01	0.01	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	SULFATE		1400.0000		NA	0.0000			mg/l	12/19/87	1	IT	GC
POKER TRAP WINDMILL	CULEBRA	SULFATE		1300.0000		NA	0.0000			mg/l	07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/19/87	1	IT	V
POKER TRAP WINDMILL	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
POKER TRAP WINDMILL	CULEBRA	THALLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	THALLIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	TITANIUM		0.3400			0.3800	< 0.03	< 0.03	mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	TITANIUM		0.1500			0.6300	< 0.03	< 0.03	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	TITANIUM		0.2900			0.4000	< 0.03	< 0.03	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	TOTAL ORGANIC CARBON		1.0000			1.0000			mg/l	12/19/87	1	IT	GC
POKER TRAP WINDMILL	CULEBRA	TOTAL ORGANIC CARBON		2.0000			2.0000			mg/l	07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	12/19/87	1	IT	GC
POKER TRAP WINDMILL	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	TOXAPHENE	<	0.0005		NA	0.0000			mg/l	12/19/87	1	IT	HP
POKER TRAP WINDMILL	CULEBRA	TOXAPHENE	<	0.0005		NA	0.0000			mg/l	07/07/88	2	IT	HP
POKER TRAP WINDMILL	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/19/87	1	IT	V
POKER TRAP WINDMILL	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
POKER TRAP WINDMILL	CULEBRA	TURBIDITY		40.0000		NA	0.0000			NTU	12/19/87	1	IT	GC
POKER TRAP WINDMILL	CULEBRA	TURBIDITY		1.0000		NA	0.0000			NTU	07/07/88	2	IT	GC
POKER TRAP WINDMILL	CULEBRA	VANADIUM	<	0.0500		<	0.0500	< 0.01	< 0.01	mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	VANADIUM		0.0200			0.0600	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	VINYL CHLORIDE	<	2.0000		NA	0.0000		T < 2.0	ug/l	12/19/87	1	IT	V
POKER TRAP WINDMILL	CULEBRA	VINYL CHLORIDE	<	2.0000		NA	0.0000		T < 2.0	ug/l	07/07/88	2	IT	V
POKER TRAP WINDMILL	CULEBRA	ZINC		0.9200			0.9100	< 0.01	< 0.01	mg/l	12/19/87	1	IT	ME
POKER TRAP WINDMILL	CULEBRA	ZINC		0.0500			0.0600	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
POKER TRAP WINDMILL	CULEBRA	pH		7.0900		NA	0.0000				12/19/87	1	IT	GC

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POKER TRAP WINDMILL	CULEBRA	pH		7.4500		NA	0.0000			--	07/07/88	2	IT	GC
** RANCH WELL														
RANCH WELL	DEWEY LAKE	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/20/87	2	IT	V
RANCH WELL	DEWEY LAKE	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	3	IT	V
RANCH WELL	DEWEY LAKE	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/20/87	2	IT	V
RANCH WELL	DEWEY LAKE	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	3	IT	V
RANCH WELL	DEWEY LAKE	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/20/87	2	IT	V
RANCH WELL	DEWEY LAKE	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	3	IT	V
RANCH WELL	DEWEY LAKE	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	2,4,5-TP (SILVEX)	<	0.0005		NA	0.0000			mg/l	12/20/87	2	IT	HP
RANCH WELL	DEWEY LAKE	2,4,5-TP (SILVEX)	<	0.0005		NA	0.0000			mg/l	04/20/88	3	IT	HP
RANCH WELL	DEWEY LAKE	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	2,4-D	<	0.0050		NA	0.0000			mg/l	12/20/87	2	IT	HP
RANCH WELL	DEWEY LAKE	2,4-D	<	0.0050		NA	0.0000			mg/l	04/20/88	3	IT	HP
RANCH WELL	DEWEY LAKE	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV

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RANCH WELL	DEWEY LAKE	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	ACETONE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	ALKALINITY (CO3)		0.0000			0.0000			mg/l	06/18/86	1	IT	GC
RANCH WELL	DEWEY LAKE	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	07/27/89	4	IT	GC
RANCH WELL	DEWEY LAKE	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	06/20/90	5	IT	GC

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RANCH WELL	DEWEY LAKE	ALKALINITY (HCO3)		220.0000			220.0000			mg/l	06/18/86	1	IT	GC
RANCH WELL	DEWEY LAKE	ALKALINITY (HCO3)		250.0000			250.0000			mg/l	12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	ALKALINITY (HCO3)		240.0000			240.0000			mg/l	07/27/89	4	IT	GC
RANCH WELL	DEWEY LAKE	ALKALINITY (HCO3)		230.0000			230.0000			mg/l	06/20/90	5	IT	GC
RANCH WELL	DEWEY LAKE	ALUMINUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	ALUMINUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	ALUMINUM	<	0.2000		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	ALUMINUM	<	2.0000		<	2.0000			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	ANTIMONY		0.1500			0.1600	< 0.05	< 0.05	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	ANTIMONY		0.1000		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	ANTIMONY		0.1100			0.1100			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	ARSENIC		0.0040			0.0030	< 0.001	< 0.001	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	ARSENIC	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	ARSENIC	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	04/20/88	3	IT	ME
RANCH WELL	DEWEY LAKE	ARSENIC	<	0.0100		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	ARSENIC	<	0.0100		NA	0.0000			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	BARIUM		0.0100			0.0100	< 0.005	< 0.005	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	BARIUM		0.0140			0.0150	< 0.005	< 0.005	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	BARIUM		0.0070			0.0070	< 0.005	< 0.005	mg/l	04/20/88	3	IT	ME
RANCH WELL	DEWEY LAKE	BARIUM	<	0.2000		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	BARIUM	<	0.2000		<	0.2000			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	BENZENE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	BENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/20/87	2	IT	V
RANCH WELL	DEWEY LAKE	BENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	3	IT	V
RANCH WELL	DEWEY LAKE	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
RANCH WELL	DEWEY LAKE	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	BERYLLIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	BERYLLIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	BERYLLIUM	<	0.0050		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	BERYLLIUM	<	0.0050		<	0.0050			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	BORON		0.2000			0.1800	0.04	0.04	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	BORON		0.1900			0.1800	< 0.01	< 0.01	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	BORON		0.2100		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	BORON		0.3300			0.3200			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	BROMIDE		2.3000		NA	0.0000			mg/l	06/18/86	1	IT	GC
RANCH WELL	DEWEY LAKE	BROMIDE		3.0000		NA	0.0000			mg/l	12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	BROMIDE	<	2.0000		<	2.0000			mg/l	07/27/89	4	IT	GC
RANCH WELL	DEWEY LAKE	BROMIDE	<	2.0000			0.0000			mg/l	06/20/90	5	IT	GC
RANCH WELL	DEWEY LAKE	BROMOFORM	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	BROMOFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/20/87	2	IT	V
RANCH WELL	DEWEY LAKE	BROMOFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	3	IT	V
RANCH WELL	DEWEY LAKE	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	CADMIUM		0.0080			0.0100	< 0.005	< 0.005	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	CADMIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	04/20/88	3	IT	ME
RANCH WELL	DEWEY LAKE	CADMIUM		0.0090		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	CADMIUM		0.0090			0.0100			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	CALCIUM		390.0000			340.0000			mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	CALCIUM		340.0000			330.0000			mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	CALCIUM		320.0000		NA	0.0000			mg/l	07/27/89	4	IT	MT

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
RANCH WELL	DEWEY LAKE	CALCIUM		550.0000			550.0000			mg/l	06/20/90	5	IT	MC
RANCH WELL	DEWEY LAKE	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/20/87	2	IT	V
RANCH WELL	DEWEY LAKE	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	3	IT	V
RANCH WELL	DEWEY LAKE	CESIUM		0.1000			0.1000	0.1	0.1	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	CESIUM		0.0300			0.0300	0.02	0.02	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	CESIUM	<	0.1000		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	CESIUM	<	0.2000		<	0.2000			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	CHLORIDE		390.0000			390.0000			mg/l	06/18/86	1	IT	GC
RANCH WELL	DEWEY LAKE	CHLORIDE		470.0000		NA	0.0000			mg/l	12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	CHLORIDE		440.0000		NA	0.0000			mg/l	04/20/88	3	IT	GC
RANCH WELL	DEWEY LAKE	CHLORIDE		330.0000		NA	0.0000			mg/l	07/27/89	4	IT	GC
RANCH WELL	DEWEY LAKE	CHLORIDE		340.0000			0.0000			mg/l	06/20/90	5	IT	GC
RANCH WELL	DEWEY LAKE	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	CHLOROFORM		1.5000		NA	0.0000		T < 1.0	ug/l	12/20/87	2	IT	V
RANCH WELL	DEWEY LAKE	CHLOROFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	3	IT	V
RANCH WELL	DEWEY LAKE	CHROMIUM		0.0200			0.0400	< 0.01	< 0.01	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	CHROMIUM		0.0400			0.0500	< 0.01	< 0.01	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	CHROMIUM		0.0400			0.0600	< 0.01	< 0.01	mg/l	04/20/88	3	IT	ME
RANCH WELL	DEWEY LAKE	CHROMIUM		0.0700		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	CHROMIUM	<	0.0100			0.0100			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	CHRYSENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	COBALT	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	COBALT		0.0100			0.0200	< 0.01	< 0.01	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	COBALT	<	0.0500		NA	0.0000			mg/l	07/27/89	4	IT	MT

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RANCH WELL	DEWEY LAKE	COBALT	<	0.0500		<	0.0500			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	COLOR	<	1.0000		NA	0.0000			CU	12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	COLOR	<	1.0000		NA	0.0000			CU	04/20/88	3	IT	GC
RANCH WELL	DEWEY LAKE	COPPER	<	0.0100			0.0200	< 0.01	< 0.01	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	COPPER	<	0.0100			0.0100	0.01	< 0.01	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	COPPER	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	04/20/88	3	IT	ME
RANCH WELL	DEWEY LAKE	COPPER	<	0.0250		<	0.0250			mg/l	06/20/90	4	IT	MT
RANCH WELL	DEWEY LAKE	COPPER	<	0.0250		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	CYANIDE	<	0.0200		NA	0.0000			mg/l	06/18/86	1	IT	GC
RANCH WELL	DEWEY LAKE	CYANIDE	<	0.0100		NA	0.0000			mg/l	07/27/89	4	IT	GC
RANCH WELL	DEWEY LAKE	CYANIDE	<	0.0100			0.0000			mg/l	06/20/90	5	IT	GC
RANCH WELL	DEWEY LAKE	DI-N-BUTYL PHTHALATE		11.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/20/87	2	IT	V
RANCH WELL	DEWEY LAKE	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	3	IT	V
RANCH WELL	DEWEY LAKE	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/20/87	2	IT	V
RANCH WELL	DEWEY LAKE	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	3	IT	V
RANCH WELL	DEWEY LAKE	DIETHYL PHTHALATE		24.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	ENDRIN	<	0.0200		NA	0.0000			ug/l	12/20/87	2	IT	HP
RANCH WELL	DEWEY LAKE	ENDRIN	<	0.0200		NA	0.0000			ug/l	04/20/88	3	IT	HP
RANCH WELL	DEWEY LAKE	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	FLUORENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	FLUORIDE		1.0000			1.0000			mg/l	06/18/86	1	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
RANCH WELL	DEWEY LAKE	FLUORIDE		1.7000		NA	0.0000			mg/l	12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	FLUORIDE		0.9000		NA	0.0000			mg/l	04/20/88	3	IT	GC
RANCH WELL	DEWEY LAKE	FLUORIDE		1.0000			1.0000			mg/l	07/27/89	4	IT	GC
RANCH WELL	DEWEY LAKE	FLUORIDE		1.0000			0.0000			mg/l	06/20/90	5	IT	GC
RANCH WELL	DEWEY LAKE	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	IODIDE		0.9600		NA	0.0000			mg/l	06/18/86	1	IT	GC
RANCH WELL	DEWEY LAKE	IODIDE	<	2.0000		<	2.0000			mg/l	12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	IODIDE	<	2.0000		<	2.0000			mg/l	07/27/89	4	IT	GC
RANCH WELL	DEWEY LAKE	IODIDE	<	2.0000		<	2.0000			mg/l	06/20/90	5	IT	GC
RANCH WELL	DEWEY LAKE	IRON		0.0200			0.0200	< 0.01	< 0.01	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	IRON		0.0300			0.0400	< 0.01	< 0.01	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	IRON	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	04/20/88	3	IT	ME
RANCH WELL	DEWEY LAKE	IRON	<	0.1000		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	IRON	<	0.1000		<	0.1000			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	LANGELIER SATURATION INDEX		0.1700		NA	0.0000				06/20/90	5	IT	GC
RANCH WELL	DEWEY LAKE	LEAD	<	0.0500			0.0700	< 0.05	< 0.05	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	LEAD		0.0700			0.0900	< 0.05	< 0.05	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	LEAD	<	0.0500		<	0.0800	< 0.05	< 0.05	mg/l	04/20/88	3	IT	ME
RANCH WELL	DEWEY LAKE	LEAD		0.0700		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	LEAD		0.0600			0.0600			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	LINDANE	<	0.0400		NA	0.0000			ug/l	12/20/87	2	IT	HP
RANCH WELL	DEWEY LAKE	LINDANE	<	0.0400		NA	0.0000			ug/l	04/20/88	3	IT	HP
RANCH WELL	DEWEY LAKE	LITHIUM		0.0220			0.0220	< 0.01	< 0.01	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	LITHIUM		12.0000		NA	0.0000			mg/l	07/27/89	4	IT	MT

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RANCH WELL	DEWEY LAKE	LITHIUM	<	0.1000		<	0.1000			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	LSI CORROSIVITY		-0.2200		NA	0.0000				12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	LSI CORROSIVITY		0.0200		NA	0.0000				04/20/88	3	IT	GC
RANCH WELL	DEWEY LAKE	MAGNESIUM		200.0000			180.0000			mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	MAGNESIUM		230.0000			230.0000			mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	MAGNESIUM		180.0000		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	MAGNESIUM		150.0000			150.0000			mg/l	06/20/90	5	IT	MC
RANCH WELL	DEWEY LAKE	MANGANESE	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	MANGANESE	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	MANGANESE	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	04/20/88	3	IT	ME
RANCH WELL	DEWEY LAKE	MANGANESE	<	0.0150		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	MANGANESE	<	0.0150		<	0.0150			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	MBAS		0.0400			0.0300			mg/l	12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	MBAS		0.0700			0.0500			mg/l	04/20/88	3	IT	GC
RANCH WELL	DEWEY LAKE	MERCURY	<	0.0002			0.0004	< 0.0002	< 0.0002	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	MERCURY		0.0007			0.0008	0.0003	< 0.0002	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	04/20/88	3	IT	ME
RANCH WELL	DEWEY LAKE	MERCURY	<	0.0002		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	MERCURY	<	0.0002		<	0.0002			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	METHOXYCHLOR	<	0.0010		NA	0.0000			mg/l	12/20/87	2	IT	HP
RANCH WELL	DEWEY LAKE	METHOXYCHLOR	<	0.0010		NA	0.0000			mg/l	04/20/88	3	IT	HP
RANCH WELL	DEWEY LAKE	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	MOLYBDENUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	MOLYBDENUM		0.0200			0.0200	< 0.01	< 0.01	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	MOLYBDENUM		0.0300		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	MOLYBDENUM		0.0400			0.0400			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS		DATE	RND	LAB	C
RANCH WELL	DEWEY LAKE	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	NICKEL	<	0.0300		<	0.0300	< 0.03	< 0.03	mg/l		06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	NICKEL	<	0.0300		<	0.0300	< 0.03	< 0.03	mg/l		12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	NICKEL	<	0.0400		NA	0.0000			mg/l		07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	NICKEL	<	0.0400		<	0.0400			mg/l		06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	NITRATE		120.0000			110.0000			mg/l	NO3-N	06/18/86	1	IT	GC
RANCH WELL	DEWEY LAKE	NITRATE		120.0000		NA	0.0000			mg/l	NO3-N	12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	NITRATE		110.0000		NA	0.0000			mg/l	NO3-N	04/20/88	3	IT	GC
RANCH WELL	DEWEY LAKE	NITRATE		110.0000		NA	0.0000			mg/l		07/27/89	4	IT	GC
RANCH WELL	DEWEY LAKE	NITRATE		71.0000			71.0000			mg/l		06/20/90	5	IT	GC
RANCH WELL	DEWEY LAKE	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	ODOR		4.0000		NA	0.0000			T.O.N.		12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	ODOR		1.0000		NA	0.0000			T.O.N.		04/20/88	3	IT	GC
RANCH WELL	DEWEY LAKE	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	P-DICHLOROBENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l		12/20/87	2	IT	V
RANCH WELL	DEWEY LAKE	P-DICHLOROBENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l		04/20/88	3	IT	V
RANCH WELL	DEWEY LAKE	PCB	<	1.0000		NA	0.0000			ug/l		06/18/86	1	IT	PC
RANCH WELL	DEWEY LAKE	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	PHENOL	<	10.0000		NA	0.0000			ug/l		06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	PHENOLICS		0.0190			0.0240			mg/l		06/18/86	1	IT	GC
RANCH WELL	DEWEY LAKE	PHENOLICS		0.0070		NA	0.0000			mg/l		12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	PHENOLICS	<	0.0050		NA	0.0000			mg/l		07/27/89	4	IT	GC
RANCH WELL	DEWEY LAKE	PHENOLICS	<	0.0050			0.0000			mg/l		06/20/90	5	IT	GC
RANCH WELL	DEWEY LAKE	PHOSPHATE		0.0400			0.0500			mg/l	T-PO4-P	06/18/86	1	IT	GC
RANCH WELL	DEWEY LAKE	PHOSPHATE	<	0.0100		NA	0.0000			mg/l	T-PO4-P	12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	PHOSPHORUS		0.0200		NA	0.0000			mg/l		07/27/89	4	IT	GC
RANCH WELL	DEWEY LAKE	PHOSPHORUS	<	0.0100		<	0.0100			mg/l		06/20/90	5	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
RANCH WELL	DEWEY LAKE	POTASSIUM		3.7000			3.6000			mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	POTASSIUM		5.1000			5.1000			mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	POTASSIUM	<	5.0000		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	POTASSIUM	<	5.0000		<	5.0000			mg/l	06/20/90	5	IT	MC
RANCH WELL	DEWEY LAKE	PYRENE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	SV
RANCH WELL	DEWEY LAKE	RESIDUE, FILTERABLE @ 180 C		3300.0000		NA	0.0000			mg/l	06/18/86	1	IT	GC
RANCH WELL	DEWEY LAKE	RESIDUE, FILTERABLE @ 180 C		3200.0000		NA	0.0000			mg/l	12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	RESIDUE, FILTERABLE @ 180 C		2900.0000			3100.0000			mg/l	04/20/88	3	IT	GC
RANCH WELL	DEWEY LAKE	RESIDUE, FILTERABLE @ 180 C		2800.0000			2800.0000			mg/l	07/27/89	4	IT	GC
RANCH WELL	DEWEY LAKE	RESIDUE, FILTERABLE @ 180 C		3000.0000			3000.0000			mg/l	06/20/90	5	IT	GC
RANCH WELL	DEWEY LAKE	RESIDUE, NONFILTERABLE @ 105 C		6.7000		NA	0.0000			mg/l	06/18/86	1	IT	GC
RANCH WELL	DEWEY LAKE	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000		NA	0.0000			mg/l	12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	RESIDUE, NONFILTERABLE @ 105 C		31.0000			32.0000			mg/l	07/27/89	4	IT	GC
RANCH WELL	DEWEY LAKE	RESIDUE, NONFILTERABLE @ 105 C	<	4.0000		<	4.0000			mg/l	06/20/90	5	IT	GC
RANCH WELL	DEWEY LAKE	SELENIUM		0.0360			0.0370	< 0.001	< 0.001	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	SELENIUM		0.0790		NA	0.0000	< 0.005	< 0.005	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	SELENIUM		0.0550		NA	0.0000	< 0.005	< 0.005	mg/l	04/20/88	3	IT	ME
RANCH WELL	DEWEY LAKE	SELENIUM	<	0.0500		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	SELENIUM	<	0.0500		NA	0.0000			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	SILICA		42.0000			38.0000	0.78	0.82	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	SILICA		49.0000			48.0000	< 0.2	< 0.2	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	SILICA		23.0000		NA	0.0000			mg/l	07/27/89	4	IT	GC
RANCH WELL	DEWEY LAKE	SILICA		20.0000			0.0000			mg/l	06/20/90	5	IT	GC
RANCH WELL	DEWEY LAKE	SILVER	<	0.0100			0.0100	< 0.01	< 0.01	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	SILVER	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	04/20/88	3	IT	ME
RANCH WELL	DEWEY LAKE	SILVER		0.0200		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	SILVER		0.0200			0.0200			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	SODIUM		190.0000			170.0000			mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	SODIUM		240.0000			240.0000			mg/l	12/20/87	2	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
RANCH WELL	DEWEY LAKE	SODIUM		130.0000		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	SODIUM		220.0000			220.0000			mg/l	06/20/90	5	IT	MC
RANCH WELL	DEWEY LAKE	SPECIFIC CONDUCTANCE		4050.0000		NA	0.0000			umhos/cm@25C	06/18/86	1	IT	GC
RANCH WELL	DEWEY LAKE	SPECIFIC CONDUCTANCE		4460.0000			4480.0000			umhos/cm@25C	12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	SPECIFIC CONDUCTANCE		3442.0000		NA	0.0000			uMhos/cm@25C	07/27/89	4	IT	GC
RANCH WELL	DEWEY LAKE	SPECIFIC CONDUCTANCE		3650.0000			3670.0000			uMhos/cm@25C	06/20/90	5	IT	GC
RANCH WELL	DEWEY LAKE	STRONTIUM		3.2000			3.2000	0.05	0.05	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	STRONTIUM		3.0000			3.1000	< 0.01	< 0.01	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	STRONTIUM		5.1000			5.1000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	STRONTIUM		5.1000			5.1000			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	STYRENE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	SULFATE		920.0000		NA	0.0000			mg/l	06/18/86	1	IT	GC
RANCH WELL	DEWEY LAKE	SULFATE		920.0000		NA	0.0000			mg/l	12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	SULFATE		1000.0000		NA	0.0000			mg/l	04/20/88	3	IT	GC
RANCH WELL	DEWEY LAKE	SULFATE		770.0000			740.0000			mg/l	07/27/89	4	IT	GC
RANCH WELL	DEWEY LAKE	SULFATE		1400.0000			1400.0000			mg/l	06/20/90	5	IT	GC
RANCH WELL	DEWEY LAKE	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/20/87	2	IT	V
RANCH WELL	DEWEY LAKE	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	3	IT	V
RANCH WELL	DEWEY LAKE	THALLIUM	<	0.5000		<	0.5000	< 0.005	< 0.0[illegible]	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	THALLIUM	<	0.1000		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	THALLIUM	<	1.0000		NA	0.0000			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	TITANIUM		0.1500			0.1500	< 0.03	< 0.03	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	TITANIUM		0.2700			0.2700	< 0.03	< 0.03	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	TITANIUM	<	0.0100		<	0.0100			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	TITANIUM		0.0100			0.0100			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	TOLUENE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	TOTAL ORGANIC CARBON		3.0000		NA	0.0000			mg/l	06/18/86	1	IT	GC
RANCH WELL	DEWEY LAKE	TOTAL ORGANIC CARBON		3.0000			3.0000			mg/l	12/20/87	2	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
RANCH WELL	DEWEY LAKE	TOTAL ORGANIC CARBON		3.0000			4.0000			mg/l	07/27/89	4	IT	GC
RANCH WELL	DEWEY LAKE	TOTAL ORGANIC CARBON		3.0000			2.0000			mg/l	06/20/90	5	IT	GC
RANCH WELL	DEWEY LAKE	TOTAL ORGANIC HALOGEN		0.4000		NA	0.0000			mg/l	06/18/86	1	IT	GC
RANCH WELL	DEWEY LAKE	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	TOTAL ORGANIC HALOGEN		0.0600		<	0.0500			mg/l	07/27/89	4	IT	GC
RANCH WELL	DEWEY LAKE	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	06/20/90	5	IT	GC
RANCH WELL	DEWEY LAKE	TOXAPHENE	<	0.0005		NA	0.0000			mg/l	12/20/87	2	IT	HP
RANCH WELL	DEWEY LAKE	TOXAPHENE	<	0.0005		NA	0.0000			mg/l	04/20/88	3	IT	HP
RANCH WELL	DEWEY LAKE	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	TRICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	12/20/87	2	IT	V
RANCH WELL	DEWEY LAKE	TRICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/20/88	3	IT	V
RANCH WELL	DEWEY LAKE	TURBIDITY		0.9000		NA	0.0000			NTU	12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	TURBIDITY		2.0000			2.2000			NTU	04/20/88	3	IT	GC
RANCH WELL	DEWEY LAKE	VANADIUM		0.0700			0.0700	< 0.01	< 0.01	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	VANADIUM		0.0700		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	VANADIUM		0.0500			0.0500			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	VINYL CHLORIDE	<	2.0000		NA	0.0000		T < 2.0	ug/l	12/20/87	2	IT	V
RANCH WELL	DEWEY LAKE	VINYL CHLORIDE	<	2.0000		NA	0.0000		T < 2.0	ug/l	04/20/88	3	IT	V
RANCH WELL	DEWEY LAKE	XYLENE	<	5.0000		NA	0.0000			ug/l	06/18/86	1	IT	V
RANCH WELL	DEWEY LAKE	ZINC		0.1700			0.1500	< 0.01	< 0.01	mg/l	06/18/86	1	IT	ME
RANCH WELL	DEWEY LAKE	ZINC		0.0600			0.0600	< 0.01	< 0.01	mg/l	12/20/87	2	IT	ME
RANCH WELL	DEWEY LAKE	ZINC		0.0900			0.0900	< 0.01	< 0.01	mg/l	04/20/88	3	IT	ME
RANCH WELL	DEWEY LAKE	ZINC		0.1100		NA	0.0000			mg/l	07/27/89	4	IT	MT
RANCH WELL	DEWEY LAKE	ZINC		0.0200			0.0200			mg/l	06/20/90	5	IT	MT
RANCH WELL	DEWEY LAKE	pH		7.6800			7.7700				06/18/86	1	IT	GC

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RANCH WELL	DEWEY LAKE	pH		6.9400			6.9200						12/20/87	2	IT	GC
RANCH WELL	DEWEY LAKE	pH		7.0400		NA	0.0000						04/20/88	3	IT	GC
RANCH WELL	DEWEY LAKE	pH		6.9100		NA	0.0000						07/27/89	4	IT	GC
RANCH WELL	DEWEY LAKE	pH		7.2000			7.2000						06/20/90	5	IT	GC
** TWIN WELLS - PASTURE																
TWIN WELLS - PASTURE	DEWEY LAKE	1,1,1-TRICHLOROETHANE	<	2.0000		NA	0.0000					ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000			T <	1.0	ug/l	08/03/88	2	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	1,1,2,2-TETRACHLOROETHANE	<	2.0000		NA	0.0000					ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	1,1,2-TRICHLOROETHANE	<	2.0000		NA	0.0000					ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	1,1-DICHLOROETHANE	<	2.0000		NA	0.0000					ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	1,1-DICHLOROETHYLENE	<	2.0000		NA	0.0000					ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000			T <	1.0	ug/l	08/03/88	2	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	1,2,4-TRICHLOROBENZENE	<	2.0000		NA	0.0000					ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	1,2-DICHLOROBENZENE	<	2.0000		NA	0.0000					ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	1,2-DICHLOROETHANE	<	2.0000		NA	0.0000					ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000			T <	1.0	ug/l	08/03/88	2	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	1,2-DICHLOROPROPANE	<	2.0000		NA	0.0000					ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	1,3-DICHLOROBENZENE	<	2.0000		NA	0.0000					ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	1,3-DICHLOROPROPYLENE	<	2.0000		NA	0.0000					ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	1,4-DICHLOROBENZENE	<	2.0000		NA	0.0000					ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	2,4,5-TP (SILVEX)	<	0.0005		NA	0.0000					mg/l	08/03/88	2	IT	HP
TWIN WELLS - PASTURE	DEWEY LAKE	2,4,5-TRICHLOROPHENOL	<	2.0000		NA	0.0000					ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	2,4,6-TRICHLOROPHENOL	<	2.0000		NA	0.0000					ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	2,4-D	<	0.0050		NA	0.0000					mg/l	08/03/88	2	IT	HP
TWIN WELLS - PASTURE	DEWEY LAKE	2,4-DICHLOROPHENOL	<	2.0000		NA	0.0000					ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	2,4-DIMETHYLPHENOL	<	2.0000		NA	0.0000					ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	2,4-DINITROPHENOL	<	20.0000		NA	0.0000					ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	2,4-DINITROTOLUENE	<	2.0000		NA	0.0000					ug/l	01/30/86	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
TWIN WELLS - PASTURE	DEWEY LAKE	2,6-DINITROTOLUENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	2-BUTANONE	<	20.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	2-CHLOROETHYLVINYL ETHER	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	2-CHLORONAPHTHALENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	2-CHLOROPHENOL	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	2-HEXANONE	<	20.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	2-METHYLNAPHTHALENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	2-METHYLPHENOL	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	2-NITROANILINE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	2-NITROPHENOL	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	3,3'-DICHLOROBENZIDINE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	3,4-BENZOFLUORANTHENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	3-NITROANILINE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	4,6-DINITRO-O-CRESOL	<	20.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	4-BROMOPHENYL PHENYL ETHER	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	4-CHLOROANILINE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	4-CHLOROPHENYL PHENYL ETHER	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	4-METHYL-2-PENTANONE	<	20.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	4-METHYLPHENOL	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	4-NITROANILINE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	4-NITROPHENOL	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	ACENAPHTHENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	ACENAPHTHYLENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	ACETONE	<	20.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	ACROLEIN	<	20.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	ACRYLONITRILE	<	20.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	01/30/86	1	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	ALKALINITY (HCO3)		230.0000			220.0000			mg/l	01/30/86	1	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
TWIN WELLS - PASTURE	DEWEY LAKE	ALKALINITY (HCO3)		220.0000		NA	0.0000			mg/l	10/20/89	3	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	ALKALINITY (HCO3)		210.0000			220.0000			mg/l	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	ALUMINUM	<	0.1000		NA	0.0000	< 0.1	< 0.1	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	ALUMINUM	<	0.2000		<	0.2000			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	ALUMINUM	<	0.2000		<	0.2000			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	ANILINE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	ANTHRACENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	ANTIMONY	<	0.0600		<	0.0600			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	ANTIMONY	<	0.0600		<	0.0600			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	ARSENIC		0.0060			0.0060	< 0.001	< 0.001	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	ARSENIC		0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	08/03/88	2	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	ARSENIC	<	0.0100		NA	0.0000			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	ARSENIC	<	0.0100		NA	0.0000			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	BARIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	BARIUM		0.1300			0.1300	< 0.005	< 0.005	mg/l	08/03/88	2	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	BARIUM	<	0.2000		<	0.2000			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	BARIUM	<	0.2000		<	0.2000			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	BENZENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	BENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	08/03/88	2	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	BENZIDINE	<	8.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	BENZO(A)ANTHRACENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	BENZO(A)PYRENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	BENZO(G,H,I)PERYLENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	BENZO(K)FLUORANTHENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	BENZOIC ACID	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	BENZYL ALCOHOL	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	BERYLLIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	BERYLLIUM	<	0.0050		<	0.0050			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	BERYLLIUM	<	0.0050		<	0.0050			mg/l	05/30/90	4	IT	MT

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
TWIN WELLS - PASTURE	DEWEY LAKE	BIS(2-CHLOROETHOXY)METHANE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	BIS(2-CHLOROETHYL)ETHER	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	BIS(2-CHLOROISOPROPYL)ETHER	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	BIS(2-ETHYLHEXYL)PHTHALATE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	BIS(CHLOROMETHYL)ETHER	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	BORON		0.1600		NA	0.0000	< 0.01	< 0.01	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	BORON		0.1300			0.1300			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	BORON		0.1500			0.1600			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	BROMIDE	<	1.0000		NA	0.0000			mg/l	01/30/86	1	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	BROMIDE		8.0000			8.0000			mg/l	10/20/89	3	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	BROMIDE		3.0000			0.0000			mg/l	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	BROMOFORM	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	BROMOFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	08/03/88	2	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	BUTYL BENZYL PHTHALATE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	CADMIUM	<	0.0010		NA	0.0000	< 0.001	< 0.001	mg/l	08/03/88	2	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	CADMIUM	<	0.0050		<	0.0050			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	CADMIUM	<	0.0050		<	0.0050			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	CALCIUM		82.0000			80.0000			mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	CALCIUM		79.0000			78.0000			mg/l	10/20/89	3	IT	MC
TWIN WELLS - PASTURE	DEWEY LAKE	CALCIUM		77.0000			77.0000			mg/l	05/30/90	4	IT	MC
TWIN WELLS - PASTURE	DEWEY LAKE	CALCIUM HARDNESS (CaCO3)		268.0000		NA	0.0000			mg/l	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	CARBON DISULFIDE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	CARBON TETRACHLORIDE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000		T < 1.0	ug/l	08/03/88	2	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	CARBONATE (CO3)		0.0000		NA	0.0000			mg/l	10/20/89	3	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	CESIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	CESIUM	<	0.1000		<	0.1000			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	CESIUM	<	0.2000		<	0.2000			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	CHLORIDE		47.0000			47.0000			mg/l	01/30/86	1	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
TWIN WELLS - PASTURE	DEWEY LAKE	CHLORIDE		39.0000		NA	0.0000			mg/l	08/03/88	2	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	CHLORIDE		40.0000		NA	0.0000			mg/l	10/20/89	3	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	CHLORIDE		35.0000			0.0000			mg/l	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	CHLOROBENZENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	CHLOROETHANE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	CHLOROFORM	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	CHLOROFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	08/03/88	2	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	CHROMIUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	CHROMIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	08/03/88	2	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	CHROMIUM		0.0300			0.0300			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	CHROMIUM		0.0200			0.0200			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	CHRYSENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	COBALT	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	COBALT	<	0.0500		<	0.0500			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	COBALT		0.0500			0.0500			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	COLOR	<	1.0000		NA	0.0000			CU	08/03/88	2	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	COPPER	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	COPPER	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	08/03/88	2	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	COPPER	<	0.0250		<	0.0250			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	COPPER		0.0480			0.0470			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	CYANIDE	<	0.0200		<	0.0200			mg/l	01/30/86	1	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	CYANIDE	<	0.0100		<	0.0200			mg/l	10/20/89	3	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	CYANIDE	<	0.0100		<	0.0200			mg/l	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	DI-N-BUTYL PHTHALATE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	DI-N-OCTYL PHTHALATE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	DIBENZO(A,H)ANTHRACENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	DIBENZOFURAN	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	DIBROMOCHLOROMETHANE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	08/03/88	2	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
TWIN WELLS - PASTURE	DEWEY LAKE	DICHLOROBROMOMETHANE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	08/03/88	2	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	DIETHYL PHTHALATE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	DIMETHYL PHTHALATE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	ENDRIN	<	0.0200		NA	0.0000			ug/l	08/03/88	2	IT	HP
TWIN WELLS - PASTURE	DEWEY LAKE	ETHYLBENZENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	Eh		419.0000		NA	0.0000			mV	01/30/86	1	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	FLUORANTHENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	FLUORENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	FLUORIDE		0.7000		NA	0.0000			mg/l	01/30/86	1	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	FLUORIDE		0.7000		NA	0.0000			mg/l	08/03/88	2	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	FLUORIDE		0.6000		NA	0.0000			mg/l	10/20/89	3	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	FLUORIDE		0.6000			0.0000			mg/l	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	HEXACHLOROBENZENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	HEXACHLOROBUTADIENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	HEXACHLOROCYCLOPENTADIENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	HEXACHLOROETHANE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	INDENO(1,2,3-CD)PYRENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	IODIDE	<	1.0000		NA	0.0000			mg/l	01/30/86	1	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	IODIDE	<	2.0000		<	2.0000			mg/l	10/20/89	3	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	IODIDE	<	2.0000		<	2.0000			mg/l	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	IRON		0.3900			0.2900	0.05	0.03	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	IRON	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	08/03/88	2	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	IRON	<	0.1000			0.1000			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	IRON	<	0.1000		<	0.1000			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	ISOPHORONE	<	8.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	LANGELIER SATURATION INDEX		0.2600		NA	0.0000			NA	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	LEAD	<	0.0500		<	0.0500	< 0.05	< 0.05	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	LEAD	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	08/03/88	2	IT	ME

WATER QUALITY SAMPLING
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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
TWIN WELLS - PASTURE	DEWEY LAKE	LEAD	<	0.0500		<	0.0500			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	LEAD	<	0.0500		<	0.0500			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	LINDANE	<	0.0400		NA	0.0000			ug/l	08/03/88	2	IT	HP
TWIN WELLS - PASTURE	DEWEY LAKE	LITHIUM		0.0300			0.0300			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	LITHIUM	<	0.1000		<	0.1000			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	LSI CORROSIVITY		0.0100		NA	0.0000				08/03/88	2	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	MAGNESIUM		24.0000			23.0000			mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	MAGNESIUM		24.0000			24.0000			mg/l	10/20/89	3	IT	MC
TWIN WELLS - PASTURE	DEWEY LAKE	MAGNESIUM		24.0000			24.0000			mg/l	05/30/90	4	IT	MC
TWIN WELLS - PASTURE	DEWEY LAKE	MANGANESE	<	0.0500		NA	0.0000	< 0.05	< 0.05	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	MANGANESE	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	08/03/88	2	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	MANGANESE	<	0.0150		<	0.0150			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	MANGANESE		0.0190			0.0190			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	MBAS		0.1300			0.1300			mg/l	08/03/88	2	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	MERCURY		0.0002			0.0003	< 0.0002	< 0.0002	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	MERCURY		0.0004			0.0003	0.0003	0.0004	mg/l	08/03/88	2	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	MERCURY	<	0.0002		<	0.0002			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	MERCURY		0.0002		<	0.0002			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	METHOXYCHLOR	<	0.0010		NA	0.0000			mg/l	08/03/88	2	IT	HP
TWIN WELLS - PASTURE	DEWEY LAKE	METHYL BROMIDE	<	20.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	METHYL CHLORIDE	<	20.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	METHYLENE CHLORIDE	<	20.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	MOLYBDENUM		0.0200			0.0300	0.04	0.03	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	MOLYBDENUM	<	0.0200		<	0.0200			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	MOLYBDENUM	<	0.0200		<	0.0200			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	N-NITROSO-DI-METHYLAMINE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	N-NITROSO-DI-PHENYLAMINE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	NAPHTHALENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	NICKEL		0.0300			0.0200	< 0.01	< 0.01	mg/l	01/30/86	1	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
TWIN WELLS - PASTURE	DEWEY LAKE	NICKEL	<	0.0400		<	0.0400			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	NICKEL	<	0.0400		<	0.0400			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	NITRATE		7.8000		NA	0.0000			mg/l NO3-N	01/30/86	1	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	NITRATE		6.2000		NA	0.0000			mg/l NO3-N	08/03/88	2	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	NITRATE		7.8000		NA	0.0000			mg/l	10/20/89	3	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	NITRATE		9.2000			0.0000			mg/l	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	NITROBENZENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	ODOR	<	1.0000		NA	0.0000			T.O.N.	08/03/88	2	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	P-CHLORO-M-CRESOL	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	P-DICHLOROBENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	08/03/88	2	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	PENTACHLOROPHENOL	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	PHENANTHRENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	PHENOL	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	PHENOLICS		0.0200		NA	0.0000			mg/l	01/30/86	1	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	PHENOLICS	<	0.0050		NA	0.0000			mg/l	10/20/89	3	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	PHENOLICS	<	0.0050			0.0000			mg/l	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	PHOSPHATE	<	0.0100		NA	0.0000			mg/l T-PO4-P	01/30/86	1	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	PHOSPHORUS		0.0200		NA	0.0000			mg/l	10/20/89	3	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	PHOSPHORUS	<	0.0100		<	0.0100			mg/l	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	POTASSIUM		3.7000			3.7000			mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	POTASSIUM	<	5.0000		<	5.0000			mg/l	10/20/89	3	IT	MC
TWIN WELLS - PASTURE	DEWEY LAKE	POTASSIUM	<	5.0000		<	5.0000			mg/l	05/30/90	4	IT	MC
TWIN WELLS - PASTURE	DEWEY LAKE	PYRENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	SV
TWIN WELLS - PASTURE	DEWEY LAKE	RESIDUE, FILTERABLE @ 180 C		400.0000		NA	0.0000			mg/l	01/30/86	1	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	RESIDUE, FILTERABLE @ 180 C		390.0000		NA	0.0000			mg/l	08/03/88	2	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	RESIDUE, FILTERABLE @ 180 C		400.0000			410.0000			mg/l	10/20/89	3	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	RESIDUE, FILTERABLE @ 180 C		410.0000			0.0000			mg/l	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	RESIDUE, NONFILTERABLE @ 105 C		13.0000			11.0000			mg/l	01/30/86	1	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	RESIDUE, NONFILTERABLE @ 105 C		4.0000		<	4.0000			mg/l	10/20/89	3	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
TWIN WELLS - PASTURE	DEWEY LAKE	RESIDUE, NONFILTERABLE @ 105 C	<	9.0000			6.0000			mg/l	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	SELENIUM	<	0.1000		NA	0.0000	< 0.001	< 0.001	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	SELENIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	08/03/88	2	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	SELENIUM	<	0.0500		NA	0.0000			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	SELENIUM	<	0.0500		NA	0.0000			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	SILICA		43.0000			42.0000	< 0.2	< 0.2	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	SILICA		19.0000			19.0000			mg/l	10/20/89	3	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	SILICA		18.0000			18.0000			mg/l	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	SILVER	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	08/03/88	2	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	SILVER		0.0100			0.0100			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	SILVER	<	0.0100		<	0.0100			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	SODIUM		26.0000			26.0000			mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	SODIUM		9.0000			9.0000			mg/l	10/20/89	3	IT	MC
TWIN WELLS - PASTURE	DEWEY LAKE	SODIUM		23.0000			22.0000			mg/l	05/30/90	4	IT	MC
TWIN WELLS - PASTURE	DEWEY LAKE	SPECIFIC CONDUCTANCE		682.0000		NA	0.0000			umhos/cm@25C	01/30/86	1	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	SPECIFIC CONDUCTANCE		597.0000			596.0000			uMhos/cm@25C	10/20/89	3	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	SPECIFIC CONDUCTANCE		1030.0000			1030.0000			uMhos/cm@25C	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	STRONTIUM		0.6000			0.6000	< 0.01	< 0.01	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	STRONTIUM		1.1000			1.0000			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	STRONTIUM		1.0000			1.0000			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	STYRENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	SULFATE		270.0000		NA	0.0000			mg/l	01/30/86	1	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	SULFATE		55.0000		NA	0.0000			mg/l	08/03/88	2	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	SULFATE		50.0000		NA	0.0000			mg/l	10/20/89	3	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	SULFATE		59.0000		NA	0.0000			mg/l	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	TETRACHLOROETHYLENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	08/03/88	2	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	THALLIUM	<	0.1000		NA	0.0000			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	THALLIUM	<	0.0100		NA	0.0000			mg/l	05/30/90	4	IT	MT

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
TWIN WELLS - PASTURE	DEWEY LAKE	TITANIUM	<	0.1000		<	0.1000	< 0.1	0.2	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	TITANIUM	<	0.0100		<	0.0100			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	TITANIUM	<	0.0100		<	0.0100			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	TOLUENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	TOTAL ORGANIC CARBON		4.0000		NA	0.0000			mg/l	01/30/86	1	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	10/20/89	3	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	TOTAL ORGANIC CARBON		2.0000			2.0000			mg/l	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	TOTAL ORGANIC HALOGEN		0.0500		NA	0.0000			mg/l	01/30/86	1	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	10/20/89	3	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	05/30/90	4	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	TOXAPHENE	<	0.0005		NA	0.0000			mg/l	08/03/88	2	IT	HP
TWIN WELLS - PASTURE	DEWEY LAKE	TRANS-1,2-DICHLOROETHYLENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	TRICHLOROETHYLENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	TRICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	08/03/88	2	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	TRICHLOROFLUOROMETHANE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	TURBIDITY	<	1.0000		NA	0.0000			NTU	08/03/88	2	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	VANADIUM	<	0.0500		<	0.0500			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	VANADIUM	<	0.0500		<	0.0500			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	VINYL ACETATE	<	20.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	VINYL CHLORIDE	<	20.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	VINYL CHLORIDE	<	2.0000		NA	0.0000		T < 2.0	ug/l	08/03/88	2	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	XYLENE	<	2.0000		NA	0.0000			ug/l	01/30/86	1	IT	V
TWIN WELLS - PASTURE	DEWEY LAKE	ZINC	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	01/30/86	1	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	ZINC		0.3100			0.3100	< 0.01	< 0.01	mg/l	08/03/88	2	IT	ME
TWIN WELLS - PASTURE	DEWEY LAKE	ZINC		0.2200			0.2200			mg/l	10/20/89	3	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	ZINC		0.5200			0.5200			mg/l	05/30/90	4	IT	MT
TWIN WELLS - PASTURE	DEWEY LAKE	pH		8.0000			8.0300				01/30/86	1	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	pH		7.4800		NA	0.0000				08/03/88	2	IT	GC
TWIN WELLS - PASTURE	DEWEY LAKE	pH		7.4100			7.4100				10/20/89	3	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
TWIN WELLS - PASTURE	DEWEY LAKE	pH		7.5400			7.5500				05/30/90	4	IT	GC
** UNGER WINDMILL														
UNGER WINDMILL	DEWEY LAKE	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/18/87	1	IT	V
UNGER WINDMILL	DEWEY LAKE	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
UNGER WINDMILL	DEWEY LAKE	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/18/87	1	IT	V
UNGER WINDMILL	DEWEY LAKE	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
UNGER WINDMILL	DEWEY LAKE	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/18/87	1	IT	V
UNGER WINDMILL	DEWEY LAKE	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
UNGER WINDMILL	DEWEY LAKE	2,4,5-TP (SILVEX)	<	0.0005		NA	0.0000			mg/l	11/18/87	1	IT	HP
UNGER WINDMILL	DEWEY LAKE	2,4,5-TP (SILVEX)	<	0.0005		NA	0.0000			mg/l	07/06/88	2	IT	HP
UNGER WINDMILL	DEWEY LAKE	2,4-D	<	0.0050		NA	0.0000			mg/l	11/18/87	1	IT	HP
UNGER WINDMILL	DEWEY LAKE	2,4-D	<	0.0050		NA	0.0000			mg/l	07/06/88	2	IT	HP
UNGER WINDMILL	DEWEY LAKE	ARSENIC	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	11/18/87	1	IT	ME
UNGER WINDMILL	DEWEY LAKE	ARSENIC	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	07/06/88	2	IT	ME
UNGER WINDMILL	DEWEY LAKE	BARIUM		0.0110			0.0110	< 0.005	< 0.005	mg/l	11/18/87	1	IT	ME
UNGER WINDMILL	DEWEY LAKE	BARIUM		0.0360			0.0660	< 0.005	< 0.005	mg/l	07/06/88	2	IT	ME
UNGER WINDMILL	DEWEY LAKE	BARIUM		0.0150			0.0460	< 0.005	< 0.005	mg/l	07/06/88	2	IT	ME
UNGER WINDMILL	DEWEY LAKE	BENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/18/87	1	IT	V
UNGER WINDMILL	DEWEY LAKE	BENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
UNGER WINDMILL	DEWEY LAKE	BROMOFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/18/87	1	IT	V
UNGER WINDMILL	DEWEY LAKE	BROMOFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
UNGER WINDMILL	DEWEY LAKE	CADMIUM		0.0100			0.0090	< 0.005	< 0.005	mg/l	11/18/87	1	IT	ME
UNGER WINDMILL	DEWEY LAKE	CADMIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	07/06/88	2	IT	ME
UNGER WINDMILL	DEWEY LAKE	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/18/87	1	IT	V
UNGER WINDMILL	DEWEY LAKE	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
UNGER WINDMILL	DEWEY LAKE	CHLORIDE		270.0000		NA	0.0000			mg/l	11/18/87	1	IT	GC
UNGER WINDMILL	DEWEY LAKE	CHLORIDE		280.0000		NA	0.0000			mg/l	07/06/88	2	IT	GC
UNGER WINDMILL	DEWEY LAKE	CHLOROFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/18/87	1	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
UNGER WINDMILL	DEWEY LAKE	CHLOROFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
UNGER WINDMILL	DEWEY LAKE	CHROMIUM		0.1200		NA	0.0000	0.01	0.02	mg/l	11/18/87	1	IT	ME
UNGER WINDMILL	DEWEY LAKE	CHROMIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	07/06/88	2	IT	ME
UNGER WINDMILL	DEWEY LAKE	COLOR		10.0000		NA	0.0000			CU	11/18/87	1	IT	GC
UNGER WINDMILL	DEWEY LAKE	COLOR	<	1.0000		NA	0.0000			CU	07/06/88	2	IT	GC
UNGER WINDMILL	DEWEY LAKE	COPPER		0.0200			0.0200	0.01	0.01	mg/l	11/18/87	1	IT	ME
UNGER WINDMILL	DEWEY LAKE	COPPER		0.1600			0.3300	< 0.01	< 0.01	mg/l	07/06/88	2	IT	ME
UNGER WINDMILL	DEWEY LAKE	COPPER		0.0400			0.2100	< 0.01	< 0.01	mg/l	07/06/88	2	IT	ME
UNGER WINDMILL	DEWEY LAKE	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/18/87	1	IT	V
UNGER WINDMILL	DEWEY LAKE	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
UNGER WINDMILL	DEWEY LAKE	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/18/87	1	IT	V
UNGER WINDMILL	DEWEY LAKE	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
UNGER WINDMILL	DEWEY LAKE	ENDRIN	<	0.0200		NA	0.0000			ug/l	11/18/87	1	IT	HP
UNGER WINDMILL	DEWEY LAKE	ENDRIN	<	0.0200		NA	0.0000			ug/l	07/06/88	2	IT	HP
UNGER WINDMILL	DEWEY LAKE	FLUORIDE		2.1000		NA	0.0000			mg/l	11/18/87	1	IT	GC
UNGER WINDMILL	DEWEY LAKE	FLUORIDE		2.1000		NA	0.0000			mg/l	07/06/88	2	IT	GC
UNGER WINDMILL	DEWEY LAKE	IRON		0.1000			0.1000	< 0.01	< 0.01	mg/l	11/18/87	1	IT	ME
UNGER WINDMILL	DEWEY LAKE	IRON		0.1100			0.2000	< 0.01	< 0.01	mg/l	07/06/88	2	IT	ME
UNGER WINDMILL	DEWEY LAKE	IRON		0.0400			0.1100	< 0.01	< 0.01	mg/l	07/06/88	2	IT	ME
UNGER WINDMILL	DEWEY LAKE	LEAD		0.0900			0.0900	< 0.05	< 0.05	mg/l	11/18/87	1	IT	ME
UNGER WINDMILL	DEWEY LAKE	LEAD	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	07/06/88	2	IT	ME
UNGER WINDMILL	DEWEY LAKE	LINDANE	<	0.0400		NA	0.0000			ug/l	11/18/87	1	IT	HP
UNGER WINDMILL	DEWEY LAKE	LINDANE	<	0.0400		NA	0.0000			ug/l	07/06/88	2	IT	HP
UNGER WINDMILL	DEWEY LAKE	LSI CORROSIVITY		0.0900		NA	0.0000				11/18/87	1	IT	GC
UNGER WINDMILL	DEWEY LAKE	LSI CORROSIVITY		-0.3000		NA	0.0000			--	07/06/88	2	IT	GC
UNGER WINDMILL	DEWEY LAKE	MANGANESE	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	11/18/87	1	IT	ME
UNGER WINDMILL	DEWEY LAKE	MANGANESE		0.0490			0.0600	< 0.005	< 0.005	mg/l	07/06/88	2	IT	ME
UNGER WINDMILL	DEWEY LAKE	MBAS	<	0.0250		<	0.0250			mg/l	11/18/87	1	IT	GC
UNGER WINDMILL	DEWEY LAKE	MBAS	<	0.0250		NA	0.0000			mg/l	07/06/88	2	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
UNGER WINDMILL	DEWEY LAKE	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	11/18/87	1	IT	ME
UNGER WINDMILL	DEWEY LAKE	MERCURY	<	0.0004		NA	0.0000	< 0.0002	< 0.0002	mg/l	07/06/88	2	IT	ME
UNGER WINDMILL	DEWEY LAKE	METHOXYCHLOR	<	0.0010		NA	0.0000			mg/l	11/18/87	1	IT	HP
UNGER WINDMILL	DEWEY LAKE	METHOXYCHLOR	<	0.0010		NA	0.0000			mg/l	07/06/88	2	IT	HP
UNGER WINDMILL	DEWEY LAKE	NITRATE		2.4000			2.5000			mg/l NO3-N	11/18/87	1	IT	GC
UNGER WINDMILL	DEWEY LAKE	NITRATE		2.5000		NA	0.0000			mg/l NO3-N	07/06/88	2	IT	GC
UNGER WINDMILL	DEWEY LAKE	ODOR		0.0000		NA	0.0000			T.O.N.	11/18/87	1	IT	GC
UNGER WINDMILL	DEWEY LAKE	ODOR		1.0000		NA	0.0000			T.O.N.	07/06/88	2	IT	GC
UNGER WINDMILL	DEWEY LAKE	P-DICHLOROBENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/18/87	1	IT	V
UNGER WINDMILL	DEWEY LAKE	P-DICHLOROBENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
UNGER WINDMILL	DEWEY LAKE	RESIDUE, FILTERABLE @ 180 C		3300.0000		NA	0.0000			mg/l	11/18/87	1	IT	GC
UNGER WINDMILL	DEWEY LAKE	RESIDUE, FILTERABLE @ 180 C		3200.0000		NA	0.0000			mg/l	07/06/88	2	IT	GC
UNGER WINDMILL	DEWEY LAKE	SELENIUM		0.0220		NA	0.0000	< 0.005	< 0.005	mg/l	11/18/87	1	IT	ME
UNGER WINDMILL	DEWEY LAKE	SELENIUM		0.0150		NA	0.0000	< 0.005	< 0.005	mg/l	07/06/88	2	IT	ME
UNGER WINDMILL	DEWEY LAKE	SILVER		0.0100			0.0100	< 0.01	< 0.01	mg/l	11/18/87	1	IT	ME
UNGER WINDMILL	DEWEY LAKE	SILVER	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	07/06/88	2	IT	ME
UNGER WINDMILL	DEWEY LAKE	SULFATE		1400.0000			1300.0000			mg/l	11/18/87	1	IT	GC
UNGER WINDMILL	DEWEY LAKE	SULFATE		850.0000		NA	0.0000			mg/l	07/06/88	2	IT	GC
UNGER WINDMILL	DEWEY LAKE	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/18/87	1	IT	V
UNGER WINDMILL	DEWEY LAKE	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
UNGER WINDMILL	DEWEY LAKE	TOXAPHENE	<	0.0005		NA	0.0000			mg/l	11/18/87	1	IT	HP
UNGER WINDMILL	DEWEY LAKE	TOXAPHENE	<	0.0005		NA	0.0000			mg/l	07/06/88	2	IT	HP
UNGER WINDMILL	DEWEY LAKE	TRICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	11/18/87	1	IT	V
UNGER WINDMILL	DEWEY LAKE	TRICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/06/88	2	IT	V
UNGER WINDMILL	DEWEY LAKE	TURBIDITY		3.0000			3.0000			NTU	11/18/87	1	IT	GC
UNGER WINDMILL	DEWEY LAKE	TURBIDITY		2.0000		NA	0.0000			NTU	07/06/88	2	IT	GC
UNGER WINDMILL	DEWEY LAKE	VINYL CHLORIDE	<	2.0000		NA	0.0000		T < 2.0	ug/l	11/18/87	1	IT	V
UNGER WINDMILL	DEWEY LAKE	VINYL CHLORIDE	<	2.0000		NA	0.0000		T < 2.0	ug/l	07/06/88	2	IT	V
UNGER WINDMILL	DEWEY LAKE	ZINC		0.1900			0.1800	< 0.01	< 0.01	mg/l	11/18/87	1	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
UNGER WINDMILL	DEWEY LAKE	ZINC		0.1800			0.1900	< 0.01	< 0.01	mg/l	07/06/88	2	IT	ME
UNGER WINDMILL	DEWEY LAKE	pH		7.2600			7.2200				11/18/87	1	IT	GC
UNGER WINDMILL	DEWEY LAKE	pH		6.9700		NA	0.0000			--	07/06/88	2	IT	GC
** USGS-1														
USGS-1	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/12/88	1	IT	V
USGS-1	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
USGS-1	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/12/88	1	IT	V
USGS-1	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
USGS-1	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/12/88	1	IT	V
USGS-1	CULEBRA	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
USGS-1	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	2,4,5-TP (SILVEX)	<	0.0005		NA	0.0000			mg/l	04/12/88	1	IT	HP
USGS-1	CULEBRA	2,4,5-TP (SILVEX)	<	0.0005		NA	0.0000			mg/l	07/07/88	2	IT	HP
USGS-1	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	2,4-D	<	0.0050		NA	0.0000			mg/l	04/12/88	1	IT	HP
USGS-1	CULEBRA	2,4-D	<	0.0050		NA	0.0000			mg/l	07/07/88	2	IT	HP
USGS-1	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV

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USGS-1	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	04/12/88	1	IT	GC
USGS-1	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	07/07/88	2	IT	GC
USGS-1	CULEBRA	ALKALINITY (HCO3)		110.0000		NA	0.0000			mg/l	04/12/88	1	IT	GC
USGS-1	CULEBRA	ALKALINITY (HCO3)		101.0000		NA	0.0000			mg/l	07/07/88	2	IT	GC
USGS-1	CULEBRA	ALUMINUM		1.0000			1.0000	< 0.1	< 0.1	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	ALUMINUM	<	0.1000			0.8000	< 0.1	< 0.1	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	ALUMINUM		0.3000			0.7000	< 0.1	< 0.1	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	ANTIMONY		0.5000		<	0.5000	< 0.05	< 0.05	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	ANTIMONY		0.1800			0.3800	< 0.05	< 0.05	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	ANTIMONY		0.0800			0.4500	< 0.05	< 0.05	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	ARSENIC	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	ARSENIC	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	BARIUM		0.0900			0.0900	< 0.005	< 0.005	mg/l	04/12/88	1	IT	ME

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USGS-1	CULEBRA	BARIUM		0.0090			0.0470	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	BARIUM		0.0160			0.0340	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	BENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/12/88	1	IT	V
USGS-1	CULEBRA	BENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
USGS-1	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	BERYLLIUM		0.0100			0.0100	< 0.005	< 0.005	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	BERYLLIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	BORON		0.7800			0.7800	0.023	< 0.005	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	BORON		0.6800			0.6800	0.02	< 0.01	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	BROMIDE		6.0000		NA	0.0000			mg/l	04/12/88	1	IT	GC
USGS-1	CULEBRA	BROMIDE	<	2.0000		<	2.0000			mg/l	07/07/88	2	IT	GC
USGS-1	CULEBRA	BROMOFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/12/88	1	IT	V
USGS-1	CULEBRA	BROMOFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
USGS-1	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	CADMIUM	<	0.0010		<	0.0010	< 0.001	< 0.001	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	CADMIUM		0.0170			0.0460	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	CADMIUM	<	0.0050			0.0520	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	CALCIUM		540.0000			540.0000			mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	CALCIUM		700.0000			690.0000			mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/12/88	1	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
USGS-1	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
USGS-1	CULEBRA	CESIUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	CESIUM	<	0.0600		<	0.0600	< 0.06	< 0.06	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	CHLORIDE		600.0000		NA	0.0000			mg/l	04/12/88	1	IT	GC
USGS-1	CULEBRA	CHLORIDE		680.0000		NA	0.0000			mg/l	07/07/88	2	IT	GC
USGS-1	CULEBRA	CHLOROFORM	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/12/88	1	IT	V
USGS-1	CULEBRA	CHLOROFORM		1.3000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
USGS-1	CULEBRA	CHROMIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	CHROMIUM		0.1000			0.2500	0.01	0.01	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	CHROMIUM		0.0300			0.3100	0.01	0.01	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	COBALT		0.2000			0.1000	< 0.01	< 0.01	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	COBALT	<	0.0100			0.1100	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	COBALT		0.0300			0.0900	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	COLOR	<	1.0000		NA	0.0000			CU	07/07/88	2	IT	GC
USGS-1	CULEBRA	COPPER		0.4000			0.4000	< 0.01	< 0.01	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	COPPER	<	0.0100			0.2100	0.01	0.01	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	COPPER		0.0300			0.1400	0.01	0.01	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/12/88	1	IT	V
USGS-1	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
USGS-1	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/12/88	1	IT	V
USGS-1	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
USGS-1	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	ENDRIN	<	0.0200		NA	0.0000			ug/l	04/12/88	1	IT	HP

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USGS-1	CULEBRA	ENDRIN	<	0.0200		NA	0.0000			ug/l	07/07/88	2	IT	HP
USGS-1	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	FLUORIDE		1.9000		NA	0.0000			mg/l	04/12/88	1	IT	GC
USGS-1	CULEBRA	FLUORIDE		2.1000			2.2000			mg/l	07/07/88	2	IT	GC
USGS-1	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	IODIDE	<	2.0000		NA	0.0000			mg/l	04/12/88	1	IT	GC
USGS-1	CULEBRA	IODIDE	<	2.0000		NA	0.0000			mg/l	07/07/88	2	IT	GC
USGS-1	CULEBRA	IRON		0.2000			0.2000	< 0.01	< 0.01	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	IRON	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	07/07/88	2	IT	SV
USGS-1	CULEBRA	LEAD	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	LEAD	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	LINDANE	<	0.0400		NA	0.0000			ug/l	04/12/88	1	IT	HP
USGS-1	CULEBRA	LINDANE	<	0.0400		NA	0.0000			ug/l	07/07/88	2	IT	HP
USGS-1	CULEBRA	LITHIUM		0.1000			0.1000	< 0.005	< 0.005	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	LITHIUM		0.1200			0.1200	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	LSI CORROSIVITY		0.1400		NA	0.0000			--	07/07/88	2	IT	GC
USGS-1	CULEBRA	MAGNESIUM		110.0000			110.0000			mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	MAGNESIUM		130.0000			120.0000			mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	MANGANESE	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	MANGANESE		0.0110			0.0190	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	MANGANESE		0.0060			0.0210	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	MBAS		0.0270			0.0320			mg/l	07/07/88	2	IT	GC
USGS-1	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	04/12/88	1	IT	ME

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USGS-1	CULEBRA	MERCURY		0.0007		NA	0.0000	< 0.0002	< 0.0002	mg/l		07/07/88	2	IT	ME
USGS-1	CULEBRA	METHOXYCHLOR	<	0.0010		NA	0.0000			mg/l		04/12/88	1	IT	HP
USGS-1	CULEBRA	METHOXYCHLOR	<	0.0010		NA	0.0000			mg/l		07/07/88	2	IT	HP
USGS-1	CULEBRA	MOLYBDENUM	<	5.0000		<	5.0000	< 0.01	< 0.01	mg/l		04/12/88	1	IT	ME
USGS-1	CULEBRA	MOLYBDENUM	<	0.0500		<	0.0500	< 0.05	< 0.05	mg/l		07/07/88	2	IT	ME
USGS-1	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		07/07/88	2	IT	SV
USGS-1	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		07/07/88	2	IT	SV
USGS-1	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		07/07/88	2	IT	SV
USGS-1	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		04/12/88	1	IT	ME
USGS-1	CULEBRA	NICKEL		0.0500			0.1400	< 0.03	< 0.03	mg/l		07/07/88	2	IT	ME
USGS-1	CULEBRA	NICKEL	<	0.0300			0.1700	< 0.03	< 0.03	mg/l		07/07/88	2	IT	ME
USGS-1	CULEBRA	NITRATE		4.0000		NA	0.0000			mg/l	NO3-N	04/12/88	1	IT	GC
USGS-1	CULEBRA	NITRATE		4.4000		NA	0.0000			mg/l	NO3-N	07/07/88	2	IT	GC
USGS-1	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		07/07/88	2	IT	SV
USGS-1	CULEBRA	ODOR	<	1.0000		NA	0.0000			T.O.N.		07/07/88	2	IT	GC
USGS-1	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		07/07/88	2	IT	SV
USGS-1	CULEBRA	P-DICHLOROBENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l		04/12/88	1	IT	V
USGS-1	CULEBRA	P-DICHLOROBENZENE	<	1.0000		NA	0.0000		T < 1.0	ug/l		07/07/88	2	IT	V
USGS-1	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		07/07/88	2	IT	PC
USGS-1	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		07/07/88	2	IT	SV
USGS-1	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		07/07/88	2	IT	SV
USGS-1	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		07/07/88	2	IT	SV
USGS-1	CULEBRA	PHENOLICS		0.0060		NA	0.0000			mg/l		07/07/88	2	IT	GC
USGS-1	CULEBRA	PHOSPHATE		0.0200			0.0300			mg/l	T-PO4-P	04/12/88	1	IT	GC
USGS-1	CULEBRA	PHOSPHATE		0.0200			0.0200			mg/l	T-PO4-P	07/07/88	2	IT	GC
USGS-1	CULEBRA	POTASSIUM		14.0000			14.0000			mg/l		04/12/88	1	IT	ME
USGS-1	CULEBRA	POTASSIUM		13.0000			13.0000			mg/l		07/07/88	2	IT	ME
USGS-1	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l		07/07/88	2	IT	SV
USGS-1	CULEBRA	RESIDUE, FILTERABLE @ 180 C		2100.0000		NA	0.0000			mg/l		04/12/88	1	IT	GC

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USGS-1	CULEBRA	RESIDUE, FILTERABLE @ 180 C		4000.0000		NA	0.0000			mg/l	07/07/88	2	IT	GC
USGS-1	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		7.0000		NA	0.0000			mg/l	04/12/88	1	IT	GC
USGS-1	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		26.0000		NA	0.0000			mg/l	07/07/88	2	IT	GC
USGS-1	CULEBRA	SELENIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	SELENIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	SILICA	<	0.4000		NA	0.0000			mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	SILICA		14.0000		NA	0.0000			mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	SILVER	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	SILVER		0.0400			0.1000	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	SILVER		0.0100			0.1300	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	SODIUM		420.0000			430.0000			mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	SODIUM		440.0000			440.0000			mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	SPECIFIC CONDUCTANCE		5200.0000			5220.0000			umhos/cm@25C	04/12/88	1	IT	GC
USGS-1	CULEBRA	SPECIFIC CONDUCTANCE		5010.0000		NA	0.0000			umhos/cm@25C	07/07/88	2	IT	GC
USGS-1	CULEBRA	STRONTIUM		7.5000			7.4000	< 0.01	< 0.01	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	STRONTIUM		7.0000			7.0000	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	SULFATE		2100.0000		NA	0.0000			mg/l	04/12/88	1	IT	GC
USGS-1	CULEBRA	SULFATE		1600.0000		NA	0.0000			mg/l	07/07/88	2	IT	GC
USGS-1	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/12/88	1	IT	V
USGS-1	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
USGS-1	CULEBRA	THALLIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	THALLIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	TITANIUM		0.8000			0.7000	< 0.01	< 0.01	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	TITANIUM		1.6000			3.2000	< 0.03	< 0.03	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	TITANIUM		0.0800			1.6000	< 0.03	< 0.03	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	04/12/88	1	IT	GC
USGS-1	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	07/07/88	2	IT	GC
USGS-1	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500			0.0600			mg/l	04/12/88	1	IT	GC
USGS-1	CULEBRA	TOTAL ORGANIC HALOGEN		0.0900		<	0.0500			mg/l	07/07/88	2	IT	GC

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USGS-1	CULEBRA	TOXAPHENE	<	0.0005		NA	0.0000			mg/l	04/12/88	1	IT	HP
USGS-1	CULEBRA	TOXAPHENE	<	0.0005		NA	0.0000			mg/l	07/07/88	2	IT	HP
USGS-1	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	04/12/88	1	IT	V
USGS-1	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000		T < 1.0	ug/l	07/07/88	2	IT	V
USGS-1	CULEBRA	TURBIDITY		1.0000		NA	0.0000			NTU	07/07/88	2	IT	GC
USGS-1	CULEBRA	VANADIUM		0.3000			0.3000	< 0.01	< 0.01	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	VANADIUM		0.0800			0.1300	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	VANADIUM		0.0500			0.1500	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	VINYL CHLORIDE	<	2.0000		NA	0.0000		T < 2.0	ug/l	04/12/88	1	IT	V
USGS-1	CULEBRA	VINYL CHLORIDE	<	2.0000		NA	0.0000		T < 2.0	ug/l	07/07/88	2	IT	V
USGS-1	CULEBRA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/12/88	1	IT	ME
USGS-1	CULEBRA	ZINC		0.3600			0.3700	< 0.01	< 0.01	mg/l	07/07/88	2	IT	ME
USGS-1	CULEBRA	pH		7.3500			7.3600				04/12/88	1	IT	GC
USGS-1	CULEBRA	pH		7.2000		NA	0.0000			--	07/07/88	2	IT	GC
** WIPP-13														
WIPP-13	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	02/16/87	1	IT	GC
WIPP-13	CULEBRA	ALKALINITY (HCO3)		120.0000		NA	0.0000			mg/l	02/16/87	1	IT	GC
WIPP-13	CULEBRA	ALUMINUM	<	1.0000		NA	0.0000	< 0.1	< 0.1	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	ANTIMONY		0.9000		NA	0.0000	< 0.05	< 0.05	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	ARSENIC	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	BARIUM		0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	BORON		11.0000		NA	0.0000	< 0.01	< 0.01	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	BROMIDE		39.0000		NA	0.0000			mg/l	02/16/87	1	IT	GC
WIPP-13	CULEBRA	CADMIUM		0.0700		NA	0.0000	< 0.005	< 0.005	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	CALCIUM		1450.0000			1490.0000			mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	CESIUM		0.5000		NA	0.0000	< 0.1	< 0.1	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	CHLORIDE		36000.0000		NA	0.0000			mg/l	02/16/87	1	IT	GC

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WIPP-13	CULEBRA	CHROMIUM		0.4000		NA	0.0000	< 0.01	< 0.01	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	COBALT		0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	COPPER		0.2000		NA	0.0000	< 0.01	< 0.01	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	FLUORIDE		1.4000			1.4000			mg/l	02/16/87	1	IT	GC
WIPP-13	CULEBRA	IODIDE	<	2.0000		NA	0.0000			mg/l	02/16/87	1	IT	GC
WIPP-13	CULEBRA	IRON		0.4000		NA	0.0000	< 0.01	< 0.01	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	LEAD		0.7000		NA	0.0000	< 0.05	< 0.05	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	LITHIUM		0.3500		NA	0.0000	0.01	0.01	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	MAGNESIUM		1010.0000			1030.0000			mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	MANGANESE		0.4600		NA	0.0000	< 0.005	< 0.005	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	MOLYBDENUM		0.0600		NA	0.0000	< 0.01	< 0.01	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	NICKEL	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	NITRATE		0.3000		NA	0.0000			mg/l NO3-N	02/16/87	1	IT	GC
WIPP-13	CULEBRA	PHOSPHATE	<	0.0100		NA	0.0000			mg/l T-PO4-P	02/16/87	1	IT	GC
WIPP-13	CULEBRA	POTASSIUM		340.0000			330.0000			mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	RESIDUE, FILTERABLE @ 180 C		67000.0000		NA	0.0000			mg/l	02/16/87	1	IT	GC
WIPP-13	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		130.0000		NA	0.0000			mg/l	02/16/87	1	IT	GC
WIPP-13	CULEBRA	SELENIUM	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	SILICA		16.0000		NA	0.0000	< 0.2	< 0.2	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	SILVER		0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	SODIUM		19000.0000			19000.0000			mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	SPECIFIC CONDUCTANCE		96700.0000		NA	0.0000			umhos/cm@25C	02/16/87	1	IT	GC
WIPP-13	CULEBRA	STRONTIUM		25.0000		NA	0.0000	< 0.01	< 0.01	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	SULFATE		4500.0000		NA	0.0000			mg/l	02/16/87	1	IT	GC
WIPP-13	CULEBRA	THALLIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	TITANIUM		0.3000		NA	0.0000	< 0.03	< 0.03	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	ZINC	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	02/16/87	1	IT	ME
WIPP-13	CULEBRA	pH		6.7400		NA	0.0000				02/16/87	1	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
** WIPP-19														
WIPP-19	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V

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WIPP-19	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		<	50.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	2,4-DINITROPHENOL	<	50.0000		<	50.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	02/12/88	2	IT	V

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WIPP-19	CULEBRA	2-BUTANONE	<	10.0000		<	10.0000		T < 10	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		<	10.0000		T < 10	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	2-CHLOROPHENOL	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	2-HEXANONE	<	10.0000		<	10.0000		T < 10	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	2-METHYLPHENOL	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	2-NITROANILINE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	2-NITROANILINE	<	50.0000		<	50.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	2-NITROPHENOL	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		<	20.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV

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WIPP-19	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	3-NITROANILINE	<	50.0000		<	50.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		<	50.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	4-CHLOROANILINE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		<	10.0000		T < 10	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	4-METHYLPHENOL	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	4-NITROANILINE	<	50.0000		<	50.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	4-NITROPHENOL	<	50.0000		<	50.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV

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WIPP-19	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	ACENAPHTHENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	ACENAPHTHYLENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	ACETONE		71.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	ACETONE		18.0000		NA	0.0000		T < 10	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	ACETONE		45.0000			33.0000		T < 10	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	07/14/87	1	IT	GC
WIPP-19	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	02/12/88	2	IT	GC
WIPP-19	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	08/29/88	3	IT	GC
WIPP-19	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	11/03/89	4	IT	GC
WIPP-19	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	06/13/90	5	IT	GC
WIPP-19	CULEBRA	ALKALINITY (HCO3)		73.0000		NA	0.0000			mg/l	07/14/87	1	IT	GC
WIPP-19	CULEBRA	ALKALINITY (HCO3)		58.0000		NA	0.0000			mg/l	02/12/88	2	IT	GC
WIPP-19	CULEBRA	ALKALINITY (HCO3)		61.0000			60.0000			mg/l	08/29/88	3	IT	GC
WIPP-19	CULEBRA	ALKALINITY (HCO3)		54.0000		NA	0.0000			mg/l	11/03/89	4	IT	GC
WIPP-19	CULEBRA	ALKALINITY (HCO3)		56.0000		NA	0.0000			mg/l	06/13/90	5	IT	GC
WIPP-19	CULEBRA	ALUMINUM	<	10.0000		<	10.0000	< 0.1	< 0.1	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	ALUMINUM	<	10.0000		<	10.0000	< 0.1	< 0.1	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	ALUMINUM	<	10.0000		<	10.0000			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	ALUMINUM	<	20.0000		<	20.0000	< 0.2	< 0.2	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	ALUMINUM	<	0.2000		<	0.2000			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	ANTHRACENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	ANTIMONY	<	5.0000		<	5.0000	< 0.05	< 0.05	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	ANTIMONY	<	5.0000		<	5.0000	< 0.05	< 0.05	mg/l	02/12/88	2	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-19	CULEBRA	ANTIMONY		1.0800			1.1000			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	ANTIMONY	<	6.0000		<	6.0000	< 0.06	< 0.06	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	ANTIMONY	<	0.6000		<	0.6000			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	ARSENIC	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	ARSENIC	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	ARSENIC	<	0.0200		<	0.0200			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	ARSENIC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	ARSENIC	<	0.0200		NA	0.0000			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	BARIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	BARIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	BARIUM	<	0.5000		<	0.5000			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	BARIUM	<	20.0000		<	20.0000	< 0.2	< 0.2	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	BARIUM	<	2.0000		<	2.0000			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	BENZENE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	BENZO(A)PYRENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV

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WIPP-19	CULEBRA	BENZOIC ACID	<	50.0000		<	50.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	BENZYL ALCOHOL	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	BERYLLIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	BERYLLIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	BERYLLIUM	<	0.5000		<	0.5000			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	BERYLLIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	BORON		33.0000			33.0000	< 0.01	< 0.01	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	BORON		30.0000			30.0000	< 0.01	< 0.01	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	BORON		34.0000			33.0000			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	BORON		30.0000			30.0000	< 0.02	< 0.02	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	BORON		26.0000			26.0000			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	BROMIDE		130.0000		NA	0.0000			mg/l	07/14/87	1	IT	GC
WIPP-19	CULEBRA	BROMIDE		95.0000			94.0000			mg/l	02/12/88	2	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-19	CULEBRA	BROMIDE		78.0000			78.0000			mg/l	08/29/88	3	IT	GC
WIPP-19	CULEBRA	BROMIDE		21.0000			21.0000			mg/l	11/03/89	4	IT	GC
WIPP-19	CULEBRA	BROMIDE		49.0000			48.0000			mg/l	06/13/90	5	IT	GC
WIPP-19	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	BROMOFORM	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	CADMIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	CADMIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	CADMIUM	<	0.0030		<	0.0040			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	CADMIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	CADMIUM	<	0.0500		<	0.0500			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	CALCIUM		1900.0000			1900.0000			mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	CALCIUM		1600.0000			1600.0000			mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	CALCIUM		1800.0000			1800.0000			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	CALCIUM		1700.0000			1700.0000			mg/l	11/03/89	4	IT	MC
WIPP-19	CULEBRA	CALCIUM		1400.0000			1400.0000			mg/l	06/13/90	5	IT	MC
WIPP-19	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	CARBON DISULFIDE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	CESIUM		0.4200			0.4600	< 0.1	< 0.1	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	CESIUM	<	0.5000		<	0.5000	< 0.01	< 0.01	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	CESIUM	<	0.2400		<	0.2400			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	CESIUM		0.1000			0.1000	0.1	< 0.1	mg/l	11/03/89	4	IT	MT

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WIPP-19	CULEBRA	CESIUM	<	0.2000		<	0.2000			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	CHLORIDE		58000.0000		NA	0.0000			mg/l	07/14/87	1	IT	GC
WIPP-19	CULEBRA	CHLORIDE		46100.0000		NA	0.0000			mg/l	02/12/88	2	IT	GC
WIPP-19	CULEBRA	CHLORIDE		38900.0000		NA	0.0000			mg/l	08/29/88	3	IT	GC
WIPP-19	CULEBRA	CHLORIDE		38400.0000		NA	0.0000			mg/l	11/03/89	4	IT	GC
WIPP-19	CULEBRA	CHLORIDE		37900.0000		NA	0.0000			mg/l	06/13/90	5	IT	GC
WIPP-19	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	CHLOROBENZENE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	CHLOROETHANE	<	10.0000		<	10.0000		T < 10	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	CHLOROFORM	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	CHROMIUM	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	CHROMIUM	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	CHROMIUM		0.0060			0.0060			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	CHROMIUM		2.0000			2.0000	0.01	0.02	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	CHROMIUM		0.1000			0.1000			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	CHRYSENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	COBALT	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	COBALT	<	0.0070		<	0.0080			mg/l	08/29/88	3	IT	ME

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WIPP-19	CULEBRA	COBALT	<	5.0000		<	5.0000	< 0.05	< 0.05	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	COBALT	<	0.5000		<	0.5000			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	COPPER	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	COPPER	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	COPPER		0.0130			0.1100			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	COPPER	<	2.5000		<	2.5000	< 0.025	< 0.025	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	COPPER	<	0.2500		<	0.2500			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	CYANIDE	<	0.0400		NA	0.0000			mg/l	07/14/87	1	IT	GC
WIPP-19	CULEBRA	CYANIDE	<	0.0100		NA	0.0000			mg/l	02/12/88	2	IT	GC
WIPP-19	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	08/29/88	3	IT	GC
WIPP-19	CULEBRA	CYANIDE	<	0.0100		NA	0.0200			mg/l	11/03/89	4	IT	GC
WIPP-19	CULEBRA	CYANIDE	<	0.0100		NA	0.0000			mg/l	06/13/90	5	IT	GC
WIPP-19	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	DIBENZOFURAN	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-19	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	DIETHYL PHTHALATE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	ETHYLBENZENE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	FLUORANTHENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	FLUORENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	FLUORIDE		0.8000			0.8000			mg/l	07/14/87	1	IT	GC
WIPP-19	CULEBRA	FLUORIDE		0.9000		NA	0.0000			mg/l	02/12/88	2	IT	GC
WIPP-19	CULEBRA	FLUORIDE		1.0000		NA	0.0000			mg/l	08/29/88	3	IT	GC
WIPP-19	CULEBRA	FLUORIDE		1.0000			1.1000			mg/l	11/03/89	4	IT	GC
WIPP-19	CULEBRA	FLUORIDE		1.0000			1.0000			mg/l	06/13/90	5	IT	GC
WIPP-19	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	HEXACHLOROBENZENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV

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WIPP-19	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	HEXACHLOROETHANE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	07/14/87	1	IT	GC
WIPP-19	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	02/12/88	2	IT	GC
WIPP-19	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	08/29/88	3	IT	GC
WIPP-19	CULEBRA	IODIDE		18.0000			18.0000			mg/l	11/03/89	4	IT	GC
WIPP-19	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	06/13/90	5	IT	GC
WIPP-19	CULEBRA	IRON	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	IRON		1.0000			1.0000	< 0.01	< 0.01	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	IRON		2.0000			2.0000			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	IRON	<	10.0000		<	10.0000	< 0.1	< 0.1	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	IRON	<	1.0000		<	1.0000			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	SV
WIPP-19	CULEBRA	ISOPHORONE	<	10.0000		<	10.0000			ug/l	02/12/88	2	IT	SV
WIPP-19	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	08/29/88	3	IT	SV
WIPP-19	CULEBRA	LEAD	<	5.0000		<	5.0000	< 0.05	< 0.05	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	LEAD		1.3000			1.2000	< 0.01	< 0.01	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	LEAD	<	0.0300		<	0.0400			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	LEAD	<	5.0000		<	5.0000	< 0.05	< 0.05	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	LEAD	<	0.5000		<	0.5000			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	LITHIUM		3.4000			3.4000	< 0.01	< 0.01	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	LITHIUM		1.0000			1.0000	< 0.01	< 0.01	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	LITHIUM		0.7300			0.6800			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	LITHIUM		0.4700			0.4700	< 0.01	< 0.01	mg/l	11/03/89	4	IT	MT

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WIPP-19	CULEBRA	LITHIUM		0.6000			0.5000			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	MAGNESIUM		2400.0000			2400.0000			mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	MAGNESIUM		1700.0000			1700.0000			mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	MAGNESIUM		1500.0000			1500.0000			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	MAGNESIUM		1400.0000			1400.0000			mg/l	11/03/89	4	IT	MC
WIPP-19	CULEBRA	MAGNESIUM		1000.0000			1000.0000			mg/l	06/13/90	5	IT	MC
WIPP-19	CULEBRA	MANGANESE		4.2000			4.2000	< 0.005	< 0.005	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	MANGANESE		3.1000			3.1000	< 0.005	< 0.005	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	MANGANESE		2.0000			2.0000			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	MANGANESE		1.6000			1.5000	< 0.015	< 0.015	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	MANGANESE		0.8000			0.8000			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	MERCURY	<	0.0020		NA	0.0000			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	MERCURY		0.0003			0.0003	< .0002	< .0002	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	MERCURY	<	0.0002		<	0.0002			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	METHYL BROMIDE	<	10.0000		<	10.0000		T < 10	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	METHYL CHLORIDE	<	10.0000		<	10.0000		T < 10	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	METHYLENE CHLORIDE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	MOLYBDENUM	<	0.0500		NA	0.0000	< 0.01	< 0.01	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	MOLYBDENUM		0.1700			0.1700	< 0.01	< 0.01	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	MOLYBDENUM		0.0240			0.0290			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	MOLYBDENUM	<	2.0000		<	2.0000	< 0.02	< 0.02	mg/l	11/03/89	4	IT	MT

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WIPP-19	CULEBRA	MOLYBDENUM	<	0.2000		<	0.2000			mg/l		06/13/90	5	IT	MT
WIPP-19	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		07/14/87	1	IT	SV
WIPP-19	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		<	10.0000			ug/l		02/12/88	2	IT	SV
WIPP-19	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		08/29/88	3	IT	SV
WIPP-19	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		07/14/87	1	IT	SV
WIPP-19	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		<	10.0000			ug/l		02/12/88	2	IT	SV
WIPP-19	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		08/29/88	3	IT	SV
WIPP-19	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		07/14/87	1	IT	SV
WIPP-19	CULEBRA	NAPHTHALENE	<	10.0000		<	10.0000			ug/l		02/12/88	2	IT	SV
WIPP-19	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		08/29/88	3	IT	SV
WIPP-19	CULEBRA	NICKEL	<	3.0000		<	3.0000	< 0.03	< 0.03	mg/l		07/14/87	1	IT	ME
WIPP-19	CULEBRA	NICKEL	<	3.0000		<	3.0000	< 0.03	< 0.03	mg/l		02/12/88	2	IT	ME
WIPP-19	CULEBRA	NICKEL	<	0.0200		<	0.0300			mg/l		08/29/88	3	IT	ME
WIPP-19	CULEBRA	NICKEL	<	4.0000		<	4.0000	< 0.04	< 0.04	mg/l		11/03/89	4	IT	MT
WIPP-19	CULEBRA	NICKEL	<	0.4000		<	0.4000			mg/l		06/13/90	5	IT	MT
WIPP-19	CULEBRA	NITRATE		0.9000		NA	0.0000			mg/l	NO3-N	07/14/87	1	IT	GC
WIPP-19	CULEBRA	NITRATE		0.1100			0.1200			mg/l	NO3-N	02/12/88	2	IT	GC
WIPP-19	CULEBRA	NITRATE	<	0.0200		NA	0.0000			mg/l	NO3-N	08/29/88	3	IT	GC
WIPP-19	CULEBRA	NITRATE	<	0.0200		NA	0.0000			mg/l		11/03/89	4	IT	GC
WIPP-19	CULEBRA	NITRATE	<	0.0200		<	0.0200			mg/l		06/13/90	5	IT	GC
WIPP-19	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		07/14/87	1	IT	SV
WIPP-19	CULEBRA	NITROBENZENE	<	10.0000		<	10.0000			ug/l		02/12/88	2	IT	SV
WIPP-19	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		08/29/88	3	IT	SV
WIPP-19	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		07/14/87	1	IT	SV
WIPP-19	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		<	10.0000			ug/l		02/12/88	2	IT	SV
WIPP-19	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		08/29/88	3	IT	SV
WIPP-19	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		07/14/87	1	IT	PC
WIPP-19	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		02/12/88	2	IT	PC
WIPP-19	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		08/29/88	3	IT	PC

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WIPP-19	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000					ug/l		07/14/87	1	IT	SV
WIPP-19	CULEBRA	PENTACHLOROPHENOL	<	50.0000		<	50.0000					ug/l		02/12/88	2	IT	SV
WIPP-19	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000					ug/l		08/29/88	3	IT	SV
WIPP-19	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000					ug/l		07/14/87	1	IT	SV
WIPP-19	CULEBRA	PHENANTHRENE	<	10.0000		<	10.0000					ug/l		02/12/88	2	IT	SV
WIPP-19	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000					ug/l		08/29/88	3	IT	SV
WIPP-19	CULEBRA	PHENOL	<	10.0000		NA	0.0000					ug/l		07/14/87	1	IT	SV
WIPP-19	CULEBRA	PHENOL	<	10.0000		<	10.0000					ug/l		02/12/88	2	IT	SV
WIPP-19	CULEBRA	PHENOL	<	10.0000		NA	0.0000					ug/l		08/29/88	3	IT	SV
WIPP-19	CULEBRA	PHENOLICS		0.0190		NA	0.0000					mg/l		07/14/87	1	IT	GC
WIPP-19	CULEBRA	PHENOLICS	<	0.0050		NA	0.0000					mg/l		02/12/88	2	IT	GC
WIPP-19	CULEBRA	PHENOLICS		0.0970		NA	0.0000					mg/l		08/29/88	3	IT	GC
WIPP-19	CULEBRA	PHENOLICS		0.0060		NA	0.0000					mg/l		11/03/89	4	IT	GC
WIPP-19	CULEBRA	PHENOLICS	<	0.0050		<	0.0100					mg/l		06/13/90	5	IT	GC
WIPP-19	CULEBRA	PHOSPHATE	<	0.0100		<	0.0100					mg/l	T-PO4-P	07/14/87	1	IT	GC
WIPP-19	CULEBRA	PHOSPHATE	<	0.0100		NA	0.0000					mg/l	T-PO4-P	02/12/88	2	IT	GC
WIPP-19	CULEBRA	PHOSPHATE		0.0300		NA	0.0000					mg/l	T-PO4-P	08/29/88	3	IT	GC
WIPP-19	CULEBRA	PHOSPHORUS		0.0100		NA	0.0000					mg/l		11/03/89	4	IT	GC
WIPP-19	CULEBRA	PHOSPHORUS	<	0.0100		NA	0.0000					mg/l		06/13/90	5	IT	GC
WIPP-19	CULEBRA	POTASSIUM		850.0000		NA	0.0000					mg/l		07/14/87	1	IT	ME
WIPP-19	CULEBRA	POTASSIUM		910.0000			890.0000					mg/l		02/12/88	2	IT	ME
WIPP-19	CULEBRA	POTASSIUM		760.0000			740.0000					mg/l		08/29/88	3	IT	ME
WIPP-19	CULEBRA	POTASSIUM		600.0000			610.0000					mg/l		11/03/89	4	IT	MC
WIPP-19	CULEBRA	POTASSIUM		600.0000			580.0000					mg/l		06/13/90	5	IT	MC
WIPP-19	CULEBRA	PYRENE	<	10.0000		NA	0.0000					ug/l		07/14/87	1	IT	SV
WIPP-19	CULEBRA	PYRENE	<	10.0000		<	10.0000					ug/l		02/12/88	2	IT	SV
WIPP-19	CULEBRA	PYRENE	<	10.0000		NA	0.0000					ug/l		08/29/88	3	IT	SV
WIPP-19	CULEBRA	RESIDUE, FILTERABLE @ 180 C		110000.0000			110000.0000					mg/l		07/14/87	1	IT	GC
WIPP-19	CULEBRA	RESIDUE, FILTERABLE @ 180 C		85400.0000		NA	0.0000					mg/l		02/12/88	2	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-19	CULEBRA	RESIDUE, FILTERABLE @ 180 C		79000.0000			77000.0000			mg/l	08/29/88	3	IT	GC
WIPP-19	CULEBRA	RESIDUE, FILTERABLE @ 180 C		80000.0000			79200.0000			mg/l	11/03/89	4	IT	GC
WIPP-19	CULEBRA	RESIDUE, FILTERABLE @ 180 C		77200.0000			74500.0000			mg/l	06/13/90	5	IT	GC
WIPP-19	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		330.0000			330.0000			mg/l	07/14/87	1	IT	GC
WIPP-19	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		59.0000		NA	0.0000			mg/l	02/12/88	2	IT	GC
WIPP-19	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		17.0000			16.0000			mg/l	08/29/88	3	IT	GC
WIPP-19	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		20.0000			20.0000			mg/l	11/03/89	4	IT	GC
WIPP-19	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		19.0000			16.0000			mg/l	06/13/90	5	IT	GC
WIPP-19	CULEBRA	SELENIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	SELENIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	SELENIUM	<	0.0400		<	0.0400			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	SELENIUM	<	0.5000		<	0.5000	< 0.005	< 0.005	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	SELENIUM	<	0.5000		NA	0.0000			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	SILICA		21.0000			21.0000	< 0.2	< 0.2	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	SILICA	<	4.2000		NA	0.0000			mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	SILICA		4.3000		NA	0.0000			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	SILICA		4.4000			4.4000			mg/l	11/03/89	4	IT	GC
WIPP-19	CULEBRA	SILICA		4.3000		NA	0.0000			mg/l	06/13/90	5	IT	GC
WIPP-19	CULEBRA	SILVER	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	SILVER	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	SILVER	<	0.0200		<	0.0200			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	SILVER	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	SILVER	<	0.1000		<	0.1000			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	SODIUM		30000.0000		NA	0.0000			mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	SODIUM		26500.0000			26500.0000			mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	SODIUM		30900.0000			31200.0000			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	SODIUM		23000.0000			23000.0000			mg/l	11/03/89	4	IT	MC
WIPP-19	CULEBRA	SODIUM		31000.0000			31000.0000			mg/l	06/13/90	5	IT	MC
WIPP-19	CULEBRA	SPECIFIC CONDUCTANCE		184000.0000			179000.0000			umhos/cm@25C	07/14/87	1	IT	GC

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WIPP-19	CULEBRA	SPECIFIC CONDUCTANCE		158000.0000			159000.0000			umhos/cm@25C	02/12/88	2	IT	GC
WIPP-19	CULEBRA	SPECIFIC CONDUCTANCE		90600.0000			90900.0000			umhos/cm@25C	08/29/88	3	IT	GC
WIPP-19	CULEBRA	SPECIFIC CONDUCTANCE		92238.0000			92458.0000			uMhos/cm@25C	11/03/89	4	IT	GC
WIPP-19	CULEBRA	SPECIFIC CONDUCTANCE		90800.0000			91100.0000			uMhos/cm@25C	06/13/90	5	IT	GC
WIPP-19	CULEBRA	STRONTIUM		44.0000			45.0000	< 0.01	< 0.01	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	STRONTIUM		35.0000			36.0000	< 0.01	< 0.01	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	STRONTIUM		28.0000			28.0000			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	STRONTIUM		28.0000			28.0000	< 0.01	< 0.01	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	STRONTIUM		22.0000			22.0000			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	STYRENE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	SULFATE		5400.0000		NA	0.0000			mg/l	07/14/87	1	IT	GC
WIPP-19	CULEBRA	SULFATE		5700.0000		NA	0.0000			mg/l	02/12/88	2	IT	GC
WIPP-19	CULEBRA	SULFATE		5500.0000			5400.0000			mg/l	08/29/88	3	IT	GC
WIPP-19	CULEBRA	SULFATE		5600.0000		NA	0.0000			mg/l	11/03/89	4	IT	GC
WIPP-19	CULEBRA	SULFATE		5000.0000		NA	0.0000			mg/l	06/13/90	5	IT	GC
WIPP-19	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	THALLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	THALLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	THALLIUM	<	5.0000		NA	0.0000			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	THALLIUM	<	10.0000		<	10.0000	< 0.01	< 0.01	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	THALLIUM	<	0.1000		NA	0.0000			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	TIN	<	4.0000		<	4.0000	< 0.04	< 0.04	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	TITANIUM	<	3.0000		<	3.0000	< 0.03	< 0.03	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	TITANIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	TITANIUM	<	0.0070		<	0.0080			mg/l	08/29/88	3	IT	ME

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WIPP-19	CULEBRA	TITANIUM	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	TITANIUM	<	0.1000		<	0.1000			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	TOLUENE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	TOTAL ORGANIC CARBON		7.0000			7.0000			mg/l	07/14/87	1	IT	GC
WIPP-19	CULEBRA	TOTAL ORGANIC CARBON		7.0000			7.0000			mg/l	02/12/88	2	IT	GC
WIPP-19	CULEBRA	TOTAL ORGANIC CARBON		5.0000			5.0000			mg/l	08/29/88	3	IT	GC
WIPP-19	CULEBRA	TOTAL ORGANIC CARBON		1.0000			2.0000			mg/l	11/03/89	4	IT	GC
WIPP-19	CULEBRA	TOTAL ORGANIC CARBON		7.0000			5.0000			mg/l	06/13/90	5	IT	GC
WIPP-19	CULEBRA	TOTAL ORGANIC HALOGEN		0.7900			1.1000			mg/l	07/14/87	1	IT	GC
WIPP-19	CULEBRA	TOTAL ORGANIC HALOGEN		1.1000			1.6000			mg/l	02/12/88	2	IT	GC
WIPP-19	CULEBRA	TOTAL ORGANIC HALOGEN		1.6000			4.8000			mg/l	08/29/88	3	IT	GC
WIPP-19	CULEBRA	TOTAL ORGANIC HALOGEN		1.1000			3.2000			mg/l	11/03/89	4	IT	GC
WIPP-19	CULEBRA	TOTAL ORGANIC HALOGEN		0.5900			0.5400			mg/l	06/13/90	5	IT	GC
WIPP-19	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	TRICHLOROETHYLENE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	VANADIUM	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	VANADIUM	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	VANADIUM		1.0000			1.0000			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	VANADIUM	<	5.0000		<	5.0000	< 0.05	< 0.05	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	VANADIUM	<	0.5000		<	0.5000			mg/l	06/13/90	5	IT	MT

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WIPP-19	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	VINYL ACETATE	<	10.0000		<	10.0000		T < 10	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	VINYL CHLORIDE	<	10.0000		<	10.0000		T < 10	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	07/14/87	1	IT	V
WIPP-19	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	02/12/88	2	IT	V
WIPP-19	CULEBRA	XYLENE	<	5.0000		<	5.0000		T < 5.0	ug/l	08/29/88	3	IT	V
WIPP-19	CULEBRA	ZINC	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	07/14/87	1	IT	ME
WIPP-19	CULEBRA	ZINC		3.0000			1.0000	< 0.01	< 0.01	mg/l	02/12/88	2	IT	ME
WIPP-19	CULEBRA	ZINC		0.0510			0.1470			mg/l	08/29/88	3	IT	ME
WIPP-19	CULEBRA	ZINC	<	2.0000		<	2.0000	< 0.02	< 0.02	mg/l	11/03/89	4	IT	MT
WIPP-19	CULEBRA	ZINC	<	0.2000		<	0.2000			mg/l	06/13/90	5	IT	MT
WIPP-19	CULEBRA	pH		7.0700			7.0500				07/14/87	1	IT	GC
WIPP-19	CULEBRA	pH		6.6700			6.7600				02/12/88	2	IT	GC
WIPP-19	CULEBRA	pH		6.9100		NA	0.0000				08/29/88	3	IT	GC
WIPP-19	CULEBRA	pH		7.2700			7.2700				11/03/89	4	IT	GC
WIPP-19	CULEBRA	pH		7.2400			7.2400				06/13/90	5	IT	GC
** WIPP-25														
WIPP-25	CULEBRA	1,1,1-TRICHLOROETHANE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	1,1,2-TRICHLOROETHANE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V

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WIPP-25	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	1,1-DICHLOROETHANE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	1,1-DICHLOROETHYLENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	1,2,4-TRICHLOROBENZENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	1,2,4-TRICHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	1,2-DICHLOROBENZENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	1,2-DICHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	1,2-DICHLOROETHANE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	1,2-DICHLOROPROPANE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	1,3-DICHLOROBENZENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	1,3-DICHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	1,3-DICHLOROPROPYLENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	1,4-DICHLOROBENZENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	1,4-DICHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	2,4,5-TRICHLOROPHENOL	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	2,4,5-TRICHLOROPHENOL	<	100.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-25	CULEBRA	2,4,6-TRICHLOROPHENOL	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	2,4,6-TRICHLOROPHENOL	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	2,4-DICHLOROPHENOL	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	2,4-DICHLOROPHENOL	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	2,4-DIMETHYLPHENOL	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	2,4-DIMETHYLPHENOL	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	2,4-DINITROPHENOL	<	20.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	2,4-DINITROPHENOL	<	100.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	2,4-DINITROTOLUENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	2,4-DINITROTOLUENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	2,6-DINITROTOLUENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	2,6-DINITROTOLUENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	2-BUTANONE	<	20.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	2-CHLORONAPHTHALENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	2-CHLORONAPHTHALENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	2-CHLOROPHENOL	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	2-CHLOROPHENOL	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-25	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	2-HEXANONE	<	20.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	2-METHYLNAPHTHALENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	2-METHYLNAPHTHALENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	2-METHYLPHENOL	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	2-METHYLPHENOL	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	2-NITROANILINE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	2-NITROANILINE	<	100.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	2-NITROPHENOL	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	2-NITROPHENOL	<	100.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	3,3'-DICHLOROBENZIDINE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	3,3'-DICHLOROBENZIDINE	<	40.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	3,4-BENZOFLUORANTHENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	3,4-BENZOFLUORANTHENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	3-NITROANILINE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	3-NITROANILINE	<	100.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	4,6-DINITRO-O-CRESOL	<	20.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	4,6-DINITRO-O-CRESOL	<	100.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV

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WIPP-25	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	4-CHLOROANILINE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	4-CHLOROANILINE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	4-METHYL-2-PENTANONE	<	20.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	4-METHYLPHENOL	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	4-METHYLPHENOL	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	4-NITROANILINE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	4-NITROANILINE	<	100.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	4-NITROPHENOL	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	4-NITROPHENOL	<	100.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	ACENAPHTHENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	ACENAPHTHENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	ACENAPHTHYLENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	ACENAPHTHYLENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	ACETONE		21.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	ACETONE	<	10.0000		NA	0.0000		T < 10	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	ACETONE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/28/88	3	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-25	CULEBRA	ACROLEIN	<	20.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	ACRYLONITRILE	<	20.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	02/12/86	1	IT	GC
WIPP-25	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	04/15/87	2	IT	GC
WIPP-25	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	03/28/88	3	IT	GC
WIPP-25	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	06/27/89	4	IT	GC
WIPP-25	CULEBRA	ALKALINITY (HCO3)		120.0000		NA	0.0000			mg/l	02/12/86	1	IT	GC
WIPP-25	CULEBRA	ALKALINITY (HCO3)		100.0000			100.0000			mg/l	04/15/87	2	IT	GC
WIPP-25	CULEBRA	ALKALINITY (HCO3)		130.0000		NA	0.0000			mg/l	03/28/88	3	IT	GC
WIPP-25	CULEBRA	ALKALINITY (HCO3)		120.0000			120.0000			mg/l	06/27/89	4	IT	GC
WIPP-25	CULEBRA	ALUMINUM	<	1.0000		NA	0.0000	< 0.1	< 0.1	mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	ALUMINUM	<	1.0000		NA	0.0000	< 0.1	< 0.1	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	ALUMINUM	<	2.0000		<	2.0000	< 0.2	< 0.2	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	ANILINE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	ANTHRACENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	ANTHRACENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	ANTIMONY	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	ANTIMONY	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	ANTIMONY	<	0.0600		<	0.0600	< 0.06	< 0.06	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	ARSENIC		0.2700		NA	0.0000	< 0.001	< 0.001	mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	ARSENIC	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	ARSENIC	<	0.0050		NA	0.0000	< 0.005	< 0.005	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	ARSENIC	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	BARIUM	<	0.0500		NA	0.0000	< 0.05	< 0.05	mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	BARIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	BARIUM	<	2.0000		<	2.0000	< 0.2	< 0.2	mg/l	06/27/89	4	IT	MT

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WIPP-25	CULEBRA	BENZENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	BENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	BENZIDINE	<	8.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	BENZO(A)ANTHRACENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	BENZO(A)ANTHRACENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	BENZO(A)PYRENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	BENZO(A)PYRENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	BENZO(G,H,I)PERYLENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	BENZO(G,H,I)PERYLENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	BENZO(K)FLUORANTHENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	BENZO(K)FLUORANTHENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	BENZOIC ACID	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	BENZOIC ACID	<	100.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	BENZYL ALCOHOL	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	BENZYL ALCOHOL	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-25	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE		280.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	BIS(CHLOROMETHYL)ETHER	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	BORON		1.7000		NA	0.0000	< 0.01	< 0.01	mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	BORON		1.5000		NA	0.0000	< 0.01	< 0.01	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	BORON		1.8000			1.8000	< 0.01	< 0.01	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	BORON		1.7000			1.7000	< 0.02	< 0.02	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	BROMIDE		4.0000			4.4000			mg/l	02/12/86	1	IT	GC
WIPP-25	CULEBRA	BROMIDE		4.0000			4.0000			mg/l	04/15/87	2	IT	GC
WIPP-25	CULEBRA	BROMIDE		4.0000			4.0000			mg/l	03/28/88	3	IT	GC
WIPP-25	CULEBRA	BROMIDE		6.0000			5.0000			mg/l	06/27/89	4	IT	GC
WIPP-25	CULEBRA	BROMOFORM	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	BUTYL BENZYL PHTHALATE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	BUTYL BENZYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	CADMIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	CADMIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	CALCIUM		1200.0000			1100.0000			mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	CALCIUM		1100.0000			1100.0000			mg/l	04/15/87	2	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-25	CULEBRA	CALCIUM		1100.0000			1100.0000			mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	CALCIUM		1300.0000		NA	0.0000			mg/l	06/27/89	4	IT	MC
WIPP-25	CULEBRA	CARBON DISULFIDE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	CARBON TETRACHLORIDE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	CESIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	CESIUM	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	CESIUM		0.0100			0.0100	< 0.01	< 0.01	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	CESIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	CHLORIDE		6200.0000		NA	0.0000			mg/l	02/12/86	1	IT	GC
WIPP-25	CULEBRA	CHLORIDE		6500.0000		NA	0.0000			mg/l	04/15/87	2	IT	GC
WIPP-25	CULEBRA	CHLORIDE		6500.0000		NA	0.0000			mg/l	03/28/88	3	IT	GC
WIPP-25	CULEBRA	CHLORIDE		6500.0000		NA	0.0000			mg/l	06/27/89	4	IT	GC
WIPP-25	CULEBRA	CHLOROBENZENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	CHLOROETHANE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	CHLOROFORM	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	CHROMIUM	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	CHROMIUM	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	CHROMIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	CHROMIUM		0.2000			0.2000	0.01	0.01	mg/l	06/27/89	4	IT	MT

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WIPP-25	CULEBRA	CHRYSENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	CHRYSENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	COBALT	<	0.1000		NA	0.0000	< 0.1	< 0.1	mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	COBALT	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	COBALT	<	0.0500		<	0.5000	< 0.05	< 0.05	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	COPPER	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	COPPER	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	COPPER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	COPPER	<	0.2500		<	0.2500	< 0.025	< 0.025	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	CYANIDE	<	0.0200		<	0.0200			mg/l	02/12/86	1	IT	GC
WIPP-25	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	04/15/87	2	IT	GC
WIPP-25	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	03/28/88	3	IT	GC
WIPP-25	CULEBRA	CYANIDE	<	0.0100		NA	0.0000			mg/l	06/27/89	4	IT	GC
WIPP-25	CULEBRA	DI-N-BUTYL PHTHALATE		3.5000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	DI-N-BUTYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	DI-N-OCTYL PHTHALATE		33.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	DI-N-OCTYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	DIBENZOFURAN	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	DIBENZOFURAN	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV

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WIPP-25	CULEBRA	DIBROMOCHLOROMETHANE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	DICHLOROBROMOMETHANE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	DIETHYL PHTHALATE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	DIETHYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	DIMETHYL PHTHALATE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	DIMETHYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	ETHYLBENZENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	Eh		438.0000		NA	0.0000			mV	02/12/86	1	IT	GC
WIPP-25	CULEBRA	FLUORANTHENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	FLUORANTHENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	FLUORENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	FLUORENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	FLUORIDE		1.6000			1.6000			mg/l	02/12/86	1	IT	GC
WIPP-25	CULEBRA	FLUORIDE		1.5000		NA	0.0000			mg/l	04/15/87	2	IT	GC
WIPP-25	CULEBRA	FLUORIDE		1.5000		NA	0.0000			mg/l	03/28/88	3	IT	GC
WIPP-25	CULEBRA	FLUORIDE		1.4000			1.4000			mg/l	06/27/89	4	IT	GC
WIPP-25	CULEBRA	HEXACHLOROBENZENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	HEXACHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV

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WIPP-25	CULEBRA	HEXACHLOROBUTADIENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	HEXACHLOROBUTADIENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	HEXACHLOROETHANE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	HEXACHLOROETHANE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	IODIDE	<	1.0000		NA	0.0000			mg/l	02/12/86	1	IT	GC
WIPP-25	CULEBRA	IODIDE	<	2.0000		NA	0.0000			mg/l	04/15/87	2	IT	GC
WIPP-25	CULEBRA	IODIDE	<	2.0000		NA	0.0000			mg/l	03/28/88	3	IT	GC
WIPP-25	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	06/27/89	4	IT	GC
WIPP-25	CULEBRA	IRON		0.4500		NA	0.0000	< 0.01	< 0.01	mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	IRON		0.2000		NA	0.0000	< 0.01	< 0.01	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	IRON		0.8000			0.8000	< 0.01	< 0.01	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	IRON		1.0000			1.0000	< 0.1	< 0.1	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	ISOPHORONE	<	8.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	ISOPHORONE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV
WIPP-25	CULEBRA	LEAD	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	LEAD	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	LITHIUM		0.2400		NA	0.0000	< 0.01	< 0.01	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	LITHIUM		0.2600			0.2600	< 0.01	< 0.01	mg/l	03/28/88	3	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-25	CULEBRA	LITHIUM		0.2300			0.2300	< 0.01	< 0.01	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	MAGNESIUM		350.0000			330.0000			mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	MAGNESIUM		330.0000			340.0000			mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	MAGNESIUM		330.0000			330.0000			mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	MAGNESIUM		350.0000		NA	0.0000			mg/l	06/27/89	4	IT	MC
WIPP-25	CULEBRA	MANGANESE		0.1100		NA	0.0000	0.02	0.01	mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	MANGANESE		0.1100		NA	0.0000	< 0.005	< 0.005	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	MANGANESE		0.1300			0.1300	< 0.005	< 0.005	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	MANGANESE	<	0.1500		<	0.1500	< 0.015	< 0.015	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	MERCURY		0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	METHYL BROMIDE	<	20.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	METHYL CHLORIDE	<	20.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	METHYLENE CHLORIDE	<	20.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000	T 41	T 35	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	MOLYBDENUM		0.0300			0.0400	< 0.01	< 0.01	mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	MOLYBDENUM		0.0600		NA	0.0000	< 0.01	< 0.01	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	MOLYBDENUM	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	MOLYBDENUM	<	0.2000		NA	0.0000	< 0.02	< 0.02	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	N-NITROSO-DI-METHYLAMINE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	SV
WIPP-25	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	20.0000		NA	0.0000			ug/l	04/15/87	2	IT	SV
WIPP-25	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l	03/28/88	3	IT	SV

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WIPP-25	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	2.0000		NA	0.0000			ug/l		02/12/86	1	IT	SV
WIPP-25	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	20.0000		NA	0.0000			ug/l		04/15/87	2	IT	SV
WIPP-25	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		03/28/88	3	IT	SV
WIPP-25	CULEBRA	NAPHTHALENE	<	2.0000		NA	0.0000			ug/l		02/12/86	1	IT	SV
WIPP-25	CULEBRA	NAPHTHALENE	<	20.0000		NA	0.0000			ug/l		04/15/87	2	IT	SV
WIPP-25	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		03/28/88	3	IT	SV
WIPP-25	CULEBRA	NICKEL	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l		02/12/86	1	IT	ME
WIPP-25	CULEBRA	NICKEL	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l		04/15/87	2	IT	ME
WIPP-25	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		03/28/88	3	IT	ME
WIPP-25	CULEBRA	NICKEL	<	0.4000		<	0.4000	< 0.04	< 0.04	mg/l		06/27/89	4	IT	MT
WIPP-25	CULEBRA	NITRATE		3.6000			3.5000			mg/l	NO3-N	02/12/86	1	IT	GC
WIPP-25	CULEBRA	NITRATE		3.0000		NA	0.0000			mg/l	NO3-N	04/15/87	2	IT	GC
WIPP-25	CULEBRA	NITRATE		2.6000		NA	0.0000			mg/l	NO3-N	03/28/88	3	IT	GC
WIPP-25	CULEBRA	NITRATE		1.8000			1.8000			mg/l		06/27/89	4	IT	GC
WIPP-25	CULEBRA	NITROBENZENE	<	2.0000		NA	0.0000			ug/l		02/12/86	1	IT	SV
WIPP-25	CULEBRA	NITROBENZENE	<	20.0000		NA	0.0000			ug/l		04/15/87	2	IT	SV
WIPP-25	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		03/28/88	3	IT	SV
WIPP-25	CULEBRA	P-CHLORO-M-CRESOL	<	2.0000		NA	0.0000			ug/l		02/12/86	1	IT	SV
WIPP-25	CULEBRA	P-CHLORO-M-CRESOL	<	20.0000		NA	0.0000			ug/l		04/15/87	2	IT	SV
WIPP-25	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		03/28/88	3	IT	SV
WIPP-25	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		04/15/87	2	IT	PC
WIPP-25	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		03/28/88	3	IT	PC
WIPP-25	CULEBRA	PENTACHLOROPHENOL	<	2.0000		NA	0.0000			ug/l		02/12/86	1	IT	SV
WIPP-25	CULEBRA	PENTACHLOROPHENOL	<	100.0000		NA	0.0000			ug/l		04/15/87	2	IT	SV
WIPP-25	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		03/28/88	3	IT	SV
WIPP-25	CULEBRA	PHENANTHRENE	<	2.0000		NA	0.0000			ug/l		02/12/86	1	IT	SV
WIPP-25	CULEBRA	PHENANTHRENE	<	20.0000		NA	0.0000			ug/l		04/15/87	2	IT	SV
WIPP-25	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		03/28/88	3	IT	SV
WIPP-25	CULEBRA	PHENOL	<	2.0000		NA	0.0000			ug/l		02/12/86	1	IT	SV

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WIPP-25	CULEBRA	PHENOL	<	20.0000		NA	0.0000			ug/l		04/15/87	2	IT	SV
WIPP-25	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		03/28/88	3	IT	SV
WIPP-25	CULEBRA	PHENOLICS		0.0130		NA	0.0000			mg/l		02/12/86	1	IT	GC
WIPP-25	CULEBRA	PHENOLICS		0.0060		NA	0.0000			mg/l		04/15/87	2	IT	GC
WIPP-25	CULEBRA	PHENOLICS		0.1060		NA	0.0000			mg/l		03/28/88	3	IT	GC
WIPP-25	CULEBRA	PHENOLICS	<	0.0050		NA	0.0000			mg/l		06/27/89	4	IT	GC
WIPP-25	CULEBRA	PHOSPHATE	<	0.0100		NA	0.0000			mg/l	T-PO4-P	02/12/86	1	IT	GC
WIPP-25	CULEBRA	PHOSPHATE		0.0200		NA	0.0000			mg/l	T-PO4-P	04/15/87	2	IT	GC
WIPP-25	CULEBRA	PHOSPHATE		0.0300		NA	0.0000			mg/l	T-PO4-P	03/28/88	3	IT	GC
WIPP-25	CULEBRA	PHOSPHORUS		0.0200		NA	0.0000			mg/l		06/27/89	4	IT	GC
WIPP-25	CULEBRA	POTASSIUM		110.0000			100.0000			mg/l		02/12/86	1	IT	ME
WIPP-25	CULEBRA	POTASSIUM		120.0000		NA	0.0000			mg/l		04/15/87	2	IT	ME
WIPP-25	CULEBRA	POTASSIUM		150.0000			150.0000			mg/l		03/28/88	3	IT	ME
WIPP-25	CULEBRA	POTASSIUM		160.0000		NA	0.0000			mg/l		06/27/89	4	IT	MC
WIPP-25	CULEBRA	PYRENE	<	2.0000		NA	0.0000			ug/l		02/12/86	1	IT	SV
WIPP-25	CULEBRA	PYRENE	<	20.0000		NA	0.0000			ug/l		04/15/87	2	IT	SV
WIPP-25	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l		03/28/88	3	IT	SV
WIPP-25	CULEBRA	RESIDUE, FILTERABLE @ 180 C		14000.0000		NA	0.0000			mg/l		02/12/86	1	IT	GC
WIPP-25	CULEBRA	RESIDUE, FILTERABLE @ 180 C		14000.0000		NA	0.0000			mg/l		04/15/87	2	IT	GC
WIPP-25	CULEBRA	RESIDUE, FILTERABLE @ 180 C		14800.0000		NA	0.0000			mg/l		03/28/88	3	IT	GC
WIPP-25	CULEBRA	RESIDUE, FILTERABLE @ 180 C		14500.0000			14500.0000			mg/l		06/27/89	4	IT	GC
WIPP-25	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		45.0000		NA	0.0000			mg/l		02/12/86	1	IT	GC
WIPP-25	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		37.0000		NA	0.0000			mg/l		04/15/87	2	IT	GC
WIPP-25	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		29.0000			24.0000			mg/l		03/28/88	3	IT	GC
WIPP-25	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		6.0000			13.0000			mg/l		06/27/89	4	IT	GC
WIPP-25	CULEBRA	SELENIUM	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l		02/12/86	1	IT	ME
WIPP-25	CULEBRA	SELENIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l		04/15/87	2	IT	ME
WIPP-25	CULEBRA	SELENIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l		03/28/88	3	IT	ME
WIPP-25	CULEBRA	SELENIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l		06/27/89	4	IT	MT

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WIPP-25	CULEBRA	SILICA		31.0000		NA	0.0000	< 0.21	< 0.21	mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	SILICA		32.0000		NA	0.0000	< 0.2	< 0.2	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	SILICA		13.0000			13.0000			mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	SILICA		14.0000			14.0000			mg/l	06/27/89	4	IT	GC
WIPP-25	CULEBRA	SILVER	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	SILVER		0.1000			0.1000	< 0.01	< 0.01	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	SODIUM		3400.0000			3300.0000			mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	SODIUM		3400.0000		NA	0.0000			mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	SODIUM		3300.0000			3300.0000			mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	SODIUM		3800.0000		NA	0.0000			mg/l	06/27/89	4	IT	MC
WIPP-25	CULEBRA	SPECIFIC CONDUCTANCE		20800.0000		NA	0.0000			umhos/cm@25C	02/12/86	1	IT	GC
WIPP-25	CULEBRA	SPECIFIC CONDUCTANCE		21500.0000			21500.0000			umhos/cm@25C	04/15/87	2	IT	GC
WIPP-25	CULEBRA	SPECIFIC CONDUCTANCE		21900.0000			22000.0000			umhos/cm@25C	03/28/88	3	IT	GC
WIPP-25	CULEBRA	SPECIFIC CONDUCTANCE		25107.0000			25237.0000			uMhos/cm@25C	06/27/89	4	IT	GC
WIPP-25	CULEBRA	STRONTIUM		1.3900			1.4200	< 0.01	< 0.01	mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	STRONTIUM		1.8000		NA	0.0000	< 0.01	< 0.01	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	STRONTIUM		19.0000			19.0000	< 0.01	< 0.01	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	STRONTIUM		18.0000		NA	0.0000	< 0.01	< 0.01	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	STYRENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	STYRENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	SULFATE		2400.0000		NA	0.0000			mg/l	02/12/86	1	IT	GC
WIPP-25	CULEBRA	SULFATE		2400.0000			2300.0000			mg/l	04/15/87	2	IT	GC
WIPP-25	CULEBRA	SULFATE		2600.0000		NA	0.0000			mg/l	03/28/88	3	IT	GC
WIPP-25	CULEBRA	SULFATE		2100.0000			1800.0000			mg/l	06/27/89	4	IT	GC
WIPP-25	CULEBRA	TETRACHLOROETHYLENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V

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WIPP-25	CULEBRA	THALLIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	THALLIUM	<	5.0000		NA	0.0000	< 0.005	< 0.005	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	THALLIUM	<	10.0000		NA	0.0000	< 0.01	< 0.01	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	TIN	<	0.4000		NA	0.0000	< 0.04	< 0.04	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	TITANIUM		0.8000		NA	0.0000	< 0.1	0.2	mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	TITANIUM	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	TITANIUM		0.3000			0.3000	< 0.03	< 0.03	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	TITANIUM	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	TOLUENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	TOLUENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	TOTAL ORGANIC CARBON		2.0000		NA	0.0000			mg/l	02/12/86	1	IT	GC
WIPP-25	CULEBRA	TOTAL ORGANIC CARBON		4.0000			4.0000			mg/l	04/15/87	2	IT	GC
WIPP-25	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	03/28/88	3	IT	GC
WIPP-25	CULEBRA	TOTAL ORGANIC CARBON		2.0000			2.0000			mg/l	06/27/89	4	IT	GC
WIPP-25	CULEBRA	TOTAL ORGANIC HALOGEN		0.3800		NA	0.0000			mg/l	02/12/86	1	IT	GC
WIPP-25	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	04/15/87	2	IT	GC
WIPP-25	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	03/28/88	3	IT	GC
WIPP-25	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.5000			0.0700			mg/l	06/27/89	4	IT	GC
WIPP-25	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	TRICHLOROETHYLENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	TRICHLOROFLUOROMETHANE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	TURBIDITY		15.5000			14.9000			NTU	06/27/89	4	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-25	CULEBRA	VANADIUM	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	VANADIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	VANADIUM	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	VINYL ACETATE	<	20.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	VINYL CHLORIDE	<	20.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000	T < 10	T < 10	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	XYLENE	<	2.0000		NA	0.0000			ug/l	02/12/86	1	IT	V
WIPP-25	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/15/87	2	IT	V
WIPP-25	CULEBRA	XYLENE	<	5.0000		NA	0.0000	T < 5.0	T < 5.0	ug/l	03/28/88	3	IT	V
WIPP-25	CULEBRA	ZINC		0.0800		NA	0.0000	< 0.05	< 0.05	mg/l	02/12/86	1	IT	ME
WIPP-25	CULEBRA	ZINC	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	04/15/87	2	IT	ME
WIPP-25	CULEBRA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	03/28/88	3	IT	ME
WIPP-25	CULEBRA	ZINC	<	0.2000		<	0.2000	< 0.02	< 0.02	mg/l	06/27/89	4	IT	MT
WIPP-25	CULEBRA	pH		7.7200		NA	0.0000				02/12/86	1	IT	GC
WIPP-25	CULEBRA	pH		7.2300			7.2600				04/15/87	2	IT	GC
WIPP-25	CULEBRA	pH		7.0000			7.0400				03/28/88	3	IT	GC
WIPP-25	CULEBRA	pH		7.1100			7.1100				06/27/89	4	IT	GC
** WIPP-26														
WIPP-26	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	1,1,2-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V

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WIPP-26	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	1,1-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	1,2,4-TRICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	1,2,4-TRICHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	1,2,4-TRICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	1,2-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	1,2-DICHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	1,2-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	1,2-DICHLOROPROPANE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	1,3-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	1,3-DICHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	1,3-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	1,3-DICHLOROPROPYLENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	1,4-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	1,4-DICHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	1,4-DICHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	2,4,5-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	2,4,5-TRICHLOROPHENOL	<	100.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-26	CULEBRA	2,4,5-TRICHLOROPHENOL	<	50.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	2,4,6-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	2,4,6-TRICHLOROPHENOL	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	2,4,6-TRICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	2,4-DICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	2,4-DICHLOROPHENOL	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	2,4-DICHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	2,4-DIMETHYLPHENOL	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	2,4-DIMETHYLPHENOL	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	2,4-DIMETHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	2,4-DINITROPHENOL	<	10.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	2,4-DINITROPHENOL	<	100.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	2,4-DINITROPHENOL	<	50.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	2,4-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	2,4-DINITROTOLUENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	2,4-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	2,6-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	2,6-DINITROTOLUENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	2,6-DINITROTOLUENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	2-BUTANONE		55.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	2-CHLORONAPHTHALENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	2-CHLORONAPHTHALENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	2-CHLORONAPHTHALENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	2-CHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV

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WIPP-26	CULEBRA	2-CHLOROPHENOL	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	2-CHLOROPHENOL	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	2-METHYLNAPHTHALENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	2-METHYLNAPHTHALENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	2-METHYLNAPHTHALENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	2-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	2-METHYLPHENOL	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	2-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	2-NITROANILINE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	2-NITROANILINE	<	100.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	2-NITROANILINE	<	50.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	2-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	2-NITROPHENOL	<	100.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	2-NITROPHENOL	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	3,3'-DICHLOROBENZIDINE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	3,3'-DICHLOROBENZIDINE	<	40.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	3,3'-DICHLOROBENZIDINE	<	20.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	3,4-BENZOFLUORANTHENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	3,4-BENZOFLUORANTHENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	3,4-BENZOFLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	3-NITROANILINE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	3-NITROANILINE	<	100.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	3-NITROANILINE	<	50.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	4,6-DINITRO-O-CRESOL	<	10.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	4,6-DINITRO-O-CRESOL	<	100.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	4,6-DINITRO-O-CRESOL	<	50.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV

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WIPP-26	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	4-CHLOROANILINE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	4-CHLOROANILINE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	4-CHLOROANILINE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	4-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	4-METHYLPHENOL	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	4-METHYLPHENOL	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	4-NITROANILINE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	4-NITROANILINE	<	100.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	4-NITROANILINE	<	50.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	4-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	4-NITROPHENOL	<	100.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	4-NITROPHENOL	<	50.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	ACENAPHTHENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	ACENAPHTHENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	ACENAPHTHENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	ACENAPHTHYLENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	ACENAPHTHYLENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	ACENAPHTHYLENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	ACETONE	<	10.0000		NA	0.0000			ug/l	04/01/87	2	IT	V

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-26	CULEBRA	ACETONE	<	10.0000		NA	0.0000		T < 10	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	ACROLEIN	<	10.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	ACRYLONITRILE	<	10.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	11/25/85	1	IT	GC
WIPP-26	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	04/01/87	2	IT	GC
WIPP-26	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	04/14/88	3	IT	GC
WIPP-26	CULEBRA	ALKALINITY (HCO3)		130.0000		NA	0.0000			mg/l	11/25/85	1	IT	GC
WIPP-26	CULEBRA	ALKALINITY (HCO3)		110.0000			110.0000			mg/l	04/01/87	2	IT	GC
WIPP-26	CULEBRA	ALKALINITY (HCO3)		110.0000		NA	0.0000			mg/l	04/14/88	3	IT	GC
WIPP-26	CULEBRA	ALUMINUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	ALUMINUM	<	1.0000		NA	0.0000	< 0.1	< 0.1	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	ALUMINUM	<	1.0000		<	1.0000	< 0.1	< 0.1	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	ANILINE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	ANTHRACENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	ANTHRACENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	ANTIMONY	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	ANTIMONY	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	ARSENIC	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	ARSENIC	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	ARSENIC	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	BARIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	BARIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	BARIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	BENZENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	BENZENE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	BENZIDINE	<	4.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	BENZO(A)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-26	CULEBRA	BENZO(A)ANTHRACENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	BENZO(A)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	BENZO(A)PYRENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	BENZO(A)PYRENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	BENZO(A)PYRENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	BENZO(G,H,I)PERYLENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	BENZO(G,H,I)PERYLENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	BENZO(G,H,I)PERYLENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	BENZO(K)FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	BENZO(K)FLUORANTHENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	BENZO(K)FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	BENZOIC ACID	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	BENZOIC ACID	<	100.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	BENZOIC ACID	<	50.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	BENZYL ALCOHOL	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	BENZYL ALCOHOL	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	BENZYL ALCOHOL	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	BERYLLIUM	<	0.0050		<	0.0050	< 0.005	< 0.005	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	BERYLLIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	BERYLLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV

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WIPP-26	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE		260.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE		14.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	BORON	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	BORON		1.4000		NA	0.0000	< 0.01	< 0.01	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	BORON		1.3000			1.3000	< 0.01	< 0.01	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	BROMIDE		12.0000		NA	0.0000			mg/l	11/25/85	1	IT	GC
WIPP-26	CULEBRA	BROMIDE		3.0000			3.0000			mg/l	04/01/87	2	IT	GC
WIPP-26	CULEBRA	BROMIDE		7.0000			7.0000			mg/l	04/14/88	3	IT	GC
WIPP-26	CULEBRA	BROMOFORM	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	BUTYL BENZYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	BUTYL BENZYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	BUTYL BENZYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	CADMIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	CADMIUM		0.0500		<	0.0500	< 0.005	< 0.005	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	CALCIUM		1800.0000			1800.0000	< 0.1	< 0.1	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	CALCIUM		1100.0000			1100.0000			mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	CALCIUM		1200.0000			1100.0000			mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	CARBON DISULFIDE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	CESIUM	<	0.1000		<	0.1000	0.1	0.2	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	CESIUM		0.0900		NA	0.0000	< 0.01	< 0.01	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	CESIUM	<	0.0200		<	0.0200	< 0.01	< 0.01	mg/l	04/14/88	3	IT	ME

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WIPP-26	CULEBRA	CHLORIDE		10000.0000			8900.0000			mg/l	11/25/85	1	IT	GC
WIPP-26	CULEBRA	CHLORIDE		3200.0000		NA	0.0000			mg/l	04/01/87	2	IT	GC
WIPP-26	CULEBRA	CHLORIDE		5500.0000		NA	0.0000			mg/l	04/14/88	3	IT	GC
WIPP-26	CULEBRA	CHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	CHLOROETHANE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	CHLOROFORM	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	CHROMIUM		0.3500			0.3500	< 0.01	< 0.01	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	CHROMIUM	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	CHROMIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	CHRYSENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	CHRYSENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	CHRYSENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	COBALT		0.4400			0.4400	< 0.01	< 0.01	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	COBALT	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	COBALT	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	COPPER		0.0600			0.0700	0.02	0.01	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	COPPER	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	COPPER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	11/25/85	1	IT	GC
WIPP-26	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	04/01/87	2	IT	GC
WIPP-26	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	04/14/88	3	IT	GC

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WIPP-26	CULEBRA	DI-N-BUTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	DI-N-BUTYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	DI-N-BUTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	DI-N-OCTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	DI-N-OCTYL PHTHALATE		21.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	DI-N-OCTYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	DIBENZOFURAN	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	DIBENZOFURAN	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	DIBENZOFURAN	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	DIETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	DIETHYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	DIETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	DIMETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	DIMETHYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	DIMETHYL PHTHALATE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	ETHYLBENZENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	Eh		462.0000		NA	0.0000			mV	11/25/85	1	IT	GC
WIPP-26	CULEBRA	FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-26	CULEBRA	FLUORANTHENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	FLUORANTHENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	FLUORENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	FLUORENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	FLUORENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	FLUORIDE		1.3000			1.3000			mg/l	11/25/85	1	IT	GC
WIPP-26	CULEBRA	FLUORIDE		1.5000		NA	0.0000			mg/l	04/01/87	2	IT	GC
WIPP-26	CULEBRA	FLUORIDE		1.6000		NA	0.0000			mg/l	04/14/88	3	IT	GC
WIPP-26	CULEBRA	HEXACHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	HEXACHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	HEXACHLOROBENZENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	HEXACHLOROBUTADIENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	HEXACHLOROBUTADIENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	HEXACHLOROBUTADIENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	HEXACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	HEXACHLOROETHANE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	HEXACHLOROETHANE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	IODIDE	<	1.0000		<	1.0000			mg/l	11/25/85	1	IT	GC
WIPP-26	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	04/01/87	2	IT	GC
WIPP-26	CULEBRA	IODIDE	<	2.0000		<	2.0000			mg/l	04/14/88	3	IT	GC
WIPP-26	CULEBRA	IRON	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	IRON	<	0.1000		NA	0.0000	0.05	< 0.01	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	IRON	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/14/88	3	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-26	CULEBRA	ISOPHORONE	<	4.0000		NA	0.0000			ug/l	11/25/85	1	IT	SV
WIPP-26	CULEBRA	ISOPHORONE	<	20.0000		NA	0.0000			ug/l	04/01/87	2	IT	SV
WIPP-26	CULEBRA	ISOPHORONE	<	10.0000		NA	0.0000			ug/l	04/14/88	3	IT	SV
WIPP-26	CULEBRA	LEAD		0.3100			0.3200	< 0.01	< 0.01	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	LEAD	<	0.5000		NA	0.0000	< 0.05	< 0.05	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	LEAD	<	0.5000		<	0.5000	< 0.05	< 0.05	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	LITHIUM		0.2500		NA	0.0000	< 0.01	< 0.01	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	LITHIUM		0.2600			0.2700	< 0.01	< 0.01	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	MAGNESIUM		370.0000			380.0000	< 0.1	< 0.1	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	MAGNESIUM		330.0000			330.0000			mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	MAGNESIUM		330.0000			330.0000			mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	MANGANESE		0.0900			0.0900	0.03	0.03	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	MANGANESE	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	MANGANESE	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	MERCURY	<	0.0002		<	0.0002	0.0004	0.0003	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	MERCURY	<	0.0002		<	0.0002	< 0.0002	< 0.0002	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	METHYLENE CHLORIDE		11.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	METHYLENE CHLORIDE	<	5.0000		NA	0.0000		T 41	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	MOLYBDENUM	<	0.0100		<	0.0100	< 0.01	< 0.01	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	MOLYBDENUM	<	0.0100		NA	0.0000	< 0.01	< 0.01	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	MOLYBDENUM	<	2.0000		<	2.0000	< 0.01	< 0.01	mg/l	04/14/88	3	IT	ME

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WIPP-26	CULEBRA	N-NITROSO-DI-METHYLAMINE	<	1.0000		NA	0.0000			ug/l		11/25/85	1	IT	SV
WIPP-26	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	1.0000		NA	0.0000			ug/l		11/25/85	1	IT	SV
WIPP-26	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	20.0000		NA	0.0000			ug/l		04/01/87	2	IT	SV
WIPP-26	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	10.0000		NA	0.0000			ug/l		04/14/88	3	IT	SV
WIPP-26	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	1.0000		NA	0.0000			ug/l		11/25/85	1	IT	SV
WIPP-26	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	20.0000		NA	0.0000			ug/l		04/01/87	2	IT	SV
WIPP-26	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	10.0000		NA	0.0000			ug/l		04/14/88	3	IT	SV
WIPP-26	CULEBRA	NAPHTHALENE	<	1.0000		NA	0.0000			ug/l		11/25/85	1	IT	SV
WIPP-26	CULEBRA	NAPHTHALENE	<	20.0000		NA	0.0000			ug/l		04/01/87	2	IT	SV
WIPP-26	CULEBRA	NAPHTHALENE	<	10.0000		NA	0.0000			ug/l		04/14/88	3	IT	SV
WIPP-26	CULEBRA	NICKEL		0.3500			0.3500	< 0.01	< 0.01	mg/l		11/25/85	1	IT	ME
WIPP-26	CULEBRA	NICKEL	<	0.3000		NA	0.0000	< 0.03	< 0.03	mg/l		04/01/87	2	IT	ME
WIPP-26	CULEBRA	NICKEL	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l		04/14/88	3	IT	ME
WIPP-26	CULEBRA	NITRATE		5.8000			5.6000			mg/l	NO3-N	11/25/85	1	IT	GC
WIPP-26	CULEBRA	NITRATE		5.2000			5.3000			mg/l	NO3-N	04/01/87	2	IT	GC
WIPP-26	CULEBRA	NITRATE		3.6000		NA	0.0000			mg/l	NO3-N	04/14/88	3	IT	GC
WIPP-26	CULEBRA	NITROBENZENE	<	1.0000		NA	0.0000			ug/l		11/25/85	1	IT	SV
WIPP-26	CULEBRA	NITROBENZENE	<	20.0000		NA	0.0000			ug/l		04/01/87	2	IT	SV
WIPP-26	CULEBRA	NITROBENZENE	<	10.0000		NA	0.0000			ug/l		04/14/88	3	IT	SV
WIPP-26	CULEBRA	P-CHLORO-M-CRESOL	<	1.0000		NA	0.0000			ug/l		11/25/85	1	IT	SV
WIPP-26	CULEBRA	P-CHLORO-M-CRESOL	<	20.0000		NA	0.0000			ug/l		04/01/87	2	IT	SV
WIPP-26	CULEBRA	P-CHLORO-M-CRESOL	<	10.0000		NA	0.0000			ug/l		04/14/88	3	IT	SV
WIPP-26	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		04/01/87	2	IT	PC
WIPP-26	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		04/14/88	3	IT	PC
WIPP-26	CULEBRA	PENTACHLOROPHENOL	<	1.0000		NA	0.0000			ug/l		11/25/85	1	IT	SV
WIPP-26	CULEBRA	PENTACHLOROPHENOL	<	100.0000		NA	0.0000			ug/l		04/01/87	2	IT	SV
WIPP-26	CULEBRA	PENTACHLOROPHENOL	<	50.0000		NA	0.0000			ug/l		04/14/88	3	IT	SV
WIPP-26	CULEBRA	PHENANTHRENE	<	1.0000		NA	0.0000			ug/l		11/25/85	1	IT	SV
WIPP-26	CULEBRA	PHENANTHRENE	<	20.0000		NA	0.0000			ug/l		04/01/87	2	IT	SV

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WIPP-26	CULEBRA	PHENANTHRENE	<	10.0000		NA	0.0000			ug/l		04/14/88	3	IT	SV
WIPP-26	CULEBRA	PHENOL	<	1.0000		NA	0.0000			ug/l		11/25/85	1	IT	SV
WIPP-26	CULEBRA	PHENOL	<	20.0000		NA	0.0000			ug/l		04/01/87	2	IT	SV
WIPP-26	CULEBRA	PHENOL	<	10.0000		NA	0.0000			ug/l		04/14/88	3	IT	SV
WIPP-26	CULEBRA	PHENOLICS		0.0030		NA	0.0000			mg/l		11/25/85	1	IT	GC
WIPP-26	CULEBRA	PHENOLICS	<	0.0050		NA	0.0000			mg/l		04/01/87	2	IT	GC
WIPP-26	CULEBRA	PHENOLICS		0.0120		NA	0.0000			mg/l		04/14/88	3	IT	GC
WIPP-26	CULEBRA	PHOSPHATE		0.0800		NA	0.0000			mg/l	T-PO4-P	11/25/85	1	IT	GC
WIPP-26	CULEBRA	PHOSPHATE		0.0100			0.0100			mg/l	T-PO4-P	04/01/87	2	IT	GC
WIPP-26	CULEBRA	PHOSPHATE		0.0400		NA	0.0000			mg/l	T-PO4-P	04/14/88	3	IT	GC
WIPP-26	CULEBRA	POTASSIUM		350.0000			350.0000	< 0.01	< 0.01	mg/l		11/25/85	1	IT	ME
WIPP-26	CULEBRA	POTASSIUM		210.0000		NA	0.0000			mg/l		04/01/87	2	IT	ME
WIPP-26	CULEBRA	POTASSIUM		189.0000			190.0000			mg/l		04/14/88	3	IT	ME
WIPP-26	CULEBRA	PYRENE	<	1.0000		NA	0.0000			ug/l		11/25/85	1	IT	SV
WIPP-26	CULEBRA	PYRENE	<	20.0000		NA	0.0000			ug/l		04/01/87	2	IT	SV
WIPP-26	CULEBRA	PYRENE	<	10.0000		NA	0.0000			ug/l		04/14/88	3	IT	SV
WIPP-26	CULEBRA	RESIDUE, FILTERABLE @ 180 C		18000.0000		NA	0.0000			mg/l		11/25/85	1	IT	GC
WIPP-26	CULEBRA	RESIDUE, FILTERABLE @ 180 C		13000.0000		NA	0.0000			mg/l		04/01/87	2	IT	GC
WIPP-26	CULEBRA	RESIDUE, FILTERABLE @ 180 C		12800.0000			12900.0000			mg/l		04/14/88	3	IT	GC
WIPP-26	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		18.0000			32.0000			mg/l		11/25/85	1	IT	GC
WIPP-26	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		30.0000		NA	0.0000			mg/l		04/01/87	2	IT	GC
WIPP-26	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		29.0000			30.0000			mg/l		04/14/88	3	IT	GC
WIPP-26	CULEBRA	SELENIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l		11/25/85	1	IT	ME
WIPP-26	CULEBRA	SELENIUM	<	0.0500		NA	0.0000	< 0.005	< 0.005	mg/l		04/01/87	2	IT	ME
WIPP-26	CULEBRA	SELENIUM		0.0220		NA	0.0000	< 0.005	< 0.005	mg/l		04/14/88	3	IT	ME
WIPP-26	CULEBRA	SILICA		29.0000			30.0000	2.1	1.9	mg/l		11/25/85	1	IT	ME
WIPP-26	CULEBRA	SILICA		36.0000		NA	0.0000	< 0.2	< 0.2	mg/l		04/01/87	2	IT	ME
WIPP-26	CULEBRA	SILICA		15.0000		NA	0.0000			mg/l		04/14/88	3	IT	ME
WIPP-26	CULEBRA	SILVER	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l		04/01/87	2	IT	ME

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WIPP-26	CULEBRA	SILVER	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	SODIUM		4200.0000			4100.0000	< 0.1	< 0.1	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	SODIUM		2900.0000		NA	0.0000			mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	SODIUM		2600.0000			2600.0000			mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	SPECIFIC CONDUCTANCE		25800.0000		NA	0.0000			umhos/cm@25C	11/25/85	1	IT	GC
WIPP-26	CULEBRA	SPECIFIC CONDUCTANCE		19900.0000			19900.0000			umhos/cm@25C	04/01/87	2	IT	GC
WIPP-26	CULEBRA	SPECIFIC CONDUCTANCE		19400.0000			19500.0000			umhos/cm@25C	04/14/88	3	IT	GC
WIPP-26	CULEBRA	STRONTIUM		17.0000			17.0000	< 0.01	< 0.01	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	STRONTIUM		18.0000		NA	0.0000	< 0.01	< 0.01	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	STRONTIUM		18.0000			19.0000	< 0.01	< 0.01	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	STYRENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	STYRENE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	SULFATE		2000.0000			1900.0000			mg/l	11/25/85	1	IT	GC
WIPP-26	CULEBRA	SULFATE		1900.0000			1900.0000			mg/l	04/01/87	2	IT	GC
WIPP-26	CULEBRA	SULFATE		2500.0000			2300.0000			mg/l	04/14/88	3	IT	GC
WIPP-26	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	THALLIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	THALLIUM	<	0.0500		<	0.0500	< 0.005	< 0.005	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	TIN	<	0.4000		NA	0.0000	< 0.04	< 0.04	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	TITANIUM		0.0800			0.0700	0.04	< 0.01	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	TITANIUM		0.3000		NA	0.0000	< 0.03	< 0.03	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	TITANIUM	<	0.3000		<	0.3000	< 0.03	< 0.03	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	TOLUENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	TOLUENE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		NA	0.0000			mg/l	11/25/85	1	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-26	CULEBRA	TOTAL ORGANIC CARBON		2.0000			2.0000			mg/l	04/01/87	2	IT	GC
WIPP-26	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		<	1.0000			mg/l	04/14/88	3	IT	GC
WIPP-26	CULEBRA	TOTAL ORGANIC HALOGEN		0.0700		NA	0.0000			mg/l	11/25/85	1	IT	GC
WIPP-26	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500			0.0800			mg/l	04/01/87	2	IT	GC
WIPP-26	CULEBRA	TOTAL ORGANIC HALOGEN	<	0.0500		<	0.0500			mg/l	04/14/88	3	IT	GC
WIPP-26	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	VANADIUM	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	VANADIUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	XYLENE	<	1.0000		NA	0.0000			ug/l	11/25/85	1	IT	V
WIPP-26	CULEBRA	XYLENE	<	5.0000		NA	0.0000			ug/l	04/01/87	2	IT	V
WIPP-26	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	04/14/88	3	IT	V
WIPP-26	CULEBRA	ZINC		0.0200			0.0200	< 0.01	< 0.01	mg/l	11/25/85	1	IT	ME
WIPP-26	CULEBRA	ZINC	<	0.1000		NA	0.0000	< 0.01	< 0.01	mg/l	04/01/87	2	IT	ME
WIPP-26	CULEBRA	ZINC	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	04/14/88	3	IT	ME
WIPP-26	CULEBRA	pH		7.3500		NA	0.0000				11/25/85	1	IT	GC
WIPP-26	CULEBRA	pH		7.1000			7.1300				04/01/87	2	IT	GC

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WIPP-26	CULEBRA	pH		6.8700			6.9000				04/14/88	3	IT	GC
** WIPP-29														
WIPP-29	CULEBRA	1,1,1-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	1,1,1-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	1,1,2,2-TETRACHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	1,1,2-TRICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	1,1,2-TRICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	1,1-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	1,1-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	1,1-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	1,1-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	1,2,4-TRICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	1,2,4-TRICHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	1,2-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	1,2-DICHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	1,2-DICHLOROETHANE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	1,2-DICHLOROETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	1,2-DICHLOROPROPANE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	1,2-DICHLOROPROPANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	1,3-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	1,3-DICHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	1,3-DICHLOROPROPYLENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	1,4-DICHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	1,4-DICHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	2,3,7,8-TETRACHLOROBENZO-P-DIOXIN	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	2,4,5-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV

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WIPP-29	CULEBRA	2,4,5-TRICHLOROPHENOL	<	100.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	2,4,6-TRICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	2,4,6-TRICHLOROPHENOL	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	2,4-DICHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	2,4-DICHLOROPHENOL	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	2,4-DIMETHYLPHENOL	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	2,4-DIMETHYLPHENOL	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	2,4-DINITROPHENOL	<	10.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	2,4-DINITROPHENOL	<	100.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	2,4-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	2,4-DINITROTOLUENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	2,6-DINITROTOLUENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	2,6-DINITROTOLUENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	2-BUTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	2-CHLOROETHYLVINYL ETHER	<	10.0000		NA	0.0000		T < 10	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	2-CHLORONAPHTHALENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	2-CHLORONAPHTHALENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	2-CHLOROPHENOL	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	2-CHLOROPHENOL	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	2-HEXANONE	<	10.0000		NA	0.0000		T < 10	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	2-METHYLNAPHTHALENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	2-METHYLNAPHTHALENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	2-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	2-METHYLPHENOL	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	2-NITROANILINE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	2-NITROANILINE	<	100.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-29	CULEBRA	2-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	2-NITROPHENOL	<	100.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	3,3'-DICHLOROBENZIDINE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	3,3'-DICHLOROBENZIDINE	<	40.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	3,4-BENZOFLUORANTHENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	3,4-BENZOFLUORANTHENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	3-NITROANILINE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	3-NITROANILINE	<	100.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	4,6-DINITRO-O-CRESOL	<	10.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	4,6-DINITRO-O-CRESOL	<	100.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	4-BROMOPHENYL PHENYL ETHER	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	4-CHLOROANILINE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	4-CHLOROANILINE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	4-CHLOROPHENYL PHENYL ETHER	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	4-METHYL-2-PENTANONE	<	10.0000		NA	0.0000		T < 10	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	4-METHYLPHENOL	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	4-METHYLPHENOL	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	4-NITROANILINE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	4-NITROANILINE	<	100.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	4-NITROPHENOL	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	4-NITROPHENOL	<	100.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	ACENAPHTHENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	ACENAPHTHENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	ACENAPHTHYLENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	ACENAPHTHYLENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	ACETONE	<	20.0000		NA	0.0000			ug/l	12/14/85	1	IT	V

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WIPP-29	CULEBRA	ACETONE		28.0000		NA	0.0000		T < 10	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	ACROLEIN	<	10.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	ACRYLONITRILE	<	10.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	ALKALINITY (CO3)		0.0000		NA	0.0000			mg/l	12/14/85	1	IT	GC
WIPP-29	CULEBRA	ALKALINITY (CO3)		0.0000			0.0000			mg/l	03/11/87	2	IT	GC
WIPP-29	CULEBRA	ALKALINITY (HCO3)		170.0000		NA	0.0000			mg/l	12/14/85	1	IT	GC
WIPP-29	CULEBRA	ALKALINITY (HCO3)		180.0000			180.0000			mg/l	03/11/87	2	IT	GC
WIPP-29	CULEBRA	ALUMINUM		0.4600			0.5600	< 0.01	< 0.01	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	ALUMINUM	<	10.0000		NA	0.0000	< 0.1	< 0.1	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	ANILINE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	ANTHRACENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	ANTHRACENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	ANTIMONY		10.0000		NA	0.0000	< 0.05	< 0.05	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	ARSENIC	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	ARSENIC	<	5.0000		NA	0.0000	< 0.005	< 0.005	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	BARIUM	<	0.1000		<	0.1000	< 0.1	< 0.1	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	BARIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	BENZENE	<	1.0000		NA	1.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	BENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	BENZIDINE	<	4.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	BENZO(A)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	BENZO(A)ANTHRACENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	BENZO(A)PYRENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	BENZO(A)PYRENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	BENZO(G,H,I)PERYLENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	BENZO(G,H,I)PERYLENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	BENZO(K)FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	BENZO(K)FLUORANTHENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	BENZOIC ACID	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-29	CULEBRA	BENZOIC ACID	<	100.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	BENZYL ALCOHOL	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	BENZYL ALCOHOL	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	BERYLLIUM		0.0500			0.0500	< 0.005	< 0.005	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	BERYLLIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	BIS(2-CHLOROETHOXY)METHANE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	BIS(2-CHLOROETHYL)ETHER	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	BIS(2-CHLOROISOPROPYL)ETHER	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	BIS(2-ETHYLHEXYL)PHTHALATE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	BORON		5.8000			5.8000	< 0.1	< 0.1	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	BORON		6.0000		NA	0.0000	< 0.01	< 0.01	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	BROMIDE		100.0000		NA	0.0000			mg/l	12/14/85	1	IT	GC
WIPP-29	CULEBRA	BROMIDE		54.0000		NA	0.0000			mg/l	03/11/87	2	IT	GC
WIPP-29	CULEBRA	BROMOFORM	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	BROMOFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	BUTYL BENZYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	BUTYL BENZYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	CADMIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	CALCIUM		630.0000			630.0000	< 0.1	< 0.1	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	CALCIUM		600.0000		NA	600.0000			mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	CARBON DISULFIDE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	CARBON DISULFIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	CARBON TETRACHLORIDE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	CARBON TETRACHLORIDE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	CESIUM	<	1.0000		<	1.0000	< 0.10	< 0.10	mg/l	12/14/85	1	IT	ME

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-29	CULEBRA	CESIUM		0.3000		NA	0.0000	< 0.1	< 0.1	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	CHLORIDE		180000.0000		NA	0.0000			mg/l	12/14/85	1	IT	GC
WIPP-29	CULEBRA	CHLORIDE		160000.0000			160000.0000			mg/l	03/11/87	2	IT	GC
WIPP-29	CULEBRA	CHLORIDE		160000.0000			160000.0000			mg/l	03/11/87	2	IT	GC
WIPP-29	CULEBRA	CHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	CHLOROBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	CHLOROETHANE	<	10.0000		NA	0.0000		T < 10	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	CHLOROFORM	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	CHLOROFORM	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	CHROMIUM		2.0000			2.2000	< 0.01	< 0.01	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	CHROMIUM		0.8000		NA	0.0000	< 0.01	< 0.01	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	CHRYSENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	CHRYSENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	CIS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	COBALT		7.8000			7.9000	< 0.01	0.03	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	COBALT	<	1.0000		NA	0.0000	< 0.01	< 0.01	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	COPPER		0.4300			0.3800	0.02	0.01	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	COPPER	<	1.0000		NA	0.0000	< 0.01	< 0.01	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	12/14/85	1	IT	GC
WIPP-29	CULEBRA	CYANIDE	<	0.0200		NA	0.0000			mg/l	03/11/87	2	IT	GC
WIPP-29	CULEBRA	DI-N-BUTYL PHTHALATE		3.5000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	DI-N-BUTYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	DI-N-OCTYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	DI-N-OCTYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	DIBENZO(A,H)ANTHRACENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	DIBENZOFURAN	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	DIBENZOFURAN	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV

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WIPP-29	CULEBRA	DIBROMOCHLOROMETHANE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	DIBROMOCHLOROMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	DICHLOROBROMOMETHANE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	DICHLOROBROMOMETHANE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	DIETHYL PHTHALATE		1.2000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	DIETHYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	DIMETHYL PHTHALATE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	DIMETHYL PHTHALATE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	ETHYLBENZENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	ETHYLBENZENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	Eh		441.0000		NA	0.0000			mV	12/14/85	1	IT	GC
WIPP-29	CULEBRA	FLUORANTHENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	FLUORANTHENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	FLUORENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	FLUORENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	FLUORIDE		0.9000			0.9000			mg/l	12/14/85	1	IT	GC
WIPP-29	CULEBRA	FLUORIDE		1.1000		NA	0.0000			mg/l	03/11/87	2	IT	GC
WIPP-29	CULEBRA	HEXACHLOROBENZENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	HEXACHLOROBENZENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	HEXACHLOROBUTADIENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	HEXACHLOROBUTADIENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	HEXACHLOROCYCLOPENTADIENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	HEXACHLOROETHANE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	HEXACHLOROETHANE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	INDENO(1,2,3-CD)PYRENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	IODIDE		2.1000		NA	0.0000			mg/l	12/14/85	1	IT	GC
WIPP-29	CULEBRA	IODIDE	<	2.0000		NA	0.0000			mg/l	03/11/87	2	IT	GC

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WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-29	CULEBRA	IRON		2.1000			1.9000	< 0.01	< 0.01	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	IRON	<	1.0000		NA	0.0000	< 0.01	< 0.01	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	ISOPHORONE	<	4.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	ISOPHORONE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	LEAD		2.9000			3.2000	< 0.01	< 0.01	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	LEAD	<	5.0000		NA	0.0000	< 0.05	< 0.05	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	LITHIUM		0.6800		NA	0.0000	< 0.01	< 0.01	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	MAGNESIUM		6300.0000			6400.0000	< 0.1	< 0.1	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	MAGNESIUM		5900.0000		NA	0.0000			mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	MANGANESE		1.8000			1.8000	0.03	0.02	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	MANGANESE		1.1000		NA	0.0000	< 0.005	< 0.005	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	MERCURY	<	0.0002		<	0.0002	0.0003	0.0006	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	MERCURY	<	0.0002		NA	0.0000	< 0.0002	< 0.0002	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	METHYL BROMIDE	<	10.0000		NA	0.0000		T < 10	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	METHYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	METHYLENE CHLORIDE	<	10.0000		NA	0.0000		T 55	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	MOLYBDENUM	<	0.1000		<	0.1000	< 0.01	< 0.01	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	MOLYBDENUM		0.2800		NA	0.0000	< 0.01	< 0.01	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	N-NITROSO-DI-METHYLAMINE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	N-NITROSO-DI-N-PROPYLAMINE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	N-NITROSO-DI-PHENYLAMINE		11.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	N-NITROSO-DI-PHENYLAMINE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	NAPHTHALENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	SV
WIPP-29	CULEBRA	NAPHTHALENE	<	20.0000		NA	0.0000			ug/l	03/11/87	2	IT	SV
WIPP-29	CULEBRA	NICKEL		4.4000			4.2000	< 0.01	< 0.01	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	NICKEL	<	3.0000		NA	0.0000	< 0.03	< 0.03	mg/l	03/11/87	2	IT	ME

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WIPP-29	CULEBRA	NITRATE		0.1000		NA	0.0000			mg/l	NO3-N	12/14/85	1	IT	GC
WIPP-29	CULEBRA	NITRATE		1.5000			1.6000			mg/l	NO3-N	03/11/87	2	IT	GC
WIPP-29	CULEBRA	NITROBENZENE	<	1.0000		NA	0.0000			ug/l		12/14/85	1	IT	SV
WIPP-29	CULEBRA	NITROBENZENE	<	20.0000		NA	0.0000			ug/l		03/11/87	2	IT	SV
WIPP-29	CULEBRA	P-CHLORO-M-CRESOL	<	1.0000		NA	0.0000			ug/l		12/14/85	1	IT	SV
WIPP-29	CULEBRA	P-CHLORO-M-CRESOL	<	20.0000		NA	0.0000			ug/l		03/11/87	2	IT	SV
WIPP-29	CULEBRA	PCB	<	1.0000		NA	0.0000			ug/l		03/11/87	2	IT	PC
WIPP-29	CULEBRA	PENTACHLOROPHENOL		3.9000		NA	0.0000			ug/l		12/14/85	1	IT	SV
WIPP-29	CULEBRA	PENTACHLOROPHENOL	<	100.0000		NA	0.0000			ug/l		03/11/87	2	IT	SV
WIPP-29	CULEBRA	PHENANTHRENE	<	1.0000		NA	0.0000			ug/l		12/14/85	1	IT	SV
WIPP-29	CULEBRA	PHENANTHRENE	<	20.0000		NA	0.0000			ug/l		03/11/87	2	IT	SV
WIPP-29	CULEBRA	PHENOL	<	1.0000		NA	0.0000			ug/l		12/14/85	1	IT	SV
WIPP-29	CULEBRA	PHENOL	<	20.0000		NA	0.0000			ug/l		03/11/87	2	IT	SV
WIPP-29	CULEBRA	PHENOLICS		0.0040		NA	0.0000			mg/l		12/14/85	1	IT	GC
WIPP-29	CULEBRA	PHENOLICS	<	0.0050		NA	0.0000			mg/l		03/11/87	2	IT	GC
WIPP-29	CULEBRA	PHOSPHATE		0.0400			0.0500			mg/l	T-PO4-P	12/14/85	1	IT	GC
WIPP-29	CULEBRA	PHOSPHATE	<	0.0100		<	0.0100			mg/l	T-PO4-P	03/11/87	2	IT	GC
WIPP-29	CULEBRA	POTASSIUM		23000.0000			23000.0000	< 0.01	< 0.01	mg/l		12/14/85	1	IT	ME
WIPP-29	CULEBRA	POTASSIUM		21000.0000		NA	0.0000			mg/l		03/11/87	2	IT	ME
WIPP-29	CULEBRA	PYRENE	<	1.0000		NA	0.0000			ug/l		12/14/85	1	IT	SV
WIPP-29	CULEBRA	PYRENE	<	20.0000		NA	0.0000			ug/l		03/11/87	2	IT	SV
WIPP-29	CULEBRA	RESIDUE, FILTERABLE @ 180 C		330000.0000		NA	0.0000			mg/l		12/14/85	1	IT	GC
WIPP-29	CULEBRA	RESIDUE, FILTERABLE @ 180 C		290000.0000		NA	0.0000			mg/l		03/11/87	2	IT	GC
WIPP-29	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		1500.0000		NA	0.0000			mg/l		12/14/85	1	IT	GC
WIPP-29	CULEBRA	RESIDUE, NONFILTERABLE @ 105 C		830.0000		NA	0.0000			mg/l		03/11/87	2	IT	GC
WIPP-29	CULEBRA	SELENIUM	<	1.0000		<	1.0000	< 0.01	< 0.01	mg/l		12/14/85	1	IT	ME
WIPP-29	CULEBRA	SELENIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l		03/11/87	2	IT	ME
WIPP-29	CULEBRA	SILICA		49.0000			53.0000	0.44	0.44	mg/l		12/14/85	1	IT	ME
WIPP-29	CULEBRA	SILICA		27.0000		NA	0.0000	< 0.2	< 0.2	mg/l		03/11/87	2	IT	ME

WATER QUALITY SAMPLING
DATA BASE OF
CHEMICAL ANALYSIS

WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-29	CULEBRA	SILVER	<	1.0000		NA	0.0000	< 0.01	< 0.01	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	SODIUM		89000.0000			91000.0000	< 0.1	< 0.1	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	SODIUM		94000.0000		NA	0.0000			mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	SPECIFIC CONDUCTANCE		330000.0000		NA	0.0000			umhos/cm@25C	12/14/85	1	IT	GC
WIPP-29	CULEBRA	SPECIFIC CONDUCTANCE		43600.0000		NA	0.0000			umhos/cm@25C	03/11/87	2	IT	GC
WIPP-29	CULEBRA	STRONTIUM		9.0000			8.9000	< 0.01	< 0.01	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	STRONTIUM		21.0000		NA	0.0000	< 0.01	< 0.01	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	STYRENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	STYRENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	SULFATE		17000.0000		NA	0.0000			mg/l	12/14/85	1	IT	GC
WIPP-29	CULEBRA	SULFATE		17000.0000			17000.0000			mg/l	03/11/87	2	IT	GC
WIPP-29	CULEBRA	TETRACHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	TETRACHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	THALLIUM	<	0.5000		NA	0.0000	< 0.005	< 0.005	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	TIN	<	4.0000		NA	0.0000	< 0.04	< 0.04	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	TITANIUM		0.3300			0.2800	< 0.01	< 0.01	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	TITANIUM	<	3.0000		NA	0.0000	< 0.03	< 0.03	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	TOLUENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	TOLUENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	TOTAL ORGANIC CARBON	<	1.0000		NA	0.0000			mg/l	12/14/85	1	IT	GC
WIPP-29	CULEBRA	TOTAL ORGANIC CARBON		2.0000			3.0000			mg/l	03/11/87	2	IT	GC
WIPP-29	CULEBRA	TOTAL ORGANIC HALOGEN		0.5400		NA	0.0000			mg/l	12/14/85	1	IT	GC
WIPP-29	CULEBRA	TOTAL ORGANIC HALOGEN		2.8000		NA	0.0000			mg/l	03/11/87	2	IT	GC
WIPP-29	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	TRANS-1,2-DICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	TRANS-1,3-DICHLOROPROPENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	TRICHLOROETHYLENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	TRICHLOROETHYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	VANADIUM	<	1.0000		NA	0.0000	< 0.01	< 0.01	mg/l	03/11/87	2	IT	ME

WATER QUALITY SAMPLING
DATA BASE OF
CHEMICAL ANALYSIS

WELL #	ZONE	PARAMETER	V	VALUE	S	D	DUP.	ACID BLANK	WATER BLANK	UNITS	DATE	RND	LAB	C
WIPP-29	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	VINYL ACETATE	<	10.0000		NA	0.0000		T < 10	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	VINYL CHLORIDE	<	10.0000		NA	0.0000		T < 10	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	XYLENE	<	1.0000		NA	0.0000			ug/l	12/14/85	1	IT	V
WIPP-29	CULEBRA	XYLENE	<	5.0000		NA	0.0000		T < 5.0	ug/l	03/11/87	2	IT	V
WIPP-29	CULEBRA	ZINC		0.4500			0.5500	< 0.01	< 0.01	mg/l	12/14/85	1	IT	ME
WIPP-29	CULEBRA	ZINC	<	1.0000		NA	0.0000	< 0.01	< 0.01	mg/l	03/11/87	2	IT	ME
WIPP-29	CULEBRA	pH		6.5700		NA	0.0000				12/14/85	1	IT	GC
WIPP-29	CULEBRA	pH		6.2800		NA	0.0000				03/11/87	2	IT	GC

APPENDIX D18
WIPP GROUNDWATER MONITORING PROGRAM PLAN

APPENDIX D18
WIPP GROUNDWATER MONITORING PROGRAM PLAN

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List of Abbreviations/Acronyms

ASER	Annual Site Environmental Report
AR/VR	Approval/Variation Request
Bell Canyon	Bell Canyon Formation
bgs	below ground surface
Castile	Castile Formation
cm	centimeter(s)
Culebra	Culebra Member of the Rustler Formation
CofC	Chain of Custody
°C	degree(s) Celsius
%C	percent completeness
DI	deionized
DOE	U.S. Department of Energy
DQO	data quality objectives
EM	Environmental Monitoring
EPA	U.S. Environmental Protection Agency
ES&H	Environment, Safety, and Health Department
FEIS	Final Environmental Impact Statement
ft	foot (feet)
ft^2	square foot (square feet)
g/cm^3	gram per cubic centimeter
GMP	Groundwater Monitoring Program
GWSP	Groundwater Surveillance Program
HWMU	hazardous waste management unit(s)
km	kilometer(s)
km^2	square kilometer(s)
$lb/in.^2$	pound(s) per square inch
LCS	laboratory control samples
LD	limit of detection
LWA	Land Withdrawal Act
m	meter(s)
M&DC	monitoring and data collection
m^2	square meter(s)
mg/L	milligram(s) per liter
mi	mile(s)
mi^2	square mile(s)
MPa	megapascal(s)
mV	millivolt(s)
NIST	National Institute for Standards and Technology
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department

List of Abbreviations/Acronyms *(Continued)*

PDSP	Pressure Density Survey Program
PRS	Project Records Services
Q&RA	Quality and Regulatory Assurance
QA	quality assurance
QA/QC	quality assurance/quality control
QAPD	Quality Assurance Program Description
QC	quality control
RCRA	Resource Conservation and Recovery Act
RFA	request for analysis
RIDS	Records Inventory and Disposition Schedule
RPD	relative percent difference
Rustler	Rustler Formation
%R	percent recovery
Salado	Salado Formation
SC	specific conductance
SNL	Sandia National Laboratories
SOP	Standard Operating Procedure
STLB	sample tracking logbook
TDS	total dissolved solids
TOC	total organic carbon
TOX	total organic halogens
TRU	transuranic
TSDF	treatment, storage, and disposal facilities
TSS	total suspended solids
VOC	volatile organic compound
WID	Waste Isolation Division
WIPP	Waste Isolation Pilot Plant
WLMP	WIPP Groundwater Level Monitoring Program
WQSP	Water Quality Sampling Program
µg/L	microgram(s) per liter
µm	micrometers

APPENDIX D18
WIPP GROUNDWATER MONITORING PROGRAM PLAN

D18-1 Introduction

The Waste Isolation Pilot Plant (WIPP) project is a geologic repository for the disposal of transuranic (TRU) waste. The disposal horizon is located 2,150 feet (ft) (655 meters [m]) below the land surface in the bedded salt of the Salado Formation (hereinafter referred to as the Salado). At the WIPP, water-bearing units occur both above and below the disposal horizon. Groundwater monitoring of the uppermost aquifer below the facility is not proposed at the WIPP because that water-bearing unit (the Bell Canyon Formation) is not considered a credible pathway for a release from the repository. The underlying water-bearing sandstones of the Bell Canyon Formation are separated from the repository horizon by over 2000 ft (610 m) of very low-permeability evaporite sediments (Appendices E1 and D6). No credible pathway has been established for contaminant transport to aquifers below the repository horizon as there is no hydrologic communication between the two. The U.S. Environmental Protection Agency (EPA) concluded in 1990 that vertical communication does not exist based on their review of numerous studies (EPA, 1990). The disposal horizon is isolated from underlying water-bearing units by extremely low-permeability layers of rock. Furthermore, drilling boreholes for groundwater monitoring through the Salado and the Castile Formation (hereinafter referred to as the Castile) into that aquifer would act to compromise the isolation properties of the repository medium and, therefore, is not allowed.

Disposal of TRU mixed waste in the WIPP facility is subject to regulation under Title 20 of the New Mexico Administrative Code, Chapter 4, Part 1 (20 NMAC 4.1), Subpart V. As required by 20 NMAC 4.1, Subpart V, §264.601, the U.S. Department of Energy (DOE) must demonstrate that the environmental performance standards for a miscellaneous unit, which are applied to the hazardous waste management units (HWMU) in the underground, will be met.

Groundwater monitoring at the WIPP in the past has focused on the Culebra member of the Rustler Formation (hereinafter referred to as the Culebra) because it represents the most significant hydrologic contaminant migration pathway to the accessible environment. The Culebra is the nearest and most significant water-bearing unit lying above the repository. Modeling of groundwater movement in the Culebra, based on the concept of a groundwater basin, is discussed in detail in Appendix D6, Section D6-2a(1).

D18-1a Site Location

The WIPP site is located in Eddy County in southeastern New Mexico (Figure D18-1) within the Pecos Valley section of the southern Great Plains physiographic province (Powers et al., 1978). The site is 26 miles (mi) (42 kilometers [km]) east of Carlsbad in an area known as Los Medaños (the dunes). Los Medaños is a relatively flat, sparsely inhabited plateau with little water and limited land uses.

The WIPP site (Figure D18-2) consists of 16 sections of federal land in Township 22 South, Range 31 East. The 16 sections of federal land were withdrawn from the application of public land laws by the WIPP Land Withdrawal Act (LWA), Public Law 102-579, that was signed on October 30, 1992. The WIPP LWA transferred the responsibility for the administration of the 16 sections from the Department of Interior, Bureau of Land Management, to the DOE. This law specified that mining and drilling for purposes other than support of the WIPP project are prohibited within this 16 section area with the exception of Section 31. Oil and gas drilling activities are restricted in Section 31 from the surface down to 6,000 feet.

D18-1b Purpose

This monitoring plan provides instructions for sample collection, water-level monitoring, data management, and reporting of annual data; identifies analytical parameters selected for assessing the quality of the groundwater; and establishes personnel responsibilities for the WIPP groundwater monitoring program. Because quality assurance is an integral component of the groundwater sampling, analysis, and reporting process, quality assurance/quality control (QA/QC) elements and associated data acceptance criteria are included in this plan.

Detailed instruction for performing field activities that will be conducted in conjunction with this sampling and analysis plan are provided in field operating procedures, referenced throughout this plan. Detailed procedures are provided for each aspect of the groundwater sampling process, including water-level measurement, sampling equipment installation and operation, field water-quality measurements, and sample collection. These procedures are intended to reinforce proper field sampling expertise. Samples will be collected by trained personnel under the supervision and direction of qualified engineers, scientists, or other technical personnel.

D18-1c Geologic and Hydrologic Characteristics

D18-1c(1) Geology

The WIPP site is situated within the Delaware Basin, which is part of the larger Permian Basin, located in the south-central region of North America. During the Permian period, which came to a close about 245 million years ago, ancient seas covered the basin. Their later evaporation resulted in the deposition of a thick sequence of evaporites. Appendix D6 presents a detailed discussion of the regional geologic history. Three major evaporite-bearing formations were deposited in the Delaware Basin (see Figures D18-3 and D18-4):

- The Castile, which formed through evaporation of the Permian Sea, consists of interbedded anhydrites and halite. Its upper boundary is at a depth of about 2,825 ft (861 m) below ground surface (bgs), and its thickness at the WIPP facility is 1,250 ft (381 m) (see Appendix D6).

- The repository is located in the Salado, which overlies the Castile and resulted from prolonged desiccation that produced predominantly halite, with some carbonates, anhydrites, and clay seams. Its upper boundary is at a depth of about 850 ft (259 m) bgs, and it is about 2,000 ft (610 m) thick in the repository area (see Appendix D6).

- The Rustler Formation (hereinafter referred to as the Rustler) was deposited in a lagoonal environment during a major freshening of the basin and consists of carbonates, anhydrites, and halites. Its beds consist of clay and anhydrite and contain small amounts of brine. The Rustler's upper boundary is about 500 ft (152 m) bgs, and it ranges up to 350 ft (107 m) in thickness in the area (see Appendix D6).

These evaporite-bearing formations lie between two other formations significant to the geology and hydrology of the WIPP site. The Dewey Lake overlying the Rustler is dominated by nonmarine sediments and consists almost entirely of mudstone, claystone, siltstone, and interbedded sandstone (Appendix D6). This formation forms a 500-ft- (152-m) thick barrier of fine-grained sediments that retard the downward percolation of water into the evaporite units below.[1] The Bell Canyon Formation (hereinafter referred to as the Bell Canyon)—the first water-bearing unit below the repository (Appendix D6)—is confined by the thick evaporite sequences of the Castile above. It consists of 1,200 ft (366 m) of interbedded sandstone, shale, and siltstone.

The Salado was selected to host the WIPP repository for several reasons. First, it is regionally extensive, underlying an area of more than 36,000 square mi (mi^2) (93,240 square kilometers [km^2]). Second, its permeability is extremely low, and fluids within it are effectively immobile. Third, salt behaves mechanically in a plastic manner under pressure (the pressure at the disposal horizon is more than 2,000 pounds per square inch [$lb/in.^2$] or 13.8 megapascals [MPa]) and moves to fill any opening (referred to as creep). Fourth, any fluid remaining in small fractures or openings is saturated with salt, is incapable of further salt dissolution, and has remained in place for millions of years. Finally, the Salado lies between the Rustler and the Castile (Figure D18-5), which contain highly impermeable layers that further confine and isolate waste within and isolate water outside the WIPP repository (Appendix D6).

D18-1c(2) Groundwater Hydrology

The Salado was selected as the host geologic unit because it is hydrologically isolated and because of the plastic nature of the salt. The general hydrogeology of the area surrounding the WIPP facility is described in this section starting with the first geologic unit below the Salado. Appendix D6 provides more detailed discussions of the local and regional hydrogeology. Relevant

[1]While there may be some uncertainty over the amount of vertical recharge occurring within the Rustler, the issue is only of significance to long-term performance calculations in which releases from the repository occur through the creation of a migration pathway resulting from drilling (inadvertently) in the WIPP area. The consequences of vertical recharge are bounded in the modeling by assuming that under future climate conditions (which are assumed to be cooler and wetter), the groundwater level (water table) moves to the land surface.

hydrological parameters for the various rock units above the Salado at the WIPP are summarized in Table D18-1.

The Castile

The Castile is a basin-filling evaporite sequence of sediments surrounded by the Capitan Reef. The Castile represents a major regional groundwater aquiclude that effectively prevents upward migration of water from the underlying Bell Canyon. Fluid present in the Castile is very restricted because evaporites do not readily maintain pore space, solution channels, or open fractures at depth. Drill-stem tests conducted in the Castile during construction of the WIPP facility found its permeability to be lower than detection limits; however, the hydraulic conductivity has been conservatively estimated to be less than 10^{-8} ft (3×10^{-9} m) per day. A description of the Castile brine reservoirs outside the WIPP area is provided in Appendix D6.

The Salado

The Salado is an evaporite sequence that filled the remainder of the Delaware Basin and lapped extensively over the Capitan Reef and the back-reef sediments beyond. The Salado consists of approximately 2,000 ft (610 m) of bedded halite, with interbeds or seams of anhydrite, clay, and polyhalite. It acts hydrologically as a regional confining bed and does not contain circulating fluids. The porosity of the Salado is very low and interconnected pores are virtually nonexistent at the depth of the disposal horizon. Fluids associated with the Salado occur mainly as very small fluid inclusions in the halite crystals and also occur between crystal boundaries (interstitial fluid) of the massive crystalline salt formation; fluids also occur in clay seams and anhydrite beds. Permeabilities measured from the surface in the area of the WIPP facility range from 0.01 to 25 microdarcies. The most reliable value, 0.3 microdarcy, was obtained from well DOE-2. The results of permeability testing at the disposal horizon are within the range of 0.001 to 0.01 microdarcy. As a comparison, the permeability of the Salado is roughly a thousand times more restrictive than that of the lower clay liner required of surface impoundments and landfills, assuming similar thicknesses. The results of recent testing suggest that permeabilities in undisturbed rock salt may approach zero (see Appendix D6).

The Rustler

The Rustler has been the subject of extensive characterization activities because it contains the most transmissive hydrologic units overlying the Salado (specifically the Culebra). Within the Rustler, five members have been identified. Of these the Culebra is the most transmissive and has been the focus of most of the Rustler hydrologic studies (see Appendix D6).

The Culebra is the first continuous water-bearing zone above the Salado and ranges up to 30 ft (9 m) in thickness. Water in the Culebra is usually present in fractures and is confined by overlying gypsum or anhydrite and underlying clay and anhydrite beds. Its hydraulic gradient in the area of the WIPP facility is approximately 20 ft per mi (3.8 m per km) and becomes much flatter south and southwest of the site (Figure D18-6). Transmissivities in the Nash Draw range up to 1,250 square

ft (ft^2) (116 square m [m^2]) per day; closer to the WIPP facility, they are as low as 0.007 to 74 ft^2 (0.00065 to 7.0 m^2) per day. The Culebra is hydrologically confined and testing indicates no significant leakage between it and other units (see Appendix D6).

The two primary types of field tests that are being used to characterize the flow and transport characteristics of the Culebra are hydraulic tests and tracer tests.

The hydraulic testing consists of pumping, injection, and slug testing of wells across the study area (e.g., Beauheim, 1987a). The most detailed hydraulic test data exist for the WIPP hydropads (e.g., H-19). The hydropads generally comprise a network of three or more wells located within a few tens of meters of each other. Long-term pumping tests have been conducted at hydropads H-3, H-11, and H-19 and at well WIPP-13 (Beauheim, 1987b, 1987c). These pumping tests provided transient pressure data at the hydropad and over a much larger area. Tests often included use of automated data-acquisition systems, providing high-resolution (in both space and time) data sets. In addition to long-term pumping tests, slug tests and short-term pumping tests have been conducted at individual wells to provide pressure data that can be used to interpret the transmissivity at that well (Beauheim, 1987a). (Additional short-term pumping tests have been conducted in the Water Quality Sampling Program (WQSP) wells [Stensrud, 1995]). Detailed cross-hole hydraulic testing has recently been conducted at the H-19 hydropad (Kloska et al., 1995).

The hydraulic tests are designed to yield pressure data for the interpretation of such characteristics as transmissivity, permeability, and storativity. The pressure data from long-term pumping tests and the interpreted transmissivity values for individual wells are used for the generation of transmissivity fields in flow modeling. Some of the hydraulic test data and interpretations are also important for the interpretation of transport characteristics. For instance, the permeability values interpreted from the hydraulic tests at a given hydropad are needed for interpretations of tracer test data at that hydropad.

There is strong evidence that the permeability of the Culebra varies spatially and varies sufficiently that it cannot be characterized with a uniform value or range over the region of interest to the WIPP. The transmissivity of the Culebra varies spatially over six orders of magnitude from east to west in the vicinity of the WIPP (see Figure D6-30). Over the site, Culebra transmissivity varies over three to four orders of magnitude. Figure D6-30 shows variation in transmissivity in the Culebra in the WIPP region. Transmissivities are from 1×10^{-3} square feet per day (1×10^{-9} square meters per second) at well P-18 east of the WIPP site to 1×10^{3} square feet per day (1×10^{-6} square meters per second) at well H-7 in Nash Draw.

Transmissivity variations in the Culebra are believed to be controlled by the relative abundance of open fractures rather than by primary (that is, depositional) features of the unit. Lateral variations in depositional environments were small within the mapped region, and primary features of the Culebra show little map-scale spatial variability, according to Holt and Powers, 1988. Direct measurements of the density of open fractures are not available from core samples because of incomplete recovery and fracturing during drilling, but observation of the relatively unfractured

exposures in the WIPP shafts suggests that the density of open fractures in the Culebra decreases to the east. Qualitative correlations have been noted between transmissivity and several geologic features possibly related to open-fracture density, including (1) the distribution of overburden above the Culebra, (2) the distribution of halite in other members of the Rustler, (3) the dissolution of halite in the upper portion of the Salado, and (4) the distribution of gypsum fillings in fractures in the Culebra.

Measured matrix porosities of the Culebra vary from 0.03 to 0.30. Fracture porosity values have not been measured directly, but interpreted values from tracer tests at the H-3, H-6, and H-11 hydropads vary from 5×10^{-4} to 3×10^{-3}. Data are insufficient to determine whether the average porosity of the matrix and fractures varies significantly on a regional scale.

Geochemical and radioisotope characteristics of the Culebra have been studied. There is considerable variation in groundwater geochemistry in the Culebra. The variation has been described in terms of different hydrogeochemical facies that can be mapped in the Culebra. A halite-rich hydrogeochemical facies exists in the region of the WIPP site and to the east, approximately corresponding to the regions in which halite exists in units above and below the Culebra, and in which a large portion of the Culebra fractures are gypsum filled. An anhydrite-rich hydrogeochemical facies exists west and south of the WIPP site, where there is relatively less halite in adjacent strata and where there are fewer gypsum-filled fractures. Radiogenic isotopic signatures suggest that the age of the groundwater in the Culebra is on the order of 10,000 years or more (see, for example, Lambert, 1987; Lambert and Carter, 1987; and Lambert and Harvey, 1987).

The radiogenic ages of the Culebra groundwater and the geochemical differences provide information potentially relevant to the groundwater flow directions and groundwater interaction with other units and are important constraints on conceptual models of groundwater flow. Previous conceptual models of the Culebra (see for example, Chapman, 1986; Chapman, 1988; LaVenue et al., 1990) have not been able to consistently relate the hydrogeochemical facies, radiogenic ages, and flow constraints (that is, transmissivity, boundary conditions, etc.) in the Culebra.

The groundwater basin modeling that has been conducted, although it did not model solute transport processes, provides flow fields that reasonably explain observed hydrogeochemical facies and radiogenic ages. The groundwater basin model combines and tests three fundamental processes: (1) it calculates vertical leakage, which may carry solutes into the Culebra; (2) it calculates lateral fluxes in the Culebra (directions as well as rates); and (3) it calculates a range of possible effects of climate change. The presence of the halite facies is explained by vertical leakage of solutes into the Culebra from the overlying halite-containing Tamarisk by advective or diffusive processes. Because lateral flow rates here are low, even slow rates of solute transport into the Culebra can result in high solute concentration. Vertical leakage occurs slowly over the entire model region, and thus the age of groundwater in the Culebra is old, consistent with radiogenic information. Lateral fluxes within the anhydrite zone are larger because of higher

transmissivity, and where the halite and anhydrite facies regions converge, the halite facies signature is lost by dilution with relatively large quantities of anhydrite facies groundwater.

Groundwater levels in the Culebra in the WIPP region have been measured for several decades. Water-level rises have been observed in the WIPP region and are attributed to three causes as discussed below. The extent of water-level rise observed at a particular well depends on several factors, but the proximity of the observation point to the cause of the water-level rise appears to be a primary factor.

In the vicinity of the WIPP site, water-level rises are unquestionably caused by recovery from drainage into the shafts. Drainage into shafts has been reduced by a number of grouting programs over the years, most recently in 1993 around the Air Intake Shaft. Northwest of the site, in and near Nash Draw, water levels appear to fluctuate in response to effluent discharge from potash mines. Correlation of water-level fluctuation with potash mine discharge cannot be proven because sufficient data on the timing and volumes of discharge are not available. Head distribution in the Culebra (see Figure D6-31) is consistent with groundwater basin modeling results indicating that the generalized directional flow of groundwater is north to south. However, caution should be used when making assumptions based on groundwater-level data alone. Studies in the Culebra have shown that fluid density variations in the Culebra can affect flow direction. One should also be aware that the fractured nature of the Culebra, coupled with variable fluid densities, can also cause localized flow patterns to differ from general flow patterns. Water-level rises in the vicinity of the H-9 hydropad, about 6.5 miles south of the site, are thought to be caused by neither WIPP activities nor potash mining discharge. They remain unexplained. The DOE continues to monitor groundwater levels throughout the region, but only water level changes at or near the site have the potential to affect performance.

Inferences about vertical flow directions in the Culebra have been made from well data collected by the DOE. Beauheim (1987a) reported flow directions towards the Culebra from both the unnamed lower member and the Magenta over the WIPP site, indicating that the Culebra acts as a drain for the units around it. This indication is consistent with results of groundwater basin modeling. Recent simulations to enhance the conceptual understanding of the geohydrology of the Rustler can be found in Corbet and Knupp, 1996.

Use of water from the Culebra is quite limited because of its varying yields and high salinity. The Culebra is not used for water supply in the immediate WIPP site vicinity. Its nearest use is approximately 7 mi (11 km) southwest of the WIPP facility, where salinity is low enough to allow its use for livestock watering (shown, for example, as Well H-8 in Figure D18-7). Appendix D6 provides a detailed discussion of the hydrologic characteristics of the other Rustler members and the Dewey Lake, which lie above the Rustler. The Culebra will be the focus of future groundwater monitoring at WIPP because it is the most transmissive continuous water-bearing zone at WIPP and is the most likely pathway for contaminant migration.

D18-2 General Regulatory Requirements

Because geologic repositories such as the WIPP facility are defined under the Resource Conservation and Recovery Act (RCRA) as land disposal facilities and as miscellaneous units, the groundwater monitoring requirements of 20 NMAC 4.1, Subpart V, §§264.600 through 264.603, must be addressed. 20 NMAC 4.1, Subpart V, §§264.90 through 264.101, applies to miscellaneous unit treatment, storage, and disposal facilities (TSDF) only if groundwater monitoring is needed to satisfy 20 NMAC 4.1, Subpart V, §§264.601 through 264.603, environmental performance standards.

The New Mexico Environment Department (NMED) has concluded that groundwater monitoring in accordance with 20 NMAC 4.1, Subpart V, §264.90 at the WIPP is necessary to meet the requirements of 20 NMAC 4.1, Subpart V, §§264.601 through 264.603.

D18-3 WIPP Groundwater Monitoring Program—Overview

D18-3a Scope

The DOE has established this "Groundwater Monitoring Program (GMP) Plan" to define and protect groundwater resources at the WIPP. In part, the purpose of the GMP is to determine background or existing conditions of groundwater quality and quantity around the WIPP facility area, and to maintain a groundwater quality database. The policy driver for this program is 20 NMAC 4.1, Subpart V, §§264.600 to 264.603, which requires monitoring for miscellaneous units. The format adopted for this plan is 20 NMAC 4.1, Subpart V, §§264.90 through 264.101, which provides instruction on the monitoring of groundwater that is or could be affected by waste management activities at WIPP. DOE Order 5400.1 (IV-10[c]) also instructs that "where appropriate, groundwater monitoring programs shall be designed and implemented in accordance with 40 CFR Part 264 Subpart F or 40 CFR 265 Subpart F."

One of the objectives of the WIPP groundwater monitoring program is to establish, by means of groundwater sampling and analysis, an accurate and representative groundwater database that is scientifically defensible and supports regulatory compliance. This plan governs all groundwater sampling events and ensures that all such data are gathered in accordance with 20 NMAC 4.1, Subpart V, §§264.90 through 264.101 and other applicable requirements. The groundwater quality data generated by monitoring activities will provide a comprehensive background database against which future analytical results can be compared during the detection monitoring program.

Groundwater monitoring at WIPP has been historically conducted by several programs including the WIPP Site Characterization Program, the WIPP WQSP, and recently the WIPP Groundwater Surveillance Program (GWSP). Groundwater quality and water-level data have been collected by these programs for over 12 years at the WIPP. The WQSP and WIPP GWSP are briefly described below to provide historical information. Data from the WQSP wells (which are widely distributed across the area) will be used to continually define changes in the area's potentiometric surface and groundwater flow directions. The new monitoring wells of the WIPP GWSP have been constructed to the specifications provided in the RCRA Ground-Water Monitoring Technical Enforcement Guidance Document (EPA, 1986a) and are now being used to establish background water quality

and water levels in accordance with 20 NMAC 4.1, Subpart V, §264.94(b)(4). These WIPP GWSP wells will be used as the monitoring installations for the WIPP Groundwater Detection Monitoring Program as required by 20 NMAC 4.1, Subpart V, §§264.90 through 264.101. Justification for the locations of these wells (3 upgradient and 4 downgradient) is presented subsequently.

D18-3b Historic WIPP WQSP

The WQSP was first initiated in January 1985. The objective of the program was to collect representative and reproducible groundwater samples from water-bearing zones in the area of the WIPP site. The purpose of the program was to provide defensible data for meeting the requirements of site characterization and provide initial background water-quality data to be used as a foundation for meeting future regulatory compliance and permitting criteria.

D18-3b(1) Background

From 1985 to 1990, the WQSP characterized the physical and chemical characteristics of representative groundwater samples occurring within and immediately surrounding the WIPP site. Various wells were serially sampled three times to determine the representative character of the groundwater present at each location.

Groundwater samples were collected for both radiological and non-radiological analysis. Data collected were used to develop a baseline of water-quality data as part of the Radiological Baseline Program and a nonradiological database to support the background water quality characterization report (Appendix D17). Data were also supplied to and used by Sandia National Laboratories (SNL) for site characterization.

During the initial phase of the WQSP, data were collected from existing wells that were drilled as part of the geologic site characterization and resource evaluation programs and made available to the WQSP. Figure D18-8 shows the monitoring locations used by the WQSP in the past.

D18-3b(2) Well Construction

The bulk of these wells were drilled between 1976 and 1980 using standard oil field drilling technology. Standard oil field steel casing either K-55 or J-55 were used in well construction. Surveillance wells were completed using two primary methods.

The first installation method required drilling the well to some depth below the zone of interest and then casing the well to the bottom of the hole. The zone of interest was then perforated using either shot or knife perforation methods.

The second installation method required drilling and casing the well to some point above the zone of interest then reentering the well bore and core drilling it through the zone of interest and leaving it open to the formation.

These types of well completions presented numerous problems in collecting useful data. The open hole completions resulted in halite rich sediments of lower formations being exposed to the sampling zone in some cases. In most cases the sampled zone collapsed from the stress of numerous pumping events filling in the interval with debris to the bottom of the cased portion of the well.

The casings soon began to corrode after exposure to the brackish-to-brine water found in the WIPP area. Based on sampling results, it appeared that products of well casing corrosion migrated from the well bore into the formation resulting in a halo or plume of groundwater altering the chemistry immediately surrounding the surveillance wells. Obtaining usable data required the use of packers to isolate the sampled formation from contaminated water standing in the casing above the formation and took unusually long periods of time to purge the well prior to obtaining representative samples.

D18-3c Current WIPP GWSP

After careful evaluation of the data gathered for background reports it became apparent that for compliance and permitting purposes, a system of new wells designed specifically for the purpose of collecting water-quality data needed to be installed.

Based on water-level surface elevation data (Richey, 1987; Stensrud et al., 1988) and pressure density survey data (Crawley, 1988) it was recognized that spatial, variable densities of groundwater presented misleading flow gradients when potentiometric maps were produced based on surface elevations alone.

Davies (1989) identified multiple flow paths extending across the WIPP site based on a groundwater flow model using groundwater surface elevation data adjusted arithmetically to freshwater equivalent heads. This method eliminated the bias created by spatial variability of groundwater density. The new surveillance program wells were sited assuming the WIPP shafts to be the release point and based on the hydrologic characteristics presented by these programs.

Surveillance program wells were sited following the general guidance in the EPA Groundwater Monitoring Technical Enforcement Guidance Document and the groundwater flow characteristics at the site. Wells WQSP-1, WQSP-2, and WQSP-3 were located directly upgradient of the WIPP shaft area. The locations of the three upgradient wells were selected to be representative of the flow vectors of groundwater moving downgradient onto the WIPP site. Figure 34 of Davies, 1989, shows the simulation of direction and magnitude of groundwater flow. The upgradient wells were located based on the flow vectors resulting from this model simulation.

WQSP-4, WQSP-5, and WQSP-6 were located downgradient of the WIPP shaft area in concert with the flow vectors shown by this model simulation. All three downgradient wells (WQSP-4, 5, and 6) were sited based on the greatest velocity magnitude of groundwater flow leaving the shaft area as shown on Figure 34 of Davies, 1989, and upgradient of the WIPP groundwater monitoring compliance point. WQSP-4 was also specifically located to monitor the zone of higher

transmissivity around wells DOE-1 and H-11, which may represent faster flow path away from the WIPP shaft area to the compliance point (DOE, 1996).

After careful consideration given to the construction materials available, the decision was made that epoxy resin fiberglass casing afforded the most resistance to the corrosive waters found in the vicinity of WIPP.

Based on the flow paths identified by Davies (1989) and research conducted for construction materials, a proposal was written that addressed the following:

1. Monitor well siting
2. Construction practices and
3. Well construction materials.

The proposal was presented to members of Westinghouse Waste Isolation Division (WID), DOE, Environmental Evaluation Group, EPA Region 6, NMED and SNL in May of 1994 and a consensual agreement was reached among the attendees regarding each of the three issues presented, including monitor well location, monitoring network configuration, and hydrologic unit to be monitored.

Construction of the WIPP GWSP wells began in September of 1995 and was completed in November 1995. Sampling of the WIPP GWSP wells to establish the water quality background began in the spring of 1996.

The original WQSP observation wells have been and will continue to be used as piezometer wells to support collection of groundwater levels and groundwater flow modeling data to support regulatory compliance and permitting activities. Groundwater level monitoring data also are used to provide:

- Data required by the WIPP Environmental Monitoring Plan
- A means to fulfill commitments made in the Final Environmental Impact Statement (FEIS)
- A means to comply with future groundwater inventory and monitoring regulations
- Input for making land use decisions (i.e., designing long-term active and passive institutional controls for the WIPP)
- Assistance in understanding whether or not the horizontal and vertical gradients of the regional groundwater flow systems are changing over time.

Current flow patterns in the Culebra suggest the configuration of the WIPP GWSP system wells will provide sound, defensible data throughout the detection monitoring period. The new wells constructed for the WIPP GWSP (Figure D18-9) will be used as the monitoring network during operational detection monitoring as required by 20 NMAC 4.1, Subpart V, §§264.90 through 264.101.

D18-3d WIPP GMP

The WIPP GMP, for which this plan has been written, is a continuation of the current WIPP GWSP. The monitoring installations used during recent groundwater surveillance (WQSP 1–6A) will serve as the monitoring location during background water-quality characterization and the detection monitoring program (Figure D18-9).

The Culebra has been selected for the focus of the GMP due to it being regionally extensive and exhibiting the most significant transmissivity of the water-bearing units at WIPP. The Culebra has been extensively studied during all past hydrologic characterization programs and found to be the most likely hydrologic pathway to the accessible environment or compliance point for any potential contamination.

At WIPP, the compliance point has been defined as the edge of the dual units 16 mi^2 land withdrawal boundary (Figure D18-9). This boundary represents the location where the nearest potential human receptor can reasonably be expected to be chronically exposed to potential contaminants.

The GMP wells were located to intercept all likely downgradient flow vectors away from the WIPP shafts area based on current density corrected potentiometric surfaces (Figure D18-9). The monitoring wells were also located to specifically allow early detection of contaminant migration by being installed upgradient of the compliance point. Based on natural contours of the potentiometric surface (Figure D18-9) the selected well placement locations are directly downgradient of the general flow direction from the shaft area. Transport modeling of contaminant migration throughout the Culebra to the compliance point has shown that travel times are on the order of thousands of years if, under worst case conditions, hazardous constituents could migrate from the sealed repository (see Section D18-9b[1][c] for repository modeling details). This time frame is well in excess of the regulatory compliance requirements of postclosure care. If contaminants were to migrate from the disposal facility, they would be detected by the GMP wells long before they could reach the facility compliance point.

Potentiometric surfaces and groundwater flow directions defined prior to large-scale pumping in the WIPP area and the excavation of WIPP shafts suggests that flow was generally to the south-southeast from the waste disposal and shaft areas (Mercer, 1983; Davies, 1989). Recent (December 1996) potentiometric surface maps of the Culebra adjusted for density differences show very similar characteristics (Figure D18-9). The GMP wells have been located directly

downgradient of the waste emplacement areas according to present-day adjusted potentiometric surfaces.

Potentiometric surfaces that have not been corrected for density differences and that contain transient relics of previous pumping-drawdown events do not reflect accurate natural groundwater flow directions and should not be used to assess the adequacy of groundwater monitoring locations. Previous potentiometric surface maps showing a potentiometric low and hydrologic gradient toward the area between WQSP-3 and WQSP-4 had not been adjusted to freshwater head equivalents, and had also been influenced by the long-term pumping at well H-19, and do not represent natural Culebra flow directions or gradients.

GMP Well Construction Specification

WQSP-1—Well WQSP-1 was drilled between September 13 and 16, 1994, to a total depth of 737 ft (225 m) bgs. The borehole was drilled through the Culebra and extends 15 ft (5 m) into the unnamed lower member of the Rustler. The well was drilled to a depth of 693 ft (211 m) bgs using compressed air as the drilling fluid. The interval from 693 to 737 ft (225 to 211 m) bgs (the total depth) was drilled using air mist with a foaming agent as the drilling fluid. WQSP-1 was drilled to 695.6 ft (212 m) bgs using a 9⅞-in. drill bit and was cored from 695.6 to 737 ft (212 to 225 m) bgs using a 5¼-in. core bit to cut 4-in.- (0.1-m) diameter core. After coring, WQSP-1 was reamed to 9⅞ in. (0.3 m) in diameter to total depth. WQSP-1 was cased from the surface to 737 ft (224.6 m) bgs with 5-in. (0.1-m) (0.28-in. [0.7-centimeter (cm)] wall) blank fiberglass casing with in-line 5-in.- (0.1-m) diameter fiberglass 0.02-in. (0.1-cm) slotted screen across the Culebra interval from 702 to 727 ft (214 to 222 m) bgs. The annulus between the borehole wall and the casing/screen is packed with sand from 640 to 651 ft (195 to 198 m) bgs and with 8/16 Brady gravel from 651 to 737 ft (198 to 225 m) bgs. Based on core log results, the Culebra is located from 699 to 722 ft (213 to 220 m) bgs (see Figure D18-10).

WQSP-2—Well WQSP-2 was drilled between September 6 and 12, 1994, to a total depth of 846 ft (257.9 m) bgs. The borehole was drilled through the Culebra and extends 12.3 ft (3.7 m) into the unnamed lower member of the Rustler. The well was drilled to a depth of 800 ft (244 m) bgs with a 9⅞-in. drill bit using compressed air as the drilling fluid. The interval from 800 to 846 ft (244 to 258 m) bgs (the total depth) was drilled with a 5¼-in. core bit to cut 4-in.- (0.1-m) diameter core using air mist with a foaming agent as the drilling fluid. After coring, WQSP-2 was reamed to 9⅞ in. (0.3 m) in diameter to total depth. WQSP-2 was cased from the surface to 846 ft (258 m) bgs with 5-in. (0.1-m) (0.28-in. [0.7-cm] wall) blank fiberglass casing with in-line 5-in.- (0.1-m) diameter fiberglass 0.02-in. (0.1-cm) slotted screen across the Culebra interval from 811 to 836 ft (247 to 255 m) bgs. The annulus between the borehole wall and the casing/screen is packed with sand from 790 to 793 ft (241 to 242 m) bgs and with 8/16 Brady gravel from 793 to 846 ft (242 to 258 m) bgs. Based on core log results, the Culebra is located from 810.1 to 833.7 ft (247 to 254 m) bgs (see Figure D18-11).

WQSP-3—Well WQSP-3 was drilled between October 21 and 26, 1994, to a total depth of 880 ft (268 m) bgs. The borehole was drilled through the Culebra and extends 10 ft (3.1 m) into the

unnamed lower member of the Rustler. The well was drilled to a depth of 880 ft (268 m) bgs using compressed air as the drilling fluid. The borehole was cleaned using air mist with a foaming agent. WQSP-3 was drilled to 833 ft (254 m) bgs using a 9⅞-in. drill bit and was cored from 833 to 879 ft (254 to 268 m) bgs using a 5¼-in. core bit to cut 4-in.- (0.1-m) diameter core. After coring, WQSP-3 was reamed to 9⅞ in. (0.3 m) in diameter to total depth of 880 ft (268 m) bgs. WQSP-3 was cased from the surface to 880 ft (268 m) bgs with 5-in. (0.1-m) (0.28-in. [0.7-cm] wall) blank fiberglass casing with in-line 5-in.- (0.1-m) diameter fiberglass 0.02-in. (0.1-cm) slotted screen across the Culebra interval from 844 to 869 ft (257 to 265 m) bgs. The annulus between the borehole wall and the casing/screen is packed with sand from 827 to 830 ft (252 to 253 m) bgs and with 8/16 Brady gravel from 830 to 880 ft (253 to 268 m) bgs. Based on core log results, the Culebra is located from 844 to 870 ft (257 to 265 m) bgs (see Figure D18-12).

WQSP-4—Well WQSP-4 was drilled between October 5 and 10, 1994, to a total depth of 800 ft (244 m) bgs. The borehole was drilled through the Culebra and extends 9.2 ft (2.8 m) into the unnamed lower member of the Rustler. The well was drilled to a depth of 740 ft (226 m) bgs with a 9⅞-in. drill bit using compressed air as the drilling fluid. The interval from 740.5 to 798 ft (225.7 to 243 m) bgs was cored with a 5¼-in. (0.13-m) core bit to cut 4-in.- (0.1-m) diameter core using air mist with a foaming agent as the drilling fluid. After coring, WQSP-4 was reamed to 9⅞ in. (0.3 m) in diameter to total depth of 800 ft (244 m) bgs. WQSP-4 was cased from the surface to 800 ft (244 m) bgs with 5-in. (0.1-m) (0.28-in. [0.7-cm] wall) blank fiberglass casing with in-line 5-in.- (0.1-m) diameter fiberglass 0.02-in. (0.1-cm) slotted screen across the Culebra interval from 764 to 789 ft (233 to 241 m) bgs. The annulus between the borehole wall and the casing/screen is packed with sand from 752 to 755 ft (229 to 230 m) bgs and with 8/16 Brady gravel from 755 to 800 ft (230 to 244 m) bgs. Based on core log results, the Culebra is located from 766 to 790.8 ft (233 to 241 m) bgs (see Figure D18-13).

WQSP-5—Well WQSP-5 was drilled between October 12 and 19, 1994, to a total depth of 681 ft (208 m) bgs. The borehole was drilled through the Culebra and extends into the unnamed lower member of the Rustler. The well was drilled to a depth of 676 ft (206 m) bgs using compressed air as the drilling fluid. The borehole was cleaned using air mist with a foaming agent. WQSP-5 was drilled to 648 ft (198 m) bgs using a 9⅞-in. drill bit and was cored from 648 to 676 ft (198 to 206 m) bgs using a 5¼-in. core bit to cut 4-in.- (0.1-m) diameter core. After coring, WQSP-5 was reamed to 9⅞ in. (0.3 m) in diameter to total depth of 681 ft (208 m) bgs. WQSP-5 was cased from the surface to 681 ft (208 m) bgs with 5-in. (0.1-m) (0.28-in. [0.7-cm] wall) blank fiberglass casing with in-line 5-in.- (0.1-m) diameter fiberglass 0.02-in. (0.1-cm) slotted screen across the Culebra interval from 646 to 671 ft (197 to 205 m) bgs. The annulus between the borehole wall and the casing/screen is packed with sand from 623 to 626 ft (190 to 191 m) bgs and with 8/16 Brady gravel from 626 to 681 ft (191 to 208 m) bgs. Based on core log results, the Culebra is located from 648 to 674.4 ft (198 to 205.6 m) bgs (see Figure D18-14).

WQSP-6—Well WQSP-6 was drilled between September 26 and October 3, 1994, to a total depth of 616.6 ft (187.9 m) bgs. The borehole was drilled through the Culebra and extends 9.7 ft (3 m) into the unnamed lower member of the Rustler. The well was drilled to a depth of 367 ft (112 m) bgs using compressed air as the drilling fluid. The interval from 367 to 616 ft (112 to

188 m) bgs (the total depth) was drilled using brine as the drilling fluid. WQSP-6 was drilled to 568 ft (173 m) 4-in.- (0.1-m) ft bgs using a 9⅞-in. drill bit and was cored from 568 to 616 ft (173 to 188 m) bgs using a 5¼-in. core bit to cut 4-in.- (0.1-m) diameter core. After coring, WQSP-6 was reamed to 9⅞ in. (0.3 m) in diameter to total depth of 616.6 ft (188 m) bgs. WQSP-6 was cased from the surface to 616.6 ft (188 m) bgs with 5-in. (0.1-m) (0.28-in. [0.7-cm] wall) blank fiberglass casing with in-line 5-in.- (0.1-m) diameter fiberglass 0.02-in. (0.1-cm) slotted screen across the Culebra interval from 581 to 606 ft (177 to 185 m) bgs. The annulus between the borehole wall and the casing/screen is packed with sand from 567 to 570 ft (173 to 173.7 m) bgs and with 8/16 Brady gravel from 570 to 616.6 ft (174 to 188 m) bgs. Based on core log results, the Culebra is located from 582 to 606.9 ft (177 to 185 m) bgs (see Figure D18-15).

WQSP-6A—Well WQSP-6A was drilled between October 31 and November 1, 1994, to a total depth of 225 ft (69 m) bgs. It is located immediately west of WQSP-6. The borehole was drilled through a water-producing zone in the Dewey Lake Redbeds that had been previously encountered while drilling well WQSP-6. The well was drilled to a depth of 225 ft (69 m) bgs using compressed air as the drilling fluid. The borehole was cleaned using air mist with a foaming agent. WQSP-6A was drilled to 160 ft (49 m) bgs using a 9⅞-in. drill bit and was cored from 160 to 220 ft (49 to 67 m) bgs using a 5¼-in. core bit to cut 4-in.- (0.1-m) diameter core. After coring, WQSP-6A was reamed to 9⅞ in. (0.3 m) in diameter to total depth of 225 ft (69 m) bgs. WQSP-6A was cased from the surface to 225 ft (69 m) bgs with 5-in. (0.1-m) (0.28-in. [0.7-cm] wall) blank fiberglass casing with in-line 5-in.- (0.1-m) diameter fiberglass 0.02-in. (0.1-cm) slotted screen from 190 to 215 ft (58 to 66 m) bgs. The annulus between the borehole wall and the casing/screen is packed with sand from 172 to 175 ft (52 to 53 m) bgs and with 8/16 Brady gravel from 175 to 225 ft (53 to 69 m) bgs (see Figure D18-16).

D18-4 Project Organization and Responsibilities

D18-4a Environmental Monitoring Manager

The Environmental Monitoring (EM) Manager is responsible for the overall design and implementation of the GMP. The EM Manager develops and approves specific procedures for the conduct of all GMP activities, and reviews and approves programmatic reports. The EM Manager provides oversight of appropriate levels of cooperation and consultation between the EM Section and the State of New Mexico regarding environmental monitoring and revises the QA section of the GMP.

The EM Manager and staff are responsible for achieving and maintaining quality in the GMP. All GMP data is reviewed and approved by the EM Manager, or designee, prior to release.

The EM Manager establishes minimum qualification criteria and training requirements for all GMP personnel. The EM Manager assures that position descriptions for assigned GMP personnel are adequately prepared. The EM Manager and/or Team Leader assures that training is performed on an individual basis to maintain an acceptable level of proficiency by all new or temporary GMP

staff and by all permanent GWSP staff. The EM Manager assures that documents detailing all staff training are current and properly filed. Copies of training records are on file in the WID Technical Training Section.

The EM Manager appoints a GMP Team Leader and Field Team, assigning the following responsibilities described below.

D18-4b Team Leader

The Team Leader will coordinate and oversee field sampling activities, ensuring that sampling and associated procedures are followed and that QA/QC and safety guidelines are met. The Team Leader directs the GMP per written approved procedures, and initiates the review of programmatic plans and procedures. The Team Leader reviews and evaluates sample data, prepares and reviews programmatic reports, and assures that appropriate samples are collected and analyzed. The Team Leader assures that adequate technical support is provided to the Quality and Regulatory Assurance (Q&RA) Department, when required during audits of vendor facilities. Any nonconformances or project changes will be immediately communicated to the Team Leader.

D18-4c Field Team

The field team members consist of one or more scientists, engineers, or technicians, who are responsible for sample collection, handling, shipping, and preparation and maintenance of appropriate data sheets, and completion of sample tracking documentation under the direction of the Team Leader, in accordance with this GMP and associated field procedures. The field team will inspect, maintain, and ensure proper calibration of equipment prior to use at each site, while ensuring that site health and safety requirements are met at all times. The field team will communicate any nonconformances, malfunctions, or project changes to the Team Leader immediately.

D18-4d Safety Manager

The Safety Manager is responsible for ensuring that the WIPP Safety Manual (WP 12-1) provides the necessary requirements for the health and safety of personnel associated with sampling and analysis activities. The cognizant manager is responsible for ensuring that field team members are operating under the WIPP Safety Manual and the personnel have appropriate training. The Safety Manager ensures that periodic health and safety assessments are conducted and that the cognizant manager initiates corrective actions where deficiencies are identified.

D18-4e Analytical Laboratory

The analytical laboratory used for sample analyses is responsible for supplying most sample collection containers and sample shipping containers to the field team. Sample collection

containers supplied by the laboratory will be certified as clean by either the laboratory or their supplier. WID supplies containers for radiological samples. The analytical laboratory is responsible for performing analyses in accordance with this GMP Plan and regulatory requirements. The laboratory will maintain documentation of sample handling and custody, analytical results, and internal quality control (QC) data. Additionally, the laboratory will analyze QC samples in accordance with this plan and its own internal QC program for indicators of analytical accuracy and precision. Data generated outside laboratory acceptance limits will trigger an investigation and, if appropriate, corrective action, as directed by the EM Manager. The laboratory will report the results of the environmental sample and QC sample analyses and any necessary corrective actions that were performed. In the event that more than one analytical laboratory is used (e.g., for different analyses), each one has the responsibilities described above.

D18-4f Q&RA Manager

The Q&RA Manager provides independent oversight of the GMP, via the assigned cognizant Q&RA engineer, to verify that quality objectives are defined and achieved. The Q&RA Manager ensures objective, independent assessments of the GMP quality performance and the quality performance of the contract analytical laboratory. The Q&RA Manager has been delegated authority by the WID General Manager to access work areas, identify quality problems, initiate or recommend corrective actions, verify implementation of corrective actions, and ensure that work is controlled or stopped until adequate disposition of an unsatisfactory condition has been implemented.

D18-5 Quality Assurance Requirements

Quality Assurance (QA) requirements for WIPP are defined in the WID Quality Assurance Program Description (QAPD) (Westinghouse, 1996), WP 13-1. Requirements specific to the GMP are presented in this section.

D18-5a QA Program—Overview

This program was developed to assure that the integrity and quality are maintained for all samples collected and that equipment and records are maintained in accordance with EPA guidance. The QA Program identifies data quality objectives (DQO), processes for assuring sample quality, and processes for generating and maintaining quality records.

D18-5b DQOs

DQOs are qualitative and quantitative statements that specify the quality of data required to support project decisions. DQOs are established to ensure that the data collected are of a sufficient and known quality for their intended uses. The overall DQO for this project is to collect accurate and defensible data of known quality that are sufficient to assess the concentrations of constituents in the groundwater underlying the WIPP area. The data generated thus far by the GMP has been used to establish a baseline groundwater quality database. For the purpose of this monitoring program, DQOs for measurement data will be specified in terms of accuracy, precision,

completeness, representativeness, and comparability. Measurements of data quality in terms of accuracy and precision will be derived from the analysis of QC samples generated in the field and laboratory. Appropriate QC procedures will be used so that known and acceptable levels of accuracy and precision are maintained for each data set. This section defines the acceptance criteria for each QC analysis performed. The following subsections define each DQO.

D18-5b(1) Accuracy

Accuracy is the closeness of agreement between a measurement and an accepted reference value. When applied to a set of observed values, accuracy is a combination of a random component and a common systematic error (bias) component. Measurements for accuracy will include analysis of calibration standards, laboratory control samples, matrix spike samples, and surrogate spike samples. The bias component of accuracy is expressed as percent recovery (%R). Percent recovery is expressed as follows:

$$\%R = \frac{(measured\ sample\ concentration)}{true\ concentration} \times 100$$

D18-5b(1)a Accuracy Objectives for Field Measurements

Field measurements will include pH, specific conductance (SC), temperature, Eh, and static water level. Field measurement accuracy will be determined using calibration check standards. Thermometers used for field measurements are calibrated to the National Institute for Standards and Technology (NIST) traceable standard on an annual basis to assure accuracy. Accuracy of water-level measurements will be made before each measurement period by verifying calibration of the device within the specified schedule. The QAPD, Section 2.4.4, Monitoring, Measuring, Test and Data Collection Equipment, outlines the basic requirements. WIPP Procedure WP 10-AD3029[2], "Calibration and Control of Monitoring and Data Collection Equipment," contains instructions that outline protocols for maintaining current calibration of water-level measurement instrumentation.

[2]WP 10-AD3029 "Calibration and Control of Monitoring and Data Collection Equipment" provides the step-by-step protocols for the establishment and maintenance of a master database of monitoring and data collection (M&DC) equipment, the recall process for equipment needing calibration, the performance of calibrations, the management of calibration results to determine the adequacy of recall frequencies, functional testing of M&DC equipment, and reporting including out-of-tolerance reporting and expired calibration reporting. In addition, the procedure provides step-by-step process for the storage of calibrated M&DC equipment and the use of rental equipment.

D18-5b(1)b Accuracy Objectives for Laboratory Measurements

Analytical system accuracy will be quantified using the following laboratory accuracy QC checks: calibration standards, laboratory control samples (LCS), laboratory blanks, matrix and surrogate spike samples. Single LCSs and matrix spike and surrogate spike sample analyses will be expressed as %R. Laboratory analytical accuracy is parameter dependent and is prescribed in the laboratory Standard Operating Procedures (SOP).

D18-5b(2) Precision

Precision is the agreement among a set of replicate measurements without assumption or knowledge of the true value. Precision data will be derived from duplicate field and laboratory measurements. Precision will be expressed as relative percent difference (RPD), which is calculated as follows:

$$RPD = \frac{|(\textit{measured value sample } 1 - \textit{measured value sample } 2)|}{\textit{average of measured samples } 1 + 2} \times 100$$

D18-5b(2)a Precision Objectives for Field Measurements

Precision of field measurements of water-quality parameters will meet or exceed required reporting levels. SC, pH, temperature, and optionally Eh are measured during well purging and after sampling. SC measurements will be precise to ±10% pH to 0.10 standard unit, and temperature to 0.10 degrees Celsius (°C), Eh to 10 millivolts (mV). Turbidity is not measured because the water drawn for the samples are typically very clear so there is no need to measure turbidity.

D18-5b(2)b Precision Objectives for Laboratory Measurements

Precision of laboratory analyses will be assessed by performing the same analyses twice on LCSs with each analytical batch assessed at a minimum frequency of 1 in 20 groundwater samples for nonradiological parameters and 1 in 10 for radiological parameters. The laboratory will determine analytical precision control limits by performing replicate analyses of control samples. Precision measurements will be expressed as RPD. Laboratory analytical precision is also parameter dependent and is prescribed in laboratory SOPs.

D18-5b(3) Contamination

In addition to measurements of precision and bias, QC checks for contamination will be performed. QC samples including trip blanks, field blanks, and method blanks will be analyzed to assess and document contamination attributable to sample collection equipment, sample handling and shipping, and laboratory reagents and glassware. Trip blanks are used to assess volatile organic compound (VOC) sample contamination during shipment and handling and will be collected and

analyzed at a frequency of 1 sample per sample shipment. Field blanks are used to assess field sample collection methods and will be collected and analyzed at a frequency of one sample per 20 samples (five percent of the samples collected). Method blanks are used to assess contamination resulting from the analytical process and will be analyzed at a frequency of one sample per 20 samples, or five percent of the samples collected. Evaluation of sample blanks will be performed following U.S. EPA "National Functional Guidelines for Organic Data Review" (EPA, 1991) and "Functional Guidelines for Evaluating Inorganics Analyses" (EPA, 1988). Only method blanks will be analyzed via wet chemistry methods. The criteria for evaluating method blanks will be established as follows: If method blank results exceed reporting limits, then that value will become the detection limit for the sample batch. Detection of analytes of interest in blank samples may be used to disqualify some samples, requiring resampling and additional analyses on a case-by-case basis.

D18-5b(4) Completeness

Completeness is defined as a measure of the amount of usable valid data resulting from a data collection activity, given the sample design and analysis. Completeness may be affected by unexpected conditions that may occur during the data collection process.

Occurrences that reduce the amount of data collected include sample container breakage in the laboratory and data generated while the laboratory was operating outside prescribed QC limits. All attempts will be made to minimize data loss and to recover lost data whenever possible. The completeness objective for noncritical measurements (i.e., field measurements) is 90 percent and 100 percent for critical measurements (i.e., compliance data). If the completeness objective is not met, the WIPP EM Manager will determine the need for resampling on a case-by-case basis. Numerical expression of the completeness (%C) of data is as follows:

$$\%C = \frac{\textit{number of accepted samples}}{\textit{total number of samples collected}} \times 100$$

D18-5b(5) Representativeness

Representativeness is the degree to which sample analyses accurately and precisely represent the media they are intended to represent. Data representativeness for this sampling program will be accomplished through implementing approved sampling procedures and the use of validated analytical methods. Sampling procedures are designed to minimize factors affecting the integrity of the samples. Groundwater samples will only be collected after well purging criteria have been met. The analytical methods selected are those that will most accurately and precisely represent the true concentration of analytes of interest.

D18-5b(6) Comparability

Comparability is the extent to which one data set can be compared to another. Comparability will be achieved through reporting data in consistent units and collection and analysis of samples using consistent methodology. Aqueous samples will consistently be reported in units of measures dictated by the analytical method. Units of measure include:

- Milligrams per liter (mg/L) for alkalinity, inorganic compounds and metals
- Micrograms per liter (µg/L) for VOCs.

Water-level measurements will be expressed as equivalent freshwater elevation in feet above mean sea level.

D18-5c Design Control

The groundwater monitoring system was designed to meet specifications described in 20 NMAC 4.1, Subpart V, §§264.97 and 264.601 through 264.603.

D18-5d Instructions, Procedures, and Drawings

Provisions and responsibilities for the preparation and use of instructions and procedures at the WIPP are outlined in Section 1.4, Documents, Section 2.1.2, Implementing Procedures, and Section 4, Sample Control, and Quality Assurance Requirements, of the QAPD. Quality-affecting activities performed by or on behalf of groundwater monitoring are required to be performed in accordance with documented and approved procedures which meet the intent of 20 NMAC 4.1, Subpart V, §264.90.

Technical procedures were developed for each quality-affecting function performed for groundwater monitoring. The technical procedures unique to the GMP are maintained in the Environment, Safety and Health Department (ES&H) at the WIPP. The procedures are sufficiently detailed and include, when applicable, quantitative or qualitative acceptance criteria.

Procedures were prepared in accordance with requirements in Section 1.4, Documents, Section 2.1.2, Implementing Procedures, and Section 4, Sample Control, and Quality Assurance Requirements, of the QAPD.

D18-5e Document Control

Requirements for the control of documents are outlined in Section 1.4, Documents, of the QAPD. Controls ensure that the latest approved versions of procedures are used in performing groundwater monitoring functions and that obsolete materials are removed from work areas.

D18-5f Control of Processes

Process control requirements, defined in the QAPD Section 2.1, Work Processes and Section 4, Sample Control and Quality Assurance Requirements, are met for this GMP.

D18-5g Inspection and Surveillance

Inspection and surveillance activities are conducted as outlined in, Section 2.4, Inspection and Testing, and Section 3.2, Independent Assessment of the QAPD. The Q&RA Department is responsible for performing the applicable inspections and surveillance on the scope of work. EM section personnel are responsible for performance checks as defined in applicable procedures and determined by WID metrology laboratory personnel. Performance checks for the GMP are designed to determine the acceptability of purchased items and to assess degradation that occurs during use.

D18-5h Control of Monitoring and Data Collection Equipment

QAPD Section 2.4.4, Monitoring, Measuring, Testing, and Data Collection Equipment, outline the basic requirements for control and calibrating monitoring and data collection (M&DC). M&DC equipment is controlled and calibrated according to WIPP Procedure WP 10-AD3029, "Calibration and Control of Monitoring and Data Collection Equipment," to ensure continued accuracy of groundwater monitoring data. Results of calibrations, maintenance, and repair are documented. Calibration records identify the reference standard and the relationship to national standards or nationally accepted measurement systems. Records are maintained to track uses of M&DC equipment. If M&DC equipment is found to be out of tolerance, the equipment is tagged and it is not used until corrections are made.

D18-5i Control of Nonconforming Conditions

Section 1.3, Quality Improvement, Section 4.4, Disposition of Nonconforming Samples, of the QAPD describes the system used at the WIPP for ensuring that appropriate measures are established to control nonconforming conditions. Nonconforming conditions connected to the GMP are identified in and controlled by documented procedures. Equipment that does not conform to specified requirements is controlled to prevent use. The disposition of defective items is documented on records traceable to the affected items. Prior to final disposition, faulty items are tagged and segregated. Repaired equipment is subject to the original acceptance inspections and tests prior to use.

D18-5j Corrective Action

Requirements for the development and implementation of a system to determine, document, and initiate appropriate corrective actions after encountering conditions adverse to quality at the WIPP are outlined in, Section 1. 3, Quality Improvement, of the QAPD. Conditions adverse to acceptable quality are documented and reported in accordance with corrective action procedures and

corrected as soon as practical. Immediate action will be taken to control work performed under conditions adverse to acceptable quality and its results to prevent quality degradation.

D18-5k Quality Assurance Records

Section 1.5, Records, of the QAPD outlines the policy used at the WIPP regarding identification, preparation, collection, storage, maintenance, disposition, and permanent storage of QA records.

Records to be generated in the groundwater monitoring program are specified by procedure. QA and RCRA operating records are identified. This is the basis for the labeling of records as "QA" or "RCRA operating" on the EM Records Inventory and Disposition Schedule (RIDS).

QA records document the results of the groundwater monitoring program implementing procedures and are sufficient to demonstrate that all quality-related aspects are valid. The records will be identifiable, legible, and retrievable in accordance with WP 15-PR, WID Records Management Plan.

D18-6 Monitoring Program Description

The WIPP GMP has been designed to meet the groundwater monitoring requirements of 20 NMAC 4.1 Subpart V §§264.90 through 264.101. The following sections of the monitoring plan describe the specific components of the GMP.

D18-6a Monitor Well Locations

Groundwater exists both above and below the WIPP repository, but no hydrologic continuity exists between the repository and the groundwater. Groundwater below the repository occurring in the sandstones of the Delaware Mountain Group (Powers, et al., 1978) is isolated by bedded salt deposits in the lower part of the Salado and in the underlying Castile. Groundwater below the repository is not being monitored as part of this program.

Groundwater above the repository is being monitored. Groundwater exists in both the Dewey Lake and the Rustler. Zones monitored for general hydrological characterization of the region within the Rustler were the Culebra and the Magenta members. These zones are dolomite units isolated from one another by impermeable layers. With the exception of excavated shafts at WIPP, these zones are isolated from the repository excavations by bedded salt deposits in the upper two thirds of the Salado.

Monitoring is now focused on the Culebra because it is the primary flow path within the Rustler. Databases are maintained for the Magenta so that if the need arises monitoring of the Magenta can be resumed.

The Culebra is areally persistent, but quantity and quality of water vary considerably from place to place. The dolomite is vuggy, fractured, and commonly associated with anhydrite (Lambert and

Mercer, 1977). The Culebra has a low hydraulic conductivity. It is a fractured unit that is best modeled as a dual-porosity media. Water yields are small and saline (Powers et al., 1978).

The Dewey Lake consists of orange-red siltstone, mudstone, and some sandstone. The Dewey Lake does not form an aquifer, but some permeable sand lenses are present and those yield limited quantities of fresh water to a few private wells in the area around the WIPP site (Powers et al., 1978). One such sand lens has been identified within the WIPP boundary and is scheduled for monitoring as part of the GMP.

Seven observation wells were completed after the WQSP baseline was established using EPA recommended drilling methods and casing materials that have the potential to meet RCRA monitoring standards. Six of the wells were completed in the Culebra; one well in the Dewey Lake. Two years of sampling are scheduled prior to the anticipated receipt of waste. The data gathered from these new wells will be compared to the existing database and the existing background data will be appended as appropriate. Of the six Culebra monitoring wells, (Figure D18-9) three were installed upgradient of the WIPP shaft areas and three wells installed downgradient of the facility in locations representative of the major groundwater flow directions (Davies, 1989). Well location surveys for each of the seven wells were performed by WID survey personnel using the State Plane Coordinates-North American Datum Model 27 method. Results of the surveys are on file with the New Mexico State Engineers Department along with the associated extraction permits for each well. Water quality data collected to date from these seven wells are included in Attachment A.

Figure D18-9 shows the WIPP GMP well installation sites and the most recent freshwater head corrected potentiometric surface of the Culebra member of the Rustler.

D18-6b <u>Monitoring Frequency</u>

The GMP has been sampling the seven monitoring wells on a semiannual basis over the past two years to establish background water chemistry in accordance with 20 NMAC 4.1 Subpart V, §§264.97 and 264.98. Background water quality in both upgradient and downgradient wells will be established prior to receipt of waste at the WIPP.

As shown in Table D18-2, the GMP will collect groundwater quality samples for all seven wells on a semiannual basis during the life of the detection monitoring program.

From this point on, groundwater samples will be collected from the GMP wells at a frequency of four sample replicates collected semiannually from each well for the indicator parameters of pH, SC, total organic carbon (TOC), and total organic halogen (TOX) to further establish background until detection monitoring in accordance with 20 NMAC 4.1, Subpart V (40 CFR §264.98) becomes applicable. Detection monitoring will start when the WIPP receives waste and continue through the postclosure phase as required by 20 NMAC 4.1, Subpart V (40 CFR §264.90[c]). During detection monitoring, one sample and one sample duplicate will be collected semiannually. 20 NMAC 4.1, Subpart V (40 CFR §264.97[g][2]) provides that an alternate sampling procedure

to that provided in 264.98 may be proposed. Given the nature and rate of groundwater flow in the area surrounding WIPP, collecting and analyzing one sample semiannually will be protective of human health and the environment because any hazardous constituent leaving the underground disposal facility will not have the potential to substantially migrate beyond the compliance point in a one-year time frame. Groundwater flow characteristics are presented in detail in Appendices D6 and E1.

Groundwater levels will also be monitored in each of the seven wells on a monthly basis. The water level in each well will also be measured prior to each sampling event. Water-level measurements in the other existing WQSP wells will also be monitored on a monthly basis to supplement the area water-level database and to help define regional changes in groundwater flow directions and gradients. The characteristics of the groundwater monitoring program (frequency, location) will be evaluated if significant changes are observed in the groundwater flow direction or gradient. Any necessary changes will be identified and a permit modification sought as appropriate.

D18-6c Analytical Parameters

The analytes of interest that are now being measured to establish background concentrations include all indicator parameters and all other parameters listed in 20 NMAC 4.1 Subpart V, §264, Appendix IX. Samples that will be taken as part of the detection monitoring program during disposal operations include the most prevalent constituents in the waste as indicated in Table D18-3, plus metals (see Table C-9 in Chapter C and Appendix C6 for more detail). In addition, field measurements of pH, SC, temperature, chloride, Eh, total iron, and alkalinity are being taken during background sampling as specified in Section D18-8 of this plan. Alkalinity, divalent cations, and iron may be deleted during detection monitoring. Parameters to be analyzed by the contract laboratory such as specific conductance, total dissolved solids, total suspended solids, density, pH, total organic carbon, and total organic halogens were chosen as indicator parameters because of their universal commonality to groundwater. Parameters such as chloride, alkalinity, calcium, magnesium, and potassium were chosen as matrix-specific general indicator parameters. Organic and inorganic compounds on the right hand side of Table D18-3 were chosen because they may occur in the waste to be disposed at the WIPP facility.

D18-6d Sample Collection and Laboratory Analysis

The mobile field laboratory provides a work place for conducting field sampling and analyses. The laboratory is positioned near the wellhead, is climate controlled, and contains the necessary equipment, reagents, glassware, and deionized water for conducting the various field analyses.

Two types of water samples are generally collected: serial samples and final samples. Serial samples are taken at regular intervals and analyzed in the mobile field laboratory for various physical and chemical parameters (called field parameters). The serial sample data are used to determine the chemical steady-state conditions of the groundwater as a direct function of the volume of the water being pumped from the well. Interpretation of the serial sampling data enables

the Team Leader to make a determination of when steady-state conditions are attained in the pumped groundwater.

Final samples are collected when the serially sampled field parameters have achieved a steady state. If one or more of the field parameters do not stabilize—and there is reason to believe it will not—the Team Leader may choose to collect the final sample regardless of this instability in the field parameter(s).

The objective of the serial sampling effort is to obtain representative water samples in a reproducible manner. By definition, a representative groundwater sample is a sample of undisturbed groundwater. A groundwater sample is considered to be representative of the undisturbed groundwater only if it is chemically identical to the undisturbed groundwater (i.e., completely unaltered by the effects of drilling, postdrilling processes and reactions, and sampling procedures).

To determine how close the pumped groundwater is to being representative, a comparison is made by monitoring the same selected field parameters that were used to initially define the background characteristics of the water. When these parameters appear stable the determination is made that the water sample is representative.

D18-6d(1) Serial Samples

Serial samples are collected and analyzed in the mobile laboratory to detect and monitor the chemical variation of the groundwater as a function of the volume of water pumped (See Section D18-8a(1)). Once serial sampling begins, the frequency at which serial samples are collected and analyzed is left to the discretion of the Team Leader. The serial sampling frequency is based upon the site-specific conditions existing at each well, but usually is performed a minimum of three times during a sampling round.

The three field parameters of temperature, Eh, and pH are determined by either an "in-line" technique, using a self-contained flow cell, or an "off-line" technique, in which the samples are collected from a nylon sample line at atmospheric pressure. The iron, divalent cation, chloride, alkalinity, specific conductance, and specific gravity samples are collected from the nylon sample line at atmospheric pressure. Because of the lack of sophisticated weights and measures equipment available for field density assessments, field density evaluations are expressed in terms of specific gravity, which is a unitless measure. Density is expressed as unit weight per unit volume.

New polyethylene containers are used to collect the serial samples from the nylon sample line. Serial sampling water collected for solute and specific conductance determinations is filtered through a 0.45 micrometers (µm) membrane filter using a stainless-steel, in-line filter holder. Filtered water is used to rinse the sample bottle prior to serial sample collection. Unfiltered groundwater is used when determining temperature, pH, Eh, and specific gravity. Sample bottles are properly identified and labeled.

The filtered sample collected for solute analyses is immediately analyzed for iron and alkalinity because these two solution parameters are extremely sensitive to changes in the ambient water-sample pressure and temperature. A sample and duplicate of filtered water are collected and analyzed for solute parameters (alkalinity, chloride, divalent cations, and iron). Temperature, pH, and Eh, when not measured in a flow cell, are measured at the approximate time of serial sample collection. These samples are collected from the unfiltered sample line.

Experience gained from the serial sampling of wells has shown that samples to be analyzed for chloride and divalent cations (after preservation with nitric acid and stored at 4°C) can be stored for one week prior to analysis with confidence that the analytical results will not be altered.

Upon completion of the collection of the final sample suite, the serial sample bottles accrued throughout the duration of the pumping of the well are discarded. No serial sample bottles will be reused for sampling purposes of any sort. However, serial samples may be stored for a period of time depending upon the need. WIPP Procedure WP 02-EM1006[3], "Final Sample and Serial Sample Collection," defines the protocols for the collection of final and serial samples. WIPP Procedure WP 02-EM1005[4], "Groundwater Serial Sample Analysis," defines the protocols for serial sample analysis.

D18-6d(2) Final Samples

The final sample is collected once the pumped groundwater has achieved a chemical steady state based on the indicator parameters discussed in Section D18-8a(1). A serial sample is also collected and analyzed for each day of final sampling. Sample preservation, handling, and transportation methods are designed to maintain the integrity and representativeness of the final samples.

Prior to collecting the final samples, the collection team must consider the analyses to be performed so that proper shipping or storage containers can be assembled.

Final samples are sent to contract laboratories and analyzed for general chemistry, radionuclides, metals, and selected VOCs that are specific to the waste anticipated to arrive at WIPP.

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[3]WP 02-EM1006 "Final Sample and Serial Sample Collection" is a technical procedure that provides step-by-step instructions for acquiring groundwater samples from the WQSP wells and from privately-owned wells in the vicinity of the WIPP. The procedure addresses the equipment in general, lists precautions and limitations which are intended to assure that only qualified individuals operate the equipment, prerequisite actions intended to assure the data quality. The procedure addresses collection of samples from private wells, collection of serial groundwater samples, the collection of final samples for submittal to the laboratory, and data review by the monitoring task leader.

[4]WP 02-EM1005 "Groundwater Serial Sample Analysis" is a technical procedure that provides step-by-step instructions for on site analysis of groundwater to determine groundwater stability prior tot he collection of final samples for analysis. The procedure addresses the equipment in general, lists precautions and limitations which are intended to assure that only qualified individuals operate the equipment, prerequisite actions intended to assure data quality. The procedure addresses the field measurement of Eh, pH, temperature, specific gravity, specific conductance, alkalinity, chloride, divalent cation, and total iron as indicators of groundwater stability.

Water samples are collected at atmospheric pressure using either the filtered or unfiltered nylon sampling lines branching from the main sample line. The samples are collected in new and unused glass and plastic containers.

Before the final sample is taken, all plastic and glass containers are rinsed with the pumped groundwater, either filtered or unfiltered, dependent upon analysis protocol. When the rinsing procedure is completed the final sample is collected.

The WIPP has not accepted waste for disposal and previous WQSP sample analyses have shown that requested hazardous constituents have not been introduced to the groundwater in the vicinity of WIPP by other activities.

The current monitoring system uses dedicated pumping systems and sample collection lines from the sampled formation to the well head. Nondedicated sample collection lines from the well head to the sample collection area are discarded after each use. Laboratory glassware are washed after each use with a solution of nonphosphorus detergent and deionized (DI) water and rinsed in DI water. Sample containers are new, certified clean containers that are discarded after one use. Groundwater level measurement devices are rinsed with fresh water after each use. Nondedicated sample collection manifold assemblies will be rinsed with two gallons of fresh water, then rinsed with five gallons of 5 percent nitric acid solution and rinsed with five gallons of DI water after each use. The exposed ends will be capped off during storage. Prior to the next use of the sampling manifold, it will be rinsed a second time with DI water and a blank rinsate sample will be collected to verify decontamination.

Resulting wastes are disposed of in accordance with the WID "Site Generated, Non-Radioactive Hazardous Waste Management Plan," WP 02-RC.01[5].

D18-6d(3) Laboratory Analysis

Analysis of samples are performed by a commercial laboratory that participates in EPA's contract laboratory program. Methods are specified in procurement documents and are selected to be consistent with EPA recommended procedures in SW 846 (EPA, 1986b). Data analysis is to provide an objective and reliable means for interpreting data in relation to the objectives of the data collection program. For the GMP, the principal goal of data analysis is the comparison of a data point or data set to equivalent data collected at another location and time (such as preoperational background data or data collected at a control location) or to a fixed standard. Additional detail on analytical techniques and methods are given in Laboratory SOPs.

[5]WP 02-RC.01 "Site-Generated, Non-Radioactive Hazardous Waste Management Plan" is a step-by-step procedure that defines site-generate non-radioactive hazardous waste (SGNRHW) and lists responsibilities of waste management organizations including the generator, waste handlers, sampling personnel, safety personnel, and compliance personnel. In addition, the procedure defines training requirements, container marking requirements, spill response, and list prohibitions. A Section of the procedure is focused on waste management practices including the management in satellite accumulation areas, the hazardous waste staging area for materials awaiting analysis, the establishment of accumulation times, and hazardous waste disposal.

Several levels of analyses are required for each parameter before statistically valid interpretation can be achieved. The type of analysis used at each level varies among parameters due to the particular characteristics of parameters and the specific objectives of monitoring. Five general levels of data analyses are described here. Analyses at each of these levels is considered for each parameter. The levels are:

(1) Determination of accuracy for each point measurement by quantification and control of precision and bias

(2) Evaluation of the effects of auto-correlation on the expected value of the point measurement due to location and time of sampling

(3) Identification of the appropriate model of variability (i.e., a probability density distribution) for each point measurement and the calculation of descriptive statistics based on the chosen model

(4) Treatment of data anomalies

(5) Interpretation of data through statistically valid comparisons (tests) and trend analysis.

The DOE performs analytical monitoring on groundwater samples through a contractual relationship with a laboratory qualified to perform analyses in accordance with EPA protocols. WIPP establishes the criteria for laboratory selection, including the stipulation that the laboratory follow the procedures specified in SW 846 and that the laboratory follow EPA protocols. The selected laboratory must demonstrate, through laboratory SOPs, that it will follow appropriate EPA SW 846 requirements and the requirements specified by the EPA protocols. The laboratory must also provide documentation to WIPP describing the sensitivity of laboratory instrumentation. Instrumentation sensitivity needs to be considered because of regulatory requirements governing constituent concentrations in groundwater and the complexity of brines associated with the WIPP repository.

Once the initial qualification criteria, as described above, have been met, WIPP selects a laboratory based upon competitive bid. The selected laboratory will perform analytical work for WIPP for a predetermined period of time, as specified in the contract between WIPP and the selected laboratory. As this period of performance comes to an end, a new laboratory selection/competitive bid process is initiated by WIPP. The same or a different laboratory may be selected for the new contract period. The SOPs for the laboratory currently under contract to WIPP are maintained in a file by the DOE.

Data validation is performed by WID Quality Assurance. Data validation results are documented on an Approval/Variation Request (AR/VR) form (Procedure WP 15-PC3041). If no discrepancies

are found in the data, the AR/VR form is signed and the approved box is checked. If however, discrepancies are found, the AR/VR form is signed and the disapproved or approved-on-condition box is checked and the form is returned to the team leader accompanied by an attached report discussing the data validation results, any anomalies, and resolutions. Copies of the data validation report are distributed to the EM Manager, Q&RA Manager, the Team Leader, and the Contract Administrator. Copies of the data validation report are kept on file in the EM records section for review upon request by NMED.

D18-6e Statistical Analysis of Laboratory Data

As required by 20 NMAC 4.1, Subpart V §264.97, water-quality data collected during the background characterization program and the operational detection monitoring program will be evaluated using appropriate statistical techniques. The following describes the statistical analysis to be performed by the GMP.

D18-6e(1) Temporal and Spatial Analysis

Environmental parameters vary with space and time. The effect of one or both of these two factors on the expected value of a point measurement is statistically evaluated through spatial analysis and time series analysis; however, these methods often require extensive sampling efforts that are in excess of the practical requirements of the WIPP GMP. The application of these methods to a particular parameter must, therefore, be limited by consideration of its significance in the final interpretation of the data.

In particular, spatial analysis has limited use in this program, although the effect of spatial auto-correlation on the interpretation of the data is considered for each parameter. Spatial variability is accounted for by the use of predetermined key sampling locations. Data analysis is performed on a location-specific basis, or data from different locations is combined only when the data have been determined to be statistically homogeneous.

Time series analysis plays a more important role in data analysis for the GMP. Parameters are reported as time series, either in tabular form or as time plots. For key time series parameters, these plots are in the form of control charts on which control levels will be identified based on preoperational database, fixed standards, control location databases, or other standards for comparison. Where significant seasonal changes in the expected value of the parameter are identified in the preoperational database or in the control locations, corrections in the control levels which reflect the seasonal change are made.

D18-6e(2) Distributions and Descriptive Statistics

For data sets which include more than ten data points that are homogeneous in space and time (including seasonal homogeneity) and have less than ten percent missing data, a test for conformance to the normal distribution is performed. A probability plot is an accepted method for performing this test; however, more powerful tests of normality, such as the W Test, or D'Agostino's

Test (Gilbert, 1987) are more accurate. Any standard best fit test is acceptable, provided the assumptions of the tests are met.

If normality is not met, the data will be log-transformed and retested for normality. If the transformed data fit a normal distribution, the original data will be accepted as having lognormal distribution. If normality is still not found, two courses may be taken. One is to continue to test the fit to standard families of distributions, such as the gamma, beta, and Weibull, with proper modifications to subsequent analyses based on these results. The other course is to use nonparametric methods of data analysis.

For data sets smaller than ten, but homogeneous and complete, the lognormal distribution is assumed. Data sets with more than ten percent missing data are analyzed using nonparametric methods. Nonhomogeneous data sets are subdivided into homogeneous sets and each of these analyzed individually.

Descriptive statistics are calculated for each homogeneous data set. At a minimum, these include a central value and a range of variation. The central value is the arithmetic mean of the untransformed data if the data are not censored at either end. If the data are censored, either a trimmed mean or the median is used as the central value (which may be within the censored range). If the data set is greater than ten and is uncensored, the standard deviation is calculated and used as a basis for the reported range in variation. If these criteria are not met, the range between the 0.25 and 0.75 quartiles is used.

D18-6e(3) Data Anomalies

Data anomalies include data points reported as being below the limit of detection (LD) or otherwise censored over a specific range of values, missing data points occurring randomly in the data set, and outliers that cannot be ascribed to a known source of variation.

Whenever possible, values which are below detection limits are obtained and incorporated into the database for statistical analysis. When values are not available, alternative methods of analysis, as described in previous sections, are used. In particular, the use of nonparametric statistics is required.

Missing data points comprising less than 10 percent of the data set do not affect data analyses. Results based on data in which more than 10 percent is missing are identified as such at the time of reporting. Consideration of the potential effect of missing data must be made when the majority of the data are missing from a discrete time span.

An outlier is defined as any data point occurring in either extreme upper or lower range of the data distribution for which there is less than 0.01 probability of occurrence. For normally distributed data this is roughly 2 or more standard deviations above or below the mean. When no probability model is identified, outliers may only be found through visual inspection of the data.

If an outside source of variation is not identified to account for outliers in a data set, it is included in the data set and all subsequent analyses. If the inclusion of such outliers is found to affect the final results of the analyses significantly, both results (with and without outliers) are reported.

D18-6e(4) Comparisons and Reporting

Prior to waste receipt, two duplicate measurements will have been made of each indicator and other parameters required by 40 CFR 265.92 (pH, SC, TOC, TOX) at every GMP groundwater monitoring well during each of the four background sampling events. Following completion of the four sampling events, the arithmetic mean and variance must then be calculated by the field supervisor or designee for each site. These measurements will then serve as a background value against which statistical values for subsequent sampling events during detection monitoring will be compared. Statistical analysis and comparison will be accomplished using Cochran's Approximation to the Behrens-Fisher students' t-test at the 0.01 level of significance (described in Appendix IV to 40 CFR 264, and stipulated in 40 CFR 265.93[b]). If the comparisons show a significant increase at any monitoring site, the site must be resampled and an analysis performed as soon as possible. The results of the statistical comparison will be reported annually in the Annual Site Environmental Report (ASER).

D18-7 Sample Documentation and Custody

To ensure the integrity of samples from the time of collection through reporting date, sample collection, handling, and custody must be documented. Sample custody and documentation procedures for EM sampling and analysis activities are detailed in WIPP Procedure WP 02-EM3001[6], "Administrative Processes for Environmental Monitoring Programs." These procedures will be strictly followed throughout the course of each sample collection and analysis event.

Standardized forms used to document samples include sample identification numbers, sample labels, custody tape, the sample tracking log books, and the request for analysis/chain of custody (RFA and CofC) form. The forms are briefly defined in the following subsections.

All sample documentation will be completed for each sample and reviewed by the Team Leader for completeness and accuracy.

[6]WP 02-EM3001 "Administrative Processes for Environmental Monitoring Programs" is a management control procedure to provide the administrative guidance to be used by Environmental Monitoring (EM) personnel to maintain quality control (QC) associated with EM sampling activities and to assure that data acquired under the WIPP Environmental Monitoring Program are valid. The precautions and limitations portion of this procedure assure that only qualified personnel acquire samples under the EM program, that cross contamination of sampling equipment is prevented, and that sample hold times are not exceeded. The Performance portion of the procedure provides step-by-step instructions for Quality Assurance/Quality Control (QA/QC) implementation, the use of data sheets and sample tracking logbooks, sample tacking from collection to submittal, and actions to take if sample results indicate the potential for exceeding a regulatory limit.

D18-7a Sample Numbers and Labels

A unique sample identification number will be assigned to each sample sent to the laboratory for analysis. The Team Leader will assign the numbers prior to sample collection. The sample identification numbers are used to track the sample from the time of collection through data reporting. Every sample container sent to the laboratory for analysis will be identified with a label affixed to it. Sample label information will be completed in permanent, indelible ink and will contain the following information: sample identification number with sample matrix type; sample location; analysis requested; time and date of collection; preservative(s), if any; and the sampler's name or initials.

D18-7b Custody Seals

Custody seals are used to detect unauthorized sample tampering from collection through analysis. The custody seals are adhesive-backed strips that are destroyed when removed or when the container is opened. The seal is dated, initialed, and affixed to the sample container in such a manner that it is necessary to break the seal to open the container. Seals are affixed to sample containers in the field immediately after collection. Upon receipt at the laboratory, the laboratory custodian will inspect the seal for integrity; a broken seal invalidates the sample.

D18-7c Sample Tracking Logbook

A sample tracking logbook (STLB) form will be completed for each sample collected. The STLB includes the following information: C of C number; RFA No.; date sample(s) were sent to the lab; laboratory name; acknowledgment of receipt or comments; well name and round number. Sample codes indicate the well location; the geologic formation where the water was collected from, the sampling round number; and the sample number. The code is broken down as follows:

$$WQ6^{1}C^{2}R2^{3}N1^{4}$$

[1]Well identification (e.g., WQSP-6 in this case)
[2]Geologic formation (e.g., the Culebra in this case)
[3]Sample round no. (Round 2)
[4]Sample no. (N1)

STLB information is completed in the field by the sampling team and checked by the Team Leader. When samples are shipped, the STLB remains in the custody of the EM Section for sample tracking purposes.

D18-7d Request for Analysis and Chain of Custody

An RFA and CofC form will be completed during or immediately following sample collection and will accompany the sample through analysis and disposal. An example of the RFA and CofC form is presented in Figures D18-17a and 17b. The RFA and CofC form is signed and dated each time

the sample custody is transferred. A sample is considered to be in a person's custody if: the sample is in his/her physical possession; the sample is in his/her unobstructed view; and/or the sample is placed, by the last person in possession of it, in a secured area with restricted access. During shipment, the carrier's airbill number serves as custody verification. Upon receipt of the samples at the laboratory, the laboratory sample custodian acknowledges possession of the samples by signing and dating the RFA and CofC. The completed original (top page) of the RFA and CofC is returned to the Team Leader with the laboratory analytical report and becomes part of the permanent record of the sampling event. The RFA and CofC form also contains specific instructions to the laboratory for sample analysis, potential hazards, and disposal instructions.

D18-8 Field Operations

The new GMP monitoring wells are routinely sampled and monitored following established SOPs. These monitoring related activities include static water level measurements, serial and final sampling, equipment installation, equipment calibration, field water quality analyses, sample handling and shipment, and waste management. The following subsections describe the routine field procedures employed by the GMP.

D18-8a Water Quality Sampling Technique

The GMP has employed two types of sampling procedures at the WIPP: serial sampling and final sampling.

D18-8a(1) Serial Sampling

Serial sampling is the collection of sequential samples for the purpose of determining when the water chemistry stabilizes or reaches a steady state. Ideally, when the water chemistry stabilizes, it is assumed that the chemistry is representative of the native formation fluid, and a final sample is collected. However, the water samples may still be impacted by well construction practices and effects from the installation of down hole pumping and sampling equipment.

A steady-state condition is determined by comparing serial sample parameters to an average of final-day serial sampling results for previous sampling rounds. A steady-state condition is considered to be reached when the majority of field indicator parameter analysis results fall within ±5 percent of the average of analytical results for the indicator parameter from previous sampling rounds. Nonstabilization of two or fewer field indicator parameters attributable to matrix interferences, instrument drift, or other unforeseen reasons would not preclude the collection of final samples, provided the volume of purged water exceeds three well bore volumes.

The field analytical parameters found to be the most useful in identifying a steady-state condition of the water chemistry include chloride, divalent cations (hardness), and alkalinity, which are analyzed by classic wet chemistry bench methods (titration) in the mobile field laboratory. Total iron has also been found to be a useful indicator and is analyzed using spectrophotometric methods. Other serial sampling parameters analyzed in the field include measurement of pH, Eh,

temperature, specific conductance, and specific gravity. Protocols for collection of serial samples are defined in WIPP Procedure WP 02-EM1006, "Final Sample and Serial Sample Collection," while analysis of serial samples are described in WIPP Procedures WP 02-EM1005, "Groundwater Serial Sample Analysis," and WP 02-EM1015[7], "Water Quality Monitoring Using the YSI Model 3560 Monitoring System."

D18-8a(2) Final Samples

Final groundwater samples are collected once evidence from serial sampling indicates that the pumped groundwater has reached a chemical steady state. Final samples are forwarded to a contract analytical laboratory for analysis.

Final samples are collected in the appropriate type of container for the specific analysis to be performed. For each parameter analyzed, a sufficient volume of sample is collected to satisfy the volume requirements of the analytical laboratory (as specified by Laboratory SOPs). This includes an additional volume of sample water necessary for maintaining quality control standards. All final samples are treated, handled, and preserved as required for the specific type of analysis to be performed. Details about sample containers, preservation, and volumes required for individual types of analyses are found in the applicable procedures generated, approved, and maintained by the contract analytical laboratory.

Duplicates of the final sample are provided to WIPP oversight agencies as requested by the DOE. A duplicate of the sample is also preserved with nitric acid and placed in storage within the ES&H Environmental Sample storage area and held until final reports from the contract analytical laboratory have been validated and approved. When the final laboratory report has been approved the samples are removed from storage and destroyed.

Detailed protocols, in the form of procedures, assure that final samples are collected in a consistent and repeatable fashion. WIPP Procedure WP 02-EM1006 defines the requirements for collection of final samples for analyses.

The serial sampling process will probably not be needed with the new wells completed specifically for the GMP and detection monitoring program. However, during the first two years of sampling, the wells will be serially sampled using an abbreviated method. It is anticipated that changes in the water chemistry from stagnated to representative will occur within the first 24 hours of the purging process. Whereas, this change usually occurred over a seven-day period with the old wells.

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[7]WP 02-EM1015 "Water Quality Monitoring Using the YSI Model 3560 Monitoring System" is a technical procedure that provides step-by-step instructions for monitoring groundwater using the YSI Model 3560 Monitoring System. The procedure addresses the equipment in general, lists precautions and limitations which are intended to assure that only qualified individuals operate the equipment, prerequisite actions intended to assure the correct installation and operation. The procedure details the performance checks of the temperature probe, the conductivity cell, the pH electrode and the Eh electrode. Sample chamber hookup to the groundwater pump line is addressed followed by the use of the equipment to measure the covered parameters. Post measurements performance checks are included along with the proper steps for shutdown and decontamination of the system. The procedure also addressees data management.

During the first two or three years of sampling these wells will be serially sampled with the first sample being analyzed as soon as possible after the pump is turned on and daily thereafter for a period of four days or until the field parameters (chloride, divalent cations, alkalinity, and iron) stabilize. Eh, pH, and SC will be continually monitored by using a flow cell with ion-specific electrodes and a real-time readout. When detection monitoring begins, the serial sampling process will be modified and the decision to collect final samples will be based on the number of well bore volumes purged and results of the analysis of chloride, temperature, specific gravity, pH, Eh, and SC.

D18-8a(3) Groundwater Pumping and Sampling Systems

The water-bearing units at the WIPP are highly variable in their ability to yield water to monitoring wells. The Culebra, the most transmissive hydrologic unit in the WIPP area, exhibits transmissivities that range many orders of magnitude across the site area and is the primary focus of the GMP. Because the water-yielding characteristics of the hydrologic units at the WIPP are variable, different types of pumping equipment have been used during water quality sampling activities.

The groundwater pumping and sampling systems used to collect a groundwater sample from the seven new GMP wells are designed to provide continuous and adequate production of water so that a representative groundwater sample can be obtained. The wells used for water quality sampling vary in yield, depth, and pumping lift. These factors affect the duration of pumping as well as the equipment required at each well.

The type of pumping and sampling system to be used in a well depends primarily on the aquifer characteristics of the Culebra and well construction. At the present time, the GMP wells are individually equipped with dedicated submersible pumping assemblies. Each well has a specific type of submersible pump, matched to the ability of the well to yield water during pumping. The down hole submersible pumps are controlled by a variable electronic flow controller to match the production capacity of the formation at each well.

The electronic flow controller allows personnel collecting samples to control the rate of discharge during well purging to minimize the potential for loss of volatiles from the sample. As recommended in the "RCRA Ground-Water Monitoring Technical Enforcement Guidance Document" (EPA, 1986a) the wells are purged a minimum of three well bore volumes at a rate that will minimize the agitation of recharge water. This is accomplished by monitoring formation pressure and matching the rate of discharge from the well as nearly as possible to the rate of recharge to the well. WIPP Procedure WP 02-EM1002[8], "Electric Submersible Pump Monitoring

[8]WP 02-EM1002 "Electric Submersible Pump Monitoring System Installation and Operation" is a technical procedure that provides step-by-step instructions for acquiring groundwater samples using electric submersible pumps (ESPs). The procedure addresses the equipment in general, lists precautions and limitations which are intended to assure that only qualified individuals operate the equipment, prerequisite actions intended to assure the correct installation and operation. The procedure details how to install the various subsystems such as the surface discharge and pressure monitoring system and the pressure monitoring bubbler and how to startup and shut down the ESP.

System Installation and Operation," describes the methods used for controlling flow rates and monitoring formation pressure. Well purging requirements are used in conjunction with serial sampling to determine when a steady-state condition has been achieved.

Wells that are completed for use as GMP installations are cased and screened through the production interval with materials that do not yield contamination to the aquifer or allow the production interval to collapse under stress (high epoxy fiberglass). Details of well construction are presented in Section D18-3c. An electric, submersible pump installation without the use of a packer is an acceptable installation in this instance. The largest amount of discharge from the submersible pump takes place from a discharge pipe. In addition to this main discharge pipe a dedicated nylon sample line, running parallel to the discharge pipe, is also used. Flow through the pipe is regulated on the surface by a flow control valve and/or variable speed drive controller. Cumulative flow is measured using a totalizing flow meter. Flow from the discharge pipe is routed to a discharge tank for disposal.

The dedicated nylon sampling line is used to collect the water sample that will undergo analysis. By using a dedicated nylon sample line, the water is not contaminated by the metal discharge pipe. The sample line branches from the main discharge pipe a few inches above the pump. Flow from the sample line is routed into the sample collection area. Flow through the sample collection line is regulated by a flow-control valve. The sample line is insulated at the surface to minimize temperature fluctuations.

D18-8a(4) Pressure Monitoring Systems

The GMP wells do not require the installation of a packer because sample biases due to well construction deficiencies are not present. However, pressures will be monitored using down hole automatic air line bubblers in the formation to maintain the water level above the pump intake. Pressure transducers may be used in line with bubblers to provide continual electronic monitoring through data acquisition systems. WIPP Procedure WP 02-EM1002, "Electric Submersible Pump Monitoring System Installation and Operation," provides instructions for monitoring formation pressure using automatic airline bubblers in conjunction with pressure transducers and data acquisition systems.

D18-8b Water-Level Monitoring Methodology

The monitoring of water levels is not specifically requested in 20 NMAC 4.1, Subpart V, as part of the groundwater detection monitoring program. However, the NMED has determined that groundwater level monitoring is needed to comply with the standards for miscellaneous units found in 20 NMAC 4.1, Subpart V, §§264.600 through 264.603.

D18-8b(1) Scope

This section of the WIPP GMP describes the WIPP groundwater-level monitoring program (WLMP). The WLMP is a subprogram of the GMP. The quality assurance activities of the WLMP are in strict accordance with the QAPD and the quality assurance implementing procedure specific to water level monitoring is WIPP Procedure WP 02-119[9], "Manual Groundwater Level Measurements."

Water-level monitoring is in progress now and will continue through the postoperational phase of the WIPP. This section of the plan addresses the activities of the WLMP during the preoperational and operational phases of the WIPP. Postoperational activity plans will be formulated at a later date and will address the objectives of water-level monitoring as required at the time of decommissioning.

D18-8b(2) Introduction

This program will continue the collection and documentation of water level data initiated by the U.S. Geological Survey (Richey, 1987) and SNL (Stensrud et al., 1988) as part of the WIPP Site Characterization Program.

As currently planned, water level measurements will be conducted using hydrologic test wells that were constructed for both the site characterization and the GMP. These test wells are distributed geographically both within and surrounding the WIPP site. The frequency of measurement is subjectively defined by the need to record the dynamic nature of the potentiometric surface through time.

On October 1, 1988, the ES&H assumed responsibility for groundwater level monitoring activities. At that time a WLMP plan was still being developed. In June of 1989, an initial plan was finalized entitled WP 07-2, WIPP Water-Level Monitoring Program Plan (Westinghouse, 1989). WP 07-2 was subsequently replaced in 1990 by WP 02-1, Groundwater Monitoring Program Plan and Procedures Manual.

Collection of groundwater-level data assists the DOE in meeting regulatory compliance and permitting requirements. These data also provide:

- Data collection as required by the Environmental Monitoring Plan.
- A means to fulfill commitments made in the FEIS.

[9]WP 02-119 "Manual Groundwater Level Measurements" is a technical procedure that describes the steps followed by Environmental Monitoring (EM) personnel for making manual groundwater level measurements in groundwater wells in the vicinity of the WIPP facility. The procedure provides general instructions including prerequisites, safety precautions, performance frequency, quality assurance, and records. Specific instructions are included for using the water level measurement electrical conductance probe and data management. The procedure references WP 02-1, "WIPP Groundwater Monitoring Program Plan and Procedures Manual" for organizational responsibilities, personnel training and qualification, reporting, records and document control, equipment calibration, and quality control requirements for the program.

- A means to comply with future groundwater inventory and monitoring regulations.
- Input for making land use decisions, (i.e., designing long-term active and passive institutional controls for the site).
- Assistance in understanding any changes to readings from the water-pressure transducers installed in each of the shafts to monitor water conditions behind the liners.
- An understanding of whether or not the horizontal and vertical gradients of flow are changing over time.

D18-8b(3) Objective

The objective of the WLMP is to extend the documented record of water-level fluctuations in the Culebra and Magenta members of the Rustler in the vicinity of the WIPP facility and to meet the requirements of 20 NMAC 4.1, Subpart V, §§264.600 through 264.603. Water-level data will also be collected from wells completed in other water-bearing zones overlying and underlying the WIPP repository horizon when access to those zones is possible. This includes, but is not limited to, the Bell Canyon, the Forty-niner, the contact zone between the Rustler and Salado, and the Dewey Lake.

The scope of the program is subject to change depending upon the following:

- Data trends
- Performance assessment program needs
- Environmental Monitoring Program needs
- Regulatory compliance needs

Water level measurements will be taken monthly in at least one accessible completed interval at each available well pad. At well pads with two or more wells completed in the same interval, quarterly measurements will be taken in the redundant wells (well locations are shown in Figure D18-18).

Water level monitoring will continue through the life of the WIPP Project. It may be deemed necessary to temporarily increase the frequency of monitoring to effectively document naturally occurring or artificial perturbations that may be imposed on the hydrologic systems at any point in time. This will be conducted in selected key wells by increasing the frequency of the manual water-level measurements or by monitoring water pressures with the aid of electronic pressure transducers and remote data-logging systems.

Interpretation of water level measurements and corresponding fluctuations over time is complicated at the WIPP by spatial variation in fluid density both vertically in well bores and areally from well to well. To monitor the hydraulic gradients of the hydrologic flow systems at the WIPP accurately, actual water level measurements and the densities of the fluids in the well bores will be monitored. When both of these parameters are known, equivalent freshwater heads will be calculated. The concept of freshwater head is discussed in Lusczynski (1961).

A discussion explaining the calculation of freshwater heads from midformation depth at WIPP can be found in Haug, et al. (1987). Freshwater heads are useful in identifying hydraulic gradients in aquifers of variable density such as those existing at the WIPP site. Freshwater head at a given point is defined as the height of a column of freshwater that will balance the existing pressure at that point (Lusczynski, 1961).

Freshwater heads are indicative of heads above the center of the Culebra and freshwater elevations are indicative of elevations above mean sea level.

Measured water-level data can be converted to equivalent freshwater head from knowledge of the density of the borehole fluid.

$$p = \rho g h$$

where

ρ = average specific gravity of the borehole fluid (unitless)
h = fluid column height above the datum (length)
g = freshwater density (mass/volume)

If the freshwater density is assumed to be 1.000 gram per cubic centimeter (g/cm^3), then the equivalent freshwater head is equal to the fluid column height times the average borehole fluid density.

Detailed fluid-density logs have been developed for calculating the exact average borehole-fluid density (Crawley, 1988).

A Pressure Density Survey Program (PDSP) has been conducted to determine the actual variation in density gradients existing in the test wells. The PDSP measured the actual midformation pressures of the Culebra. Data from this program have identified those wells in which some adjustment to measured water level values must be accounted for in order to calculate the measured water levels accurately in terms of equivalent freshwater heads (Crawley, 1988).

D18-8b(4) Field Methods

To obtain an accurate groundwater-level measurement, a calibrated water-level measuring device is lowered into a test well and the depth to water is recorded from a known reference point. When using an electrical conductance probe, the depth to water can be determined by reading the appropriate measurement markings on the embossed measuring tape when the alarm is activated at the surface. WIPP Procedure WP 02-119, "Manual Groundwater Level Measurements," describes the methods to be used in obtaining groundwater-level measurements.

D18-8b(5) Records and Document Control

All incoming data will be processed in a timely manner to assure data integrity. The data management process for water-level measurements begins with completion of the field data sheets. Date, time, tape measurement, equipment identification number, calibration due date, initial of the field personnel, and equipment/comments are recorded on the field data sheets. If, for some unexpected reason, a measurement is not possible (i.e., a test is under way that blocks entry to the well bore), then a notation as to why the measurement was not taken is recorded in the comment column. Personnel also use the comment column to report any security observations (i.e., well lock missing).

Data recorded on the field data sheets and submitted by field personnel are subject to guidelines outlined in WIPP Procedure WP 02-EM3001, "Administrative Processes for Environmental Monitoring Programs." This procedure describes the processes for administering and managing data gathered by the environmental monitoring section. The data are entered onto a computerized work sheet. The work sheet calculates water level in both feet and meters relative to the top of the casing and also relative to mean sea level. The work sheet also adjusts levels to equivalent freshwater heads.

A check print is made of the work sheet printout. The check print is used to verify that data taken in the field is properly reported on the database printout. A minimum of 10 percent of the spreadsheet calculations are randomly verified on the check print to ensure that calculations are being performed correctly. If errors are found, the work sheet is corrected. The data contained on the computerized work sheet are translated into a database file. A printout is made of the database file. The data each month are then compiled into report format and transmitted to the appropriate agencies as requested by the DOE.

A computerized database file is maintained for all groundwater-level data. Monthly and quarterly data are appended into a yearly file. Upon verification that the yearly database is free of errors, it is appended into the project database file. A printed copy of the current project database (through December of the preceding year) is kept in the ES&H EM fire-resistant storage area.

D18-8b(6) Reporting

Data collected from this program are reported in the ASER. The ASER includes all applicable information that may affect the comparison of water level data through time. This information will include but is not limited to:

- Well configuration changes that may have occurred from the time of the last measurement (i.e., plug installation and removal, packer removal and reinstallation, or both; and the type and quantity of fluids that may have been introduced into the test wells).

- Any pumping activities that may have taken place since publication of the last annual report (i.e., water quality sampling, hydraulic testing, and shaft installation or grouting activities).

D18-8c Calibration

D18-8c(1) Sampling Equipment Calibration Requirements

The equipment used to collect data for the WQSP is to be calibrated in accordance with WP 10-AD, WIPP Maintenance Administrative Procedures Manual. The EM Section is responsible for calibrating needed equipment on schedule, in accordance with written procedures. The EM Section is also responsible for maintaining current calibration records for each piece of equipment.

D18-8c(2) Water-Level Monitoring Equipment Calibration Requirements

The equipment used in taking groundwater level measurements is to be calibrated in accordance with WIPP Procedure WP 10-AD3029, "Calibration and Control of Monitoring and Data Collection Equipment." The EM Section is responsible for calibrating the needed equipment on schedule in accordance with written procedures. The EM Section is also responsible for maintaining current calibration records for each piece of equipment.

D18-8d Well Evacuation Procedures

Each GMP well is evacuated using the dedicated submersible pump until all serial sampling field parameters are stable. This evacuation procedure generally removes numerous well bore volumes of water from the well and assures representative water samples.

D18-8e Sample Preservation, Tracking, Packaging, and Transportation

Many of the chemical constituents measured by the GMP are not chemically stable and require preservation and special handling techniques. Samples requiring acidification are treated with

either high purity hydrochloric acid, nitric acid, or sulfuric acid (ULTREX or equivalent), depending upon the standard method of treatment required for the particular parameter suite or as requested by contract laboratory SOPs.

The contract laboratory receiving the samples uses procedures that prescribe the type and amount of preservative, the container material type, and the required sample volumes that should be collected. This information is recorded on the Final Sample Checklist for use by field personnel when final samples are being collected. WIPP will follow the EPA "RCRA Ground-Water Monitoring Technical Enforcement Guidance Document," Table 4-1 (EPA, 1986a), if laboratory SOPs do not specify sample container, volume, or preservation requirements.

The sample tracking system at WIPP uses uniquely numbered CofC Forms and RFA Forms. The primary consideration for storage or transportation is that samples must be analyzed within the prescribed holding times for the parameters of interest. WIPP Procedure WP 02-EM3001, "Administrative Processes for Environmental Monitoring Programs," provides instructions to ensure proper sample tracking protocol.

Insulated shipping containers packaged with reusable ice packs are used to keep the samples cool during transport to the contract laboratory. Hold times for specific analytical parameters require samples to be shipped by express air freight. The coolers are packaged to meet Department of Transportation and International Air Transportation Association commercial carrier regulations.

D18-9 Reporting

D18-9a Laboratory Data Reports

Laboratory data are provided in electronic and hard copy reports to WIPP. Laboratory data reports will be forwarded to the Team Leader and contain the following information for each analytical report:

- A brief narrative summarizing laboratory analyses performed, date of issue, deviations from the analytical method, technical problems affecting data quality, laboratory quality checks, corrective actions (if any), and the project manager's signature approving issuance of the data report.

- Header information for each analytical data summary sheet including: sample number and corresponding laboratory identification number; sample matrix; date of collection, receipt, preparation and analysis; and analyst's name.

- Analytical parameter, analytical result, reporting units, reporting limit, analytical method used.

- Results of QC sample analyses for all concurrently analyzed QC samples.

D18-9b Statistical Analysis and Reporting of Results

Analytical results from semi-annual groundwater sampling activities will be compared and interpreted by the Team Leader through generation of statistical analyses as described in Section D18-6. The Team Leader or designee will perform statistical analyses; the results will be included in the ASER in summary form.

D18-9c Annual Site Environmental Report

Data collected from groundwater sampling activities will be reported to the EM Manager in the ASER. The ASER includes all applicable information that may affect the comparison of water level data through time. This information will include but is not limited to:

- Well configuration changes that may have occurred from the time of the last measurement (i.e., plug installation and removal, packer removal and reinstallation, or both; and the type and quantity of fluids that may have been introduced into the test wells).

- Any pumping activities that may have taken place since publication of the last annual report (i.e., water quality sampling, hydraulic testing, and shaft installation or grouting activities).

The GMP data used in generating the ASER will be maintained as part of the WIPP operating record and made available to the NMED for review as specified in the permit.

D18-10 Records Management

Records generated during groundwater sampling and water level monitoring events will be maintained in the form project files in the EM section. Project records include, but are not limited to:

- Sampling and Analysis Plans (SAP)
- SOPs
- STLBs
- RFA and CofC forms
- Contract Analytical Laboratory Data Reports
- Variance Logs and Nonconformance Reports
- Corrective Action Reports.

All raw analytical records generated in conjunction with groundwater sampling and water level monitoring will be stored in fire resistant cabinets in the EM section according to the RIDS and will be made available for inspection upon request. These records will be transmitted to the WIPP Project Records Services (PRS) for long-term storage in accordance with the RIDS.

- Instrument maintenance and calibration records
- QC sample data
- Control charts and calculation
- Sample tracking and control documentation
- Raw analytical results.

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TABLES

TABLE D18-1
HYDROLOGICAL PARAMETERS FOR ROCK UNITS ABOVE THE SALADO AT WIPP

Unit		Hydraulic Conductivity	Storage Coefficient	Transmissivity	Permeability	Thickness	Hydraulic Gradient
Santa Rosa		2×10^{-8} to 2×10^{-6} m/s (1) (2)	Specific capacity 0.029 to 0.041 ℓ/s/m	6×10^{-7} to 6×10^{-5} m^2/s (3)	10^{-10} m^2	0 to 91 m	0.001 (5)
Dewey Lake		10^{-8} m/s	Specific storage 1×10^{-5} (1/m) (2)	2.8×10^{-6} to 2.8×10^{-4} m^2/s (4)	5.01×10^{-17} m^2	152 m	0.001 (5)
Rustler	Forty-niner	1×10^{-13} to 1×10^{-11} m/s (anhydrite) 1×10^{-9} m/s (mudstone) (2)	Specific storage 1×10^{-5} (1/m) (2)	8×10^{-8} to 8×10^{-9} m^2/s	0 m^2	13 to 23 m	NA (6)
	Magenta	$1 \times 10^{-8.5}$ to $1 \times 10^{-6.5}$ m/s (2)	Specific storage 1×10^{-5} (1/m) (2)	4×10^{-4} to 1×10^{-9} m^2/s	6.31×10^{-14} m^2	7 to 8.5 m	3 to 6
	Tamarisk	1×10^{-13} to 1×10^{-11} m/s (anhydrite) 1×10^{-9} m/s (mudstone) (2)	Specific storage 1×10^{-5} (1/m) (2)	$<2.7 \times 10^{-11}$ m^2/s	0 m^2	26 to 56 m	NA (6)
	Culebra	$1 \times 10^{-7.5}$ to $1 \times 10^{-5.5}$ m/s (2)	Specific storage 1×10^{-5} (1/m) (2)	1×10^{-3} to 1×10^{-9} m^2/s	2.1×10^{-14} m^2	4 to 11.6 m	0.003 to 0.007 (5)
	Unnamed lower member	6×10^{-15} to 1×10^{-13} m/s 1.5×10^{-11} to 1.2×10^{-11} m/s (basal interval)	Specific storage 1×10^{-5} (1/m) (2)	2.9×10^{-10} to 2.2×10^{-13} m^2/s 2.9×10^{-10} to 2.4×10^{-10} m^2/s (basal interval)	0 m^2	29 to 38 m	NA (6)

Matrix characteristics relevant to fluid flow include values used in this table such as permeability, hydraulic conductivity, gradient, etc.)

Table Notes:

(1) The Santa Rosa Formation is not present in the western portion of the WIPP site. It was combined with the Dewey Lake Red Beds in three-dimensional regional groundwater flow modeling (Corbet and Knupp, 1996), and the range of values entered here are those used in that study for the Dewey Lake/Triassic hydrostratigraphic unit.

(2) Values or ranges of values given for these entries are the values used in three-dimensional regional groundwater flow modeling (Corbet and Knupp, 1996). Values are estimated based on literature values for similar rock types, adjusted to be consistent with site-specific data where available. Ranges of values include spatial variation over the WIPP site and differences in values used in different simulations to test model sensitivity to the parameter.

(3) The range of values given here for transmissivity of the Santa Rosa is estimated for the center of the site. Transmissivity is the product of the thickness of the productive interval times its hydraulic conductivity. Thickness of the Santa Rosa is estimated to be 30 meters at the center of the WIPP site, and the range of derived transmissivities are based on the range of hydraulic conductivity values used by Corbet and Knupp (1996) for the combined Dewey Lake/Triassic unit.

(4) The range of values given here by transmissivity of the Dewey Lake is estimated for the center of the site. Transmissivity is the product of the thickness of the productive interval times its hydraulic conductivity. Thickness of the Dewey Lake is estimated to be 140 meters at the center of the WIPP site, and the range of derived transmissivities are based on the range of hydraulic conductivity values used by Corbet and Knupp (1996) for the combined Dewey Lake/Triassic unit.

(5) Hydraulic gradient is a dimensionless term describing change in the elevation of hydraulic head divided by change in horizontal distance. Values given in these entries are determined from potentiometric surfaces. The range of values given for the Culebra reflects the highest and lowest gradients observed within the WIPP site boundary. Values for the Dewey Lake and Santa Rosa are assumed to be the same as the gradient determined from the water table. Note that the Santa Rosa Formation is absent or above the water table in most of the controlled area, and that the concept of a horizontal hydraulic gradient is not meaningful for these regions.

(6) Flow in units of very low hydraulic conductivity is slow, and primarily vertical. The concept of a horizontal hydraulic gradient is not applicable.

Sources: Beauheim, 1986; Domenico and Schwartz, 1990; Domski, Upton, and Beauheim, 1996; Earlough, 1977.

TABLE D18-2
WIPP GROUNDWATER MONITORING PROGRAM
SAMPLE COLLECTION AND WATER-LEVEL MEASUREMENT FREQUENCY

Installation	Frequency
Water Quality Sampling	
All WIPP surveillance wells	On special request only
GMP monitoring wells	Semiannually
Water-Level Monitoring	
All WIPP surveillance wells	Monthly
GMP monitoring wells	Monthly and prior to sampling events

TABLE D18-3
ANALYTICAL PARAMETER LIST FOR THE WIPP DETECTION MONITORING PROGRAM

Background Water Quality	Operational Detection Monitoring Water Quality
<u>Indicator Parameters</u> pH, SC, TOC, TOX, TDS, TSS <u>Parameters Listed in</u> 20 NMAC 4.1 Subpart V 264, Appendix IX, Calcium, Magnesium, Potassium <u>Field Analyses</u> pH, SC, temperature, chloride, Eh, alkalinity, total Fe, specific gravity	<u>Indicator Parameters</u> pH, SC, TOC, TOX, TDS, TSS <u>Organic Parameters</u> Carbon tetrachloride Chlorobenzene 1,1-dichloroethylene 1,1-dichloroethane Methylene chloride 1,1,2,2-tetrachloroethane Toluene 1,1,1-trichloroethane <u>Metals</u> TCLP metals Arsenic Barium Cadmium Chromium Lead Mercury Selenium Silver Calcium Magnesium Potassium <u>Field Analyses</u> pH, SC, temperature, chloride, Eh, alkalinity, total Fe, specific gravity

Note: Because of the lack of sophisticated weights and measures equipment available for field density assessment, field density evaluations are expressed in terms of specific gravity, which is a unitless measure.

FIGURES

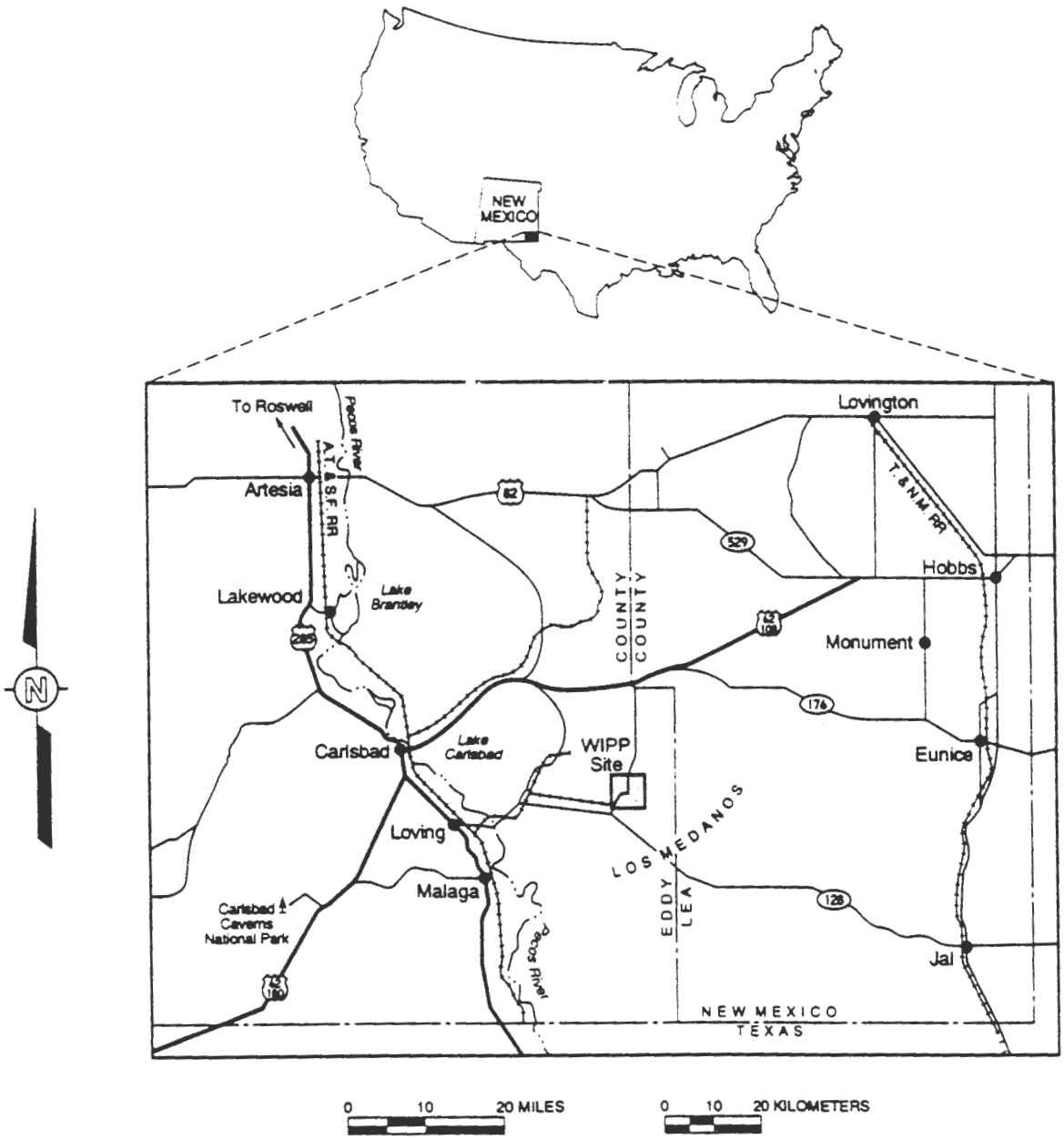


Figure D18-1
General Location of the WIPP Facility

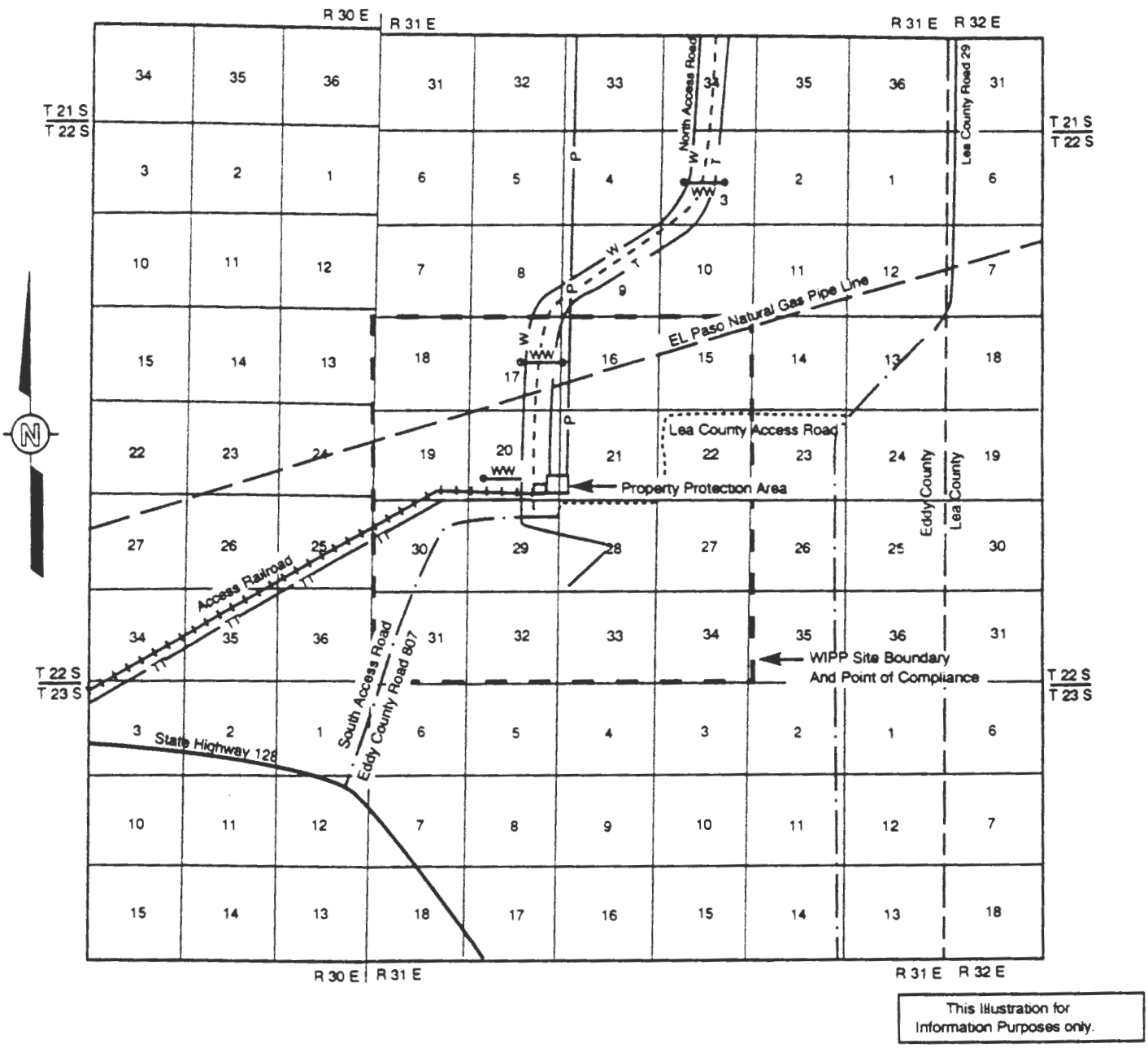


Figure D18-2

WIPP Facility Boundary Showing 16 Square-Mile Land Withdrawal Boundary and Point of Compliance

System	Series	Group	Formation	Member
Recent	Recent		Surficial Deposits	
Quaternary	Pliestocene		Mescalero Caliche	
			Gatuña	
Tertiary	Mid-Pliocene		Ogallala	
Triassic		Dockum	Santa Rosa	
Permian	Ochoan		Dewey Lake	
			Rustler	Forty-niner
				Magenta
				Tamarisk
				Culebra
				Unnamed lower
			Salado	Upper
				McNutt Potash
				Lower
			Castile	
	Guadalupian	Delaware Mountain	Bell Canyon	
			Cherry Canyon	
			Brushy Canyon	

Figure D18-3
Site Geologic Column

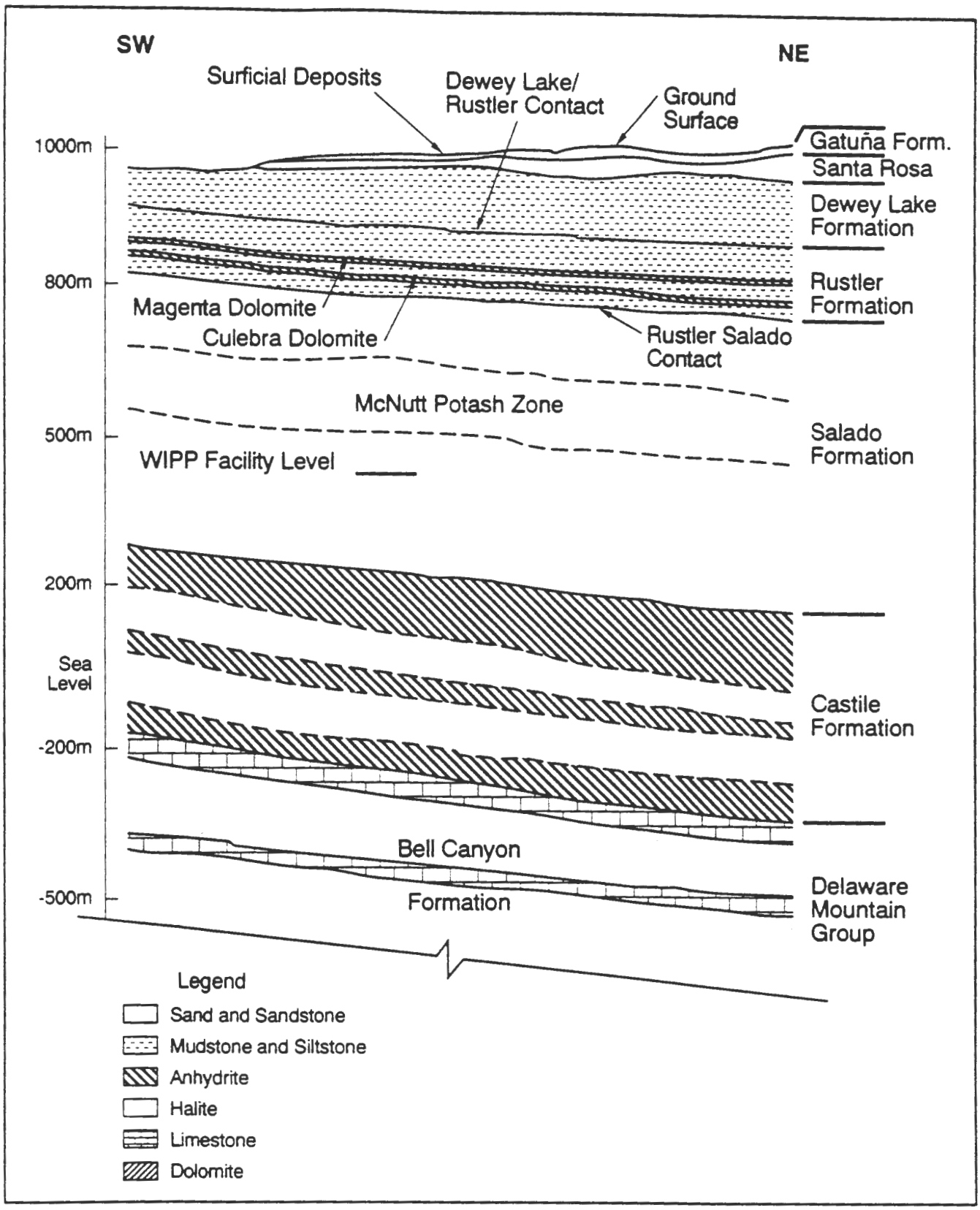


Figure D18-4
Generalized Stratigraphic Cross Section above Bell Canyon Formation at WIPP Site

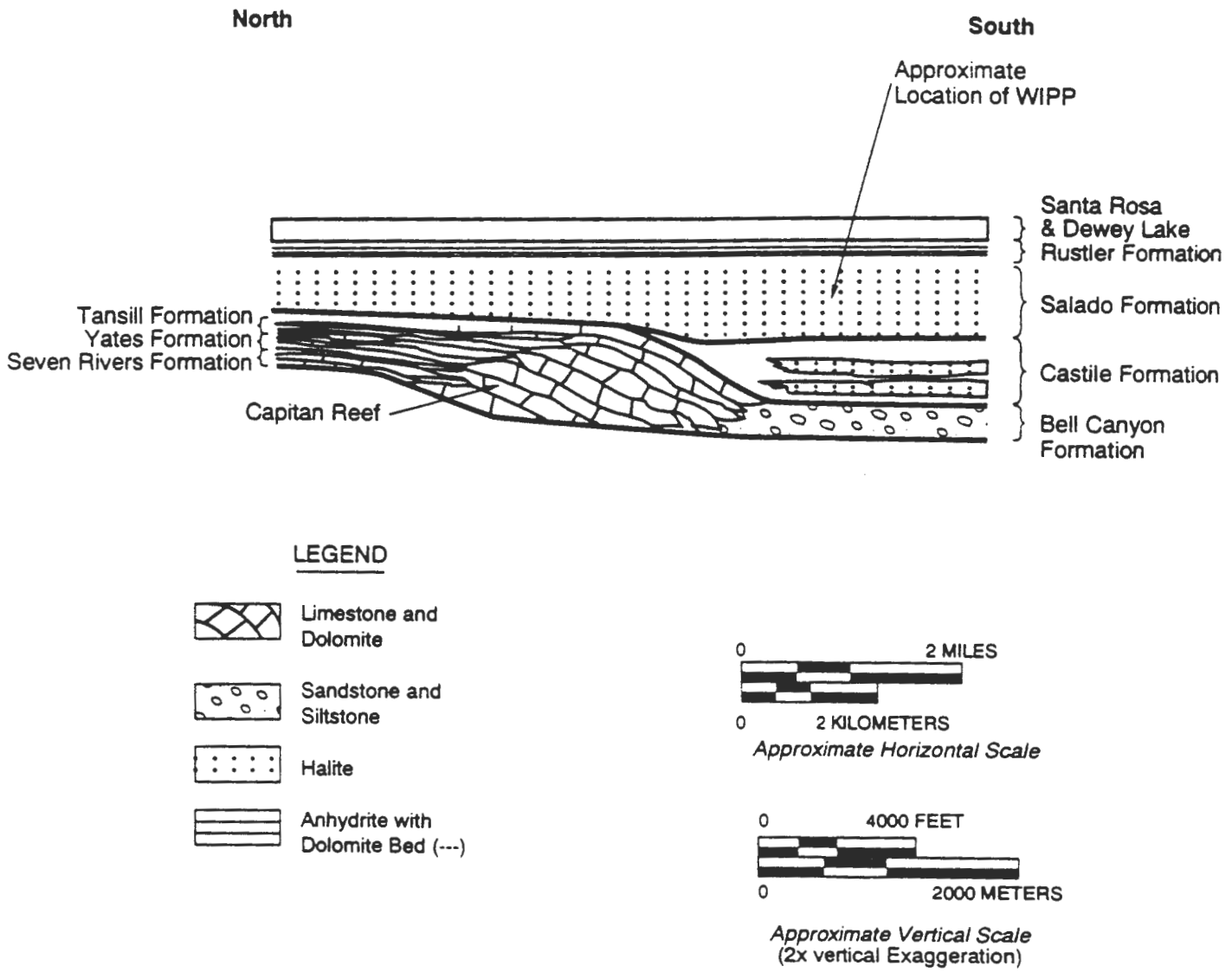
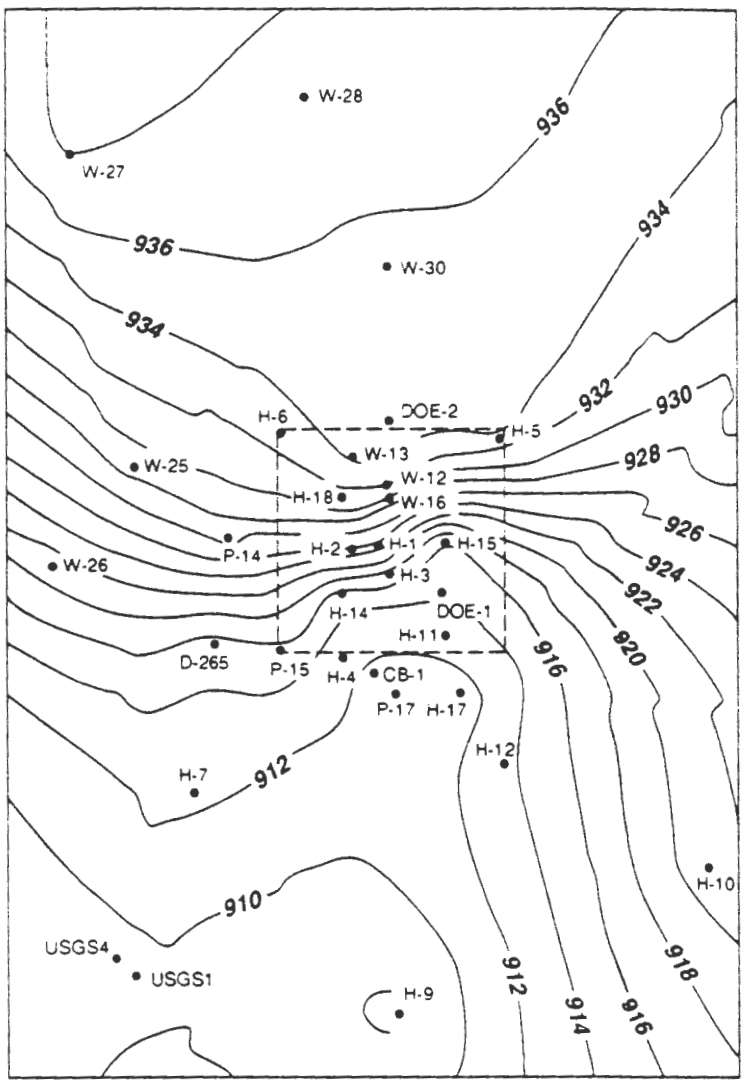


Figure D18-5
Schematic North-South Cross-Section through the North Delaware Basin



Source: Jones et al. 1992. Figure 2-5

• Observation Well

Freshwater Heads in meters above mean sea level

Contour Interval: 2 meters

0 4 8 kilometers

0 4 8 miles

SCALE

Figure D18-6
Culebra Freshwater-Head Contour Surface

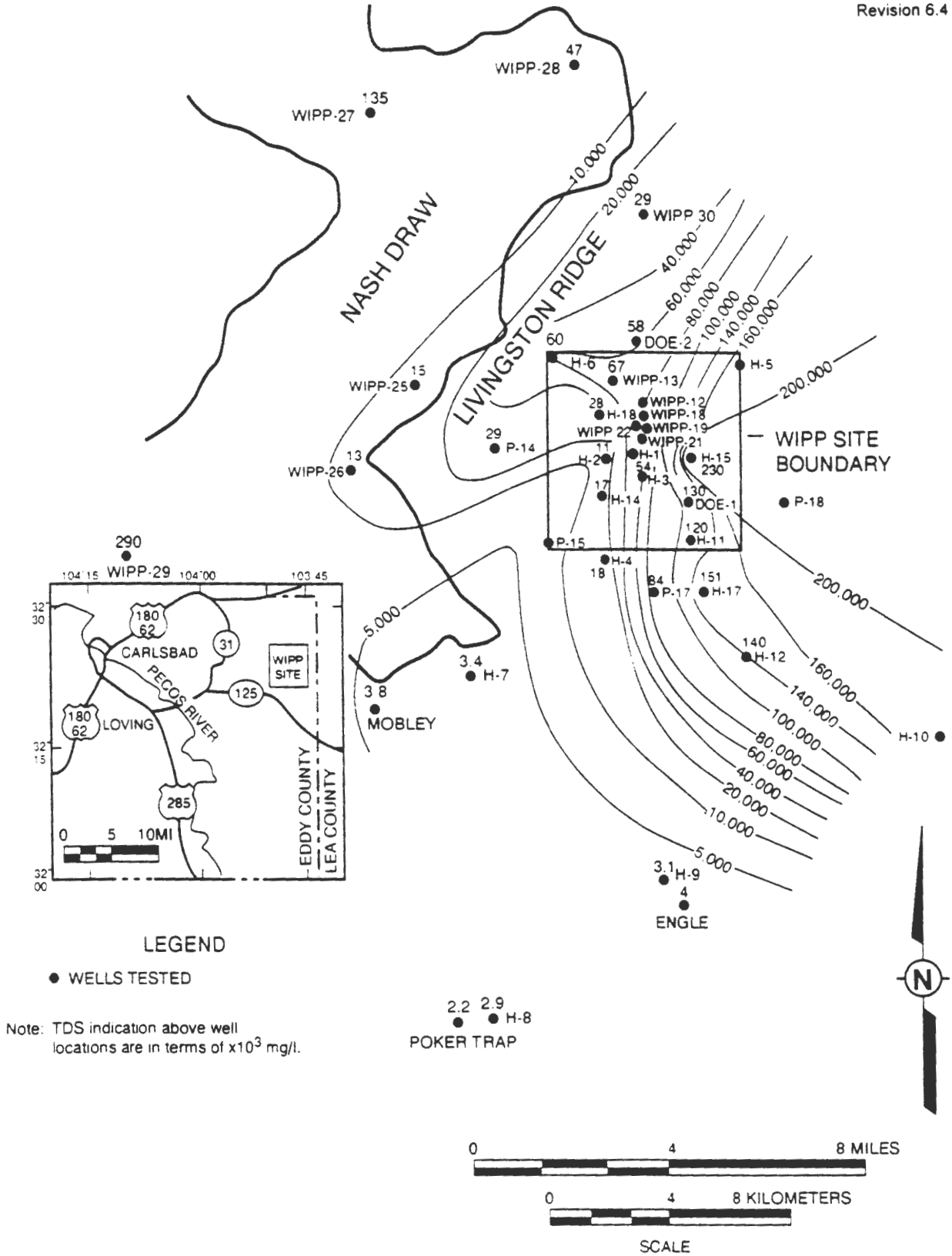


Figure 18-7
Total Dissolved Solids Distribution in the Culebra

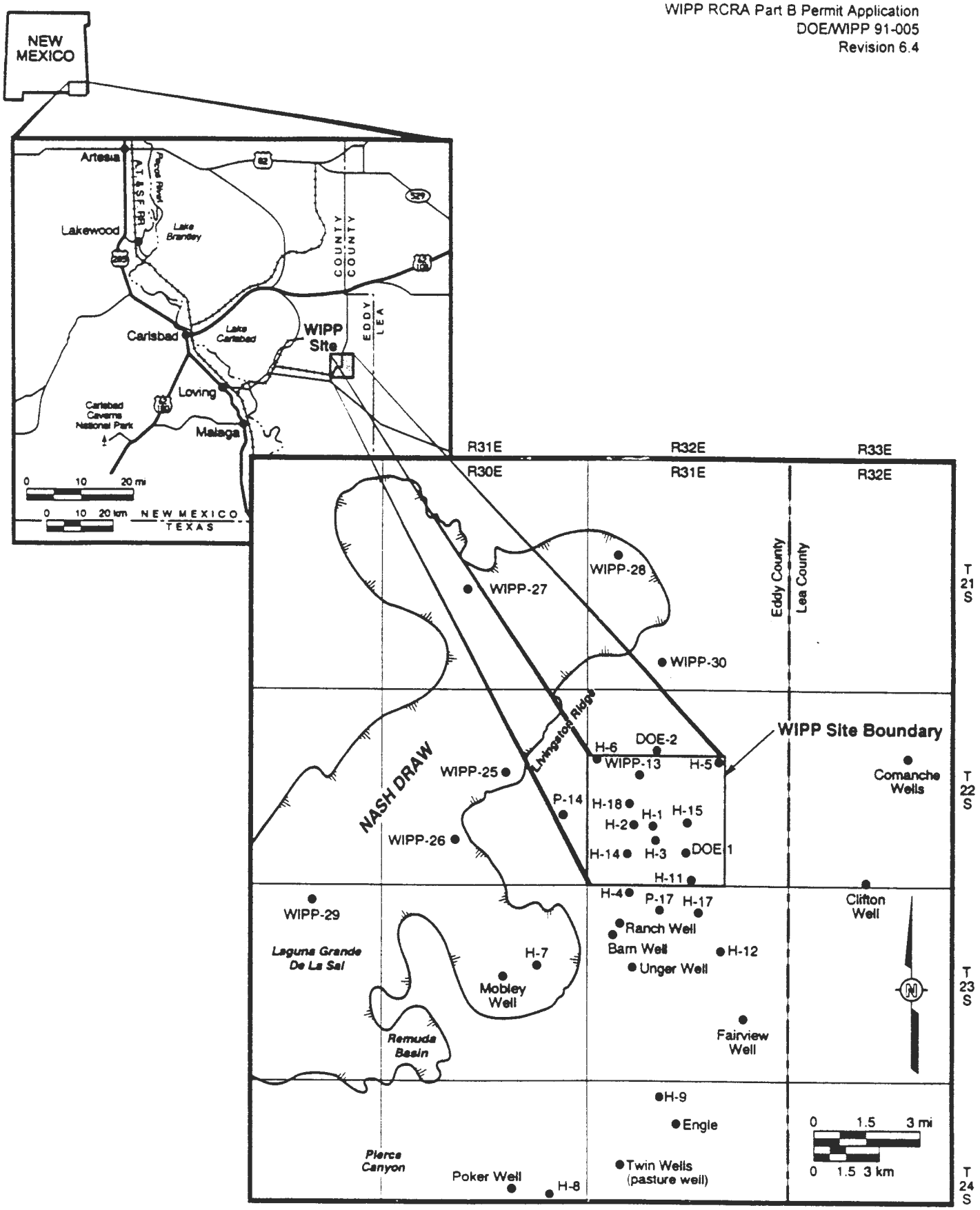
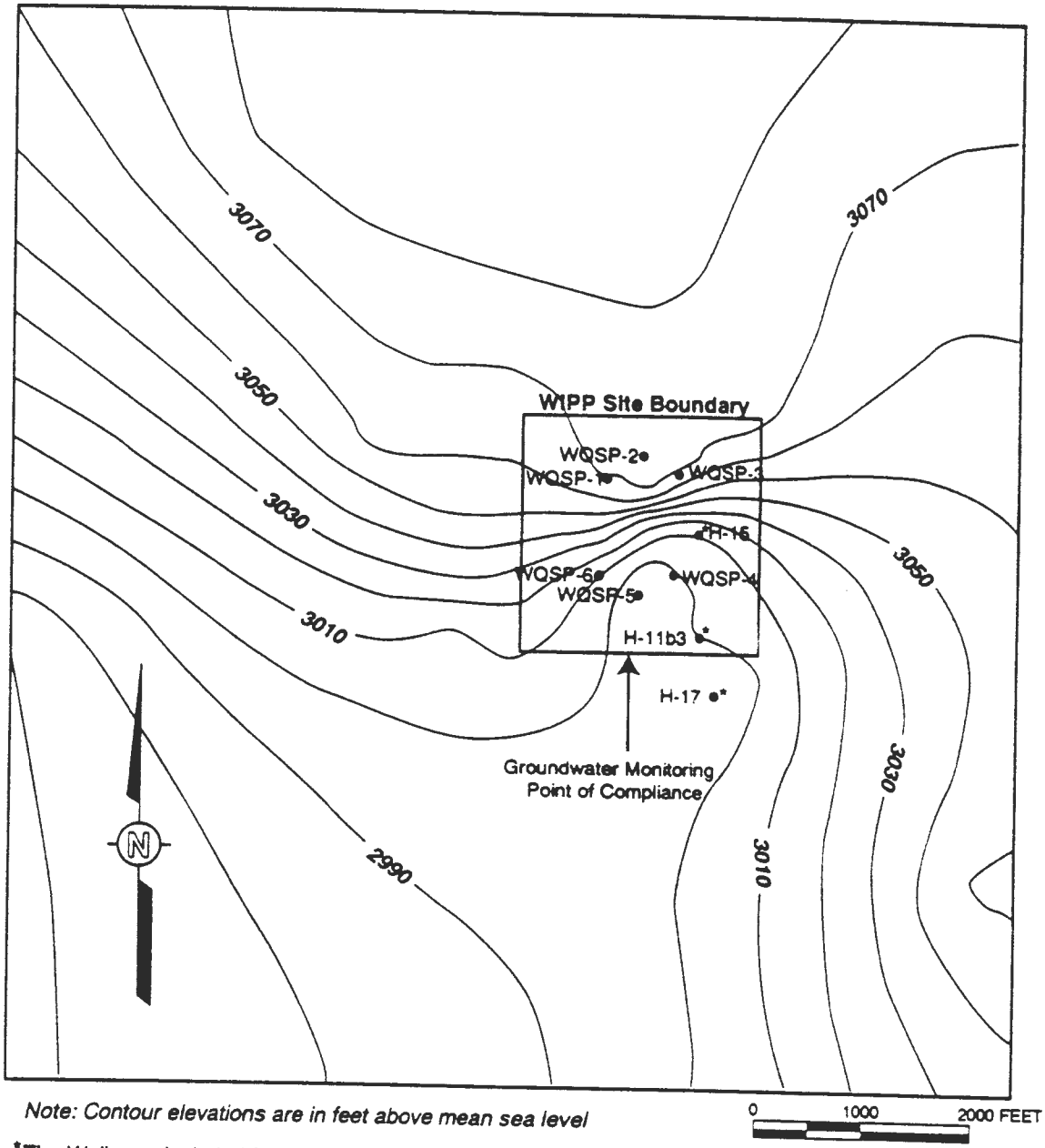


Figure D18-8
WQSP Monitor Well Locations

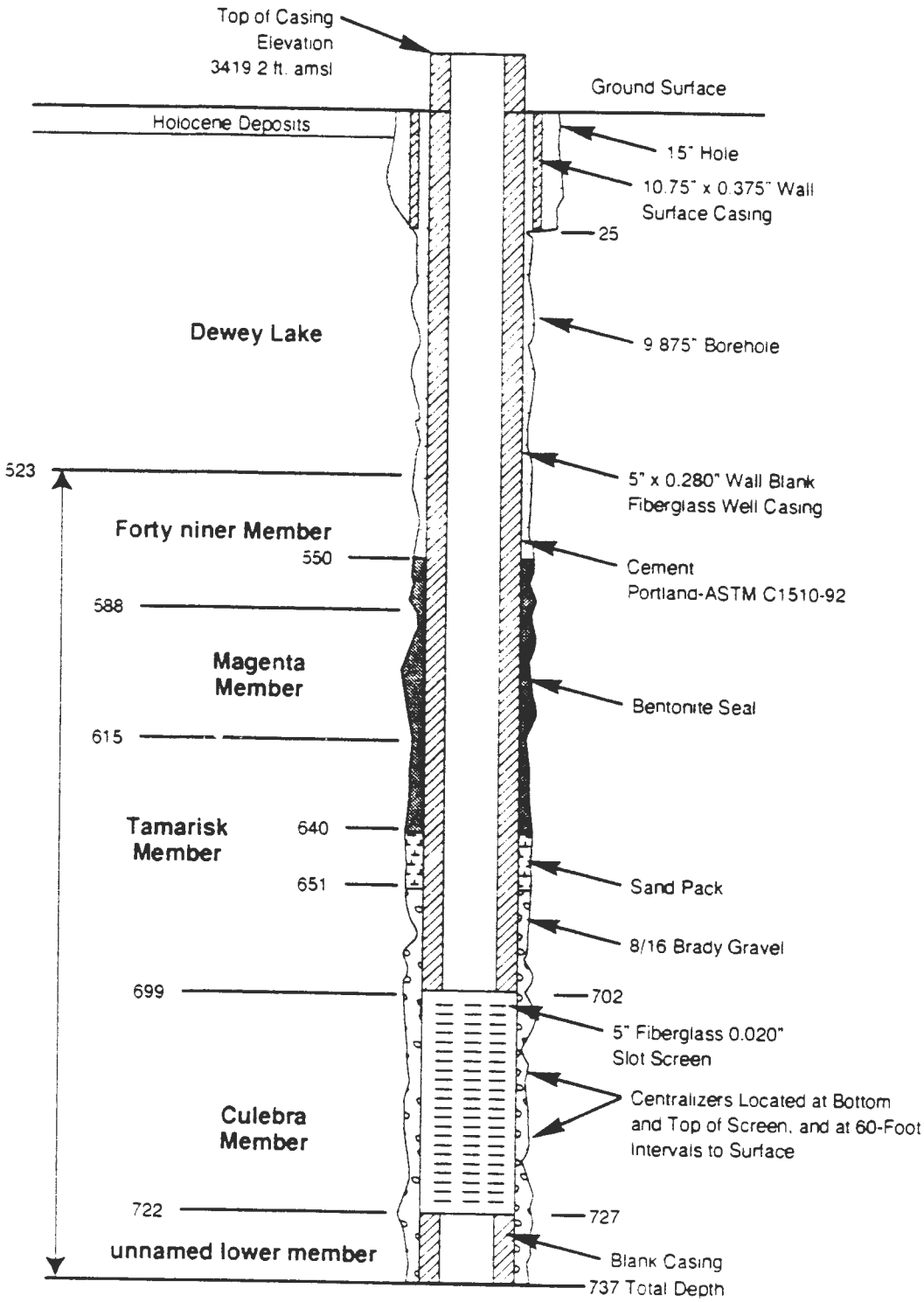


Note: Contour elevations are in feet above mean sea level

*The Wells are included for reference only–they are not part of GMP

Figure D18-9

WIPP GMP Monitor Well Locations and Potentiometric Surface of the Culebra Dolomite Member of the Rustler Formation Near the WIPP Site as of 12/96 (adjusted to equivalent freshwater head)



Note: Depths in feet bgs approximate
Not to Scale

Figure D18-10
As-Built Configuration of Well WQSP-1

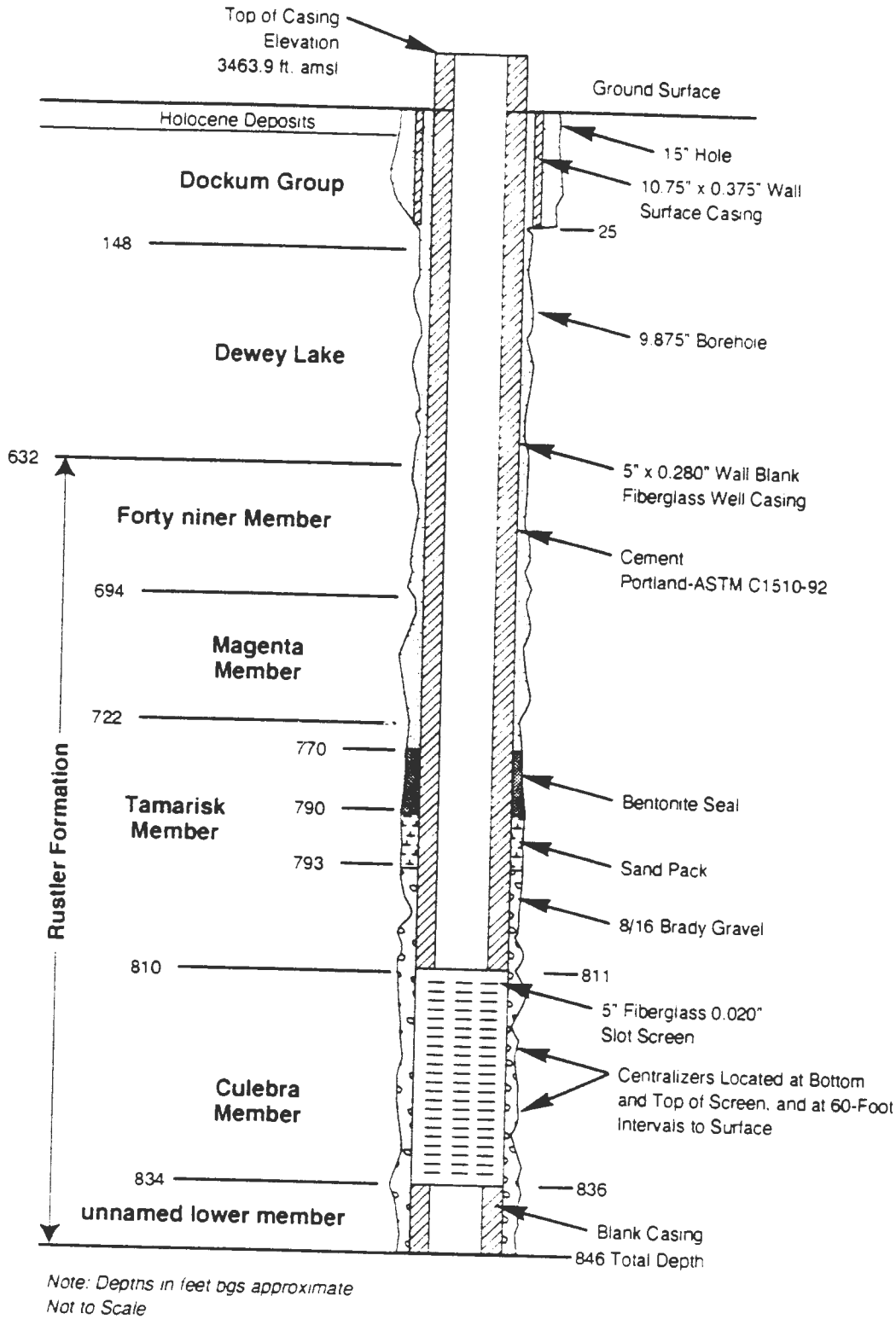
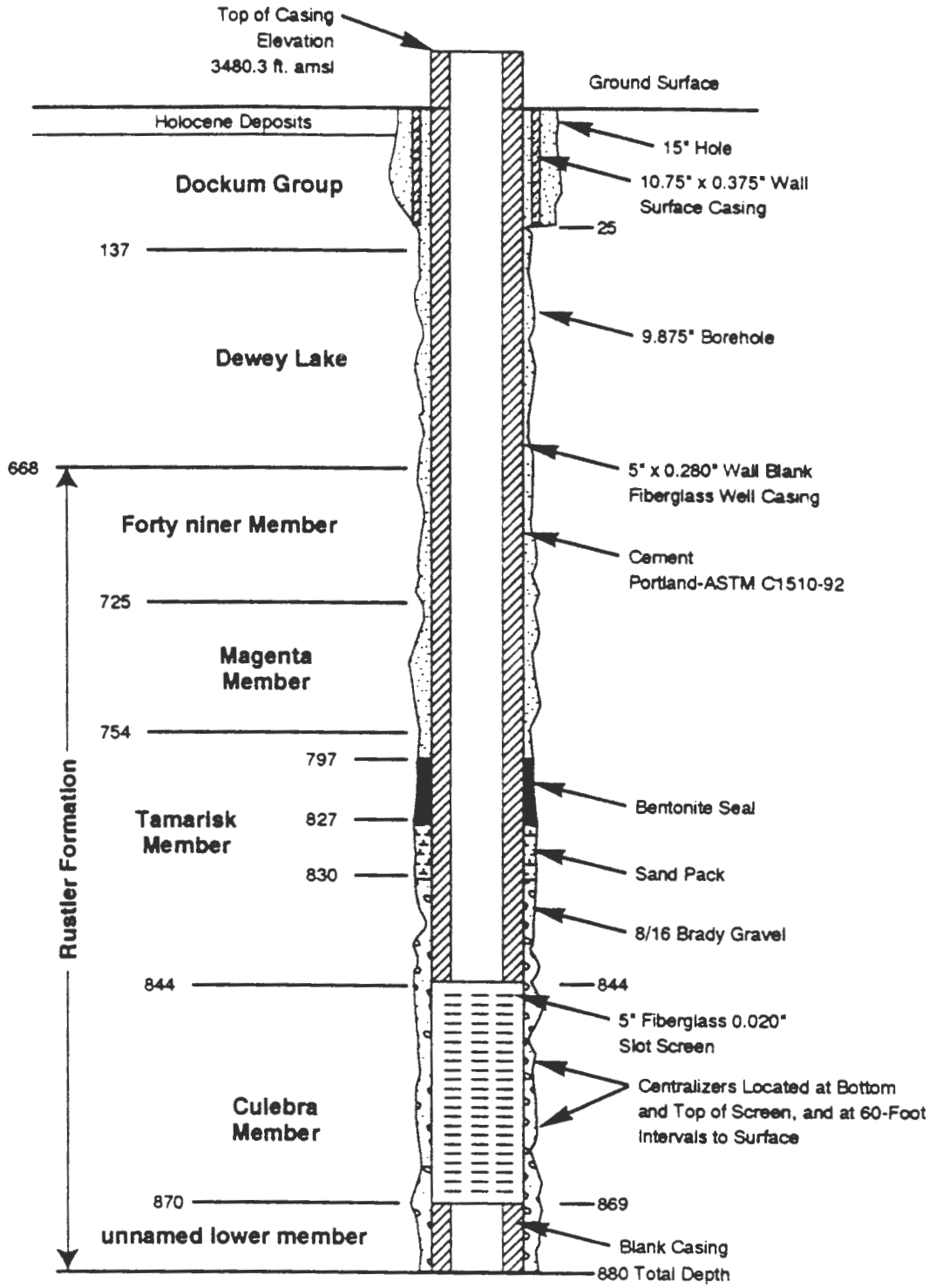
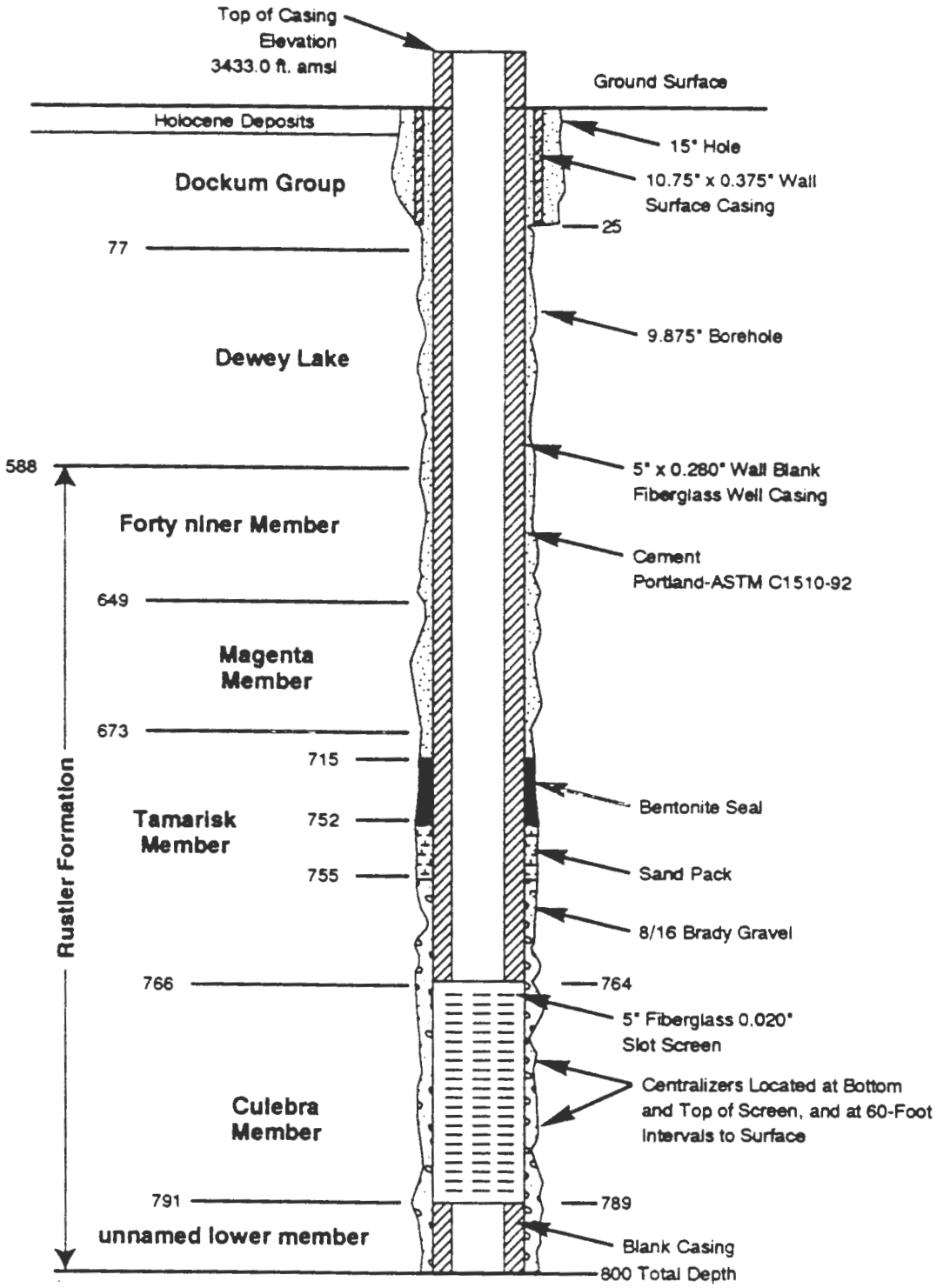


Figure D18-11
As-Built Configuration of Well WQSP-2



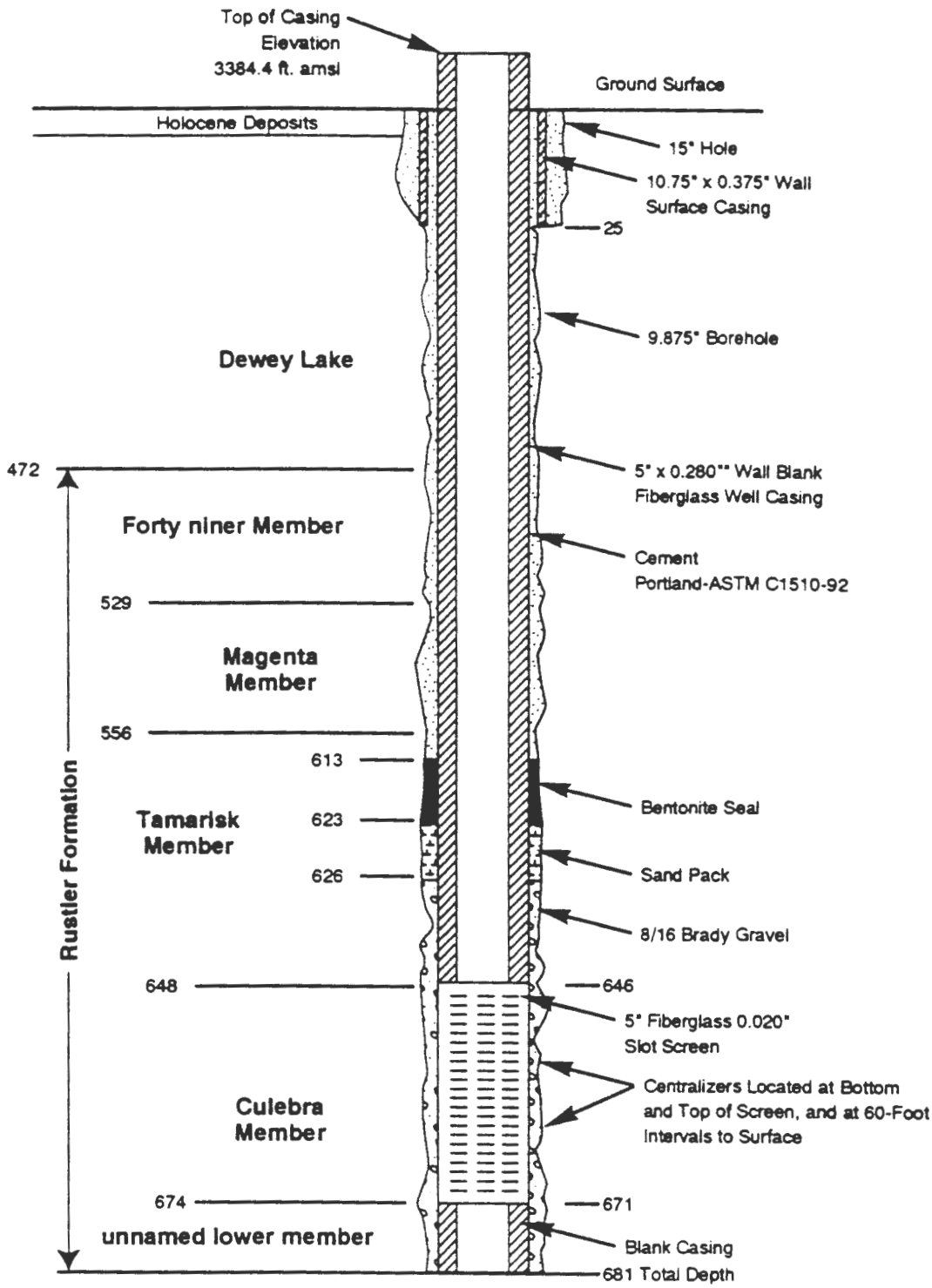
Note: Depths in feet bgs approximate
Not to Scale

Figure D18-12
As-Built Configuration of Well WQSP-3



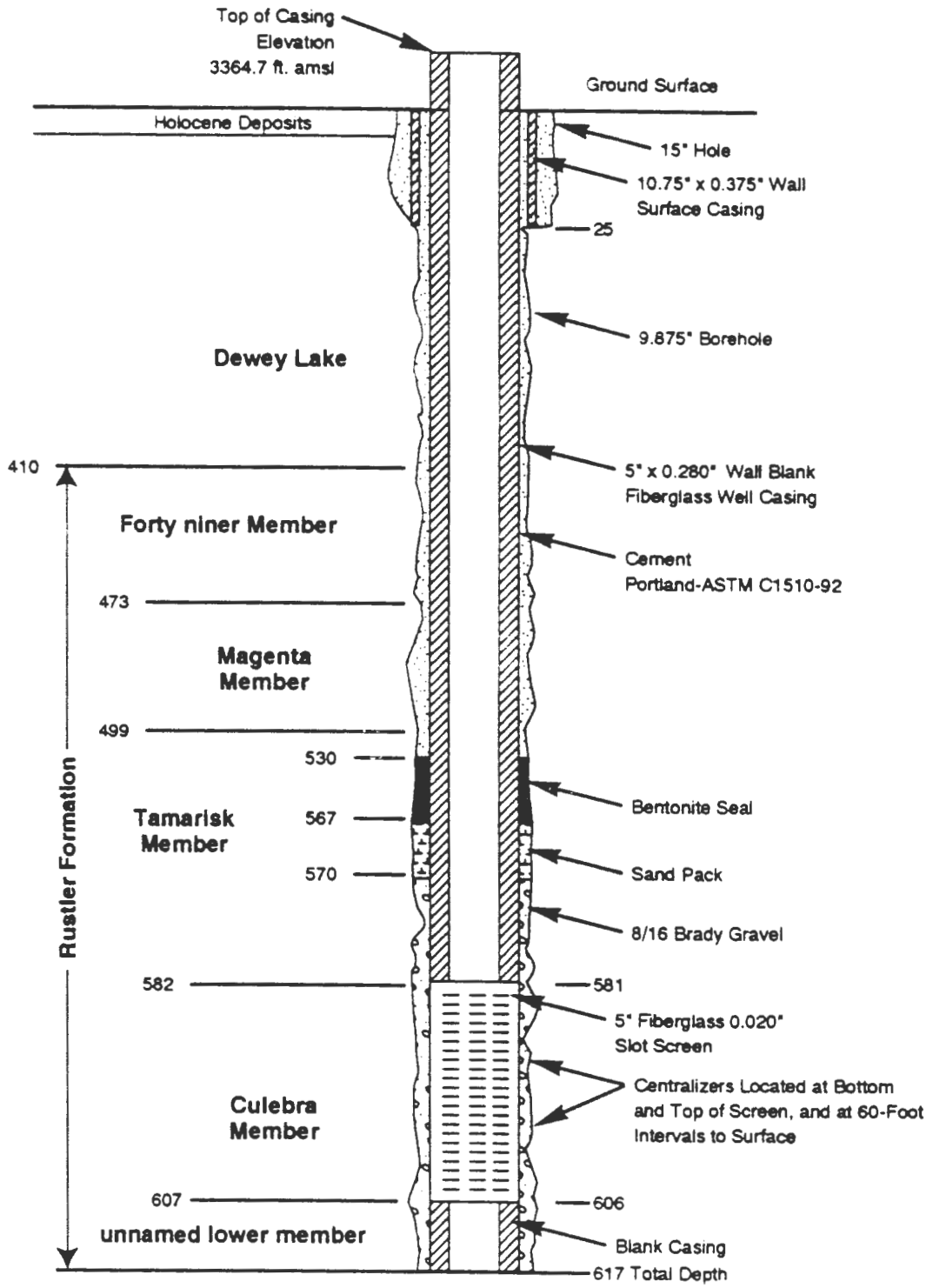
Note: Depths in feet bgs approximate
Not to Scale

Figure D18-13
As-Built Configuration of Well WQSP-4



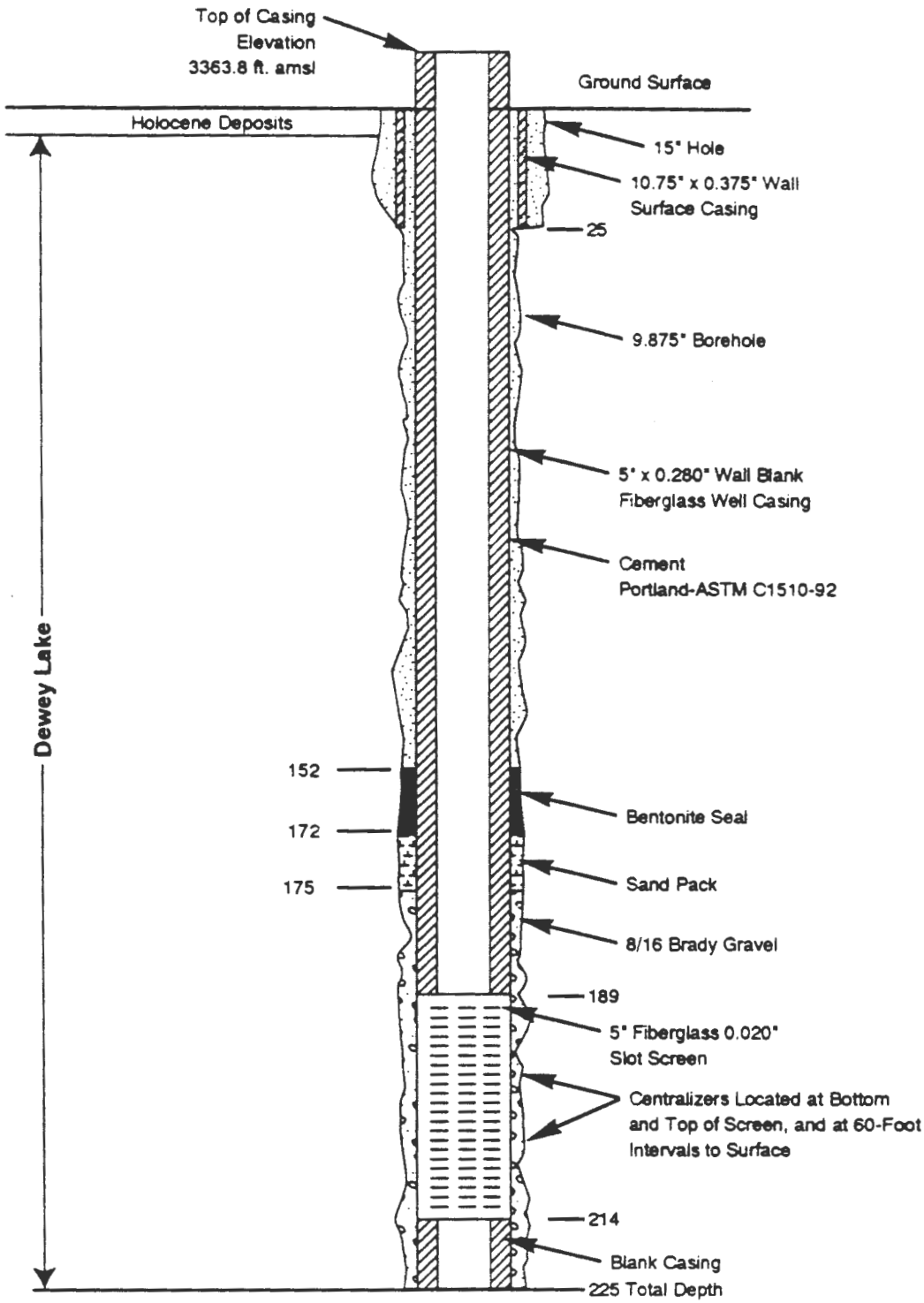
Note: Depths in feet bgs approximate
Not to Scale

Figure D18-14
As-Built Configuration of Well WQSP-5



Note: Depths in feet bgs approximate
Not to Scale

Figure D18-15
As-Built Configuration of Well WQSP-6



Note: Depths in feet bgs approximate
Not to Scale

Figure D18-16
As-Built Configuration of Well WQSP-6A

Chain of Custody Record

WASTE ISOLATION PILOT PLANT
WESTINGHOUSE ELECTRIC CORP.
P.O. BOX 2078
CARLSBAD, NM 88221-2078

C of C Control No. _____

RFA Control No. _____

SAMPLING PROGRAM _____ LAB DESTINATION _____

SAMPLE TEAM MEMBERS _____ CARRIER/WAYBILL NO. _____

Sample Number	Sample Location and Description	Date and Time Collected	Sample Type	Container Type	Condition on Receipt (Name and Date)	Disposal Record No

Special Instructions _____

Possible Sample Hazards: _____

Signatures: (Name, Company, Date and Time: _____

1. Relinquished By: _____
   Received By: _____
2. Relinquished By: _____
   Received By: _____
3. Relinquished By: _____
   Received By: _____
4. Relinquished By: _____
   Received By: _____

WHITE-Original, to accompany samples YELLOW-Field Copy PINK-Other

Figure D18-17a

Chain of Custody Record

760336 09 01 00 00 A11
5/26/97

REQUEST FOR ANALYSIS

RFA Control No. _____

C of C Control No. _____

WASTE ISOLATION PILOT PLANT
WESTINGHOUSE ELECTRIC CORP.
P.O. BOX 2078
CARLSBAD, NM 88221-2078

DATE SAMPLES SHIPPED _____

LAB DESTINATION _____

LABORATORY CONTRACT _____

SEND LAB REPORT TO _____

_____

DATE REPORT REQUIRED _____

SAMPLING PROGRAM _____

PROJECT CONTACT _____

SAMPLE TEAM MEMBERS _____

PROJECT CONTACT PHONE NO. _____

Sample Number	Sample Type	Sample Quantity	Preservative	Req't Testing Program	Special Instructions

TURNAROUND TIME REQUIRED: (Rush must be approved by appropriate Manger) NORMAL ___ RUSH ___ (Subject to rush Surcharge)
POSSIBLE HAZARD IDENTIFICATION (Please indict if samples are hazardous materials and/or suspected to contain high levels of hazardous substance.)
NONHAZARD___ FLAMMABLE ___ SKIN IRRITANT_____ HIGHLY TOXIC_____BIOLOGICAL_____OTHER _____
SAMPLE DISPOSAL: (Please indicate disposition of sample following analysis.) RETURN TO CLIENT_____ DISPOSAL BY LAB_____

FOR LAB USE ONLY_____
RECEIVED BY: _____ DATE/TIME _____

WHITE-Original, to accompany samples YELLOW-Field Copy PINK-Other

Figure D18-17b

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6/26/97

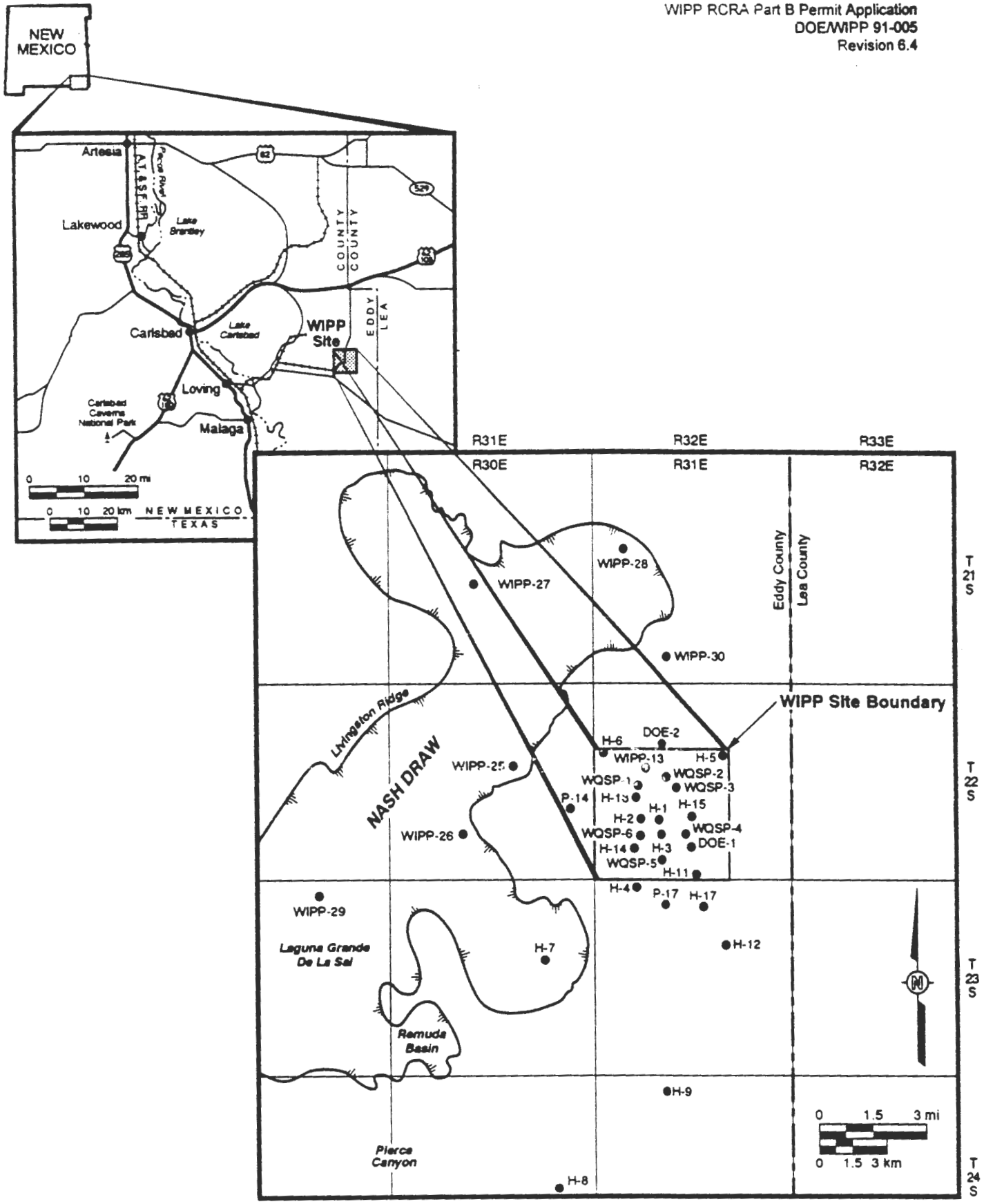

Figure D18-18
Water Level Monitoring Locations

ATTACHMENT A
GMP WATER QUALITY DATA TO DATE

TABLE D-18A-1
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-1

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
SPECIFIC CONDUCTANCE	umhos/cm		83600.0000		84900.0000		80100.0000
SULFATE	mg/l		5360.0000		5540.0000		4935.0000
TOTAL DISS SOLIDS	mg/l		77500.0000		64900.0000		67800.0000
TOTAL SUSP SOLIDS	mg/l	<	10.0000		19.0000		30.5000
DENSITY	g/mL		1.0530		1.0460		1.0475
pH	SU		7.1000		7.2850		7.2350
ALKALINITY	mg/l		47.0000		52.5000		50.1000
BROMIDE	mg/l		45.0000		35.4000		41.1500
CHLORIDE	mg/l		34750.0000		33250.0000		37100.0000
FLUORIDE	mg/l	<	2.0000		1.4400		1.0650
IODIDE	mg/l	<	2.0000	<	2.0000	<	2.0000
NITROGEN, NO3 (AS N)	mg/l	<	0.0100	<	0.2000	<	0.1000
TOTAL ORGANIC CARBON	mg/l		1.4800		1.3100		1.0250
TOTAL ORGANIC HALOGENS	mg/l		0.0255		0.0365		0.0434
ORTHOPHOSPHATE (AS P)	mg/l	<	0.0200	<	0.0200	<	0.0200
BORON	mg/l		13.8000		11.5500		12.4000
CALCIUM	mg/l		1685.0000		1700.0000		1705.0000
IRON	mg/l	<	1.0000	<	0.5000	<	0.5000
LITHIUM	mg/l		0.4155		0.3580		0.4065
MAGNESIUM	mg/l		1095.0000		1045.0000		1001.0000
POTASSIUM	mg/l		485.5000		470.5000		461.0000
SILICA	mg/l		9.3350		10.3000		10.3000
SODIUM	mg/l		19950.0000		18350.0000		18650.0000
FREON-113	mg/l	<	0.0050	<	0.0050	<	0.0050
CYANIDE	mg/l			<	0.0100	<	0.0100
SULFIDE	mg/l			<	1.5000	<	1.5000

TABLE D-18A-1
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-1

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
ANTIMONY	mg/l			<	0.0130	<	0.0130
ARSENIC	mg/l	<	0.0055	<	0.0130	<	0.0130
BARIUM	mg/l	<	0.0400		0.0240		0.0260
BERYLLIUM	mg/l	<	0.0200	<	0.0025	<	0.0025
CADMIUM	mg/l			<	0.0025	<	0.0025
CHROMIUM	mg/l	<	0.0025	<	0.0250	<	0.0250
COBALT	mg/l			<	0.0130	<	0.0130
COPPER	mg/l			<	0.0130	<	0.2500
LEAD	mg/l	<	0.0130	<	0.0130	<	0.0130
MERCURY	mg/l	<	0.0002	<	0.0020	<	0.0020
NICKEL	mg/l			<	0.0250	<	0.0250
SELENIUM	mg/l	<	0.0100	<	0.0130	<	0.0130
SILVER	mg/l	<	0.0025	<	0.0130	<	0.0130
THALLIUM	mg/l			<	0.0130	<	0.0130
TIN	mg/l			<	0.0250	<	0.0250
VANADIUM	mg/l			<	0.0250	<	0.0250
ZINC	mg/l			<	0.0500	<	0.0500
ACETONE	ug/l			<	10.0000	<	10.0000
ACETONITRILE	ug/l			<	50.0000	<	50.0000
ACROLEIN	ug/l			<	10.0000	<	10.0000
ACRYLONITRILE	ug/l			<	10.0000	<	10.0000
BENZENE	ug/l			<	5.0000	<	5.0000
DICHLOROBROMOMETHANE	ug/l			<	5.0000	<	5.0000
BROMOFORM	ug/l			<	5.0000	<	5.0000
METHYL BROMIDE	ug/l			<	10.0000	<	10.0000
2-BUTANONE	ug/l			<	10.0000	<	10.0000
CARBON DISULFIDE	ug/l			<	5.0000	<	5.0000

TABLE D-18A-1
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-1

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
CARBON TETRACHLORIDE	ug/l	<	5.0000	<	5.0000	<	5.0000
CHLOROBENZENE	ug/l			<	5.0000	<	5.0000
CHLOROPRENE	ug/l			<	5.0000	<	5.0000
CHLOROETHANE	ug/l			<	10.0000	<	10.0000
CHLOROFORM	ug/l			<	5.0000	<	5.0000
METHYL CHLORIDE	ug/l			<	10.0000	<	10.0000
ALLYL CHLORIDE	ug/l			<	5.0000	<	5.0000
DIBROMOCHLOROMETHANE	ug/l			<	5.0000	<	5.0000
1,2-DIBROMO-3-CHLOROPROPANE	ug/l			<	5.0000	<	5.0000
1,2-DIBROMOETHANE	ug/l			<	5.0000	<	5.0000
TRANS-1,4-DICHLORO-2-BUTENE	ug/l			<	5.0000	<	5.0000
DICHLORODIFLUOROMETHANE	ug/l			<	10.0000	<	10.0000
1,1-DICHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,2-DICHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,1-DICHLOROETHYLENE	ug/l			<	5.0000	<	5.0000
TRANS-1,2-DICHLOROETHYLENE	ug/l			<	5.0000	<	5.0000
1,2-DICHLOROPROPANE	ug/l			<	5.0000	<	5.0000
CIS-1,3-DICHLOROPROPENE	ug/l			<	5.0000	<	5.0000
TRANS-1,3-DICHLOROPROPENE	ug/l			<	5.0000	<	5.0000
ETHYLBENZENE	ug/l			<	5.0000	<	5.0000
ETHYL METHACRYLATE	ug/l			<	5.0000	<	5.0000
2-HEXANONE	ug/l			<	10.0000	<	10.0000
METHYL IODIDE	ug/l			<	5.0000	<	5.0000
METHACRYLONITRILE	ug/l			<	5.0000	<	5.0000
METHYLENE BROMIDE	ug/l			<	5.0000	<	5.0000
METHYLENE CHLORIDE	ug/l		1.6500	<	5.0000	<	5.0000
METHYL METHACRYLATE	ug/l			<	5.0000	<	5.0000

TABLE D-18A-1
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-1

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
4-METHYL-2-PENTANONE	ug/l			<	10.0000	<	10.0000
PROPIONITRILE	ug/l			<	20.0000	<	20.0000
STYRENE	ug/l			<	5.0000	<	5.0000
1,1,1,2-TETRACHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,1,2,2-TETRACHLOROETHANE	ug/l			<	5.0000	<	5.0000
TETRACHLOROTEHYLENE	ug/l			<	5.0000	<	5.0000
TOLUENE	ug/l			<	5.0000	<	5.0000
1,1,1-TRICHLOROETHANE	ug/l	<	5.0000	<	5.0000	<	5.0000
1,1,2-TRICHLOROETHANE	ug/l			<	5.0000	<	5.0000
TRICHLOROETHYLENE	ug/l	<	5.0000	<	5.0000	<	5.0000
TRICHLOROFLUOROMETHANE	ug/l			<	5.0000	<	5.0000
1,2,3-TRICHLOROPROPANE	ug/l			<	5.0000	<	5.0000
VINYL ACETATE	ug/l			<	10.0000	<	20.0000
VINYL CHLORIDE	ug/l			<	10.0000	<	10.0000
XYLENE	ug/l			<	10.0000	<	10.0000
1,4-DIOXANE	ug/l			<	410.0000	<	410.0000
ISOBUTYL ALCOHOL	ug/l			<	320.0000	<	320.0000
ACENAPHTHENE	ug/l			<	10.0000	<	10.0000
ACENAPHTHYLENE	ug/l			<	10.0000	<	10.0000
ACETOPHENONE	ug/l			<	10.0000	<	10.0000
2-ACETYLAMINOFLUORENE	ug/l			<	10.0000	<	10.0000
4-AMINOBIPHENYL	ug/l			<	10.0000	<	10.0000
ANILINE	ug/l			<	10.0000	<	10.0000
ANTHRACENE	ug/l			<	10.0000	<	10.0000
ARAMITE	ug/l			<	10.0000	<	10.0000
1,2-BENZANTHRACENE	ug/l			<	10.0000	<	10.0000
3,4-BENZOFLUORANTHENE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-1
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-1

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
BENZO[K]FLUORANTHENE	ug/l			<	10.0000	<	10.0000
BENZO[GHI]PERYLENE	ug/l			<	10.0000	<	10.0000
BENZO[A]PYRENE	ug/l			<	10.0000	<	10.0000
BENZYL ALCOHOL	ug/l			<	20.0000	<	20.0000
BIS(2-CHLOROETHOXY)METHANE	ug/l			<	10.0000	<	10.0000
BIS(2-CHLOROETHYL)ETHER	ug/l			<	10.0000	<	10.0000
BIS(2-CHLORO-1-METHYLETHYL)ETHER	ug/l			<	10.0000	<	10.0000
BIS(2-ETHYLHEXYL)PHTHALATE	ug/l				17.8000	<	10.0000
4-BROMOPHENYL PHENYL ETHER	ug/l			<	10.0000	<	10.0000
BENZYL BUTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
4-CHLOROANILINE	ug/l			<	10.0000	<	10.0000
CHLOROBENZILATE	ug/l			<	10.0000	<	10.0000
P-CHLORO-M-CRESOL	ug/l			<	10.0000	<	10.0000
2-CHLORONAPHTHALENE	ug/l			<	10.0000	<	10.0000
2-CHLOROPHENOL	ug/l			<	10.0000	<	10.0000
4-CHLOROPHENYL PHENYL ETHER	ug/l			<	10.0000	<	10.0000
CHRYSENE	ug/l			<	10.0000	<	10.0000
DIALLATE	ug/l			<	10.0000	<	10.0000
DIBENZ[A,H]ANTHRACENE	ug/l			<	10.0000	<	10.0000
DIBENZOFURAN	ug/l			<	10.0000	<	10.0000
DI-N-BUTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
1,2-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
1,3-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
1,4-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
DCB	ug/l			<	20.0000	<	20.0000
2,4-DICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
2,6-DICHLOROPHENOL	ug/l			<	10.0000	<	10.0000

TABLE D-18A-1
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-1

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
DIETHYL PHTHALATE	ug/l			<	10.0000	<	10.00
P-(DIMETHYLAMINO)AZOBENZENE	ug/l			<	10.0000	<	10.00
7,12-DIMETHYLBENZ[A]ANTHRACENE	ug/l			<	10.0000	<	10.00
O-TOLIDINE	ug/l			<	10.0000	<	10.00
A,A-DIMETHYLPHENETHYLAMINE	ug/l			<	10.0000	<	10.00
2,4-DIMETHYLPHENOL	ug/l			<	10.0000	<	10.00
DIMETHYL PHTHALATE	ug/l			<	10.0000	<	10.00
1,3-DINITROBENZENE	ug/l			<	10.0000	<	10.00
4,6-DINITRO-O-CRESOL	ug/l			<	50.0000	<	50.00
2,4-DINITROPHENOL	ug/l			<	50.0000	<	50.00
2,4-DINITROTOLUENE	ug/l			<	10.0000	<	10.00
2,6-DINITROTOLUENE	ug/l			<	10.0000	<	10.00
DINOSEB	ug/l			<	10.0000	<	10.00
DI-N-OCTYL PHTHALATE	ug/l			<	10.0000	<	10.00
DIPHENYLAMINE	ug/l			<	10.0000	<	10.00
ETHYL METHANESULFONATE	ug/l			<	10.0000	<	10.00
FLUORANTHENE	ug/l			<	10.0000	<	10.00
FLUORENE	ug/l			<	10.0000	<	10.00
HEXACHLOROBENZENE	ug/l			<	10.0000	<	10.00
HEXACHLOROBUTADIENE	ug/l			<	10.0000	<	10.00
HEXACHLOROCYCLOPENTADIENE	ug/l			<	10.0000	<	10.00
HEXACHLOROETHANE	ug/l			<	10.0000	<	10.00
HEXACHLOROPHENE	ug/l			<	10.0000	<	10.00
HEXACHLOROPROPENE	ug/l			<	10.0000	<	10.00
INDENO(1,2,3-CD)PYRENE	ug/l			<	10.0000	<	10.00
ISOPHORONE	ug/l			<	10.0000	<	10.00
ISOSAFROLE	ug/l			<	10.0000	<	10.00

TABLE D-18A-1
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-1

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
METHAPYRILENE	ug/l			<	10.0000	<	10.0000
3-METHYLCHOLANTHRENE	ug/l			<	10.0000	<	10.0000
METHYL METHANESULFONATE	ug/l			<	10.0000	<	10.0000
2-METHYLNAPHTHALENE	ug/l			<	10.0000	<	10.0000
2-MEYTHLPHENOL	ug/l			<	10.0000	<	10.0000
3+4-METHYLPHENOL	ug/l			<	10.0000	<	10.0000
NAPHTHALENE	ug/l			<	10.0000	<	10.0000
1,4-NAPHTHOQUINONE	ug/l			<	200.0000	<	200.0000
1-NAPHTHYLAMINE	ug/l			<	10.0000	<	10.0000
2-NAPHTHYLAMINE	ug/l			<	10.0000	<	10.0000
O-NITROANILINE	ug/l			<	50.0000	<	50.0000
M-NITROANILINE	ug/l			<	50.0000	<	50.0000
P-NITROANILINE	ug/l			<	50.0000	<	50.0000
NITROBENZENE	ug/l			<	10.0000	<	10.0000
2-NITROPHENOL	ug/l			<	10.0000	<	10.0000
4-NITROPHENOL	ug/l			<	10.0000	<	10.0000
4-NITROQUINOLINE-1-OXIDE	ug/l			<	20.0000	<	20.0000
N-NITROSODI-N-BUTYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIMETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIPHENYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIPROPYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSOMETHYLETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSOMORPHOLINE	ug/l			<	10.0000	<	10.0000
N-NITROSOPIPERIDINE	ug/l			<	10.0000	<	10.0000
N-NITROSOPYRROLIDINE	ug/l			<	10.0000	<	10.0000
5-NITRO-O-TOLUIDINE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-1
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-1

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
PENTACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
PENTACHLOROETHANE	ug/l			<	10.0000	<	10.0000
PENTACHLORONITROBENZENE	ug/l			<	10.0000	<	10.0000
PENTACHLOROPHENOL	ug/l			<	50.0000	<	50.0000
PHENACETIN	ug/l			<	10.0000	<	10.0000
PHENANTHRENE	ug/l			<	10.0000	<	10.0000
PHENOL (TOTAL)	ug/l			<	10.0000	<	10.0000
P-PHENYLENEDIAMINE	ug/l			<	10.0000	<	10.0000
2-PICOLINE	ug/l			<	10.0000	<	10.0000
PRONAMIDE	ug/l			<	10.0000	<	10.0000
PYRENE	ug/l			<	10.0000	<	10.0000
PYRIDINE	ug/l			<	10.0000	<	10.0000
SAFROLE	ug/l			<	10.0000	<	10.0000
1,2,4,5-TETRACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
2,3,4,6-TETRACHLOROPHENOL	ug/l			<	10.0000	<	10.0000
O-TOLUIDINE	ug/l			<	10.0000	<	10.0000
1,2,4-TRICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
2,4,5-TRICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
2,4,6-TRICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
1,3,5-TRINITROBENZENE	ug/l			<	10.0000	<	10.0000
ALDRIN	ug/l			<	0.0500	<	0.0500
ALPHA-BHC	ug/l			<	0.0500	<	0.0500
BETA-BHC	ug/l			<	0.0500	<	0.0500
DELTA-BHC	ug/l			<	0.0500	<	0.0500
LINDANE	ug/l			<	0.0500	<	0.0500
CHLORDANE	ug/l			<	0.1000	<	0.1000
TDE	ug/l			<	0.1000	<	0.1000

TABLE D-18A-1
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-1

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
DDE	ug/l			<	0.1000	<	0.1000
DDT	ug/l			<	0.1000	<	0.1000
DIELDRIN	ug/l			<	0.1000	<	0.1000
ENDOSULFAN I	ug/l			<	0.0500	<	0.0500
ENDOSULFAN II	ug/l			<	0.1000	<	0.1000
ENDOSULFAN SULFATE	ug/l			<	0.1000	<	0.1000
ENDRIN	ug/l			<	0.1000	<	0.1000
ENDRIN ALDEHYDE	ug/l			<	0.1000	<	0.1000
HEPTACHLOR	ug/l			<	0.0500	<	0.0500
HEPTACHLOR EPOXIDE	ug/l			<	0.0500	<	0.0500
ISODRIN	ug/l			<	0.0500	<	0.0500
KEPONE	ug/l			<	0.2500	<	0.2500
METHOXYCHLOR	ug/l			<	0.5000	<	0.5000
TOXAPHENE	ug/l			<	2.0000	<	2.0000
AROCLOR 1016	ug/l			<	1.0000	<	1.0000
AROCLOR 1221	ug/l			<	2.0000	<	2.0000
AROCLOR 1232	ug/l			<	1.0000	<	1.0000
AROCLOR 1242	ug/l			<	1.0000	<	1.0000
AROCLOR 1248	ug/l			<	1.0000	<	1.0000
AROCLOR 1254	ug/l			<	1.0000	<	1.0000
AROCLOR 1260	ug/l			<	1.0000	<	1.0000
DIMETHOATE	ug/l			<	0.5000	<	0.2500
DISULFOTON	ug/l			<	0.5000	<	0.2500
FAMPHUR	ug/l			<	0.5000	<	0.2500
METHYL PARATHION	ug/l			<	0.5000	<	0.2500
PARATHION	ug/l			<	0.5000	<	0.2500
PHORATE	ug/l			<	0.5000	<	0.2500

TABLE D-18A-1
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-1

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
SULFOTEPP	ug/l			<	0.5000	<	0.2500
THIONAZIN	ug/l			<	0.5000	<	0.2500
O,O,O-TRIETHYL PHOSPHOROTHIOATE	ug/l			<	0.5000	<	0.2500
2,4-D	ug/l			<	1.0000	<	1.0000
2,4,5-T	ug/l			<	1.0000	<	1.0000
2,4,5- TP	ug/l			<	1.0000	<	1.0000
HEXACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0270	<	0.0380
HEXACHLORODIBENZOFURANS	ng/l			<	0.0090	<	0.0190
PENTACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0180	<	0.1100
PENTACHLORODIBENZOFURANS	ng/l			<	0.0150	<	0.0500
2,3,7,8-TCDD	ng/l			<	0.0160	<	0.0490
TETRACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0160	<	0.0490
TETRACHLORODIBENZOFURANS	ng/l			<	0.0088	<	0.0310

TABLE D-18A-2
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-2

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
SPECIFIC CONDUCTANCE	umhos/cm		80000.0000		81250.0000		78000.0000
SULFATE	mg/l		5505.0000		5625.0000		5705.0000
TOTAL DISS SOLIDS	mg/l		67600.0000		70500.0000		65000.0000
TOTAL SUSP SOLIDS	mg/l		41.0000	<	10.0000		40.5000
DENSITY	g/mL		1.0550		1.0403		1.0395
pH	SU		7.3300		7.1250		7.3400
ALKALINITY	mg/l		28.8750		48.1000		48.1000
BROMIDE	mg/l		33.5500		31.1000		37.0500
CHLORIDE	mg/l		38500.0000		35100.0000		36000.0000
FLUORIDE	mg/l	<	2.0000		1.3100	<	1.0000
IODIDE	mg/l	<	2.0000	<	2.0000	<	2.0000
NITROGEN, NO3 (AS N)	mg/l	<	0.1000		0.2700	<	0.1000
TOTAL ORGANIC CARBON	mg/l	<	4.0000		1.3400		2.2200
TOTAL ORGANIC HALOGENS	mg/l		44.1000		0.4574		0.0474
ORTHOPHOSPHATE (AS P)	mg/l	<	0.0200	<	0.0200	<	0.0200
BORON	mg/l		17.2000		14.0500		15.5000
CALCIUM	mg/l		1455.0000		1445.0000		1420.0000
IRON	mg/l	<	1.0000	<	0.5000	<	0.5000
LITHIUM	mg/l	<	0.3890		0.3460		0.4090
MAGNESIUM	mg/l		963.0000		938.0000		880.0000
POTASSIUM	mg/l		448.0000		415.5000		447.5000
SILICA	mg/l		7.6600		10.4000		9.6400
SODIUM	mg/l		18750.0000		18300.0000		19000.0000
FREON-113	mg/l	<	0.0050	<	0.0050	<	0.0050
CYANIDE	mg/l			<	0.0100	<	0.0100
SULFIDE	mg/l			<	1.5000	<	1.5000

TABLE D-18A-2
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-2

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
ANTIMONY	mg/l			<	0.0130	<	0.0130
ARSENIC	mg/l	<	0.0100	<	0.0130	<	0.0130
BARIUM	mg/l	<	0.0400		0.0201		0.0211
BERYLLIUM	mg/l	<	0.0200	<	0.0025	<	0.0025
CADMIUM	mg/l			<	0.0025	<	0.0025
CHROMIUM	mg/l	<	0.0025	<	0.0250	<	0.0250
COBALT	mg/l			<	0.0130	<	0.0130
COPPER	mg/l			<	0.0130	<	0.2500
LEAD	mg/l	<	0.0130	<	0.0130	<	0.0130
MERCURY	mg/l	<	0.0010	<	0.0020	<	0.0020
NICKEL	mg/l			<	0.0250	<	0.0250
SELENIUM	mg/l	<	0.0100	<	0.0130	<	0.0130
SILVER	mg/l		0.0025	<	0.0130	<	0.0130
THALLIUM	mg/l			<	0.0130	<	0.0130
TIN	mg/l			<	0.0250	<	0.0250
VANADIUM	mg/l			<	0.0250	<	0.0250
ZINC	mg/l			<	0.0500	<	0.0500
ACETONE	ug/l			<	10.0000	<	10.0000
ACETONITRILE	ug/l			<	50.0000	<	50.0000
ACROLEIN	ug/l			<	10.0000	<	10.0000
ACRYLONITRILE	ug/l			<	10.0000	<	10.0000
BENZENE	ug/l			<	5.0000	<	5.0000
DICHLOROBROMOMETHANE	ug/l			<	5.0000	<	5.0000
BROMOFORM	ug/l			<	5.0000	<	5.0000
METHYL BROMIDE	ug/l			<	10.0000	<	10.0000
2-BUTANONE	ug/l			<	10.0000	<	10.0000
CARBON DISULFIDE	ug/l			<	5.0000	<	5.0000

TABLE D-18A-2
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-2

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
CARBON TETRACHLORIDE	ug/l	<	5.0000	<	5.0000	<	5.0000
CHLOROBENZENE	ug/l			<	5.0000	<	5.0000
CHLOROPRENE	ug/l			<	5.0000	<	5.0000
CHLOROETHANE	ug/l			<	10.0000	<	10.0000
CHLOROFORM	ug/l			<	5.0000	<	5.0000
METHYL CHLORIDE	ug/l			<	10.0000	<	10.0000
ALLYL CHLORIDE	ug/l			<	5.0000	<	5.0000
DIBROMOCHLOROMETHANE	ug/l			<	5.0000	<	5.0000
1,2-DIBROMO-3-CHLOROPROPANE	ug/l			<	5.0000	<	5.0000
1,2-DIBROMOETHANE	ug/l			<	5.0000	<	5.0000
TRANS-1,4-DICHLORO-2-BUTENE	ug/l			<	5.0000	<	5.0000
DICHLORODIFLUOROMETHANE	ug/l			<	10.0000	<	10.0000
1,1-DICHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,2-DICHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,1-DICHLOROETHYLENE	ug/l			<	5.0000	<	5.0000
TRANS-1,2-DICHLOROETHYLENE	ug/l			<	5.0000	<	5.0000
1,2-DICHLOROPROPANE	ug/l			<	5.0000	<	5.0000
CIS-1,3-DICHLOROPROPENE	ug/l			<	5.0000	<	5.0000
TRANS-1,3-DICHLOROPROPENE	ug/l			<	5.0000	<	5.0000
ETHYLBENZENE	ug/l			<	5.0000	<	5.0000
ETHYL METHACRYLATE	ug/l			<	5.0000	<	5.0000
2-HEXANONE	ug/l			<	10.0000	<	10.0000
METHYL IODIDE	ug/l			<	5.0000	<	5.0000
METHACRYLONITRILE	ug/l			<	5.0000	<	5.0000
METHYLENE BROMIDE	ug/l			<	5.0000	<	5.0000
METHYLENE CHLORIDE	ug/l	<	5.0000	<	5.0000	<	5.0000
METHYL METHACRYLATE	ug/l			<	5.0000	<	5.0000

TABLE D-18A-2
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-2

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
4-METHYL-2-PENTANONE	ug/l			<	10.0000	<	10.0000
PROPIONITRILE	ug/l			<	20.0000	<	20.0000
STYRENE	ug/l			<	5.0000	<	5.0000
1,1,1,2-TETRACHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,1,2,2-TETRACHLOROETHANE	ug/l			<	5.0000	<	5.0000
TETRACHLOROTEHYLENE	ug/l			<	5.0000	<	5.0000
TOLUENE	ug/l			<	5.0000	<	5.0000
1,1,1-TRICHLOROETHANE	ug/l	<	5.0000	<	5.0000	<	5.0000
1,1,2-TRICHLOROETHANE	ug/l			<	5.0000	<	5.0000
TRICHLOROETHYLENE	ug/l	<	5.0000	<	5.0000	<	5.0000
TRICHLOROFLUOROMETHANE	ug/l			<	5.0000	<	5.0000
1,2,3-TRICHLOROPROPANE	ug/l			<	5.0000	<	5.0000
VINYL ACETATE	ug/l			<	10.0000	<	20.0000
VINYL CHLORIDE	ug/l			<	10.0000	<	10.0000
XYLENE	ug/l			<	10.0000	<	10.0000
1,4-DIOXANE	ug/l			<	410.0000	<	410.0000
ISOBUTYL ALCOHOL	ug/l			<	320.0000	<	320.0000
ACENAPHTHENE	ug/l			<	10.0000	<	10.0000
ACENAPHTHYLENE	ug/l			<	10.0000	<	10.0000
ACETOPHENONE	ug/l			<	10.0000	<	10.0000
2-ACETYLAMINOFLUORENE	ug/l			<	10.0000	<	10.0000
4-AMINOBIPHENYL	ug/l			<	10.0000	<	10.0000
ANILINE	ug/l			<	10.0000	<	10.0000
ANTHRACENE	ug/l			<	10.0000	<	10.0000
ARAMITE	ug/l			<	10.0000	<	10.0000
1,2-BENZANTHRACENE	ug/l			<	10.0000	<	10.0000
3,4-BENZOFLUORANTHENE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-2
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-2

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
BENZO[K]FLUORANTHENE	ug/l			<	10.0000	<	10.0000
BENZO[GHI]PERYLENE	ug/l			<	10.0000	<	10.0000
BENZO[A]PYRENE	ug/l			<	10.0000	<	10.0000
BENZYL ALCOHOL	ug/l			<	20.0000	<	20.0000
BIS(2-CHLOROETHOXY)METHANE	ug/l			<	10.0000	<	10.0000
BIS(2-CHLOROETHYL)ETHER	ug/l			<	10.0000	<	10.0000
BIS(2-CHLORO-1-METHYLETHYL)ETHER	ug/l			<	10.0000	<	10.0000
BIS(2-ETHYLHEXYL)PHTHALATE	ug/l			<	10.0000	<	10.0000
4-BROMOPHENYL PHENYL ETHER	ug/l			<	10.0000	<	10.0000
BENZYL BUTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
4-CHLOROANILINE	ug/l			<	10.0000	<	10.0000
CHLOROBENZILATE	ug/l			<	10.0000	<	10.0000
P-CHLORO-M-CRESOL	ug/l			<	10.0000	<	10.0000
2-CHLORONAPHTHALENE	ug/l			<	10.0000	<	10.0000
2-CHLOROPHENOL	ug/l			<	10.0000	<	10.0000
4-CHLOROPHENYL PHENYL ETHER	ug/l			<	10.0000	<	10.0000
CHRYSENE	ug/l			<	10.0000	<	10.0000
DIALLATE	ug/l			<	10.0000	<	10.0000
DIBENZ[A,H]ANTHRACENE	ug/l			<	10.0000	<	10.0000
DIBENZOFURAN	ug/l			<	10.0000	<	10.0000
DI-N-BUTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
1,2-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
1,3-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
1,4-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
DCB	ug/l			<	20.0000	<	20.0000
2,4-DICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
2,6-DICHLOROPHENOL	ug/l			<	10.0000	<	10.0000

TABLE D-18A-2
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-2

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
DIETHYL PHTHALATE	ug/l			<	10.0000	<	10.0000
P-(DIMETHYLAMINO)AZOBENZENE	ug/l			<	10.0000	<	10.0000
7,12-DIMETHYLBENZ[A]ANTHRACENE	ug/l			<	10.0000	<	10.0000
O-TOLIDINE	ug/l			<	10.0000	<	10.0000
A,A-DIMETHYLPHENETHYLAMINE	ug/l			<	10.0000	<	10.0000
2,4-DIMETHYLPHENOL	ug/l			<	10.0000	<	10.0000
DIMETHYL PHTHALATE	ug/l			<	10.0000	<	10.0000
1,3-DINITROBENZENE	ug/l			<	10.0000	<	10.0000
4,6-DINITRO-O-CRESOL	ug/l			<	50.0000	<	50.0000
2,4-DINITROPHENOL	ug/l			<	50.0000	<	50.0000
2,4-DINITROTOLUENE	ug/l			<	10.0000	<	10.0000
2,6-DINITROTOLUENE	ug/l			<	10.0000	<	10.0000
DINOSEB	ug/l			<	10.0000	<	10.0000
DI-N-OCTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
DIPHENYLAMINE	ug/l			<	10.0000	<	10.0000
ETHYL METHANESULFONATE	ug/l			<	10.0000	<	10.0000
FLUORANTHENE	ug/l			<	10.0000	<	10.0000
FLUORENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROBUTADIENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROCYCLOPENTADIENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROETHANE	ug/l			<	10.0000	<	10.0000
HEXACHLOROPHENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROPROPENE	ug/l			<	10.0000	<	10.0000
INDENO(1,2,3-CD)PYRENE	ug/l			<	10.0000	<	10.0000
ISOPHORONE	ug/l			<	10.0000	<	10.0000
ISOSAFROLE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-2
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-2

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
METHAPYRILENE	ug/l			<	10.0000	<	10.0000
3-METHYLCHOLANTHRENE	ug/l			<	10.0000	<	10.0000
METHYL METHANESULFONATE	ug/l			<	10.0000	<	10.0000
2-METHYLNAPHTHALENE	ug/l			<	10.0000	<	10.0000
2-MEYTHLPHENOL	ug/l			<	10.0000	<	10.0000
3+4-METHYLPHENOL	ug/l			<	10.0000	<	10.0000
NAPHTHALENE	ug/l			<	10.0000	<	10.0000
1,4-NAPHTHOQUINONE	ug/l			<	200.0000	<	200.0000
1-NAPHTHYLAMINE	ug/l			<	10.0000	<	10.0000
2-NAPHTHYLAMINE	ug/l			<	10.0000	<	10.0000
O-NITROANILINE	ug/l			<	50.0000	<	50.0000
M-NITROANILINE	ug/l			<	50.0000	<	50.0000
P-NITROANILINE	ug/l			<	50.0000	<	50.0000
NITROBENZENE	ug/l			<	10.0000	<	10.0000
2-NITROPHENOL	ug/l			<	10.0000	<	10.0000
4-NITROPHENOL	ug/l			<	10.0000	<	10.0000
4-NITROQUINOLINE-1-OXIDE	ug/l			<	20.0000	<	20.0000
N-NITROSODI-N-BUTYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIMETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIPHENYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIPROPYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSOMETHYLETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSOMORPHOLINE	ug/l			<	10.0000	<	10.0000
N-NITROSOPIPERIDINE	ug/l			<	10.0000	<	10.0000
N-NITROSOPYRROLIDINE	ug/l			<	10.0000	<	10.0000
5-NITRO-O-TOLUIDINE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-2
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-2

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
PENTACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
PENTACHLOROETHANE	ug/l			<	10.0000	<	10.0000
PENTACHLORONITROBENZENE	ug/l			<	10.0000	<	10.0000
PENTACHLOROPHENOL	ug/l			<	50.0000	<	50.0000
PHENACETIN	ug/l			<	10.0000	<	10.0000
PHENANTHRENE	ug/l			<	10.0000	<	10.0000
PHENOL (TOTAL)	ug/l			<	10.0000	<	10.0000
P-PHENYLENEDIAMINE	ug/l			<	10.0000	<	10.0000
2-PICOLINE	ug/l			<	10.0000	<	10.0000
PRONAMIDE	ug/l			<	10.0000	<	10.0000
PYRENE	ug/l			<	10.0000	<	10.0000
PYRIDINE	ug/l			<	10.0000	<	10.0000
SAFROLE	ug/l			<	10.0000	<	10.0000
1,2,4,5-TETRACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
2,3,4,6-TETRACHLOROPHENOL	ug/l			<	10.0000	<	10.0000
O-TOLUIDINE	ug/l			<	10.0000	<	10.0000
1,2,4-TRICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
2,4,5-TRICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
2,4,6-TRICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
1,3,5-TRINITROBENZENE	ug/l			<	10.0000	<	10.0000
ALDRIN	ug/l			<	0.0500	<	0.0500
ALPHA-BHC	ug/l			<	0.0500	<	0.0500
BETA-BHC	ug/l			<	0.0500	<	0.0500
DELTA-BHC	ug/l			<	0.0500	<	0.0500
LINDANE	ug/l			<	0.0500	<	0.0500
CHLORDANE	ug/l			<	0.1000	<	0.1000
TDE	ug/l			<	0.1000	<	0.1000

TABLE D-18A-2
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-2

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
DDE	ug/l			<	0.1000	<	0.1000
DDT	ug/l			<	0.1000	<	0.1000
DIELDRIN	ug/l			<	0.1000	<	0.1000
ENDOSULFAN I	ug/l			<	0.0500	<	0.0500
ENDOSULFAN II	ug/l			<	0.1000	<	0.1000
ENDOSULFAN SULFATE	ug/l			<	0.1000	<	0.1000
ENDRIN	ug/l			<	0.1000	<	0.1000
ENDRIN ALDEHYDE	ug/l			<	0.1000	<	0.1000
HEPTACHLOR	ug/l			<	0.0500	<	0.0500
HEPTACHLOR EPOXIDE	ug/l			<	0.0500	<	0.0500
ISODRIN	ug/l			<	0.0500	<	0.0500
KEPONE	ug/l			<	0.2500	<	0.2500
METHOXYCHLOR	ug/l			<	0.5000	<	0.5000
TOXAPHENE	ug/l			<	2.0000	<	2.0000
AROCLOR 1016	ug/l			<	1.0000	<	1.0000
AROCLOR 1221	ug/l			<	2.0000	<	2.0000
AROCLOR 1232	ug/l			<	1.0000	<	1.0000
AROCLOR 1242	ug/l			<	1.0000	<	1.0000
AROCLOR 1248	ug/l			<	1.0000	<	1.0000
AROCLOR 1254	ug/l			<	1.0000	<	1.0000
AROCLOR 1260	ug/l			<	1.0000	<	1.0000
DIMETHOATE	ug/l			<	0.2500	<	0.2500
DISULFOTON	ug/l			<	0.2500	<	0.2500
FAMPHUR	ug/l			<	0.2500	<	0.2500
METHYL PARATHION	ug/l			<	0.2500	<	0.2500
PARATHION	ug/l			<	0.2500	<	0.2500
PHORATE	ug/l			<	0.2500	<	0.2500

TABLE D-18A-2
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-2

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
SULFOTEPP	ug/l			<	0.2500	<	0.2500
THIONAZIN	ug/l			<	0.2500	<	0.2500
O,O,O-TRIETHYL PHOSPHOROTHIOATE	ug/l			<	0.2500	<	0.2500
2,4-D	ug/l			<	1.0000	<	1.0000
2,4,5-T	ug/l			<	1.0000	<	1.0000
2,4,5- TP	ug/l			<	1.0000	<	1.0000
HEXACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0580	<	0.0740
HEXACHLORODIBENZOFURANS	ng/l			<	0.0320	<	0.0510
PENTACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0940	<	0.0830
PENTACHLORODIBENZOFURANS	ng/l			<	0.0730	<	0.0740
2,3,7,8-TCDD	ng/l			<	0.0360	<	0.0530
TETRACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0360	<	0.0530
TETRACHLORODIBENZOFURANS	ng/l			<	0.0410	<	0.0580

TABLE D-18A-3
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-3

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
SPECIFIC CONDUCTANCE	umhos/cm		193500.0000		200500.0000		118500.0000
SULFATE	mg/l		6705.0000		6800.0000		7650.0000
TOTAL DISS SOLIDS	mg/l		218500.0000		211500.0000		217205.0000
TOTAL SUSP SOLIDS	mg/l		72.5000	<	10.0000		15.0000
DENSITY	g/mL		1.1350		1.1435		1.1540
pH	SU		7.1150		6.8200		6.8550
ALKALINITY	mg/l		44.0000		35.0000		35.6000
BROMIDE	mg/l		102.5000		83.4000		70.6000
CHLORIDE	mg/l		134000.0000		144500.0000		128500.0000
FLUORIDE	mg/l	<	2.0000	<	10.0000	<	1.0000
IODIDE	mg/l	<	2.0000	<	2.0000		2.1800
NITROGEN, NO3 (AS N)	mg/l	<	0.1000		0.1950	<	0.1000
TOTAL ORGANIC CARBON	mg/l	<	1.3600		1.4100		1.2800
TOTAL ORGANIC HALOGENS	mg/l		0.1565		0.0394		54.9500
ORTHOPHOSPHATE (AS P)	mg/l	<	0.0200	<	0.0200	<	0.0200
BORON	mg/l		49.3000		49.4000		40.7000
CALCIUM	mg/l		1385.0000		1465.0000		1280.0000
IRON	mg/l	<	4.0000	<	0.5000	<	0.5000
LITHIUM	mg/l	<	0.8000		0.9065		0.7995
MAGNESIUM	mg/l		2160.0000		1985.0000		1925.0000
POTASSIUM	mg/l		1345.0000		1710.0000		1405.0000
SILICA	mg/l		4.5700		4.2000		3.9550
SODIUM	mg/l		77900.0000		73950.0000		72450.0000
FREON-113	mg/l	<	0.0050	<	0.0050	<	0.0050
CYANIDE	mg/l			<	0.0100	<	0.0100
SULFIDE	mg/l				5.6000	<	1.5000

TABLE D-18A-3
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-3

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
ANTIMONY	mg/l			<	0.0130	<	0.0130
ARSENIC	mg/l	<	0.0100	<	0.0130	<	0.0130
BARIUM	mg/l	<	0.1600		0.0283		0.0260
BERYLLIUM	mg/l	<	0.0800		0.0054	<	0.0025
CADMIUM	mg/l			<	0.0025	<	0.0025
CHROMIUM	mg/l	<	0.0026	<	0.0250	<	0.0250
COBALT	mg/l			<	0.0130	<	0.0130
COPPER	mg/l				0.0460	<	0.0250
LEAD	mg/l	<	0.0130	<	0.0130	<	0.0130
MERCURY	mg/l	<	0.0010	<	0.0020	<	0.0020
NICKEL	mg/l			<	0.0250	<	0.0250
SELENIUM	mg/l	<	0.0100	<	0.0130	<	0.0130
SILVER	mg/l	<	0.0025	<	0.0130	<	0.0130
THALLIUM	mg/l			<	0.0130	<	0.0130
TIN	mg/l			<	0.0250	<	0.0250
VANADIUM	mg/l			<	0.0250	<	0.0250
ZINC	mg/l			<	0.0500	<	0.0500
ACETONE	ug/l				21.0000		26.0000
ACETONITRILE	ug/l			<	50.0000	<	50.0000
ACROLEIN	ug/l			<	10.0000	<	10.0000
ACRYLONITRILE	ug/l			<	10.0000	<	10.0000
BENZENE	ug/l			<	5.0000	<	5.0000
DICHLOROBROMOMETHANE	ug/l			<	5.0000	<	5.0000
BROMOFORM	ug/l			<	5.0000	<	5.0000
METHYL BROMIDE	ug/l			<	10.0000	<	10.0000
2-BUTANONE	ug/l			<	10.0000	<	10.0000
CARBON DISULFIDE	ug/l			<	5.0000	<	5.0000

TABLE D-18A-3
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-3

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
CARBON TETRACHLORIDE	ug/l	<	5.0000	<	5.0000	<	5.0000
CHLOROBENZENE	ug/l			<	5.0000	<	5.0000
CHLOROPRENE	ug/l			<	5.0000	<	5.0000
CHLOROETHANE	ug/l			<	10.0000	<	10.0000
CHLOROFORM	ug/l			<	5.0000	<	5.0000
METHYL CHLORIDE	ug/l			<	10.0000	<	10.0000
ALLYL CHLORIDE	ug/l			<	5.0000	<	5.0000
DIBROMOCHLOROMETHANE	ug/l			<	5.0000	<	5.0000
1,2-DIBROMO-3-CHLOROPROPANE	ug/l			<	5.0000	<	5.0000
1,2-DIBROMOETHANE	ug/l			<	5.0000	<	5.0000
TRANS-1,4-DICHLORO-2-BUTENE	ug/l			<	5.0000	<	5.0000
DICHLORODIFLUOROMETHANE	ug/l			<	10.0000	<	10.0000
1,1-DICHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,2-DICHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,1-DICHLOROETHYLENE	ug/l			<	5.0000	<	5.0000
TRANS-1,2-DICHLOROETHYLENE	ug/l			<	5.0000	<	5.0000
1,2-DICHLOROPROPANE	ug/l			<	5.0000	<	5.0000
CIS-1,3-DICHLOROPROPENE	ug/l			<	5.0000	<	5.0000
TRANS-1,3-DICHLOROPROPENE	ug/l			<	5.0000	<	5.0000
ETHYLBENZENE	ug/l			<	5.0000	<	5.0000
ETHYL METHACRYLATE	ug/l			<	5.0000	<	5.0000
2-HEXANONE	ug/l			<	10.0000	<	10.0000
METHYL IODIDE	ug/l			<	5.0000	<	5.0000
METHACRYLONITRILE	ug/l			<	5.0000	<	5.0000
METHYLENE BROMIDE	ug/l			<	5.0000	<	5.0000
METHYLENE CHLORIDE	ug/l	<	5.0000	<	5.0000	<	5.0000
METHYL METHACRYLATE	ug/l			<	5.0000	<	5.0000

TABLE D-18A-3
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-3

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
4-METHYL-2-PENTANONE	ug/l			<	10.0000	<	10.0000
PROPIONITRILE	ug/l			<	20.0000	<	20.0000
STYRENE	ug/l			<	5.0000	<	5.0000
1,1,1,2-TETRACHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,1,2,2-TETRACHLOROETHANE	ug/l			<	5.0000	<	5.0000
TETRACHLOROTEHYLENE	ug/l			<	5.0000	<	5.0000
TOLUENE	ug/l			<	5.0000	<	5.0000
1,1,1-TRICHLOROETHANE	ug/l	<	5.0000	<	5.0000	<	5.0000
1,1,2-TRICHLOROETHANE	ug/l			<	5.0000	<	5.0000
TRICHLOROETHYLENE	ug/l	<	5.0000	<	5.0000	<	5.0000
TRICHLOROFLUOROMETHANE	ug/l			<	5.0000	<	5.0000
1,2,3-TRICHLOROPROPANE	ug/l			<	5.0000	<	5.0000
VINYL ACETATE	ug/l			<	10.0000	<	20.0000
VINYL CHLORIDE	ug/l			<	10.0000	<	10.0000
XYLENE	ug/l			<	10.0000	<	10.0000
1,4-DIOXANE	ug/l			<	410.0000	<	410.0000
ISOBUTYL ALCOHOL	ug/l			<	320.0000	<	320.0000
ACENAPHTHENE	ug/l			<	10.0000	<	10.0000
ACENAPHTHYLENE	ug/l			<	10.0000	<	10.0000
ACETOPHENONE	ug/l			<	10.0000	<	10.0000
2-ACETYLAMINOFLUORENE	ug/l			<	10.0000	<	10.0000
4-AMINOBIPHENYL	ug/l			<	10.0000	<	10.0000
ANILINE	ug/l			<	10.0000	<	10.0000
ANTHRACENE	ug/l			<	10.0000	<	10.0000
ARAMITE	ug/l			<	10.0000	<	10.0000
1,2-BENZANTHRACENE	ug/l			<	10.0000	<	10.0000
3,4-BENZOFLUORANTHENE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-3
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-3

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
BENZO[K]FLUORANTHENE	ug/l			<	10.0000	<	10.0000
BENZO[GHI]PERYLENE	ug/l			<	10.0000	<	10.0000
BENZO[A]PYRENE	ug/l			<	10.0000	<	10.0000
BENZYL ALCOHOL	ug/l			<	20.0000	<	20.0000
BIS(2-CHLOROETHOXY)METHANE	ug/l			<	10.0000	<	10.0000
BIS(2-CHLOROETHYL)ETHER	ug/l			<	10.0000	<	10.0000
BIS(2-CHLORO-1-METHYLETHYL)ETHER	ug/l			<	10.0000	<	10.0000
BIS(2-ETHYLHEXYL)PHTHALATE	ug/l				10.0000		10.8000
4-BROMOPHENYL PHENYL ETHER	ug/l			<	10.0000	<	10.0000
BENZYL BUTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
4-CHLOROANILINE	ug/l			<	10.0000	<	10.0000
CHLOROBENZILATE	ug/l			<	10.0000	<	10.0000
P-CHLORO-M-CRESOL	ug/l			<	10.0000	<	10.0000
2-CHLORONAPHTHALENE	ug/l			<	10.0000	<	10.0000
2-CHLOROPHENOL	ug/l			<	10.0000	<	10.0000
4-CHLOROPHENYL PHENYL ETHER	ug/l			<	10.0000	<	10.0000
CHRYSENE	ug/l			<	10.0000	<	10.0000
DIALLATE	ug/l			<	10.0000	<	10.0000
DIBENZ[A,H]ANTHRACENE	ug/l			<	10.0000	<	10.0000
DIBENZOFURAN	ug/l			<	10.0000	<	10.0000
DI-N-BUTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
1,2-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
1,3-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
1,4-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
DCB	ug/l			<	20.0000	<	20.0000
2,4-DICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
2,6-DICHLOROPHENOL	ug/l			<	10.0000	<	10.0000

TABLE D-18A-3
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-3

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
DIETHYL PHTHALATE	ug/l			<	10.0000	<	10.0000
P-(DIMETHYLAMINO)AZOBENZENE	ug/l			<	10.0000	<	10.0000
7,12-DIMETHYLBENZ[A]ANTHRACENE	ug/l			<	10.0000	<	10.0000
O-TOLIDINE	ug/l			<	10.0000	<	10.0000
A,A-DIMETHYLPHENETHYLAMINE	ug/l			<	10.0000	<	10.0000
2,4-DIMETHYLPHENOL	ug/l			<	10.0000	<	10.0000
DIMETHYL PHTHALATE	ug/l			<	10.0000	<	10.0000
1,3-DINITROBENZENE	ug/l			<	10.0000	<	10.0000
4,6-DINITRO-O-CRESOL	ug/l			<	50.0000	<	50.0000
2,4-DINITROPHENOL	ug/l			<	50.0000	<	50.0000
2,4-DINITROTOLUENE	ug/l			<	10.0000	<	10.0000
2,6-DINITROTOLUENE	ug/l			<	10.0000	<	10.0000
DINOSEB	ug/l			<	10.0000	<	10.0000
DI-N-OCTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
DIPHENYLAMINE	ug/l			<	10.0000	<	10.0000
ETHYL METHANESULFONATE	ug/l			<	10.0000	<	10.0000
FLUORANTHENE	ug/l			<	10.0000	<	10.0000
FLUORENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROBUTADIENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROCYCLOPENTADIENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROETHANE	ug/l			<	10.0000	<	10.0000
HEXACHLOROPHENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROPROPENE	ug/l			<	10.0000	<	10.0000
INDENO(1,2,3-CD)PYRENE	ug/l			<	10.0000	<	10.0000
ISOPHORONE	ug/l			<	10.0000	<	10.0000
ISOSAFROLE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-3
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-3

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
METHAPYRILENE	ug/l			<	10.0000	<	10.0000
3-METHYLCHOLANTHRENE	ug/l			<	10.0000	<	10.0000
METHYL METHANESULFONATE	ug/l			<	10.0000	<	10.0000
2-METHYLNAPHTHALENE	ug/l			<	10.0000	<	10.0000
2-MEYTHLPHENOL	ug/l			<	10.0000	<	10.0000
3+4-METHYLPHENOL	ug/l			<	10.0000	<	10.0000
NAPHTHALENE	ug/l			<	10.0000	<	10.0000
1,4-NAPHTHOQUINONE	ug/l			<	200.0000	<	200.0000
1-NAPHTHYLAMINE	ug/l			<	10.0000	<	10.0000
2-NAPHTHYLAMINE	ug/l			<	10.0000	<	10.0000
O-NITROANILINE	ug/l			<	50.0000	<	50.0000
M-NITROANILINE	ug/l			<	50.0000	<	50.0000
P-NITROANILINE	ug/l			<	50.0000	<	50.0000
NITROBENZENE	ug/l			<	10.0000	<	10.0000
2-NITROPHENOL	ug/l			<	10.0000	<	10.0000
4-NITROPHENOL	ug/l			<	10.0000	<	10.0000
4-NITROQUINOLINE-1-OXIDE	ug/l			<	20.0000	<	20.0000
N-NITROSODI-N-BUTYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIMETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIPHENYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIPROPYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSOMETHYLETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSOMORPHOLINE	ug/l			<	10.0000	<	10.0000
N-NITROSOPIPERIDINE	ug/l			<	10.0000	<	10.0000
N-NITROSOPYRROLIDINE	ug/l			<	10.0000	<	10.0000
5-NITRO-O-TOLUIDINE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-3
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-3

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
PENTACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
PENTACHLOROETHANE	ug/l			<	10.0000	<	10.0000
PENTACHLORONITROBENZENE	ug/l			<	10.0000	<	10.0000
PENTACHLOROPHENOL	ug/l			<	50.0000	<	50.0000
PHENACETIN	ug/l			<	10.0000	<	10.0000
PHENANTHRENE	ug/l			<	10.0000	<	10.0000
PHENOL (TOTAL)	ug/l			<	10.0000	<	10.0000
P-PHENYLENEDIAMINE	ug/l			<	10.0000	<	10.0000
2-PICOLINE	ug/l			<	10.0000	<	10.0000
PRONAMIDE	ug/l			<	10.0000	<	10.0000
PYRENE	ug/l			<	10.0000	<	10.0000
PYRIDINE	ug/l			<	10.0000	<	10.0000
SAFROLE	ug/l			<	10.0000	<	10.0000
1,2,4,5-TETRACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
2,3,4,6-TETRACHLOROPHENOL	ug/l			<	10.0000	<	10.0000
O-TOLUIDINE	ug/l			<	10.0000	<	10.0000
1,2,4-TRICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
2,4,5-TRICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
2,4,6-TRICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
1,3,5-TRINITROBENZENE	ug/l			<	10.0000	<	10.0000
ALDRIN	ug/l			<	0.0500	<	0.0500
ALPHA-BHC	ug/l			<	0.0500	<	0.0500
BETA-BHC	ug/l			<	0.0500	<	0.0500
DELTA-BHC	ug/l			<	0.0500	<	0.0500
LINDANE	ug/l			<	0.0500	<	0.0500
CHLORDANE	ug/l			<	0.1000	<	0.1000
TDE	ug/l			<	0.1000	<	0.1000

TABLE D-18A-3
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-3

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
DDE	ug/l			<	0.1000	<	0.1000
DDT	ug/l			<	0.1000	<	0.1000
DIELDRIN	ug/l			<	0.1000	<	0.1000
ENDOSULFAN I	ug/l			<	0.0500	<	0.0500
ENDOSULFAN II	ug/l			<	0.1000	<	0.1000
ENDOSULFAN SULFATE	ug/l			<	0.1000	<	0.1000
ENDRIN	ug/l			<	0.1000	<	0.1000
ENDRIN ALDEHYDE	ug/l			<	0.1000	<	0.1000
HEPTACHLOR	ug/l			<	0.0500	<	0.0500
HEPTACHLOR EPOXIDE	ug/l			<	0.0500	<	0.0500
ISODRIN	ug/l			<	0.0500	<	0.0500
KEPONE	ug/l			<	0.2500	<	0.2500
METHOXYCHLOR	ug/l			<	0.5000	<	0.5000
TOXAPHENE	ug/l			<	2.0000	<	2.0000
AROCLOR 1016	ug/l			<	1.0000	<	1.0000
AROCLOR 1221	ug/l			<	2.0000	<	2.0000
AROCLOR 1232	ug/l			<	1.0000	<	1.0000
AROCLOR 1242	ug/l			<	1.0000	<	1.0000
AROCLOR 1248	ug/l			<	1.0000	<	1.0000
AROCLOR 1254	ug/l			<	1.0000	<	1.0000
AROCLOR 1260	ug/l			<	1.0000	<	1.0000
DIMETHOATE	ug/l			<	0.2500	<	0.2500
DISULFOTON	ug/l			<	0.2500	<	0.2500
FAMPHUR	ug/l			<	0.2500	<	0.2500
METHYL PARATHION	ug/l			<	0.2500	<	0.2500
PARATHION	ug/l			<	0.2500	<	0.2500
PHORATE	ug/l			<	0.2500	<	0.2500

TABLE D-18A-3
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-3

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
SULFOTEPP	ug/l			<	0.2500	<	0.2500
THIONAZIN	ug/l			<	0.2500	<	0.2500
O,O,O-TRIETHYL PHOSPHOROTHIOATE	ug/l			<	0.2500	<	0.2500
2,4-D	ug/l			<	1.0000	<	1.0000
2,4,5-T	ug/l			<	1.0000	<	1.0000
2,4,5- TP	ug/l			<	1.0000	<	1.0000
HEXACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0120	<	0.0190
HEXACHLORODIBENZOFURANS	ng/l			<	0.0035	<	0.0120
PENTACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0880	<	0.0240
PENTACHLORODIBENZOFURANS	ng/l			<	0.0065	<	0.0270
2,3,7,8-TCDD	ng/l			<	0.0046	<	0.0220
TETRACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0046	<	0.0220
TETRACHLORODIBENZOFURANS	ng/l			<	0.0031	<	0.0160

TABLE D-18A-4
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-4

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
SPECIFIC CONDUCTANCE	umhos/cm		106500.0000		126500.0000		118500.0000
SULFATE	mg/l		7075.0000		6240.0000		7260.0000
TOTAL DISS SOLIDS	mg/l		108000.0000		106500.0000		122500.0000
TOTAL SUSP SOLIDS	mg/l		57.0000	<	10.0000	<	10.0000
DENSITY	g/mL		1.0800		1.0755		1.0665
pH	SU		7.1650		7.5800		7.2350
ALKALINITY	mg/l		41.0000		29.5000		39.5500
BROMIDE	mg/l		54.1500		49.7500		50.2500
CHLORIDE	mg/l		60950.0000		61350.0000		58350.0000
FLUORIDE	mg/l	<	2.0000		2.3400		2.5800
IODIDE	mg/l	<	2.0000	<	2.0000	<	2.0000
NITROGEN, NO3 (AS N)	mg/l	<	0.1000	<	0.1000	<	0.1000
TOTAL ORGANIC CARBON	mg/l	<	1.1850		2.0050		1.6500
TOTAL ORGANIC HALOGENS	mg/l	<	0.0395		0.0934		0.0466
ORTHOPHOSPHATE (AS P)	mg/l	<	0.0200	<	0.0200	<	0.0200
BORON	mg/l		33.5500		27.8500		27.2500
CALCIUM	mg/l		1680.0000		1560.0000	<	1595.0000
IRON	mg/l	<	4.0000	<	0.5000	<	0.5000
LITHIUM	mg/l	<	0.8000		0.4760		0.6040
MAGNESIUM	mg/l		1250.0000		1085.0000		1145.0000
POTASSIUM	mg/l		748.0000		695.5000		757.5000
SILICA	mg/l		6.0750		6.2550	<	7.4400
SODIUM	mg/l		35150.0000		33000.0000		33100.0000
FREON-113	mg/l	<	0.0050	<	0.0050	<	0.0050
CYANIDE	mg/l			<	0.0100	<	0.0100
SULFIDE	mg/l			<	1.5000	<	1.5000

TABLE D-18A-4
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-4

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
ANTIMONY	mg/l			<	0.0130	<	0.0130
ARSENIC	mg/l	<	0.0080	<	0.0130	<	0.0130
BARIUM	mg/l	<	0.1600		0.0258		0.0240
BERYLLIUM	mg/l	<	0.0800	<	0.0260	<	0.0025
CADMIUM	mg/l			<	0.0025		0.0410
CHROMIUM	mg/l	<	0.0025	<	0.0250	<	0.0250
COBALT	mg/l			<	0.0130	<	0.0130
COPPER	mg/l			<	0.0130	<	0.0130
LEAD	mg/l	<	0.0130	<	0.0130		0.5250
MERCURY	mg/l	<	0.0010	<	0.0020	<	0.0020
NICKEL	mg/l			<	0.0250	<	0.0250
SELENIUM	mg/l	<	0.0100	<	0.0130	<	0.0130
SILVER	mg/l	<	0.0025	<	0.0130	<	0.0130
THALLIUM	mg/l			<	0.0130	<	0.0130
TIN	mg/l			<	0.0250	<	0.0250
VANADIUM	mg/l			<	0.0250	<	0.0250
ZINC	mg/l			<	0.0500	<	0.0500
ACETONE	ug/l				12.4000	<	10.0000
ACETONITRILE	ug/l			<	50.0000	<	50.0000
ACROLEIN	ug/l			<	10.0000	<	10.0000
ACRYLONITRILE	ug/l			<	10.0000	<	10.0000
BENZENE	ug/l			<	5.0000	<	5.0000
DICHLOROBROMOMETHANE	ug/l			<	5.0000	<	5.0000
BROMOFORM	ug/l			<	5.0000	<	5.0000
METHYL BROMIDE	ug/l			<	10.0000	<	10.0000
2-BUTANONE	ug/l			<	10.0000	<	10.0000
CARBON DISULFIDE	ug/l			<	5.0000	<	5.0000

TABLE D-18A-4
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-4

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
CARBON TETRACHLORIDE	ug/l	<	5.0000	<	5.0000	<	5.0000
CHLOROBENZENE	ug/l			<	5.0000	<	5.0000
CHLOROPRENE	ug/l			<	5.0000	<	5.0000
CHLOROETHANE	ug/l			<	10.0000	<	10.0000
CHLOROFORM	ug/l			<	5.0000	<	5.0000
METHYL CHLORIDE	ug/l			<	10.0000	<	10.0000
ALLYL CHLORIDE	ug/l			<	5.0000	<	5.0000
DIBROMOCHLOROMETHANE	ug/l			<	5.0000	<	5.0000
1,2-DIBROMO-3-CHLOROPROPANE	ug/l			<	5.0000	<	5.0000
1,2-DIBROMOETHANE	ug/l			<	5.0000	<	5.0000
TRANS-1,4-DICHLORO-2-BUTENE	ug/l			<	5.0000	<	5.0000
DICHLORODIFLUOROMETHANE	ug/l			<	10.0000	<	10.0000
1,1-DICHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,2-DICHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,1-DICHLOROETHYLENE	ug/l			<	5.0000	<	5.0000
TRANS-1,2-DICHLOROETHYLENE	ug/l			<	5.0000	<	5.0000
1,2-DICHLOROPROPANE	ug/l			<	5.0000	<	5.0000
CIS-1,3-DICHLOROPROPENE	ug/l			<	5.0000	<	5.0000
TRANS-1,3-DICHLOROPROPENE	ug/l			<	5.0000	<	5.0000
ETHYLBENZENE	ug/l			<	5.0000	<	5.0000
ETHYL METHACRYLATE	ug/l			<	5.0000	<	5.0000
2-HEXANONE	ug/l			<	10.0000	<	10.0000
METHYL IODIDE	ug/l			<	5.0000	<	5.0000
METHACRYLONITRILE	ug/l			<	5.0000	<	5.0000
METHYLENE BROMIDE	ug/l			<	5.0000	<	5.0000
METHYLENE CHLORIDE	ug/l		10.0000		15.8000	<	5.0000
METHYL METHACRYLATE	ug/l			<	5.0000	<	5.0000

TABLE D-18A-4
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-4

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
4-METHYL-2-PENTANONE	ug/l			<	10.0000	<	10.0000
PROPIONITRILE	ug/l			<	20.0000	<	20.0000
STYRENE	ug/l			<	5.0000	<	5.0000
1,1,1,2-TETRACHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,1,2,2-TETRACHLOROETHANE	ug/l			<	5.0000	<	5.0000
TETRACHLOROTEHYLENE	ug/l			<	5.0000	<	5.0000
TOLUENE	ug/l			<	5.0000	<	5.0000
1,1,1-TRICHLOROETHANE	ug/l	<	5.0000	<	5.0000	<	5.0000
1,1,2-TRICHLOROETHANE	ug/l			<	5.0000	<	5.0000
TRICHLOROETHYLENE	ug/l	<	5.0000	<	5.0000	<	5.0000
TRICHLOROFLUOROMETHANE	ug/l			<	5.0000	<	5.0000
1,2,3-TRICHLOROPROPANE	ug/l			<	5.0000	<	5.0000
VINYL ACETATE	ug/l			<	10.0000	<	10.0000
VINYL CHLORIDE	ug/l			<	10.0000	<	10.0000
XYI ENE	ug/l			<	10.0000	<	10.0000
1,4-DIOXANE	ug/l			<	410.0000	<	410.0000
ISOBUTYL ALCOHOL	ug/l			<	320.0000	<	320.0000
ACENAPHTHENE	ug/l			<	10.0000	<	10.0000
ACENAPHTHYLENE	ug/l			<	10.0000	<	10.0000
ACETOPHENONE	ug/l			<	10.0000	<	10.0000
2-ACETYLAMINOFLUORENE	ug/l			<	10.0000	<	10.0000
4-AMINOBIPHENYL	ug/l			<	10.0000	<	10.0000
ANILINE	ug/l			<	10.0000	<	10.0000
ANTHRACENE	ug/l			<	10.0000	<	10.0000
ARAMITE	ug/l			<	10.0000	<	10.0000
1,2-BENZANTHRACENE	ug/l			<	10.0000	<	10.0000
3,4-BENZOFLUORANTHENE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-4
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-4

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
BENZO[K]FLUORANTHENE	ug/l			<	10.0000	<	10.0000
BENZO[GHI]PERYLENE	ug/l			<	10.0000	<	10.0000
BENZO[A]PYRENE	ug/l			<	10.0000	<	10.0000
BENZYL ALCOHOL	ug/l			<	20.0000	<	20.0000
BIS(2-CHLOROETHOXY)METHANE	ug/l			<	10.0000	<	10.0000
BIS(2-CHLOROETHYL)ETHER	ug/l			<	10.0000	<	10.0000
BIS(2-CHLORO-1-METHYLETHYL)ETHER	ug/l			<	10.0000	<	10.0000
BIS(2-ETHYLHEXYL)PHTHALATE	ug/l			<	10.0000		17.1000
4-BROMOPHENYL PHENYL ETHER	ug/l			<	10.0000	<	10.0000
BENZYL BUTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
4-CHLOROANILINE	ug/l			<	10.0000	<	10.0000
CHLOROBENZILATE	ug/l			<	10.0000	<	10.0000
P-CHLORO-M-CRESOL	ug/l			<	10.0000	<	10.0000
2-CHLORONAPHTHALENE	ug/l			<	10.0000	<	10.0000
2-CHLOROPHENOL	ug/l			<	10.0000	<	10.0000
4-CHLOROPHENYL PHENYL ETHER	ug/l			<	10.0000	<	10.0000
CHRYSENE	ug/l			<	10.0000	<	10.0000
DIALLATE	ug/l			<	10.0000	<	10.0000
DIBENZ[A,H]ANTHRACENE	ug/l			<	10.0000	<	10.0000
DIBENZOFURAN	ug/l			<	10.0000	<	10.0000
DI-N-BUTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
1,2-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
1,3-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
1,4-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
DCB	ug/l			<	20.0000	<	20.0000
2,4-DICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
2,6-DICHLOROPHENOL	ug/l			<	10.0000	<	10.0000

TABLE D-18A-4
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-4

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
DIETHYL PHTHALATE	ug/l			<	10.0000	<	10.0000
P-(DIMETHYLAMINO)AZOBENZENE	ug/l			<	10.0000	<	10.0000
7,12-DIMETHYLBENZ[A]ANTHRACENE	ug/l			<	10.0000	<	10.0000
O-TOLIDINE	ug/l			<	10.0000	<	10.0000
A,A-DIMETHYLPHENETHYLAMINE	ug/l			<	10.0000	<	10.0000
2,4-DIMETHYLPHENOL	ug/l			<	10.0000	<	10.0000
DIMETHYL PHTHALATE	ug/l			<	10.0000	<	10.0000
1,3-DINITROBENZENE	ug/l			<	10.0000	<	10.0000
4,6-DINITRO-O-CRESOL	ug/l			<	50.0000	<	50.0000
2,4-DINITROPHENOL	ug/l			<	50.0000	<	50.0000
2,4-DINITROTOLUENE	ug/l			<	10.0000	<	10.0000
2,6-DINITROTOLUENE	ug/l			<	10.0000	<	10.0000
DINOSEB	ug/l			<	10.0000	<	10.0000
DI-N-OCTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
DIPHENYLAMINE	ug/l			<	10.0000	<	10.0000
ETHYL METHANESULFONATE	ug/l			<	10.0000	<	10.0000
FLUORANTHENE	ug/l			<	10.0000	<	10.0000
FLUORENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROBUTADIENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROCYCLOPENTADIENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROETHANE	ug/l			<	10.0000	<	10.0000
HEXACHLOROPHENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROPROPENE	ug/l			<	10.0000	<	10.0000
INDENO(1,2,3-CD)PYRENE	ug/l			<	10.0000	<	10.0000
ISOPHORONE	ug/l			<	10.0000	<	10.0000
ISOSAFROLE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-4
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-4

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
METHAPYRILENE	ug/l			<	10.0000	<	10.0000
3-METHYLCHOLANTHRENE	ug/l			<	10.0000	<	10.0000
METHYL METHANESULFONATE	ug/l			<	10.0000	<	10.0000
2-METHYLNAPHTHALENE	ug/l			<	10.0000	<	10.0000
2-MEYTHLPHENOL	ug/l			<	10.0000	<	10.0000
3+4-METHYLPHENOL	ug/l			<	10.0000	<	10.0000
NAPHTHALENE	ug/l			<	10.0000	<	10.0000
1,4-NAPHTHOQUINONE	ug/l			<	200.0000	<	200.0000
1-NAPHTHYLAMINE	ug/l			<	10.0000	<	10.0000
2-NAPHTHYLAMINE	ug/l			<	10.0000	<	10.0000
O-NITROANILINE	ug/l			<	50.0000	<	50.0000
M-NITROANILINE	ug/l			<	50.0000	<	50.0000
P-NITROANILINE	ug/l			<	50.0000	<	50.0000
NITROBENZENE	ug/l			<	10.0000	<	10.0000
2-NITROPHENOL	ug/l			<	10.0000	<	10.0000
4-NITROPHENOL	ug/l			<	10.0000	<	10.0000
4-NITROQUINOLINE-1-OXIDE	ug/l			<	20.0000	<	20.0000
N-NITROSODI-N-BUTYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIMETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIPHENYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIPROPYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSOMETHYLETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSOMORPHOLINE	ug/l			<	10.0000	<	10.0000
N-NITROSOPIPERIDINE	ug/l			<	10.0000	<	10.0000
N-NITROSOPYRROLIDINE	ug/l			<	10.0000	<	10.0000
5-NITRO-O-TOLUIDINE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-4
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-4

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
PENTACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
PENTACHLOROETHANE	ug/l			<	10.0000	<	10.0000
PENTACHLORONITROBENZENE	ug/l			<	10.0000	<	10.0000
PENTACHLOROPHENOL	ug/l			<	50.0000	<	50.0000
PHENACETIN	ug/l			<	10.0000	<	10.0000
PHENANTHRENE	ug/l			<	10.0000	<	10.0000
PHENOL (TOTAL)	ug/l			<	10.0000	<	10.0000
P-PHENYLENEDIAMINE	ug/l			<	10.0000	<	10.0000
2-PICOLINE	ug/l			<	10.0000	<	10.0000
PRONAMIDE	ug/l			<	10.0000	<	10.0000
PYRENE	ug/l			<	10.0000	<	10.0000
PYRIDINE	ug/l			<	10.0000	<	10.0000
SAFROLE	ug/l			<	10.0000	<	10.0000
1,2,4,5-TETRACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
2,3,4,6-TETRACHLOROPHENOL	ug/l			<	10.0000	<	10.0000
O-TOLUIDINE	ug/l			<	10.0000	<	10.0000
1,2,4-TRICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
2,4,5-TRICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
2,4,6-TRICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
1,3,5-TRINITROBENZENE	ug/l			<	10.0000	<	10.0000
ALDRIN	ug/l			<	0.0500	<	0.0500
ALPHA-BHC	ug/l			<	0.0500	<	0.0500
BETA-BHC	ug/l			<	0.0500	<	0.0500
DELTA-BHC	ug/l			<	0.0500	<	0.0500
LINDANE	ug/l			<	0.0500	<	0.0500
CHLORDANE	ug/l			<	0.1000	<	0.1000
TDE	ug/l			<	0.1000	<	0.1000

TABLE D-18A-4
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-4

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
DDE	ug/l			<	0.1000	<	0.1000
DDT	ug/l			<	0.1000	<	0.1000
DIELDRIN	ug/l			<	0.1000	<	0.1000
ENDOSULFAN I	ug/l			<	0.0500	<	0.0500
ENDOSULFAN II	ug/l			<	0.1000	<	0.1000
ENDOSULFAN SULFATE	ug/l			<	0.1000	<	0.1000
ENDRIN	ug/l			<	0.1000	<	0.1000
ENDRIN ALDEHYDE	ug/l			<	0.1000	<	0.1000
HEPTACHLOR	ug/l			<	0.0500	<	0.0500
HEPTACHLOR EPOXIDE	ug/l			<	0.0500	<	0.0500
ISODRIN	ug/l			<	0.0500	<	0.0500
KEPONE	ug/l			<	0.2500	<	0.2500
METHOXYCHLOR	ug/l			<	0.5000	<	0.5000
TOXAPHENE	ug/l			<	2.0000	<	2.0000
AROCLOR 1016	ug/l			<	1.0000	<	1.0000
AROCLOR 1221	ug/l			<	2.0000	<	2.0000
AROCLOR 1232	ug/l			<	1.0000	<	1.0000
AROCLOR 1242	ug/l			<	1.0000	<	1.0000
AROCLOR 1248	ug/l			<	1.0000	<	1.0000
AROCLOR 1254	ug/l			<	1.0000	<	1.0000
AROCLOR 1260	ug/l			<	1.0000	<	1.0000
DIMETHOATE	ug/l			<	0.2500	<	0.2500
DISULFOTON	ug/l			<	0.2500	<	0.2500
FAMPHUR	ug/l			<	0.2500	<	0.2500
METHYL PARATHION	ug/l			<	0.2500	<	0.2500
PARATHION	ug/l			<	0.2500	<	0.2500
PHORATE	ug/l			<	0.2500	<	0.2500

TABLE D-18A-4
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-4

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
SULFOTEPP	ug/l			<	0.2500	<	0.2500
THIONAZIN	ug/l			<	0.2500	<	0.2500
O,O,O-TRIETHYL PHOSPHOROTHIOATE	ug/l			<	0.2500	<	0.2500
2,4-D	ug/l			<	1.0000	<	1.0000
2,4,5-T	ug/l			<	1.0000	<	1.0000
2,4,5- TP	ug/l			<	1.0000	<	1.0000
HEXACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0340	<	0.0230
HEXACHLORODIBENZOFURANS	ng/l			<	0.0180	<	0.0070
PENTACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0620	<	0.0150
PENTACHLORODIBENZOFURANS	ng/l			<	0.0390	<	0.0140
2,3,7,8-TCDD	ng/l			<	0.0180	<	0.0140
TETRACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0180	<	0.0140
TETRACHLORODIBENZOFURANS	ng/l			<	0.0130	<	0.0078

TABLE D-18A-5
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-5

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
SPECIFIC CONDUCTANCE	umhos/cm		43150.0000		44500.0000		45050.0000
SULFATE	mg/l		5375.0000		5815.0000		5090.0000
TOTAL DISS SOLIDS	mg/l		43950.0000		33250.0000		32400.0000
TOTAL SUSP SOLIDS	mg/l	<	10.0000	<	10.0000	<	10.0000
DENSITY	g/mL		1.0290		1.0220		1.0185
pH	SU		7.8000		7.6700		7.5800
ALKALINITY	mg/l		51.0000		41.6000		50.1000
BROMIDE	mg/l		21.5000		19.7500		46.2000
CHLORIDE	mg/l		14900.0000		15850.0000		15950.0000
FLUORIDE	mg/l	<	3.0000		2.9100		2.2500
IODIDE	mg/l	<	2.0000	<	2.0000	<	2.0000
NITROGEN, NO3 (AS N)	mg/l	<	0.1000		0.2850	<	0.1000
TOTAL ORGANIC CARBON	mg/l		1.9450		1.3600		1.6200
TOTAL ORGANIC HALOGENS	mg/l		0.0537		0.0635		0.0353
ORTHOPHOSPHATE (AS P)	mg/l	<	0.0200	<	0.0200	<	0.0200
BORON	mg/l		30.2000		28.2000		28.3000
CALCIUM	mg/l		984.5000		1020.0000		1020.0000
IRON	mg/l	<	1.0000	<	0.5000	<	0.5000
LITHIUM	mg/l		0.3570		0.3805		0.3705
MAGNESIUM	mg/l		433.0000		422.0000		424.0000
POTASSIUM	mg/l		286.0000		289.0000		291.5000
SILICA	mg/l		10.9500		10.2500		11.0500
SODIUM	mg/l		8890.0000		9500.0000		9135.0000
FREON-113	mg/l	<	0.0050	<	0.0050	<	0.0050
CYANIDE	mg/l			<	0.0100	<	0.0100
SULFIDE	mg/l			<	1.5000		3.8000

TABLE D-18A-5
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-5

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
ANTIMONY	mg/l			<	0.0130	<	0.0130
ARSENIC	mg/l	<	0.0130	<	0.0130	<	0.0130
BARIUM	mg/l	<	0.0400		0.0185		0.0150
BERYLLIUM	mg/l	<	0.0200	<	0.0025	<	0.0025
CADMIUM	mg/l			<	0.0025	<	0.0025
CHROMIUM	mg/l	<	0.0130	<	0.0250	<	0.0250
COBALT	mg/l			<	0.0130	<	0.0130
COPPER	mg/l			<	0.0130	<	0.0130
LEAD	mg/l	<	0.0130	<	0.0130	<	0.0130
MERCURY	mg/l	<	0.0010	<	0.0020	<	0.0020
NICKEL	mg/l			<	0.0250	<	0.0250
SELENIUM	mg/l	<	0.0130	<	0.0130	<	0.0130
SILVER	mg/l	<	0.0130	<	0.0130	<	0.0130
THALLIUM	mg/l			<	0.0130	<	0.0130
TIN	mg/l			<	0.0250	<	0.0250
VANADIUM	mg/l			<	0.0250	<	0.0250
ZINC	mg/l			<	0.0500	<	0.0500
ACETONE	ug/l				10.0000	<	10.0000
ACETONITRILE	ug/l			<	50.0000	<	50.0000
ACROLEIN	ug/l			<	10.0000	<	10.0000
ACRYLONITRILE	ug/l			<	10.0000	<	10.0000
BENZENE	ug/l			<	5.0000	<	5.0000
DICHLOROBROMOMETHANE	ug/l			<	5.0000	<	5.0000
BROMOFORM	ug/l			<	5.0000	<	5.0000
METHYL BROMIDE	ug/l			<	10.0000	<	10.0000
2-BUTANONE	ug/l			<	10.0000	<	10.0000
CARBON DISULFIDE	ug/l			<	5.0000	<	5.0000

TABLE D-18A-5
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-5

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
CARBON TETRACHLORIDE	ug/l	<	5.0000	<	5.0000	<	5.0000
CHLOROBENZENE	ug/l			<	5.0000	<	5.0000
CHLOROPRENE	ug/l			<	5.0000	<	5.0000
CHLOROETHANE	ug/l			<	10.0000	<	10.0000
CHLOROFORM	ug/l			<	5.0000	<	5.0000
METHYL CHLORIDE	ug/l			<	10.0000	<	10.0000
ALLYL CHLORIDE	ug/l			<	5.0000	<	5.0000
DIBROMOCHLOROMETHANE	ug/l			<	5.0000	<	5.0000
1,2-DIBROMO-3-CHLOROPROPANE	ug/l			<	5.0000	<	5.0000
1,2-DIBROMOETHANE	ug/l			<	5.0000	<	5.0000
TRANS-1,4-DICHLORO-2-BUTENE	ug/l			<	5.0000	<	5.0000
DICHLORODIFLUOROMETHANE	ug/l			<	10.0000	<	10.0000
1,1-DICHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,2-DICHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,1-DICHLOROETHYLENE	ug/l			<	5.0000	<	5.0000
TRANS-1,2-DICHLOROETHYLENE	ug/l			<	5.0000	<	5.0000
1,2-DICHLOROPROPANE	ug/l			<	5.0000	<	5.0000
CIS-1,3-DICHLOROPROPENE	ug/l			<	5.0000	<	5.0000
TRANS-1,3-DICHLOROPROPENE	ug/l			<	5.0000	<	5.0000
ETHYLBENZENE	ug/l			<	5.0000	<	5.0000
ETHYL METHACRYLATE	ug/l			<	5.0000	<	5.0000
2-HEXANONE	ug/l			<	10.0000	<	10.0000
METHYL IODIDE	ug/l			<	5.0000	<	5.0000
METHACRYLONITRILE	ug/l			<	5.0000	<	5.0000
METHYLENE BROMIDE	ug/l			<	5.0000	<	5.0000
METHYLENE CHLORIDE	ug/l	<	5.0000	<	5.0000	<	5.0000
METHYL METHACRYLATE	ug/l			<	5.0000	<	5.0000

TABLE D-18A-5
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-5

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
4-METHYL-2-PENTANONE	ug/l			<	10.0000	<	10.0000
PROPIONITRILE	ug/l			<	20.0000	<	20.0000
STYRENE	ug/l			<	5.0000	<	5.0000
1,1,1,2-TETRACHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,1,2,2-TETRACHLOROETHANE	ug/l			<	5.0000	<	5.0000
TETRACHLOROTEHYLENE	ug/l			<	5.0000	<	5.0000
TOLUENE	ug/l			<	5.0000	<	5.0000
1,1,1-TRICHLOROETHANE	ug/l	<	5.0000	<	5.0000	<	5.0000
1,1,2-TRICHLOROETHANE	ug/l			<	5.0000	<	5.0000
TRICHLOROETHYLENE	ug/l	<	5.0000	<	5.0000	<	5.0000
TRICHLOROFLUOROMETHANE	ug/l			<	5.0000	<	5.0000
1,2,3-TRICHLOROPROPANE	ug/l			<	5.0000	<	5.0000
VINYL ACETATE	ug/l			<	10.0000	<	10.0000
VINYL CHLORIDE	ug/l			<	10.0000	<	10.0000
XYLENE	ug/l			<	10.0000	<	10.0000
1,4-DIOXANE	ug/l			<	410.0000	<	410.0000
ISOBUTYL ALCOHOL	ug/l			<	320.0000	<	320.0000
ACENAPHTHENE	ug/l			<	10.0000	<	10.0000
ACENAPHTHYLENE	ug/l			<	10.0000	<	10.0000
ACETOPHENONE	ug/l			<	10.0000	<	10.0000
2-ACETYLAMINOFLUORENE	ug/l			<	10.0000	<	10.0000
4-AMINOBIPHENYL	ug/l			<	10.0000	<	10.0000
ANILINE	ug/l			<	10.0000	<	10.0000
ANTHRACENE	ug/l			<	10.0000	<	10.0000
ARAMITE	ug/l			<	10.0000	<	10.0000
1,2-BENZANTHRACENE	ug/l			<	10.0000	<	10.0000
3,4-BENZOFLUORANTHENE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-5
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-5

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
BENZO[K]FLUORANTHENE	ug/l			<	10.0000	<	10.0000
BENZO[GHI]PERYLENE	ug/l			<	10.0000	<	10.0000
BENZO[A]PYRENE	ug/l			<	10.0000	<	10.0000
BENZYL ALCOHOL	ug/l			<	20.0000	<	20.0000
BIS(2-CHLOROETHOXY)METHANE	ug/l			<	10.0000	<	10.0000
BIS(2-CHLOROETHYL)ETHER	ug/l			<	10.0000	<	10.0000
BIS(2-CHLORO-1-METHYLETHYL)ETHER	ug/l			<	10.0000	<	10.0000
BIS(2-ETHYLHEXYL)PHTHALATE	ug/l				13.0000	<	10.0000
4-BROMOPHENYL PHENYL ETHER	ug/l			<	10.0000	<	10.0000
BENZYL BUTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
4-CHLOROANILINE	ug/l			<	10.0000	<	10.0000
CHLOROBENZILATE	ug/l			<	10.0000	<	10.0000
P-CHLORO-M-CRESOL	ug/l			<	10.0000	<	10.0000
2-CHLORONAPHTHALENE	ug/l			<	10.0000	<	10.0000
2-CHLOROPHENOL	ug/l			<	10.0000	<	10.0000
4-CHLOROPHENYL PHENYL ETHER	ug/l			<	10.0000	<	10.0000
CHRYSENE	ug/l			<	10.0000	<	10.0000
DIALLATE	ug/l			<	10.0000	<	10.0000
DIBENZ[A,H]ANTHRACENE	ug/l			<	10.0000	<	10.0000
DIBENZOFURAN	ug/l			<	10.0000	<	10.0000
DI-N-BUTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
1,2-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
1,3-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
1,4-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
DCB	ug/l			<	20.0000	<	20.0000
2,4-DICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
2,6-DICHLOROPHENOL	ug/l			<	10.0000	<	10.0000

TABLE D-18A-5
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-5

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
DIETHYL PHTHALATE	ug/l			<	10.0000	<	10.0000
P-(DIMETHYLAMINO)AZOBENZENE	ug/l			<	10.0000	<	10.0000
7,12-DIMETHYLBENZ[A]ANTHRACENE	ug/l			<	10.0000	<	10.0000
O-TOLIDINE	ug/l			<	10.0000	<	10.0000
A,A-DIMETHYLPHENETHYLAMINE	ug/l			<	10.0000	<	10.0000
2,4-DIMETHYLPHENOL	ug/l			<	10.0000	<	10.0000
DIMETHYL PHTHALATE	ug/l			<	10.0000	<	10.0000
1,3-DINITROBENZENE	ug/l			<	10.0000	<	10.0000
4,6-DINITRO-O-CRESOL	ug/l			<	50.0000	<	50.0000
2,4-DINITROPHENOL	ug/l			<	50.0000	<	50.0000
2,4-DINITROTOLUENE	ug/l			<	10.0000	<	10.0000
2,6-DINITROTOLUENE	ug/l			<	10.0000	<	10.0000
DINOSEB	ug/l			<	10.0000	<	10.0000
DI-N-OCTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
DIPHENYLAMINE	ug/l			<	10.0000	<	10.0000
ETHYL METHANESULFONATE	ug/l			<	10.0000	<	10.0000
FLUORANTHENE	ug/l			<	10.0000	<	10.0000
FLUORENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROBUTADIENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROCYCLOPENTADIENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROETHANE	ug/l			<	10.0000	<	10.0000
HEXACHLOROPHENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROPROPENE	ug/l			<	10.0000	<	10.0000
INDENO(1,2,3-CD)PYRENE	ug/l			<	10.0000	<	10.0000
ISOPHORONE	ug/l			<	10.0000	<	10.0000
ISOSAFROLE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-5
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-5

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
METHAPYRILENE	ug/l			<	10.0000	<	10.0000
3-METHYLCHOLANTHRENE	ug/l			<	10.0000	<	10.0000
METHYL METHANESULFONATE	ug/l			<	10.0000	<	10.0000
2-METHYLNAPHTHALENE	ug/l			<	10.0000	<	10.0000
2-MEYTHLPHENOL	ug/l			<	10.0000	<	10.0000
3+4-METHYLPHENOL	ug/l			<	10.0000	<	10.0000
NAPHTHALENE	ug/l			<	10.0000	<	10.0000
1,4-NAPHTHOQUINONE	ug/l			<	200.0000	<	200.0000
1-NAPHTHYLAMINE	ug/l			<	10.0000	<	10.0000
2-NAPHTHYLAMINE	ug/l			<	10.0000	<	10.0000
O-NITROANILINE	ug/l			<	50.0000	<	50.0000
M-NITROANILINE	ug/l			<	50.0000	<	50.0000
P-NITROANILINE	ug/l			<	50.0000	<	50.0000
NITROBENZENE	ug/l			<	10.0000	<	10.0000
2-NITROPHENOL	ug/l			<	10.0000	<	10.0000
4-NITROPHENOL	ug/l			<	10.0000	<	10.0000
4-NITROQUINOLINE-1-OXIDE	ug/l			<	20.0000	<	20.0000
N-NITROSODI-N-BUTYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIMETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIPHENYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIPROPYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSOMETHYLETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSOMORPHOLINE	ug/l			<	10.0000	<	10.0000
N-NITROSOPIPERIDINE	ug/l			<	10.0000	<	10.0000
N-NITROSOPYRROLIDINE	ug/l			<	10.0000	<	10.0000
5-NITRO-O-TOLUIDINE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-5
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-5

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
PENTACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
PENTACHLOROETHANE	ug/l			<	10.0000	<	10.0000
PENTACHLORONITROBENZENE	ug/l			<	10.0000	<	10.0000
PENTACHLOROPHENOL	ug/l			<	50.0000	<	50.0000
PHENACETIN	ug/l			<	10.0000	<	10.0000
PHENANTHRENE	ug/l			<	10.0000	<	10.0000
PHENOL (TOTAL)	ug/l			<	10.0000	<	10.0000
P-PHENYLENEDIAMINE	ug/l			<	10.0000	<	10.0000
2-PICOLINE	ug/l			<	10.0000	<	10.0000
PRONAMIDE	ug/l			<	10.0000	<	10.0000
PYRENE	ug/l			<	10.0000	<	10.0000
PYRIDINE	ug/l			<	10.0000	<	10.0000
SAFROLE	ug/l			<	10.0000	<	10.0000
1,2,4,5-TETRACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
2,3,4,6-TETRACHLOROPHENOL	ug/l			<	10.0000	<	10.0000
O-TOLUIDINE	ug/l			<	10.0000	<	10.0000
1,2,4-TRICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
2,4,5-TRICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
2,4,6-TRICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
1,3,5-TRINITROBENZENE	ug/l			<	10.0000	<	10.0000
ALDRIN	ug/l			<	0.0500	<	0.0500
ALPHA-BHC	ug/l			<	0.0500	<	0.0500
BETA-BHC	ug/l			<	0.0500	<	0.0500
DELTA-BHC	ug/l			<	0.0500	<	0.0500
LINDANE	ug/l			<	0.0500	<	0.0500
CHLORDANE	ug/l			<	0.1000	<	0.1000
TDE	ug/l			<	0.1000	<	0.1000

TABLE D-18A-5
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-5

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
DDE	ug/l			<	0.1000	<	0.1000
DDT	ug/l			<	0.1000	<	0.1000
DIELDRIN	ug/l			<	0.1000	<	0.1000
ENDOSULFAN I	ug/l			<	0.0500	<	0.0500
ENDOSULFAN II	ug/l			<	0.1000	<	0.1000
ENDOSULFAN SULFATE	ug/l			<	0.1000	<	0.1000
ENDRIN	ug/l			<	0.1000	<	0.1000
ENDRIN ALDEHYDE	ug/l			<	0.1000	<	0.1000
HEPTACHLOR	ug/l			<	0.0500	<	0.0500
HEPTACHLOR EPOXIDE	ug/l			<	0.0500	<	0.0500
ISODRIN	ug/l			<	0.0500	<	0.0500
KEPONE	ug/l			<	0.2500	<	0.2500
METHOXYCHLOR	ug/l			<	0.5000	<	0.5000
TOXAPHENE	ug/l			<	2.0000	<	2.0000
AROCLOR 1016	ug/l			<	1.0000	<	1.0000
AROCLOR 1221	ug/l			<	2.0000	<	2.0000
AROCLOR 1232	ug/l			<	1.0000	<	1.0000
AROCLOR 1242	ug/l			<	1.0000	<	1.0000
AROCLOR 1248	ug/l			<	1.0000	<	1.0000
AROCLOR 1254	ug/l			<	1.0000	<	1.0000
AROCLOR 1260	ug/l			<	1.0000	<	1.0000
DIMETHOATE	ug/l			<	0.2500	<	0.2500
DISULFOTON	ug/l			<	0.2500	<	0.2500
FAMPHUR	ug/l			<	0.2500	<	0.2500
METHYL PARATHION	ug/l			<	0.2500	<	0.2500
PARATHION	ug/l			<	0.2500	<	0.2500
PHORATE	ug/l			<	0.2500	<	0.2500

TABLE D-18A-5
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-5

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
SULFOTEPP	ug/l			<	0.2500	<	0.2500
THIONAZIN	ug/l			<	0.2500	<	0.2500
O,O,O-TRIETHYL PHOSPHOROTHIOATE	ug/l			<	0.2500	<	0.2500
2,4-D	ug/l			<	1.0000	<	1.0000
2,4,5-T	ug/l			<	1.0000	<	1.0000
2,4,5- TP	ug/l			<	1.0000	<	1.0000
HEXACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0580	<	0.0180
HEXACHLORODIBENZOFURANS	ng/l			<	0.0320	<	0.0130
PENTACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0940	<	0.0130
PENTACHLORODIBENZOFURANS	ng/l			<	0.0730	<	0.0100
2,3,7,8-TCDD	ng/l			<	0.0360	<	0.0100
TETRACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0360	<	0.0100
TETRACHLORODIBENZOFURANS	ng/l			<	0.0410	<	0.0100

TABLE D-18A-6
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
SPECIFIC CONDUCTANCE	umhos/cm		27150.0000		18750.0000		21800.0000
SULFATE	mg/l		5465.0000		4700.0000		4430.0000
TOTAL DISS SOLIDS	mg/l		21600.0000		17200.0000		16400.0000
TOTAL SUSP SOLIDS	mg/l	<	14.7500	<	10.0000	<	10.0000
DENSITY	g/mL		0.9995		1.0028		1.0120
pH	SU		7.8050		7.6350		7.6200
ALKALINITY	mg/l		52.5000		51.5000		47.6000
BROMIDE	mg/l		10.9500	<	2.0000		10.5400
CHLORIDE	mg/l		15800.0000		6200.0000		6148.0000
FLUORIDE	mg/l	<	2.0000		2.2500		2.5850
IODIDE	mg/l	<	1.5100	<	2.0000	<	2.0000
NITROGEN, NO3 (AS N)	mg/l	<	0.1000	<	0.1000	<	0.1000
TOTAL ORGANIC CARBON	mg/l		1.1350		1.0450		1.5450
TOTAL ORGANIC HALOGENS	mg/l		0.0455		0.0554		0.0624
ORTHOPHOSPHATE (AS P)	mg/l	<	0.0200	<	0.0200	<	0.0200
BORON	mg/l		16.7500		15.6000		14.5000
CALCIUM	mg/l		725.0000		661.0000		702.5000
IRON	mg/l	<	1.0000	<	0.1870	<	0.5000
LITHIUM	mg/l		0.2605		0.2385		0.2545
MAGNESIUM	mg/l		251.5000		213.5000		200.5000
POTASSIUM	mg/l		183.0000		194.5000		151.5000
SILICA	mg/l		10.4500		10.6500		11.8900
SODIUM	mg/l		6060.0000		5455.0000		4460.0000
FREON-113	mg/l	<	0.0050	<	0.0050	<	0.0050
CYANIDE	mg/l			<	0.0100	<	0.0100
SULFIDE	mg/l			<	1.5000	<	1.5000

TABLE D-18A-6
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
CARBON TETRACHLORIDE	ug/l	<	5.0000	<	5.0000	<	5.0000
CHLOROBENZENE	ug/l			<	5.0000	<	5.0000
CHLOROPRENE	ug/l			<	5.0000	<	5.0000
CHLOROETHANE	ug/l			<	10.0000	<	10.0000
CHLOROFORM	ug/l			<	5.0000	<	5.0000
METHYL CHLORIDE	ug/l			<	10.0000	<	10.0000
ALLYL CHLORIDE	ug/l			<	5.0000	<	5.0000
DIBROMOCHLOROMETHANE	ug/l			<	5.0000	<	5.0000
1,2-DIBROMO-3-CHLOROPROPANE	ug/l			<	5.0000	<	5.0000
1,2-DIBROMOETHANE	ug/l			<	5.0000	<	5.0000
TRANS-1,4-DICHLORO-2-BUTENE	ug/l			<	5.0000	<	5.0000
DICHLORODIFLUOROMETHANE	ug/l			<	10.0000	<	10.0000
1,1-DICHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,2-DICHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,1-DICHLOROETHYLENE	ug/l			<	5.0000	<	5.0000
TRANS-1,2-DICHLOROETHYLENE	ug/l			<	5.0000	<	5.0000
1,2-DICHLOROPROPANE	ug/l			<	5.0000	<	5.0000
CIS-1,3-DICHLOROPROPENE	ug/l			<	5.0000	<	5.0000
TRANS-1,3-DICHLOROPROPENE	ug/l			<	5.0000	<	5.0000
ETHYLBENZENE	ug/l			<	5.0000	<	5.0000
ETHYL METHACRYLATE	ug/l			<	5.0000	<	5.0000
2-HEXANONE	ug/l			<	10.0000	<	10.0000
METHYL IODIDE	ug/l			<	5.0000	<	5.0000
METHACRYLONITRILE	ug/l			<	5.0000	<	5.0000
METHYLENE BROMIDE	ug/l			<	5.0000	<	5.0000
METHYLENE CHLORIDE	ug/l	<	6.5000	<	5.0000	<	5.0000
METHYL METHACRYLATE	ug/l			<	5.0000	<	5.0000

TABLE D-18A-6
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
4-METHYL-2-PENTANONE	ug/l			<	10.0000	<	10.0000
PROPIONITRILE	ug/l			<	20.0000	<	20.0000
STYRENE	ug/l			<	5.0000	<	5.0000
1,1,1,2-TETRACHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,1,2,2-TETRACHLOROETHANE	ug/l			<	5.0000	<	5.0000
TETRACHLOROTEHYLENE	ug/l			<	5.0000	<	5.0000
TOLUENE	ug/l			<	5.0000	<	5.0000
1,1,1-TRICHLOROETHANE	ug/l	<	5.0000	<	5.0000	<	5.0000
1,1,2-TRICHLOROETHANE	ug/l			<	5.0000	<	5.0000
TRICHLOROETHYLENE	ug/l	<	5.0000	<	5.0000	<	5.0000
TRICHLOROFLUOROMETHANE	ug/l			<	5.0000	<	5.0000
1,2,3-TRICHLOROPROPANE	ug/l			<	5.0000	<	5.0000
VINYL ACETATE	ug/l			<	10.0000	<	20.0000
VINYL CHLORIDE	ug/l			<	10.0000	<	10.0000
XYLENE	ug/l			<	10.0000	<	10.0000
1,4-DIOXANE	ug/l			<	410.0000	<	410.0000
ISOBUTYL ALCOHOL	ug/l			<	320.0000	<	320.0000
ACENAPHTHENE	ug/l			<	10.0000	<	10.0000
ACENAPHTHYLENE	ug/l			<	10.0000	<	10.0000
ACETOPHENONE	ug/l			<	10.0000	<	10.0000
2-ACETYLAMINOFLUORENE	ug/l			<	10.0000	<	10.0000
4-AMINOBIPHENYL	ug/l			<	10.0000	<	10.0000
ANILINE	ug/l			<	10.0000	<	10.0000
ANTHRACENE	ug/l			<	10.0000	<	10.0000
ARAMITE	ug/l			<	10.0000	<	10.0000
1,2-BENZANTHRACENE	ug/l			<	10.0000	<	10.0000
3,4-BENZOFLUORANTHENE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-6
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
BENZO[K]FLUORANTHENE	ug/l			<	10.0000	<	10.0000
BENZO[GHI]PERYLENE	ug/l			<	10.0000	<	10.0000
BENZO[A]PYRENE	ug/l			<	10.0000	<	10.0000
BENZYL ALCOHOL	ug/l			<	20.0000	<	20.0000
BIS(2-CHLOROETHOXY)METHANE	ug/l			<	10.0000	<	10.0000
BIS(2-CHLOROETHYL)ETHER	ug/l			<	10.0000	<	10.0000
BIS(2-CHLORO-1-METHYLETHYL)ETHER	ug/l			<	10.0000	<	10.0000
BIS(2-ETHYLHEXYL)PHTHALATE	ug/l				26.0000	<	10.0000
4-BROMOPHENYL PHENYL ETHER	ug/l			<	10.0000	<	10.0000
BENZYL BUTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
4-CHLOROANILINE	ug/l			<	10.0000	<	10.0000
CHLOROBENZILATE	ug/l			<	10.0000	<	10.0000
P-CHLORO-M-CRESOL	ug/l			<	10.0000	<	10.0000
2-CHLORONAPHTHALENE	ug/l			<	10.0000	<	10.0000
2-CHLOROPHENOL	ug/l			<	10.0000	<	10.0000
4-CHLOROPHENYL PHENYL ETHER	ug/l			<	10.0000	<	10.0000
CHRYSENE	ug/l			<	10.0000	<	10.0000
DIALLATE	ug/l			<	10.0000	<	10.0000
DIBENZ[A,H]ANTHRACENE	ug/l			<	10.0000	<	10.0000
DIBENZOFURAN	ug/l			<	10.0000	<	10.0000
DI-N-BUTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
1,2-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
1,3-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
1,4-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
DCB	ug/l			<	20.0000	<	20.0000
2,4-DICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
2,6-DICHLOROPHENOL	ug/l			<	10.0000	<	10.0000

TABLE D-18A-6
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
DIETHYL PHTHALATE	ug/l			<	10.0000	<	10.0000
P-(DIMETHYLAMINO)AZOBENZENE	ug/l			<	10.0000	<	10.0000
7,12-DIMETHYLBENZ[A]ANTHRACENE	ug/l			<	10.0000	<	10.0000
O-TOLIDINE	ug/l			<	10.0000	<	10.0000
A,A-DIMETHYLPHENETHYLAMINE	ug/l			<	10.0000	<	10.0000
2,4-DIMETHYLPHENOL	ug/l			<	10.0000	<	10.0000
DIMETHYL PHTHALATE	ug/l			<	10.0000	<	10.0000
1,3-DINITROBENZENE	ug/l			<	10.0000	<	10.0000
4,6-DINITRO-O-CRESOL	ug/l			<	50.0000	<	50.0000
2,4-DINITROPHENOL	ug/l			<	50.0000	<	50.0000
2,4-DINITROTOLUENE	ug/l			<	10.0000	<	10.0000
2,6-DINITROTOLUENE	ug/l			<	10.0000	<	10.0000
DINOSEB	ug/l			<	10.0000	<	10.0000
DI-N-OCTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
DIPHENYLAMINE	ug/l			<	10.0000	<	10.0000
ETHYL METHANESULFONATE	ug/l			<	10.0000	<	10.0000
FLUORANTHENE	ug/l			<	10.0000	<	10.0000
FLUORENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROBUTADIENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROCYCLOPENTADIENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROETHANE	ug/l			<	10.0000	<	10.0000
HEXACHLOROPHENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROPROPENE	ug/l			<	10.0000	<	10.0000
INDENO(1,2,3-CD)PYRENE	ug/l			<	10.0000	<	10.0000
ISOPHORONE	ug/l			<	10.0000	<	10.0000
ISOSAFROLE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-6
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
METHAPYRILENE	ug/l			<	10.0000	<	10.0000
3-METHYLCHOLANTHRENE	ug/l			<	10.0000	<	10.0000
METHYL METHANESULFONATE	ug/l			<	10.0000	<	10.0000
2-METHYLNAPHTHALENE	ug/l			<	10.0000	<	10.0000
2-MEYTHLPHENOL	ug/l			<	10.0000	<	10.0000
3+4-METHYLPHENOL	ug/l			<	10.0000	<	10.0000
NAPHTHALENE	ug/l			<	10.0000	<	10.0000
1,4-NAPHTHOQUINONE	ug/l			<	200.0000	<	200.0000
1-NAPHTHYLAMINE	ug/l			<	10.0000	<	10.0000
2-NAPHTHYLAMINE	ug/l			<	10.0000	<	10.0000
O-NITROANILINE	ug/l			<	50.0000	<	50.0000
M-NITROANILINE	ug/l			<	50.0000	<	50.0000
P-NITROANILINE	ug/l			<	50.0000	<	50.0000
NITROBENZENE	ug/l			<	10.0000	<	10.0000
2-NITROPHENOL	ug/l			<	10.0000	<	10.0000
4-NITROPHENOL	ug/l			<	10.0000	<	10.0000
4-NITROQUINOLINE-1-OXIDE	ug/l			<	20.0000	<	20.0000
N-NITROSODI-N-BUTYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIMETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIPHENYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIPROPYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSOMETHYLETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSOMORPHOLINE	ug/l			<	10.0000	<	10.0000
N-NITROSOPIPERIDINE	ug/l			<	10.0000	<	10.0000
N-NITROSOPYRROLIDINE	ug/l			<	10.0000	<	10.0000
5-NITRO-O-TOLUIDINE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-6
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
PENTACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
PENTACHLOROETHANE	ug/l			<	10.0000	<	10.0000
PENTACHLORONITROBENZENE	ug/l			<	10.0000	<	10.0000
PENTACHLOROPHENOL	ug/l			<	50.0000	<	50.0000
PHENACETIN	ug/l			<	10.0000	<	10.0000
PHENANTHRENE	ug/l			<	10.0000	<	10.0000
PHENOL (TOTAL)	ug/l			<	10.0000	<	10.0000
P-PHENYLENEDIAMINE	ug/l			<	10.0000	<	10.0000
2-PICOLINE	ug/l			<	10.0000	<	10.0000
PRONAMIDE	ug/l			<	10.0000	<	10.0000
PYRENE	ug/l			<	10.0000	<	10.0000
PYRIDINE	ug/l			<	10.0000	<	10.0000
SAFROLE	ug/l			<	10.0000	<	10.0000
1,2,4,5-TETRACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
2,3,4,6-TETRACHLOROPHENOL	ug/l			<	10.0000	<	10.0000
O-TOLUIDINE	ug/l			<	10.0000	<	10.0000
1,2,4-TRICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
2,4,5-TRICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
2,4,6-TRICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
1,3,5-TRINITROBENZENE	ug/l			<	10.0000	<	10.0000
ALDRIN	ug/l			<	0.0500	<	0.0500
ALPHA-BHC	ug/l			<	0.0500	<	0.0500
BETA-BHC	ug/l			<	0.0500	<	0.0500
DELTA-BHC	ug/l			<	0.0500	<	0.0500
LINDANE	ug/l			<	0.0500	<	0.0500
CHLORDANE	ug/l			<	0.1000	<	0.1000
TDE	ug/l			<	0.1000	<	0.1000

TABLE D-18A-6
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
DDE	ug/l			<	0.1000	<	0.1000
DDT	ug/l			<	0.1000	<	0.1000
DIELDRIN	ug/l			<	0.1000	<	0.1000
ENDOSULFAN I	ug/l			<	0.0500	<	0.0500
ENDOSULFAN II	ug/l			<	0.1000	<	0.1000
ENDOSULFAN SULFATE	ug/l			<	0.1000	<	0.1000
ENDRIN	ug/l			<	0.1000	<	0.1000
ENDRIN ALDEHYDE	ug/l			<	0.1000	<	0.1000
HEPTACHLOR	ug/l			<	0.0500	<	0.0500
HEPTACHLOR EPOXIDE	ug/l			<	0.0500	<	0.0500
ISODRIN	ug/l			<	0.0500	<	0.0500
KEPONE	ug/l			<	0.2500	<	0.2500
METHOXYCHLOR	ug/l			<	0.5000	<	0.5000
TOXAPHENE	ug/l			<	2.0000	<	2.0000
AROCLOR 1016	ug/l			<	1.0000	<	1.0000
AROCLOR 1221	ug/l			<	2.0000	<	2.0000
AROCLOR 1232	ug/l			<	1.0000	<	1.0000
AROCLOR 1242	ug/l			<	1.0000	<	1.0000
AROCLOR 1248	ug/l			<	1.0000	<	1.0000
AROCLOR 1254	ug/l			<	1.0000	<	1.0000
AROCLOR 1260	ug/l			<	1.0000	<	1.0000
DIMETHOATE	ug/l			<	0.2500	<	0.2500
DISULFOTON	ug/l			<	0.2500	<	0.2500
FAMPHUR	ug/l			<	0.2500	<	0.2500
METHYL PARATHION	ug/l			<	0.2500	<	0.2500
PARATHION	ug/l			<	0.2500	<	0.2500
PHORATE	ug/l			<	0.2500	<	0.2500

TABLE D-18A-6
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
SULFOTEPP	ug/l			<	0.2500	<	0.2500
THIONAZIN	ug/l			<	0.2500	<	0.2500
O,O,O-TRIETHYL PHOSPHOROTHIOATE	ug/l			<	0.2500	<	0.2500
2,4-D	ug/l			<	2.0000	<	1.0000
2,4,5-T	ug/l			<	2.0000	<	1.0000
2,4,5- TP	ug/l			<	2.0000	<	1.0000
HEXACHLORODIBENZO-P-DIOXINS	ng/l			<	0.1400	<	0.1000
HEXACHLORODIBENZOFURANS	ng/l			<	0.0550	<	0.0570
PENTACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0960	<	0.1000
PENTACHLORODIBENZOFURANS	ng/l			<	0.0790	<	0.1000
2,3,7,8-TCDD	ng/l			<	0.0460	<	0.0990
TETRACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0460	<	0.0990
TETRACHLORODIBENZOFURANS	ng/l			<	0.0340	<	0.0400

TABLE D-18A-7
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6a

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
SPECIFIC CONDUCTANCE	umhos/cm		4968.0000		4311.0000		4550.7500
SULFATE	mg/l		1905.0000		1800.0000		1980.0000
TOTAL DISS SOLIDS	mg/l		11000.0000		3870.0000		4240.0000
TOTAL SUSP SOLIDS	mg/l	<	91.0000	<	10.0000	<	10.0000
DENSITY	g/mL		0.9772		1.0015		1.0000
pH	SU		7.6600		7.2500		7.6400
ALKALINITY	mg/l		111.0000		101.5000		104.7000
BROMIDE	mg/l	<	2.0000	<	2.0000		2.1250
CHLORIDE	mg/l		1040.0000		511.0000		6723.0000
FLUORIDE	mg/l	<	3.0000		1.4400		1.0650
IODIDE	mg/l	<	2.0000	<	2.0000	<	2.0000
NITROGEN, NO3 (AS N)	mg/l		7.6200		4.0050		2.8050
TOTAL ORGANIC CARBON	mg/l		1.1000		1.7800		1.1450
TOTAL ORGANIC HALOGENS	mg/l		0.0880		0.0663		0.0442
ORTHOPHOSPHATE (AS P)	mg/l	<	0.0200	<	0.0200	<	0.0200
BORON	mg/l		0.4290		0.3760	<	0.5000
CALCIUM	mg/l		681.0000		566.0000		646.5000
IRON	mg/l	<	0.4000	<	0.1375	<	0.5000
LITHIUM	mg/l		0.0950		0.0905	<	0.2000
MAGNESIUM	mg/l		181.0000		155.5000		155.5000
POTASSIUM	mg/l		4.8200		3.8850		5.0550
SILICA	mg/l		24.2700		24.7200		22.8400
SODIUM	mg/l		347.0000		282.0000		314.0000
FREON-113	mg/l	<	0.0050	<	0.0050	<	0.0050
CYANIDE	mg/l			<	0.0100	<	0.0100
SULFIDE	mg/l				5.3800	<	1.5000

TABLE D-18A-7
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6a

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
ANTIMONY	mg/l			<	0.0130	<	0.0130
ARSENIC	mg/l	<	0.0060	<	0.0130	<	0.0130
BARIUM	mg/l	<	0.0200		0.0090		0.0100
BERYLLIUM	mg/l	<	0.0100	<	0.0025	<	0.0030
CADMIUM	mg/l			<	0.0025	<	0.0030
CHROMIUM	mg/l	<	0.0025	<	0.0250	<	0.0250
COBALT	mg/l			<	0.0130	<	0.0130
COPPER	mg/l			<	0.0130	<	0.0250
LEAD	mg/l	<	0.0125	<	0.0130		0.0170
MERCURY	mg/l	<	0.0002	<	0.0020	<	0.0020
NICKEL	mg/l			<	0.0250	<	0.0250
SELENIUM	mg/l	<	0.0060	<	0.0130		0.0200
SILVER	mg/l	<	0.0028	<	0.0130	<	0.0130
THALLIUM	mg/l			<	0.0130	<	0.0130
TIN	mg/l			<	0.0250	<	0.0250
VANADIUM	mg/l				0.0500		0.0530
ZINC	mg/l			<	0.0500	<	0.0500
ACETONE	ug/l			<	10.0000	<	10.0000
ACETONITRILE	ug/l			<	50.0000	<	50.0000
ACROLEIN	ug/l			<	10.0000	<	10.0000
ACRYLONITRILE	ug/l			<	10.0000	<	10.0000
BENZENE	ug/l			<	5.0000	<	5.0000
DICHLOROBROMOMETHANE	ug/l			<	5.0000	<	5.0000
BROMOFORM	ug/l			<	5.0000	<	5.0000
METHYL BROMIDE	ug/l			<	10.0000	<	10.0000
2-BUTANONE	ug/l			<	10.0000	<	10.0000
CARBON DISULFIDE	ug/l			<	5.0000	<	5.0000

TABLE D-18A-7
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6a

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
CARBON TETRACHLORIDE	ug/l	<	5.0000	<	5.0000	<	5.0000
CHLOROBENZENE	ug/l			<	5.0000	<	5.0000
CHLOROPRENE	ug/l			<	5.0000	<	5.0000
CHLOROETHANE	ug/l			<	10.0000	<	10.0000
CHLOROFORM	ug/l			<	5.0000	<	5.0000
METHYL CHLORIDE	ug/l			<	10.0000	<	10.0000
ALLYL CHLORIDE	ug/l			<	5.0000	<	5.0000
DIBROMOCHLOROMETHANE	ug/l			<	5.0000	<	5.0000
1,2-DIBROMO-3-CHLOROPROPANE	ug/l			<	5.0000	<	5.0000
1,2-DIBROMOETHANE	ug/l			<	5.0000	<	5.0000
TRANS-1,4-DICHLORO-2-BUTENE	ug/l			<	5.0000	<	5.0000
DICHLORODIFLUOROMETHANE	ug/l			<	10.0000	<	10.0000
1,1-DICHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,2-DICHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,1-DICHLOROETHYLENE	ug/l			<	5.0000	<	5.0000
TRANS-1,2-DICHLOROETHYLENE	ug/l			<	5.0000	<	5.0000
1,2-DICHLOROPROPANE	ug/l			<	5.0000	<	5.0000
CIS-1,3-DICHLOROPROPENE	ug/l			<	5.0000	<	5.0000
TRANS-1,3-DICHLOROPROPENE	ug/l			<	5.0000	<	5.0000
ETHYLBENZENE	ug/l			<	5.0000	<	5.0000
ETHYL METHACRYLATE	ug/l			<	5.0000	<	5.0000
2-HEXANONE	ug/l			<	10.0000	<	10.0000
METHYL IODIDE	ug/l			<	5.0000	<	5.0000
METHACRYLONITRILE	ug/l			<	5.0000	<	5.0000
METHYLENE BROMIDE	ug/l			<	5.0000	<	5.0000
METHYLENE CHLORIDE	ug/l	<	5.0000	<	5.0000	<	5.0000
METHYL METHACRYLATE	ug/l			<	5.0000	<	5.0000

TABLE D-18A-7
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6a

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
4-METHYL-2-PENTANONE	ug/l			<	10.0000	<	10.0000
PROPIONITRILE	ug/l			<	20.0000	<	20.0000
STYRENE	ug/l			<	5.0000	<	5.0000
1,1,1,2-TETRACHLOROETHANE	ug/l			<	5.0000	<	5.0000
1,1,2,2-TETRACHLOROETHANE	ug/l			<	5.0000	<	5.0000
TETRACHLOROTEHYLENE	ug/l			<	5.0000	<	5.0000
TOLUENE	ug/l			<	5.0000	<	5.0000
1,1,1-TRICHLOROETHANE	ug/l	<	5.0000	<	5.0000	<	5.0000
1,1,2-TRICHLOROETHANE	ug/l			<	5.0000	<	5.0000
TRICHLOROETHYLENE	ug/l	<	5.0000	<	5.0000	<	5.0000
TRICHLOROFLUOROMETHANE	ug/l			<	5.0000	<	5.0000
1,2,3-TRICHLOROPROPANE	ug/l			<	5.0000	<	5.0000
VINYL ACETATE	ug/l			<	10.0000	<	20.0000
VINYL CHLORIDE	ug/l			<	10.0000	<	10.0000
XYLENE	ug/l			<	10.0000	<	10.0000
1,4-DIOXANE	ug/l			<	410.0000	<	410.0000
ISOBUTYL ALCOHOL	ug/l			<	320.0000	<	320.0000
ACENAPHTHENE	ug/l			<	10.0000	<	10.0000
ACENAPHTHYLENE	ug/l			<	10.0000	<	10.0000
ACETOPHENONE	ug/l			<	10.0000	<	10.0000
2-ACETYLAMINOFLUORENE	ug/l			<	10.0000	<	10.0000
4-AMINOBIPHENYL	ug/l			<	10.0000	<	10.0000
ANILINE	ug/l			<	10.0000	<	10.0000
ANTHRACENE	ug/l			<	10.0000	<	10.0000
ARAMITE	ug/l			<	10.0000	<	10.0000
1,2-BENZANTHRACENE	ug/l			<	10.0000	<	10.0000
3,4-BENZOFLUORANTHENE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-7
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6a

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
BENZO[K]FLUORANTHENE	ug/l			<	10.0000	<	10.0000
BENZO[GHI]PERYLENE	ug/l			<	10.0000	<	10.0000
BENZO[A]PYRENE	ug/l			<	10.0000	<	10.0000
BENZYL ALCOHOL	ug/l			<	20.0000	<	20.0000
BIS(2-CHLOROETHOXY)METHANE	ug/l			<	10.0000	<	10.0000
BIS(2-CHLOROETHYL)ETHER	ug/l			<	10.0000	<	10.0000
BIS(2-CHLORO-1-METHYLETHYL)ETHER	ug/l			<	10.0000	<	10.0000
BIS(2-ETHYLHEXYL)PHTHALATE	ug/l			<	10.0000	<	10.0000
4-BROMOPHENYL PHENYL ETHER	ug/l			<	10.0000	<	10.0000
BENZYL BUTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
4-CHLOROANILINE	ug/l			<	10.0000	<	10.0000
CHLOROBENZILATE	ug/l			<	10.0000	<	10.0000
P-CHLORO-M-CRESOL	ug/l			<	10.0000	<	10.0000
2-CHLORONAPHTHALENE	ug/l			<	10.0000	<	10.0000
2-CHLOROPHENOL	ug/l			<	10.0000	<	10.0000
4-CHLOROPHENYL PHENYL ETHER	ug/l			<	10.0000	<	10.0000
CHRYSENE	ug/l			<	10.0000	<	10.0000
DIALLATE	ug/l			<	10.0000	<	10.0000
DIBENZ[A,H]ANTHRACENE	ug/l			<	10.0000	<	10.0000
DIBENZOFURAN	ug/l			<	10.0000	<	10.0000
DI-N-BUTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
1,2-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
1,3-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
1,4-DICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
DCB	ug/l			<	20.0000	<	20.0000
2,4-DICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
2,6-DICHLOROPHENOL	ug/l			<	10.0000	<	10.0000

TABLE D-18A-7
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6a

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
DIETHYL PHTHALATE	ug/l			<	10.0000	<	10.0000
P-(DIMETHYLAMINO)AZOBENZENE	ug/l			<	10.0000	<	10.0000
7,12-DIMETHYLBENZ[A]ANTHRACENE	ug/l			<	10.0000	<	10.0000
O-TOLIDINE	ug/l			<	10.0000	<	10.0000
A,A-DIMETHYLPHENETHYLAMINE	ug/l			<	10.0000	<	10.0000
2,4-DIMETHYLPHENOL	ug/l			<	10.0000	<	10.0000
DIMETHYL PHTHALATE	ug/l			<	10.0000	<	10.0000
1,3-DINITROBENZENE	ug/l			<	10.0000	<	10.0000
4,6-DINITRO-O-CRESOL	ug/l			<	50.0000	<	50.0000
2,4-DINITROPHENOL	ug/l			<	50.0000	<	50.0000
2,4-DINITROTOLUENE	ug/l			<	10.0000	<	10.0000
2,6-DINITROTOLUENE	ug/l			<	10.0000	<	10.0000
DINOSEB	ug/l			<	10.0000	<	10.0000
DI-N-OCTYL PHTHALATE	ug/l			<	10.0000	<	10.0000
DIPHENYLAMINE	ug/l			<	10.0000	<	10.0000
ETHYL METHANESULFONATE	ug/l			<	10.0000	<	10.0000
FLUORANTHENE	ug/l			<	10.0000	<	10.0000
FLUORENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROBUTADIENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROCYCLOPENTADIENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROETHANE	ug/l			<	10.0000	<	10.0000
HEXACHLOROPHENE	ug/l			<	10.0000	<	10.0000
HEXACHLOROPROPENE	ug/l			<	10.0000	<	10.0000
INDENO(1,2,3-CD)PYRENE	ug/l			<	10.0000	<	10.0000
ISOPHORONE	ug/l			<	10.0000	<	10.0000
ISOSAFROLE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-7
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6a

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
METHAPYRILENE	ug/l			<	10.0000	<	10.0000
3-METHYLCHOLANTHRENE	ug/l			<	10.0000	<	10.0000
METHYL METHANESULFONATE	ug/l			<	10.0000	<	10.0000
2-METHYLNAPHTHALENE	ug/l			<	10.0000	<	10.0000
2-MEYTHLPHENOL	ug/l			<	10.0000	<	10.0000
3+4-METHYLPHENOL	ug/l			<	10.0000	<	10.0000
NAPHTHALENE	ug/l			<	10.0000	<	10.0000
1,4-NAPHTHOQUINONE	ug/l			<	200.0000	<	200.0000
1-NAPHTHYLAMINE	ug/l			<	10.0000	<	10.0000
2-NAPHTHYLAMINE	ug/l			<	10.0000	<	10.0000
O-NITROANILINE	ug/l			<	50.0000	<	50.0000
M-NITROANILINE	ug/l			<	50.0000	<	50.0000
P-NITROANILINE	ug/l			<	50.0000	<	50.0000
NITROBENZENE	ug/l			<	10.0000	<	10.0000
2-NITROPHENOL	ug/l			<	10.0000	<	10.0000
4-NITROPHENOL	ug/l			<	10.0000	<	10.0000
4-NITROQUINOLINE-1-OXIDE	ug/l			<	20.0000	<	20.0000
N-NITROSODI-N-BUTYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIMETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIPHENYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSODIPROPYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSOMETHYLETHYLAMINE	ug/l			<	10.0000	<	10.0000
N-NITROSOMORPHOLINE	ug/l			<	10.0000	<	10.0000
N-NITROSOPIPERIDINE	ug/l			<	10.0000	<	10.0000
N-NITROSOPYRROLIDINE	ug/l			<	10.0000	<	10.0000
5-NITRO-O-TOLUIDINE	ug/l			<	10.0000	<	10.0000

TABLE D-18A-7
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6a

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
PENTACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
PENTACHLOROETHANE	ug/l			<	10.0000	<	10.0000
PENTACHLORONITROBENZENE	ug/l			<	10.0000	<	10.0000
PENTACHLOROPHENOL	ug/l			<	50.0000	<	50.0000
PHENACETIN	ug/l			<	10.0000	<	10.0000
PHENANTHRENE	ug/l			<	10.0000	<	10.0000
PHENOL (TOTAL)	ug/l			<	10.0000	<	10.0000
P-PHENYLENEDIAMINE	ug/l			<	10.0000	<	10.0000
2-PICOLINE	ug/l			<	10.0000	<	10.0000
PRONAMIDE	ug/l			<	10.0000	<	10.0000
PYRENE	ug/l			<	10.0000	<	10.0000
PYRIDINE	ug/l			<	10.0000	<	10.0000
SAFROLE	ug/l			<	10.0000	<	10.0000
1,2,4,5-TETRACHLOROBENZENE	ug/l			<	10.0000	<	10.0000
2,3,4,6-TETRACHLOROPHENOL	ug/l			<	10.0000	<	10.0000
O-TOLUIDINE	ug/l			<	10.0000	<	10.0000
1,2,4-TRICHLOROBENZENE	ug/l			<	10.0000	<	10.0000
2,4,5-TRICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
2,4,6-TRICHLOROPHENOL	ug/l			<	10.0000	<	10.0000
1,3,5-TRINITROBENZENE	ug/l			<	10.0000	<	10.0000
ALDRIN	ug/l			<	0.0500	<	0.0500
ALPHA-BHC	ug/l			<	0.0500	<	0.0500
BETA-BHC	ug/l			<	0.0500	<	0.0500
DELTA-BHC	ug/l			<	0.0500	<	0.0500
LINDANE	ug/l			<	0.0500	<	0.0500
CHLORDANE	ug/l			<	0.1000	<	0.1000
TDE	ug/l			<	0.1000	<	0.1000

TABLE D-18A-7
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6a

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
DDE	ug/l			<	0.1000	<	0.1000
DDT	ug/l			<	0.1000	<	0.1000
DIELDRIN	ug/l			<	0.1000	<	0.1000
ENDOSULFAN I	ug/l			<	0.0500	<	0.0500
ENDOSULFAN II	ug/l			<	0.1000	<	0.1000
ENDOSULFAN SULFATE	ug/l			<	0.1000	<	0.1000
ENDRIN	ug/l			<	0.1000	<	0.1000
ENDRIN ALDEHYDE	ug/l			<	0.1000	<	0.1000
HEPTACHLOR	ug/l			<	0.0500	<	0.0500
HEPTACHLOR EPOXIDE	ug/l			<	0.0500	<	0.0500
ISODRIN	ug/l			<	0.0500	<	0.0500
KEPONE	ug/l			<	0.2500	<	0.2500
METHOXYCHLOR	ug/l			<	0.5000	<	0.5000
TOXAPHENE	ug/l			<	2.0000	<	2.0000
AROCLOR 1016	ug/l			<	1.0000	<	1.0000
AROCLOR 1221	ug/l			<	2.0000	<	2.0000
AROCLOR 1232	ug/l			<	1.0000	<	1.0000
AROCLOR 1242	ug/l			<	1.0000	<	1.0000
AROCLOR 1248	ug/l			<	1.0000	<	1.0000
AROCLOR 1254	ug/l			<	1.0000	<	1.0000
AROCLOR 1260	ug/l			<	1.0000	<	1.0000
DIMETHOATE	ug/l			<	0.5000	<	0.2500
DISULFOTON	ug/l			<	0.5000	<	0.2500
FAMPHUR	ug/l			<	0.5000	<	0.2500
METHYL PARATHION	ug/l			<	0.5000	<	0.2500
PARATHION	ug/l			<	0.5000	<	0.2500
PHORATE	ug/l			<	0.5000	<	0.2500

TABLE D-18A-7
GMP WATER QUALITY DATA TO DATE
FOR
WQSP-6a

Parameter	Unit		Value		Value		Value
			Round		Round		Round
			1		2		3
SULFOTEPP	ug/l			<	0.5000	<	0.2500
THIONAZIN	ug/l			<	0.5000	<	0.2500
O,O,O-TRIETHYL PHOSPHOROTHIOATE	ug/l			<	0.5000	<	0.2500
2,4-D	ug/l			<	1.0000	<	1.0000
2,4,5-T	ug/l			<	1.0000	<	1.0000
2,4,5- TP	ug/l			<	1.0000	<	1.0000
HEXACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0230	<	0.0350
HEXACHLORODIBENZOFURANS	ng/l			<	0.0076	<	0.0130
PENTACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0430	<	0.0490
PENTACHLORODIBENZOFURANS	ng/l			<	0.0140	<	0.0360
2,3,7,8-TCDD	ng/l			<	0.0110	<	0.0330
TETRACHLORODIBENZO-P-DIOXINS	ng/l			<	0.0110	<	0.0330
TETRACHLORODIBENZOFURANS	ng/l			<	0.0070	<	0.0240

APPENDIX D19
DOCUMENTATION OF THE INDEPENDENT REVIEW OF THE WIPP FACILITY AS-BUILT CONDITION

APPENDIX D19
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D19-1 INTRODUCTION D19-1

D19-2 DOCUMENTATION OF INDEPENDENT REVIEW D19-3

Supporting information in Section D19-2

Letter from E. Gordon of the New Mexico Environment Department to Robert F. Kehrman of Westinghouse Electric Corporation dated November 22, 1991 summarizing the meeting of November 14, 1991. (3 pages)

Letter from E. Gordon of the New Mexico Environment Department to Robert F. Kehrman of Westinghouse Electric Corporation dated February 14, 1992 summarizing the meeting of January 17, 1992. (3 pages)

Letter from A. Hunt of the U.S. Department of Energy to J. Espinosa of the New Mexico Environment Department dated March 4, 1992 requesting the acceptance of the DOE review in lieu of signatures on as-built drawings. (4 pages)

The following was attached to the March 4, 1992 letter:

Memorandum from James P. Knight of the U.S. Department of Energy to J. B. Tillman of the U.S. Department of Energy dated August 2, 1989 on the EH-30 Safety Evaluation Report (SER) for the Waste Isolation Pilot Plant (WIPP) plus attachment. (199 pages)

Memorandum from Joseph E. Fitzgerald of the U.S. Department of Energy to J. Lytle of the U.S. Department of Energy dated January 16, 1990 on the Supplement to Safety Evaluation Report for the Waste Isolation Pilot Plant (WIPP) plus attachment. (4 pages)

Memorandum from Joseph E. Fitzgerald of the U.S. Department of Energy to J. Lytle of the U.S. Department of Energy dated March 8, 1991 on the Completion of the Office of Environment, Safety and Health (EH) Supplemental Safety Evaluation Report for the Waste Isolation Pilot Plant (WIPP) Final Safety Analysis Report (FSAR) plus attachment. (42 pages)

List of WIPP FSAR - BNL Reviewers (1 page)

New Mexico Reading Room Mail List (1 page)

Letter from A. Hunt of the U.S. Department of Energy to B. Garcia of the New Mexico Environment Department dated October 29, 1992 transmitting responses to requests for information of Chapter D of the permit application. (2 pages)

The following was attached to the October 29, 1992 letter:

Response to General Comment D-12 (2 pages)

Memorandum from James P. Knight of the U.S. Department of Energy to J. B. Tillman of the U.S. Department of Energy dated August 2, 1989 on the EH-30 Safety Evaluation Report (SER) for the Waste Isolation Pilot Plant (WIPP) without attachment. (2 pages)

Memorandum from Joseph E. Fitzgerald of the U.S. Department of Energy to J. Lytle of the U.S. Department of Energy dated January 16, 1990 on the Supplement to Safety Evaluation Report for the Waste Isolation Pilot Plant (WIPP) without attachment. (2 pages)

Memorandum from Joseph E. Fitzgerald of the U.S. Department of Energy to J. Lytle of the U.S. Department of Energy dated March 8, 1991 on the Completion of the Office of Environment, Safety and Health (EH) Supplemental Safety Evaluation Report for the Waste Isolation Pilot Plant (WIPP) Final Safety Analysis Report (FSAR) without attachment. (2 pages)

Report entitled "Environmental Restoration and Waste Management Operational Readiness Review of the Waste Isolation Pilot Plant, Main Report, Summer 1991. (Cover and signature page)

Report entitled "Environmental Restoration and Waste Management Operational Readiness Review of the Waste Isolation Pilot Plant, Addendum, Summer 1991. (Cover and signature page)

List of WIPP FSAR - BNL Reviewers (1 page)

Document entitled "Description of Configuration Management System at WIPP". (25 pages)

D19-3 CONFIGURATION CONTROL PROGRAM D19-329

APPENDIX D19
DOCUMENTATION OF THE INDEPENDENT REVIEW OF THE WIPP FACILITY AS-BUILT CONDITION

D19-1 Introduction

In 1990, when the DOE began preparing the hazardous waste permit application for the Waste Isolation Pilot Plant (WIPP), a question was discussed with the New Mexico Environment Department regarding the submittal of previously general facility information to support the application. Since site selection and characterization were complete, facility design and construction finished, operating procedures in place, and safety analysis completed, the DOE had a great amount of documentation available for review. After consulting with the Environmental Protection Agency (EPA), who had recently completed a review of the WIPP facility as part of a no-migration determination process, the NMED specified documentation it considered useful in assessing the design and construction of the facility. Much of the documentation in Appendices D1 to D8 of this permit application constitutes the documentation as specified by the NMED. Included are site selection reports, design analyses, design basis documents, environmental reports, and as-built drawings of the finished facility. Since that time, the DOE has added more facility information to the application, such as the final panel closure design and the shaft seal design.

One topic that the DOE discussed with the NMED in 1992, was the level of certification needed on the documents that are submitted in the application. This topic arose after consideration of the requirements in 20 NMAC 4.1, Subpart IX, §270.14(a) which states that *"...Certain technical data, such as design drawings and specifications, and engineering studies shall be certified by a registered professional engineer."* At the heart of the matter was whether or not previously generated "as-built" drawings needed individual signatures by a registered professional engineer (PE) or whether the DOE facility acquisition process, which includes a thorough review by an organization independent of the designer, constructor or operator, is an equivalent level of review.

The DOE provided the NMED with documentation that explained the DOE process of documenting that the review had occurred and that all outstanding action items had been resolved.

The following section contains documentation of the discussion of this topic with the NMED and evidence that the DOE's independent review was equivalent to a review by a professional engineer. The DOE has implemented a Configuration Control Management Program to assure that proposed facility changes are assessed to determined whether or not the regulations of the Part 4.1 of Title 20 of the NMAC apply. For those changes determined to be covered by 20 NMAC 4.1, the DOE assures that associated design drawings, specifications, and engineering studies are signed by a professional engineer.

A subsequent section of this appendix contains the current WIPP Configuration Control Program.

D19-2 Documentation of Independent Review

The attached information is divided as follows:

- Two letter reports by the NMED summarizing the discussions of engineering materials. The discussion on engineering documentation first occurred at a meeting between the applicants (DOE and Westinghouse) and the NMED on November 14, 1991. The topic was subsequently discussed at a January 17, 1992, meeting. The report from that meeting recommends the course of action to be taken by the DOE.

- Transmittal of documentation of the independent review to the NMED.

- Question raised by the NMED during the technical review of the Test Phase Permit Application regarding PE signatures and the DOE's response. Only the response to the relevant comment which is General Comment D-12 is shown in the attached materials. Note that the rest of this letter is reproduced as it was transmitted to the NMED, including attachments. One attachment included a copy of the WIPP Configuration Management Plan in effect at the time. Since that plan has since been revised, the current plan is attached in the next section of this appendix.

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RON CURRY
DEPUTY SECRETARY

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STRATEGIC PLANNING

November 22, 1991

Mr. Robert F. Kehrman
Westinghouse Electric Corporation
WIPP Project
Environmental Strategic Planning
P.O. Box 2098
Carlsbad, NM 88221

Dear Mr. Kehrman:

This is to confirm our meeting of November 14, 1991 regarding technical issues on the Part B application for the Department of Energy's (DOE) Waste Isolation Pilot Plant (WIPP).

The following technical issues were discussed and the following conclusions reached.

1.a. ISSUE: Waste characterization. DISCUSSION: Chapter three on waste characterization of the Part B application will be extensively modified. Rather than the extensive breakdown of waste categories as presently seen in the item description codes (IDCs), waste categories will be broader, i.e. inorganic waste water treatment sludges or all glass waste. There will be a table indicating which IDCs belong under a particular waste form. This will result in approximately 12-15 waste forms versus the couple of hundred IDCs. Analytic and sampling methods, parameters for analysis and sampling frequencies will be indicated for each waste form. Additionally, waste characterization will be expanded to cover all generating sites, not just Rocky Flats Plant (RFP) and Idaho National Engineering Laboratory (INEL). The remainder of the application will focus on wastes from RFP and INEL which still are the only wastes to be received for the test phase. In regards to analytical methods, methods in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (SW-846) will be cited where possible. However, there are wastes forms for which SW-846 methods cannot presently be used and equivalent methods may not be available until 1993. CONCLUSION: The new approach is preferred over that presently in Chapter 3. Equivalent methods are allowed by the New Mexico Hazardous Waste Regulations (HWMR-6), Part I, 40 CFR section 260.21 In regards to the SW-846 methods, this could be handled in a couple of ways in the permit: a table of waste forms and their approved methods and a table of waste forms for which

methods are to be determined and which cannot be shipped until there is an approved method; or a compliance schedule of required actions for determining and approving methods. No waste form will be shipped if an analytical method cannot be found.

1.b. ISSUE: Waste profile plans. DISCUSSION and CONCLUSION: These plans will no longer be a major component of the waste analysis plan and state approval of the plans is no longer needed. They will be used primarily as quality control documents to determine whether or not the generators are analyzing their wastes as required by the waste analysis plan.

1.c. Issue: "Envelope concept." DISCUSSION and CONCLUSION: This concept will not be used for waste analysis for RCRA waste characterization. It is being used only for gas generation criteria. Chapter 9 in SW-846 will be used to determine the amount of sampling needed for RCRA waste characterization and not the envelope concept. Each generating site will do a sampling program on its waste before it is shipped to WIPP; they will not be using data from gas generation to declare a waste form from RFP or INEL as a representative waste.

2. ISSUE: TCLP analyses vs. total metals and organics analyses.. DISCUSSION: A position paper was left for review by NMED. NMED stated that the state was not authorized for TCLP; consequently, any call on TCLP will be the Environmental Protection Agency-Region 6 decision. However, the state will discuss the issue with EPA-Region 6. One of the difficulties with TCLP in a hot cell is cleaning the apparatus. Total analysis is more pertinent to DOE's need to define source terms required for the second no-migration variance petition. They do need a definite decision in order to budget for TCLP if necessary. CONCLUSION: The NMED will review the paper and confer with EPA-Region 6.

3. ISSUE: Schedule for submitting an augmented Part B. DISCUSSION: NMED stated that the request for proposals for review of the permit application had been re-advertized and the date for awarding the contract was January 29th. At this time, NMED stated that a quick review of the application for engineering materials required by HWMR-6, Pt. IX, sec. 270.23 revealed that the materials were not there nor were there the required certifications by a professional engineer. Both should be included in the augmented permit application. DOE and Westinghouse stated that they had attempted to summarized the information, rather than submit the information wholesale due to the volume involved. CONCLUSION: DOE and Westinghouse will list what materials they think should be needed and the NMED will confer with EPA headquarters regarding the engineering materials they found

necessary in order to determine what will be needed.

4. ISSUE: Permit fees DISCUSSION: NMED stated that it could not discuss the issue until Kathleen Sisneros, Director, Water and Waste Management Division was present. They did not intend to discuss the amount, but they did need to know when the fees would be assessed. RESPONSE: Fees are assessed when the application is declared administratively complete after review against the requirements in HWMR-6, Pt. IX, secs. 270.14 and 270.23. That would probably be at the need of this fiscal year or the beginning of the next one.

5. ISSUE: Deletion of the TRUCON document and the Clements and Kudera materials from the application and incorporating them by reference. DISCUSSION and CONCLUSION: NMED does have the No-Migration Petition which includes these materials, but the application must be a stand-alone document. However, NMED will review that material and determine if it must be included. DOE and Westinghouse pointed out that those materials were ones that required no judgment by NMED and that the TRUCON document was a transportation document.

There was a brief discussion of differences between states hosting generator sites for WIPP regarding what each considered a hazardous waste. An example was: Colorado does not consider graphite molds wiped with solvents and then scraped to recover plutonium to be a hazardous waste; Idaho does.

Additionally, DOE and Westinghouse emphasized that the phased approach to permit application was being dropped; that all bins would be included in this application and that any changes required for the alcove tests would be a permit modification or a change under interim status. NMED made no comments regarding interim status.

If you have any additions or corrections to make regarding this meeting, please contact me at (505) 827-4300.

Yours truly,

A. Elizabeth Gordon, Ph.D.

A. Elizabeth Gordon, Ph.D.
WIPP Permit Coordinator
Hazardous and Radioactive Materials Bureau

cc: Mike McFadden

State of New Mexico
ENVIRONMENT DEPARTMENT
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Santa Fe, New Mexico 87502
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JUDITH M. ESPINOSA
SECRETARY

RON CURRY
DEPUTY SECRETARY

February 14, 1992

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ENVIRONMENTAL
STRATEGIC PLANNING

Mr. Robert F. Kehrman
Westinghouse Electric Corporation
WIPP Project
Environmental Strategic Planning
P.O. Box 2098
Carlsbad, NM 88221

Dear Mr. Kehrman:

This is to confirm our meeting of January 17, 1992 regarding technical issues on the Part B application for the Department of Energy's (DOE) Waste Isolation Pilot Plant (WIPP).

The following technical issues were discussed and the following conclusions reached.

1. ISSUE: Open topics from the tour of the Rocky Flats Plant (RFP). DISCUSSION and CONCLUSION: There are no additional questions from the New Mexcio Environment Department (NMED) about the Rocky Flats Plant at this time. If some do arise, NMED will contact the necessary DOE personnel.

2. ISSUE: Waste characterization requirements for supercompacted waste. DISCUSSION and CONCLUSION: The NMED cannot determine whether or not it will require further characterization for supercompacted waste from the RFP until it sees the augmented waste characterization chapter in the Part B. NMED understands that the RFP needs to start supercompacting waste as soon as the supercompactor meets all the environmental requirements and that, obviously, any waste characterization must be done before the waste is supercompacted. The NMED will try to determine any such requirements as soon as possible, but cannot do so until the augmented waste characterization plan for the Part B is reviewed.

3. Issue: Design information in Chapter D: Facility and Process Information of the permit application. DISCUSSION: At the November meeting, it was pointed out that more detailed engineering information would be required in this chapter. Attached is the list of siting reports, engineering design basis reports and detailed plans and drawings the DOE and Westinghouse propose to add to Chapter D. NMED had discussions with headquarters staff for the Environmental Protection Agency (EPA) regarding what reports they would

recommended including in the chapter based on EPA's experience with the no-migration petition for WIPP. The reports suggested by EPA were: 1986 design validation report; current engineering reports regarding roof stability; closure engineering reports; engineering reports used to support no-migration determination such as final safety analysis plan; MSHA agreement. The DOE and Westinghouse list was agreed to due to the amount of overlap between the two lists. DOE and Westinghouse representatives agreed to include the MSHA Agreement. The one area of disagreement was the request for the engineering reports regarding closure. Westinghouse representatives thought it unnecessary because closure would not be a part of the test phase. The closure decision will come later and the engineering data supplied then. NMED pointed out that detailed closure plans are required because if the facility is order to close on short notice, the closure plans in the permit are the ones that must be followed. CONCLUSION: The DOE and Westinghouse list was agreed to; the MSHA Agreement will be included. NMED will make a final call regarding the closure engineering reports later.

4. ISSUE: Certification of engineering reports and data by a professional engineer. DISCUSSION: Construction project for DOE are not certified by a professional engineer. Rather an acquisition board is assembled at a research laboratory and that board reviews all engineering materials and makes a recomendation as to whether or not the project should be accepted. The board does submit a final report regarding their recommendation. Could that report be substituted for certification by a professional engineer? CONCULSION: A letter formally requesting that substitution should be sent to NMED. The recommendation will be that the substitution be allowed.

5. ISSUE: Form of some of the engineering materials. DISCUSSION: The calculations in proposed AppendixD 2 indexed as CS-41-D-486 through CS-41-D-492 and CS-41-D-495 are on microfiche and involve hundreds of pages and would cost $1200 for one copy. DOE and Westinghouse could make microfiche readers available to NMED and repositories for the public copies of the permit application. CONCLUSION: It was agreed that those materials could be submitted on microfiche.

6. ISSUE: TCLP analyses vs. total metals and organics analyses. DISCUSSION: Rich Mayer from EPA-Region 6 indicated that he had discussed the request with the EPA headquarter's staff and they had no difficulties with the request. However, he had not had time to discuss with his superiors in Region 6. DOE and Westinghouse pointed out that some generators will use TCLP in order to prove that a waste is not hazardous; others will opt for the total metals approach. CONCLUSION: The issue would be discussed further both by EPA Region 6 and NMED and a final decision made later.

7. ISSUE: Status of waste analysis plan. DICUSSION and CONCLUSION: It has yet to be review by the generator sites. The plan is being used to force waste analysis at these sites; consequently, it is imperative that they review the plan before the augmented permit application is submitted.

8. ISSUE: No-migration and TRUPACT II information. DISCUSSION: Is it necessary to submit those materials with the application when the NMED already has copies and the volume involved is so great? Additionally, they are peripheral to the new waste analysis plan. CONCLUSION: Although the NMED usually requires a free-standing document for a permit application, these materials need not be submitted as appendices. However, all parties need to check that the editions referenced are the ones in house for NMED.

9. ISSUE: Schedule for submitting an augmented Part B. DISCUSSION and CONCLUSION: They hope to submit it early in February, but they must wait for the generator sites to review the waste analysis plan. NMED does not have a set time. However, the sooner the permit application is submitted, the sooner it can be reviewed.

As indicated in item # 3, NMED indicated that it would make a final call regarding engineering information for closure. The New Mexico Hazardous Waste Management Regulations (HWMR-6), Part IX, 40 CFR section 270.23(a)(2) require: "Detailed plans and engineering reports describing how the unit will be ...closed to comply with the requirement of" Pt. V, secs. 264.601 and 264.602. Consequently, the NMED will require detailed engineering information on closure and requests that that information be included in the augmented new permit application.

If you have any additions or corrections to make regarding this meeting, please contact me at (505) 827-4300.

Yours truly,

A. Elizabeth Gordon, Ph.D.

A. Elizabeth Gordon, Ph.D.
WIPP Permit Coordinator
Hazardous and Radioactive Materials Bureau

cc: Mike McFadden, DOE-WPSO
Kathleen Sisneros, Director, NMED, WWMD

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Department of Energy
Albuquerque Operations Office
Waste Isolation Pilot Plant Project Officer
P. O. Box 3090
Carlsbad, New Mexico 88221

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• ANDERSON	• MUGNO
X CARRELL	X REED
X COX	X TREGO
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X FITCH	X MRC
• HALVERSON	X bagers
X KEHRMAN	•
X KUNTZ	•
• LEE	•
• MILLER	•

Ms. Judith M. Espinosa, Secretary
New Mexico Environment Department
P. O. Box 26110
Santa Fe, New Mexico

Dear Ms. Espinosa:

This letter is in response to several action items from the November 14, 1991 and January 17, 1992 meetings with the New Mexico Environment Department (NMED) in Santa Fe, New Mexico.

First, the Department of Energy (DOE) has compiled a list of additional drawings and documents (provided to you during the January 17 meeting) to be included in the revision of the Waste Isolation Pilot Plant (WIPP) Resource Conservation and Recovery Act (RCRA) Part B Permit Application. These drawings and documents detail the final design of facilities, equipment, and systems. As required by 40 CFR § 270.23 (a), only those systems with direct application to waste handling, waste management, facility protection, and protection of the public and the environment are included.

The first item from the November 14, 1991 meeting pertained to the RCRA requirement (40 CFR 270.14[a]) for certification of drawings by a Professional Engineer. The WIPP facility was acquired in accordance with DOE standard procedures as defined in DOE Order 4700.1. This order implements federal acquisition policies. Bechtel National Incorporated was the Architect-Engineer (AE) for the WIPP facility. The U. S. Army Corps of Engineers was the constructor. For projects such as the WIPP facility, the AE holds the Professional Engineer's responsibility. The AE Project Manager's signature on the drawings, documents, and the Design Validation Report (included in the Part B Permit Application) was sufficient certification to satisfy the DOE's acquisition requirements. The AE Project Manager is a registered Professional Engineer.

The DOE as owner is also required to perform independent review and verification of the adequacy of the design as part of the facility safety analysis and review process. For the WIPP facility this independent review was performed by the Brookhaven National Laboratories under contract to the DOE. Full documentation is available in the WIPP Project files. Enclosures 1, 2, and 3 are the Safety Evaluation Reports and Supplements indicating closure of all issues identified by that review. The Brookhaven review personnel names and credentials are listed in Enclosure 4.

In addition, the design and operation of the WIPP facility has been reviewed by many unbiased, independent groups. Each of these review groups was composed of numerous scientific and engineering professionals. While these reviews and resulting approvals did not include certifications by

registered Professional Engineers, they were completely documented and constitute the functional equivalent and accomplish the same goal of protection of the public health and the environment, as required by 40 CFR § 270.23 (a).

The final step in the DOE's acquisition process involves a decision to proceed with the project. This decision is made after all necessary facility design and safety reviews by the DOE Office of Environmental Restoration and Waste Management (EM) Operational Readiness Reviews are complete, and is based on a determination by the Energy Systems Acquisition Advisory Board (ESAAB) that the facility meets the intent of the design, can be operated safely in a manner that protects the public and the environment, and is in compliance with the applicable laws and standards. This decision was addressed on March 29, 1991 when the ESAAB authorized the Director of EM to close out construction and make final preparation for operations at the WIPP facility. Subsequently, the Director of EM distributed the "Report to the Secretary of Energy on WIPP Readiness to Begin Test Phase Activities with Transuranic Waste" on October 3, 1991.

Although the language of 40 CFR § 270.14 (a) is specific as to the certification of certain portions of the design documentation for a miscellaneous unit by a registered Professional Engineer, DOE believes the system of controls and reviews in place and as described above, accomplishes the same intent. In other words, this system ensures that the design of the facility is appropriate for the intended purpose, that the facility has been constructed to the specified requirements, and that written operating procedures are in place to protect the health and safety of the general public, the operating personnel, and the environment, which is the intent of the specified RCRA regulation.

The DOE requests that the NMED accept the DOE Major Systems Acquisition (MSA) approvals, including the safety analysis and review process, as satisfying the requirement for certification by a registered Professional Engineer. Further information regarding this MSA process and the reviews can be provided as needed.

The second action item that was discussed at the November 14 meeting involved the preparation of a cross reference table for waste characterization information. At the time, it was suggested that a cross-correlation table would be useful in the permit application to tie the waste categories to specific item description codes (IDCs) or to TRUPACT-II content codes (TRUCON codes). The rationale was to provide this table as a road map to information collected in other documents regarding the waste. As discussed during the January 17 meeting, the revision of the WIPP Waste Analysis Plan (WAP) has progressed to the point that such a correlation table is not useful in the context of the WAP. This conclusion was reached after evaluating the bases used by the generator sites for developing the current waste classification system. Specifically, the IDCs were developed to provide segregation control of waste by the generator, and TRUCON codes to support modelling for the transportation of the waste, and address gas generation issues, not the RCRA constituents of the waste.

The revised WAP uses waste categories that are oriented toward the specific RCRA requirements. The sampling and analysis requirements will apply to all the waste that is in the category, regardless of any other designations that are applied for other purposes. While all of the IDC's or TRUCON codes fall into one of the new waste categories, it is no longer useful to provide any specific correlation between the new waste categories and the old waste codes in the revision to the Part B Application.

By replacing the IDC's and the TRUCON codes, the WAP reflects only those waste codes or classifications specified in Part A of the permit application. This will allow a generator to create new IDC or TRUCON codes due to changing requirements without a need to revise the WIPP permit, provided no new RCRA categories are introduced or the estimated volumes of waste are exceeded.

The third action item from the December 14 meeting addressed the No-Migration Variance Petition (NMVP) appendices. Consistent with the concept of RCRA related waste categories, the DOE further proposed during the January 17 meeting to delete the NMVP appendices from the Part B permit application. The DOE believes that the information in the revised WAP will be sufficient to meet the requirements of HWMR-6, Part V, 40 CFR § 264.13 and 265.13 without the appended information. Specifically, the WAP includes a description of the waste to be managed at the facility, the types of operations and processes which generate TRU waste, the facility process tolerance limits and boundary conditions, the waste parameters to be monitored, the sampling and analysis procedures, and the quality assurance/quality control requirements. The NMVP information is useful for reference and is a matter of public record, should the NMED desire to pursue that level of detail.

The first action item from the January 17 meeting regarded supply of the WIPP facility validation and verification correspondence to the NMED separately from the Part B Permit Application. This letter provides that documentation in the enclosures.

The final action item was a request for a list of all New Mexico public reading rooms. Enclosure 5 has that list.

If you have any questions or comments concerning this matter, please contact Trey Greenwood of my staff at 887-8107.

Sincerely,

Arlen Hunt
Project Site Manager

Enclosures:
1. EH-30 Safety Evaluation Report for the WIPP
2. Supplement to Safety Evaluation Report for WIPP
3. Completion of the Office of Environment, Safety, and Health (EH) Supplemental Safety Evaluation Report (SER) for the WIPP FSAR
4. Safety Evaluation Review Team
5. New Mexico Reading Room Mail List

MAR 0 4 1992

cc w/enclosures:
C&C File (ATS920007)
E. Gordon, NMED

cc w/o enclosures:
G. Gonzales, NMED
P. McCasland, NMED/WIPP
K. Sisneros, NMED
B. Garcia, NMED
M. Frei, DOE-HQ
J. Arthur, DOE-WPIO
M. McFadden, DOE-WPSO
J. Mewhinney, DOE-WPSO
H. Greenwood, DOE-WPSO
R. Farrell, WID

WIPP:HMG I92-0033

DOE F 1325.8
(10-88)

ENCLOSURE 1

United States Government

Department of Energy

memorandum

DATE: AUG 2 1989

REPLY TO ATTN OF: EH-332

SUBJECT: EH-30 Safety Evaluation Report (SER) for the Waste Isolation Pilot Plant (WIPP)

TO: Jack B. Tillman, Project Manager, DOE/WPO

The Office of the Deputy Assistant Secretary for Safety, Health and Quality Assurance (EH-30) has completed its review of the WIPP Final Safety Analysis Report and has documented the results of its review in the attached SER. As a result of the review, a number of open items remain outstanding and will require follow-up.

After you have reviewed the SER, we request that you schedule a meeting to discuss your proposed approach to resolve all open items and recommendations. This SER is based on material received through June 15, 1989. Material supplied after that date will likely be effective in resolving some of the open items reported in this SER and will be reviewed by EH-30 if received sufficiently prior to the meeting.

James P. Knight, Director
Office of Safety Appraisals

Attachment

cc w/attachment:
Richard W. Starostecki, EH-30
Lewis G. Hulman, EH-32
Robert W. Barber, EH-34
Joseph E. Fitzgerald, EH-35
Oliver D. T. Lynch, Jr., EH-331
Harry J. Pettengill, EH-332
Carol Borgstrom, EH-25
Norman Davison, EH-342
Critz George, DP-123
John J. Schinkle, AL/SPD
Tom Lukow, DOE/WPO
Tom Hindman, DP-12
Nolan Bailey, AL/SPD
Art Follett, DP-122
Jill Lytle, DP-10
Dennis Krenz, AL
Jack Tillman, DOE/WPO
Wallace Kornack, ACNFS
Morris Reich, BNL

WASTE ISOLATION PILOT PLANT

SAFETY EVALUATION REPORT

PREPARED UNDER
THE DIRECTION OF _____
Shirley J. Olinger
Team Leader

REVIEWED BY _____
Harry J. Pettengill, Director
Nuclear Safety Technology Division

REVIEWED BY _____
James P. Knight, Director
Office of Safety Appraisals

APPROVED BY _____ 7/27/89
Richard W. Starostecki Date
Deputy Assistant Secretary
Safety, Health and Quality Assurance

July 1989

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SUMMARY

Background

The Office of the Deputy Assistant Secretary for Safety, Health and Quality Assurance, EH-30 (hereinafter referred to as EH), has reviewed the Final Safety Analysis Report (FSAR) (December 1988 version as modified and supplemented through June 15, 1989) for the Waste Isolation Pilot Plant (WIPP) Facility located near Carlsbad, New Mexico. The purpose of EH's oversight review was to independently document in a Safety Evaluation Report (SER) the completeness and adequacy of the FSAR documentation in accordance with DOE Order 5481.1B. The principal programmatic responsibility for assuring the safety of operation of the WIPP Facility rests with DOE's Office of Defense Programs (DOE/DP) and DOE's Albuquerque Operations Office (DOE/AL).

The construction of the WIPP Facility has been completed and the facilities are being readied for operation in order to carry out an initial 5-year Pilot Plant Phase (Test Phase). The Test Phase is intended to demonstrate conformance to applicable environmental performance standards. Where complete, the EH review fully addressed the adequacy of the WIPP FSAR for the lifetime of the structures (i.e., design criteria for above ground structures and site characterization). Elsewhere, the EH review was limited to the Test Phase because of program uncertainties regarding the particulars of operation beyond the Test Phase. The review was further limited by the program decision to process and store only Contact Handled (CH) Transuranic (TRU) waste during initial operation. To completely access facility operations and safety beyond the Test Phase, and more specifically to evaluate those safety

procedures used for the processing and storing of Remote Handled (RH) TRU waste, will require addenda to this evaluation.

Scope

Principal areas reviewed by EH include: Site Characteristics; Principal Design Criteria; Plant Design; Process Description; Radiological Protection; Accident Analysis; Conduct of Operations; Operational Safety Requirements; Quality Assurance; and Decontamination and Decommissioning.

The EH initial review of the December 1988 FSAR concluded that additional information and clarification by the responsible program offices was required. Requests for this information were formally transmitted to DOE/WPO (Refs. 1 and 2). In order to expedite resolution of those comments and questions, meetings between DOE/EH, its DOE/WPO/AL counterpart and their respective contractors, were held at the WIPP site on April 24-28, 1989. Further discussions were held at the Bechtel offices in San Francisco, California, and during the DOE/EH Readiness Review Inspection (RRI) performed at the WIPP Site during May 8-15, 1989 (Refs. 3 and 4).

The actions noted above have resulted in numerous revisions and clarifications to the FSAR. Incorporated in this SER are EH's consideration of those revisions of the FSAR and supplemental information provided in formal responses to EH Requests for Additional Information (RAI). In general, DOE/WPO/AL has limited actual revision to the FSAR to those instances where the information is explicitly required by DOE Orders. In a number of other

instances DOE/WPO/AL has chosen to provide substantive information, including commitments EH considers essential to safe operation, in the formal responses to the RAIs but not to incorporate the information in the FSAR. It must be noted that the EH review and related concurrences are based on giving full weight to both the FSAR modifications and the supplemental information provided in the RAI responses. It is the EH position therefore that the formal RAI responses provided by DOE/WPO/AL have the same status and require the same control as the contents of the FSAR.

All statements and findings in this SER are provided in a format that parallels the FSAR for the WIPP Facility. For each FSAR chapter or section for which there were substantive issues, a complete description is presented. This description includes: (1) a summary description of the FSAR chapter or section; (2) the acceptance criteria used by EH to evaluate the chapter or section; (3) a complete statement of the issues and resolutions, as appropriate; requests for additional information if needed; and (5) the conclusions and open issues, if any. For those sections of the FSAR where there was no substantive technical information requiring a detailed safety review, there are no sections in the SER.

A complete compilation of all comments, questions, and requests for additional information, along with WIPP Project responses are included as Appendix B. In addition, Appendix A provides a cross reference of all the Appendix B requests for additional information to the SER text. The numbering system used to identify the questions, comments and issues, and the subsequent responses are consistent with the chapter/section numbers used in the FSAR, thus allowing

for rapid cross-referencing by the reader. Appendix C is a compilation of Readiness Review Inspection (RRI) findings that require modification of the FSAR and that are not tracked in the RRI report (Ref. 4). Appendix D lists the acronyms used in this report. Appendix E lists the principal participants in this review.

Findings

As a result of the FSAR review, 23 items were still outstanding as of June 15, 1989. Table 1 summarizes the open items, with appropriate references to chapters or sections of the SER that provide the detailed discussion for that open issue. The table does not include the Appendix C RRI findings that will require modification of the FSAR and the Appendix C findings will be tracked to closure by this report.

The more prominent open items identified in the SER include: Quality Assurance (staffing, qualifications, and authority); Structural and Systems Design (CH Area and electrical systems); Waste Monitoring and Retrievability (room closure and decontamination and decommissioning plan); and Accident Analysis (source term and scenarios).

EH intends to issue a supplement to the SER upon completion of all open items.

References for Summary

1. Memorandum from H. J. Pettengill (DOE/EH) to J. B. Tillman (DOE/WPO), March 29, 1989; Subject--Requests for Additional Information (RAI's) for Chapters 2, 8, 9, 10, 12, and 13 of the WIPP FSAR

2. Memorandum from H. J. Pettengill (DOE/EH) to J. B. Tillman (DOE/WPO), April 13, 1989; Subject--RAI's for Chapters 1, 3, 4, 5, 6, 7, and 11 of the WIPP FSAR

3. Memorandum, EH-332, S. Olinger (DOE/EH), to J. P. Knight and H. J. Pettengill (DOE/EH), May 4, 1989; Subject--Trip Report, WIPP Onsite Review of the FSAR, April 24-28, 1989

4. EH-30 Readiness Review Inspection of the Waste Isolation Pilot Plant: June 2, 1989

Table 1. Listing of Open Action Items from WIPP FSAR Review

Item No.	FSAR Chapter/ Section	Open Action Item
1	11	The DOE/WPO Quality Assurance (QA) Organization does not have sufficient resources and authority for adequate control of operations at WIPP. Also, the interface controls and responsibilities, both external and internal, between organizations of the three major participants are not clearly defined.
2	11	Engineering staff of DOE/WPO and the operating contractor lack technical understanding of the facility's design bases, design calculations and their related quality control.
3	11	The DOE/WPO Project Manager's authority to direct the work of project participants and to stop unsatisfactory work should be described and substantiated.
4	4.2	Four of the columns on Line F of the CH Area were found to be overstressed by about 13 percent. This was found for the dead load, live load, and design wind load combination.
5	4.4	The design bases for the electrical system (standards and guides) must be identified in the FSAR.
6	4.4	The description of the diesel generator start system should be included in the FSAR. This was removed in the June 1989 revision.
7	4.4	Uninterruptible Power Supply (UPS) loads must be less than the design capacity of that equipment.
8	4.4	Verification that the battery can supply 30 minutes of power at rated conditions is necessary through testing or analysis.
9	4.4	FSAR wording clarifying startup of diesel generator (local or remote) is necessary. Also, the FSAR wording should be changed to reflect actual operator actions required to restore power to the UPS within 30 minutes.
10	2.10	Monitoring of filled CH TRU waste storage rooms is required to ensure structural stability of these rooms and adequate performance of the installed rock bolts throughout the retrieval period, i.e., ten years. It is not as yet clear how such a program can be implemented in those CH TRU waste storage areas filled with containers.

Item No.	FSAR Chapter/ Section	Open Action Item
11	12	The Retrievability plan and the Decontamination and Decommissioning Plan for the Test Phase must be completed by the project and confirmed acceptable prior to emplacement of waste.
12	7	The source term assumptions are inconsistent with the WIPP Waste Acceptance criteria. Also, administrative controls are not sufficiently detailed and additional analyses should be done to calculate worker doses for maximum source term accident conditions with and without respirators, i.e., 1000 PE-Ci (Pu-239 equivalent curies) and 69 PE-Ci, respectively.
13	7	Doses for workers assumed to remain in the immediate accident area for accident scenarios C2 and C3 should be recalculated using assumptions consistent with previous accident analysis calculations.
14	7	The FSAR estimates 2×10^{-4} drum fires/year for accident C-7. Therefore, this accident requires analyses incorporating the fire suppression system impact on potential doses to workers.
15	7	A respiratory mask requirement for workers downstream from the active and open waste storage area is needed.
16	7	The potential for underground roof falls should be evaluated including the potential for releasing material from the stored CH TRU waste containers.
17	7	The catastrophic hoist accident (C8) requires calculations to verify that the probability is sufficiently low so that no accident analysis is required.
18	7	The waste drum fire propagation accident (C10) requires recalculation of probability values.
19	3.3.2	WIPP has not specified when and how often the valves used as isolation dampers in the air handling system are tested. Also, a copy of the test standards and procedures should be provided and permissible leakage rates specified.

Item No.	FSAR Chapter/ Section	Open Action Item
20	2.10	The specifications of the threshold values, i.e., ± 0.5 inches from the extrapolated data, to be used in the monitoring are not contained in Section 1.5 of the FSAR as committed at the April 24-28, 1989, FSAR meeting.
21	4.4	The description of the Failure Mode and Effects Analysis for the electrical system should specify that only single failures of the system were analyzed.
22	3.1	The flow chart implementing the component classification criteria (Figure 3.1-1 in the FSAR) was inconsistent with the stated criteria with respect to the differences between Class IIIA and Class IIIB. Although the figure was removed from the May 1989 FSAR, it should still be verified that the figure was correct in the Design Basis Document.
23	4.3	Modify Subsection 4.3.1.1.1 of the FSAR to indicate that the shaft linings did not in fact include a ground movement component in their design.

*This issue was discussed in the SER, its resolution and closure is also being tracked by the RRI process.

CHAPTER 1 - WIPP GENERAL DESCRIPTION

1.0 SUMMARY DESCRIPTION

This chapter was written as an introduction for the FSAR. It briefly describes the organization of the FSAR, the WIPP Facility's purpose and goals, and its operations and technical programs. The introductory chapter also identifies the agents and contractors participating in the WIPP Project.

Most of the sections of this introductory chapter contain information which either simply introduces the facility or summarizes information provided in much greater technical detail elsewhere in the FSAR. Notably, Section 1.5, entitled Technical Programs, does contain technical information that warranted EH review; however, for purposes of efficiency, the EH review of Section 1.5 has been incorporated in the review of Section 2.10 of the SER. Additionally, Chapter 1A of the FSAR summarizes the accident scenarios that were analyzed and these are covered in detail in Chapter 7 of the SER.

CHAPTER 2 - SITE CHARACTERISTICS

This chapter of the FSAR describes the site in the vicinity of the WIPP in terms of: Geography and Demography; Nearby Industrial, Transportation and Military Facilities; Meteorology; Surface Hydrology; Subsurface Hydrology; Regional Geology; Geology in the Vicinity of WIPP; Vibrating Ground Motion; Surface Faulting; Stability of Subsurface Materials and Foundations; and Slope Stability. It is to be noted that an important guideline for the review of this chapter was the assumption that the legislation pending in Congress and/or Administrative land withdrawal with the Department of Interior pertaining to the withdrawal of the entire 10,240-acre area within the WIPP Site boundary for DOE exclusive use would be approved.

SECTION 2.1 - GEOGRAPHY AND DEMOGRAPHY OF THE AREA AROUND THE WIPP FACILITY

1.0 SUMMARY DESCRIPTION

This section of the FSAR describes the WIPP Facility location and configuration, exclusion areas, and nearby population distribution. The WIPP Facility is located within a site boundary which is defined by a square, four miles on a side, containing 10,240 acres committed to the WIPP Facility. Approximately centered within the square is a fenced area of about 35 acres which contains the WIPP surface structures and is designated as Zone I (FSAR Fig. 2.1-3). An area of about 1800 acres, which encompasses Zone I and overlies the existing and planned underground development is designated as Zone II. Most of Zone II lies within a chain link perimeter fence, called the Secured Area, with access restricted to authorized personnel. The WIPP site boundary is located at least one mile beyond any point on Zone II.

All land within the WIPP site boundary is federal land and is intended to remain under federal control during WIPP operation. Only mining and drilling associated with the WIPP Project is permitted in Zone I and in the Secured Area. Cattle grazing is permitted outside the Zone II area.

There are no communities within 10 miles of the WIPP Facility. The nearest community is Loving, with a population of 1,450, which is 18 miles from WIPP. The nearest significant population center is Carlsbad which is 26 miles west of the WIPP and has a population of 27,000. In 1976, there were about 94,000 people living within 50 miles of the WIPP Facility. The estimated population by the Year 2005 is 204,000.

2.0 ACCEPTANCE CRITERIA

Acceptance criteria used to review this section of the FSAR were taken primarily from USNRC Regulatory Guide 3.26 for nuclear fuel reprocessing plants (Ref. I).

Specific acceptance criteria used to evaluate Section 2.1 were demonstrated adequacy of:

1. Description of the location of the facility and a clear map for an area of at least a 50-mile radius around the facility.

2. Definition of site boundaries including distances from significant facility features to the site boundary.

3. Delineation of exclusion areas and description of legal rights with respect to the land ownership.

4. Identification of the boundaries for establishing effluent release limits.

5. Description of population distribution as a function of distance and direction.

6. Description of uses of nearby lands and waters within at least a five-mile radius.

7. Identification of activities conducted within the site boundary other than those directly related to the operation of the facility.

3.0 ISSUES

1. Section 2.1.2 of the FSAR states that "legislation is pending before Congress that will result in the permanent withdrawal of the entire 10,240-acre area within the WIPP Site boundary for DOE exclusive use." The SER review is based on the assumption that the legislative process is completed.

   Resolution:

   None required.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides an acceptable analysis of the Geography and Demography of the Area provided that the precondition discussed in Paragraph 3.0 is met.

SECTION 2.2 - NEARBY INDUSTRIAL, TRANSPORTATION AND MILITARY FACILITIES

1.0 SUMMARY DESCRIPTION

This section of the FSAR describes the industrial and extraction activities, oil and gas pipelines, land and water transportation routes, airports and aviation routes, and military operations that could have a potential effect on operations at the WIPP Facility.

There are ranches and gas wells within five miles and three potash mines and two chemical processing plants within ten miles of the WIPP Facility. Sixteen gas pipelines are located within a five-mile radius of the WIPP Facility; the closest is 1.2 miles from the WIPP surface structures. Two airways pass within five miles of the WIPP Facility; however, the FSAR states that because of the low number of flights and the size of the facility the probability of an air disaster at the WIPP Facility is considered to be insignificant. The White Sands Missile Range (WSMR) is located about 160 miles west of the WIPP Facility. About six aircraft from WSMR fly over the WIPP Facility in a year. Missile and drone test activities are conducted at WSMR but none overfly the WIPP Facility.

An evaluation of potential accidents indicates that the risks due to nearby industrial, transportation and military activities, are small.

2.0 ACCEPTANCE CRITERIA

Acceptance criteria used to review this section of the FSAR were taken primarily from Subsection 2.1.3 of the USNRC Regulatory Guide 3.26 (Ref. 1).

Specific acceptance criteria used to evaluate FSAR Section 2.2 were demonstrated adequacy that there were no effects of:

1. Oil or gas pipelines which cross or pass close to the facility.

2. Nearby industrial, mining or agricultural activities.

3. Aircraft, missiles or drones, overflying the facility.

4. Land and water transportation routes which cross or pass close to the facility.

3.0 ISSUES

1. Missile and drones are tested around the WIPP Facility. Information was requested on the potential effects of a missile or drone impact.

   Resolution:

   The intent of the FSAR was clarified to indicate that there is a minimal potential that a missile or drone malfunction could affect the WIPP Facility, since all missiles and drones flown around the WIPP area are equipped with fail-safe devices that are initiated either automatically or by a flight safety officer. The response is considered acceptable and this issue is resolved.

2. Information was requested regarding the effects on WIPP of present and future mining activity in the vicinity of the WIPP Facility.

   Resolution:

   The FSAR will be modified to indicate that the minimum of one mile of intact salt surrounding the waste emplacement areas is adequate protection for the potential mining activities in the vicinity. This is based on recommendations made by the Oak Ridge National Laboratory and the Geological Characterization Report (Ref. 34). The response is considered acceptable and this issue is resolved.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides an acceptable description of nearby industrial, transportation and military facilities.

SECTION 2.3 - METEOROLOGY

1.0 SUMMARY DESCRIPTION

This section of the FSAR describes the regional climatology, local meteorology, the WIPP on-site meteorological measurement program, paleoclimatology and potential climatic changes. The primary focus of this section is to address the impact of meteorological issues on the design of the WIPP Facility, particularly the specification of wind and tornado design velocities as well as the determination of radiological doses at the WIPP Site boundaries.

2.0 ACCEPTANCE CRITERIA

Acceptance criteria used to review the on-site Meteorological Measurement Program included USNRC Regulatory Guide 1.23 (Ref. 9) and the ANSI Standard cited in Ref. 10.

Specific acceptance criteria used to evaluate Section 2.3 were demonstrated adequacy of:

1. Description of the general climate of the regions based on standard climatic summaries. Consideration of the relationships between regional synoptic-scale atmospheric processes and local (site) meteorological conditions based on appropriate meteorological data.

2. Data on severe weather phenomena based on standard meteorological records from a nearby representative National Weather Service Station (Roswell) and applicability of the data to local site conditions.

3. Operating basis tornado parameters as substantiated by two independent methods.

4. Operating basis wind velocity data.

5. Documents for other meteorological and air quality data used for safety related design and operating bases.

3.0 ISSUES

1. A series of questions were raised concerning the details of the AIRDOS calculations that were performed to assess potential wind borne radiation dosage. First, EH raised a concern on the use of the AIRDOS model, which is primarily an averaging calculation, to arrive at maximum exposure levels from an accidental release. Second, a question was raised concerning the frequency distribution of stability classes that is used as input to the AIRDOS calculation.

   Resolution:

   The response provided to comments in Subsection 7.2 (Appendix B) indicates that the AIRDOS model used a limited plume spread for the calculation of accidental release. Radionuclide concentrations were then calculated along the plume centerline at discrete distances downwind for each of seven stability classes. The case which resulted in the highest concentration for the selected receptor locations was chosen. This is considered an acceptable approach and this issue is resolved.

   The frequency distribution of stability classes used as input to the AIRDOS calculation is significantly different from that reported at the nearby Roswell Site. However, DOE/WPO indicated at the April FSAR review meeting that they are committed to recalculation of the AIRDOS predictions during the Test Phase, using site specific data taken with the currently placed instrumentation. On this basis the question associated with the frequency distribution used in the AIRDOS calculation will be eliminated.

2. The specification of the WIPP site-specific Design Based Tornado (DBT) is based on information (Ref. 8) using meteorological data for

the period 1916-1976. This yielded design wind velocities of 183 mph. Since it is known that some relatively large tornadoes have occurred in the WIPP vicinity in recent years, the validity of this information was questioned.

Resolution:

Dr. T.T. Fujita was contacted to discuss the adequacy of the design wind velocity in light of this new information. Based on his knowledge of the current state of the tornado data base, he indicated that updated design wind velocities would be close to those used in the original structural design. Since it was found from the structural evaluations that adequate safety margins exist in the design when subjected to tornado loadings, it is felt that the DBT used in the structural analysis is acceptable and this issue is resolved.

3. A question was raised as to the adequacy of the locations of the on-site meteorological sensors, and the impact of the buildings on these measurements. Since the AIRDOS model cannot include building wake effects in the calculations, such effects could negate the adequacy of the calculation.

Resolution:

In the on-site meteorological measurement program described in the FSAR, the sensors were originally located close enough to the structures to influence measured data. The May 1989 revision to the FSAR indicates that the instrument sensors have been relocated away from existing surface structures such that flows to the sensors are not influenced by the buildings. Such a relocation satisfies the conditions assumed for the AIRDOS calculations and this issue is resolved.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides an acceptable analysis of the meteorology.

SECTION 2.4 - SURFACE HYDROLOGY

1.0 SUMMARY DESCRIPTION

This section of the FSAR describes the surface hydrology in the vicinity of the WIPP Site. The WIPP lies in a 44,500 square mile basin that drains into the Pecos River. The river has headwaters close to Santa Fe, New Mexico and empties into the Rio Grande River after a course of about 500 miles. The WIPP Site is about 14 miles east of the Pecos at about midway along its course. The elevation of the WIPP surface structures is about 500 feet above the river elevation at its closest point to the WIPP.

There are no major drainage features east of the Pecos (the WIPP side). There is a topological depression (Nash Draw) about four miles northwest of the WIPP, but this drainage feature carries water only during very wet years. The bed elevation of Nash Draw is about 250 feet below the surface elevation of WIPP.

The WIPP area has an arid to semi-arid climate with average precipitation of 12 inches per year. The drainage systems at the WIPP were designed for "probable maximum precipitation" storms specified in a Corps of Engineers study (Ref. 11). The maximum precipitation for a six-hour period at the WIPP area is 25 inches. The normal drainage of areas north, south and west of the WIPP is to the west into Nash Draw and does not pass through the WIPP Site. A series of interceptors are provided east of WIPP to divert runoff from the area east of the WIPP.

The maximum flood stage on the Pecos River at the WIPP Site is 42.1 feet (corresponding to a flow of 120,000 cubic feet) and occurred on August 23, 1966. It is judged to be inconceivable that a flood could effect the WIPP Facility which is 500 feet above the river elevation.

Several dams exist along the Pecos River. Five of these dams are upstream of the WIPP Site and all together have a maximum storage capacity of about 900,000 acre-feet (4×10^{10} cubic feet). It is argued that this quantity

of water is insufficient to cause any flooding that could raise the river level (420 feet above the probable maximum flood stage) by an amount required to affect the WIPP.

2.0 ACCEPTANCE CRITERIA

Acceptance criteria used for review of this section were taken primarily from USNRC Regulatory Guide 3.26 (Ref. 1). Specific acceptance criteria were that:

1. Surface water could not drain into the WIPP Facility and thereby affect its operation.

2. Floods and dam failure would not affect the WIPP Facility.

3. The FSAR describes the hydrologically related design bases, performance requirements, and operating procedures important to safety.

3.0 ISSUES

1. The FSAR indicates that no liquid effluents are discharged from WIPP. This section of the FSAR does not contain a description of the process used to ensure that the containment waste (such as water used for decontamination) is not mixed with surface drainage effluent from the site.

   Resolution:

   The liquid effluent from the WIPP Site are separated so that potentially contaminated waste is collected, tested and stored at the site if found to be radioactive (see Section 5.4 of the FSAR). There is no mixing of water which is used for decontamination and normal rainfall at the site. It is therefore concluded that there is no

potential for mixing the contaminated and non contaminated wastes. This response is acceptable and this issue is resolved.

2. The FSAR refers to a system of drainage ditches used to collect surface runoff and to pass the runoff through the site. The FSAR indicated that the drainage ditches were described in Figure 2.4-3, but that figure contained no reference to the drainage system.

   Resolution:

   A system of drainage ditches (see Figure 2.4-3 of the May 1989 revision to the FSAR) is provided to divert the rainfall runoff at the site into natural drainage systems in the area. These ditches provide an acceptable drainage system for the rainfall at the site. This response is acceptable and this issue is resolved.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides an acceptable analysis of Surface Hydrology. The WIPP Site is located in a dry area and is at a high elevation relative to the natural drainage features in the area. It is concluded that flooding and runoff problems are not expected to be significant at the site. The elevation of the WIPP surface facilities is 500 feet above the Pecos River and 250 feet above the Nash Draw, the only two prominent drainage features in the area. The vertical separation ensures that flooding in the area will not affect the WIPP Site. Failure of dams on the Pecos River would not release sufficient water to raise the river elevation by 500 feet. The region is arid and most precipitation in this area is lost through transpiration. This reduces the likelihood of surface runoff either entering the WIPP Site or of passing through the WIPP Site and potentially spreading contamination.

Provisions are made to collect local runoff so that it does not affect the operation of the facility and does not allow for contaminated water to enter the drainage features in the area.

SECTION 2.5 - SUBSURFACE HYDROLOGY

1.0 SUMMARY DESCRIPTION

This section of the FSAR describes the subsurface hydrogeologic conditions in the vicinity of the WIPP Site. The site is quite dry with a few formations that contain aquifers. The aquifer bearing formations are separated by rather thick layers of rock having very low permeabilities, thereby restricting any vertical migration of water from one aquifer to the other.

Several aquifers are located in the near surface formations (within about 150 feet of the surface). These aquifers again exhibit rather low permeability and are charged from and discharge into the Pecos River. Little use is made of the water contained in the aquifers.

The majority of the water used in the region is taken from the Capitan Reef aquifer. This aquifer is located in the Bell Canyon formation, which is about 2300 feet below the horizon of the WIPP storage area. The Capitan Reef aquifer is charged from and discharges into regions that are remote from the WIPP area. The low permeability of the Salado and Castile formations located above the Capitan Reef hydrologically isolate this aquifer from the WIPP Site.

In addition to the aquifers, pockets of entrapped brine are found in the halite and potash formations. These pockets are apparently stable, under reasonably high pressure equal to the lithostatic pressure, and can be quite large, that is, contain up to several hundred thousand gallons of brine.

The FSAR contains data describing the significant hydrologic properties (e.g., transmissivity, storage, etc.) in each of the host rock formations from the ground surface down to depths of about 2500 feet, which is below the WIPP storage horizon. These data were obtained from observations made at existing wells, exploratory wells drilled in support of the WIPP Project and data collected during the mining operations at WIPP.

2.0 ACCEPTANCE CRITERIA

The data in the FSAR include descriptive material for the geohydrology at the site. These data were reviewed to ensure that they were consistent with the conclusions deduced in the FSAR. The goal of the review was to develop confidence in the conclusion that the WIPP storage horizon is hydrologically isolated from the two aquifers (Dockum Group and Castile) in the region during the Test Phase. This would ensure that contaminated water from WIPP could not enter the groundwater systems and, in turn, that groundwater would not seep into the WIPP facilities during the Test Phase.

Specific acceptance criteria that were used to evaluate this section were taken from the following sections of Appendix IV of the 10 CFR 111 (Ref. 12):

1. 960.4-2-1 Geohydrology - this criteria requires that there is not potential for connection between aquifers in the area and the Facility.

2. 960.4-2-6 Dissolution - the rock types and water in the area will not lead to dissolution of material around the Facility.

3. 96-.5-2-10 Hydrology - the local hydrology, in terms of potentiometric surfaces, is compatible with the construction and operation of the site.

3.0 ISSUES

1. The FSAR referred to numerical modeling of the hydrologic system at WIPP but did not contain specific information regarding the models. Information on these models is required so that a better understanding of the hydrologic system at WIPP could be developed.

Resolution:

There is an extensive hydrologic experimental program that is ongoing and is a part of the long term assessment validation. Three ongoing modeling efforts are being conducted by the Sandia National Laboratories (SNL). Numerical simulation of groundwater flow in the Culebra initially used the three-dimensional finite element code SWIFT-II using variable fluid density and a single porosity formulation. This is presently being modified to a dual porosity formulation. The Second Interim Report on this simulation (Ref. 13) was released in March 1988, with the final report due later in 1989.

A second SNL modeling effort is under way to formulate a full 3-D model of potential release paths from the facility horizon to the surface aquifers. This will be completed in FY 1991. A third modeling effort is underway by the SNL Performance Assessment Team to formulate a regional Los Medanos hydrologic model from the surface through the Bell Canyon formation. This model is presently scheduled for completion in FY 1991.

These descriptions of the hydrologic modeling provide an acceptable basis for understanding the site hydrology and this issue is resolved.

2. The FSAR contained a reference to large cavities, filled with pressurized brine, in the vicinity of WIPP. There was a concern that these large cavities could create problems if they were breached during the mining operation.

Resolution:

The FSAR referred to the fact that some of the potash mines in the vicinity of WIPP contain large cavities that are filled with pressurized brine. The extent to which such cavities exist was investigated. It was determined that these are not open cavities but, rather interconnected porous zones. These pockets have not been observed in the WIPP shafts. All of the observed cavities are at least 5 miles laterally away from WIPP. These data are referenced in the May 1989 revision to the FSAR. This response is acceptable and this issue is resolved.

3. The FSAR referred to the difficulty and uncertainty in obtaining sorption data applicable to the WIPP Site. A concern was raised as to the planned program to resolve this uncertainty.

Resolution:

The May 1989 revision to the FSAR has referred to a SNL program (Ref. 14) to evaluate these data and to perform an assessment of long-term radionuclide transport. This was reviewed and found to be acceptable and this issued is resolved.

4. The FSAR refers to studies suggesting the possibility of salt dissolution at large depths and the evidence of such dissolution being manifested in "localized collapse features." The concern existed that such activity could create voids in the vicinity of WIPP.

Resolution:

The May 1989 revision to the FSAR used data contained in Refs. 15 and 16 to confirm that evidence of salt dissolution is not present near the WIPP Site. These references were reviewed and substantiate the

conclusion that salt dissolution has not occurred near the WIPP Site. This issue is resolved.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides an acceptable analysis of the subsurface hydrology. The WIPP Site is located in a relatively impermeable salt formation where any fractures will tend to heal with time. The impermeable host material for the repository together with the rather large separation of the storage horizon from known water sources support the conclusion that water inflow or outflow from the facility should not present any safety issues. It is important to note that SNL has long range planned hydrologic experimental programs which are part of the long term assessment and should uncover any major problems, should they exist. It is also important to note that the EH review focused on the Test Phase. Therefore, no specific consideration was given to potential hydrologic problems which may occur during closure. The data required for this evaluation will be developed during the experimental program.

SECTION 2.6 - REGIONAL GEOLOGY

1.0 SUMMARY DESCRIPTION

The major geological features found within a radius of about 200 miles of the WIPP Facility are discussed in this section of the FSAR under the headings of (1) Regional Physiography and Geomorphology, (2) Regional Geologic and Structural History, (3) Regional Stratigraphy and Lithology, (4) Regional Structure and Tectonics, and (5) Pleistocene Climate of the WIPP Facility.

The WIPP Site is in the southwestern portion of the Great Plains physiographic province. This province is a broad highland belt, sloping gently eastward, and bordered on the north and west by the Rocky Mountains and Basin and Range province and on the east by the Central Lowlands province. The major permanent drainage of the area is the north-south flowing Pecos River located 14 miles west of the WIPP Facility. The Delaware Basin, in which the WIPP Facility is situated, is located in the Pecos Valley section of the Great Plains physiographic province. Much of the surface of the Pecos Valley Section exhibits karst topography pitted by numerous sinks and other karst features. The largest of these dissolution features are Nash Draw located four miles northwest of the WIPP Facility and San Simon Swale located 20 miles east. The WIPP Facility is situated on the western flank of a low drainage divide which separates these two features.

The geologic record of the region suggests a history of sedimentation upon a Precambrian basement and organic activity. This was followed by erosion and the onset of mild epeirogenic movement. The development of a shelf and basin setting in the late Paleozoic era resulted in an accumulation of clastics, carbonates, and evaporite reaching a maximum of 20,000 ft. Since that time the region has been mainly emergent and has undergone a slight east-south east tilt. The major geologic events of southeastern New Mexico subsequent to the development and filling of the Delaware Basin are a period of submergence and the Laramide Orogeny in the Mesozoic era, Basin and Range

uplift, erosion/dissolution and eolian activity and sedimentation in the Cenozoic era.

The underground WIPP Facility is located in the approximately 2000 ft. thick Salado formation which is part of the Ochoan sedimentary sequence.

Most of the large scale structures in the region were completely formed by the late Paleozoic. The remainder, including regional tilting, were formed as the result of mid to late Tertiary and Quaternary Basin and Range - related doming and faulting. The features are discussed according to structural type and time of formation. Major folds, flexures and faults in the WIPP Facility region are discussed separately.

Based on the type and location of the glacial and periglacial features of the region, the probability of future glacial disturbance to the WIPP Facility is minimal.

2.0 ACCEPTANCE CRITERIA

Acceptance criteria used for review of this section of the FSAR were taken primarily from 10 CFR 111, Part 960, Section 960.4-2-3, Rock Characteristics (Ref. 12).

Specific acceptance criteria that were used to evaluate Section 2.6 were:

1. The regional geology has been studied in depth, is well understood and described and illustrated.

2. The description includes geologic history, typography, stratigraphy and lithology, structure and tectonics, and igneous activity.

3. The regional geology allows for the identification of sites that contain geologic members that are massive, extensive, relatively homogeneous, and impermeable.

4. Maps, profiles, plots and cross sections are used to model the regional geology.

More specific criteria used to evaluate Section 2.6 are contained in Appendix D-1, biologic criterion and site-selection factors, FEIS, October 1980, (Ref. 17).

3.0 ISSUES

The geologic model used to predict the long term stability of the WIPP region and site is judgmental but is based on quantitative data developed from extensive site characterization studies. Much of the information in the geologic model is the result of extensive work done by the U.S. Geological Survey. Other information has been derived from core boring and geophysical investigations. The geologic model is judgmental in that it is based on information derived from sample points often far apart but generally not specified. The information on geologic conditions between sample points is based on geologic inference and/or extrapolations which is typically done for such geological investigations.

1. A request was made to obtain estimates of the level of subsidence which is anticipated due to the underground excavations at the WIPP Facility.

   Resolution:

   Based on additional information provided at the April 24-28, 1989 FSAR review meeting, using conservative assumptions regarding the extraction ratio for the WIPP Facility, the average subsidence was estimated at about 5 inches. An upper bound level of 15 inches was also conservatively estimated. These subsidence levels are considered to be acceptable. Another factor supporting this conclusion, is that the existing subsidence in the nearby potash mines has not caused any concern over the years. Note that the extraction ratios at the potash mines are much higher than that of

the WIPP. The response is considered acceptable and the issue is resolved.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides an acceptable analysis of the regional geology.

SECTION 2.7 - GEOLOGY IN THE VICINITY OF THE WIPP FACILITY

1.0 SUMMARY DESCRIPTION

The local geological features in the vicinity of the WIPP Facility are discussed in this section of the FSAR under the headings of (1) Physiography and Geomorphology, (2) Stratigraphy and Lithology, (3) Structure and Tectonics, (4) Geologic Mapping, (5) Geologic History, (6) Plot Plans and Profiles, (7) Engineering Geology, (8) Geochemistry and Geophysics, (9) Analysis of Foundations.

The WIPP Facility is located near the eastern edge of the Pecos Valley section of the Great Plains physiographic province on the flank of a natural divide between Nash Draw and San Simon Swale. Much of the area is covered with eolian sand of very erratic distribution and thickness.

The rock formations of the WIPP Facility from the precambrian basement to the surface are described with respect to stratigraphy and lithology, and structure and tectonics. In particular the Ochoan series of sediments are discussed in detail. Subsurface information generated by drill hole logs, test pits, mapping of the shafts, and geophysical investigations is given in plot plans and geologic profiles.

2.0 ACCEPTANCE CRITERIA

Acceptance criteria used for review of this section of the FSAR were taken primarily from 10 CFR 111. Part 960 Section 960.5-2-9, Rock Characteristics (Ref. 12), and the validation of the criterion given in Chapter 2, USNRC Panel on WIPP report titled "Review of the Scientific and Technical Criteria for the Waste Isolation Pilot Plant" (Ref. 18).

Specific acceptance criteria used to evaluate Section 2.7 were:

1. The geology of the site is such that the repository will not be breached by natural phenomena.

2. The geology should permit the safe development and operation of the WIPP repository.

3. The geological data collected over the past 10 years has served to corroborate the anticipated geologic formations and structures and gives confidence in the geologic model of the repository.

3.0 ISSUES

None were identified.

4.0 REQUEST FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides an acceptable analysis of the local geology. The related geomechanical behavior of the shafts, drifts, storage rooms and other appurtenances are addressed in Section 2.10.

The WIPP Facility horizon is taken to mean the level of underground drifts, rooms, waste experimental area plus 50 ft. above and below this level, thus encompassing strata found in the roof and floor of the storage horizon. Approximately 5.5 miles of drift have been excavated in the facility's horizon. Of this total, 2.8 miles have been geologically mapped. Map Unit 1 has been mapped or surveyed in all drifts to check for continuity of lithology and to check the geological structure throughout the facility's horizon. The underground drilling program, consisting of at least 126 vertical up and down

core holes, has demonstrated nearly identical stratigraphy throughout the facility's horizon. Individual map units vary slightly from sample point to sample point with respect to thickness, crystal size, and percentage of accessing constituents such as clay and polyhalite. Map units are considered to be fairly continuous. Surface mapping of the area around the WIPP Facility has been done by the U.S. Geological Survey. Underground mappings and geological characterization is an on going process and the data obtained thus far gave confidence in the geologic model of the WIPP.

The geologic model of the WIPP Facility as depicted on maps, cross sections, profiles and written information thoroughly portrays the known information concerning the geology of the site developed in the past 10 years. The information developed has served to corroborate the geologic model and the judgments upon which it is based. Based on the above discussion, the geological consequences given in Section 2.7.4 of the FSAR are considered acceptable.

It should be noted that forecasting the long term behavior of the underground openings at the storage horizon based on local geologic features only is insufficient. It needs to be supplemented by data obtained from continuous monitoring of the stability of the underground openings as discussed in Section 2.10 of this SER.

SECTION 2.8 - VIBRATORY GROUND MOTION

1.0 SUMMARY DESCRIPTION

Section 2.8 of the FSAR describes the procedures and the results associated with the definition of the Design Basis Earthquake (DBE) for the WIPP Facility. The DBE represents the design ground motion used in the seismic response evaluation of Class I and II structures and components of the facility. Its derivation is based on seismological and geological information pertinent to the site. The seismic hazard at the WIPP was evaluated through probabilistic techniques. The result of this evaluation was expressed in terms of seismic hazard curves which relate peak ground accelerations with annual probability of exceedance. On the basis of the WIPP hazard curves, it was concluded that the 1000 year acceleration (annual probability of exceedance 0.1%) corresponds to a 0.075g peak ground acceleration. In order to introduce additional conservatism, it was decided to set the peak acceleration of the DBE at 0.1 g. The latter peak acceleration together with the USNRC Regulatory Guide 1.60 design spectra (Ref. 19) define the DBE for the WIPP Facility.

The task for deriving the design earthquake for the WIPP Facility was primarily carried out by Bechtel National, Inc. (San Francisco, California) with significant contributions from Professor Allen R. Sanford of New Mexico Tech (Socorro, New Mexico). The general procedure employed in arriving at the DBE, consists of the following steps: (a) evaluation of the seismicity in the region; (b) evaluation of the geologic characteristics and tectonic activity in the region; (c) correlation of earthquake activity with geologic structures or tectonic provinces; and d) development of probabilistic estimates of the seismic hazard at the site. It should be noted that the above procedure follows the general guidelines given in Section 2.5 of the USNRC Standard Review Plan (Ref. 20). This reflects that an adequate level of detail was incorporated into the derivation of the DBE at the WIPP Facility. It should be kept in mind, however, that the seismic design of the WIPP Facility does not have to be based on seismic criteria as severe as that used for the seismic design of commercial nuclear plants that require significantly higher

performance levels. Thus, systematic application of all SRP acceptance criteria into the seismic design of the WIPP is judged by EH to be unnecessary.

The regional seismicity discussed in the FSAR concentrates on seismic data reported in New Mexico and particularly earthquakes in the WIPP region (area within 180 miles of the site). Both microseismic as well as regional seismographic data were considered in the development of the seismic data base. For convenience, the seismic data base was subdivided into two categories, namely pre- and post-1962 earthquake data. The pre-1962 data are primarily of the macroseismic nature whereas the post-1962 data (up to 1986) are primarily instrumental data and represent the major portion of the seismic data base. The largest earthquake considered in the data base of the region is the 1931 Valentine Texas Earthquake (estimated Richter magnitude about 6.4) which occurred approximately 120 miles southwest of the WIPP Facility. The seismic data base appears to be complete for earthquakes having magnitudes greater than or equal to 3 (MM intensities greater or equal to approximately IV).

Geologic evidence and recorded data associated with the WIPP region suggest that the region can be subdivided into two basic subregions, namely, the Permian Basin and the Basin and Range subregions. The Permian Basin subregion seems reasonably stable while the Basin and Range subregion is tectonically active with surface faults showing evidence of Quaternary movement. Earthquake activity in the Basin and Range subregion includes the 1931 Valentine, Texas Earthquake. The WIPP Facility is located in the relatively stable Permian Basin subregion. Seismicity studies of the WIPP region also indicate consistent seismic activity reported in the Central Basin Platform which is a small area located west of the WIPP Facility. This area, although a part of the Permian Basin subregion, has demonstrated a distinct seismicity pattern (magnitudes about 3-4). Seismological studies, however, have concluded that the earthquakes of the Central Basin Platform are due to

operations in oil fields (secondary recovery efforts) and are not related to tectonic activity.

The FSAR also describes the earthquakes of July 1972 (estimated magnitude about 2.8) and November 1974 (estimated magnitude about 3.8) which were associated with rockfall and considerable ground cracking at the National Potash Co. - Eddy County Mine. Based on an investigation of the origin of these two events the FSAR concludes that either of the above two earthquakes might have occurred at the rockfall site. Finally, based on the geologic and seismological evidence of the WIPP region, the FSAR concludes that no earthquake activity of interest to the WIPP region is known to be correlated to specific faults (see also Section 2.9 of the SER).

2.0 ACCEPTANCE CRITERIA

Acceptance criteria considered in the present review are primarily contained in several DOE and USNRC reports. Refs. 8, 21, and 22 are the primary DOE sources of acceptance criteria pertinent to the evaluation of the design earthquake of the WIPP Facility. Similar USNRC sources, including most recent modifications in seismic criteria, are given in Refs. 20, 23, 24, 25 and 26. Furthermore the review and acceptance process presented here by EH involves exercise of certain levels of engineering judgment which is an essential ingredient when dealing with predictions of earthquake response behavior. A balance of all of these aspects was maintained during the review process in order to reach a reasonable conclusion on the appropriateness of the seismic design input for the WIPP Facility.

3.0 ISSUES

The review of Section 2.8 of the WIPP FSAR resulted in a set of ten questions and/or clarifications, most of which were resolved after the April 24-28, 1989 FSAR review meeting (Ref. 27) held at the WIPP Facility. The resolutions required making changes to the FSAR and providing additional

information (Appendix B). The remaining questions concerning Section 2.8, Vibratory Ground Motion, are related to the following issues:

1. Potential mine induced seismic effects;
2. Seismic attenuation;
3. Definition of seismic hazard; and
4. Seismic evaluation of underground facility.

These issues are discussed below:

1. Potential mine induced seismicity from existing mines in the WIPP region could be important to the WIPP Facility. The WIPP Project was requested to address the possible impact of mine induced seismic effects on the facility.

   Resolution:

   This issue was primarily brought up because of the uncertainty associated with the origin of the July 1972 and November 1974 events which are reported in the FSAR. Based on studies conducted with the objective to locate these two events, it appears that their origin could have been related to a nearby potash mine (National Potash Co. - Eddy County) in which rockfall and considerable cracking was reported very close to the earthquake origin time (within one minute). The initial response (Appendix B) by the WIPP Project was that these two events "may or may not" have been mine related. Subsequent telephone discussions held during the April 24-28, 1989 FSAR meeting (Refs. 27) on this subject with J. Litehizer and H. Taylor of Bechtel National, Inc. did not resolve the possibility that recorded seismic activity in the WIPP region could have originated at a nearby potash mine (approximately located 30 miles northwest of WIPP). It was further concluded that additional analysis cannot be performed since insufficient recorded data is available from the above two events.

Given the uncertainty of the origin of the July 1972 and November 1974 events, the main question is what would be the possible impact of mine related dynamic activity on the WIPP Facility. The estimated magnitudes of the above events were 2.8 and 3.8 for the July 1972 and November 1974 earthquake, respectively. These magnitudes are considered low in the sense that they are not expected to produce ground accelerations at the WIPP Facility greater than those associated with the DBE. Accordingly, even if it is assumed that the largest of the above two seismic events originated at the potash mine, its impact on the WIPP Facility is judged to be less than that anticipated due to the occurrence of the DBE. This issue is resolved.

2. Adequacy of the seismic attenuation employed in the derivation of the DBE at the WIPP Facility in view of recent developments in the ground motions modeling area.

Resolution:

The attenuation law used by Bechtel in the seismic hazard study of the WIPP Facility is compared in the FSAR with that used in the 1976 work by Algermissen and Perkins (Ref. 28). In the latter study, attenuation relations from the western United States were considered with subsequent corrections to reflect a slower seismic attenuation which could be more representative for sites east of the Rocky Mountains. Such approach seems to be reasonable considering that (a) there are few strong ground motion data from earthquakes in the eastern United States while a large amount of such data are available from earthquakes in the western United States and (b) recorded data indicate that the seismic attenuation in the eastern United States is much different from that of the western United States.

Since the 1976 study by Algermissen and Perkins (Ref. 28), however, several ground motion models have been developed. Such models were

considered in a very recent study of the seismic hazard in the eastern United States (Ref. 25). In fact, the Algermissen and Perkins model was excluded from the latter study. Given the fact that the estimation of the seismic hazard is directly affected by the particular ground motion model employed in the analysis, it was decided to take a closer look at the seismic attenuation employed for the WIPP region.

After telephone discussions on this subject during the April 24-28, 1989 FSAR review meeting (Ref. 27), it was agreed that the forms of ground motion attenuation contained in the recent study by Bernreuter et al. (Ref. 25) be considered for comparison purposes. In the latter study, a set of seven models were considered by an expert ground motion panel as part of the most recent seismic hazard characterization of the eastern United States. Some of these models (Boore-Atkinson, Toro-McGuire and Veneziano) were used by Bechtel as a basis for comparison with the attenuation employed in the seismic hazard study of the WIPP Facility (Ref. 29).

In Figure 1, the WIPP seismic acceleration attenuation curves (solid) are plotted together with the corresponding curves obtained as a simple average of the above three models (dashed). The two results compare well. The differences shown for distances larger than about 200 Km are on the conservative side (distances of interest to WIPP region are up to 300 Km).

The conclusion reached from this review is that the attenuation employed in the seismic hazard estimation of the WIPP Facility discussed in the FSAR, correlates reasonably well with ground motion models considered in a recent study by Bernreuter et al. (Ref. 25). It should be mentioned, however, that the Electric Power Research Institute (EPRI) has independently conducted a similar study (Ref. 32) on the seismic hazard of the Eastern United States. EH recommends that the latter study be reviewed for possible

application to the WIPP Facility; however, for purposes of this SER, this issue is closed.

3. The estimate of the seismic hazard at the WIPP Facility was not adequately justified.

Resolution:

In order to demonstrate the conservatism in estimating the seismic hazard at the WIPP Facility, Bechtel indicated that their hazard study considered Richter magnitudes larger than 5.0. This argument was not quite clear since the main conclusion reached from the WIPP seismic hazard study was that the peak acceleration at the site is about 0.075 g which was subsequently raised to 0.1 g for defining the DBE. Specifically, it was suspected that the latter peak ground acceleration could be on the low side considering the magnitudes which were associated with it. This issue was further examined with the objective to resolve the question of how individual magnitudes affect the total hazard curve obtained for the WIPP. Subsequent investigation of this issue led to the conclusion that the main contribution to the total hazard is due to earthquake magnitudes in the range of about 3.75 to 5.0 (Ref. 29).

In order to further examine the adequacy of the total hazard curves of the WIPP Facility, EH considered the results of Ref. 21 dealing with seismic hazard models for DOE sites. In the latter study, hazard curves for two sites in New Mexico were obtained. Figures 2 and 3 show the hazard curves for the Sandia National Laboratory and the Los Alamos National Laboratory, respectively, that were derived from the study reported in Ref. 21. It may be noted that the 1000-year acceleration is associated with about 0.22 g which is much higher than that of the WIPP Facility. A closer examination of this difference, however, suggests that the proposed hazard curves of Ref. 21 for the above two sites may not be applicable to the WIPP. Specifically, by inspection of the Seismic Zone Map of the Uniform

Building Code (Figure 4) it can be concluded that the increase in peak ground accelerations in the Sandia and Los Alamos sites is essentially due to localized behavior. The WIPP Facility located in southeast New Mexico, is associated with a more seismically quiet zone. A closer site to the WIPP than those reported in Ref. 21, is the Pantex Plant located in northwest Texas. Hazard curves for the latter site that were obtained in Ref. 21 are shown in Figure 5. From the latter figure it can be seen that the (best estimate) 1000-year acceleration corresponds to about 0.1 g which is also the peak ground acceleration of the DBE for the WIPP site. Furthermore, the recent seismic hazard study by Berneuter et al. (Ref. 25) of 69 nuclear plant facilities located in the eastern United States was also considered by EH to further assess the adequacy of the WIPP hazard curves. Specifically, from the results obtained in the latter studies for the Comanche Peak nuclear plant (Figure 6) it can be seen that the 1000-year acceleration for this nuclear plant is less than 0.05 g by considering the 50th percentile of the constant percentile hazard curves. The corresponding acceleration at the 85th percentile is about 0.13 g. Finally, it may be noted that the seismic zone factor (equivalent to the peak ground acceleration) which is recommended by the Uniform Building Code (p. 168, 1988 Edition) for Zone 1 (of interest to WIPP) is 0.075.

The above discussion gives a qualitative appraisal of the hazard curves which were obtained in the seismic hazard study of the WIPP. From an overall prospective, it is concluded that the hazard curves (which form the basis for defining the peak acceleration for the DBE) were reasonably estimated based on the geologic and seismological data considered in the seismic hazard study. Finally, two additional items were considered by EH in judging the adequacy of the DBE. First, the design stresses in the structural members of the main structures of the WIPP such as the Waste Handling Building (Class II) are primarily dominated from tornado/wind loads. Second, the majority of these structures are steel frame structures which

are known for their inherent ductile behavior. The response is acceptable and this issue is closed.

4. FSAR descriptions related to the assessment of the underground facility were inconclusive. Clear descriptions of what was actually done as well as justification of the approach employed in the seismic evaluation of the underground facilities at WIPP was requested.

Resolution:

As a result of the initial FSAR review, the following comment and request for additional information was made (Ref. 2):

"The subject of underground seismic evaluation of the WIPP Facility is oversimplified in the FSAR (briefly mentioned in Section 2.8.6 which in turn refers to Subsection 3.2.6). Although a relatively considerable effort was made in the FSAR in order to address how the design basis earthquake was obtained at the site, the corresponding definition for the underground part of the facility is very limited. Specifically, it is claimed that no credit was taken due to attenuation with depth and consequently the 0.1 g peak seismic acceleration was also employed for underground structures. It is not clear if the one dimensional deconvolution approach (based on the SHAKE methodology) could be applicable at depths below the surface related to the WIPP site. Even if we reasonably assume that P or S waves attenuate with depth, this justification alone is insufficient. Address (within reasonable limits) the type of waves to be employed in the seismic analysis of underground facilities. Secondly, and more importantly, no seismic input were noted in any design calculations of underground facilities, (shafts, stability of rooms, etc.). Provide specific data to indicate where such seismic inputs were used in the design of the underground structures."

During a meeting held at Bechtel offices in San Francisco, May 3, 1989, Bechtel indicated that underground facilities at WIPP are Class IIIB and as such do not require seismic evaluation. Since there is an apparent discrepancy between this position and the descriptions given in the FSAR, WIPP agreed to change the FSAR to indicate that no seismic analysis was performed for the underground structures (June 1989 revision to the FSAR, p. 2.8-42). However, the question of what would be considered as an acceptable potential seismic risk with respect to the underground facility still required discussion. In attempting to quantify such potential risk at the WIPP, Bechtel has indicated that mine experience and available data (Ref. 31) show that no damage has been related to underground structures for cases in which the peak acceleration at the surface is below 0.2 g. In EH's opinion, although this is an encouraging factor, it is not completely sufficient to resolve the uncertainty in predicting earthquake effects in underground mines. This concern is indeed expressed in recent reviews on this subject sponsored by USNRC (Refs. 26 and 32). It is advisable to realize that the current state-of-the-art on dynamic response of underground facilities to earthquake loads still contains considerable uncertainty. On the other hand, there is a rather low level of excitation associated with the DBE at the WIPP, and there seems to be an absence of geological and seismological evidence that would support possible severe earthquake damage.

Even though there is insufficient evidence to indicate that severe damage of the underground facility due to earthquakes would occur, it is worthwhile to note that the vulnerability of the underground facility is expected to increase with time. The reason for this is the observed nonuniform creep behavior in the underground excavations, especially that associated with MB-139 that could substantially weaken the resistance of the underground structures when subjected to dynamic events. The effect of these events in causing potential accidents is discussed in Section 2.10 and Chapter 7 of the SER.

In conclusion, from the review of the seismic and/or dynamic aspects of the underground facility, it is unlikely that significant damage will occur during the Test Phase at the WIPP Facility due to seismic events. It is cautioned that with the passage of time there will be an increase in vulnerability of the underground structures, that are not backfilled, to dynamic excitations. This needs to be addressed by analyzing the effects of resulting potential accidents as discussed in Section 2.10 and Chapter 7 of this SER.

The issue is identified and will be tracked in Section 2.10 and Chapter 7.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides an acceptable analysis of vibratory ground motion.

No significant issues remain to be completed. The overall approach employed in the derivation the seismic design input motion for the WIPP Facility is considered to be appropriate and within acceptable engineering bounds. The level of the DBE is judged to be generally consistent with the seismological and geological information pertinent to the WIPP region. In addition, the seismic hazard results obtained for the WIPP correlate reasonably with the seismic hazards of commercial nuclear plants and other DOE facilities closer to the WIPP Facility.

SECTION 2.9 - SURFACE FAULTING

1.0 SUMMARY DESCRIPTION

This section of the FSAR summarizes the state of surface faulting in the vicinity of the WIPP Facility, the effect of these faults on the geologic setting within which the facility resides, and the impact of such faulting on the definition of the seismic environment to which the facility is designed. This section of the FSAR provides a detailed summary of surface faulting at the site; that is, faulting which may be noted at the ground surface and which is associated with "displacements of a few centimeters to a few kilometers in scale." The conclusion of this section is that no such surface faulting exists within five miles of the site. This specific distance is relatively important if the siting procedures specified in Appendix A of 10 CFR 100 (Ref. 23) are to be followed when developing the design base earthquake (DBE). No corresponding discussion of faulting below or near the ground surface is presented.

A capable fault is defined in Ref. 23 as one in which movement of either recent vintage or of a recurring nature, has occurred; that is, one that can be associated with seismic events. The existence of such faults is clearly important in defining the procedures that must be used to quantitatively determine the seismic environment to be used for the facility design, that is the DBE.

2.0 ACCEPTANCE CRITERIA

Acceptance criteria used in this review include descriptions of the procedures used to develop the seismic hazard models summarized in UCRL-53582 (Ref. 21), and the design and evaluation guidelines associated with seismic hazards contained in UCRL-15910 (Ref. 8). In addition, criteria from Section 2.5.3 of the USNRC Standard Review Plan (Ref. 20), and the siting criteria outlined in Appendix A of 10 CFR 100 (Ref. 23) were utilized. This criteria describes procedures used to evaluate the suitability of the site for locating nuclear power reactors, and the impact of faulting on the procedures used in

the site evaluation. In meeting the requirements of the SRP, the subsection of the FSAR is deemed acceptable if sufficient surface and subsurface information is provided to assess the character of faulting in the area, as well as its age. The detailed site characterization presented in the Review of the Scientific and Technical Criteria (Ref. 18) of the National Academy of Sciences was used to assess fault descriptions presented in the FSAR.

3.0 ISSUES

1. Subsection 2.9.2 of the FSAR states that no surface faults have been mapped within five miles of the WIPP Facility. The term "surface faulting" is defined in Ref. 23 as "differential ground displacement at or near the surface caused directly by fault movement." Subsection 2.9.3 of the June 1989 revision to the FSAR refers to Section 2.7.3.4.2 stating that there are no capable faults within five miles of the site. The reference to Section 2.7.3.4.2 is incorrect, since no such section exists.

   Resolution:

   A review of Refs. 34 and 35 indicates that there is no evidence of any movement which may be associated with recent faulting. As indicated in Section 2.6 of the FSAR, and in Ref. 35, movements are restricted to the Castile formation below the Salado and these are associated with pre-Pliocene times (about five-million years ago). No evidence of movement of the Castile or Salado at the present time is indicated in these reports. Thus, the statement that no capable faults exist within five miles of the site seems reasonable. Subsection 2.9.3 of the June 1989 revision to the FSAR should be revised to give a correct reference; however, for purposes of the SER, this issue is resolved.

2. Subsection 2.9.4 indicates that two small earthquakes were located with epicenters near the Eddy County Mine, an existing mine, and are probably mining related; that is, were induced by the presence of the

mine itself or incidents which occurred within the mine. However, in Subsection 2.8.1.3, the FSAR apparently refers to the same events, but indicates that they cannot have been mining related.

Resolution:

After discussion of this anomaly with WIPP personnel, a revised description of these events has been inserted in Subsection 2.8.1.3 of the June 1989 revision to the FSAR. The references mentioned in Subsection 2.9.4 were modified to eliminate this concern and this issue is resolved.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides an acceptable description of surface faulting.

SECTION 2.10 - STABILITY OF SUBSURFACE MATERIALS AND FOUNDATIONS

1.1 SUMMARY DESCRIPTION

This section of the FSAR is concerned with the general topic of stability of subsurface facilities, foundations and materials. The term stability refers to the impact of engineering properties of the host soil/rock and foundation configuration parameters on the evaluation of the acceptability of the design of a particular foundation element under consideration. Specific areas of interest discussed in this section include potential subsidence of the ground surface due to extraction of salt rock at depth, residual stress states at depth in the salt, design bases for near surface foundations, shaft linings and shaft keys, specific properties of soils and rocks (strength, stiffness, creep, permeability, resistivity, groundwater conditions, etc.), description of the exploratory boring program conducted at the site, as well as description of the ongoing instrumentation programs being used to monitor response with time.

2.0 ACCEPTANCE CRITERIA

The acceptance criteria used in review of this section derive from the procedures outlined in Section 2.5.4 of the USNRC Standard Review Plan (Ref. 20).

3.0 ISSUES

1. Two different criteria for allowable subsidence were mentioned in the December 1988 FSAR and in the DVFR (Ref. 36), the first that subsidence should not exceed one inch within 500 feet of the Waste Shaft, and the second that subsidence should not exceed 15 inches over 35 years above the storage areas. The applicability of these to the design and the computations to support the criteria were not available.

Resolution:

The calculations shown in Appendix F were provided at the April FSAR review meeting (Ref. 27). The first criteria mentioned is the standard allowable settlement criteria for surface structures to minimize differential settlements while the second is a qualitative criteria to minimize the impact of the salt extraction from the storage area on the surrounding surface area. The calculations were reviewed and indicate that the low extraction ratios planned for the WIPP Facility leads to relatively low subsidence levels which satisfy the criteria mentioned above and this issue is resolved.

2. In the design of the underground rooms, empirical approaches were used in the selection of the room dimensions, and no specific indication was presented in the FSAR on how salt creep effects were included in the design. A detailed description of a threshold monitoring program was requested to ensure safe operations of the underground facility.

Resolution

The empirical design of the underground rooms was supported by the measured creep behavior determined during the Site and Preliminary Design Validation Test Program. These experiences include implicitly the effects of salt creep in an approximate fashion. To ensure the long term stability of the underground openings, a detailed description of the threshold monitoring program was verbally presented by DOE/WPO at the April 24-28, 1989, FSAR review meeting. The objective of the program is to monitor creep effects as well as the development and growth of fracture zones about the underground rooms.

The issue is resolved.

3. In evaluating the opening configurations used in the mined storage areas and access drifts, empirical mining criteria, together with specific experiences learned from the preliminary exploratory program carried out at the site (Ref. 38), have yielded the currently used configurations. No separate analytic evaluations of local stability of these openings, nor the impact of creep on the long term stability have been completed. There is evidence to indicate that rock fracturing, together with growth in separations along natural fault lines, will continue around these openings as creep in the host rocks occurs. Alternate approaches must be used to evaluate stability and safety.

Resolution:

A detailed monitoring program is being used to support these empirical designs. At the April FSAR meeting (Ref. 27), a specific threshold program was presented verbally. Normal mining procedures, such as floor, wall and roof drumming, together with closure measurements, must continually be used to monitor changes in behavior and, therefore, stability of these openings. The current criteria being used to monitor stability changes relies on extrapolating measured closure data. Whenever closure varies by 0.5 inches from the extrapolated data, more detailed investigations must be invoked to evaluate local separation effects on stability and safety. The response provided to the question (Appendix B) concerning threshold values refers to Section 1.5.3.3 of the FSAR. However, the June 1989 draft of the FSAR does not specify the ± 0.5 inch threshold committed at the April 24-28, 1989 FSAR meeting. This is an open issue.

The various numerical simulation programs that have been conducted, and are planned to be conducted in the future, should yield sufficient information on rock properties, which, in turn, may lead to a capability for prediction of future behavior. However, these analytic/numerical studies cannot include all the effects of local anomalies on stability and safety. The monitoring programs must

therefore be continued to provide suitable confidence in safety margins.

4. No discussion is presented in the June 1989 revision to the FSAR of the ability to perform monitoring of filled CH TRU waste storage rooms. Such monitoring is required to ensure structural stability of these rooms and adequate performance of the installed rock bolts throughout the retrieval period, i.e. ten years.

Resolution:

The potential for a roof collapse onto CH TRU waste canisters should be evaluated as a potential accident scenario of interest. Chapter 7 of the SER presents more details on this issue. However, since stability is to be evaluated by the long term monitoring program, the problem of monitoring within filled rooms remains an open issue.

5. In the design of the various shaft keys, the lateral pressure used in the designs indicates that these keys are not subjected to full lithostatic pressures. Generally, such rigid unyielding structures would be expected to sustain full overburden pressures due to the creeping salt foundation. The derivation of the design pressures used for the keys, described in the FSAR, was considered unsupported by traditionally used technical assumptions.

Resolution:

Existing long term empirical evidence available from existing mines in the area indicates that shaft keys are not subjected to full overburden lithostatic pressures. At the contact between the Salado and Rustler rocks, interface friction effects probably account for the significant reduction of the overburden loads on the keys. Traditional modeling calculations performed by BNL indicate that the projected pressure acting against the key over its lifetime, while less than full lithostatic, will be larger than the design pressures

assumed in the calculations. However, accepting the higher strengths for the existing concrete because of in-situ compression tests, together with the existing monitoring programs proposed for the Waste Shaft, leads to a conclusion that the shaft keys do not constitute a safety hazard throughout the Test Phase. This response is acceptable and this issue is resolved.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides an adequate evaluation of the subsurface materials and foundations, with the caveats below.

It should be emphasized that to establish and maintain information on safety and stability of all underground openings, a detailed monitoring program must be maintained throughout the life of the facility. The specifications of the threshold values to be used in the monitoring are not contained in Section 1.5 of the FSAR as committed at the April 24-28, 1989 FSAR meeting. In addition, it is not as yet clear as to the program to be implemented in those CH TRU waste storage areas filled with drums. The impact of a potential roof collapse onto CH canisters should be an accident scenario of interest as noted in Chapter 7 of the SER.

SECTION 2.11 - SLOPE STABILITY

1.0 SUMMARY DESCRIPTION

This section of the FSAR describes the condition of slopes, both permanent and temporary, in the vicinity of the site. The area around the WIPP Facility is relatively flat, with average slopes of less than 1%. No significant permanent cut slopes or embankments are planned within the area of interest. The excavation slopes planned within Control Zone I are temporary slopes.

2.0 ACCEPTANCE CRITERIA

The information presented in this section of the FSAR was reviewed to ensure that it substantiates the evaluations of stability of slopes at the site. The methods presented in Refs. 39 and 40 are those typically used for such evaluations. In addition, the information presented in the Geotechnical Field Data Reports (Ref. 37) as well as the site characterizations presented in the DVFR (Ref. 36) and the National Academy of Sciences (Ref. 18) were consulted to confirm the information presented in the FSAR. The criteria presented in Section 3.6.5 of the USNRC Regulatory Guide 3.26 (Ref. 1) were used to guide the evaluation.

3.0 ISSUES

1. The minimum acceptable safety factor used in the design of slopes in the area was selected as 1.1, a value lower than typically used in slope stability analysis.

   Resolution:

   The soils in the area, based on information in Ref. 39, as well as a physical inspection of the area, are granular and possess significant strength even without major compaction efforts used in placement.

The computed safety factors for these soils exceeded a value of 2, for embankments that are 20 feet high at a 2 over 1 slope. Most slopes, particularly temporary slopes, are designed with safety factors less than this value. Therefore, the design of these slopes is considered acceptable and this issue is resolved.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides an acceptable analysis of slope stability.

The slopes in the vicinity of the WIPP Facility are temporary slopes composed primarily of granular fills. The safety factors for these slopes are larger than design recommendations.

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CHAPTER 3 - DESIGN CRITERIA

This chapter of the FSAR describes the principal design criteria used at WIPP: General Design Criteria; Structural and Mechanical Design Criteria; Safety Protection Criteria; Decommissioning and Decontamination Design Criteria; and Design Development Construction and Start-up of the WIPP Facility. Decommissioning and decontamination (Section 3.4) is dealt with in detail in Chapter 12.

SECTION 3.1 - GENERAL DESIGN CRITERIA

1.0 SUMMARY DESCRIPTION

This section of the FSAR presents the design criteria used at the WIPP. EH's review does not include the Remote Handled Transuranic (RH TRU) waste criteria. The review of this area will be done at a later date, prior to receipt of RH TRU waste. Criteria for Contact Handled Transuranic (CH TRU) waste are presented in each of the following areas:

1. Waste Characterization. The criteria which define TRU waste are described. TRU waste contains alpha emitting transuranic radionuclides with half lives greater than 20 years and in concentrations greater than 100 nCi/g. CH TRU waste can have surface dose rates of up to 200 mrem/hr but the average surface dose rate is expected to be about 14 mrem/hr.

2. CH TRU Waste Handling, Emplacement, and Retrieval. The criteria for handling, emplacement and retrieval of the CH TRU waste are described. This includes a description of the spatial and equipment requirements.

3. Underground Development. These criteria require that the mining operations be physically separated from the waste storage areas. The storage areas are also to be provided with entryways and ventilation passages permitting access for retrievability.

4. Monitoring and Surveillance. These criteria require that meteorological, groundwater, air quality, and seismic data are monitored at the site.

5. Facility Products and By-products. The criteria for handling of non-radioactive hazardous materials at the WIPP are in accordance with the codes and standards described in Reference 1. All radioactive by-products generated during operations will be emplaced underground.

6. Classification of Structures, Systems and Components. The criteria for determining the design classification of WIPP items are described. All of the structures, systems and components are classified as Classes I, II, IIIA, or IIIB. An item would be classified as either Class I if it was required to reduce the 50-year dose at the boundary to 25 rem for the whole body or to 75 rem to other organs. All of the accident scenarios result in lower dosages so that there are no Class I components at the WIPP.

   Items are Class II if they provide permanent shielding, provide permanent confinement, or monitor and control parameters essential to maintain the safety of the facility. There is another division within Class II. Class II components that provide the permanent confinement are designed to resist Design Basis Earthquake (DBE) and Tornado (DBT) while other Class II components are designed for Uniform Building Code (Ref. 2) wind and seismic criteria.

All other components are Class III. An item is Class IIIA if it monitors on-site radiation, its failure would cause a major work stoppage, its fabrication is very complex, its failure could lead to local contamination, or its failure could lead to WIPP operating personnel injuries.

All significant systems and structures are classified according to this system in FSAR Table 3.1-8. The applicable design codes for each type of component are given in Table 3.1-7.

2.0 ACCEPTANCE CRITERIA

The intent of the acceptance criteria for this section of the FSAR is to assure that the General Design Criteria specified in the section lead to designs that comply with applicable DOE orders (Ref. 6) and national standards (Refs 2, 9, 10, 14), and that the margins of safety reflect the safety importance of the component. Specifically EH required that the General Design Criteria assure that:

1. The characterization of the CH TRU waste conservatively represents the radioactivity that would be expected and consistent with data contained in the Final Environmental Impact Statement (Ref. 3) and in the WIPP Waste Acceptance Criteria (Ref. 4).

2. The operational (e.g. waste handling) criteria lead to procedures that minimize the risk of radioactive releases either within the facility or at the site boundary.

3. The codes specified to determine allowable limits (e.g., stresses, deformations) are national standards and are properly applied.

4. The criteria used to specify component classifications reflect the importance of the components.

5. The specific classification of components is consistent with the criteria specified in the FSAR.

3.0 ISSUES

1. The FSAR refers to the use of an average surface dose rate of 14 mrem/hr, rather than the maximum allowable surface dose rate of 200 mrem/hr, in analyzing the effects of "frequent" accidents. The validity of use of this average value was questioned.

   Resolution:

   The 14 mrem/hr represents the average radiation dose for CH TRU waste containers. This average is updated on an annual basis and the WIPP has committed to review the updated average values and to determine whether the 14 mrem/hr value should be changed during the five year Pilot Plant Phase (Test Phase). Since the average dose rate is updated yearly, the use of 14 mrem/hr is acceptable and this issue is resolved.

2. The FSAR refers to surge areas to be used as temporary holding areas for CH TRU containers that cannot be placed underground during each shift. Concerns were raised regarding the specific locations of these areas and the controls placed on containers stored in these areas.

   Resolution:

   The surge area is comprised of three components:

   An area for 12 parking spaces for trailers carrying TRUPACTS. This area is outside the radiologically controlled area. In the event of prolonged shutdown of the WIPP all shipping sites would be notified to cease shipments. These 12 spaces would accommodate

any shipments already in progress. Any TRUPACTS left in the area overnight will receive a more detailed radiological survey.

The normal CH waste handling areas. Any TRUPACTS in this area will be unopened. Any drums having surface dose rates in access of 100 mrem/h or that cannot be placed underground by the end of the a shift will be placed in a shielded storage area.

Shielded storage area. Any drums having surface dose rates exceeding 100 mrem/h are placed in this area. Containers will not be left in this area for more than one week.

The controls placed on the surge storage areas are acceptable and this issue is resolved.

3. Table 3.1-8 of the FSAR lists the classifications of all structure and component systems at WIPP and the seismic (DBE or UBC) design criteria. The table indicated that some Class II structures are designed for DBE seismic loadings while others are designed for UBC seismic loadings. There were no criteria given in the FSAR for deciding which seismic loading should be used.

   Resolution:

   The basis for the difference is given in Note 9 to Table 3.1-8 of the May 1989 revision to the FSAR. If a Class II component is contained wholly within another Class II building, the interior Class II components can be designed for UBC seismic loading and no tornado consideration. This is a reasonable approach since all primary containments are Class II. Any accident results in a "buttoning up" of the operation (e.g., no air flow to the outside except through the HEPA filters). Therefore, the failure of a structure or component contained within this outer containment would not result in the release of radioactivity to the atmosphere. The response is acceptable and this issue is resolved.

4. The FSAR listed the classification of the Exhaust Filter Building (EFB) as Class II and UBC seismic design. Since the EFB is not contained within another Class II structure, an issue was raised as to why it was not designed for DBE rather than UBC (see Issue 3).

   Resolution:

   The EFB classification has been changed to Class IIIA in the June 1989 revision to the FSAR since the HEPA filter system was assumed to be inoperative for all of the underground accident scenarios. Note that Class IIIA structures are designed for UBC seismic. Since no credit is taken for the HEPA filters in calculating the off-site doses to the public at the site boundaries during an accident, the EFB classification is adequate. The response is acceptable and this issue is resolved.

5. The FSAR contained a figure (3.1-1) that showed a flow chart formalizing the criteria for assigning a classification to a structure or component. A review of this figure indicated that it did not include all of the elements that would make a component Class IIIA rather than Class IIIB. Therefore, the application of this figure could result in components being classified IIIB rather than IIIA as required by the criteria contained in the FSAR.

   Resolution:

   The figure has been removed from the May 1989 revision to the FSAR. The figure was, however, also included in the WIPP Design Basis Document (Ref. 17). This figure must be modified to conform to the classification criteria in the FSAR. This issue is open.

6. The FSAR does not include a section comparing the actual criteria used for the design of the WIPP Facility with current design criteria as required by DOE Order 5481.1B (Ref. 5). In accordance with DOE

Order 6430.1A (Ref. 6), Section 0101-2, a determination must be made concerning whether or not any facility changes are necessary or desirable in order to comply with the current design criteria contained in 6430.1A. Such a determination must provide adequate documentation of the justification for any deviations from current Order 6430.1A that would require design or construction modifications.

Resolution:

The WIPP has agreed to complete this comparison within 18 months after startup and EH has concurred. This issue is resolved.

All RAIs for this section contained in Appendix B have been adequately answered except for the open item listed below.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provide acceptable design criteria except as noted below. The criteria used to distinguish between Classes I, II, and III are reasonable and support the safety of the WIPP. The distinction between Class I and Class II is based on the potential magnitude of the long term radiation dosages at the WIPP boundary. The components are deemed Class II or Class III depending on whether they are required to control off-site or on-site radiation releases.

The findings discussed above support the conclusions that the FSAR satisfies the acceptance criteria stated in paragraph 2.0, above except for the following open item:

The flow chart implementing the component classification criteria (Figure 3.1-1 in the FSAR) was inconsistent with the stated criteria with respect to the differences between Class IIIA and Class IIIB. The figure was removed from the May 1989 revision to the FSAR but it should be verified that the figure was corrected in the Design Basis Document (Ref. 17).

SECTION 3.2 - STRUCTURAL AND MECHANICAL DESIGN CRITERIA

1.0 SUMMARY DESCRIPTION

This section of the FSAR describes the design criteria of the loads and load combinations that are applicable to the design of structures and mechanical equipment of the WIPP Project. It is divided into ten primary subsections: (1) wind loading, (2) tornado loading, (3) water level design, (4) groundwater design, (5) protection against dynamic effects, (6) seismic design, (7) snow loading, (8) equipment and material-derived loads, (9) thermal loading and (10) combined load criteria. For each loading, the occurrence, the intensity and the manner that it is applied on the structure or pertinent mechanical equipment are discussed. Tornado loadings are applicable to certain Design Class II surface facilities (referred to as DBE/DBT in the FSAR). Tornado effects on structures are described in Bechtel topical report BC-Top-3-A (Ref. 7). Likewise Design Basis Earthquake (DBE) is applied to Design Class II confinement structures and the analytical methods are described in Bechtel topical report BC-Top-4-A (Ref. 8). The combined load criteria for Design Class II structures are based on the requirement that all sections that provide strength must be at least equal to the combined load effects. For steel structures, the elastic method based on American Institute of Steel Construction (Ref. 9) specifications is used while for concrete structures, the strength design method based on American Concrete Institute Standard 318-77 (Ref. 10) is used. The Design Class III structures and mechanical equipment and those Design Class II structures not required for confinement are designed in accordance with the Uniform Building Code (Ref. 2).

2.0 ACCEPTANCE CRITERIA

The acceptance criteria used in this review include information provided in the USNRC Standard Review Plan (Ref. 11), USNRC Regulatory Guide 1.60 (Ref. 12), USNRC Regulatory Guide 1.92 (Ref. 13), the ANSI Standard A58.1 (Ref. 14), AISC Code (Ref. 9) and the ACI Standard (Ref. 10). The data contained in the

FSAR were reviewed in reference to the above information to assure its acceptability.

The specific acceptance criteria are developed from the following parts of Section 4.2 of the USNRC Regulatory Guide 3.26 (Ref. 15).

1. 4.2.1 Wind Loading - should be specified in accordance with ANSI Standard (Ref. 14).

2. 4.2.2 Tornado Loading - should be specified in accordance to the site specific data of Section 2.3 of the FSAR.

3. 4.2.5 Seismic Design - the loading should be specified in accordance with the requirements of Section 2.8 of the FSAR. The analyses should be conducted in accordance with the USNRC Standard Review Plan (Ref. 11) for Class II and the Uniform Building Code (Ref. 2) for Class III components.

4. 4.2.8 Load Combinations - the load combinations and load factors should be specified in accordance with the importance of the component and standard practice as reflected in the AISC (Ref. 9) and ACI Codes (Ref. 10).

3.0 ISSUES

1. The specified wind loading for Class III structures is 91 mph. However, the Support Building (SB) and Exhaust Filter Building (EFB) are designed for 99 mph winds even though they are Class III structures. The issue was raised regarding this apparent inconsistent application of the criteria (Ref. 16).

Resolution:

The Class III criteria wind loading depends on whether the items are Class IIIA or IIIB. Class IIIA items are designed for 99 mph while Class IIIB are designed for 91 mph. Both the EFB and SB are Class IIIA and are, therefore, designed for 99 mph wind velocity. The response is acceptable and this issue is resolved.

2. The FSAR did not contain a listing of the Class III structures that were designed for tornado loading.

Resolution:

The June 1989 revision to the FSAR states that the SB and the TRUPACT Maintenance Facility are designed for tornado loading since their collapse would influence Class II structures (Waste Handling Building). The response is acceptable and this issue is resolved.

3. The FSAR often refers to the Bechtel Topical Report BC-TOP-4-A (Ref. 8) in describing methods used for seismic response calculations at WIPP. This reference contains many alternative methods and the FSAR is not specific in specifying the method.

Resolution:

The FSAR was revised to include more material describing the methods of seismic analysis used for WIPP. The response is acceptable and this issue is resolved.

4. Several issues were raised regarding the methods of analysis used for Class II piping.

Resolution:

References to Class II piping were removed from the FSAR since there is no Class II piping at WIPP. The response is acceptable and this issue is resolved.

5. The load combinations contained in the FSAR include a load component due to salt creep for structures that abut the salt formations. These loads are to be included for all Class II structures. No data were included in the FSAR describing the magnitude of these loads or the methods to be used to determine the loads.

   Resolution:

   It was determined that there are no Class II structures subjected to salt creep loads. The response is acceptable and this issue is resolved.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides acceptable design criteria for the loads and load combinations that are applicable to the design of structures and mechanical equipment of the WIPP Project.

SECTION 3.3 - SAFETY PROTECTION CRITERIA

1.0 SUMMARY DESCRIPTION

SECTION 3.3.2 - AIR HANDLING

This section of the FSAR discusses the air handling systems designed to: (1) provide a suitable environment for personnel and equipment during normal plant operation, and (2) provide contamination control for anticipated operational occurrences and postulated waste handling accidents. This section also discusses certain components of the air handling systems used for functions related to space cooling and removal of heat generated by the equipment and waste.

The WIPP Facility air handling systems serve three major plant areas: the surface nuclear facilities, the surface support facilities, and the subsurface facilities.

SECTION 3.3.3 - FIRE AND EXPLOSION PROTECTION

The fire and explosion protection systems at the WIPP Facility are designed to ensure the safety of plant personnel, ensure the reliability and continuity of plant operations, and minimize property loss.

2.0 ACCEPTANCE CRITERIA

SECTION 3.3.2 - AIR HANDLING

The acceptance criteria used for the review of this section of the FSAR are those contained in the following documents:

The air handling systems are designed so that the emissions meet the limitations in DOE Order 5480.11 (Ref. 18).

Dampers are classified by function, configuration, construction and leak tightness in accordance with Tables 5.7 through 5.10 of ERDA 76-21 (Ref. 19). Damper selection is based on the requirements of ERDA 76-21, Table 5.12.

Other codes and standards used in the review of the air handling equipment design are as follows:

1. Fans conform to the Air Moving and Conditioning Association (AMCA) Application Guide No. 201 (Ref. 20).

2. Prefilters are rated in accordance with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 52-76 (Ref. 21).

3. High efficiency particulate air (HEPA) filters conform to the standards of U.S. Military Specification MIL-F-51068D (Ref. 22).

4. Installed air cleaning systems are tested in accordance with ANSI N510, Testing of Nuclear Air Cleaning Systems (Ref. 23).

5. Air handling systems installation conforms to National Fire Protection Association (NFPA) Standard No. 90A-1979 (Ref. 24).

6. DOE 6430.1A, General Design Criteria (Ref. 6): Section 1550-2.5, "Air Handling and Air Distribution Systems," and Section 1595-6, "Control of Air Handling Systems."

7. ANSI Standard N509 (Ref. 25).

SECTION 3.3.3 - FIRE AND EXPLOSION PROTECTION

The acceptance criteria for this section of the FSAR are based on designs that are safe as judged by national standards. The specific items that were considered in EH's review were:

1. Buildings and their support structures are protected by fixed, automatic fire suppression systems designed to the specific, individual hazards of each area.

2. Noncombustible construction, fireproof masonry construction, and fire resistant materials are used whenever possible.

3. Areas susceptible to fire are separated by fire walls and automatic fire doors to contain and isolate hazardous materials or operations. Fire separations are installed where required because of different occupancies per the Uniform Building Code (UBC) (Ref. 2).

4. All vertical openings in buildings are protected by enclosing stairways, elevators, pipeways, electrical penetrations, etc., to prevent fire from spreading to upper floors.

With one exception noted below, the safety protection criteria described in the WIPP FSAR for the air handling and the fire and explosion protection systems are adequate to provide assurance that the systems are designed to meet or exceed the acceptance criteria and that the systems are operable at all times or that suitable backup systems are provided. This is based on the following commitments:

a. The ventilation systems for the Waste Handling Building and Exhaust Filter Building provide dynamic confinement barriers to limit potential releases of airborne radioactive contaminants to levels ALARA, consistent with the requirement of DOE Order 5480.11 (Ref. 18).

b. The exhaust fans and controls are capable of being supplied by emergency power in the event that normal power is interrupted.

c. The Central Monitoring System (CMS) is manually switched to the emergency power supply to ensure continued operation monitoring and control of the HVAC systems if the normal power supply is lost.

d. The surface exhaust fans are capable of being connected to the emergency power supply in the event that normal power is lost.

e. The active components of the waste storage ventilation system (fans and motors) have 200 percent redundancy during emergency operations.

f. Air reversal capability during fire isolation mode is provided for all areas underground except the waste handling and waste storage areas.

g. The components of the electrical service and distribution systems are listed by Underwriters' Laboratory or approved by Factory Mutual Engineering Corporation.

h. Adequate provisions for the safe exit of personnel are ensured for all potential fire occurrences.

i. Evacuation alarm signals are provided throughout occupied areas.

3.0 ISSUES

SECTION 3.3.2 - AIR HANDLING

1. No information was provided regarding the testing and performance of the valves used as isolation dampers.

Resolution:

The DOE/WPO response indicated that this information is not available at the present time but would be provided for review when available.

This issue is open.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

Except as noted above, the May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides acceptable safety protection criteria for the Air Handling and the Fire/Explosion Protection systems. The criteria are in compliance with the acceptance criteria in Paragraph 2.0, except for one remaining open item relating to the testing of the valves used as isolation dampers. WIPP has agreed to furnish the test standards and procedures for the isolation dampers and to specify permissible leakage rates for EH review.

SECTION 3.3.6 - UNDERGROUND MINE SAFETY

1.0 SUMMARY DESCRIPTION

This section of the FSAR describes the layout of the underground facilities and the methods of providing physical separation and ventilation isolation between waste storage and mining operations. Personnel work upstream of stored CH TRU waste. Automatic alarm systems are installed to warn of hazardous radiological conditions. Air quantity and quality, fire monitoring and control, security (movement of personnel) and radiation levels are monitored at the Central Monitoring Room (CMR).

All underground equipment is painted with bright colors, equipped with lights, has audible alarms or flashing lights for operating in reverse, and give operators, where possible, a 360° field of vision. Reinforced canopy protection and fire extinguisher and/or extinguishing system are available. All electrical equipment is grounded. Underground mining areas are lighted where required.

2.0 ACCEPTANCE CRITERIA

This section was evaluated based on the requirements of federal and state regulations as prescribed in 30 CFR Part 57 (Ref. 26). Specific acceptance criteria used to evaluate this section were the following:

1. When rock bolts are used as a means of ground support, anchorage test procedures shall be established and tests shall be conducted to determine the anchorage capacity of rock-bolt installations.

2. Ground support shall be used if the operating experience of the mine, or any particular area of the mine, indicates that it is required.

3. Whenever self-propelled equipment is used underground, a fire extinguisher shall be on the equipment.

4. Ground conditions along haulageways and travelways shall be examined periodically and scaled or supported as necessary.

3.0 ISSUES

1. Information was requested regarding the safety checks performed in the underground areas (Ref 16).

Resolution:

The FSAR was revised in Section 3.3.6.3 to provide additional details of the underground safety inspections. Other details of the inspections were provided in the responses to the RAI. The responses are acceptable and the issue is resolved.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provide acceptable underground mine safety criteria. The safety criteria comply with the Paragraph 2.0 acceptance criteria.

SECTION 3.5 - DESIGN DEVELOPMENT, CONSTRUCTION AND START-UP OF THE WIPP FACILITY

1.0 SUMMARY DESCRIPTION

This section of the FSAR presents a general description of the development of the WIPP Facility, progressing from the conceptual design, through preliminary design and to the final design period. Construction and turnover aspects of the process are also described.

2.0 ACCEPTANCE CRITERIA

The design criteria for the facility (loadings, analysis methodologies, and acceptable limits of response) are discussed in Sections 3.1 through 3.4 of the May 1989 revision to the FSAR. The application of these criteria to facility design is discussed in Chapter 4 of the May 1989 revision to the FSAR. This section of the FSAR describes the process used to complete the

facility development. As such, specific acceptance criteria are not applicable to this section.

3.0 ISSUES

1. Based on presentations made to EH during a number of site visits, it was indicated by Bechtel National, Inc. that a detailed finite element calculation was initially performed by Serata to investigate initial room layout and extraction ratios (Ref. 27). This analysis was not provided for review.

   Resolution:

   As indicated by the response to the inquiry concerning the Serata calculation (Appendix B), this analysis was applicable to a preliminary design concept which involved a second storage horizon approximately 600 feet deeper than the current horizon. On this basis, the details of the analysis are no longer of interest, and this issue is resolved.

2. Subsection 3.5.1.2 of the FSAR makes reference to calculations using laboratory test data as input to the finite element analyses performed by Bechtel. However, in descriptions made by Bechtel at various site visits, this was in fact not done.

   Resolution:

   As described by Bechtel, the primary input to these analyses is the data obtained from the studies associated with the Site Preliminary Design Validation (SPDV) Program. As described in Section 1.5 of this SER, the monitoring program implemented by the DOE/WPO is the primary basis for evaluating stability of the underground facility. Safety margin estimates inherent in the designs of the underground openings are not available, although one of the stated goals of the five year Pilot Plant Phase (Test Phase) is to develop such

estimates. Therefore, this is no longer considered an issue, although it is recommended that the wording of this subsection of the FSAR be revised to indicate that laboratory data did not play a significant role in the underground design; however, for purposes of this SER, this issue is closed.

3. During the review of the design calculations, several instances of inconsistencies (see Section 4.2 discussion) were found between the calculations, drawings, and field conditions. This finding led to a search for the QA/QC track for several selected structural and equipment components. The results of this review were:

   Inconsistencies do exist between the drawings, calculations, and field conditions.

   The QA construction documents are poorly organized making them difficult to locate. However, through various meetings and pursuits the required documentation was found indicating that the documentation is available but poorly organized.

   The WIPP should develop "as-built" drawings reflecting the field conditions.

   Resolution:

   EH performed an independent evaluation of some of the major Class II structures including the CH area of WHB, the Hoist Tower and the Hot Cell (see Section 4.2) and did not uncover any serious deficiencies that have not been resolved except for a small overstress in some of the columns of the WHB (as discussed in Section 4.2 of this SER). It is therefore concluded that the structures are generally adequate and the problem with the inconsistencies in the design calculations are QA related. This issue is resolved.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provide an acceptable description of the design, development, construction and startup of WIPP.

REFERENCES FOR CHAPTER 3

1. Westinghouse Electric Corporation, "Operations Program Plan," DOE/WIPP-85-001, Rev. 3, July 1988.

2. Uniform Building Code, 1982 Edition.

3. U.S. Department of Energy, Final Environmental Impact Statement, Waste Isolation Pilot Plant, DOE/EIS 0026, U.S. Department of Energy, October 1980.

4. U.S. Department of Energy, "WIPP Waste Acceptance Criteria," WIPP/DOE-069, Rev. 3, January 1989.

5. U.S. Department of Energy, "Safety Analysis and Review System," DOE Order 5481.1B, September 23, 1986.

6. U.S. Department of Energy, "General Design Criteria," DOE Order 6430.1A, April 6, 1989.

7. Bechtel Power Corporation, "Tornado and Extreme Wind Design Criteria for Nuclear Power Plants," BC-Top-3-A, Rev. 3, Aug. 1974.

8. Bechtel Power Corporation, "Seismic Analysis of Structures and Equipment for Nuclear Power Plants," BC-Top-4-A, Rev. 3, Nov. 1974.

9. American Institute of Steel Construction, "Specification for Design, Fabrication, Erection of Structural Steel for Buildings," Nov. 1978.

10. American Concrete Institute, "Building Code Requirement for Reinforced Concrete," Standard 318-77, Dec. 1977.

11. U.S. Nuclear Regulatory Commission, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," NUREG-0800, July 1981.

12. U.S. Nuclear Regulatory Commission, "Regulatory Guide 1.60, Design Response Spectra for Seismic Design of Nuclear Power Plants," Rev. 1, December 1973.

13. U.S. Nuclear Regulatory Commission, "Regulatory Guide 1.92 "Combining Modal Response and Spatial Components in Seismic Response Analysis," Rev. 1, February 1976.

14. American National Standard Institute, "Building Code Requirements for Minimum Design Loads in Building and other Structures," ANSI A58.1-1972.

15. U.S. Nuclear Regulatory Commission, "Regulatory Guide 3.26, "Standard Format and Content of Safety Analysis Reports for Fuel Reprocessing Plant," February 1975.

16. Memorandum, H.J. Pettengill (DOE/EH) to J.B. Tillman (DOE/WPO), April 13, 1989; Subject: Final Safety Analysis Report for the Waste Isolation Pilot Plant (transmitting EH comments on Chapters 1, 3, 4, 5, 6, 7, and 11).

17. Bechtel National, Inc., "Design Basis, Design Classification," D-76-K-03, Rev. 7, November 30, 1982.

18. U.S. Department of Energy "Radiation Protection for Occupational Workers," DOE Order 5480.11, December 21, 1988

19. U.S. Energy Research and Development Administration, Nuclear Air Cleaning Handbook, "Design, Construction and Testing or High Efficiency Air Cleaning System for Nuclear Applications," ERDA-76-21, 1976.

20. Air Moving and Conditioning Association (AMCA), "Fans and Systems," Application Guide No. 201, 1973.

21. American Society of Heating, Refrigerating, and Air Conditioning Engineers, ASHRAE, Method of Testing Air Cleaning Devices Used in General Ventilation for Removing Particulate Matter, ASHRAE 52-76, 1976.

22. Department of Defense, Military Specification, Filter, Particulate, High Efficiency, Fire Resistant, MIL-F 51068D, August 1988.

23. American National Standards Institute, Testing of Nuclear Air Cleaning Systems, Standard N510, 1980.

24. National Fire Protection Association (NFPA), Standard for the Installation of Air Conditioning and Ventilating Systems, Standard No. 90A-1979.

25. American National Standards Institute, Nuclear Power Plant Air Cleaning Systems, Standard N509, 1976.

26. Mine Safety and Health Administration (MSHA), Federal Mining Code for Metal and Non-Metallic Underground Mines, Title 30, Code of Federal Regulations, Part 57, 1988.

27. Bechtel National, Inc., "Design Validation Final Report, Waste Isolation Pilot Plant," DOE-WIPP-86-010, 1986.

CHAPTER 4 - PLANT DESIGN

This section of the FSAR contains six sections describing the following aspects of the WIPP Facility: Summary Description of Facility; Surface Structures; Shafts and Subsurface Facilities; Service and Utility Systems; Waste Handling, Emplacement, and Retrieval Equipment; and Underground Mining Equipment. The SER does not review FSAR Section 4.1 since it is a general description of the facility and no RAI's pertaining to it appear in the Appendices.

SECTION 4.2 - SURFACE STRUCTURES

1.0 SUMMARY DESCRIPTION

This section of the FSAR describes the functions, the major design and construction features, and the design classification of the surface structures at the WIPP Facility. Surface structures are grouped under two general headings: (1) Waste Handling Building (WHB) and (2) Support Structures.

WASTE HANDLING BUILDING

For the WHB, the FSAR describes the following four functional areas and two systems:

Areas:

- CH TRU Waste Handling Area -- includes Air Locks, Inventory and Preparation Area, Overpack and Repair Room and support facilities.
- RH TRU Waste Handling Area -- includes Inventory and Preparation Area, Cask Receiving Area, Cask Preparation Area, Cask Maintenance Station, Hot Cell Complex and support facilities.
- TRUPACT Maintenance Facility Area
- WHB Support Areas

Systems

- o Fire protection system
- o Effluent monitoring system

Support Systems

The support structures are the following buildings which are required for support of the waste handling operations:

- o Exhaust Filter Building
- o Salt Handling Shaft Head Frame and Hoist House
- o Air Intake Shaft Head Frame and Hoist House
- o Main Warehouse Building
- o Water Pumphouse
- o Support Building
- o Vehicle Service Building
- o Guard and Security Building
- o Main Gatehouse
- o Armory Facility
- o Safety and Emergency Services Building
- o Compressor Building

The FSAR states that on the basis of the design classification definitions presented in Subsection 3.1.7, there are no Design Class I structures at the WIPP Facility. The WHB, which serves as a containment barrier to control the potential release of radioactive material, is the only surface structure designated as Design Class II and required to be designed to withstand the design basis earthquake (DBE) and the design basis tornado (DBT).

The primary focus of this review is the CH area. A complete review of the RH area will be performed at a later date prior to the receipt of RH waste. The RAIs (Ref. 11) associated with the RH area will be delayed until that time.

2.0 ACCEPTANCE CRITERIA

The acceptance criteria used for review of this section of the FSAR were the AISC Code (Ref. 3), the Uniform Building Code (Ref. 4), the ACI Code (Ref. 5), the Tornado Design Guide by McDonald, Mehta and Minor (Ref. 6), and the DOE Orders 6430.1A, 5480.5, and 5480.11 (Refs. 7-9).

The review included checks on the design calculations and as-built drawings of parts of the WHB, including the Hot Cell, the Hoist Tower, and the CH Area.

The following specific acceptance criteria were used in performing these reviews:

1. The loadings applied to the structures should be in accordance with the design analyses and the applicable building codes (Refs. 3, 4 and 5).

2. The methods of analysis used to evaluate structural responses (deformation and stresses) are in accordance with the applicable codes (Refs. 3, 4 and 5).

3. The allowable responses are within those specified in the design documents (Ref. 1 and 2).

3.0 ISSUES

1. The provided as-built drawings showed plate girders having 1/4-inch welds while the AISC code requires a 5/16-inch minimum size weld.

Resolution:

The shop drawing (Mosher Steel Fab Dwg. 265A) was examined during the April 24-28, 1989, FSAR review meeting at the site and the drawing indicated that a 5/16-inch weld was used as required. The shop drawings for these girders were not part of the documentation transmitted to EH for review. Based on the as-built drawings it is concluded that the welds are 5/16-inch as required. The issue is resolved.

2. The Hoist Tower floor, at elevation 185 ft-6 in., was designed as a composite system with shear studs connecting the steel beam and concrete slab. Confirmatory analysis by EH led to a concern that the shear studs were overstressed for Beam B-20.

Resolution:

Bechtel provided another calculation for the beam indicating that the studs were adequate provided the strength of the puddle welds was included with the studs. This additional calculation was reviewed during the April 24-28, 1989, FSAR meeting. It should be noted that the strength of the puddle welds would normally not be included in evaluating the strength of the connection between the concrete slab and steel during the design phase. Since the facility has already been constructed, it was determined that the inclusion of the puddle welds in the structural evaluation is acceptable and, therefore, the issue is resolved.

3. EH was not provided with calculations for the design of the girts and siding.

Resolution:

These calculations (CS-41-D-112, 113, and 116) were provided for review at the April 24-28, 1989, FSAR meeting and found to be acceptable. The issue is resolved.

4. EH questioned whether seismic restraints were provided for the crane. The drawings provided for review did not include these restraints.

Resolution:

The procurement specifications (1433L-014 and 1105-014) were examined during the April 24-28, 1989, FSAR meeting and found to require the restraints. The restraints were visually inspected during the RRI and found to be adequate. The issue is resolved.

5. EH questioned the seismic load calculations for some of the columns in the Hoist Tower. The correct calculation was not available when the report was prepared.

Resolution:

The calculation (CS-31-D-011) was provided for review during the April 24-28, 1989 FSAR review meeting and was found to be acceptable. The issue is resolved.

6. EH independently analyzed the seismic response of the Hoist Tower. The results of this study indicated that a seismic gap of at least 0.83 inches is required to prevent interference during the DBE. The size of the gap specified in the drawing was unclear.

Resolution:

The seismic gap was inspected during the RRI and found to be more than the 0.83-inch required. Thus, this issue is resolved.

7. A wall of the Hot Cell was analyzed as a T-beam and EH reviewers questioned the flange width used in the analysis.

Resolution:

This problem was evaluated during the April 24-28, 1989, FSAR review meeting. The flange of the T-beam in question is actually in the tension zone so that the wall behaves more as a rectangular beam than a T-beam. The Bechtel calculation assumed that the effective width of the flange was equal to one-quarter of the beam span on each side of the web. The ACI Code specification (Section 8.10.2) calls for the total flange width (not the overhang on one side) to be limited to one-quarter of the span. Actually, the ACI Code provision is for compressive flanges and the Code contains no provisions for tensile flanges. The Bechtel calculation uses the tensile flange width to determine the total reinforcement acting with the beams. The steel within the flange width assumed by Bechtel is required to satisfy the ACI minimum reinforcement ratios. If the reduced flange width (span/4) is used, the reinforcement available is about one-half of that used by Bechtel and violates the minimum reinforcement requirement in the ACI Code. A calculation was made by EH, and is included as Appendix G indicating that the reduced steel area results in a beam moment capacity of 10,290 kip-ft while the required moment is 10,100 kip-ft. Since this strength is adequate, the issue is resolved.

8. A question was raised regarding the adequate treatment of stresses around an opening in the Hot Cell roof.

Resolution:

A calculation was made by EH, and is included as Appendix H. This calculation indicates that the slab could carry the entire load acting as a one-way slab having the strength determined by omitting the cutout. This issue is, therefore, resolved.

9. The mat Hot Cell foundation was found to be slightly overstressed in shear in the Bechtel calculations which were reviewed.

Resolution:

This was found to be true but was based on a very conservative (uniform) distribution of soil pressure. A more realistic distribution of soil pressure (with the load concentrated near the supports) indicates that the foundation is adequate. This issue is resolved.

10. In addition to the above nine items, many instances were noted where the design calculations and "as-built" drawings were inconsistent. This problem was also considered during the RRI and amplified by the finding that the "as-built" drawings do not always reflect the field conditions.

Resolution:

This was also identified as a finding in the RRI and will be corrected by the WIPP when a correct set of as-built drawings are developed. The EH structural reviews have not indicated any serious concerns with structural adequacy at the WIPP. However, since there are discrepancies in the calculations due to changes made in the design (e.g., standardizing member sizes, resolving interferences, etc.), the design changes should be evaluated to determine if the original calculations are still valid. This will be tracked in the RRI follow-up. For purposes of the SER, this issue is resolved.

11. Four of the columns on Line F, supporting the roof trusses in the CH area, were found to be overstressed by about 13%. This was found for the dead load, live load, and design wind load combination. The Bechtel calculations were reviewed and found to contain the following errors leading to this overstress: the dead weight of the roof trusses was not included in the loads acting on the columns and the moment induced at the top of the columns by the horizontal reactions applied to the columns by the top and bottom chords of the roof trusses was not included.

    Resolution:

    This is an open issue.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, show that WIPP surface structures are designed in accordance with the applicable design bases and design criteria, with the exception of the 13% overstress that was found for four columns in Line F of the CH Area.

SECTION 4.3 - SHAFTS AND SUBSURFACE FACILITIES

1.0 SUMMARY DESCRIPTION

This section of the FSAR presents a general description of the four shafts and underground rooms currently in place or planned to be placed in the facility during the five year Pilot Plant Phase (Test Phase), together with a summary description of the design bases for these facilities. The four shafts (Waste, Salt Handling, Exhaust and Air Intake Shafts) connect the surface to the underground storage horizon within the salt (Salado) formation. All shafts, except the exhaust shaft, contain a hoist conveyance. Each shaft consists of a shaft collar, that extends from the surface through the upper granular soils, a shaft lining, that extends to the salt formation, a shaft key, that extends into the salt formation, and an unlined section within the salt formation that extends from the key to the shaft station at the depth of the storage horizon. The shaft lining is typically unreinforced concrete, except for that in the Salt Handling Shaft, which is steel. The function of the lining is to retain any loose rocks encountered in the upper rock formations above the salt, as well as to retain any water which may seep from aquifers penetrated by the shafts.

The underground facilities in the storage horizon consist of the shaft stations, the CH TRU and RH TRU storage areas and the experimental rooms. In addition, various support rooms are provided for these areas. EH's review does not include the RH TRU waste storage areas. The review of these areas will be done at a later date prior to the receipt of RH TRU wastes.

2.0 ACCEPTANCE CRITERIA

The acceptance criteria used for the review of this section of the FSAR are the ACI Code (Ref. 5) and the appropriate DOE Orders (Ref. 7-9) and as-built drawings. As part of this review, checks were performed on the design calculations and the as-built drawings of the shaft liners and shaft keys.

The following specific acceptance criteria were applied in performing these assessments:

1. The loadings applied to the structures should be in conformance with the definitions of Ref. 2 and the applicable building code (Ref. 5).

2. The methods of analysis used to evaluate the response of the liners and keys are in conformance with the requirements of the applicable codes (Ref. 5).

3. The allowable responses are within those specified in the design documents (Refs. 1 and 2).

4. The soil and rock property data used in the analyses conform with the measured data provided in the references (Refs. 13 and 14).

3.0 ISSUES

1. The first comment made in the review of the FSAR concerned the statement in Subsection 4.3.1.1.1 that indicated that the design bases used for shaft furnishings included a seismic load component while the design calculations did not.

   Resolution:

   This subsection was modified in the May 1989 revision to the FSAR to indicate that the shaft furnishings were designed to resist the dynamic forces associated with the hoisting system, and that these are larger than any forces associated with underground seismic effects. Considering the low level of seismic design input anticipated at the site, this revision is considered adequate and the issue is resolved.

2. It is stated in FSAR Subsection 4.3.1.1.1 that the shaft linings were designed to resist both water pressures from the aquifers above the salt formation as well as anticipated ground movement. The impact of any ground movement on the lining design was not indicated in the Design Validation Final Report (DVFR) (Ref. 15). In particular, the effects of any movements induced by seismic effects were not included in the design.

   Resolution:

   Independent calculations were performed by EH (see Appendix I) considering the level of ground shaking anticipated at the upper levels of the lining, using the seismic design motion as input at the ground surface. Assuming that the lining moves with the ground during the seismic event, the strains developed in the lining were found to be small indicating that they would not have a significant impact on the safety of the shaft lining. Thus, the design of the lining is controlled by water pressures and the impact of ground movement on the design is negligible. Unless other types of ground movement were considered in the design basis, this statement in the FSAR, Subsection 4.3.1.1.1, should be further revised to indicate that the shaft linings did not in fact include a ground movement component in their designs.

3. The lateral pressures used in the final design of the various shaft keys located at the interface between the salt and anhydride rock layers were considerably lower than the pressures originally described in the design calculations, with no justification. This apparently arbitrary reduction could not be duplicated by independent calculations performed by EH.

Resolution:

The description in Subsection 4.3.1.1.2 of the FSAR, referring to the design bases used for the shaft keys, was revised to indicate that the design was based primarily on empirical data available from existing potash mines in the vicinity of WIPP. This empirical data is essentially the qualitative observation that keys much thinner than those at WIPP have performed well. EH agrees that the empirical data from existing mines is one important element in evaluating current key designs. However, a valid analysis of record is necessary to link, insofar as possible, that experience with the final design as well as to confirm and document the actual margins of safety.

State of the art analyses were undertaken by both EH and the program in an effort to confirm the analysis supporting the as-built design of the key.

The results of the EH independent calculations performed by BNL indicate that the most highly stressed key (waste shaft) would remain within the code allowable stress when credit is taken for the actual measured concrete strength, in accordance with code provisions, rather than the original design strength (Ref. 26). Three separate calculations have been performed for WPO by Sandia, Bechtel and IT Corporation. These calculations each indicate lower loads and therefore lower key stresses than those resulting from the EH analysis due to the use of different, and held by WPO to be more appropriate, creep relationships as well as apparent computational differences. It must be noted that neither group has successfully demonstrated a good understanding of the actual phenomena controlling the loads on the shaft keys. Even the lower loads predicted by the WPO contractors would likely have caused distress in the relatively thin keys in the nearby mines, but, in fact, this has not occurred.

Although somewhat perplexing, it is clear that the best current computational techniques give a conservative characterization of the lateral pressure applied to the keys due to the creep of the salt. The shaft keys have been shown to meet code requirements when subjected to these conservative loads. In addition, the shaft keys will be subject to scheduled visual inspection as part of the normal mine maintenance program throughout the life of the WIPP Facility. This issue is resolved.

4. The design of the underground configuration of room and drift openings does not adequately account for long term creep effects nor separately address the evaluation of long term stability of these openings.

   Resolution:

   In the design of the underground rooms, empirical approaches were used in the selection of room dimensions together with the experiences gained from the Site and Preliminary Design Validation Test Room. These experiences include the effects of salt creep in an approximate fashion, with the current monitoring program being used to ensure that behavior of the openings follows a consistent path. The threshold monitoring program described in Section 2.10 will be used to monitor creep effects as well as potential impact of any fracturing which may develop around the openings. As mentioned in Section 2.10 of this SER, the ability to monitor rooms filled with CH containers is still an open issue.

   As indicated in Section 2.10 of this SER, there is evidence to indicate that rock fracturing, together with growth in separations along natural fault lines will continue around these openings as creep in the host rocks occurs. The monitoring programs must therefore be used to continually establish local stability and safety margins in the underground.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides acceptable criteria for shafts and subsurface facilities. A confirmatory two-dimensional axisymmetric analysis was performed by EH to support the key design for the waste shaft. Additional information on these issues associated with the key was received on June 15, 1989 and is under review. A minor modification is required in Subsection 4.3.1.1.1 of the FSAR to indicate that the shaft linings did not in fact include a ground movement component in their design.

Finally, it should be emphasized that to establish and maintain information on safety and stability of all underground openings, a detailed monitoring program must be maintained throughout the life of the facility. The ability to perform such monitoring in storage rooms filled with CH containers during the Test Phase has not been addressed and remains an open issue as addressed in SER Section 2.10.

SECTION 4.4 - SERVICE AND UTILITY SYSTEMS

SECTION 4.4.2 - ELECTRICAL SYSTEM

1.0 SUMMARY DESCRIPTION

This section of the FSAR describes the WIPP Facility electrical system, including normal power, that is supplied from off-site by a public utility company; backup power, provided by two (redundant) on-site 1100-kw diesel generators; and essential power, supplied by an 80-kva Uninterruptible Power Supply (UPS). This section summarizes the function of each of the power sources, and how they are integrated to assure reliable power to facility equipment and instrumentation. This section concludes that from the electrical perspective, the WIPP Facility design is fail-safe; essential systems are uninterruptible.

In addition, a Failure Mode and Effects Analysis (FMEA) has been provided for the surface and underground electrical system. This analysis concludes that a single failure of a component or system does not impose undue risk to the health and safety of the public or on-site personnel.

2.0 ACCEPTANCE CRITERIA

Division 16 of DOE Order 6430.1A (Ref. 7) and USNRC Regulatory Guide 3.26 (Ref. 17), provide the general design criteria for electrical systems. For the most part, the criteria are based on established industry standards including IEEE and NFPA standards. The appropriate standards were used for the review of the electrical system, particularly those portions of the description related to the diesel generators, the UPS, and protective relaying.

Specific criteria that were used to evaluate this section of the FSAR were:

1. Electrical systems shall be designed so that all components operate within their capacities for initial and projected loads.

2. Emergency power systems shall be capable of maintaining full operation of emergency load for a specified time period.

3. Batteries shall be kept fully charged.

4. The design of the primary and emergency power sources should be described.

5. The mechanics, sequence, and timing of events which will occur on a loss of offsite power should be presented.

3.0 ISSUES

1. The FSAR indicated that the diesel generators could be remotely started from the Central Monitoring Room (CMR). This was reflected in Subsections 4.4.2.1.2, 4.4.2.1.3, and in the second paragraph of Subsection 4.4.2.2.2. As identified by the Readiness Review Inspection (RRI) (Ref. 19, Finding B-3.6), the diesel generator controls are maintained in the 'LOCAL' mode, which precludes starting them from the CMR. This permits a controlled start of the diesel, including a five minute warm up period. Modifications to the FSAR partially address this concern.

   Resolution:

   a. The second paragraph of Subsection 4.4.2.1.2 states that the diesel generators can be remotely started from the CMR. In the FSAR, the wording was changed to indicate that it is standard practice to use the local start capability, however, the sentence goes on to state that the unit can be remotely started from the CMR. This is still not totally accurate. While the capability exists to start the diesels from the CMR the control switch

located at the diesel must be placed in 'REMOTE', which precludes starting the diesels in accordance with the operating procedure. The FSAR wording should clearly state that the controls permit starting the diesels either locally <u>or</u> remotely, and that the choice has been made to start the diesels locally. It should be noted that the additional time necessary to start the diesels locally does not significantly impact the acceptance criteria of establishing emergency power within 30 minutes.

b. The third paragraph of Subsection 4.4.2.1.3 states that AC power input to the UPS will be restored within 30 minutes via CMR operator action. However, a substantial number of field operator actions are necessary to manually start the diesels and perform the switching necessary to supply power to the UPS and other loads.

c. The second paragraph of Subsection 4.4.2.2.1 stated that the diesel generators would be started manually from the CMR. As previously noted, this is not consistent with the WIPP operating philosophy of closely monitoring the start-up of diesel generators. This was corrected in the June revision of the FSAR and is acceptable to EH.

Issues a. and b. above are open.

2. As documented in RAI comment #3(a) (Ref. 11), Subsection 4.4.2 of the FSAR should establish the design basis including the applicable standards, codes, and guides used for the design, procurement and installation of the electrical system.

Resolution:

DOE/WPO provided EH with information on 6/15/89 illustrating how the WIPP electrical design compares to DOE Order 6430.1 (Ref. 24) and 6430.1A (Ref. 7). DOE/WPO should review, summarize, and incorporate the information pertaining to DOE Order 6430.1 into the FSAR. EH has agreed that the design comparison to DOE Order 6430.1A may be completed within eighteen months after startup. This issue is open.

3. The third paragraph of Subsection 4.4.2.1.3 states that the dedicated batteries can supply power to a fully loaded UPS for 30 minutes. As identified during the RRI (Ref. 19, Finding B-3.5) verification, either through testing or analysis, that such capacity exists has not been demonstrated. As indicated in RAI comment #7(d), the battery testing or monitoring to assure 30 minutes of supply power was requested.

Resolution:

The response provided (Appendix B) was not adequate since it addressed the preventive maintenance program for the UPS. This issue is open.

4. The emergency diesel generator starting system is an important subsystem which should be described in the FSAR.

Resolution:

As agreed during the April 24-28, 1989 FSAR review meeting, the second paragraph of Subsection 4.4.2.1.2 in the May revision to the FSAR accurately responded to RAI comment #6(a) regarding the emergency diesel generator starting system. However, in a June revision to the FSAR, statements describing the diesel generator battery systems were deleted.

This finding raises concerns regarding agreements in this regard made during the April 24-28, 1989, meeting as reflected in the May 1989 revisions to the FSAR. DOE/WPO should revalidate the May 1989 revision to the FSAR responses to ensure other commitments were not inadvertently removed in the June revisions to the FSAR. This issue is open.

5. Subsection 4.4.2.1.3 describes the function of the 80 KVA UPS and refers to Table 4.4-9 for a list of essential loads. As identified during the RRI (Ref. 19, Finding B-3.3) this table contains more load (126.1 KVA) than the UPS is capable of delivering.

   Resolution:

   Information received on 6/15/89 indicates that the testing has been completed which demonstrates significantly lower loads exist. These results should be used to revise Table 4.4-9 of the FSAR. This issue is open for the RRI and will be tracked in the RRI report (Ref. 19).

6. A concern also existed regarding the loading of the 1100 KW diesel generator. As requested in RAI comment #16, the actual loads for the equipment listed in Table 4.4-8 were added in the April FSAR revision. It was subsequently noted, however, that the rated loads exceeded the capacity of the diesel.

   Resolution:

   This has been corrected in the June 1989 revisions to Table 4.4-8 of the FSAR. The response is acceptable and the issue is closed.

7. Subsection 4.4.2.2 describes the safety consideration of the electrical system. This system is classified as a Design Class III system based upon the fail-safe nature of the facility design. This analysis assumes a single failure criteria; i.e., the failure of only one component assumed for each scenario is fail safe.

Resolution:

This subsection should indicate that only single failures of the electrical system have been analyzed. This issue is open.

8. The description in the second paragraph of FSAR Subsection 4.4.2.1.1 was inconsistent with the referenced figure (Figure 4.1-4).

Resolution:

This paragraph was revised to more accurately reflect the offsite power grid as illustrated in Figure 4.1-4. The response is acceptable and the issue is resolved.

9. Additional information was requested regarding the time and sequence of events necessary to place the backup power source on line.

Resolution:

The first paragraph of FSAR Subsection 4.4.2.1.2 was revised to address this issue. The response is acceptable and the issue is resolved.

10. The protective relaying associated with the electrical system should be described.

Resolution:

Paragraph 3 of Subsection 4.4.2.1.4 was added to describe how load loss is minimized in a fault condition. The response is acceptable and the issue is resolved.

11. Information was requested regarding the preselected sequence of loading when power is restored. The concern was that the diesel generator could be subjected to overload conditions.

Resolution:

Subsection 4.4.2.1.5 was revised to accurately reflect the procedures addressing this issue. The response is acceptable and the issue is resolved.

12. Diesel generator testing should be described in the FSAR to assure the operational readiness of this important equipment.

Resolution:

Reference to the procedures associated with periodic testing of the diesel generators was added to Subsection 4.4.2.1.6. The response is acceptable and the issue is resolved.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR revisions, as supplemented by the responses in Appendix B, provides requirements for an acceptable electrical system that is in compliance with the acceptance criteria, except as indicated above.

SECTION 4.4.3 - FIRE PROTECTION SYSTEM

1.0 SUMMARY DESCRIPTION

The objectives for fire and explosion protection at the WIPP Facility are to ensure the safety of plant personnel, the reliability and continuity of plant operations, and to minimize property loss.

Items discussed in this section are: fire characteristics and protection; fire protection system description and evaluation; inspection and testing requirements; and, fire personnel qualification and training.

Operational Safety Requirements (OSRs) for the fire detection and alarm systems are described in detail in Subsection 10.3.4 of the WIPP FSAR; the fire suppression system OSR's are described in Subsection 10.3.5.

The WIPP Fire Protection System is designed to meet the criteria for an "improved risk" level of fire protection described in DOE Order 5480.7 (Ref. 20) and to comply with the regulations and criteria contained in Refs. 18-23. Document No. D-76-F-06, "Design Basis - Fire Protection," (Ref. 21) identifies the design requirements for fire protection at the WIPP.

2.0 ACCEPTANCE CRITERIA

The acceptance criteria were based primarily on Subsection 5.4.9 of USNRC Regulatory Guide 3.26 (Ref. 17). The specific acceptance criteria used to evaluate this section of the FSAR include:

1. Identifies the fires that could directly or indirectly affect safety-related structures, systems, and components.

2. Describes or discusses the bases for the design of the fire protection system.

3. Discusses fire characteristics.

4. Discusses the features of buildings and facility arrangements that provide fire prevention, fire extinguishing and fire control.

5. Lists the codes and standards considered and used for the design of the fire protection system.

In response to RAIs concerning life safety and building design features, modifications and additions were made to the FSAR to assure that the safety protection criteria for the fire protection system are adequate for life safety requirements and that the system is designed to meet or exceed the acceptance criteria. This is based on the following commitments which are contained in the revised FSAR and in responses to the RAIs.

a. All buildings and their support structures are protected by fixed, automatic fire suppression systems. (The shielded storage area in the WHB did not have an automatic fire suppression system at the time of the RRI (Ref. 19). DOE/WPO committed to install this system prior to waste receipt).

b. Noncombustible construction, fireproof masonry construction, and fire resistant materials are used whenever possible.

c. Areas susceptible to fire are separated by fire walls and automatic fire doors. Fire separations are installed where required per the Uniform Building Code (UBC, Ref. 4).

d. All vertical openings in buildings are protected by enclosing stairways, elevators, pipeways, electrical penetration, etc., to prevent fire from spreading to upper floors.

e. Adequate provisions for the safe exit of personnel are ensured for all potential fire occurrences. Evacuation alarm signals are provided throughout occupied areas.

3.0 ISSUES

1. Information was requested with regard to the design of the fire water system, specifically verification of the sufficiency of the fire water system's capacity and flow rate.

   Resolution:

   The following calculations were provided for review:

   a. Calculation CS-41-F-006, "To Analyze the Water Supply Requirements for each facility including Outside Protection, in Order to Determine Water Flow and Pressure Demands for Fire Protection."

   b. Calculation CS-41-F-002, "To Determine Firewater Demands and Firewater Collection Requirements for the WHB."

   c. Calculation CS-45-F-006, "To Determine the Fire Water Demand for the Support Building."

   It was found that these calculations adequately verify the sufficiency of the fire water system's capacity and flow rate and therefore the issue is closed.

2. Information was requested regarding pipe sizing for the fire water system.

Resolution:

Calculation CS-25-C-012, "Fire Water Distribution System," which calculates the flows and pressures in the fire water system and checks the correctness of the pipe sizes was provided for review. It was found that the calculation is acceptable and that the diameters of the fire loop pipes are adequate. The issue is closed.

3. Information was requested on the criteria used to locate the fire hydrants.

Resolution:

Document D-76-F-06, "Design Basis Fire Protection," (Ref. 21) was provided. Subsection 3.2.1.A of this document contains the criteria for fire hydrant location. The response is acceptable and the issue is closed.

4. Information was requested on the codes and standards used to design the fire detection and suppression systems.

Resolution:

Document D-76-F-06, "Design Basis Fire Protection," (Ref. 21) was provided. Subsection 3.2.1.C, of this document contains the criteria for fire or smoke detectors and is in accordance with NFPA 72E; suppression systems are designed in accordance with NFPA 10, 13 and 14. The response is acceptable and the issue is closed.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR as supplemented by the responses to Appendix B provide an acceptable Fire Protection System at WIPP that complies with the paragraph 2.0 acceptance criteria, and that has adequate administrative controls and safeguards in force to assure safe operation of the facility. The issue of the automatic fire suppression system for the shielded storage area is discussed in Section 5.1 of the SER and will be tracked in the RRI report (Ref. 19, Finding C-3.1).

SECTION 4.4.4 - WATER AND WASTE WATER SYSTEM
SECTION 4.4.5 - SALT HANDLING SYSTEM
SECTION 4.4.6 - RADIOACTIVE WASTE SYSTEMS
SECTION 4.4.7 - TRANSPORTATION
SECTION 4.4.8 - SAFETY COMMUNICATIONS AND ALARMS
SECTION 4.4.9 - MAINTENANCE PROVISIONS
SECTION 4.4.10 - COMPRESSED AIR SYSTEMS
SECTION 4.4.11 - UNDERGROUND FUEL SYSTEM

1.0 SUMMARY DESCRIPTION

The above subsections discuss various components of the WIPP service and utility systems:

1. Subsection 4.4.4: The water system supplies water for domestic use and fire protection. WIPP requires a maximum peak water supply of 375 gallons per minute; the average daily domestic demand is about 75,000 gallons per day.

2. Subsection 4.4.4: The sanitary sewage waste water system includes a buried sanitary collection system, a sewage treatment plant, and an effluent pond.

3. Subsection 4.4.5: Salt is transported from the excavating equipment to the salt handling system. This subsection describes the salt handling equipment, and the underground and surface salt handling controls.

4. Subsection 4.4.6: The solid, liquid, and airborne radwastes and radioactive mixed wastes that will be generated, collected and handled by the facility are described.

5. Subsection 4.4.7: Access to the WIPP Facility is provided by U.S. Highway 62/180 from the north and New Mexico State Highway 128 from the south. Roadways have been constructed within the secured area to

serve the surface facilities. Rail access is provided from a spur at the Western Ag Minerals Nash Draw Mine to the facility. Parking is provided outside the Zone 1 fence for employee vehicles and on-site for site maintenance and staff vehicles.

6. Subsection 4.4.8: Both intraplant and plant-to-off-site communications systems are available. This subsection describes the various components of each system.

7. Subsection 4.4.9: This subsection discusses the maintenance requirements on structures and equipment at the WIPP Facility.

8. Subsection 4.4.10: Three types of compressed air systems for the WIPP Facility are discussed: plant, instrument (dried and filtered plant air), and a single unit, high pressure breathing air compressor/bottle fill station.

9. Subsection 4.4.11: This subsection discusses the underground fuel system used to convey diesel fuel from the surface to a fuel depot on the storage horizon.

2.0 ACCEPTANCE CRITERIA

The acceptance criteria used to review these subsections of the FSAR were taken primarily from DOE Orders 5480.1B and 5820.2A and USNRC Regulatory Guide 3.26 (Refs. 18, 22 and 17 respectively). Specific acceptance criteria used to evaluate these subsections follow. The FSAR adequately:

1. Discusses the primary source of the water supply, alternate sources, storage facilities, the effects of loss of water supply, and power failure.

2. Describes the sanitary sewage handling system and shows that no radioactive material can be discharged in this effluent.

3. Presents the design bases for supplying the compressed air needs of the facility.

4. Discusses the systems to be used for internal and external communications.

5. Describes the functioning of the alarms and communication systems in response to normal and abnormal operations and under accident conditions.

3.0 ISSUES

1. WIPP was asked to describe the role that off-site agencies, such as fire control and rescue teams, would play in the event of an emergency situation.

   Resolution:

   Memorandums of understanding for assistance exist between WIPP and off-site agencies for ambulance, medical and fire support. This response is acceptable and the issue is closed.

2. WIPP was asked to specify the pressure drop levels and radiation limits which mandate filter change.

   Resolution:

   The WIPP criteria require changing HEPA filters at a differential pressure of three inches water gauge from new filter base reading. This response is acceptable and the issue is closed.

3. WIPP was asked to discuss any consideration of problems which may arise due to failure of a component resulting in the loss of compressed air. The FSAR does not appear to consider safety related

problems which may arise due to loss of compressed air systems for the Hoist brake, critical instrumentation and breathing air.

Resolution:

DOE/WPO supplied a description of the breathing air system, the plant air system and the instruments air system. In addition, a failure mode and effects analysis table was added to the June 1989 version of the FSAR. This table identifies each component and the associated failure effect. The response is acceptable and the issue is closed.

4. WIPP was requested to provide the design calculations verifying the sufficiency of the water supply system's flow rates and pipe sizes as described in Section 4.4.4.1 of the WIPP FSAR.

Resolution:

WIPP responded by providing the following design calculations and design basis documents:

a. D-23-F-01, "Design Basis Water Supply"

b. CS 23-C-028, "Water Pipeline - Hydraulic Analysis"

c. CS 23-C-031, "Water Pipeline Hydraulics"

d. CS 23-C-035, "Water Pipeline Hydraulics - New System"

e. CS 23-C-038, "Water Pipeline Hydraulics - Computer Runs"

f. CS 25-F-002, "Domestic Water Demand for WIPP"

These documents describe the flow capacity requirements of the water supply system and provide the calculations which verify the adequacy of the flow rates and pipe sizes. The response shows that the water supply system at WIPP is adequate and the issue is closed.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR as supplemented by the responses to Appendix B provide acceptable service and utility systems that comply with the acceptance criteria of paragraph 2.0, and also provides adequate controls and safeguards to assure safe and reliable operation of these systems at the WIPP Facility.

SECTION 4.5 - WASTE HANDLING EMPLACEMENT AND RETRIEVAL EQUIPMENT

SECTION 4.5.3 - UNDERGROUND HANDLING, EMPLACEMENT AND RETRIEVAL EQUIPMENT

1.0 SUMMARY DESCRIPTION

This section of the FSAR describes the major equipment used for transporting and storing CH TRU wastes underground. This function is accomplished by a CH TRU waste transporter and a CH TRU waste lift truck. The waste lift truck can handle seven packs of 55 gallon waste drums or four packs of 85 gallon drums. The retrieval operation is the emplacement operation in reverse and the same equipment is used.

2.0 ACCEPTANCE CRITERIA

General acceptance criteria were taken primarily from the Federal Mining Code for Metal and Non-metallic Underground Mines (Ref. 23). Specific acceptance criteria used to evaluate Subsection 4.5.3 were:

1. Provides a description of the underground handling, emplacement and retrieval equipment.

2. Demonstrates that the equipment is designed to eliminate accidents.

3. Demonstrates that the transport equipment performs its function and has been proof tested.

3.0 ISSUES

1. The major equipment used to transport and store CH TRU waste underground consists of the CH TRU transporter and diesel powered CH TRU waste lift trucks. The waste transporter is a commercially available diesel powered tractor-trailer designed for transporting CH TRU waste on pallets and is modified to comply with mine and other

safety codes. The waste lift truck handles seven packs of 55 gallon waste drums or four packs of 85 gallon drums. Since retrieval is the emplacement operation in reverse, the same equipment is required with provisions to overpack damaged waste packages and to supplement ventilation and control contamination if needed. CH TRU waste retrieval demonstrations were performed with non-radioactive "mock" waste forms. These demonstrations fully tested the handling equipment prior to commencement of waste receipts. For retrieval demonstrations, the expected conditions of the rooms at retrieval were simulated to the extent practical by contouring the room floor for the expected amount of floorheave and by undersizing the room to simulate creep closure. The details of this demonstration are reported in Westinghouse Electric Corp., Final Report for the Contact-Handled Transuranic Waste Mock Retrieval Demonstration, DOE/WIPP 88-006, January 1988, Ref. (25).

Resolution:

Based on the review of this section of the FSAR as well as the descriptions given in the Westinghouse report (Ref. 25), the equipment used in the underground waste storage area for handling, emplacement and retrieval of the wastes meet the acceptance criteria outlined above in Section 2.0. There is, however, an open issue related to the monitoring program in the CH TRU waste storage area. This issue is discussed in Section 2.10 of this SER.

4.0 REQUEST FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR as supplemented by the responses to Appendix B provide for acceptable underground handling and retrieval equipment for CH TRU waste. There are no open issues to be resolved.

SECTION 4.6 - UNDERGROUND MINING EQUIPMENT

1.0 SUMMARY DESCRIPTION

This section of the FSAR discusses the mining operations requiring three primary types of equipment: continuous miners, haulage vehicles, and auxiliary vehicles. Two types of continuous miners are used: drum type and boom type. Two types of haulage vehicles are used: diesel powered dump trucks and load-haul-dump units. A diesel powered scissor lift truck and a mobile sealer truck are available. Roof bolts are installed with two electric roof bolters and a crane equipped supply truck is used for heavy and bulky items.

A specialized self propelled, track mounted milling machine unit is used to maintain the underground haulageways. With a rear mounted cutting drum, it can cut the road surface to a smooth, even grade. The continuous miners and milling machines are equipped with laser control capability.

For safety, continuous miners are equipped with deflector shields for operator protection in case of a gas "blowout." Reinforced canopies will be used on mobile equipment when needed. Radiological considerations were not used in equipment selection.

2.0 ACCEPTANCE CRITERIA

General acceptance criteria were taken from the Federal Mining Code for Metal and Non-metallic Mines (Ref. 23). The specific acceptance criteria used to evaluate Section 4.6 were:

1. Provides an accurate description of the underground mining equipment.

2. Demonstrates that the equipment is designed to provide protection of both continuous miner operators and roof bolt installers.

3. Demonstrates that the equipment can perform its function.

4. Meets the standards of Mine Safety and Health Administration (MSHA).

3.0 ISSUES

1. With the exception of the specialized unit for maintaining the underground haulageways, the underground mining equipment is standard equipment for this type of mining operation. A number of equipment manufacturers produce similar equipment. The equipment types have been proof tested in many salt mining operations around the world. Provided it is operated and maintained according to manufacturer's recommendations and in accordance with state and federal regulations and standards, no problem should develop with mining equipment.

   Continuous miners are equipped with deflector shields for operator protection in case of a gas "blowout." In addition, laser control of the excavating equipment reduces the duration of operator exposure to the excavating activity. All roof bolters are equipped with an automatic temporary roof support system to protect the operator while drilling and installing rock bolts.

   Observations of the underground rooms show, in a number of instances, fracturing and cracking of the salt at the roof-rib junction and rib-floor junction. This is, in general, an indication of developing instability around the mined opening. (The issue of roof-rib-flow fracturing and cracking is dealt with further in Section 2.10 and Section 7.3). To inhibit or prevent this instability from developing further, scaling of the loose material and rock bolting is used. These functions require the need for various pieces of mining equipment to be used in the storage rooms.

   At the April 24-28, 1989 FSAR review meeting, the WIPP Project indicated that these rooms will be patterned rock bolted to provide additional assurance of ground control and that the need for mining equipment to re-enter a waste room would be an off normal or unusual

event. For removal of loose roof and rib materials, a small mobile scaler, rather than mining equipment, will be used.

Resolution:

The descriptions given in the FSAR regarding underground mining equipment are acceptable in that they satisfy the criteria described above in Section 2.0. This issue is resolved.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR as supplemented by the responses to Appendix B provide for acceptable underground mining equipment.

REFERENCES FOR CHAPTER 4

1. Bechtel National, Inc., "Design Basis, Structural (General)," Document No. D-76-D-01, December 1, 1982.

2. Bechtel National, Inc., "Design Basis, Design Classification," Document No. D-76-K-03, November 30, 1983.

3. American Institute of Steel Construction, Manual of Steel Construction, (AISC), Eighth Edition, 1980.

4. Uniform Building Code (UBC), 1982.

5. "Building Code Requirements for Reinforced Concrete," American Concrete Institute, ACI 318-83, 1983.

6. J. R. McDonald, K. C. Mehta and J. E. Minor, "Tornado Resistant Design of Nuclear Power Plant Structure," Nuclear Safety, Vol. 15, No. 4, July-August 1974.

7. U.S. Department of Energy, "General Design Criteria," DOE Order 6430.1A, December 25, 1987.

8. U.S. Department of Energy, "Safety of Nuclear Facilities," DOE Order 5480.5, September 23, 1986.

9. U.S. Department of Energy, "Requirements for Radiation Protection," DOE Order 5480.11, December 21, 1988.

10. Memorandum, H.J. Pettengill, (DOE/EH), to J. B. Tillman, (DOE/WPO), March 22, 1989; Subject: Waste Isolation Pilot Plant, Hoist Tower/Hot Cell Design Report.

11. Memorandum, H.J. Pettengill, (DOE/EH), to J.B. Tillman, (DOE/WPO), April 13, 1989; Subject: Final Safety Analysis Report for the Waste Isolation Pilot Plant (transmitting EH comments on Chapters 1, 3, 4, 5, 6, 7, and 11).

12. J. Xu, S.E. Pepper, P.C. Wang, and M. Reich, "BNL Structural Evaluation of the Contact-Handled (CH) Area of the Waste Handling Building of WIPP," Brookhaven National Laboratory, BNL-SAD-89-105, July 1989.

13. Westinghouse Electric Corporation, "Geotechnical Field Data and Analysis Report," DOE/WIPP 86-012, 1986.

14. D.J. Borns and J.C. Stormont, "An Interim Report on Excavation Effect Studies at WIPP: The Delineation of the Disturbed Rock Zone," Sandia National Laboratories, SAND 87-1375, 1987.

15. Bechtel National, Inc., "Design Validation Final Report, Waste Isolation Pilot Plant," DOE-WIPP-86-010, 1986.

16. Waste Isolation Pilot Plant, "Facility Operations Manual," WP-04-1.

17. U.S. Nuclear Regulatory Commission, Regulatory Guide 3.26, "Standard Format and Content of Safety Analysis Reports for Fuel Reprocessing Plant," February 1975.

18. U. S. Department of Energy, "Environmental Protection, Safety, and Health Protection Program for DOE Operations," DOE Order 5480.1B, January 23, 1989.

19. U.S. Department of Energy, EH-30 Readiness Review Inspection of the Waste Isolation Pilot Plant; June 2, 1989.

20. U.S. Department of Energy, "Fire Protection," DOE Order 5480.7, November 16, 1987.

21. Bechtel National Inc., "Design Basis, Fire Protection," Document No. D-76-F-06.

22. U.S. Department of Energy, "Radioactive Waste Management," DOE Order 5820.2A, September 26, 1988.

23. Mine Safety and Health Administration (MSHA), "Federal Mining Code for Metal and Non-metallic Underground Mines," Title 30, Code of Federal Regulations, Part 57, 1988.

24. U.S. Department of Energy, "General Design Criteria," DOE Order 6430.1, December 12, 1983.

25. Westinghouse Electric Corp., "Final Report for the Contact-Handled Transuranic Waste Mock Retrieval Demonstration," DOE/WIPP 88-006, January 1988.

26. N. Simos, "Design Loads of Waste Shaft Key due to Creep Effects of the Salt Rock," to be published.

CHAPTER 5 - PROCESS DESCRIPTION

This chapter describes the processes and systems in place for handling Contact Handled (CH) and Remote Handled (RH) Transuranic (TRU) wastes at the WIPP Facility. These processes include emplacement, retrieval, disposal of site generated radwaste and mining operations. Systems such as the Central Monitoring System (CMS) and the WIPP Waste Information System (WWIS) are also discussed.

It should be noted that the organization of Chapter 5 has been changed for the May 1989 revision to the FSAR. The subject matter of Section 5.3 of the December 1988 FSAR, "Radioactive Source Experiments," has been deleted. "Retrievability of Stored Waste," Section 5.8 in the December 1988 FSAR, is Section 5.3 in the May 1989 revision to the FSAR.

EH's review does not include the RH TRU waste. Therefore, Section 5.2 of the FSAR, which deals exclusively with the handling and emplacement of RH TRU, has not been reviewed for inclusion in the SER. Subsection 5.3.2, which describes plans for retrieval of RH TRU, has also not been reviewed. Review of these sections will be performed at a later date prior to the receipt of the RH TRU wastes.

SECTION 5.1 - CH TRU WASTE HANDLING SYSTEM

1.0 SUMMARY DESCRIPTION

This section of the FSAR describes the handling process for CH TRU wastes from receipt to emplacement. The CH Waste Handling System, which includes both above and below ground operations, was designed to handle 55-gallon waste drums in seven pack configurations, 85-gallon overpack waste drums in four pack configurations and standard waste boxes (SWBs). The anticipated average throughput is approximately 250,000 ft^3 per year as compared to the design basis throughput of 500,000 ft^3 per year. At various stages in the process, radiological surveys are made. When radiological limits are exceeded, waste

packages are decontaminated or overpacked to prevent the spread of contamination.

2.0 ACCEPTANCE CRITERIA

Acceptance criteria used for review of this section of the FSAR were taken primarily from DOE Orders 5480.5 and 5480.11 (Ref. 1 and 2). In addition EH required that the waste handling process as presented in the FSAR be feasible and that environmental, safety and health matters be adequately addressed to ensure radiological protection during normal plant operations and during abnormal conditions that can reasonably be expected to occur over the lifetime of the facility.

Specific acceptance criteria used to evaluate Section 5.1 were demonstrated adequacy of:

1. A formal, documented system for the control and traceability of records and documents associated with the CH waste containers.

2. Plans and procedures for receiving wastes into the facility and for inspecting the waste shipment upon arrival.

3. Plans and procedures for storing materials, including quantity, container descriptions and spacing between containers.

4. Commitment to maintain to personnel, site and environmental exposures to radiation resulting from operations within limiting values and as low as reasonable achievable (ALARA).

5. Proposed radiological surveys during the waste handling operations to ensure that the radwaste dose rates, contamination levels, and airborne activity are below the levels identified in the Radiation Safety Manual (Ref. 3) and Waste Acceptance Criteria (WAC) (Ref. 4).

6. Marks, labels and seals required for the waste packages in accordance with the WIPP Waste Acceptance Criteria (WAC) (Ref. 4).

3.0 ISSUES

1. Inventory and record keeping is considered to be important in the operation of this facility, yet no description of such activity is included in the FSAR. In addition, information is required which shows how the design basis throughput of 500,000 ft^3/yr is achieved compared to the anticipated average throughput of 250,000 ft^3/yr.

   Resolution:

   Inventory and record keeping is performed by use of the WIPP Waste Information System (WWIS). A description of the WWIS has been provided and is considered to be acceptable. This data base will store pertinent information about each container stored at WIPP.

   Increase in throughput would be achieved by extending plant operating hours. There would be no deviation from the current acceptable procedures. The response is acceptable and the issue is closed.

2. Information was requested to resolve some questions concerning the receipt of waste. Specifically, (a) how TRUPACTs with high radiation levels would be handled, (b) how shipments are logged in and verified, and (c) how waste containers are identified.

   Resolution:

   (a) Subsection 5.1.1.1 of the June 1989 revision to the FSAR, was revised to describe how TRUPACTs with high radiation levels are handled.

(b) Shipments are verified upon arrival at the facility by comparing the shipping manifest to the label on the waste packages. During routine operation, the WIPP Waste Tracking System (WWTS-a personal computer based system) will log in the receipt date for each shipment and determine whether the TRUPACTs and waste packages received match the data downloaded from the WWIS. When the shipment is emplaced, the emplacement date, emplacement location data, and overpack number (if overpacking was necessary) also will be entered into the WWTS for uploading to the WWIS.

(c) The requirements for labeling of waste packages are specified by the WIPP WAC (Ref. 4).

The responses are acceptable and the issue is closed.

3. Subsection 5.1.1.2 of the FSAR states that waste packages can be decontaminated at the unloading dock, but no levels or types of contamination that can be handled at the loading dock are specified. Nor is there any mention of changes in packing configuration when waste requires overpacking.

Resolution:

According to the WIPP Radiation Safety Manual (Ref. 3) an area no greater than 6 ft^2 and levels no greater than 300 dpm/100 cm^2 for alpha, or 1000 dpm/100 cm^2 for beta/gamma can reasonably be controlled at the unloading dock in the WHB. Due to the larger diameter of overpacked drums, they are assembled in a four pack versus the usual seven pack prior to transfer underground. These assemblies are always placed on the top row in the waste stack to ensure stability. The response is acceptable and the issue is closed.

4. The procedure for handling high radiation level containers including high radiation area controls, stay times, evaluation for extremity monitoring, and intermediate storage requirements was requested.

Resolution:

Time limits and storage requirements were included in Subsections 3.1.2.2 and 3.1.2.3 of the June 1989 revision to the FSAR and Procedure WP 05-106 is being modified to implement high radiation waste handling. Subsection 3.1.2.2 provides a commitment to a one week limit for storing high radiation level containers in the Shielded Storage Room (SSR). The FSAR also states that the SSR has a sprinkler system for fire suppression. This sprinkler system had not been installed at the time of the Readiness Review Inspection (RRI) (Appendix C, Finding C-3.1). DOE/WPO has committed to correct this deficiency prior to start-up. In addition Procedure WP 05-106 did not include the committed storage time limit requirements at the time of the RRI (Appendix C, Finding C-3.1). These issues remain open for the RRI and will be tracked by the RRI report (Ref. 6). For the purposes of this SER the issue is closed.

5. The design basis for the Overpack and Repair Room (OP&RR) assumes that 2% of the waste packages are contaminated or damaged. However, the decontamination enclosure is not adequate to accommodate this volume.

Resolution:

Based on the fact that operational experience shows that the receipt of breached containers or contaminated packages is unlikely under normal WIPP operational circumstances, the 2% number has been deleted from the June 1989 revision to the FSAR. However, accidental situations could arise, i.e., punctured or dropped drum, therefore, we recommend that WIPP reevaluate this position during the Test Phase. However, for purposes of this SER, this issue is closed.

6. The following accidental fire scenarios (Ref. 5) were not adequately addressed.

(a) Control of radioactive waste generated by the suppression of fires in the site-generated radwaste room, OP&RR, CH Waste Handling Area, and the waste storage area.

(b) Control of the diesel fuel fire and waste drum fire with the fire extinguishing equipment available in the underground waste storage area.

Resolution:

(a) In the event of a waste drum fire in the site-generated radwaste room, OP&RR or the CH TRU waste handling area, automatic sprinklers as well as portable extinguishers are relied on to extinguish the fire. During any such fire, resulting smoke and aerosols will be handled by the roughing filters and HEPA filters. Any cleanup will become site generated radwaste. Fire water will collect in the sump and be handled using a qualified liquid waste process.

(b) For suppression of fires in the underground, such as diesel fuel and waste drum fires, three suppression systems are available: (i) "on board" fixed dry chemical system with a capacity range of 20 at 120 sq ft, (ii) portable and wheeled dry chemical units rated to 120 sq ft and 1200 sq ft, respectively, and (iii) the underground emergency response vehicle (200 gallon capacity) with the ability to generate 1500 sq ft of fire suppressing foam. Diesel fuel fires will be suppressed using the "on board" fixed dry chemical system. If this is ineffective, the other methods of fire suppression will be employed. While a diesel fuel fire can reasonably be

expected to occur, engineering requirements and the underground vehicle design make the release of radioactivity due to an underground diesel fuel fire a non-credible event. Therefore, radioactive wastes will not be generated. A fire in a waste drum being transported can be suppressed using any of the three systems described above. Once drums are in the waste storage rooms, drum fires may be suppressed using these means only if the location of the drum makes it accessible. If a fire occurs in a drum which is located at the center of a storage room other drums will be moved until the drum is accessible. Then one of the three fire suppression methods will be utilized. Contamination resulting from a waste drum fire is unlikely as air flow will ensure that radioactivity is kept away from the clean areas. Radwastes generated by waste drum fire suppression are limited to liquid radwastes which are expected to evaporate into the ventilation system. A calculation was supplied showing the worst case fire, i.e., diesel fuel fire, to cover approximately 772 square feet. The fire truck fire suppression capacity is approximately two times the maximum expected fire size.

The responses are acceptable and the issue is closed.

7. Evaporation of the liquid radwastes into the ventilation system would cause an automatic switch to filtration by HEPA filters. Further review of Issue 6, above, led to the question of whether smoke generated by an underground fire could clog the HEPA filters.

<u>Resolution</u>:

Air passing through the HEPA filters is prefiltered by roughing filters. The roughing filters in combination with the considerable distance from a potential fire to the HEPA filters, and the nature of the particulate matter expected, indicates that clogging of HEPA

filters is not a major concern. In the event that the EFB HEPA filters become clogged, there is a HEPA filtration bypass mode which utilizes the smaller, 60,000 cfm fans. The response is acceptable and the issue is closed.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provide for an acceptable CH TRU Waste Handling System that is in compliance with the acceptance criteria except for Issue 4 concerning the installation of a sprinkler system in the Shielded Storage Room and the maximum drum storage time in the SSR. This issue will be tracked by the RRI report.

SECTION 5.3 - RETRIEVABILITY OF STORED WASTE

1.0 SUMMARY DESCRIPTION

This section of the FSAR addresses the retrieval of CH and RH TRU waste. EH has not reviewed Subsection 5.3.2 as it discusses the retrieval of RH TRU waste.

This section describes the situations which may be encountered during CH TRU waste retrieval operations and how these situations will be handled to prevent the spread of any underground contamination. Facilities for over-packing and/or isolating breached containers will be installed near the storage rooms. Radiological surveying will identify radiation sources so that they can be decontaminated before being transported to the surface.

2.0 ACCEPTANCE CRITERIA

CH TRU waste retrieval operations must ensure protection of workers, site and environment from undue radiological exposure. Procedures must conform to DOE Orders 5480.5 and 5480.11 (Ref. 1 and 2) and provide guidance for handling normal and abnormal situations.

Specific acceptance criteria used to evaluate the adequacy of Section 5.3 were:

1. Personnel, site, and environmental exposures to radiation resulting from the release of hazardous materials under normal and abnormal operating conditions must be maintained within limiting values and as low as reasonably achievable (ALARA).

2. Plans and procedures for the retrieval of wastes are feasible and comprehensive.

3. Air monitoring capabilities shall be available during retrieval operations.

3.0 ISSUES

No requests for additional information (RAIs) were made for Section 5.3 during the initial FSAR review. The issue discussed below is a result of open issues in Chapter 7 and 12 concerning the accident evaluation of a roof collapse in the CH TRU waste storage rooms and the Retrievability Plan.

1. The surface storage of waste containers awaiting transport to "a DOE-assigned interim storage site and/or an approved repository," is not discussed. The WHB may not be able to accommodate the quantity of waste containers that will be received during the Test Phase (up to 3% of the total waste allowed). In addition, at this time administrative and technical procedures identifying the process proposed for repackaging and shipping the waste to the interim storage site have not been addressed by the FSAR.

   Resolution:

   Review of the Retrievability Plan that is identified as an issue in Chapter 12 of this SER should adequately resolve this issue. There are no further issues.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

Provide the Retrievability Plan for independent review.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provide an acceptable system for retrieval of CH TRU waste except for two areas: (1) further details are necessary with regard to the timely

removal of waste containers from the facility once they reach the surface, and (2) an accident involving a roof collapse in a CH TRU waste storage room should be evaluated. An independent review of the Retrievability Plan will be required before this issue can be resolved.

SECTION 5.4 - PLANT-GENERATED RADWASTE SYSTEM

1.0 SUMMARY DESCRIPTION

Solid radwaste, the result of various activities such as decontamination and maintenance efforts, will be contact handled and will be collected in disposal containers. Liquid radwaste will be largely the result of fire suppression. All fire water will be collected and tested for radioactivity. Water which exceeds the limits for uncontrolled release will be processed and transferred to 55-gallon drums. Both solid and liquid radwaste will be disposed of in the underground waste storage area.

2.0 ACCEPTANCE CRITERIA

Site generated radwaste must be handled and disposed of responsibly such that radiological protection of workers, site and environment will be ensured. Such waste must also conform to the ALARA criterion as stated in DOE 5480.11 (Ref. 2). Procedures must be designed so that WIPP is capable of controlling all site generated radwastes. Specific acceptance criteria, also borrowed from DOE Orders 5480.5 and 5820.2A (Refs. 1 and 7, respectively), were:

1. The plant-generated radwaste system shall provide facilities, methods of disposal, and equipment to handle solid, liquid and gaseous wastes safely and effectively.

2. Technical and administrative controls shall be directed for reducing the gross volume of waste generated and/or the amount of radioactivity requiring disposal.

3.0 ISSUES

1. DOE Order 5820.2A (Ref. 7) requires that contaminated fire water be processed rather than solidified to reduce the volume of radioactive wastes.

   Resolution:

   DOE Order 5820.2A applies to storage facilities where radwaste has to be accumulated, stored and shipped elsewhere for disposal. As the WIPP has on-site disposal capacity, and the anticipated radwaste is sporadic if expected at all, processing the liquid radwaste to release limits is not economically feasible. The response is acceptable and the issue is closed.

2. DOE Order 5820.2A requires that solid radwaste be compacted to reduce the volumes of radwaste requiring disposal.

   Resolution:

   Compacting solid radwaste is not required unless the worst case volume estimates are exceeded, because the anticipated volume does not make compaction cost effective. Moreover, it is felt that compaction operations increase the risk for the spread of contamination. The committed response in Appendix B to modify Section 5.4.2 to reflect the proposed handling of solid radwastes was included in the June 1989 revision to the FSAR. The issue is closed.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, supplemented by the responses in Appendix B, provide an acceptable basis for concluding that the site generated radwaste will be handled and disposed of in a reasonable manner and in compliance with the acceptance criteria.

SECTION 5.5 - GENERAL PROCESS CONSIDERATIONS

1.0 SUMMARY DESCRIPTION

This section of the FSAR discusses general process considerations such as monitoring instrumentation, criticality safety, process interruption modes, and the WIPP Waste Information System (WWIS).

The WIPP monitoring instrumentation provides measurements and controls to ensure safe operation of the plant. Both local and remote monitoring of plant systems are possible. Certain instrumentation is safety related.

Studies have been performed to assess the possibility of accidental nuclear criticality. It was found that no credible criticality hazard exists.

Routine and emergency process interruptions are discussed. Routine interruptions would be those due to scheduled maintenance, unscheduled maintenance and plant inspection, and would be conducted according to established procedures. Emergency interruptions are those due to abnormal or accident conditions such as fire, earthquake or loss of electric power. Each of these instances requires that appropriate action be taken to correct the problem and to ensure that the facility can safely return to normal operations.

The WWIS is a computerized data base which stores important data on each waste container such as shipment number, identifying waste container numbers, date of shipment, maximum surface dose rate, radionuclide data, date of receipt, storage date and storage location. This information will be available in WWIS for CH TRU waste during the storage period and can be used for retrieval if necessary.

2.0 ACCEPTANCE CRITERIA

The WIPP must be designed to safely handle normal and abnormal situations which can reasonably be expected to occur during the lifetime of the facility. Safety systems and procedures must be on-line and available to avert the threat of accidents. The requirements of DOE Order 5480.5 (Ref. 1), with respect to nuclear criticality, notification and reporting of occurrences and emergency plans to handle potential accidents, must be satisfied.

Specific acceptance criteria used to evaluate Section 5.3 were the adequacy of:

1. Warning and alarm systems and central monitoring of these systems.

2. Assurances of nuclear criticality safety.

3.0 ISSUES

1. Subsection 5.5.1 of the FSAR generally discusses the functions, design and testing of the monitoring instrumentation. However, it does not discuss what specific instrumentation is used, where it is located, or what specifically is monitored.

   Resolution:

   In response to this comment, EH was supplied with a table listing each specific monitoring system and the location of associated components throughout the plant (Appendix B). The response is acceptable and the issue is closed.

2. Subsection 5.5.3.2, Emergency Interruptions, states: "If the earthquake is of sufficient magnitude, inspection of structures and equipment will be required." DOE/WPO was asked (a) to define

"sufficient magnitude" and (b) to provide a description of the inspection of structures and equipment that will be performed.

Resolution:

(a) "Sufficient magnitude" is defined as 0.1 g.

(b) A procedure identifying immediate inspections that may be required after a seismic event for critical structures or equipment (e.g., Hoist Tower and Waste Hoist) necessary for evacuation of personnel from the mine does not exist. A procedure must be available which defines, as a minimum, the purpose of inspection, what structural components and equipment require inspection, methods of damage assessment, and levels of acceptable damage. This item is an open issue of the Readiness Review Inspection (RRI) (Ref. 6, Finding C-6.2) and will be tracked by the RRI report, and thus is resolved for the SER.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provide for acceptable safety related processes that are in place to maintain the overall integrity of the facility, with the exception of the one open issue, namely, to develop a procedure requiring structural inspections after an earthquake. This issue will be tracked through the RRI report.

SECTION 5.6 - UNDERGROUND MINING OPERATIONS

1.0 SUMMARY DESCRIPTION

Mining is performed by two continuous mining machines, one a boom type and the other a drum type continuous miner. Diesel powered underground trucks and load-haul-dumps (LHDs) are used for removal of mined salt. In virgin areas, probe holes to test for the presence of pressurized gas or brine are drilled prior to mining. After mining, vertical holes are drilled at the main intersections of the drifts and cross cuts. Safety checks during and immediately after mining are standard practice. Rock bolts are used extensively throughout the underground openings. They are used not only for remedial work, but also for safety. In addition, roofs in the first waste storage panel and many high traffic areas will be pattern bolted for extra safety and to provide greater assurance of the retrievability of waste. Both resin and mechanical bolts are used in most ground control activities. A qualification of bolts and bolting practices used in the WIPP Facility underground bolting program is described in Ref. 8. Specifications used in defining bolting requirements for the underground and used to guide the purchase of bolts are found in Refs. 9 and 10.

Separate ventilation circuits are maintained between the mining area and the storage area, with the air pressure maintained to ensure that any air leakage is from the clear mining area to the potentially contaminated storage area. Air quality and quantity are maintained at the levels required by the Mine Safety and Health Administration standard (Ref. 11).

2.0 ACCEPTANCE CRITERIA

Underground mining operations follow practices developed over the last 30 to 40 years for the use of continuous mining machines in horizon mining. Mining operations are inspected by federal and state authorities. Acceptance criteria were taken from the standards and regulations as given in 30 CFR Part 57, (Ref. 11).

3.0 ISSUES

1. Rock bolts are and will be used extensively throughout the underground openings. Information concerning (a) the adequacy of rock bolts determined through certification tests and (b) the effects of corrosion on rock bolts installed in the facility was not adequate.

   Resolution:

   (a) In addition to rock bolt certification tests performed in salt, Eddy County, New Mexico, certification of rock bolts is performed routinely by WIPP mine engineering personnel in compliance with 30 CFR Part 57.3203 b(2), h and i (Ref. 11).

   (b) The effects of corrosion on installed rock bolts have been studied by Sandia National Laboratory (Ref. 12) and Westinghouse (Ref. 9) resulting in the conclusion that environmental effects on rock bolts are insignificant.

The responses are acceptable and the issue is closed.

All RAIs have been adequately answered as documented in Appendix B. However, the effect of rock bolting in crack formation, propagation and total extent of the cracks as well as long term stability remains an open issue at this time. See Section 2.10 for a further discussion of this issue.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provide acceptable confidence that underground mining operations follow standard industry practice and meet federal and state regulations and standards.

SECTION 5.7 - CENTRAL MONITORING SYSTEM (CMS)

1.0 SUMMARY DESCRIPTION

The CMS monitors the fire alarm system, the security system, the radiation monitoring system, the electrical power status, the ventilation system, air quality, facility system and meteorological data.

The CMS computer and main consoles are located in the Central Monitoring Room (CMR) of the Support Building. The CMR was designed to allow its use during normal and emergency situations. Special features include two-hour fire walls, HEPA filtered air intake to allow occupancy during radiological release, uninterruptible power supply and linkage to the diesel generator. In the event that the CMR becomes uninhabitable, all plant systems can be monitored from the Guard and Security Building.

2.0 ACCEPTANCE CRITERIA

The requirements of Chapter 10, Operational Safety Requirements (OSRs), were used to evaluate this section of the FSAR. The CMS must be capable of alerting the WIPP staff to abnormal on-site conditions. Chapter 10 of the FSAR requires that the CMS monitor the fire alarm system, security systems, radiation monitoring systems, electrical power supply status, ventilation systems, air quality, personnel access, facility systems, effluent monitoring systems, and meteorological data.

DOE Order 5480.11 (Ref. 2) requires that air monitoring of workplaces be performed.

3.0 ISSUES

No issues were identified for this section.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides for acceptable functions and safety features for the CMS and complies with the acceptance criteria.

REFERENCES FOR CHAPTER 5

1. U.S. Department of Energy, "Safety of Nuclear Facilities," DOE Order 5480.5, September 23, 1986.

2. U.S. Department of Energy, "Radiation Protection for Occupational Workers," DOE Order 5480.11, December 21, 1988.

3. Waste Isolation Pilot Plant, "Radiation Safety Manual," WP 12-5, Revision 2, February 1989.

4. U.S. Department of Energy, "TRU Waste Acceptance Criteria for the Waste Isolation Pilot Plant," WIPP/DOE-069, Rev. 3, January 1989.

5. Memorandum, H.J. Pettengill (DOE/EH) to J.B. Tillman (DOE/WPO), April 13, 1989; Subject: EH comments on Chapters 1, 3, 4, 5, 6, 7 and 11 of the WIPP FSAR.

6. U.S. Department of Energy, EH-30 Readiness Review Inspection of the Waste Isolation Pilot Plant; June 2, 1989.

7. U.S. Department of Energy, "Radioactive Waste Management," DOE Order 5820.2A, September 26, 1988.

8. Westinghouse Electric Corp., Rock Bolt Certification Tests in Salt, Eddy County, New Mexico, TME 3135, November 1981.

9. Westinghouse Electric Corp., Shops Area Bolt and Mesh, Specification E404A56.

10. Westinghouse Electric Corp., Rock Bolts, Specification E404A48.

11. Mine Safety and Health Administration, "Federal Mining Code for Metal and Non-metallic Underground Mines," Title 30, Code of Federal Regulations, Part 57, 1988.

12. J.P. Lucas, Analysis of Rock Bolt Material Failures at the WIPP Site, SAND 84-0224, Sandia Laboratories, 1984.

CHAPTER 6 - ENVIRONMENTAL, SAFETY AND HEALTH PROTECTION

The principal areas of the EH review of Chapter 6 of the FSAR were contained in Section 6.1, "Radiological Protection." Although all sections of the FSAR were reviewed, only Section 6.1 is discussed below. Section 6.2, "Environmental Protection," was outside the scope of this review because it dealt with environmental matters, as opposed to safety issues. Section 6.3, "Safety," provided an overview of the safety philosophy for WIPP, and a brief summary of the safety program. Section 6.4, "Industrial Hygiene," provided general information regarding industrial hygiene. No requests for additional information were generated as a result of EH's review of Sections 6.3 and 6.4.

SECTION 6.1 - RADIOLOGICAL PROTECTION

1.0 SUMMARY DESCRIPTION

This section of the FSAR describes the Radiation Protection Program, procedures, and equipment that will be used to limit and control worker occupational radiation exposure. Principal areas discussed in this section included: (1) Measures to Assure that Occupational Radiation Exposure will be "as low as reasonably achievable" (ALARA); (2) Radiation Sources; (3) Radiation Protection Design Features; (4) On-Site Dose Assessment; (5) Radiological Control Program; (6) Off-Site Dose Assessment; and (7) Exposure to Hazardous Wastes. No requests for additional information were generated as a result of EH's review of Areas 6 and 7.

2.0 ACCEPTANCE CRITERIA

Acceptance criteria used for review of this section were taken primarily from DOE Order 5480.11 (Ref. 1) and Chapter 8 "Radiation Protection," of USNRC Regulatory Guide 3.26 (Ref. 2). Specific acceptance criteria used to evaluate Section 6.1 were demonstrated adequacy of:

1. Methods, responsibilities, and programs to maintain occupational exposures ALARA.

2. Descriptions of direct and airborne radioactive material sources and predicted operational exposures.

3. Descriptions of area radiation and airborne radioactivity monitoring systems.

4. Identification of the radiation safety administrative organization and functional responsibilities.

5. Descriptions of the equipment, instrumentation, and facilities used to support the operation of the Radiation Safety Program.

3.0 ISSUES

The issues discussed in this section are a result of review of: (1) the December 1988 FSAR; (2) the May 1989 revision to the FSAR; (3) selected procedures from the WIPP Radiation Safety Manual (Ref. 3); and (4) the DOE/WPO responses to EH comments (Appendix B). Observations of the actual implementation of the Radiation Protection Program were made during the EH Readiness Review Inspection (RRI) conducted on May 8-15, 1989 (Ref. 4).

Review of Section 6.1 of the FSAR identified that descriptions of facility source terms, facility design relevant to radiation protection, and of the Radiation Protection Program itself were adequate, except as discussed below. In response to the EH comments, several revisions were incorporated into the May 1989 version of the FSAR. These are:

(a) The updating of the references and definitions included in Section 6.1 to reflect DOE Order 5480.11.

(b) The addition of specific information (detector type, range, alarm set points) relative to radiation protection instrumentation.

(c) The provision of clarifications as to respiratory protection program commitments to industry standards.

Several issues identified during the initial FSAR review were followed up during the EH RRI and are discussed below:

1. The information relative to the Radiation Safety Administrative Organization was deemed deficient in that it did not include: an organizational chart depicting all positions in the Radiation Safety Organization, minimum position qualification requirements for the Radiation Safety Organization, and a reference to the stop-work authority of the organization.

   Resolution:

   FSAR Subsection 6.1.5.2, Administrative Organization, and the accompanying Figure 6.1-14 were expanded to provide additional information related to the organization and managerial responsibilities of the Radiation Safety (RS) organization.

   Position qualification requirements for the RS manager are specified in FSAR Subsection 9.1.3; a specific reference to this subsection was added to Section 6.1. A commitment to specific position qualification requirements for other members of the RS staff was not included in the FSAR; however, these requirements are contained in RS position descriptions (see SER Section 9.1).

   A statement describing adequate stop-work authority for the RS staff was added to the FSAR.

   These responses are acceptable and the FSAR issue is closed.

During the RRI Review (Ref. 4), additional concerns with RS position vacancies and a lack of operational health physics experience among several members of the staff were identified (Ref. 4, Finding C-2.1, C-2.2). These items were evaluated as requiring resolution prior to waste receipt and will be tracked by the RRI report.

2. A concern was noted with the May 1989 revision to the FSAR Subsection 6.1.5.2, which discusses RS responsibilities in implementing the radiation worker training program. The December 1988 FSAR clearly specified biennial re-qualification for radiation workers, which meets DOE Order 5480.11 requirements. The May 1989 revision to the FSAR requires biennial re-qualification only for health physics technicians.

   Resolution:

   Westinghouse staff subsequently submitted a revised FSAR Subsection 6.1.5.2, dated June 1989, which re-institutes the biennial re-qualification requirement for radiation worker training. This response is acceptable and the issue is closed.

3. EH review of the locations of the Continuous Air Monitoring System (CAM) monitors raised a concern relative to the ability of the three CAMs in the large CH Receiving Area to effectively sample the air volume and whether additional portable air sampling in this area would be provided. During the EH RRI review of this area, more general concerns related to CAM system location, representativeness, sample collection efficiency, and effects of salt-loading were identified. The overall issue of CAM system adequacy was identified during the EH RRI as an item requiring resolution prior to TRU waste receipt.

Resolution:

Additional studies are being performed to validate CAM location, representativeness, collection efficiency and the effects of salt loading.

The issue of CAM system adequacy (which encompasses the specific EH FSAR review concern) remains open for the RRI and will be tracked by the RRI report (Ref. 4). As this issue will require onsite review as part of the RRI follow-up, it is considered closed for the SER. Final resolution of this issue will be reflected in the FSAR as necessary.

4. Review of FSAR Subsections 6.1.3.2, 6.1.5.3, and 6.1.5.4 found that the commitments contained in the FSAR relative to the respiratory protection and internal and external exposure monitoring programs are appropriate. Review of procedures referenced for implementation of these commitments, however, along with review of program and procedure status during the RRI, identified that formal, proceduralized programs for internal and external exposure monitoring are not in place and the existing respiratory protection procedures require upgrading.

Resolution:

Since these issues involve detailed implementation procedures, they are considered closed for the SER. They were, however, evaluated as requiring resolution prior to waste receipt and remain open for the RRI. They will be tracked by the RRI report (Ref. 4).

5. Justification was requested for the magnitude of the contamination levels assumed in the routine releases source term (FSAR Subsections 6.1.2.2, 6.1.6.1). The reference cited in the FSAR (Ref. 5) did not appear relevant and did not support the conclusions of the FSAR.

Resolution:

The DOE/WPO written response (Appendix B) to the subject comment provided several revisions to the FSAR Subsection 6.1.6.1 to provide additional justification. Reference 5 was deleted from the FSAR. In addition, EH reviewed FSAR Appendix 6A, titled "Calculation of Airborne Concentrations and Releases", which had not originally been provided. Review of the document confirmed that source term assumptions related to contamination levels are adequately conservative. The response is acceptable and this issue is closed.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSION

The revised May 1989 revision to the FSAR (in conjunction with the June 1989 revision noted in Issue 2 and the responses in Appendix B) provides an acceptable Radiological Protection Program. The description and commitments for the Radiation Protection Program are adequate to provide an appropriate level of radiological controls and protection for the worker. The concerns relative to implementation of this program noted in the RRI (i.e., Issues 1, 3 and 4 above) are being tracked and followed-up as part of the EH RRI process. With resolution of these issues modifications to the FSAR may be appropriate.

REFERENCES FOR CHAPTER 6

1. U.S. Department of Energy, "Radiation Protection for Occupational Workers," DOE Order 5480.11, December 1988.

2. U.S. Nuclear Regulatory Commission, Regulatory Guide 3.26, "Standard Format and Content of Safety Analysis Reports for Fuel Reprocessing Plants," February 1975.

3. Westinghouse Electric Corporation, WIPP Radiation Safety Manual (WP 12-5), February 1989.

4. EH-30 Readiness Review Inspection of the Waste Isolation Pilot Plant, June 2, 1989.

5. McKinley, K.B., and J.D. McKinney, "Initial Drum Retrieval - A Final Report," TREE-1286, Idaho National Engineering Laboratory, August 1978.

CHAPTER 7 - ACCIDENT ANALYSIS

1.0 SUMMARY DESCRIPTION

This chapter of the FSAR presents analyses of all credible accidents in terms of the potential exposure to workers and to members of the public. The accidents, involving CH TRU waste, that were analyzed are:

FSAR Accident Identification No.	Description
C0	Forklift knocks TRUPACT-II off trailer -- Radiological Control Area -- Outside of WHB
C1	Vehicle collision with a shipping container -- Offloading Area
C2	Drum drops from forklift -- Inventory/Preparation Area
C3	Drum punctured by forklift -- Inventory/Preparation Area
C4	Transporter hits pallet -- Underground Storage Area
C5	Drums drop from forklift -- Underground Storage Area
C6	Other equipment punctures drum -- Underground Storage Area
C7	Spontaneous ignition within a drum -- Inventory/Preparation Area
C8	A loaded hoist cage drops down waste handling shaft -- Hoist Loading Area
C9	Diesel fire in storage array underground -- Underground Storage Area
C10	Spontaneous ignition within a drum -- Underground Storage Area

Dose assessments are presented for each accident scenario. The maximum committed effective dose equivalent to a member of the public is given as 1.7

rem for Accident C10, and the maximum committed effective dose equivalent to a worker is given as 9.2 rem for Accident C6.

2.0 ACCEPTANCE CRITERIA

Acceptance criteria used for review of this section were taken from DOE Orders 5480.11, AL5481.1B, 6430.1A, WIPP-DOE-069, WTSD-TME-063, DOE/WIPP-87-005 and "Radiation Protection Guidance to Federal Agencies for Occupational Exposure" (Ref. 1-7)

Specific acceptance criteria used to evaluate Chapter 7 were adequacy of:

1. Identification of each accident and the location in the facility where it occurs.

2. Description of the sequence of events leading to the initiation of the accident.

3. Estimates of the probability of occurrence for each accident and their basis.

4. Description of the concentration of radioactive material released from the waste container(s) as a result of the accident.

5. Description of the conditions of meteorology, topography or other circumstances considered in the analyses.

6. Analysis of the radiological effects of each accident.

7. Assessment of the consequences of each accident to persons and property on-site and off-site.

8. Identification of the mathematical or physical models employed in the analysis and the assumptions that were used.

3.0 ISSUES

The December 1988 FSAR was reviewed and requests for additional information (RAIs) were issued on April 13, 1989 (Ref. 8). Responses to these comments were discussed at the April 24-28, 1989, FSAR review meeting and were documented in Appendix B received on May 4, 1989. All RAIs were satisfactorily resolved except for seven unresolved issues which are discussed below:

1. EH identified a concern (Appendix B, Section 7.2, Comment 1) regarding the use of the average value (12.9 PE-Ci) of waste package radioactivity rather than the maximum value (1000 PE-Ci) in the accident analyses. The DOE/WPO response was that an "administrative" limit would be placed on handling drums containing more than 70 PE-Ci. Drums above this limit would be handled under increased radiation safety control.

   Separate analysis is required, based on the assumption that an administrative procedure requiring that respirators will be worn whenever the quantity exceeds 70 PE-Ci. This additional analysis should evaluate resultant worker doses for the maximum source term conditions with and without respirators, i.e., for a 69 PE-Ci drum without respirators and for a 1000 PE-Ci drum with respirators. Further, the detailed application of this administrative procedure must be addressed in the FSAR for all of the potentially exposed workers (i.e., not just the waste handlers) and for as long as the potential for exposure exists (e.g., during waste handling operations above and below ground and during long term storage).

2. EH identified a concern with the assumptions made to calculate worker doses in several of the listed accident scenarios (Appendix B, Section 7.3, Comment 2). Specifically, dose calculations assumed workers in the immediate accident area avoided all intake by exiting

the area. Doses were calculated for nearby (approximately 20 feet away) workers who were assumed to be unaware of the accident. The approach was viewed as nonconservative.

The DOE/WPO response to the above comment (Appendix B) included revising the FSAR for the aboveground accidents (C2, C3) to include calculated doses for a worker assumed to remain in the immediate accident area for two minutes. Review of these doses identified them to be lower than the doses calculated for workers 20 feet away from the accident. Discussion with DOE/WPO personnel identified the newer doses were calculated using different assumptions than those used in the previous calculations. These dose values should be recalculated for consistency with the original calculations and the FSAR should be updated with the revised values.

DOE/WPO also indicated in their response to EH comments (Appendix B) and during subsequent conversation, that additional dose calculations for workers in the immediate area of underground accidents (i.e., C4) were not necessary, as waste emplacement work is done from the upstream direction of ventilation flow. Therefore, doses already calculated in the FSAR for individuals downstream of the waste drift were sufficient. As any additional dose calculations for hypothetical immediate-area workers are already bounded by those calculated in C3, the DOE/WPO position is acceptable.

3. In accident C-7, the FSAR estimates 2×10^{-4} drum fires/year. This accident should therefore be analyzed incorporating the fire suppression systems impact on potential doses to workers.

4. In the analysis of Accident C10, it is stated that the effects are mitigated due to plateout and to the relative location of the underground worker with respect to the ventilation flow pattern and the drum fire. In order to rely on the intent of the statement "waste is emplaced downstream of the worker" a commitment to adminis-

trative requirements for mandatory respiratory protection for workers downstream from the active and open waste storage area is needed.

5. Although Section 7.1 indicates no underground release is caused by earthquakes, the discussion in Subsection 2.10.3 suggests that roof falls may be anticipated due to the weakening of the underground structure resulting from the effects of long term creep of the salt formation. Additionally, effects from either seismic disturbances or any other dynamic external event (e.g., accidents in nearby mines, etc.) may further deteriorate the stability of the underground openings (which were subjected to creep) leading to roof collapse. Therefore, the potential for this accident should be analyzed in terms of the likelihood of destroying the integrity of the stored drums by a roof fall.

6. In accident C-8 (Appendix B, Section 7.3, Comment 4), the probability calculation of a catastrophic hoist accident required further clarification. After discussions at the April 24-28, 1989 FSAR review meeting DOE/WPO responded in Appendix B that additional calculations may be required to determine the accident probability due to the differences between MSHA and WIPP in the cable system static load safety factor. EH has not received these calculations.

7. In accident C-10 (Appendix B, Section 7.3, Comment 6c), the basis of the probability analysis of fire propagation to adjacent waste containers was questioned. As a result of the April 24-28, 1989 FSAR review meeting DOE/WPO responded in Appendix B that the final probability values will be recalculated. EH has not received these calculations.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

EH has reviewed the accident analyses described in Chapter 7 and the DOE/WPO's responses to the EH RAIs (Appendix B). The accident analyses contained in Chapter 7 of the May 1989 revision to the FSAR, as supplemented by the responses in Appendix B are adequate except for the seven outstanding issues discussed above which still require resolution and incorporation into the FSAR.

REFERENCES FOR CHAPTER 7

1. U.S. Department of Energy, "Radiation Protection for Occupational Workers," DOE Order 5480.11, December 21, 1988.

2. U.S. Department of Energy, "Safety Analysis and Review System, DOE Order," AL5481.1B, January 27, 1988.

3. U.S. Department of Energy, "General Design Criteria," DOE Order 6430.1A, (Draft), December 25, 1987.

4. U. S. Department of Energy, "TRU Waste Acceptance Criteria for the Waste Isolation Plant," WIPP-DOE-069, Rev. 3, January 1989.

5. Banz, Buchberger and Rasmussen, "Probability of a Catastrophic Hoist Accident at WIPP," WTSD-TME-063, July 1985.

6. Westinghouse Electric Corporation, "Waste Drum Fire Propagation at the Waste Isolation Pilot Plant," DOE/WIPP-87-005, April 1987.

7. "Radiation Protection Guidance to Federal Agencies for Occupational Exposure," Federal Register, Vol. 52, No. 17, January 27, 1987.

8. Memorandum from H.J. Pettengill, DOE/EH, to J.B. Tillman, DOE/WPO, April 13, 1989; Subject: Final Safety Analysis Report for the Waste Isolation Pilot Plant (transmitting EH comments on Chapters 1, 3, 4, 5, 6, 7 and 11 of the WIPP FSAR).

CHAPTER 8 - LONG TERM WASTE ISOLATION ASSESSMENTS

1.0 SUMMARY DESCRIPTION

This chapter of the FSAR discusses preliminary results of the long term isolation assessments that will be performed for the WIPP Facility. The assessments will not be completed until 1992. The assessments will provide input to the decision whether to make the WIPP Facility a permanent repository for the emplaced TRU wastes or remove them. Chapter 8 was included to satisfy commitments made to the State of New Mexico. No conclusions are presented in Chapter 8 as to the adequacy of WIPP's long term waste isolation capability.

Chapter 8, and supporting references, contained insufficient information to enable EH to judge the accuracy of the calculations and the results that are reported in Chapter 8. When the assessments are complete, i.e. 1992, FSAR Chapter 8 and supporting references will need to be independently reviewed.

CHAPTER 9 - CONDUCT OF OPERATIONS

SECTION 9.1 - ORGANIZATIONAL STRUCTURE

1.0 SUMMARY DESCRIPTION

This section of the FSAR describes the organizational structure, functions, responsibilities, and authorities of the Management and Operating Contractor (MOC), Westinghouse. It also describes the Westinghouse Corporate structure for managing the WIPP activity and specifies the minimum qualifications of the general manager, staff managers, and line managers with ES&H responsibilities.

Only the MOC will have an ongoing effect on day-to-day operation of the facility. Subsection 11.1.1 discusses the organizational functions, responsibilities, and authorities of the owner, the U.S. Department of Energy (DOE), the MOC, and the Scientific Advisor, Sandia National Laboratories.

2.0 ACCEPTANCE CRITERIA

Acceptance criteria used to review this section of the FSAR were taken primarily from the USNRC Regulatory Guide 3.26 for nuclear fuel reprocessing plants, and from DOE Orders 5480.1B, 5480.4, 5480.5, 5481.1B, and 5482.1B (Refs. 1-6).

Specific acceptance criteria used to evaluate Section 9.1 were demonstrated adequacy of:

1. The process by which management provides and maintains a technically competent and safety-oriented staff.

2. The structure, functions, and responsibilities of the organizations responsible for operation, maintenance, and safety of the facility or operation.

3. The corporate organization, including the organization chart, management, engineering, and technical support organizations, and supported by organization charts. Also included are the corporation's technical staff supporting the engineering and operation of the WIPP.

4. The line of succession of authority and responsibility for overall facility operation.

5. The organizational arrangement for assessing safe operation and the interface between safety and operations.

6. An organizational chart which shows the titles, hierarchy of authority, and areas of responsibility.

7. The qualification requirements for the technical staff supporting design, construction, operation, and maintenance.

3.0 ISSUES

1. The December 1988 FSAR did not describe the corporate functions, responsibilities, and authorities with respect to plant engineering and design, construction, quality assurance, testing, and operation.

Resolution:

The May 1989 revision to the FSAR included a section describing the corporate management structure as it relates to the WIPP facility. The description in this section substantiates the substantive breadth and level of experience for management of the project as well as adequate technical and scientific manpower to implement project operation. The response is acceptable and the issue is resolved.

2. The December 1988 FSAR did not specify the minimum qualification requirements for all plant operating, technical, and maintenance support personnel.

Resolution:

The May 1989 revision to the FSAR specified the additional minimum qualifications for line managers with ES&H responsibilities and provides a commitment to develop position descriptions for all permanent staff positions within the MOC organization at WIPP. During the Readiness Review Inspection (RRI) EH reviewed a sample of the position descriptions and found them to be adequate. The issue is resolved.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides an acceptable organizational structure to operate WIPP.

SECTION 9.2 - START-UP TESTING AND PREOPERATIONAL CHECKOUT

1.0 SUMMARY DESCRIPTION

This section of the FSAR describes the Start-up Testing and Preoperational Checkout Program and specifies: program objectives, administrative procedures for conducting the program, vendor testing, preoperational checkout, and the ongoing evaluation and testing.

2.0 ACCEPTANCE CRITERIA

Acceptance criteria used for review of this section of the FSAR were taken primarily from the USNRC Regulatory Guide 3.26 for nuclear fuel reprocessing plants, and from DOE Orders 5480.1B, 5480.4, 5480.5, 5481.1B, and 5482.1B (Refs. 1-6).

Specific acceptance criteria used to evaluate Section 9.2 were demonstrated adequacy of:

1. The preoperational and operational inspection and testing program and that it provides assurance that equipment, components, and structures are capable of meeting safety requirements.

2. The organization and management system responsible for assuring that periodic testing of components related to safety is performed as required by Operational Safety Requirements (OSRs).

3. The system used for preparing, reviewing, approving, and executing all testing procedures and instructions and for evaluating, documenting, and approving the test results provide a reference to the document with this information.

4. The test objectives and the general methods for accomplishing these objectives. The acceptance criteria used to evaluate the test results enumerate general prerequisites for performing the tests, including special conditions to simulate normal and abnormal operating conditions of the tests listed.

5. The response and acceptance criteria expected in terms of design bases and criteria contained in the FSAR.

3.0 ISSUES

1. The December 1988 FSAR did not provide a list of all the equipment and systems designed for the WIPP facility with corresponding test procedures that will be used prior to receipt of CH TRU wastes.

   Resolution:

   The May 1989 revision to the FSAR referenced the revised Table 3.1-8 that includes a list of all the equipment and systems. A listing of the corresponding test procedures was provided and is included as Appendix J. The response is acceptable and this issue is resolved.

2. The December 1988 FSAR did not provide sufficient information to allow review against Acceptance Criteria No. 5.

Resolution:

Due to the number of official test procedures for CH systems (65) and corresponding test criteria and prerequisites, it was agreed by EH that providing a reference to the Start-up Program Procedures in the FSAR would be adequate. The required reference was made in the May 1989 revision to the FSAR, Additionally, the following nine procedures were reviewed by EH and found acceptable: TP-014-036, TP-017-004A, TP-017-004B, TP-019-008, TP-019-010, TP-019-017, TP-017-038, TP-019-011, TP-009/010-013 (Refs.9-17). The issue is resolved.

3. The December 1988 FSAR did not provide sufficient information to allow review against Acceptance Criteria No. 3.

Resolution:

The May 1989 revision to the FSAR, referenced the required Start-up Program Procedures, WP 03-001, WP 03-005, WP 03-006, and WP 03-007 (Refs. 18-21). EH has agreed that the references are adequate and the issue is resolved.

4. The December 1988 FSAR did not provide sufficient information to allow review against Acceptance Criteria No. 2.

Resolution:

Subsection 9.2.5 was added to the May 1989 revision to the FSAR, This section discusses the ongoing evaluation and testing program. The OSR equipment that is subjected to periodic operability checks to ensure that operating parameters are within the range allowed is discussed in the Operational Safety Requirements Administration Manual (Ref. 22). This Manual is referenced in the May 1989 revision to the FSAR, In addition, references to the preventive maintenance and calibration system are discussed in this new section. The

response is acceptable and this issue is resolved.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The revised May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides an acceptable Start-up Testing and Preoperational Checkout Program for WIPP.

SECTION 9.3 - TRAINING PROGRAM

1.0 SUMMARY DESCRIPTION

This section of the FSAR describes the General Training, Radiation Worker Training, Miner Training and Qualification Training Programs. It also discusses the administration and record keeping requirements as they relate to the various training programs.

2.0 ACCEPTANCE CRITERIA

Acceptance criteria used for review of this section of the FSAR were taken primarily from the USNRC Regulatory Guide 3.26 for nuclear fuel reprocessing plants, and from DOE Orders 5480.1B, 5480.4, 5480.5, 5481.1B, and 5482.1B (Refs. 1-6).

Specific acceptance criteria used to evaluate Section 9.3 were adequacy of:

1. The description of the proposed training program, including the scope of training in plant operations and design, instrumentation and control, methods of dealing with process malfunctions, decontamination procedures, and emergency procedures; in health physics, subjects such as nature and sources of radiation, methods of controlling contamination, interactions of radiation with matter, biological effects of radiation, and use of monitoring equipment.

2. The description of the program for continued training through presentation of additional materials and refresher training.

3. Identification of personnel in the organization responsible for the training programs and for maintaining up-to-date records on the status of trained personnel, training for new employees, and refresher or upgrading training of present personnel.

3.0 ISSUES

1. The radiation safety training elements are referenced in the December 1988 FSAR in Subsection 6.1.5.4 of the FSAR and Section 3 of the WIPP Radiation Safety Manual, Rev. 1, (Ref. 23). These training elements do not include an element on the use of monitoring equipment.

   Resolution:

   Subsection 6.1.5.4 of the May 1989 revision to the FSAR added a reference to the Radiation Worker Training that includes an acceptable training element on radiation survey instrumentation. The issue is resolved.

2. The December 1988 FSAR did not include a summary of the training requirements for visitors, subcontractors, etc., as required by DOE Order 5480.5 (Ref. 4).

   Resolution:

   In addition to employees at the WIPP Facility, the May 1989 revision to the FSAR included reference to visitors and subcontractors and specified the section of the WIPP Training Program Manual, WP 14-1 (Ref. 24) which meets the training requirements of DOE Order 5480.5 (Ref. 4). The response is acceptable and this issue is resolved.

3. The December 1988 FSAR did not include a summary description of the proposed retraining program.

   Resolution:

   The May 1989 revision to the FSAR referenced, in Subsection 9.3.4, the sections of the WIPP Training Program Manual (Subsections 3.4.6, 7 and 8) that details an acceptable retraining program. The issue is

resolved.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides an acceptable training program for WIPP.

SECTION 9.4 - NORMAL OPERATIONS

1.0 SUMMARY DESCRIPTION

This section of the FSAR describes the operating procedures for operations involving radioactive material, hazardous operations, and system testing and inspection; operational occurrences; and plant records.

2.0 ACCEPTANCE CRITERIA

Acceptance criteria used for review of this section of the FSAR were taken primarily from the USNRC Regulatory Guide 3.26 (Ref. 1), DOE Orders 5480.1B, 5480.4, 5480.5, 5481.1B (Refs. 2-5), DOE Orders 1324.2, 5484.2 and 5000.3 (Refs. 25-27).

Specific acceptance criteria used to evaluate Section 9.4 were adequacy of the description of the:

1. Process in which operating, maintenance, and testing procedures are developed, reviewed, approved, implemented, and changed. Provide details for procedures relating to hazardous operations. Indicate organizational responsibility for developing, approving and updating procedures.

2. Management system for maintaining historical records associated with operation of the plant, maintenance, QA records, modifications, abnormal occurrences, radioactive releases and environmental surveys.

3.0 ISSUES

1. The December 1988 FSAR did not provide the necessary information to validate Acceptance Criteria No. 2.

   Resolution:

   The May 1989 revision to the FSAR references the Operations Administration Manual, WP 04-3 and the WIPP Procedures Manual, WP 15-030 (Refs. 28 and 29) in Subsection 9.4.5. These manuals describe the proper dispositioning of records associated with the areas identified in Acceptance Criteria No. 2 as identified by DOE Order 1324.2 (Ref. 25). The QA aspects of record keeping are discussed in Section 11.17 of the FSAR. The response is acceptable and this issue is resolved.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides acceptable operating procedures for operations involving radioactive material, hazardous operations, and system testing and inspection; operational occurrences; and plant records.

REFERENCES FOR CHAPTER 9

1. U.S. Nuclear Regulatory Commission, Regulatory Guide 3.26, "Standard Format and Content of Safety Analysis Reports for Fuel Reprocessing Plants," February 1975.

2. U.S. Department of Energy, "Environment, Safety, and Health Program for Department of Energy Operations," DOE Order 5480.1B, January 23, 1989.

3. U.S. Department of Energy, "Environmental Protection, Safety, and Health Protection Standards," DOE Order 5480.4, May 15, 1984.

4. U.S. Department of Energy, "Safety of Nuclear Facilities," DOE Order 5480.5, September 23, 1986.

5. U.S. Department of Energy, "Safety Analysis and Review System," DOE Order 5481.1B, September 23, 1986.

6. U.S. Department of Energy, "Environment, Safety, and Health Appraisal Program," DOE Order 5482.1B, September 23, 1986.

7. Memorandum from H.J. Pettengill, (USDOE/EH) to J.B. Tillman, (DOE/WPO), "Final Safety Analysis Report (FSAR) for Waste Isolation Pilot Plant (WIPP)," (transmitting EH comments on Chapters 2, 8, 9, 10, and 12), March 29, 1989.

8. U.S. Department of Energy, "EH-30 Readiness Review Inspection of the Waste Isolation Pilot Plant," dated June 2, 1989.

9. Westinghouse Electric Corporation, WIPP Start-up Test Program, TP-014-036, Startup Test Procedure for: "Final CH Area HVAC Operations Test," Revision 0, May 27, 1988.

10. Westinghouse Electric Corporation, Start-up Test Procedure TP-017-004A, "Surface Facilities Seismic System," Revision 1, September 1988.

11. Westinghouse Electric Corporation, Startup Test Procedure TP-017-004B, "Underground Seismic System," Revision 1, September 1988.

12. Westinghouse Electric Corporation, Startup Test Procedure TP-019-008, "Underground Ventilation System Integrated Test," Revision 0, August 1988.

13. Westinghouse Electric Corporation, Startup Test Procedure TP-019-010, "Underground Booster Fan Interlocks and Controls," Revision 0, September 1988.

14. Westinghouse Electric Corporation, Startup Test Procedure TP-019-017, "Effluent Monitoring Skid Vacuum Pump Test," Revision 0, March 1989.

15. Westinghouse Electric Corporation,Startup Test Procedure TP-017-038, "Bulkhead Doors," Revision 0, September 1988.

16. Westinghouse Electric Corporation, Startup Test Procedure TP-019-011, "Underground Ventilation System Testing and Balancing," Revision 0, November 1988.

17. Westinghouse Electric Corporation, Startup Test Procedure TP-009/010-13, "Diesel Generator 1 & 2 (Load Test and Permissive Circuitry)," Revision 0, April 28, 1989.

18. Waste Isolation Pilot Plant Procedure WP 03-001, "Initiating, Executing, Revising and Cancelling Startup Test Procedures," Revision 4, March 31, 1989.

19. Waste Isolation Pilot Plant Procedure WP 03-005, "Startup Testing Documents/Records Control," Revision 1, April 28, 1989.

20. Waste Isolation Pilot Plant Procedure WP 03-006, "Qualification and Certification Requirements for Startup Testing Personnel," Revision 1, November 30, 1988.

21. Waste Isolation Pilot Plant Procedure WP-03-007, "Startup Testing: Open Items Tracking/Completion," Revision 1, March 22, 1989.

22. Waste Isolation Pilot Plant Procedure WP 04-7, "WIPP Operational Safety Requirements Administration Manual," Revision 0, March 2, 1989.

23. Waste Isolation Pilot Plant Procedure WP 12-5, "WIPP Radiation Safety Manual," Revision 2, February 1989.

24. Waste Isolation Pilot Plant, WP 14-1, "WIPP Training Program Manual," Revision 6, October 19, 1988.

25. U.S. Department of Energy, DOE Order 1324.2A, "Records Disposition," September 13, 1988.

26. U.S. Department of Energy, DOE Order 5484.2, "Unusual Occurrence Reporting," August 13, 1981.

27. U.S. Department of Energy, DOE Order 5000.3, "Unusual Occurrence Reporting System, November 7, 1984.

28. Waste Isolation Pilot Plant Procedure WP 04-3, "Operations Administration Manual," Revision 0, September 23, 1988.

29. Waste Isolation Pilot Plant Procedure WP 15-030, "Records Management," Revision 1, June 30, 1987."

CHAPTER 10 - OPERATIONAL SAFETY REQUIREMENTS

The principal results of EH's review of Chapter 10 of the FSAR (Ref. 7) are contained in Section 10.2 of this SER. Although all sections of the FSAR Chapter 10 were reviewed, only Section 10.2 of the May 1989 revision to the FSAR is discussed below (Section 10.2 of the December 1988 FSAR was deleted and Section 10.3 "Limiting Conditions for Operation," was renumbered to become Section 10.2). Section 10.1 contained an introduction which had no relevant technical information.

EH comments on Section 10.3, "Surveillance Requirements," were addressed by the WIPP, where appropriate, in Subsection 9.2.5 of Chapter 9. No changes to Section 10.3 were made as a result of EH comments, and none were deemed necessary.

EH comments on Sections 10.4, 10.5, and 10.6 were either [illegible] or were requests for additional technical information. Such [illegible] needed to enable a sufficient EH on-site Readiness Review Inspection but did not require FSAR changes. No substantial changes to FSAR Sections 10.4, 10.5, and 10.6 were made by the WIPP as a result of EH comments and none were deemed necessary.

SECTION 10.2 - LIMITING CONDITIONS FOR OPERATION

1.0 SUMMARY DESCRIPTION

The purpose of this section of the FSAR is to specify the Limiting Conditions for Operation (LCOs) of WIPP equipment required to assure protection of employees, the environment, and the public. Each LCO contains a statement of the limiting condition and a required action statement (usually suspension of waste handling activities within 15 minutes). A violation is defined as exceeding the limiting condition and not accomplishing the required action.

Section 10.2 contains LCO's for: (1) Continuous Air Monitors (CAMs) (in five locations), (2) effluent monitors (in three locations), (3) Area Radiation Monitors (ARMs) (in 11 locations), (4) differential pressure monitors (in four above ground locations and one underground location), (5) filtration systems (two above ground areas and one underground), (6) backup electrical system, (7) fire detection and alarm systems (three areas), and (8) fire suppression systems (three areas).

2.0 ACCEPTANCE CRITERIA

Acceptance criteria used for review of this section of the FSAR were taken primarily from the USNRC Regulatory Guide 3.26 for nuclear fuel reprocessing plants, and from DOE Orders 5480.1B, 5480.4, 5480.5, 5481.1B and 5482.1B (Refs. 1-6).

Specific acceptance criteria used to evaluate Chapter 10 were adequacy of:

1. Monitoring equipment and local alarms for direct radiation exposure of personnel in areas where radioactive waste is stored or handled.

2. Monitoring equipment and local alarms for detection of airborne radiation in areas where radioactive waste is stored or handled.

3. Monitoring equipment and alarms for monitoring pressures within areas where radioactive waste is stored or handled to assure no leakage into the environment.

4. Monitors and alarms for airborne radioactive effluents released into the environment from areas where radioactive waste is stored or handled to assure releases are within limits.

5. Capability to monitor air flows through filtration systems to protect workers, the environment and the public.

6. Systems for fire detection, fire alarms, and fire suppression for worker and public safety, and for the protection of DOE's investment.

3.0 ISSUES

1. The December 1988 FSAR indicated that a satisfactory condition resulted even when a limiting condition was exceeded provided that the required action was taken. The required action was, in most cases, the suspension of waste handling operations. Thus, violations could nearly always be prevented by merely suspending waste handling operations. The FSAR was not specific about who could authorize resumption of waste handling activities. According to the operating procedures, waste handling operations could be suspended by the operating contractor for an indefinite time period whenever a limiting condition was encountered. However, DOE would not necessarily be notified of the resulting suspension of waste handling operations or involved in any way in the resumption of waste handling activities.

   Resolution:

   The May 1989 revision to the FSAR specified who has the authority to suspend and resume waste handling operations in response to exceeding a limiting condition. The FSAR also now requires that DOE (the DOE WIPP duty officer) be notified of such suspensions and resumptions. DOE does not routinely concur in the resumption of waste handling activities. The issue is resolved.

2. The December 1988 FSAR indicated that only one CAM was required to be operational at each of the five locations in the Waste Handling Building and remote monitoring was not required. EH was concerned

that sufficient consideration may not have been given to redundancy and central monitoring.

Resolution:

The May 1989 revision to the FSAR committed to CAMs at each location in the Waste Handling Building that are monitored at the Central Monitoring Station and to maintain operable backup equipment in the event of a CAM failure. This change adequately resolves the issue.

3. To assure that all leakage would be inward the pressures in various areas must be maintained negative. EH was concerned about the lack of commitment to central station monitoring of these pressures.

   Resolution:

   The May 1989 revision to the FSAR committed to remote monitoring of differential pressures in critical areas. This resolves the issue.

4. The December 1988 FSAR required set points of one atmosphere for several of the differential pressure monitors (Overpack and Repair Room, Hot Cell, RH High Bay, and CH Receiving Bay). EH expressed a concern in the request for additional information (Ref. 7) that it would not be possible to insure all leakage would be inward with such set points. The monitors have some inaccuracies and thus it would be possible for pressures in these areas to rise slightly above atmospheric, resulting in outleakage, without sounding an alarm.

CHAPTER 11 - QUALITY ASSURANCE

1.0 SUMMARY DESCRIPTION

This section of the FSAR summarizes the Quality Assurance Program for the WIPP Facility Operation. The Quality Assurance Program commits to compliance with ANSI/ASME NQA-1 1986 "Quality Assurance Program Requirements for Nuclear Power Facilities" (Ref. 8) as required by DOE Order 5700.6 (Ref. 3) and DOE-AL Order AL5700.6 (Ref 4).

Several revisions of the WIPP FSAR Quality Assurance chapter have been reviewed (November 1988, December 1988, and February 1989). The first two reviews generated a number of substantial comments which were transmitted to WIPP in Ref. 1. In order to resolve outstanding issues, a meeting was held on January 17, 1989 and most of the remaining issues were resolved. The meeting results are reported in Ref. 2. Subsequently, a revision of Chapter 11, received on February 13, 1989, incorporated the comment resolutions. Four key issues still remain and are discussed below.

2.0 ACCEPTANCE CRITERIA

Acceptance criteria used to review this section of the FSAR were taken from DOE Orders and recommended practices (Refs.3-5, 11).

Specific acceptance criteria used to evaluate this section of the FSAR were:

1. The Quality Assurance Organization is responsible for performing verification of work using persons who are not directly responsible for performing the work.

2. The responsible Quality Assurance authority shall have direct access to responsible management at a level where appropriate action can be effected for resolution of quality problems.

3. Those responsible for quality assurance shall report to a management level that will provide required authority and organizational freedom to resolve problems effectively and be independent of production and cost considerations.

4. External interfaces between organizations and internal interfaces between organization units are described to effect efficient management.

5. The Quality Assurance Program requires technical and quality assurance indoctrination, training and retraining programs to assure that persons involved in "important to safety" items and activities are knowledgeable in technical and quality assurance requirements and instructions and demonstrate a high level of competence and skill in the performance of their activities.

3.0 ISSUES

1. Review of Chapter 11 of the Draft FSAR dated November 15, 1988, version identified the following deficiencies: (1) a lack of sufficient independence for the QA Organization, (2) a lack of adherence to the intent of the ANSI/ASME NQA-1 Supplements, (3) a lack of an adequate design control program, (4) an inconsistent approach for the evaluation of "Important to Safety" items and services, (5) a lack of training, qualification and certification of audit, inspection, and test personnel and (6) no training and indoctrination programs.

Resolution:

DOE/WPO substantially revised the Draft and reissued it in December, 1988. The review of this revision revealed a lack of specific information as to "how" the policies of ANSI/ASME NQA-1 were to be

implemented. The requirements of ANSI/ASME NQA-1 were quoted but no description of how they would be implemented was provided. Although there was improvement in most areas, the Quality Assurance Program still lacked: (1) identification of the responsible Quality Assurance authority and its place in the WIPP Organization Structure, (2) interface requirements between the three major participants, (3) responsible authority and commitment for a Training and Indoctrination Program, (4) specific commitment(s) for review and approval of procurement documents, (5) a requirement for receipt inspection and the option of using source inspection to accept procured items or services, (6) the specifics for waste material receipt inspection at the site, (7) responsibilities for the processing and storage of radioactive waste materials, (8) test procedure requirements, (9) handling and storage requirements for radioactive waste materials, (10) responsibilities for nonconformance control, and (11) qualification and certification of audit personnel.

A meeting was held on January 17-18, 1989, with EH, DOE/WPO and BNL participants with the intended purpose to resolve the remaining open issues (Ref. 2). While most items were resolved at this meeting, the following key issues could not be resolved: (1) the inadequacy of the DOE/WPO Quality Assurance Organization in terms of the number of personnel and reporting level, and (2) the lack of clearly defined external and internal interface controls between the three project participants at the WIPP site.

These issues remain open.

2. A Quality Assurance issue that became apparent during the April 24-28, 1989, FSAR review meeting was the failure to adequately transfer knowledge of facility design bases (Ref. 13) to either DOE or the operating contractor.

DOE and operating contractor staff engineer(s) were not fully knowledgeable of the details of the WIPP designs, the design calculations, specifications and drawings (as-built, shop, etc.). It is therefore unlikely that issues pertaining to the design bases, design calculations, structures, etc., and related quality control can be adequately addressed.

Resolution:

This remains an open issue.

3. An additional Quality Assurance issue, which was confirmed during the Readiness Review Inspection, deals with the lack of contractual authority on the part of the DOE/WPO Project Manager to direct the work of project participants and to stop unsatisfactory work.

Resolution:

This remains an open issue.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides for an acceptable QA program with the exception of the three open issues discussed above.

6.0 REFERENCES

1. Memorandum, EH-332, E.F. Branagan, Jr. (DOE-EH) to J. Tillman (DOE/WPO), December 9, 1989; Subject: Review of Waste Isolation Pilot Plant Quality Assurance.

2. FSAR Chapter 11, Comment Resolutions, January 11, 1989 (with January 17 and 18 meeting results), 22 pages.

3. U. S. Department of Energy, "Quality Assurance," DOE Order 5700.6, September 23, 1986.

4. U. S. Department of Energy, "Quality Assurance," DOE/AL Order AL5700.6, September 23, 1986.

5. U. S. Department of Energy, "Records Disposition," DOE Order 1324.2, September 13, 1988.

6. U. S. Department of Energy, "Operation Quality Assurance Program Plan," DOE/WIPP 87-007, February 4, 1988.

7. U. S. Department of Energy, "Quality Assurance Requirement for Certification of TRU Waste for Shipment to the Waste Isolation Pilot Plant," DOE/WIPP-120.

8. American National Standards Institute, ANSI/ASME NQA-1-1986, Quality Assurance Program Requirements for Nuclear Power Facilities, 1986.

9. Sandia National Laboratories, Waste Management Technology Department, Waste Isolation Pilot Plant Quality Assurance Program Plan, February 1, 1988.

10. Westinghouse Waste Isolation Division, "Quality Program Manual," April April 29, 1988.

11. American Society of Nondestructive Testing, Recommended Practice SNT-TC-IA, (Intended for Certification of Nondestructive Testing Personnel), 1984.

12. Letter, M. Reich (BNL) to O. Thompson (DOE/EH), December 7, 1988; Subject: WIPP FSAR, Chapter 11.

13. Memorandum, S. Olinger (DOE/EH) to J.P. Knight and H.J. Pettengill (DOE/EH), May 4, 1989; Subject: Trip Report, WIPP Onsite Review of the FSAR, April 24-28, 1989.

CHAPTER 12 - DECONTAMINATION AND DECOMMISSIONING OF THE WIPP FACILITY

1.0 SUMMARY DESCRIPTION

This chapter of the FSAR describes the decontamination and decommissioning (D&D) commitments both at the end of the five year Pilot Plant Phase (Test Phase) and the operating life of 25 years. The chapter also discusses the D&D design features and activities, the closure, monuments, and records, and the post closure physical and environmental surveillance requirements.

At this time, EH's review is concerned only with the D&D commitments associated with the completion of the five year Test Phase. Additional safety analysis will be written if, at the end of the Test Phase, the WIPP is determined to be an acceptable waste repository and if the Test Phase period is extended.

2.0 ACCEPTANCE CRITERIA

Acceptance criteria used for review of this chapter of the FSAR were taken primarily from the USNRC Regulatory Guide 3.26 for nuclear fuel reprocessing plants, and from DOE Orders 5480.5, 5820.2, 6430.1A (Refs. 1-4).

Specific acceptance criteria used to evaluate Chapter 12 were the adequacy of:

1. Commitments to decontaminate and decommission (D&D) the WIPP Facility at the end of the Test Phase.

2. Consideration in the WIPP design and operations of the need to facilitate decontamination of structures and equipment, reduce radiation exposure to workers and the general public, minimize the quantity of radioactive wastes and contaminated equipment, and facilitate the removal of radioactive wastes and contaminated materials if the WIPP requires permanent decommissioning at the end

of the Test Phase.

3. The plan for retrieval of wastes at the end of the Test Phase that includes a review by independent peers.

3.0 ISSUES

1. The December 1988 FSAR did not discuss the commitment and provisions to D&D the WIPP Facility at the end of the Test Phase, if WIPP is determined to be unacceptable as a waste repository.

   Resolution:
   The response (Appendix B) to this item consists of a commitment to provide detailed information on D&D features in the D&D plan. In addition, the RAI item in Section 3.1 of Reference 6 requires a design criteria comparison of the WIPP design criteria to criteria in DOE Order 6430.1A (Ref. 4). The response is acceptable but until the D&D plan is completed and determined acceptable, this issue is open.

2. The December 1988 FSAR did not identify minimum elements of the conceptual D&D plan for the end of the Test Phase. Refer to Ref. 5, Question No. 1 in Section 12.3.

   Resolution:

   The response to Issue No. 1 above also applies to this issue in that WPO commits to a detailed D&D plan part of its overall waste retrieval plan. The response is acceptable but until the D&D plan is completed and determined to be acceptable, this issue is open.

3. The December 1988 FSAR did not include a commitment to issue a retrieval plan prior to start-up.

Resolution:

The May 1989 revision to the FSAR now includes Section 12.6 that describes DOE's commitment to maintaining retrieval for wastes emplaced during the Test Phase. The subsection describes specific measures to assure retrievability, however, this is not a detailed plan. WPO is preparing a detailed retrieval plan which will be completed prior to start of the Test Phase. A memorandum from Jack B. Tillman to Bill C. Moffitt is included in Appendix B and identifies the minimum characteristics to be included in the waste retrieval plan. The response is acceptable but until the retrieval plan is completed and determined to be acceptable, the issue is open.

4.0 REQUESTS FOR ADDITIONAL INFORMATION

There are no new or outstanding RAIs.

5.0 CONCLUSIONS

The May 1989 revision to the FSAR, as supplemented by the responses in Appendix B, provides acceptable D&D commitments, providing the retrieval and D&D plans are issued and confirmed to be acceptable prior to emplacement of waste.

REFERENCES FOR CHAPTER 12

1. U.S. Nuclear Regulatory Commission, Regulatory Guide 3.26, "Standard Format and Content of Safety Analysis Reports for Fuel Reprocessing Plants," February 1975.

2. U.S. Department of Energy, "Safety of Nuclear Facilities," DOE Order 5480.5, September 23, 1986.

3. U.S. Department of Energy, "Radioactive Waste Management," DOE Order 5820.2A, September 26, 1988.

4. U.S. Department of Energy, "General Design Criteria," DOE Order 6430.1A, April 6, 1989.

5. Memorandum, H.J. Pettengill, DOE-EH to J.B. Tillman, DOE-WPO, "Final Safety Analysis Report (FSAR) for Waste Isolation Pilot Plant (WIPP)," (transmitting EH comments on Chapters 2, 8, 9, 10, and 12), March 29, 1989.

6. Memorandum, H.J. Pettengill, DOE-EH to J.B. Tillman, DOE-WPO, "Final Safety Analysis Report for the Waste Isolation Pilot Plant (WIPP)," (transmitting EH comments on Chapters 1, 3, 4, 5, 6, 7 and 11), April 13, 1989.

ENCLOSURE 2

United States Government

memorandum

Department of Ener

JAN 26 1990

DATE: JAN 16 1990

REPLY TO ATTN OF: EH-332

SUBJECT: Supplement to Safety Evaluation Report for Waste Isolation Pilot Plant (WIPP)

TO: Jill Lytle, EM-30

The Office of the Deputy Assistant Secretary for Safety, Health and Quality Assurance (EH-30) has completed its review of the WIPP Project Office's responses to the 23 open items reported in our WIPP Safety Evaluation Report (SER) of July 27, 1989. As a result of the Project's commitments to change the WIPP Final Safety Analysis Report (FSAR), all 23 items are closed, subject to final documentation in the FSAR document.

As you know, the Project needs to issue the Experimental Plan for the Test Phase, the Retrieval Plan, and the Decontamination and Decommissioning Plan for WIPP. We consider each of these documents, and the corresponding amendments to the SAR to be important to safety. In our opinion, the review process for these documents and the corresponding SAR amendments should follow a process similar to that utilized by EH for the SAR review.

We also plan to complete a supplement to the Readiness Review Inspection (RRI) report in the near future. With completion of the FSAR review and RRI report by EH, it appears appropriate to begin the coordination necessary for transition to EM nuclear safety oversight of WIPP, in accord with SEN-6 directives. You should be aware that many of the EH staff active in WIPP review efforts to date have moved to other DOE elements as part of the overall realignment of nuclear safety responsibilities; others are likely to move in the not too distant future. Please let me know when you are ready to discuss these matters.

Attached is a copy of Supplement 1 to the SER.

Joseph E. Fitzgerald, Jr.
Joseph E. Fitzgerald, Jr.
Acting Deputy Assistant Secretary
Safety, Health and Quality Assurance

Attachment

cc w/attachment: See List

SUPPLEMENT 1 TO SAFETY EVALUATION REPORT

FOR

WASTE ISOLATION PILOT PLANT

Prepared Under the Direction of — Edward F. Bonnaza Jr. for Carl Newton, EH-332

Reviewed By — Edward F. Bonnaza Jr. for Harry J. Pettengill, EH-332

Reviewed By — James P. Knight, EH-33

Approved By — Joseph E. Fitzgerald, Jr., EH-30 — Date

I. INTRODUCTION AND SUMMARY

This report evaluates the WIPP Project Office's (hereinafter referenced to as the project) responses to each of the 23 items reported in the SER.

The Waste Isolation Pilot Plant (WIPP) Safety Evaluation Report (SER) was issued on July 27, 1989, by the Office of the Deputy Assistant Secretary for Safety, Health and Quality Assurance, EH-30 (Reference 1). The purpose of the SER was to document EH-30's independent safety review of the WIPP Final Safety Analysis Report (FSAR).

The EH-30 review was limited to the initial 5-year Pilot Plant phase operation of WIPP. The review was further limited by the programmatic decision to receive only Contact Handled Transuranic waste during WIPP's initial period of operation. A revision or addendum to the WIPP FSAR to cover operation either beyond the 5-year test phase or to cover receipt of Remote Handled Waste (RH) will be required to continue operations beyond the test phase, or to expand operations to include RH waste.

As a result of the initial FSAR review, 23 open items were identified and documented in the SER. The more prominent open items included Quality Assurance staffing and authority, design of the electrical system, waste retrieval concerns, and accident analysis source terms and scenarios.

Table 1 summarizes the status of the 23 open items reported in the SER.

The project has already made a number of changes to the FSAR to correct deficiencies discovered during the initial EH review. Of the 23 open items identified in the EH SER (Reference 1), changes have been made, or committed to be made, for satisfactory resolution of all 23 items.

Fourteen of the 23 items required a change to the FSAR. Agreement has been reached on appropriate and acceptable FSAR changes for all 14 items.

TABLE 1 - SUMMARY OF EH EVALUATION

ITEM NO.	DESCRIPTION OF ITEM	FSAR CHANGE REQUIRED*	FOLLOW-UP ACTION REQUIRED**
1	QA Resources and Authority & Organizational Interfaces	Yes	Yes
2	Operating Contractor Understanding of Facility Design	No	Yes
3	Project Manager's Stop Work Authority	Yes	No
4	Overstressed Columns in Waste Handling Building	No	No
5	Design Bases for Electrical System Not Specified	Yes	Yes
6	Diesel Generator Starting	Yes	No
7	UPS Loads	Yes	No
8	Battery Testing	No	Yes
9	Remote Diesel Startup	Yes	Yes
10	Room Monitoring for Structural Stability	Yes	Yes
11	Retrieval and D&D Plan	No	Yes
12	Additional Radiological Analyses Needed	Yes	No
13	Recalculation of Worker Doses	Yes	No
14	Re-evaluation of Drum Fires Accident	Yes	No
15	Respiratory Mask Requirement for Downstream Workers	Yes	Yes
16	Evaluate Underground Roof Falls	No	No

DOE F 1325.8
(8-89)
EFG (07-90)

ENCLOSURE 3

United States Government

Department of Energ

memorandum

DATE: MAR 08 1991

REPLY TO ATTN OF: EH-332

SUBJECT: Completion of the Office of Environment, Safety and Health (EH) Supplemental Safety Evaluation Report (SER) for the Waste Isolation Pilot Plant (WIPP) Final Safety Analysis Report (FSAR)

TO: Jill E. Lytle, EM-30

Attached is Supplement 2 to the EH Safety Evaluation Report for the WIPP FSAR (Revision 0, May 1990). Supplement 2 documents the resolution of the remaining outstanding items from the original FSAR review dated July 27, 1989, and Supplement 1 dated January 16, 1990. All issues have been closed and the EH review effort in this area has been completed.

EH safety evaluations of the WIPP Readiness Review Inspection and the FSAR Addendum will be provided separately.

This review was conducted by the Office of Safety Appraisals within the Office of Safety and Quality Assurance. Any questions concerning this report should be referred to Thomas McSpadden, Safety Technology Division, on extension (3-5656).

Joseph E. Fitzgerald, Jr.
Deputy Assistant Secretary
Safety and Quality Assurance

Attachment

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cc w/attachment:
Paul L. Ziemer, EH-1
Peter N. Brush, EH-2
Mark Frei, EM-34
Robert W. Barber, EH-36
Oliver D. T. Lynch, Jr., EH-331
Harry J. Pettengill, EH-40
John J. Schinkle, AL/SPD
Arlen Hunt, WPO
Nolan Bailey, AL/SPD
Dennis Krenz, AL
Morris Reich, BNL
Wallace Kornack, ACNFS
Dan Gannon, SAIC
Robert Neill, EEG
Kirkland Jones, EID

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SUPPLEMENT 2 TO SAFETY EVALUATION REPORT

FOR THE

WASTE ISOLATION PILOT PLANT

Dated: MAR 4 1991

Prepared Under the Direction of _____ 2/28/91
Thomas McSpadden — Date
Safety Technology Division

Reviewed by _____ 2/28/91
Darrell Huff — Date
Safety Technology Division

Reviewed by _____ 2/28/91
Richard J. Serbu — Date
Acting Director
Safety Inspection Division

Approved by _____ 3/4/91
Oliver D. T. Lynch, Jr. — Date
Acting Director
Office of Safety Appraisals

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I. Introduction

The Waste Isolation Pilot Plant (WIPP) Safety Evaluati (SER) was issued on July 27, 1989, by the Office of t Assistant Secretary for Safety and Quality Assuranc (Reference 1) of the Office of Environment, Safety and Hea The purpose of the SER was to document EH-30's independe review of the WIPP Final Safety Analysis Report (FSAR Revision 0 (May 1990).

The EH-30 review was limited to the initial 5-year Pi phase of operation at WIPP. The Pilot Plant phase was the receipt, emplacement, and storage of Contact Transuranic (CH TRU) waste over a 5-year period in demonstrate the safe disposal of defense wastes. Ba evaluation at the end of the Pilot Plant phase, a decis have been made as to the acceptability of the WIPP disposal operations.

More recently, the Department of Energy (DOE) has decided to demonstrate safe disposal in compliance with relevant environmental regulatory requirements by using a phased approach. phase is the Dry Bin Scale Test Program during which wa packed into test bins, emplaced, and monitored fo Specific data to be obtained include the quantity, compo kinetic rate of gas production and consumption. The Addendum for the Dry Bin Scale Tests (Reference discusses the safety implications of this program, is separate review.

EH will issue an additional SER supplement to address the WIPP FSAR Addendum.

Under current planning, subsequent test phases will include wet bin, leachability, and alcove tests. The consequences or safety aspects of these tests will be addressed in future safety analyses, probably in the form of additional addenda to the FSAR, to be prepared prior to the performance of these tests.

As a result of the EH-30 FSAR review, 23 open items were identified and documented in the SER. The more significant open items included Quality Assurance staffing and authority, design of the electrical system, waste retrieval concerns, and accident analysis source terms and scenarios.

EH-30 issued Supplement 1 to the Safety Evaluation Report (SSER No. 1) for the Waste Isolation Pilot Plant in January 1990 (Reference 7). The purpose of the SSER No. 1 was to document EH-30's evaluation of the WIPP Project Office's (WPOs) responses to each of the 23 items reported in the SER.

At the time the SSER No. 1 was issued, EH-30 and WPO agreed on requirements for resolution of each of the 23 findings. For 15 of the findings, resolution required a change to the text of the WIPP FSAR. Eleven findings required corrective action to be taken prior to closure. Corrective actions entail either design changes or

additional safety analyses. In four cases, the project response was sufficient to resolve the finding without requiring an FSAR text change or a corrective action. Table 1 summarizes the closure requirements for the 23 findings identified in the SER.

This report confirms and documents the final closeout of the SER findings. Section II discusses the 11 items which require corrective action for resolution. Section III discusses the 15 findings which require FSAR text changes for closure. The findings which require no corrective action or FSAR text changes are considered closed and are not addressed in this report.

TABLE 1 - SUMMARY OF EH EVALUATION

ITEM NO.	DESCRIPTION OF ITEM	FSAR CHANGE REQUIRED*	CORRECTIVE ACTION REQUIRED**
1	QA Resources and Authority & Organizational Interfaces	Yes	Yes
2	Operating Contractor Understanding of Facility Design	No	Yes
3	Project Manager's Stop Work Authority	Yes	No
4	Overstressed Columns in Waste Handling Building	No	No
5	Design Bases for Electrical System Not Specified	Yes	Yes
6	Diesel Generator Starting	Yes	No
7	UPS Loads	Yes	No
8	Battery Testing	No	Yes
9	Remote Diesel Startup	Yes	Yes
10	Room Monitoring for Structural Stability	Yes	Yes
11	Retrieval and D&D Plan	Yes	Yes
12	Additional Radiological Analyses Needed	Yes	No
13	Recalculation of Worker Doses	Yes	No
14	Reevaluation of Drum Fires Accident	Yes	No
15	Respiratory Mask Requirement for Downstream Workers	Yes	Yes
16	Evaluate Underground Roof Falls	No	No

TABLE 1 - SUMMARY OF EH EVALUATION
(continued)

ITEM NO.	DESCRIPTION OF ITEM	FSAR CHANGE REQUIRED*	CORRECTIVE ACTION REQUIRED**
17	Catastrophic Hoist Accident Probability	No	Yes
18	Drum Fire Propagation Accident Probability	No	No
19	Testing of Isolation Damper Valves	No	Yes
20	Monitoring of Room Closure Threshold Values	Yes	Yes
21	Only Single Failures in Electrical System Were Analyzed	Yes	No
22	Inconsistent Flow Charts for Quality Level Assignments	No	No
23	No Ground Movement Considered in Shaft Lining Design	Yes	No

Note: This table lists outstanding requirements for closure as of January 1990.

* See Section III of this report
** See Section II of this report

II. Evaluation of Project Responses and Corrective Actions

Supplement No. 1 to the Safety Evaluation Report (SSER No. 1) identified 11 SER findings which required corrective action prior to startup of the WIPP facility. Reference 7 provides a list of recommended actions to be completed for resolution of these SER findings.

It should be noted that SSER No. 1 recommends corrective action for SER Item No. 17. This action involves reviewing documentation related to the failure of the waste hoist bearing to confirm that an accurate assessment of the cause of failure has been made and that appropriate corrective action has been taken. The failure of the waste hoist bearing is addressed in Reference 10 as Readiness Review Inspection Finding No. 76. The EH concerns identified in SER Item No. 17 are adequately addressed in Reference 10 and will not be addressed in this report.

EH-30 and WPO worked together to confirm that proper corrective action has been taken to resolve all 11 findings. Confirmation entailed the review of substantiating documentation and field verification. A summary description of the evaluation is provided for each of the findings requiring corrective action.

Item No. 1: QA Resources and Authority; Organizational Interfaces

EH's Original Concern:

(a) The DOE/WPO Quality Assurance (QA) Organization does not have sufficient resources and authority for adequate control of operations at WIPP.

(b) Also, the interface controls and responsibilities, both external and internal, among organizations of the three major participants are not clearly defined.

EH Evaluation of Project Response:

(a) The project has proposed a revised organization to address this EH concern. In the proposed organization, a new office, Quality and Regulatory Assurance (QRA), would be established. The manager of the new office would report directly to the project manager. The new office would be staffed by a manager, three engineers, and a secretary. The DOE/WPO QA Manager is responsible for monitoring the design, construction and operation of the facility, and identifying QA related problems (DOE/WIPP 103, Directive 4.1.1). In addition, the QA Manager is responsible for initiating, recommending, or approving solutions to quality-related problems.

The revised organization resolves EH's concerns regarding staffing level for QA and level of reporting. However, the new organization needs to be implemented, and this implementation documented in an FSAR revision.

The project's proposed FSAR changes are acceptable. (See Section III).

(b) Interface controls are clarified in a new project publication, Management Directive 103. In this document (Part II, Directives 2.2.1 and 2.3.1, dated May 18, 1989), the roles of the experimental contractor (Sandia) and the Management and Operating Contractor (Westinghouse) are clarified.

The description of interface controls and responsibilities provided in Management Directive 103 (Reference 2, Item 1) appear satisfactory and when fully implemented will resolve EH's concern with interface controls.

The FSAR changes committed to in the project's response are acceptable. (See Section III).

Item No.1, (continued)

Required Confirmatory Action:

(a) Before startup, confirm that a reasonable number of the positions in the new QRA Office have been filled and that the personnel are well qualified.

(b) Before startup, confirm that the new interface controls described in Management Directives 2.2.1 and 2.3.1 have been fully implemented and that they are effective.

EH Evaluation (9/30/90):

(a) This item was resolved in conjunction with Readiness Review Inspection (RRI) Finding Nos. 66, "Authority of QA Manager," and 73, "Inadequate QA Audits Performed" (References 8-10). An acting QRA Branch Chief has been appointed. This individual reports directly to the Assistant Project Manager for Compliance and has sufficient authority to initiate and verify corrective actions. In addition, three new positions in the QA organization were authorized. Resumes were provided to show these positions are filled by certified quality assurance professionals.

(b) No information has been received.

EH Evaluation (12/20/90):

A transmittal concerning Item 1(b) was received on 12/7/90. The response reads:

"The interface controls described in Management Directive 2.2.1 and 2.3.1 have been fully implemented and DOE/WPO believes them to be effective. BNL is invited to field verify this item for closure."

EH discussed this with Westinghouse during a 12/10/90 conference call. Westinghouse agreed to provide EH with the Management Directives so that field verification would not be necessary.

EH Evaluation (1/4/91):

The Management Directives were received on 12/19/90 (Reference 15). The implementation of the interface controls described in the Management Directives requires field verification for closure of Item 1(b).

EH Evaluation (1/25/91):

EH met with representatives of DOE/WPO during the January 22-24, 1991, site visit to discuss Item 1(b). EH received documentation delineating the responsibilities of DOE, Westinghouse and Sandia.

Item No. 1. (continued)

In addition, DOE/WPO described weekly meetings which are held among the three organizations. Sandia has recently issued a management memorandum appointing a senior SNL employee to be responsible for all interactions with Westinghouse.

As part of the site verification, EH attended the weekly ES&H Interface Meeting. DOE/WPO and Westinghouse representatives of Quality and Regulatory Assurance, Radiation Safety, Dosimetry, Safety, Regulatory and Environmental Programs were present at the meeting. The group fully discussed a list of all outstanding commitments and upcoming events which will require cooperation among the organizations.

This item is closed.

Item No. 2: Operating Contractor Understanding of Facility Design

EH's Original Concern:

Engineering staff of DOE/WPO and the operating contractor lack technical understanding of the facility's design bases, design calculations and their related quality control.

EH Evaluation of Project Response:

The project has committed (Reference 2, Item 2) to training of key operating contractor personnel to enhance their knowledge of the technical details of the WIPP facility design. Specific training on Limiting Conditions for Operation and Operational Safety Requirements (LCO/OSR) was described in Reference 2. The project also committed to completing the as-built drawings for critical systems in the facility prior to startup and to implement configuration control procedures to assure drawings are maintained up-to-date. A description of critical systems and a proposed schedule was provided by the project (Reference 6).

Completion of as-built drawings, implementation of an adequate configuration control system, and the commitment to provide the proposed training resolve EH's concern in this area.

Required Confirmatory Action:

Confirm that as-built drawings of critical systems have been completed, that the required training has been completed, and that adequate configuration control procedures have been implemented.

EH Evaluation (8/31/90):

This item is being resolved in conjunction with Readiness Review Inspection (RRI) Finding No. 6 "Revise Electrical Drawings to 'As-Built'" (References 8-10). The confirmatory action cannot be completed until RRI Finding No. 6 is closed. In addition, configuration control procedures and training documentation are required.

EH Evaluation (12/20/90):

A transmittal concerning this item was received on 12/7/90 (Reference 14). The configuration control procedure was reviewed along with the lesson plan and associated attendance sheets. These documents and the associated training satisfy the concerns expressed. Assuming that the as-built drawings are found to be complete, this item can be closed. Field verification of this item will be conducted in conjunction with RRI Finding No. 6.

Item No. 2, continued

EH Evaluation (1/25/91):

In response to this item and RRI Finding No. 6, the project identified 243 drawings that are critical to safety. Of the 19 plant systems, top priority was given to systems that are related to industrial safety or include LCO/OSR equipment. The 243 drawings represent the following systems:

- Plant Electrical Distribution System, Surface and Underground
- Effluent and Environmental Monitoring Systems
- Radiation Monitoring System
- Plant Communication System
- Fire Protection System
- Underground Ventilation System
- Underground Hoisting System

The project hired a contractor to field verify and update the existing site drawings. EH reviewed procedures, written by the project and the contractor, that adequately control the conduct of work.

The "As-Built Program" for the 243 critical drawings was completed on 9/14/90. An independent review of every drawing was conducted by a committee of Westinghouse personnel who found minor discrepancies in 72 of the 243 drawings. Engineering Change Orders (ECOs) were written to correct these errors. This part of the effort was completed in January 1991, prompting a followup visit by EH.

The goal of the January 22-24, 1991, site visit was to verify that the site had completed the "As-Built Program" in accordance with commitments made previously. To determine this, a sample of 20 drawings was reviewed by the team. The review consisted of the following attributes:

- The marked up drawings that were used to develop the as-built drawings were examined to determine the types of discrepancies found by the contractor's field walkdowns. These were compared with the final approved drawing to assure that observations were accurately recorded.

- The reviewers performed a walkdown of selected drawings.
- ECOs were reviewed to ensure that the changes were accurately made.
- Discussions were held with the cognizant engineers and the Westinghouse engineering management to better understand the resolution of apparent discrepancies.

The review team found minor discrepancies on six of the drawings. However, due to the complexity of the drawings reviewed and the insignificant nature of the errors, this number of errors is considered to be acceptable. The goal to achieve drawings for critical equipment and systems that are truly representative of field conditions has been satisfactorily achieved.

This item is closed.

Item No. 5: Design Bases for Electrical System Not Specified

EH's Original Concern:

The design bases for the electrical system (standards and guides) must be identified in the FSAR.

EH Evaluation of Project Response:

The project verified that WIPP meets the requirements of DOE Order 6430.1 and has committed (Reference 2, Item 5) to add a statement to the FSAR attesting to compliance of the WIPP electrical system with the design criteria.

In addition, the project agreed to evaluate the design against the requirements of DOE Order 6430.1A. This review is not required to be completed until 18 months after startup (Reference 1).

The project's proposed FSAR changes are acceptable and resolve EH's concern. (See Section III).

Required Confirmatory Action:

Confirm that the analysis of the WIPP electrical system against the requirements in DOE Order 6430.1A has been completed. Evaluate all areas that do not fully comply for potential retrofits.

EH Evaluation (8/31/90):

Despite the agreement that this item can be resolved after startup, EH discussed this item with Westinghouse during the August 14-16, 1990, site visit. Westinghouse Electrical Engineering provided information regarding the status of the review. Several items are still under review.

EH Evaluation (9/30/90):

A transmittal concerning this issue was received from the project on 9/18/90 (Reference 12). This transmittal addressed each relevant section of DOE 6430.1A. The reviewers conclude, on the basis of this document, that the critical safety issues related to the design bases have been resolved sufficiently to satisfy the pre-startup commitments. The remaining work is scheduled for completion by December 1990.* This remaining work is of a non-critical nature, allowing the item to be closed.

This item is closed.

---

* As of January 1991, the remaining non-critical work is still in progress. A post-startup review (within 18 months) should be completed to verify full compliance with this issue.

Item No. 8: Battery Testing

EH's Original Concern:

Verification that the battery can supply 30 minutes of power at rated conditions is necessary through testing or analysis.

EH Evaluation of Project Response:

The project has provided copies of the revised startup test procedure and the results of the startup test conducted in June 1989. This procedure provides for a test of battery capacity that is consistent with FSAR requirements.

The response is adequate. No changes to the FSAR are required to resolve EH's concern.

Required Confirmatory Action:

Confirm that a comprehensive test has been satisfactorily completed.

EH Evaluation (8/31/90):

It was confirmed during the August 14-16, 1990, site visit that the battery testing has been completed.

This item is closed.

Item No. 9: Remote Diesel Startup

EH's Original Concern:

The section in the FSAR regarding startup of the diesel generators (local or remote) needs to be clarified. Also, the FSAR should be changed to reflect actual operator actions required to restore power to the Underground Power System (UPS) within 30 minutes.

EH Evaluation of Project Response:

The project has revised the startup procedure for the diesel generator (Reference 2, Item 9) so that it is now possible for an operator at the Central Monitoring Room (CMR) to remotely start the diesel generator without any action by personnel at the diesel generator location. Revised wording describing the startup procedure has been prepared. The project has committed to add this description of startup to the FSAR.

The project's proposed FSAR changes are acceptable and resolve EH's concern. (See Section III).

Required Confirmatory Action:

Confirm that a satisfactory test of remote startup capability has been performed.

EH Evaluation (8/31/90):

It was confirmed during the August 14-16, 1990, site visit that the diesel generator acceptance test included remote startup from the CMR.

This item is closed.

Item No. 10: Room Monitoring for Structural Stability

EH's Original Concern:

Monitoring of filled CH TRU waste storage rooms is required to ensure structural stability of these rooms and adequate performance of the installed rock bolts throughout the retrieval period, i.e., 10 years. It is not, as yet, clear how such a program can be implemented in those CH TRU waste storage areas filled with containers.

EH Evaluation of Project Response:

The project initially claimed that monitoring of filled waste storage rooms was not required to ensure structural stability and did not commit to monitoring in the FSAR (Reference 2). The project felt that "bolting experience, plus conservative extrapolation of Creep Data indicate that a minimum of 81/2 years is available, for emplacement and retrieval."

After reviewing the project's initial response to this item, EH reaffirmed the concerns about structural stability. EH requested that the project commit to a comprehensive monitoring system in underground rooms containing waste. Monitoring would be for the period waste is stored underground until it is either removed or a decision made to permanently dispose of it in WIPP, in which case the rooms would be backfilled and the monitoring function discontinued. EH restated its belief that such monitoring is essential to assure retrieval during the test phase. Effective monitoring could warn of impending roof falls, provide prompt detection of roof falls that occur, and assure that creep closure rates are not threatening container integrity before retrieval.

The project's revised response (Reference 6) committed to monitoring (both visually and with instruments) the rooms that contain waste. This commitment will be documented in several sections of the FSAR. The project noted that alcoves will not be monitored, but committed to additional roof control measures in alcoves (pattern bolting and wire mesh). The project also noted that the narrower width (25 feet for the alcoves versus 33 feet for the storage rooms) also greatly reduces the creep closure rate and the likelihood of roof fall events.

The project provided revised wording for several sections of the FSAR (Reference 6) that would implement the room monitoring commitment.

EH agrees that monitoring of the alcoves is not required, providing the roof bolt patterns and wire mesh commitments are adhered to and provided the mined width of the alcoves is limited to 25 feet.

Item No. 10, (continued)

The project's proposed FSAR changes are acceptable and resolve EH's concern.

Required Confirmatory Action:

Confirm that the monitoring program actually employed by the project is adequate to meet the FSAR requirements. Confirm that procedures for monitoring have been issued and review them for adequacy.

EH Evaluation (8/31/90):

The concerns initially raised are associated with two aspects of the underground monitoring program required to assure safe operation. The first has to do with development of threshold criteria for relative room closure beyond which serious concern for room stability and safety of operation develops. It was agreed during the FSAR review that in any storage areas, rock movements will be monitored on a relatively continuous basis. Predictions of future movements will be made based on these measurements, together with results obtained from the previous long history of operation at the site dating back to the Preliminary Design Verification studies and ongoing analytic studies of rock behavior. Whenever measurements exceed predictions by 0.5 inches in any 1 year, further storage operations will cease and detailed engineering investigations will be performed to evaluate the cause of the exceedances. This is considered to be acceptable.

The second aspect of the monitoring program makes use of continuous "drumming" procedures to uncover local wall and roof separations and to evaluate the potential for scabbing and rock falls. This "drumming" procedure is a standard mining practice to help ensure safe operation in mines. However, the "drumming" program obviously cannot be used to monitor potential scabbing effects at roof and wall locations in filled rooms.

It was learned during the August 14-16 1990, site visit that waste drums are no longer to be placed to fill the rooms during the five-year test phase. Therefore, it is assumed that the bin scale test program will not prevent access to the test rooms, the "drumming" procedure is acceptable and the monitoring program is adequate to meet the FSAR commitments. Monitoring procedures should be submitted for review and availability of room access for monitoring (including "drumming") should be assured.

EH Evaluation (12/20/90):

Procedure Nos. WP 07-301 to WP 07-207 are adequate for defining the procedures for installing various monitors. However, a specific statement should be provided to indicate that all storage rooms

Item No. 10, (continued)

will be monitored with some minimum number of instruments, that the data will be made part of the computerized data base to compare with the criteria, and that "drumming" will be utilized in these storage rooms. The confirmatory action cannot be completed without the additional information.

EH Evaluation (1/8/91):

EH received a transmittal regarding this finding on 12/31/90, which read in part:

> "All underground storage rooms will be monitored for stability with at least two redundant monitoring instruments...
>
> Ground control inspections will utilize sounding ("drumming") in accessible areas of storage rooms per the enclosed procedure, WP 04-220, WIPP Operations Ground Control Procedures."

EH discussed two concerns with this response with Westinghouse and DOE-EM in a conference call on 1/3/91. First, it is imperative that storage rooms be monitored with at least one horizontal instrument and one vertical instrument. Westinghouse informed EH that two horizontal and two vertical instruments (thus, "two redundant monitoring instruments") will be used. The response will be revised to clarify this point.

Second, it is necessary that all intersections of walls and ceilings be accessible for "drumming." On 1/17/91, EH received a revision to the response reading as follows:

> "Ground control inspections will utilize sounding ("drumming") in all areas of storage rooms per the enclosed procedure WP 04-220, WIPP Operations Ground Control Procedures. This ground control practice includes the back (roof), the ribs (wall), and the back/rib interface" (Reference 16).

This item is closed.

Item No. 11: Retrieval and D&D Plan

EH's Original Concern:

The Retrievability Plan and the Decontamination and Decommissioning Plan for the test phase must be completed by the project and confirmed acceptable prior to emplacement of waste.

EH Evaluation of Project Response:

The project has committed (Reference 3, Item 11) to issue final plans for retrieval and for decontamination and decommissioning prior to startup of the facility. In addition, the project has committed to revise the FSAR to include assurance that measures will be taken to prevent roof falls from complicating waste retrieval.

The response is adequate, provided a review and project response process, comparable to that used in the SAR review, is employed.

The project's proposed FSAR changes are acceptable and resolve EH's concern. (See Section III).

Required Confirmatory Action:

Confirm that final plans have been issued and that comments of reviewers have been appropriately considered.

EH Evaluation (8/31/90):

During the August 14-16, 1990, site visit, Westinghouse confirmed that they no longer plan to issue a separate document to discuss plant decontamination and decommissioning. Instead, this topic is discussed in Appendix C of the final Waste Retrieval Plan which was issued in May 1990 (Reference 11). EH reviewed this document for content, in connection with recommendations made by the Advisory Committee on Nuclear Facility Safety, and with regard to FSAR commitments.

As documented, the waste retrieval process appears adequate, in that it mirrors the waste emplacement process.

The Decontamination and Decommissioning (D&D) Plan, as presented in Appendix C of the Waste Retrieval Plan, does not provide details for the environmental surveillance monitoring or monument placement required by the FSAR. However, the FSAR (Section 12.3) states:

> "Actual D&D activities will be initiated prior to the cessation of WIPP facility operation and will proceed in a multi-phase approach which consists of three phases:
> (1) characterization of the facility; (2) development of a detailed decommissioning plan; and (3) implementation of the decommissioning plan and final report."

Item No. 11, (continued)

Therefore, while the Waste Retrieval Plan addresses decontamination and decommissioning only briefly, WIPP is committed to developing a detailed D&D Plan by the end of the test phase, if retrieval will be initiated.

EH agrees that this is a reasonable approach and confirms that the commitments of the Waste Retrieval Plan are acceptable when combined with those of the FSAR. It is unlikely that a detailed D&D Plan written this far in advance could accurately reflect plant conditions five years from now. A D&D Plan written towards the end of the test phase will more accurately address the critical issues.

This item is closed.

Item No. 15: Respiratory Mask Requirement for Downstream Workers

EH's Original Concern:

A respiratory mask requirement for workers downstream from the active and open waste storage area is needed.

EH Evaluation of Project Response:

The project has agreed to a respiratory mask requirement (Reference 2, item 15) for workers who are nonroutinely required to be downstream of active and open waste storage areas. Such workers are not expected to perform tasks downwind. Procedures to implement this requirement are being prepared. An FSAR commitment has been made to require respiratory protection. A commitment to post the entrances to such areas was also made.

The project's proposed FSAR changes are acceptable and resolve EH's concerns. (See Section III).

Required Confirmatory Action:

Confirm that implementing procedures are in place and that underground entry points are posted.

EH Evaluation (9/30/90):

The reviewers received a response addressing this item on 9/18/90 (Reference 12).

The reviewers agree that the respiratory protection requirements described in FSAR Sections 7.3 and 7.3.2 are adequate to meet EH's concerns.

The only question which remains is when the warning signs would be posted. The FSAR (page 7.3-5) states that "entries to these areas will be posted in accordance with the WIPP Radiation Protection Manual." The reviewers assume this to mean that the posting is done prior to waste handling operations and not after the fire (CIO) has occurred as is implied in the project response.

Based on this assumption, this item is closed.

EH Evaluation (12/20/90):

The reviewers received a transmittal concerning this item on 12/7/90 (Reference 14). The response states the following:

> "In the event of a fire while moving a ≥ 70 PE-Ci drum, the underground area will be evacuated per WIPP Emergency Procedures. During recovery activities the areas downstream of the fire will be posted appropriately as contamination

Item No. 15, (continued)

areas and as airborne contamination areas per Radiation Safety Manual Section 8. In addition, recovery activities will be covered by radiation work permit (RWP)."

The reviewers are satisfied that respiratory protection is adequate.

This item is closed.

Item No. 19: Testing of Isolation Damper Valves

EH's Original Concern:

WIPP has not specified when and how often the valves used as isolation dampers in the air handling system are tested. Also, a copy of the test standards and procedures should be provided and permissible leakage rates specified.

EH Evaluation of Project Response:

The project provided a copy of the test procedure and the results of the testing conducted on June 14, 1989, and committed to inspect their operability daily. Justification for not specifying leakage rates was provided. Leakage rates are not specified for the dampers and leak rate testing was shown to be unnecessary.

The daily operability inspections are judged adequate by EH, as well as the results of the initial tests of the system. However, damper XD-38 could not be tested because of faulty fan control wiring. This damper should be retested after the repairs to the fan control wiring are complete. Leak rate testing is judged unnecessary since any excessive leaks would be detected during testing of the air handling system.

The response is adequate. No changes to the FSAR are required to resolve EH's concerns.

Required Confirmatory Action:

Review the results of the tests of the isolation damper valves.

EH Evaluation (8/31/90):

A review of the Tornado Damper Test results confirmed that damper XD-38 satisfied test requirements during the June 14, 1990, testing.

This item is closed.

Item No. 20: Monitoring of Room Closure Threshold Values

EH's Original Concern:

The specifications of the threshold values; i.e., ± 0.5 inches from the extrapolated data to be used in the monitoring, are not contained in Section 1.5 of the FSAR as committed at the April 24-28, 1989, FSAR meeting.

EH Evaluation of Project Response:

The project has committed to clarify in the FSAR the basis for the 0.5 inches and to specify in the FSAR the threshold limit. Proposed wording for the FSAR change was provided by the project (Reference 2, Item 20).

The project's proposed FSAR changes are acceptable and resolve EH's concern. (See Section III).

Required Confirmatory Action:

Confirm that the monitoring devices have been installed and are operational. Confirm that procedures have been issued and review them for adequacy.

EH Evaluation (8/31/90):

Underground monitoring devices were inspected by EH during the site visit of August 14-16, 1990. The areas inspected were the SPDV room area, test room areas, and new rooms in Panel 1 area to be used for bin scale tests.

The monitoring instrumentation in the various areas is considered to be acceptable. Most of the displacement measuring devices are digitally downloaded to the data base for use in the monitoring program. In some cases, the devices are manually read. If the rooms are not to be filled with waste drums during the 5-year test phase, as indicated to the reviewers during the site visit, the manual procedure is acceptable. In addition, "drumming" will be used based on the assumption that access to the walls and roof is available.

Monitoring procedures should be submitted for review, and assurance should be provided on room monitoring accessibility.

EH Evaluation (12/20/90):

See EH Evaluation for Item No. 10.

EH Evaluation (1/8/91):

See EH Evaluation for Item No. 10.

This item is closed.

III. Confirmation of Required FSAR Text Changes

Fifteen of the 23 SER items require FSAR text changes. Table 2 specifies text changes proposed by the project that would satisfactorily resolve the EH concerns. Alternate wording in the FSAR is acceptable, provided the intent is the same.

The May 1990 WIPP FSAR was reviewed to ensure that all required FSAR changes have been made in accordance with Tables 1 and 2. All required FSAR text changes as proposed by the project and accepted by EH have been incorporated into the text of the May 1990 FSAR with the following exceptions.

Proposed FSAR text changes for SER Item Nos. 12 and 13 reference an administrative radiological protection limit of 100 PE-Ci (plutonium equivalent-curies). In the text of the May 1990 FSAR, this limit is given as 70 PE-Ci. However, since the deviation leads to more conservative protection of the workers, the text change is acceptable.

The May 1990 FSAR was approved by the Office of Environmental Restoration and Waste Management on June ~~7~~ 12, 1990.

TABLE 2 - REQUIRED FSAR CHANGES

ITEM NO.	DESCRIPTION OF CONCERN/REQUIRED FSAR CHANGE
1a	QA Resources and Authority Add to 11.1.1: The Quality and Regulatory Assurance (QARA) Manager reports directly to the DOE/WPO Project Manager and shall have a sufficient qualified staff to implement the requirements and responsibilities identified herein. The QARA Manager has the authority and organizational freedom to: a. Identify and recommend solutions to quality problems, and b. Verify implementation of solutions.
1b	Organizational Interfaces Add to 9.1.1: Operating responsibility for the WIPP facility has been assigned to the MOC organization as depicted in Figure 9.1-1. Add to 11.1.2.1: DOE/WPO shall ensure that QA interface control measures between the Scientific Advisor (SA) and Management and Operating Contractor (MOC) are documented in their respective QA Programs.
2	Operating Contractor Understanding of Facility No changes are required.
3	Project Manager's Stop Work Authority DOE/WPO Project Manager has been assigned the contractual authority for the DOE contracts with the Major Project Participants (MPPs). As stated in Refs. 1 and 2, this includes the authority to stop work that is being performed by the Management and Operating Contractor and the Scientific Advisor.
4	Overstressed Columns in Waste Handling Building No changes are required.

TABLE 2 - CONTINUED

ITEM NO.	DESCRIPTION OF CONCERN/REQUIRED FSAR CHANGE
5	Design Bases for Electrical System Not Specified Add to 3.0: The WIPP facility is designed to DOE Order 6430.1 entitled, "General Design Criteria Manual for Department of Energy Facilities," draft, dated June 10, 1981, as specified in Reference 15.
6	Diesel Generator Starting Add to 4.4.2.1.2: Although it is standard practice to start the diesel generators from the local control panel (per the Facility Operations Manual, WP 04-1), each unit can be remotely started from the Central Monitoring Room (CMR) via a local processing unit (LPU). This capability is maintained by leaving the generator start switch in the "remote" position. Monitoring of the diesel generators and associated breakers will be possible at the CMR, thus providing the ability to feed selected facility loads from the backup power source, in sequence, without exceeding generator capacity.
7	UPS Loads Replace Table 4.4-9 with: Table 4.4-9 UPS Loads 80 KVA Central UPS 28 KVA UPS Actual Measured Load Individual UPS 7 units - 2 KVA each: Local Processing Units (equipped with their own UPS) 5 units - 2.4 KVA each 2 units - 5 KVA each: Selected Radiation Monitoring Units None: Hydrogen Monitoring Units

TABLE 2 - CONTINUED

ITEM NO.	DESCRIPTION OF CONCERN/REQUIRED FSAR CHANGE
8	**Battery Testing** No changes are required
9	**Remote Diesel Startup** Add to 4.4.2.1.2: Each of the diesel generators can carry all preselected monitoring loads (see Section 4.4.2.1.3 for a discussion of essential loads), plus operation of the Air Intake shaft hoist for personnel evacuation and other selected backup loads in accordance with procedures in the Facility Operations Manual. The diesel generator can be brought on line within 30 minutes. Upon loss of normal power, the generator(s) is started manually by the Facility Operator using the electric starter/batteries. The starter system is a 24 volt battery system with a 300 amp-hour capacity. The diesel automatically attempts four starts of 30 seconds each. Additional manual start capability exists after those automatic start attempts. Although it is standard practice to start the diesel generators from the local control panel (per the Facility Operations Manual, WP 04-1), each unit can be remotely started from the Central Monitoring Room (CMR) via a local processing unit (LPU). This capability is maintained by leaving the generator start switch in the "remote" position. Operations of emergency power supplies and the selection of loads is covered in the Facility Operations Manual, WP 04-1. Add to 4.4.2.1.3: In case of loss of AC power input to the UPS's, the dedicated batteries can supply power to a fully loaded UPS for 30 minutes. It is expected that the AC power input to the UPS will be restored within 30 minutes via operator action. Operations of the diesel generator is covered by the Facility Operations Manual, WP 04-1.

TABLE 2 - CONTINUED

ITEM NO.	DESCRIPTION OF CONCERN/REQUIRED FSAR CHANGE
10	Room Monitoring for Structural Stability Add to 1.5.3.2: In addition, during the Pilot Plant phase, storage rooms will be monitored using both instrumentation and visual inspection in order to assure that wastes in these rooms will be readily retrievable.
11	Retrieval and D&D Plan Add to 7.1: These measures, in addition to monitoring using both instruments and visual inspections, should ensure that roof falls will not complicate retrieval. During the pilot plant phase, some rooms may not be readily accessible or available for monitoring. These sealed rooms will be reduced in width and be pattern bolted for greater safety.
12	Additional Radiological Analyses Needed Add to 7.3: In the event that packages are being handled which have the potential to result in accident doses much greater than 50 rem committed effective dose equivalent, any potentially exposed workers will wear full-face respirators as an added precaution. This limit will be based on the activity content of containers and will be specified in the Radiation Safety Manual. It is estimated that this limit will be 100 PE-Ci although it may vary depending on waste form, waste source, and waste packaging.

TABLE 2 - CONTINUED

ITEM NO.	DESCRIPTION OF CONCERN/REQUIRED FSAR CHANGE

12 (cont'd) Replace Table 7.3-2 with:

Table 7.3-2

DOSE COMMITMENTS TO EXPOSED WORKER

Accident *+	Committed Effective Dose Equivalent (CEDE) (REM)
C2**	0.7
C3**	1.3
C4	5.2
C6	9.2

* For the accidents not listed, the accident is considered to be either not credible, no release is expected, or no worker is present. See the text for details.

\+ Calculated CEDEs based on average contained loading if 12.9 PE-Ci.

** Calculated to worker located at 20 feet.

13 Recalculation of Worker Doses

Add to 7.3.1: Scenario C2: The total activity calculated to be inhaled by the worker is 1.4×10^{-9} PE-Ci with a calculated committed effective dose equivalent (CEDE) of 0.7 rem. Because workers are trained to leave the work area in the event of an accident which could damage a waste container, this quantity of inhaled activity is considered to be very conservative. If injury or other circumstances force a worker to remain in the area of the accident following the release, a potential CEDE of 8.0 rem can be calculated to workers within 6 feet of the accident.

Postulating higher activities in the containers, such as the administrative radiological protection limit of 100 PE-Ci and the maximum allowable limit of 1000 PE-Ci, then calculated CEDEs to the worker within 6 feet of the accident are estimated to be 62 rem for the 100 PE-Ci container and just over 12 rem for the 1000 PE-Ci container. The CEDE calculated for the 1000 PE-Ci is

TABLE 2 - CONTINUED

ITEM NO.	DESCRIPTION OF CONCERN/REQUIRED FSAR CHANGE
13 cont'd	lower than that for the 100 PE-Ci container since respirators with a minimum protection factor of 50 are assumed to be in use when handling packages in excess of 100 PE-Ci. Add to 7.3.1: Scenario C3: Based on the exposure model described in C2, a worker in an adjacent area could inhale 2.5×10^{-9} PE-Ci with a resulting CEDE of 1.3 rem. Again, the worker's dose commitment is expected to be much smaller than that reported in Table 7.3-2 because workers are trained to evacuate the work area immediately as a result of any accident which could damage a waste container. As for C2, if a worker were to remain in the area of the accident following the release, a potential CEDE of 14 rem can be calculated. Furthermore, if the maximally affected container described in the above scenario (i.e., the container losing the lid), contains either 100 PE-Ci or 1000 PE-Ci, the calculated CEDEs to a worker at 6 feet would be 68 rem and 13 rem, respectively.
14	Reevaluation of Drum Fires Accident Add to 7.3.2: Scenario C7: The only spontaneous ignition in a waste drum occurred at the Idaho National Engineering Laboratory (INEL) in June 1970[6]. Using the estimated annual throughput rate of 19,000 drums and 1400 boxes, and an estimated average residence time for each container in the WHB of 4 hours based on the current operational timeline, then an overall residence time in the WHB of approximately 9 years may be calculated. From this residence time and the estimated frequency of occurrence, it can be calculated that WIPP could expect 5×10^{-6} drum fires per year in the WHB due to spontaneous ignition. The WIPP Waste Acceptance Criteria (WAC) have since been formulated to preclude this type of event by severely restricting the presence of pyrophoric materials which may be sent to WIPP. Due to the mitigating criteria of the WIPP WAC discussed above, it is felt that the accident scenario resulting from spontaneous ignition in a drum during its relatively short residence time in the WHB is unrealistic and, as such, the accident analysis is not presented in the FSAR.

TABLE 2 - CONTINUED

ITEM NO.	DESCRIPTION OF CONCERN/REQUIRED FSAR CHANGE
	As a further means of mitigating the potential of the consequences of such an accident, an automatic sprinkler system has been added to the shielded storage room.
15	Respiratory Mask Requirements for Downstream Workers Add to 7.3.2: Waste is emplaced and stored downstream of workers and, therefore, no dose consequences to a waste handler is postulated for this event. Any workers that are required to be in waste storage area exhaust air streams will be in anticontamination clothing, wear full-face respirators, and will follow all applicable procedures in the WIPP Radiation Safety Manual. In addition, the entries to these areas will be posted in accordance with the WIPP Radiation Protection Manual.
16	Evaluate Underground Roof Falls No changes are required
17	Catastrophic Hoist Accident Probability No changes are required
18	Drum Fire Propagation Accident Probability No changes are required
19	Testing of Isolation Damper Valves No changes are required
20	Monitoring of Room Closure Threshold Values Add to 1.5.3.3: The threshold limit is established from statistical analyses of room closure data and is +0.5 inches above predicted levels. This analysis is updated on a regular basis and is reported in geotechnical data reports.

TABLE 2 - CONTINUED

ITEM NO.	DESCRIPTION OF CONCERN/REQUIRED FSAR CHANGE
20 cont'd	Once the threshold is crossed at an instrumented location, a study is initiated to determine the cause. If the cause cannot be related to operational considerations, such as mining activity, then additional field monitoring will be undertaken to characterize the ground response. Should the field data indicate that ground conditions are deteriorating, then corrective action will be taken as required.
21	Only Single Failures in Electrical System Were Analyzed Add to 4.4.1: A Failure Mode and Effects Analysis (FMEA) has been provided for the surface and underground electrical system to show the adequacy of the design and its effects on the operation and the safety of the public and operating personnel. The analysis assumes only single failures within components or systems as shown on the legend and presents the consequences of those failures. The results of this analysis are given in Table 4.4-6 for the surface electrical system and Table 4.4-7 for the underground electrical system.
22	Inconsistent Flow Charts for Quality Level Assignments No changes are required
23	No Ground Movement Considered in Shaft Lining Design Add to 4.3.1.1.1: The hoist systems are designated as Design Class III and are designed in accordance with the Uniform Building Code.[2] All the shaft furnishings are Design Class III and are designed to resist the dynamic forces of the hoisting system. Design studies were performed that indicated that ground movement was not significant for the design of the shaft linings, therefore, they are designed based on expected hydrostatic heads in the Rustler Formation.

IV. SUMMARY

Table 3 is a listing of the final status of the 23 open items identified in the SER. As of January 1991, all project commitments made in response to EH concerns have been met and all SER open items have been resolved. The FSAR text changes and required followup actions listed in Table 1 have been completed. Therefore, the review of the WIPP FSAR is complete.

TABLE 3

FINAL STATUS OF SER ITEMS

SER Item No.	Description	Follow Up Action Confirm that:	FSAR Change Required?	Status
1a	QA Responses and Authority	Positions in the new Quality and Regulatory Assurance Office have been filled by qualified personnel.	Yes	Resolved
1b	Organizational Interfaces	New interface controls are fully implemented and effective.	Yes	Resolved
2	Operating Contractor Understanding of Facility	As-builts of critical systems are complete, training is complete, configuration control procedures have been implemented.	No	Resolved
3	Project Managers Stop Work Authority	None	Yes	Resolved
4	Overstressed Columns in Waste Handling Building	None	No	Resolved
5	Design Bases for Electrical System Not Specified	WIPP electrical system evaluated against DOE Order 6430.1A	Yes	Resolved
6	Diesel Generator Starting	None	Yes	Resolved
7	UPS Loads	None	Yes	Resolved
8	Battery Testing	Comprehensive testing is complete.	No	Resolved

TABLE 3 (continued)

FINAL STATUS OF SER ITEMS

SER Item No.	Description	Follow Up Action Confirm that:	FSAR Change Required?	Status
9	Remote Diesel Startup	Testing of remote capability is complete.	Yes	Resolved
10	Room Monitoring for Structural Stability	Monitoring Program is adequate. Procedures for monitoring are adequate.	Yes	Resolved
11	Retrieval and D&D Plan	Final plans are issued and adequate.	No	Resolved
12	Additional Radiological Analyses Needed	None	Yes	Resolved
13	Recalculation of Worker Doses	None	Yes	Resolved
14	Reevaluation of Drum Fires Accident	None	Yes	Resolved
15	Respiratory Mask Requirements for Downstream Workers	Implementing procedures are in place and underground entry points are posted.	Yes	Resolved
16	Evaluate Underground Roof falls	None	No	Resolved
17	Catastrophic Hoist Accident Probability	An accurate assessment of the cause of failure of the waste hoist bearing has been made and appropriate action has been taken.*	No	Resolved
18	Drum Fire Propagation Accident Probability	None	No	Resolved

TABLE 3 (continued)

FINAL STATUS OF SER ITEMS

SER Item No.	Description	Follow Up Action Confirm that:	FSAR Change Required?	Status
19	Testing of Isolation Damper Valves	The results of the tests of the isolation damper valves are acceptable.	No	Resolved
20	Monitoring of Room Closure Threshold Values	Monitoring devices are installed and operational. Procedures are adequate.	Yes	Resolved
21	Only Single Failures in Electrical System Were Analyzed	None	Yes	Resolved
22	Inconsistent Flow Charts for Quality Level Assignments	None	No	Resolved
23	No ground movement Considered in Shaft Lining Design	None	Yes	Resolved

* Note: The January 1990, SSER (Reference 7) identifies required confirmatory action for SER Item No. 17. This action is reviewed as Readiness Review Inspection Finding No. 76 (Reference 10).

V. REFERENCES

1. U.S. Department of Energy, Office of Safety, Health and Quality Assurance, "Waste Isolation Pilot Plant - Safety Evaluation Report," July 27, 1989.

2. Memorandum, Jack B. Tillman (DOE-AL, WPO) to Mark Frei (DP-12), "Responses to DOE/HQ-EH Safety Evaluation Report" (Responses to Items 1, 10, 15, 16, and 19-51), September 21, 1989.

3. Memorandum, Jack B. Tillman (DOE-AL, WPO) to Mark Frei (DP-12), "Responses to DOE/HQ-EH Safety Evaluation Report" (Responses to Items 11, 12, 13, 14, 17, and 18), October 3, 1989.

4. Letter from H.G. Taylor (Bechtel) to R. J. Figlik, Manager, Management Support Staff (DOE-AL, WPO), "Bechtel Job No. 12484, WIPP Project, BNL WHB-CH-Area Design Review," August 10, 1989.

5. Memorandum, Mark Frei (DOE, DP-12) to James P. Knight (DOE, EH-33), "Final Response to DOE-HQ EH Safety Evaluation Report," October 11, 1989.

6. Memorandum, Mark Frei (DOE, EM-34) to James P. Knight (DOE, EH-33), "Revised Responses to WIPP SER Items 1, 2, 10, 16, and 17," December 1, 1989.

7. U.S. Department of Energy, Office of Safety, Health and Quality Assurance, "Supplement 1 to Safety Evaluation Report for Waste Isolation Pilot Plant," January 16, 1990.

8. U.S. Department of Energy, Office of Safety, Health and Quality Assurance, "EH-30 Readiness Review Inspection of the Waste Isolation Pilot Plant," June 2, 1989.

9. U.S. Department of Energy, Office of Safety, Health and Quality Assurance, "Supplement 1 to the EH Readiness Review Inspection of the Waste Isolation Pilot Plant," January 22, 1990.

10. U.S. Department of Energy, Office of Safety, Health and Quality Assurance, "Supplement 2 to EH Readiness Review Inspection of the Waste Isolation Pilot Plant," February 1991.

11. DOE/WIPP 89-022, "Waste Retrieval Plan," May 1990.

References, continued

12. Memorandum, Mark W. Frei (DOE, EM-34) to R. Serbu (DOE, EH-332), "Transmittal of Waste Isolation Pilot Plant Responses to EH-30 Readiness Review Inspection Findings and Safety Evaluation Report Items," (Responses to RRI Finding Nos. 66, 73, 74, 76, and 77 and SER Item Nos. 5 and 15), September 13, 1990.

13. Memorandum, E.K. Hunter (WIPP) to Mark Frei (DOE, EM-34), "Transmittal of Additional Information Required to Close EH-30 Critical Audit Findings C-1.02.1 (#18), C-1.02.2 (#19), C-2.10.1 (#37), C-6.03 (#50) and C-6.08 (#55)," October 29, 1990.

14. Letter, L.L. Reed (Westinghouse/WIPP) to J.A. Mewhinney (DOE/WPO), "Additional Information Required in Brookhaven National Laboratory Safety Evaluation Report for the closure of the Readiness Review Inspection Critical Open Items and the Open WIPP FSAR concerns, " (Responses to SER Item Nos. 1b, 2, 10, 15, and 20 and RRI Finding Nos. 6, 9, 18, 19, 37, 50, 55, 59, 75, 76, and 77), December 5, 1990.

15. Letter, L.L. Reed (Westinghouse/WIPP) to J.A. Mewhinney (DOE/WPO), "Additional Information Requested by Brookhaven National Laboratory Draft Safety Evaluation Report and the December 10, 1990 conference call for the closure of the Readiness Review Inspection Critical Open Items and the Open WIPP FSAR Concerns," (Responses to RRI Finding Nos. 6, 9, 19, 37, 50, 55, 59, 75, 76, and 77 and SER Item Nos. 1b, 10, 15, and 20), December 17, 1990.

16. Letter, L.L. Reed (Westinghouse/WIPP) to J.A. Mewhinney (DOE/WPO), "Revised Response Requested by Brookhaven National Laboratory in the January 3, 1991, Conference Call," (Response to SER Item Nos. 10 and 20), January 11, 1991.

17. WP 02-9, "Waste Isolation Pilot Plant Final Safety Analysis Report Addendum Dry Bin Scale Test," draft, Westinghouse Electric Corporation, December 1990.

WIPP FSAR - BNL REVIEWERS

Reviewer	Degree	Professional Affiliation
Paul Bezler	Ph.D (Mech. Eng.)	PE; NY
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Mike Philippacopoulos	Ph.D (Civil Eng.)	
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Morris Reich	Ph.D (Mech. Eng.)	
Nikolaos Simos	Ph.D (Mech. Eng.)	
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ENCLOSURE 5

New Mexico Reading Room Mail List

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Ms. Joan Ogbazghi
DOE/Forrestal Bldg.
Public Library Reading Room
AD - 234.1
FOI - USDOE
1000 Independence Ave. SW
Washington D. C. 20585

Mrs. Mary Elms
Carlsbad Public Library
101 S. Halagueno Street
Carlsbad, NM 88220

SNL Technical Library
Attn: Reports Reference Desk, 3144
P.O. Box 5800
Albuquerque, NM 87185

Martin Speare Memorial Library
New Mexico Tech
Campus Station
Socorro, NM 87801

Ms. Kathleen Keating
Zimmerman Library
Government Publication Dept.
University of New Mexico
Albuquerque, NM 87138

Pannell Library
New Mexico Junior College
5317 Lovington Highway
Hobbs, NM 88240
Attn: Ruth Hill or Gale Robinson

Document Control
Office of Scientific and Tech. Information
Technical Information Center
P.O. Box 62
Oak Ridge, TN 37830

Ms. Lisa Mitchell
SNL Waste Mgmt. & Transpt. Library
Organization 6332
P. O. Box 5800
Albuquerque, NM 87185

Mr. John T. Conway, Chairman
Defense Nuclear Facilities
Safety Board
600 E Street NW, Suite 675
Washington, DC 20004

Ms. Norma McCallum
New Mexico State Library
325 Don Gaspar
Santa Fe, NM 87503

Reference Librarian
Thomas Brannigan Memorial Library
200 E. Picacho
Las Cruces, NM 88005

Raton Public Library
244 Cook Avenue
Raton, NM 87740
Attn: Richard Azar

Department of Energy
Albuquerque Operations Office
Waste Isolation Pilot Plant Project Office
P. O. Box 3090
Carlsbad, New Mexico 88221

DI9200069

OCT 29 1992

X C & C	X Weddle
X PRC	• Conway
• Anderson	X Kehrman
X Carrell	X Howard
X Cox	•
X Kuntz	•
• Lee	•
• Mugno	
X Reed	
X Trego	

Mr. Benito J. Garcia
New Mexico Environment Department
Hazardous and Radioactive Waste Bureau
525 Camino de los Marquez
P. O. Box 26110
Santa Fe, New Mexico 87502

Dear Mr. Garcia:

The purpose of this letter is to transmit responses to the request for information regarding Chapters D and I, and the request for additional information regarding Chapter B of the Waste Isolation Pilot Plant (WIPP) Resource Conservation and Recovery Act (RCRA) Permit B application (Enclosure 1). These comments were provided to the Department of Energy (DOE) and Westinghouse by the New Mexico Environment Department (NMED) in your letters dated September 29, 1992 and October 20, 1992, respectively.

Also enclosed are revisions to Chapter D and I of the permit application (Enclosure 2). A revised Chapter B and Part A of the application will be provided on November 13, 1992. The enclosed revisions reflect the guidance given by the NMED and focuses the permit application on the Test Phase activities. The revisions include bin-scale testing with Type 1 bins. The permit application currently is for a waste quantity equal to 0.5 percent of the capacity of the WIPP facility, or 4,250 drum equivalents. Only new appendices for Chapters D and I are included. Old appendices remain valid and will be reproduced for the final submittal in January, 1993. We are also enclosing a new drawing #41-D-009-014 to be incorporated in Appendix D3.

One major change in the application is the specification of portions of the Waste Handling Building (WHB) as a permitted container storage unit. While this change necessitates significant revisions to the permit application, our practice has always been to manage wastes in the WHB in accordance with the container management requirements of RCRA.

RECEIVED
NOV - 4 1992
C&C / CLB

If you have any questions regarding the materials attached to this letter, please contact Dr. J. A. Mewhinney of my staff at 887-8143.

Sincerely,

Arlen Hunt

Arlen E. Hunt, Manager
WIPP Project Site Office

Enclosures

cc w/o enclosures:
A. Trego, WID
K. Griffith, DOE/AL

cc w/enclosures:
D. Mercer, DOE/WPIO

shipment. The DOE will, prior to implementation of the final closure plan, submit the appropriate permit modifications for retrieval activities that are not included in the Test Phase permit.

12. None of the WIPP engineering drawings or reports provided in the application (Appendices D1 through D13) are stamped with professional engineer's seals, although they are required to be certified by a professional engineer (PE) in 270.14(a). Provide a detailed explanation of the DOE/Westinghouse drawing and report review, approval and quality assurance process, and statement(s) proposed in lieu of typical PE certifications for these drawings and reports.

RESPONSE: **The topic of Professional Engineer (PE) certification of WIPP facility drawings can be discussed in these parts: 1) The use of signature and certification by New Mexico registered PE which evidently is not needed, 2) The use of a disclosure or "in lieu of" statement on the drawings and, 3) Proof that the facility was designed and built in a professional manner and that the design and construction are protective of public and the environment.**

1) The Use of PE Signatures and Certification

State statutes regulate the practice of certified professional engineers in 61-23 NMSA-1978. An exemption is applied in 61-23-22B to federal facilities and in 61-23-22C to employees who perform work only for their employer in the operation of the employer's business. Based on these exemptions, the WIPP engineering drawings do not have to be certified.

2) The Use of an "in lieu of" statement

DOE proposes to label design drawings and appropriate design reports with a statement that attests to the accuracy of the information and that the preparer is exempt from certification. Note that this statement will appear on design documents only and not on final or as built drawings. As built drawings are not design documents and therefore, are not covered by the requirements of 270.14(a).

3) DOE Facility Design and Independent Verification Process

3A. DOE Facility Acquisition Process

The WIPP facility was acquired in accordance with DOE standard procedures as defined in DOE Order 4700.1. This order implements federal acquisition policies. Bechtel National Incorporated was the Architect-Engineer (AE) for the WIPP facility. The U. S. Army Corps of Engineers was the constructor. For projects such as the WIPP facility, the AE holds the Professional Engineer's responsibility. The AE Project

Manager's signature on the drawings, documents, and the Design Validation Report (included in the Part B Permit Application) was sufficient certification to satisfy the DOE's acquisition requirements. The AE Project Manager is a registered Professional Engineer.

The DOE as owner is also required to perform independent review and verification of the adequacy of the design as part of the facility safety analysis and review process. For the WIPP facility this independent review was performed by the Brookhaven National Laboratories under contract to the DOE. Full documentation is available in the WIPP Project files. Attachment B contains signature pages to the Safety Evaluation Reports and Supplements indicating closure of all issues for the base facility and the Brookhaven review personnel names and credentials.

In addition, the design and operation of the WIPP facility has been reviewed by many unbiased, independent groups (See General Comment 10). Each of these review groups was composed of numerous scientific and engineering professionals. While these reviews and resulting approvals did not include certifications by registered Professional Engineers, they were completely documented and constitute the functional equivalent and accomplish the same goal of protection of the public health and the environment, as required by 40 CFR § 270.23(a).

The final step in the DOE's acquisition process involves a decision to proceed with the project. This decision is made after all necessary facility design and safety reviews by the DOE Office of Environmental Restoration and Waste Management (EM) Operational Readiness Reviews are complete, and is based on a determination by the Energy Systems Acquisition Advisory Board (ESAAB) that the facility meets the intent of the design, can be operated safely in a manner that protects the public and the environment, and is in compliance with the applicable laws and standards. This decision was addressed on March 29, 1991 when the ESAAB authorized the Director of EM to close out construction and make final preparation for operations at the WIPP facility. Subsequently, the Director of EM distributed the "Report to the Secretary of Energy on WIPP Readiness to begin Test Phase activities with Transuranic Waste" on October 3, 1991.

3B. Control of Facility Configuration

Control of facility configuration is described in Attachment C which is attached.

ATTACHMENT B

United States Government Department of Ene

memorandum

DATE: AUG 2 1989

REPLY TO ATTN OF: EH-332

SUBJECT: EH-30 Safety Evaluation Report (SER) for the Waste Isolation Pilot Plant (WIPP)

TO: Jack B. Tillman, Project Manager, DOE/WPO

The Office of the Deputy Assistant Secretary for Safety, Health and Quality Assurance (EH-30) has completed its review of the WIPP Final Safety Analysis Report and has documented the results of its review in the attached SER. As a result of the review, a number of open items remain outstanding and will require follow-up.

After you have reviewed the SER, we request that you schedule a meeting to discuss your proposed approach to resolve all open items and recommendations. This SER is based on material received through June 15, 1989. Material supplied after that date will likely be effective in resolving some of the open items reported in this SER and will be reviewed by EH-30 if received sufficiently prior to the meeting.

James P. Knight, Director
Office of Safety Appraisals

Attachment

cc w/attachment:
Richard W. Starostecki, EH-30
Lewis G. Hulman, EH-32
Robert W. Barber, EH-34
Joseph E. Fitzgerald, EH-35
Oliver D. T. Lynch, Jr., EH-331
Harry J. Pettengill, EH-332
Carol Borgstrom, EH-25
Norman Davison, EH-342
Critz George, DP-123
John J. Schinkle, AL/SPD
Tom Lukow, DOE/WPO
Tom Hindman, DP-12
Nolan Bailey, AL/SPD
Art Follett, DP-122
Jill Lytle, DP-10
Dennis Krenz, AL
Jack Tillman, DOE/WPO
Wallace Kornack, ACNFS
Morris Reich, BNL

WASTE ISOLATION PILOT PLANT

SAFETY EVALUATION REPORT

PREPARED UNDER
THE DIRECTION OF _____
Shirley J. Olinger
Team Leader

REVIEWED BY _____
Harry J. Pettengill, Director
Nuclear Safety Technology Division

REVIEWED BY _____
James P. Knight, Director
Office of Safety Appraisals

APPROVED BY _____ 7/27/89
Richard W. Starostecki — Date
Deputy Assistant Secretary
Safety, Health and Quality Assurance

July 1989

United States Government

memorandum

Department of Ener

JAN 26 1990

DATE: JAN 16 1990

REPLY TO ATTN OF: EH-332

SUBJECT: Supplement to Safety Evaluation Report for Waste Isolation Pilot Plant (WIPP)

TO: Jill Lytle, EM-30

The Office of the Deputy Assistant Secretary for Safety, Health and Quality Assurance (EH-30) has completed its review of the WIPP Project Office's responses to the 23 open items reported in our WIPP Safety Evaluation Report (SER) of July 27, 1989. As a result of the Project's commitments to change the WIPP Final Safety Analysis Report (FSAR), all 23 items are closed, subject to final documentation in the FSAR document.

As you know, the Project needs to issue the Experimental Plan for the Test Phase, the Retrieval Plan, and the Decontamination and Decommissioning Plan for WIPP. We consider each of these documents, and the corresponding amendments to the SAR to be important to safety. In our opinion, the review process for these documents and the corresponding SAR amendments should follow a process similar to that utilized by EH for the SAR review.

We also plan to complete a supplement to the Readiness Review Inspection (RRI) report in the near future. With completion of the FSAR review and RRI report by EH, it appears appropriate to begin the coordination necessary for transition to EM nuclear safety oversight of WIPP, in accord with SEN-6 directives. You should be aware that many of the EH staff active in WIPP review efforts to date have moved to other DOE elements as part of the overall realignment of nuclear safety responsibilities; others are likely to move in the not too distant future. Please let me know when you are ready to discuss these matters.

Attached is a copy of Supplement 1 to the SER.

Joseph E. Fitzgerald, Jr.
Acting Deputy Assistant Secretary
Safety, Health and Quality Assurance

Attachment

cc w/attachment: See List

SUPPLEMENT 1 TO SAFETY EVALUATION REPORT

FOR

WASTE ISOLATION PILOT PLANT

Prepared Under the Direction of — Edward F. Bonagura Jr. for Carl Newton, EH-332

Reviewed By — Edward F. Bonagura Jr. for Harry J. Pettengill, EH-332

Reviewed By — James P. Knight, EH-33

Approved By — Joseph E. Fitzgerald, Jr., EH-30 — Date

United States Government

Department of Energ

memorandum

DATE: MAR 08 1991

REPLY TO ATTN OF: EH-332

SUBJECT: Completion of the Office of Environment, Safety and Health (EH) Supplemental Safety Evaluation Report (SER) for the Waste Isolation Pilot Plant (WIPP) Final Safety Analysis Report (FSAR)

TO: Jill E. Lytle, EM-30

Attached is Supplement 2 to the EH Safety Evaluation Report for the WIPP FSAR (Revision 0, May 1990). Supplement 2 documents the resolution of the remaining outstanding items from the original FSAR review dated July 27, 1989, and Supplement 1 dated January 16, 1990. All issues have been closed and the EH review effort in this area has been completed.

EH safety evaluations of the WIPP Readiness Review Inspection and the FSAR Addendum will be provided separately.

This review was conducted by the Office of Safety Appraisals within the Office of Safety and Quality Assurance. Any questions concerning this report should be referred to Thomas McSpadden, Safety Technology Division, on extension (3-5656).

Joseph E. Fitzgerald, Jr.
Deputy Assistant Secretary
Safety and Quality Assurance

Attachment

cc w/attachment:
Paul L. Ziemer, EH-1
Peter N. Brush, EH-2
Mark Frei, EM-34
Robert W. Barber, EH-36
Oliver D. T. Lynch, Jr., EH-331
Harry J. Pettengill, EH-40
John J. Schinkle, AL/SPD
Arlen Hunt, WPO
Nolan Bailey, AL/SPD
Dennis Krenz, AL
Morris Reich, BNL
Wallace Kornack, ACNFS
Ian Gannon, SAIC
Robert Neill, EEG
Kirkland Jones, EID

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MAR 18 1991

SUPPLEMENT 2 TO SAFETY EVALUATION REPORT

FOR THE

WASTE ISOLATION PILOT PLANT

Dated: MAR 4 1991

Prepared Under the Direction of _____ 2/25/91
Thomas McSpadden — Date
Safety Technology Division

Reviewed by _____ 2/28/91
Darrell Huff — Date
Safety Technology Division

Reviewed by _____ 2/27/91
Richard J. Serbu — Date
Acting Director
Safety Inspection Division

Approved by _____ 3/4/91
Oliver D. T. Lynch, Jr. — Date
Acting Director
Office of Safety Appraisals

Environmental Restoration
and
Waste Management

Operational Readiness Review
of the
Waste Isolation Pilot Plant

MAIN REPORT

Summer 1991

OFFICE OF ENVIRONMENTAL RESTORATION AND WASTE MANAGEMENT

OPERATIONAL READINESS REVIEW

of the

WASTE ISOLATION PILOT PLANT

Prepared by: Thomas C. Elsasser, Team Leader

Owen O. Thompson, Deputy Team Leader

Approved by: Edwin E. Kintner, Senior Advisor

Edward A. Mason, Senior Advisor

Thomas H. Pigford, Senior Advisor

August 9, 1991

Environmental Restoration
and
Waste Management

Operational Readiness Review
of the
Waste Isolation Pilot Plant

ADDENDUM

Revision 1

Summer 1991

OFFICE OF ENVIRONMENTAL RESTORATION AND WASTE MANAGEMENT

ADDENDUM TO THE

OPERATIONAL READINESS REVIEW

of the

WASTE ISOLATION PILOT PLANT

Prepared by:

Thomas C. Elsasser, Team Leader

Owen O. Thompson, Deputy Team Leader

Approved by:

Edwin E. Kintner, Senior Advisor

Edward A. Mason, Senior Advisor

Thomas H. Pigford, Senior Advisor

Revision 1
September 25, 1991

WIPP FSAR - BNL REVIEWERS

Reviewer	Degree	Professional Affiliation
Paul Bezler	Ph.D (Mech. Eng.)	PE; NY
Gerard Breidenbach	M.S. (Mech. Eng.)	
Carl Costantino	Ph.D. (Civil Eng.)	PE; NY
Walter Grossman	M.S. (Civil Eng.)	PE; NY, NJ, DE
William Gunther	M.S. (Electr. Eng.)	PE; NY
Andrew Hull	M.S. (Physics)	Certification-American Board of Health Physics
Donald Lamvermeyer	B.S. (Met. Eng.)	PE; California
Charles Meinhold	B.S. (Physics)	Certification-American Board of Health Physics
Charles Miller	Ph.D (Civil Eng.)	PE; NY
Young Park	Ph.D (Civil Eng.)	
Mike Philippacopoulos	Ph.D (Civil Eng.)	
Susan Pepper	M.S. (Civil Eng.)	
Morris Reich	Ph.D (Mech. Eng.)	
Nikolaos Simos	Ph.D (Mech. Eng.)	
Malcolm Wane	E.M. (Mining Eng.)	PE; Ontario
P.C. Wang	Ph.D (Eng.)	PE; NY, NJ

ATTACHMENT C

Description of Configuration Management System at WIPP

1.0 BACKGROUND

The Waste Isolation Pilot Plant (WIPP) is a government owned contractor operated (GOCO) facility. The Westinghouse Waste Isolation Division (WID) has been contracted by the Department of Energy (DOE) under contract no. DE-AC04-86-AL31950 to manage and operate the facility. The WID has contractual responsibility for the Configuration Management (CM) Program that includes configuration control of all systems, facilities, equipment, and components, including packaging configuration, but excluding the Sandia National Laboratories (SNL) nonradioactive experimental testing.

The SNL has been contracted by the DOE to function as the scientific advisor for the WIPP project. In this capacity the SNL interacts daily with the WID with regard to the implementation of scientific activities at the WIPP facility.

The WID procedure WP 09-024, Configuration Control Board and Engineering Change Proposals, establishes the design interface between the SNL and the WID by identifying the impacts of the WID changes to the SNL and impacts of the SNL changes to the WID.

Bechtel International was the Architect/Engineering (A/E) firm for the WIPP project with responsibility for all structures and systems design. The facilities were constructed by several subcontractors under the direction of the United States Army Corps of Engineers. As facilities were completed, they were turned over to the DOE and subsequently released to the WID for operation. Major construction projects identified and funded subsequent to the base facility construction are contracted by the WID to an independent A/E for detailed design.

The following sections describe the WIPP Configuration Management which has been established by the DOE to assure control over modifications to the facility. Definitions that are used in this description are included in Attachment I, and references are in Attachment II.

2.0 GOALS

Configuration Management goals are as follows:

- Maintain an adequate approved design baseline, including the facility

  Design criteria

Design bases
System Design Descriptions (SDDs)
Other design baseline documents.

- Maintain and document the physical configuration of the base facility, including

  As-built drawings
  Operations and Maintenance (O&M) manuals
  Operations procedure
  Other base facility descriptive material.

- Maintain the safety of the workers and public

- Maintain conformance between all elements of the configuration process

- Ensure existing facility changes do not adversely impact future operations

- Assist in achieving, at the lowest cost, the required system performance and operational efficiency

- Attain maximum efficiency in change management by evaluating all aspects of

  Necessity
  Benefit
  Cost
  Timing

Many features have been incorporated into the plant design to provide for adequate protection for workers, the public, and protection of the environment. Changes to the baseline design are controlled by the configuration control program to ensure that these features continue to function throughout the plant operating life.

3.0 WID ORGANIZATION

Specific responsibilities of Configuration Management are delineated in this section by departmental organization. In addition all individuals report design or facility deficiencies or potential problems to supervisors or use the Employee Concerns Program to identify issues.

3.1 General Manager

- Provides overall support and direction for the Configuration Management program

- Ensures adequate staffing and budget to meet configuration control program requirements

- Requests Quality Assurance (QA) audits when necessary and monitors overall program QA

3.2 Manager, Operations

- Serves as chairman of the Configuration Control Board (CCB)

- Ensures compliance with applicable WID procedures

- Provides management overview

3.3 Project Management and Regulatory Assurance

- Maintains Project Record Services (PRS)

- Conducts audits and surveillances, as required

- Participates in receipt inspections, as required

- Ensures compliance with approved procedures and plans

- Tracks and monitors QA identified deficiencies and corrective actions

- Identifies quality control/assurance issues and requirements

- Reviews and approves documents and/or revisions, as required, to ensure compliance with QA requirements

- Provides long-range budget planning for capital equipment, General Plant Projects (GPP) and major construction projects (MCP)

- Provides detailed scheduling and Cost Account Planning and Reporting

- Maintains lead responsibility for WIPP Transport Packaging (WTP) Configuration Control

3.4 Environment, Safety and Health

- Evaluates changes and new designs for compliance with the Life Safety Code

- Ensures any changes to the FSAR are identified and incorporated per WP 02-11, Waste Isolation Pilot Plant (WIPP) Safety Analysis Manual

- Identifies any environmental concerns and evaluates changes for compliance with environmental requirements
- Ensures the proposed actions have been addressed through the National Environmental Policy Act (NEPA)

- Ensures required permits and licenses are obtained

- Initiates required emergency preparedness actions

- Verifies appropriate fire protection and detection requirements are applied

- Verifies appropriate Mine Safety and Health Administration (MSHA) and Occupatiolnal Safety and Health Administration (OSHA) requirements are met

- Ensures adequate consideration of radiological or as low as reasonably achievable (ALARA) concerns

- Ensures appropriate safety work permits and radiation work permits are included in work packages

- Addresses adequacy of overall safety and environmental concerns in designs

- Reviews and approves documents as required

3.5 Operations

- Maintains Operational Configuration Control

- Evaluates overall maintainability and maintenance requirements

- Assists in the identification and procurement of spares

- Operates the Work Control Center (WCC)

- Reviews work packages prior to release for field work for completeness and adequacy

- Implements tag-out and jumper/lifted lead controls

- Identifies operations, calibration, and preventive maintenance procedures that require revision

3.6 Engineering

- Provides cognizant engineers for systems
- Provides adequate designs
- Identifies testing and verification requirements
- Maintains design documentation
- Applies codes, regulations, and DOE orders appropriate to the design (e.g., DOE order 6430.1A)
- Provides drafting and design support
- Manages all construction
- Maintains site component indices
- Issues/controls equipment numbers, valve numbers, etc.
- Maintains lead responsibility for the configuration control process
- Provides primary SNL interface
- Maintains Site Development Plan and space planning

3.7 Controller

- Provides procurement and administration
- Administers financial planning
- Administers funds accountability

3.8 Human Resources

- Reviews and approves all security related changes
- Provides training procedures and modifications as required
- Helps locate and identify qualified personnel

- Recommends disciplinary action for violations of administrative requirements

- Provides plant security personnel

4.0 CONFORMANCE TO CONFIGURATION MANAGEMENT

Essential configuration control elements that support conformance to approved design requirements are as follows:

- The Evaluation Process - identifies the plant hardware, software, and documents that are included in the CM program.

- Design Requirements - are identified in the WID design bases documents (i.e. SDDs). The requirements are updated to reflect approved changes.

- Modification or Change Control - ensures that all changes are properly identified. The changes are evaluated against design bases, design requirements, national and industry standards and DOE orders, etc. The changes, if appropriate, are subsequently implemented and documented.

- Document Control - provides a system to store, retrieve, and update plant documents throughout the life of the plant.

4.1 Operational Configuration

Operational configuration control is delineated in WP 04-3, Operations Administration Manual. The WID operates the facility in accordance with reviewed and approved procedures. The operating procedures establish the normal operational configuration of the facility, such as valve and breaker lineups and component availability.

A work control system has been implemented that controls all temporary deviations in operational configuration due to maintenance, equipment tagouts, or jumper/lifted lead work. Temporary deviations must be approved by the Operations Cognizant Manager or his representative.

4.2 Design Configuration

It is Engineering's responsibility to ensure that the method of operation keeps a facility or system within the approved and documented design. Engineering notifies Operations when a change will impact a procedure. This includes Preventive Maintenance (PM) and calibration procedures. Administrative tracking of impacts to procedures is documented per WP 09-007, Engineering and Design Document Preparation and Change Control.

Having responsibility for design configuration and verification, Engineering is required to evaluate all requests for changes against the current approved design baseline. If a change is necessary, Engineering must generate the documentation to make that change. WIPP facility systems have been delegated to Cognizant Engineers who are responsible for evaluation and inspection, identification of future system needs, and detection of needed maintenance or repair work. Refer to Figure 1 for a diagram of design and operational configuration interfaces.

5.0 CONFIGURATION MANAGEMENT DOCUMENTS

Original design bases and Construction Contract Packages (CCPs) for the WIPP were developed for construction purposes. The CCP design bases are being superseded by System Design Descriptions (SDDs).

These design basis documents will establish the primary functions and design requirements for all WIPP systems. In addition to establishing the technical baseline, the documents provide the baseline criteria for design description details, operation, system limitations, set points and precautions, off-normal events, recovery, and maintenance. Applicable DOE orders (primarily 6430.1A), codes and standards, and engineering analyses are incorporated into the documents.

Without exception, each time a new facility is designed or an existing facility is modified, the design bases documents are reviewed for compliance. Figure 2 describes the document heirarchy for configuration management.

5.1 Design Output and Safety Analysis Documents

Design output documents establish the required and approved physical configuration and detailed performance criteria for a structure, system or component. Engineering drawings, Design Specifications and Equipment Specifications are considered Design Output Documents.

The primary objective of safety analysis documents is to ensure that all aspects of the WIPP facility can be operated safely and at minimum risk to employees and the public. The Final Safety Analysis Report (FSAR) and the Safety Analysis Report for Packaging (SARP) are the documents establishing the WIPP commitment to operational safety. Every design or facility change request is reviewed for impact on the FSAR. This FSAR impact review is required to be performed in accordance with the WID Procedure WP 02-1102. All of the FSAR impacts are incorporated after DOE approval. If the FSAR impact involves a change to the Operational Safety Requirement (OSR) or a reduction to any QA requirement, then the FSAR impact (and the associated design or procedure change) is approved by the DOE/HQ (and, at their option, their independent review contractor) prior to the change being implemented.

CONFIGURATION MANAGEMENT PROGRAM
PROCESS FLOW DIAGRAM

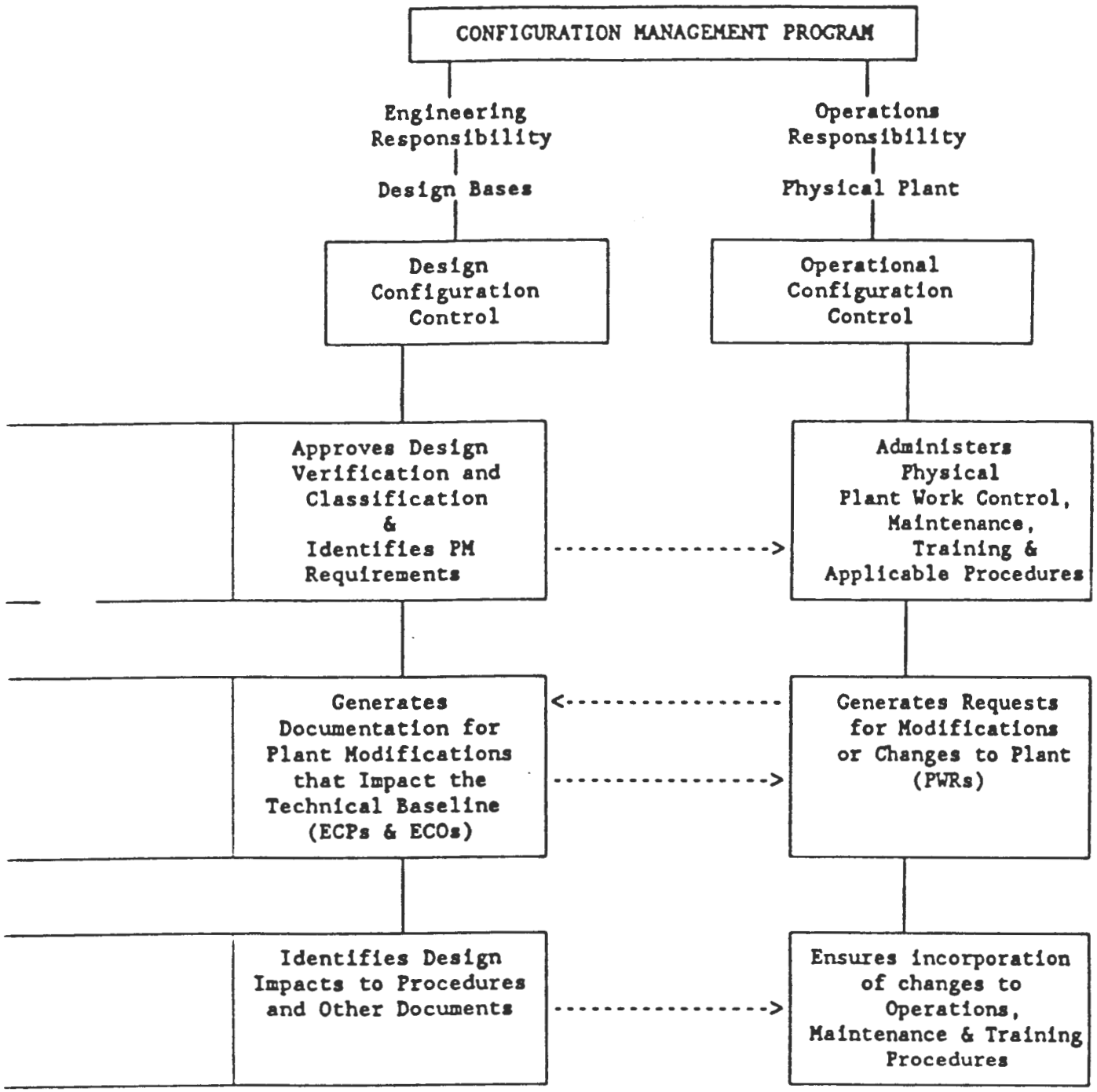

FIGURE 1

CONFIGURATION MANAGEMENT DOCUMENT HEIRARCHY

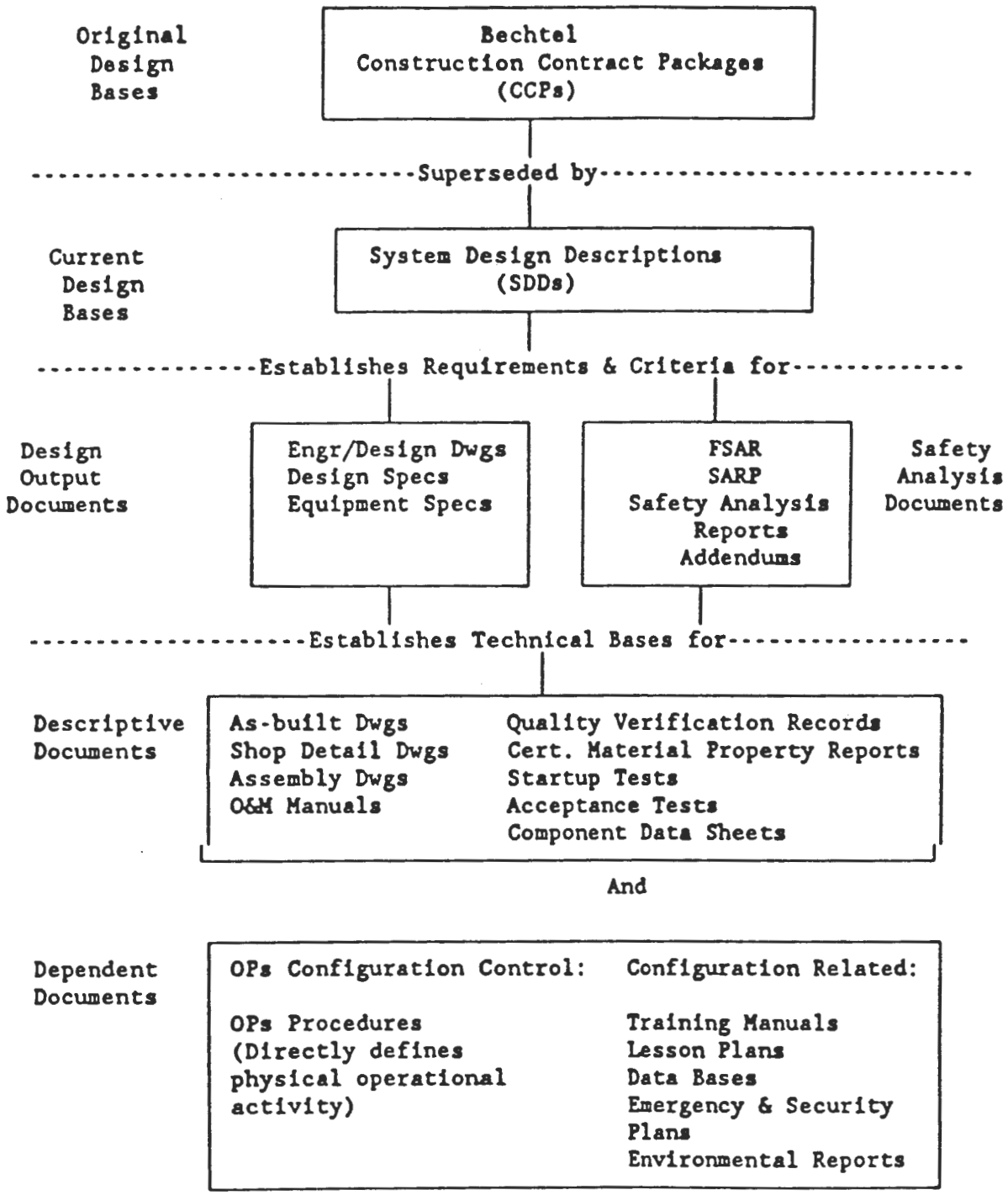

FIGURE 2

5.2 Descriptive Documents

These documents provide the detailed plant information used primarily for operations and maintenance and other normal plant activities that do not have an impact on the plant technical baseline. A variety of descriptive documents exist: field verified drawings (as-builts), assembly drawings, shop detail drawings, component data sheets, Operation and Maintenance (O&M) manuals, quality verification records (e.g., welding records), certified material property reports, startup tests and acceptance tests.

As-built drawings are obtained upon the initial receipt inspections, when components are accepted, or at turnover of a construction project per WP 09-7, Construction Management Manual. As-built drawings provide the baseline against which all future changes are tracked. Once the as-built baseline has been developed, the change control process for plant work requests, procedures, and design changes ensures that the physical baseline remains current.

5.3 Dependent Documents

These documents are essentially the sources used for maintaining the plant operations procedures, maintenance procedures, training documents and licensing documents. The information provided in these documents is dependent on the input derived from the design and descriptive documents.

- Operational Configurational Control Documents. Operational procedures are used to define the operational configuration of the facility. Based upon the design basis, drawings, start-up testing, and other previously discussed documents, procedures define lineups (breaker/valve/components, on/off/standby availability), loading, speed, and other variables.

  In addition, a work control system provides a mechanism for operations groups to be cognizant of any impairments to a system, precautions required for safe work, or component problems.

- Configuration Related Documents. In addition to those documents directly defining configuration, it is essential that other key WIPP facility documents be consistent with the requirements established in previously listed documents. Training manuals, lesson plans, data bases, emergency and security plans, environmental reports, and other documents are prepared to accurately reflect the approved, installed, and operating condition of the facility.

6.0 CONFIGURATION BASELINE IDENTIFICATION

The WID technical design basis is described in System Design Descriptions (SDDs). The documents define the design, functional, and performance requirements and characteristics for the plant systems.

Lower tiered design documents identified under configuration management include equipment and design specifications, and engineering and design drawings.

6.1 Design Input

The Cognizant Engineer (CE) understands the design criteria and requirements that establish the functions to be performed by a facility, system, or component. In addition, he has a thorough knowledge of the design bases being changed and the impacts of the change on the operating characteristics of the facility, system, or component to interfacing systems and the plant as a whole.

In addition, the CE classifies and categorizes the change:

- Is the modification a Class 1, 2, or 3?
- Does the change correct a safety, operational, or maintenance deficiency?
- Does the change incorporate other approved project changes?
- Does the change effect substantial life cycle cost savings?

The procedure WP 09-024, Configuration Control Board/Engineering Change Proposal, initiates the design modifications.

If the proposed design change is approved by the Configuration Control Board, the CE continues the design effort by preparing design/equipment specifications, as necessary, per WP 09-8, WIPP Specification Preparation Style Guide, and obtains appropriate reviews. In accordance with WP 09-007, Engineering and Design Document Preparation and Change Control, the CE initiates an Engineering Change Order (ECO). Based on impact the design verification process is initiated. (See Figure 1).

6.2 Design Verification

Design verification ensures a design change is adequate for its intended application. The adequacy is gauged by quality, safety, and performance requirements. Formal design verification usually consists of one or a combination of the following methods:

- Independent Review

- Alternate Calculations

- Qualification Testing

- Formal Design Review

In accordance with WP 09-018, Design Verification, the Cognizant Design Manager (CDM) identifies the appropriate method of design verification.

Per WP 09-007, an Impact Level 1 or 2 Engineering Change Order (ECO) requires some type of design verification. On any change that requires verification, the Engineering Department Manager or designated representative(s) concurs with design verification methods chosen by the CDM for the design.

Design verification requirements are evaluated and documented on the ECO. (Detailed guidance is provided in WP 09-007 and WP 09-018). The CDM ensures that the design and verification activities are documented.

6.3 Testing And Retesting

6.3.1 Testing

The requirements of the system being changed and the reason for making a change are the key determining factors for whether testing will be required. When implementing a change, it is assumed that the same or a higher degree of confidence in the ability of a system to function as was demonstrated by the original start-up or qualification testing is required. If there is a lesser degree of confidence, then the assumption is that start-up tests need to be repeated or new tests performed.

In order to determine if testing is required and what the testing objectives might be, three questions are considered:

- Does the new design meet all the functional design requirements?

- Does the new design meet all the environmental specifications?

- Will the design, as implemented, function correctly with all the interfacing systems under all transient functional or environmental conditions? Example: What happens on Loss of Electric Power (LOEP), loss of pneumatics, high temperature, cold temperature, radiation, etc.?

Detailed guidance on start-up testing is provided in WP 03-1, WIPP Startup and Acceptance Test Program.

6.3.2 Retests to Verify Operational Configuration

Operations in conjunction with Engineering and Quality Assurance, is responsible for ensuring systems are retested after maintenance, repair, modification, or rework. For Operational Safety Requirements (OSR) related equipment, the retest is performed by a surveillance procedure. Personnel designating a retest should make the retest comprehensive enough that any part of a system that was impaired by work activity is verified fully functional and operating normally.

6.4 Design Approvals

A tiered system has been established for the approval of design documents. All modifications for configuration controlled items originate as an Engineering Change Proposal (ECP). The Configuration Control Board (CCB) membership is shown in Figure 3. ECPs are separated into 3 classes. Class 1 ECP's require the DOE's approval. Class 2 and 3 ECPs can be approved by WID. In the conceptual stage the design approach and requirements for review are established and impacts considered.

Detailed designs are approved and documented on ECOs. Classification of ECOs is based on impact. Impact levels are defined in Figure 4. As a minimum all designs are approved by the cognizant engineer and his manager.

If necessary, the DOE will arrange for an independent review of changes. Higher impact changes are reviewed by QA, Startup, Safety, Operations, and the DOE. Complex or high impact designs require an independent technical design verification.

The purpose of having this process is to provide safe workable designs which are error free. This process minimizes the probability of missing required items.

CONFIGURATION CONTROL BOARD MEMBERSHIP

Operations Manager CHAIRMAN	Engineering Manager	ES&H Manager	CC&D Manager SECRETARY	Maintenance Representative
Project Control Representative Note 2	Quality Assurance Representative	Sandia National Laboratories Representative Note 3	Generator Site Representative Note 4	

NOTES:

1. Managers of Engineering; Environment, Safety, and Health; Surface Operations; Underground Operation(s); and CC&D may designate alternate representatives in writing to the CCB Chairman.

2. Project Control representative, if attending, may cover budgeting and schedule concurrence.

3. Sandia representation is only necessary for ECPs impacting the SNL or SNL impacting the WID.

4. Generator site representation may be required for ECPs which impact packaging and/or transportation.

FIGURE 3

IMPACT LEVELS AND APPROVAL REQUIREMENTS

DEFINITIONS

Impact Level - The uniform classification applied to design (technical) documents and modifications commensurate with the complexity, consequences of failure, and cost of the facility and equipment involved. Impact levels are used to determine the approval requirements for the initial release or revision of design documents.

Impact Level 1 - Modifications or changes that affect the established design criteria, operational safety requirements, engineered safety features, agreements with the State of New Mexico and other government agencies, formal baseline documents, or approved project cost and schedule. Included are modifications to components, systems, structures, or packaging whose potential failure represents a significant programmatic impact, unreviewed safety questions, or a downgrading of component safety or seismic category.

Impact Level 2 - Modifications or changes to the technical design or operational characteristics which involve a change in functional or performance capability of the facility or equipment. Included are changes that could have an adverse technical effect relative to the validity of developmental and waste handling test results.

Impact Level 3 - Modifications or changes to facilities or equipment that have a minimal effect on the health and safety of personnel or on operational performance. These changes are relatively uncomplicated. Failure of equipment in the category would constitute minimal or no programmatic impact.

Impact Level 4 - Minor changes to buildings, facilities, or equipment which have no impact on waste handling, research and development test activities, safety, environmental protection, no requirement for quality assurance verification of conformance to requirements, and which have no impact on operational or maintenance procedure impact. For example, inconsequential editorial changes.

These changes are relatively uncomplicated. Failure of equipment in the category would result in minimal or no programmatic impact.

FIGURE 4

APPROVAL REQUIREMENTS

Minimum Approval Requirements Only (1)

Impact Level	Cog. Engr.	Cog. Mgr.	Startup	QA	DOE	Safety	Cog. Ops. Mgr.	Maint.	Asst. Gen. Mgr.	Dept. Mgr.	Security
1	A	A	R(3)	A	A	A	A	A	A	R(3)	A(4)
2	A	A	R(3)	A	A	R(2)	A	R(3)	N/A	N/A	A(4)
3	A	A	R(3)	R	N/A	(2)	R(3)	R(3)	N/A	N/A	A(4)
4	A	A									

KEY:

A - Approval. Denotes signature is required to verify that the ECO is technically correct.

R - Review. Signature indicates that the ECO has been reviewed.

(1) Minimum approval signatures are identified within the bold line. Additional approval and review requirements may be identified as deemed appropriate by the Cognizant Manager or the CE.

(2) Approval required on all Impact Level 2 and 3 ECOs that affect safety as determined by the Cognizant Manager. All Impact Level 2 ECOs require Safety review as a minimum, which may include Fire Protection, Industrial, and/or Radiation Safety. Examples of safety-related equipment are fire alarm and suppression systems, radiation monitoring, and environmental monitoring. If the FSAR is impacted, the CE shall revise per WP 02-1102.

If a USQ exists, the CE shall submit the evaluation to the Safety and Analysis Review Manager (Safety) per instructions in WP 02-1102. The Safety and Analysis Review Manager determines whether the evaluation requires a new safety analysis, a safety assessment, an addendum to the FSAR, or a revision to any other WID safety analysis document.

(3) Review required depending on the applicability and interfaces of the affected design equipment, as determined by the Cognizant Manager. If review is not required, an information copy of the ECO shall be transmitted.

(4) Approval required on all ECOs that affect security-related equipment, components, systems, and/or facilities, as determined by the Cognizant Manager.

NOTE: All design changes estimated to cost $100,000 or more will require a DOE review.

NOTE: For ECOs that initiate documents, review/approval signatures may be deferred until sign off of the document except that the CE's and CM's signatures are always required.

Distribution: Distribution shall be as listed in Block 16 of the ECO form.

FIGURE 4 (CONTINUED)

DEFINITIONS

As-Built Drawing - A formal graphic engineering record that depicts the physical characteristics or layout of the end-item product of a fabrication, manufacturing, construction, or engineering task. Refer to WP 09-26.

Cancel - Cancellation removes a document from the active lists. Documents subject to cancellation are, design documents for which no field work has been done or Engineering Change Orders (ECOs) for which changes have not been initiated.

Configuration - The functional and or physical characteristics of hardware or software as set forth in technical documentation (engineering drawings, specifications, Safety Analysis Reports for Packaging (SARPs), WIPP Transport Packaging (WTP) User Requirement Documents, O&M manuals, etc.).

Configuration Control (CC) - The process that provides a documented approach to ensure that engineering changes are properly implemented and installed conditions verified. In addition, the process provides a system for thorough evaluation, verification, and control of all proposed changes that impact the safety and operations of the plant. Some of the changes may include, but are not limited to, maintenance, modifications, or testing.

Configuration Management (CM) - The program wherein documentation, change controls, appraisal, and assignment of responsibilities are provided for the items that have been evaluated and determined to be under the configuration control process. Items and services that with regard to relative importance, may require varying degrees of control, documentation, and verification to assure compliance with applicable requirements.

Cognizant Engineer (CE) - The WIPP engineer assigned responsibility for design, configuration control, engineering documentation; modification of equipment, systems, facilities or components, as well as for establishing requirements, evaluating the adequacy of protective and corrective maintenance, and spare parts level so that defined objectives of performance, safety, reliability, cost, and schedule are satisfied. CEs are normally assigned to WID's Engineering department.

Design Changes - Changes that occur to approved design documents. These changes are identified and approved on the Engineering Change Order (ECO). Refer to WP 09-007.

Design Document - A general term used to define documents such as System Design Descriptions (SDDs), Design Specifications (D-Specs), Packaging Specifications, SARPs, WTP User Requirement Documents, Equipment Specifications (E-Specs), O&M

manuals, and engineering drawings that specify requirements for design or that provide specific details of installed hardware or software configuration.

Design Specification (D-Spec) - The document prepared by the cognizant design engineer that establishes requirements and performance criteria for complex or integrated design efforts for which Westinghouse WID has primary design responsibility. D-Specs are prepared in accordance with WP 09-8.

Engineering Change Order (ECO) - The engineering document used to define and control the initiation of new engineering design documents and to define and control changes to approved engineering design documents. Refer to WP 09-007.

Engineering Change Proposal (ECP) - A proposed design change which affects currently approved engineering documents or WIPP facilities, systems, or equipment. Engineering documents include drawings, specifications, System Design Descriptions, etc. A proposed design change which may not affect engineering documents, but which affects other technical baseline documents such as the Final Safety Analysis Report (FSAR) and the Safety Analysis Report for Packaging (SARP), shall also result in an ECP. Refer to WP 09-024.

Engineering Data Transmittal (EDT) - Provides a formal method for ensuring that engineering data or documents relating to a system, equipment, or a facility are available. It documents the process to forward the information/data to the Design History File.

Equipment Specification (E-Spec) - The document prepared by the cognizant design engineer to specify the design characteristics, functional requirements, operational, and performance criteria for equipment to be purchased from or designed by suppliers and organizations external to the WID, or to be applied to work performed by WID personnel and contractors. E-Specs are prepared in accordance with WP 09-8.

Environmental Compliance Equipment - Items or pieces of equipment that directly support compliance with environmental requirements other than those defined in Chapter 10, subsection 1.1.1 of the Final Safety Analysis Report (FSAR).

General Plant Projects (GPP) - Projects whose total cost to the government, with tax and fee, does not exceed 1.2 million dollars. The Site Development Plan (SDP) maintains a listing of planned GPP projects.

Impact Level - The uniform classification applied to design (technical) documents and modifications commensurate with the complexity, consequences of failure, and cost of the facility and equipment involved. Impact levels are used to determine the approval requirements for the initial release or revision of design documents.Refer to WP 09-007.

Limiting Conditions for Operations (LCOs) - Administratively established constraints on facility equipment and operating parameters that shall be adhered to during operation of the facility. The LCOs specify the minimum performance levels required for safe operation of the facility.

Major Construction Projects (MCP) - Projects whose total cost to the government exceeds 1.2 million dollars.

Operational Compliance Equipment/Items (OCE) - Those items or equipment that are essential for the protection of the public or plant personnel or essential to maintaining compliance with the Operation Safety Requirements (OSRs) and Limiting Conditions of Operation (LCOs) that are defined in Chapter 10, subsection 1.1.1, of the FSAR.

Operational Safety Limits - Westinghouse WID requirements that define the conditions, safe boundaries (and bases thereof), and management controls required to assure safe operation of a non-nuclear facility and to assure that operations remain with the definition of a non-nuclear facility.

Operational Safety Requirements - Department of Energy approved requirements which define the conditions, safe boundaries, (and bases thereof), and management controls required to assure the safe operation of a nuclear facility.

Operational Support Equipment/Items - Includes all equipment, facilities, and items not designated as safety, operational, or environmental compliance equipment or items, refer to subsection 1.1.1, this document.

Packaging Specifications - The specifications that include requirements for procurement, design, and fabrication of the packaging due to the needs of the WID in accordance with requirements as set forth in the Nuclear Regulatory Commission (NRC) regulations.

Project Engineer - The WID engineer assigned responsibility to manage the implementation of the design and technical work (fabrication, field installation, etc.) on a facility, system, or component to ensure that Project objectives of performance, safety, reliability, and schedule are satisfied.

Safety Class Items - Systems components, and structures, including portions of process systems, whose failure could adversely affect the environment or the safety and health of the public; refer to subsection 1.1.1, this document.

Sandia National Laboratories (SNL) - The scientific advisor for the WIPP Project.

Superseded - The term applied to design documents that have been replaced.

System Design Description (SDD) - The technical baseline document which defines the design, functional operating and performance requirements and characteristics for a WIPP system. WP 09-10 provides the format, content, and level of detail required for SDDs. (Currently chapters 1.0, 2.0 and 3.3 are approved).

Title I - Refers to preliminary and conceptual design work.

Title II - Refers to the development of the definitive design. This phase of a project involves the development of the drawings and specifications necessary for bid or procurement. For MCPs at the WIPP, an architect/engineer (A/E) must be obtained.

Title III - Refers to the turning over of vendor submittals and as-built drawings to the operator. This phase begins after a facility or construction job has been accepted from the contractor. The documents should reflect field conditions. Also, the as-built condition should agree with the documents developed in Titles I and II.

TRUPACT-II User Requirement Documents - A controlled collection of requirements from the TRUPACT-II Certificate of Compliance (C of C) i.e., a copy of the latest C of C, O&Ms, and an established Quality Assurance (QA) program equivalent to 10 CFR Part 71, Subpart H.

Detailed Definitions

Safety Class Items - Specifically, safety class items are those systems, components, and structures with any of the following characteristics:

1. Those whose failure, following any credible Design Basis Accident (DBA) would produce exposure consequences that would cause doses in excess of the DOE 5400 order series limits for public exposure.

2. Those required to maintain operating parameters within the safety limits specified in the OSRs during normal operational occurrences.

3. Those required for nuclear criticality safety.

4. Those required to monitor the release of radioactive materials to the environment during and after a DBA.

5. Those required to achieve and maintain the facility in a safe shutdown condition.

6. Those that control the safety class items described above.

In the DBA analysis, predicted exposure consequences were below the limits established in the DOE 5400 Order series; therefore, Item 1 is not applicable.

The WIPP has no Operation Safety Requirement (OSR) safety limits; therefore, Item 2 is not applicable.

The WIPP cannot achieve nuclear criticality; therefore, Item 3 is not applicable.

Item 4 could be considered to apply to the radioactive effluent monitors at the WIPP. However, based upon accident analysis, the WIPP cannot exceed permissable release limits at the site boundary. Also, since the unit was originally designed in accordance with DOE Order 6430.1, Station A has not been designated a safety class item.

The concept of "safe shutdown" is not applicable to WIPP's processes; therefore, Item 5 is not applicable.

The Radioactive Effluent Monitors do not have any controls outside the system itself; therefore Item 6 is not applicable.

Operational Compliance Equipment/Items (OCE) - Refers to individual pieces of equipment. Systems at WIPP do not uniquely support compliance with requirements previously listed.

The equipment or items are limited, where possible, to those required to provide evidence that LCOs or OSRs are not being violated during operation of the facility. Support equipment is included only when its failure or improper operation would result in an undetected out-of-compliance condition.

The official list of OCE is maintained as drawing 412-X-001-W. Approval and review requirements for changes to the list are in WP 09-021.

The purpose of giving equipment a special designation is to provide increased management oversight to selected equipment, based upon engineering and operational judgement, and the previously listed requirements.

Operational Support Equipment/Items - Within this category, Operations management may designate equipment which requires additional oversight.

Environmental Compliance Equipment - Requirements may include any of the following:

RCRA	- Resource Conservation and Recovery Act
CAA	- Clean Air Act

CWA	- Clean Water Act
SDWA	- Safe Drinking Water Act
CERCLA	- Comprehensive Environmental Response, Compensation, and Liability Act
EPCRA	- Emergency Planning and Community Right-to-Know Act
OSHA	- Occupational Safety and Health Administration
C of C Agreement	- Consultation and Cooperation Agreement (State of New Mexico)
DOE Orders	
NRC	- Nuclear Regulatory Commission (for WTP only as applicable to NRC certification)
DOT	- Department of Transportation

Attachment II

References

Applicable DOE Orders are as follows:

1324.2A	Records Disposition
1324.5	Records Management Program
1330.1C	Computer Software Management
1540.2	Hazardous Material Packaging for Transport Administrative Procedure
2250.1C	Cost and Schedule Control Systems Criteria
4010.1	Value Engineering
4330.4A	Maintenance Management Program Guide
4480.7	Fire Protection
4700.1	Projet Management System
Draft	Configuration Management Program
5000.3A	Occurrence Reporting and Processing of Operations Information
5480.3A	Safety Requirements for Packaging and Transportation of Hazardous Materials, Hazardous Substance, and Hazardous Waste
5480.11	Radioactive Protection
5635.4	Protection of Unclassified Controlled Nuclear Information
6430.1A	General Design Criteria

DOE-WIPP 88-026 TRUPACT-II Container Maintenance Program Plan

Applicable WID procedures, documents, and manuals are as follows:

WP 02-9	WIPP Final Safety Analysis Report (FSAR)
	Safety Analysis Report for Packaging (SARP)
WP 02-1101	Preparation of Safety Analysis Documentation
WP 02-1102	Preparing Revisions to WIPP Safety Analysis Documentation
WP 03-1	WIPP Startup and Acceptance Program
WP 04-3	Operations Administration Manual
WP 04-AD3014	Work Authorization
WP 04-9	TRU Waste Container Maintenance Manual for the WIPP
WP 04-901	TRUPACT-II Material Control
WP 04-902	TRUPACT-II Work Control
WP 09-6	Site Development Plan (Construction Plan - Current Five Year Plan)
WP 09-7	Construction Management Manual
WP 09-8	WIPP Specification Preparation Style Guide
WP 09-10	WIPP Preparation Guide for Plant and System Design Description Documents
WP 09-006	Engineering Document Distribution
WP 09-007	Engineering and Design Document Preparation and Change Control
WP 09-009	Location and Control of Underground Drilling Holes
WP 09-010	Design Development
WP 09-018	Design Verification
WP 09-019	Computer-Aided Design (CAD) Generated Drawings

WP 09-020	Engineering File Room Check-Out
WP 09-021	WIPP Equipment Numbering System and Register
WP 09-022	Design Classification
WP 09-024	Configuration Control Board/Engineering Change Proposal
WP 09-032	Manually Generated Drawings
WP 09-034	Configuration Management Determination
WP 16-112	Computer Program Abstracts
WP 16-113	WIPP Computer Resource Requests
WP 16-114	Software Baseline and Configuration Control Procedure
WP 16-115	Computer Activity Requests

D19-3 Configuration Control Program

The DOE configuration control program at WIPP, which is conducted in accordance with the "WID Operational Configuration Management Plan", WIPP Plan WP 09-9 is attached. Revision 3 of WP 09-9 replaces all previous versions.

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Effective Date: 2/25/96

WP 09-9
Revision 3

WID Operational Configuration Management Plan

Cognizant Section: Configuration Management & Startup

Approved By: A. E. Hirst

Cognizant Department: Engineering

Approved By: John J. Garcia

WASTE ISOLATION PILOT PLANT
WIPP

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EXECUTIVE SUMMARY

The Waste Isolation Division (WID) Operational Configuration Management Plan (OCMP) defines the processes that establish and maintain consistency among design requirements, physical configuration, and facility documentation throughout the life of the Waste Isolation Pilot Plant (WIPP). The benefits of configuration management include increased facility safety and reliability, improved environmental protection and reduced potential for facility shutdown.

The OCMP incorporates the following basic elements: 1) Program Management, 2) Document Control, 3) Change Control, 4) Design Requirements, and 5) Assessments. This document describes these elements as applied to WID. In addition, specific organizational responsibilities are described.

The WID OCMP satisfies the DOE requirements in DOE STD 1073-93, "Guide for Operational Configuration Management Program," the DOE Orders 4330.4a "Maintenance Management Program," 5480.19 "Conduct of Operations," and 4700.1 "Project Management System," for documentation of a configuration management plan.

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1.0 INTRODUCTION

The WIPP is a waste repository and nonreactor nuclear facility. The WID manages and operates WIPP for DOE under contract and includes configuration management for the facility as a specific responsibility under the M&O contract. Sandia National Labs (SNL) is contracted by the DOE to function as the scientific advisor for the WIPP. SNL generated data and associated reports are excluded from the WID OCMP. Figure 1 illustrates WID and SNL responsibility relative to the DOE.

Configuration management is a process which ensures that design requirements, physical configuration, and associated documentation of the systems, structures and components (SSCs) within the WIPP facility remain consistent throughout the life of the facility, even as changes are made. The physical configuration of SSCs should conform to specified and documented design requirements. The facility documentation which includes design bases, system design descriptions, design and vendor drawings, as built drawings, and operations and maintenance procedures should reflect the design requirements and physical configuration. Changes to the design requirements should be reflected in the physical configuration and the documentation. Figure 2 diagrams basic configuration management relationships.

The essential configuration management elements as identified in DOE Standard 1073-93, Configuration Management Standard, are as follows:

- Program Management - directs and monitors the development and implementation of the configuration management plan.

- Design Requirements - establishes and maintains SSC design requirements and associated design basis.

- Change Control - maintains consistency among design requirements, the physical configuration and facility documentation as changes are made. The changes are evaluated against design bases, design requirements, national and industry standards, regulatory requirements, and DOE Orders.

- Document Control - provides a process to store, retrieve, and update facility documentation throughout the life of the plant, and identifies and maintains OCMP documents consistent with physical configuration and design requirements.

- Assessments - measures the extent to which configuration management elements are effective.

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Figure 3 illustrates configuration management elements and supporting functions. The figure also depicts two adjunct programs associated with configuration management: Material Conditioning and Aging (MCA); and Design Reconstitution. These programs are one-time efforts and not considered repetitive over the life-cycle of the facility. At WIPP, Design Reconstitution was accomplished with the generation of the System Design Descriptions (SDDs) and the General Plant Design Description (GPDD). The Bechtel design basis documents were superseded with SDDs and the GPDD. The SDDs and GPDD are maintained current as required changes and facility upgrades are made. The MCA program is accomplished through the WIPP Maintenance Management Plan which includes trending and equipment performance evaluations. The following sections describe how the WID implements the configuration management elements identified in the DOE Standard.

2.0 PROGRAM MANAGEMENT

2.1 Graded Approach

WID utilizes a graded approach to determine the applicability and level of configuration controls for SSCs. Design control, work control, and level of maintenance programs applied to SSCs are dependent on factors such as design classification, associated hazard, importance to safety and environmental protection, regulatory requirements, and cost effectiveness while meeting the WIPP mission.

2.2 Configuration Management Criteria

All permanent facility SSCs are under configuration management. Many temporary structures such as trailers, conexes, surface and underground mobile equipment are under configuration management, but require less documentation. In accordance with the graded approach, criteria for SSC inclusion in or exclusion from configuration management processes are delineated in WP 09-CN3034, "Configuration Management Determination." In general, items which are not under the WID OCMP are as follows:

- Temporary structures (those to be onsite less than 6 months)
- SNL experimental test equipment, records, and documents
- WIPP facilities located in the municipal city of Carlsbad
- Personal dial phones, computers, radios, beepers, off-the-shelf commercial software
- Surface and U/G mobile units (golf carts, mining equipment, fire truck, ambulance, security and safety trucks, etc.)

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- Laboratory test equipment

- Ventilation for miscellaneous outbuildings

- Miscellaneous consumable equipment such as hand tools/instruments used for plant maintenance, cameras and metal detectors, access control equipment, etc.

- SSCs which are exempted from Configuration Management through a documented and approved waiver processed in accordance with WP 09-CN3034.

Items under configuration management are uniquely numbered and listed in the site component indices (also referred to as the master equipment list), which are procedurally controlled by Engineering Department personnel. All WID personnel utilize the indices for SSC identification. The unique component identifier is referenced on controlled site documents such as work orders; maintenance, operating, and calibration procedures; engineering drawings; specifications; and engineering design change control documents.

2.3 Primary Order Interfaces

Configuration Management (CM) activities such as design change control, drawing and document change control, and assessments support DOE program implementation through the following:

- CM provides mechanisms for identifying, documenting, and maintaining the design requirements and design bases to satisfy DOE 6430.1A, General Design Criteria.

- CM maintains the technical baseline established in the design and construction phase into the operational phase and implements configuration management in the operational phase as referenced by DOE 4700.1, Project Management System.

- CM Provides the mechanisms to document design requirements and design basis related to the Safety Analysis Report (SAR), so that the information can be used to support safety evaluations, SAR upgrades, and resolution of non-compliances, as required by DOE 5480.23, Nuclear Safety Analysis Reports.

- CM identifies and retrieves design requirements information and physical configuration information that supports operability determination as required by DOE 5480.22, Technical Safety Requirements.

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- CM provides for SSC identification and labeling, and provides for control of design and facility information that is important to operation as required by DOE 5480.19, Conduct of Operations, and DOE 5700.6C, Quality Assurance (QA).

- CM provides change control mechanisms that identify and review changes to the design, physical configuration or facility documentation as required by DOE 5700.6C, Quality Assurance.

- CM provides technical criteria for establishing preventive and predictive maintenance activities as required by DOE 4330.4A, Maintenance Management Program, through trending, analyzing, and predicting mechanical or electrical failures.

2.4 Organizational Responsibilities and Interfaces

Configuration management is integral to a culture of quality performance. Responsibilities for the configuration management at the WIPP apply to each employee. The following list defines organizational responsibilities and interfaces.

Engineering:

- Maintains lead responsibility for the OCMP and provides representation on the Configuration Management Board (CMB).

- Provides overall design responsibility for WIPP SSCs utilizing a systems engineering approach with specific cognizant engineers assigned the responsibility for specific designs.

- Provides a process to evaluate proposed SSC changes against criteria specified in DOE Orders, industry codes and standards, and regulatory requirements.

- Provides a process for design verifications and Registered Professional Engineer review based on aspects which include but are not limited to design class and radiological control, Safety Analysis Reports, industry codes and standards, applicable DOE Orders, Occupational Safety and Health ACT (OSHA) and Mine Safety and Health Administration (MSHA) requirements, and compliance issues such as Resource Conservation and Recovery Act (RCRA) permit requirements, and National Environmental Policy Act (NEPA).

- Provides a graded approach to the level of review and approval required for proposed changes or new designs.

- Provides process for identifying design modifications impactive to WID plant calibration, maintenance, operations, and safety procedures.

- Provides fire proof interim storage for engineering documentation including drawings, specifications, master copies of the SDDs and GPDD, engineering developed software source codes, etc., until transmitted to project records.

- Maintains and controls changes to the Component Indices. These changes are distributed periodically to affected site organizations such as Operations, Work Control, Warehouse and Property Management, etc., so that affected organizations can make associated procedure maintenance, spare parts, and inventory changes as necessary based on changes to the component indices.

- Maintains and controls changes to the WID Systems list and the responsible Cognizant Engineer list.

- Assigns and maintains system designators for WIPP SSCs.

- Provides electrical and mechanical support to SNL as necessary to support scientific experiments.

- Provides drafting services.

- Identifies startup and post modification testing requirements.

- Maintains "User" documentation for Waste Transport Packaging.

- Maintains mine survey data, borehole locational data, and geotechnical information for the repository.

Operations:

- Maintains the Conduct of Operations and Maintenance Management Program in compliance with DOE Orders 5480.19 and 4330.4A.

- Operates systems and equipment within the design limits according to approved operating procedures.

- Provides a work control process for controlling maintenance, repair, replacement and modifications to SSCs.

- Assists in the identification and procurement of spares.

- Implements tag-out and jumper/lifted lead controls.

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- Reviews proposed facility changes for operational impact and as applicable, incorporates those changes into operations, calibration, and maintenance procedures.
- Provides chairman for Configuration Management Board (CMB).
- Maintains the Construction Management Plan and Site Development Plan.
- Utilizes input from Engineering Change Orders and associated work orders to maintain operation and maintenance procedures.

Environment, Safety, and Health:

- Evaluates new designs and design changes for SAR impact and incorporation.
- Evaluates new designs and design changes for impact on emergency preparedness procedures.
- Evaluates new designs and design changes for compliance with applicable safety and environmental regulations including MSHA, OSHA, Fire Protection Code, RCRA, NEPA, and ALARA.
- Participates on the CMB

Quality and Regulatory Assurance

- Maintains the WID Quality Assurance Program Description in compliance with DOE Order 5700.6C and 10 CFR 830.120.
- Conducts assessments and surveillances to assess performance relative to approved procedure requirements.
- Participates in receipt inspections.
- Tracks and monitors programmatic deficiencies, readiness open items, and audit commitments.
- Participates on the CMB.
- Reviews design changes for Design Class II and IIIA SSCs.

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Program Management

- Provides budget planning for contract requirements, capital equipment, General Plant Projects, etc.

Controller:

- Maintains software configuration management procedures for WID developed software.
- Utilizes input from Engineering and Operations for inventory control on spare parts and consumables.
- Excesses site equipment through the warehouse procedures. Excessing of permanent plant equipment has associated ECOs and ECPs generated and approved by Engineering.

Human Resources:

- Provides Technical Training for site personnel.
- Assists in identification of qualified personnel consistent with DOE Orders.

2.5 Sandia National Laboratories Interface

SNL experimental testing, experimental equipment, and resulting documentation and records are excluded from the WID OCMP. Applicable WID drawings reflect the specific interfacing details.

If SNL modifications impact the WID or if WID modifications impact the SNL, an Engineering Change Proposal (ECP) is processed. (See Section 4.1.) A Sandia representative is a member of the Configuration Management Board.

2.6 Procedures

Administrative and Technical procedures are initiated, maintained, and modified through WID approved document control processes, which include mechanisms for review by affected organizations. Permit applications, startup test procedures, design basis documents, the SAR, and the Safety Analysis Report for Packaging (SARP) are controlled external to the administrative and technical procedure process. WID procedures applicable to key processes such as design, work control, operations, and inspections may be additionally reviewed by a formal document review committee. Operations and maintenance procedures may require a form of validation prior to being placed into use.

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It is the responsibility of every individual to use the latest approved procedures or document and any associated change documents when performing work or operating the facility. Design, procurement, construction, or work performed by WID is done in accordance with approved procedures. User responsibility includes identifying discrepancies, errors, and inconsistencies in procedure content to the cognizant department or individual.

2.7 Training

All WID personnel, through the General Employee Training, are provided training on WID configuration management. The Technical Training organization additionally maintains current configuration management philosophy in training modules.

Personnel administering configuration management activities at WID should have extensive training or professional experience in areas such as procedure control, work control, engineering documentation control, records management, inspection and testing, design review, and drafting, as appropriate to their specific job assignments. Formal technical training by an accredited institution may be considered for key personnel whose primary function is configuration management.

3.0 DESIGN REQUIREMENTS

Design requirements reflect those functional and operational features which are engineered to 1) prevent or mitigate consequences for non-radiological or radiological hazards to personnel offsite, onsite, and local to the facility, 2) provide worker health and safety, or protect the environment, and 3) demonstrate compliance with applicable safety or environmental requirements. (Examples: OSHA, MSHA, RCRA, NEPA)

3.1 General Plant Design Description

The GPDD establishes the overall requirements and guidance for designing, building, modifying, testing, operating, and decommissioning the WIPP facilities. The GPDD establishes the relationship and interfaces between the technical functions required to provide and integrate the overall design of the WIPP.

3.2 System Design Descriptions

The SDDs establish the design bases for the WIPP facility's systems.

A system's primary functions, design requirements, and design description (performance characteristics) are delineated in the first three sections of the SDDs. Codes and standards applicable to each of the systems are listed in each SDD. The SDDs also provide the requirements for system operations, maintenance, limitations and set points, and off-normal events and recovery.

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3.3 Nuclear Regulatory Commission (NRC) Requirements

The only NRC requirements applicable to WIPP apply to shipping casks/systems. The WID has "User" responsibility for Waste Transportation and Packaging (WTP), and, therefore, does not have design authority to change the configuration of the TRUPACT II. The configuration management process for TRUPACT-II is maintained through 10 CFR 71, Subpart H. As "User" of the TRUPACT-II, the WID cannot make any changes or modifications to the design approved by the NRC as reflected in the NRC Certificate of Compliance No. 9218.

4.0 CHANGE CONTROL

4.1 Design Modifications

Changes in the physical configuration of WIPP SSCs is controlled through Engineering procedures.

Some types of changes are described on an Engineering Change Proposal (ECP) and are approved by the CMB prior to committing resources to fully develop the design for purchasing and construction.

The Engineering Change Order (ECO) is the design change control document which details the changes in documentation associated with a particular design. The ECO is used to make drawing changes, changes to the SDDs, changes to specifications, changes to O&M manuals, changes to the component indices, and references design considerations, calculations, or design verification as applicable.

Work instructions to detail the installation and subsequent testing of a modification or new design are documented on the Work Order (WO).

Figure 4 provides a flow chart for the WID design change control process.

4.2 Design Approvals

Approval levels for design are based on the complexity of modifications or new designs, the impact on safety analyses, regulatory permits, applicability of quality assurance requirements, cost, and impact to occupational safety. ECPs are divided into 2 classes. Class 1 ECPs require the DOE's approval subsequent to review and concurrence by the CMB. Class 2 ECPs require only WID CMB approval.

As a minimum, all ECOs are approved by the cognizant engineer and his manager. Based on the design class and effects on safety analyses, regulatory permits, occupational safety, waste handling, etc., additional approval/review is required. Depending on the complexity or purpose of a design modification, the proposed design may require design verification prior to placing into service.

4.3 Design Verification

Design verification ensures a design or design change is adequate for its intended application. The adequacy is gauged by quality, safety, and performance requirements. Design verification may consist of one or more of the following methods which are detailed in engineering procedures:

- Independent Review
- Alternate Calculations
- Design Development or Qualification Testing
- Formal Design Review

4.4 Startup and Post Modification Testing

When implementing a design change, it must be demonstrated that the SSC functions properly and with an equivalent or higher degree of confidence in the ability of a system to function as was demonstrated by the original start-up testing. Functional design requirements, failure modes and environmental conditions under which the SSC will be required to function affect testing. Startup testing and post modification testing are described in WP 03-1, "WIPP Startup and Acceptance Test Program."

4.5 Operational Retests after Maintenance or Modifications

Operations, in conjunction with Engineering and Quality Assurance, is responsible for ensuring systems are retested after maintenance, repair, modification, or rework. Operations procedures and other equivalent tests are performed after work completion to establish operability. Personnel designating a retest ensure that the retest is comprehensive and tests any part of a system that was affected by the work activity.

5.0 DOCUMENTS AND DOCUMENT CONTROL

Figure 5 illustrates the document hierarchy applicable to WIPP. Design documents such as System Design Descriptions, Engineering drawings, Design Specifications, and Equipment Specifications establish the required and approved physical configuration and detailed performance criteria for an SSC. Safety analysis documents ensure that the WIPP facility can be operated safely and at minimum risk to employees and the public. The SAR and the SARP document the analyses and bases of WIPP operational safety. Every proposed new design or design change on WIPP SSCs is reviewed for impact on the safety analyses to determine if an unreviewed safety question exists. Changes to the SAR are incorporated annually and are reviewed by DOE for approval.

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Documents such as field verified drawings (as builts), assembly drawings, shop detail drawings, WID Engineering Component Indices, and O&M manuals provide detailed information used primarily for operations and maintenance. As-built drawings are generated upon completion of a construction project and are updated as modifications are made. Accurate as-built drawings are essential for facility maintenance and troubleshooting.

Operational procedures define the operational configuration of the facility and provide step-by-step instructions for piping system valve lineup, electrical system breaker/switch lineup and energization sequence to place systems into operation. Operational procedures additionally detail parameters which are monitored such as speed, pressure, temperature, load, and standby availability. Operational procedures are based upon the design, associated drawings, and testing results.

The Work Order controls physical work or changes to facility SSCs. Operations personnel evaluate all work orders for impact on facility operations, to properly isolate energy sources to allow repairs or modifications to be made safely, and return SSCs to service safely following work completion.

Other WIPP facility documents such as training manuals, lesson plans, emergency and security plans, and environmental reports are based on the approved, installed, and operating condition of the facility.

In addition to the above, documents such as non-destructive testing or load test reports provide confidence that the item's integrity has not been compromised beyond the design limits through use. Receipt inspections and material certifications provide confidence that the item specified and ordered is the item received. Vendor qualification reports provide documented evidence that "qualified" suppliers meet criteria deemed important to WID.

WIPP configuration documentation is maintained at several facility locations. Engineering File Resources (EFR) is the main location for current revisions of drawings and copies of outstanding ECOs. The EFR also houses SDD masters, design bases, specifications, and Equipment files. Partial controlled drawing files are maintained in the Surface Facility Operations area and the Underground.

Work Orders (WO) are maintained and tracked by Work Control. During development of modification work instructions, a WO may reside in Engineering. During implementation, WOs may reside in Work Control or with the cognizant Operations group.

The Table 1 provides a listing of controlled document types and locations at WIPP.

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6.0 ASSESSMENTS

WID departments perform assessments in order to evaluate programmatic strengths and weaknesses. Each department is responsible for assessing their portion of the configuration control process. Engineering specifically assesses various aspects of the procedures which control design and design change and may include additional items such as as built, drafting, component numbering, controlled drawing distribution, design change impact on the SAR or SARP, and transmittal of records, as examples.

Periodic assessments by Quality Assurance of WID programs and procedures is required by the WID Quality Assurance Program. Specific configuration management related items for inclusion in QA audits may include:

- Approval/review requirements on design change control documents
- Procedure review and approvals
- Field walkdowns to compare drawings with the field configuration
- Identification of permanent/quality records
- Training/qualification of personnel who design, operate or maintain facility SSCs
- Facility description in regulatory permits and safety analyses consistent with the SSC design descriptions and design bases
- Procedural compliance

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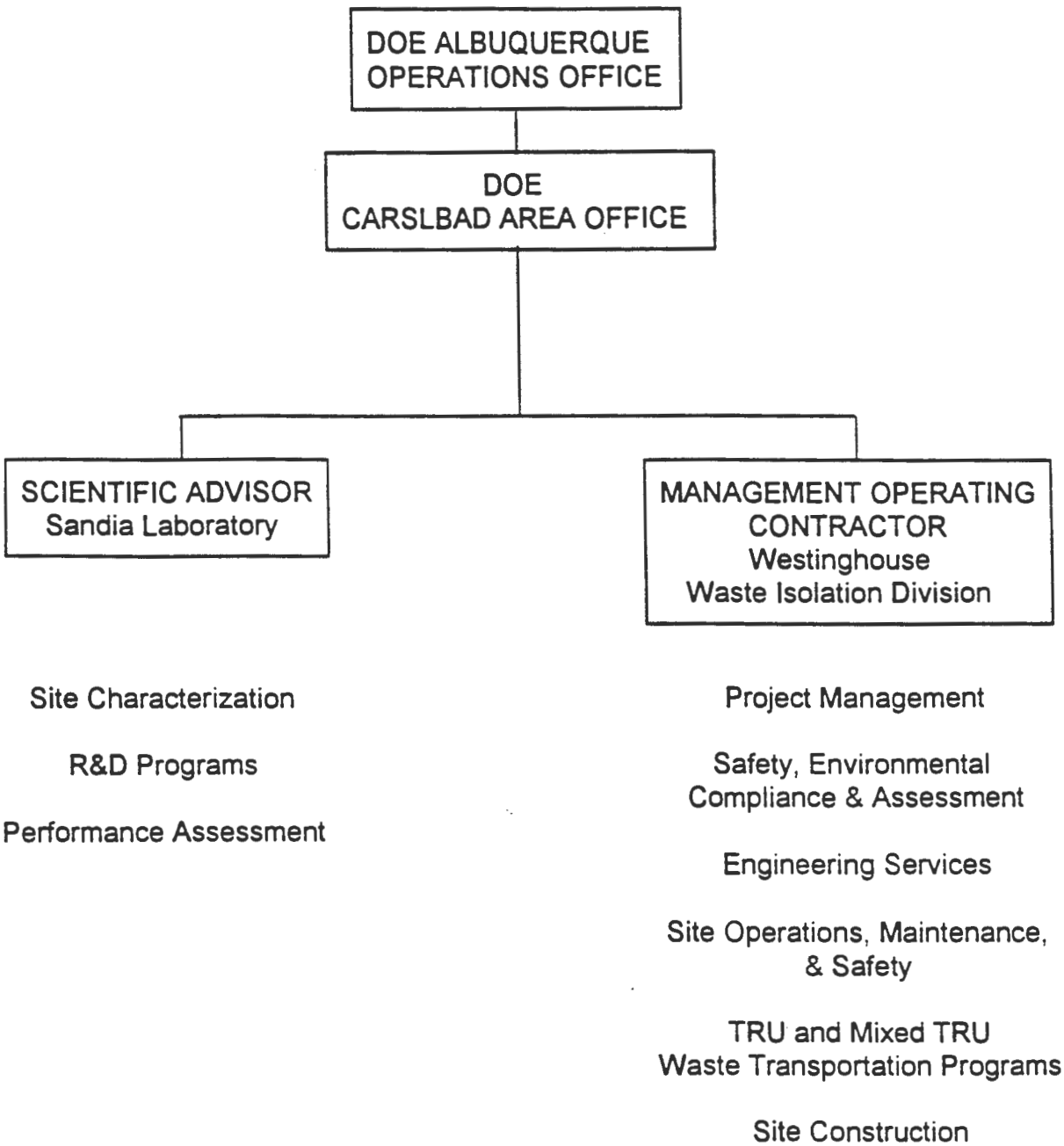

Figure 1 WID Organization and Responsibilities

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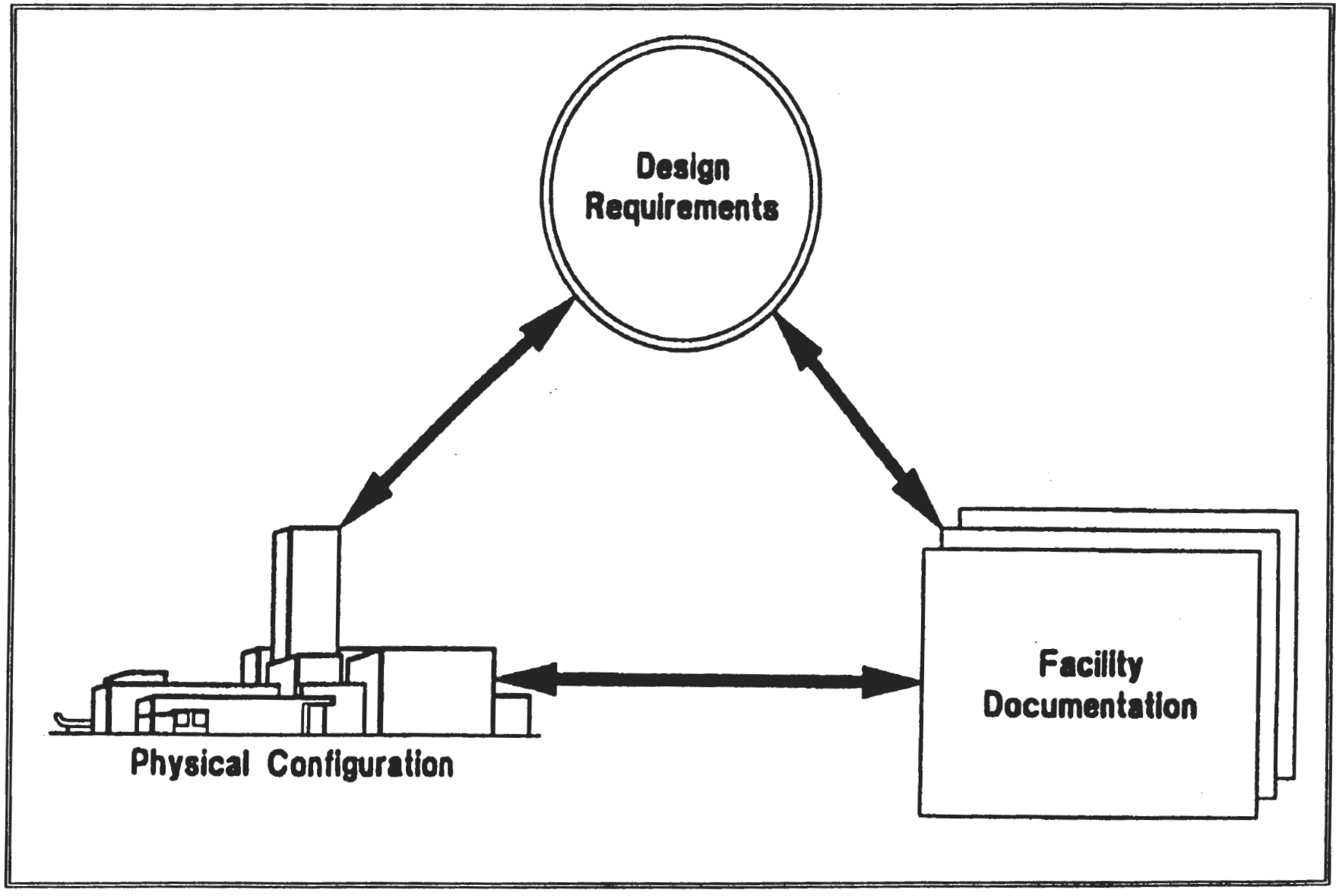

Figure 2 OCMP Basic Relationships

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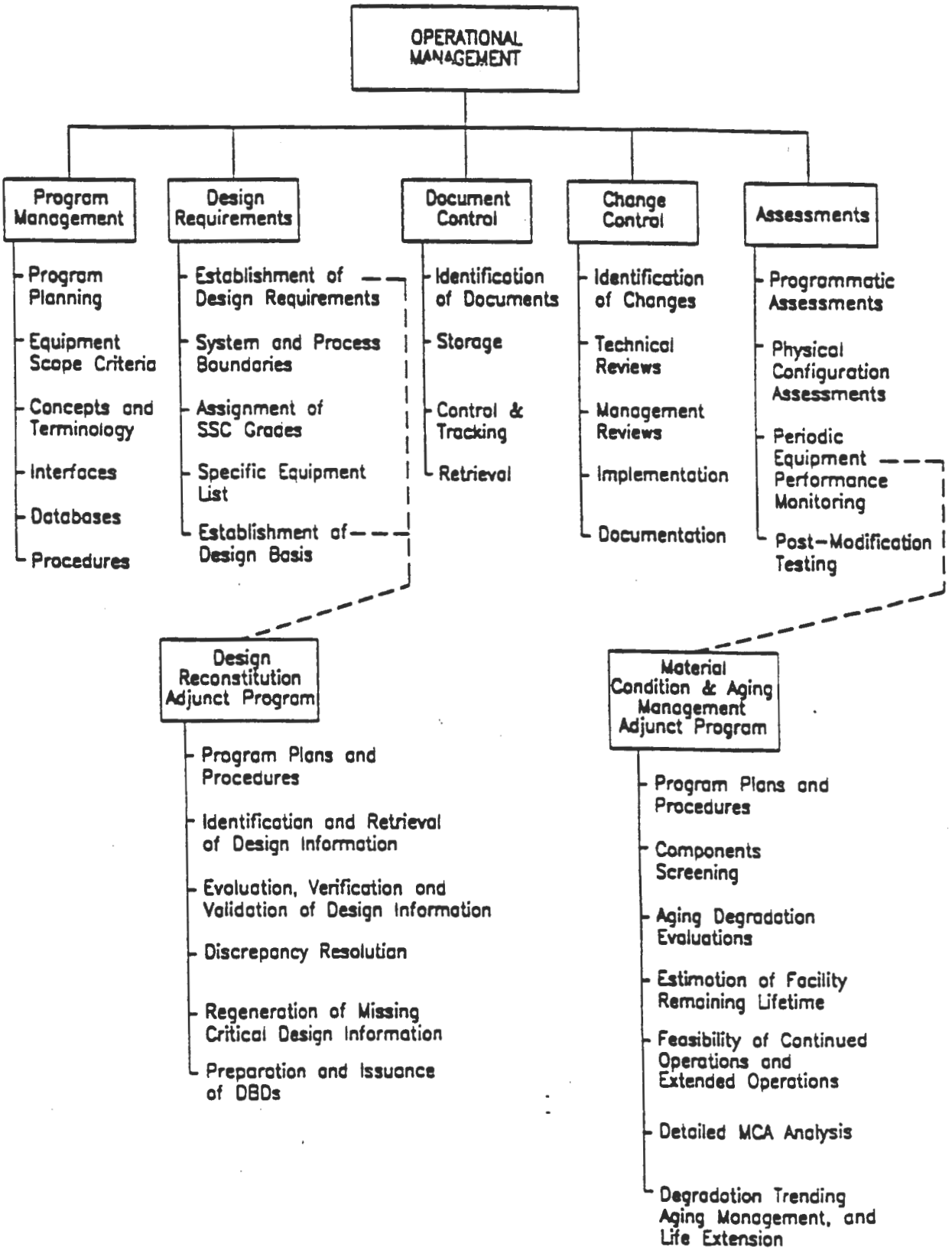

Figure 3 OCMP Elements and Functions

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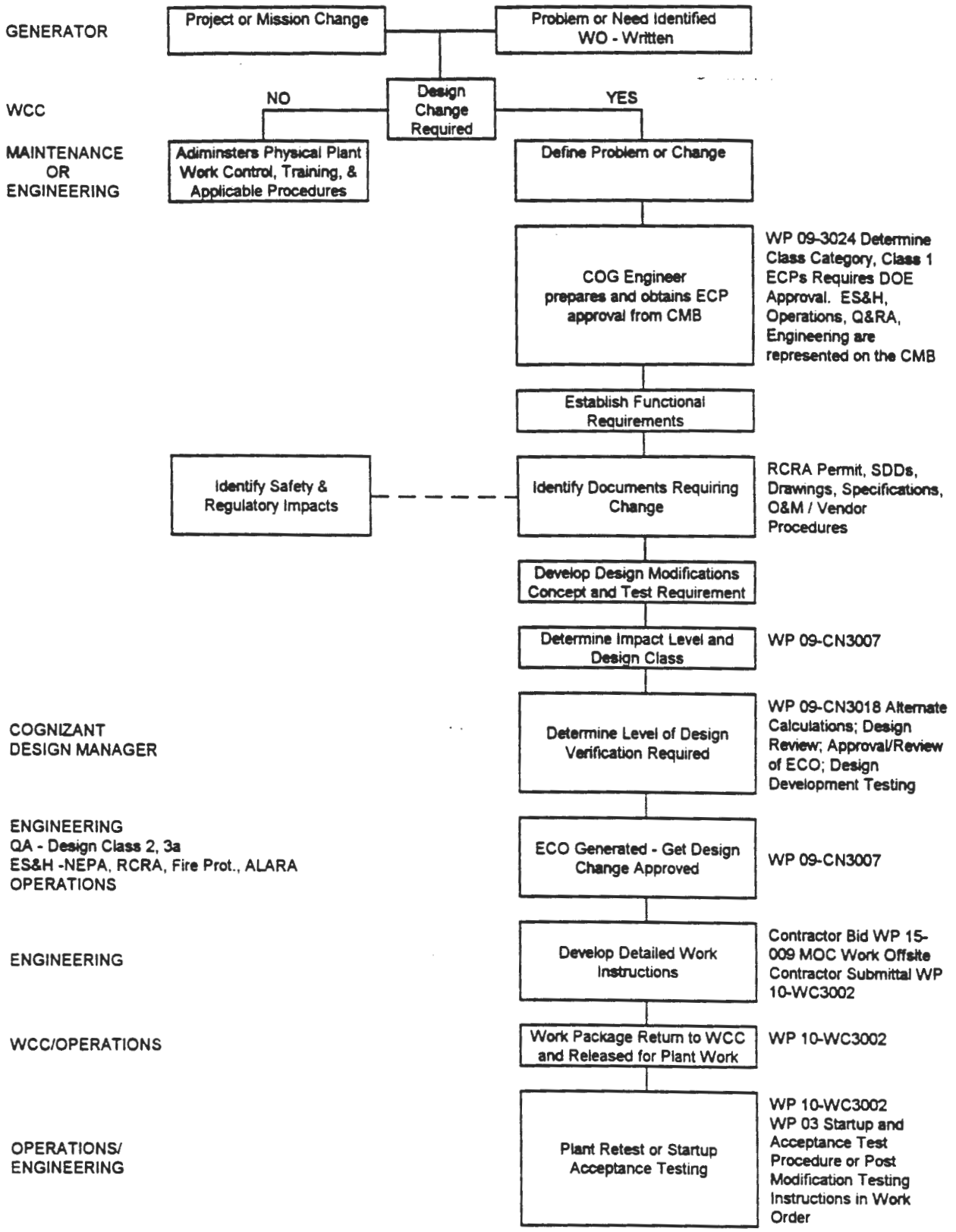

Figure 4 Design Change Control

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TYPE/DESCRIPTION	PURPOSE	RESPONSIBILITY/LOCATION
1. Drawing Register (PC Data Base) and original drawings.	Provides a listing and cross reference of active and superseded drawings maintained by Engineering. The list contains the number, title, revision, and status of drawings for which WID has reproducibles (updated daily).	Engineering File Resources Available on VAX Network
2. ECOs and ECO Register.	Provides the status, number, and documents affected for each ECO generated. Original ECOs are controlled and filed until complete, then transmitted to Project Records Services.	Engineering File Resources Available on VAX Network
3. ECP Register	Provides a listing of ECPs and actions, if any, required by the Configuration Management Board.	Engineering File Resources Available on VAX Network
4. D-Specs/E-Specs & Register	Provides a listing of specifications for design and equipment with revision and status.	Engineering File Resources Available on VAX Network
5. Component Indices a. Equipment Register b. Valve List c. Piping List d. Instrument Register e. Load List f. Damper List g. Conduit List	Provides a listing of component numbers, active or inactive status, associated drawings, design class, manufacturer, etc.	Engineering File Resources Available on the VAX Network
6. WID Index to Controlled Documents	Provides the listing with revision and title of approved procedures (updated weekly).	P&P/Controlled Document Locations
7. Procedures	Provides most current approved procedures (updated as required).	P&P/Controlled Document Locations
8. O&M Manuals, Vendor Data on active WIPP SCCs	Provides a variety of information from vendors of active SSCs.	Engineering File Resources

Table 1 Controlled Document Types and Locations

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9. System Design Descriptions/General Plant Design Description	Establishes the design baseline for the WID facility systems, including the following: A. Primary Functions B. Design Requirements C. Design Description D. Operations E. Systems Limitations, Set points, & Precautions F. Off-Normal Events and Recovery G. Maintenance	EFR, Controlled copy holders, Available on VAX Network
10. Cognizant Engineers, Systems, and SDD List	Controlled listing that identifies system cognizant engineers, alternates, support engineers, systems, and relevant information	Engineering File Resources
11. Work Orders and Database	Documents a plant repair, maintenance activity or modification and status	WOs are temporarily stored in Work control until transmitted to permanent records.
12. Safety Analyses	Documents the analysis associated with the risk or failure of a design feature or administrative control	Safety analysis group

Table 1 Controlled Document Types and Locations

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Effective Date: _____

WP 12-VC.01
Revision 0

Confirmatory Volatile Organic Compound Monitoring Plan

Cognizant Section: RCRA Permitting

Approved by: _____

Cognizant Department: Environment, Safety, and Health

Approved by: _____

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ACRONYMS AND ABBREVIATIONS

BFB	4-Bromofluorobenzene
BS/BSD	blank spike/blank spike duplicate
CLP	Contract Laboratory Program
COC	concentration of concern
CRQL	contract-required quantitation limit
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
ft	feet
FTIR	Fourier transform infrared spectrometry
g/mol	grams per mole
GC/MS	gas chromatography/mass spectrometry
LCS	laboratory control sample
m	meter
MDL	method detection limit
MRL	method reporting limit
NIST	National Institute of Standards and Testing
NMAC	New Mexico Administrative Code
ppbv	parts per billion by volume
QA	quality assurance
QAPD	Quality Assurance Program Description
QAPjP	Quality Assurance Project Plan
QC	quality control
RCRA	Resource Conservation and Recovery Act
RPD	relative percent difference
SOP	standard operating procedure
SOW	statement of work
VOC	volatile organic compound
WID	Waste Isolation Division
WIPP	Waste Isolation Pilot Plant

1.0 INTRODUCTION

This document describes the confirmatory monitoring plan for volatile organic compound (VOC) emissions from mixed waste that may be entrained in the exhaust air from the U.S. Department of Energy (DOE) Waste Isolation Pilot Plant (WIPP), Carlsbad, New Mexico, during the disposal phase at the facility. This plan is designed to confirm the assumptions and predictions used to demonstrate compliance with the environmental performance standards contained in the WIPP Resource Conservation and Recovery Act (RCRA) Part B Permit Application (DOE/WIPP 91-005, Revision 6, 1996). Confirmation of this demonstration will be made when observed constituent concentrations are determined to be less than or equal to predicted concentrations. This plan includes the monitoring design, a description of sampling and analysis procedures, quality assurance (QA) objectives, and reporting activities.

1.1 Background

The hazardous waste management units, defined as waste panels, are located 2,150 feet (ft) (655 meters [m]) below ground surface, in the WIPP underground. The waste panels consist of seven rooms and two access drifts each. Each room is approximately 300 ft (91 m) long, 33 ft (10 m) wide, and 13 ft (4 m) high. Access drifts connect the rooms and have the same cross section. The panels provide room for 6.2 million cubic feet (175,600 m^3) of mixed waste.

The RCRA Part B Permit Application demonstrates anticipated compliance with environmental performance standards of 20 New Mexico Administrative Code (NMAC) 4.1, Subpart V, § 264.601(c). This plan describes a sampling and analysis program developed to confirm the theoretical calculations contained in the RCRA Part B Permit Application. The monitoring program will be capable of quantifying VOC concentrations in ambient mine air at WIPP. Other media are not considered viable contaminant transport pathways during the WIPP operational time frame and are not addressed in this program. By the nature of WIPP operations, there is no credible mechanism for direct release of VOCs to water or soil during routine TRU-waste operations. For the disposal phase, the mine ventilation system is the only possible pathway.

This plan addresses the following elements:

1. Rationale for the design of the monitoring program, based on:

    - Possible pathways from WIPP during the active life of the facility
    - VOC sampling operations at WIPP
    - Strength of engineered and natural barriers at WIPP
    - Optimum location of the ambient mine air monitoring stations to confirm the theoretical calculations contained in the RCRA Part B Permit Application

2. Descriptions of the specific elements of the monitoring program, including:

    - The type of monitoring conducted
    - The location of the monitoring stations
    - The monitoring interval
    - The specific hazardous constituents monitored
    - The implementation schedule for the monitoring program
    - The equipment used at the monitoring stations
    - Sampling and analytical techniques used
    - Data recording/reporting procedures

The results of baseline VOC monitoring at WIPP were used, in part, to define the confirmatory monitoring program that will be established for the Disposal Phase, during which full-scale waste emplacement activities will occur. The baseline VOC monitoring results are presented in Appendix D21 of the RCRA Part B Permit Application. These data represent the anticipated background levels of VOCs during operations at WIPP.

1.2 Waste Disposal

The DOE will operate and maintain WIPP so that it is free of both chemical and radiological contamination. Therefore, as allowed by New Mexico Administrative Code 4.1, Subpart V, § 264.13, and consistent with joint U.S. Environmental Protection Agency (EPA) and U.S. Nuclear Regulatory Commission guidance, all waste sampling and analyses are conducted by DOE generator sites in accordance with established procedures. The generator conducts the required waste characterization activities, for each container of waste to be sent to WIPP, under a QA program. The reports resulting from waste characterization activities are then reviewed for completeness and acceptability at WIPP prior to transport of the wastes.

Waste will be disposed of in the seven rooms of a panel. Each panel will be closed when it is full using a panel closure system installed in each of the two panel access drifts, as described in the closure plan of the RCRA Part B Permit Application (Chapter I). The closure system conceptual design consists of concrete block bulkheads and a poured concrete bulkhead. The concrete block bulkheads provide a ventilation barrier while the concrete bulkhead is being installed. The concrete component provides strength and stability for maintenance-free service during the operational period. The DOE's analysis of the bulkhead shows that the structure has sufficient rigidity and compressive strength to remain stable for creep and short-term dynamic loadings. Once a panel has been filled and closed, it will be managed per the requirements of the WIPP RCRA Permit.

1.3 Objectives of the Volatile Organic Compound Confirmatory Monitoring Plan

As described in the RCRA Part B Permit Application, minute quantities of VOCs could be released from open and closed panels located at WIPP during the disposal phase of the project. The RCRA Part B Permit Application contains a demonstration that any VOCs released from panels would be below any concentrations of concern (COC). This plan describes how VOCs released from waste panels will be monitored to confirm the VOC concentration estimates contained in the RCRA Part B Permit Application. This plan is responsive to requirements of 20 NMAC 4.1, Subpart V, § 264.602 and § 270.23(a)(2), and addresses confirmatory monitoring of waste management activities during the WIPP disposal phase.

2.0 TARGET VOLATILE ORGANIC COMPOUNDS

The wastes proposed for disposal at WIPP are described in the Waste Analysis Plan of the RCRA Part B Permit Application (Chapter C). Approximately 60 percent of the waste proposed to be emplaced at WIPP during the entire lifetime of the facility is classified as transuranic mixed waste, which consists of waste that contains both radioactive and RCRA-regulated hazardous chemical components.

Generator knowledge of the wastes and the processes by which they are generated, as well as available analytical data, indicate that the VOCs most commonly present in the wastes and responsible for approximately 99 percent of the calculated RCRA-constituent posed human health risk are as follows:

- 1,1-Dichloroethylene
- Carbon tetrachloride
- Methylene chloride
- Chloroform
- 1,1,2,2-Tetrachloroethane
- 1,1,1-Trichloroethane
- Chlorobenzene
- 1,2-Dichloroethane
- Toluene

Physical and chemical data for these target VOCs are presented in Table 2.1.

Table 2.1. Target Analytes for VOC Monitoring During the WIPP Disposal Phase

Target Analyte	Common Synonyms and Acronyms	Chemical	Molecular Weight (g/mol)	Boiling Point (˚C)*
1,1-Dichloroethylene	1,1-Dichloroethene, Vinylidene chloride, 1,1-DCE	$C_2H_2Cl_2$	96.95	31
Carbon tetrachloride	Tetrachloromethane	CCl_4	153.8	77
Methylene chloride	Dichloromethane	CH_2Cl_2	84.94	40
Chloroform	Trichloromethane	$CHCl_3$	119.4	61
1,1,2,2-Tetrachloro-ethane	sym-Tetrachloroethane, Tetrachloroethane	$C_2H_2Cl_4$	167.9	147
1,1,1-Trichloroethane	1,1,1-TCA, TCA, Methyl chloroform	$C_2H_3CCl_3$	133.42	74
Chlorobenzene	Monochlorobenzene, Benzene chloride	C_6H_5Cl	112.6	132
1,2-Dichloroethane	1,2-DCA, DCA, Ethylene dichloride, EDC, sym-Dichloroethane	$C_2H_4Cl_2$	98.96	83
Toluene	Methyl benzene	C_7H_8	92.13	111

g/mol grams per mole
˚C Degrees Celsius

* Handbook of Chemistry and Physics, 62nd Edition, CRC Press, 1982

2.1 Sources of Volatile Organic Compound Emissions

Figure 2.1 depicts the initial WIPP underground facility configuration. Potential waste-related sources of VOCs include (1) open panels containing vented waste containers, and (2) closed panels of disposed waste. Any VOC emissions from emplaced waste will pass by a monitoring system as they are directed to the exhaust shaft. Other activities not related to normal waste management activities may also lead to VOC emissions. These non-waste-related sources of VOCs will not be monitored directly at WIPP.

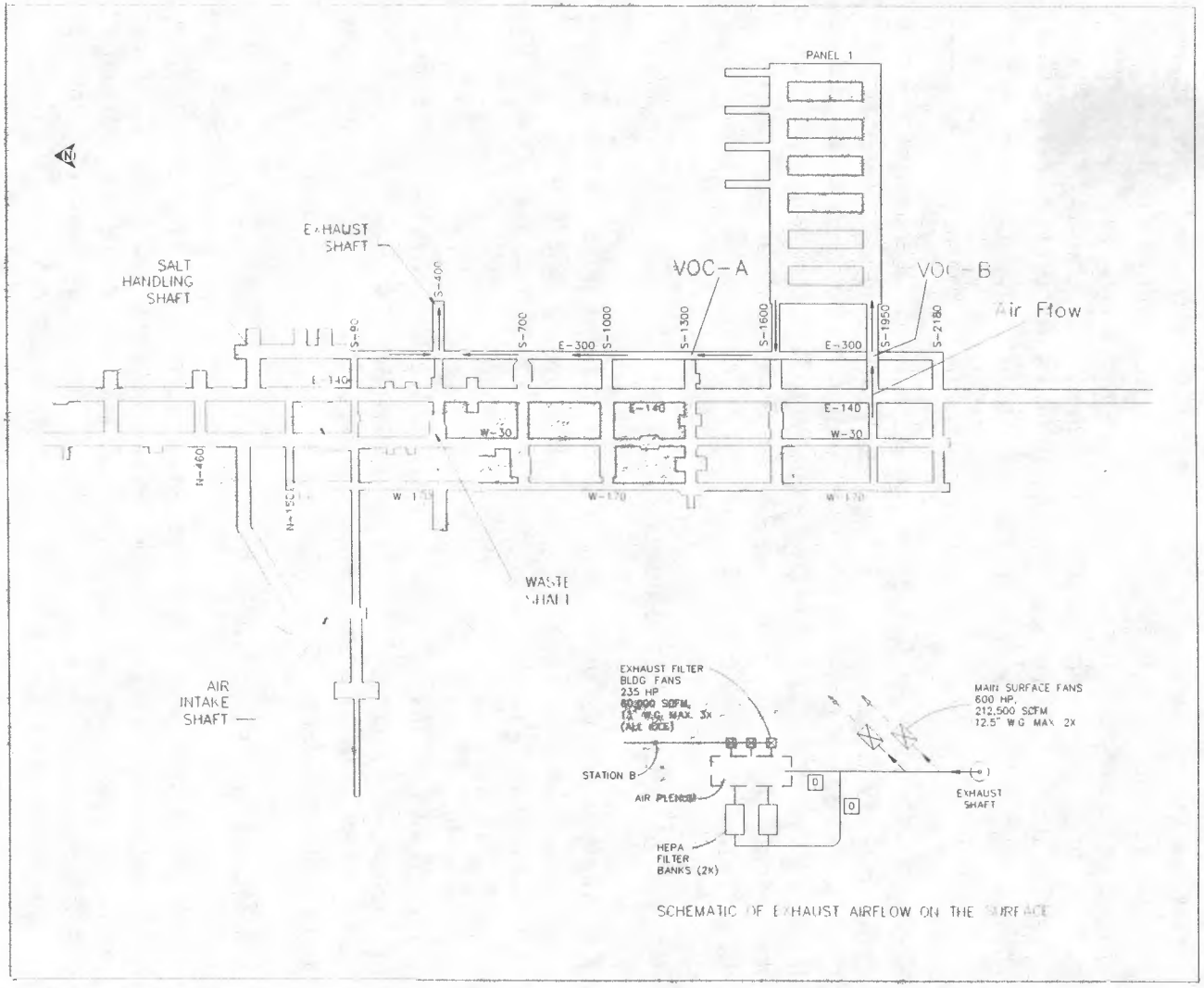

Figure 2.1. Panel Area Air Flow

Non-waste-related sources of VOCs at WIPP include background sources and emissions from operational activities in ambient mine air. Background sources of VOCs include any sources that emit VOCs to the ambient air that are subsequently drawn into the air intake shaft of the underground WIPP facility. Examples of background sources are oil and gas exploration and petroleum production and potash production activities in the WIPP vicinity, and motor vehicle emissions in the WIPP parking lot and on nearby roads. Sources of VOC emissions related to WIPP mine operational activities also exist below ground surface. Fuel combustion, painting activities, cleaning solvents, equipment exhaust, and air conditioners are potential sources of VOCs.

The RCRA Part B Permit Application establishes COCs for the VOCs from waste in open and closed panels. Therefore, the VOC Confirmatory Monitoring Plan is designed to differentiate VOC concentrations attributed to open and closed panels from other potential sources. Accordingly, VOC monitoring performed to confirm the theoretical calculations in the RCRA Part B Permit Application will begin when waste emplacement commences in the first panel.

2.2 Volatile Organic Compound Pathway

The only pathway for VOCs during the operational phase is via airborne transport. Any VOCs released in the underground facility would become entrained in the underground ventilation air and released to the atmosphere through the exhaust shaft (Figure 2.1).

The RCRA Part B Permit Application identifies COCs in the Drift E-300 air pathway for the target VOCs. The COCs have been extrapolated from the theoretical calculations for the surface, to the panels, using a mathematical dispersion model and facility ventilation design data.

3.0 MONITORING DESIGN

Detailed design features of this plan are presented in this section. The purpose of this program is to confirm the theoretical calculations presented in the RCRA Part B Permit Application for specific target VOCs. This plan uses available sampling and analysis techniques to measure VOC concentrations in air. Available sampling equipment includes the WIPP VOC canister samplers.

3.1 Sampling Locations

Air samples will be collected at two locations in the facility to quantify airborne VOC concentrations. VOC concentrations attributable to VOC emissions from Panel 1 will be measured by placing one VOC monitoring station just downstream from Panel 1 at VOC-A and another station upstream from Panel 1 at VOC-B (Figure 2.1). In this configuration, VOC-B will measure VOC concentrations attributable to releases from

the upstream sources and other background sources of VOCs. VOC-A will measure upstream VOC concentrations plus any additional VOC concentrations resulting from releases from Panel 1. A sample will be collected from each station on designated sample days. For each quantified target VOC, the concentration measured at VOC-B will be subtracted from the concentration measured at VOC-A to assess any release from Panel 1. Measurements from the first panel will confirm estimates of release concentrations from all panels since the releases will be cyclic from panel to panel.

The sampling locations were selected based on operational considerations and the calculations presented in the RCRA Part B Permit Application. As discussed in Section 2.0, there are several different potential sources of release for VOCs. These sources include incoming air from above ground, facility support operations, open waste panels, and closed waste panels. In addition, because of the ventilation requirements of the underground facility and atmospheric dispersion characteristics, any VOCs that are released from Panel 1 may be difficult to detect and differentiate from other sources of VOCs at any underground or above ground location further downstream of Panel 1. By measuring VOC concentrations close to the potential source of release (i.e., Panel 1), it will be possible to differentiate potential releases from background levels and confirm the theoretical calculations.

3.1.1 E-300 Panel 1 Air Outlet (Station VOC-A)

Panel 1 will be the first open panel, and it will become the first closed waste panel once it is filled and the panel closure systems are installed and certified. Waste disposal activities will begin in Panel 2 during closure of Panel 1. Because Panel 1 is a potential source of VOC releases to the ventilation air traveling to the exhaust shaft, sampling station VOC-A has been established in the Drift E-300 downstream of the Panel 1 air outlet (Drift S-1300). The purpose of this station is to evaluate whether the concentrations of VOCs measured at this point are sufficiently higher than upstream concentrations to indicate potential VOC releases from Panel 1. Therefore, concentrations of VOCs measured upstream of Panel 1 will be subtracted from those measured at station VOC-A, and the resulting differences will be compared to the calculated COCs for Drift E-300.

The COCs for releases from waste panels have been calculated for each of the target VOCs in the Drift E-300 under normal operational conditions. The calculated COC difference between VOC-A and VOC-B is presented in Table 3.1 for each of the nine target compounds. The values are presented in terms of micrograms per cubic meter (μg/m3) and parts per billion by volume (ppbv). As presented in Appendix D21 of the RCRA Part B Permit Application, baseline VOC monitoring has been performed at WIPP for three of the target VOCs (i.e., carbon tetrachloride, methylene chloride, and 1,1,1-trichloroethane). The average measured concentrations of these compounds entrained in the facility exhaust air are less than 1 percent of the respective COCs presented in Table 3.1. These data demonstrate that it will be possible to

differentiate between the VOC concentrations measured at VOC-A and VOC-B for comparison to the COCs presented in Table 3.1.

Table 3.1. Volatile Organic Compound Concentrations of Concern*

Compound	Molecular Weight (g/mol)	Drift E-300 Concentration	
		$\mu g/m^3$	ppbv
1,1-Dichloroethylene	96.95	1700	430
Carbon tetrachloride	153.8	570	90
Methylene chloride	84.94	18000	5200
Chloroform	119.4	370	76
1,1,2,2-Tetrachloroethane	167.9	1500	210
1,1,1-Trichloroethane	133.42	8500000	2300000
Chlorobenzene	112.6	170000	37000
1,2,-Dichloroethane	98.96	330	81
Toluene	92.13	3400000	900000

$\mu g/m^3$ micrograms per cubic meter
ppbv parts per billion by volume

* Calculated at 25 degrees Celsius and 760 millimeters of mercury.

3.1.2 E-300 Panel 2 Air Outlet (Station VOC-B)

To quantify VOC concentrations upstream of Panel 1, another sampling station will be established in Drift E-300 upstream of the Panel 1 air inlet (S-1950). Results from this monitoring station will allow target VOC concentrations in the ventilation air upstream of Panel 1 to be distinguished from concentrations of any target VOCs that may be released from Panel 1. VOC concentrations measured at this location will consist of background concentrations entering the facility through the air intake shaft, concentrations attributed to upstream facility operations, and concentrations from waste disposal activities in open Panel 2 after Panel 1 is closed. For each sampling event, target compound concentrations detected at VOC-B will be subtracted from those measured at VOC-A to assess VOC releases from Panel 1.

3.2 Analytes to Be Monitored

Based on waste characterization methods such as acceptable knowledge, previous analytical data, and recent risk calculations, nine VOCs have been identified for monitoring. These compounds are listed in Table 2.1. The analysis will focus on routine detection and quantification of these compounds in collected samples. Other compounds may also be present in the samples. As part of the analytical evaluations, the presence of other compounds will be investigated. The analytical method will allow semiquantitative evaluation of these compounds as tentatively identified compounds.

3.3 Sampling and Analysis Methods

A technically sound, reliable, and versatile sampling method is required for the VOC monitoring program. The selected method must be able to definitively identify and quantify the nine target compounds. Another consideration is the desire to use EPA-recommended methods that provide data of known and documented quality. In addition, the present WIPP program includes a comprehensive VOC monitoring program established at the facility; equipment, training, and documentation for VOC measurements are already in place.

The method selected for VOC sampling is based on the concept of pressurized sample collection contained in the EPA Compendium Method TO-14 (EPA, 1988b; Winberry and others, 1990). The TO-14 sampling concept uses 6-liter SUMMA® passivated stainless-steel canisters to collect integrated air samples at each sample location. This conceptual method will be used as a reference for collecting the samples at WIPP. The samples will be analyzed using gas chromatography/mass spectrometry (GC/MS) under an established QA/quality control (QC) program. Laboratory analytical procedures have been developed based on the concepts contained in both TO-14 and the draft *EPA Contract Laboratory Program - Statement of Work* (CLP-SOW) *for Volatile Organics Analysis of Ambient Air in Canisters* (EPA, 1991). The VOC Quality Assurance Project Plan (QAPjP) (WP 12-VC.02) contains additional QA/QC information for this program.

The TO-14 method is an EPA-recognized sampling concept for VOC sampling and speciation. It can be used to provide integrated samples, or grab samples, and compound quantitation for a broad range of concentrations. The sampling system can be operated unattended but requires detailed operator training.

As presently designed, the field sampling systems will be operated in the pressurized mode. In this mode, air is drawn through the inlet and sampling system with a pump. The air is pumped into an initially evacuated SUMMA® passivated canister by the sampler, which regulates the rate and duration of sampling. The passivation process forms a pure chrome-nickel oxide on the interior surfaces of the canisters. This type of container has been used routinely at WIPP in the past and has demonstrated

sample storage stability for a wide variety of VOCs. At the end of each sampling period, the canisters will be pressurized to about two atmospheres absolute. In the event of shortened sampling periods or other sampling conditions, the final pressure in the canister may be less than two atmospheres absolute. Sampling duration will be approximately six hours, so that a complete sample can be collected during a single work shift.

The canister sampling system and GC/MS analytical method are particularly appropriate for the VOC Confirmatory Monitoring Program because a relatively large sample volume is collected, and multiple dilutions and reanalyses can occur to ensure identification and quantification of target VOCs within the working range of the method. The contract-required quantitation limits (CRQL) proposed by the EPA in the CLP-SOW are 5 ppbv or less for the nine target compounds (EPA, 1991). Consequently, low concentrations can be measured. CRQLs are the EPA-specified levels of quantitation proposed for EPA contract laboratories that analyze canister samples by GC/MS. The CLP-SOW describes how instrument detection limits are demonstrated. For the purpose of this plan, the CRQLs are defined as the method reporting limits (MRL). The MRL is a function of instrument performance, sample preparation, sample dilution, and all steps involved in the sample analysis process.

Detailed analytical standard operating procedures (SOPs) and a QAPjP have been prepared for canister analysis as part of the baseline VOC monitoring at WIPP. Revisions to these documents have been made to meet the QA/QC objectives described in Section 5.0. In addition, canister and sampling system cleaning and certification SOPs and QAPjPs have been prepared. These procedures and plans are consistent with the QA/QC objectives defined for the program.

Alternative sampling methods will be considered for deployment. One option will be to use subatmospheric samplers rather than pressurized sampling systems for stations VOC-A and VOC-B. In addition, remote sensing by proposed draft EPA Method TO-16, open-path fourier transform infrared spectrometry (FTIR) and extractive FTIR, may constitute supplemental or alternative methods for detecting VOCs released from waste panels at WIPP. WIPP personnel will continue to follow the development of emerging FTIR technology, and other potentially applicable technologies for assessing VOCs in the WIPP environment. Real-time monitoring with an FTIR system may be a feasible future option for the VOC Confirmatory Monitoring Program.

3.4 Sampling Schedule

Many tasks will be completed prior to the initiation of VOC monitoring according to this plan. For example, power will be run to the monitoring station locations, engineering drawings will be created/revised for the monitoring stations, and Waste Isolation Division (WID) program QAPjP and SOP documentation will be finalized. Some sampling will be conducted prior to waste emplacement to troubleshoot the

monitoring and analytical systems. The purpose of collecting data during this phase will be to evaluate whether the monitoring systems and analytical methods are functioning properly. The troubleshooting period will be determined by WID VOC monitoring group personnel.

Confirmatory VOC sampling at Stations VOC-A and VOC-B will begin with initial waste emplacement in Panel 1. Sampling will continue during Panel 1 operations and will end no earlier than six months after the certified closure of Panel 1.

The environment within Panel 1 is not expected to vary substantially from day to day. If VOC releases from Panel 1 do occur, concentrations in Drift E-300 may increase gradually over time as the panel is filled. Once the panel is filled and closed, the panel closure systems are designed to minimize air leakage from the relatively static panel environment. For these reasons, routine sampling will be conducted twice a week during the time Panel 1 is being filled and for the first six months after the closure of Panel 1 has been certified. VOC concentrations will be evaluated quarterly to assess whether the sampling results represent adequate confirmation of the emission calculations.

If the average measured concentrations for the Panel 1 monitoring period confirm the calculations, no additional sampling will be performed. Confirmation will be achieved if the annual average concentration is below the predicted value. Monitoring will be extended for at least 12 months if no emissions are detected. However, the sampling frequency will be decreased to one per week. In addition, if a 12-month average target compound concentration from Panel 1 exceeds the concentration of concern, additional sampling will be considered.

4.0 SAMPLING AND ANALYSIS PROCEDURES

This section describes the equipment and procedures that will be implemented during sample collection and analysis activities for VOCs at WIPP.

4.1 Sampling Equipment

The sampling equipment that will be used during the study includes the following: 6-liter (L) stainless-steel SUMMA® canisters, and VOC canister samplers. A discussion of each of these items is presented below.

4.1.1 SUMMA® Canisters

Six-liter, stainless-steel canisters with SUMMA® passivated interior surfaces will be used to collect and store all ambient air and gas samples for VOC analyses collected as part of the monitoring processes. These canisters will be cleaned and certified prior to their use, in a manner similar to that described by Compendium Method TO-14 and the draft EPA CLP-SOW for Analysis of Ambient Air in Canisters.

An SOP describing this process in detail has been prepared by the analytical laboratory. Compendium Method TO-14 and the CLP-SOW (EPA, 1991) were used as reference documents in the preparation of this SOP.

4.1.2 Volatile Organic Compound Canister Samplers

A conceptual diagram of a VOC sample collection unit is provided in Figure 4.1. Unless an alternate sampling method is selected, two such systems, VOC-A and VOC-B, will be operational at the time waste disposal operations begin in Panel 1. The sampling system consists of a sample pump, flow controller, sample inlet, two inlet filters in series to remove particulate matter, vacuum/pressure gauge, electronic timer, inlet purge vent, two sampling ports, and sufficient collection canisters so that any delays attributed to laboratory turnaround time and canister cleaning and certification will not result in canister shortages. Knowledge of sampler flow rates and duration of sampling will allow calculation of sample volume. The set point flow rate will be verified before and after sample collection from the mass flow indication. Prior to use, the sample collection units will be tested and certified to demonstrate that they are free of contamination above the reporting limits of the VOC analytical method (see Section 5.0). Ultra-high purity humidified zero air will be pumped through the inlet line and sampling unit and collected in previously certified canisters as sampler blanks for analysis, as described in the subcontractor QAPjP. An SOP describing in detail the cleaning and certification procedure for samplers (including pressure testing and target compound recovery evaluation) has been prepared.

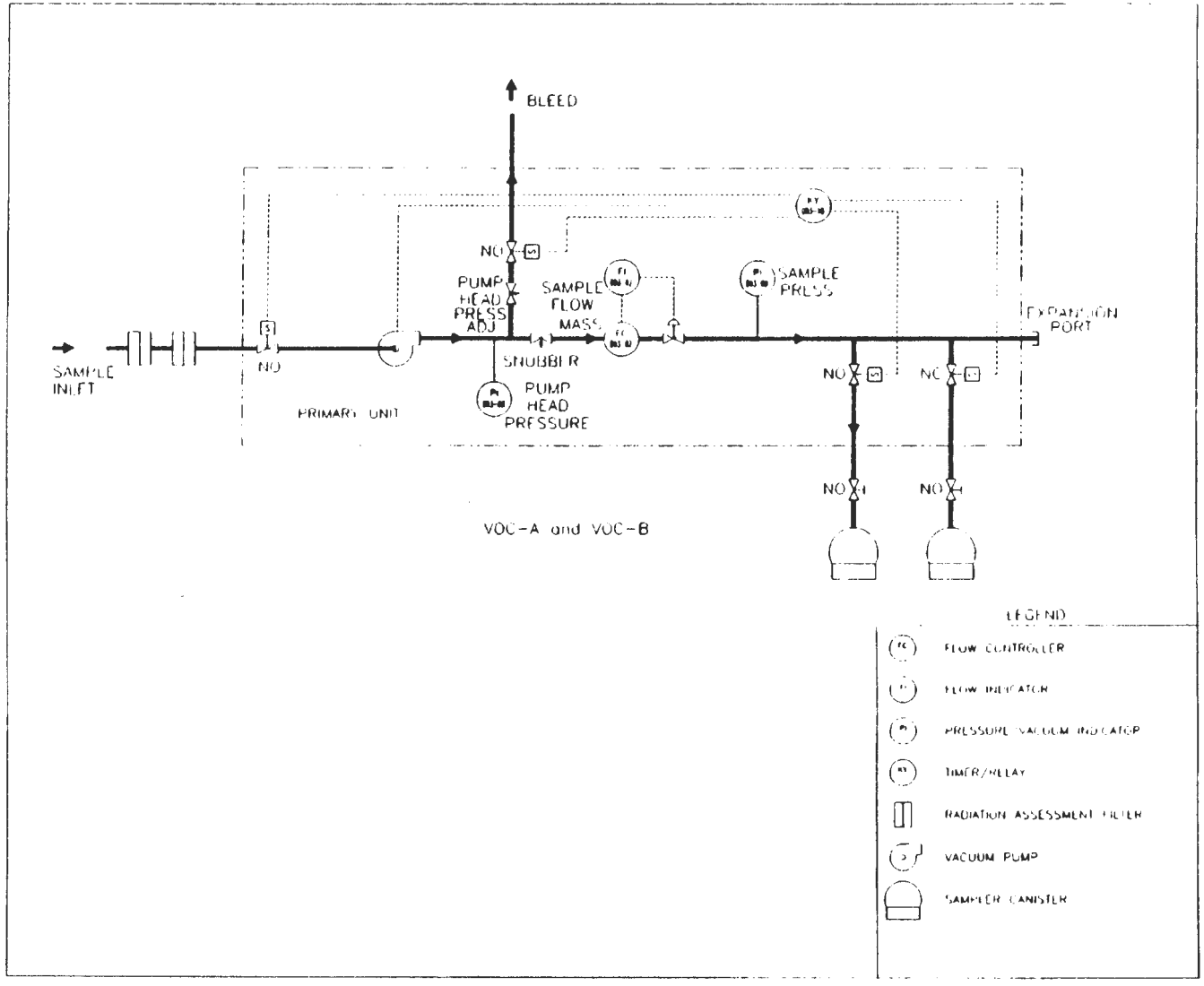

Figure 4.1. VOC Monitoring System Design

4.2 Sample Collection

Samples collected from the underground facility should be representative of routine waste handling operations; therefore, six-hour integrated samples will be collected on each sample day. Alternative sampling durations may be defined for experimental purposes. The VOC canister sampler at each location will sample ambient air on the same programmed schedule. The sample pump will be programmed to sample continuously over a six-hour period during the workday. The units will sample at a nominal flow rate of 33.3 actual milliliters per minute over a six-hour sample period. This schedule will yield a final sample volume of approximately 12 L. Flow rates and sampling duration may be modified as necessary for experimental purposes and to meet the data quality objectives.

Sample flow will be checked each sample day using an in-line mass flow controller. The flow controllers are initially factory-calibrated and specify a typical accuracy of better than 10 percent full scale. Additionally, each air flow controller is calibrated at a manufacturer-specified frequency using a National Institute of Standards and Testing (NIST) primary flow standard. Existing SOPs address the specific calibration requirements of the VOC monitoring equipment.

Upon initiation of waste disposal activities in Panel 1, samples will be collected twice each week (at Stations VOC-A and VOC-B). Samples collected at the panel locations should represent the same matrix type (i.e., elevated levels of salt aerosols). To verify the matrix similarity, duplicate samples will be collected from each sampling station (Stations VOC-A and VOC-B) during the first sampling event and at an overall frequency of 5 percent thereafter (see Section 5.1).

4.3 Sample Management

Field sampling data sheets will be used to document the conditions under which each sample is collected. These data sheets have been developed specifically for VOC monitoring at the WIPP facility. The individuals assigned to collect the specific samples will be required to fill in all of the appropriate sample data and to maintain this record in sample logbooks. The program team leader will review these forms for each sampling event.

All samples will be maintained, and shipped if necessary, at ambient temperatures. Collected samples will be transported in appropriate containers. Prior to leaving the underground for analysis, sample containers may undergo radiological screening. No potentially contaminated samples or equipment will be transported to the surface.

Additional QA requirements for sample management contained in the sitewide Quality Assurance Program Description (QAPD) (DOE, 1996), will be followed as appropriate. Chain-of-custody procedures will be followed closely, and additional requirements imposed by the laboratory for sample analysis will be included as necessary.

Individuals collecting samples will be responsible for the initiation of custody procedures. The chain of custody will include documentation as to the canister certification, location of sampling event, time, date, and individual handling the samples. Samples will be collected and handled as described in the WID QAPjP and approved SOPs. Deviations from procedure will be considered variances. Variances must be preapproved by the program manager and recorded in the project files. Unintentional deviations, sampler malfunctions, and other problems are nonconformances. Nonconformances must be documented and recorded in the project files. All field logbooks/data sheets must be incorporated into WIPP's records management program.

More detailed documentation of sample management is presented in the QAPjP for the VOC Confirmatory Monitoring Program (WP 12-VC.02).

4.4 Sampler Maintenance

Routine sampler maintenance will be the responsibility of the sampler cleaning and certification subcontractor. This maintenance will include, but not be limited to, replacement of damaged or malfunctioning parts without compromising the integrity of the sampler, leak testing, and instrument calibration. Additionally, complete spare units will be maintained on-site to minimize downtime because of sampler malfunction. A sampler preventative maintenance schedule has been developed and is included in the subcontractor QAPjP. At a minimum, samplers will be certified for cleanliness initially, after any parts that are included in the sample flow path are replaced, or any time analytical results indicate potential contamination. All sample canisters will be certified prior to each usage.

4.5 Analytical Procedures

Analytical procedures used in the analysis of VOC samples from canisters are based on concepts contained in Compendium Method TO-14 (EPA, 1988) and in the draft CLP-SOW for Analysis of Ambient Air (EPA, 1991). Specific analytical SOPs and method validation data are in place at the program analytical laboratory for the performance of canister sample analyses. The technical approach for canister sample analysis is summarized below.

4.5.1 Sample Preparation

Because canisters will be pressurized during the sampling procedure, laboratory pressurization will not normally be necessary for analyses. Canister pressures will be verified by the laboratory when they are received to confirm that significant losses did not take place during shipping and storage.

4.5.2 Analytical System Requirements

The GC/MS analytical system will consist of three major components: the sample introduction system, the analyte separation system (GC), and the analyte detector system (MS).

- Sample Introduction System for Canisters: This system may include a drying tube to remove moisture from the gas stream. One or more cryogenic traps may be used to focus and desorb trapped material. Transfer lines within the introduction unit will be heated as necessary so that volatile compounds are not actively adsorbed. Valves and solenoids will be heated and of a low dead volume type. The introduction system will have an in-line mass flow controller. The introduction unit will be capable of introducing internal standards directly into the sample flow path.

- Analyte Separation: Analyte separation will be achieved by GC. The GC will be capable of subambient temperature programming.

- Detection System: Analyte detection will be accomplished by MS. The MS must be capable of scanning from 35 to 300 mass-to-charge ratio in one second or less, using 70 electron-volt electron energy in the electron impact ionization mode, and produce a mass spectrum which meets all the instrument performance acceptance criteria when 50 nanograms of 4-bromofluorobenzene (BFB) is analyzed. The MS must have a data system capable of continuous acquisition and storage on machine readable media storing all raw data, and a computer algorithm for analyte quantitation and forward library searching. All raw and processed GC/MS data must be stored on magnetic tape or disk and kept for the duration of this project.

4.5.3 Standard Preparation

Primary analytical standards will be prepared by the laboratory from commercially available, certified calibration gases. Alternatively, primary standards may be generated internally by the laboratory. Primary standards of analytes that are gases at standard temperature and pressure may be prepared internally in a static gas dilution bottle. For analytes that are liquid or solid at standard temperature and pressure, a mixture may be made and loaded directly into a standard preparation cylinder. These internally generated standards will be checked against EPA audit cylinders or other reference materials to verify the accuracy of their concentrations.

Primary standards will be prepared for the nine target compounds as well as the internal standards. Secondary standards used for instrument calibration will be prepared from dilution of the primary standards.

4.5.4 Calibration Procedures

Prior to the analysis of a standard curve, the GC/MS system must undergo a mass calibration check. This check is performed by introducing 50 nanograms of BFB into the capillary column through the preconcentrator. The requirements (criteria) for relative ion abundances for BFB, listed in Table 4.1, must be met before analyses may proceed. BFB requirements must be met for each 12 hours of operation.

Quantitative standards for the nine target analytes will be analyzed at five concentrations. These concentrations should define the linear range of the instrument for these nine compounds; however, if some nonlinearity exists, concentrations may be determined by curve fitting or physically plotting the data. One standard concentration shall be at or near a concentration corresponding to the required MRL for each target compound. Relative response factors will be generated for each target compound. These response factors must meet the requirements listed in Section 5.1.3. As discussed above, if low concentration standards do not meet the linearity requirement, a curve-fitting routine may be used. The method used to quantify the data must be reported with the analytical results.

Table 4.1. 4-Bromofluorobenzene Key Ions and Ion Abundance Criteria

Mass	Ion Abundance Criteria
50	8 to 40 percent of mass 95
75	30 to 66 percent of mass 95
95	Base Peak, 100 percent Relative Abundance
96	5 to 9 percent of mass 95
173	<2 percent of mass 174
174	50 to 120 percent of mass 95
175	4 to 9 percent of mass 174
176	93 to 101 percent of mass 174
177	5 to 9 percent of mass 176

4.5.5 Library Searches

In every sample analyzed, a forward search of the NIST library of mass spectra must be performed for all chromatographic peaks greater than 10 percent of the nearest internal standard.

4.5.6 Data Reporting

Sample target analyte concentrations will be quantified using the mid-range calibration standards and will be reported in ppbv. Non-target sample contaminants identified by NIST library searches will be reported as tentatively identified compounds, and concentration calculations will be based on the response of the nearest internal standard. The relative response factor used for quantitation, as well as copies of spectra with the library search results (purity and/or fit), will be submitted with the results. A table listing the run sequence with the corresponding internal standard area counts must be reported with the analytical results. A narrative describing any problems with sample analyses must be included. Any nonconformances must be included with the reporting of the data. Data reporting and documentation requirements are discussed in greater detail in WP 12-VC.02.

4.6 Laboratory Selection

Sample analyses will occur at the WIPP on-site analytical laboratory and/or at a suitable contract analytical laboratory. Upon selection of an off-site contract laboratory, measures will be taken, in accordance with the current Westinghouse Waste Isolation Division procurement policies and procedures, to ensure that procured services conform to specified requirements. These measures generally will include one or more of the following: (1) evaluation of the supplier's capability to provide services in accordance with requirements, including a history of providing similar services; (2) evaluation of objective evidence of conformance, such as laboratory document submittals; and (3) examination of delivered services.

4.7 Laboratory Procedures

Specific laboratories that perform analyses and sampler certification activities for the Confirmatory VOC Monitoring Program are required to develop and maintain the following SOPs as appropriate:

- Canister cleaning and certification
- Sampler cleaning and certification
- Analyses of VOCs in SUMMA® canisters
- Data QA and reporting

Analytical laboratories are required to maintain an internal program QA manual, and to develop and prepare a QAPjP covering cleaning and certification of canisters and laboratory analysis of canister samples. In addition, laboratories will be required to review and comply with the QAPjP for Confirmatory VOC Monitoring.

5.0 QUALITY ASSURANCE

Many QA objectives for the Confirmatory VOC Monitoring Plan have been addressed in Sections 3.0 and 4.0. For example, sample collection procedures are discussed, including justification of sampling location selection. Additional topics include discussions of sampling program operations, preparation of sampling equipment and sample containers, redundancy in sampling equipment and sample containers (including canister certification), a general sample management/control scheme, and the selection of analytical procedures. More detailed descriptions of these functions, as well as additional quality-related objectives, are addressed in the QAPjP. The QAPjP has been prepared in accordance with the document *EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations* (EPA, 1994), and the *Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans* (EPA, 1983), and QA criteria listed in Table 5.1. This section addresses the methods to be used to evaluate the components of the measurement system and how this evaluation will be used to assess data quality. In addition, project activities will be performed in conformance with QA requirements described in the QAPjP.

Table 5.1. Quality Assurance Objectives for Accuracy, Precision, Sensitivity, and Completeness

Compound	Accuracy (Percent Recovery)	Precision (RPD) Laboratory	Precision (RPD) Field	Required MRL (ppbv)	Completeness (Percent)
1,1-Dichloroethylene	60 to 140	25	35	5	90
Carbon tetrachloride	60 to 140	25	35	2	90
Methylene chloride	60 to 140	25	35	5	90
Chloroform	60 to 140	25	35	2	90
1,1,2,2-Tetrachloroethane	60 to 140	25	35	2	90
1,1,1-Trichloroethane	60 to 140	25	35	5	90
Chlorobenzene	60 to 140	25	35	2	90
1,2-Dichloroethane	60 to 140	25	35	2	90
Toluene	60 to 140	25	35	5	90

MRL method reporting limit
RPD relative percent difference

These data quality objectives are based on control criteria proposed by the EPA as presented in the *CLP-SOW for the Analysis of Ambient Air in Canisters* (EPA, 1991).

5.1 Quality Assurance Objectives for the Measurement of Precision, Accuracy, Sensitivity, and Completeness

QA objectives for this plan will be defined in terms of the following data quality parameters.

Precision. For the duration of this program, precision will be defined and evaluated by the RPD values calculated between field duplicate samples and between laboratory duplicate samples.

$$RPD = \frac{(A - B)}{([A + B] / 2)} \times 100$$

where: A = Original sample result
B = Duplicate sample result

Accuracy. Analytical accuracy will be defined and evaluated through the use of analytical standards. Because recovery standards cannot reliably be added to the sampling stream, overall system accuracy must be based on analytical instrument performance evaluation criteria. These criteria will include performance verification for instrument calibrations, laboratory control samples, sample surrogate recoveries, and sample internal standard areas. These criteria will constitute the verification of accuracy for target analyte quantitation (i.e., quantitative accuracy). Evaluation of standard ion abundance criteria for BFB will be used to evaluate the accuracy of the analytical system in the identification of targeted analytes, as well as the evaluation of unknown contaminants (i.e., qualitative accuracy).

Sensitivity. Sensitivity will be defined by the required MRLs for the program. Attainment of required MRLs will be verified by the performance of statistical method detection limit (MDL) studies in accordance with 40 *Code of Federal Regulations* § 136. The MDL represents the minimum concentration that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero. An MDL study will be performed by the program analytical laboratory prior to sampling and analysis, and annually thereafter.

Completeness. Completeness will be defined as the percentage of the ratio of the number of valid sample results received versus the total number of samples collected. Completeness may be affected, for example, by sample loss or destruction during shipping, by laboratory sample handling errors, or by rejection of analytical data during data validation.

5.1.1 Evaluation of Laboratory Precision

Laboratory sample duplicates and blank spike/blank spike duplicates (BS/BSD) will be used to evaluate laboratory precision. QA objectives for laboratory precision are listed in Table 5.1, and are based on precision criteria proposed by the EPA for canister sampling programs (EPA, 1991). These values will be appropriate for the evaluation of samples with little or no matrix effects. Because of the potentially high level of salt-type aerosols in the WIPP underground environment, the analytical precision achieved for WIPP samples may vary with respect to the EPA criteria. RPDs for BS/BSD analyses will be tracked through the use of control charts. RPDs obtained for laboratory sample duplicates will be compared to those obtained for BS/BSDs to ascertain any sample matrix effects on analytical precision. BS/BSDs and laboratory sample duplicates will be analyzed at a frequency of 10 percent, or one per analytical lot, whichever is more frequent. Precision windows and outlier criteria are addressed in the subcontractor QAPjP.

5.1.2 Evaluation of Field Precision

Field duplicate samples will be collected at a frequency of 5 percent for both monitoring locations. The data quality objective for field precision is 35 percent for each set of duplicate samples.

5.1.3 Evaluation of Laboratory Accuracy

Quantitative Accuracy. Quantitative analytical accuracy will be evaluated through performance criteria on the basis of (1) relative response factors generated during instrument calibration, (2) analysis of laboratory control samples (LCS), and (3) recovery of internal standard compounds. The criteria for the initial calibration (5-point calibration) is $\leq$ 30 percent relative standard deviation for target analytes. After the successful completion of the 5-point calibration, it is sufficient to analyze only a midpoint standard for every 12 hours of operation. The midpoint standard must pass a 30 percent difference acceptance criterion for each target compound before sample analysis may begin.

A blank spike or LCS is an internal QC sample generated by the analytical laboratory by spiking a standard air matrix (humid zero air) with a known amount of a certified reference gas. The reference gas will contain the target VOCs at known concentrations. Percent recoveries for the target VOCs will be calculated for each LCS relative to the reference concentrations. Objectives for percent recovery are listed in Table 5.1, and are based on accuracy criteria proposed by the EPA for canister sampling programs (EPA, 1991). LCSs will be analyzed at a frequency of 10 percent, or one per analytical lot, whichever is more frequent. Recovery windows and outlier criteria are addressed in the subcontractor QAPjP.

Internal standards will be introduced into each sample analyzed, and will be monitored as a verification of stable instrument performance. In the absence of any unusual interferences, areas should not change by more than 40 percent over a 12-hour period. Deviations larger than 40 percent are an indication of a potential instrument malfunction. If an internal standard area in a given sample changes by more than 40 percent, the sample must be reanalyzed. If the 40 percent criterion is not achieved during the reanalysis, the instrument must undergo a performance check and the midpoint standard must be reanalyzed to verify proper operation. Response and recovery of internal standards will also be compared between samples, LCSs, and calibration standards to identify any matrix effects on analytical accuracy.

Qualitative Accuracy. Qualitative accuracy in the identification of target VOCs will be evaluated by the relative ion abundance criteria established for the internal standard compound BFB. For each 12 hours of sample analysis, a 50-nanogram injection of BFB must be made, and the requirements listed in Table 4.1 must be met before the instrument may be used to analyze samples.

5.1.4 Evaluation of Sensitivity

The presence of aerosol salts in underground locations may affect the MDL of the samples collected in those areas. The intake manifold of the sampling systems will be protected sufficiently from the underground environment to minimize salt aerosol interference.

The MDL for each of the nine target compounds will be evaluated by the analytical laboratories before sampling begins. The initial and annual MDL evaluation will be performed in accordance with 40 *Code of Federal Regulations* § 136 and with EPA/530-SW-90-021, as revised and retitled, "Quality Assurance and Quality Control" (Chapter 1 of SW-846) (1986).

5.1.5 Completeness

The expected completeness for this program is greater than or equal to 90 percent. Data completeness will be tracked monthly.

5.2 Sample Handling and Custody Procedures

Sample packaging, shipping, and custody procedures are addressed in the QAPjP (Sections 7.4 and 8.0).

5.3 Calibration Procedures and Frequency

Calibration procedures and frequencies for analytical instrumentation are listed in Section 4.5.4.

5.4 Analytical Procedures

The analytical procedures for the Confirmatory VOC Monitoring Program, which are based on the draft CLP-SOW for Analysis of Ambient Air in Canisters (EPA, 1991) and EPA Method TO-14 (EPA, 1988), are outlined in Section 4.5.

5.5 Data Reduction, Validation, and Reporting

Data reduction and validation are addressed in the QAPjP. A brief description of data reporting is given in Section 4.5; more detail on data reporting is provided in the QAPjP.

A dedicated logbook will be maintained by the operators. This logbook will contain documentation of all pertinent data for the sampling. Sample collection conditions, maintenance, and calibration activities will be included in this logbook. Additional data collected by other groups at WIPP, such as ventilation airflow, temperature, pressure, etc., will be obtained to document the sampling conditions, as necessary.

Data validation procedures will be specified in the monitoring program QA protocols. At a minimum, all field data forms and sampling logbooks will be checked for completeness and correctness. Sample custody and analysis records will be reviewed routinely by the QA officer and the laboratory supervisor.

Data will be summarized quarterly. Data summaries will include target VOC results for each sample collected as well as overall statistical summaries. Graphical summaries may also be included.

5.6 Performance and System Audits

System audits will initially address start-up functions for each phase of the project. These audits will consist of on-site evaluation of materials and equipment, review of canister and sampler certification, review of laboratory qualification and operation and, at the request of the QA officer, an on-site audit of the laboratory facilities. The function of the system audit is to verify that the requirements in this plan and the QAPjP have been met prior to initiating the program. System audits will be performed prior to the initiation of the monitoring program.

Performance audits will be accomplished as necessary through the evaluation of analytical QC data by performing periodic site audits throughout the duration of the project, and through the introduction of third-party audit cylinders (laboratory blinds) into the analytical sampling stream. Performance audits will also include a surveillance/review of data associated with canister and sampler certification, a project-specific technical audit of field operations, and a laboratory performance audit. Field logs, logbooks, and data sheets will be reviewed weekly. Blind-audit canisters

will be introduced once during the sampling period. Details concerning scheduling, personnel, and data quality evaluation are addressed in the QAPjP.

5.7 Preventive Maintenance

Sampler maintenance is described briefly in Section 4.4. Maintenance of analytical equipment is addressed in the analytical SOP.

5.8 Corrective Actions

Nonconformances and corrective actions of noncomformances will be processed as outlined in the QAPD (DOE, 1996).

5.9 Quality Assurance Reports to Management

The results of audits will be reported in accordance with the sitewide QAPD. Audit reports will include identification of findings and/or observations, and an assessment of the effectiveness of the QA elements.

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WP 12-VC.02, Volatile Organic Compounds Monitoring Quality Assurance Project Plan

APPENDIX D21

BACKGROUND AIR DATA

WIPP VOC MONITORING PROGRAM DATA - STATION VOC-1

All concentrations in parts per billion

1	Date	Sample	Trichloro-trifluoro-ethane		Methylene Chloride		Trichloro-ethane		Carbon Tetra-Chloride		Trichloro-ethylene	
2	09/06/91	47	0.19	JB	0.31	B	12.00		0.10	U	0.10	U
3	09/11/91	51	0.49	B	0.42		13.00		0.12	J	0.10	U
4	09/18/91	63	1.30	B	0.77		2.50	B	0.11	J	0.10	U
5	09/25/91	60	0.69	B	0.20		2.40		0.10	J	0.10	U
6	09/29/91	66	0.21	B	0.16	J	0.56		0.07	J	0.10	U
7	10/01/91	70	9.30	B	0.10	U	45.00		0.12	J	0.10	U
8	10/03/91	75	0.21	B	0.27		1.50		0.09	J	0.10	U
9	10/10/91	78	0.31	B	0.19	J	48.00		0.14	J	0.10	U
10	10/17/91	80	0.20	B	0.48		20.00		0.12	J	0.10	U
11	10/26/91	86	0.20	B	0.49		110.00		0.15	J	0.10	U
12	10/31/91	89	0.19	B	0.10	U	12.00		0.10	U	0.10	U
13	11/06/91	92	0.24	B	0.22		2.00		0.10	J	0.10	U
14	11/13/91	100	0.86	B	0.22		22.00		0.12	J	0.10	U
15	11/21/91	104	0.34		0.36		9.30		0.11	J	0.10	U
16	11/26/91	112	0.29	B	0.18	J	10.00		0.11	J	0.10	U
17	12/06/91	114	0.76	B	0.18	J	9.70		0.11	J	0.10	U
18	12/10/91	119	0.37	B	0.28		6.60		0.11	J	0.10	U
19	12/17/91	123	0.56	B	0.23		39.00		0.13	J	0.10	U
20	12/27/91	127	0.22	B	0.15	J	3.00		0.10	J	0.09	J
21	12/31/91	131	0.18	JB	0.14	J	1.40		0.10	J	0.10	U
22	02/05/92	135	0.12	JB	0.12	J	0.40		0.11	J	0.10	U
23	02/07/92	136	0.15	JB	0.10	U	0.58		0.12	J	0.10	U
24	02/08/92	138	0.17	JB	0.14	J	0.37		0.11	J	0.10	U
25	02/19/92	139	0.12	JB	0.13	J	0.28	J	0.10	J	0.10	U
26	02/27/92	140	0.15	JB	0.12	J	0.39		0.10	J	0.10	U
27	03/04/92	144	0.16	JB	0.14	J	0.40	B	0.10	J	0.10	U
28	03/16/92	148	0.16	J	0.13	J	0.33	B	0.10	J	0.10	U
29	03/21/92	152	0.13	JB	0.12	J	0.81	B	0.09	J	0.10	U
30	03/27/92	153	0.16	JB	0.10	J	0.42	B	0.10	J	0.10	U
31	04/02/92	168	0.13	JB	0.10	U	0.35	B	0.10	J	0.10	U
32	04/08/92	169	0.19	JB	0.14	J	0.51	B	0.11	J	0.10	U
33	04/14/92	171	0.14	JB	0.10	U	0.36	B	0.11	J	0.10	U
34	04/16/92	172	0.15	JB	0.10	U	0.36	B	0.11	J	0.10	U
35	04/20/92	174	0.12	JB	0.10	U	0.37	B	0.10	JB	0.10	U
36	04/25/92	176	0.11	J	0.10	U	0.29	JB	0.09	J	0.10	U
37	04/29/92	178	0.11	J	0.10	U	670.00	B	0.20		0.10	U
38	05/01/92	179	0.15	J	0.09	J	0.32	B	0.11	J	0.10	U
39	05/05/92	181	0.15	J	0.11	J	0.31	B	0.10	J	0.10	U
40	05/08/92	182	0.58		0.13	J	5.70	B	0.13	J	0.10	U
41	05/14/92	186	0.23		0.10	U	45.00	B	0.14	J	0.10	U
42	05/20/92	188	0.08	J	0.12	J	1.60	B	0.10	J	0.10	U
43	05/27/92	190	5.10		0.10	J	12.00	B	0.12	J	0.10	U
44	06/02/92	191	1.30		0.19	J	7.40	B	0.13	J	0.10	U
45	06/08/92	192	0.09	J	0.13	J	4.50	B	0.12	J	0.10	U
46	06/13/92	193	0.11	J	0.20		7.50	B	0.13	J	0.10	U
47	06/19/92	194	0.11	JB	0.10	U	5.60	B	0.11	J	0.10	U

WIPP VOC MONITORING PROGRAM DATA - STATION VOC-1
All concentrations in parts per billion (continued)

1	Date	Sample	Trichloro-trifluoro-ethane		Methylene Chloride		Trichloro-ethane		Carbon Tetra-Chloride		Trichloro-ethylene	
1	06/25/92	199	0.13	J	0.15	J	1.40	B	0.10	J	0.10	U
2	06/26/92	200	4.00		0.10	U	8.40	B	0.11	J	0.10	U
3	06/30/92	202	0.26	B	0.10	U	1.40	B	0.12	J	0.10	U
4	07/08/92	203	0.18	J	0.13	J	0.55	B	0.10	J	0.10	U
5	07/16/92	204	0.22	B	0.10	U	1.70	B	0.12	J	0.10	U
6	07/24/92	205	15.00		0.10	U	2.60	B	0.10	J	0.10	U
7	08/01/92	206	3.60	B	0.46		31.00	B	0.11	J	0.10	U
8	08/04/92	207	0.84	B	0.30		0.65	B	0.11	J	0.10	U
9	08/12/92	214	1.60	B	0.15	J	1.70		0.11	J	0.10	U
10	08/14/92	217	0.37	B	0.21		4.40	B	0.12	J	0.21	
11	08/19/92	218	0.15	JB	0.15	J	0.72	B	0.13	J	0.08	J
12	08/27/92	219	0.17	JB	0.15	J	0.94	B	0.12	J	0.07	J
13	09/02/92	220	0.14	J	0.19	J	16.00		0.11	J	0.10	U
14	09/04/92	222	0.37		0.31		280.00		0.13	J	0.10	J
15	09/12/92	223	0.49		0.13	J	4.80		0.11	J	0.24	
16	09/16/92	224	0.22	B	0.13	J	21.00		0.11	J	0.07	J
17	09/17/92	227	0.39	B	0.16	J	2.30		0.11	J	0.10	U
18	09/18/92	230	0.16	J	0.15	J	2.50		0.14	J	0.10	J
19	09/21/92	231	0.14	J	0.68		1.30		0.14	J	0.10	J
20	10/08/92	232	0.13	B	1.20		130.00		0.12	J	0.10	J
21	10/16/92	233	0.66		0.10	U	9.40		0.11	J	0.10	U
22	10/22/92	234	0.10	J	0.10	U	4.30		0.10	J	0.10	U
23	10/29/92	236	0.34		0.16	J	16.00		0.11	J	0.12	J
24	11/04/92	237	0.49		0.45		8.30		0.10	J	0.12	J
25	11/11/92	238	0.60		0.27		3.40		0.09	J	0.07	J
26	11/21/92	240	0.48		0.32		4.60	J	0.07	J	0.09	J
27	11/26/92	243	0.11	J	0.18	J	7.90		0.10	J	0.10	U
28	12/02/92	244	0.19	J	0.12	J	100.00	J	0.13	J	0.10	U
29	12/10/92	245	0.65		0.31		54.00		0.11	J	0.10	U
30	12/15/92	246	0.12	J	0.14	J	84.00		0.11	J	0.10	U
31	12/23/92	247	0.50		0.34		47.00		0.08	J	0.09	J
32	12/31/92	248	0.11	J	0.18	J	17.00		0.09	J	0.05	J
33	01/08/93	249	0.09	J	0.65		76.00		0.10	J	0.10	U
34	01/16/93	252	0.11	J	0.12	J	38.00		0.08	J	0.20	U
35	01/18/93	253	0.10	J	0.10	U	0.80		0.10	J	0.10	U
36	01/26/93	254	0.09	J	0.12	J	29.00		0.09	J	0.10	U
37	02/04/93	256	0.16	J	0.10	U	58.00		0.10	J	0.10	U
38	02/11/93	257	0.20	J	0.17	J	24.00		0.10	J	0.07	J
39	02/19/93	258	0.08	J	0.18	J	11.00		0.10	J	0.10	J
40	02/27/93	259	0.10	J	0.16	J	4.20		0.10	J	0.10	U
41	03/01/93	260	0.11	J	3.30		1.70		0.10	J	0.30	
42	03/09/93	267	2.30		0.23		3.20		0.10	J	0.10	U
43	03/18/93	268	0.11	J	0.17	J	3.60		0.13	J	0.10	U
44	03/27/93	269	0.25		0.22		9.90		0.09	J	0.10	U
45	04/02/93	270	0.11	J	0.37	B	3.80		0.09	J	0.03	
46	04/07/93	271	0.12	J	0.39	B	7.80		0.10	J	0.14	J
47	04/09/93	273	0.09	J	0.42	B	3.40		0.09	J	0.03	J
48	04/14/93	274	0.11	J	0.23		5.50		0.10	U	0.10	U

WIPP VOC MONITORING PROGRAM DATA - STATION VOC-1
All concentrations in parts per billion (continued)

1	Date	Sample	Trichloro-trifluoro-ethane		Methylene Chloride		Trichloro-ethane		Carbon Tetra-Chloride		Trichloro-ethylene	
1	04/22/93	276	0.24		0.19	J	1.50		0.10	J	0.10	U
2	04/27/93	277	0.10	J	0.26	B	17.00		0.09	J	0.10	U
3	05/05/93	278	1.60		1.00	B	6.70		0.11	J	0.12	J
4	05/12/93	279	0.41	B	0.52	B	320.00		0.09	J	0.03	J
5	05/20/93	280	0.32	B	0.87	B	13.00		0.07	J	0.10	U
6	05/27/93	290	0.63	B	0.44	B	0.50		0.07	J	0.10	U
7	06/02/93	296	0.52		0.21	B	4.90		0.10	J	0.10	U
8	06/10/93	311	0.12	J	0.35	B	2.70		0.10	J	0.10	U
9	06/18/93	329	0.10	J	0.20	B	1.50		0.10	J	0.10	U
10	06/23/93	344	0.30	B	0.30	B	3.10		0.10	J	0.10	U
11	06/24/93	346	0.12	J	0.19	JB	2.60		0.11	J	0.04	J
12	06/30/93	364	0.20	J	0.40	B	4.90		0.10	J	0.10	U
13	07/08/93	373	0.20		0.20	B	9.00		0.10	J	0.10	U
14	07/16/93	385	0.18	JB	0.27	B	4.20		0.02	J	0.10	U
15	07/20/93	389	1.30		0.20	B	5.10		0.10	J	0.10	U
16	07/28/93	391	0.10	J	0.20	B	18.00		0.10	J	0.10	J
17	08/05/93	397	0.10	J	0.30	B	19.00		0.10	J	0.10	U
18	08/13/93	399	0.29	JB	0.29	B	3.20		0.09	J	0.14	J
19	08/21/93	401	0.39	B	0.10	U	1.40		0.08	J	0.10	J
20	08/23/93	402	0.11	JB	0.08	JB	1.20		0.08	J	0.10	J
21	08/30/93	403	0.54	B	0.10	U	36.00		0.07	J	0.10	U
22	09/07/93	404	0.07	B	0.34	JB	5.80		0.20	U	0.20	U
23	09/16/93	406	9.80	B	0.18	JB	16.00		0.09	J	0.10	U
24	09/23/93	408	0.17	J	0.21	B	1.90		0.13	J	0.04	J
25	09/29/93	410	1.60	B	0.46	B	7.90		0.09	J	0.10	U
26	10/06/93	412	0.18	J	0.21	B	21.00		0.13	J	0.56	
27	10/12/93	415	0.06	J	0.28	B	48.00		0.10	U	0.10	U
28	10/20/93	417	1.20		0.23	B	1.70		0.12	J	0.10	U
29	10/28/93	419	0.90		0.15	J	1.90		0.07	J	0.10	U
30	11/05/93	423	0.52	B	0.22	B	24.00		0.09	J	0.02	J
31	11/07/93	424	0.25	JB	0.24	B	1.80		0.09	J	0.01	J
32	11/15/93	426	0.50	B	0.16	JB	1.80	Jv	0.06	J	0.01	J
33	11/23/93	428	0.10	U	2.80	J	4.90	J	0.66	J	2.30	J
34	12/01/93	431	0.17	J	0.10	U	3.00		0.07	J	0.08	J
35	12/09/93	433	0.11	J	0.16	JB	0.22		0.06	J	0.20	
36	12/16/93	437	0.46		0.36	B	1.80		0.06	J	0.09	J
37	12/19/93	439	0.12	J	0.21	B	0.26		0.12	J	0.10	U
38	12/27/93	441	0.14	J	0.24	BJv	1.90	Jv	0.14	J	0.07	J
39	01/06/94	443	0.60		0.25	B	1.50		0.15	J	0.10	J
40	01/19/94	446	0.25		0.29	B	1.80	B	0.16	J	0.08	J
41	02/01/94	453	4.80		0.39		1.20		0.14	J	0.10	U
42	02/14/94	456	2.40		0.10	U	0.44		0.13	J	0.10	U
43	03/03/94	461	0.10	U	0.10	U	1.10		0.10	J	0.10	U
44	03/16/94	466	0.10	U	1.40		1.20		0.56		0.42	
45	03/29/94	474	0.10	U	0.10	U	0.47		0.10	U	0.10	U
46	04/11/94	477	0.13	J	0.38		3.60		0.11	J	0.10	U
47	04/27/94	484	0.10	U	0.10	U	4.20		0.10	U	0.10	U
48	05/11/94	489	0.10	U	0.10	U	1.30		0.10	U	0.10	U

WIPP VOC MONITORING PROGRAM DATA - STATION VOC-1
All concentrations in parts per billion (continued)

Date	Sample	Trichloro-trifluoro-ethane		Methylene Chloride		Trichloro-ethane		Carbon Tetra-Chloride		Trichloro-ethylene	
05/24/94	492	0.25		0.19	JB	1.90		0.11	J	0.08	J
06/07/94	498	0.11	J	0.19	JB	5.10		0.07	J	0.28	
06/23/94	502	0.11	J	0.45		3.50		0.06	J	0.10	U
07/06/94	508	0.29	B	0.17	J	1.30		0.05	J	0.04	J
07/19/94	510	0.25	B	1.20	B	1.80		0.10	U	0.10	U
08/01/94	518	1.20	B	1.30	B	6.30		0.10	U	0.13	J
08/18/94	522	0.10	U	2.40		1.60		0.10	U	0.10	U
09/16/94	527	0.26	JB	0.17	JB	0.10	J	0.10	U	0.10	U
09/27/94	538	0.10	U	0.26	B	0.10	U	0.10	U	0.10	U
10/11/94	547	0.22	B	0.20	JB	0.10	J	0.10	U	0.10	U
11/09/94	555	1.90	B	0.12	JB	0.10	U	0.10	U	0.10	U
11/21/94	561	0.26	B	0.23	B	0.13	J	0.10	U	0.10	U
12/08/94	568	0.24	B	0.24		0.49		0.13	J	0.20	
12/21/94	590	0.21	B	0.10	U	0.46		0.10	U	0.10	U
01/18/95	601	0.24	B	0.19	JB	0.18	J	0.10	U	0.10	U
01/30/95	602	0.26	B	0.23	B	1.40		0.10	U	0.10	U
02/15/95	606	1.90		2.30	B	4.00		2.20		3.80	
03/14/95	618	0.20	JB	0.17	JB	0.10	U	0.10	U	0.10	U
03/27/95	621	0.23	B	0.33	B	0.30		0.10	U	0.10	U
04/12/95	627	0.27	B	0.14	JB	0.14	J	0.10	U	0.10	U
04/27/95	636	0.21	B	0.24	B	0.10	J	0.10	U	0.10	U
05/10/95	647	0.10	U	0.23	B	0.10	U	0.10	U	0.10	U
06/05/95	656	0.19	JB	0.43	B	0.29		0.10	U	0.10	U
06/20/95	667	0.27	B	0.27	B	0.16	J	0.10	U	0.10	U
07/06/95	670	1.10	B	0.26	B	0.69		0.10	U	0.10	U
07/19/95	676	0.28	B	0.86	B	0.18	J	0.10	U	0.14	J
08/14/95	681	0.34	B	1.20	B	0.33		0.10	U	0.19	J
08/31/95	688	0.18	JB	0.60	B	0.43		0.10	U	0.10	J
09/13/95	691	0.17	JB	0.39	B	0.12	J	0.10	U	0.10	U
10/09/95	697	0.20	J	0.22	B	0.15	J	0.10	U	0.10	U
Minimum		0.06	J	0.08	U	0.10	U	0.02	J	0.01	J
Maximum		15.00	B	3.30	J	670.00		2.20		3.80	
Average		0.63		0.32		17.17		0.12		0.14	

Data qualifiers:

J - indicates an estimated value and is used when mass spectral data indicate the presence of a compound, but the result is less than the specified reporting limit.

B - indicates the analyte was detected in the blank as well as in the sample.

U - indicates the compound was not detected in the sample. The report value is one-half the laboratory reporting detection limit.

JB - indicates the associated results are considered to be estimated based on findings of the WIPP data validation procedure. This qualifier is applied to analytical results when minor deviations of program quality control or documentation requirements are discovered and are not subsequently corrected by the laboratory.

WIPP VOC MONITORING PROGRAM DATA - STATION VOC-2
All concentrations in parts per billion

1	Date	Sample	Trichloro-trifluoro-ethane		Methylene Chloride		Trichloro-ethane		Carbon Tetra-Chloride		Trichloro-ethylene	
2	09/06/91	48	0.18	JB	0.21	B	0.31		0.09	J	0.10	U
3	09/11/91	52	0.23	B	0.10	U	0.21	J	0.08	J	0.10	U
4	09/18/91	64	0.37	B	0.13	J	0.25	J	0.09	J	0.10	U
5	09/25/91	59	0.20	B	0.10	U	0.18	J	0.08	J	0.10	U
6	09/29/91	67	0.18	JB	0.10	U	0.23	J	0.10	U	0.10	U
7	10/03/91	74	0.18	JB	0.10	U	0.31		0.10	U	0.10	U
8	10/10/91	79	0.18	JB	0.10	U	0.28	J	0.09	J	0.10	U
9	10/17/91	81	0.19	JB	0.10	J	0.32		0.08	J	0.10	U
10	10/26/91	87	0.18	JB	0.12	J	0.24	J	0.09	J	0.10	U
11	10/31/91	91	0.19	JB	0.27		0.22		0.10	U	0.10	U
12	11/06/91	93	0.19	JB	0.23		0.25	J	0.09	J	0.10	U
13	11/13/91	101	0.20	B	0.43		0.36		0.09	J	0.10	U
14	11/21/91	102	0.19	J	0.24		0.26	J	0.10	J	0.10	U
15	11/26/91	113	0.17	JB	0.14	J	0.68		0.09	J	0.84	
16	12/06/91	115	0.20	JB	0.13	J	0.21	J	0.09	J	0.10	U
17	12/10/91	118	0.21	B	0.22		0.33		0.09	J	0.10	U
18	12/17/91	124	0.19	JB	0.12	J	0.35		0.09	J	0.10	U
19	12/27/91	128	0.17	JB	0.10	U	0.22	J	0.09	J	0.10	U
20	12/31/91	132	0.18	JB	0.11	J	0.33		0.10	J	0.10	U
21	04/23/92	175	0.11	J	0.10	U	19.00	B	0.11	J	0.10	U
22	04/28/92	177	0.10	J	0.10	U	32.00	B	0.11	J	0.10	J
23	01/06/94	444	0.17	J	0.21	B	0.25	J	0.14	J	0.08	J
24	01/19/94	448	0.16	J	0.25	B	0.33	B	0.14	J	0.08	J
25	02/01/94	452	0.14	J	0.39	B	0.31		0.11	J	0.04	J
26	02/14/94	457	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
27	03/03/94	462	0.10	U	0.10	U	0.14	J	0.10	J	0.10	U
28	03/16/94	468	0.10	U	0.10	U	0.19	J	0.10	U	0.10	U
29	03/29/94	472	0.10	U	0.10	U	0.15	J	0.10	U	0.10	U
30	04/11/94	479	0.10	U	0.10	U	0.15	J	0.10	U	0.20	J
31	04/28/94	483	0.10	U	0.10	U	0.19	J	0.10	U	0.10	U
32	05/11/94	487	0.10	J	0.20	B	0.14	J	0.09	J	0.22	B
33	05/24/94	494	0.10	J	0.10	U	0.13	J	0.09	J	0.10	J
34	06/07/94	499	0.18	JB	0.10	U	0.08	J	0.03	J	0.03	J
35	06/23/94	505	0.09	J	0.14	J	0.12	J	0.07	J	0.15	J
36	07/06/94	506	0.16	J	0.31	B	0.45		0.40		0.92	
37	07/19/94	512	0.21	B	0.36	B	0.58		0.10	U	0.21	
38	07/25/94	516	0.42	B	0.60	B	0.16	J	0.08	J	0.08	J
39	08/01/94	519	0.20	B	0.26	B	0.13	J	0.10	U	0.10	U
40	08/18/95	523	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
41	09/21/94	533	0.19	JB	0.20	JB	0.10	J	0.10	U	0.10	U
42	10/10/94	544	0.21	B	0.20	JB	0.12	J	0.10	U	0.10	U
43	10/28/94	548	0.21	B	0.22	B	0.14	J	0.10	U	0.10	U
44	11/21/94	563	0.32	B	0.24	B	0.10	U	0.10	U	0.10	U
45	12/08/94	569	0.17	JB	0.12	J	0.10	J	0.10	U	0.10	U
46	12/21/95	591	0.26	B	0.23	B	0.10	U	0.10	U	0.10	U
47	01/05/95	593	0.27	B	0.22	B	0.10	J	0.10	U	0.10	U
48	01/30/95	605	0.27	B	0.21	B	0.10	J	0.10	U	0.10	U
49	02/15/95	608	0.10	U	0.29	B	0.10	U	0.10	U	0.10	U

Date	Sample	Trichloro-trifluoro-ethane		Methylene Chloride		Trichloro-ethane		Carbon Tetra-Chloride		Trichloro-ethylene	
03/01/95	614	0.19	JB	0.22	B	0.10	U	0.10	U	0.10	U
03/14/95	619	0.25	B	0.21	B	0.15	J	0.10	U	0.10	U
04/12/95	628	0.18	JB	0.18	JB	0.10	U	0.10	U	0.10	U
04/27/95	634	0.20	JB	0.17	JB	0.10	U	0.10	U	0.10	U
05/09/95	646	0.10	U	0.16	JB	0.10	U	0.10	U	0.10	U
05/25/95	652	0.18	JB	0.16	JB	0.10	U	0.10	U	0.10	U
06/20/95	666	0.21	B	0.47	B	0.10	U	0.10	U	0.10	U
07/06/95	668	0.18	JB	0.35	B	0.10	U	0.10	U	0.10	U
07/19/95	675	0.17	JB	0.37	B	0.10	U	0.10	U	0.10	U
08/01/95	677	0.19	JB	0.34	B	0.10	U	0.10	U	0.10	U
08/31/95	687	0.17	JB	0.21	B	0.10	U	0.10	U	0.10	U
09/13/95	689	0.16	JB	0.29	B	0.10	U	0.10	U	0.10	U
10/09/95	696	0.16	J	0.20	JB	0.10	U	0.10	U	0.10	U
11/07/95	700	0.10	U	0.11	JB	0.10	U	0.10	U	0.10	U
Minimum		0.09	J	0.10	U	0.08	J	0.03	J	0.03	J
Maximum		0.42	B	0.60	B	32.00	B	0.40		0.92	
Average		0.18		0.20		1.01		0.44		0.13	

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U - indicates the compound was not detected in the sample. The report value is one-half the laboratory reporting detection limit.

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WIPP VOC MONITORING PROGRAM DATA - STATION VOC-8

All concentrations in parts per billion

1	Date	Sample	Trichloro-trifluoro-ethane		Methylene Chloride		Trichloro-ethane		Carbon Tetra-Chloride		Trichloro-ethylene	
2	09/06/91	39	0.32	B	0.29		1.40		0.10	U	0.10	U
3	09/11/91	45	3.30	B	1.50		1.80		0.11	J	0.10	U
4	09/17/91	57	0.39	JB	0.25		24.00		0.12	J	0.10	U
5	09/25/91	49	3.00	B	0.24		2.40		0.09	J	0.10	U
6	09/29/91	61	0.24	B	0.19	J	0.37		0.08	J	0.10	U
7	10/03/91	68	0.25	B	1.80		12.00		0.11	J	0.10	U
8	10/10/91	72	0.24	B	0.13	J	63.00		0.13	J	0.10	U
9	10/17/91	82	0.28	B	0.18	J	16.00		0.11		0.10	U
10	10/26/91	76	0.23	B	0.37		98.00		0.14	J	0.10	U
11	10/31/91	84	0.23	B	0.10	U	124.00		0.14	J	0.10	U
12	11/06/91	88	0.25	B	0.15	J	0.54		0.09	J	0.10	U
13	11/13/91	94	0.26	B	0.10	U	21.00		0.11	J	0.10	U
14	11/21/91	106	0.22		0.18	J	0.76		0.09	J	0.10	U
15	11/26/91	97	0.26	B	0.10	U	4.40		0.10	J	0.10	U
16	12/06/91	110	0.28	B	0.10	U	0.44		0.10	J	0.10	U
17	12/10/91	116	0.19	JB	0.73		0.66		0.11	J	0.10	U
18	12/17/91	120	0.52	B	0.10	U	0.35		0.09	J	0.10	U
19	12/27/91	125	0.18	JB	0.10	U	0.31		0.09	J	0.10	U
20	12/31/91	129	0.17	JB	0.10	U	0.32		0.09	J	0.10	U
21	08/05/92	208	0.32	B	0.76		3800.00		0.19		0.10	U
22	11/23/93	429	0.13	J	0.22	B	56.00		0.15	J	0.43	
23	12/09/93	434	0.21	J	0.77	B	2.20		0.07	J	0.15	J
24	12/16/93	435	0.14	J	0.30	B	4.50		0.06	J	0.12	J
25	12/20/93	440	0.11	J	0.18	JB	0.23		0.06	J	0.10	J
26	12/27/93	442	0.14	J	0.19	JB	0.47		0.13	J	0.13	J
27	01/06/94	445	0.17	J	0.24	B	0.72		0.17	J	0.17	J
28	01/19/94	450	0.46		0.44	B	0.51	B	0.15	J	0.14	J
29	02/01/94	455	0.25		0.22	B	0.24		0.11	J	0.13	J
30	02/14/94	459	0.59		0.10	U	0.26		0.13	J	0.10	U
31	03/03/94	463	0.16	J	2.30	B	0.25		0.10	U	0.10	U
32	03/15/94	470	0.10	U	0.10	U	0.24		0.10	U	0.10	U
33	03/29/94	473	0.10	U	0.10	U	3.30		0.10	U	0.10	U
34	04/11/94	478	0.10	U	0.10	U	2.20		0.10	U	0.10	U
35	04/28/94	485	0.10	U	0.10	U	0.28		0.10	U	0.10	U
36	05/11/94	488	0.10	J	0.24	B	0.25		0.08	J	0.09	JB
37	05/24/94	496	3.00		0.28	B	0.27		0.12	J	0.10	U
38	06/07/94	501	0.15	J	0.20	B	0.65		0.07	J	0.10	U
39	06/23/94	503	0.22	B	0.14	JB	0.10	J	0.10	U	0.10	U
40	07/06/94	507	0.12	J	0.22	B	0.16	J	0.09	J	0.10	U
41	07/25/94	514	0.19	JB	0.25	B	0.10	U	0.10	U	0.10	U
42	08/01/94	521	0.21	B	0.19	JB	0.16	J	0.10	U	0.10	U
43	08/18/94	524	0.10	U	0.42		0.10	U	0.10	U	0.10	U
44	09/19/94	531	0.20	B	0.16	JB	0.33		0.10	U	0.28	
45	09/26/94	536	0.10	U	0.29	B	0.24		0.10	U	0.10	U
46	10/31/94	551	2.70	B	0.20	JB	4.50		0.10	U	0.20	J
47	11/08/94	552	0.27	B	0.20	B	0.42		0.10	U	0.10	U
48	11/21/94	565	0.47	B	0.25	B	0.20		0.10	U	0.10	U
49	12/21/94	587	0.33	B	0.21	B	4.40		0.10	U	0.10	U

Date	Sample	Trichloro-trifluoro-ethane		Methylene Chloride		Trichloro-ethane		Carbon Tetra-Chloride		Trichloro-ethylene	
01/05/95	592	0.28	B	0.27	B	3.20		0.10	U	0.10	U
01/17/95	599	0.25	B	0.17	JB	3.80		0.10	U	0.10	U
02/15/95	610	0.10	U	0.22	B	1.30		0.10	U	0.10	U
03/01/95	617	0.22	B	0.24	B	2.40		0.10	U	0.10	U
03/14/95	620	0.22	B	0.19	JB	0.11	J	0.10	U	0.10	U
03/27/95	622	0.21	B	0.40	B	0.21		0.10	U	0.10	U
04/27/95	638	0.20	JB	0.17	JB	0.10	U	0.10	U	0.10	U
05/08/95	645	0.17	J	0.35	B	0.10	U	0.10	U	0.10	U
05/25/95	653	0.20	JB	0.18	JB	0.11	J	0.10	U	0.10	U
06/05/95	659	0.73	B	0.17	JB	0.11	J	0.10	U	0.10	U
07/06/95	672	0.17	JB	0.15	JB	0.14	J	0.10	U	0.10	U
07/19/95	674	0.41	B	0.19	JB	0.11	J	0.10	U	0.10	U
08/01/95	678	0.79	B	0.18	JB	0.12	J	0.10	U	0.10	U
08/14/95	684	0.20	B	0.42	B	0.20	J	0.10	U	0.10	U
09/13/95	693	0.16	JB	0.17	JB	0.10	U	0.10	U	0.10	U
10/09/95	695	0.16	J	0.19	JB	0.10	J	0.10	U	0.10	U
11/07/95	699	0.10	U	0.12	JB	0.10	U	0.10	U	0.10	U
Minimum		0.10	J	0.10	U	0.10		0.06	J	0.09	JB
Maximum		3.30		2.30	B	3800.00		0.19	J	0.43	
Average		0.41		0.31		65.65		22.02		0.11	

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WIPP VOC MONITORING PROGRAM DATA - STATION VOC-9
All concentrations in parts per billion

Date	Sample	Trichloro-trifluoro-ethane		Methylene Chloride		Trichloro-ethane		Carbon Tetra-Chloride		Trichloro-ethylene	
09/06/91	42	0.20	B	0.29		8.40		0.11	J	0.10	U
09/11/91	46	2.70	B	1.50		1.80		0.12	J	0.10	U
09/24/91	65	0.45	B	0.19	J	1.30		0.11	J	0.10	U
09/25/91	58	2.50	B	0.19	J	2.10		0.09	J	0.10	U
09/29/91	62	0.21	B	0.19	J	0.27	J	0.07	J	0.10	U
10/03/91	69	0.19	B	2.90		65.00		0.13	J	0.10	U
10/10/91	73	0.15	JB	0.13	J	63.00		0.15	J	0.10	U
10/17/91	83	0.22	B	0.16	J	19.00		0.13	J	0.10	U
10/26/91	77	0.18	JB	0.34		87.00		0.17	J	0.10	U
11/06/91	85	0.28	B	0.53		0.64		0.09	J	0.10	U
11/13/91	95	0.22	B	0.24		19.00		0.11	J	0.10	U
11/21/91	108	0.23		1.10		0.66		0.09	J	0.10	U
11/26/91	98	0.28	B	0.16	J	4.80		0.10	J	0.10	U
12/06/91	111	0.28	B	0.29		0.96		0.10	J	0.30	
12/10/91	117	0.19	JB	0.86		0.61		0.10	J	0.10	U
12/17/91	121	0.48	B	0.15	J	0.33		0.10	J	0.10	U
12/27/91	126	0.19	JB	0.14	J	0.32		0.09	J	0.10	U
12/31/91	130	0.18	JB	0.54		0.34		0.09	J	0.10	U
Minimum		0.15		0.13		0.27		0.07		0.10	
Maximum		2.70		2.90		87.00		0.17		0.30	
Average		0.51		0.55		15.31		0.11		0.11	

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APPENDIX D22

INFORMATION ON WIPP BACKFILL

APPENDIX 22
INFORMATION ON BACKFILL

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MgO MSDS D22-11

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SANDIA NATIONAL LABORATORIES REPORT

Sandia National Laboratories
Operated for the U.S. Department of Energy by
Sandia Corporation

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April 09, 1996

Mr. Bob Kehrman
Westinghouse Electric Corporation
Waste Isolation Pilot Plant
Post Office Box 2078
Carlsbad, New Mexico 88221

Dear Mr. Kehrman:

Per your request, Sandia National Laboratories is pleased to provide you the attached report which describes the concept and impacts of a backfill for the Waste Isolation Pilot Plant. This report is geared toward providing the necessary information for inclusion in the RCRA Part B Permit Application. Information dealing with the backfill's effect on the mobile actinide source term will be contained in the Compliance Certification Application in greater detail.

If you have further questions or need for clarification, please contact Jim Nowak at 505-238-1725 or Vann Bynum at 505-848-0638.

Sincerely,

Margaret S. Y. Chu
Deputy Project Manager

Control of the Chemical Environment Through Implementation of an MgO Backfill Material

April 8, 1996

1. Introduction

A backfill system has been designed which will control the chemical environment of the post-closure repository to a domain where the actinide solubility is within its lowest region. The actinide solubility is highly dependent on the chemical species which constitute the fluid, the resulting pH of the fluid, and the oxidation state of the actinide which is stable under the specific conditions. Within some scenarios of the WIPP Performance Assessment (PA), there will be a significant quantity of carbon dioxide (CO_2) generated as a result of microbial degradation of carbon containing waste material (i.e. cellulosics, plastics, and rubbers). The formation of CO_2 has a significant impact on the solubility of the actinides through the following processes:

1. Upon contact with water, carbon dioxide reacts according to the equation,

$$CO_2(g) + H_2O \leftrightarrow H_2CO_3$$

forming carbonic acid. Carbonic acid, although a relatively weak acid, is capable of driving the pH of the repository into the acidic range where the solubility of the actinides is typically at its highest point.

2. As the carbonic acid dissociates according to the equations

$$H_2CO_3 \leftrightarrow H^+ + HCO_3^-$$

and

$$HCO_3^- \leftrightarrow H^+ + CO_3^{2-}$$

carbonate species are generated. The carbonate ion is known to bind very strongly to the actinides, forming stable, relatively highly soluble species. The presence of carbonate in any significant quantity therefore drives the actinide solubility to much higher values due to both lowering pH and forming soluble actinide carbonate complexes.

To mitigate these two detrimental effects of CO_2 generation, a material was required which would prevent the decrease in pH of the brines *and* minimize the ability of the carbonate ion to remove CO_2 and thus participate in complexation reactions. The alkaline earth oxides (e.g. MgO) were identified as fulfilling these two functions.

The alkaline earth oxides react with water according to the following equation:

$$MgO(s) + H_2O \leftrightarrow Mg(OH)_2(s)$$

The hydroxide thus formed is then available to react with carbonic acid

$$Mg(OH)_2(s) + H_2CO_3 \leftrightarrow MgCO_3(s) + 2H_2O$$

thus effectively removing the carbonate from the system due to $MgCO_3$ being quite insoluble. The mineralogy of the solid magnesium carbonate phase is being investigated, but will not impact the pH buffering capacity.

2. Description of the Backfill System

The backfill material will be emplaced as a dry granular or pelletized material in bags. The bags serve two purposes: 1) provide ease of handling during the operational phase, and 2) provide protection from premature exposure to atmospheric CO_2 during handling and prior to room closure. The bags may be made out of plastic or cellulose.

Granular or pelletized material is specified for a several reasons:

- reduction of dusting potential in case of a premature bag rupture
- ensure that sufficient permeability is maintained to make the backfill material accessible to any brine flow
- reduce the probability of the backfill material being flushed out of the repository system by entrainment in an established brine flow field.
- provide for a high enough material density so that sufficient backfill material can be emplaced without major operational difficulties.

For the backfill material to be effective, it must be emplaced such that it is available to react with any brine that may reach the repository and with any CO_2 which is generated as a result of microbial action. To accomplish this, a design has been developed which provides for the dispersal of the backfill material throughout the waste emplacement. The specifics of this design are being documented by Westinghouse Waste Isolation Division.

Many chemical forms of MgO are available, but to ensure sufficient reactivity, the form resulting from low-temperature dehydration of magnesium hydroxide is required. Other forms, such as that resulting from calcination of magnesium carbonate or dolomite $\{Ca/Mg(CO_3)_2\}$, may not demonstrate sufficient reactivity to ensure the desired chemical effects.

3. Impacts on Balance of System

3.1 Gas Generation

The addition of MgO as a backfill material will increase and maintain the solution pH of the repository in the basic region. There has been no identified dependence of the generation rate of CO_2 by microbial action as a function of solution pH. With respect to

the corrosion of steels, there has been identified a correlation between pH and corrosion rate, and thus hydrogen generation rate[1]. However, the experiments used to determine the range of hydrogen generation rates utilized in PA [2] were performed at a pH of approximately 10, which approximates the pH region expected from the addition of a MgO backfill.[3] Additionally, the range of gas generation rates provided to the PA has already taken into account the potential for variations in rates due to pH effects. [4]

As previously discussed in Section 1, there are no new gas generating reactions introduced by the addition of MgO. Although the MgO could be postulated to have adsorbed some gases during handling and transportation, the potential for this is minimized by the bagging of the material. Even if there were to be adsorbed gases, desorption generally requires elevated temperatures to be effective. No elevated temperatures are anticipated in the repository.

The addition of MgO will however impact the total quantity of gas which may be present in the repository. As described in section 1, the MgO is being added to react with the CO_2 potentially being generated by microbial action. There will therefore be an overall decrease in the total quantity of gas which may be present in the repository for scenarios in which significant microbial gas generation is assumed. This decrease of gas quantity is not significant in comparison with the total quantity of gas which may be generated by all processes during the repository lifetime.[5]

Since the MgO backfill is being added in large excess, any quantity of brine which may enter the repository will be saturated with respect to the appropriate MgO reaction products. Therefore, any chemical changes induced as a result of the addition of MgO as a backfill is independent on the degree of saturation of the repository.

3.2 Disposal Room

The backfill material will occupy what would have been void space within the previous project baseline. Filling of this space will therefore have an effect on the closure rate of the repository. As shown in Figure 1, the rate of closure is dependent on the presence of a material filling the void space, in this previous case, salt was used as a comparison. The curve for salt backfill was developed using a salt backfill creep model to describe densification with time. Thus, the resulting closure curve was reflective of the salt achieving a permeability nearly equivalent to that of the surrounding halite.

Within the current backfill design, not all of the available void space will be filled. This is primarily due to the design requirement quantity not requiring all of the void space for the amount of backfill specified, and operational concerns regarding placement. The net effect of this quantity of backfill being added is that we will achieve a closure curve intermediate between the "no backfill" curve (i.e. the current baseline) and the "salt backfill" included curve. We believe that the effect of the closure rate arising from emplacement of the current backfill system will have minimal impact on the Compliance

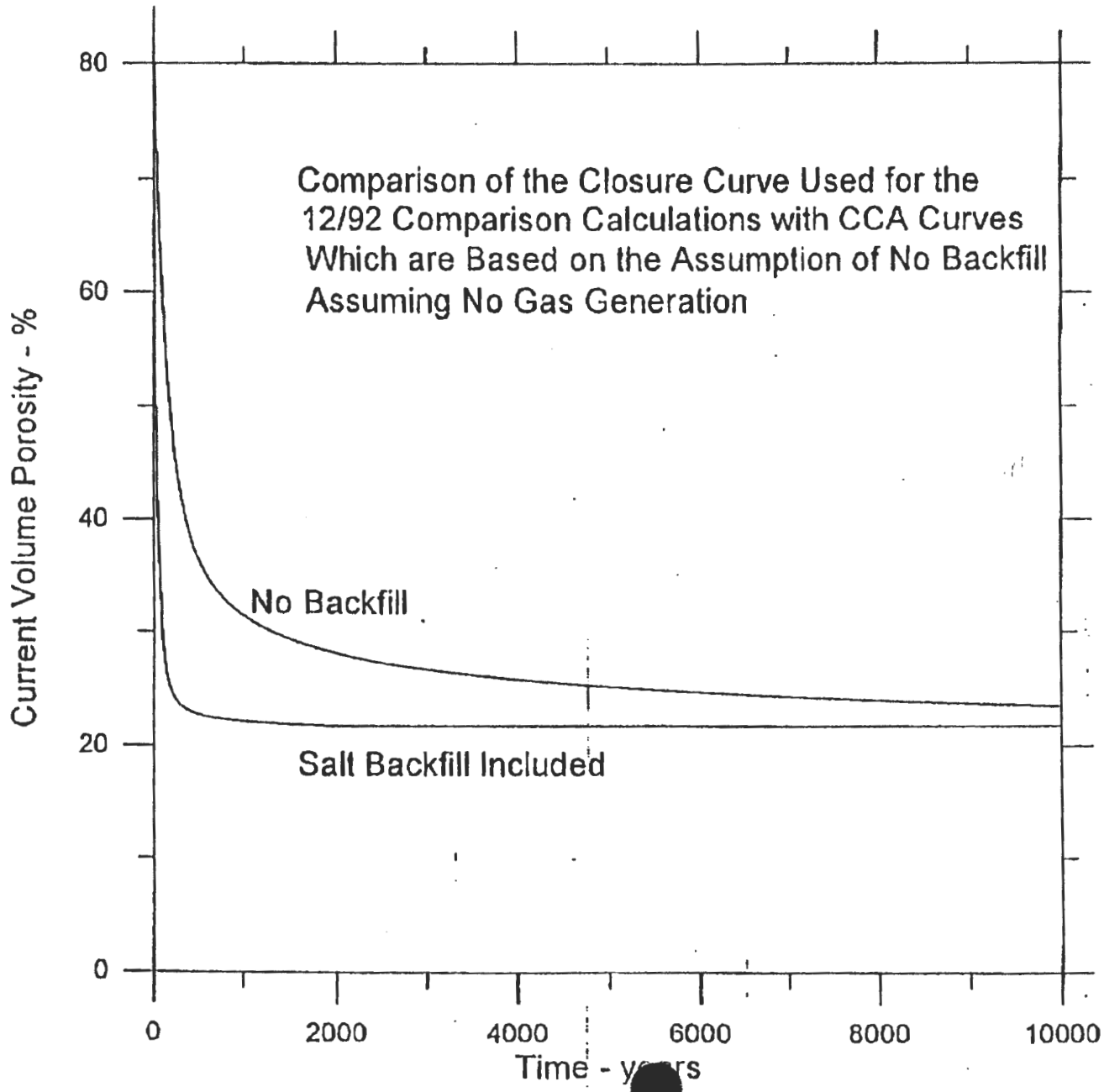
Comparison of the Closure Curve Used for the
12/92 Comparison Calculations with CCA Curves
Which are Based on the Assumption of No Backfill
Assuming No Gas Generation
No Backfill
Salt Backfill Included
Current Volume Porosity - %
80
60
40
20
0
0
2000
4000
6000
8000
10000
Time - years

Figure 1

Certification Application (CCA) calculations. The attached chart shows that most of the closure will be achieved early in the life of the repository and thus could only have any impact at all during the first several hundred years post-closure. Even during this time frame we feel that the impact will be within the expected variation of the calculations. Previous PA calculations have shown that the porosity of backfills in the drifts, experimental region, and shaft below the seal, and the volume fractions of materials which are expected to have an impact on the final room porosity to be less important parameters to compliance.[6,7]

3.3 Culebra Transport

The chemical conditions can have an impact on the transport of mobile species. However, the K_d values to be used to describe chemical retardation in the Culebra have not been provided to PA at this time and the investigators responsible for determining and providing those values are incorporating the effect of the modified repository conditions on the K_d values.

3.4 Colloidal Actinide Source Term

The Colloidal Actinide Source Term is sensitive to the chemical conditions in the repository. For example, the concentration of actinide intrinsic colloids is dependent on the pH of the fluid. At extremely low pH values (i.e. highly acidic solutions), actinide intrinsic colloid formation is inhibited.[8] At all of the pH values which could be possible within the repository, both with and without backfill material, actinide intrinsic colloids may be formed. However, the residual concentration of kinetically stable actinide intrinsic colloids is dependent on the pH. Experiments within the Colloidal Actinide Source Term Program have measured the residual concentration of actinide intrinsic colloids as a function of pH and the effects are thus accounted for.

The formation of actinide-bearing humic colloids is also impacted by the introduction of MgO backfill. Humic substances are known to complex with metal cations, including actinides.[9] This complexation is typically through hydroxyl or carboxylic acid functionalities and is therefore pH dependent to some degree. Humic substances also will complex with non-actinide metal cations, such as magnesium. The magnesium added in the backfill competes with the actinides for complexation with the humics, resulting in a reduced contribution to the mobile actinide concentration from the humic substances.

4. References

[1] Telander, M. R. & Westerman (1995) *Hydrogen Generation by Metal Corrosion in Simulated Waste Isolation Pilot Plant Environments: Final Report.* (draft)

[2] Wang Y. & L. Brush, (1996) *Estimates of Gas-Generation Parameters for the Long-Term WIPP Performance Assessment* memo to Martin S. Tierney, 1/26/96.

[3] Telander, M. R. & Westerman (1993) *Hydrogen Generation by Metal Corrosion in Simulated Waste Isolation Pilot Plant Environments: Progress Report for the Period November 1989 through December 1992.* SAND92-7347, Sandia National Laboratories, Albuquerque, NM.

[4] Wang Y. & L. Brush, (1996) *Estimates of Gas-Generation Parameters for the Long-Term WIPP Performance Assessment* memo to Martin S. Tierney, 1/26/96.
[5] Nowak, E. J. (1996) personal communication.
[6] Sandia WIPP Project, (1992) *Preliminary Performance Assessment for the Waste Isolation Pilot Plant, December 1992. Volume 4: Uncertainty and Sensitivity Analysis for 40 CFR 191, Subpart B.* SAND92-0700/4. Sandia National Laboratories, Albuquerque, NM.
[7] Sandia WIPP Project, (1992) *Preliminary Performance Assessment for the Waste Isolation Pilot Plant, December 1992. Volume 5: Uncertainty and Sensitivity Analysis of Gas and Brine Migration for Undisturbed Performance.* SAND92-0700/5. Sandia National Laboratories, Albuquerque, NM.
[8] Cleveland, J. (1979) *The Chemistry of Plutonium.* American Nuclear Society, La Grange Park, IL.
[9] Choppin, G. R. (1988). "Humics and Radionuclide Migration," *Radiochemica Acta.* Vol. 44/55, pt. 1, 23-28.

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MgO MSDS

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NATIONAL
REFRACTORIES & MINERALS

MATERIAL SAFETY DATA SHEET

ADDRESS : 1852 Rutan Drive
Livermore, California 94550

LABEL NO. : None MSDS NO. : 0150-4

PRODUCT NAME : MAG-PLUS; ML-F98; NUTRI-MAG; PRILLS; PYRO-MAG

DATE : July 27, 1994

EMERGENCY PHONE: (510) 449-5010

CHEMICAL NAME: Magnesium oxide

DOT ID NUMBER : NAp

I. INGREDIENTS

Ingredient	%	CAS Number	Exposure Limits 1993-94 ACGIH TLV's (TWA)	Exposure Limits 1910.1000 OSHA PEL's (TWA)	SARA TITLE III, SECTION 313 REPORTABLE
Magnesium oxide	100	1309-48-4	10 mg/m^3 (fume)	5 mg/m^3 (fume)	No

II. PHYSICAL DATA

APPEARANCE : Granular, dry
BOILING POINT: NAp
MELTING POINT: NAp

COLOR : Light gray
ODOR : None
pH : NAp

SPECIFIC GRAVITY (gm/cc): 1.0 - 4.0
SOLUBILITY IN WATER (%) : Nil
VAPOR PRESSURE (mm Hg) : NAp

III. PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION : Respirator approved by NIOSH/MSHA and adequate for contaminant concentrations encountered.
HAND PROTECTION : Impervious gloves are recommended.
EYE PROTECTION : Safety glasses are recommended.
OTHER : Local exhaust recommended to maintain exposures below TLV's and PEL's.

IV. EMERGENCY MEDICAL PROCEDURES

SKIN: Wash with soap and plenty of water.

EYES: Irrigate immediately with copious amounts of water. Consult physician if necessary.

INHALATION: Remove to fresh air.

NAp = Not Applicable NAv = Not Available

V. HEALTH INFORMATION

CARCINOGENICITY: NAp

INHALATION: May irritate the respiratory tract on prolonged or repeated contact. May aggravate pre-existing respiratory conditions.

SKIN: Repeated or prolonged contact may cause irritation.

EYES: May irritate or injure eyes.

LD_{50}: NAv

LC_{50}: NAv

VI. FIRE & REACTIVITY DATA

STABILITY : Stable
FLASH POINT : NAp
FLAMMABLE LIMITS: NAp
UNUSUAL FIRE & EXPLOSION HAZARDS: NAp
HAZARDOUS DECOMPOSITION PRODUCTS: NAp

INCOMPATIBILITY : NAp
EXTINGUISHING MEDIA: NAp
CONDITIONS TO AVOID: NAp

VII. ENVIRONMENTAL

SPILL OR LEAK PROCEDURES: Use dust free methods of cleanup.

WASTE DISPOSAL METHOD: Final used product should be tested to determine hazard status and disposed in accordance with federal, state and local laws and regulations.

VIII. ADDITIONAL INFORMATION

1. Use an approved respirator if dust is created during handling, installation or tearout.
2. Toxic risk may be altered by chemical or physical changes caused by conditions of use.
3. May become slippery when wet.

Prepared by: Corporate Environmental Services

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ODOR : None
pH : NAp

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VAPOR PRESSURE (mm Hg) : NAp

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FLAMMABLE LIMITS: NAp
INCOMPATIBILITY : NAp
EXTINGUISHING MEDIA: NAp
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UNUSUAL FIRE & EXPLOSION HAZARDS: NAp
HAZARDOUS DECOMPOSITION PRODUCTS: NAp

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Prepared by: Corporate Environmental Services

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