

**Ground-Water Oversight at
Los Alamos National Laboratory and Surrounding Areas**

1994 Through 1995

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ABSTRACT

The New Mexico Environment Department (NMED) Department of Energy Oversight Bureau (DOE OB) conducted ground-water oversight activities during 1994 and 1995 at Los Alamos National Laboratory (LANL) and outlying areas (San Ildefonso Pueblo, Los Alamos County and Santa Fe National Forest). Activities included split and independent sampling, as well as locating and characterizing any known and previously undocumented springs by evaluating temperature values, hydrochemical and discharge data. Samples were analyzed for one or more analytes or parameters: general chemistry, total and dissolved metals, radionuclides, and organics. Anthropogenic constituents were detected within each of the four saturated zones in the Los Alamos area. Field investigations led to the discovery and characterization of several on-site springs which emanate from the Bandelier Formation and canyon alluvium. Surface-water flow measurements were conducted downstream from several of these springs, and data show that they may support perennial flow within portions of Cañon de Valle and Pajarito Canyon. It is suggested that these springs recharge perched ground-water zones within canyon alluvium which have not yet been characterized.

INTRODUCTION

In October 1990, the State of New Mexico entered into an agreement with the U.S. Department of Energy (DOE) to provide environmental oversight, monitoring, and guidance associated with applicable state and federal laws and regulations at DOE facilities. These include air, surface-water, ground-water, as well as hazardous-and-radioactive-materials issues. Activities associated with the agreement are conducted by the New Mexico Environment Department (NMED). From 1990 to 1994 oversight was performed by individual bureaus within NMED. In January 1995, the NMED DOE Oversight Bureau (OB) was created to address agreement activities. DOE OB performs oversight activities at Los Alamos National Laboratory (LANL), Sandia National Laboratory (SNL), Inhalation Toxicology Research Institute, and the Waste Isolation Pilot Plant. DOE OB personnel are located at all DOE facilities and in Santa Fe. The LANL DOE OB office is located in White Rock and has a staff of six, and is supplemented by technical support personnel in Santa Fe as needed. This report presents oversight activities conducted at LANL and outlying areas by DOE OB staff in 1994 and 1995.

There were two main objectives for the oversight: verification of LANL's data, and general characterization of the ground-water system. This involved obtaining field data (such as specific conductance, temperature, flow amounts, and location of source, etc.) as well as independent or

co-sampling ground water for analysis of constituents of concern. Sampling and monitoring activities were conducted at LANL, San Ildefonso Pueblo, Los Alamos County, and Santa Fe National Forest (Plates 1A and 1B).

The purpose of this ground-water report is to present the results of DOE OB's activities at LANL for 1994 and 1995. This report only illustrates DOE OB data, and very little interpretation is included. Comparison of LANL's data with DOE OB's verification split-sampling results will be evaluated as soon as LANL releases their 1994 and 1995 data.

LOS ALAMOS NATIONAL LABORATORY

SETTING

LANL is located west of the Rio Grande, approximately 40 mi northwest of Santa Fe (Figure 1). Neighboring residential areas include Los Alamos, White Rock and San Ildefonso Pueblo. The Laboratory encompasses approximately 43 mi² on the Pajarito Plateau, an expanse of deeply dissected Bandelier Tuff between the Jemez Mountains and the Rio Grande (Smith, 1938). Mesas and canyons generally trend from northwest to southeast. The elevation of mesa tops ranges from approximately 7850 ft at the edge of the Jemez Mountains to about 6200 ft at their easternmost extent above the Rio Grande.

BACKGROUND

LANL is a multidisciplinary national laboratory that conducts nuclear and non-nuclear research. The Laboratory is operated by the University of California for DOE. Since its inception in 1943, LANL's operations have produced radioactive and non-radioactive materials which have entered the environment via air, surface water and ground water.

ENVIRONMENTAL SURVEILLANCE

Ground-water monitoring at the laboratory was initiated by Los Alamos Scientific Laboratory, United States Geological Survey (USGS) and the Atomic Energy Commission. In 1978, ground-water monitoring activities were taken over by LANL. Test wells, supply wells and springs located on-site and off-site are sampled yearly by LANL's Environment, Safety and Health Division (ESH-18). Samples are analyzed for radionuclides, metals, non-metal inorganics, organics, and general chemistry (major cations/anions). LANL Environmental Surveillance results are published annually. During 1994 and 1995, the DOE OB collected split-samples with LANL's ESH-18 group at numerous ground-water stations.

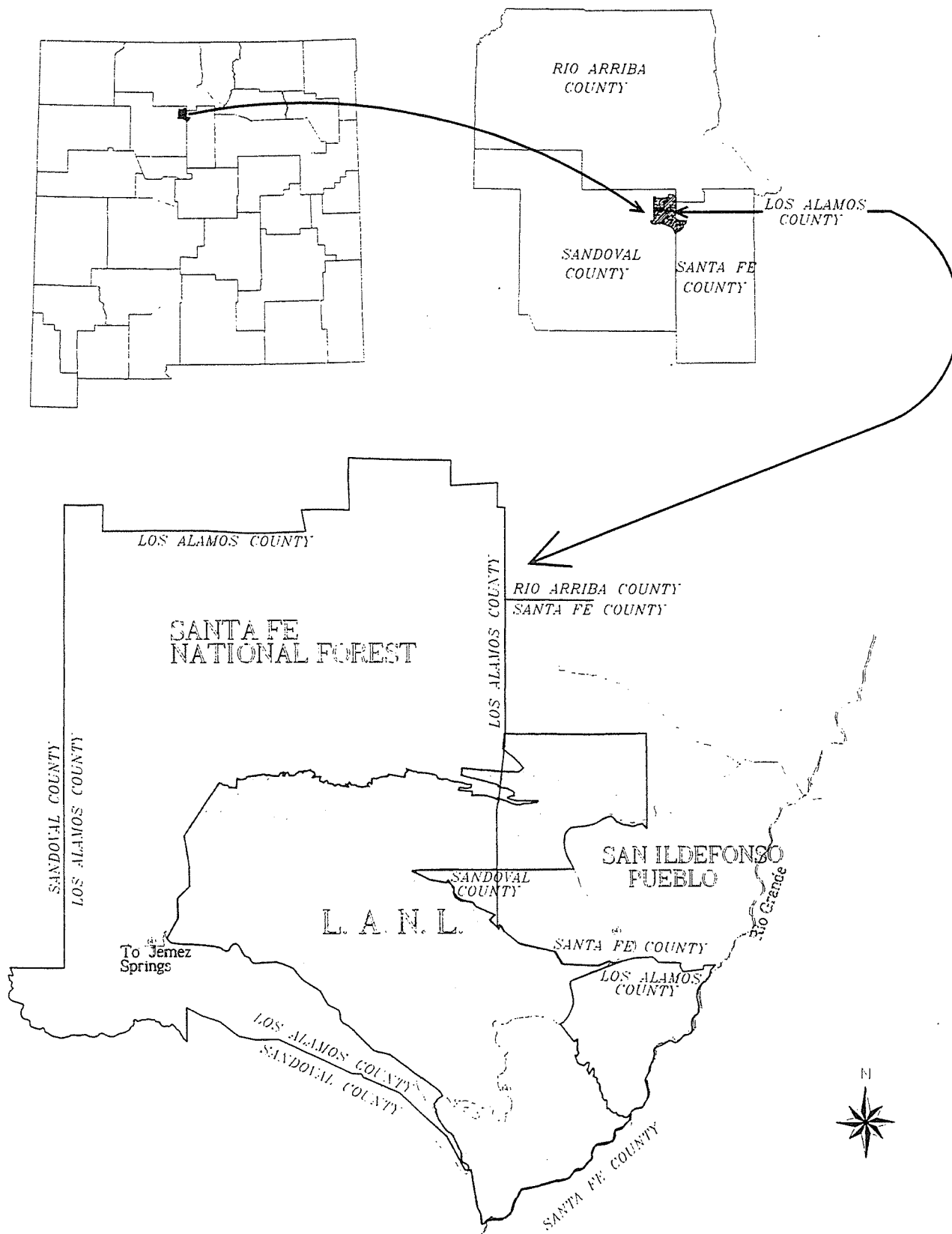


Figure 1. Location of Los Alamos National Laboratory and surrounding area.

ENVIRONMENTAL RESTORATION

In 1987, the DOE established the Environmental Restoration (ER) Project in order to protect the present environment, remediate damages to the environment by past releases of contaminants, and comply with applicable environmental regulations and orders. One goal of the ER project is to characterize ground water at or near potentially contaminated areas, referred to as potential release sites (PRS). Several wells have been drilled in Los Alamos, DP, and Pajarito Canyons by the ER Program in order to assess ground-water quality and acquire characterization data (e.g., saturated thickness). These activities are restricted to shallow and intermediate perched ground water. During 1994 and 1995, the DOE OB collected split-samples with LANL's ER project group at nine ground-water monitoring wells.

HYDROGEOLOGY

GEOLOGY

The geology beneath LANL and associated outlying areas of the Pajarito Plateau is characterized by a thick sedimentary sequence overlain by and intercalated with a series of younger volcanic units. The age of these units range from early Miocene to Pleistocene. The following brief description of units proceeds chronologically, in order of decreasing age.

The Santa Fe Group (Spiegel and Baldwin, 1963) is the oldest unit tapped by area wells. It includes most of the Cenozoic sedimentary strata underlying the Pajarito Plateau, and represents the regional Miocene sedimentary deposits related to the Rio Grande Rift. The Tesuque Formation (Baldwin, 1956) comprises the majority of the Santa Fe Group in this region, and is composed of mainly alluvial/fluvial deposits with subordinate lacustrine deposits and inter-bedded ash-fall tuff layers. The Chamita Formation (Galusha and Blick, 1971) overlies the Tesuque Formation within part of the Pajarito Plateau and Española basin and represents a similar depositional environment.

The Polvadera Group consists of late Miocene to early Pleistocene volcanic deposits and related sedimentary deposits. The Tschicoma Formation (Pliocene) resulted from eruptions that occurred to the west of the Pajarito Plateau, and produced a number of dacitic lavas (Smith, 1938). Beneath the western part of the plateau these are intercalated with the Chamita Formation, Totavi Formation, and the Puye Formation, which itself was formed as alluvial-apron deposits eroded from the Tschicoma eruptive center.

The basalts of Cerros Del Rio and Chino Mesa also formed during and after the Tschicoma eruptions, just to the east and southeast of the Pajarito Plateau. They are intercalated with the Chamita Formation, Totavi Formation, and Puye Formation in the eastern part of the plateau. The Tewa Group encompasses all units formed by regional Pleistocene volcanic activity, and in

the vicinity of the Pajarito Plateau includes the Cerro Toledo interval of the Cerro Toledo Rhyolite Member, the Bandelier Tuff, and the El Cajete pumice. The Tshirege and Otowi Members of the Bandelier Tuff represent thickly bedded sequences of rhyolitic ash-flow tuffs, exhibiting varying degrees of welding throughout. Throughout the Pajarito Plateau the Tshirege Member is the most visible and prominent unit of the Tewa Group, capping virtually all of the mesas within the plateau, and forming steep cliffs and benches that dominate canyon morphology. In this report the authors make no attempt to correlate units as distinguished by Rogers (1995) with Bandelier Tuff nomenclature for the Laboratory's Environmental Restoration Project (Broxton and Reneau, 1995).

HYDROLOGY

Ground water occurs beneath the Pajarito Plateau in four distinct positions: perched within units D, E, and B of the Tshirege Member of the Bandelier Tuff (Rogers, 1995), perched within canyon alluvium, perched within volcanic and sedimentary rock at and beneath the base of the Bandelier Tuff, and the deep aquifer (Dale and Yanicak, 1996). The interconnection of these four saturated zones is unknown; however, historical analytical data from LANL and NMED DOE OB reveal that downward migration of anthropogenic constituents has occurred.

The shallowest perched ground water within units D, E, and B of the Tshirege Member issues as spring discharge from numerous locations in the western and central portions of the Pajarito Plateau. Recharge pathways are unknown, but it is suggested that recharge may be from surface-water infiltration in the upper reaches of Cañon de Valle, Pajarito Canyon and possibly other canyons west of State Route 501. Flow paths are unknown due to the lack of monitoring wells or control points. Spring water discharges predominantly from fractures, contacts, or parting surfaces between tuff beds of similar lithology, but varying competency (Dale and Yanicak, 1996). Water analyses of several springs show detectible concentrations of dissolved barium and boron, solvents and high explosives.

Perched ground water also occupies part of the Quaternary alluvial fill within many reaches of the canyons. Recharge is assumed to be controlled by the amount of surface-water infiltration from spring discharge, storm-water and snow-melt runoff, and Laboratory outfalls. Flow direction is assumed to be down-canyon or eastward, and may parallel canyon bottom topography. Seepage or downward flow from these zones may exist due to the fact that underlying intermediate perched ground water contain anthropogenic constituents. In addition, preliminary modeling (Stone, 1995) of shallow ground water within the alluvium of Mortandad Canyon suggests downward leakage. Discharge may occur ephemerally at locations such as LA-5.19 and WC-6.25 which issue from canyon alluvium and contain chloride concentrations which are generally comparable to that of alluvium ground water. Additional data need to be collected to determine if these discharges are indeed ephemeral springs. Chemical analyses of alluvium ground water show elevated nitrates, metals and radionuclides.

Intermediate perched ground water located to date occurs approximately midway in depth between the perched ground water in the canyon alluvium and the deep or "main" aquifer, and occupies

portions of the Otowi Member (Guaje Pumice Bed) of the Bandelier Tuff, Puye Formation, upper Santa Fe Group, and the volcanic rocks that intercalate with these units (the Tschicoma Formation lavas in the western plateau, and the Chino Mesa/Cerros del Rio lavas in the eastern plateau). Recharge to this aquifer and flow paths are unknown due to the lack of adequate characterization. However, it is suggested that recharge may be from alluvium ground water leaking via fault systems (e.g., Pajarito fault system). Downward flow or leakage from this zone may be occurring due to the presence of contamination in the deep aquifer. Discharge may be occurring at springs along White Rock Canyon (Griggs, 1964), and other springs such as Los Alamos and Basalt Springs, which are located in lower Los Alamos Canyon. Contaminants have been detected in this zone of saturation.

The Pajarito Plateau overlies a portion of the deep aquifer, which ranges to the north, south, and west beyond the plateau. This mode of ground-water resides within the lower Puye Formation, Tschicoma Formation, and the Santa Fe Group. The depth of the deep aquifer ranges from tens of feet near the Rio Grande to approximately 1300 ft below mesa tops near the west central Laboratory boundary. Recharge is theorized to be from seepage along small streams and rivulets on the lower slopes of the Sierra de los Valles (Griggs, 1964). Some recharge may be from intermountain basins such as the Valle Grande (Purtymun, 1984). Flow is from the west to the east and southeast, where a part may discharge through seeps and springs into White Rock Canyon on the Rio Grande (Purtymun, 1995). LANL and NMED DOE OB analytical data (historical and recent) from several deep-aquifer test wells (e.g., TW-4) show elevated concentrations of nitrate, trace metals, tritium (^3H), and strontium-90 (^{90}Sr).

DATA COLLECTION METHODS

FIELD ACTIVITIES

Specific conductance, pH, and temperature were the field parameters routinely measured at most ground-water sampling sites (Plates 1A and 1B). Generally, field-parameter measurements are taken at the spring discharge point or from the first water discharged after purging the well. In 1994, several springs monitored by LANL's ESH-18 group along White Rock Canyon were sampled by LANL and DOE OB at the point at which spring-flow enters the Rio Grande. Such points were some distance from the source of the springs. Therefore, physical and hydrochemical data obtained may not represent true ground-water conditions. In 1995 DOE OB corrected this by locating, sampling, and marking these springs at their source.

All pH and temperature data were obtained using an Orion Model 290A ion-specific meter with an automatic-temperature-compensated electrode. Specific conductance was measured using an Orion Model 124 or 126 meter. Field equipment was calibrated according to manufacturer's specifications prior to use.

Flow measurements were conducted by utilizing culverts and temporary diversion structures located downstream from springs. Measurements were determined by using the bucket-and-stop-watch method. Multiple measurements were made in order to acquire an average value.

NMED DOE OB personnel performed ground-water (springs) reconnaissance activities on-site and off-site during excursions within canyon bottoms. The accurate location of all springs was determined by using a Global Positioning System (GPS), aerial photos, LANL FIMAD orthophotos, and field observations corresponding to referenced points on USGS topographic maps (7.5 minute quadrangle).

SAMPLING PROCEDURES

Well samples analyzed by DOE OB were collected by LANL's ESH-18 and ER project personnel, and DOE OB staff using LANL standard operating procedures. Generally, Environmental Surveillance (ES) and independent spring samples were collected at their source by DOE OB personnel. In order to eliminate the chance for cross-contamination, samples were collected using dedicated pre-cleansed polyethylene or stainless-steel scoops. Scoops were rinsed with sample water prior to sampling. Clean, unused vinyl gloves were worn at each sampling site.

Samples were analyzed for one or more of several constituents: major cations and anions, ammonia, nitrate+nitrite as nitrogen, total phosphate as phosphorous, total and dissolved trace metals, total and dissolved radionuclides, high-explosive compounds, volatile- and semi-volatile-organic compounds, and polychlorinated biphenyls. Samples were analyzed in accordance with the latest edition of U.S. Environmental Protection Agency's (EPA) SW-846/600 methods, including EPA's method-detection limits and holding times (from sampling date). Unless noted otherwise, all samples were stored and shipped via overnight carrier at an approximate temperature of 4 ° C. Samples analyzed for total metals (non-radioactive and radioactive) were acidified in the field or at the analytical laboratory. Samples analyzed for dissolved metals were passed through a 0.45 μ m filter prior to acidification. Non-metal inorganics (e.g., nitrate+nitrite as nitrogen) were preserved with sulfuric acid in the field. Table 1 illustrates the type of containers, preservatives, methods, etc., used.

QUALITY ASSURANCE/QUALITY CONTROL

NMED's contract laboratories are responsible for establishing the precision and accuracy of analytical procedures. Quality-control procedures include the analysis of replicate, split, spiked and blank samples. Data from such procedures are evaluated and documented by the laboratory prior to submittal to NMED. Several external-duplicate samples were collected, as noted in the data tables. Laboratory quality-control guidelines will be provided by the bureau upon request.

Table 1. Methods, container type and preservatives used for sampling analytes.

ANALYTE	METHOD	CONTAINER TYPE	PRESERVATION (dissolved/totals)
Metals (dissolved/totals)			
Aluminum (Al)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Antimony (Sb)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Arsenic(As)	6010, 7060	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Barium(Ba)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Beryllium(Be)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Boron(B)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Cadmium(Cd)	6010, 7131	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Cobalt(Co)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Copper(Cu)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Iron(Fe)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Lead(Pb)	6010, 7421	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Lithium(Li)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Magnesium(Mg)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Manganese(Mn)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Mercury(Hg)	7471	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Molybdenum(Mo)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Nickel(Ni)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Potassium(K)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Selenium(Se)	6010, 7740	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Silicon(Si)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Silver(Ag)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Sodium(Na)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Strontium(Sr)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Thallium(Th)	6010, 7841	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Tin(Sn)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Vanadium(V)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Zinc(Zn)	6010	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Non-metal inorganics			
Ammonia	350.1	1 Liter Plastic	Sulfuric Acid - pH <2
Nitrate+Nitrite as Nitrogen	353.2	1 Liter Plastic	Sulfuric Acid - pH <2
Total Kjeldahl Nitrogen	351.2	1 Liter Plastic	Sulfuric Acid - pH <2
Total Phosphate as Phosphorus	365.1	1 Liter Plastic	Sulfuric Acid - pH <2
Anions & general chemistry			
Chloride(Cl)	300.0, 325.2	1 Liter Plastic	Unpreserved
Bicarbonate(HCO3)	2320B, 310.1	1 Liter Plastic	Unpreserved
Sulfate(SO4)	300.0, 375.4	1 Liter Plastic	Unpreserved
Carbonate(CO3)	2320B, 310.1	1 Liter Plastic	Unpreserved
Fluoride(F)	340.2	1 Liter Plastic	Unpreserved
Total Dissolved Solids(TDS)	160.1	1 Liter Plastic	Unpreserved
Total Suspended Solids(TSS)	160.2	1 Liter Plastic	Unpreserved
Radiochemical (dissolved & totals)			
Gross alpha	Gas prop. counter	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Gross beta	Gas prop. counter	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Strontium-90	Gas prop. counter	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Cesium-137	Gamma spectroscopy	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Americium-241	Alpha & gamma spectroscopy	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Plutonium-239/240&238	Alpha spectroscopy	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Tritium	Liquid scintillation	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Uranium-234/235/238	Alpha spectroscopy	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Total uranium	Laser-induced kinetic phosphorimetry	1 Liter Plastic	After Filtration-Nitric/Field Acidified-Nitric
Organic compounds			
Volatile organics	8010, 8020, 8240, 8260, 502.2 (EPA-SDWA)	2X-40 ml Glass Vial with septum	3 Drops HCl
Semi-volatile organics, polychlorinated biphenyls, etc.	8270, 525 (EPA-SDWA), 8080	1 Liter Amber Glass	Unpreserved
High explosives	8330	1 Liter Amber Glass	Unpreserved

Note: Dissolved metals/radionuclides samples were filtered through a 0.45 um filter prior to acidification

HYDROCHEMICAL RESULTS

WELLS

DOE OB sampled numerous monitoring wells and water-supply wells on-site and off-site during 1994 and 1995 (Table 2) (Plates 1A and 1B). Analytical results (Appendices A through F) appear to indicate that each mode of ground-water occurrence has been impacted by man-made activities. Due to the lack of background hydrochemical data (i.e., no LANL wells or data suitable for background comparisons), data comparison between monitoring locations was used to make a reasonable assumption as to whether elevated concentrations exist within each zone of saturation. That is, the concentration ranges noted within each zone of saturation were compared and used as an indicator for estimating whether man-made constituents might be present. It should be noted that a limited suite of analyses was performed at each sampling location, and, therefore, data may not adequately represent water quality or maximum levels of contamination. The following describes ranges and concentrations of specific contaminants such as ^{90}Sr or nitrate+nitrite as nitrogen ($\text{NO}_2\text{-NO}_3$) in each mode of occurrence.

Natural and anthropogenic constituents were detected within the deep aquifer. The following data were obtained from LANL deep aquifer test wells only. Activity concentration (pCi/L) ranges for specific parameters were: strontium-90 (^{90}Sr) <0.69 to 6.59; plutonium-238 (^{238}Pu) <0.02 to 0.135; plutonium-239/240 ($^{239/240}\text{Pu}$) <0.008 to 0.09; americium-241 (^{241}Am) 0.099 to 0.144; gross alpha (α) <0.60 to 9.55; and gross beta (β) <2.0 to 14.19. Total uranium (U) and $\text{NO}_2\text{-NO}_3$ concentrations range from 0.171 to 2.821 $\mu\text{g/L}$ and <0.1 to 6.2 mg/L respectively. The radionuclides ^3H and cesium-137 (^{137}Cs) were not detected above analytical detection limits.

Four intermediate aquifer wells were sampled. The following data may indicate the presence of elevated natural and man-made constituents: 1) ^3H was detected at 2607.2 pCi/L at TW-2A in 1994, 2) in 1995, TW-1A showed $\text{NO}_2\text{-NO}_3$ at 4.7 mg/L, and 3) LADP-3 showed ^3H at 1470 pCi/L, gross α at 11.7 pCi/L and gross β at 9.5 pCi/L in 1995. The radionuclides ^{90}Sr , ^{238}Pu , $^{239/240}\text{Pu}$, ^{241}Am , ^{137}Cs were not detected above analytical detection limits.

A total of 18 perched ground-water (canyon alluvium) wells were sampled, and data show that anthropogenic constituents exist in Canada del Buey, Los Alamos, Mortandad, Pajarito, and Pueblo Canyons. Maximum activity concentrations (pCi/L) include the following: 1) ^3H at 22137.9 and gross β at 141.57 in Mortandad Canyon, 2) ^{90}Sr at 39.23, ^{234}U at 4.44, ^{235}U at 0.14, ^{238}U at 3.45, ^{238}Pu at 0.058, $^{239/240}\text{Pu}$ at 0.41 and ^{241}Am at 0.56 in Los Alamos Canyon, and 3) gross α at 55.08 and total uranium at 11.299 $\mu\text{g/L}$ in Pajarito Canyon. The radionuclide ^{137}Cs was not detected above analytical detection limits. $\text{NO}_2\text{-NO}_3$ concentrations range from 0.2 to 63.4 mg/L. Maximum concentrations were detected in wells located in Mortandad Canyon.

One monitoring well (ER ID#03-2664), located at TA-3, was constructed within the upper portion of the Bandelier Tuff and was sampled during 1995. The well was not developed nor purged prior to sampling, and therefore, data may not adequately represent ground-water quality.

Table 2. Location and description of ground-water sampling sites

STATION ID	STATION	X - Y Coordinates		ELEVATION	CASED	SCREENED	SATURATED	ESTIMATED	
	TYPE	(ES, ER or IN)	EASTING	NORTHING	(LSD)	DEPTH	INTERVAL	ZONE	FLOW**
					(ft)	(ft)	(INITIAL WATER LEVEL IN FEET)	(gpm)	
WELLS									
<u>DEEP AQUIFER</u>									
TW-1	ES		509888.88	1771974.36	6369.19*	642*	632-642*	Puye Fm.*(685)	NA
TW-2	ES		494091.98	1777167.29	6648.1*	834*	768-824*	Puye Fm.*(759)	NA
TW-3	ES		497506.83	1772966.97	6595.31*	815*	805-815*	Puye Fm.*(743)	NA
TW-4	ES		483852.17	1777527.32	7244.6*	1205*	1195-1205*	Tschicomma Fm.*(1171)	NA
TW-8	ES		492175.75	1769358.45	6877.62*	1065*	953-1065*	Puye Fm.*(968)	NA
DT-5A	ES		485441.26	1754449.25	7144*	1821*	1172-1392*	Chino Mesa Basalt Unit 2*(1173)	NA
DT-9	ES		488650.79	1751336.11	6935*	1501*	1040-1500?*	Chino Mesa Basalt Unit 2*(1003)	NA
DT-10	ES		488720.25	1754434.79	7020*	1409*	1080-1390?*	Chino Mesa Basalt Unit 2*(1085)	NA
<u>INTERMEDIATE AQUIFER</u>									
<u>(VOLCANICS/SEDIMENTARY)</u>									
TW-1A	ES		509834.88	1772014.66	6369.28*	225*	215-225*	Chino Mesa Basalt Unit 3*(188)	NA
TW-2A	ES		493939.78	1777236.08	6650.4*	132*	127-132*	Puye Fm.*(121)	NA
LAOI(A)-1.1	ER		489263.57	1773796.95	6834.8**	323**	295.2-305**	Guaje Mbr.** (NA)	NA
LADP-3	ER		492770.64	1773254.47	6755**	326**	316-326**	Guaje Mbr. ** (NA)	NA
<u>PERCHED AQUIFER</u>									
<u>(ALLUVIUM)</u>									
Los Alamos Canyon									
LAO-0.7	ES		487625.76	1774148.81	7010^	NA	NA	Alluvium, Bandelier Tuff ?(NA)	NA
LAO-1	ES		489092.9	1773771.66	6836.24*	28*	8-28*	Alluvium*(4.6)	NA
LAO-2	ES		479338.59	1773037.84	6592.97*	32*	12-32*	Alluvium*(11)	NA
LAOR-1	ES		488438.2	1774099.12	6860^	NA	NA	Alluvium, Bandelier Tuff ?(NA)	NA
LAO-B	ER		474753.01	1774887.17	7322.57**	28**	11.8-26.8**	Alluvium, Bandelier Tuff ?(NA)	NA
LAO-0.3	ER		485276.74	1774295.48	6967.82**	11.4**	5.9-10.9**	Alluvium, Bandelier Tuff ?(NA)	NA
LAO-0.6	ER		486803.21	1774178.51	6910.34**	13.6**	8-13**	Alluvium, Bandelier Tuff ?(NA)	NA
LAO-0.8	ER		487990.85	1774125.15	6887.04**	13**	7.5-12.5**	Alluvium, Bandelier Tuff ?(NA)	NA
LAO-0.91	ER		488564.38	1774046.48	6861.16**	15**	9.5-14.5**	Alluvium, Bandelier Tuff ?(NA)	NA
Pajarito Canyon									
PCO-1	ES		497871.33	1759648.89	6687*	12.3*	4.3-12.3*	Alluvium*(1.3)	NA
PCO-2	ES		501699.84	1757238.29	6618.3*	9.5*	1.5-9.5*	Alluvium*(6.3)	NA
PCO-3	ES		506094.38	1755275.66	6546.6*	17.7*	5.7-17.7*	Alluvium*(3.1)	NA
ER ID# 18-01685	ER		499626.87	1758154.76	6650^	NA	NA	Alluvium, Bandelier Tuff ?(NA)	NA
Mortandad Canyon									
MCO-5	ES		492035.8	1769475.27	6875.8*	46*	21-46*	Alluvium*(24.6)	NA
MCO-7	ES		494200.28	1768423.87	6827.4*	69*	39-69*	Alluvium*(39.7)	NA
Pueblo Canyon									
APCO-1	ES		509080.06	1772851.44	6367.53*	19.7*	4.7-14.7*	Alluvium*(6.2)	NA
Canada de Buey									
CDBO-6	ES		493613.05	1764538.28	6817*	49*	34-44*	Bandelier Tuff?(NA)	NA
CDBO-7	ES		492709.5	1763139.81	6771*	44*	29-39*	Bandelier Tuff?(NA)	NA
<u>PERCHED AQUIFER</u>									
<u>(SHALLOW VOLCANICS)</u>									
ER ID# 03-2664	ER		476457.99	1773216.64	7460^	NA	NA	Bandelier Tuff?(NA)	NA
<u>SUPPLY WELLS</u>									
Offsite									
G-1A	ES		515122.68	1784091.85	6014*	1519*	272-1513?*	Tesuque Fm*(250)	NA
G-6	ES		504826.35	1786671.92	6422*	1530*	700-1510?*	Tesuque Fm*(572)	NA

Table 2 (cont). Location and description of ground-water sampling sites

STATION ID	STATION	X - Y Coordinates		ELEVATION	CASED	SCREENED	SATURATED	ESTIMATED
	TYPE	EASTING	NORTHING	(LSD)	DEPTH	INTERVAL	ZONE	FLOW**
	(ES, ER or IN)				(ft)	(ft)	(INITIAL WATER LEVEL IN FEET)	(gpm)
Onsite								
O-4	ES	497111.24	1772896.6	6627*	2617?*	1115-2596?*	Puye Fm*(780)	NA
PM-2	ES	497149.31	1759641.6	6715*	2300?*	1001-2280?*	Puye Fm*(823)	NA
PM-3	ES	502342.75	1769325.3	6640*	2552?*	956-2532?*	Puye Fm*(740)	NA
San Ildefonso Pueblo								
LA-5	ES	519742.63	1772347.29	5840*	1750*	440-1740*	Tesuque Fm*(71)	NA
OTOWI HOUSE	ES	532332.69	1774006.29	NA	NA	NA	Santa Fe Grp.?(NA)	NA
OLD COMMUNITY	ES	NA	NA	NA	NA	NA	Santa Fe Grp.?(NA)	NA
PAJARITO PUMP 1	ES	NA	NA	NA	NA	NA	Santa Fe Grp.?(NA)	NA
PAJARITO PUMP 2	ES	NA	NA	NA	NA	NA	Santa Fe Grp.?(NA)	NA
WESTSIDE ARTESIAN	ES	NA	NA	NA	NA	NA	Santa Fe Grp.?(NA)	NA
HALLADAY HOUSE	ES	530342.01	1774757.8	NA	NA	NA	Santa Fe Grp.?(NA)	NA
NEW COMMUNITY	ES	NA	NA	NA	NA	NA	Santa Fe Grp.?(NA)	NA
SPRINGS								
White Rock Canyon								
ANCHO	ES	506679.79	1737332.22	5700*	NA	NA	Totavi Lenti*	30-40
DOE	ES	501924.69	1733797.46	5580*	NA	NA	Chaquehui Fm.*	1-2
LA MESITA	ES	531950.94	1772704.05	5580*	NA	NA	Tesuque Fm.*	1-2
SANDIA	ES	523327.41	1761129.21	5650*	NA	NA	Totavi Lenti*	3-5
OTOWI SPRING	IN	532242.73	1773692.75	5513^	NA	NA	Alluvium?*	1-2
SPRING 1	ES	527508.16	1768075.63	5680*	NA	NA	Tesuque Fm.*	NA
SPRING 2	ES	526901.53	1765835.05	5660*	NA	NA	Tesuque Fm.*	2-5
SPRING 3	ES	520993.04	1753739.24	5550*	NA	NA	Totavi Lenti*	15-20
SPRING 3A	ES	520851.35	1753453.41	5530*	NA	NA	Totavi Lenti*	30-35
SPRING 3AA	ES	520760.52	1751228.59	5460*	NA	NA	Totavi Lenti*	1-2
SPRING 3B	ES	521092.35	1749989.13	5450*	NA	NA	Tesuque Fm.*	2-4
SPRING 4	ES	517071.3	1748230	5420*	NA	NA	Totavi Lenti*	30-40
SPRING 4A	ES	515729.57	1747945.45	5640*	NA	NA	Totavi Lenti*	75-100
SPRING 4AA	IN	515871.67	1748325.44	5630*	NA	NA	Puye Fm.**	2-4
SPRING 4B	IN	516633.23	1748091.71	5510*	NA	NA	Slide Block**	2-4
SPRING 4C	IN	516902.87	1748262.8	5460*	NA	NA	Slide Block**	15-20
SPRING 5	ES	514796.39	1743250.01	5560*	NA	NA	Totavi Lenti*	10-15
SPRING 5A	ES	515214.01	1741893.99	5420*	NA	NA	Basalt*	NA
SPRING 5B	ES	511501.36	1738110.24	5400*	NA	NA	Chaquehui Fm., Basalt*	NA
SPRING 6	ES	508780.95	1735473.98	5385*	NA	NA	Basalt*	2-4
SPRING 6A	ES	506652.83	1734315.48	5380*	NA	NA	Basalt*	NA
SPRING 8A	ES	503584.16	1734236.86	5560*	NA	NA	Chaquehui Fm.*	5-10
SPRING 9	ES	502931.59	1733680.84	5500*	NA	NA	Chaquehui Fm.*	10-15
SPRING 9A	ES	502177.69	1733748.54	5560*	NA	NA	Chaquehui Fm., Basalt*	4-6
SPRING 9B	ES	501881.53	1732564.83	5570*	NA	NA	Chaquehui Fm., Basalt*	1-2
SPRING 9D	IN	501838.29	1730959.28	5390*	NA	NA	Santa Fe Grp.7**	0.5
Los Alamos Canyon & Tributaries								
BASALT	IN	516618.5	1770675.6	6000*	NA	NA	Talus slope, Chino Mesa Basalt Unit 3*	3*
LOS ALAMOS	IN	517253.8	1770858.55	5980*	NA	NA	Chino Mesa Basalt Unit 4*	1-3
LA-11.2	IN	476950.6	1776107.2	7300*	NA	NA	Bandelier Tuff**	5-10
LA-5.19	IN	503449.3	1771840.69	6485*	NA	NA	Alluvium?*	0-5
DP	NA	496233.03	1773589.06	6840*	NA	NA	Alluvium, Bandelier Tuff?*	?
Pajarito Canyon & Tributaries								
UPPER STARMER'S	IN	472893.5	1767695.79	7490*	NA	NA	Alluvium, Bandelier Tuff**	0-5
CHARLIE'S	IN	473039.72	1767633.05	7480*	NA	NA	Bandelier Tuff**	2-4
PERKINS	IN	473270.57	1767648.06	7460*	NA	NA	Bandelier Tuff**	0-1
GARVEY	IN	473346.84	1767647.23	7465*	NA	NA	Bandelier Tuff**	0-0.5
JOSIE	IN	474204.33	1767792.18	7380*	NA	NA	Bandelier Tuff**	<1-2
STARMER'S	IN	473384.98	1767653.56	7460*	NA	NA	Bandelier Tuff**	10-15
HOMESTEAD	IN	473926.77	1768582.67	7450*	NA	NA	Bandelier Tuff**	5-10
KIELING	IN	474454.01	1767051.89	7400*	NA	NA	Bandelier Tuff?*	4-8
BULLDOG	IN	474765.23	1767092.58	7390*	NA	NA	Bandelier Tuff**	15-20

Table 2 (cont). Location and description of ground-water sampling sites

STATION ID	STATION TYPE	X - Y Coordinates		ELEVATION	CASED DEPTH	SCREENED INTERVAL	SATURATED ZONE	ESTIMATED FLOW**
	(ES, ER or IN)	EASTING	NORTHING	(LSD)	(ft)	(ft)	(INITIAL WATER LEVEL IN FEET)	(gpm)
<u>Pajarito Canyon & Tributaries-continued</u>								
ANDERSON	IN	475690.41	1771290.87	7440 [^]	NA	NA	Bandelier Tuff**	2-3
HANLON	IN	475271.79	1771461.01	7460 [^]	NA	NA	Bandelier Tuff**	<1
TW-1.72	IN	478479.38	1770801.66	7460 [^]	NA	NA	Bandelier Tuff**	<1
SM-30	IN	476305.94	1773019.09	7420 [^]	NA	NA	Alluvium, Bandelier Tuff?*	0-0.25
SM-30A	IN	476364.56	1772658.21	7410 [^]	NA	NA	Alluvium, Bandelier Tuff?*	0-0.25
TA-18	IN	493879.97	1760608.01	6760 [^]	NA	NA	Bandelier Tuff**	1-2
THREEMILE (A)	IN	491678.37	1761503.14	6795 [^]	NA	NA	Alluvium, Bandelier Tuff?*	0-1
THREEMILE (B)	IN	491678.37	1761503.14	6795 [^]	NA	NA	Alluvium, Bandelier Tuff?*	6-10
<u>Tensite Canyon</u>								
TS-1.42	IN	486571.11	1768748.04	7160 [^]	NA	NA	Alluvium, Bandelier Tuff?*	0-<1
<u>Water Canyon & Tributaries</u>								
BURNING GROUND	IN	473877.07	1764474.28	7420 [^]	NA	NA	Bandelier Tuff*	10-15
SWSC	IN	473614.58	1764567.59	7430 [^]	NA	NA	Bandelier Tuff**	2-4
MARTIN	IN	474492.29	1761862.85	7430 [^]	NA	NA	Bandelier Tuff**	1-2
PETER	IN	473404.34	1764676.69	7440 [^]	NA	NA	Alluvium, Bandelier Tuff?*	<1-6
HOLLOW	IN	482081.52	1762350.3	7160 [^]	NA	NA	Bandelier Tuff**	0-0.25
FISH LADDER	IN	476606.5	1763122.09	7340 [^]	NA	NA	Alluvium, Bandelier Tuff?*	1-2
VA-0.8	IN	481460.14	1760792.61	7000 [^]	NA	NA	Alluvium, Bandelier Tuff?*	0-4
WC-6.25	IN	484745.68	1757441.12	6800 [^]	NA	NA	Alluvium, Bandelier Tuff?*	1-2
<u>Misc. Springs</u>								
SACRED	ES	529642.82	1780378.38	5640*	NA	NA	Santa Fe Grp.?*	<1*
GC-10.8	IN	483905.9	1804133.22	7720 [^]	NA	NA	Bandelier Tuff**	5-15
PINE SPRING	IN	489835.71	1803343.44	7216 [^]	NA	NA	Alluvium, Bandelier Tuff?*	2-6
GC-0.36	IN	488401.67	1804201.74	7280 [^]	NA	NA	Alluvium, Bandelier Tuff?*	<1
WATER CANYON GALLERY	ES	467773.05	1761085.64	7560 [^]	NA	NA	Alluvium, Bandelier Tuff?*	approx. 150*

ES - Environmental Surveillance Station

ER - Environmental Restoration Station

IN - Independent Station

NA - Not determined or applicable

* - Taken from W.D. Purtymun, LA-12883-MS, UC-903, UC-940, January 1995

** - Rock type and estimated flow determined from field observations

[^] - Estimated elevations from field observations using U.S.G.S. maps and aerial photos

^{^^} - Anonymous, 1995

? - Unknown or unable to interpret

Note: Estimated X - Y coordinates from Bandelier National Monument and Vicinity, Puye, and Guaje Mountain U.S.G.S. 7.5 minute quadrangles.

SPRINGS

A total of 61 springs were sampled during 1994 and 1995 (Table 2) (Plates 1A and 1B). Generally, sampling occurred at springs located on the western edge of the laboratory and in White Rock Canyon. For the purpose of the following discussion, the springs are categorized into three geographically distinct groups: White Rock Canyon (west side), on-site LANL, and off-site (non-DOE property). General characteristics concerning individual springs are given in Table 2. Data from various springs indicate the constituents $\text{NO}_2\text{-NO}_3$, total U, gross β , volatile organic compounds (VOC's), high explosives (HE), barium (Ba), and boron (B) vary in concentration or activity concentration. All spring data are located in Appendices A through F.

A total of 26 springs were sampled in White Rock Canyon. On each visit during the two-year-sampling period all 26 springs were observed to be flowing. Eight springs (Ancho, Spring 1, Spring 2, Spring 4A, Spring 5A, Spring 5B, Spring 6, and Spring 6A) show $\text{NO}_2\text{-NO}_3$ ranging from 0.1 to 2.1 mg/L. Thirteen springs (Ancho, DOE, Sandia, Springs 1, 2, 3, 3A, 4A, 5, 5A, 8A, 9, and 9A) show U ranging from 0.133 to 9.400 $\mu\text{g/L}$. Nine springs (Ancho, Springs 3, 3A, 4A, 5, 5A, 5B, 6, and 6A) show dissolved gross β ranging from 1.89 to 5.55 pCi/L. Hydrochemical species (e.g., bicarbonate) and total dissolved solids from several White Rock Canyon springs are graphically represented on Figure 2. The data appear to show a similar trend between the referenced parameters such that the major cations and anions tend to decrease in concentration from springs located in the upper reach of White Rock Canyon near the mouth of Los Alamos Canyon to the lower reach near Chaquehui Canyon. Based on the observed bicarbonate concentration (177 mg/L) at Sandia Spring, some interconnection may exist between the abnormally high-bicarbonate ground water within Mortandad Canyon alluvium and the zone from which Sandia Spring discharges.

A total of 28 springs were sampled on-site. During the two-year-sampling period 19 springs were observed to be continuously flowing, and nine were observed to be ephemeral or flowing seasonally. Eight springs (Upper Starmer's, Charlie's, Perkins, Starmer's, Homestead, Bulldog, TS-1.42, and Peter) show $\text{NO}_2\text{-NO}_3$ ranging from 0.027 to 29.0 mg/L, four springs (Charlie's, Starmer's, TA-18, and Hollow) show U ranging from 0.14 to 1.94 $\mu\text{g/L}$, sixteen springs (Charlie's, Starmer's, Homestead, Bulldog, SM-30A, TA-18, Threemile A and B, TS-1.42, Burning Ground, SWSC, Martin, Peter, Hollow, Fish Ladder, and WC-6.25) show gross β values ranging from 2.78 to 45.0 pCi/L. VOC analyses of water from four springs (Burning Ground, SWSC, Martin, and Peter) in the Cañon de Valle area show detectable solvents: cis-1,2-dichloroethene at 21 $\mu\text{g/L}$, trichloroethene ranging from 0.9 to 3.4 $\mu\text{g/L}$, tetrachloroethene ranging from 2.2 to 15 $\mu\text{g/L}$ at SWSC and Peter. HE analyses of water from five springs show detectable HE compounds: 2-amino-4,6/2,6-DNT ranging from 2.3 to 3.3 $\mu\text{g/L}$ at SWSC and Martin, HMX ranging from 1.2 to 1100 $\mu\text{g/L}$ at Threemile (B) and 4.1 at WC-6.25, and RDX ranging from 2.7 to 100 $\mu\text{g/L}$ at Fish Ladder and Martin; 2,4,6-TNT was detected at Threemile(B) at 68 $\mu\text{g/L}$. Analysis of water from eight springs (Charlie's, Perkins, Homestead, Martin, Peter, Hollow, Fish Ladder, and WC-6.25) showed dissolved Ba ranging from 0.12 to 1.7 mg/L, and that from 12 springs (Charlie's, Homestead, Bulldog, SM-30A, TS-1.42, Burning Ground, SWSC, Martin, Peter, Hollow, Fish Ladder, and WC-6.25) showed dissolved gross β ranging from 0.01 to 1.4 mg/L.

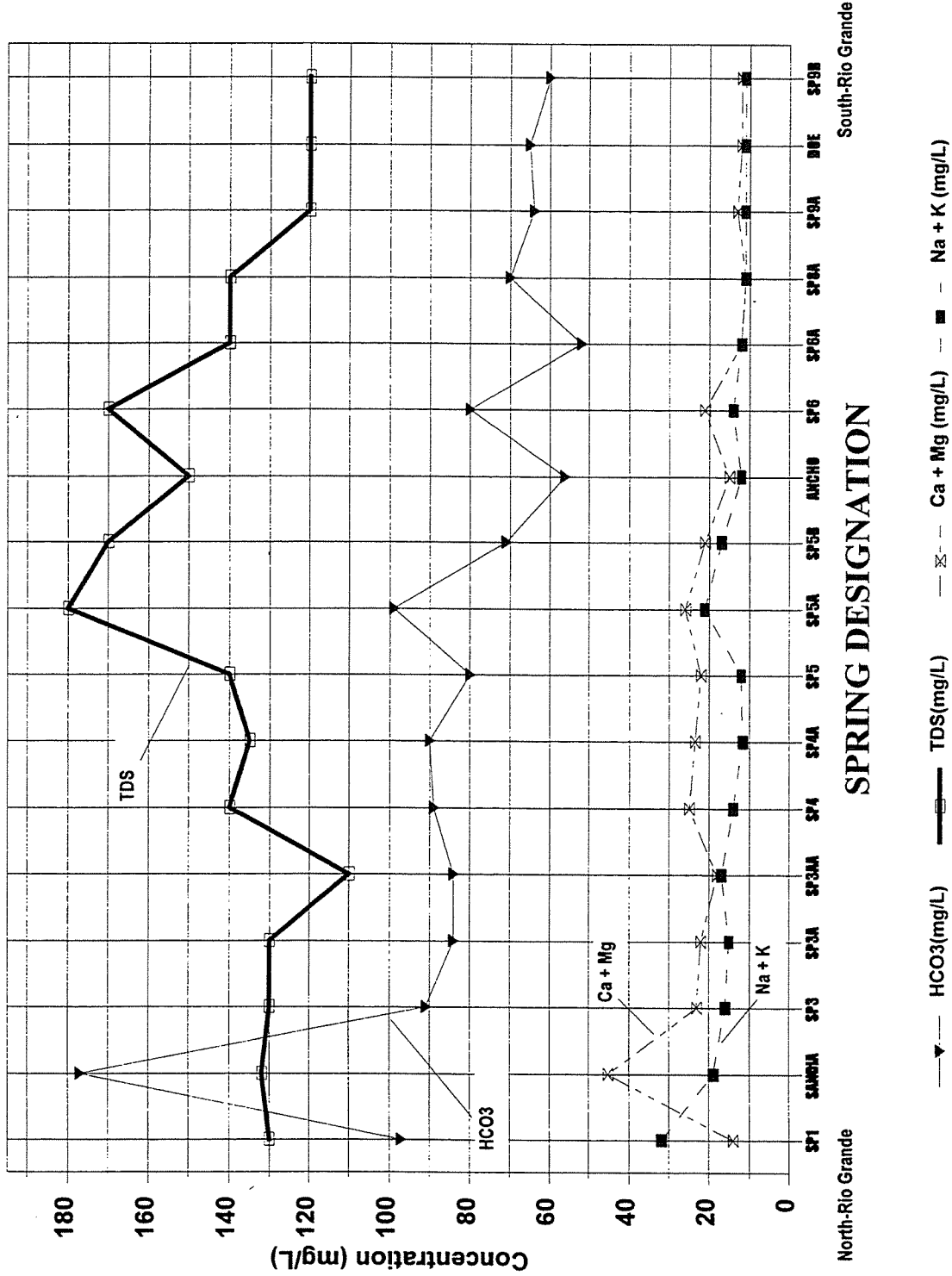


Figure 2. Hydrochemical plot illustrating the relationship between hydrochemical species and total dissolved solids from several springs along White Rock Canyon during 1994 and 1995.

A total of seven springs were sampled off-site. During the 2-yr sampling period six springs were observed to be continuously flowing, and one was observed to be ephemeral or flowing seasonally. Analysis of water from four springs (Basalt, Los Alamos, Pine and GC-10.8) showed $\text{NO}_2\text{-NO}_3$ ranging from 0.2 to 3.1 mg/L. Water from two springs (Basalt and Sacred) contained U at 0.466 and 0.854 $\mu\text{g/L}$. Results for five springs (Basalt, Los Alamos, LA 5.19, Pine and GC-10.8) showed dissolved gross β ranging from 3.39 to 69.9 pCi/L.

Several spring-temperature anomalies were noted during the sampling period. Spring temperature is a distinguishing factor in determining the probable depth of ground-water occurrence. Considering the absence of thermal anomalies beneath the Pajarito Plateau, warmer spring-water temperatures likely indicate a deep-aquifer origin, and cooler spring-water temperatures likely indicate a shallower source. Deep-aquifer temperature data (Appendix A) show values between 18.8 °C at TW-8 and 21.2 °C at TW-3. Therefore, the 16 - 21 °C range of White Rock Canyon (west side) springs suggests that several may be deep-aquifer discharge points. Figure 3 shows the relationship between temperature and elevation for these springs. Note that Springs 4 and 6 have significantly lower temperatures (15.4 °C and 15.9 °C) than other White Rock Canyon springs. It is suggested that anomalies at Springs 4 and 6 may be due to dispersion/infiltration of surface water downstream from Springs 4A and 4AA in Pajarito Canyon and Ancho Spring in Ancho Canyon respectively. That is, surface-waters located above Springs 4 and 6 may be losing water into the subsurface and re-issuing at a lower elevation at Springs 4 and 6. Another suggestion may be that these waters are traveling through slump blocks which may be thermally cooler than natural bedrock. Temperature of Basalt Spring water was field measured at 10.0 °C on May 3, 1995, and does not correlate with that of intermediate ground-water temperatures at TW-1A, which has a temperature of approximately 16.3 °C (measured by DOE OB on June 6, 1995). Low temperature at Basalt Spring may indicate nearby (< 0.25 km) recharge, perhaps by infiltration of cooler upstream surface water. Mixing of nearby upstream surface water with intermediate ground water may be occurring. Los Alamos Spring, which is located approximately 0.2 mi east of Basalt Spring issues from the south side of Los Alamos Canyon at a position approximately 40 ft above the active channel. Hydrochemical data (Appendix A) and general observations suggest that this spring may represent unaltered-intermediate ground water.

Based on historical data and general observations, we suggest that the source of ground water within canyon alluvium between the DP/Los Alamos Canyon confluence and the vicinity of LAO-5 may be DP Spring and intermittent surface-water flow in DP Canyon. Field observations show that ground water issuing from DP Spring infiltrates rapidly and may enter Los Alamos Canyon through a saturated zone or underflow within the alluvium of DP Canyon. This possible ground-water zone or conduit may be entirely or intermittently connected to saturated alluvium in Los Alamos Canyon at LAO-2. Hence, ground water within the Los Alamos Canyon alluvium may be subdivided into two distinct ground-water occurrences: one located at some unknown distance upgradient of the DP and Los Alamos Canyon confluence and one located between the mouth of DP Canyon and the vicinity of LAO-4.5. LANL's conceptual model for ground-water within Los Alamos Canyon alluvium and any deeper intermediate zones will need to be re-evaluated if this interpretation is correct.

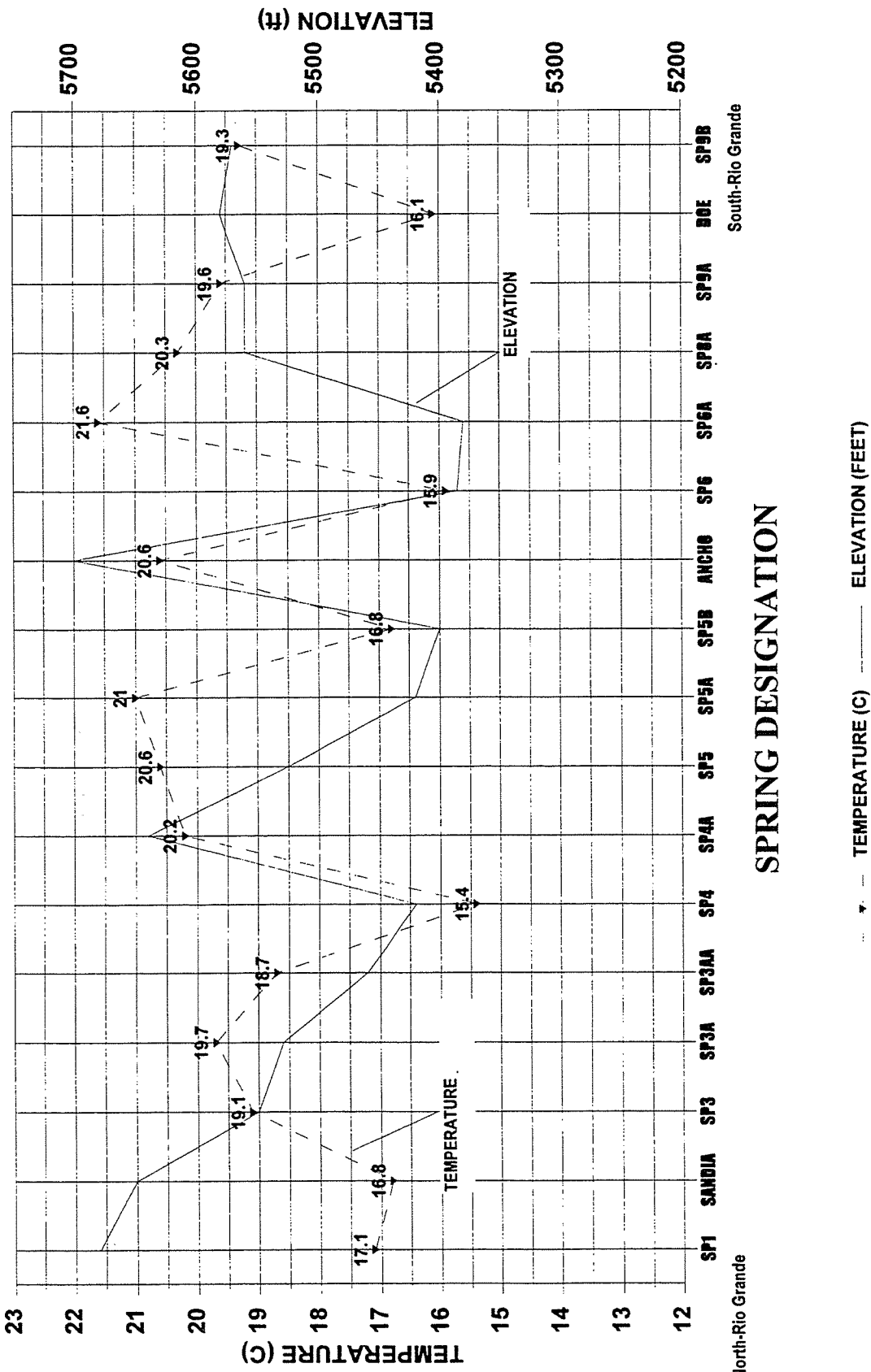


Figure 3. Plot illustrating the relationship between ground-water temperature and elevation at several springs along White Rock Canyon during 1994 and 1995.

SPECIAL STUDIES

FLOW MEASUREMENTS

Flow measurements were conducted at several spring sources and downstream from on-site springs in order to determine the amount of water they contributed to the stream. Mean-flow amounts and measurement dates are given on Plates 1A and 1B. Average values were calculated using 7-to-12 replicate measurements. As flow measurements were made at some distance below the springs, they may not adequately represent spring discharge. More specifically, the values may be low, due to losses associated with infiltration, or high, due to contributions by interflow or runoff. Since measurements were made during extremely dry conditions, the former is most likely and data may represent minimum spring discharge (Dale and Yanicak, 1996).

PURGE TESTS

In 1995 DOE OB requested that LANL sample several deep-aquifer test wells (TW-3, 4 and 8) for analysis of low-level tritium during well-purging to investigate possible borehole leakage and/or natural recharge of tritiated water. Initially, it was the DOE OB's intention to split samples with LANL for analysis of low-level tritium, but by year's end the DOE OB was unsuccessful in contracting with a laboratory with the appropriate analytical capabilities. Although we did collect split samples, we were only able to perform field measurements and analyze for a limited suite of chemical constituents at the referenced test wells. Analytical results (Appendix A) are inconclusive due to the lack of trends or obvious anomalies.

CONCLUSIONS AND RECOMMENDATIONS

Analytical results obtained from ground-water sampling during 1994 and 1995 indicate that anthropogenic constituents are present, in varying concentrations, within each saturated zone in the LANL area. The largest and most diverse concentrations of anthropogenic constituents in ground water are found within canyon alluvium.

LANL's deep-aquifer monitoring wells were installed between 1949 and 1960. Most are not grouted and have screened intervals ranging from approximately 10 to 450 ft. Hence, as noted by Stone and others (1993), LANL's current monitoring system is inadequate. It is suggested that LANL characterize, and ultimately develop an adequate ground-water monitoring network for each of these saturated zones.

Several on-site springs were identified and characterized during 1994 and 1995. Field observations and flow measurements at several of these on-site springs indicate that perennial flow may exist. On-site springs which emanate from the Bandelier Formation (Homestead, Starmer's, Bulldog, Burning Ground, Martin and TA-18) should be sampled or monitored bi-annually for several years in order to obtain baseline water-quality data. Additionally, these springs may possibly be recharging perched ground-water within canyon alluvium and possibly deeper zones formerly thought to be dry. It is recommended that LANL determine if these suspect segregated canyon alluvium perched zones (e.g., Pajarito Canyon west of TA-18 to Homestead Spring) indeed exist. As mentioned previously, DOE OB data suggest that ground water within Los Alamos Canyon alluvium may be subdivided into individual zones of saturation; therefore, these systems need to be delineated.

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APPENDIX A

Analytical Results for General Chemistry

STATION ID	Date	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Na (mg/L)	Cl (mg/L)	F (mg/L)	CO3 (mg/L)	HCO3 (mg/L)	Phos^ (mg/L)	SO4 (mg/L)	NO2+NO3 as Nitrogen		Ammonia		TSS (mg/L)	Field pH (S.U.)	Field SC (uS/cm)	Field Temp. (C)
												(mg/L)	(mg/L)	(mg/L)	(mg/L)				
TW-1	6/31/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.07	360**	17.2
	6/19/95	NA	NA	NA	35	NA	NA	NA	NA	<0.05	NA	NA	6.2	NA	NA	290	7.61	360	13.7
TW-2 (TEST @ 09:48) (TEST @ 13:16) (TEST @ 16:06)	6/31/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.43	451**	16.2
	8/1/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.52	131	16.6
	8/1/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.48	131	15.0
	8/1/95	NA	NA	NA	2.3	NA	NA	NA	NA	0.05	NA	NA	<0.1	<0.2	<0.05	100	8.58	151	15.8
TW-3 (TEST @ 08:10) (TEST @ 10:08) (TEST @ 10:46) (TEST @ 12:09) (TEST @ 14:00) (TEST @ 16:50) (TEST @ 17:00)	6/2/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.97**	168**	21.3**
	T 7/18/95	16	5	2	NA	NA	NA	<1	83	<0.05	NA	NA	<0.1	<0.5	<0.05	90	8.23	170	11.1
	T 7/18/95	12	4	2	NA	NA	NA	<1	64	<0.05	NA	NA	<0.1	<0.5	<0.05	60	7.51	133	18.5
	7/18/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.49	164	20.1
	7/18/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.15	179	21.0
	7/18/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.56	170	21.3
7/18/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.74	179	21.2	
7/18/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.70	179	21.2	
TW-4 (TEST @ 09:00) (TEST @ 13:30)	6/20/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.58**	137**	11.2**
	10/19/95	NA	NA	NA	2	NA	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA	8.00	139	10.2
	10/19/95	NA	NA	NA	2	NA	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA	7.78	142	14.9
TW-8 (TEST @ 09:10) (TEST @ 11:00) (TEST @ 12:30) (TEST @ 13:56) (TEST @ 15:30) (TEST @ 17:10) (TEST @ 00:30) (TEST @ 01:11)	10/21/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.77	NA	20
	T 7/17/95	NA	NA	NA	9	NA	NA	57	0.39	NA	NA	NA	<0.1	<0.5	<0.05	53	8.57	116	12.1
	T 7/17/95	NA	NA	NA	10	NA	NA	NA	<0.05	NA	NA	NA	0.2	<0.5	<0.05	NA	8.12	142	17.6
	7/17/95	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	NA	NA	0.2	<0.5	<0.05	NA	7.99	138	18.8
	7/17/95	NA	NA	NA	10	NA	NA	NA	NA	<0.05	NA	NA	0.2	<0.5	<0.05	NA	7.83	133	18.8
	7/17/95	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	NA	NA	0.2	<0.5	<0.05	NA	7.89	139	18.8
	T 7/17/95	NA	NA	NA	10	NA	NA	NA	NA	<0.05	NA	NA	0.2	<0.5	<0.05	NA	8.03	139	18.9
	7/18/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.90	139	18.7
7/17/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.96	139	18.6	
DT-5A	9/8/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.38	NA	20.0
	T 9/8/94	9.2	2.80	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-	-	-
	F 9/8/94	9.7	2.80	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-	-	-
	11/21/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.30	NA	13.1***
11/13/95	NA	NA	NA	2	NA	NA	NA	NA	<0.05	<10	NA	0.4	NA	<0.05	110	7.13	112	20.9	
DT-9	9/8/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.53	NA	19.5
	T 9/8/94	11.0	2.90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-	-	-
	5/30/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	110	8.04	133.3 ^c	18.7
DT-10	9/8/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.52	NA	18.3
	T 9/8/94	12.0	3.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-	-	-
	5/31/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100	7.78	118.0	20.8

STATION ID

INTERM. AQUIFER
[VOLCANICSEDIMENTARY]

STATION ID	Date	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Na (mg/L)	Cl (mg/L)	F (mg/L)	CO3 (mg/L)	HCO3 (mg/L)	Phos^ (mg/L)	SO4 (mg/L)	NO2+NO3 as Nitrogen (mg/L)			Ammonia as Nitrogen (mg/L)			TSS (mg/L)	Field pH (S.U.)	Field SC (uS/cm)	Field Temp. (C)
												NO2+NO3 as Nitrogen (mg/L)	Kjeld-N^ (mg/L)	Ammonia as Nitrogen (mg/L)	TDS (mg/L)						
TW-1A	5/31/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.21	445**	14.9	
	6/19/95	NA	NA	NA	42	NA	NA	NA	NA	0.94	NA	NA	4.7	NA	NA	330	NA	7.28	477	16.3	
TW-2A (TEST @ 09:48) (TEST @ 13:10) (TEST @ 15:00)	5/31/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.21	362**	16.8	
	8/1/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5	333	11	
	8/1/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5	335	11.5	
	8/1/95	NA	NA	NA	40.9	NA	NA	NA	NA	0.13	NA	NA	1.6	NA	<0.05	243	NA	7.1	387	15.8	

LAOI(A)-1.1
LADP-3

PERCHED AQUIFER
[ALLUVIUM]

Los Alamos Canyon

LAO-0.7	11/30/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.20	NA	8.6
	6/21/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	640	NA	6.99	227	12.4
LAO-1	6/21/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	200	NA	6.89	217	11.2
	6/9/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.40**	550**	11.4**
LAO-2	F 6/21/95	17	NA	NA	NA	34	NA	NA	NA	0.22	NA	NA	NA	NA	220	NA	NA	NA	280	NA
	6/14/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.73	NA	11.3
LAO-B	F 1/17/95	8.6	2.6	2	8.0	10	<0.2	<1	340	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	T 1/17/95	8.4	2.6	2	7.7	NA	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
LAO-0.3	6/14/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.39**	NA	11.1**
LAO-0.6	F 6/14/94	26	19	7	63	97	0.30	<1	78	NA	12	NA	NA	NA	290	NA	6.74	NA	NA	15.4
LAO-0.8	6/16/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.01	NA	15.2
LAO-0.91	6/16/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.61	NA	14.8

Pajarito Canyon

PCO-1	6/22/94	NA	NA	NA	NA	NA	NA	NA	NA	<0.09	NA	0.3	0.3	<0.1	NA	NA	NA	NA	NA	NA	NA
PCO-2	6/22/94	NA	NA	NA	NA	NA	NA	NA	NA	3.9	NA	0.6	3.6	0.1	NA	NA	NA	NA	NA	NA	NA
PCO-3	8/12/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.41**	481**	17.7**	
	F 6/20/95	17	2	9	39	95	0.4	<1	240	NA	<10	NA	NA	NA	430	NA	NA	NA	NA	NA	

STATION ID	Date	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Na (mg/L)	Cl (mg/L)	F (mg/L)	CO3 (mg/L)	HCO3 (mg/L)	Phos^A (mg/L)	SO4 (mg/L)	NO2+NO3 as Nitrogen (mg/L)		Ammonia as Nitrogen (mg/L)		TSS (mg/L)	Field pH (s.u.)	Field SC (uS/cm)	Field Temp. (C)
												Kjeld-N^A^ (mg/L)	NH4-N (mg/L)	Kjeld-N^A^ (mg/L)	NH4-N (mg/L)				
ER ID #18-01685	F 8/1/95	17	5	4	25	NA	NA	NA	NA	0.57	NA	0.2	0.7	<0.05	NA	NA	NA	NA	NA
Mortandad Canyon																			
MCO-5	6/23/94	NA	NA	NA	NA	NA	NA	NA	NA	<0.09	NA	33.0	0.6	<0.1	NA	NA	NA	NA	NA
MCO-7	6/27/94	NA	NA	NA	NA	NA	NA	NA	NA	<0.09	NA	63.4	0.4	<0.10	NA	NA	NA	NA	NA
Pueblo Canyon																			
APCO-1	6/20/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/23/95	NA	NA	NA	NA	40	NA	NA	NA	3.6	NA	2.2	NA	NA	340	12	6.90	466	14.5
Canada de Buey																			
CDBO-6	T 11/29/94	14	2.8	3	26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/14/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	220	2200	NA	NA	NA
CDBO-7	T 11/29/94	29	5.9	5	22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PERCHED AQUIFER (SHALLOW VOLCANICS)																			
ER ID #03-2664	T 2/2/95	12	2.6	4	22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.43	NA	11.9
WATER SUPPLY																			
Offsite																			
G-1A	5/24/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.40**	NA	28.2**
	7/14/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.27	189	28.5
G-6	7/14/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.09	163	30.4
Onsite																			
O-4	T 4/28/94	21	8.1	3	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PM-2	7/14/95	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	NA	0.38	1.8	<0.2	NA	NA	7.37	127	25.1
PM-3	4/25/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.66**	NA	23.8**
(TEST @ 14:32)	4/26/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.67**	NA	23.6**
(TEST @ 13:29)	4/27/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.63**	NA	23.1**
(TEST @ 13:16)	4/28/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.75**	NA	23.6**
(TEST @ 13:21)	7/14/95	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	NA	0.36	0.25	<0.2	NA	NA	7.49	260	27.3

STATION ID	Date	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Na (mg/L)	Cl (mg/L)	F (mg/L)	CO3 (mg/L)	HCO3 (mg/L)	Phos ^a (mg/L)	SO4 (mg/L)	NO2+NO3 as Nitrogen (mg/L)			Ammonia as Nitrogen (mg/L)			TSS (mg/L)	Field pH (S.U.)	Field SC (uS/cm)	Field Temp. (C)	
												NO2+NO3 as Nitrogen (mg/L)	Kjeld-N ^{^^} (mg/L)	Ammonia (mg/L)	TDS (mg/L)							
San Ildefonso Pueblo LA-5	7/29/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.09	NA	19.7	
	7/29/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.85	NA	17.3	
	5/24/95	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	NA	NA	0.5	<0.5	<0.05	NA	NA	NA	7.14	NA	17.5	
OTOWI HOUSE	7/27/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/24/95	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	NA	NA	0.2	<0.5	<0.05	NA	NA	NA	7.45	NA	17.4	
PAJARITO PUMP 1	5/24/95	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	NA	NA	3.7	<0.5	<0.05	NA	NA	NA	7.27	NA	17.1	
PAJARITO PUMP 2	5/24/95	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	NA	NA	1.5	<0.5	<0.05	NA	NA	NA	8.04	360	14.6	
WESTSIDE ARTESIAN	7/27/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HALLADAY HOUSE	7/29/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.75	NA	20.2	
NEW COMMUNITY	5/25/95	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	NA	NA	0.6	<0.5	<0.05	NA	NA	NA	9.00	NA	16.8	
	5/24/95	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	NA	NA	1.5	<0.5	<0.05	NA	NA	NA	8.04	360	14.6	
SPRINGS White Rock Canyon	F 4/6/94	13	2.9	2	10	<5	0.4	NA	68	NA	<5	NA	NA	NA	NA	130	NA	8	7.6	NA	18.5	
		12	2.9	<2	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	T 4/6/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.45	NA	20.8	
		12	3	2	10	3	0.4	0.14	56	<1	0.14	<10	0.4	0.7	<0.05	150	<0.05	320	7.57	133	20.6	
	F 4/12/95	11	2.9	2	11	<5	0.5	NA	68	NA	NA	13	NA	NA	NA	126	NA	10	7.98	NA	9.4*	
		12	3.3	<2	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	T 9/29/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.55	NA	13.8*
		9	3	2	9	<5	<0.5	65	<5	65	NA	<5	NA	NA	120	<10	NA	NA	7.90	124	16.1	
	F 4/12/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.41	140	16.2
		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.41	140	16.2
T 7/28/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.83	411	17.0	
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.08	NA	15.3	
LA MESITA	4/4/94	42	3.2	3	16	<5	0.6	NA	177	NA	5	NA	NA	NA	132	NA	34	7.95	NA	NA	11.4*	
	4/4/94	44	3.8	3	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/11/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.53	241	16.8	
OTOWI	10/15/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.45	NA	14.1	
SPRING 1	4/4/94	17	0.7	2	31	<5	0.6	NA	116	NA	8	NA	NA	NA	142	NA	16	7.41	NA	NA	12.2*	
	4/4/94	15	0.8	<2	32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

STATION ID	Date	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Na (mg/L)	Cl (mg/L)	F (mg/L)	CO3 (mg/L)	HCO3 (mg/L)	Phos ^a (mg/L)	SO4 (mg/L)	NO2+NO3 as Nitrogen (mg/L)			Ammonia as Nitrogen (mg/L)			TSS (mg/L)	pH (S.U.)	Field SC (uS/cm)	Field Temp. (C)
												NO2+NO3 as Nitrogen (mg/L)	Kjeld-N ^{^^} (mg/L)	Ammonia as Nitrogen (mg/L)	TDS (mg/L)						
SPRING 1 (cont.)	F 3/30/95	16	1.5	2	27	<5	0.6	NA	NA	0.14	11	0.19	0.9	<0.05	210	420	7.82	205	11.6*		
	F 6/6/95	14	<1	2	30	<5	0.5	8	97	0.06	9	0.3	<0.5	<0.05	130	30	7.84	213	17.1		
SPRING 2	F 4/4/94	22	1.9	2	55	5	1.0	NA	192	NA	9	NA	NA	NA	244	5	7.89	NA	14.0*		
	T 4/4/94	22	1.3	<2	57	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	F 3/30/95	40	2.1	2	37	6	0.8	NA	NA	0.52	12	0.08	<0.5	0.06	340	1100	8.35	244	9.4*		
	F 6/6/95	14	<1	2	40	<5	0.5	11	112	0.09	9	0.2	<0.5	<0.05	140	2	8.18	256	13.6*		
SPRING 3	F 4/4/94	24	1.9	3	16	5	0.5	NA	101	NA	6	NA	NA	NA	136	3	7.92	NA	17.0*		
	T 4/4/94	22	1.8	3	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	F 9/27/94	23	2.2	5	17	5	NA	NA	102	NA	7.8	NA	NA	NA	NA	NA	7.85	NA	19.6		
	F 4/10/95	21	2	3	13	<5	<0.5	<5	91	NA	9	NA	NA	NA	130	220	7.99	199	19.1		
	F 9/11/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.58	203	20.0		
SPRING 3A	F 4/4/94	22	1.7	3	15	<5	0.5	NA	98	NA	6	NA	NA	NA	134	<3	NA	NA	NA		
	F 9/27/94	22	2	5	16	<5	NA	NA	NA	NA	7.6	NA	NA	NA	NA	NA	7.75	NA	19.1		
	F 4/10/95	20	2	3	12	<5	<0.5	<5	84	NA	6	NA	NA	NA	130	<10	7.82	185	19.7		
	T 4/10/95	20	2	3	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SPRING 3A	F 5/17/95	18	<1	3	14	<5	<0.5	<5	84	NA	5	NA	NA	NA	110	17	7.68	168	18.7		
	F 9/11/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.51	171	19.5		
SPRING 3B	F 9/27/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.56**	NA	24**		
	F 4/20/95	21	4	3	11	7	<0.5	<5	89	NA	5	NA	NA	NA	140	17	7.50	212	15.4		
SPRING 4A	F 4/6/94	20	4.4	2	12	5	0.5	NA	91.2	NA	6	NA	NA	NA	148	<3	7.88	NA	20.8*		
	T 4/6/94	20	4.5	2.2	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	F 9/28/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.65	NA	20.1		
	F 3/24/95	19	4.5	2	9.7	<5	<0.5	<5	90	<0.05	7	1.34	<0.5	<0.05	135	<10	7.86	178	20.2		
SPRING 4A	F 3/24/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.78	185	18.5		
	F 4/20/95	24	5	3	11	7	<0.5	<5	96	NA	9	NA	NA	NA	160	77	7.53	230	15.5		
SPRING 4B	F 9/11/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.52	232	16.9		
	F 9/11/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.52	213	17.1		
SPRING 5	F 9/28/94	19	4.6	4	12	5.5	NA	NA	NA	NA	7.7	NA	NA	NA	NA	NA	7.80	NA	20.0		
	F 4/10/95	17	5	2	10	<5	<0.5	<5	80	NA	5	NA	NA	NA	140	<10	7.85	182	20.6		
	T 4/10/95	17	4	2	9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
SPRING 5A	F 9/28/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.42	208	20.9		
	F 9/12/95	23	3	3	18	5	0.4	<1	99	0.05	<10	0.6	<0.5	<0.05	180	220	7.44	225	21.0		

STATION ID	Date	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Na (mg/L)	Cl (mg/L)	F (mg/L)	CO3 (mg/L)	HCO3 (mg/L)	Phos ^A (mg/L)	SO4 (mg/L)	NO2+NO3 as Nitrogen			Ammonia as Nitrogen			TSS (mg/L)	Field pH (S.U.)	Field SC (µS/cm)	Field Temp. (C)		
												(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)					(mg/L)	(mg/L)
SPRING 5B	9/28/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/12/95	17	4	3	14	4	0.5	1	71	<0.05	<10	2.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPRING 6	9/12/95	17	4	2	12	3	0.4	<1	80	0.08	<10	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/12/95	9	3	2	10	2	0.4	<1	52	<0.05	<10	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPRING 8A	4/6/94	11	3.1	2	12	<5	0.4	NA	68	NA	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/6/94	10	3.1	<2	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/29/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/11/95	8	3	2	9	5	<0.5	<5	70	NA	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/13/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPRING 9	9/29/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/13/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPRING 9A	4/6/94	11	3.1	2	11	<5	0.5	NA	73	NA	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/6/94	12	3.3	<2	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/29/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/11/95	10	3	2	9	5	<0.5	<5	64	NA	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPRING 9B	9/13/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/12/95	9	3	2	9	<5	<0.5	<5	60	NA	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPRING 9D	4/12/95	9	3	1	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/13/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BASALT	7/28/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/3/95	11	3	7	26	30	<0.5	<10	80	1.7	20	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/25/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/3/95	31	8	4	14	20	0.9	<10	100	<0.05	40	3.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/6/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LA-11.2	11/15/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/23/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LA-5.19	3/10/95	9.3	2.5	2	10	6	0.3	<10	58	NA	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/16/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Los Alamos Canyon	12/20/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/14/95	11	4	5	26	36	0.7	<1	56	0.06	10	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

STATION ID

Pajarito Canyon & Tributaries

STATION ID	Date	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Na (mg/L)	Cl (mg/L)	F (mg/L)	CO3 (mg/L)	HCO3 (mg/L)	Phos^A (mg/L)	SO4 (mg/L)	NO2+NO3 as Nitrogen (mg/L)	Kjeld-N^A^A (mg/L)	Ammonia (mg/L)	TDS (mg/L)	TSS (mg/L)	Field	Field	Field
																	pH (S.U.)	SC (uS/cm)	Temp. (C)
UPPER STARMER'S	4/28/95	NA	NA	NA	NA	NA	NA	NA	NA	0.08	NA	0.1	<0.5	<0.05	145	NA	6.69	167	8.1
	F 5/19/95	7	2	2	7	<5	<0.5	NA	37	NA	17	NA	NA	NA	80	16	6.69	97	8.5
	6/14/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.77	92	8.9
	6/22/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.98	101	9.1
	7/7/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.86	97	10.6
10/20/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(dry)
11/9/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(dry)
CHARLIE'S	F 7/22/94	10	3.3	4	10	8	0.1	<1	52	NA	6	NA	NA	NA	132	20	7.10	NA	9.0
	T 2/24/95	11	3.8	3	14	31	<0.2	<1	29	NA	27	NA	NA	NA	230	6	7.43	NA	8.9
	F 4/28/95	10	3	2	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	143	NA	7.03	166	8.4
	6/14/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.78	92	8.5
	6/22/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.85	101	8.6
7/7/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.63	96	8.4	
10/20/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.07	121	8.8	
F 11/9/95	10	3	2	9	9	<0.2	<1	41	<0.05	<0.05	<10	0.4	<0.5	120	<5	6.97	112	8.8	
PERKINS	F 4/28/95	10	4	3	11	NA	NA	NA	NA	0.13	NA	29	2.0	<0.05	148	NA	6.78	169	8.5
	6/19/95	NA	NA	NA	NA	<5	<0.5	40	40	NA	19	NA	NA	NA	80	84	6.61	93	9.1
	F 6/24/95	7	2	2	6	6	<0.5	<10	40	0.09	20	0.1	<0.5	<0.05	90	106	6.24	91	9.4
	6/14/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.62	91	9.1
	6/22/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.57	103	9.0
7/7/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.48	96	9.3	
10/20/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(dry)
11/9/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(dry)
GARVEY	6/24/95	NA	NA	NA	NA	NA	NA	NA	NA	0.12	NA	<0.1	<0.5	<0.05	NA	NA	6.57	94	9.6
	6/22/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(dry)
	10/20/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(dry)
	11/9/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(dry)
	4/28/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(Flowing, no field parameters)	(Flowing, no field parameters)	(Flowing, no field parameters)
F 5/19/95	6	2	2	5	<5	<0.5	<5	37	NA	19	NA	NA	NA	70	<2	6.62	83	8.7	
6/14/95	NA	NA	NA	NA	NA	NA	NA	NA	0.07	NA	<0.1	<0.5	<0.05	NA	NA	6.36	83	8.7	
6/14/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.59	82	8.8	
6/22/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.36	85	9.1	
7/7/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.39	91	8.9	
10/20/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(Flowing, no field parameters)	(Flowing, no field parameters)	(Flowing, no field parameters)	
11/9/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(Flowing, no field parameters)	(Flowing, no field parameters)	(Flowing, no field parameters)	
STARMER'S	F 7/22/94	10	3.2	4	9	8	0.1	<1	50	<0.09	7	0.20	0.30	0.10	142	NA	7.27	NA	9.1
	T 2/24/95	13	4.6	4	13	31	<0.2	<1	32	NA	26	NA	NA	NA	250	9	7.79	NA	8.9
	F 4/28/95	11	4	3	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	144	NA	6.85	171	8.8
	6/14/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	96	8.8
6/22/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.42	96	8.9	

STATION ID	Date	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Na (mg/L)	Cl (mg/L)	F (mg/L)	CO3 (mg/L)	HCO3 (mg/L)	Phos ^a (mg/L)	SO4 (mg/L)	NO2+NO3 as Nitrogen (mg/L)	Ammonia			TSS (mg/L)	Field pH (S.U.)	Field SC (µS/cm)	Field Temp. (C)
													Kjeld-N ^{aa} as Nitrogen (mg/L)	(mg/L)	(mg/L)				
STARMER'S (cont.)	7/7/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.80	101	8.6	
	10/20/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.28	117	8.3	
	F 11/9/95	10	3	2	8	7	<0.2	<1	41	<0.05	<10	0.3	<0.5	100	33	6.93	120	8.3	
BRYAN	5/19/95	10	3	2	10	6	<0.5	<5	53	NA	21	NA	NA	100	2	7.06	118	9.1	
	6/22/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.78	114	9.4	
	7/7/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.85	120	9.5	
10/20/95	10/20/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.71	137	8.1	
	11/9/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.14	131	8.0	
	8/9/94	11	2.9	5	11	17	<0.1	<1	46	NA	6	NA	NA	NA	NA	7.06	NA	9.5	
HOMESTEAD	T 2/24/95	12	4.6	4	8.4	19	<0.2	<1	31	NA	14	NA	NA	200	<5	6.75	NA	7.6	
	F 4/28/95	10	4	2	9	NA	NA	NA	NA	NA	NA	NA	NA	133	NA	6.61	158	7.7	
	5/19/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.45	82	8.2	
F 6/22/95	7	2	2	6	4	4	<0.2	<1	35	0.17	<10	<0.1	<0.5	96	11	6.20	79	9.0	
	7/7/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.45	90	8.6	
	10/20/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.48	98	8.6	
F 11/9/95	8	3	2	6	5	5	<0.2	<1	37	<0.05	<10	0.1	<0.5	99	<5	6.88	97	8.4	
	5/19/95	11	3	3	10	8	<0.5	<5	54	NA	20	NA	NA	110	54	7.26	145	9.6	
	7/7/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.84	168	10.4	
KIELING	10/20/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.60	189	8.3	
	11/9/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(Flowing, no field parameters)	NA	NA	
	F 8/9/94	14	1.3	4	14	12	0.2	<1	66	NA	9	NA	NA	NA	NA	6.87	NA	11.9	
BULLDOG	T 2/24/95	18	5.0	3	18	26	0.3	<1	58	NA	18	NA	NA	200	7	7.39	NA	9.5	
	F 4/28/95	16	5	3	16	NA	NA	NA	NA	NA	NA	NA	NA	159	NA	7.42	231	9.4	
	5/19/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.09	226	9.4	
7/7/95	7/7/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.26	217	9.8	
	10/20/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.21	229	10.0	
	F 11/9/95	18	5	3	20	16	0.3	<1	72	<0.05	11	1.1	<0.5	170	10	7.35	206	10.0	
ANDERSON	12/14/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.42	150	10.8	
	12/14/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.53	160	8.1*	
	12/1/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.02	161	0.1*	
SM-30	2/2/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.58	NA	3.6*	
	6/29/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(Flowing, no field parameters)	NA	NA	
	1 F 6/29/95	11	3	3	31	56	<0.2	<1	46	0.10	<10	<0.1	1.0	<0.05	210	360	6.40	277	10.8*
TA-18	F 3/21/94	12	3.5	3	13	10	0.2	<1	58	NA	9	NA	NA	126	13	6.84	NA	12.1*	
	F 3/13/95	10	3	3	11	14	<0.2	<1	52	NA	17	NA	NA	120	16	6.54	167	4.6*	
	11/17/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.20	150	8.4*	
THREEMILE (A)	F 6/23/95	10	3	3	13	17	<0.2	<1	44	0.20	<10	<0.1	<0.5	250	52	6.55	141	7.9*	

STATION ID	Date	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Na (mg/L)	Cl (mg/L)	F (mg/L)	CO3 (mg/L)	HCO3 (mg/L)	Phos^ (mg/L)	SO4 (mg/L)	NO2+NO3 as Nitrogen			Ammonia			TSS (mg/L)	Field pH (S.U.)	Field SC (uS/cm)	Field Temp. (C)	
												NO2+NO3 as Nitrogen (mg/L)	Kjeld-N^^ (mg/L)	as Nitrogen (mg/L)	Ammonia (mg/L)	as Nitrogen (mg/L)	as Nitrogen (mg/L)					
THREEMILE (A) (cont.)	8/18/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(Dry)
	11/17/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(Dry)
	F 6/23/95	10	3	3	7	3	0.2	<1	85	0.12	<10	<0.1	<0.5	<0.05	290	33	6.37	104	9.6*			
THREEMILE (B)	8/18/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.2*
	11/17/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9*
	F 10/16/95	19.9	2.8	2.9	33.8	15.1	0.36	<5	89	0.11	1.7	0.027	0.32	0.12	193	95	6.60	227	8.6*			
<u>Tensite Canyon</u>																						
TS-1.42																						
<u>Water Canyon & Tributaries</u>																						
BURNING GROUND	F 8/12/94	20	4.9	5	19	15	0.2	<10	92	NA	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.3
	F 3/17/95	14	4.5	3	25	19	<0.5	<5	85	NA	30	NA	NA	NA	180	NA	7.04	223	10.3			
	3/22/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.12	224	10.3			
	5/12/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.76	181	10.8			
	8/31/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.23	216	10.4			
SWSC (duplicate)	F 8/12/94	18	2.5	5	19	15	0.2	<10	90	NA	10	NA	NA	NA	NA	NA	6.78	NA	10.4			
	F 3/17/95	16	4.8	3	24	19	<0.5	<5	80	NA	31	NA	NA	NA	174	NA	7.06	234	9.5			
	F 3/17/95	17	5.1	3	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
	3/22/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.13	228	9.5			
	5/12/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.07	206	9.6			
8/31/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.13	213	9.9				
MARTIN	F 6/12/95	24	6	3	22	19	<0.5	<5	104	NA	20	NA	NA	NA	200	9	6.99	315	10.0			
	7/21/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.04	323	10.4			
PETER	8/12/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(Flowing, no field parameters)	(Flowing, no field parameters)	(Flowing, no field parameters)	(Flowing, no field parameters)	(Flowing, no field parameters)	(Flowing, no field parameters)
	5/12/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.72	129	9.9*			
	F 6/2/95	15	4	3	16	16	<0.5	<5	83	0.12	18	0.5	0.7	<0.05	140	460	6.72	129	9.9*			
	8/31/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.07	259	12.7*			
HOLLOW	T 12/9/94	8.2	3.0	4	18	9	0.4	<1	45	NA	<25	NA	NA	NA	NA	NA	7.83	NA	2.3*			
	F 3/17/95	7.4	2.1	2	16	8	0.07	<5	55	NA	39	NA	NA	NA	172	NA	6.32	130	4.2*			
FISH LADDER	F 6/2/95	4	1	<1	12	7	<0.5	<5	25	0.27	84	<0.1	1.9	<0.05	250	370	5.87	100	10.8*			
VA-0.8	T 12/9/94	13	4.1	4	10	6	0.2	<1	42	0.09	<25	0.2	<0.5	NA	NA	NA	7.14	NA	4.8*			
WC-6.25	F 8/4/95	17	5	5	22	33	0.2	<1	67	0.07	<10	<0.1	<0.5	170	<5	6.64	255	14.3*				
<u>Other Springs</u>																						
SACRED	7/28/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.91	NA	22*			
	5/24/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.37	NA	17*			

STATION ID	Date	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Na (mg/L)	Cl (mg/L)	F (mg/L)	CO3 (mg/L)	HCO3 (mg/L)	Phos ^A (mg/L)	SO4 (mg/L)	NO2+NO3 as Nitrogen		Ammonia		TSS (mg/L)	Field pH (S.U.)	Field SC (uS/cm)	Field Temp. (C)
												(mg/L)	(mg/L)	(mg/L)	(mg/L)				
GC-10.8	F 3/26/95	11	3.6	3	5.1	<5	<0.5	NA	NA	0.15	66	0.2	0.8	<0.05	151	<10	7.17	105	10.3
	F 10/16/95	10	3	3	6	2	<0.2	<1	48	0.09	<10	0.1	<0.5	<0.05	130	<5	6.66	107	10.2
PINE SPRING	1 F 12/27/94	11	3.3	4	6.9	<2	<0.2	<1	41	0.15	<25	0.2	0.5	<0.05	NA	NA	6.81	65	3.3*
	F 10/16/95	14	4	4	7	2	<0.2	<1	61	0.15	11	<0.1	<0.5	<0.5	170	<5	5.97	136	12.1*
GC-0.36	1 F 12/27/94	21	4.8	9	14	4	0.3	<1	77	NA	<50	NA	NA	NA	NA	NA	7.26	68	4.8*
	10/16/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.40	72	10.2*
WCG	6/24/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.81**	NA	11.5**

1 - sample not received at contract laboratory at 4 degrees Celsius

A - Total phosphate as phosphorus

AA - Total kjeldahl nitrogen

* - Temperature may not represent true ground-water temperature due to low-flow conditions

** - LAML's ER or ES field data

*** - Low temperature due to sampling through piping and filter apparatus

TDS - Total dissolved solids

TSS - Total suspended solids

SC - Specific conductance

NA - Not analyzed or not available

T: Indicates that the sample was acidified prior to filtration or analysis, and represents total metals.

F: Indicates that the sample was filtered through a 0.45 micron filter prior to acidification or analysis, and represents dissolved metals.

APPENDIX B

Analytical Results for Total and Dissolved Metals

STATION ID **WELLS**

DEEP AQUIFER

Date	Ag	Al	As	B	Ba	Be	Cd	Cr	Co	Cu	Fe	Hg	Li	Mn	Mo	Ni	Pb	Sb	Se	Si	Sn	Sr	Tl	V	Zn
T 6/31/94	<0.01	<0.2	<0.005	<0.09	<0.1	<0.001	<0.005	<0.01	<0.01	<0.01	0.2	<0.0002	NA	0.02	<0.01	<0.02	0.068	<0.06	<0.005	NA	<0.2	0.26	<0.2	<0.01	0.56
F 6/19/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.1	NA	NA	0.02	NA	NA	0.013	NA	NA	NA	NA	NA	NA	NA	NA
T 6/31/94	<0.01	<0.2	<0.005	<0.09	<0.1	<0.001	<0.005	<0.01	<0.01	<0.01	2.8	<0.0002	NA	0.10	<0.01	<0.02	0.046	<0.06	<0.005	NA	<0.2	<0.01	<0.2	<0.01	0.50
T 8/1/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	26	NA	NA	0.55	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
T 7/18/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
T 7/18/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
T 6/20/94	<0.01	<0.2	<0.005	<0.09	<0.1	<0.001	<0.005	<0.01	<0.02	0.01	0.51	<0.0002	NA	0.03	<0.01	<0.02	0.057	<0.06	<0.005	NA	<0.2	0.05	<0.2	<0.01	6.00
T 10/21/94	<0.01	<0.2	<0.06	<0.01	<0.1	<0.001	<0.005	<0.01	<0.01	<0.01	<0.1	<0.0002	NA	<0.01	<0.01	<0.02	0.006	<0.06	<0.005	NA	<0.02	0.05	<0.2	<0.01	0.76
T 9/8/94	<0.01	<0.2	<0.06	<0.01	<0.1	<0.001	<0.005	<0.01	<0.01	<0.01	0.4	<0.0002	NA	0.01	<0.01	<0.02	0.29	<0.06	<0.005	NA	<0.2	<0.01	<0.2	<0.01	0.56
(duplicate)											0.6	<0.0005	NA	<0.05	<0.1	<0.1	0.27	NA	<0.005	NA	<0.1	<0.1	NA	<0.1	0.49
F 9/8/94	<0.1	<0.1	0.001	<0.1	<0.1	<0.1	<0.001	<0.001	<0.001	<0.01	0.1	<0.0005	NA	<0.05	0.001	<0.1	0.26	NA	<0.005	33	<0.1	<0.1	NA	<0.1	0.35
T 11/21/94	<0.01	<0.2	<0.06	<0.01	<0.1	<0.001	<0.005	0.03	<0.01	<0.01	0.5	<0.0002	NA	0.04	<0.01	<0.02	0.056	<0.06	<0.005	NA	<0.2	0.05	<0.2	<0.01	3.3
F 11/21/94	<0.01	<0.2	<0.06	<0.01	<0.1	<0.001	<0.005	0.03	<0.01	<0.01	<0.1	<0.0002	NA	<0.01	<0.01	<0.02	0.011	<0.06	<0.005	NA	<0.2	0.04	<0.2	<0.01	1.8
F 11/9/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.003	NA	NA	NA	NA	NA	NA	NA	NA
T 9/8/94	<0.01	<0.2	<0.06	0.01	<0.1	<0.001	<0.005	<0.01	<0.01	0.07	5.6	<0.0002	NA	0.05	<0.01	<0.02	<0.05	<0.06	<0.005	NA	<0.02	<0.01	<0.2	<0.01	0.49
T 9/8/94	<0.1	<0.1	<0.001	<0.1	<0.1	<0.1	<0.001	0.008	<0.001	0.07	4.1	<0.0005	NA	0.06	0.001	<0.1	0.011	NA	<0.005	NA	<0.1	<0.1	NA	<0.1	0.46
F 5/30/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.006	NA	NA	NA	NA	NA	NA	NA	NA
F 5/30/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.003	NA	NA	NA	NA	NA	NA	NA	NA
T 9/8/94	<0.01	<0.2	<0.06	0.02	<0.1	<0.001	<0.005	<0.01	<0.01	<0.01	0.6	<0.0002	NA	0.01	<0.01	<0.02	<0.05	<0.06	<0.005	NA	<0.02	<0.01	<0.2	<0.01	3.1
T 9/8/94	<0.1	<0.1	<0.001	<0.1	<0.1	<0.1	0.002	0.003	<0.001	<0.01	0.9	<0.0005	NA	<0.05	<0.001	<0.1	0.027	NA	<0.005	26	<0.1	<0.1	NA	<0.1	2.9
F 5/31/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.008	NA	NA	NA	NA	NA	NA	NA	NA
F 5/31/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.003	NA	NA	NA	NA	NA	NA	NA	NA

INTERM. AQUIFER
(VOLCANICS/SEDIMENTARY)

T 6/31/94	<0.01	<0.2	<0.005	0.19	<0.1	<0.001	<0.005	<0.01	<0.01	<0.01	1.0	<0.0002	NA	0.14	<0.01	<0.02	0.003	<0.06	<0.005	NA	<0.2	<0.01	<0.2	<0.01	2.0
F 6/19/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.1	NA	NA	0.13	NA	NA	<0.003	NA	NA	NA	NA	NA	NA	NA	NA
T 6/31/94	<0.01	<0.2	<0.005	0.09	<0.1	<0.001	<0.005	<0.01	<0.02	<0.01	<0.1	<0.0002	NA	0.03	<0.01	<0.02	<0.003	<0.06	<0.005	NA	<0.2	<0.01	<0.2	<0.01	0.24
T 8/1/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	47	NA	NA	0.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F 11/1/95	<0.01	1.2	<0.01	<0.1	<0.1	<0.005	<0.005	<0.01	<0.01	0.01	0.4	<0.0002	<0.01	<0.01	<0.01	<0.02	<0.003	<0.02	<0.005	36	<0.02	0.04	<0.01	<0.01	0.04
F 4/26/95	<0.01	1.0	<0.01	0.03	<0.1	<0.005	<0.005	0.01	<0.01	0.02	2.7	<0.0002	<0.01	0.36	<0.01	<0.02	0.018	<0.02	<0.005	29	<0.02	0.12	<0.01	<0.01	0.56

STATION ID
 STATION ID
 STATION ID

PERCHED AQUIFER
 (ALLUVIUM)

Los Alamos Canyon

Date	Ag	Al	As	B	Ba	Be	Cd	Cr	Co	Cu	Fe	Hg	Li	Mn	Mo	Ni	Pb	Sb	Se	Si	Sn	Sr	Tl	V	Zn
T 6/9/94	<0.01	<0.2	<0.005	<0.09	<0.1	<0.001	<0.005	<0.01	<0.01	<0.1	<0.0002	NA	<0.01	0.53	<0.02	<0.003	<0.06	<0.005	NA	<0.2	<0.01	<0.2	<0.01	<0.01	<0.02
T 6/9/94 (duplicate)	<0.01	<0.2	<0.005	<0.09	<0.1	<0.001	<0.005	<0.01	<0.01	<0.1	<0.0002	NA	<0.01	0.52	<0.02	<0.003	<0.06	<0.005	NA	<0.2	<0.01	<0.2	<0.01	<0.01	<0.02
F 6/21/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.1	<0.0002	NA	<0.01	NA	NA	<0.003	NA	NA	NA	NA	0.11	NA	NA	NA	NA
T 6/9/94	<0.01	7.2	<0.005	<0.09	0.1	0.001	<0.005	<0.01	<0.01	4.7	<0.0002	NA	0.28	0.05	<0.02	0.014	<0.06	<0.005	NA	<0.2	<0.01	<0.2	0.02	0.02	0.06

LAO-B

F 6/13/94	<0.01	<0.2	NA	<0.09	<0.1	<0.001	<0.005	<0.01	<0.02	<0.1	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.02	NA	<0.06	<0.005	17	<0.2	0.06	NA	<0.01	<0.02
T 6/13/94	<0.01	3.70	<0.005	<0.09	<0.1	<0.001	<0.005	<0.01	<0.02	1.90	<0.0002	<0.01	0.07	<0.01	<0.02	<0.003	<0.06	<0.005	26	<0.2	0.06	NA	<0.01	<0.01	<0.02
F 1/17/95	<0.01	<0.2	<0.005	<0.01	<0.1	<0.001	<0.005	<0.01	<0.01	<0.1	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.02	<0.003	<0.06	<0.005	15	<0.01	0.06	<0.005	<0.01	<0.02
T 1/17/95	<0.01	1.1	<0.005	0.01	<0.1	<0.001	<0.005	<0.01	<0.01	0.5	<0.0002	<0.01	<0.01	<0.01	<0.02	<0.003	<0.06	<0.005	15	<0.01	0.06	<0.005	<0.01	<0.01	<0.02

LAO-0.3

T 6/14/94	<0.01	1.2	<0.005	<0.09	<0.1	<0.001	<0.005	<0.01	<0.02	0.6	<0.0002	<0.01	<0.01	<0.01	<0.02	<0.003	<0.06	<0.005	21	<0.2	0.10	NA	<0.01	<0.01	<0.02
T 6/14/94	<0.01	2.6	<0.005	<0.09	<0.1	<0.001	<0.005	<0.01	<0.02	1.3	<0.0002	0.01	0.61	<0.01	<0.02	<0.003	<0.06	<0.005	22	<0.2	0.17	NA	<0.01	<0.01	0.02

33

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LAO-0.8

T 6/15/94	<0.01	17	<0.005	<0.09	0.1	0.001	<0.005	<0.01	<0.02	6.4	<0.0002	0.01	0.14	<0.01	<0.02	0.008	<0.06	<0.005	55	<0.2	0.11	NA	0.01	0.01	0.03
T 6/16/94	<0.01	1.6	<0.005	<0.09	<0.1	<0.001	<0.005	<0.01	<0.02	0.9	<0.0002	0.01	0.02	0.02	<0.02	<0.003	<0.06	<0.005	21	<0.2	0.11	NA	<0.01	<0.01	<0.02

Pajarito Canyon

1 T 6/22/94	<0.01	0.4	<0.005	<0.09	0.1	<0.001	<0.005	<0.01	<0.02	0.4	<0.0002	NA	0.04	<0.01	<0.02	0.007	<0.06	<0.005	NA	<0.2	0.18	<0.2	<0.01	<0.01	<0.02
1 T 6/22/94	<0.01	270	<0.005	<0.09	2.7	0.018	<0.005	0.20	0.08	240	0.0004	NA	7.1	<0.01	0.15	0.18	0.07	<0.005	NA	<0.2	0.54	<0.2	0.29	0.67	

PCO-2

F 6/20/95	NA	NA	<0.01	NA	<0.1	NA	NA	NA	NA	NA	NA	NA	<0.01	NA	NA	<0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA
F 8/1/95	NA	NA	<0.01	0.03	<0.1	<0.005	<0.005	<0.01	<0.01	NA	<0.0002	<0.01	0.01	<0.01	<0.02	<0.003	<0.02	<0.005	16	0.02	0.12	<0.01	<0.01	<0.01	<0.02

18-01685

1 T 6/23/94	<0.01	4.1	<0.005	<0.09	0.1	<0.001	<0.005	<0.01	<0.02	2.1	<0.0002	NA	0.04	0.23	<0.02	<0.003	<0.06	<0.005	NA	<0.2	0.12	<0.2	<0.01	<0.01	<0.02
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Mortandad Canyon

1 T 6/20/94	<0.01	8.3	0.006	0.31	0.15	<0.001	<0.005	<0.01	<0.02	5.1	<0.0002	NA	2.8	<0.01	<0.02	0.006	<0.06	<0.005	NA	<0.2	0.14	<0.2	0.02	0.02	0.04
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Pueblo Canyon

APCO-1	<0.01	8.3	0.006	0.31	0.15	<0.001	<0.005	<0.01	<0.02	5.1	<0.0002	NA	2.8	<0.01	<0.02	0.006	<0.06	<0.005	NA	<0.2	0.14	<0.2	0.02	0.02	0.04
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STATION ID	Date	Ag (mg/L)	Al (mg/L)	As (mg/L)	B (mg/L)	Ba (mg/L)	Be (mg/L)	Cd (mg/L)	Cr (mg/L)	Co (mg/L)	Cu (mg/L)	Fe (mg/L)	Hg (mg/L)	Li (mg/L)	Mn (mg/L)	Mo (mg/L)	Ni (mg/L)	Pb (mg/L)	Sb (mg/L)	Se (mg/L)	Si (mg/L)	Sn (mg/L)	Sr (mg/L)	Tl (mg/L)	V (mg/L)	Zn (mg/L)	
Canada de Buey																											
	CDBO-6	T 11/29/94	<0.01	3.7	<0.005	0.04	0.2	0.001	0.0006	<0.01	<0.01	0.01	2.0	0.0002	<0.01	0.12	<0.01	<0.02	0.016	<0.005	32	<0.02	0.10	<0.005	<0.01	0.02	
		F 8/14/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.1	NA	NA	NA	NA	NA	<0.003	NA	NA	NA	NA	NA	NA	NA	
	CDBO-7	T 11/29/94	<0.01	9.3	<0.005	0.04	1.4	0.006	<0.0005	<0.01	0.01	3.7	<0.0002	<0.01	0.47	<0.01	<0.02	0.026	<0.005	46	<0.02	0.23	<0.005	0.02	0.08		
	B1	T 2/2/95	<0.01	6.2	<0.005	0.21	0.8	0.003	<0.0005	0.04	<0.01	0.05	4.6	<0.0002	<0.01	0.56	<0.01	0.06	0.020	<0.005	17	<0.02	0.08	<0.005	<0.01	0.47	
SUPPLY WELLS																											
Offsite																											
	G-1A	T 7/14/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA
	G-6	T 7/14/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA
Onsite																											
	O-4	T 4/28/94	<0.01	<0.2	<0.005	<0.09	<0.1	<0.001	<0.005	0.01	<0.01	<0.1	<0.0002	0.04	<0.01	<0.01	<0.02	<0.003	<0.06	<0.005	44	<0.2	<0.01	<0.03	0.02	0.05	
PM-3																											
	(TEST @ 14:32)	T 4/28/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.005	NA	NA	NA	NA	NA	NA	NA
	(TEST @ 13:29)	T 4/28/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.005	NA	NA	NA	NA	NA	NA	NA
	(TEST @ 13:16)	T 4/27/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.005	NA	NA	NA	NA	NA	NA	NA
	(TEST @ 13:21)	T 4/28/94	<0.01	<0.2	<0.06	<0.09	<0.1	<0.001	<0.005	<0.01	<0.01	<0.1	<0.0002	NA	<0.01	<0.01	<0.02	<0.05	<0.06	<0.005	NA	<0.2	<0.01	<0.2	<0.01	<0.02	
San Ildefonso Pueblo																											
	LA-5	1 T 7/29/94	<0.01	<0.2	<0.06	0.02	<0.1	<0.001	<0.005	<0.01	<0.01	<0.1	<0.0002	NA	<0.01	<0.01	<0.02	<0.05	<0.06	<0.005	NA	<0.2	0.22	<0.2	0.01	0.08	
	OTOWI HOUSE	1 T 7/29/94	<0.01	<0.2	<0.06	0.05	0.3	<0.001	<0.005	<0.01	<0.01	0.2	<0.0002	NA	<0.01	<0.01	<0.02	<0.05	<0.06	<0.005	NA	<0.2	0.92	<0.2	<0.01	0.10	
	OLD COMMUNITY	1 T 7/27/94	<0.01	<0.2	<0.06	<0.2	0.2	<0.001	<0.005	<0.01	<0.01	<0.1	<0.0002	NA	<0.01	<0.01	<0.02	<0.05	<0.06	<0.01	NA	<0.2	0.49	<0.2	<0.01	<0.02	
	PAJARITO PUMP 1	1 T 7/27/94	<0.01	<0.2	<0.06	0.3	0.1	<0.001	<0.005	<0.01	<0.01	<0.1	<0.0002	NA	<0.01	<0.01	<0.02	<0.05	<0.06	<0.01	NA	<0.2	0.47	<0.2	0.03	<0.02	
		T 5/24/95	NA	NA	<0.01	NA	NA	NA	<0.01	NA	NA	NA	<0.0002	NA	NA	NA	NA	<0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA
	WESTSIDE ARTESIAN	1 T 7/27/94	<0.01	<0.2	<0.06	1.6	<0.1	<0.001	<0.005	<0.01	<0.01	0.2	<0.0002	NA	<0.01	0.05	<0.02	<0.05	<0.06	<0.01	NA	<0.2	0.33	<0.2	<0.01	<0.02	

STATION ID	Date	Ag (mg/L)	Al (mg/L)	As (mg/L)	B (mg/L)	Ba (mg/L)	Be (mg/L)	Cd (mg/L)	Cr (mg/L)	Co (mg/L)	Cu (mg/L)	Fe (mg/L)	Hg (mg/L)	Li (mg/L)	Mn (mg/L)	Mo (mg/L)	Ni (mg/L)	Pb (mg/L)	Sb (mg/L)	Se (mg/L)	Si (mg/L)	Sn (mg/L)	Sr (mg/L)	Tl (mg/L)	V (mg/L)	Zn (mg/L)
MARTIN	F 5/12/95	<0.01	<0.2	<0.01	1.4	0.2	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.0003	<0.01	<0.01	<0.01	<0.02	<0.003	<0.02	<0.005	23	0.02	0.12	<0.1	<0.01	<0.02
PETER	F 6/2/95	<0.01	<0.2	<0.01	0.04	1.0	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.0002	<0.01	<0.01	<0.1	<0.02	<0.003	<0.02	<0.005	18	<0.01	0.11	<0.01	<0.01	0.07
HOLLOW	T 12/9/94	<0.01	14	<0.06	0.03	<0.1	<0.001	<0.005	<0.01	<0.01	<0.01	7.1	<0.0002	NA	0.13	<0.01	<0.02	<0.05	<0.06	<0.005	NA	<0.02	0.05	<0.2	<0.01	0.03
	F 3/17/95	NA	0.2	<0.005	0.03	0.2	<0.001	<0.005	<0.01	<0.01	<0.01	0.1	<0.0002	0.01	<0.01	<0.01	<0.02	<0.003	<0.06	<0.005	15	<0.02	0.06	<0.005	<0.01	0.04
FISH LADDER	F 6/2/95	<0.01	2.0	<0.01	0.20	1.7	<0.005	<0.005	<0.01	<0.01	<0.01	1.0	<0.0002	0.02	0.01	<0.1	<0.02	0.003	<0.02	0.008	18	<0.01	0.04	<0.01	<0.01	0.06
VA-0.8	T 12/9/94	<0.01	12	<0.06	0.04	0.5	<0.001	<0.005	<0.01	<0.01	<0.01	6.3	<0.0002	NA	0.07	<0.01	<0.02	<0.05	<0.06	<0.005	NA	<0.02	0.09	<0.2	<0.01	<0.02
WC-6.25	F 8/4/95	NA	<0.2	NA	0.04	0.5	<0.005	NA	<0.01	NA	NA	<0.1	<0.0002	NA	<0.01	NA	NA	<0.003	NA	NA	19	NA	0.12	NA	<0.01	<0.02

Other Springs

SACRED	T 7/29/94	<0.01	0.9	<0.06	0.03	0.2	<0.001	<0.005	<0.01	<0.01	<0.01	0.9	<0.0002	NA	0.03	<0.01	<0.02	<0.05	<0.06	<0.005	NA	<0.2	0.51	<0.2	<0.01	<0.02
GC-10.8	F 3/26/95	<0.01	1.0	<0.005	0.02	0.1	<0.001	<0.005	<0.01	<0.01	<0.01	0.5	<0.0002	0.01	<0.01	<0.01	<0.02	<0.003	<0.06	<0.005	46	0.03	0.09	<0.005	<0.01	<0.02
	F 10/16/95	<0.01	<0.2	<0.01	<0.1	<0.1	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.0002	<0.01	<0.01	<0.01	<0.02	<0.003	<0.02	<0.005	24	<0.01	0.07	<0.01	<0.01	<0.02
PINE SPRING	F 10/16/95	<0.01	<0.2	<0.01	<0.1	<0.1	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.0002	<0.01	<0.01	<0.01	<0.02	<0.003	<0.02	<0.005	25	<0.01	0.10	<0.01	<0.01	<0.02
GC-0.36	T 12/27/94	<0.01	1.1	<0.005	0.02	0.1	<0.001	<0.005	<0.01	<0.01	0.03	0.5	<0.0002	NA	0.07	<0.01	<0.02	<0.003	<0.06	<0.005	NA	<0.02	0.11	<0.005	<0.01	<0.02

T - sample not received at contract laboratory at 4 degrees Celsius

< - symbol indicates that the constituent was not detected above method detection limits

NA - Not analyzed or applicable

Note: Shaded dates indicate the sample was acidified prior to filtration or analysis, and represents total metals.

T: Indicates that the sample was acidified prior to filtration or analysis, and represents total metals.

F: Indicates that the sample was filtered through a 0.45 micron filter prior to acidification or analysis, and represents dissolved metals.

APPENDIX C

Analytical Results for Total and Dissolved Radionuclides

STATION ID H3 90Sr 137Cs U 234U 235U 238U 238Pu 239/240Pu 241Am Gross Alpha Gross Beta

(pCi/L) (pCi/L) (pCi/L) (pCi/L) (ug/L) (pCi/L) (pCi/L) (pCi/L) (pCi/L) (pCi/L) (pCi/L) (pCi/L) (pCi/L)

Date unc unc unc unc unc unc unc unc unc unc unc unc

TW-1	T 5/31/94	NA	-	<0.69	BDL	2.821	0.380	NA	NA	NA	NA	<0.033	BDL	<0.008	BDL	<13.993	BDL	<4.48	BDL	<4.80
	F 6/19/95	<180	BDL	NA	NA	NA	NA	NA	NA	NA	NA	<0.03	BDL	<0.01	BDL	NA	BDL	<7.9	BDL	6.3
TW-2 (TEST @ 09:46) (TEST @ 13:16) (TEST @ 15:05)	T 5/31/94	NA	-	<0.70	BDL	0.171	0.023	NA	NA	NA	NA	<0.046	BDL	<0.020	BDL	<11.315	BDL	<2.06	BDL	2.46
	T 8/1/95	NA	-	NA	NA	NA	NA	NA	NA	NA	NA	<0.42	BDL	<0.27	BDL	NA	BDL	NA	NA	NA
	T 8/1/95	NA	-	NA	NA	NA	NA	NA	NA	NA	NA	<0.35	BDL	<0.22	BDL	NA	BDL	NA	NA	NA
	T 8/1/95	NA	-	NA	NA	NA	NA	NA	NA	NA	NA	<0.59	BDL	<0.34	BDL	NA	BDL	<1.6	BDL	3.3
TW-3 (TEST @ 08:10) (TEST @ 10:08)	T 7/18/95	NA	-	<1.2	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	T 7/18/95	NA	-	<1.3	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TW-4 (TEST @ 13:30)	T 6/20/94	<165.7	BDL	6.59	1.00	<3.111	BDL	1.27	0.15	NA	NA	<0.054	BDL	<0.019	BDL	<11.763	BDL	<3.17	BDL	<4.68
	T 10/19/95	NA	-	<0.88	BDL	NA	NA	NA	NA	NA	NA	<0.02	BDL	<0.03	BDL	NA	BDL	<0.60	BDL	3.08
TW-8 (TEST @ 09:10) (TEST @ 11:00) (TEST @ 13:56) (TEST @ 17:10)	T 10/21/94	NA	-	<0.84	BDL	<3.54	BDL	0.51	0.07	NA	NA	<0.102	BDL	<0.044	BDL	<3.02	BDL	<1.69	BDL	<1.68
	T 7/17/95	NA	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.12	0.07	NA	NA	NA
	T 7/17/95	NA	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.06	BDL	NA	NA	NA
	T 7/17/95	NA	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.06	BDL	NA	NA	NA
DT-5A	T 9/8/94	<168.9	BDL	<1.32	BDL	<4.143	BDL	0.230	0.031	NA	NA	<0.080	BDL	0.045	0.038	0.144	0.074	<1.85	BDL	2.52
	F 11/13/95	NA	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.3	BDL	2.80
DT-9	T 9/8/94	<169.0	BDL	<1.36	BDL	<2.865	BDL	0.284	0.038	NA	NA	0.135	0.065	0.045	0.036	0.117	0.073	9.55	1.87	14.19
	F 5/30/95	NA	-	NA	NA	NA	NA	NA	NA	NA	NA	<0.08	BDL	<0.04	BDL	NA	BDL	<3.0	BDL	<2.0
DT-10	T 9/8/94	<169.0	BDL	<0.82	BDL	<3.356	BDL	0.308	0.041	NA	NA	<0.094	BDL	0.090	0.038	0.099	0.064	<1.81	BDL	2.10
	F 5/31/95	NA	-	NA	NA	NA	NA	NA	NA	NA	NA	<0.08	BDL	<0.02	BDL	NA	BDL	<2.8	BDL	<2.9
TW-1A	T 5/31/94	NA	-	<0.65	BDL	<3.294	BDL	0.384	0.038	NA	NA	<0.051	BDL	<0.034	BDL	<12.267	BDL	<5.13	BDL	<5.19
	F 6/19/95	<180	BDL	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	BDL	<0.02	BDL	NA	BDL	<9.0	BDL	5.8
TW-2A (TEST @ 09:48) (TEST @ 13:10) (TEST @ 15:00)	T 5/31/94	2607.2	2558	<0.72	BDL	<3.297	BDL	0.651	0.088	NA	NA	<0.036	BDL	<0.021	BDL	<12.942	BDL	<3.51	BDL	<4.33
	T 8/1/95	NA	-	NA	NA	NA	NA	NA	NA	NA	NA	<0.50	BDL	<0.44	BDL	NA	BDL	NA	NA	NA
	T 8/1/95	NA	-	NA	NA	NA	NA	NA	NA	NA	NA	<0.44	BDL	<0.36	BDL	NA	BDL	NA	NA	NA
	T 8/1/95	<470	BDL	NA	NA	NA	NA	NA	NA	NA	NA	<0.48	BDL	<0.33	BDL	NA	BDL	<2.7	BDL	<3.2
LAO(A)-1.1	F 11/1/95	NA	-	<0.66	BDL	<3.56	BDL	NA	NA	0.30	0.07	<0.08	BDL	<0.03	BDL	<0.06	BDL	3.67	0.87	6.7
LADP-3	F 4/26/95	1470	210	<0.65	BDL	<3.97	BDL	NA	NA	NA	NA	<0.15	BDL	<0.03	BDL	<0.04	BDL	11.7	3.2	9.5

INTERM. AQUIFER
(VOLCANICS/SEDIMENTARY)

STATION ID	Date	H3 (pCi/L)	90Sr (pCi/L)	137Cs (pCi/L)	U (ug/L)	234U (pCi/L)	235U (pCi/L)	238U (pCi/L)	238Pu (pCi/L)	239/240Pu (pCi/L)	241Am (pCi/L)	Gross				
												Alpha (pCi/L)	Beta (pCi/L)			
PERCHED AQUIFER (ALLOUVIUM)																
Los Alamos Canyon																
LAO-0.7	T 11/30/94 F 6/21/95	<710 NA	<0.76 NA	<3.78 NA	NA NA	0.33 4.44	<0.04 0.14	0.33 3.45	<0.09 <0.06	BDL BDL	0.35 0.41	0.08 NA	7.2 32.0	2.2 5.2	6.9 20.9	1.30 3.0
LAO-1	F 6/21/95	<170	NA	<3.04	NA	0.16	<0.03	0.09	<0.06	BDL	0.05	0.02	<2.3	BDL	12.9	1.9
LAO-2	T 6/9/94 T 6/9/94 (duplicate)	886.3 941.4	39.23 35.85	<1.480 <1.548	0.089 0.088	NA NA	NA NA	NA NA	0.027 <0.033	0.018 BDL	<0.018 <0.015	BDL BDL	<3.31 <2.99	BDL BDL	73.27 65.18	8.78 7.86
LAOR-1	F 6/21/95 T 6/9/94	<170 1866.7	BDL 185.4	NA 3.07	NA 4.369	NA 0.588	NA NA	NA NA	NA <0.030	BDL BDL	0.053	0.022	7.03	1.92	52.87	6.49
LAO-B	T 6/13/94 F 1/17/95 T 1/17/95	NA NA NA	<0.74 <0.88 <3.8	BDL BDL BDL	0.61 NA NA	0.08 NA NA	NA <0.03 <0.10	NA <0.05 <0.20	<0.036 <0.13 <0.57	BDL BDL BDL	<0.019 <0.04 <0.19	BDL BDL BDL	<1.43 <1.5 <4.0	BDL BDL BDL	2.68 <1.8 <6.8	0.62 BDL BDL
LAO-0.3	T 6/14/94	NA	<0.76	BDL	<3.398	BDL	NA	NA	<0.052	BDL	0.146	0.039	<3.10	BDL	<3.07	BDL
LAO-0.6	T 6/14/94	NA	<0.72	BDL	<1.557	BDL	NA	NA	0.058	0.025	<0.023	BDL	<4.54	BDL	6.53	1.51
LAO-0.8	T 6/15/94	<166.8	<0.80	BDL	<2.840	BDL	NA	NA	<0.040	BDL	0.023	0.018	<3.45	BDL	6.94	1.33
LAO-0.91	T 6/16/94 F 6/16/94 (duplicate)	564.1 630	2.67 NA	<3.502 NA	<0.59 NA	BDL NA	NA NA	NA NA	<0.072 NA	BDL BDL	0.035 NA	0.018	<2.13 NA	BDL BDL	9.80 NA	1.49 NA
Pajarito Canyon																
PCO-1	T 6/22/94	293.4	<0.68	BDL	<2.804	BDL	NA	NA	<0.057	BDL	<0.022	BDL	<1.76	BDL	4.56	0.85
PCO-2	T 6/22/94	293.4	4.49	0.82	<3.408	BDL	NA	NA	<0.068	BDL	<0.034	BDL	48.01	7.31	47.00	5.91
PCO-3	T 8/15/94 F 6/20/95	<167.2 NA	<0.72 NA	BDL NA	11.299 NA	1.553 NA	NA 0.18	NA 0.03	<0.014 NA	BDL BDL	<0.021 NA	BDL BDL	55.08 NA	8.37	63.16 NA	7.96 NA
18-01685	F 8/1/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<3.7	BDL	5.0	1.0
Mortandad Canyon																
MCO-5	T 6/23/94	22137.9	38.12	4.20	<1.591	BDL	NA	NA	0.045	0.028	0.077	0.028	<7.06	BDL	141.57	16.72
Pueblo Canyon																
APCO-1	T 6/20/94 F 6/23/95	<165.8 <180	BDL BDL	1.08 NA	<3.453 BDL	0.94 NA	NA NA	NA NA	<0.047 <0.03	BDL BDL	0.077 0.06	0.033 0.02	<6.38 <8.7	BDL BDL	25.50 23.9	4.21 3.4

STATION ID	Date	H3 (pCi/L)	90Sr (pCi/L)	137Cs (pCi/L)	U (ug/L)	234U (pCi/L)	235U (pCi/L)	238U (pCi/L)	239/240Pu (pCi/L)	241Am (pCi/L)	Gross			
											Alpha (pCi/L)	Beta (pCi/L)		
Canada de Buey														
PERCHED AQUIFER (SHALLOW VOLCANICS)														
SUPPLY WELLS														
Offsite														
G-1A	T 7/14/95	NA	NA	NA	NA	NA	NA	NA	<0.57	BDL	NA	NA		
G-6	T 7/14/95	NA	NA	NA	NA	NA	NA	<0.66	BDL	NA	NA	NA		
Onsite														
O-4	T 4/28/94	NA	<0.72	BDL <3.356	0.890	NA	NA	<0.009	0.023	<12.788	BDL	<2.15	BDL	<3.52
PM-2	T 7/14/95	NA	NA	NA	NA	NA	NA	<0.52	<0.37	BDL	NA	NA	NA	NA
PM-3														
(TEST @ 14:32)	T 4/25/94	NA	<0.77	BDL <3.379	BDL	NA	NA	NA	NA	<12.625	BDL	NA	NA	NA
(TEST @ 13:29)	T 4/26/94	NA	<0.79	BDL <2.865	BDL	NA	NA	NA	NA	<13.684	BDL	NA	NA	NA
(TEST @ 13:16)	T 4/27/94	NA	<0.74	BDL <2.951	BDL	NA	NA	NA	NA	<11.116	BDL	NA	NA	NA
(TEST @ 13:21)	T 4/28/94	NA	<0.72	BDL <2.753	BDL	NA	NA	NA	NA	<9.529	BDL	NA	NA	NA
T 7/14/95	T 7/14/95	NA	NA	NA	NA	NA	NA	<0.30	<0.25	BDL	NA	NA	NA	NA
San Ildefonso Pueblo														
LA-5	T 7/29/94	NA	<0.67	BDL <2.962	1.198	0.161	NA	<0.039	<0.017	<11.444	BDL	<2.21	BDL	2.20
OTOWI HOUSE	T 7/29/94	NA	<0.68	BDL <4.017	4.677	0.630	NA	0.059	0.032	<16.135	BDL	<3.24	BDL	<3.77
F 5/24/95	F 5/24/95	NA	NA	NA	NA	NA	NA	<0.25	<0.05	BDL	NA	<4.7	BDL	4.3
OLD COMMUNITY	T 7/27/94	NA	<0.81	BDL <3.992	44.280	5.961	NA	<0.057	<0.023	<15.984	BDL	16.38	2.79	6.07
PAJARITO PUMP 1	T 7/27/94	NA	1.01	0.39	<2.757	BDL	6.800	<0.048	<0.032	<13.778	BDL	<4.11	BDL	<4.46
WESTSIDE ARTESIAN	T 7/27/94	NA	<0.68	BDL <3.259	BDL	27.030	3.638	<0.048	<0.039	<12.511	BDL	12.68	4.56	<14.65
HALLADAY HOUSE	T 5/25/95	NA	NA	NA	NA	NA	NA	<0.08	<0.02	BDL	NA	<2.7	BDL	<3.8

STATION ID	Date	H3 (pCi/L)	unc	90Sr (pCi/L)	unc	137Cs (pCi/L)	unc	U (ug/L)	unc	234U (pCi/L)	235U (pCi/L)	238U (pCi/L)	238Pu (pCi/L)	239/240Pu (pCi/L)	241Am (pCi/L)	unc	Gross Alpha (pCi/L)	unc	Gross Beta (pCi/L)	unc
ANCHO	T 4/5/94	<171.6	BDL	<0.77	BDL	<3.250	BDL	0.653	0.086	0.387	0.023	0.212	0.023	0.117	0.030	BDL	<1.20	BDL	<1.73	BDL
	T 9/28/94	NA	-	<0.90	BDL	<3.348	BDL	0.247	0.033	NA	NA	NA	<0.033	<0.019	BDL	0.045	<2.10	BDL	<1.86	BDL
	F 9/12/95	NA	-	NA	-	NA	-	NA	-	NA	NA	NA	NA	NA	NA	NA	1.36	0.50	3.66	0.94
DOE	T 4/6/94	<171.6	BDL	<0.78	BDL	<3.865	BDL	0.854	0.114	0.964	0.036	0.455	0.018	0.063	0.024	<3.433	<1.48	BDL	<1.92	BDL
	T 9/29/94	NA	-	<0.92	BDL	<3.295	BDL	0.202	0.027	NA	NA	NA	<0.046	<0.018	BDL	<0.055	<2.13	BDL	<1.86	BDL
	F 4/12/95	NA	-	NA	-	NA	-	NA	-	NA	NA	NA	NA	NA	NA	NA	<2.0	BDL	<1.7	BDL
LA MESITA	T 7/28/94	NA	-	<0.73	BDL	<3.440	BDL	10.493	1.413	NA	NA	NA	<0.030	<0.016	BDL	<12.675	<3.48	BDL	3.28	0.94
	T 4/4/94	<171.6	BDL	<0.82	BDL	<2.892	BDL	1.041	0.140	0.568	0.009	0.374	<0.008	0.090	0.029	<11.174	<1.83	BDL	<3.19	BDL
SPRING 1	T 4/4/94	<171.6	BDL	<0.78	BDL	<4.078	BDL	3.357	0.452	1.883	0.054	1.045	0.023	0.113	0.034	<16.224	<1.68	BDL	2.24	0.77
	T 3/30/95	NA	-	NA	-	NA	-	NA	-	NA	NA	NA	NA	NA	NA	NA	<4.4	BDL	<2.2	BDL
SPRING 2	T 4/4/94	<171.6	BDL	<0.85	BDL	<2.710	BDL	3.125	0.421	1.739	0.05	0.968	0.009	0.171	0.041	<13.764	<2.57	BDL	<3.36	BDL
	T 3/30/95	NA	-	NA	-	NA	-	NA	-	NA	NA	NA	NA	NA	NA	NA	7.4	2.2	4.7	1.0
SPRING 3	T 4/4/94	<171.6	BDL	<0.79	BDL	<3.357	BDL	1.491	0.201	0.892	0.023	0.572	<0.009	0.248	0.054	<12.862	<1.41	BDL	3.34	0.81
	T 9/27/94	NA	-	<1.43	BDL	<3.301	BDL	1.596	0.216	NA	NA	NA	<0.049	<0.018	BDL	0.059	<3.07	BDL	3.66	0.96
	F 4/10/95	NA	-	NA	-	NA	-	NA	-	NA	NA	NA	NA	NA	NA	NA	<2.4	BDL	5.55	0.90
SPRING 3A	T 9/27/94	NA	-	<1.37	BDL	<4.064	BDL	1.191	0.161	NA	NA	NA	<0.038	<0.027	BDL	0.045	<2.30	BDL	<2.29	BDL
	F 4/10/95	NA	-	NA	-	NA	-	NA	-	NA	NA	NA	NA	NA	NA	NA	<2.2	BDL	2.73	0.63
SPRING 3A	F 5/17/95	NA	-	NA	-	NA	-	NA	-	NA	NA	NA	NA	NA	NA	NA	<1.0	BDL	<1.5	BDL
	T 9/27/94	<0.046	BDL	<1.12	BDL	<1.623	BDL	20.516	2.774	NA	NA	NA	<0.041	0.023	0.012	<0.046	17.61	4.18	5.92	1.97
SPRING 4	F 4/20/95	NA	-	NA	-	NA	-	NA	-	NA	NA	NA	NA	NA	NA	NA	<4.3	BLD	<2.0	BLD
	T 4/6/94	<171.6	BDL	<0.84	BDL	<3.683	BDL	1.039	0.140	0.676	<0.009	0.369	<0.010	0.077	0.028	<3.523	<1.47	BDL	<2.19	BDL
SPRING 4A	T 9/28/94	NA	-	<0.91	BDL	<2.758	BDL	1.303	0.178	NA	NA	NA	<0.051	<0.022	BDL	<0.061	<2.52	BDL	2.65	0.90
	F 3/24/95	NA	-	NA	-	NA	-	NA	-	NA	NA	NA	NA	NA	NA	NA	<3.3	BDL	2.08	0.59
	F 4/20/95	NA	-	NA	-	NA	-	NA	-	NA	NA	NA	NA	NA	NA	NA	<4.3	BDL	<2.3	BDL
SPRING 5	T 9/28/94	NA	-	<1.22	BDL	<3.273	BDL	0.543	0.073	NA	NA	NA	<0.044	<0.018	BDL	0.050	<2.38	BDL	<2.57	BDL
	F 4/10/95	NA	-	NA	-	NA	-	NA	-	NA	NA	NA	NA	NA	NA	NA	<2.4	BDL	2.13	0.58
SPRING 5A	T 9/28/94	NA	-	<1.69	BDL	<3.355	BDL	2.835	0.383	NA	NA	NA	<0.046	0.018	0.010	<0.050	6.09	1.81	6.39	1.63
	F 9/12/95	NA	-	NA	-	NA	-	NA	-	NA	NA	NA	NA	NA	NA	NA	1.77	0.65	4.8	1.4
SPRING 5B	F 9/12/95	NA	-	NA	-	NA	-	NA	-	NA	NA	NA	NA	NA	NA	NA	1.12	0.49	2.8	1
	F 9/12/95	NA	-	NA	-	NA	-	NA	-	NA	NA	NA	NA	NA	NA	NA	<0.85	BLD	2.34	0.89

STATION ID	Date	H3 (pCi/L)	90Sr (pCi/L)	137Cs (pCi/L)	U (ug/L)	234U (pCi/L)	235U (pCi/L)	238U (pCi/L)	239/240Pu (pCi/L)	241Am (pCi/L)	Gross Alpha		Gross Beta		
											unc	unc	unc	unc	unc
SPRING 6A	1 F 9/12/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.93	BDL	1.89	0.96	
SPRING 8A	T 4/5/94	<171.6	BDL	<3.117	0.133	0.104	0.023	0.050	0.018	<9.237	BDL	<1.34	BDL	1.94	
	1 T 9/29/94	NA	<1.38	BDL	0.087	NA	NA	<0.031	BDL	<0.037	BDL	<2.35	BDL	<2.16	
	F 4/10/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.7	BDL	<1.6	BDL	
SPRING 9	1 T 9/29/94	NA	1.59	0.89	<3.001	9.400	1.271	NA	<0.043	BDL	6.10	1.55	4.97	1.06	
SPRING 9A	T 4/6/94	<171.6	BDL	<1.598	0.613	0.428	0.018	0.212	0.014	<4.047	BDL	<3.79	BDL	<8.77	
	1 T 9/29/94	NA	<1.01	BDL	0.374	0.051	NA	<0.047	BDL	<0.058	BDL	<2.33	BDL	<2.53	
	F 4/12/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	BDL	<1.5	BDL	
Los Alamos Canyon															
BASALT	1 T 7/28/94	NA	1.15	0.24	<4.087	0.466	0.093	NA	<0.032	BDL	0.014	<5.13	BDL	5.10	1.40
	F 5/3/95	NA	NA	NA	NA	NA	NA	<0.46	BDL	<0.18	BDL	<4.1	BDL	6.9	1.4
	F 5/25/95	NA	NA	NA	NA	NA	NA	<0.03	BDL	<0.04	0.02	<2.6	BDL	7.0	1.1
LOS ALAMOS	F 5/3/95	NA	NA	NA	NA	NA	NA	<0.11	BDL	NA	BDL	331	47	69.9	8.5
	F 6/6/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.7	BDL	3.42	0.97	
	T 6/6/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.8	BDL	4.09	0.99	
LA-11.2	T 3/10/95	NA	<1.4	BDL	NA	0.22	<0.04	0.22	<0.18	BDL	<0.15	BDL	<3.6	3.60	0.73
LA-5.19	F 12/16/94	320	0.96	0.52	<3.45	BDL	NA	<0.06	<0.11	BDL	0.03	<4.0	BDL	7.2	1.4
	F 7/14/95	<190	BDL	NA	NA	NA	NA	NA	NA	NA	NA	3.2	1.2	8.8	1.3
Pajarito Canyon & Tributaries															
CHARLIE'S	1 T 7/22/94	<167.3	BDL	<0.85	BDL	0.241	0.033	NA	<0.035	BDL	<0.011	<2.92	BDL	<4.38	BDL
	F 2/24/95	NA	<0.66	BDL	NA	NA	0.23	0.14	<0.08	BDL	0.03	<3.4	BDL	4.87	0.90
STARMER'S	1 T 7/22/94	<167.3	BDL	<3.180	0.264	0.036	NA	<0.021	BDL	<2.6712	<0.014	<1.61	BDL	3.21	0.67
	F 2/24/95	NA	<0.69	BDL	NA	NA	0.24	<0.06	BDL	<0.07	0.04	<2.6	BDL	3.49	0.75
HOMESTEAD	F 2/24/95	NA	<0.97	BDL	NA	NA	0.06	<0.02	BDL	<0.05	<0.05	<2.4	BDL	3.62	0.87
	F 2/24/95	NA	<0.68	BDL	NA	NA	0.27	<0.04	BDL	<0.09	0.04	<2.5	BDL	4.92	0.89
SM-30	F 8/23/94	<167.7	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	F 2/2/95	<170	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SM-30A	1 F 6/29/95	310	140	<0.71	BDL	<3.30	BDL	0.07	<0.03	0.06	<0.03	<3.1	BDL	4.64	0.97
	T 3/21/94	NA	NA	<3.095	BDL	0.140	0.019	NA	NA	NA	NA	<0.96	BDL	3.20	0.65
THREEMILE (A)	T 3/13/95	NA	<0.75	BDL	NA	NA	0.05	<0.04	<0.016	BDL	<0.05	<2.9	BDL	2.78	0.68
	F 6/23/95	<200	BDL	<0.70	BDL	<3.40	BDL	0.74	0.03	2.55	<0.04	4.4	1.2	5.2	1.1

STATION ID	Date	H3 (pCi/L)	unc	90Sr (pCi/L)	unc	U (ug/L)	unc	137Cs (pCi/L)	unc	234U (pCi/L)	unc	235U (pCi/L)	238U (pCi/L)	238Pu (pCi/L)	239/240Pu (pCi/L)	unc	241Am (pCi/L)	unc	Gross Alpha (pCi/L)	unc	Gross Beta (pCi/L)	unc	
																							234U (pCi/L)
THREEMILE (B)	F 6/23/95	350	128	<0.67	BDL	NA	-	<3.99	BDL	0.37	NA	<0.07	0.88	<0.08	BDL	<0.03	BDL	<0.12	BDL	<2.0	BDL	3.9	1.1
	F 8/18/95	220	110	NA	-	NA	-	NA	-	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA	-
Tensite Canyon																							
TS-1.42	F 10/18/95	830	307	14	1.4	<22	BDL	NA	-	<1.5	<1.0	<0.96	2.6	0.87	0.86	0.49	<0.07	BDL	10	2.9	45	3.8	
Water Canyon & Tributaries																							
BURNING GROUND																							
SWSC	T 3/17/95	NA	-	<0.68	BDL	NA	-	NA	-	0.63	0.03	0.70	<0.14	BDL	<0.08	BDL	<0.10	BDL	<4.4	BDL	3.87	0.97	
	T 3/17/95	NA	-	<0.70	BDL	NA	-	NA	-	0.37	<0.03	0.23	<0.10	BDL	<0.03	BDL	<0.13	BDL	<4.3	BDL	10.1	1.6	
MARTIN	F 5/12/95	NA	-	NA	-	NA	-	NA	-	0.77	<0.02	0.52	NA	-	NA	-	NA	-	<6.7	BDL	3.5	1.0	
PETER	F 6/2/95	NA	-	NA	-	NA	-	NA	-	NA	NA	NA	NA	-	NA	-	NA	-	<4.1	BDL	5.1	1.2	
HOLLOW	T 12/9/94	NA	-	NA	-	NA	-	NA	-	NA	0.27	NA	NA	-	NA	-	NA	-	NA	-	NA	-	-
	F 3/17/95	NA	-	<0.68	BDL	NA	-	NA	-	0.38	<0.02	0.21	<0.09	BDL	<0.03	BDL	<0.12	BDL	<2.8	BDL	6.8	1.0	
FISH LADDER	F 6/2/95	NA	-	NA	-	NA	-	NA	-	NA	NA	NA	NA	-	NA	-	NA	-	<3.5	BDL	4.6	1.3	
WC-6.25	F 8/4/95	660	140	NA	-	NA	-	NA	-	0.10	<0.04	0.14	NA	-	NA	-	NA	-	<2.5	BDL	5.87	0.94	
Other Springs																							
SACRED	1 T 7/28/94	NA	-	<0.79	BDL	<2.866	BDL	0.854	0.115	NA	NA	NA	<0.032	BDL	<0.015	BDL	<13.800	BDL	<1.40	BDL	3.57	0.71	
	T 3/26/95	NA	-	<0.74	BDL	<1.69	BDL	NA	-	0.22	<0.03	0.18	<0.1	BDL	<0.05	BDL	<0.33	BDL	<4.4	BDL	6.4	1.1	
GC-10.8	F 10/16/95	NA	-	<1.2	BDL	<3.47	BDL	NA	-	0.18	<0.05	0.15	<0.11	BDL	<0.04	BDL	0.17	0.12	<0.54	BDL	3.39	0.78	
	F 10/16/95	NA	-	NA	-	NA	-	NA	-	NA	NA	NA	NA	-	NA	-	NA	-	<0.63	BDL	4.8	1.0	
PINE SPRING	F 10/16/95	NA	-	NA	-	NA	-	NA	-	NA	NA	NA	NA	-	NA	-	NA	-	NA	-	NA	-	-
GC-0.36	1 T 12/27/94	NA	-	<0.83	BDL	<1.77	BDL	NA	-	0.22	<0.02	0.17	<0.06	BDL	<0.03	BDL	<6.14	BDL	NA	-	NA	-	-
WATER CANYON GALLERY	T 5/24/94	<182.9	BDL	NA	-	<3.032	BDL	NA	-	NA	NA	NA	NA	-	NA	-	<10.884	BDL	NA	-	NA	-	-

1 - sample not recieved at contract laboratory at 4 degrees celcius
NA - Not analyzed or not available
BDL - Below method detection limits
UNC - Uncertainties (2 sigma)
T: indicates that the sample was acidified prior to filtration or analysis, and represents total metals.
F: indicates that the sample was filtered through a 0.45 micron filter prior to acidification or analysis, and represents dissolved metals.

APPENDIX D

Analytical Results for High-Explosive Compounds

WELL

SPRINGS

SAMPLE ID: ER ID#18-01685
 SAMPLING DATE: 8/1/95

HIGH EXPLOSIVE COMPOUND

2-AMINO-4,6-DNT & 2-AMINO-2,6-DNT	BDL	2.0
OCTAHYDRO-1,3,5,7-TETRAZOCINE (HMX)	BDL	2.0
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE (RDX)	BDL	2.0
1,3,5-TRINITROBENZENE (1,3,5-TNB)	NA	-
1,3-DINITROBENZENE (1,3-DNB)	NA	-
TETRYL	NA	-
NITROBENZENE (NB)	BDL	2.0
2,4,6-TRINITROTOLUENE (2,4,6-TNT)	NA	-
2,4-DINITROTOLUENE(2,4-DNT) & 2,6-DINITROTOLUENE(2,6-DNT)	NA	-
o-NITROTOLUENE (2-NT)	NA	-
p-NITROTOLUENE (4-NT)	NA	-
m-NITROTOLUENE (3-NT)	NA	-

Perkins Spring
 5/24/95

*RESULT (ug/L)	DL
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0

Joeie Spring
 6/24/95

*RESULT (ug/L)	DL
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0

Threemile (A)
 6/23/95

*RESULT (ug/L)	DL
BDL	2
BDL	2
BDL	2
BDL	2
BDL	2
BDL	2
BDL	2
BDL	2
BDL	2
BDL	2
BDL	2
BDL	2
BDL	2
BDL	2
BDL	2
BDL	2

Threemile (B)
 6/23/95

*RESULT (ug/L)	DL
BDL	2
1100	1
77	0.84
BDL	-
BDL	-
BDL	-
BDL	-
BDL	-
BDL	-
BDL	-
BDL	-
BDL	-
BDL	-
BDL	-
BDL	-
BDL	-
BDL	-

8/18/95

*RESULT (ug/L)	DL
NA	-
1.2	1
BDL	0.84
NA	-
NA	-
NA	-
NA	-
BDL	0.25
NA	-
NA	-
NA	-
NA	-
NA	-
NA	-
NA	-
NA	-
NA	-

SPRINGS--continued

SAMPLE ID: SWSC
 SAMPLING DATE: 5/12/95

HIGH EXPLOSIVE COMPOUND

2-AMINO-4,6-DNT & 2-AMINO-2,6-DNT	2.3	2.0
OCTAHYDRO-1,3,5,7-TETRAZOCINE (HMX)	5.5	2.0
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE (RDX)	83	2.0
1,3,5-TRINITROBENZENE (1,3,5-TNB)	BDL	2.0
1,3-DINITROBENZENE (1,3-DNB)	BDL	2.0
TETRYL	BDL	2.0
NITROBENZENE (NB)	BDL	2.0
2,4,6-TRINITROTOLUENE (2,4,6-TNT)	BDL	2.0
2,4-DINITROTOLUENE(2,4-DNT) & 2,6-DINITROTOLUENE(2,6-DNT)	BDL	2.0
o-NITROTOLUENE (2-NT)	BDL	2.0
p-NITROTOLUENE (4-NT)	BDL	2.0
m-NITROTOLUENE (3-NT)	BDL	2.0

MARTIN
 6/12/95

*RESULT (ug/L)	DL
3.3	2.0
11	2.0
100	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0

PETER
 6/2/95

*RESULT (ug/L)	DL
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0

FISH LADDER
 6/2/95

*RESULT (ug/L)	DL
BDL	2.0
7.6	2.0
2.7	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0

VA-0.8
 12/9/95

*RESULT (ug/L)	DL
BDL	80
BDL	110
BDL	130
BDL	70
BDL	70
BDL	80
BDL	80
BDL	80
BDL	80
BDL	80
BDL	80
BDL	50
BDL	90
BDL	60

WC-6.25
 8/4/95

*RESULT (ug/L)	DL
BDL	2.0
4.1	2.0
BDL	2.0
NA	-
NA	-
NA	-
NA	-
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0
BDL	2.0

* - Modified Method 8330
 NA - Not analyzed or not available
 BDL - Below method detection limits
 DL - Method detection limit (ug/L)
 (A) & (B) - Samples collected at two distinct discharge points

APPENDIX E

Analytical Results for Volatile Organic Compounds

WELLS

ANALYTE	SAMPLE ID: LAOI(A)-1.1 ¹		PCO-3		PAJARITO PUMP 2		HALLADAY HOUSE	
	11/1/95		6/20/95		5/24/95		5/24/95	
	RESULT (ug/L)	DL	RESULT (ug/L)	DL	RESULT (ug/L)	DL	RESULT (ug/L)	DL
ACETONE	BDL	10	NA	-	NA	-	NA	-
BENZENE	BDL	5	BDL	0.5	BDL	0.5	BDL	0.5
BROMOBENZENE	NA	-	NA	-	NA	-	NA	-
BROMOCHLOROMETHANE	NA	-	NA	-	NA	-	NA	-
BROMODICHLOROMETHANE	BDL	5	BDL	0.2	BDL	0.2	BDL	0.2
BROMOFORM	BDL	5	BDL	0.5	BDL	0.5	BDL	0.5
BROMOMETHANE	BDL	10	BDL	1	BDL	1	BDL	1
2-BUTANONE (MEK)	BDL	10	NA	-	NA	-	NA	-
n-BUTYLBENZENE	NA	-	NA	-	NA	-	NA	-
sec-BUTYLBENZENE	NA	-	NA	-	NA	-	NA	-
tert-BUTYLBENZENE	NA	-	NA	-	NA	-	NA	-
tert-BUTYL METHYL ETHER (MTBE)	NA	-	NA	-	NA	-	NA	-
CARBON DISULFIDE	BDL	5	NA	-	NA	-	NA	-
CARBON TETRACHLORIDE	BDL	5	BDL	0.2	BDL	0.2	BDL	0.2
CHLOROBENZENE	BDL	5	BDL	0.5	BDL	0.5	BDL	0.5
CHLOROETHANE	BDL	10	BDL	0.5	BDL	0.5	BDL	0.5
CHLOROFORM	BDL	5	BDL	0.5	BDL	0.5	BDL	0.5
CHLOROMETHANE	BDL	10	BDL	1	BDL	1	BDL	1
2-CHLOROTOLUENE	NA	-	NA	-	NA	-	NA	-
4-CHLOROTOLUENE	NA	-	NA	-	NA	-	NA	-
1,2-DIBROMO-3-CHLOROPROPANE	NA	-	NA	-	NA	-	NA	-
DIBROMOCHLOROMETHANE	BDL	5	BDL	0.2	BDL	0.2	BDL	0.2
1,2-DIBROMOETHANE (EDB)	NA	-	BDL	0.2	BDL	0.2	BDL	0.2
DIBROMOMETHANE	NA	-	NA	-	NA	-	NA	-
1,2-DICHLOROBENZENE	NA	-	BDL	0.5	BDL	0.5	BDL	0.5
1,3-DICHLOROBENZENE	NA	-	BDL	0.5	BDL	0.5	BDL	0.5
1,4-DICHLOROBENZENE	NA	-	BDL	0.5	BDL	0.5	BDL	0.5
DICHLORODIFLUOROMETHANE	NA	-	NA	-	NA	-	NA	-
1,1-DICHLOROETHANE	BDL	5	BDL	0.2	BDL	0.2	BDL	0.2
1,2-DICHLOROETHANE (EDC)	BDL	5	BDL	0.5	BDL	0.5	BDL	0.5
1,1-DICHLOROETHENE	BDL	5	BDL	0.2	BDL	0.2	BDL	0.2
CIS-1,2-DICHLOROETHENE	BDL	5	BDL	0.2	BDL	0.2	BDL	0.2
TRANS-1,2-DICHLOROETHENE	BDL	5	BDL	1	BDL	1	BDL	1
1,2-DICHLOROPROPANE	BDL	5	BDL	0.2	BDL	0.2	BDL	0.2
CIS-1,3-DICHLOROPROPENE	BDL	5	BDL	0.2	BDL	0.2	BDL	0.2
2,2-DICHLOROPROPANE	NA	-	NA	-	NA	-	NA	-
2,2-DICHLOROPROPENE	NA	-	NA	-	NA	-	NA	-
TRANS-1,3-DICHLOROPROPENE	BDL	5	BDL	0.2	BDL	0.2	BDL	0.2
ETHYLBENZENE	BDL	5	BDL	0.5	BDL	0.5	BDL	0.5
2-HEXANONE	BDL	10	NA	-	NA	-	NA	-
HEXACHLOROBUTADIENE	NA	-	NA	-	NA	-	NA	-
ISOPROPYLBENZENE	NA	-	NA	-	NA	-	NA	-
METHYL-t-BUTYL ETHER	NA	-	BDL	2.5	BDL	2.5	BDL	2.5
4-METHYL-2-PENTANONE	BDL	10	NA	-	NA	-	NA	-
1-METHYLNAPHTHALENE	NA	-	NA	-	NA	-	NA	-
2-METHYLNAPHTHALENE	NA	-	NA	-	NA	-	NA	-
4-ISOPROPYLTOLUENE	NA	-	NA	-	NA	-	NA	-
METHYLENE CHLORIDE	BDL	5	BDL	2	BDL	2	BDL	2
NAPHTHALENE	NA	-	NA	-	NA	-	NA	-
PROPYLBENZENE	NA	-	NA	-	NA	-	NA	-
STYRENE	BDL	5	NA	-	NA	-	NA	-
1,1,1,2-TETRACHLOROETHANE	BDL	5	NA	-	NA	-	NA	-
1,1,2,2-TETRACHLOROETHANE	NA	-	BDL	0.2	BDL	0.2	BDL	0.2
TETRACHLOROETHENE	BDL	5	BDL	0.5	BDL	0.5	BDL	0.5
TETRAHYDROFURAN (THF)	NA	-	NA	-	NA	-	NA	-
TOLUENE	BDL	5	BDL	0.5	BDL	0.5	BDL	0.5
1,2,3-TRICHLOROBENZENE	NA	-	NA	-	NA	-	NA	-
1,2,4-TRICHLOROBENZENE	NA	-	NA	-	NA	-	NA	-
1,1,1-TRICHLOROETHANE	BDL	5	BDL	1	BDL	1	BDL	1
1,1,2-TRICHLOROETHANE	BDL	5	BDL	0.2	BDL	0.2	BDL	0.2
TRICHLOROETHENE	BDL	5	BDL	0.2	BDL	0.2	BDL	0.2
TRICHLOROFLUOROMETHANE	NA	-	BDL	0.2	BDL	0.2	BDL	0.2
1,2,3-TRICHLOROPROPANE	NA	-	NA	-	NA	-	NA	-
1,1,2-TRICHLORO-2,2,1-TRIFLUOROETHANE	NA	-	NA	-	NA	-	NA	-
1,2,4-TRIMETHYLBENZENE	NA	-	NA	-	NA	-	NA	-
1,3,5-TRIMETHYLBENZENE	NA	-	NA	-	NA	-	NA	-
VINYL ACETATE	BDL	10	NA	-	NA	-	NA	-
VINYL CHLORIDE	BDL	10	BDL	0.5	BDL	0.5	BDL	0.5
o-XYLENE	NA	-	NA	-	NA	-	NA	-
p- & m-XYLENE	NA	-	NA	-	NA	-	NA	-
TOTAL XYLENES	BDL	5	BDL	0.5	BDL	0.5	BDL	0.5

DL - Method detection limit
BDL - Below method detection limit
NA - Not analyzed

SPRINGS

SAMPLE ID: SAMPLING DATE: ANALYTE	CHARLIE'S 5/19/95		JOSIE 5/19/95		STARMER'S 7/7/95		HOMESTEAD 5/19/95	
	RESULT (ug/L)	DL	RESULT (ug/L)	DL	RESULT (ug/L)	DL	RESULT (ug/L)	DL
	ACETONE	NA	-	NA	-	NA	-	NA
BENZENE	BDL	0.5	BDL	0.5	BDL	0.5	BDL	0.5
BROMOBENZENE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
BROMOCHLOROMETHANE	BDL	0.5	BDL	0.5	BDL	0.2	BDL	0.5
BROMODICHLOROMETHANE	BDL	0.5	BDL	0.5	BDL	0.5	BDL	0.5
BROMOFORM	BDL	0.5	BDL	0.5	BDL	1	BDL	0.5
BROMOMETHANE	BDL	5	BDL	5	NA	-	BDL	5
2-BUTANONE (MEK)	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
n-BUTYLBENZENE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
sec-BUTYLBENZENE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
tert-BUTYLBENZENE	BDL	5	BDL	5	NA	-	BDL	5
tert-BUTYL METHYL ETHER (MTBE)	BDL	5	NA	-	NA	-	NA	-
CARBON DISULFIDE	NA	-	BDL	0.5	BDL	0.2	BDL	0.5
CARBON TETRACHLORIDE	BDL	0.5	BDL	0.5	BDL	0.5	BDL	0.5
CHLOROBENZENE	BDL	0.5	BDL	0.5	BDL	0.5	BDL	0.5
CHLOROETHANE	BDL	0.5	BDL	0.5	BDL	0.5	BDL	0.5
CHLOROFORM	BDL	0.5	BDL	0.5	BDL	1	BDL	0.5
CHLOROMETHANE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
2-CHLOROTOLUENE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
4-CHLOROTOLUENE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
1,2-DIBROMO-3-CHLOROPROPANE	BDL	0.5	BDL	0.5	BDL	0.2	BDL	0.5
DIBROMOCHLOROMETHANE	BDL	0.5	BDL	0.5	BDL	0.2	BDL	0.5
1,2-DIBROMOETHANE (EDB)	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
DIBROMOMETHANE	BDL	0.5	BDL	0.5	BDL	0.5	BDL	0.5
1,2-DICHLOROETHANE	BDL	0.5	BDL	0.5	BDL	0.5	BDL	0.5
1,3-DICHLOROETHANE	BDL	0.5	BDL	0.5	BDL	0.5	BDL	0.5
1,4-DICHLOROETHANE	BDL	0.5	BDL	0.5	BDL	0.5	BDL	0.5
DICHLORODIFLUOROMETHANE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
1,1-DICHLOROETHANE	BDL	0.5	BDL	0.5	BDL	0.2	BDL	0.5
1,2-DICHLOROETHANE (EDC)	BDL	0.5	BDL	0.5	BDL	0.5	BDL	0.5
1,1-DICHLOROETHENE	BDL	0.5	BDL	0.5	BDL	0.2	BDL	0.5
CIS-1,2-DICHLOROETHENE	BDL	0.5	BDL	0.5	BDL	1	BDL	0.5
TRANS-1,2-DICHLOROETHENE	BDL	0.5	BDL	0.5	BDL	0.2	BDL	0.5
1,2-DICHLOROPROPANE	BDL	0.5	BDL	0.5	BDL	0.2	BDL	0.5
CIS-1,3-DICHLOROPROPENE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
2,2-DICHLOROPROPANE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
2,2-DICHLOROPROPENE	BDL	0.5	BDL	0.5	BDL	0.2	BDL	0.5
TRANS-1,3-DICHLOROPROPENE	BDL	0.5	BDL	0.5	BDL	0.5	BDL	0.5
ETHYLBENZENE	NA	-	NA	-	NA	-	NA	-
2-HEXANONE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
HEXACHLOROBUTADIENE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
ISOPROPYLBENZENE	NA	-	NA	-	BDL	2.5	NA	-
METHYL-1-BUTYL ETHER	NA	-	NA	-	NA	-	NA	-
4-METHYL-2-PENTANONE	NA	-	NA	-	NA	-	NA	-
1-METHYLNAPHTHALENE	NA	-	NA	-	NA	-	NA	-
2-METHYLNAPHTHALENE	NA	-	NA	-	NA	-	NA	-
4-ISOPROPYLTOLUENE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
METHYLENE CHLORIDE	BDL	0.5	BDL	0.5	BDL	2	BDL	0.5
NAPHTHALENE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
PROPYLBENZENE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
STYRENE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
1,1,1,2-TETRACHLOROETHANE	BDL	0.5	BDL	0.5	BDL	0.2	BDL	0.5
1,1,1,2,2-TETRACHLOROETHANE	BDL	0.5	BDL	0.5	BDL	0.5	BDL	0.5
TETRACHLOROETHENE	BDL	5	BDL	5	NA	-	BDL	5
TETRAHYDROFURAN (THF)	BDL	5	BDL	5	BDL	0.5	BDL	0.5
TOLUENE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
1,2,3-TRICHLOROETHANE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
1,2,4-TRICHLOROETHANE	BDL	0.5	BDL	0.5	BDL	1	BDL	0.5
1,1,1-TRICHLOROETHANE	BDL	0.5	BDL	0.5	BDL	0.2	BDL	0.5
1,1,2-TRICHLOROETHANE	BDL	0.5	BDL	0.5	BDL	0.2	BDL	0.5
TRICHLOROETHENE	BDL	0.5	BDL	0.5	BDL	0.2	BDL	0.5
TRICHLOROFLUOROMETHANE	BDL	0.5	BDL	0.5	BDL	0.2	BDL	0.5
1,2,3-TRICHLOROPROPANE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
1,1,2-TRICHLORO-2,2,1-TRIFLUOROETHANE	NA	-	NA	-	NA	-	NA	-
1,2,4-TRIMETHYLBENZENE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
1,3,5-TRIMETHYLBENZENE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
VINYL ACETATE	NA	-	NA	-	NA	-	NA	-
VINYL CHLORIDE	BDL	0.5	BDL	0.5	BDL	0.5	BDL	0.5
o-XYLENE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
p- & m-XYLENE	BDL	0.5	BDL	0.5	NA	-	BDL	0.5
TOTAL XYLENES	BDL	1	BDL	1	BDL	0.5	BDL	1

DL - Method detection limit
BDL - Below method detection limit
NA - Not analyzed

SPRINGS--continued

ANALYTE	SAMPLE ID: 5/19/95		SM-30 2/2/95		SM-30A 6/29/95		TA-18 3/21/94	
	RESULT (ug/L)	DL	RESULT (ug/L)	DL	RESULT (ug/L)	DL	RESULT (ug/L)	DL
ACETONE	NA	-	BDL	10	NA	-	NA	-
BENZENE	BDL	0.5	BDL	5	BDL	0.5	BDL	0.5
BROMOBENZENE	BDL	0.5	NA	-	NA	-	BDL	0.5
BROMOCHLOROMETHANE	BDL	0.5	NA	-	NA	-	BDL	0.5
BROMODICHLOROMETHANE	BDL	0.5	BDL	5	BDL	0.2	BDL	0.5
BROMOFORM	BDL	0.5	BDL	5	BDL	0.5	BDL	0.5
BROMOMETHANE	BDL	0.5	BDL	10	BDL	1	BDL	0.5
2-BUTANONE (MEK)	BDL	5	BDL	10	NA	-	BDL	5
n-BUTYLBENZENE	BDL	0.5	NA	-	NA	-	BDL	0.5
sec-BUTYLBENZENE	BDL	0.5	NA	-	NA	-	BDL	0.5
tert-BUTYLBENZENE	BDL	0.5	NA	-	NA	-	BDL	0.5
tert-BUTYL METHYL ETHER (MTBE)	BDL	5	NA	-	NA	-	BDL	5
CARBON DISULFIDE	NA	-	BDL	5	NA	-	NA	-
CARBON TETRACHLORIDE	BDL	0.5	BDL	5	BDL	0.2	BDL	0.5
CHLOROETHANE	BDL	0.5	BDL	10	BDL	0.5	BDL	0.5
CHLOROFORM	BDL	0.5	BDL	5	BDL	0.5	BDL	0.5
CHLOROMETHANE	BDL	0.5	BDL	10	BDL	1	BDL	0.5
2-CHLOROTOLUENE	BDL	0.5	NA	-	NA	-	BDL	0.5
4-CHLOROTOLUENE	BDL	0.5	NA	-	NA	-	BDL	0.5
1,2-DIBROMO-3-CHLOROPROPANE	BDL	0.5	NA	-	NA	-	BDL	0.5
DIBROMOCHLOROMETHANE	BDL	0.5	BDL	5	BDL	0.2	BDL	0.5
1,2-DIBROMOETHANE (EDB)	BDL	0.5	NA	-	BDL	0.2	BDL	0.5
DIBROMOMETHANE	BDL	0.5	NA	-	NA	-	BDL	0.5
1,2-DICHLOROETHANE	BDL	0.5	NA	-	BDL	0.5	BDL	0.5
1,3-DICHLOROETHANE	BDL	0.5	NA	-	BDL	0.5	BDL	0.5
1,4-DICHLOROETHANE	BDL	0.5	NA	-	BDL	0.5	BDL	0.5
DICHLORODIFLUOROMETHANE	BDL	0.5	NA	-	NA	-	BDL	0.5
1,1-DICHLOROETHANE	BDL	0.5	BDL	5	BDL	0.2	BDL	0.5
1,2-DICHLOROETHANE (EDC)	BDL	0.5	BDL	5	BDL	0.5	BDL	0.5
1,1-DICHLOROETHANE	BDL	0.5	BDL	5	BDL	0.2	BDL	0.5
CIS-1,2-DICHLOROETHANE	BDL	0.5	BDL	5	BDL	0.2	BDL	0.5
TRANS-1,2-DICHLOROETHANE	BDL	0.5	BDL	5	BDL	1	BDL	0.5
1,2-DICHLOROPROPANE	BDL	0.5	BDL	5	BDL	0.2	BDL	0.5
CIS-1,3-DICHLOROPROPENE	BDL	0.5	BDL	5	BDL	0.2	BDL	0.5
2,2-DICHLOROPROPANE	BDL	0.5	NA	-	NA	-	BDL	0.5
2,2-DICHLOROPROPENE	BDL	0.5	NA	-	NA	-	BDL	0.5
TRANS-1,3-DICHLOROPROPENE	BDL	0.5	BDL	5	BDL	0.2	BDL	0.5
ETHYLBENZENE	BDL	0.5	BDL	5	BDL	0.5	BDL	0.5
2-HEXANONE	NA	-	BDL	10	NA	-	NA	-
HEXACHLOROBUTADIENE	BDL	0.5	NA	-	NA	-	BDL	0.5
ISOPROPYLBENZENE	BDL	0.5	NA	-	NA	-	BDL	0.5
METHYL-t-BUTYL ETHER	NA	-	NA	-	BDL	2.5	NA	-
4-METHYL-2-PENTANONE	NA	-	BDL	10	NA	-	NA	-
1-METHYLNAPHTHALENE	NA	-	NA	-	NA	-	NA	-
2-METHYLNAPHTHALENE	NA	-	NA	-	NA	-	NA	-
4-ISOPROPYLTOLUENE	BDL	0.5	NA	-	NA	-	BDL	0.5
METHYLENE CHLORIDE	BDL	0.5	BDL	5	BDL	2	BDL	0.5
NAPHTHALENE	BDL	0.5	NA	-	NA	-	BDL	0.5
PROPYLBENZENE	BDL	0.5	NA	-	NA	-	BDL	0.5
STYRENE	BDL	0.5	BDL	5	NA	-	BDL	0.5
1,1,1,2-TETRACHLOROETHANE	BDL	0.5	BDL	5	NA	-	BDL	0.5
1,1,2,2-TETRACHLOROETHANE	BDL	0.5	NA	-	BDL	0.2	BDL	0.5
TETRACHLOROETHENE	BDL	0.5	BDL	5	BDL	0.5	BDL	0.5
TETRAHYDROFURAN (THF)	BDL	5	NA	-	NA	-	BDL	5
TOLUENE	BDL	0.5	BDL	5	BDL	0.5	BDL	0.5
1,2,3-TRICHLOROETHANE	BDL	0.5	NA	-	NA	-	BDL	0.5
1,2,4-TRICHLOROETHANE	BDL	0.5	NA	-	NA	-	BDL	0.5
1,1,1-TRICHLOROETHANE	BDL	0.5	BDL	5	BDL	1	BDL	0.5
1,1,2-TRICHLOROETHANE	BDL	0.5	BDL	5	BDL	0.2	BDL	0.5
TRICHLOROETHENE	BDL	0.5	BDL	5	BDL	0.2	BDL	0.5
TRICHLOROFLUOROMETHANE	BDL	0.5	NA	-	BDL	0.2	BDL	0.5
1,2,3-TRICHLOROPROPANE	BDL	0.5	NA	-	NA	-	BDL	0.5
1,1,2-TRICHLORO-2,2,1-TRIFLUOROETHANE	NA	-	NA	-	NA	-	NA	-
1,2,4-TRIMETHYLBENZENE	BDL	0.5	NA	-	NA	-	BDL	0.5
1,3,5-TRIMETHYLBENZENE	BDL	0.5	NA	-	NA	-	BDL	0.5
VINYL ACETATE	NA	-	BDL	10	NA	-	NA	-
VINYL CHLORIDE	BDL	0.5	BDL	10	BDL	0.5	BDL	0.5
o-XYLENE	BDL	0.5	NA	-	NA	-	BDL	0.5
p- & m-XYLENE	BDL	0.5	NA	-	NA	-	BDL	0.5
TOTAL XYLENES	BDL	1	BDL	5	BDL	0.5	BDL	1

DL - Method detection limit
BDL - Below method detection limit
NA - Not analyzed

SPRINGS--continued

ANALYTE	THREEMILE (A) 6/23/95		THREEMILE (B) 6/23/95		TS-1.42 10/18/95		BURNING GROUND 3/17/95	
	RESULT (ug/L)	DL	RESULT (ug/L)	DL	RESULT (ug/L)	DL	RESULT (ug/L)	DL
ACETONE	NA	-	NA	-	BDL	10	BDL	5
BENZENE	BDL	0.5	BDL	0.5	BDL	5	BDL	1
BROMOBENZENE	NA	-	NA	-	NA	-	BDL	1
BROMOCHLOROMETHANE	NA	-	NA	-	NA	-	BDL	1
BROMODICHLOROMETHANE	BDL	0.2	BDL	0.2	BDL	5	BDL	1
BROMOFORM	BDL	0.5	BDL	0.5	BDL	5	BDL	1
BROMOMETHANE	BDL	1	BDL	1	BDL	10	BDL	1
2-BUTANONE (MEK)	NA	-	NA	-	BDL	10	BDL	5
n-BUTYLBENZENE	NA	-	NA	-	NA	-	BDL	1
sec-BUTYLBENZENE	NA	-	NA	-	NA	-	BDL	1
tert-BUTYLBENZENE	NA	-	NA	-	NA	-	BDL	1
tert-BUTYL METHYL ETHER (MTBE)	NA	-	NA	-	NA	-	BDL	5
CARBON DISULFIDE	NA	-	NA	-	BDL	5	NA	-
CARBON TETRACHLORIDE	BDL	0.2	BDL	0.2	BDL	5	BDL	1
CHLOROBENZENE	BDL	0.5	BDL	0.5	BDL	5	BDL	1
CHLOROETHANE	BDL	0.5	BDL	0.5	BDL	10	BDL	1
CHLOROFORM	BDL	0.5	BDL	0.5	BDL	5	BDL	1
CHLOROMETHANE	BDL	1	BDL	1	BDL	10	BDL	1
2-CHLOROTOLUENE	NA	-	NA	-	NA	-	BDL	1
4-CHLOROTOLUENE	NA	-	NA	-	NA	-	BDL	1
1,2-DIBROMO-3-CHLOROPROPANE	NA	-	NA	-	NA	-	BDL	1
DIBROMOCHLOROMETHANE	BDL	0.2	BDL	0.2	BDL	5	BDL	1
1,2-DIBROMOETHANE (EDB)	BDL	0.2	BDL	0.2	NA	-	BDL	1
DIBROMOMETHANE	NA	-	NA	-	NA	-	BDL	1
1,2-DICHLOROBENZENE	BDL	0.5	BDL	0.5	NA	-	BDL	1
1,3-DICHLOROBENZENE	BDL	0.5	BDL	0.5	NA	-	BDL	1
1,4-DICHLOROBENZENE	BDL	0.5	BDL	0.5	NA	-	BDL	1
DICHLORODIFLUOROMETHANE	NA	-	NA	-	NA	-	BDL	1
1,1-DICHLOROETHANE	BDL	0.2	BDL	0.2	BDL	5	BDL	1
1,2-DICHLOROETHANE (EDC)	BDL	0.5	BDL	0.5	BDL	5	BDL	1
1,1-DICHLOROETHENE	BDL	0.2	BDL	0.2	BDL	5	BDL	1
CIS-1,2-DICHLOROETHENE	BDL	0.2	BDL	0.2	BDL	5	BDL	1
TRANS-1,2-DICHLOROETHENE	BDL	1	BDL	1	BDL	5	BDL	1
1,2-DICHLOROPROPANE	BDL	0.2	BDL	0.2	BDL	5	BDL	1
CIS-1,3-DICHLOROPROPENE	BDL	0.2	BDL	0.2	BDL	5	BDL	1
2,2-DICHLOROPROPANE	NA	-	NA	-	NA	-	BDL	1
2,2-DICHLOROPROPENE	NA	-	NA	-	NA	-	BDL	1
TRANS-1,3-DICHLOROPROPENE	BDL	0.2	BDL	0.2	BDL	5	BDL	1
ETHYLBENZENE	BDL	0.5	BDL	0.5	BDL	5	BDL	1
2-HEXANONE	NA	-	NA	-	BDL	10	NA	-
HEXACHLOROBUTADIENE	NA	-	NA	-	NA	-	BDL	1
ISOPROPYLBENZENE	NA	-	NA	-	NA	-	BDL	1
METHYL-4-BUTYL ETHER	BDL	2.5	BDL	2.5	NA	-	NA	-
4-METHYL-2-PENTANONE	NA	-	NA	-	BDL	10	NA	-
1-METHYLNAPHTHALENE	NA	-	NA	-	NA	-	BDL	1
2-METHYLNAPHTHALENE	NA	-	NA	-	NA	-	BDL	1
4-ISOPROPYLTOLUENE	NA	-	NA	-	NA	-	BDL	1
METHYLENE CHLORIDE	BDL	2	BDL	2	BDL	5	BDL	1
NAPHTHALENE	NA	-	NA	-	NA	-	BDL	1
PROPYLBENZENE	NA	-	NA	-	NA	-	BDL	1
STYRENE	NA	-	NA	-	BDL	5	BDL	1
1,1,1,2-TETRACHLOROETHANE	NA	-	NA	-	BDL	5	BDL	1
1,1,1,2-TETRACHLOROETHANE	BDL	0.2	BDL	0.2	NA	-	BDL	1
TETRACHLOROETHENE	BDL	0.5	BDL	0.5	BDL	5	2.8	1
TETRAHYDROFURAN (THF)	NA	-	NA	-	NA	-	BDL	5
TOLUENE	BDL	0.5	BDL	0.5	BDL	5	BDL	1
1,2,3-TRICHLOROBENZENE	NA	-	NA	-	NA	-	BDL	1
1,2,4-TRICHLOROBENZENE	NA	-	NA	-	NA	-	BDL	1
1,1,1-TRICHLOROETHANE	BDL	1	BDL	1	BDL	5	BDL	1
1,1,2-TRICHLOROETHANE	BDL	0.2	BDL	0.2	BDL	5	BDL	1
TRICHLOROETHENE	BDL	0.2	BDL	0.2	BDL	5	2.6	1
TRICHLOROFLUOROMETHANE	BDL	0.2	BDL	0.2	NA	-	BDL	1
1,2,3-TRICHLOROPROPANE	NA	-	NA	-	NA	-	BDL	1
1,1,2-TRICHLORO-2,2,1-TRIFLUOROETHANE	NA	-	NA	-	NA	-	BDL	1
1,2,4-TRIMETHYLBENZENE	NA	-	NA	-	NA	-	BDL	1
1,3,5-TRIMETHYLBENZENE	NA	-	NA	-	NA	-	BDL	1
VINYL ACETATE	NA	-	NA	-	BDL	10	NA	-
VINYL CHLORIDE	BDL	0.5	BDL	0.5	BDL	10	BDL	1
o-XYLENE	NA	-	NA	-	NA	-	BDL	1
p- & m-XYLENE	NA	-	NA	-	NA	-	BDL	1
TOTAL XYLENES	BDL	0.5	BDL	0.5	BDL	5	NA	-

DL - Method detection limit
BDL - Below method detection limit
NA - Not analyzed

SPRINGS--continued

ANALYTE	BURNING GROUND 5/12/95		SWSC 3/17/95		SWSC 5/12/95		MARTIN 5/12/95	
	RESULT (ug/L)	DL	RESULT (ug/L)	DL	RESULT (ug/L)	DL	RESULT (ug/L)	DL
ACETONE	NA	-	BDL	5	NA	-	NA	-
BENZENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
BROMOBENZENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
BROMOCHLOROMETHANE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
BROMODICHLOROMETHANE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
BROMOFORM	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
BROMOMETHANE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
2-BUTANONE (MEK)	BDL	5	BDL	5	BDL	5	BDL	5
n-BUTYLBENZENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
sec-BUTYLBENZENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
tert-BUTYLBENZENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
tert-BUTYL METHYL ETHER (MTBE)	BDL	5	BDL	5	BDL	5	BDL	5
CARBON DISULFIDE	NA	-	NA	-	NA	-	NA	-
CARBON TETRACHLORIDE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
CHLOROENZENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
CHLOROETHANE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
CHLOROFORM	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
CHLOROMETHANE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
2-CHLOROTOLUENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
4-CHLOROTOLUENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,2-DIBROMO-3-CHLOROPROPANE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
DIBROMOCHLOROMETHANE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,2-DIBROMOETHANE (EDB)	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
DIBROMOMETHANE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,2-DICHLOROENZENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,3-DICHLOROENZENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,4-DICHLOROENZENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
DICHLORODIFLUOROMETHANE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,1-DICHLOROETHANE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,2-DICHLOROETHANE (EDC)	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,1-DICHLOROETHENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
CIS-1,2-DICHLOROETHENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
TRANS-1,2-DICHLOROETHENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,2-DICHLOROPROPANE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
CIS-1,3-DICHLOROPROPENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
2,2-DICHLOROPROPANE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,1-DICHLOROPROPENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
TRANS-1,3-DICHLOROPROPENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
ETHYLBENZENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
2-HEXANONE	NA	-	NA	-	NA	-	NA	-
HEXACHLOROBUTADIENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
ISOPROPYLBENZENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
METHYL-1-BUTYL ETHER	NA	-	NA	-	NA	-	NA	-
4-METHYL-2-PENTANONE	NA	-	NA	-	NA	-	NA	-
1-METHYLNAPHTHALENE	NA	-	BDL	1	NA	-	NA	-
2-METHYLNAPHTHALENE	NA	-	BDL	1	NA	-	NA	-
4-ISOPROPYLTOLUENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
METHYLENE CHLORIDE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
NAPHTHALENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
PROPYLBENZENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
STYRENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,1,1,2-TETRACHLOROETHANE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,1,2,2-TETRACHLOROETHANE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
TETRACHLOROETHENE	3.2	0.5	2.3	1	2.2	0.5	BDL	0.5
TETRAHYDROFURAN (THF)	BDL	5	BDL	5	BDL	5	BDL	5
TOLUENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,2,3-TRICHLOROENZENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,2,4-TRICHLOROENZENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,1,1-TRICHLOROETHANE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,1,2-TRICHLOROETHANE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
TRICHLOROETHENE	3.4	0.5	2.2	1	2.4	0.5	0.9	0.5
TRICHLOROFUOROMETHANE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,2,3-TRICHLOROPROPANE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,1,2-TRICHLORO-2,2,1-TRIFLUOROETHANE	NA	-	BDL	1	NA	-	NA	-
1,2,4-TRIMETHYLBENZENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
1,3,5-TRIMETHYLBENZENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
VINYL ACETATE	NA	-	NA	-	NA	-	NA	-
VINYL CHLORIDE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
o-XYLENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
p- & m-XYLENE	BDL	0.5	BDL	1	BDL	0.5	BDL	0.5
TOTAL XYLENES	BDL	1	NA	-	BDL	1	BDL	1

DL - Method detection limit
BDL - Below method detection limit
NA - Not analyzed

SPRINGS--continued

ANALYTE	SAMPLE ID: 6/2/95		HOLLOW 3/17/95		FISH LADDER 6/2/95	
	RESULT (ug/L)	DL	RESULT (ug/L)	DL	RESULT (ug/L)	DL
ACETONE	NA	-	BDL	5	NA	-
BENZENE	BDL	0.5	BDL	1	BDL	0.5
BROMOBENZENE	NA	-	BDL	1	NA	-
BROMOCHLOROMETHANE	BDL	0.2	BDL	1	BDL	0.2
BROMODICHLOROMETHANE	NA	-	BDL	1	NA	-
BROMOFORM	BDL	0.5	BDL	1	BDL	0.5
BROMOMETHANE	BDL	1	BDL	1	BDL	1
2-BUTANONE (MEK)	NA	-	BDL	5	NA	-
n-BUTYLBENZENE	NA	-	BDL	1	NA	-
sec-BUTYLBENZENE	NA	-	BDL	1	NA	-
tert-BUTYLBENZENE	NA	-	BDL	1	NA	-
tert-BUTYL METHYL ETHER (MTBE)	NA	-	BDL	5	NA	-
CARBON DISULFIDE	NA	-	NA	-	NA	-
CARBON TETRACHLORIDE	BDL	0.2	BDL	1	BDL	0.2
CHLOROENZENE	BDL	0.5	BDL	1	BDL	0.5
CHLOROETHANE	BDL	0.5	BDL	1	BDL	0.5
CHLOROFORM	BDL	0.5	BDL	1	BDL	0.5
CHLOROMETHANE	BDL	1	BDL	1	BDL	1
2-CHLOROTOLUENE	NA	-	BDL	1	NA	-
4-CHLOROTOLUENE	NA	-	BDL	1	NA	-
1,2-DIBROMO-3-CHLOROPROPANE	NA	-	BDL	1	NA	-
DIBROMOCHLOROMETHANE	BDL	0.2	BDL	1	BDL	0.2
1,2-DIBROMOETHANE (EDB)	BDL	0.2	BDL	1	BDL	0.2
DIBROMOMETHANE	NA	-	BDL	1	NA	-
1,2-DICHLOROENZENE	BDL	0.5	BDL	1	BDL	0.5
1,3-DICHLOROENZENE	BDL	0.5	BDL	1	BDL	0.5
1,4-DICHLOROENZENE	BDL	0.5	BDL	1	BDL	0.5
DICHLORODIFLUOROMETHANE	NA	-	BDL	1	NA	-
1,1-DICHLOROETHANE	BDL	0.2	BDL	1	BDL	0.2
1,2-DICHLOROETHANE (EDC)	BDL	0.5	BDL	1	BDL	0.5
1,1-DICHLOROETHENE	BDL	0.2	BDL	1	BDL	0.2
CIS-1,2-DICHLOROETHENE	21	0.2	BDL	1	BDL	0.2
TRANS-1,2-DICHLOROETHENE	BDL	1	BDL	1	BDL	1
1,2-DICHLOROPROPANE	BDL	0.2	BDL	1	BDL	0.2
CIS-1,3-DICHLOROPROPENE	BDL	0.2	BDL	1	BDL	0.2
2,2-DICHLOROPROPANE	NA	-	BDL	1	NA	-
1,1-DICHLOROPROPENE	NA	-	BDL	1	NA	-
TRANS-1,3-DICHLOROPROPENE	BDL	0.2	BDL	1	BDL	0.2
ETHYLBENZENE	BDL	0.5	BDL	1	BDL	0.5
2-HEXANONE	NA	-	NA	-	NA	-
HEXACHLOROBUTADIENE	NA	-	BDL	1	NA	-
ISOPROPYLBENZENE	NA	-	BDL	1	NA	-
METHYL-4-BUTYL ETHER	NA	-	NA	-	NA	-
4-METHYL-2-PENTANONE	NA	-	NA	-	NA	-
1-METHYLNAPHTHALENE	NA	-	BDL	1	NA	-
2-METHYLNAPHTHALENE	NA	-	BDL	1	NA	-
4-ISOPROPYLTOLUENE	NA	-	BDL	1	NA	-
METHYLENE CHLORIDE	BDL	2	BDL	1	BDL	2
NAPHTHALENE	NA	-	BDL	1	NA	-
PROPYLBENZENE	NA	-	BDL	1	NA	-
STYRENE	NA	-	BDL	1	NA	-
1,1,1,2-TETRACHLOROETHANE	NA	-	BDL	1	NA	-
1,1,2,2-TETRACHLOROETHANE	BDL	0.2	BDL	1	BDL	0.2
TETRACHLOROETHENE	15	0.5	BDL	1	BDL	0.5
TETRAHYDROFURAN (THF)	NA	-	BDL	5	NA	-
TOLUENE	BDL	0.5	BDL	1	BDL	0.5
1,2,3-TRICHLOROENZENE	NA	-	BDL	1	NA	-
1,2,4-TRICHLOROENZENE	NA	-	BDL	1	NA	-
1,1,1-TRICHLOROETHANE	BDL	1	BDL	1	BDL	1
1,1,2-TRICHLOROETHANE	BDL	0.2	BDL	1	BDL	0.2
TRICHLOROETHENE	3.1	0.2	BDL	1	0.3	0.2
TRICHLOROFLUOROMETHANE	BDL	0.2	BDL	1	BDL	0.2
1,2,3-TRICHLOROPROPANE	NA	-	BDL	1	NA	-
1,1,2-TRICHLORO-2,2,1-TRIFLUOROETHANE	NA	-	BDL	1	NA	-
1,2,4-TRIMETHYLBENZENE	NA	-	BDL	1	NA	-
1,3,5-TRIMETHYLBENZENE	NA	-	BDL	1	NA	-
VINYL ACETATE	NA	-	NA	-	NA	-
VINYL CHLORIDE	BDL	0.5	BDL	1	BDL	0.5
o-XYLENE	NA	-	BDL	1	NA	-
p- & m-XYLENE	NA	-	BDL	1	NA	-
TOTAL XYLENES	BDL	0.5	NA	-	BDL	0.5

DL - Method detection limit
BDL - Below method detection limit
NA - Not analyzed

APPENDIX F

Analytical Results for Semi-volatile Organic Compounds, Polychlorinated Biphenyls, etc.,

WELLS

SAMPLE ID: LAOI(A)-1.1
SAMPLING DATE: 11/1/95

<u>ANALYTE</u>	<u>RESULT (ug/L)</u>	<u>DL</u>	<u>ANALYTE-continued</u>	<u>RESULT (ug/L)</u>	<u>DL</u>
1,2,4,-TRICHLOROBENZENE	ND	20	BENZO(B)FLUORANTHENE	ND	20
1,2,4,5-TETRACHLOROBENZENE	NA	-	BENZO(G,H,I)PERYLENE	ND	20
1,2-DICHLOROBENZENE	ND	20	BENZO(K)FLUORANTHENE	ND	20
1,2-DIPHENYLHYDRAZINE	NA	-	BENZOIC ACID	ND	100
1,3,-DICHLOROBENZENE	ND	20	BENZYL ALCOHOL	ND	20
1,4,-DICHLOROBENZENE	ND	20	BIS (2-CHLOROETHOXY) METHANE	ND	20
1-CHLORONAPHTHALENE	NA	-	BIS (2-CHLOROETHYL) ETHER	ND	20
1-NAPHTHYLAMINE	NA	-	BIS (2-CHLOROISOPROPY) ETHER	ND	20
2,2,3,3,4,5,6,6-OCTACHLOROBIPHENYL	NA	-	BIS(2-ETHYLHEXYL)PHTHALATE	ND	20
2,2,3,3,4,4,6-HEPTACHLOROBIPHENYL	NA	-	BUTYL BENZYL PHTHALATE	ND	20
2,2,4,4,5,6-HEXACHLOROBIPHENYL	NA	-	BUTACHLOR	NA	-
2,2,3,4,6-PENTACHLOROBIPHENYL	NA	-	CARBAZOLE	ND	20
2,2,4,4-TETRACHLOROBIPHENYL	NA	-	CHLORDANE (TOTAL)	NA	-
2,3,4,6-TETRACHLOROPHENOL	NA	-	CHRYSENE	ND	20
2,4,5-TRICHLOROBIPHENYL	NA	-	DI(2 ETHYLHEXYL) ADIPATE	NA	-
2,4,5-TRICHLOROPHENOL	ND	100	DI(2 ETHYLHEXYL) PHTHALATE	NA	-
2,4,6-TRICHLOROPHENOL	ND	20	DI-N-BUTYL PHTHALATE	ND	20
2,3-DICHLOROBIPHENYL	NA	-	DI-N-OCTYL PHTHALATE	ND	20
2,4-DICHLOROPHENOL	ND	20	DIBENZO(A,H)ANTHRACENE	ND	20
2,4-DIMETHYLPHENOL	ND	20	DIBENZO(A,J)ACRIDINE	NA	-
2,4-DINITROPHENOL	ND	100	DIBENZOFURAN	ND	20
2,4-DINITROTOLUENE	ND	20	DIELDRIN	NA	-
2,6-DICHLOROPHENOL	NA	-	DIETHYL PHTHALATE	ND	20
2,6-DINITROTOLUENE	ND	20	DIMETHYL PHTHALATE	ND	20
2-CHLORONAPHTHALENE	ND	20	DIPHENYLAMINE	NA	-
2-CHLOROBIPHENYL	NA	-	ENDRIN	NA	-
2-CHLOROPHENOL	ND	20	FLUORANTHENE	ND	20
2-METHYLNAPHTHALENE	ND	20	FLUORENE	ND	20
2-METHYLPHENOL	ND	20	GAMMA-CHLORDANE	NA	-
2-NAPHTHYLAMINE	NA	-	HEPTACHLOR	NA	-
2-NITROANILINE	ND	100	HEPTACHLOR EPOXIDE	NA	-
2-NITROPHENOL	ND	20	HEXACHLOROBENZENE	ND	20
2-PICOLINE	NA	-	HEXACHLOROBUTADIENE	ND	20
3,3-DICHLOROAZOBENZIDINE	ND	100	HEXACHLOROCYCLOPENTADIENE	ND	20
3-METHYLCHOLANTHRENE	NA	-	HEXACHLOROETHANE	ND	20
3-NITROANILINE	ND	100	INDENO(1,2,3-CD)PYRENE	ND	20
4,6-DINITRO-2-METHYLPHENOL	ND	100	ISOPHORONE	ND	20
4-AMINOBIPHENYL	NA	-	LINDANE	NA	-
4-BROMOPHENYL PHENYL ETHER	ND	20	N-NITROSO-DI-N-PROPYLAMINE	ND	20
4-CHLORO-3-METHYLPHENOL	ND	20	N-NITROSODI-N-BUTYLAMINE	NA	-
4-CHLOROANILINE	ND	50	N-NITROSODIMETHYLAMINE	NA	-
4-CHLOROPHENYL PHENYL ETHER	ND	20	N-NITROSODIMETHYLAMINE	ND	20
4-METHYLPHENOL	ND	20	N-NITROSODIPHENYLAMINE	ND	20
4-NITROANILINE	ND	100	N-NITROSOPIPERIDINE	NA	-
4-NITROPHENOL	ND	100	NAPHTHALENE	ND	20
7,12-DIMETHYLBENZO(A)ANTHRACENE	NA	-	NITROBENZENE	ND	20
A-,A-DIMETHYLPENETHYLAMINE	NA	-	METOLACHLOR	NA	-
ACENAPHTHENE	ND	20	METHOXYCHLOR	NA	-
ACENAPHTHYLENE	ND	20	METRIBUZIN	NA	-
ACETOPHENONE	NA	-	P-DIMETHYLAMINOAZOBENZENE	NA	-
ALACHLOR	NA	-	PENTACHLOROBENZENE	NA	-
ALDRINE	NA	-	PENTACHLORONITROBENZENE	NA	-
ALPHA-CHLORDANE	NA	-	PENTACHLOROPHENOL	ND	100
ANILINE	ND	50	PHENACETIN	NA	-
ANTHRACENE	ND	20	PHENANTHRENE	ND	20
AROCLOR 1016	ND	0.5	PHENOL	ND	20
AROCLOR 1221	ND	0.5	PRONAMIDE	NA	-
AROCLOR 1232	ND	0.5	PROPACHLOR	NA	-
AROCLOR 1242	ND	0.5	PYRENE	ND	20
AROCLOR 1248	ND	0.5	PYRIDINE	ND	20
AROCLOR 1254	ND	0.5	SIMAZINE	NA	-
AROCLOR 1260	ND	0.5	TOXAPHENE MIXTURE	NA	-
ATRAZINE	NA	-	TRANS NONACHLOR	NA	-
AZOBENZENE	ND	20			
BENZIDINE	ND	100			
BENZO(A)ANTHRACENE	ND	20			
BENZO(A)PYRENE	ND	20			

DL - Method detection limit

B - Indicates compound was detected in lab blank as well as in the sample

J - Indicates an estimated value for tentatively identified components, or compounds detected and identified but present at a concentration less than the practical quantitation limit

SPRINGS

SAMPLE ID: SM-30A
 SAMPLING DATE: 6/29/95

ANALYTE	RESULT (ug/L)	DL	ANALYTE--continued	RESULT (ug/L)	DL
1,2,4,-TRICHLOROBENZENE	ND	10	BENZO(B)FLUORANTHENE	ND	10
1,2,4,5-TETRACHLOROBENZENE	ND	10	BENZO(G,H,I)PERYLENE	ND	10
1,2-DICHLOROBENZENE	ND	10	BENZO(K)FLUORANTHENE	ND	10
1,2-DIPHENYLHYDRAZINE	ND	10	BENZOIC ACID	ND	50
1,3,-DICHLOROBENZENE	ND	10	BENZYL ALCOHOL	ND	10
1,4,-DICHLOROBENZENE	ND	10	BIS (2-CHLOROETHOXY) METHANE	ND	10
1-CHLORONAPHTHALENE	ND	10	BIS (2-CHLOROETHYL) ETHER	ND	10
1-NAPHTHYLAMINE	ND	10	BIS (2-CHLOROISOPROPY) ETHER	ND	10
2,2,3,3,4,5,6,-OCTACHLOROBIPHENYL	NA	-	BIS(2-ETHYLHEXYL)PHTHALATE	ND	10
2,2,3,3,4,4,6,-HEPTACHLOROBIPHENYL	NA	-	BUTYL BENZYL PHTHALATE	ND	10
2,2,4,4,5,6,-HEXACHLOROBIPHENYL	NA	-	BUTACHLOR	NA	-
2,2,3,4,6,-PENTACHLOROBIPHENYL	NA	-	CARBAZOLE	ND	NA
2,2,4,4,-TETRACHLOROBIPHENYL	NA	-	CHLORDANE (TOTAL)	NA	-
2,3,4,6,-TETRACHLOROPHENOL	ND	10	CHRYSENE	ND	10
2,4,5-TRICHLOROBIPHENYL	NA	-	DI(2 ETHYLHEXYL) ADIPATE	NA	-
2,4,5-TRICHLOROPHENOL	ND	50	DI(2 ETHYLHEXYL) PHTHALATE	NA	-
2,4,6-TRICHLOROPHENOL	ND	10	DI-N-BUTYL PHTHALATE	ND	10
2,3-DICHLOROBIPHENYL	NA	-	DI-N-OCTYL PHTHALATE	ND	10
2,4-DICHLOROPHENOL	ND	10	DIBENZO(A,H)ANTHRACENE	ND	10
2,4-DIMETHYLPHENOL	ND	10	DIBENZO(A,J)ACRIDINE	ND	10
2,4-DINITROPHENOL	ND	50	DIBENZOFURAN	ND	10
2,4-DINITROTOLUENE	ND	10	DIELDRIN	NA	-
2,6-DICHLOROPHENOL	ND	10	DIETHYL PHTHALATE	ND	10
2,6-DINITROTOLUENE	ND	10	DIMETHYL PHTHALATE	ND	10
2-CHLORONAPHTHALENE	ND	10	DIPHENYLAMINE	ND	10
2-CHLOROBIPHENYL	NA	-	ENDRIN	NA	-
2-CHLOROPHENOL	ND	10	FLUORANTHENE	ND	10
2-METHYLNAPHTHALENE	ND	10	FLUORENE	ND	10
2-METHYLPHENOL	ND	10	GAMMA-CHLORDANE	NA	-
2-NAPHTHYLAMINE	ND	10	HEPTACHLOR	NA	-
2-NITROANILINE	ND	10	HEPTACHLOR EPOXIDE	NA	-
2-NITROPHENOL	ND	10	HEXACHLOROBENZENE	ND	10
2-PICOLINE	ND	10	HEXACHLOROBUTADIENE	ND	10
3,3-DICHLOROBENZIDINE	ND	50	HEXACHLOROCYCLOPENTADIENE	ND	10
3-METHYLCHOLANTHRENE	ND	10	HEXACHLOROETHANE	ND	10
3-NITROANILINE	ND	10	INDENO(1,2,3-CD)PYRENE	ND	10
4,6-DINITRO-2-METHYLPHENOL	ND	50	ISOPHORONE	ND	10
4-AMINOBIIPHENYL	ND	10	LINDANE	NA	-
4-BROMOPHENYL PHENYL ETHER	ND	10	N-NITROSO-DI-N-PROPYLAMINE	ND	10
4-CHLORO-3-METHYLPHENOL	ND	10	N-NITROSODI-N-BUTYLAMINE	ND	10
4-CHLOROANILINE	ND	10	N-NITROSODIMETHYLAMINE	ND	10
4-CHLOROPHENYL PHENYL ETHER	ND	10	N-NITROSODIMETHYLAMINE	ND	10
4-METHYLPHENOL	ND	10	N-NITROSODIPHENYLAMINE	ND	10
4-NITROANILINE	ND	10	N-NITROSOPIPERIDINE	ND	10
4-NITROPHENOL	ND	50	NAPHTHALENE	ND	10
7,12-DIMETHYLBENZO(A)ANTHRACENE	ND	10	NITROBENZENE	ND	10
A,-A-DIMETHYLPHENETHYLAMINE	ND	10	METOLACHLOR	NA	-
ACENAPHTHENE	ND	10	METHOXYCHLOR	NA	-
ACENAPHTHYLENE	ND	10	METRIBUZIN	NA	-
ACETOPHENONE	ND	10	P-DIMETHYLAMINOAZOBENZENE	ND	10
ALACHLOR	NA	-	PENTACHLOROBENZENE	ND	10
ALDRINE	NA	-	PENTACHLORONITROBENZENE	ND	10
ALPHA-CHLORDANE	NA	-	PENTACHLOROPHENOL	ND	50
ANILINE	ND	10	PHENACETIN	ND	10
ANTHRACENE	ND	10	PHENANTHRENE	ND	10
AROCLOR 1016	NA	-	PHENOL	ND	10
AROCLOR 1221	NA	-	PRONAMIDE	ND	10
AROCLOR 1232	NA	-	PROPACHLOR	NA	-
AROCLOR 1242	NA	-	PYRENE	ND	10
AROCLOR 1248	NA	-	PYRIDINE	ND	NA
AROCLOR 1254	NA	-	SIMAZINE	NA	-
AROCLOR 1260	NA	-	TOXAPHENE MIXTURE	NA	-
ATRAZINE	NA	-	TRANS NONACHLOR	NA	-
AZOBENZENE	ND	NA			
BENZIDINE	ND	10			
BENZO(A)ANTHRACENE	ND	10			
BENZO(A)PYRENE	ND	10			

DL - Method detection limit

B - Indicates compound was detected in lab blank as well as in the sample

J - Indicates an estimated value for tentatively identified components, or compounds detected and identified but present at a concentration less than the practical quantitation limit

SPRINGS--continued

SAMPLE ID: TA-18		DL		ANALYTE--continued		DL		
SAMPLING DATE: 3/21/94		DL		ANALYTE--continued		DL		
ANALYTE	RESULT (ug/L)	DL	ANALYTE--continued	RESULT (ug/L)	DL	ANALYTE--continued	RESULT (ug/L)	DL
1,2,4,-TRICHLORO BENZENE	ND	1	BENZO(B)FLUORANTHENE	ND	2			
1,2,4,5-TETRACHLORO BENZENE	NA	-	BENZO(G,H,I)PERYLENE	ND	2			
1,2-DICHLORO BENZENE	ND	1	BENZO(K)FLUORANTHENE	ND	2			
1,2-DIPHENYLHYDRAZINE	NA	-	BENZOIC ACID	ND	5			
1,3,-DICHLORO BENZENE	ND	1	BENZYL ALCOHOL	ND	1			
1,4,-DICHLORO BENZENE	ND	1	BIS (2-CHLOROETHOXY) METHANE	ND	1			
1-CHLORONAPHTHALENE	NA	-	BIS (2-CHLOROETHYL) ETHER	ND	1			
1-NAPHTHYLAMINE	NA	-	BIS (2-CHLOROISOPROPY) ETHER	ND	1			
2,2,3,3,4,5,6-OCTACHLORO BIPHENYL	NA	-	BIS(2-ETHYLHEXYL)PHTHALATE	ND	1			
2,2,3,3,4,4,6-HEPTACHLORO BIPHENYL	NA	-	BUTYL BENZYL PHTHALATE	ND	1			
2,2,4,4,5,6-HEXACHLORO BIPHENYL	NA	-	BUTACHLOR	NA	-			
2,2,3,4,6-PENTACHLORO BIPHENYL	NA	-	CARBAZOLE	NA	-			
2,2,4,4-TETRACHLORO BIPHENYL	NA	-	CHLORDANE (TOTAL)	NA	-			
2,3,4,6-TETRACHLOROPHENOL	NA	-	CHRYSENE	ND	1			
2,4,5-TRICHLORO BIPHENYL	NA	-	DI(2 ETHYLHEXYL) ADIPATE	NA	-			
2,4,5-TRICHLOROPHENOL	ND	1	DI(2 ETHYLHEXYL) PHTHALATE	NA	-			
2,4,6-TRICHLOROPHENOL	ND	1	DI-N-BUTYL PHTHALATE	ND	1			
2,3-DICHLORO BIPHENYL	NA	-	DI-N-OCTYL PHTHALATE	ND	1			
2,4-DICHLOROPHENOL	ND	1	DIBENZO(A,H)ANTHRACENE	ND	1			
2,4-DIMETHYLPHENOL	ND	1	DIBENZO(A,J)ACRIDINE	NA	-			
2,4-DINITROPHENOL	ND	10	DIBENZOFURAN	ND	1			
2,4-DINITROTOLUENE	ND	1	DIELDRIN	NA	-			
2,6-DICHLORO BIPHENYL	NA	-	DIETHYL PHTHALATE	NA	-			
2,6-DINITROTOLUENE	ND	1	DIMETHYL PHTHALATE	ND	1			
2-CHLORONAPHTHALENE	ND	1	DIPHENYLAMINE	NA	-			
2-CHLORO BIPHENYL	NA	-	ENDRIN	NA	-			
2-CHLOROPHENOL	ND	1	FLUORANTHENE	ND	1			
2-METHYLNAPHTHALENE	ND	1	FLUORENE	ND	1			
2-METHYLPHENOL	ND	1	GAMMA-CHLORDANE	NA	-			
2-NAPHTHYLAMINE	NA	-	HEPTACHLOR	NA	-			
2-NITROANILINE	ND	1	HEPTACHLOR EPOXIDE	NA	-			
2-NITROPHENOL	ND	1	HEXACHLORO BENZENE	ND	1			
2-PICOLINE	NA	-	HEXACHLOROBUTADIENE	ND	5			
3,3-DICHLORO BENZIDINE	ND	1	HEXACHLOROCYCLOPENTADIENE	ND	5			
3-METHYLCHOLANTHRENE	NA	-	HEXACHLOROETHANE	ND	1			
3-NITROANILINE	ND	10	INDENO(1,2,3-CD)PYRENE	ND	1			
4,6-DINITRO-2-METHYLPHENOL	ND	3	ISOPHORONE	ND	1			
4-AMINO BIPHENYL	NA	-	LINDANE	NA	-			
4-BROMOPHENYL PHENYL ETHER	ND	1	N-NITROSO-DI-N-PROPYLAMINE	ND	1			
4-CHLORO-3-METHYLPHENOL	ND	1	N-NITROSODI-N-BUTYLAMINE	NA	-			
4-CHLOROANILINE	ND	2	N-NITROSODIMETHYLAMINE	NA	-			
4-CHLOROPHENYL PHENYL ETHER	ND	1	N-NITROSODIMETHYLAMINE	NA	-			
4-METHYLPHENOL	ND	1	N-NITROSODIPHENYLAMINE	ND	1			
4-NITROANILINE	ND	5	N-NITROSOPIPERIDINE	NA	-			
4-NITROPHENOL	ND	10	NAPHTHALENE	ND	1			
7,12-DIMETHYLBENZO(A)ANTHRACENE	NA	-	NITROBENZENE	ND	1			
A,-A-DIMETHYLPENETHYLAMINE	NA	-	METOLACHLOR	NA	-			
ACENAPHTHENE	ND	1	METHOXYCHLOR	NA	-			
ACENAPHTHYLENE	ND	1	METRIBUZIN	NA	-			
ACETOPHENONE	NA	-	P-DIMETHYLAMINOAZOBENZENE	ND	1			
ALACHLOR	NA	-	PENTACHLORO BENZENE	NA	-			
ALDRINE	NA	-	PENTACHLORONITROBENZENE	NA	-			
ALPHA-CHLORDANE	NA	-	PENTACHLOROPHENOL	ND	3			
ANILINE	NA	-	PHENACETIN	NA	-			
ANTHRACENE	ND	1	PHENANTHRENE	ND	1			
AROCLOR 1016	NA	-	PHENOL	ND	1			
AROCLOR 1221	NA	-	PRONAMIDE	NA	-			
AROCLOR 1232	NA	-	PROPACHLOR	NA	-			
AROCLOR 1242	NA	-	PYRENE	ND	1			
AROCLOR 1248	NA	-	PYRIDINE	NA	-			
AROCLOR 1254	NA	-	SIMAZINE	NA	-			
AROCLOR 1260	NA	-	TOXAPHENE MIXTURE	NA	-			
ATRAZINE	NA	-	TRANS NONACHLOR	NA	-			
AZOBENZENE	NA	-						
BENZIDINE	NA	-						
BENZO(A)ANTHRACENE	ND	1						
BENZO(A)PYRENE	ND	2						

DL - Method detection limit

B - Indicates compound was detected in lab blank as well as in the sample

J - Indicates an estimated value for tentatively identified components, or compounds detected and identified but present at a concentration less than the practical quantitation limit

SPRINGS--continued

SAMPLE ID: TS-1.42		SAMPLING DATE: 10/18/95		ANALYTE--continued	
ANALYTE	RESULT (ug/L)	DL	ANALYTE--continued	RESULT (ug/L)	DL
1,2,4,-TRICHLOROBENZENE	ND	10	BENZO(B)FLUORANTHENE	ND	10
1,2,4,5-TETRACHLOROBENZENE	NA	-	BENZO(G,H,I)PERYLENE	ND	10
1,2-DICHLOROBENZENE	ND	10	BENZO(K)FLUORANTHENE	ND	10
1,2-DIPHENYLHYDRAZINE	NA	-	BENZOIC ACID	ND	50
1,3,-DICHLOROBENZENE	ND	10	BENZYL ALCOHOL	ND	10
1,4,-DICHLOROBENZENE	ND	10	BIS (2-CHLOROETHOXY) METHANE	ND	10
1-CHLORONAPHTHALENE	NA	-	BIS (2-CHLOROETHYL) ETHER	ND	10
1-NAPHTHYLAMINE	NA	-	BIS (2-CHLOROISOPROPY) ETHER	ND	10
2,2,3,3,4,5,6,6-OCTACHLOROBIPHENYL	NA	-	BIS(2-ETHYLHEXYL)PHTHALATE	4 J B	10
2,2,3,3,4,4,6,6-HEPTACHLOROBIPHENYL	NA	-	BUTYL BENZYL PHTHALATE	ND	10
2,2,4,4,5,6-HEXACHLOROBIPHENYL	NA	-	BUTACHLOR	NA	-
2,2,3,4,6-PENTACHLOROBIPHENYL	NA	-	CARBAZOLE	ND	10
2,2,4,4-TETRACHLOROBIPHENYL	NA	-	CHLORDANE (TOTAL)	NA	-
2,3,4,6-TETRACHLOROPHENOL	NA	-	CHRYSENE	ND	10
2,4,5-TRICHLOROBIPHENYL	NA	-	DI(2 ETHYLHEXYL) ADIPATE	NA	-
2,4,5-TRICHLOROPHENOL	ND	50	DI(2 ETHYLHEXYL) PHTHALATE	NA	-
2,4,6-TRICHLOROPHENOL	ND	10	DI-N-BUTYL PHTHALATE	ND	10
2,3-DICHLOROBIPHENYL	NA	-	DI-N-OCTYL PHTHALATE	ND	10
2,4-DICHLOROPHENOL	ND	10	DIBENZO(A,H)ANTHRACENE	ND	10
2,4-DIMETHYLPHENOL	ND	10	DIBENZO(A,J)ACRIDINE	NA	-
2,4-DINITROPHENOL	ND	50	DIBENZOFURAN	ND	10
2,4-DINITROTOLUENE	ND	10	DIELDRIN	NA	-
2,6-DICHLOROPHENOL	NA	-	DIETHYL PHTHALATE	ND	10
2,6-DINITROTOLUENE	ND	10	DIMETHYL PHTHALATE	ND	10
2-CHLORONAPHTHALENE	ND	10	DIPHENYLAMINE	NA	-
2-CHLOROBIPHENYL	NA	-	ENDRIN	NA	-
2-CHLOROPHENOL	ND	10	FLUORANTHENE	ND	10
2-METHYLNAPHTHALENE	ND	10	FLUORENE	ND	10
2-METHYLPHENOL	ND	10	GAMMA-CHLORDANE	NA	-
2-NAPHTHYLAMINE	NA	-	HEPTACHLOR	NA	-
2-NITROANILINE	ND	50	HEPTACHLOR EPOXIDE	NA	-
2-NITROPHENOL	ND	10	HEXACHLOROBENZENE	ND	10
2-PICOLINE	NA	-	HEXACHLOROBUTADIENE	ND	10
3,3-DICHLOROBENZIDINE	ND	50	HEXACHLOROCYCLOPENTADIENE	ND	10
3-METHYLCHOLANTHRENE	NA	-	HEXACHLOROETHANE	ND	10
3-NITROANILINE	ND	50	INDENO(1,2,3-CD)PYRENE	ND	10
4,6-DINITRO-2-METHYLPHENOL	ND	50	ISOPHORONE	ND	10
4-AMINOBIIPHENYL	NA	-	LINDANE	NA	-
4-BROMOPHENYL PHENYL ETHER	ND	10	N-NITROSO-DI-N-PROPYLAMINE	ND	10
4-CHLORO-3-METHYLPHENOL	ND	10	N-NITROSODI-N-BUTYLAMINE	NA	-
4-CHLOROANILINE	ND	25	N-NITROSODIMETHYLAMINE	NA	-
4-CHLOROPHENYL PHENYL ETHER	ND	10	N-NITROSODIMETHYLAMINE	ND	10
4-METHYLPHENOL	ND	10	N-NITROSODIPHENYLAMINE	ND	10
4-NITROANILINE	ND	50	N-NITROSOPIPERIDINE	NA	-
4-NITROPHENOL	ND	50	NAPHTHALENE	ND	10
7,12-DIMETHYLBENZO(A)ANTHRACENE	NA	-	NITROBENZENE	ND	10
A,-A-DIMETHYLPHENETHYLAMINE	NA	-	METOLACHLOR	NA	-
ACENAPHTHENE	ND	10	METHOXYCHLOR	NA	-
ACENAPHTHYLENE	ND	10	METRIBUZIN	NA	-
ACETOPHENONE	NA	-	P-DIMETHYLAMINOAZOBENZENE	NA	-
ALACHLOR	NA	-	PENTACHLOROBENZENE	NA	-
ALDRINE	NA	-	PENTACHLORONITROBENZENE	NA	-
ALPHA-CHLORDANE	NA	-	PENTACHLOROPHENOL	ND	50
ANILINE	ND	25	PHENACETIN	NA	-
ANTHRACENE	ND	10	PHENANTHRENE	ND	10
AROCLOR 1016	ND	0.5	PHENOL	ND	10
AROCLOR 1221	ND	0.5	PRONAMIDE	NA	-
AROCLOR 1232	ND	0.5	PROPACHLOR	NA	-
AROCLOR 1242	ND	0.5	PYRENE	ND	10
AROCLOR 1248	ND	0.5	PYRIDINE	ND	10
AROCLOR 1254	ND	0.5	SIMAZINE	NA	-
AROCLOR 1260	ND	0.5	TOXAPHENE MIXTURE	NA	-
ATRAZINE	NA	-	TRANS NONACHLOR	NA	-
AZOBENZENE	ND	10			
BENZIDINE	ND	50			
BENZO(A)ANTHRACENE	ND	10			
BENZO(A)PYRENE	ND	10			

DL - Method detection limit

B - Indicates compound was detected in lab blank as well as in the sample

J - Indicates an estimated value for tentatively identified components, or compounds detected and identified but present at a concentration less than the practical quantitation limit

SPRINGS--continued

SAMPLE ID: BURNING GROUND				ANALYTE--continued	
SAMPLING DATE: 3/17/95				RESULT (ug/L) DL	
ANALYTE	RESULT (ug/L)	DL	ANALYTE--continued	RESULT (ug/L)	DL
1,2,4,-TRICHLOROBENZENE	NA	-	BENZO(B)FLUORANTHENE	ND	0.02
1,2,4,5-TETRACHLOROBENZENE	NA	-	BENZO(G,H,I)PERYLENE	ND	0.02
1,2-DICHLOROBENZENE	NA	-	BENZO(K)FLUORANTHENE	ND	0.02
1,2-DIPHENYLHYDRAZINE	NA	-	BENZOIC ACID	NA	-
1,3,-DICHLOROBENZENE	NA	-	BENZYL ALCOHOL	NA	-
1,4,-DICHLOROBENZENE	NA	-	BIS (2-CHLOROETHOXY) METHANE	NA	-
1-CHLORONAPHTHALENE	NA	-	BIS (2-CHLOROETHYL) ETHER	NA	-
1-NAPHTHYLAMINE	NA	-	BIS (2-CHLOROISOPROPY) ETHER	NA	-
2,2,3,3,4,5,6,6-OCTACHLOROBIPHENYL	ND	0.5	BIS(2-ETHYLHEXYL)PHTHALATE	NA	-
2,2,3,3,4,4,6-HEPTACHLOROBIPHENYL	ND	0.5	BUTYL BENZYL PHTHALATE	0.13 J B	0.01
2,2,4,4,5,6-HEXACHLOROBIPHENYL	ND	0.5	BUTACHLOR	ND	0.03
2,2,3,4,6-PENTACHLOROBIPHENYL	NA	-	CARBAZOLE	NA	-
2,2,4,4-TETRACHLOROBIPHENYL	ND	0.5	CHLORDANE (TOTAL)	ND	0.02
2,3,4,6-TETRACHLOROPHENOL	NA	-	CHRYSENE	ND	0.02
2,4,5-TRICHLOROBIPHENYL	ND	0.5	DI(2 ETHYLHEXYL) ADIPATE	0.02 J B	0.02
2,4,5-TRICHLOROPHENOL	NA	-	DI(2 ETHYLHEXYL) PHTHALATE	3.39 B	0.03
2,4,6-TRICHLOROPHENOL	NA	-	DI-N-BUTYL PHTHALATE	0.01 J B	0.02
2,3-DICHLOROBIPHENYL	ND	0.5	DI-N-OCTYL PHTHALATE	NA	-
2,4-DICHLOROPHENOL	NA	-	DIBENZO(A,H)ANTHRACENE	ND	0.02
2,4-DIMETHYLPHENOL	NA	-	DIBENZO(A,J)ACRIDINE	NA	-
2,4-DINITROPHENOL	NA	-	DIBENZOFURAN	NA	-
2,4-DINITROTOLUENE	NA	-	DIELDRIN	ND	0.02
2,6-DICHLOROPHENOL	NA	-	DIETHYL PHTHALATE	0.13 J B	0.01
2,6-DINITROTOLUENE	NA	-	DIMETHYL PHTHALATE	ND	0.01
2-CHLORONAPHTHALENE	NA	-	DIPHENYLAMINE	NA	-
2-CHLOROBIPHENYL	ND	0.05	ENDRIN	ND	0.35
2-CHLOROPHENOL	NA	-	FLUORANTHENE	NA	-
2-METHYLNAPHTHALENE	NA	-	FLUORENE	ND	0.01
2-METHYLPHENOL	NA	-	GAMMA-CHLORDANE	ND	0.02
2-NAPHTHYLAMINE	NA	-	HEPTACHLOR	ND	0.04
2-NITROANILINE	NA	-	HEPTACHLOR EPOXIDE	ND	0.13
2-NITROPHENOL	NA	-	HEXACHLOROBENZENE	ND	0.01
2-PICOLINE	NA	-	HEXACHLOROBUTADIENE	NA	-
3,3-DICHLOROBENZIDINE	NA	-	HEXACHLOROCYCLOPENTADIENE	ND	0.04
3-METHYLCHOLANTHRENE	NA	-	HEXACHLOROETHANE	NA	-
3-NITROANILINE	NA	-	INDENO(1,2,3-CD)PYRENE	ND	0.03
4,6-DINITRO-2-METHYLPHENOL	NA	-	ISOPHORONE	NA	-
4-AMINOBIIPHENYL	NA	-	LINDANE	ND	0.02
4-BROMOPHENYL PHENYL ETHER	NA	-	N-NITROSO-DI-N-PROPYLAMINE	NA	-
4-CHLORO-3-METHYLPHENOL	NA	-	N-NITROSODI-N-BUTYLAMINE	NA	-
4-CHLOROANILINE	NA	-	N-NITROSODIMETHYLAMINE	NA	-
4-CHLOROPHENYL PHENYL ETHER	NA	-	N-NITROSODIMETHYLAMINE	NA	-
4-METHYLPHENOL	NA	-	N-NITROSODIPHENYLAMINE	NA	-
4-NITROANILINE	NA	-	N-NITROSOPIPERIDINE	NA	-
4-NITROPHENOL	NA	-	NAPHTHALENE	NA	-
7,12-DIMETHYLBENZO(A)ANTHRACENE	NA	-	NITROBENZENE	NA	-
A-,A-DIMETHYLPENETHYLAMINE	NA	-	METOLACHLOR	ND	0.09
ACENAPHTHENE	NA	-	METHOXYCHLOR	ND	0.01
ACENAPHTHYLENE	ND	0.01	METRIBUZIN	ND	0.03
ACETOPHENONE	NA	-	P-DIMETHYLAMINOAZOBENZENE	NA	-
ALACHLOR	ND	0.02	PENTACHLOROBENZENE	NA	-
ALDRINE	ND	0.03	PENTACHLORONITROBENZENE	NA	-
ALPHA-CHLORDANE	ND	0.01	PENTACHLOROPHENOL	ND	0.04
ANILINE	NA	-	PHENACETIN	NA	-
ANTHRACENE	ND	0.01	PHENANTHRENE	ND	0.01
AROCLOR 1016	NA	-	PHENOL	NA	-
AROCLOR 1221	NA	-	PRONAMIDE	NA	-
AROCLOR 1232	NA	-	PROPACHLOR	ND	0.03
AROCLOR 1242	NA	-	PYRENE	ND	0.01
AROCLOR 1248	NA	-	PYRIDINE	NA	-
AROCLOR 1254	NA	-	SIMAZINE	ND	0.11
AROCLOR 1260	NA	-	TOXAPHENE MIXTURE	ND	1
ATRAZINE	ND	0.01	TRANS NONACHLOR	ND	0.02
AZOBENZENE	NA	-			
BENZIDINE	NA	-			
BENZO(A)ANTHRACENE	ND	0.01			
BENZO(A)PYRENE	ND	0.01			

DL - Method detection limit

B - Indicates compound was detected in lab blank as well as in the sample

J - Indicates an estimated value for tentatively identified components, or compounds detected and identified but present at a concentration less than the practical quantitation limit

SPRINGS--continued

SAMPLE ID: SAMPLING DATE:		SWSC			ANALYTE--continued	
		3/17/95	RESULT (ug/L)	DL	RESULT (ug/L)	DL
ANALYTE						
1,2,4,-TRICHLOROBENZENE	NA	-	BENZO(B)FLUORANTHENE	ND	0.02	
1,2,4,5-TETRACHLOROBENZENE	NA	-	BENZO(G,H,I)PERYLENE	ND	0.02	
1,2-DICHLOROBENZENE	NA	-	BENZO(K)FLUORANTHENE	ND	0.02	
1,2-DIPHENYLHYDRAZINE	NA	-	BENZOIC ACID	NA	-	
1,3,-DICHLOROBENZENE	NA	-	BENZYL ALCOHOL	NA	-	
1,4,-DICHLOROBENZENE	NA	-	BIS (2-CHLOROETHOXY) METHANE	NA	-	
1-CHLORONAPHTHALENE	NA	-	BIS (2-CHLOROETHYL) ETHER	NA	-	
1-NAPHTHYLAMINE	NA	-	BIS (2-CHLOROISOPROPY) ETHER	NA	-	
2,2,3,3,4,5,6,6-OCTACHLOROBIPHENYL	ND	0.5	BIS(2-ETHYLHEXYL)PHTHALATE	NA	-	
2,2,3,3,4,4,6-HEPTACHLOROBIPHENYL	ND	0.5	BUTYL BENZYL PHTHALATE	0.26 J B	0.01	
2,2,4,4,5,6-HEXACHLOROBIPHENYL	ND	0.5	BUTACHLOR	ND	0.03	
2,2,3,4,6-PENTACHLOROBIPHENYL	NA	-	CARBAZOLE	NA	-	
2,2,4,4-TETRACHLOROBIPHENYL	ND	0.5	CHLORDANE (TOTAL)	ND	0.02	
2,3,4,6-TETRACHLOROPHENOL	NA	-	CHRYSENE	ND	0.02	
2,4,5-TRICHLOROBIPHENYL	ND	0.5	DI(2 ETHYLHEXYL) ADIPATE	ND	0.02	
2,4,5-TRICHLOROPHENOL	NA	-	DI(2 ETHYLHEXYL) PHTHALATE	ND	0.03	
2,4,6-TRICHLOROPHENOL	NA	-	DI-N-BUTYL PHTHALATE	0.10 J B	0.02	
2,3-DICHLOROBIPHENYL	ND	0.5	DI-N-OCTYL PHTHALATE	NA	-	
2,4-DICHLOROPHENOL	NA	-	DIBENZO(A,H)ANTHRACENE	ND	0.02	
2,4-DIMETHYLPHENOL	NA	-	DIBENZO(A,J)ACRIDINE	NA	-	
2,4-DINITROPHENOL	NA	-	DIBENZOFURAN	NA	-	
2,4-DINITROTOLUENE	NA	-	DIELDRIN	ND	0.02	
2,6-DICHLOROPHENOL	NA	-	DIETHYL PHTHALATE	0.35 J B	0.01	
2,6-DINITROTOLUENE	NA	-	DIMETHYL PHTHALATE	ND	0.01	
2-CHLORONAPHTHALENE	NA	-	DIPHENYLAMINE	NA	-	
2-CHLOROBIPHENYL	ND	0.05	ENDRIN	ND	0.35	
2-CHLOROPHENOL	NA	-	FLUORANTHENE	NA	-	
2-METHYLNAPHTHALENE	NA	-	FLUORENE	ND	0.01	
2-METHYLPHENOL	NA	-	GAMMA-CHLORDANE	ND	0.02	
2-NAPHTHYLAMINE	NA	-	HEPTACHLOR	ND	0.04	
2-NITROANILINE	NA	-	HEPTACHLOR EPOXIDE	ND	0.13	
2-NITROPHENOL	NA	-	HEXACHLOROBENZENE	ND	0.01	
2-PICOLINE	NA	-	HEXACHLOROBUTADIENE	NA	-	
3,3-DICHLOROBENZIDINE	NA	-	HEXACHLOROCYCLOPENTADIENE	ND	0.04	
3-METHYLCHOLANTHRENE	NA	-	HEXACHLOROETHANE	NA	-	
3-NITROANILINE	NA	-	INDENO(1,2,3-CD)PYRENE	ND	0.03	
4,6-DINITRO-2-METHYLPHENOL	NA	-	ISOPHORONE	NA	-	
4-AMINOBIIPHENYL	NA	-	LINDANE	ND	0.02	
4-BROMOPHENYL PHENYL ETHER	NA	-	N-NITROSO-DI-N-PROPYLAMINE	NA	-	
4-CHLORO-3-METHYLPHENOL	NA	-	N-NITROSODI-N-BUTYLAMINE	NA	-	
4-CHLOROANILINE	NA	-	N-NITROSODIMETHYLAMINE	NA	-	
4-CHLOROPHENYL PHENYL ETHER	NA	-	N-NITROSODIMETHYLAMINE	NA	-	
4-METHYLPHENOL	NA	-	N-NITROSODIPHENYLAMINE	NA	-	
4-NITROANILINE	NA	-	N-NITROSOPIPERIDINE	NA	-	
4-NITROPHENOL	NA	-	NAPHTHALENE	NA	-	
7,12-DIMETHYLBENZO(A)ANTHRACENE	NA	-	NITROBENZENE	NA	-	
A-,A-DIMETHYLPENETHYLAMINE	NA	-	METOLACHLOR	ND	0.09	
ACENAPHTHENE	NA	-	METHOXYCHLOR	ND	0.01	
ACENAPHTHYLENE	ND	0.01	METRIBUZIN	ND	0.03	
ACETOPHENONE	NA	-	P-DIMETHYLAMINOAZOBENZENE	NA	-	
ALACHLOR	ND	0.02	PENTACHLOROBENZENE	NA	-	
ALDRINE	ND	0.03	PENTACHLORONITROBENZENE	NA	-	
ALPHA-CHLORDANE	ND	0.01	PENTACHLOROPHENOL	ND	0.04	
ANILINE	NA	-	PHENACETIN	NA	-	
ANTHRACENE	ND	0.01	PHENANTHRENE	ND	0.01	
AROCLOR 1016	NA	-	PHENOL	NA	-	
AROCLOR 1221	NA	-	PRONAMIDE	NA	-	
AROCLOR 1232	NA	-	PROPACHLOR	ND	0.03	
AROCLOR 1242	NA	-	PYRENE	ND	0.01	
AROCLOR 1248	NA	-	PYRIDINE	NA	-	
AROCLOR 1254	NA	-	SIMAZINE	ND	0.11	
AROCLOR 1260	NA	-	TOXAPHENE MIXTURE	ND	1	
ATRAZINE	ND	0.01	TRANS NONACHLOR	ND	0.02	
AZOBENZENE	NA	-				
BENZIDINE	NA	-				
BENZO(A)ANTHRACENE	ND	0.01				
BENZO(A)PYRENE	ND	0.01				

DL - Method detection limit

B - Indicates compound was detected in lab blank as well as in the sample

J - Indicates an estimated value for tentatively identified components, or compounds detected and identified but present at a concentration less than the practical quantitation limit

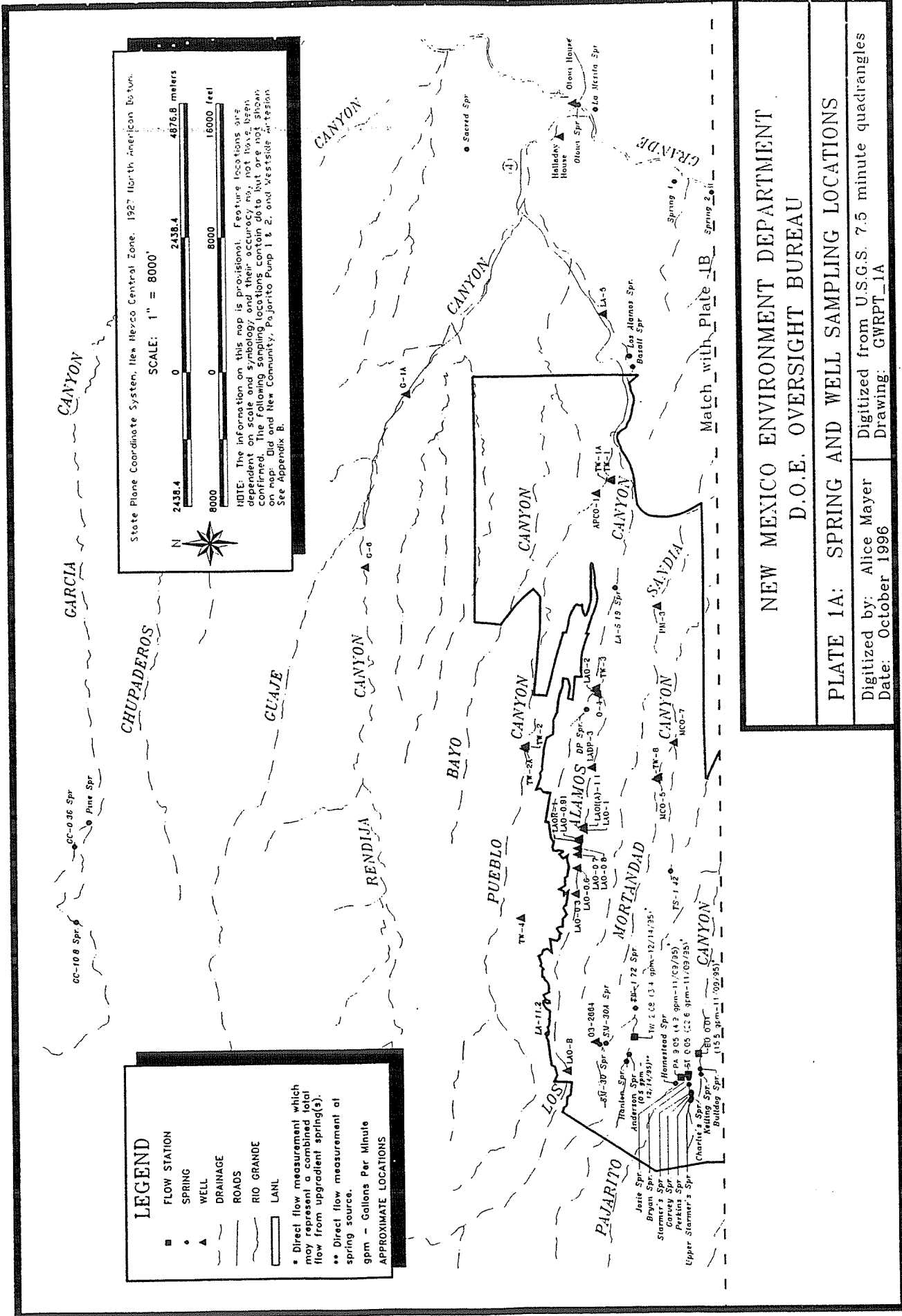
SPRINGS--continued

SAMPLE ID: HOLLOW		HOLLOW		ANALYTE--continued	
SAMPLING DATE: 3/17/95		3/17/95		RESULT (ug/L) DL	
ANALYTE	RESULT (ug/L)	DL	ANALYTE--continued	RESULT (ug/L)	DL
1,2,4,-TRICHLORO BENZENE	NA	-	BENZO(B)FLUORANTHENE	ND	0.02
1,2,4,5-TETRACHLORO BENZENE	NA	-	BENZO(G,H,I)PERYLENE	ND	0.02
1,2-DICHLORO BENZENE	NA	-	BENZO(K)FLUORANTHENE	ND	0.02
1,2-DIPHENYLHYDRAZINE	NA	-	BENZOIC ACID	NA	-
1,3,-DICHLORO BENZENE	NA	-	BENZYL ALCOHOL	NA	-
1,4,-DICHLORO BENZENE	NA	-	BIS (2-CHLOROETHOXY) METHANE	NA	-
1-CHLORONAPHTHALENE	NA	-	BIS (2-CHLOROETHYL) ETHER	NA	-
1-NAPHTHYLAMINE	NA	-	BIS (2-CHLOROISOPROPY) ETHER	NA	-
2,2,3,3,4,5,6,6-OCTACHLOROBIPHENYL	ND	0.5	BIS(2-ETHYLHEXYL)PHTHALATE	NA	0.03
2,2,3,3,4,4,6-HEPTACHLOROBIPHENYL	ND	0.5	BUTYL BENZYL PHTHALATE	0.17 J B	0.01
2,2,4,4,5,6-HEXACHLOROBIPHENYL	ND	0.5	BUTACHLOR	ND	0.03
2,2,3,4,6-PENTACHLOROBIPHENYL	NA	-	CARBAZOLE	NA	-
2,2,4,4-TETRACHLOROBIPHENYL	ND	0.5	CHLORDANE (TOTAL)	ND	0.02
2,3,4,6-TETRACHLOROPHENOL	NA	-	CHRYSENE	ND	0.02
2,4,5-TRICHLOROBIPHENYL	ND	0.5	DI(2 ETHYLHEXYL) ADIPATE	0.02 J B	0.02
2,4,5-TRICHLOROPHENOL	NA	-	DI(2 ETHYLHEXYL) PHTHALATE	8.16 B	0.03
2,4,6-TRICHLOROPHENOL	NA	-	DI-N-BUTYL PHTHALATE	0.08 J B	0.02
2,3-DICHLOROBIPHENYL	ND	0.5	DI-N-OCTYL PHTHALATE	NA	-
2,4-DICHLOROPHENOL	NA	-	DIBENZO(A,H)ANTHRACENE	ND	0.02
2,4-DIMETHYLPHENOL	NA	-	DIBENZO(A,J)ACRIDINE	NA	-
2,4-DINITROPHENOL	NA	-	DIBENZOFURAN	NA	-
2,4-DINITROTOLUENE	NA	-	DIELDRIN	ND	0.02
2,6-DICHLOROPHENOL	NA	-	DIETHYL PHTHALATE	0.48 J B	0.01
2,6-DINITROTOLUENE	NA	-	DIMETHYL PHTHALATE	ND	0.01
2-CHLORONAPHTHALENE	NA	-	DIPHENYLAMINE	NA	-
2-CHLOROBIPHENYL	ND	0.05	ENDRIN	ND	0.35
2-CHLOROPHENOL	NA	-	FLUORANTHENE	NA	-
2-METHYLNAPHTHALENE	NA	-	FLUORENE	ND	0.01
2-METHYLPHENOL	NA	-	GAMMA-CHLORDANE	ND	0.02
2-NAPHTHYLAMINE	NA	-	HEPTACHLOR	ND	0.04
2-NITROANILINE	NA	-	HEPTACHLOR EPOXIDE	ND	0.13
2-NITROPHENOL	NA	-	HEXACHLOROBENZENE	ND	0.01
2-PICOLINE	NA	-	HEXACHLOROBUTADIENE	NA	-
3,3-DICHLORO BENZIDINE	NA	-	HEXACHLOROCYCLOPENTADIENE	ND	0.04
3-METHYLCHOLANTHRENE	NA	-	HEXACHLOROETHANE	NA	-
3-NITROANILINE	NA	-	INDENO(1,2,3-CD)PYRENE	ND	0.03
4,6-DINITRO-2-METHYLPHENOL	NA	-	ISOPHORONE	NA	-
4-AMINO BIPHENYL	NA	-	LINDANE	ND	0.02
4-BROMOPHENYL PHENYL ETHER	NA	-	N-NITROSO-DI-N-PROPYLAMINE	NA	-
4-CHLORO-3-METHYLPHENOL	NA	-	N-NITROSODI-N-BUTYLAMINE	NA	-
4-CHLOROANILINE	NA	-	N-NITROSODIMETHYLAMINE	NA	-
4-CHLOROPHENYL PHENYL ETHER	NA	-	N-NITROSODIMETHYLAMINE	NA	-
4-METHYLPHENOL	NA	-	N-NITROSODIPHENYLAMINE	NA	-
4-NITROANILINE	NA	-	N-NITROSOPIPERIDINE	NA	-
4-NITROPHENOL	NA	-	NAPHTHALENE	NA	-
7,12-DIMETHYLBENZO(A)ANTHRACENE	NA	-	NITROBENZENE	NA	-
A-,A-DIMETHYLPENETHYLAMINE	NA	-	METOLACHLOR	ND	0.09
ACENAPHTHENE	NA	-	METHOXYCHLOR	ND	0.01
ACENAPHTHYLENE	ND	0.01	METRIBUZIN	ND	0.03
ACETOPHENONE	NA	-	P-DIMETHYLAMINOAZOBENZENE	NA	-
ALACHLOR	ND	0.02	PENTACHLOROBENZENE	NA	-
ALDRINE	ND	0.03	PENTACHLORONITROBENZENE	NA	-
ALPHA-CHLORDANE	ND	0.01	PENTACHLOROPHENOL	ND	0.04
ANILINE	NA	-	PHENACETIN	NA	-
ANTHRACENE	ND	0.01	PHENANTHRENE	ND	0.01
AROCLOR 1016	NA	-	PHENOL	NA	-
AROCLOR 1221	NA	-	PRONAMIDE	NA	-
AROCLOR 1232	NA	-	PROPACHLOR	ND	0.03
AROCLOR 1242	NA	-	PYRENE	ND	0.01
AROCLOR 1248	NA	-	PYRIDINE	NA	-
AROCLOR 1254	NA	-	SIMAZINE	ND	0.11
AROCLOR 1260	NA	-	TOXAPHENE MIXTURE	ND	1
ATRAZINE	ND	0.01	TRANS NONACHLOR	ND	0.02
AZOBENZENE	NA	-			
BENZIDINE	NA	-			
BENZO(A)ANTHRACENE	ND	0.01			
BENZO(A)PYRENE	ND	0.01			

DL - Method detection limit

B - Indicates compound was detected in lab blank as well as in the sample

J - Indicates an estimated value for tentatively identified components, or compounds detected and identified but present at a concentration less than the practical quantitation limit

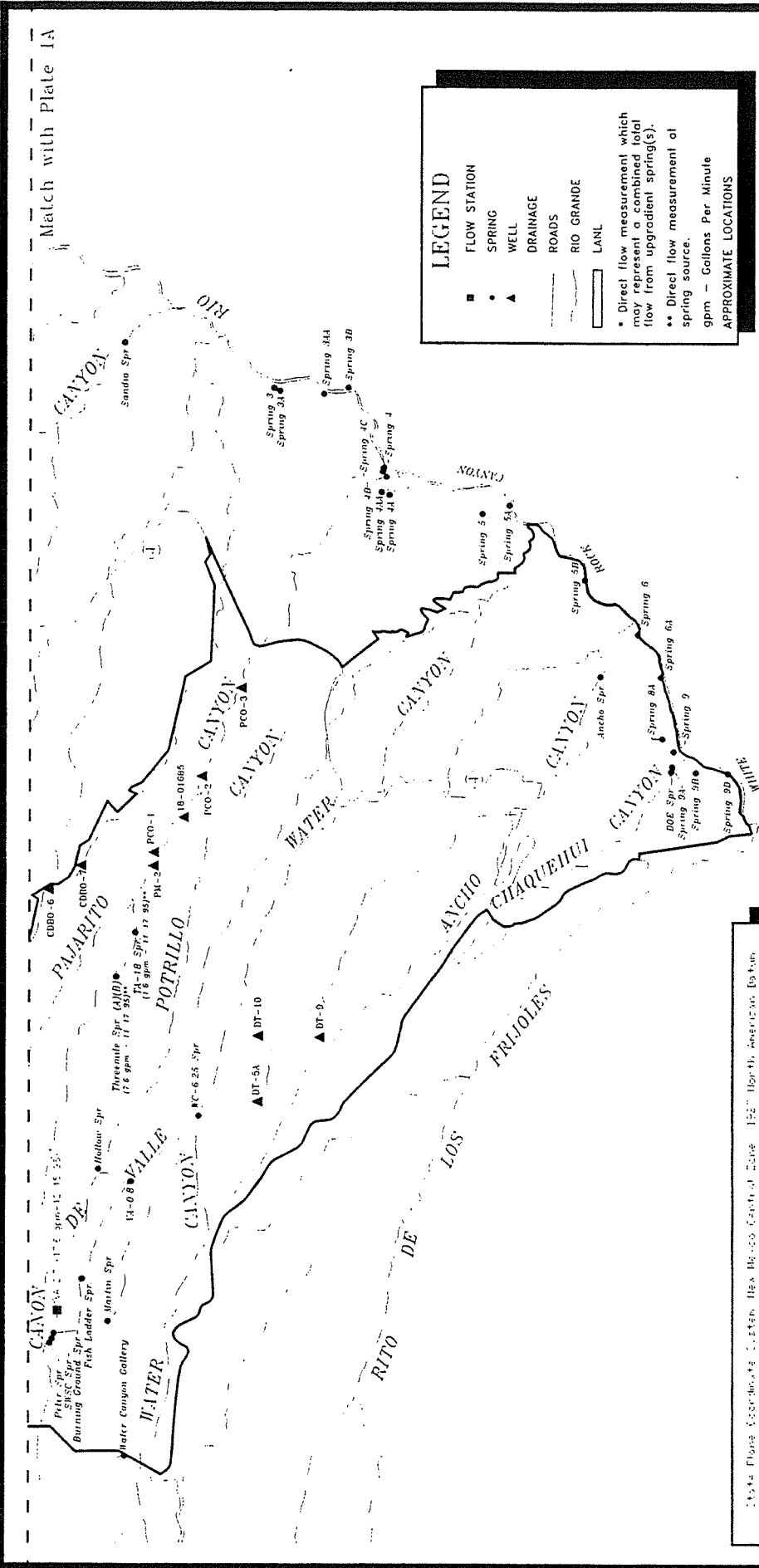


NEW MEXICO ENVIRONMENT DEPARTMENT
 D.O.E. OVERSIGHT BUREAU

PLATE 1A: SPRING AND WELL SAMPLING LOCATIONS

Digitized by: Alice Mayer
 Date: October 1996

Digitized from U.S.G.S. 7.5 minute quadrangles
 Drawing: GWRPT_1A



Match with Plate 1A

NEW MEXICO ENVIRONMENT DEPARTMENT
D.O.E. OVERSIGHT BUREAU

PLATE 1B: SPRING AND WELL SAMPLING LOCATIONS

Digitized by: Alice Mayer
Date: October 1996

Digitized from U.S.G.S. 7.5 minute quadrangles
Drawing: GWRPT_1B

